

Market Pulse

A monthly review of Indian economy and markets



Market Pulse

Volume 6, Issue 12

This publication is issued monthly by the Economic Policy and Research (EPR) department of the National Stock Exchange of India Limited. It is a review of major developments in the economy and financial markets and market statistics for the month gone by, insights from cited academic research papers and topical research articles.

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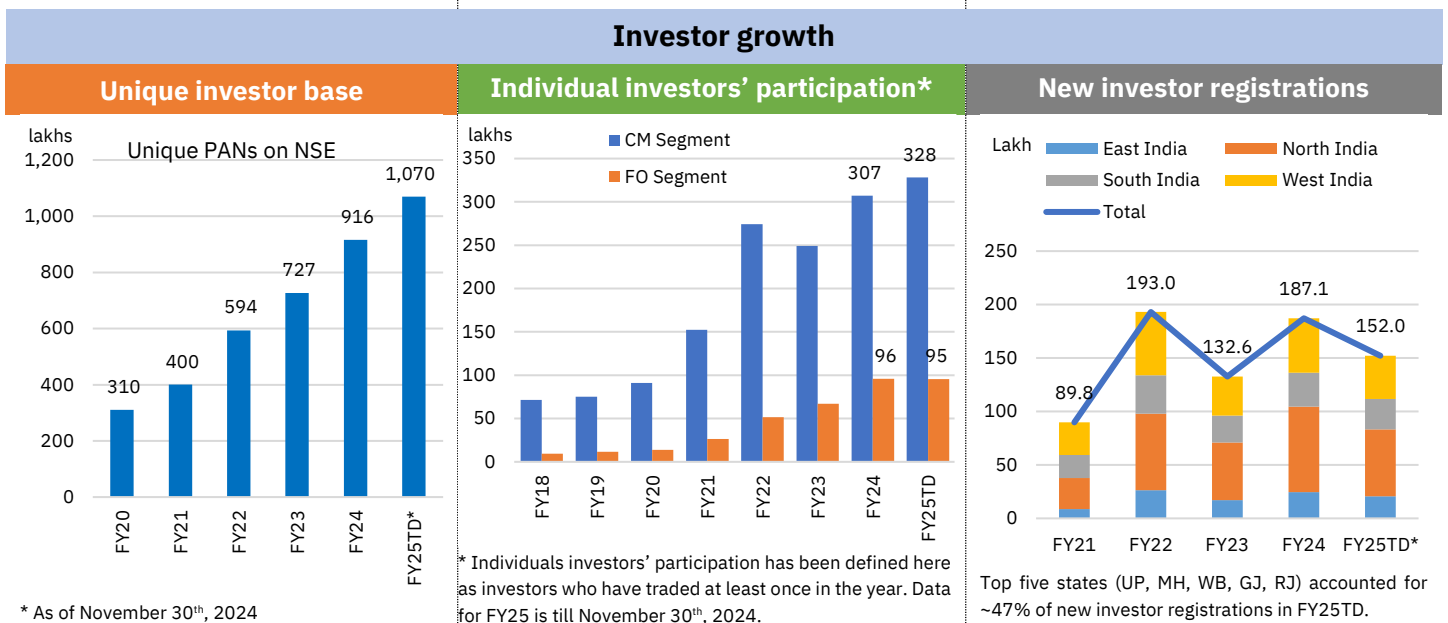
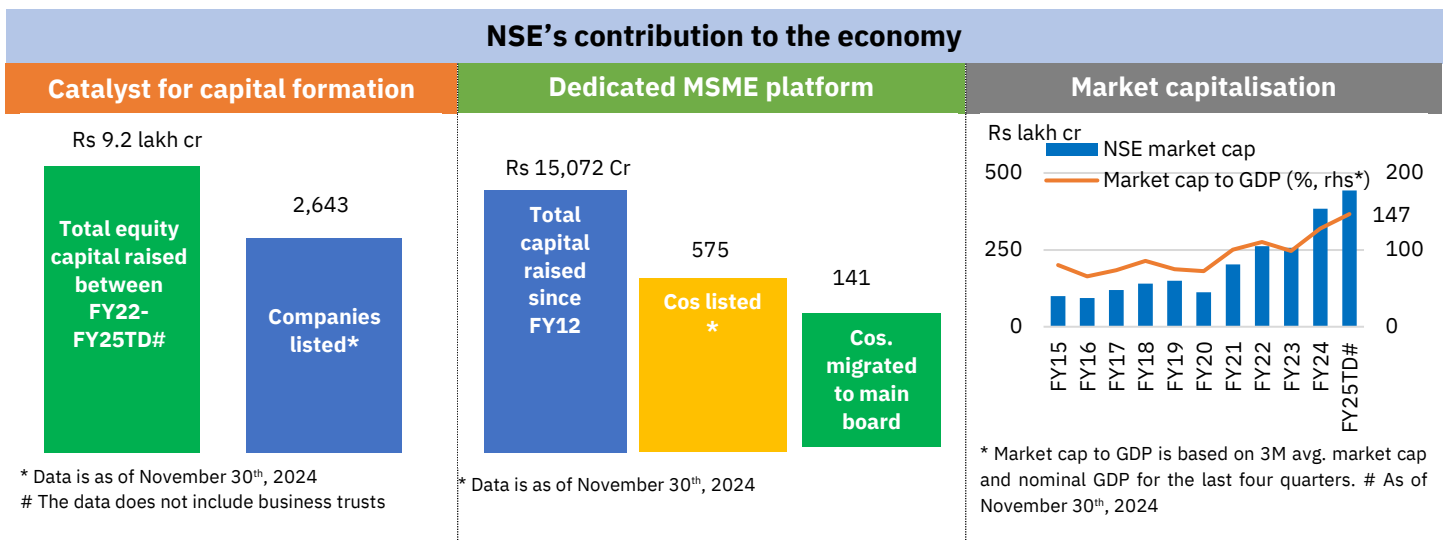
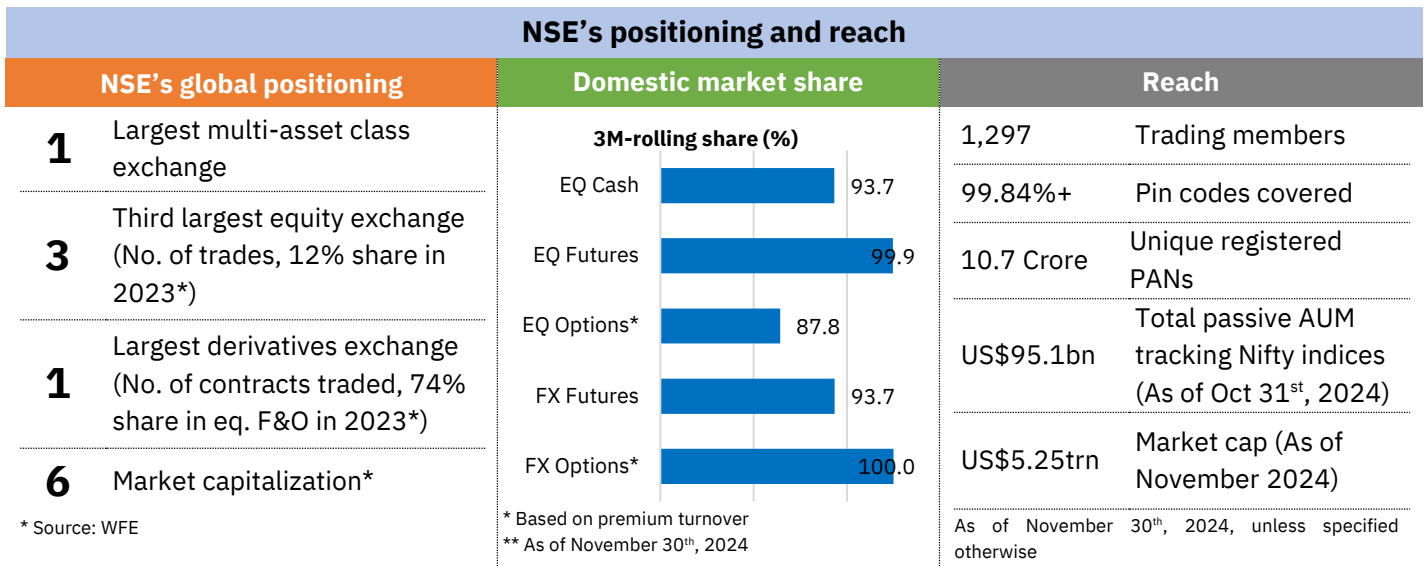
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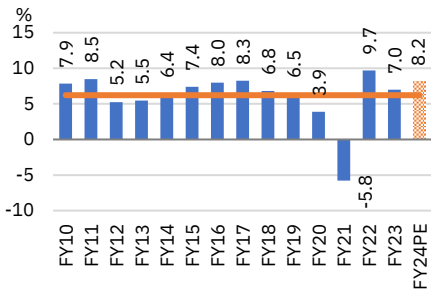
NSE at a glance



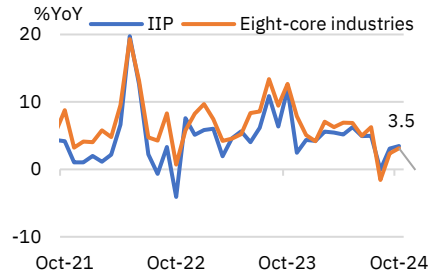
Key macro charts

Growth outlook robust

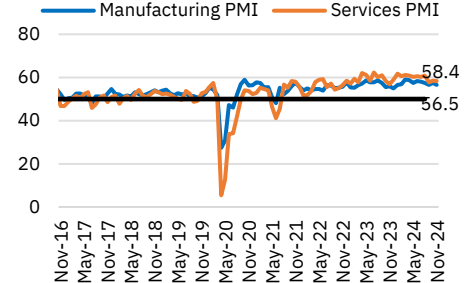
Annual GDP growth



Industrial activity rebounds

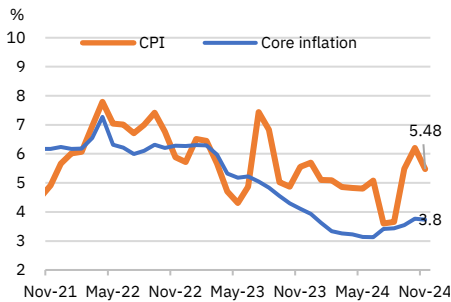


PMI in the expansion zone

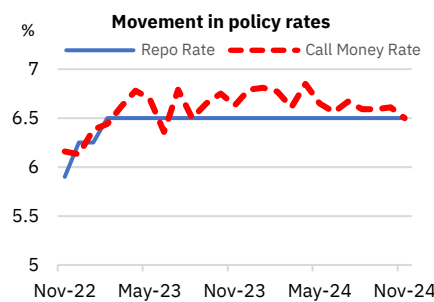


Inflation moderates; policy options equally balanced

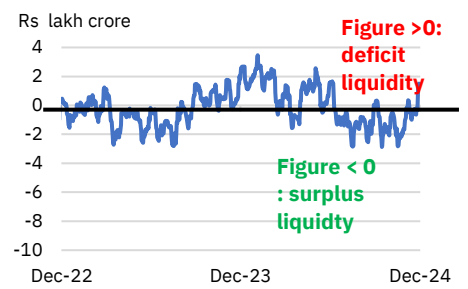
Inflation below RBI's target



Money market rates falling

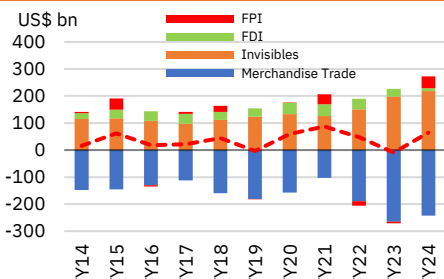


Liquidity in surplus

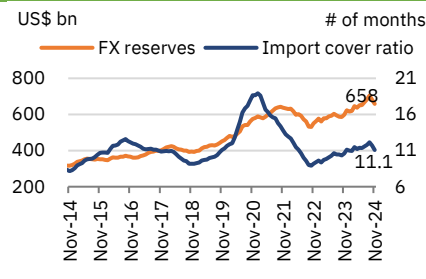


External situation comfortable; rupee depreciates but volatility contained

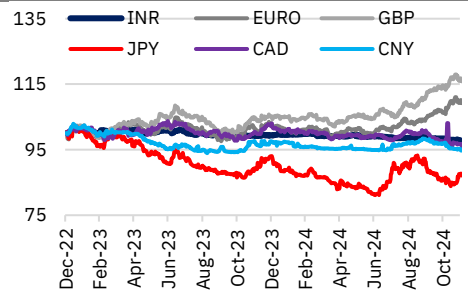
Overall BOP



Forex reserves

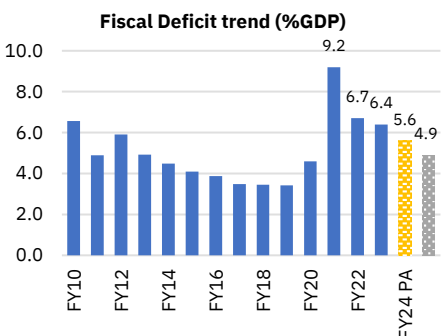


Rupee volatility contained

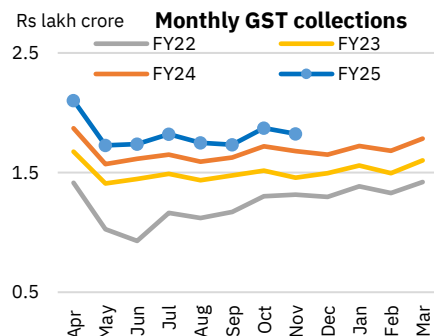


Fiscal prudence but with higher capex

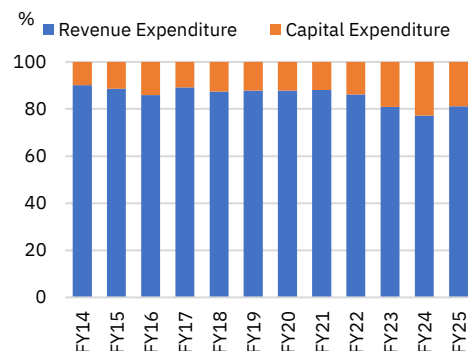
Fiscal consolidation underway



GST collections robust

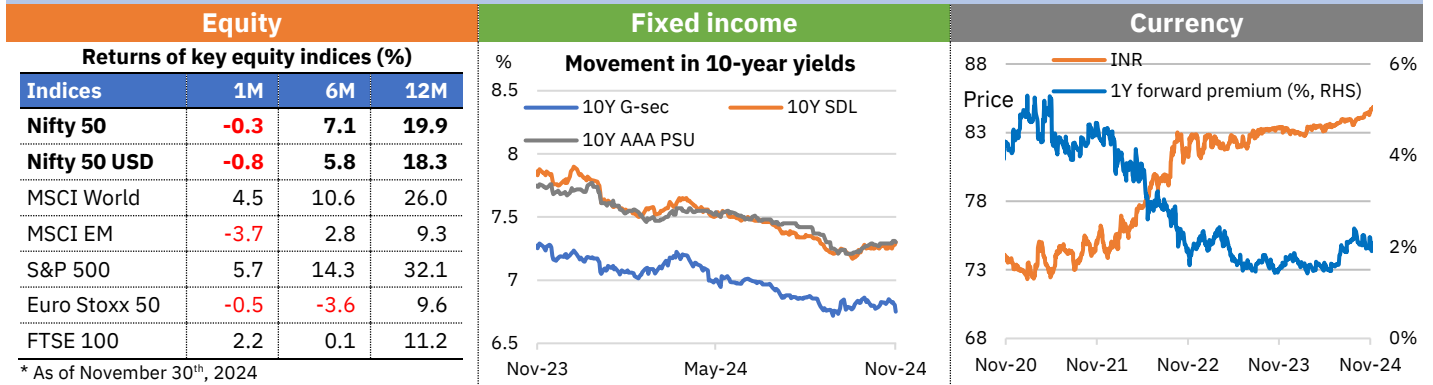


Share of capex rising

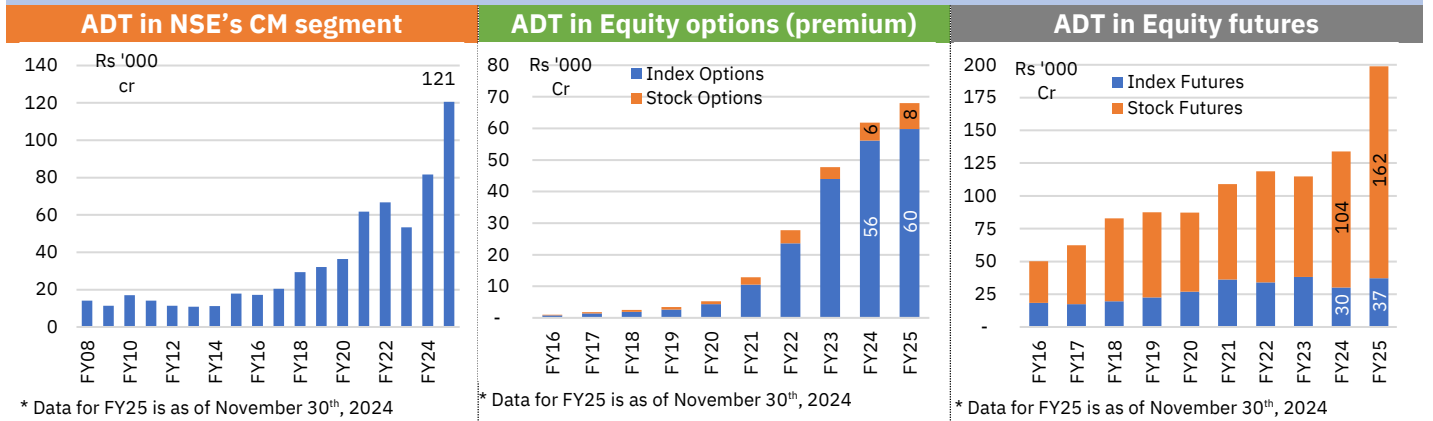


Key market charts

Performance across asset classes



Segment-wise turnover trend



Market activity

Client category	Category-wise gross turnover and share in FY25TD						Average open interest			
	CM		Equity options#		Equity futures		Nov'24		Oct'24	
	Value (Rs '000 Cr)	Share (%)	Value (Rs '000 Cr)	Share (%)	Value (Rs '000 Cr)	Share (%)	Contracts ('000)	Value (Rs crore)	Contracts ('000)	Value (Rs crore)
Corporates	1,955	5%	1,022	5%	5,627	9%	770	49,563	876	57,667
DIIs	4,702	12%	22	0.1%	5,359	8%	6,332	4,10,007	5,756	4,40,030
FIs	5,925	15%	2,198	10%	16,734	25%	20,561	13,24,403	21,228	14,06,107
Individuals	13,964	35%	7,728	34%	12,348	19%	4,080	2,64,007	4,729	3,63,044
Others	1,878	5%	664	3%	3,339	5%				
Prop	11,621	29%	10,946	48%	22,648	34%				

Based on premium turnover. Data for FY25TD is as of November 30th, 2024

Note: Notional value is presented here.

Category-wise net inflows into Indian equities

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024*
In Rs cr													
FII	1,28,361	1,13,136	97,069	17,946	20,493	49,234	-34,252	1,01,111	1,70,260	24,004	-1,21,439	1,71,107	-15,020
DIIs	-55,800	-73,052	-28,557	67,587	35,363	90,738	1,09,662	42,257	-35,663	94,846	2,75,726	1,81,482	4,93,244
Individuals#	-24,900	-22,000	-30,100	-8,243	-26,382	-37,988	-8,523	-25,280	52,897	1,42,755	88,376	5,243	1,54,854
In US\$bn													
FII	24.4	20.1	16.1	3.2	3.2	7.5	-4.6	14.4	23	3.8	-16.5	20.7	-1.7
DIIs	-10.6	-12.8	-4.8	10.4	5.2	14	16	6	-4.8	12.6	35.7	22	59.0
Individuals#	-4.7	-3.8	-4.9	-1.3	-3.9	-5.8	-1.4	-3.6	7.1	19.3	11.7	0.6	18.5

* As of November 30th, 2024.

Data pertaining to individuals include net flows on the NSE in the secondary market only. Individuals include individual /proprietorship firms, HUF and NRI.

Executive Summary

Sayonara 2024

It isn't the first time we write this, but the year 2024 has been eventful in more ways than one, spanning across geographical, economic, climatic and political realms. In a year when a significant chunk of humanity chose their leaders, Donald Trump's re-election as the US President in a down-to-the-wire contest has forced a refresh of the economic and geopolitical calculus across the world. His proposed tax cuts, trade-protectionist, America-first policies have pushed US isolationism upon an increasingly fragmented world, with implications for the rest of the world, including India. A world used to US demand would be forced to reckon with spillovers of a stronger dollar, more competition, higher import duties and new strategic alignments.

For the US, this has also meant tapered rate cut expectations next year with the Federal Reserve's dot plot now guiding for 50bps cut in 2025 after a total of 100bps that we saw this year. There are also other factors at play for the US economy and markets such as the rising importance of unelected persons of interest and of digital assets. The two hot wars of last year continue; the Middle East saw the decades-old Assad regime fall in a matter of weeks, with Turkey and Israel gaining significantly in the balance of power. The Russia-Ukraine conflict has now seen entry of North Korean troops, apart from the indirect participation of multiple countries on each side. Geopolitical uncertainty has contributed to commodity price volatility, but lower than in previous years, as demand pressures have kept prices in check.

Back home, the 2024 General Elections secured a third consecutive term for Shri Narendra Modi, making him only the second Prime Minister in the country's history since Independence to achieve this feat. Economic growth remained strong for most of the year before surprising on the downside in the later part with a weak Q2 GDP print and subdued corporate profitability. Nevertheless, India remains the fastest growing large economy in the world. An inflation spike, however, kept the RBI's MPC on hold; it remains to be seen how the reconstituted MPC will decide going forward. For detailed coverage on the macro scene, please refer to our Macro Round-up section. For domestic capital markets, the year saw several crucial developments, ranging from modifications in capital gains taxes to tightening of F&O norms to massive FPI selling in the later part of the year, and of course, the IPO boom. The year 2024 saw record-high capital raising through IPOs, with Rs 1.4 lakh crore raised till November 2024, with India leading the world in number of issuances (241 during Jan-Nov'24). Retail interest in the markets led to significant milestones being crossed. The number of unique investors passed the nine crore mark in February, 10 crore in August and currently stands at 10.85 crore. The number of accounts through these investors trade (UCCs) is nearly 21 crore.

Global equities had a strong run this year, albeit with notable divergences across markets. Developed market equities, as represented by the MSCI World Index (which includes stocks from 23 developed markets), posted a robust 16.6% gain year-to-date (as of December 19th, 2024), largely driven by a strong rally in US equities (S&P 500: +23%). In contrast, European and UK markets recorded more modest mid-single-digit gains. Emerging markets, represented by the MSCI EM Index (which tracks stocks from 24 emerging economies), underperformed with a return of 5.7% year-to-date, as the strengthening US dollar, trade policy uncertainties, and growth concerns in China dampened investor sentiment. Meanwhile, global debt markets have experienced significant volatility and are poised to close the year in the red, reflecting the impact of shifting policy expectations.

Indian markets, while outperforming the broader emerging market pack, had a roller coaster ride this year. After rising to fresh record high levels in late-September, the Nifty 50 Index witnessed an 11% correction in little over a month, even as the year-to-date gain remains decent at 10.2% (As of December 19th, 2024). Emerging signs of economic slowdown, heavy FPI selling and stretched valuations triggered a sell-off in Indian equities over the last few months.

Our Story of the month looks at second-quarter earnings. Topline growth for Nifty 50 and Nifty 500 companies moderated to a 15-quarter low of 6.6% and a three-quarter low of 8.3% YoY, respectively. Mid- and small-cap companies (Nifty 500 ex-Nifty 50) performed better with a robust 9.8% YoY growth in net sales, the highest in six quarters. Financials drove over 50% of topline growth, supported by strong credit offtake, while Consumer Discretionary contributed 27.5%, led by consumer durables and apparel. In contrast, Materials and Energy faced a

weak quarter due to softer demand, lower realizations, and weaker refining margins. Industrials showed resilience, benefitting from a pick-up in government spending post-election. Rising costs pressured profitability, as operating profit (EBITDA) for Nifty 50/Nifty 500 (ex-Financials) contracted 0.5%/4.1% YoY and 1.7%/4% QoQ. Adjusted PAT growth fell to an eight-quarter low of 0.8% YoY for Nifty 50 and -4.1% YoY for Nifty 500. The Nifty 500 ex-Nifty 50 universe underperformed on profitability with -10.1% YoY, despite stronger revenue growth. Our Chart of the month takes a deeper look at how India's merchandise trade composition and partnerships have evolved over the years.

A weak second quarter resulted in downward revisions in earnings estimates across the board, and starkly so in commodity-oriented sectors including Energy and Materials. Earnings estimate for FY26 was also curtailed by 2.9% during this period, even as the revisions were relatively more broad-based across sectors, leading to a steep fall in the Earnings Revision Indicator (ERI) as well. Notwithstanding a disappointing performance in the second quarter, corporate profitability over the coming quarters should see an improvement, thanks to higher Government spending, festive-led boost to urban consumption and continued recovery in rural demand. Escalation in geopolitical tensions, and consequent surge in commodity price volatility, coupled with weather-related disruptions, pose key downside risks. By the way, 2024 is on track to be the hottest year on record!

Our Insights section has a number of interesting papers from the CBS team at IIM Ahmedabad, and the EPR team. The first paper presents the idea of "pleasure of paying," a pleasant emotion felt when using mobile payments by investigating the neural correlations of pain and pleasure in payment using electroencephalogram (EEG) techniques. The second paper explores how stocks with mean-reverting returns affect investors who base their preferences on prospect theory. The third paper explores the role of personality traits in investment decisions, demonstrating that they influence investment behaviour through beliefs, preferences, and social interaction tendencies. The fourth paper examines how AI investment drives product innovation, leading to enhanced sales growth, employment, and market value. The fifth paper uncovers how digital adoption stimulates consumer spending due to reduced transaction costs and the subdued endowment effect. The sixth paper addresses pricing of perpetual futures under no-arbitrage conditions, exploring both discrete and continuous-time formulations, deriving funding specifications that ensure perpetual futures prices match the spot prices. The seventh paper presents an approach to measure the state of the economy through textual analysis of business news using a text-augmented vector autoregression.

Towards the end as usual, any take on the year is complete without an account of the technology frontier that gets better by the day. We now have an LLM that can do advanced math, quantum computing that promises to become mainstream soon, leading to commercial viability. These changes are likely to change our lives in ways that would be difficult to fathom in the short term but would have long-term consequences. On that note, we bring you the December edition of the Market Pulse. As always, we look forward to your comments and suggestions.

Tirthankar Patnaik

Chief Economist

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Story of the month

Q2FY25 Earnings Review: A muted quarter

Topline growth for Nifty 50 and Nifty 500 companies moderated to a 15-quarter low of 6.6% and a three-quarter low of 8.3% YoY, respectively. Mid- and small-cap companies (Nifty 500 ex-Nifty 50) performed better with a robust 9.8% YoY growth in net sales, the highest in six quarters. Financials drove over 50% of topline growth, supported by strong credit offtake, while Consumer Discretionary contributed 27.5%, led by consumer durables and apparel. In contrast, Materials and Energy faced a weak quarter due to softer demand, lower realizations, and weaker refining margins. Industrials showed resilience benefitting from a pick-up in government spending post-election. Rising costs pressured profitability, as operating profit (EBITDA) for Nifty 50/Nifty 500 (ex-Financials) contracted 0.5%/4.1% YoY and 1.7%/4% QoQ. Operating expenses rose 6.4%/8.7% YoY, outpacing revenue growth, leading to margin compression of 83bps/172bps YoY to 20.4%/17.6%, respectively. Nifty 500 ex-Nifty 50 companies saw a sharper margin decline of 256bps YoY to a six-quarter low of 14.7%, despite better topline performance. Adjusted PAT growth fell to an eight-quarter low of 0.8% YoY for Nifty 50 and -4.1% YoY for Nifty 500. Financials offset declines in commodity sectors (Energy, Materials) impacted by weaker demand and falling prices. The Nifty 500 ex-Nifty 50 universe underperformed on profitability with -10.1% YoY, despite stronger revenue growth.

A weak second quarter resulted in downward revisions in earnings estimates across the board, and starkly so in commodity-oriented sectors including Energy and Materials. Consensus earnings estimates (from LSEG Datastream) for FY25 for the top 200 covered companies by market cap witnessed earnings cut of 3.6% since September-end (As of December 12th), with Energy and Materials accounting for ~64% of the change in aggregate earnings during this period. Earnings estimate for FY26 was also curtailed by 2.9% during this period, even as the revisions were relatively more broad-based across sectors. This translates into an expected aggregate profit growth of 5.9%/18.3% in FY25/FY26 on top of a robust 33.4% growth in FY24, implying a CAGR of 11.9% during FY24-26. In line with significant downgrades, the Earnings Revision Indicator (ERI)¹ also fell deep in the negative territory, implying a greater number of downgrades than upgrades. Notwithstanding a disappointing performance in the second quarter, corporate profitability over the coming quarters should see an improvement, thanks to higher Government spending, festive-led boost to urban consumption and continued recovery in rural demand. Escalation in geopolitical tensions, and consequent surge in commodity price volatility, coupled with weather-related disruptions, pose key downside risks.

- Topline growth remained muted in Q2FY25:** The topline growth of Nifty 50 and Nifty 500 companies slowed to a 15-quarter and a three-quarter low of 6.6% and 8.3% respectively in Q2FY25. Excluding the Nifty 50 companies, the topline growth of the remaining companies stood at a robust 9.8% YoY—the highest in the last six quarters, indicating relatively better performance of mid- and small-cap companies. Within Nifty 500 companies, Financials drove over 50% of the topline growth, aided by strong credit offtake, while Consumer Discretionary contributed 27.5%, led by consumer durables and apparel. Commodity sectors, viz., Materials and Energy, reported a weak quarter, reflecting the impact of weaker demand, lower realisations and weaker refining margins, while Industrials showed resilience, aided by a pick-up in government spending after election-led halt.
- Rising costs weighed on operating profits in Q2FY25:** Operating profit (EBITDA) for Nifty 50/Nifty 500 universe (ex. Financials) contracted 0.5%/4.1% YoY and 1.7%/4% QoQ, reflecting rising cost pressures that accentuated the slowdown in consumption demand. Operating expenses surged 6.4%/8.7% YoY, outpacing revenue growth of 3.5%/5.3% YoY, resulting in margin contraction of 83bps/172

While Nifty 500 companies reported a three-quarter low net sales growth of 8.3%, Nifty 50 companies reported a 15-quarter low growth of 6.6% YoY.

EBITDA growth rate moderated to -0.5% YoY/-1.7% QoQ and 4.1%YoY/4% QoQ for Nifty50 and Nifty 500 universe respectively.

¹ The ERI is calculated as “(number of upgrades – number of downgrades)/total number of upgrades and downgrades”. It can range between -1 to 1.

bps YoY to 20.4%/17.6%. For Nifty 500 universe ex-Nifty 50, margins fell by a higher 256bps YoY to a six-quarter low of 14.7%, despite better revenue performance. Higher share in incremental raw material costs of Energy (25%) and Consumer Discretionary (48%) sectors, yielded margin compression in Q2. Excluding Energy, Financials, and Consumer Discretionary, EBITDA grew by a decent 7.3% YoY, resulting in a margin accretion of 49bps to 22.7%.

- Adjusted PAT growth declined to an eight-quarter low in Q2:** Aggregate adjusted PAT growth for Nifty 50 and Nifty 500 companies fell to an eight-quarter low of 0.8% YoY and -4.1% YoY respectively in Q2FY25. Sector-wise, companies in the Financials sector have contributed majorly to the PAT growth in both Nifty 50 and Nifty 500 companies, counterbalancing the drag on overall profitability from commodity sectors including Energy and Materials. Weaker demand, falling prices and weaker refining margins for oil marketing companies weighed on the profitability of commodity-linked companies in the quarter gone by. Notably, five out of 11 GICS sector within the Nifty 500 universe reported a YoY contraction in aggregate profits. Further, while the Nifty 500 ex-Nifty 50 universe outperformed Nifty 50 companies in terms of topline growth, its performance in terms of profitability was weaker than that of the Nifty 50 companies at -10.1% YoY.
- A disappointing performance in Q2 triggered downward revisions in earnings estimates:** Our analysis of earnings revisions of top 200 covered companies by market capitalisation show that aggregate earnings estimate for FY25 fell by 3.6% since September-end, translating into earnings growth falling to 5.9% (As on December 12th) from 9.8% as of September-end. Notably, all sectors, barring Real Estate, have seen downgrades in earnings estimates during this period, led by Energy and Materials, reflecting the impact of a disappointing quarter and rising geopolitical uncertainty. Excluding these two—accounting for 64% of the change in aggregate earnings since September-end, the downward revision in aggregate profit estimate was relatively modest at 1.7%. Earnings estimate for FY26 was also cut by 2.9% since Sep-end, almost entirely reversing the upward revision seen in H1FY25, translating into an expected profit growth of 18.3% (CAGR over FY24-26: 11.9%). The downward revision in FY26 earnings was relatively broad-based, with Energy, Financials and Materials together accounting for nearly two-third to the absolute decline in FY26 profit estimate.
- ...With the ERI falling deep in the negative territory:** After a sharp drop following the onset of the Russia-Ukraine war in Feb'22, the Earnings Revision Indicator (ERI)² for the Nifty 50 universe picked up in H2-2022, indicating higher number of upgrades than downgrades. This was aided by resilient economic performance, strong Government capex and robust credit offtake by banks. The ERI moved in a tight band over the subsequent 15 months until March 2024, as in-line corporate earnings kept number of upgrades and downgrades contained. In FY25 thus far, however, the ERI has turned volatile again, and has fallen deep in the negative territory over the last three months. All sectors barring Healthcare IT, and Communication Services have the ERI values hovering in the negative territory, indicating a greater number of downgrades than upgrades.

Aggregate adjusted PAT growth for Nifty 50 and Nifty 500 companies came in at an eight-quarter low of 0.8% YoY and -4.1% YoY respectively in Q2FY25.

Aggregate earnings growth of top 200 companies is pegged at 5.9% and 18.3% in FY25 and FY26 respectively, implying an earnings CAGR of 11.9% during this period.

² The ERI is calculated as “(number of upgrades – number of downgrades)/total number of upgrades and downgrades”. It can range between -1 to 1.

Nifty 50 Q2FY25 results

Aggregate topline growth for Nifty50 companies moderated for the second quarter in a row:

The Nifty 50 companies experienced a slowdown in their topline growth for two straight quarters, with the YoY growth falling from 9.7% in Q1FY25 to a 15-quarter low of 6.6% in Q2FY25. On a sequential basis, the topline growth fell by a modest 0.1% QoQ as compared to a 2.2% QoQ drop in the previous quarter. Comparing this with the pre-pandemic performance, the topline growth in Q2FY25 was lower than the average of YoY/QoQ growth rate of 11.1%/1.2% witnessed in the same period over five years prior to the onset of the pandemic (2015-19). Within the Nifty 50 universe, 40 and 36 companies registered a YoY and QoQ expansion in net sales during the September quarter as compared to 45 and 29 companies respectively in the previous quarter.

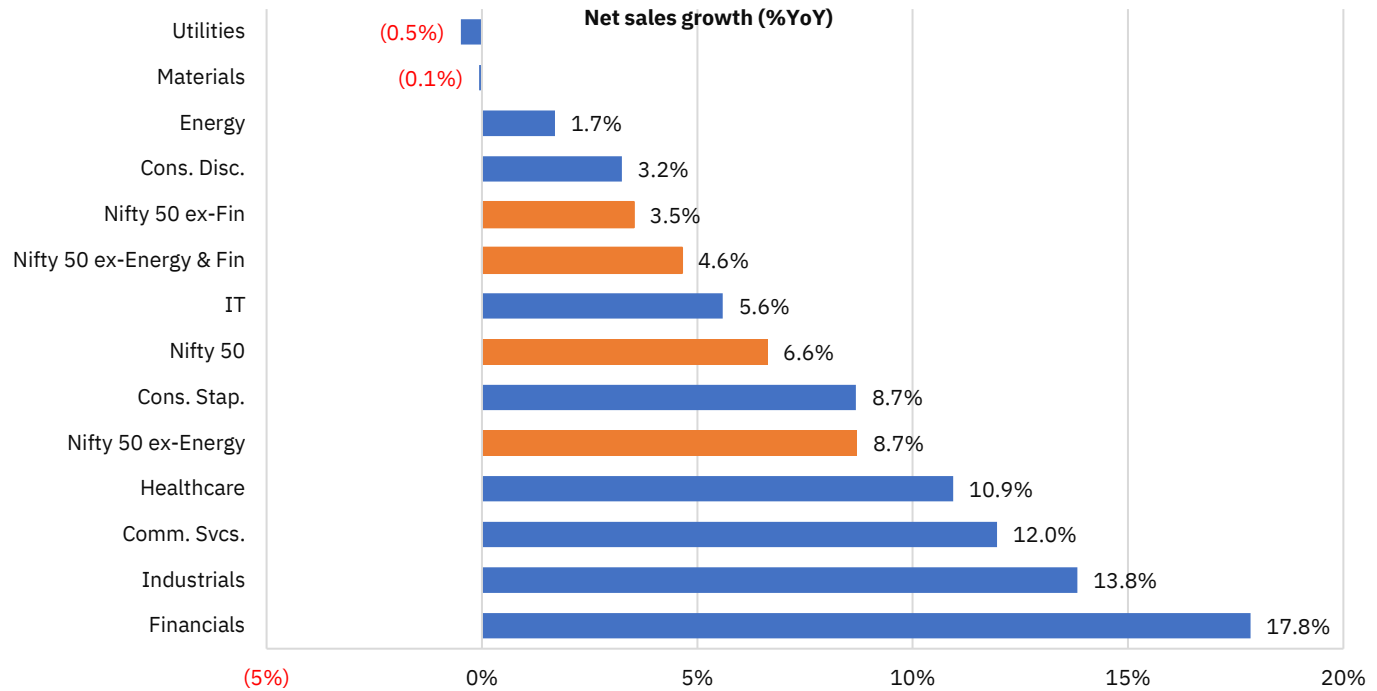
Sector-wise, Financials (gross interest income) continued to be the key driver of expansion in Nifty 50 net sales during the quarter, accounting for over 55% of the YoY rise, aided by strong recoveries and lower credit costs. That said, the sector's topline growth slowed for the third consecutive quarter, marking its weakest performance in the past eight quarters due to asset quality challenges. Excluding Financials, Nifty 50 universe posted a subdued topline growth of 3.5% YoY, reflecting the impact of weak external and domestic urban consumption demand. On the other hand, the industrials sector reported an improvement in topline growth, contributing slightly over 10% of the YoY rise in Nifty50 aggregate topline. This growth was driven by robust order books and increased government spending on infrastructure projects following the elections.

Among other sectors, Energy, contributing 29% to the Nifty 50's revenue, reported a modest 1.7% YoY growth in the September quarter. This was primarily led by declining refining and marketing margins, impacted by lower crude oil prices and weak demand. The Consumer Discretionary sector reported a 10-quarter low topline growth, due to muted commercial and passenger vehicle demand, partially offset by robust two-wheeler sales. Materials and Utilities sector reported YoY and QoQ decline in the September quarter, weighed by poor demand and lower commodity prices.

Table 1: Sector-wise net sales growth of Nifty 50 companies in Q2FY25

Sector	QoQ growth			YoY growth		
	Sep-23	Jun-24	Sep-24	Sep-23	Jun-24	Sep-24
Communication Services	(1.1)	2.4	7.7	7.3	2.8	12.0
Consumer Discretionary	5.3	(4.4)	(0.6)	24.8	9.3	3.2
Consumer Staples	3.4	2.6	6.4	4.5	5.6	8.7
Energy	(1.1)	(1.7)	(4.5)	(5.3)	5.3	1.7
Financials	11.7	1.0	4.3	33.3	26.2	17.8
Health Care	4.0	6.4	5.7	11.9	9.1	10.9
Industrials	1.3	(17.8)	4.4	(6.6)	10.5	13.8
Information Technology	0.7	1.4	2.9	5.6	3.4	5.6
Materials	(1.7)	(5.4)	(3.1)	0.7	1.4	(0.1)
Utilities	3.9	(0.1)	(6.0)	1.7	10.0	(0.5)
Nifty 50	2.8	(2.2)	(0.1)	7.5	9.7	6.6
Nifty 50 ex-Energy	4.6	(2.4)	1.8	14.0	11.7	8.7
Nifty 50 ex-Financials	0.6	(3.1)	(1.4)	2.0	5.6	3.5
Nifty 50 ex-energy ex-fin	1.7	(4.0)	0.6	7.1	5.8	4.6
Nifty 50 excl HDFCBK	1.4	(2.4)	(0.2)	5.5	8.1	6.4

Source: CMIE Prowess, LSEG workspace, NSE EPR. Note: The above table provides data for companies in the Nifty 50 index as on September 30th, 2024.

Figure 1: Sector-wise net sales growth of Nifty 50 companies in Q2FY25


Source: CMIE Prowess, LSEG workspace, NSE EPR

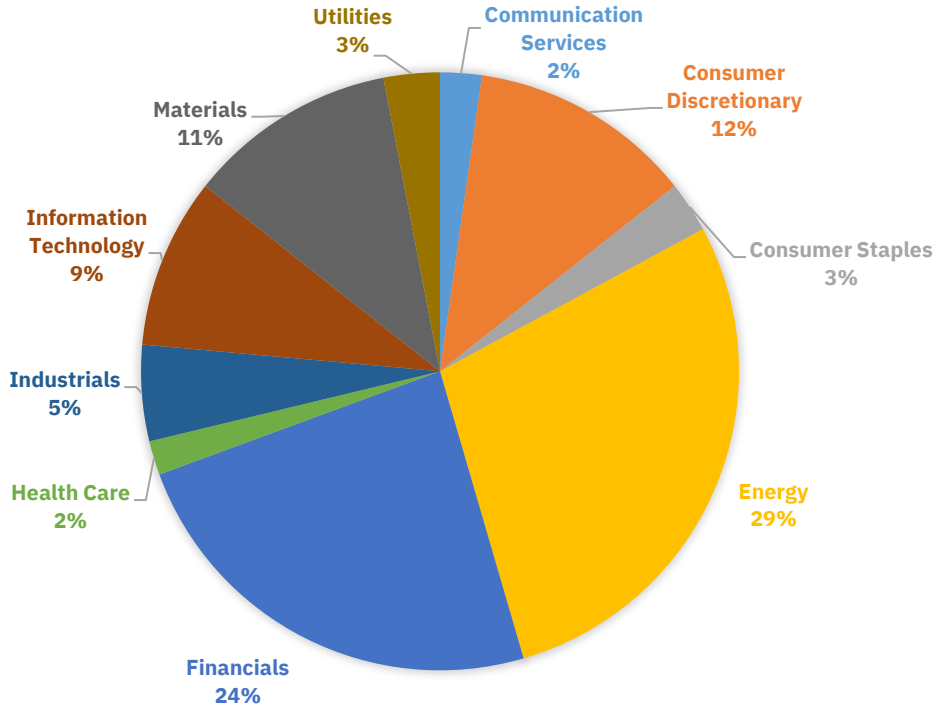
 Note: The above chart provides data for companies in the Nifty 50 index as on September 30th, 2024.

Table 2: Sector-wise contribution of Nifty 50 companies to net sales growth in Q2FY25

Sector	Net sales (Rs crore)	Contribution to net sales growth	
		% QoQ	% YoY
Communication Services	41,473	0.2	0.3
Consumer Discretionary	2,23,507	(0.1)	0.4
Consumer Staples	50,648	0.2	0.2
Energy	5,23,322	(1.3)	0.5
Financials	4,40,855	1.0	3.9
Health Care	33,970	0.1	0.2
Industrials	95,835	0.2	0.7
Information Technology	1,69,722	0.3	0.5
Materials	2,09,017	(0.4)	(0.0)
Utilities	55,974	(0.2)	(0.0)
Nifty 50	18,44,323	(0.1)	6.6
Nifty 50 ex-Energy	13,21,000	(126.6)	6.1
Nifty 50 ex-Financials	14,03,468	104.6	2.8
Nifty 50 ex-energy ex-fin	8,80,145	(28.6)	2.3

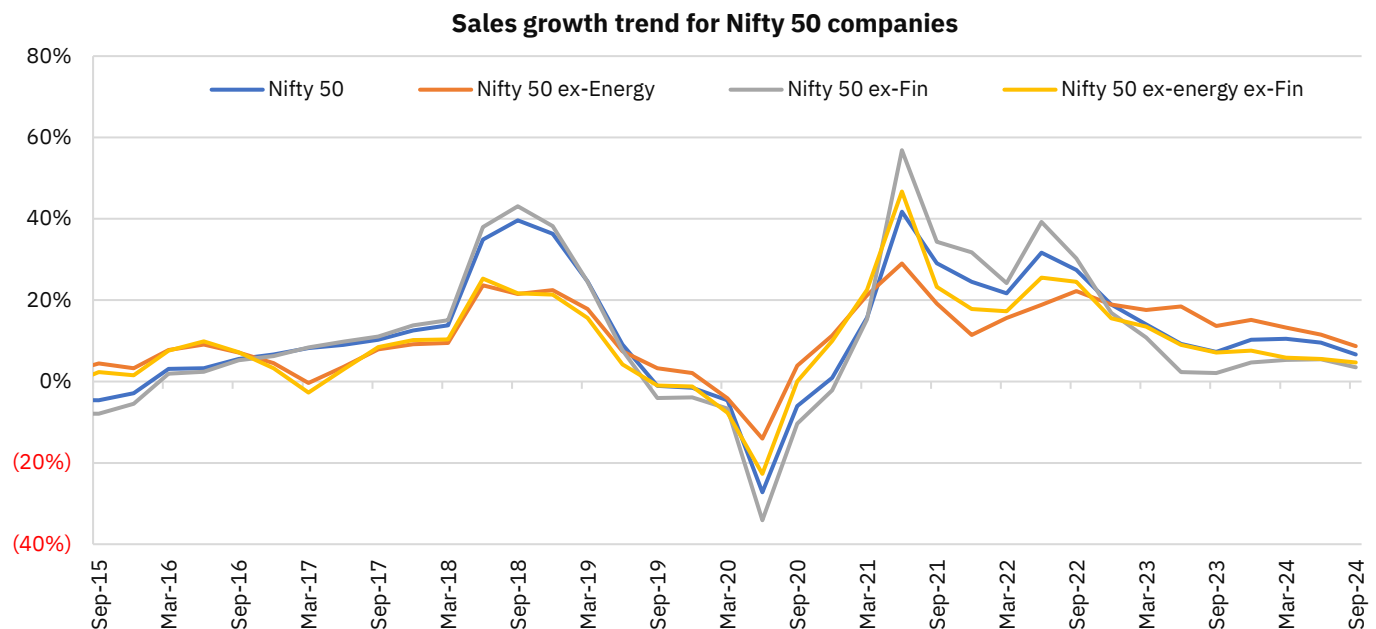
Source: CMIE Prowess, LSEG workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 50 index as on September 30th, 2024.

Figure 2: Sector-wise share in net sales of Nifty 50 companies in Q2FY25


Source: CMIE Prowess, LSEG workspace, NSE EPR

Note: The above chart provides data for companies in the Nifty 50 index as on September 30th, 2024.

Figure 3: Quarterly trend of Nifty 50 revenue growth (YoY)


Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: The above chart includes companies in the Nifty 50 index as on end of respective quarters.

Nifty50 companies' EBITDA growth in Q2FY25 declined to an eight-quarter low: The operating profit (EBITDA) growth rate of non-financial Nifty 50 companies moderated for the four consecutive quarters. In Q2FY25, aggregate EBITDA contracted by 0.5% YoY and 1.7% QoQ, much lower than the average YoY growth rate of 7% witnessed in the September quarters over five years prior to the onset of the pandemic (2015-19). As a

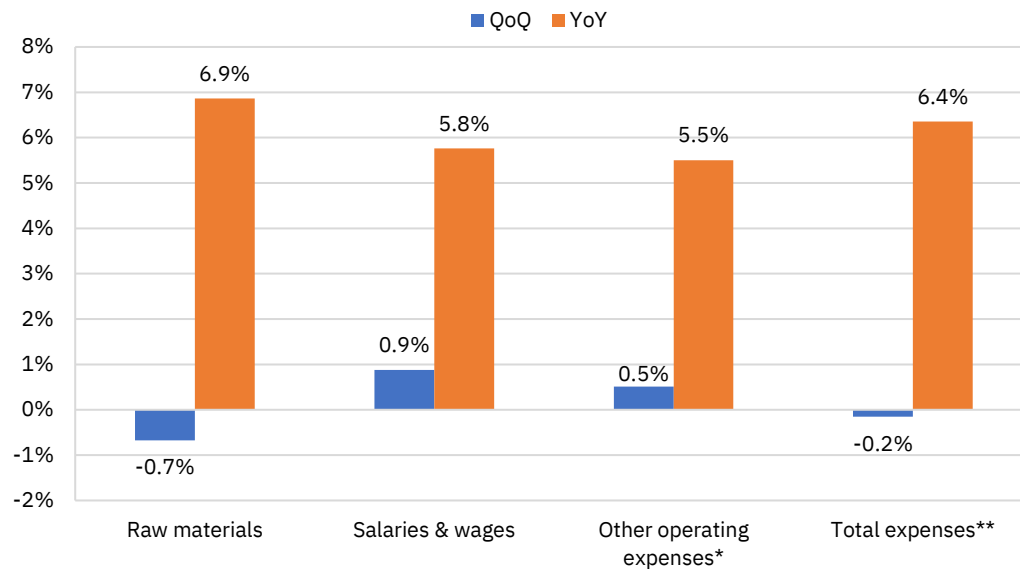
result, EBITDA margins contracted by 83bps YoY and 8bps QoQ to 20.4%. Out of 39 non-financial companies in the Nifty50 Index, 28 and 20 companies registered a YoY and QoQ expansion in EBITDA in Q2FY25 vs. 34 and 39 companies respectively in the previous quarter. These trends highlight a broad-based pressure on profitability, driven by a combination of slowing demand and rising operational costs.

Raw material costs for Nifty50 universe excluding Financials surged 6.9% YoY, resulting in an expansion of the raw material costs to net sales ratio by 64bps YoY/108bps QoQ, driven by slowdown in revenue growth and rising input costs. Energy sector contributed a significant 54% to the YoY rise in raw material costs for the universe, with a growth rate of 7.2% YoY. This was primarily influenced by softer product prices and weaker demand amid global uncertainties and subdued domestic industrial activity.

The wage bill for non-financial Nifty 50 companies grew by 5.8% YoY, with its share of net sales rising by a modest 4bps YoY in Q2FY25. Notably, IT and Consumer Discretionary sectors accounted for 57% of the increase. Total operating expenses of non-financial Nifty 50 companies rose by 6.4% YoY, outpacing the net sales growth of 3.5% YoY for this universe, indicating cost pressures. Sequentially, operating expenses contracted by a modest 0.2% QoQ, more than offset by a higher 1.4% QoQ decline in net sales.

Barring Energy that reported the steepest decline in the last 17 quarters, all other sectors registered a YoY expansion in EBITDA in the quarter gone by. Excluding Financials and Energy, aggregate EBITDA of the Nifty 50 companies grew by 7.5% YoY, exceeding the revenue growth of 4.6% YoY, thereby resulting in a margin accretion of 60bps YoY to 22.9% for this universe.

Figure 4: Change in expenses for Nifty 50 companies (ex-Financials) in Q2FY25



Source: CMIE Prowess, LSEG workspace, NSE EPR

- *Other operating expenses include selling, general & administrative expenses, rental expenses, and other operating costs.
- ** Total expenses exclude interest expenses and depreciation.
- The above chart provides data for companies in the Nifty 50 index as on September 30th, 2024.

Table 3: Sector-wise EBITDA growth of Nifty 50 companies in Q2FY25

Sector	QoQ growth			YoY growth		
	Sep-23	Jun-24	Sep-24	Sep-23	Jun-24	Sep-24
Communication Services	(0.5)	2.3	10.4	12.5	2.2	13.4
Consumer Discretionary	7.6	(1.7)	(8.4)	57.1	20.4	2.5
Consumer Staples	1.9	1.0	0.1	10.4	2.9	1.0
Energy	(3.5)	(7.5)	(6.1)	59.2	(13.0)	(15.4)
Financials	10.4	0.3	4.3	50.0	27.3	20.3
Health Care	6.3	14.6	6.7	15.9	15.3	15.9
Industrials	9.9	(10.8)	8.2	18.9	19.9	18.1
Information Technology	2.7	(3.7)	0.1	4.9	9.0	6.3
Materials	(6.4)	(5.6)	(4.2)	32.8	3.4	5.9
Utilities	3.2	(4.8)	3.4	9.0	6.6	6.8
Nifty 50	4.8	(2.0)	1.3	39.6	13.2	9.4
Nifty 50 ex-Energy	6.9	(1.0)	2.7	35.9	19.6	14.9
Nifty 50 ex-Financials	0.3	(4.3)	(1.7)	31.4	1.5	(0.5)
Nifty 50 ex-energy ex-fin	2.4	(2.9)	0.2	20.1	9.8	7.5

Source: CMIE Prowess, LSEG Workspace, NSE EPR

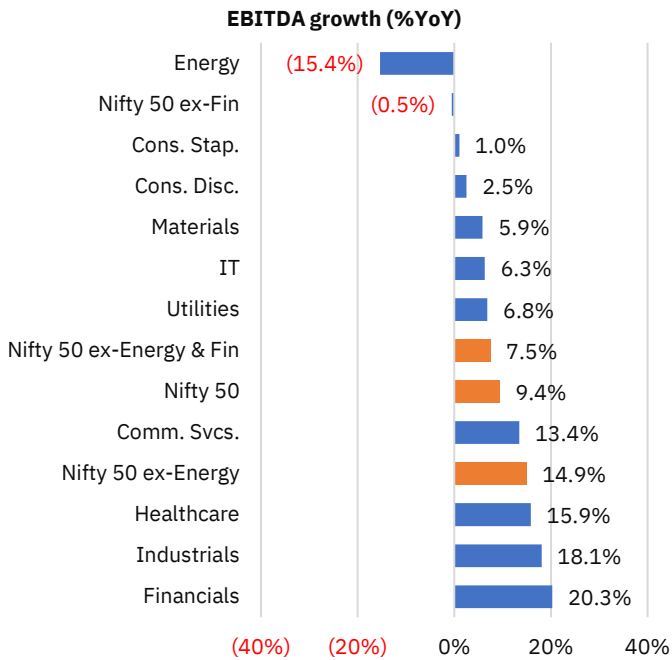
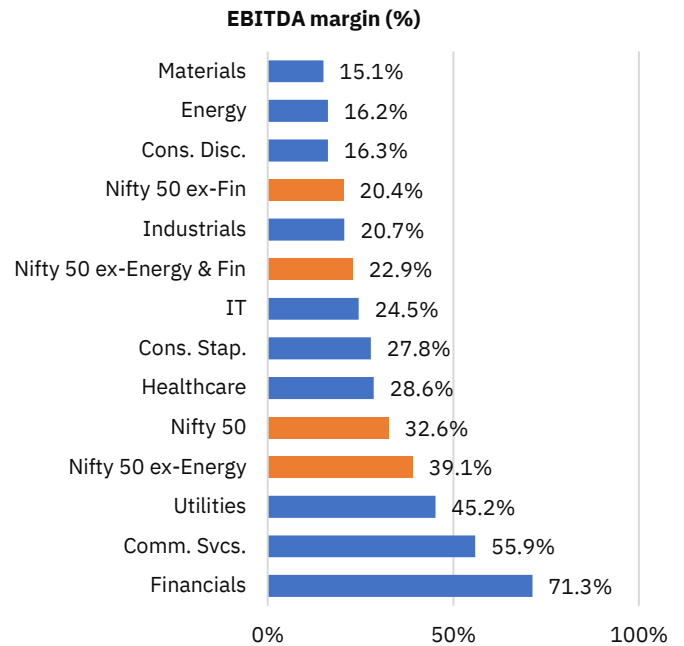
 Note: The above table provides data for companies in the Nifty 50 index as on September 30th, 2024.

Table 4: Sector-wise EBITDA margin of Nifty 50 companies in Q2FY25

Sector	EBITDA Margin	QoQ change (bps)	YoY change (bps)
Communication Services	55.9	139	73
Consumer Discretionary	16.3	(140)	(11)
Consumer Staples	27.8	(177)	(210)
Energy	16.2	(28)	(328)
Financials	71.3	1	143
Health Care	28.6	27	122
Industrials	20.7	72	75
Information Technology	24.5	(67)	17
Materials	15.1	(17)	84
Utilities	45.2	409	309
Nifty 50	32.6	45	82
Nifty 50 ex-Energy	39.1	33	211
Nifty 50 ex-Financials	20.4	(8)	(83)
Nifty 50 ex-energy ex-fin	22.9	(8)	60

Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 50 index as on September 30th, 2024.

Figure 5: Sector-wise EBITDA growth of Nifty 50 companies in Q2FY25

Figure 6: Sector-wise EBITDA margin of Nifty 50 companies in Q2FY25


Source: CMIE Prowess, LSEG Workspace, NSE EPR

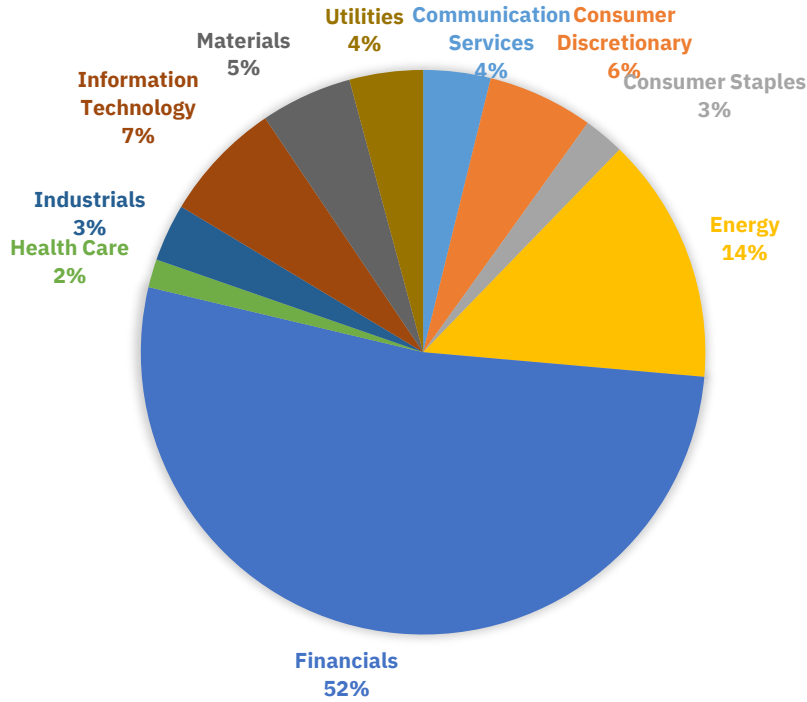
 Note: The above charts provide data for companies in the Nifty 50 index as on September 30th, 2024.

Table 5: Sector-wise contribution of Nifty 50 companies to EBITDA growth in Q2FY25

Sector	EBITDA (Rs crore)	Contribution to EBITDA growth	
		% QoQ	% YoY
Communication Services	23,175	0.4	0.5
Consumer Discretionary	36,380	(0.6)	0.2
Consumer Staples	14,069	0.0	0.0
Energy	84,944	(0.9)	(2.8)
Financials	3,14,316	2.2	9.6
Health Care	9,717	0.1	0.2
Industrials	19,806	0.3	0.6
Information Technology	41,647	0.0	0.5
Materials	31,478	(0.2)	0.3
Utilities	25,293	0.1	0.3
Nifty 50	6,00,823	1.3	9.4
Nifty 50 ex-Energy	5,15,880	2.3	12.2
Nifty 50 ex-Financials	2,86,508	(0.9)	(0.3)
Nifty 50 ex-energy ex-fin	2,01,564	0.1	2.5

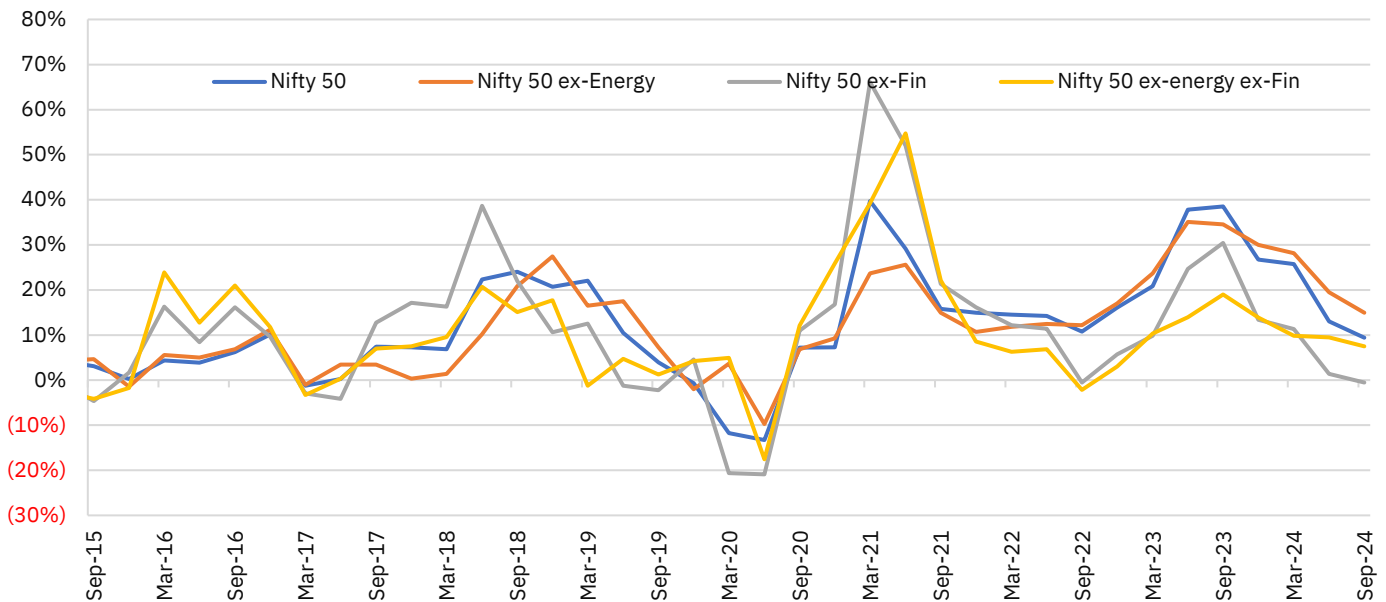
Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 50 index as on September 30th, 2024.

Figure 7: Sector-wise share in EBITDA of Nifty 50 companies in Q2FY25


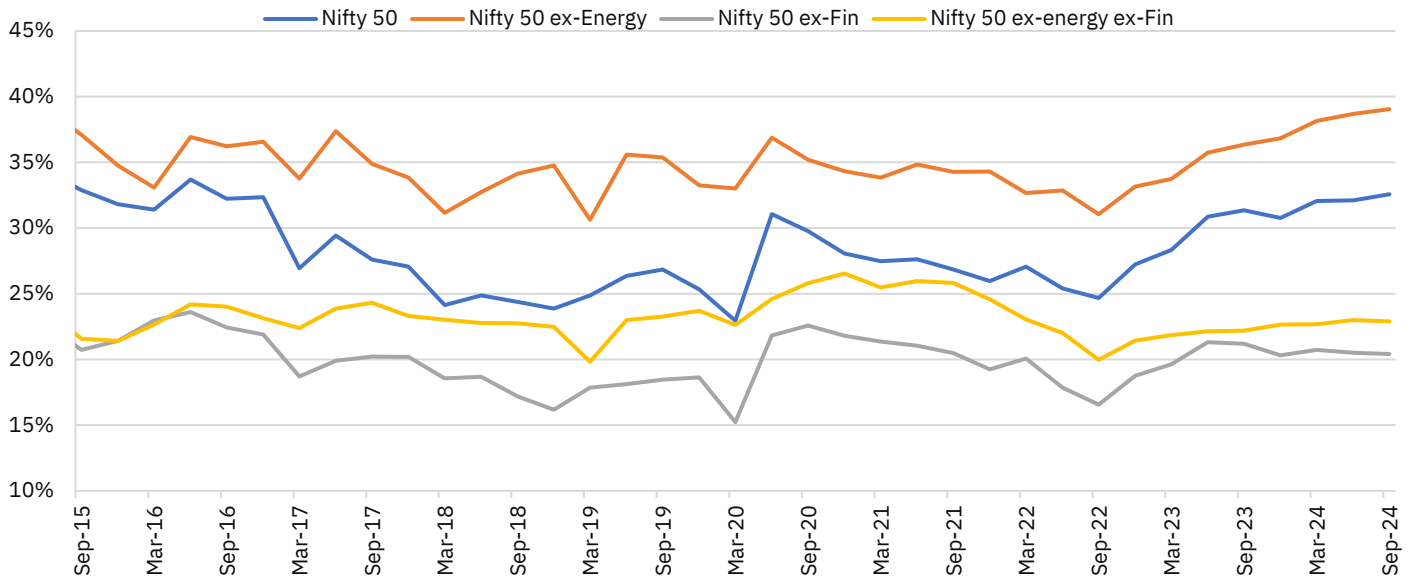
Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above chart provides data for companies in the Nifty 50 index as on September 30th, 2024.

Figure 8: Quarterly trend of Nifty 50 EBITDA growth (YoY)
EBITDA growth trend for Nifty 50 companies


Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: The above chart includes companies in the Nifty 50 index as on end of respective quarters.

Figure 9: Quarterly EBITDA margin trend of Nifty 50 companies
EBITDA margin trend for Nifty 50 companies


Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: The above chart includes companies in the Nifty 50 index as on end of respective quarters.

PAT growth for Nifty 50 universe dropped to an eight-quarter low in Q2FY25: In the quarter ending September 2024, the PAT growth rate for Nifty 50 companies came in at a modest 0.8% YoY to Rs 2.03 lakh crore. This marked the slowest YoY expansion in the last eight quarters, attributed to rising costs and moderation in revenue growth. Within Nifty 50 companies, 23 and 15 companies reported a YoY and QoQ growth in PAT in the September quarter, down from 37 and 21 companies respectively in the June quarter. The Financials sector, which accounts for 38% of the total PAT for Nifty 50 companies, was the primary contributor to PAT growth in Q2. Excluding Financials, aggregate PAT actually declined by 7.4% YoY, marking the second consecutive decline in the last seven quarters. While the Nifty 50 PAT margin fell to a three-quarter low of 11%, it dropped to a seven-quarter low of 8.9% when excluding Financials.

Among other sectors, the YoY PAT growth was led by Industrials supported by robust revenue performance in Q2 in the wake of pick up in government capex spending. On the other hand, Energy sector dragged the PAT lower, with a YoY contraction of 26.8%, marking the steepest YoY decline in the last eight quarters, attributed to lower refining margins. Excluding Energy, Nifty 50 PAT grew at a decent pace of 10.3% YoY, with a PAT margin of 12.5% (+18bps YoY). Consumer Discretionary, Consumer Staples and Materials sectors also weighed on profitability of Nifty 50 universe, primarily due to weak urban consumption demand, lower realisations and reduced industrial activity.

Table 6: Sector-wise PAT growth of Nifty 50 companies in Q2FY25

Sector	QoQ growth			YoY growth		
	Sep-23	Jun-24	Sep-24	Sep-23	Jun-24	Sep-24
Communication Services	141.0	53.8	36.5	23.0	100.2	13.4
Consumer Discretionary	11.2	(38.7)	(18.8)	112.3	31.9	(3.8)
Consumer Staples	1.3	(1.9)	(0.8)	6.6	1.1	(0.9)
Energy	(5.3)	(13.0)	(8.7)	83.1	(24.0)	(26.8)
Financials	2.9	(2.3)	6.8	24.5	13.3	17.6
Health Care	8.7	9.6	7.5	20.4	18.4	17.0
Industrials	13.1	(14.8)	12.7	30.4	32.4	32.0
Information Technology	2.1	(5.8)	(1.5)	3.1	10.1	6.3
Materials	(12.3)	(13.9)	(19.9)	87.2	(6.7)	(14.8)
Utilities	0.0	(12.0)	(2.1)	18.3	10.2	7.8
Nifty 50	1.6	(10.5)	(1.0)	37.5	3.5	0.8
Nifty 50 ex-Energy	4.2	(9.8)	0.9	26.6	14.0	10.3
Nifty 50 ex-Financials	1.0	(14.4)	(5.4)	44.9	(1.1)	(7.4)
Nifty 50 ex-energy ex-fin	5.3	(15.0)	(3.9)	28.4	14.5	4.5
Nifty 50 excl HDFCBK	(0.0)	(12.6)	(1.9)	37.2	1.2	(0.7)

Source: CMIE Prowess, LSEG Workspace, NSE EPR

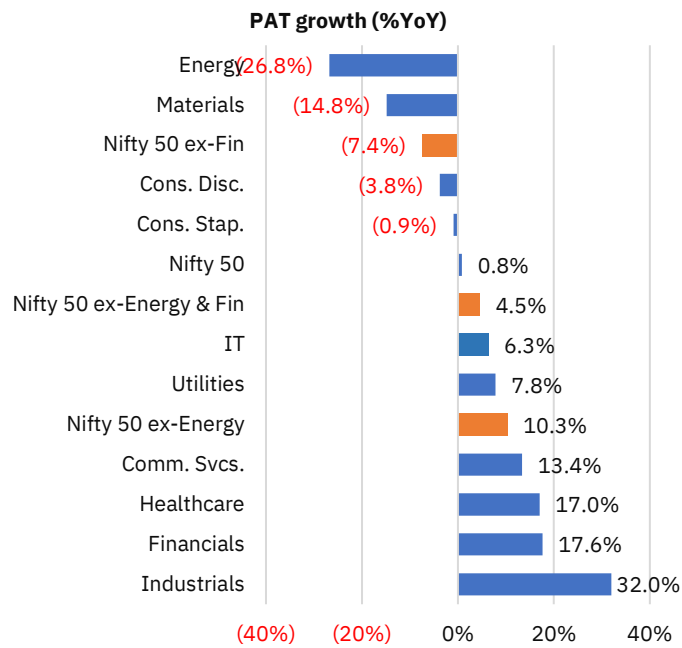
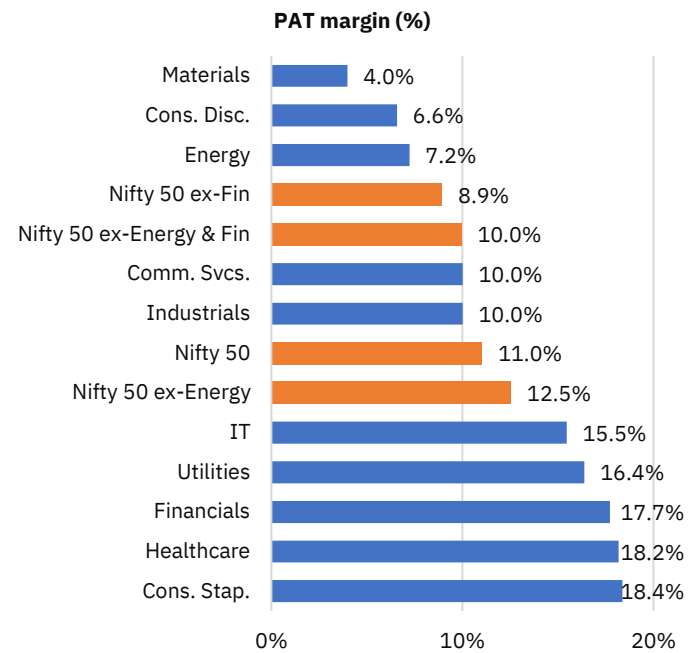
 Note: The above table provides data for companies in the Nifty 50 index as on September 30th, 2024.

Table 7: Sector-wise PAT margin of Nifty 50 companies in Q2FY25

Sector	PAT Margin	QoQ change (bps)	YoY change (bps)
Communication Services	10.0	211	12
Consumer Discretionary	6.6	(148)	(48)
Consumer Staples	18.4	(135)	(178)
Energy	7.2	(34)	(281)
Financials	17.7	43	(3)
Health Care	18.2	29	94
Industrials	10.0	74	138
Information Technology	15.5	(69)	10
Materials	4.0	(84)	(69)
Utilities	16.4	65	126
Nifty 50	11.0	(11)	(63)
Nifty 50 ex-Energy	12.5	(11)	18
Nifty 50 ex-Financials	8.9	(38)	(105)
Nifty 50 ex-energy ex-fin	10.0	(46)	(1)

Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 50 index as on September 30th, 2024.

Figure 10: Sector-wise PAT growth of Nifty 50 companies in Q2FY25

Figure 11: Sector-wise PAT margin of Nifty 50 companies in Q2FY25


Source: CMIE Prowess, LSEG Workspace, NSE EPR

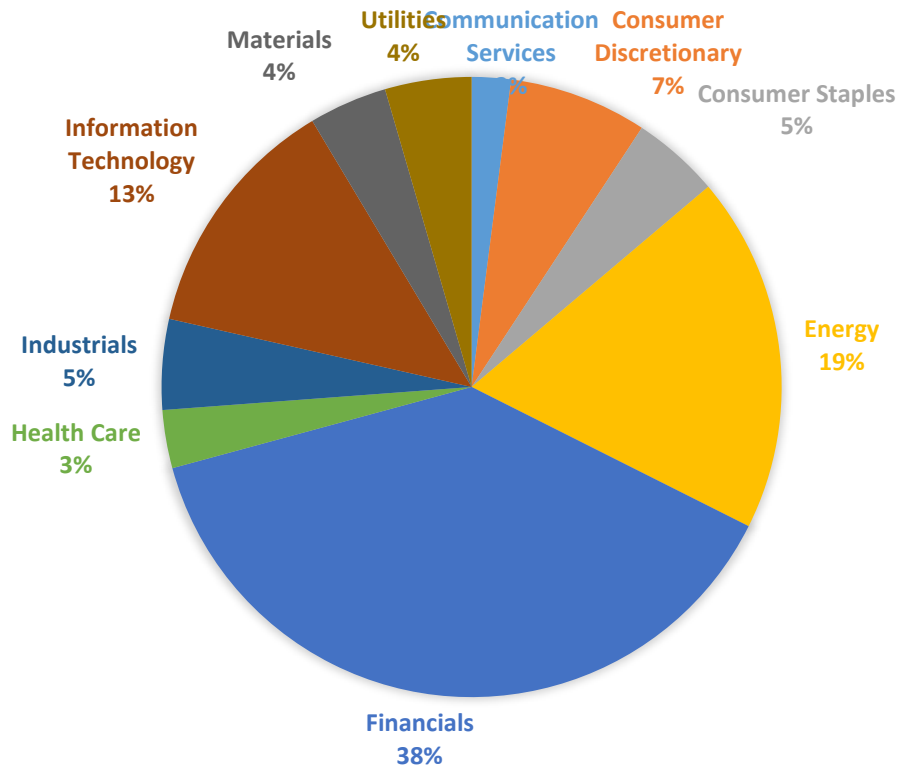
 Note: The above charts provide data for companies in the Nifty 50 index as on September 30th, 2024.

Table 8: Sector-wise contribution of Nifty 50 companies to PAT growth in Q2FY25

Sector	PAT (Rs crore)	Contribution to PAT growth	
		% QoQ	% YoY
Communication Services	4,153	0.5	0.2
Consumer Discretionary	14,685	(1.7)	(0.3)
Consumer Staples	9,309	(0.0)	(0.0)
Energy	37,849	(1.8)	(6.9)
Financials	78,133	2.4	5.8
Health Care	6,172	0.2	0.4
Industrials	9,599	0.5	1.2
Information Technology	26,236	(0.2)	0.8
Materials	8,313	(1.0)	(0.7)
Utilities	9,173	(0.1)	0.3
Nifty 50	2,03,622	(1.0)	0.8
Nifty 50 ex-Energy	1,65,774	0.7	7.7
Nifty 50 ex-Financials	1,25,489	(3.5)	(5.0)
Nifty 50 ex-energy ex-fin	87,641	(1.7)	1.9

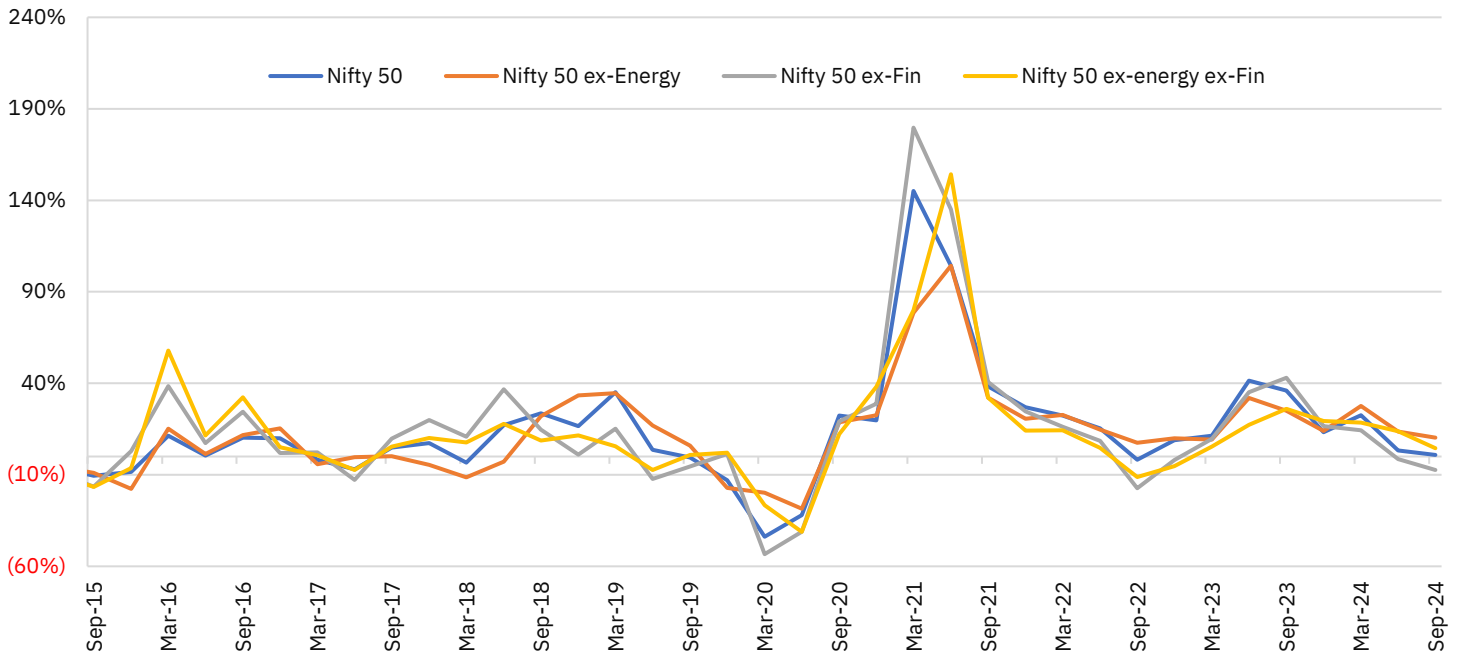
Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 50 index as on September 30th, 2024.

Figure 12: Sector-wise share in PAT of Nifty 50 companies in Q2FY25


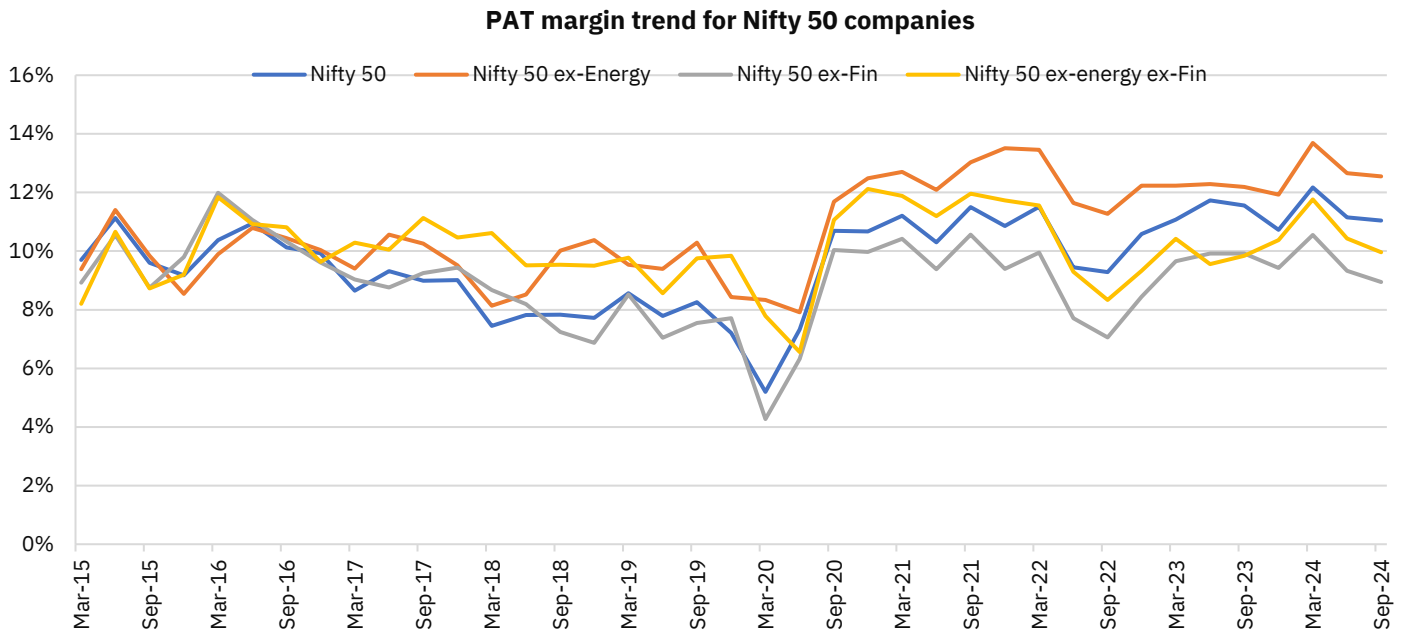
Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above chart provides data for companies in the Nifty 50 index as on September 30th, 2024

Figure 13: Quarterly trend of Nifty 50 PAT growth (YoY)
PAT growth trend for Nifty 50 companies


Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: The above chart includes companies in the Nifty 50 index as on end of respective quarters.

Figure 14: PAT margin trend of Nifty 50 companies


Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: The above chart includes companies in the Nifty 50 index as on end of respective quarters.

Nifty 500 Q2FY25 results

Topline growth for Nifty500 companies slowed to a three-quarter low in Q2FY25:

Aggregate top line for the Nifty 500 companies increased by 8.3% YoY to Rs 39 lakh crore in Q2FY25, slowing down from 8.5% and 9.9% YoY growth in Q1FY25 and Q4FY24 respectively. On a sequential basis, aggregate revenues saw a modest 0.5% QoQ rise, weighed down by weak consumer demand, higher input costs and global economic uncertainties.

Nifty 50 companies, that represent 48% of the aggregate revenue of Nifty 500 universe, accounted for 38% to the YoY expansion in the overall revenue growth of the Nifty 500 universe in the September quarter, down from 49% in the previous quarter. Excluding the Nifty 50 companies, the revenue growth of Nifty 500 companies in Q2FY25 stood at a robust rate on 9.8% YoY – the highest in the last six quarters. Among these, Nifty Next 50, Nifty Midcap 150 and Nifty Smallcap 250 companies contributed 24%, 23% and 15% respectively to the overall revenue growth of Nifty 500 universe.

Within the Nifty 500 universe, 394 and 351 companies recorded expansion in the revenues on a YoY and QoQ basis respectively in the September quarter. Notably, the Nifty 500 universe (ex. Nifty 50) fared better in the September quarter as compared to the average YoY growth rate of 6.4% witnessed in the same period over five years prior to the onset of the pandemic (2015- 19).

Sector-wise: The topline growth of Nifty500 companies was primarily driven by the Financials sector (gross interest income), accounting for more than half of the overall growth in the Nifty 500 universe. This was due to higher credit offtake, better recoveries, and reduced credit costs. Excluding Financials, the YoY growth for the Nifty 500

(excluding Nifty 50) was 7.2%, while the overall YoY growth for the Nifty 500 stood at a slightly lower 5.3%.

Consumer Discretionary sector was the second-largest contributor (27.5%) to the topline growth in the Nifty 500 (ex. Nifty 50 universe), supported by strong demand in consumer durables and apparels segment, which grew by a solid 53.3% YoY. This was partially offset by weak demand in auto sector, which saw a modest 10% YoY growth in the September quarter. Consumer Staples also witnessed a decent growth, driven by rural demand although urban demand remained subdued.

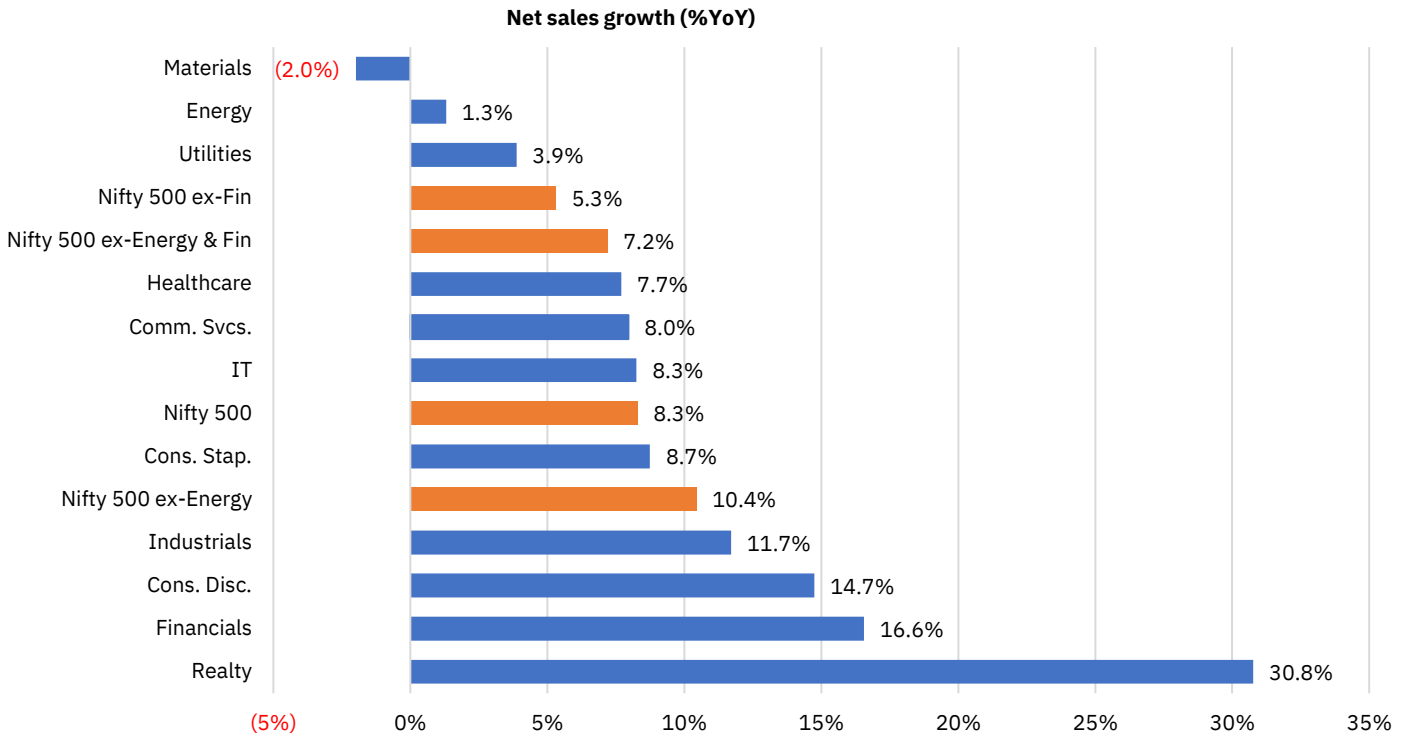
Sectors that underperformed in Q2FY25 include a) Materials: Declining prices and falling demand affected the sector's revenue growth (+2% YoY/-0.6% QoQ in the September quarter). b) Energy: The sector recorded its weakest performance in the past three quarters with a modest 1.3% YoY and -6.7% QoQ, due to weak demand and lower refining and marketing margins, caused by drop in crude prices during the quarter.

Table 9: Sector-wise net sales growth of Nifty 500 companies in Q2FY25

Sector	QoQ growth			YoY growth		
	Sep-23	Jun-24	Sep-24	Sep-23	Jun-24	Sep-24
Communication Services	(2.3)	3.0	3.5	7.7	3.4	8.0
Consumer Discretionary	(7.5)	(7.7)	2.5	4.9	3.8	14.7
Consumer Staples	1.3	5.4	2.1	3.9	7.9	8.7
Energy	(4.6)	(2.0)	(6.7)	(9.1)	3.7	1.3
Financials	7.5	(2.7)	5.0	16.6	19.3	16.6
Health Care	3.2	2.2	4.5	13.6	6.4	7.7
Industrials	2.6	(16.5)	3.2	6.3	10.2	11.7
Information Technology	1.7	0.6	5.1	10.0	4.8	8.3
Materials	2.3	(4.2)	(0.6)	1.4	1.4	(2.0)
Real Estate	8.6	(22.2)	13.5	29.1	24.1	30.8
Utilities	3.5	7.8	(5.4)	2.6	13.5	3.9
Nifty 500	0.7	(3.4)	0.5	4.0	8.5	8.3
Nifty 500 ex-Energy	2.4	(3.8)	2.8	8.9	10.1	10.4
Nifty 500 ex-Financials	(1.6)	(3.6)	(1.1)	0.1	4.9	5.3
Nifty 500 ex-energy ex-fin	(0.1)	(4.4)	1.6	5.1	5.5	7.2

Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: The above table provides data for companies in the Nifty 500 index as on September 30th, 2024.

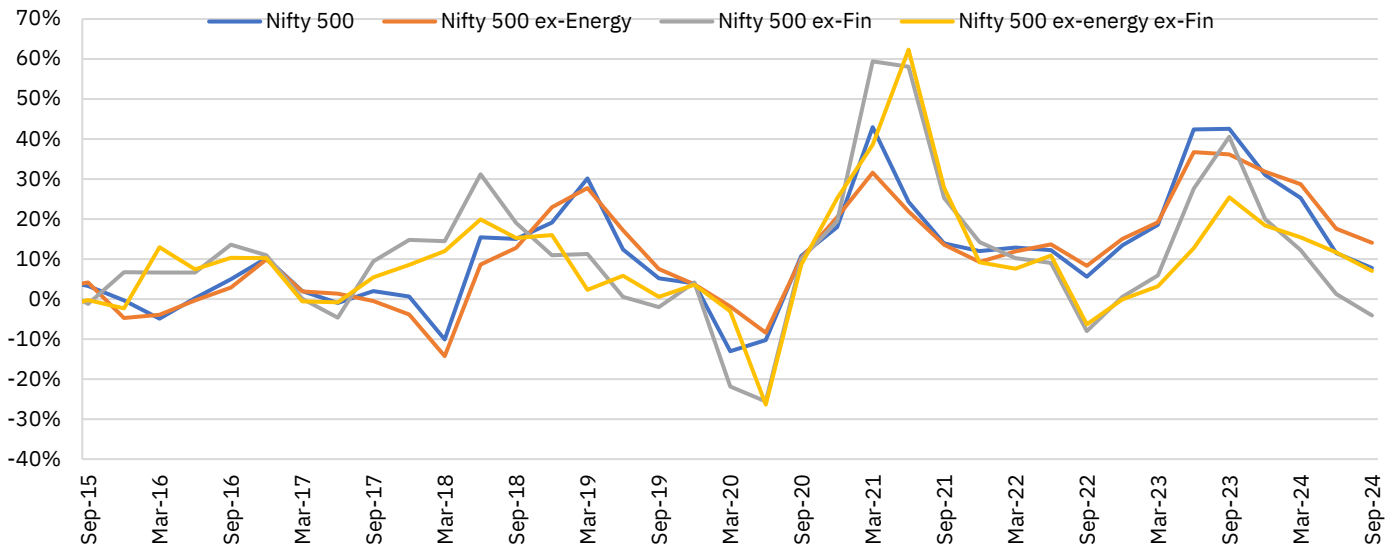
Figure 15: Sector-wise net sales growth of Nifty 500 companies in Q2FY25


Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above chart provides data for companies in the Nifty 500 index as of September 30th, 2024.

Figure 16: Quarterly Nifty 500 revenue growth trend (YoY)

EBITDA growth trend for Nifty 500 companies



Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: The above chart includes companies in the Nifty 500 index as on end of respective quarters.

Table 10: Sector-wise contribution of Nifty 500 companies to net sales growth in Q2FY25

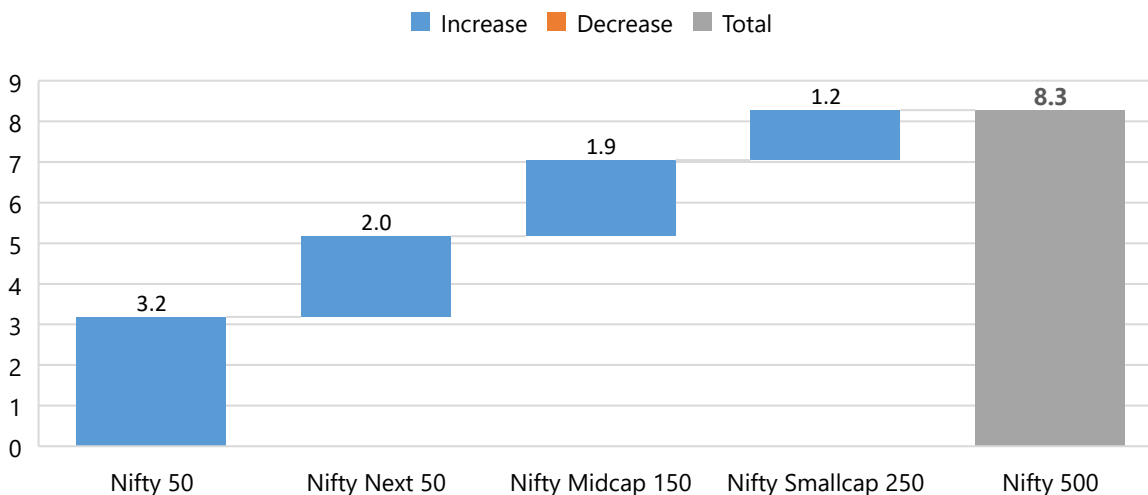
Sector	Net sales (Rs crore)	Contribution to net sales growth	
		% QoQ	% YoY
Communication Services	79,196	0.1	0.2
Consumer Discretionary	4,47,626	0.3	1.6
Consumer Staples	1,31,458	0.1	0.3
Energy	8,59,299	-1.6	0.3
Financials	11,12,119	1.4	4.4
Health Care	1,06,378	0.1	0.2
Industrials	2,78,024	0.2	0.8
Information Technology	2,40,842	0.3	0.5
Materials	4,60,373	-0.1	-0.3
Real Estate	13,591	0.0	0.1
Utilities	1,68,491	-0.3	0.2
Nifty 500	38,97,396	0.5	8.3
Nifty 500 ex-Energy	30,38,097	2.2	8.0
Nifty 500 ex-Financials	27,85,277	-0.8	3.9
Nifty 500 ex-energy ex-fin	19,25,978	0.8	3.6

Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 500 index as of September 30th, 2024.

Figure 17: Share of Nifty index constituents in overall net sales growth of Nifty 500 universe in Q2FY25

Contribution of Nifty index constituents to the overall net sales growth (%YoY) in Q3FY24



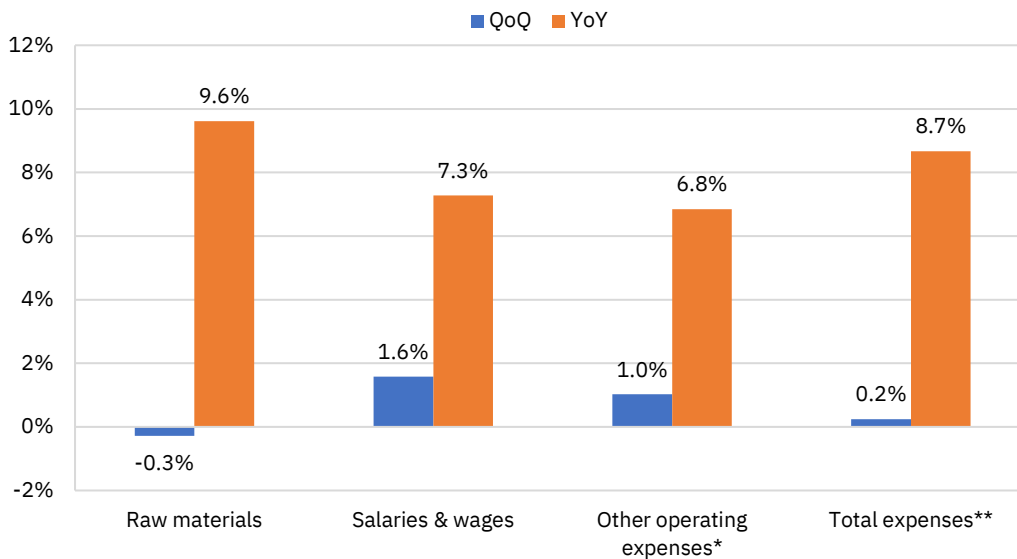
Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above chart provides data for companies in the Nifty 500 index as of September 30th, 2024.

Rising operating costs eroded margins in Q2: While net sales of Nifty 500 universe (excl. financials) grew 5.3% YoY in Q2FY25, operating expenses surged 8.7% YoY, leading to a 4.1% YoY decline EBITDA of mere 1.3% YoY, marking the sharpest decline in EBITDA in last eight quarters. This resulted in a 172bps YoY compression in EBITYDA margins to 17.6%. For Nifty 500 companies excluding Nifty 50, margins fell by 256bps YoY to 14.7, the lowest in last six quarters. Within the Nifty 500 universe, 269/218 (vs. 293/186 in Q1FY25) non-financial companies registered a YoY/QoQ growth in EBITDA.

Raw material costs for the Nifty 500 universe, excluding Financials, surged 9.6% on a YoY basis, pushing the raw material to net sales ratio up by 344bps YoY to 55.8%. While Energy sector accounted for over half of the rise in raw materials costs in Nifty 50 universe, Consumer Discretionary led the rise in raw materials costs in Nifty 500 universe, contributing 37%, closely followed by Energy sector at 35%. Excluding Energy, Financials and Consumer Discretionary, EBITDA of Nifty 500 companies grew by 7.3% YoY, outpacing net sales growth of 5.1% YoY, resulting in an operating margin expansion of 49bps YoY to 22.7%.

Figure 18: Change in expenses for Nifty 500 companies (ex-Financials) in Q2FY25



Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: 1. The above chart provides data for companies in the Nifty 500 index as of September 30th, 2024.

2. *Other operating expenses include selling, general & administrative expenses, rental expenses, and other operating costs.

3. ** Total expenses exclude interest expenses and depreciation.

Table 11: Sector-wise EBITDA growth of Nifty 500 companies in Q2FY25

Sector	QoQ growth			YoY growth		
	Sep-23	Jun-24	Sep-24	Sep-23	Jun-24	Sep-24
Communication Services	1.0	1.7	8.9	14.8	2.6	13.1
Consumer Discretionary	3.8	(1.4)	(6.2)	45.8	16.3	5.5
Consumer Staples	0.0	7.5	(3.6)	15.3	11.1	7.1
Energy	(2.6)	(11.3)	(13.6)	105.0	(23.7)	(32.3)
Financials	7.4	0.4	4.5	44.3	21.7	18.8
Health Care	8.2	14.4	1.7	28.8	25.6	18.3
Industrials	2.9	(18.0)	(1.5)	26.0	21.4	18.8
Information Technology	2.9	(4.3)	3.0	8.9	8.5	8.6
Materials	3.8	(0.6)	(2.2)	30.7	7.5	(1.1)
Real Estate	34.8	(9.7)	(15.0)	191.8	52.6	(7.0)
Utilities	1.6	9.6	(3.2)	27.5	6.2	2.4
Nifty 500	4.5	(1.4)	0.6	43.1	11.6	7.7
Nifty 500 ex-Energy	5.7	(0.2)	2.2	36.6	17.6	14.1
Nifty 500 ex-Financials	1.6	(3.6)	(4.0)	41.9	1.3	(4.1)
Nifty 500 ex-energy ex-fin	3.3	(1.1)	(1.3)	26.5	11.8	7.1

Source: CMIE Prowess, LSEG Workspace, NSE EPR

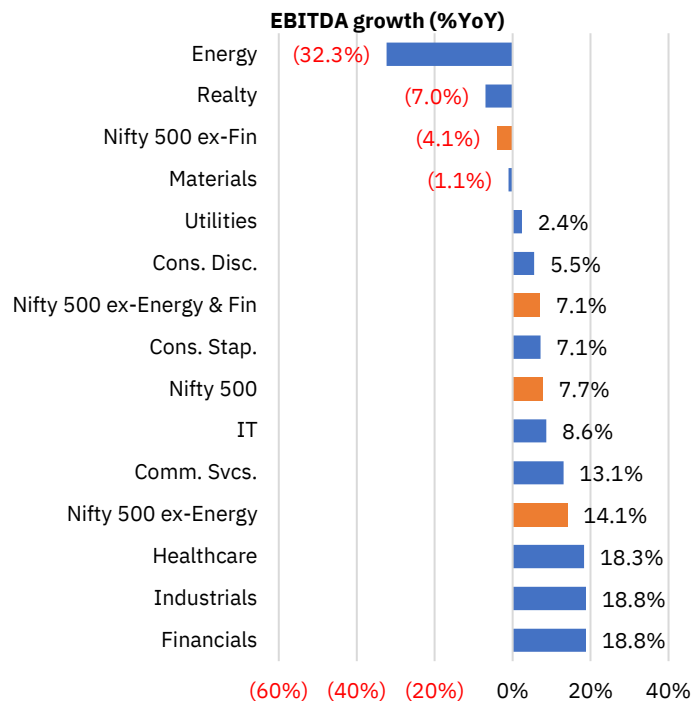
Note: The above table provides data for companies in the Nifty 500 index as of September 30th, 2024.

Table 12: EBITDA margin of Nifty 500 companies in Q2FY25

Sector	EBITDA Margin	QoQ change (bps)	YoY change (bps)
Communication Services	46.9	233	212
Consumer Discretionary	12.7	(118)	(111)
Consumer Staples	18.7	(111)	(28)
Energy	11.3	(91)	(564)
Financials	57.9	(31)	111
Health Care	27.8	(77)	250
Industrials	18.7	(91)	112
Information Technology	21.2	(44)	7
Materials	17.4	(28)	16
Real Estate	34.2	(1146)	(1386)
Utilities	33.5	79	(49)
Nifty 500	29.1	3	(15)
Nifty 500 ex-Energy	34.1	(20)	109
Nifty 500 ex-Financials	17.6	(52)	(172)
Nifty 500 ex-energy ex-fin	20.4	(59)	(2)

Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 500 index as of September 30th, 2024.

Figure 19: Sector-wise EBITDA growth of Nifty 500 companies in Q2FY25


Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above charts provide data for companies in the Nifty 500 index as of September 30th, 2024.

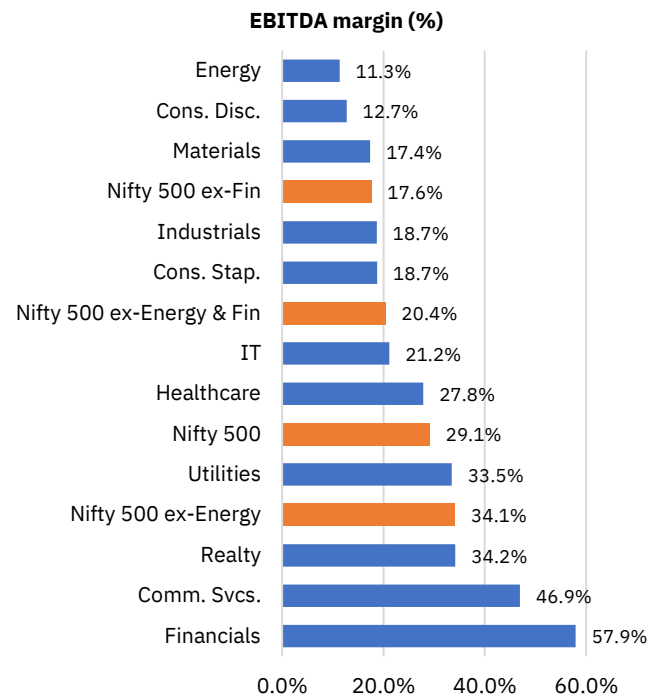
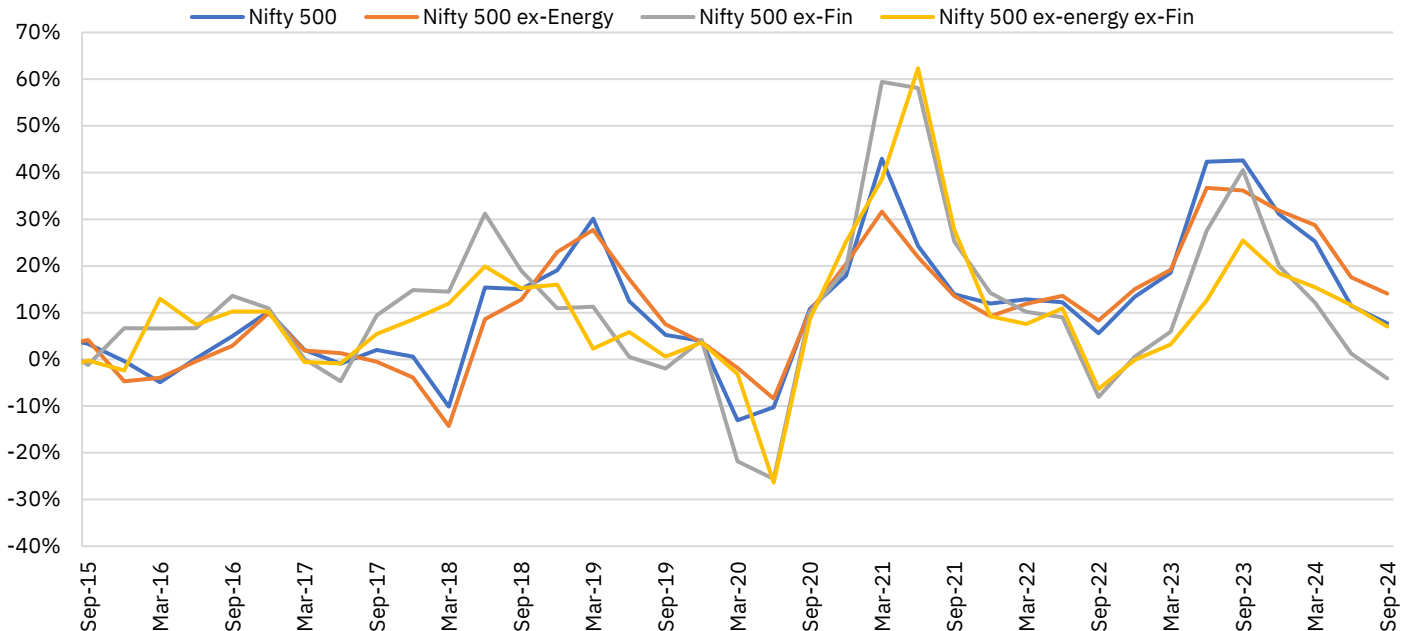
Figure 20: Sector-wise EBITDA margin of Nifty 500 companies in Q2FY25


Table 13: Sector-wise contribution of Nifty 500 companies to EBITDA growth in Q2FY25

Sector	EBITDA (Rs crore)	Contribution to EBITDA growth	
		% QoQ	% YoY
Communication Services	37,159	0.3	0.4
Consumer Discretionary	57,040	(0.3)	0.3
Consumer Staples	24,629	(0.1)	0.2
Energy	97,524	(1.4)	(4.4)
Financials	6,44,083	2.4	9.7
Health Care	29,613	0.0	0.4
Industrials	51,913	(0.1)	0.8
Information Technology	50,957	0.1	0.4
Materials	80,025	(0.2)	(0.1)
Real Estate	4,647	(0.1)	(0.0)
Utilities	56,416	(0.2)	0.1
Nifty 500	11,34,007	0.6	7.7
Nifty 500 ex-Energy	10,36,483	2.0	12.2
Nifty 500 ex-Financials	4,89,923	(1.8)	(2.0)
Nifty 500 ex-energy ex-fin	3,92,400	(0.4)	2.5

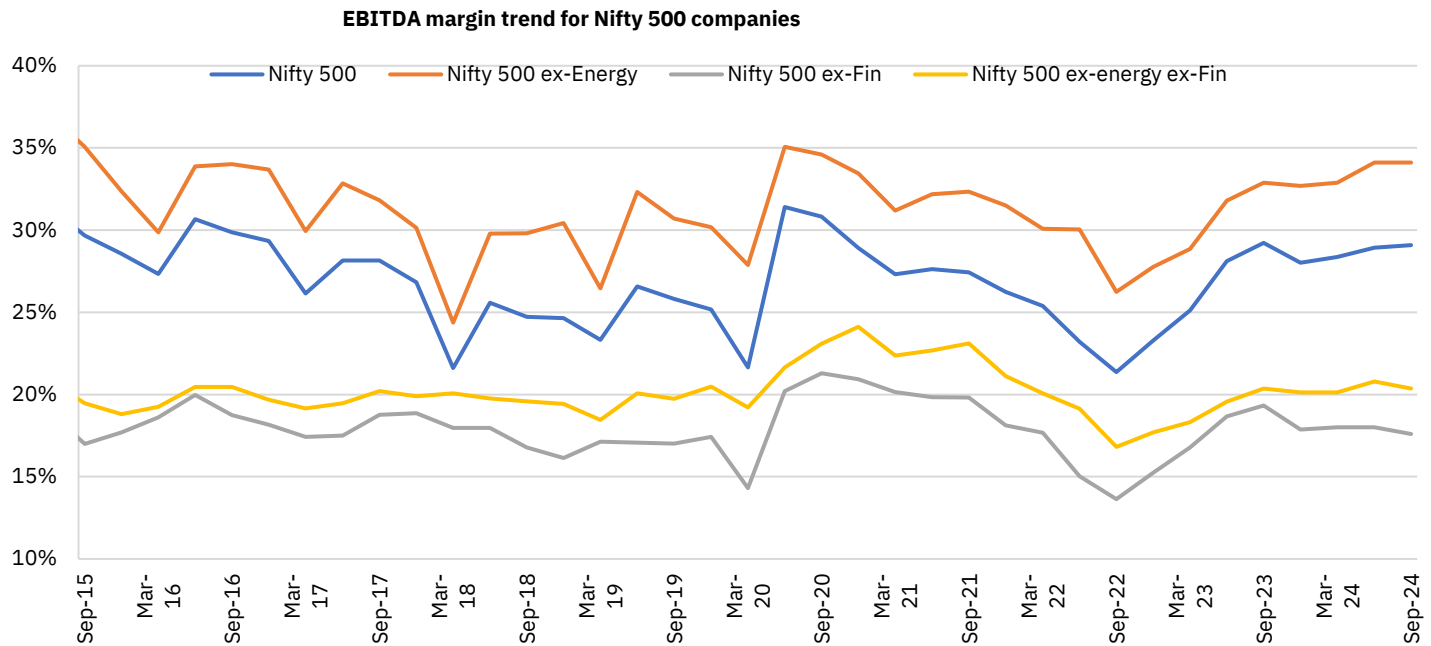
Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 500 index as of September 30th, 2024.

Figure 21: Quarterly Nifty 500 EBITDA growth trend (YoY)
EBITDA growth trend for Nifty 500 companies


Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: The above chart includes companies in the Nifty 500 index as on end of respective quarters.

Figure 22: EBITDA margin trend of Nifty 500 companies


Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: The above chart includes companies in the Nifty 500 index as on end of respective quarters.

PAT growth for Nifty 500 universe declined for the first time in the last eight quarters:

The aggregate adjusted PAT for the Nifty 500 companies declined 4.1% YoY in Q2FY25 to Rs 3.5 lakh crore, marking the first YoY contraction in the last eight quarters. While the Nifty 500 universe outperformed the Nifty 50 companies in terms of topline growth, its performance in terms of profitability was weaker than that of the Nifty 50 companies. Excluding the Nifty 50 companies, the PAT growth for Nifty 500 companies worsened to -10.1% YoY, primarily attributed to a decline in aggregate profits for the Nifty Next 50 companies. Within the Nifty 500 universe, 224 and 186 companies reported PAT expansion on a YoY and QoQ basis respectively in the September quarter.

Sector-wise, the drop in profitability was led by Energy (-50.7% YoY), reflecting the impact of weak demand, poor realisations and declining margins. This was partly offset by Financials, that reported a YoY PAT growth of 16.9% in Q2FY25 within the Nifty 500 universe. Excluding Energy and Financials, Nifty 500 and Nifty 500 (ex. Nifty 50) universe reported a modest growth of 1.7% YoY and a decline of 1.6% YoY respectively in Q2FY25.

Table 14: Sector-wise PAT growth of Nifty 500 companies in Q2FY25

Sector	QoQ growth			YoY growth		
	Sep-23	Jun-24	Sep-24	Sep-23	Jun-24	Sep-24
Communication Services	NA	NA	NA	NA	NA	NA
Consumer Discretionary	1.2	(30.0)	(16.6)	77.5	20.2	(2.2)
Consumer Staples	0.4	8.1	(5.3)	13.2	12.4	6.1
Energy	(3.9)	(17.8)	(24.4)	194.3	(37.3)	(50.7)
Financials	1.5	(4.1)	2.5	14.4	17.1	16.9
Health Care	12.0	47.1	0.6	45.7	35.5	21.4
Industrials	(6.3)	(18.6)	(9.7)	45.8	25.6	22.6
Information Technology	2.6	(6.9)	2.2	7.2	8.4	7.9
Materials	0.4	4.2	(14.8)	51.9	3.1	(16.7)
Real Estate	48.8	(17.2)	(10.1)	1721.6	64.7	(2.4)
Utilities	3.8	19.3	(7.2)	63.3	(1.0)	(11.3)
Nifty 500	0.8	(5.9)	(6.0)	46.5	3.8	(4.1)
Nifty 500 ex-Energy	2.2	(3.7)	(3.1)	28.7	15.7	8.5
Nifty 500 ex-Financials	0.5	(7.1)	(11.5)	72.8	(3.4)	(15.5)
Nifty 500 ex-energy ex-fin	2.8	(3.4)	(7.8)	43.3	14.6	1.7

Source: CMIE Prowess, LSEG Workspace, NSE EPR

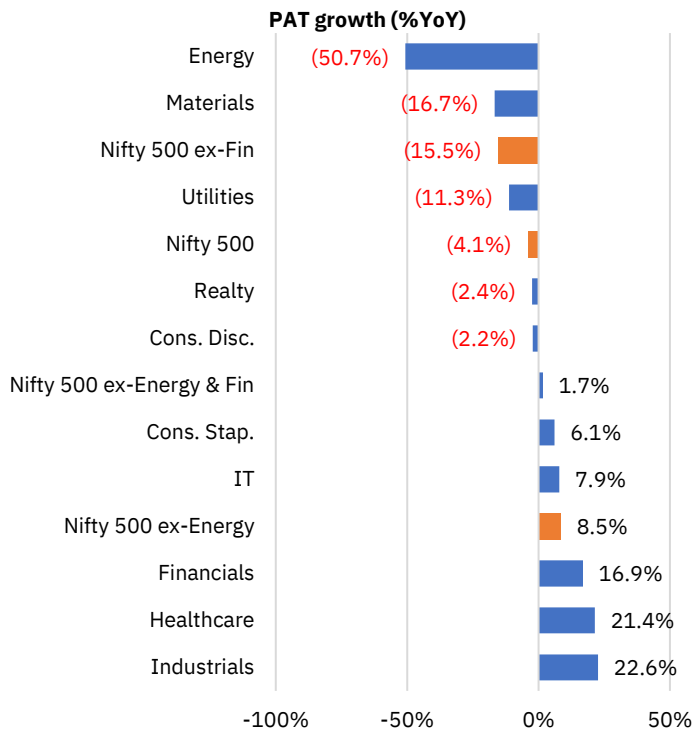
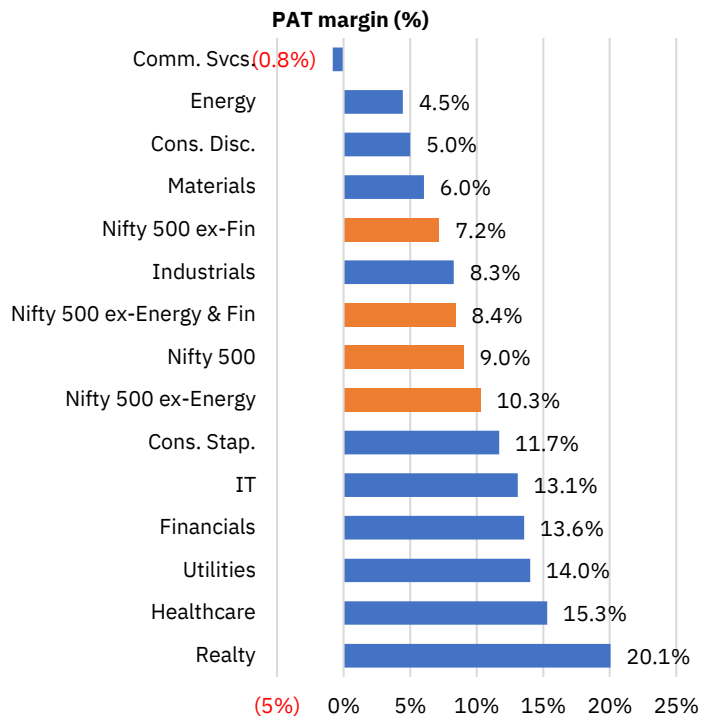
 Note: 1. The above table provides data for companies in the Nifty 500 index as of September 30th, 2024. 2. NA: Not Applicable

Table 15: Sector-wise PAT margin of Nifty 500 companies in Q2FY25

Sector	PAT Margin	QoQ change (bps)	YoY change (bps)
Communication Services	(0.8)	47	206
Consumer Discretionary	5.0	(114)	(87)
Consumer Staples	11.7	(91)	(29)
Energy	4.5	(104)	(470)
Financials	13.6	(33)	4
Health Care	15.3	(60)	173
Industrials	8.3	(118)	74
Information Technology	13.1	(37)	(5)
Materials	6.0	(101)	(106)
Real Estate	20.1	(525)	(681)
Utilities	14.0	(26)	(239)
Nifty 500	9.0	(63)	(116)
Nifty 500 ex-Energy	10.3	(63)	(19)
Nifty 500 ex-Financials	7.2	(84)	(177)
Nifty 500 ex-energy ex-fin	8.4	(85)	(46)

Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 500 index as of September 30th, 2024.

Figure 23: Sector-wise PAT growth of Nifty 500 companies in Q2FY25

Figure 24: Sector-wise PAT margin of Nifty 500 companies in Q2FY25


Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above charts provide data for companies in the Nifty 500 index as of September 30th, 2024.

Table 16: Sector-wise contribution of Nifty 500 companies to PAT growth in Q2FY25

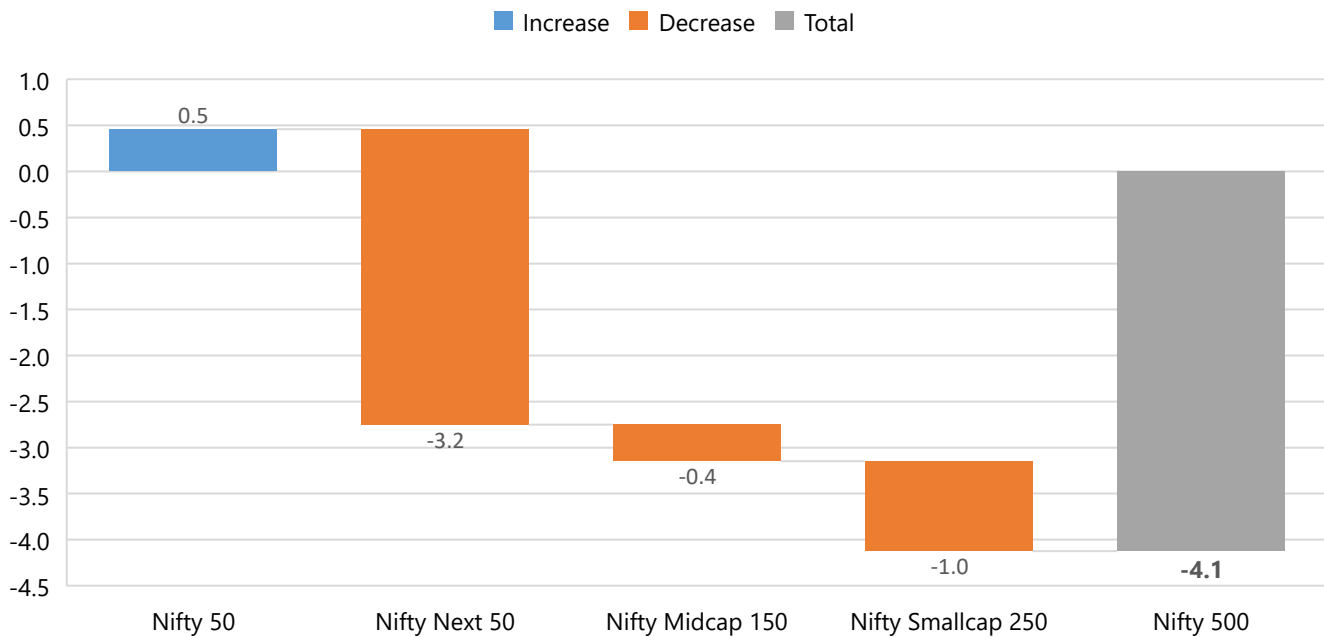
Sector	PAT (Rs crore)	Contribution to PAT growth	
		% QoQ	% YoY
Communication Services	-651	0.1	0.4
Consumer Discretionary	22,350	(1.2)	(0.1)
Consumer Staples	15,361	(0.2)	0.2
Energy	38,321	(3.3)	(10.8)
Financials	1,50,818	1.0	6.0
Health Care	16,265	0.0	0.8
Industrials	23,025	(0.7)	1.2
Information Technology	31,517	0.2	0.6
Materials	27,758	(1.3)	(1.5)
Real Estate	2,725	(0.1)	(0.0)
Utilities	23,611	(0.5)	(0.8)
Nifty 500	3,51,099	(6.0)	(4.1)
Nifty 500 ex-Energy	3,12,778	(2.7)	6.7
Nifty 500 ex-Financials	2,00,281	(7.0)	(10.0)
Nifty 500 ex-energy ex-fin	1,61,960	(3.7)	0.7

Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above table provides data for companies in the Nifty 500 index as of September 30th, 2024.

Figure 25: Share of Nifty index constituents in overall PAT growth of Nifty 500 universe in Q2FY25

Contribution of Nifty index constituents to the overall PAT growth (%YoY)

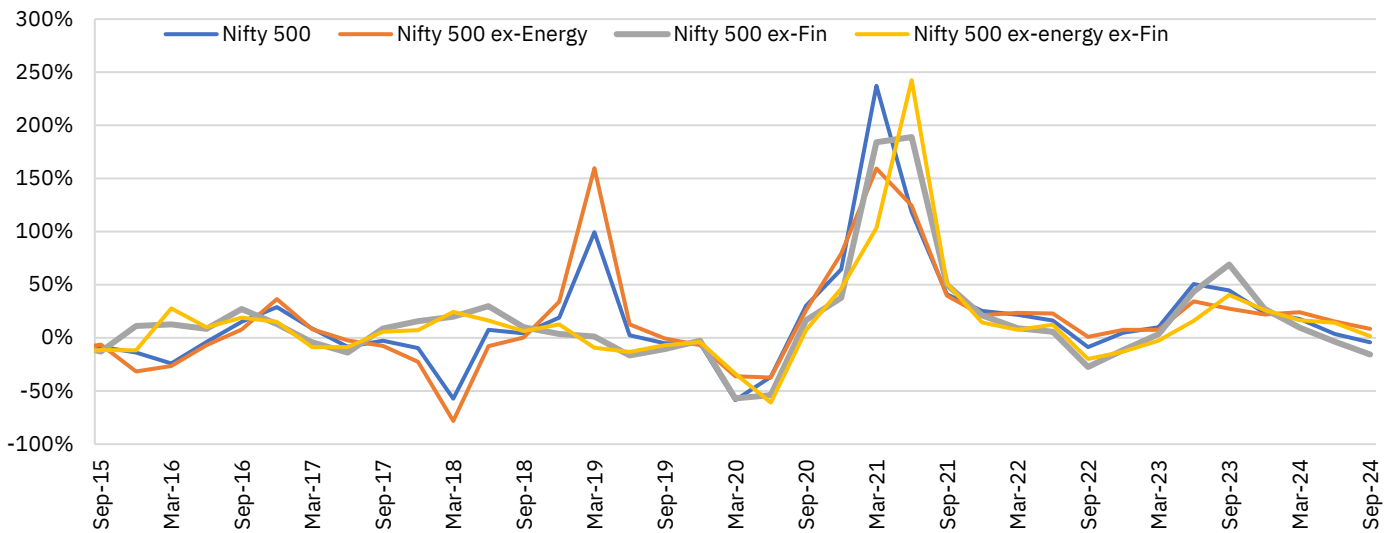


Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: The above chart provides data for companies in the Nifty 500 index as of September 30th, 2024.

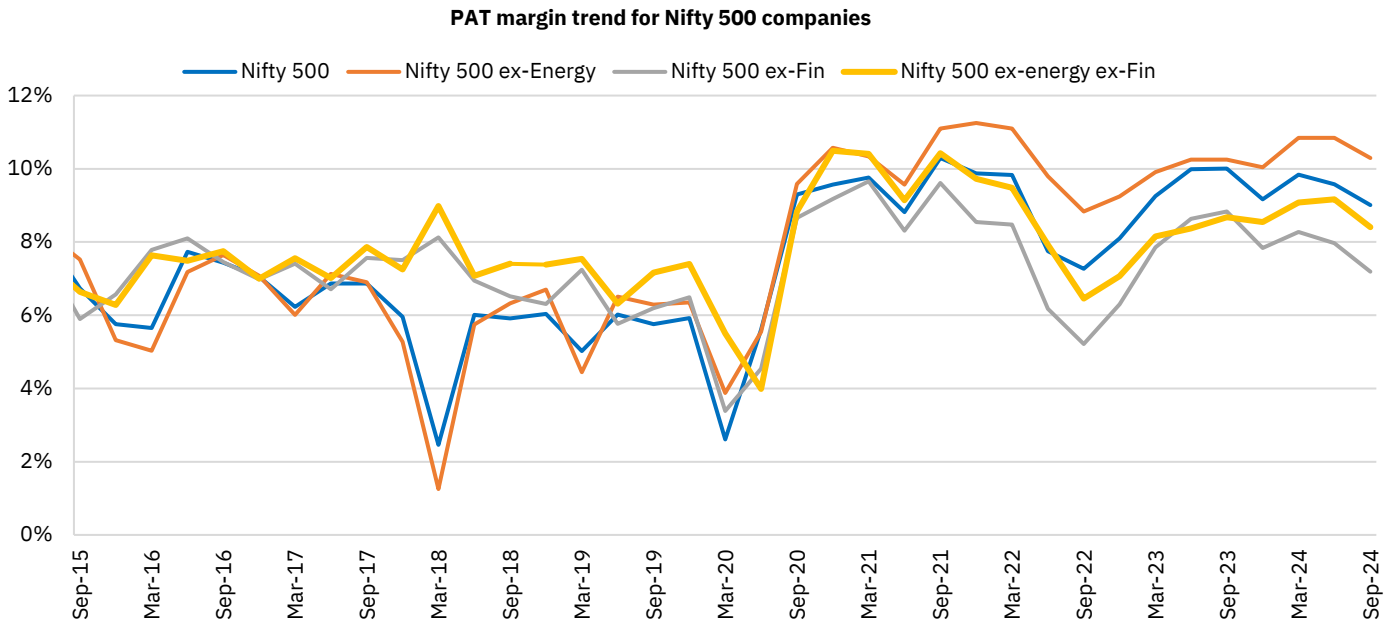
Figure 26: Quarterly Nifty 500 PAT growth trend (YoY)

PAT growth trend for Nifty 500 companies



Source: CMIE Prowess, LSEG Workspace, NSE EPR.

Note: The above chart includes companies in the Nifty 500 index as on end of respective quarters.

Figure 27: PAT margin trend of Nifty 500 companies


Source: CMIE Prowess, LSEG Workspace, NSE EPR.

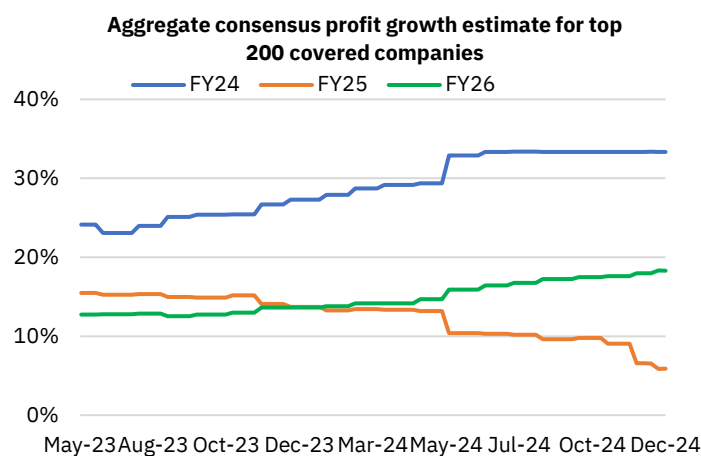
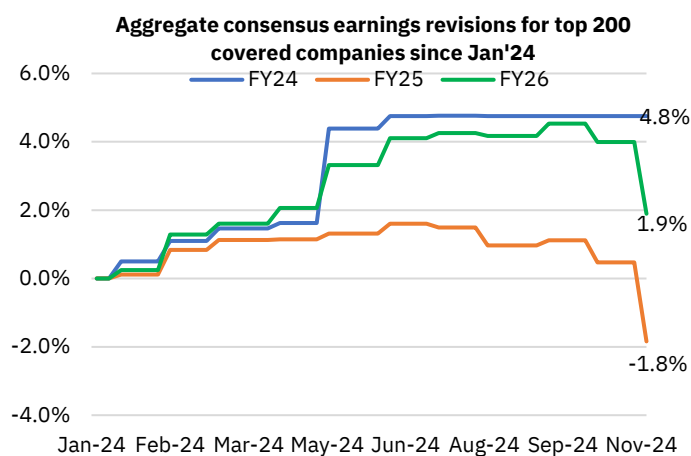
Note: The above chart includes companies in the Nifty 500 index as on end of respective quarters.

Earnings revision analysis

Consensus FY25/26 aggregate PAT estimates downgraded meaningfully following a weak quarter: Earnings growth in Q2FY25 moderated for the second quarter in a row, falling short of consensus expectations. The moderation was primarily led by a significant YoY drop in commodity-sectors, viz., Energy and Materials, partly reflecting the impact of falling commodity prices and muted demand. In fact, four out of 11 sectors reported a YoY contraction in earnings growth. Our analysis of earnings revisions of top 200 covered companies by market capitalisation³ show that aggregate earnings estimate for FY25 fell by 3.6% since September-end. Notably, all sectors, barring Real Estate, have seen downgrades in earnings estimates during this period, led by Energy and Materials, reflecting the impact of falling commodity prices. These two sectors are expected to account for a quarter to FY25 earnings but contributed to nearly 64% to the total drop in earnings for this universe since September-end. Excluding these two, the downward revision in aggregate profit estimate was relatively modest at 1.7%.

With this, the aggregate earnings of the top 200 companies are now expected to grow at 5.9% and 18.3% in FY25 and FY26 respectively, vs. 9.8% and 17.5% as of September-end, following a strong 33.4% PAT growth in FY24. This translates into an annualised growth of 11.9% during FY24-26 (As of December 11th, 2024), falling from 13.4% as of September-end.

³ The sample set consists of top 200 companies by one-year average market cap ending June 30th, 2023, covered by at least five or more analysts during the previous 12 months using IBES estimates from LSEG Datastream.

Figure 28: Aggregate consensus profit growth estimate for top 200 covered companies (% YoY)

Figure 29: Aggregate consensus earnings revisions since Jan'24 for top 200 covered companies


Source: CMIE Prowess, LSEG Workspace, NSE EPR

 Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five analysts at any given point of time over the last one year. Data is as of December 12th, 2024.

Table 17: Monthly trend of sector-wise FY25 consensus earnings growth estimate (% YoY)

Sectors	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Comm. Svcs.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Consumer Disc.	18.8	19.9	19.9	20.2	5.7	6.0	5.9	5.4	5.1	4.5	1.0	0.6
Consumer Staples	14.6	12.8	12.9	12.9	11.1	10.3	10.0	9.1	9.0	8.0	5.2	5.0
Energy	-8.1	-8.8	-9.3	-10.1	-10.5	-10.0	-10.3	-11.5	-10.9	-13.2	-16.6	-17.1
Financials	15.2	15.8	15.8	15.7	11.9	10.9	10.8	11.3	11.3	11.3	11.1	10.8
Health Care	18.6	17.5	18.2	17.9	16.3	18.7	18.6	20.1	20.5	20.7	20.4	20.8
Industrials	19.1	19.4	19.7	20.4	16.8	17.9	18.2	19.0	19.5	19.8	15.7	15.5
IT	14.2	14.2	14.4	12.2	10.1	9.9	9.9	10.0	10.1	9.1	9.2	9.2
Materials	29.6	32.4	33.6	38.7	37.2	43.7	42.4	33.5	32.9	31.1	18.0	17.2
Real Estate	25.4	27.3	27.1	26.2	23.4	19.5	20.0	23.3	23.4	22.7	28.4	28.5
Utilities	12.1	11.7	11.8	12.0	13.5	9.9	9.7	10.8	11.3	11.5	9.5	9.1
Total	13.3	13.4	13.3	13.2	10.4	10.3	10.2	9.6	9.8	9.1	6.6	5.9

Source: LSEG Workspace, NSE EPR

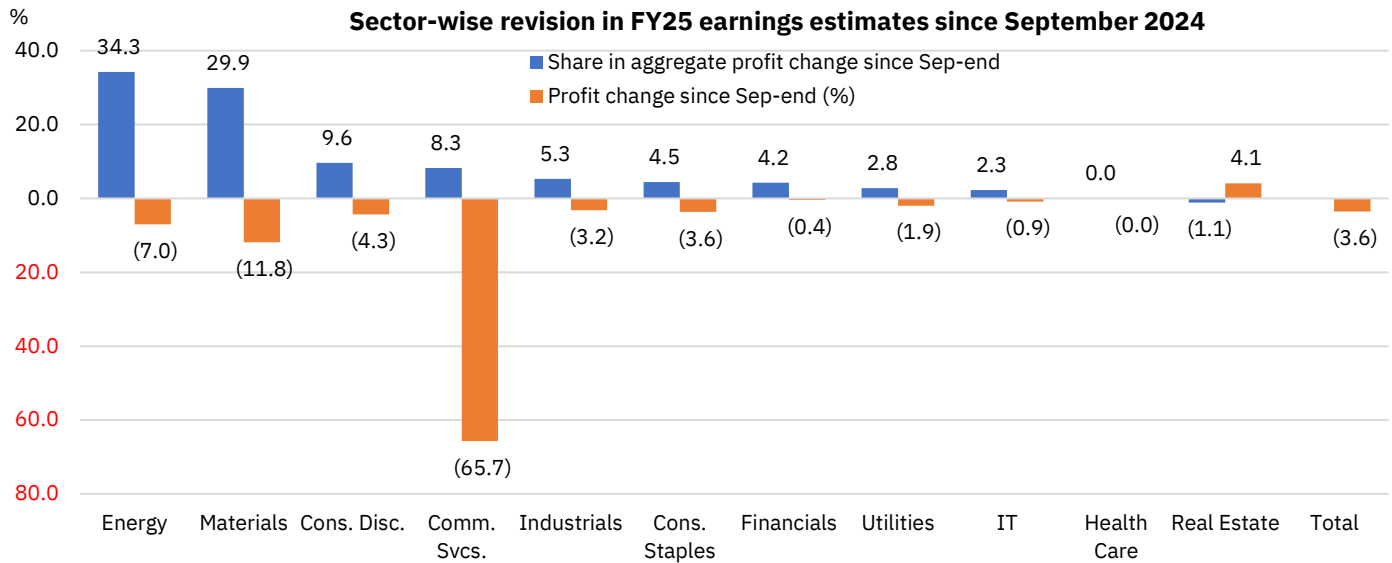
 Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five analysts at any given point of time over the last one year. * Data is as of December 12th, 2024.

Table 18: Monthly trend of sector-wise FY26 consensus earnings growth estimate (% YoY)

Sectors	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24
Comm. Svcs.	153.0	273.7	286.9	290.9	228.7	409.4	341.2	233.6	232.6	180.2	176.3	711.2
Consumer Disc.	16.3	18.3	17.8	18.2	18.8	19.2	19.6	20.8	20.8	20.9	21.7	21.7
Consumer Staples	12.6	13.0	13.1	13.2	13.8	13.7	13.9	14.4	14.6	14.4	14.4	14.4
Energy	5.5	5.6	5.9	6.6	9.9	10.6	10.6	13.2	13.9	14.1	15.8	16.4
Financials	15.9	14.5	14.4	14.5	15.1	15.2	15.4	14.1	14.1	14.1	12.8	12.6
Health Care	14.8	15.9	16.2	16.2	16.2	17.2	17.4	18.0	18.3	18.0	18.1	18.1
Industrials	18.4	19.9	20.1	19.6	19.7	20.6	20.5	20.9	21.3	21.1	22.5	22.5
IT	10.0	10.3	10.5	13.0	12.8	12.8	12.9	13.1	13.1	13.9	13.5	13.5
Materials	14.1	17.0	17.3	17.9	21.4	22.4	23.4	29.0	29.5	31.5	39.4	39.7
Real Estate	28.6	29.5	29.8	29.9	28.8	29.1	27.9	27.8	28.1	28.1	23.9	24.2
Utilities	8.9	9.2	9.1	9.2	8.9	9.8	10.4	10.6	10.9	10.9	11.0	10.9
Total	13.8	14.1	14.2	14.7	15.9	16.4	16.7	17.3	17.5	17.6	18.0	18.3

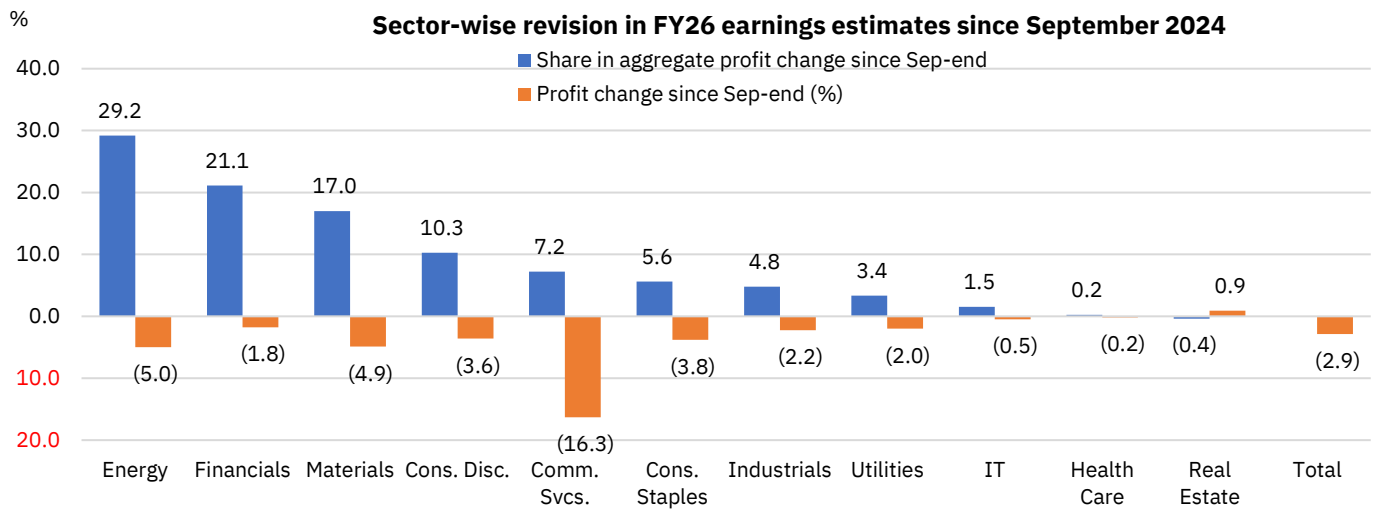
Source: LSEG Workspace, NSE EPR

 Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five analysts at any given point of time over the last one year. * Data is as of December 12th, 2024.

Figure 30: Sector-wise revision in FY25 earnings estimates for top 200 companies since September 2024


Source: LSEG Workspace, NSE EPR

 Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five analysts at any given point of time over the last one year. Data is as on December 12th, 2024.

Figure 31: Sector-wise revision in FY26 earnings estimates for top 200 companies since September 2024


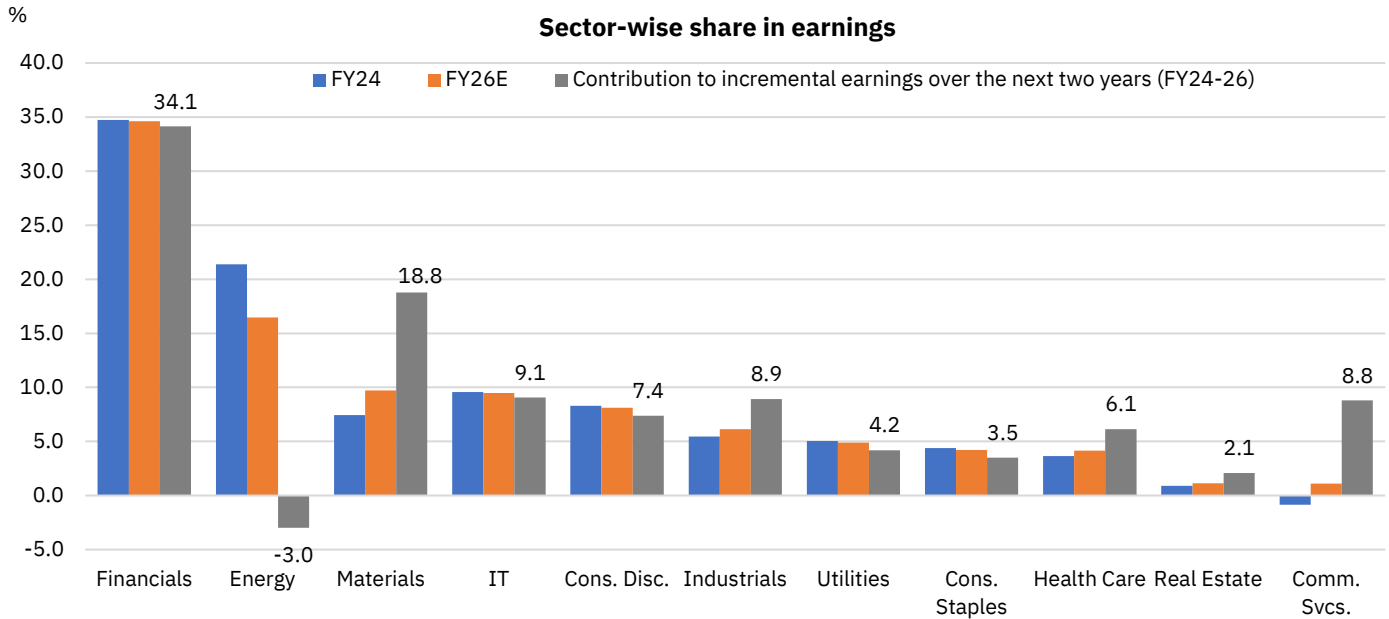
Source: LSEG Workspace, NSE EPR

 Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five analysts at any given point of time over the last one year. Data is as on December 12th, 2024.

Financials and Materials to account for nearly 53% of the incremental earnings over the next two years: Financials, with a share of slightly over 34% in aggregate earnings of top 200 companies, is expected to contribute a similar share to incremental earnings between FY24 and FY26. This is followed by Materials, contributing 18.8% to the absolute change in earnings during this period, despite significant earnings downgrades this year, resulting in its share in total earnings rising from 7.4% to 9.7%. Communication Services, that reported a huge loss in FY24, is expected to report profit amounting to 1.1% of aggregate earnings of top 200 companies by FY26, thereby contributing to a significant 8.8% to aggregate incremental earnings of this universe over the next two years. Industrials and IT are expected to contribute a similar 8.9% and 9.1% to absolute change

in corporate earnings between FY24 and FY26. After seeing earnings downgrades in the last few months, the Energy sector is expected to see a 17.1% YoY drop in aggregate earnings estimate in FY25, only to recover commensurately in FY26. Consequently, its share in aggregate earnings of the top 200 companies is expected to fall from 21.4% in FY24 to 16.5% in FY26. Clearly, the earnings trajectory over the next two years hinges on persistence of consumption and investment demand as well as global growth recovery.

Figure 32: Sector-wise share and contribution to earnings

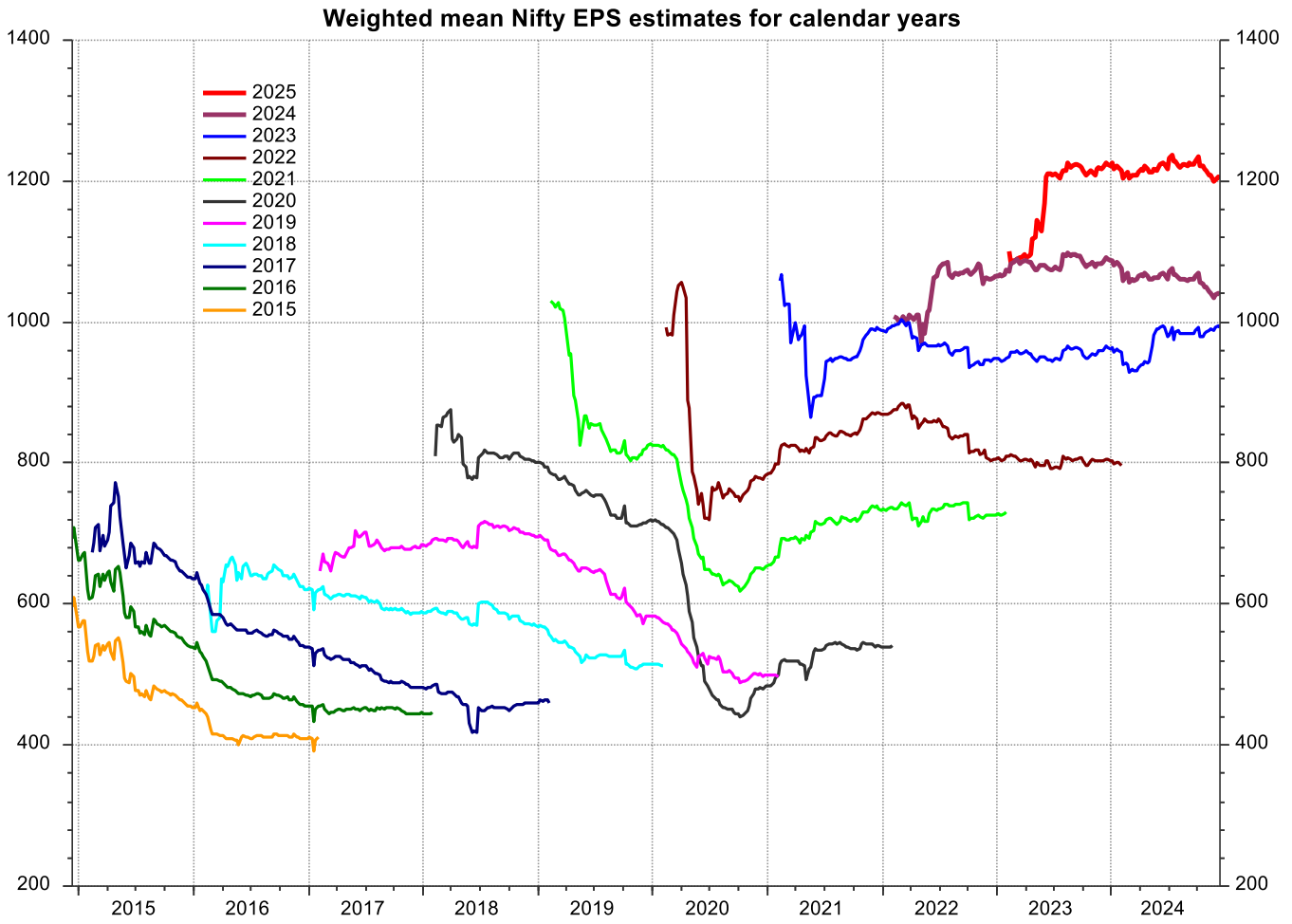


Source: CMIE Prowess, LSEG Workspace, NSE EPR

Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five analysts at any given point of time over the last one year. Data is as of December 12th, 2024.

The chart below shows how Consensus estimates usually begin the year (calendar) with a bullish view on earnings, but are then brought back to *terra firma* with downgrades, year after year, as the macro environment overhang prevails over optimism.

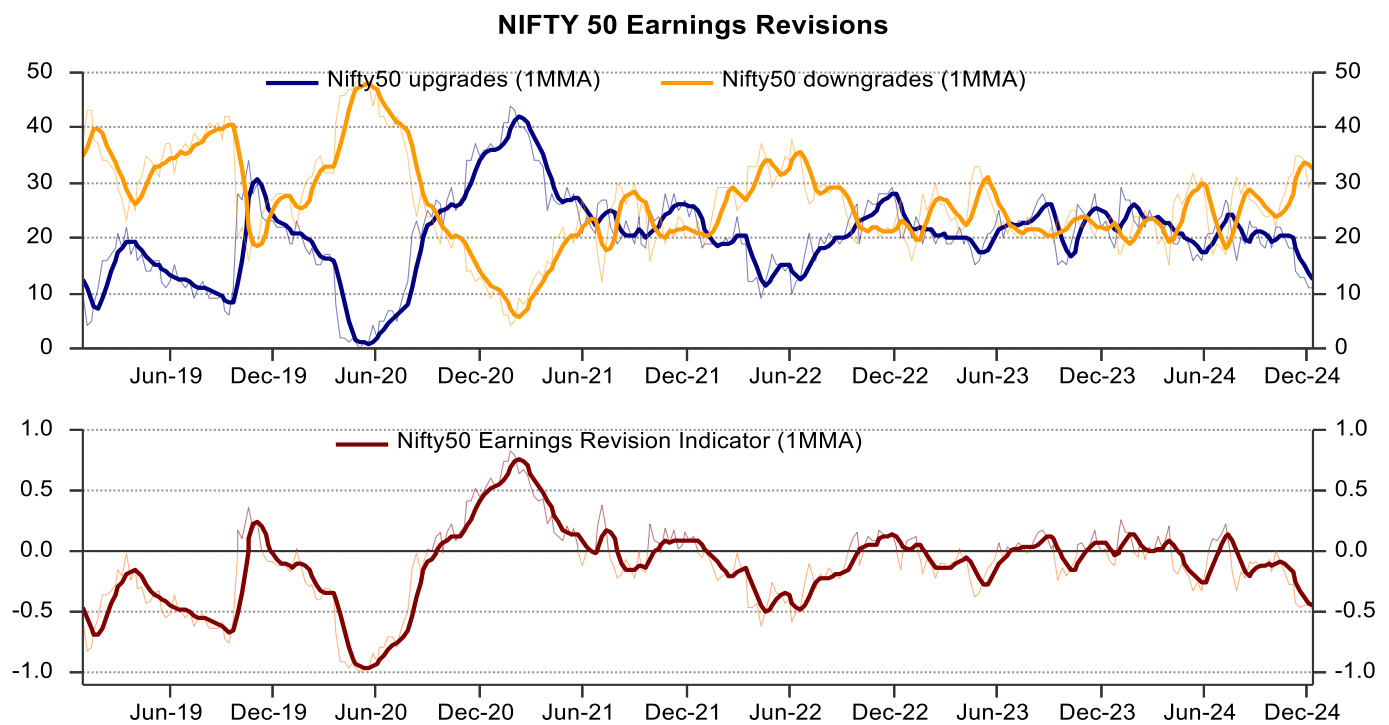
A different story was playing out this time until recently, with earnings for the Nifty 50 companies for both 2024 and 2025 seeing a steady downward trend over the last few months. The EPS estimates for Nifty 50 for 2024 and 2025 have been curtailed by 2.9% and 2.5% since October-beginning after a weaker-than-expected performance during the second quarter, more than offsetting the upward revisions seen in the early part of this year.

Figure 33: Yearly trend of NIFTY 50 Consensus EPS estimates


Source: LSEG Workspace, NSE EPR

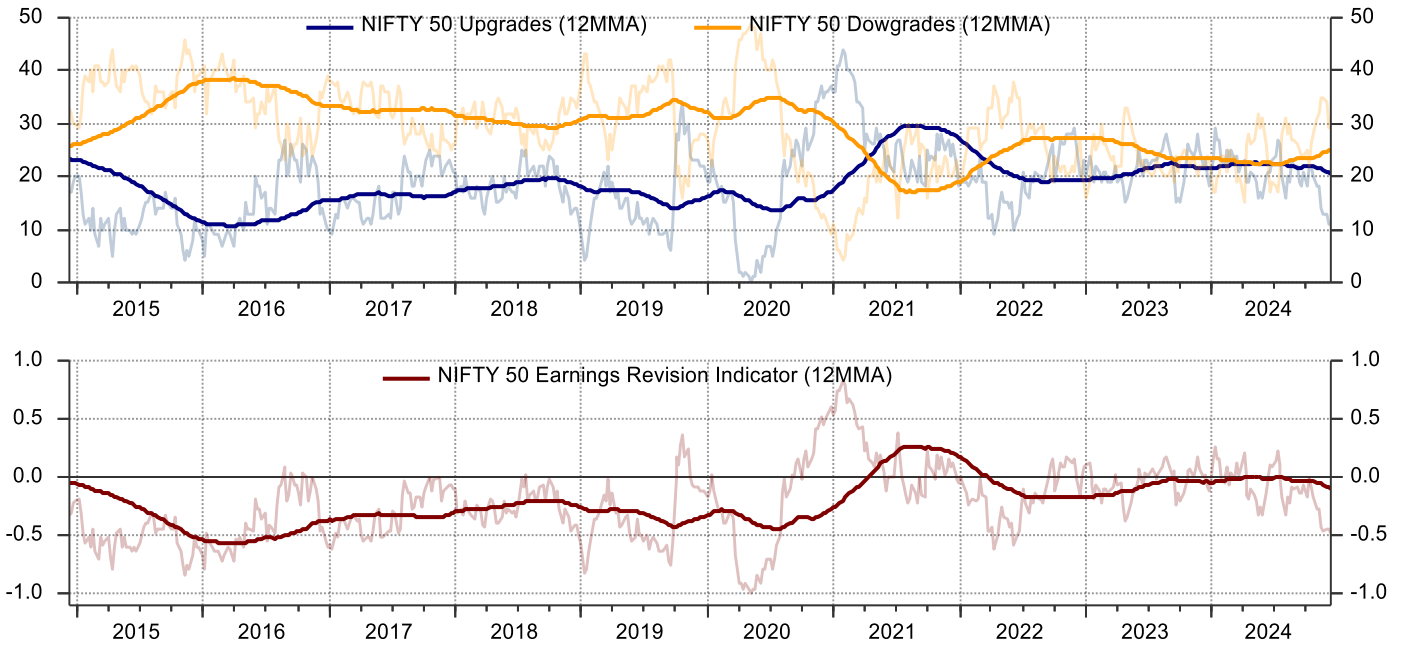
Nifty 50 Earnings Revision Indicator fell deep in the negative territory: After a sharp drop following the onset of the Russia-Ukraine war in February 2022, the Earnings Revision Indicator (ERI)⁴ for the Nifty 50 universe picked up meaningfully in the second half of 2022, indicating higher number of upgrades than downgrades. This was aided by resilient economic performance, strong Government capex and robust credit offtake by banks. The ERI moved in a tight band over the subsequent 15 months until March 2024, as in-line corporate earnings kept number of upgrades and/or downgrades contained. In this fiscal thus far, however, the ERI has turned volatile again, and in fact has been steadily falling deep in the negative territory since the last three months. All sectors barring IT, Healthcare and Communication Services have the ERI values hovering in the negative territory, indicating a greater number of downgrades than upgrades.

Figure 34: Nifty 50 Earnings Revision Indicator (since January 2019)

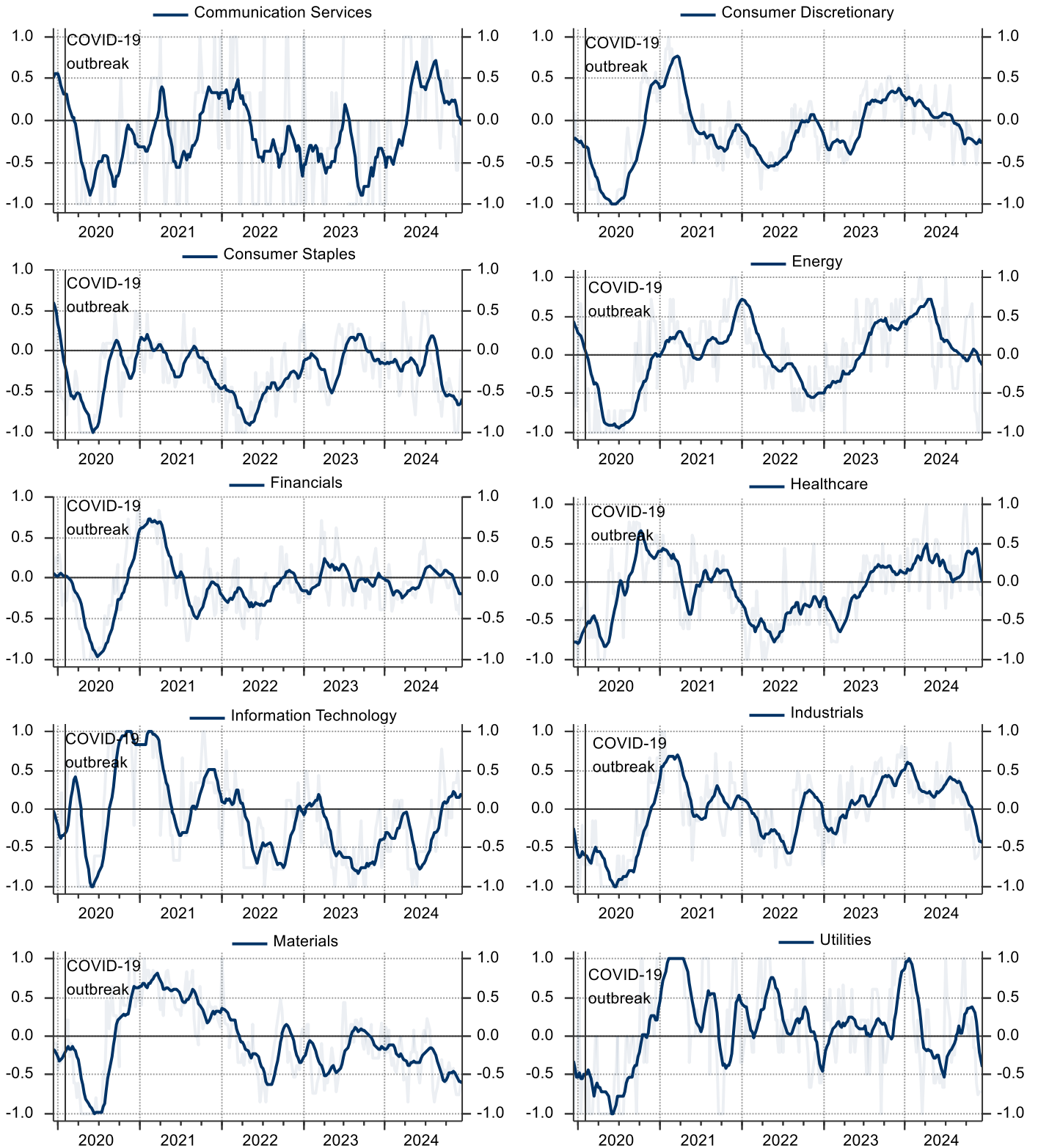


Source: LSEG Workspace, NSE EPR.

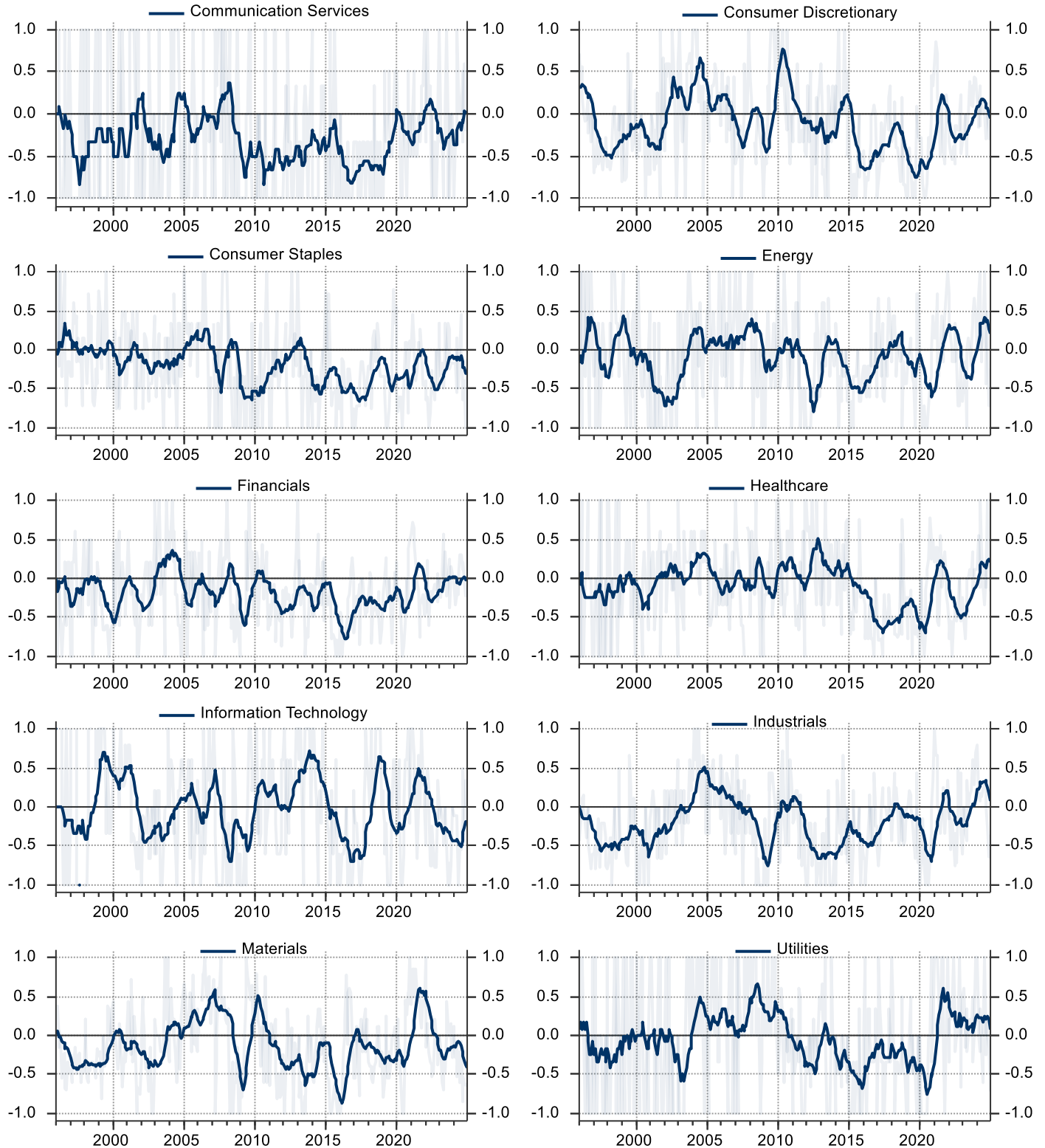
⁴ The ERI is calculated as “(number of upgrades – number of downgrades)/total number of upgrades and downgrades”. It can range between -1 to 1.

Figure 35: Nifty 50 Earnings Revision Indicator (10-year trend)
NIFTY 50 Earnings Revisions


Source: LSEG Workspace, NSE EPR.

Figure 36: Short-term trend of Earnings Revision Indicator across MSCI sectors
India Earnings Revision Indicator across sectors: Short-term (2MMA)


Source: LSEG Workspace, NSE EPR.

Figure 37: Long-term trend of Earnings Revision Indicator across MSCI sectors
India Earnings Revision Indicator (ERI) across sectors: Long-term (12MMA)


Source: LSEG Workspace, NSE EPR.

Chart of the month

A deep dive into India's trade dynamics over the last three decades

Over the past three decades, global trade dynamics have undergone significant shifts, with increasing de-globalization, rising protectionist policies and a plethora of exogenous macroeconomic shocks. Despite these challenges, India has steadily improved its position, with its overall share of global exports doubling from 1.2% in 2005 to 2.4% in 2023. India's global ranking in exports stands at 16th for merchandise goods and 7th for services, with its share in global merchandise exports rising from 0.9% in 2005 to 1.8% in 2023, and in services from 2% to 4.3% during the same period. This growth has been driven by factors such as strong trade agreements, government initiatives like Make in India and Production Linked Incentive (PLI) schemes, diversification of export baskets, and development of logistics infrastructure. India's export growth was robust in the first two decades post-liberalization, with a CAGR of 11.1% during FY94-FY04 and 17.3% during FY04-FY14. However, the last decade (FY14-FY24) saw a significant moderation, with export growth slowing to a CAGR of 3.3% due to subdued global demand, trade protectionism, and disruptions like the COVID-19 pandemic and geopolitical tensions. Services exports, while also moderating, sustained higher CAGR at 8.4% in the last decade, reflecting India's comparative advantage in sectors like IT, financial and consulting services.

Over the decades, merchandise goods' contribution to India's total exports has declined from 78% in 1991-92 to 54% in H1-FY25, while the share of services exports surged from 22% to 46% during the same period. India maintains a trade surplus with countries like the USA, UAE, Bangladesh, and the Netherlands, with the USA being its largest export destination (18% of total exports in FY24). China remains the top import partner with a 15% share in FY24, followed by Middle Eastern nations like Saudi Arabia and Iraq and some Asian peers like Singapore, Hong Kong and Indonesia.

Going forward, India has significant opportunities for expanding its trade footprint, supported by policy reforms, diversification of export markets, strengthening trade infrastructure, enhancing product competitiveness and a stable global economic outlook. That said, risks emanating from geopolitical tensions, evolving energy trade dynamics, and rising protectionist measures could dampen trade flows.

- **India's share in both global exports and imports has increased during the last two decades:** India's share in global merchandise exports increased from 0.9% in 2005 to 1.8% in 2023, while its services export share more than doubled from 2% to 4.3%. Overall, India's export share rose from 1.2% in 2005 to 2.4% in 2023, driven by strong trade agreements, a diversified export basket, development of logistics infrastructure, government initiatives like Make in India and PLI scheme and changing global trade dynamics. In contrast, India's share in merchandise imports surged from 1.3% to 2.8%, while services imports rose from 2.4% to 3.4%, with overall imports increasing from 1.5% to 2.9%.
- **India's performance in services exports better than goods:** India ranks 16th globally in merchandise exports and 7th in services exports. India's share of merchandise exports in total exports is 56.2% (below the global average of 75.3%), implying its services exports share at 43.8% is the highest among major economies. Over the last two decades, global merchandise exports have shifted towards China (+8.4pp), largely at the expense of Japan, Germany, France, UK and USA. In services, India and Singapore witnessed an improvement in their shares, while the USA's share declined. India holds a Relative Comparative Advantage (RCA) in agricultural products, textiles, chemicals, and pharmaceuticals but lags in machinery, transport equipment, and electronics.

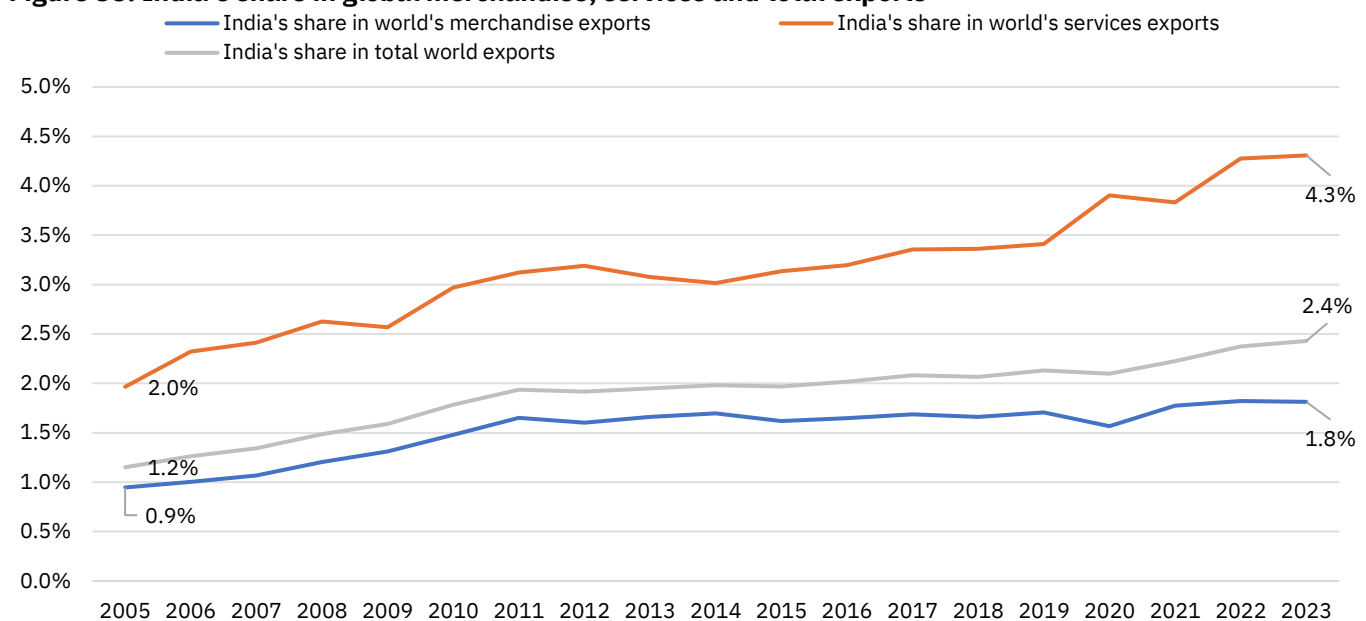
- **Merchandise and services decadal export growth has moderated:** India's total exports grew at a CAGR of 10.4% over the past three decades, with double-digit growth of 11.1% and 17.3% in the first two decades (FY94-FY04, FY04-FY14), driven by a global economic boom, trade liberalization, export financing, and improved logistics. However, 10-year CAGR slowed to 3.3% in FY14-FY24 due to slower global economic growth, rising trade protectionism, the COVID-19 pandemic, and geopolitical tensions. Services exports followed a similar trend but maintained a higher CAGR of 8.4% in the last decade.
- **Non-oil trade deficits higher than oil trade deficits in recent years:** India's merchandise trade deficit expanded from US\$ 1.1 bn in FY94 to US\$ 238.4 bn in FY24, peaking at US\$ 264.8 bn in FY23. India's non-oil trade deficit has exceeded the oil trade deficit in five of the last 31 years. Non-oil trade surpluses were recorded in 11 years since FY1992, but recent non-oil trade deficit is driven by rising consumer demand for electronics and gold, along with industrial demand for machinery and capital goods.
- **Contrasting trade dynamics between India and its major trading partners:** India's merchandise trade surplus with the USA nearly doubled from US\$ 20.6 bn in FY15 to US\$ 36.8 bn in FY24, driven by exports of labor-intensive goods like pharmaceuticals, gems, and electronics, while importing capital-intensive products. Conversely, its trade deficit with China widened from US\$ 48.5 bn to US\$ 85.1 bn during the same period, reflecting imports of industrial and consumer goods. The trade deficit with Russia surged to US\$ 57.2 bn in FY24 due to increased petroleum imports. India's trade dynamics reveal a consistent pattern of merchandise trade surplus with countries like the USA, Netherlands, Bangladesh, Nepal, Spain, and Sri Lanka, while sustaining trade deficits with China, Switzerland, Germany, Australia, Malaysia, South Korea, Saudi Arabia, and Iraq over the last two decades.
- **USA, UAE, and China have consistently been India's top export destinations:** The USA and UAE have consistently been India's top export partners, with China third since 2005-10. The USA accounted for 18% of India's exports in FY24, up from 12% a decade ago. Germany's ranking fell to ninth by FY20-24, while the Netherlands rose to fourth, driven by petroleum exports. Exports to the USA, UK, Bangladesh and Germany are well-diversified, unlike the Netherlands, Hong Kong and Singapore which remain heavily reliant on petroleum and gems & jewelry.
- **China, Asian peers and Middle Eastern countries are top import partners:** China remains India's top import partner, with its share rising to ~15% in FY24. Asian peers like Indonesia, Singapore, and Hong Kong have replaced European countries in the top 10 import partners. Russia, driven by petroleum imports post the Ukraine war, is now the fifth-largest partner. Middle Eastern countries like UAE, Saudi Arabia, and Iraq continue to dominate petroleum imports.

India's position in global trade

India's share in global merchandise exports increased from 0.9% in 2005 to 1.8% in 2023, while its share in services exports has more than doubled, rising from 2% in 2005 to 4.3% in 2023. Strong trade agreements, diversified exports basket, significant growth in IT and business process outsourcing (BPOs), development of logistic infrastructure (ports, highways, dedicated freight corridors) to reduce costs, implementation of Government initiatives like Make in India, Production Linked Incentive Schemes (PLI) and changing global trade dynamics amidst recent geopolitical shifts have contributed to the increase in the overall export share from 1.2% in 2005 to 2.4% in 2023.

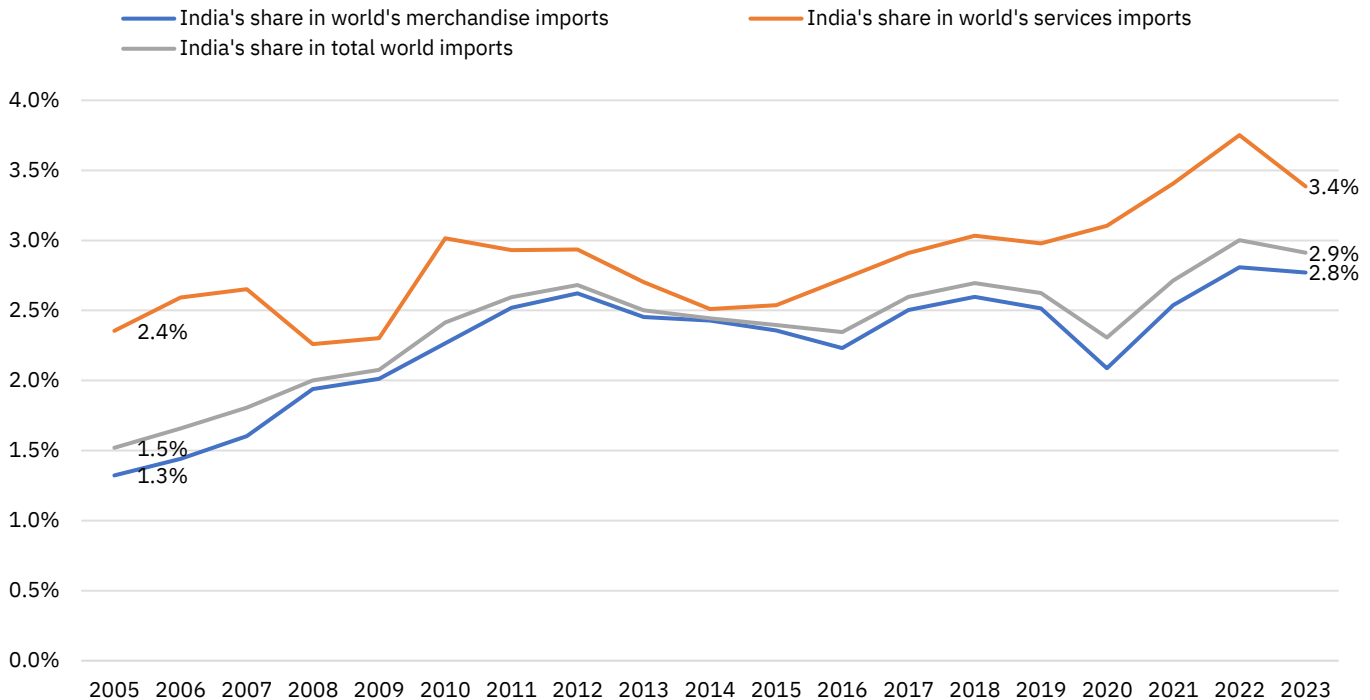
Conversely, India's share in global services imports grew from 2.4% in 2005 to 3.4% in 2023, while the share in global merchandise imports surged from 1.3% in 2005 to 2.8% in 2023. Sustained GDP and consumption growth, rising purchasing power, an expanding middle class, elevated reliance on crude oil imports, India's inclusion in global value chains and rising industrial and infrastructure development activity have driven the increase in share of imports from 1.5% in 2005 to 2.9% in 2023. During the COVID-19 pandemic, India's share in global merchandise imports fell by around 40bps YoY to 2.1% in 2020 and then subsequently increasing to 2.8% by 2023. Consequently, India's share in overall global imports, at 2.9%, exceeds its share in overall global exports, which stands at 2.4% in 2023.

Figure 38: India's share in global merchandise, services and total exports



Source: World Trade Organization, NSE EPR;

Note: 1) For services, we have considered total commercial services as defined under IMF's Balance of Payment Manual (BPM6) for which data is available since 2005

Figure 39: India's share in global merchandise, services and total imports


Source: World Trade Organization, NSE EPR;

Note: 1) For services, we have considered total commercial services as defined under IMF's Balance of Payment Manual (BPM6) for which data is available since 2005

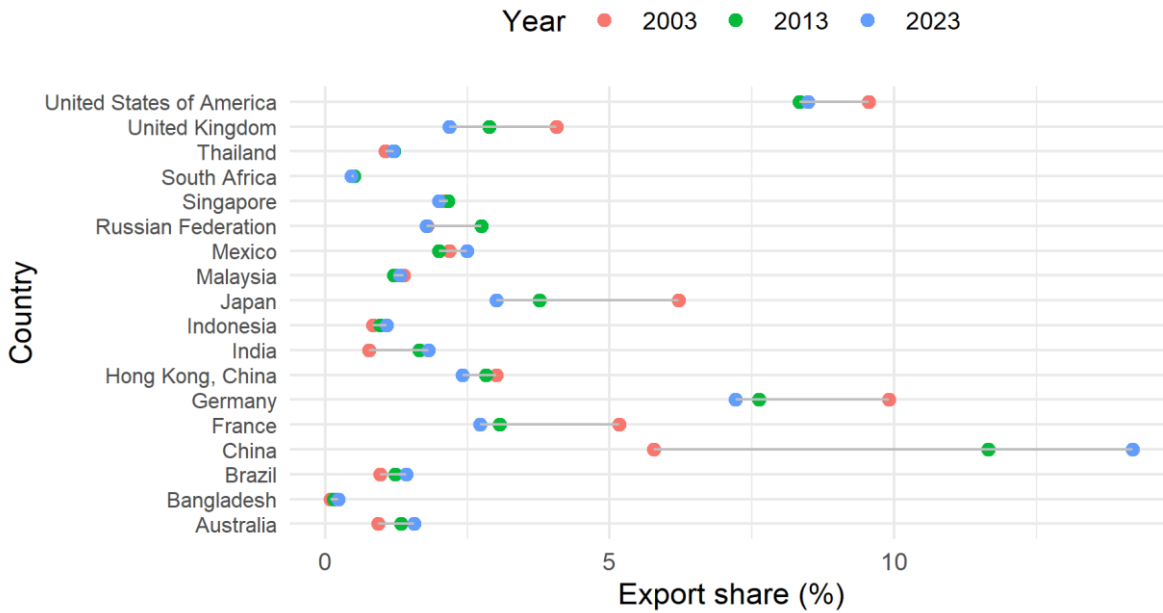
India's performance in services exports better than goods, globally: In terms of share of merchandise exports, India ranks 16th globally, with China (14.2%), the USA (8.5%), and Germany (7.2%) occupying the top three positions. India's global ranking in merchandise exports has improved from 31 in 2000 to 20 in 2010 but slipped slightly to 21 at the beginning of the current decade. The top 10 exporters account for half of global merchandise exports of US\$ 23.8 trn in 2023. Over the past two decades, China's share has improved by 8.4pp in global merchandise exports, largely at the expense of major economies such as Japan (-3.2pp), Germany (-2.7pp), France (-2.4pp), the UK (-1.9pp), and the USA (-1.1pp). Conversely, India ranks 7th in global services exports, trailing behind the top three ranked economies: USA (12.7%), the UK (7.4%), and Germany (5.5%). The top 10 service exporters account for 55.2% of global services exports. Over the last decade, India and Singapore saw a significant improvement in their share of services exports, with increases of 1.2 and 1.3pp, respectively, which was partially offset by a decline in the share of the USA of 1.7pp during the same period.

India's share of merchandise goods exports in total exports stood at 56.2% vs. the world average of 75.3%, implying that the share of services exports at 43.8% in the total basket is the highest among major economies. Contrastingly, the share of services imports in the total basket of imports is at 26.7%, marginally higher than the world average of 23%. Countries like USA (33%), France (35.6%), Singapore (40.8%) and UK (52.7%) have a higher share of services exports in their total basket vis-à-vis the world average. On the other hand, Brazil, Germany, France, UK and Singapore have a higher share of services imports vis-à-vis the world average. Agricultural products, textiles and certain sub-components of manufacturing like iron & steel, chemicals and pharmaceuticals are some broad commodities in which India has a Relative Comparative Advantage (RCA).

Conversely, machinery & transport equipment, office equipment and electronic components have a lower RCA.

Figure 40: Country-wise share of world merchandise exports across different years

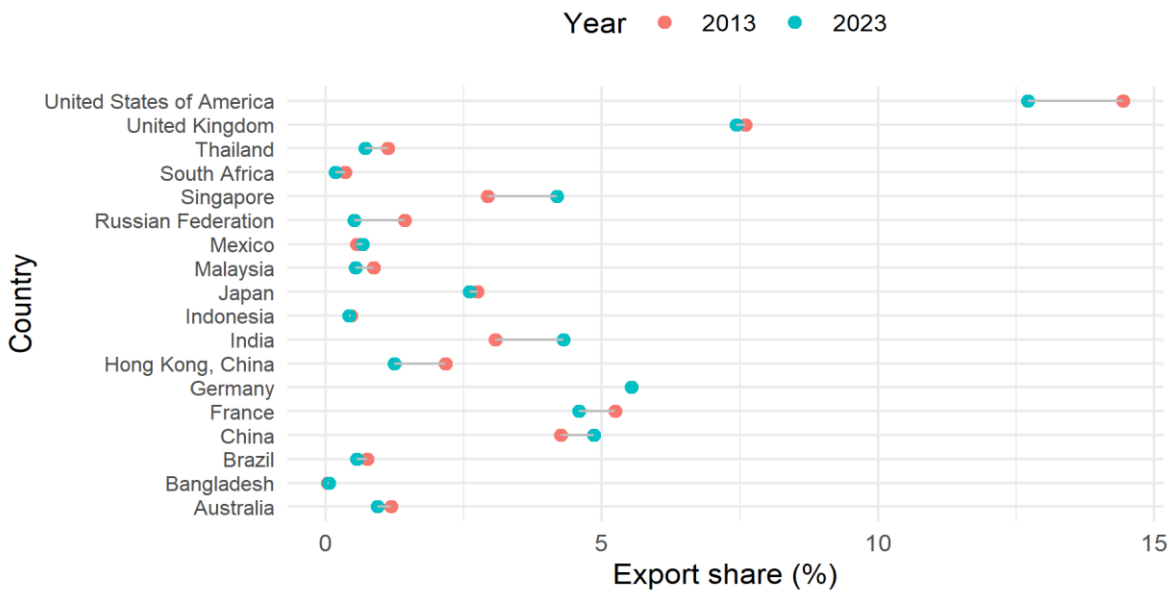
Country-wise Share of World Exports



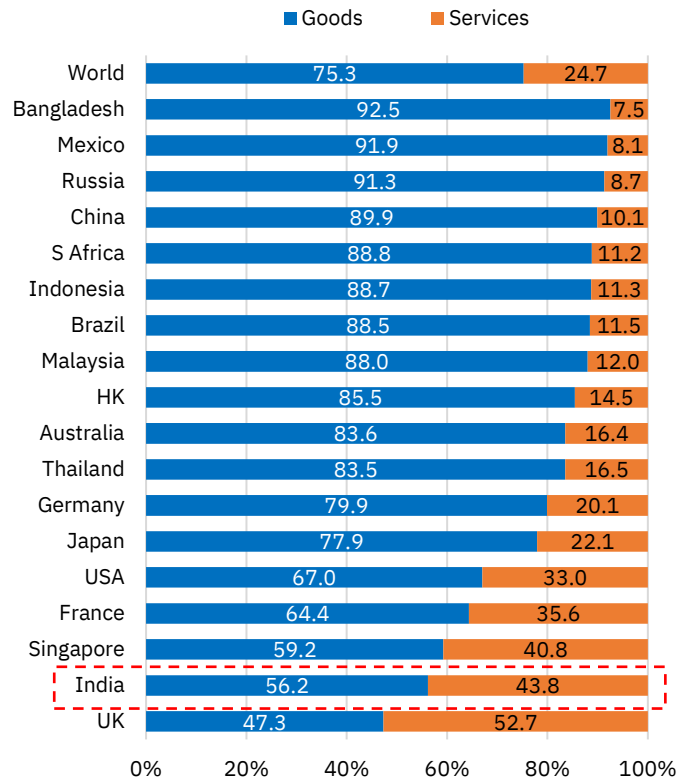
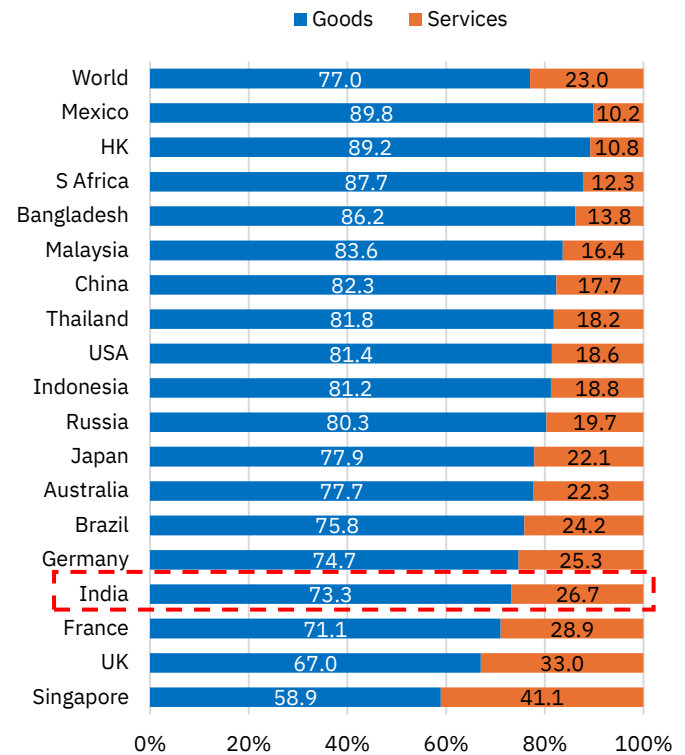
Source: World Trade Organization, NSE EPR;

Figure 41: Country-wise share of world services exports across different years

Country-wise Share of World Exports - Services



Source: World Trade Organization, NSE EPR

Figure 42: Country-wise break-up of goods and service exports in 2023 (%)

Figure 43: Country-wise break-up of goods and services imports in 2023 (%)


Source: World Trade Organization, NSE EPR

Table 19: Relative Comparative Advantage for select Indian commodities

RCA	1990	2000	2010	2020	2023
Agricultural products	1.6	1.6	1.2	1.4	1.2
Food	1.7	1.9	1.1	1.4	1.3
Fuels and mining products	0.6	0.5	1.2	1.1	1.4
Fuels	0.3	0.3	1.1	1.1	1.5
Manufacturing	1.0	1.1	0.9	1.0	1.0
Iron and steel	0.4	1.4	1.7	2.2	1.5
Chemicals	0.9	1.1	0.9	1.5	1.2
Pharmaceuticals		1.6	1.0	1.7	1.4
Machinery and transport equipment	0.2	0.2	0.4	0.5	0.6
Office and telecom equipment	0.1	0.1	0.2	0.2	0.5
Electronic data processing and office equipment		0.1	0.1	0.1	0.1
Telecommunications equipment		0.1	0.3	0.4	1.1
Integrated circuits and electronic components		0.0	0.1	0.0	0.1
Transport equipment		0.2	0.6	0.7	0.6
Automotive products	0.1	0.2	0.5	0.5	0.5
Textiles	4.1	5.4	3.4	2.9	3.1
Clothing	4.5	4.6	2.1	1.8	1.5

Source: WTO, NSE EPR.

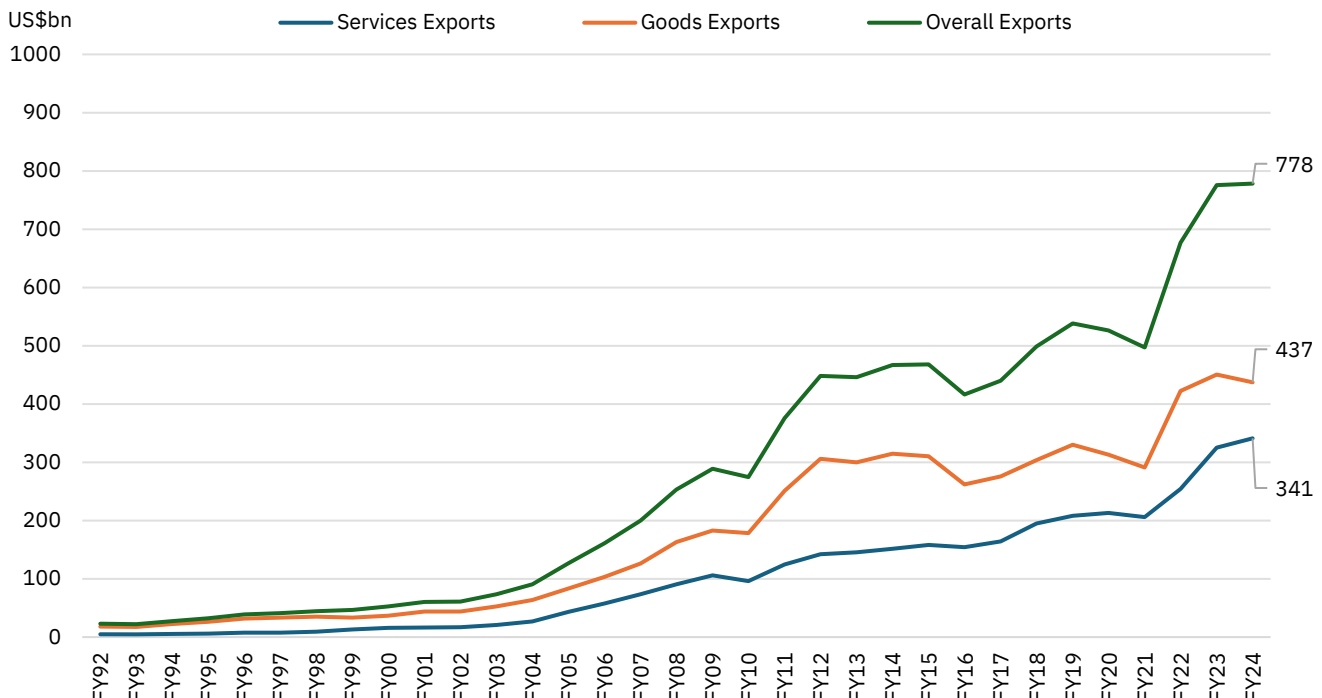
Note: Relative Comparative Advantage (RCA) is the ability of a country to produce a particular good or service at a lower opportunity cost than its trading partners. This is computed as the ratio of exports of a specific product to its total exports of all goods in relation to the same ratio for the world. A country has an RCA if this ratio is more than 1.

India's aggregate trade picture

India's total exports have grown at a CAGR of 10.4% over the past three decades, with a remarkable double-digit CAGR of 11.1% and 17.3% in the first (FY1994-FY2004) and second (FY2004-FY2014) decades respectively. The remarkable growth in these first two decades under review can be ascribed to global economic boom prior to the Global Financial Crisis (GFC) in 2008-09, concentrated efforts towards trade liberalization via regional and bilateral trades and export financing coupled with gradual improvement in trade logistics. However, growth moderated significantly in the most recent decade, with the 10-year CAGR declining to 3.3%. This slowdown can be attributed to factors such as deceleration in global economic growth, rising trade protectionism, the COVID-19 pandemic, and persistent geopolitical tensions that disrupted supply chains, among other challenges.

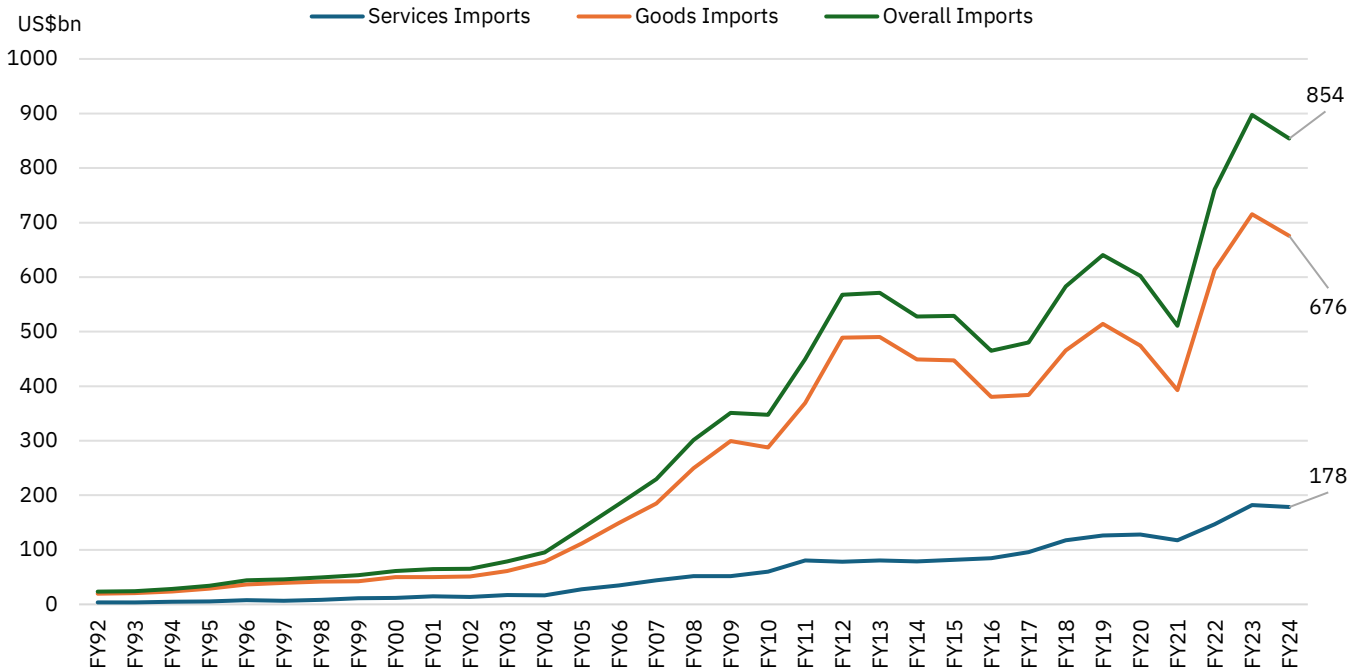
A similar trend is evident in the services trade. Both exports and imports of services witnessed robust double-digit growth during the first two decades (FY94-FY04 and FY04-FY14). However, growth in the past decade (FY14-FY24) has moderated, though the services export CAGR of 8.4% remains notably higher than that of merchandise exports. In the first seven months of FY25, merchandise exports amounted to US\$ 252.2 bn, 3.1% higher compared to the same period last year, while merchandise imports stood at US\$ 416.8 bn, reflecting a 5.7% increase. Conversely, services exports during the same period rose by 12.7% year-on-year to US\$ 216.3 bn, while services imports increased by 12.2% to US\$ 114.8 bn during the period April-October 2024.

Figure 44: Trend of India's merchandise goods, services and total exports



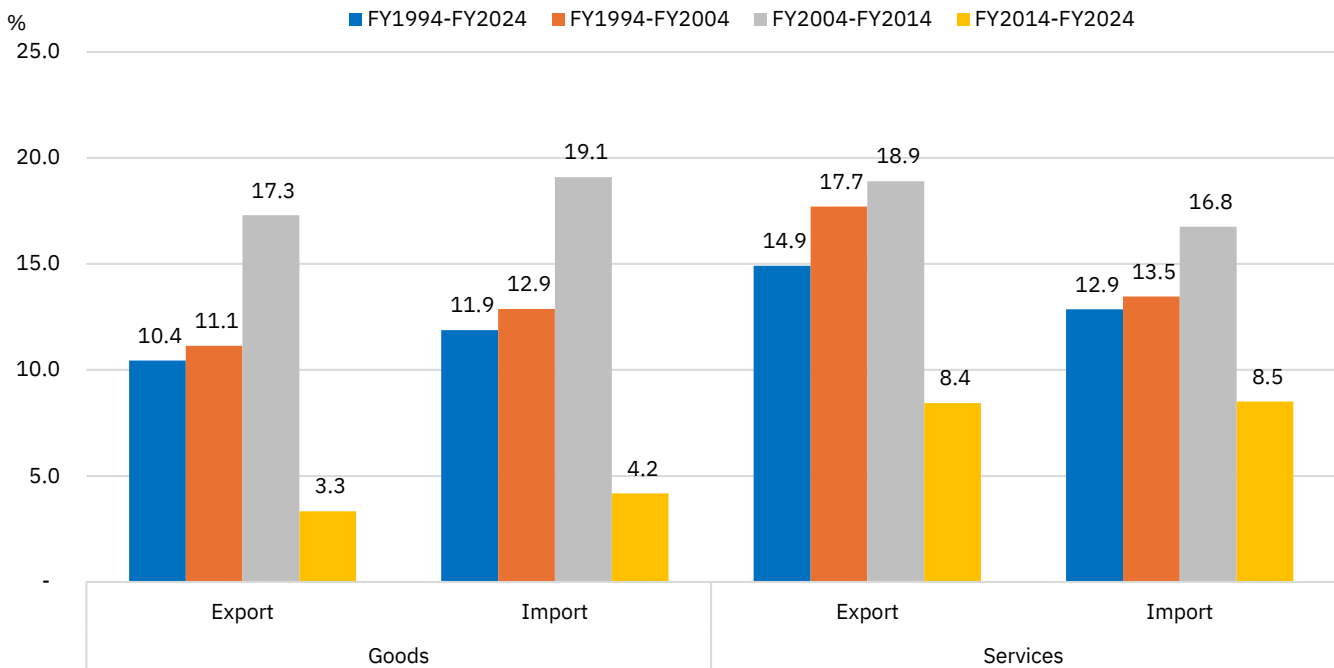
Source: CMIE Economic Outlook

Note: 1) Services exports have been defined as per BPM5 methodology 2) Overall exports is a sum of services and merchandise goods exports

Figure 45: Trend of India's services, goods and total imports


Source: CMIE Economic Outlook

Note: 1) Services imports have been defined as per BPM5 methodology 2) Overall exports is a sum of services and merchandise goods imports

Figure 46: CAGR growth during the last three decades for goods and services trade


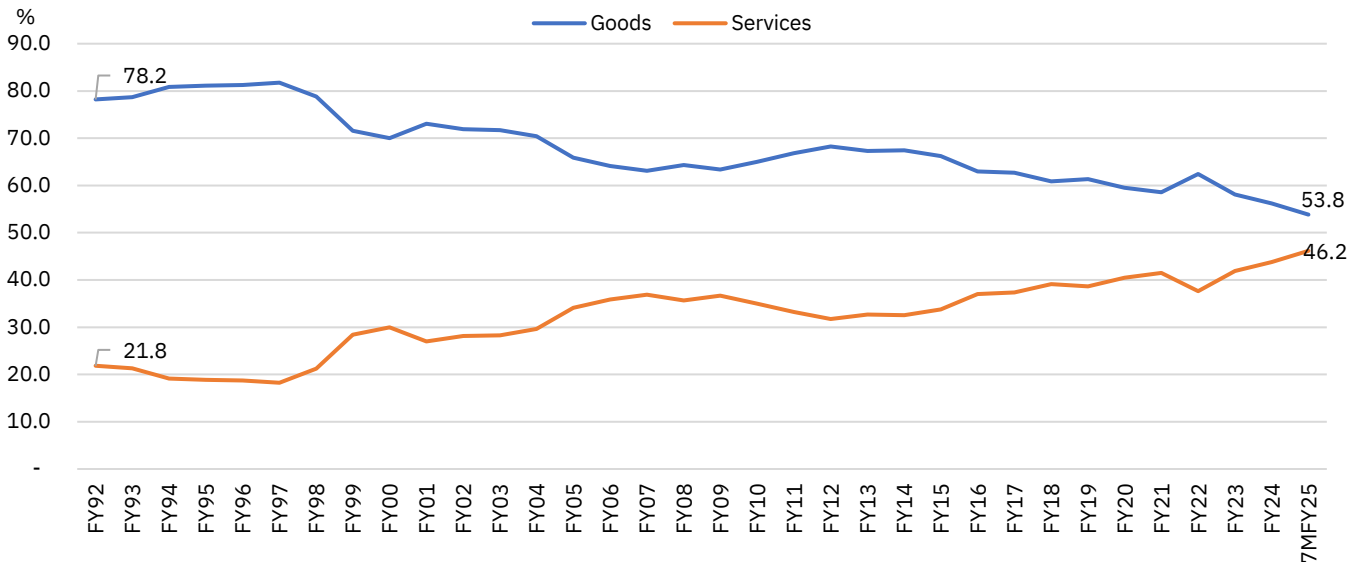
Source: CMIE Economic Outlook, NSE EPR

Share of services exports in overall basket has seen a noticeable growth over the years:

India's share of merchandise exports in total exports has declined significantly over the last three decades, falling from 78% in 1991-92 to 54% in the first half of FY25. In contrast, the share of services exports has risen sharply from 22% to 46% during the same period. The increase in the share of services in the overall basket is due to the relatively faster growth in services exports supported by global outsourcing boom,

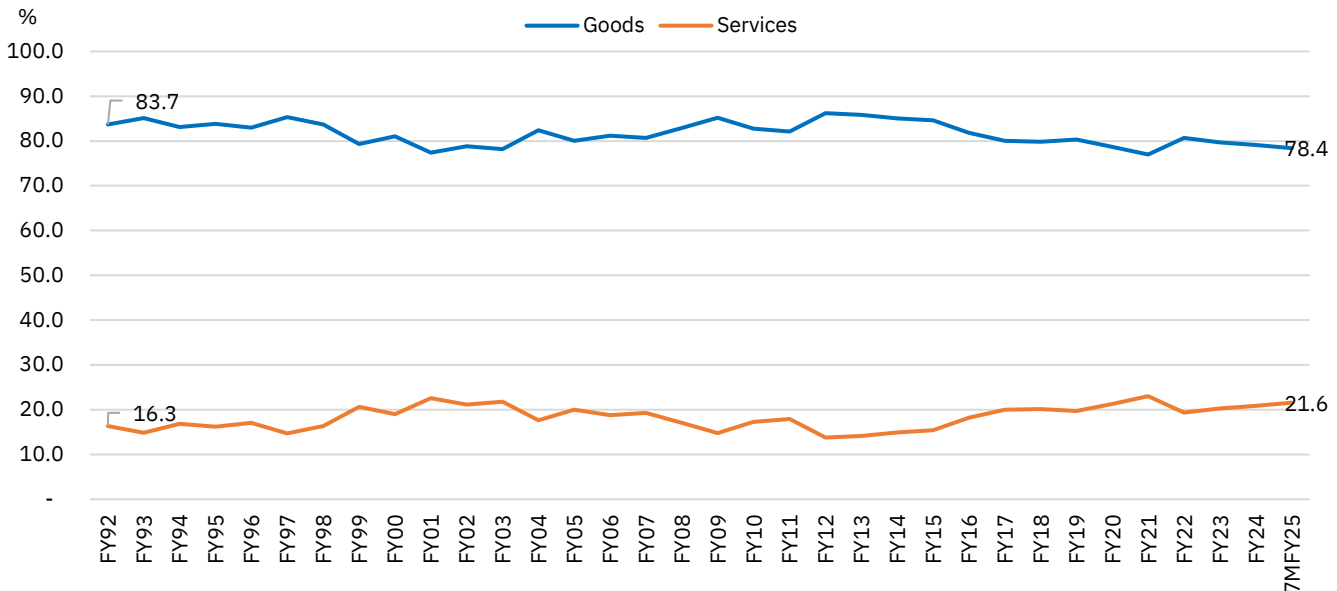
emergence of IT hubs, establishment of IT-specific Special Economic Zones (SEZs), rapid adoption of cloud computing and cyber security services which has cumulatively boosted IT services exports coupled with diversification of the basket towards exports of financial and consulting services. Regarding imports, the share of goods in total imports decreased at a slower rate, from 83.7% in 1991-92 to 78.4% in 7M-FY25, while the share of services imports increased more gradually, from 16.3% to 21.6% during the same period.

Figure 47: Share of goods and services exports in India's total exports



Source: CMIE Economic Outlook, NSE EPR

Figure 48: Share of goods and services imports in India's total imports

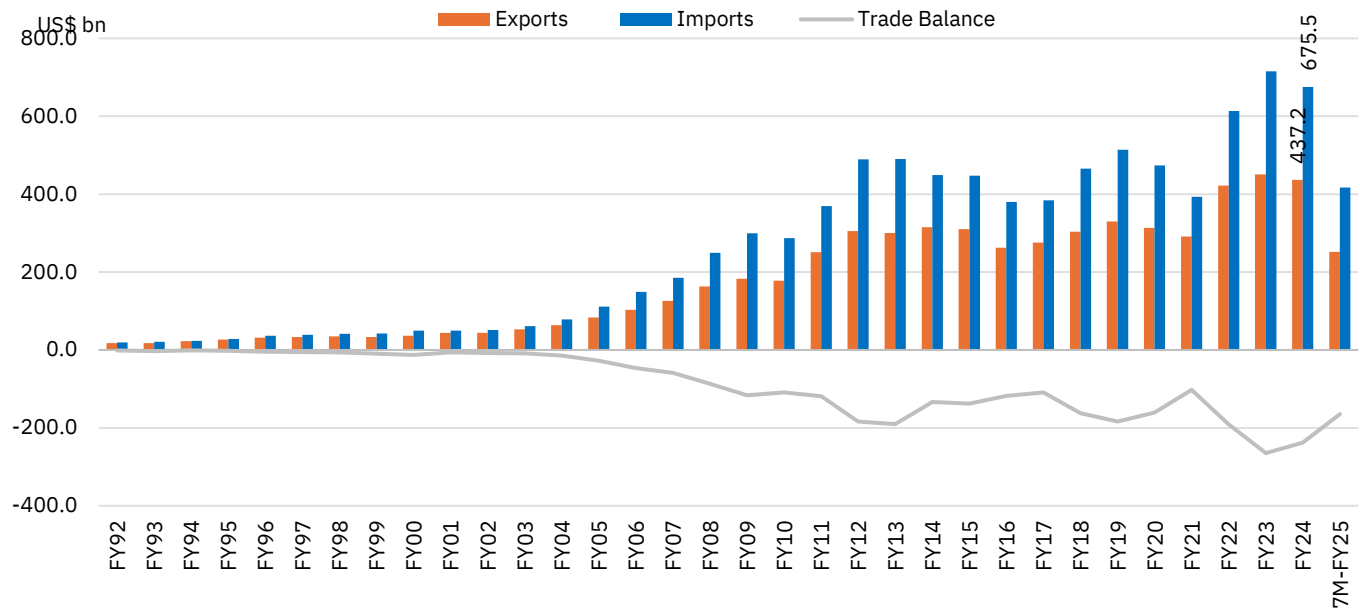


Source: CMIE Economic Outlook, NSE EPR

India's non-oil trade deficit has outpaced oil trade deficit: India's merchandise trade balance has expanded from a three-decade low of US\$ 1.1 bn in FY94 to US\$ 238.4 bn in FY24, after reaching a peak of US\$264.8 bn in FY23. In the first seven months of this fiscal, the trade balance has widened to US\$164.6 bn, 9.9% higher than the same period last year. In the past three-and-a-half fiscal years (FY22-H1FY25), India's non-oil trade

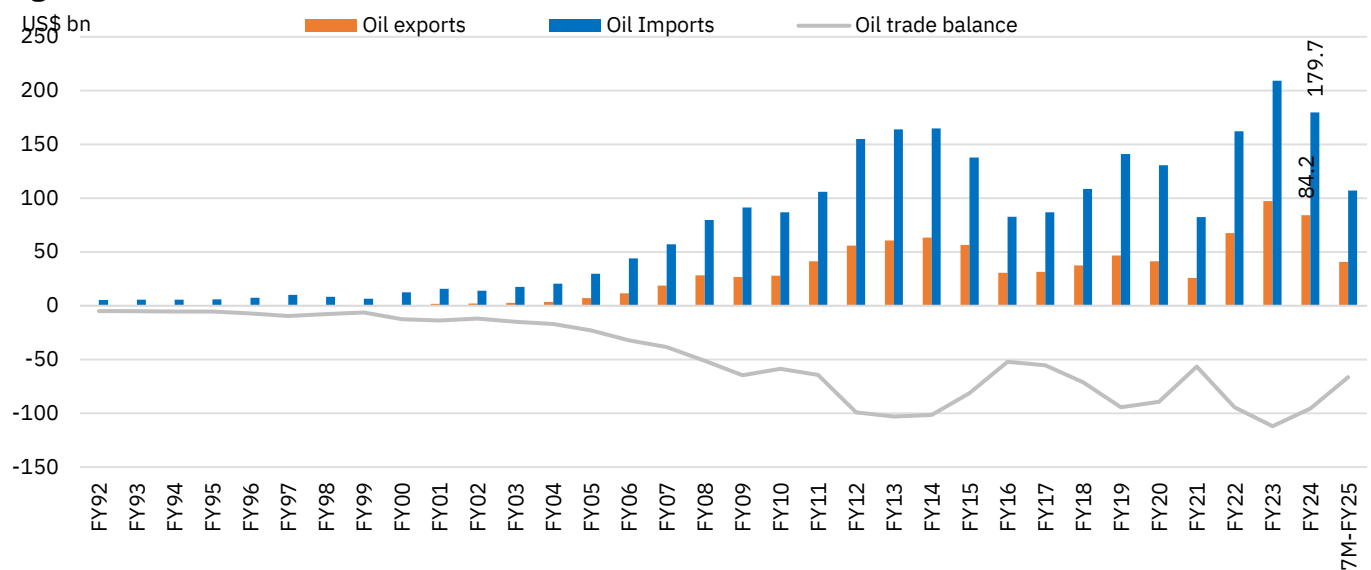
deficit surpassed the oil trade deficit, a trend observed in only five out of the last 31 years. Since FY1991-92, there have been 11 years when the non-trade balance was in surplus with the recent years of expanding non-oil deficit ascribed to rising demand for consumer goods like electronics and gold along with industrial demand for machinery and capital goods. Regarding imports, the share of petroleum products, which peaked at 36.8% in FY14, has declined to 26.6% in FY24, resulting in non-petroleum imports now accounting for nearly three-fourths of India's total imports. The share of gold & silver imports has also been volatile, having peaked at 12.6% in FY12, while hovering in single digits since FY14.

Figure 49: India's merchandise trade – exports, imports and trade balance during the last three decades

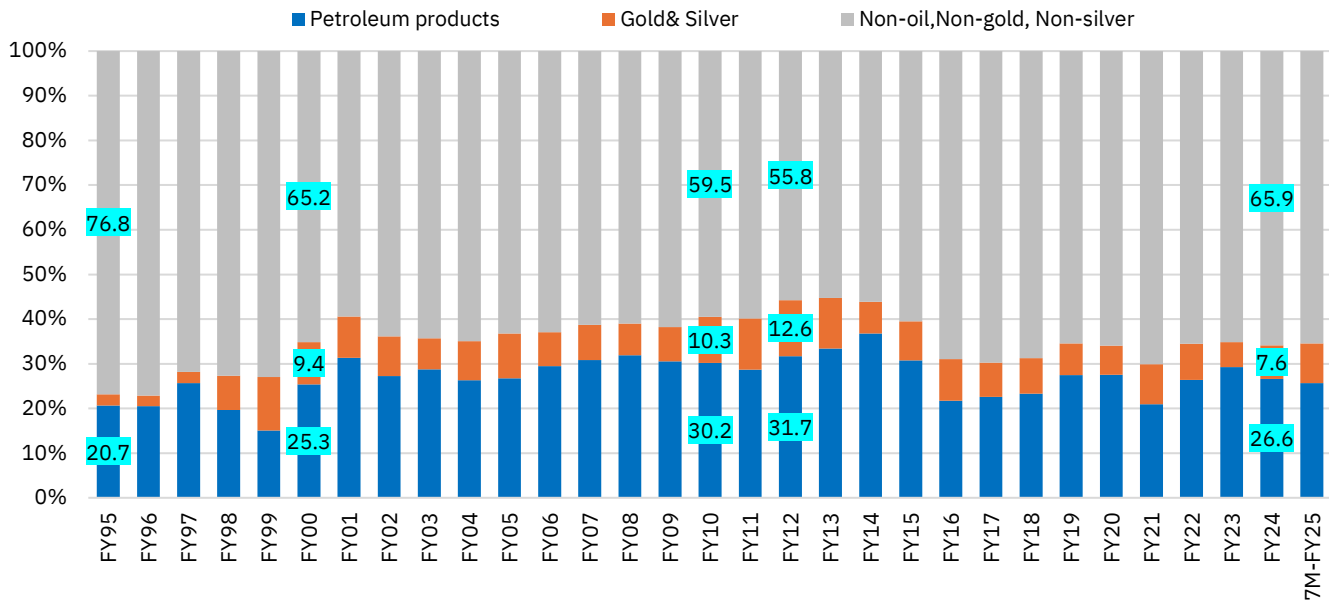


Source: CMIE Economic Outlook

Figure 50: Trends in oil trade balance vs. non-oil trade balance



Source: CMIE Economic Outlook, NSE EPR

Figure 51: Composition of India's imports – across broad categories and time


Source: CMIE Economic Outlook, NSE EPR

Analysis of India's trading partners

Country-wise trade balance

USA has the highest trade surplus, while China has the highest trade deficit: In the last two decades, India has recorded merchandise trade surplus with some of the countries like USA, Netherlands, Bangladesh, Nepal, Spain, Sri Lanka and trade deficit with China, Switzerland, Germany, Australia, Malaysia, South Korea, Saudi Arabia and Iraq on a sustained basis.

The contrasting trade dynamics between India and its two major trading partners – USA and China – is noteworthy. India's merchandise trade surplus with the USA has nearly doubled from US\$ 20.6 bn in FY15 to US\$ 36.8 bn in FY24, while its trade deficit with China has increased from US\$ 48.5 bn in FY15 to US\$ 85.1 bn in FY24. USA and India have complementary trade structures with India providing labor-intensive goods like pharmaceuticals, G&J and electronics while importing capital-intensive products. Conversely, India imports from China caters to domestic industrial and consumer needs while exporting predominantly raw materials like ores & minerals.

The trade deficit with Russia has surged from US\$ 2.1 bn in FY15 and US\$ 4.1 bn in FY20 to US\$ 57.2 bn in FY24, driven primarily by higher petroleum imports post the Ukraine-Russia conflict. The trade surplus with the Netherlands has expanded fivefold, from US\$3.5 bn in FY15 to US\$ 17.4 bn in FY24. The number of countries with which India has recorded a merchandise trade deficit has varied over the years. In FY01, India had a trade deficit with 20 out of 58 countries, which increased to 37 countries by FY10. As of FY24, this number stands at 34 countries.

Table 20: Top five countries based on merchandise trade surplus and deficit

Indicator	1991-92	1999-00	2009-10	2019-20	2023-24
Top 5 surplus	Russia (1.3)	USA (4.8)	UAE (4.5)	USA (17.3)	USA (36.8)
	USA (1.1)	Hong Kong (1.7)	Netherlands (4.3)	Bangladesh (6.9)	Netherlands (17.4)
	UAE (0.6)	Bangladesh (0.6)	Hong Kong (3.2)	Nepal (6.4)	Bangladesh (9.2)
	Hong Kong (0.5)	Sri Lanka (0.5)	USA (2.5)	Netherlands (5)	Nepal (6.2)
	Bangladesh (0.3)	Netherlands (0.4)	Bangladesh (2.2)	Sri Lanka (2.9)	UK (4.5)
	Belgium (-0.7)	Nigeria (-2.6)	China (-19.3)	China (-48.5)	China (-85.1)
Top 5 deficit	Morocco (-0.4)	Belgium (-2.3)	Switzerland (-14)	Iraq (-21.9)	Russia (-57.2)
	Australia (-0.3)	Saudi Arabia (-2.3)	Saudi Arabia (-13.1)	Saudi Arabia (-20.6)	Iraq (-26.7)
	Germany (-0.3)	Switzerland (-2.3)	Australia (-11)	Switzerland (-15.6)	Saudi Arabia (-20.2)
	Brazil (-0.2)	Kuwait (-1.8)	Kuwait (-7.4)	Indonesia (-10.9)	Switzerland (-19.7)

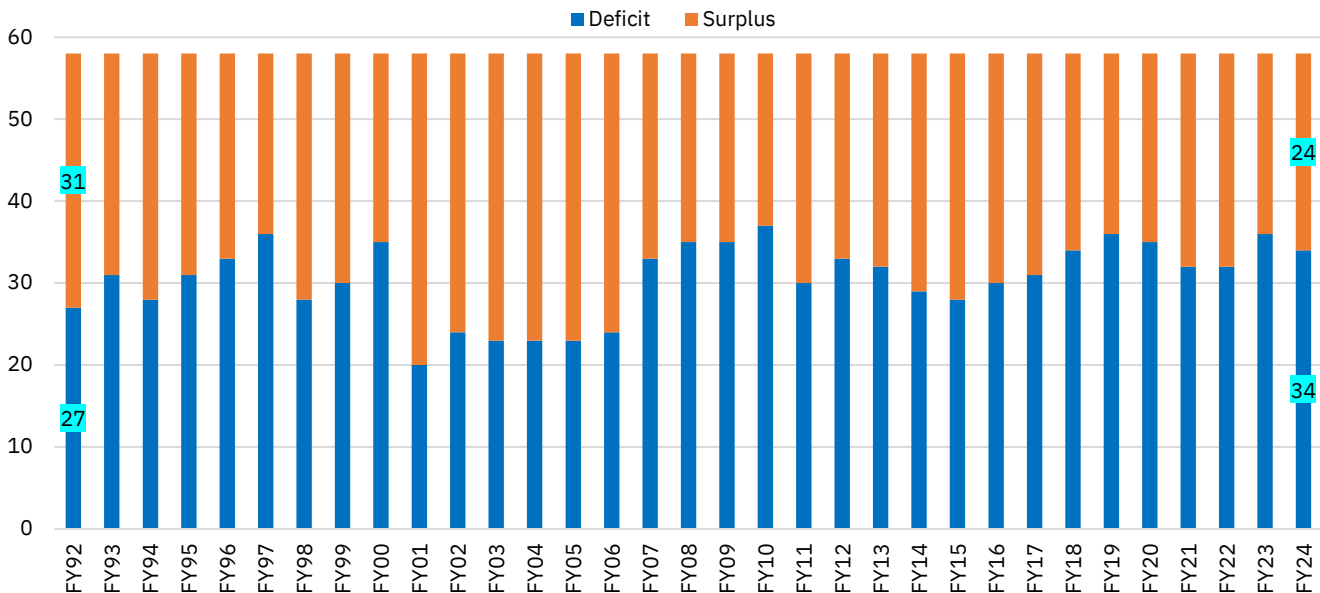
Source: CMIE Economic Outlook, NSE EPR; Figures in parentheses are trade balances for the respective year in US\$ bn

Table 21: Country-wise, year-wise merchandise trade balance

US\$ mn	Top-5 countries based on trade surplus					Top-5 countries based on trade deficit				
	USA	Netherlans	Bangladesh	Nepal	UK	China	Russia	Iraq	Saudi Arabia	Switzerland
FY92	1,057	118	321	59	-37	28	1,325	-3	129	69
FY95	2,116	200	607	84	131	-507	303	0	-1,134	-577
FY00	4,819	414	558	-37	-683	-748	325	-150	-2,275	-2,250
FY05	6,762	813	1,571	397	115	-1,482	-691	130	111	-5,397
FY10	2,495	4,271	2,171	1,077	1,761	-19,261	-2,591	-6,539	-13,098	-14,013
FY15	20,622	3,527	5,829	3,931	4,325	-48,471	-2,142	-13,359	-16,874	-21,067
FY20	17,344	4,969	6,942	6,443	2,059	-48,510	-4,076	-21,878	-20,595	-15,623
FY24	36,761	17,407	9,222	6,209	4,549	-85,087	-57,175	-26,669	-20,245	-19,724

Source: CMIE Economic Outlook, NSE EPR

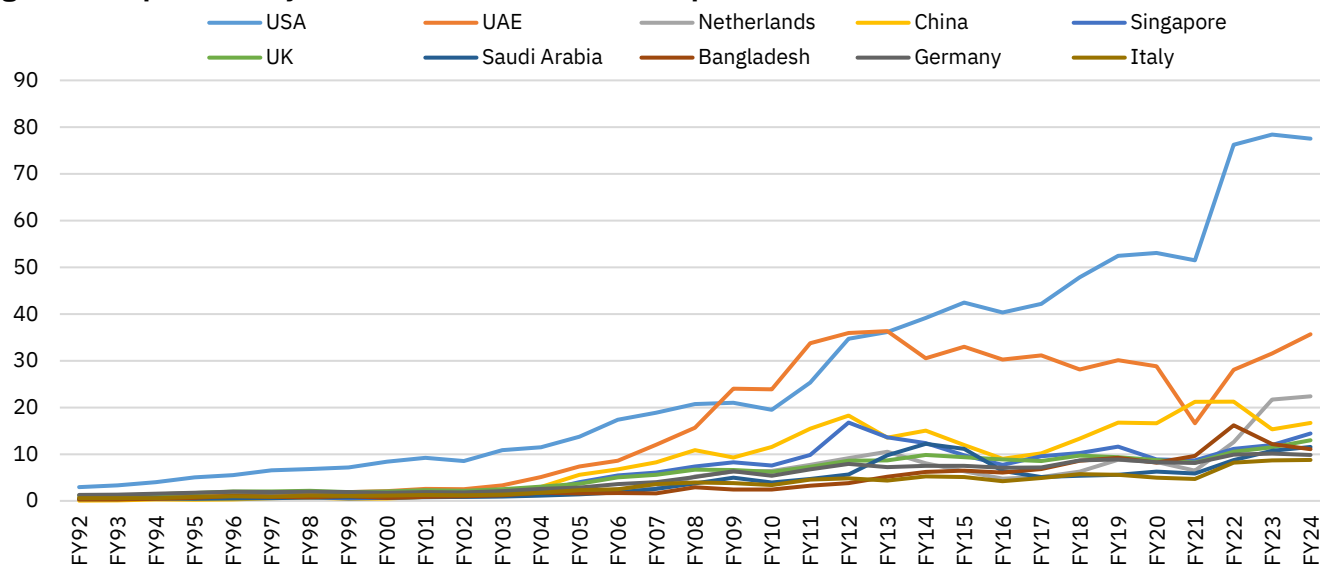
Note: 1) The countries have been shortlisted based on the trade balance of the respective countries in FY24

Figure 52: Year-wise number of countries with trade deficit and surplus


Source: CMIE Economic Outlook, NSE EPR

Country-wise exports

USA, UAE and China have been consistently top export destinations: Based on quinquennial average exports, the USA and UAE have consistently been India's top export partners for the past five series (2005-10 to 2020-24), with China ranking third since 2005-2010. Germany's ranking has fallen from fifth during FY95-FY00 to ninth during FY20-FY24 while Netherlands ranking has improved from eight during FY05-10 to fourth during FY20-24, driven by petroleum exports. Countries such as Japan, Italy, and Russia, which were among India's top 10 export destinations during FY95-00, are no longer included in the current list of top export partners. In FY24, the USA accounted for 18% of India's total exports, up from 12% a decade ago, making it the only country with a significant increase in share over this period. Bangladesh, absent from the top 10 list until 2010-2015, is now India's 5th-largest export partner.

Figure 53: Top 10 country-wise trends in merchandise exports


Source: CMIE Economic Outlook, NSE EPR

Note: 1) The countries have been shortlisted based on the exports of the respective countries in FY24

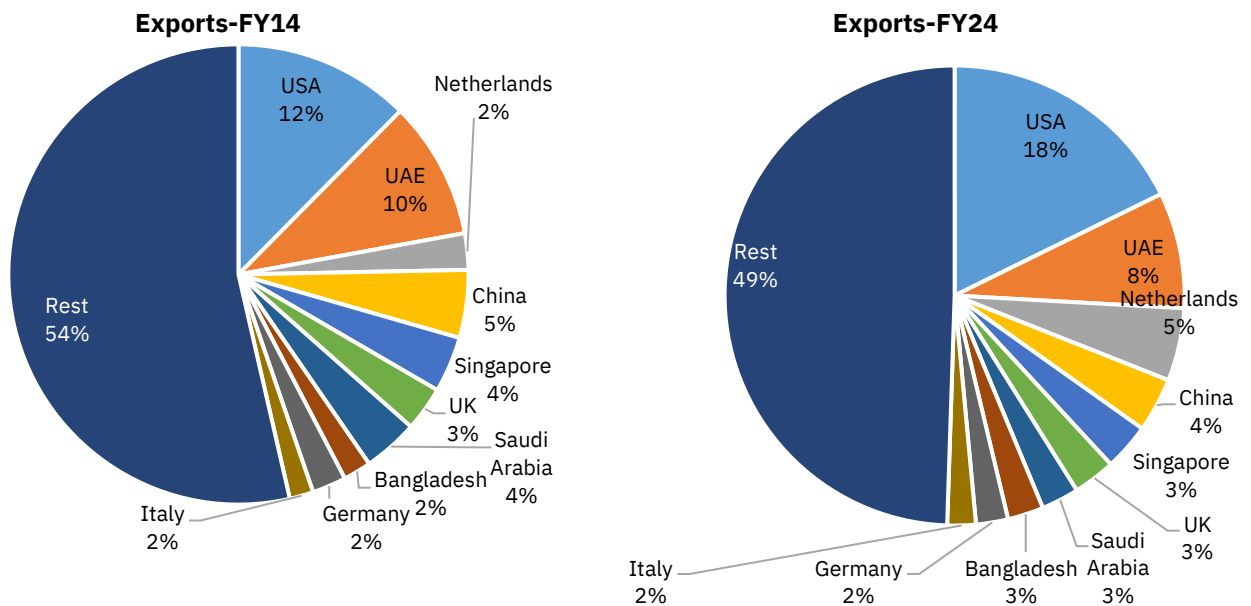
Table 22: Top-10 trading partners based on merchandise exports

1995-00	2000-05	2005-10	2010-15	2015-20	2020-24
USA	USA	USA	USA	USA	USA
UK	UAE	UAE	UAE	UAE	UAE
Hong Kong	Hong Kong	China	China	China	China
Japan	UK	Singapore	Singapore	Hong Kong	Netherlands
Germany	China	UK	Hong Kong	Singapore	Bangladesh
UAE	Germany	Hong Kong	UK	UK	Singapore
Belgium	Singapore	Germany	Saudi Arabia	Germany	UK
Italy	Japan	Netherlands	Netherlands	Bangladesh	Hong Kong
Russia	Belgium	Belgium	Germany	Netherlands	Germany
Bangladesh	Italy	Italy	Belgium	Vietnam	Saudi Arabia

Source: NSE EPR

Note: 1) The top-10 trading partners for each quinquennial series has been arrived at after calculating the average exports during the corresponding period under review

2) The color shade has been applied to countries which have been part of the top-10 export partners for atleast four out of the six quinquennial periods.

Figure 54: Country-wise composition of exports in FY14 and FY24


Source: CMIE Economic Outlook, NSE EPR

Note: 1) The countries have been shortlisted based on the total merchandise exports of the respective country in FY24

Exports to advanced economies relative more diversified: Exports to the USA (gems & jewellery, pharmaceuticals, electronics), the UK (machinery, electronics, garments, petroleum), Bangladesh (textiles, agriculture, petroleum products) and Germany (machinery, electronics, metals) are relatively diversified. In contrast, exports to the Netherlands (64% petroleum), Hong Kong (82% gems & jewellery), and Singapore (48% petroleum products) are relatively more concentrated. Interestingly, in FY14, exports to the UAE and Saudi Arabia were concentrated in just one-two products, but by FY24, the range of export products to these countries has broadened significantly.

Nearly two-thirds of ores and minerals exports go to China, while one-third of electronic goods exports are to the USA, with the latter's share increasing by 20pp over the past decade. The sharp increase in the share of electronics exports to the USA can be

attributed to growing manufacturing capabilities, diversification of supply chains, cost competitiveness along with Government programs like Make in India and PLI scheme. Textile (excluding readymade garments) exports to the USA and Bangladesh has seen a combined share increase of ~13pp, partly offsetting China's declining share by 6.7pp. India's geographic proximity as a raw material supplier to Bangladesh's garment production and an alternative to traditional suppliers for the USA has driven growth in textile exports to these countries. The share of petroleum exports to Netherlands has increased from 6.1% in FY14 to 17% in FY24 as it acts as a key re-export hub for other European countries, increased demand for cleaner fuels to meet stricter environmental regulations and shift in energy trade dynamics (i.e higher crude oil purchases from Russia translating into higher refinement and exports) post the Russia-Ukraine crisis.

Table 23: Commodity-wise share in respective country's exports from India in FY14 and FY24

	% share	USA	UAE	China	Netherl ands	Bangla desh	Singapor e	UK	Hong Kong	Saudi Arabia	Germa ny
FY14	Ferrous and non-ferrous metals	4.4	4.0	14.4	2.2	1.6	3.8	5.5	0.2	3.1	7.2
	Machinery & instruments	5.0	2.2	3.0	2.5	5.7	2.8	6.8	0.5	4.5	9.1
	Transport equipment	3.2	8.0	3.6	4.1	8.6	15.6	10.0	0.1	2.2	5.0
	Gems & Jewelry	19.8	41.7	0.8	0.2	0.0	4.3	4.1	87.5	0.1	1.5
	Drugs& pharma products	10.1	0.4	0.8	2.9	2.6	1.1	5.4	0.3	0.3	5.4
	Electronic goods	3.1	3.2	2.4	6.0	1.4	3.0	3.0	1.8	1.4	5.2
	Readymade garment	8.8	5.7	0.4	6.9	0.5	0.5	16.9	0.6	2.5	15.8
	Textiles	7.8	2.8	14.0	2.3	19.2	0.6	5.9	1.5	1.1	7.8
	Agriculture	10.9	6.3	20.6	9.2	38.3	3.0	7.7	1.9	17.2	6.7
	Ores & minerals	0.2	0.9	12.0	0.5	3.1	0.1	0.1	0.0	0.7	0.1
	Petroleum products	10.0	13.8	6.9	47.7	1.3	58.7	11.1	0.2	55.7	0.5
	% share	USA	UAE	China	Netherl ands	Bangla desh	Singapor e	UK	Hong Kong	Saudi Arabia	Germa ny
FY24	Ferrous and non-ferrous metals	5.5	2.9	4.8	2.6	4.3	3.9	4.6	0.2	14.8	6.6
	Machinery & instruments	9.1	4.6	5.6	2.3	6.0	10.0	13.3	1.7	9.3	19.0
	Transport equipment	3.4	6.0	1.0	0.5	4.9	8.5	3.1	0.1	18.5	6.8
	G&J	12.8	22.6	0.2	0.2	0.0	4.6	4.6	81.6	0.9	1.3
	Drugs& pharma	11.3	1.3	2.2	3.1	2.4	0.8	6.0	0.6	1.1	5.8
	Electronic	13.5	9.4	4.8	7.7	1.6	3.7	12.0	9.1	4.2	9.6
	Readymade garment	6.1	3.2	0.4	2.8	0.2	0.3	10.2	0.8	3.3	8.0
	Textiles	6.0	1.9	5.6	1.3	19.5	0.2	4.2	0.1	1.3	4.8
	Agri	6.5	8.8	20.9	4.5	21.9	2.9	7.5	1.7	19.0	6.4
	Ores&minerals	0.1	0.5	25.4	0.1	1.5	0.0	1.2	0.0	1.1	0.1
	Petroleum products	7.5	18.9	7.0	63.9	11.3	48.1	10.3	0.3	7.6	0.0

Source: CMIE Economic Outlook, NSE EPR

Table 24: Major commodity-wise share of exports from top five trading partners in FY14 and FY24

Commodities	Country name	% share - FY14	%share - FY24	Change (bps)
Agricultural and allied products	USA	9.9	10.4	47
	China	7.2	7.2	1
	UAE	4.5	6.5	204
	Bangladesh	5.5	5.0	-49
	Vietnam	8.8	4.8	-394
Petroleum products	Netherlands	6.1	17.0	1093
	Singapore	11.5	8.2	-323
	UAE	6.6	8.0	138
	USA	6.2	6.9	77
	South Africa	2.7	5.1	237
Ores & minerals	China	50.1	63.4	1328
	Oman	1.9	4.3	244
	Indonesia	1.2	3.4	224
	Russia	0.1	2.6	241
	UAE	7.6	2.5	-502
Leather & leather manufactures	USA	11.8	19.8	797
	Germany	13.3	11.5	-184
	UK	11.5	8.8	-268
	Italy	9.0	7.1	-193
	France	6.2	5.5	-69
Chemicals & related products	USA	19.0	21.5	252
	UAE	2.5	5.5	297
	Brazil	3.1	4.0	88
	Singapore	1.8	3.6	182
	Netherlands	2.4	3.1	66
Engineering goods	USA	9.9	15.8	592
	UAE	8.3	5.6	-274
	Saudi Arabia	2.7	5.0	228
	Germany	3.3	3.7	44
	Italy	2.6	3.6	102
Electronic goods	USA	13.8	33.8	2001
	UAE	11.4	10.8	-59
	Netherlands	5.6	5.6	2
	UK	3.4	5.0	163
	Italy	1.1	3.2	208
Textiles (excluding readymade garments)	USA	16.9	25.0	812
	Bangladesh	6.6	11.6	495
	China	11.7	5.0	-668
	UAE	4.8	3.7	-113
	Sri Lanka	2.8	3.4	60
	USA	22.8	32.5	965
	UK	11.1	9.1	-194

Commodities	Country name	% share - FY14	%share - FY24	Change (bps)
Readymade garments	UAE	11.6	7.8	-374
	Germany	7.9	5.4	-254
	France	5.2	4.4	-71

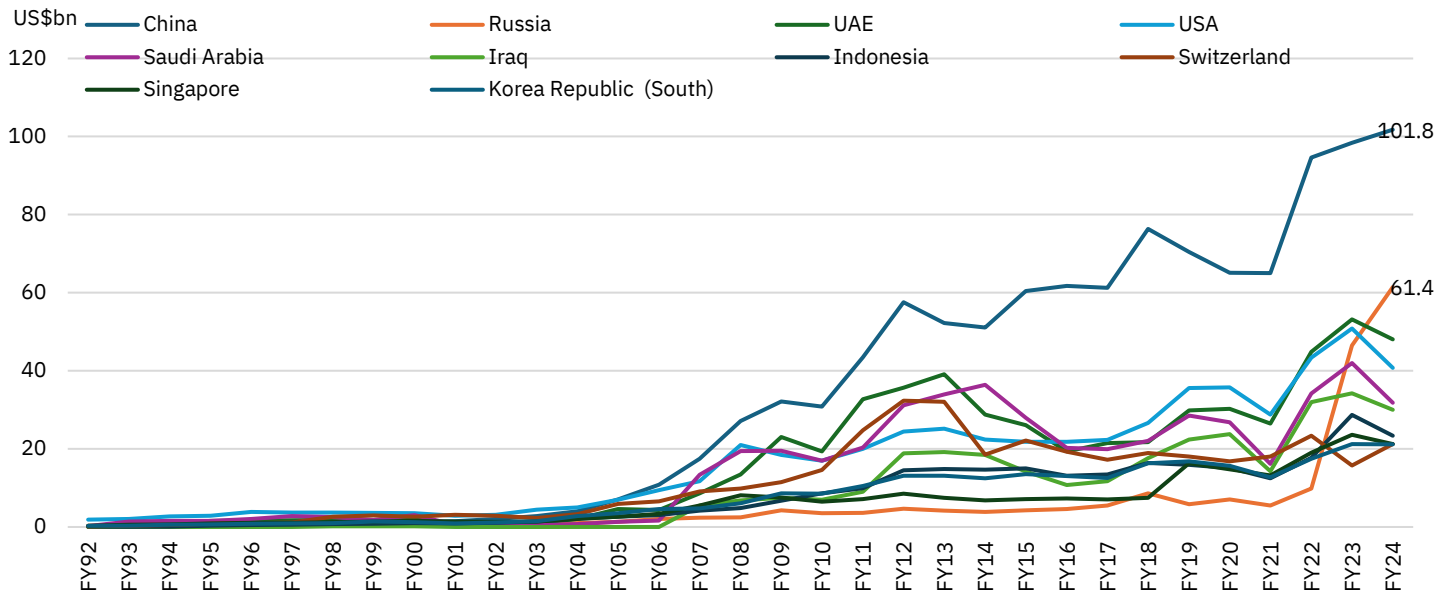
Source: CMIE Economic Outlook, NSE EPR

Country-wise imports

China remains top import partner supported by Asian and Middle Eastern partners:

China has been India's leading import partner, with its share rising to ~15% in FY24, a 4pp increase from a decade earlier. The USA, which ranked as India's top import partner between FY1995-FY2005, has slipped to third place during 2020-24. European countries like Belgium, Germany, and the UK, which featured in the top 10 during 1995-2005, have been replaced in recent years by Asian peers such as Indonesia, Singapore, and Hong Kong. Japan was a key import partner for India during FY95-FY05 but is no longer among the top 10 import partners. The surge in petroleum imports from Russia following the Ukraine-Russia conflict has made it India's fifth-largest import partner, marking its first appearance in the top 10 across the quinquennial series. The decline in the share of "Rest" among import partners, from 52% to 41% over the last decade, indicates an increased concentration of imports from a smaller group of countries. This shift could reflect stronger trade ties with major economies or a strategic focus on specific nations for sourcing key goods.

Middle Eastern countries like the UAE, Saudi Arabia, and Iraq have remained notable import partners since 2010, with more than three-fourths of imports from Saudi Arabia and 99% from Iraq consisting of petroleum products. Imports from several countries remain concentrated in specific products: Russia, UAE, Saudi Arabia, and Iraq in petroleum products; Switzerland in gems and jewellery; Indonesia in ores and minerals; and China, Singapore, and Hong Kong in electronic goods. In FY14, Russia's imports were relatively diversified, but the Ukraine-Russia war has altered trade dynamics, increasing the focus on petroleum product imports in FY24. Petroleum imports account for nearly a quarter of the imports from the USA in FY24 (vs. 4.5% in FY14), thanks to surge in shale oil production along with geopolitical factors and diversification of supply sources. There has been a shift in India's import of ores & minerals from Australia and Indonesia to USA and Russia owing to geopolitical shifts and energy transition (i.e., more focus of Australia on renewable energy sources) and its concomitant diversification of import sources. India's import share of electronic goods has improved significantly from Hong Kong (+10.2pp), offsetting the fall in the share of imports from China (-9.7pp) due to Hong Kong's role as a key re-export hub, tariff advantages, its logistics infrastructure, and the strategic importance of Hong Kong in the global electronics supply chain.

Figure 55: Top-10 country-wise trends in merchandise imports


Source: CMIE Economic Outlook, NSE EPR

Note: 1) The countries have been shortlisted based on the total merchandise imports of the respective country in FY24

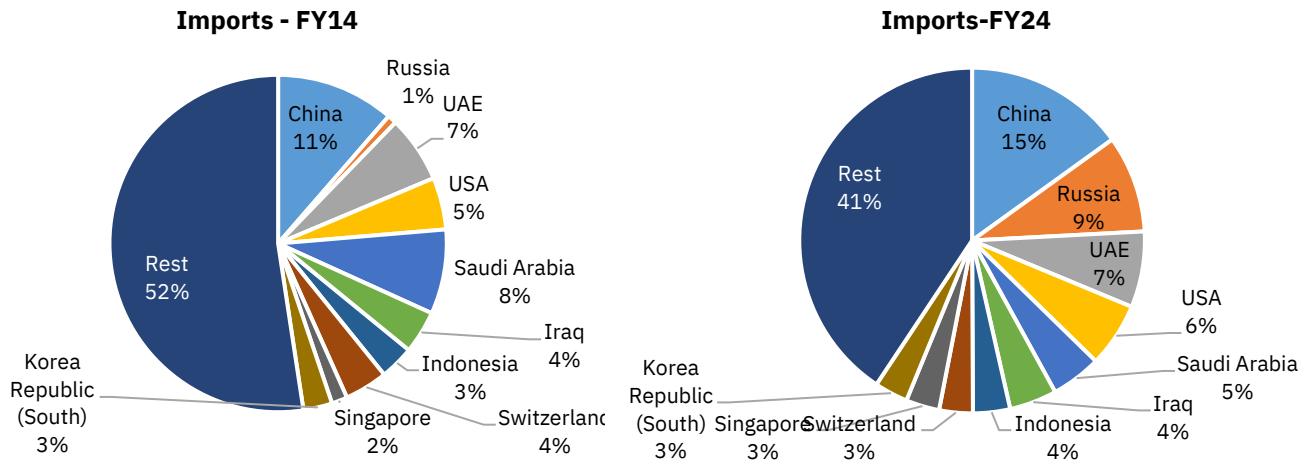
Table 25: Top-10 trading partners based on merchandise imports

1995-00	2000-05	2005-10	2010-15	2015-20	2020-24
USA	USA	China	China	China	China
Belgium	Belgium	USA	UAE	USA	UAE
Germany	Switzerland	Saudi Arabia	Saudi Arabia	UAE	USA
Saudi Arabia	China	UAE	Switzerland	Saudi Arabia	Saudi Arabia
UK	UK	Switzerland	USA	Switzerland	Russia
Japan	Germany	Germany	Iraq	Iraq	Iraq
Switzerland	Japan	Australia	Kuwait	South Korea	Indonesia
Kuwait	Australia	South Korea	Indonesia	Indonesia	Switzerland
UAE	South Korea	Kuwait	Germany	Germany	Singapore
Nigeria	UAE	Singapore	Qatar	Hong Kong	Hong Kong

Source: NSE EPR

Note: 1) The top-10 trading partners for each quinquennial series has been arrived at after calculating the average imports during the corresponding period

2) The color shade has been applied to countries which have been part of the top-10 import partners for atleast four out of the six quinquennial periods.

Figure 56: Country-wise composition of imports in FY14 and FY24


Source: CMIE Economic Outlook, NSE EPR

Note: 1) The countries have been shortlisted based on the total merchandise imports of the respective country in FY24

Table 26: Commodity-wise share in respective country's imports to India in FY14 and FY24

	Commodities	China	Russia	UAE	USA	Saudi Arabia	Iraq	Indonesia	Switzerland	Singapore	Hong Kong
FY14	Petroleum crude & products (POL)	0.5	7.5	46.1	4.5	90.0	99.6	0.3	-	7.7	0.0
	Electronic goods	33.2	1.3	0.2	11.0		0.0	1.4	1.5	25.3	9.1
	Chemicals and related products	18.2	15.3	0.5	14.0	5.3		4.3	2.9	27.9	0.4
	Gold & silver	1.7	8.4	17.7	5.9	0.1		0.1	89.0	0.6	6.0
	Ores and minerals	1.5	7.6	1.1	2.7	0.2		51.4	-	0.1	0.0
	Agricultural and allied products	0.9	2.6	0.4	3.8	0.0	0.3	24.3	0.1	0.9	0.0
	Non-electrical machinery	9.2	1.6	0.3	7.8	0.0		0.5	1.6	3.9	0.5
	Ferrous and non-ferrous metal products	4.9	15.5	4.5	2.4	1.0		0.7	0.3	2.5	0.7
	Pearls precious & semiprecious stones	0.1	19.2	20.7	2.9	0.4		-	1.2	1.8	57.1
	Transport equipment	3.9	0.8	2.0	12.2			1.8	0.1	11.4	1.4
FY24	Petroleum crude & products (POL)	0.3	82.6	35.8	19.3	78.2	99.3	0.1	0.0	5.0	0.0
	Electronic goods	33.3	0.1	0.6	10.4	0.0		0.9	2.2	33.0	51.4
	Chemicals and related products	17.6	3.7	3.6	10.7	9.1	0.1	6.3	3.2	9.6	7.7
	Gold & silver	0.1	0.1	19.6	3.1	1.6		-	84.6	3.6	6.9
	Ores and minerals	0.6	6.3	3.0	10.9	0.2		49.3	2.8	11.6	0.4
	Agricultural and allied products	0.5	2.5	1.0	4.3	0.1	0.6	22.1	1.1	3.5	0.0
	Non-electrical machinery	12.5	0.1	0.7	4.1	0.1		1.1	1.3	4.0	0.6
	Ferrous and non-ferrous metal products	5.2	0.1	2.8	4.5	2.1		1.7	0.4	3.3	1.8
	Pearls precious & semiprecious stones	0.1	1.9	19.5	8.7			-	1.0	0.1	20.5
	Transport equipment	2.2	0.0	3.8	3.7	4.3		1.3	0.0	8.3	0.3

Source: CMIE Economic Outlook, NSE EPR

Table 27: Major commodity-wise share of imports from top five trading partners in FY14 and FY24

Commodities	Country name	% share - FY14	%share - FY24	Change (bps)
Agricultural and allied products	Indonesia	22.6	15.8	-681
	Brazil	4	10	595
	Malaysia	9.5	8.2	-136
	Argentina	7.3	5.9	-140
	USA	5.5	5.3	-15
Petroleum products	Russia	0.2	28.2	2800
	Iraq	11.1	16.6	544
	Saudi Arabia	19.9	13.8	-606
	UAE	8.1	9.6	151
	Qatar	8.9	6.1	-272
Ores & minerals	Australia	29	24.5	-445
	Indonesia	30.8	24	-685
	USA	2.5	9.3	680
	Russia	1.2	8.1	684
	South Africa	8.8	8.1	-70
Leather & leather manufactures	China	23.4	18.6	-473
	Vietnam	3.8	17.4	1353
	Italy	12.5	9.2	-333
	Bangladesh	1.4	8.5	712
	Thailand	2.5	5.7	324
Chemicals & related products	China	25.7	28.6	281
	USA	8.7	6.9	-175
	Japan	2.3	5.4	311
	Saudi Arabia	5.4	4.6	-77
	Russia	1.7	3.6	194
Engineering goods	China	21.3	26	471
	Germany	10.3	7.7	-258
	Japan	8.3	7.6	-64
	USA	9.5	6.4	-313
	South Korea	7.9	6.4	-152
Electronic goods	China	47.4	37.2	-1020
	Hong Kong	1.8	11.6	971
	Singapore	4.8	7.7	288
	Ireland	0.8	5.8	499
	Taiwan	2.3	5.1	281
Textiles (excluding readymade garments)	China	49.5	54.9	540
	Bangladesh	3.6	5.9	229
	Vietnam	2.4	4.9	248
	Thailand	3.4	3.6	24
	USA	4.6	3.6	-103
Readymade garments	Bangladesh	22.1	40	1790

Commodities	Country name	% share - FY14	%share - FY24	Change (bps)
	China	33.7	17.8	-1598
	Spain	10.1	8.5	-161
	Italy	6.3	4.8	-155
	Vietnam	1.2	4.5	327

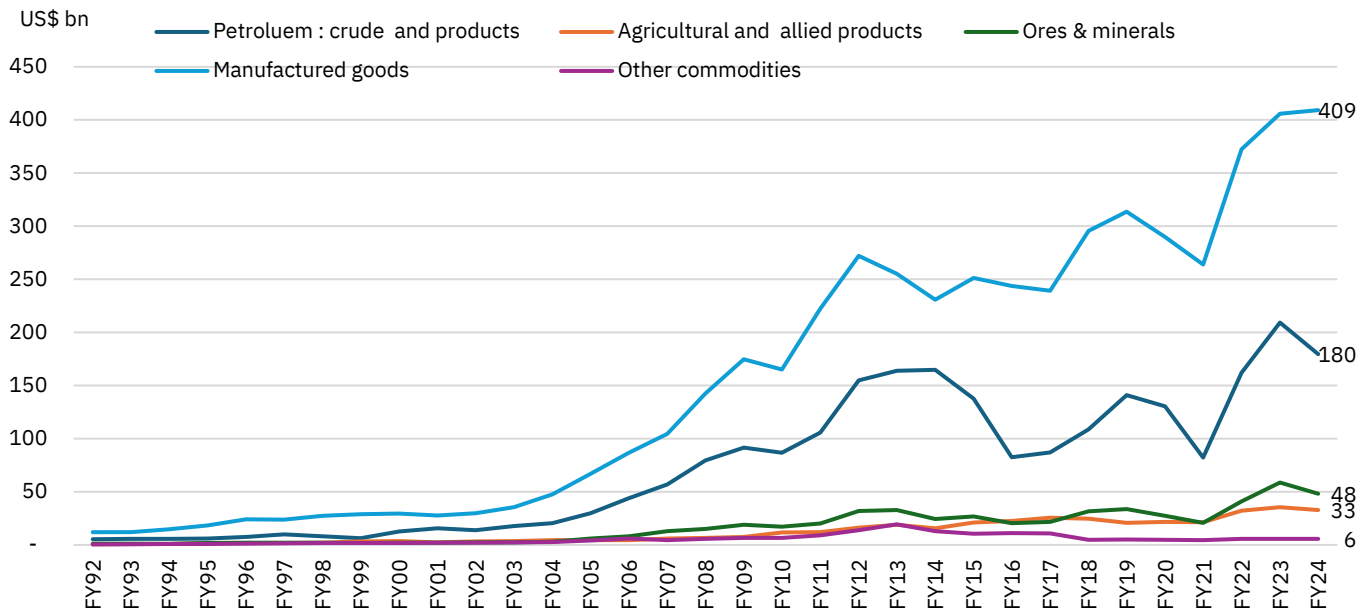
Source: CMIE Economic Outlook, NSE EPR

Analysis of trade for key commodities

Manufacturing products account for three-fifth of India's imports: The share of manufacturing imports rose from 51% in FY14 to 60% in FY24, driven by electronic goods (13%; +5pp) and engineering goods (19%; +3pp). These gains in import share of manufacturing goods have been partially offset by a decline in the import share of petroleum products. Import of manufacturing items rose at a 10-year CAGR of 5.7% with the CAGR in readymade textiles of 13% and electronic items of 9.8%.

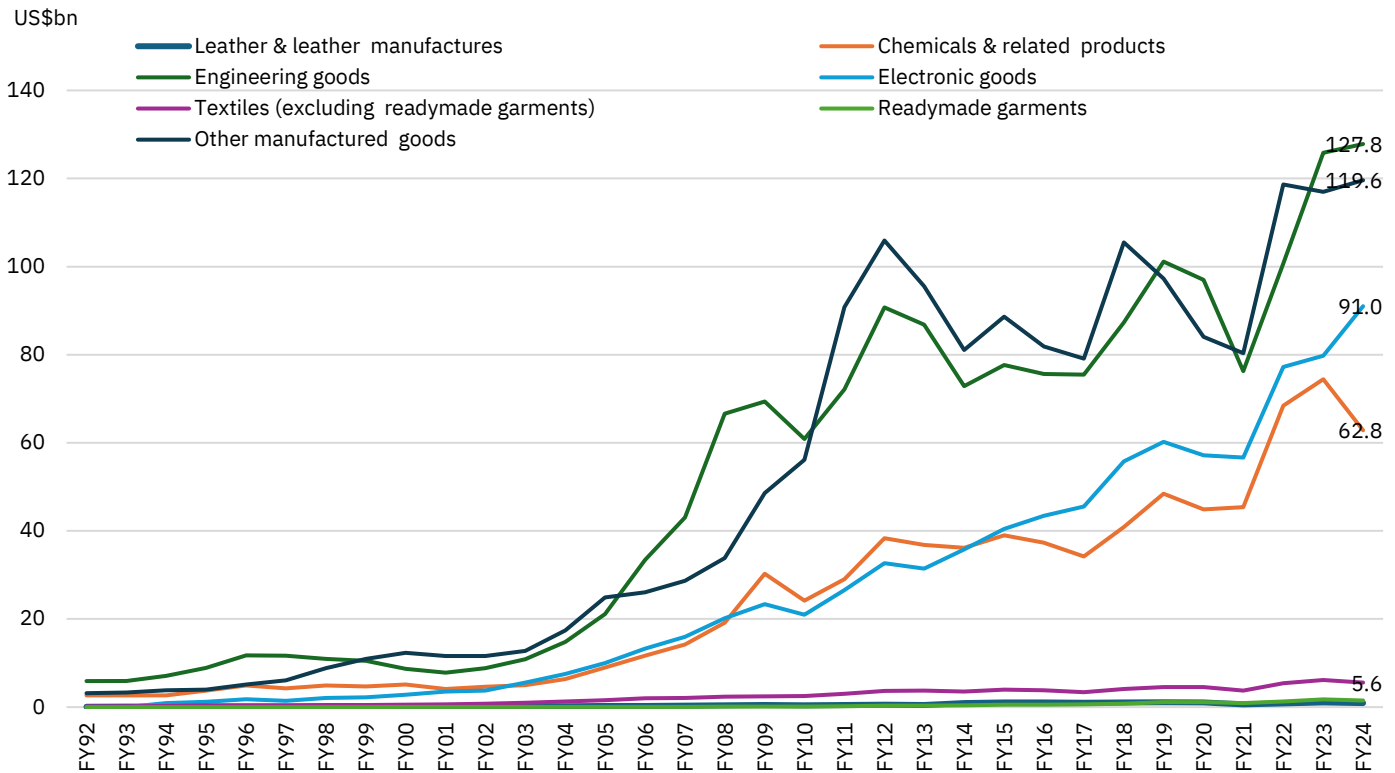
In terms of merchandise exports, the share of engineering goods (24%; ~+5pp), electronic goods (7%; ~+4pp) and chemical and related goods (14%; ~+4pp) has seen a significant improvement for the following reasons: 1) competitive manufacturing hub due to lower labour costs and improved productivity 2) significant investments in technology, automation and skill development 3) policy support such as Make in India, PLI schemes 4) leveraging of opportunities from geopolitical tensions and China+1 strategy and 5) rising global demand amidst global economic recovery. The 10-year CAGR in electronics is 13.6% followed by chemicals & related products (6.6%) and engineering goods (5.4%).

Figure 57: Commodity-wise, trends in total merchandise imports



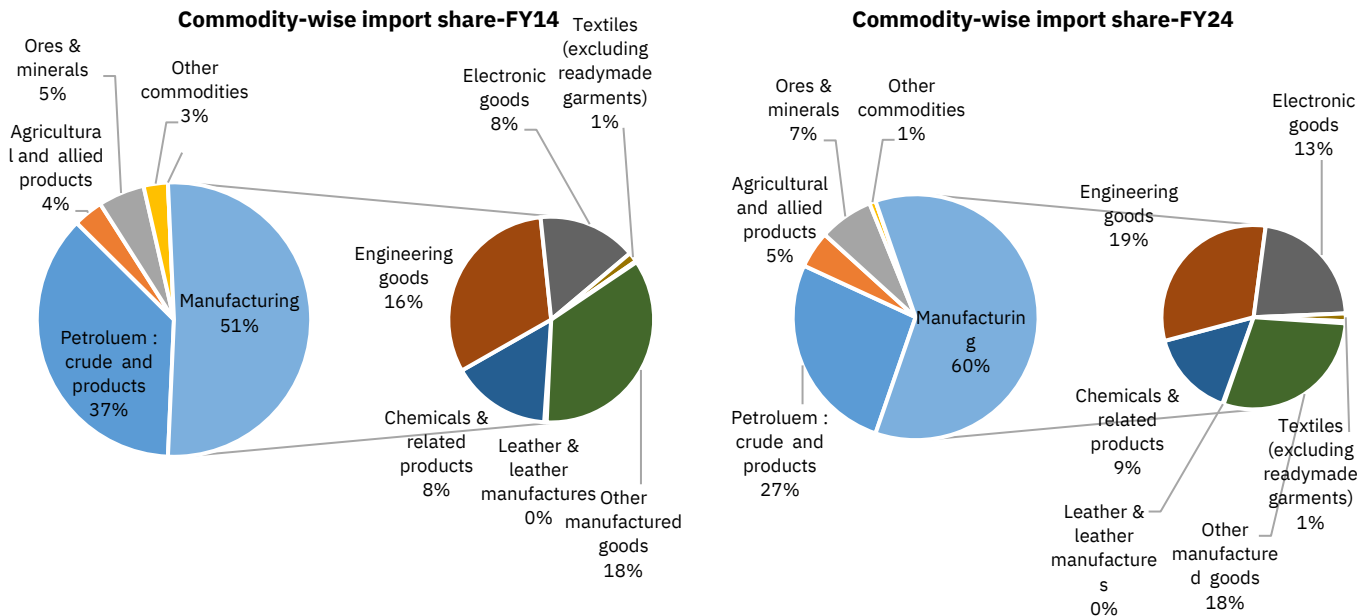
Source: CMIE Economic Outlook

Figure 58: Commodity-wise, trends in imports of manufacturing sub-components

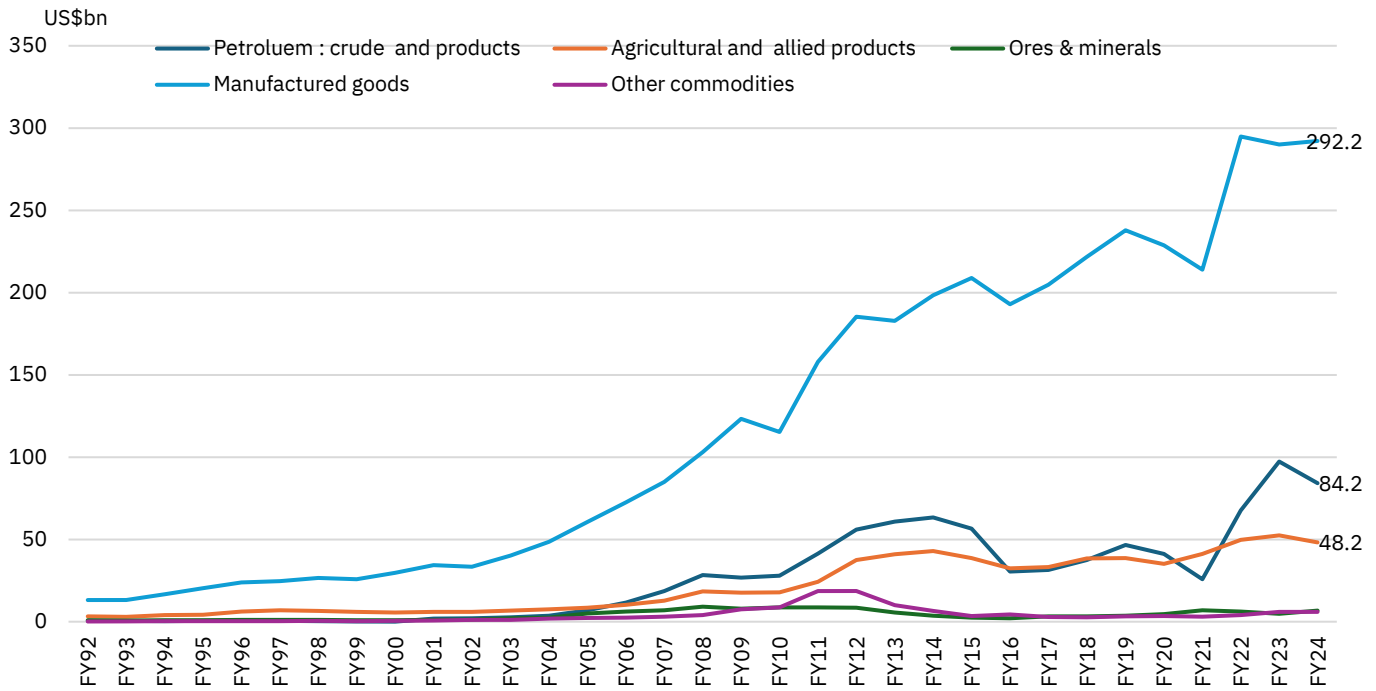


Source: CMIE Economic Outlook

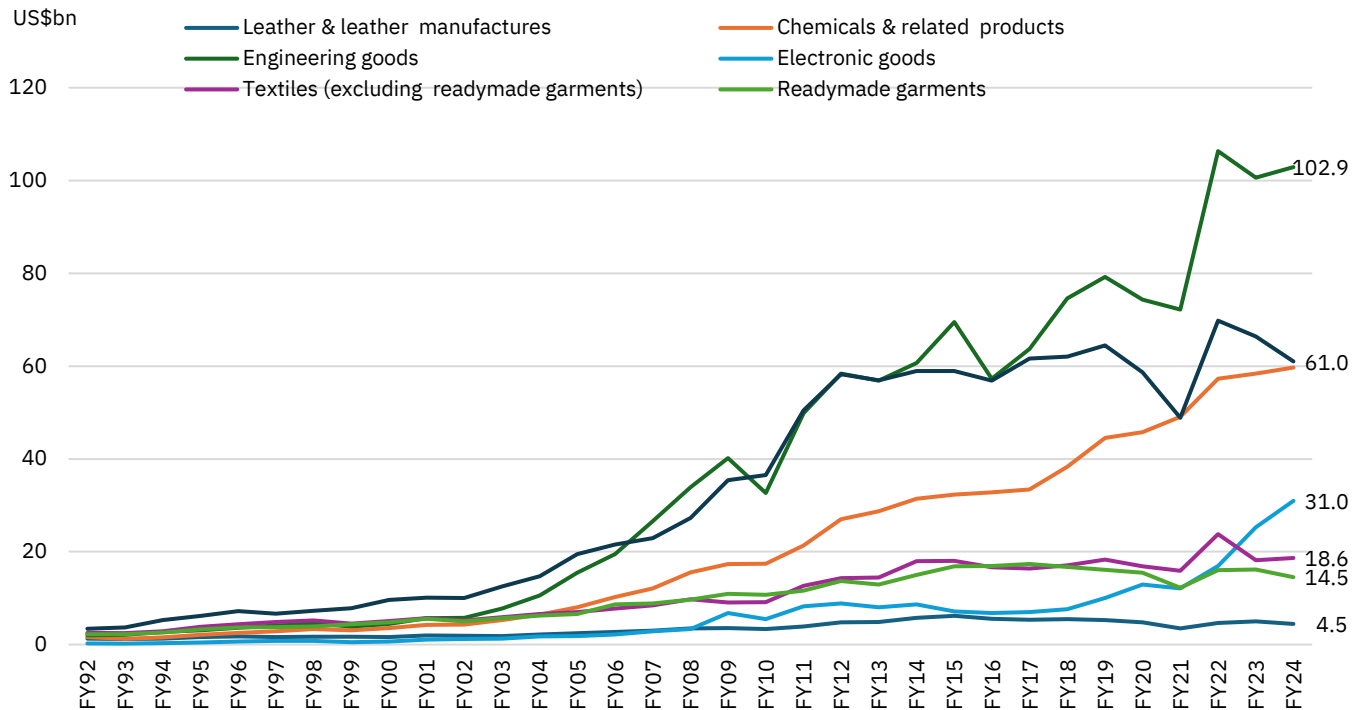
Figure 59: Commodity-wise share of imports in FY14 and FY24



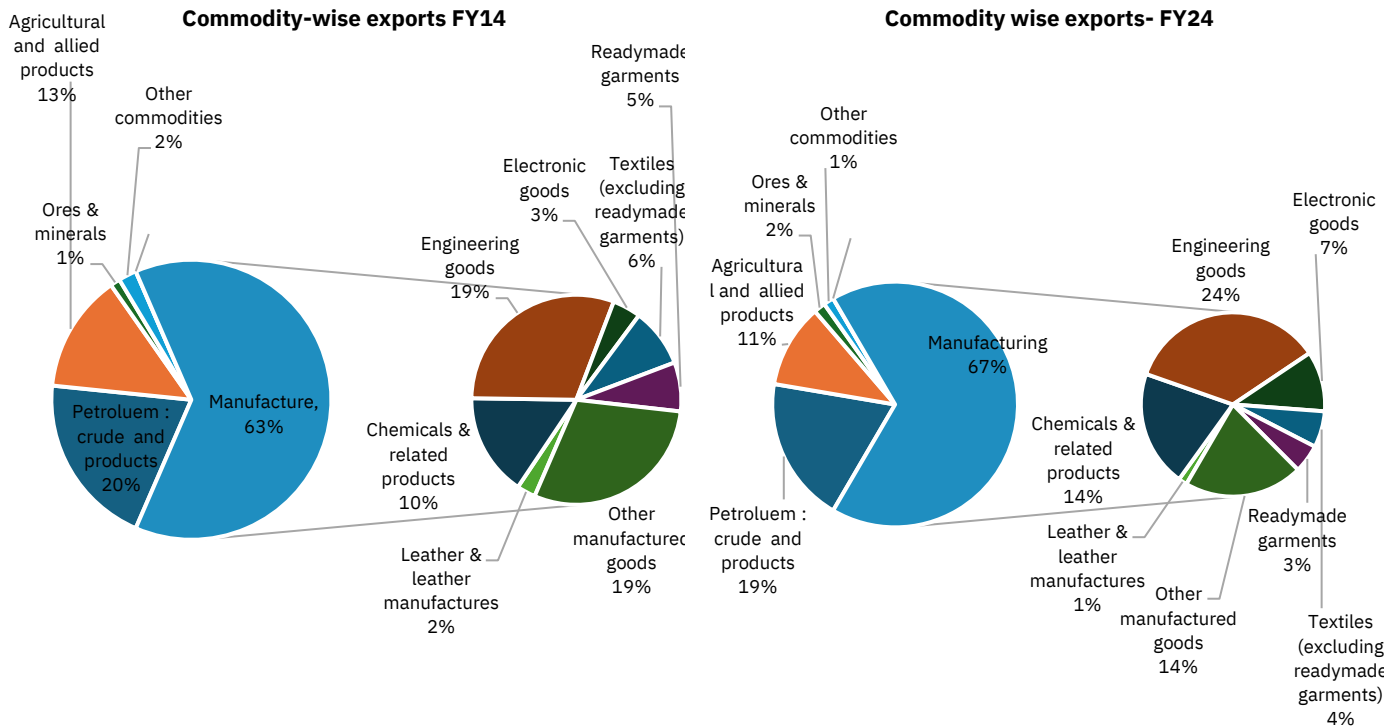
Source: CMIE Economic Outlook, NSE EPR

Figure 60: Major commodity-wise, trends in total merchandise exports


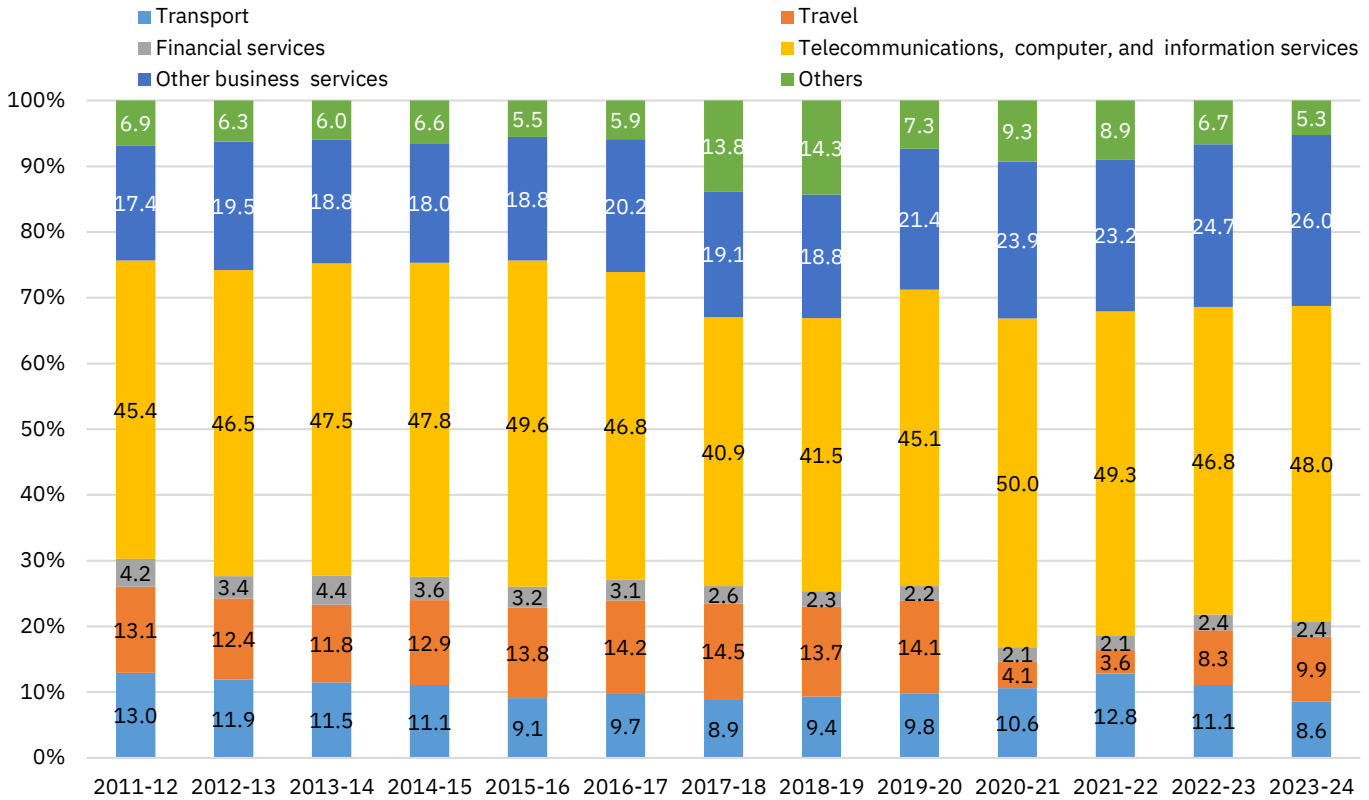
Source: CMIE Economic Outlook

Figure 61: Commodity-wise, trends in merchandise exports of manufacturing sub-components


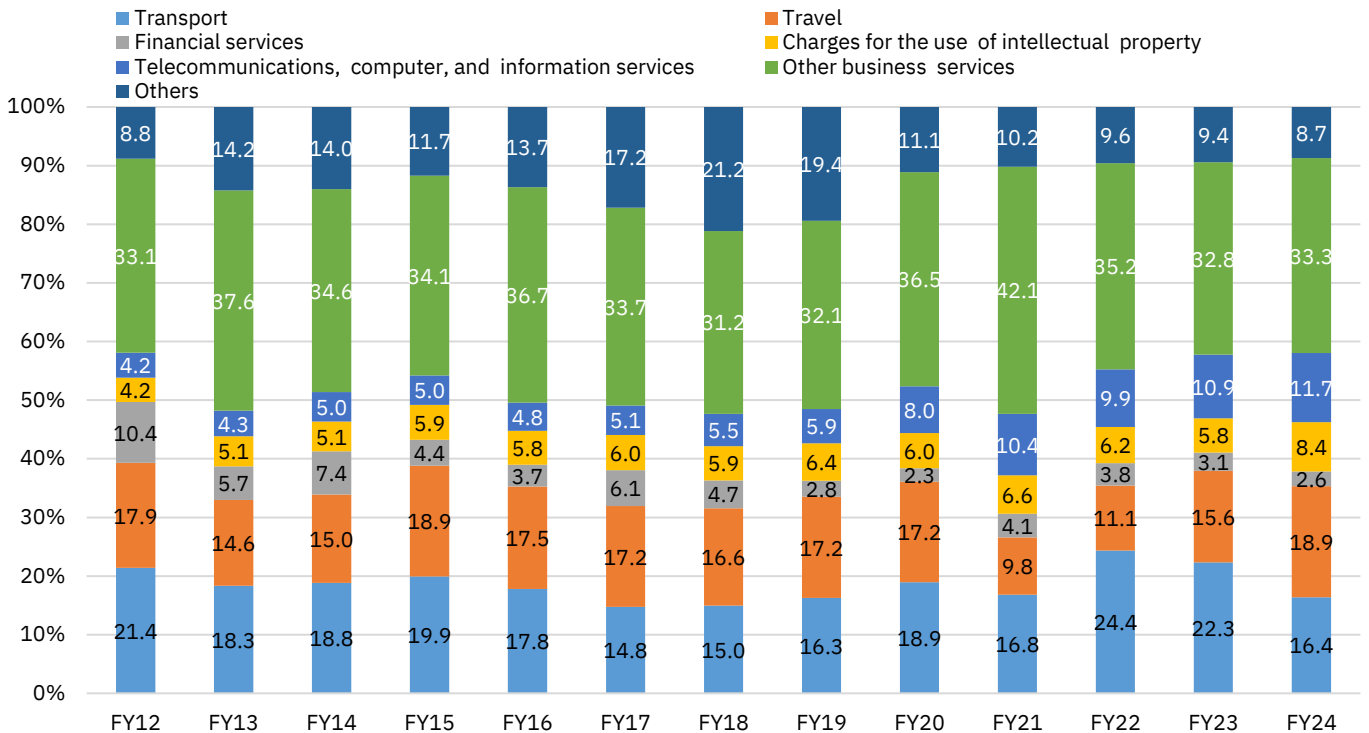
Source: CMIE Economic Outlook

Figure 62: Commodity-wise share of exports in FY14 and FY24


Services trade surplus has more than doubled in the last decade: Services exports recorded an annualised growth of 8.4% over the last 10 years, reaching US\$ 341.1 bn in FY24. This growth was primarily led by telecommunications, computer, and information services (10-year CAGR: +8.6%) and other business services (CAGR: +12%). Together, these two segments now contribute nearly three-fourths of total services exports, compared to two-thirds a decade ago. Services imports also expanded at a 10-year CAGR of 8.6% and stood at US\$ 178.3 bn in FY24, with growth primarily led by travel services (11.1% CAGR) and other business services (8.1% CAGR). These two collectively accounted for 52% of services imports in FY24. The services trade surplus has witnessed substantial growth, more than doubling from US\$ 73 bn in FY14 to US\$ 162.8 bn in FY24.

Figure 63: Category-wise share of services exports


Source: CMIE Economic Outlook, NSE EPR

Figure 64: Category-wise share of services imports


Source: CMIE Economic Outlook, NSE EPR

Macroeconomy

Cautious optimism as we approach the end of 2024

As 2024 concludes, there is a cautious optimism about India's economic scenario despite lingering external challenges. After weaker-than-expected Q2FY25 GDP growth at 5.4% YoY, the RBI revised FY25 GDP growth projections down to 6.6% (earlier: 7.2%). The RBI's MPC kept policy rates unchanged in its December meeting, factoring in the upward revision in headline inflation forecasts to 4.8% in FY25 (earlier 4.5%), while addressing near-term liquidity challenges with a 50bps CRR cut. Industrial activity rebounded in October following a contraction in August and lacklustre growth in industrial GVA in Q2FY25. Bank deposit growth of 10.7% YoY has marginally outpaced credit growth (10.6% YoY), as the latter continues to see a broad-based and sustained moderation across sectors — especially personal loans and services. On the external front, the merchandise trade deficit surged to a record high in November, driven by increased imports and declining exports. This is likely to exert some pressure on the balance of payments and has contributed to the rupee's depreciation to record low levels recently. Inflation, which peaked in October, has eased slightly in November, supported by declining food prices. Improved agricultural output and mandi arrivals should provide further relief, and easing of retail inflation towards the 4% target could open the door for a potential rate cut in the coming quarter. Fiscal conditions remain under check, with the gross fiscal deficit of the Union government in the first seven months reaching 46% of FY25BE. Recently, the Government approved additional spending of Rs 87,762 crore through a supplementary demand, signalling increased expenditure in the remaining months. Globally, the COP29 deal secured a climate finance target of US\$300 bn annually by 2035, though it fell short of estimated needs (US\$ 1.3 trn) of developing countries. In the latest policy meet of the U.S. Federal Reserve, the policy rate was reduced by 25 bps to 4.25%-4.5% while signalling to a lower rate-cut outlook of 50bps (earlier 100bps) due to persistent inflation concerns amidst robust growth outlook.

- **Industrial activity records further improvement:** Notwithstanding an unfavorable base, IIP grew by 3.4% YoY in October, a slight improvement from 3.1% YoY expansion in the previous month, driven by manufacturing (4.1% YoY) and electricity (2% YoY), even as mining growth remained subdued (0.9% YoY). Notably, 18 of 23 manufacturing sub-sectors recorded an expansion, with five posting double-digit growth. Use-based data showed mixed trends, with growth improvement in consumer non-durables, primary goods, and infrastructure offsetting deceleration in capital goods and consumer durables. Core sector growth improved to 3.1% YoY, led by coal, steel, and refinery products but weighed down by crude oil and natural gas. Notwithstanding some easing, India's Manufacturing and Services PMIs 56.5 and 58.4 respectively in November remained well in the expansion zone.
- **Retail and wholesale inflation ease:** Retail inflation eased to 5.5% YoY in November, aided by a 4.6% MoM decline in vegetable prices and moderation in fruits, pulses, and sugar due to improved harvest and better mandi arrivals. Sequentially, inflation contracted (-0.2%MoM) for the first time in ten months, though pressures persist in categories like oils, fats, and cereals. Core inflation remained steady at 3.7% YoY, with subdued trends except for gold and silver prices. WPI inflation also softened to 1.9% YoY due to receding food inflation.
- **Fiscal deficit in the first seven months of FY25 at 46.5% of BE:** The fiscal deficit of the Union Government remained under control at 46.5% of the FY25BE during 7MFY25 and is on track to remain within the FY25 target of 4.9% of GDP. This is supported by robust tax revenues, higher RBI dividends, and subdued capital expenditure. That said, major revenue streams have shown weaker realization

compared to last year (54.5% of FY25BE vs. 59.6%), alongside capital expenditure (42% vs. 54.6%), contrasting with revenue expenditure, which slightly exceeds last year's pace (54% vs. 53%). The first batch of supplementary demands for grants was announced on December 12th with a gross additional expenditure of Rs 87,762 crore (net: Rs 44,142 crore) largely towards fertilizer subsidy, agriculture and defence and part of which will be met by savings in other ministries.

- **Record high imports widen merchandise trade deficit:** India's merchandise trade deficit hit a record high of US\$37.8bn in November, up from US\$26.9bn in October, driven by a steep decline in exports and a surge in gold imports. Exports fell 4.8% YoY, led by a 50% drop in oil exports and partly offset by growth in non-oil exports of 7.8% YoY, supported by electronics and engineering goods. Imports grew 28.4% YoY to US\$70bn, fueled by higher gold and oil imports. Meanwhile, the services trade surplus rose to US\$17.9bn, helping offset some of the pressure from the widening goods deficit. Notwithstanding the fall in foreign exchange reserves to US\$6529bn as of December 13th, 2024, they are sufficient to mitigate any external vulnerabilities.
- **Bank deposit growth outpaces credit growth marginally:** Bank credit growth slowed to 11.5% YoY in October and further to 10.6% YoY by November 29th, 2024. The deceleration has been broad-based across sectors with 8.3pp decline in credit growth since May'24 led by personal loans (-15.8pp), services (-10.5pp) and agriculture (-6.1pp). As of November 29th, 2024, total deposits reached Rs 220.1 lakh crore, growing 10.7% YoY, slightly surpassing bank credit growth. In FY25 thus far, outstanding deposits grew by 7.5%, marginally higher than 6.6% growth in outstanding credit, increasing the Incremental Credit to Deposit Ratio (ICDR) to 69.8% from 60.5% in the previous month. Banks also raised Rs 1 lakh crore through Certificates of Deposit (CD), bringing the total outstanding CD to Rs 4.9 lakh crore.
- **COP29 delegation agrees to triple climate finance by 2035:** The COP29, held in Baku, Azerbaijan, set a new climate finance target of US\$ 300 bn annually by 2035, tripling the previous US\$ 100 bn goal, to support developing countries in addressing climate disasters and transitioning to clean energy. Significant progress was made on carbon markets through the implementation of Article 6 of the Paris Agreement, aiming to improve efficiency and safeguard human rights. The conference also emphasized transparency, with 13 countries submitting Biennial Transparency Reports (BTRs) to track emissions reductions. Support for vulnerable nations, including the least developed countries and small island states, was strengthened through adaptation and inclusion plans.

Q2FY25 GDP growth moderates, H2 outlook remains positive

India's Q2FY25 real GDP growth slowed to a seven-quarter low of 5.4% YoY (vs. 6.7% in Q1), falling short of market expectations (Consensus/RBI's MPC estimate: 6.5%/7%). This translates into a growth of 6% in the first half of FY25. The moderation in Q2 growth, albeit off an unfavourable base (+8.1% in Q2FY24), has stemmed from subdued urban consumption demand, heavy rainfall, and softening investment and export activity amid a challenging global environment. That said, rural consumption showed signs of resilience, supported by robust prospects of Kharif output, while Government spending picked up post elections, capping the moderation to some extent. Nominal GDP growth also fell to a 15-quarter low of 8% YoY. By economic activity, Gross Value Added (GVA) growth decelerated to 5.6% YoY, led by muted industrial activity (3.6% YoY), corroborated by slowdown in corporate earnings, partly offset by strong growth in the services sector (7.1% YoY). The GVA growth continues to be higher than the GDP growth for the second consecutive quarter, indicating a higher subsidy outgo.

Following a slowdown in Q2, economic growth is expected to pick-up in the second half of FY25, supported by festive and wedding-led spur in consumption demand, and improvement in rural demand, bolstered by continued strength in agriculture. Additionally, improving capacity utilization, higher capital spending by the Central and State Governments following the H1 shortfall, and revival in private investment activity, supported by strong financial health of corporates and banks are likely to provide an additional support to economic activity in the second half. Key downside risks to the growth outlook stem from prolonged geopolitical tensions, policy uncertainty in the US, volatile global commodity prices, and persistence of inflation at elevated levels, thereby weighing on consumption.

- Q2FY24 GDP slows to a seven-quarter low of 5.4%...:** India's real GDP growth moderated to a seven-quarter low of 5.4% YoY in Q2FY25, notably lower than the consensus estimate of 6.5% and RBI's MPC estimate of 7% for the quarter. This moderation in growth, albeit of an unfavourable base (+8.1% in Q2Y24) can be ascribed to slowdown in private consumption, particularly urban demand, and softening investment activity and exports. That said, the revival in rural demand, thanks to strong *kharif* output, and improvement in government expenditure post elections helped limit the extent of moderation. GDP growth in the first half of FY25 now stands at 6% YoY, lower than 8.2% YoY growth in the same period last year. In nominal terms, GDP growth came in at a 15-quarter low of 8% YoY in Q2FY25 (vs. 9.7% YoY in Q1).
- ...led by slower growth in private consumption and investment:** Private Final Consumption Expenditure (PFCE) growth softened to 6% YoY in Q2 (vs. 7.5% YoY in Q1) as muted urban consumption — reflected in lower urban FMCG demand growth (2.8%) and negative growth in passenger car domestic sales (-18.2% YoY in Q2) — outweighed the buoyancy in rural consumption, as seen in relatively stronger rural FMCG demand growth (6%), robust prospects of kharif output and lower MGNREGA demand. On similar lines, Gross Fixed Capital Formation (GFCF) — a barometer of investments in the economy — grew at a six-quarter low of 5.9% YoY in Q2, as excess rainfall in August/September impacted construction and investment activity. That said, the improvement in capital expenditure by the Central Government post elections (+10.3% YoY in Q2 vs. -35% YoY in Q1) supported overall investment activity. Government Final Consumption Expenditure (GFCE) growth improved to 4.4% YoY, after exhibiting negative growth in the previous quarter (-0.2% YoY), thanks to post-election spending by the Central government. Export growth slowed down to 2.8% (vs. 8.7% YoY in Q1) on the back of tepid global growth and geopolitical challenges impacting key shipping routes.

GDP growth in Q2FY25 came in at a seven-quarter low of 5.4% YoY, vs. 6.7% in Q1 and 8.1% in Q2FY24, significantly lower than market/RBI expectations by 110/160bps.

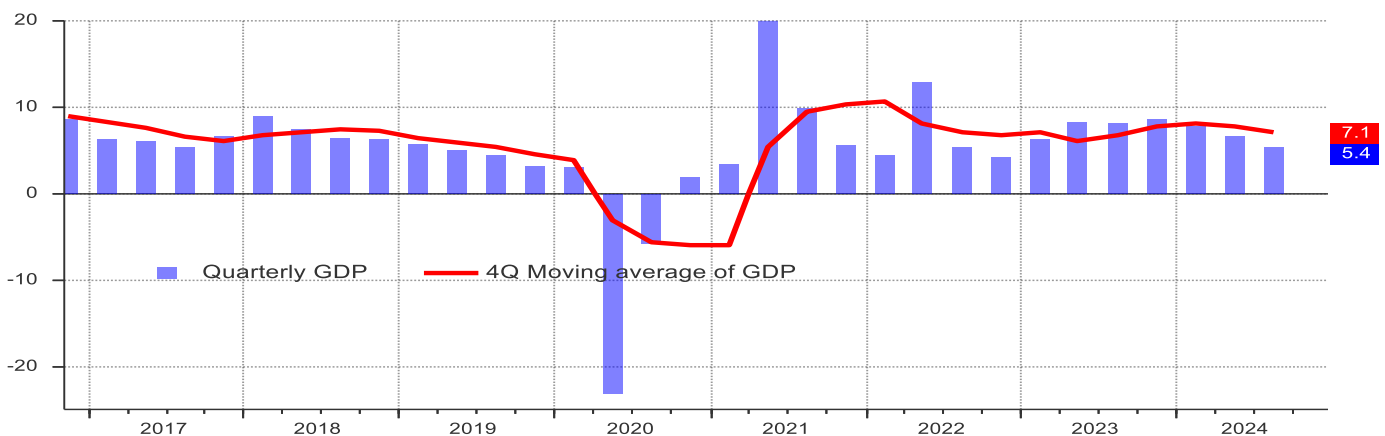
GDP growth moderation was led by muted growth in private final consumption, investment and exports.

After 15 consecutive quarters of growth, imports contracted by 2.9% YoY (vs. 4.4% in Q1), thanks to benign crude oil prices and muted consumption demand.

- GVA growth moderates to 5.6% led by muted industrial activity:** GVA growth also came in at a seven-quarter low of 5.6% vs. 6.8% YoY in the previous quarter. This can be primarily ascribed to a significant deceleration in the industrial GVA growth to a six-quarter low of 3.6% YoY (vs. 8.3% in Q1), partly offset by robust growth in services (7.1%) and agriculture (3.5%). The GVA growth of electricity and other utilities fell sharply to 3.3% YoY on the back of an unfavourable base (+10.5% in Q2FY24), higher than normal monsoon and lower industrial demand. Manufacturing GVA growth eased to a six-quarter low of 2.2% YoY (vs. 7% YoY in Q1), as reflected in subdued manufacturing output growth (IIP: 3.1% YoY in Q2) and weaker corporate earnings in the manufacturing sector. Construction activity growth also moderated to 7.7% YoY while mining activity contracted for the first time in eight months led by a high base and seasonal impact of monsoon. Agriculture GVA growth, recovered from a sub-optimal performance in the previous four quarter to grow by 3.5% YoY in Q2 (vs 2% in Q1) on the back of robust *kharif* output. The stable and resilient services sector growth of 7.1% YoY in Q2 can be ascribed to improvement in travel and real estate activity, which was partly offset by moderation in financial services, as reflected in slowing credit growth.
- India's growth likely to see a fillip in H2FY25:** Despite a moderation in GDP growth during Q2, India remains among the fastest-growing large economies globally. Following a slowdown in Q2, economic growth is expected to pick-up in the second half of FY25, supported by festive and wedding-led spur in consumption demand, and improvement in rural demand, bolstered by continued strength in agriculture. Additionally, improving capacity utilization, higher capital spending by the Central and State Governments following the H1 shortfall, and revival in private investment activity, supported by strong financial health of corporates and banks are likely to provide an additional support to economic activity in the second half. Key downside risks to the growth outlook stem from prolonged geopolitical tensions, policy uncertainty in the US, volatile global commodity prices, and persistence of inflation at elevated levels, thereby weighing on consumption

Robust growth in services sector GVA (7.1%) and improvement in agriculture GVA growth to 3.5% supported the overall GVA growth while manufacturing GVA growth slowed down to 2.2%.

Figure 65: India quarterly GDP growth trend

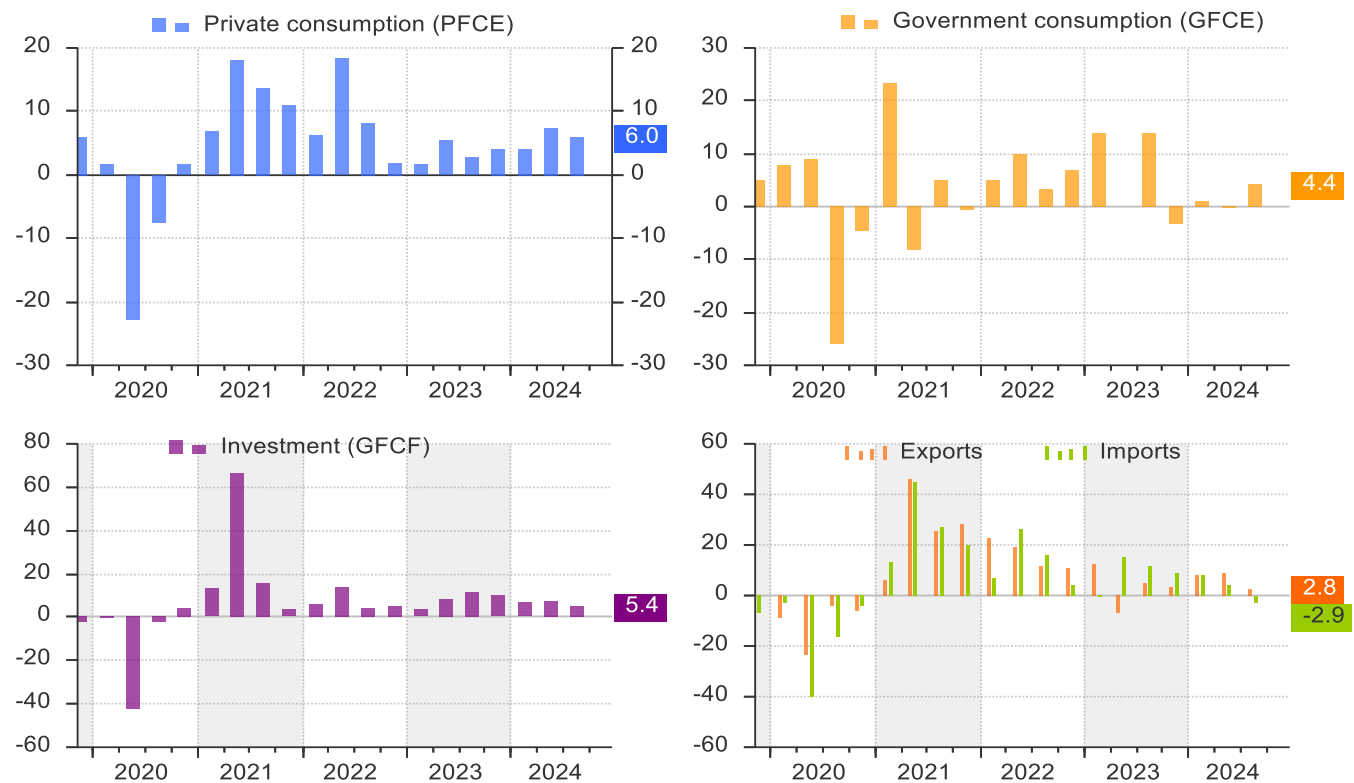


Source: LSEG Datastream, NSE EPR.

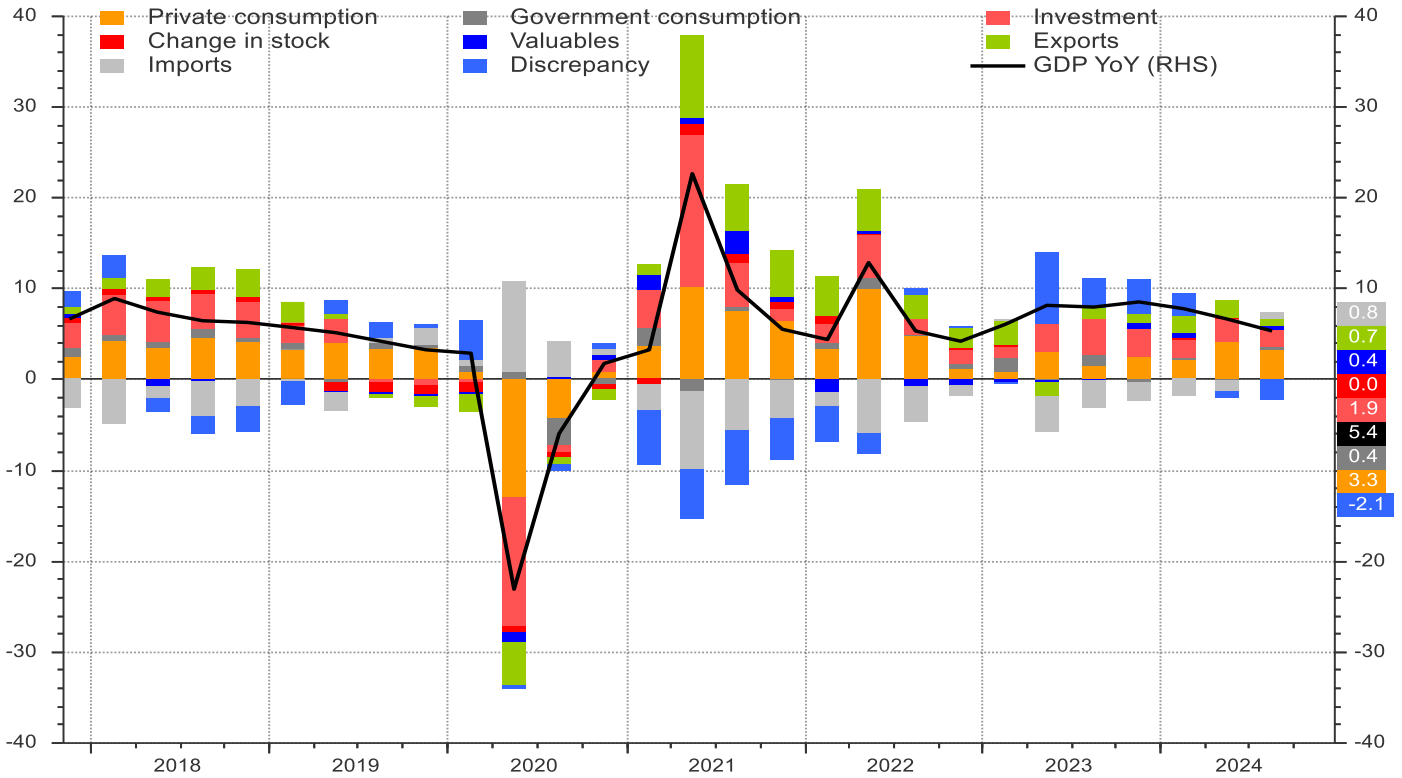
Table 28: Quarterly GDP growth trend (2011-12=100) (%YoY)

	FY23				FY24				FY25	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Gross Domestic Product (GDP)	12.8	5.5	4.3	6.2	8.2	8.1	8.6	7.8	6.7	5.4
Private Consumption (PFCE)	18.5	8.2	1.8	1.5	5.5	2.6	4.0	4.0	7.4	6.0
Government Consumption (GFCE)	9.8	3.4	7.1	13.9	-0.1	14.0	-3.2	0.9	-0.2	4.4
Gross Capital Formation (GCF)	14.9	2.4	2.8	3.3	7.5	10.7	11.5	8.0	7.1	5.9
Gross Fixed Capital Formation (GFCF)	13.9	4.7	5.0	3.8	8.5	11.6	9.7	6.5	7.5	5.4
Exports	19.1	11.7	10.9	12.4	-6.6	5.0	3.4	8.1	8.7	2.8
Imports	26.1	16.1	4.1	-0.4	15.2	11.6	8.7	8.3	4.4	-2.9
Gross Value Added (GVA)	11.3	5.0	4.8	6.0	8.3	7.7	6.8	6.3	6.8	5.6
Agriculture	2.7	2.3	5.2	7.6	3.7	1.7	0.4	0.6	2.0	3.5
Industry	6.8	-2.4	0.6	3.4	6.0	13.6	10.5	8.4	8.3	3.6
Mining and Quarrying	6.6	-4.1	1.4	2.9	7.0	11.1	7.5	4.3	7.2	-0.1
Manufacturing	2.2	-7.2	-4.8	0.9	5.0	14.3	11.5	8.9	7.0	2.2
Electricity	15.6	6.4	8.7	7.3	3.2	10.5	9.0	7.7	10.4	3.3
Construction	14.7	6.9	9.5	7.4	8.6	13.6	9.6	8.7	10.5	7.7
Services	16.7	9.8	7.2	7.2	10.7	6.0	7.1	6.7	7.2	7.1
Trade, Hotels, Trans., Storage, Comm.	22.1	13.2	9.2	7.0	9.7	4.5	6.9	5.1	5.7	6.0
Fin. Svcs, Real Estate & Business Svcs.	10.5	8.7	7.7	9.2	12.6	6.2	7.0	7.6	7.1	6.7
Public Admin., Defence & Other Svcs.	23.6	7.3	3.5	4.7	8.3	7.7	7.5	7.8	9.5	9.2

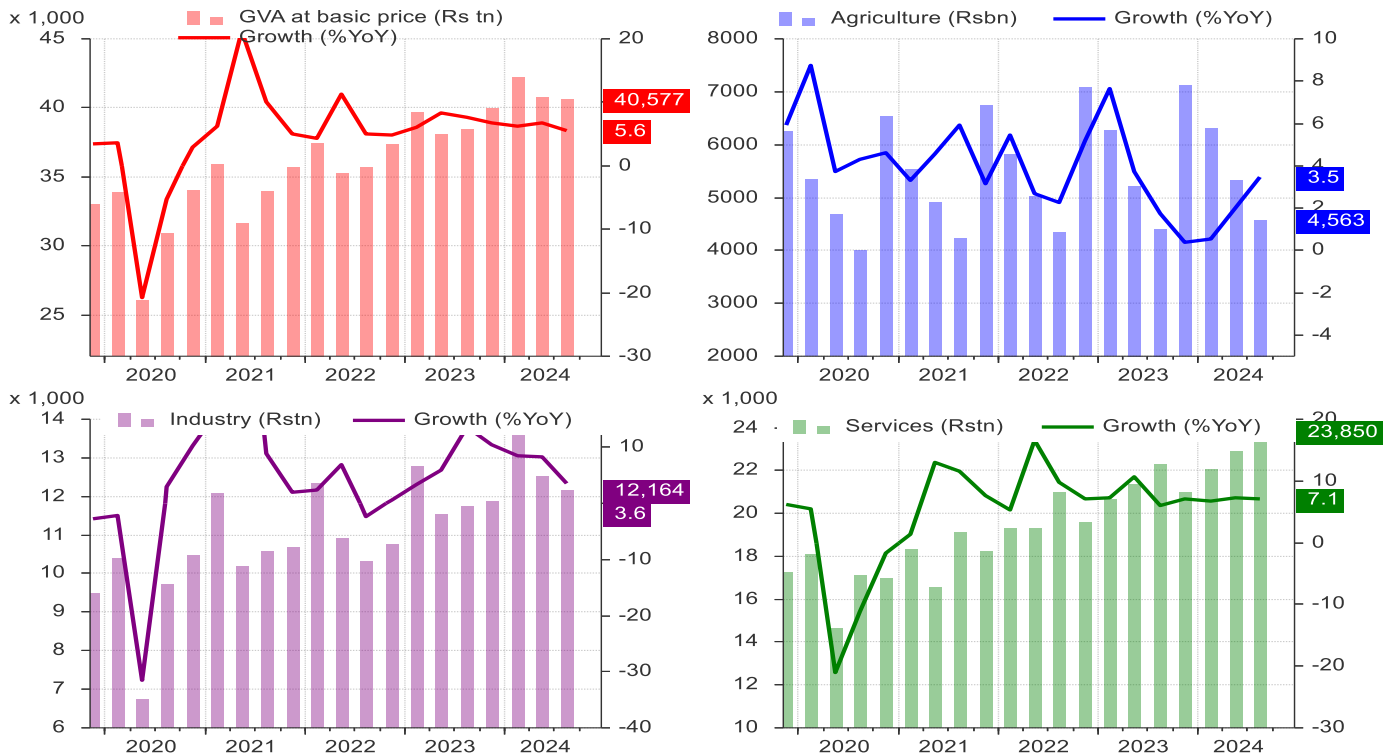
Source: CSO, NSE EPR.

Figure 66: Quarterly GDP growth by expenditure (%YoY)


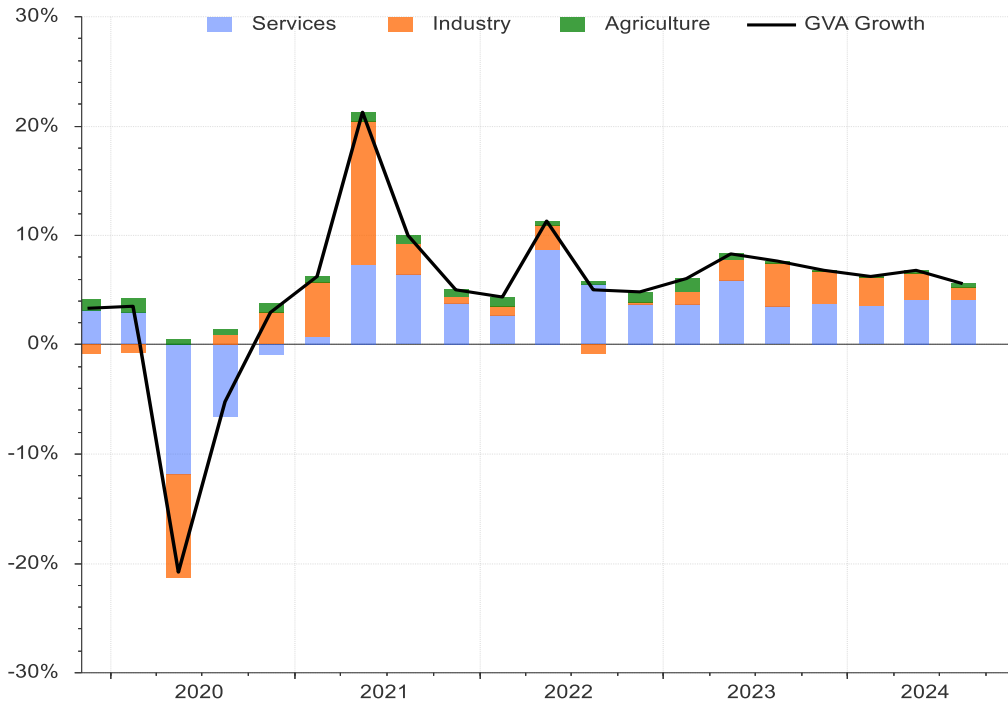
Source: LSEG Datastream, NSE EPR.

Figure 67: India GDP sector share of growth (%)


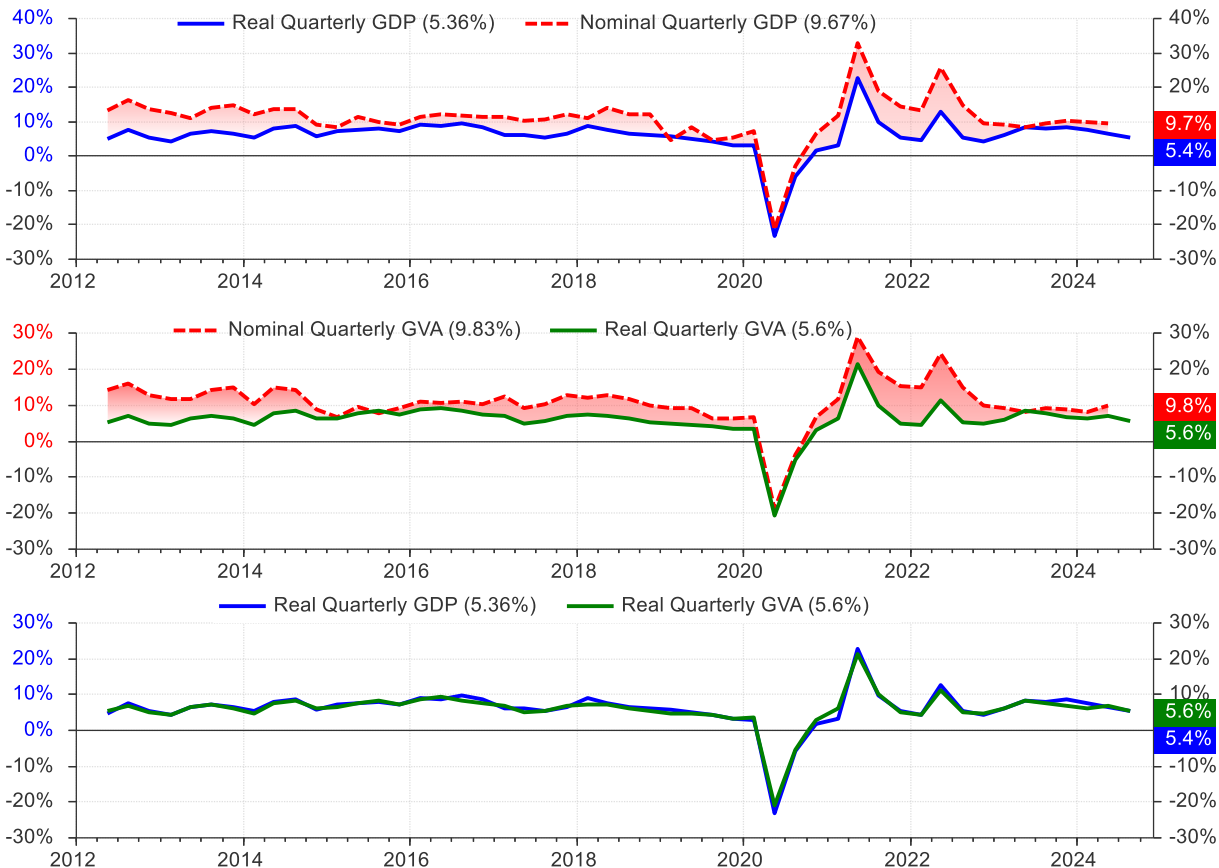
Source: LSEG Datastream, NSE EPR.

Figure 68: Gross value added (GVA) across sectors


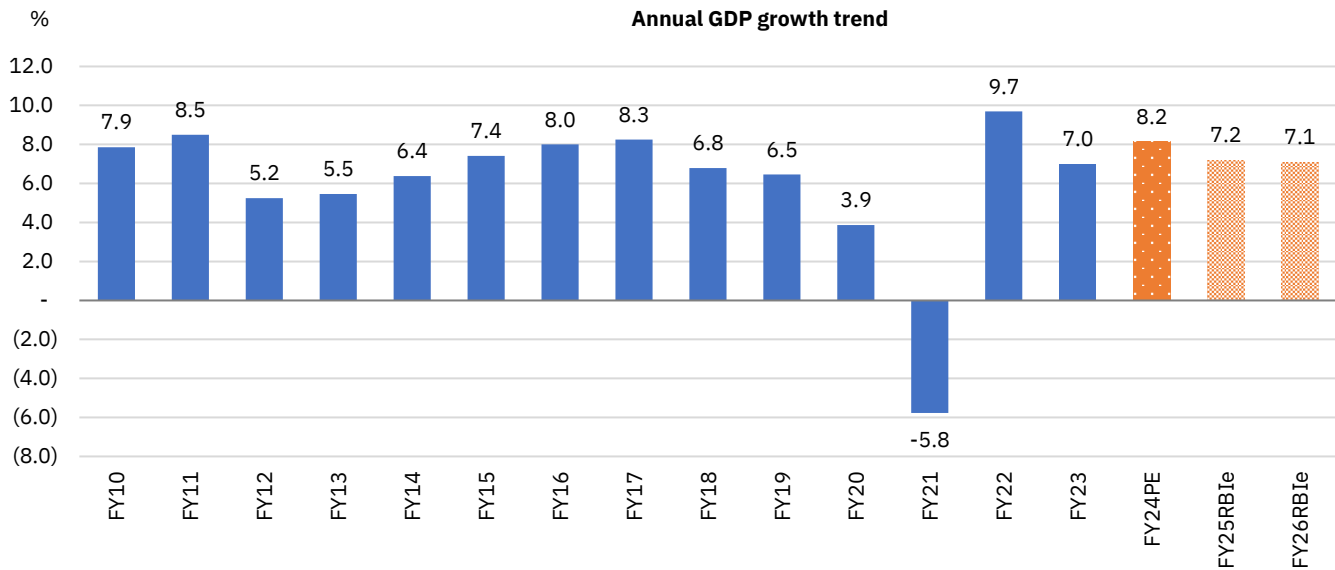
Source: LSEG Datastream, NSE EPR.

Figure 69: India GVA sector share of growth (%)


Source: LSEG Datastream, NSE EPR.

Figure 70: Quarterly trend of nominal vs. real GDP and GVA growth
India GDP, GVA: Nominal and Real Growth


Source: LSEG Datastream, NSE EPR.

Figure 71: Annual real GDP growth trend


Source: CSO, CMIE Economic Outlook, NSE EPR. SAE = Second Advance Estimate; PE = Provisional Estimate; RBIE = RBI Estimate.

Table 29: Annual real GDP growth trend (% YoY)

	FY20	FY21	FY22	FY23	FY24PE	H1FY25
Gross Domestic Product (GDP)	3.9	-5.8	9.7	7.0	8.2	6.0
Private Consumption (PFCE)	5.2	-5.3	11.7	6.8	4.0	6.7
Government Consumption (GFCE)	3.9	-0.8	0.0	9.0	2.5	2.0
Gross Capital Formation (GCF)	-2.6	-7.4	21.1	5.5	9.4	6.5
Gross Fixed Capital Formation (GFCF)	1.1	-7.1	17.5	6.6	9.0	6.4
Exports of goods & services	-3.4	-7.0	29.6	13.4	2.6	5.6
Imports of goods & services	-0.8	-12.6	22.1	10.6	10.9	0.7
Gross Value Added (GVA)	3.9	-4.1	9.4	6.7	7.2	6.2
Agriculture	6.2	4.0	4.6	4.7	1.4	2.7
Industry	-1.4	-0.4	12.2	2.1	9.5	6.0
Mining and Quarrying	-3.0	-8.2	6.3	1.9	7.1	3.9
Manufacturing	-3.0	3.1	10.0	-2.2	9.9	4.5
Electricity	2.3	-4.2	10.3	9.4	7.5	6.8
Construction	1.6	-4.6	19.9	9.4	9.9	9.1
Services	6.4	-8.4	9.2	10.0	7.6	7.1
Trade, Hotels, Transport, Storage, Comm.	6.0	-19.9	15.2	12.0	6.4	5.9
Fin. Svcs, Real Estate & Business Svcs.	6.8	1.9	5.7	9.1	8.4	6.9
Public Administration, Defence & Other Svcs.	6.6	-7.6	7.5	8.9	7.8	9.3

Source: CSO, NSE EPR.

IIP and core sector growth improves further in October 2024

India's industrial activity recovered further in October, with the IIP exhibiting a growth of 3.4% YoY, a slight improvement from 3.1% in the previous month, supported primarily by manufacturing (4.1% YoY) and electricity (2% YoY). This was partly offset by tepid growth in mining activity (0.9% YoY) amidst an unfavourable base effect across categories. Notably, 18 out of 23 manufacturing sectors recorded an expansion, with key sub-industries like basic metals, refined petroleum products, and food products registering modest growth, coupled with double-digit growth in five sub-industries. A mixed picture emerged in the use-based classification as deceleration in capital goods and consumer durable production growth was partly offset by an acceleration in consumer non-durables production growth (five-month high), primary goods and infrastructure/construction goods. The core sector expanded by 3.1% YoY in October, up from 2.4% YoY in September, as strong growth in coal (+7.8% YoY), refinery products (+5.2% YoY) and steel (+4.2% YoY) were partly off-set by negative growth in crude oil (-4.8% YoY; 20-month low) and natural gas. In the first seven months of FY25, IIP core sector growth moderated considerably to 4%/4.1% YoY, due to a broad-based growth deceleration across sectors and core-industries, barring consumer durables. India's manufacturing and services PMI, despite a slight moderation in Nov'24, continues to outperform those of major global economies.

- **IIP growth expands in October, led by manufacturing:** IIP growth expanded further to 3.5% YoY in October, a slight improvement from 3.1% in the previous month, led primarily by manufacturing and electricity, alongside lackluster growth in mining, largely due to an unfavorable base effect. Manufacturing production grew by 4.1% YoY, with 18 out of 23 industries recorded growth, of which five sub-industries, viz., tobacco products, wood products, electrical equipment, other transport equipment, and furniture, registered double-digit growth. That said, five industries saw YoY contractions: leather products (-3.5% YoY), printing and reproduction of recorded media (-9.5% YoY), machinery and equipment (-2.4% YoY), motor vehicles (-1.6% YoY), and other manufacturing (-11.2% YoY). The growth in mining was subdued at 0.9% YoY as a high base effect was partially offset by a robust sequential improvement (+15% MoM).
- **Modest improvement in use-based categories despite high base:** Notwithstanding an unfavorable base, growth acceleration was observed across most of the sectors under the use-based classification in October — barring capital goods and consumer durables. Primary goods production (highest weight: 34%) expanded by 2.6% YoY, thanks to robust double-digit growth in fuel-based production (diesel, petrol, ATFs), supported by rising transport and travel activities. Consumer goods (second largest weight of 28.2%) grew by 4% YoY in October with contrasting trends witnessed within the category. Consumer non-durables growth rose to a five-month high of 2.7% YoY (vs. 2.2% YoY in September) suggesting strengthening consumption in rural areas and among low and middle-income households. Conversely, the growth of consumer durables moderated to 5.9% YoY (vs. 6.5% YoY in September), reflecting some tapering in durable goods demand. Further improvement in growth of infrastructure & construction goods to a three-month high of 4% YoY (vs. 3.2% YoY) underscores pick-up in construction activity and higher government capex spending. The moderation in growth of capital goods to 3.1% YoY can be ascribed to a high base effect coupled with tepid pick-up in private investment activity.
- **Eight core sectors show signs of revival in October:** Eight core sector growth displayed further improvement in October, expanding by 3.1% YoY (vs. 2.4% YoY in September), despite a high base-effect. Coal production growth rose to a four-

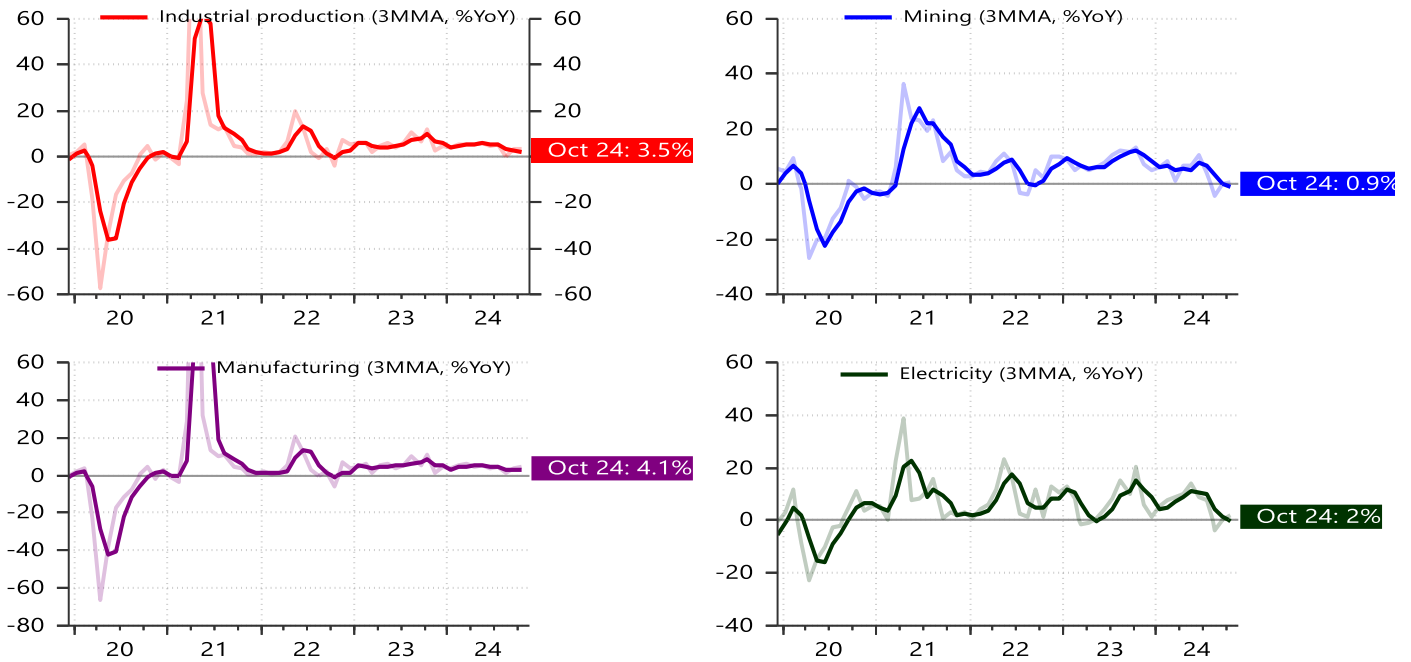
month high of 7.8% YoY (22.5% MoM) led by higher industrial demand. Conversely, an unfavourable base effect translated into a subdued growth in electricity output of 0.6% YoY. Steel production grew by 4.2% YoY (vs. 1.6% in September) while cement production growth moderated to 3.3% YoY (vs. 7.2% YoY in September). Notwithstanding a high base effect, the growth in both these components reflects sequential improvement, backed by higher construction activity and government capex spending towards infrastructure projects. Production of refinery products grew by 5.2% YoY in October due to improved activity in the transport and travel segment. Crude oil production growth declined to a 20-month low of 4.8% YoY alongside negative growth observed in natural gas production of 1.2% YoY, cumulatively capping the overall gains.

- PMI slips in November 2024 but remains in the expansion zone:** India's Manufacturing PMI moderated to 56.5 in November, down from 57.5 in October, primarily due to a continued moderation in output growth amidst rising price pressures. Despite this deceleration, the index remained in expansion territory, supported by a four-month high in new export orders. Similarly, the Services PMI saw a slight dip to 58.4 in November, from 58.5 in October as stronger international demand was offset by rising food and labour costs. The overall decline in both the manufacturing and services PMI is reflected in the composite PMI, which decreased to 58.6 in November (vs. 59.1 in October). That said, India's manufacturing PMI continues to outperform those of major global economies, including the US, UK, China, the Euro Area, and Japan.

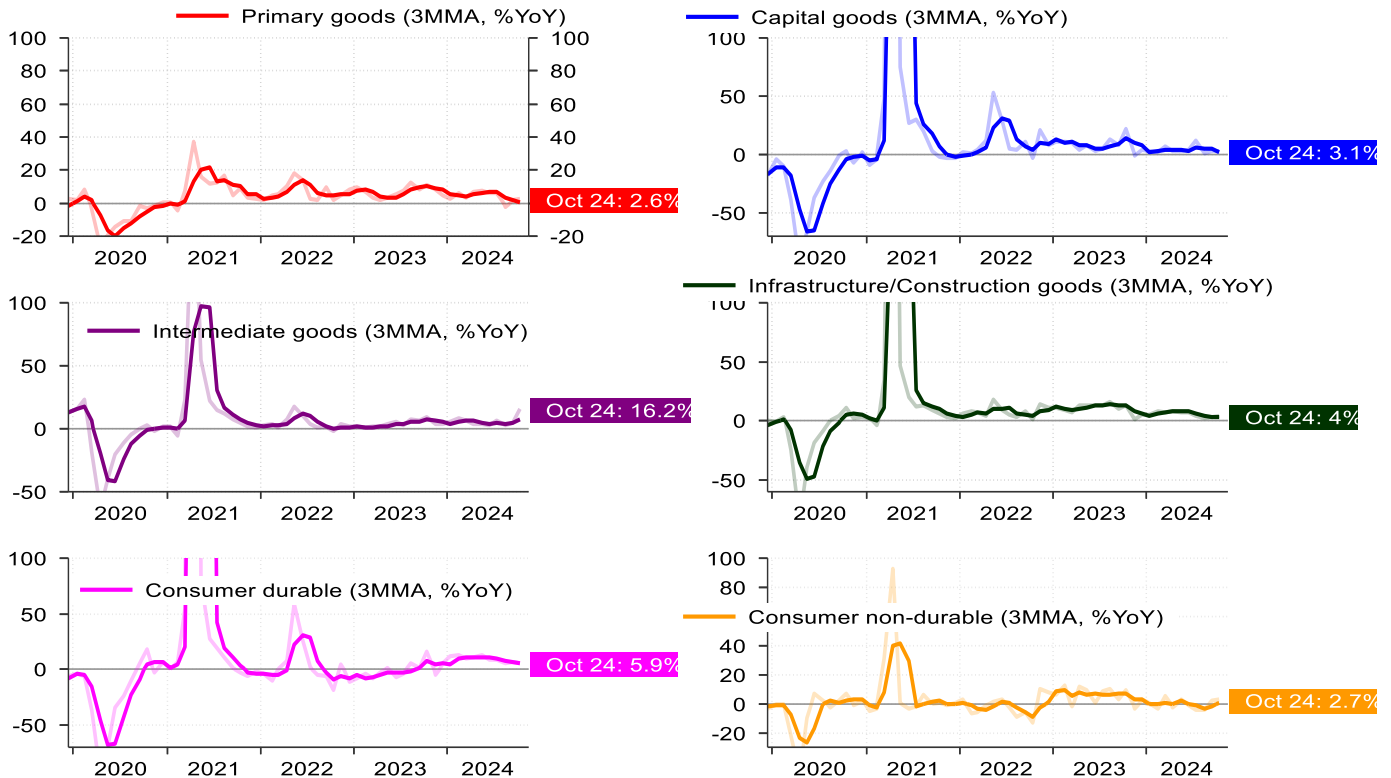
Table 30: India industrial production for October 2024 (%YoY)

	%YoY	Weight (%)	Oct-24	Sep-24	Oct-23	FY25	FY24
	IIP		3.5	3.1	11.9	4.0	7.0
Sector-based indices	Mining	14.4	0.9	0.2	13.1	3.6	9.4
	Manufacturing	77.6	4.1	3.9	10.6	3.8	6.6
	Electricity	8.0	2.0	0.5	20.4	5.4	7.9
Use-based Goods	Primary Goods	34	2.6	1.8	11.4	4.1	7.1
	Capital Goods	8.2	3.1	3.6	21.7	4.0	8.9
	Intermediate Goods	17.2	3.7	3.6	9.5	4.0	5.2
	Infra/Construction Goods	12.3	4.0	3.2	12.6	5.6	13.0
	Consumer Goods	28.2	4.0	4.0	12.0	2.9	4.8
	Consumer Durables	12.8	5.9	6.5	15.9	8.2	1.4
	Consumer non-durables	15.3	2.7	2.2	9.3	(0.7)	7.2

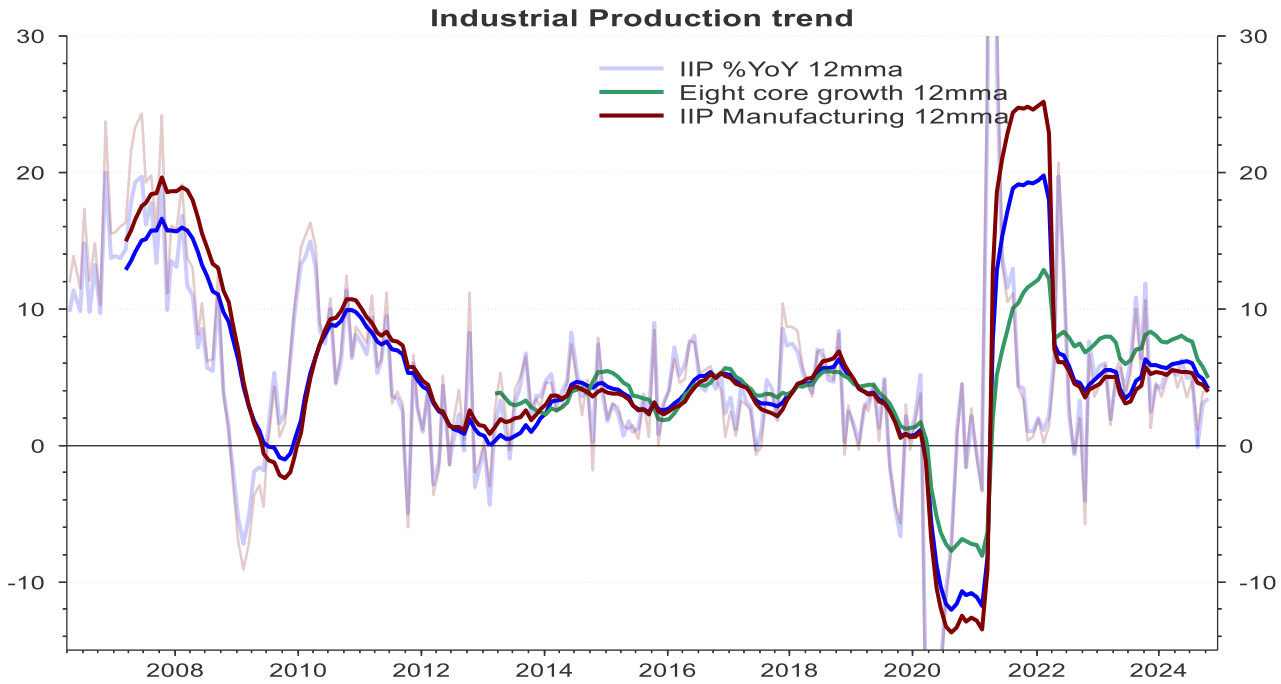
Source: CMIE Economic Outlook, NSE EPR.

Figure 72: India industrial production (3MMA)


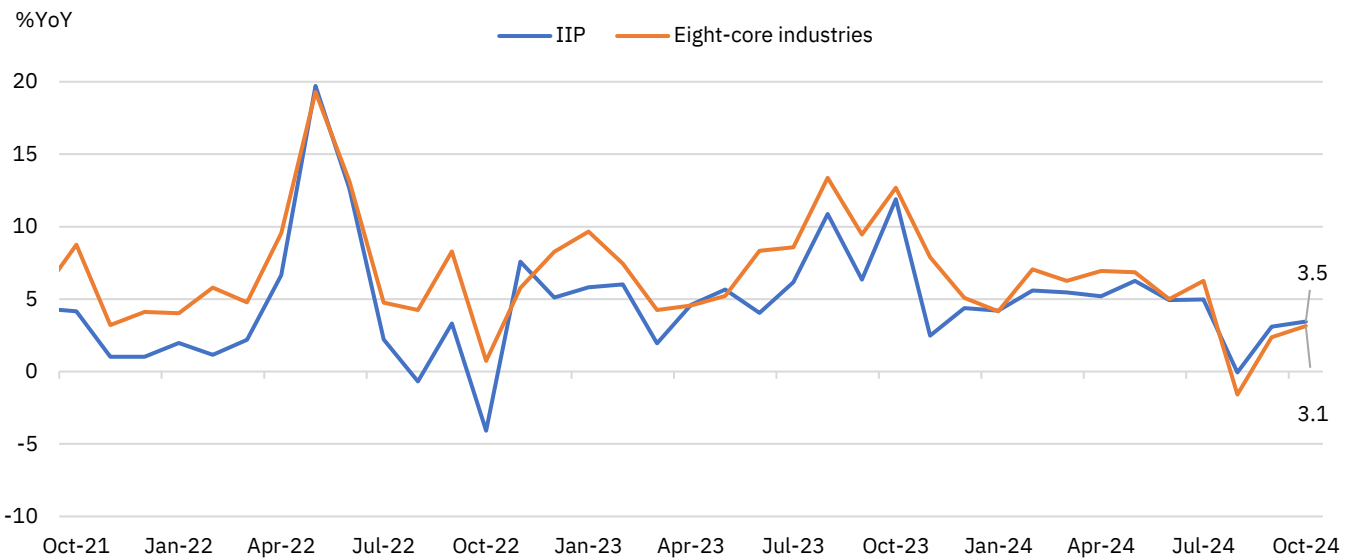
Source: LSEG Datastream, NSE EPR.

Figure 73: India industrial production use-based goods (3MMA)


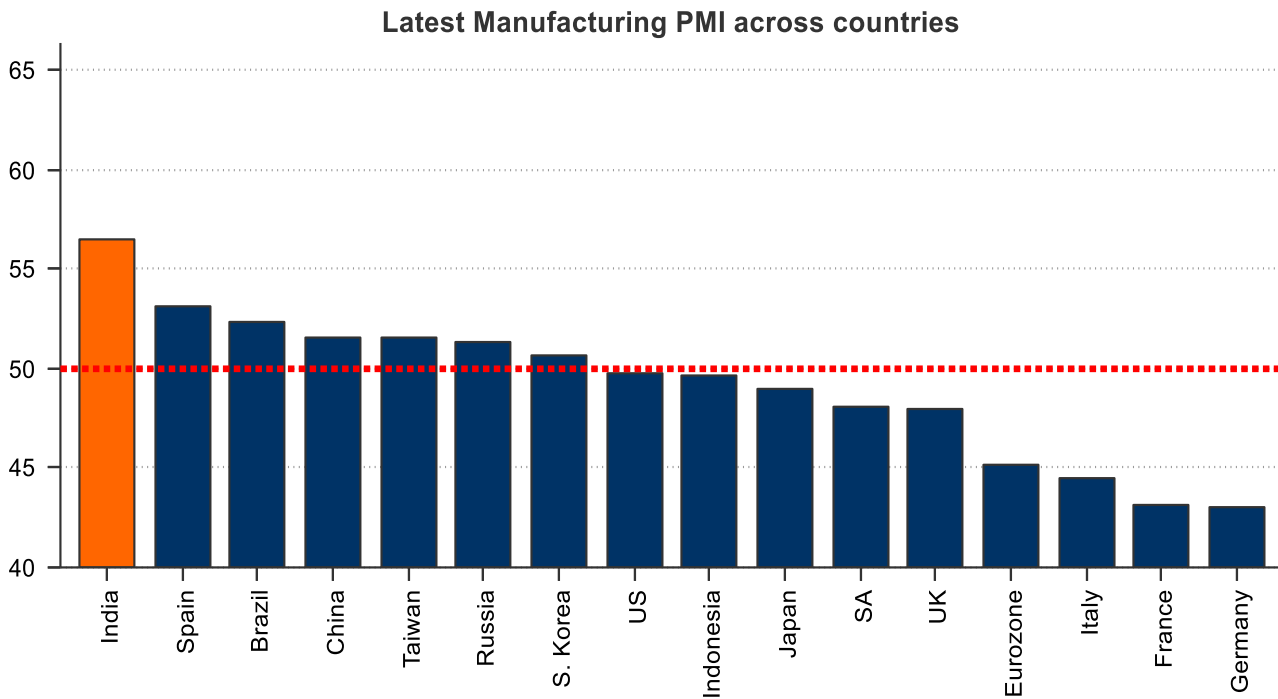
Source: LSEG Datastream, NSE EPR.

Figure 74: Long-term industrial production trend (12MMA)


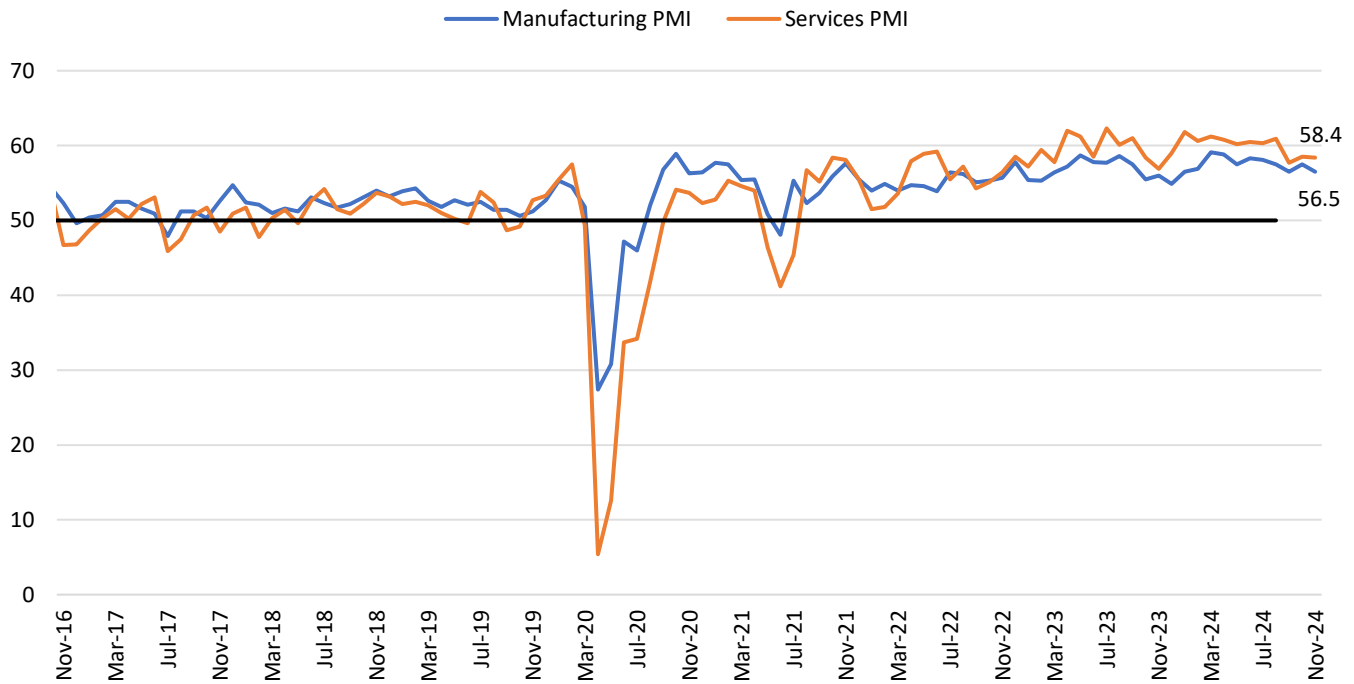
Source: LSEG Datastream, NSE EPR.

Figure 75: Eight core industries and IIP growth trend (% YoY)


Source: CMIE Economic Outlook, NSE EPR.

Figure 76: Manufacturing PMI across countries


Source: LSEG Datastream, NSE EPR.

Figure 77: India's Manufacturing and Services PMI trend


Source: CMIE Economic Outlook, NSE EPR.

RBI Monetary Policy: Status quo with a liquidity booster

The RBI's MPC expectedly decided to retain the policy repo rate⁵ at 6.5% for the 11th consecutive time with a 4:2 majority and unanimously decided to retain the 'neutral' stance. Dr Nagesh Kumar and Dr Ram Singh dissented by voting for a 25bps rate cut. The RBI's MPC acknowledged that the growth-inflation outcomes have turned adverse since October, and the medium-term focus on further realigning inflation to the target while ensuring pick-up in growth momentum remains imperative. The GDP growth forecast for FY25 has been trimmed by 60bps to 6.6%, with a stable prognosis for H2FY25 fuelled by strengthening agriculture outlook, revival in rural demand, increased government expenditure, pick-up in industrial activity and upbeat exports. Headline inflation estimates for FY25 have been revised upwards by 30bps to 4.8%, and a sharp upward revision of 90bps in Q3FY25 to 5.7%. Notwithstanding the near-term spike, the MPC expects food prices to soften, on record kharif output, higher mandi arrivals and better rabi crop prospects. To address the expected near-term tightening in liquidity conditions, the RBI announced a 50bps cut in the Cash Reserve Ratio (CRR)⁶ to 4%, to be implemented in two tranches of 25bps each from December 14th and 28th. This is likely to add nearly Rs 1.16 lakh crore to the banking system liquidity.

The RBI's MPC faces an interesting conundrum amid slowing growth and elevated inflation, in turn complicating policy decisions. Notwithstanding a positive growth outlook for the second half of the fiscal, emerging signs of moderation in domestic growth drivers, coupled with global uncertainties, could open room for a rate cut, provided inflation follows a glide path towards the 4% target. That said, the MPC is expected to tread cautiously, closely monitoring persistent food price pressures and their second-round effects. During this period, the RBI is likely to remain nimble and flexible on liquidity management to ensure orderly money market rates and maintain financial stability, with the possibility of a rate moderation evenly balanced in the remaining part of the fiscal.

- MPC maintains status quo on rates and stance:** The RBI's MPC expectedly decided to retain the policy repo rate at 6.5% for the 11th consecutive time with a 4:2 majority, while *unanimously* deciding to retain the stance as *neutral*. With this, the Standing Deposit Facility (SDF) and the Marginal Standing Facility (MSF) rates—the upper and lower bounds of the Liquidity Adjustment Facility (LAF) corridor—remained unchanged at 6.25%, and 6.75% respectively. The rationale behind maintaining status quo is the need for durable price stability to ensure a conducive environment for sustainable growth and restoring the inflation growth balance.
- Inflation forecast revised higher to 4.8% for FY25:** The headline inflation projection for FY25 has been revised upward by 30bps to 4.8% for FY25, with a sharp 90bps increase in Q3FY25 inflation projection to 5.7% along with a shallower upward revision of 30bps in Q4 estimate to 4.5%. The Q1/Q2FY26 inflation forecast stood at 4.6%/4% respectively. The upward revision has been ascribed to persistent food price pressures, alongside firming up of prices of manufacturing and services firms, translating into a pick-up in core inflation. That said, expectation of some softening is expected from record *kharif* production, higher mandi arrivals, conducive *rabi* sowing and seasonal winter correction in vegetable prices. Upside risks emanate from unexpected weather events, lingering geopolitical conflicts, volatility in crude oil prices and rise in international agriculture commodity prices.
- GDP growth forecast for FY25 revised lower by 60bps to 6.6%:** After retaining the FY25 GDP forecast at 7.2% in the previous three meetings, the MPC decided to

The RBI expectedly kept the policy repo rate unchanged at 6.5% with a 4:2 majority, while unanimously retaining the stance as "neutral".

Inflation forecast for FY25 has been revised upwards by 30bps to 4.8% while GDP growth forecast has been trimmed by 60bps to 6.6% in FY25.

⁵ Repo rate is the rate at which the RBI lends money to commercial banks. Standing Deposit Facility (SDF) rate is the rate at which the RBI accepts uncollateralised deposits on an overnight basis from banks. Marginal Standing Facility (MSF) rate is the rate at which banks borrow from RBI in an emergency when inter-bank liquidity dries up.

⁶ Cash reserve ratio (CRR) is the minimum fraction of total deposits that banks must hold as reserves with the RBI

reduce it by 60bps to 6.6%, with Q3FY25, Q4FY25 and Q1FY26 GDP forecast revised downward to 6.8% (-60bps), 7.2% (-20bps) and 6.9% (-40bps) respectively. After the lower-than-anticipated growth in Q2FY25, the economic growth for the remainder of the fiscal is expected to be supported by a) an improved agriculture outlook and revival in rural demand, b) sustained buoyancy in services, c) an expected pick-up in industrial activity, d) resilient world trade prospects, thereby aiding exports, and f) higher government spending. Potential headwinds may emerge from ongoing geo-political tensions, volatility in international commodity prices and uncertain global growth outlook.

- **Liquidity booster via a 50bps CRR cut:** The RBI announced a reduction in the Cash Reserve Ratio (CRR) by 50 bps to 4.0%, marking the first cut since May 2022. This cut will be implemented in two equal tranches of 25bps each (from December 14th and 28th respectively) and is expected to infuse nearly Rs 1.16 lakh crore into the banking system. This move aims to ease potential liquidity stress arising from tax-related outflows, increased currency in circulation, and capital flow volatility in the coming weeks. During October-November 2024, banking system liquidity remained largely in surplus averaging Rs 1.5 lakh crore, aided by sustained government spending and a reduction in government cash balances. To manage this surplus, the RBI conducted five main and 23 fine-tuning VRRR auctions during the period, absorbing a total of Rs 11.7 lakh crore. Additionally, five fine-tuning VRR operations were conducted from late October to the end of November to manage short-term liquidity strains. The weighted average call rate (WACR) remained well anchored within the LAF corridor of 6.25%-6.75%, averaging 6.51% during October-November as against 6.53% observed in August-September. With the CRR cut and continued liquidity management, the banking system is expected to remain adequately liquid, supporting financial stability in the months ahead.
- **Regulatory measures:** The RBI announced the linking of the FX-Retail platform, with NPCI's Bharat Connect platform, allowing users to transact via mobile apps from banks and non-bank providers. The RBI also proposed the introduction of the Secured Overnight Rupee Rate (SORR), a new benchmark based on secured overnight money market transactions, to strengthen the interest rate derivatives market. Further, to support small farmers amidst rising agricultural input costs, the limit for collateral-free agriculture loans has been increased from Rs 1.6 lakh to Rs 2 lakh. Pre-sanctioned UPI credit lines will now be available through Small Finance Banks, promoting financial inclusion. Additionally, the RBI introduced the 'MuleHunter.AI™' AI solution to address digital fraud and mule bank accounts. Lastly, the RBI launched the 'Connect 2 Regulate' initiative, inviting stakeholder feedback on regulatory topics and proposed adding podcasts to its communication toolkit for wider dissemination of information.
- **A status quo vs rate cut dilemma on the cards:** The RBI's MPC faces an interesting conundrum amid slowing growth and elevated inflation, in turn complicating policy decisions. Notwithstanding a positive growth outlook for H2FY25, emerging signs of growth moderation, coupled with global uncertainties, could open room for a rate cut, provided inflation follows a glide path towards the 4% target. That said, the MPC is expected to tread cautiously, closely monitoring persistent food price pressures and their second-round effects. With the near-term inflation-growth outlook turning adverse, the focus of the MPC will be to further align inflation with the target while ensuring a pick-up in growth momentum. During

this period, the RBI is likely to remain nimble and flexible on liquidity management to ensure orderly money market rates and maintain financial stability. The possibility of the start of rate cut cycle in the remaining part of the fiscal remains evenly balanced for now.

Table 31: Current policy rates

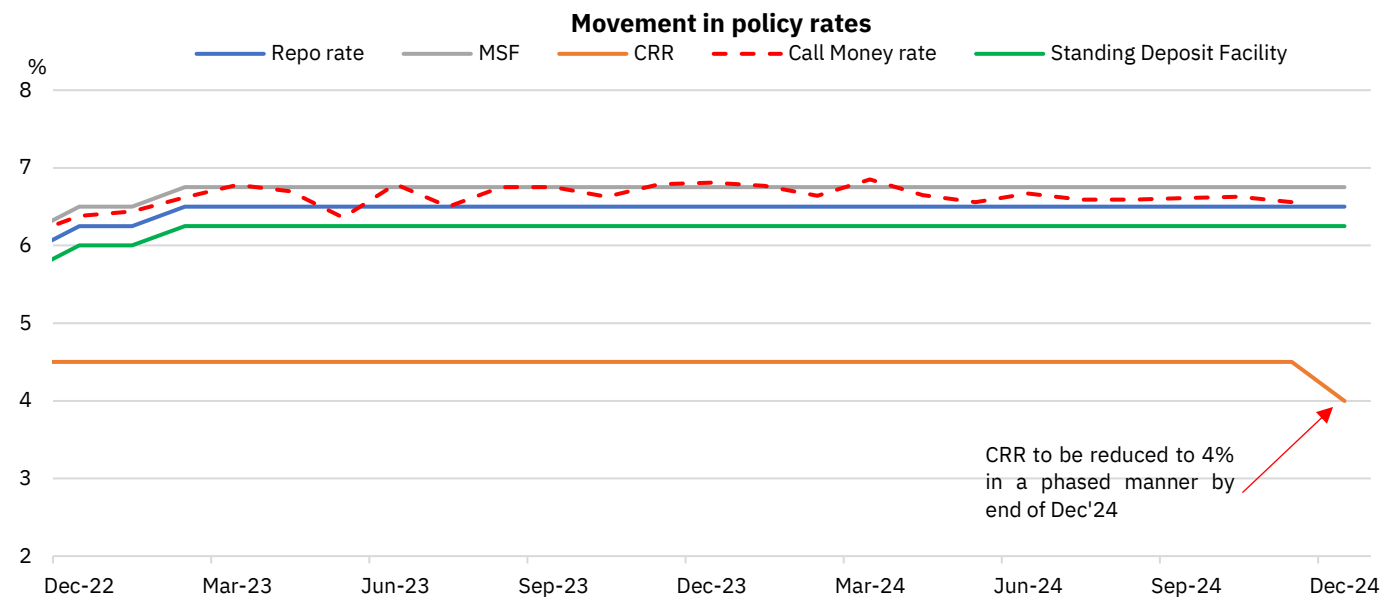
The policy repo rate was retained at 6.5% in the December policy with a 4:2 majority, while the policy stance has been unanimously retained at “neutral”. The CRR will be reduced from 4.5% to 4.0% in a phased manner, with the first tranche of a 25bps cut effective from December 14th, followed by the second equal cut from December 28th.

Key rates	Jun 2024	August 2024	October 2024	December 2024
Repo Rate	6.50%	6.50%	6.50%	6.50%
Standing Deposit Facility (SDF)*	6.25%	6.25%	6.25%	6.25%
Marginal Standing Facility (MSF)	6.75%	6.75%	6.75%	6.75%
Bank Rate	6.75%	6.75%	6.75%	6.75%
Cash Reserve Ratio (CRR)	4.50%	4.50%	4.50%	4.00%

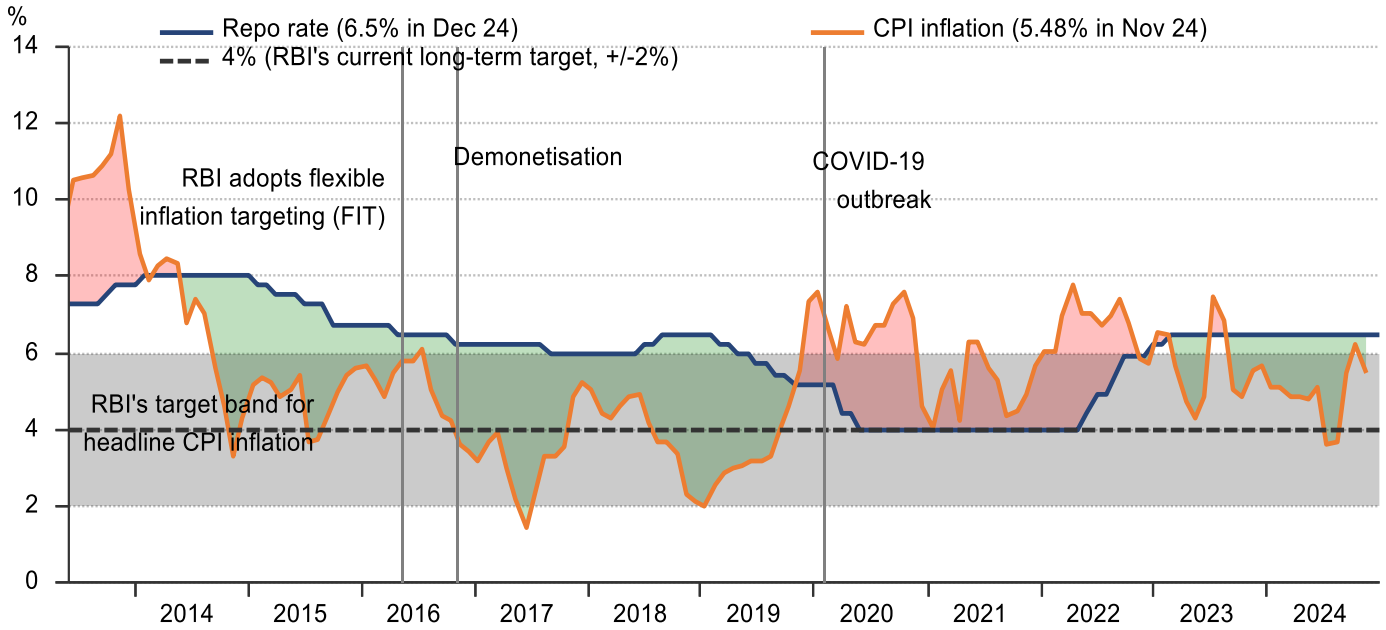
Source: RBI, NSE EPR. * Introduced in April 2022 policy as the new floor of the LAF corridor. + after implementation of the phased reduction of CRR

Figure 78: Movement in key policy rates

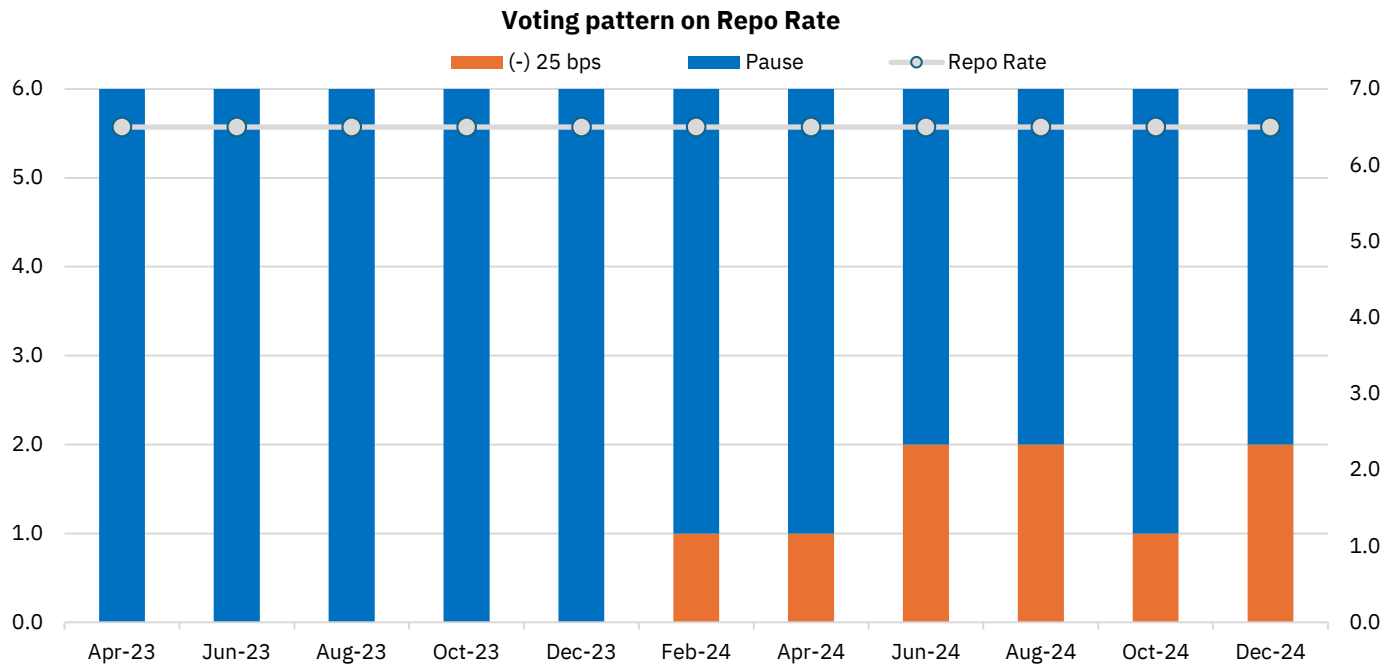
Flexible liquidity management by the RBI has helped bring down money market rates closer to the policy repo rate. The average Weighted Average Call Money Rate (WACR) fell marginally to 6.51% during October-November from 6.53% during August-September.



Source: LSEG Datastream, NSE EPR.

Figure 79: Real interest rates


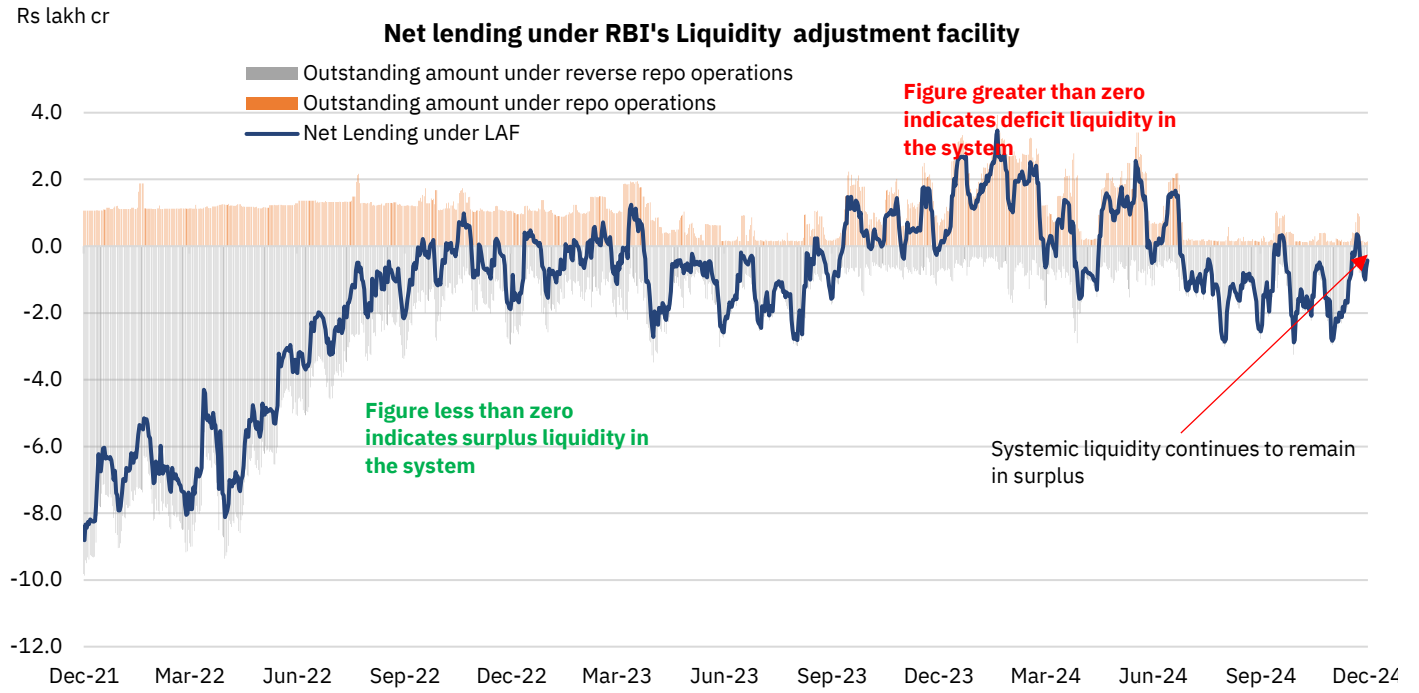
Source: Refinitiv Datastream, NSE EPR.

Figure 80: MPC members' voting pattern


Source: RBI, NSE EPR.

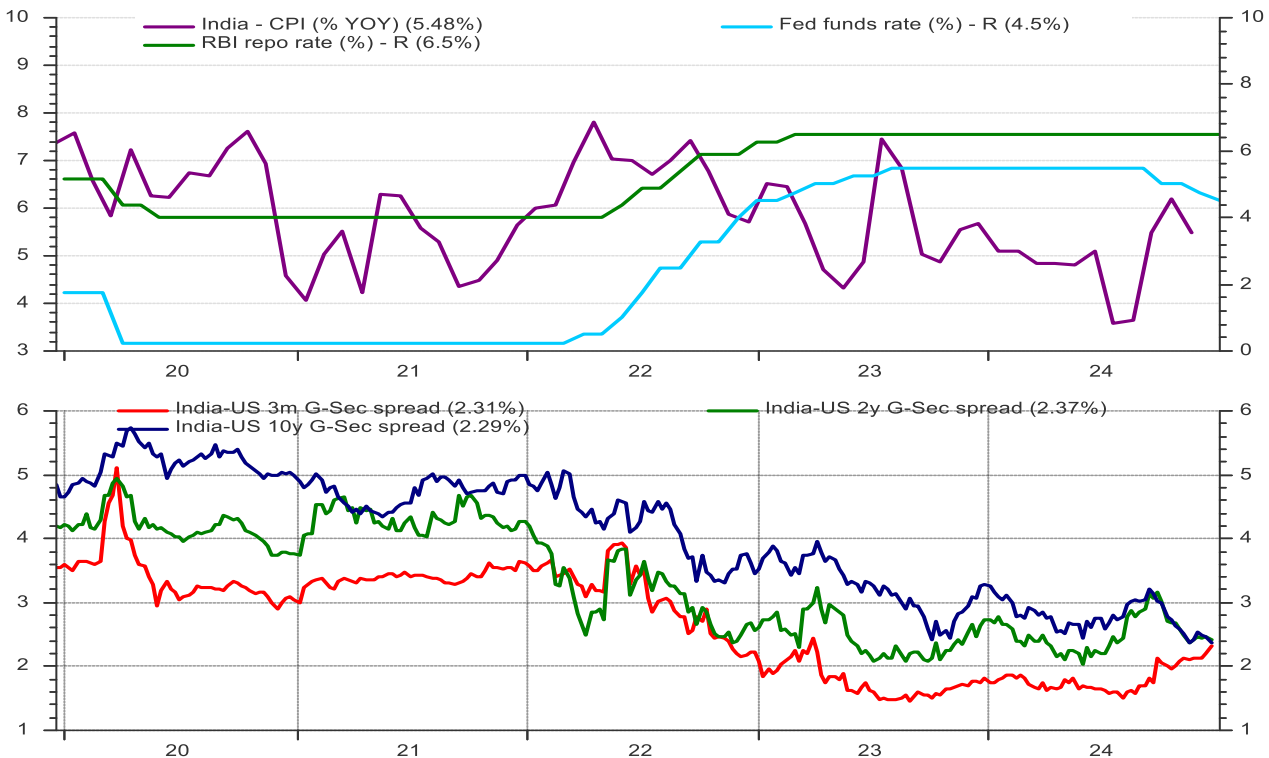
Figure 81: Net lending under RBI's Liquidity Adjustment Facility

System liquidity continued in surplus during October-November 2024, averaging Rs 1.5 lakh crore. It moved into deficit for a brief period in late November (26-28), before returning to a surplus of Rs 0.42 lakh crore as of December 5th, 2024. This surplus was mainly due to higher government spending, despite the downward pressure from increased currency in circulation and capital outflows.



Source: CMIE Economic Outlook, NSE EPR.

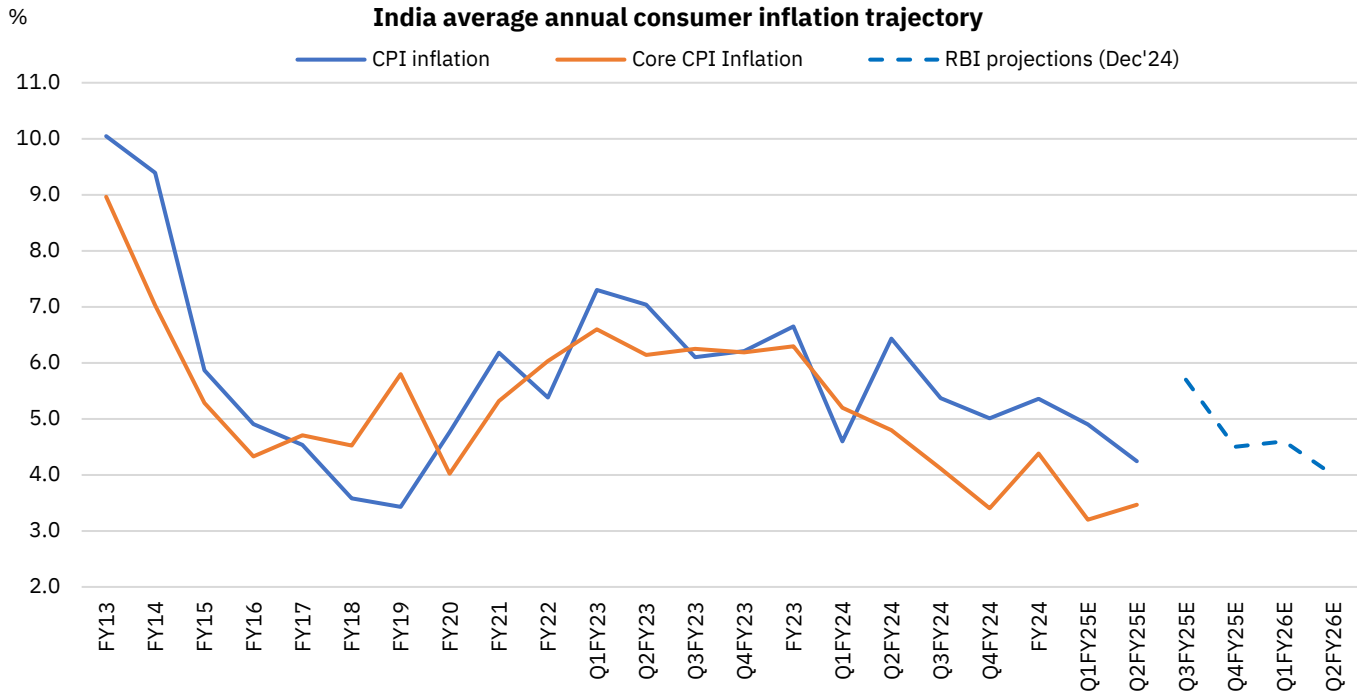
Figure 82: India vs. US policy rates and yield differential



Source: LSEG Datastream, NSE EPR.

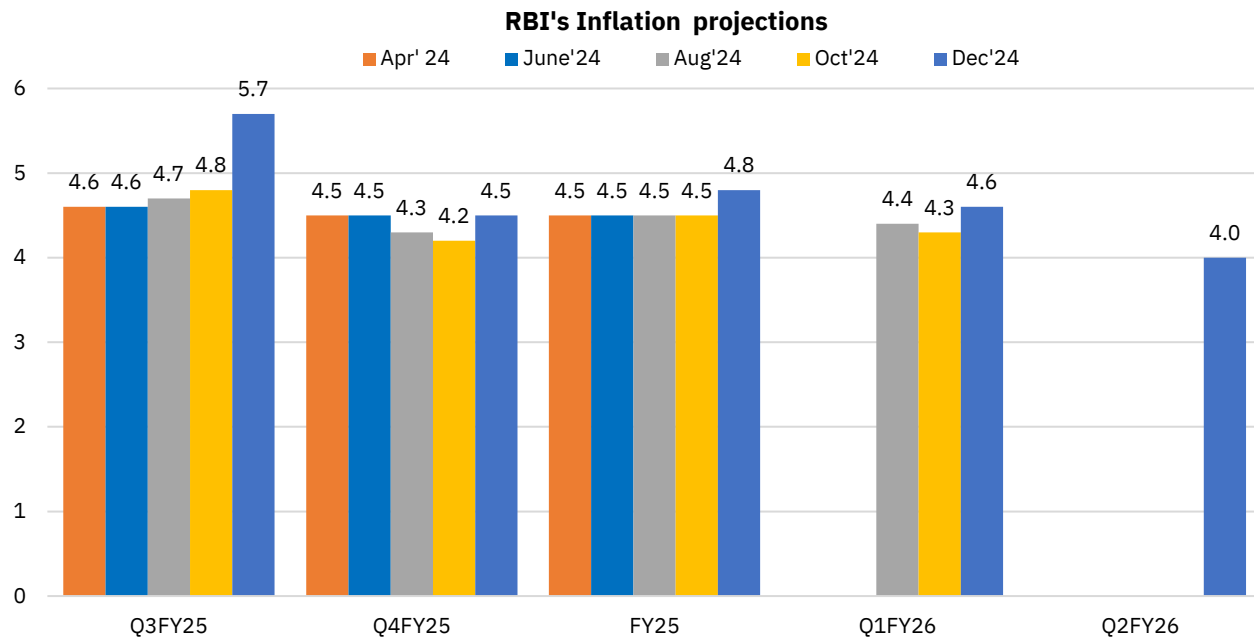
Figure 83: India's consumer inflation trajectory and RBI's forecasts

Headline inflation projection for FY25 has revised higher by 30bps to 4.8%, with a sharp upward revision in Q3 to 5.7% (+90bps) while a shallower increase of 30bps to 4.5% in Q4. The forecast for Q1/Q2FY26 has been pegged at 4.6% and 4% respectively.



Source: CMIE Economic Outlook, RBI EPR. Core inflation is calculated as CPI inflation excluding food, pan, tobacco & intoxicants and fuel & light.

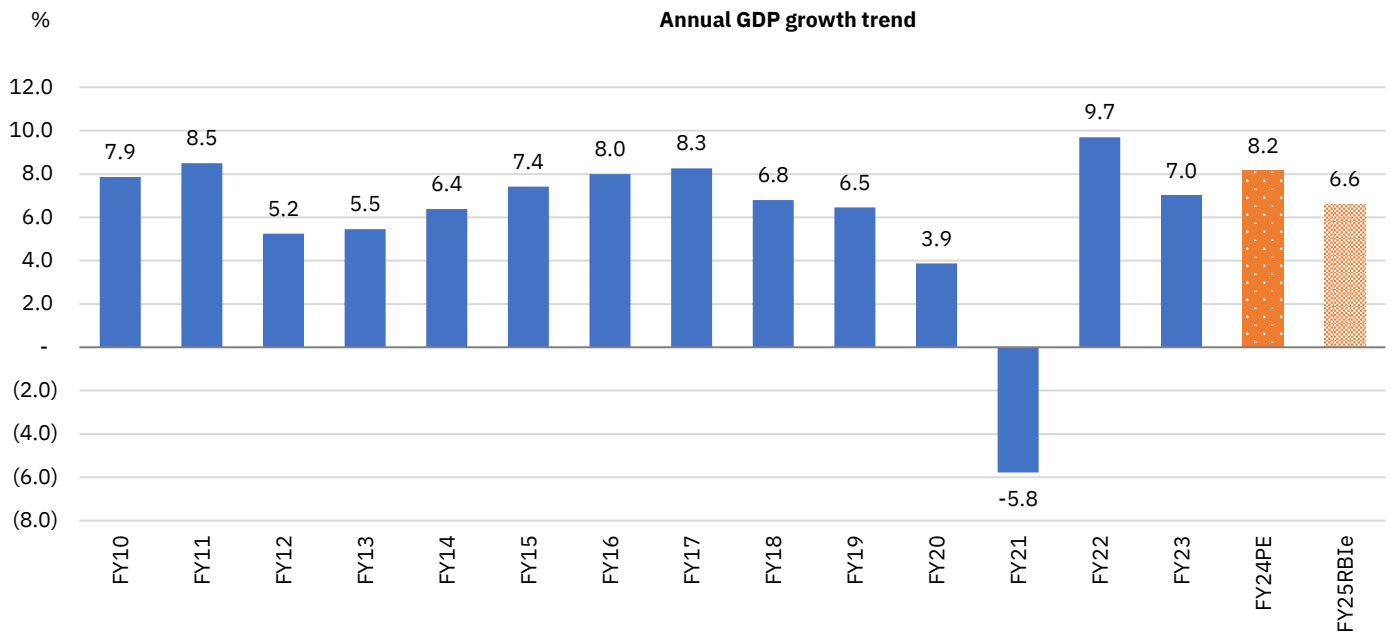
Figure 84: Quarterly and annual inflation forecasts by RBI



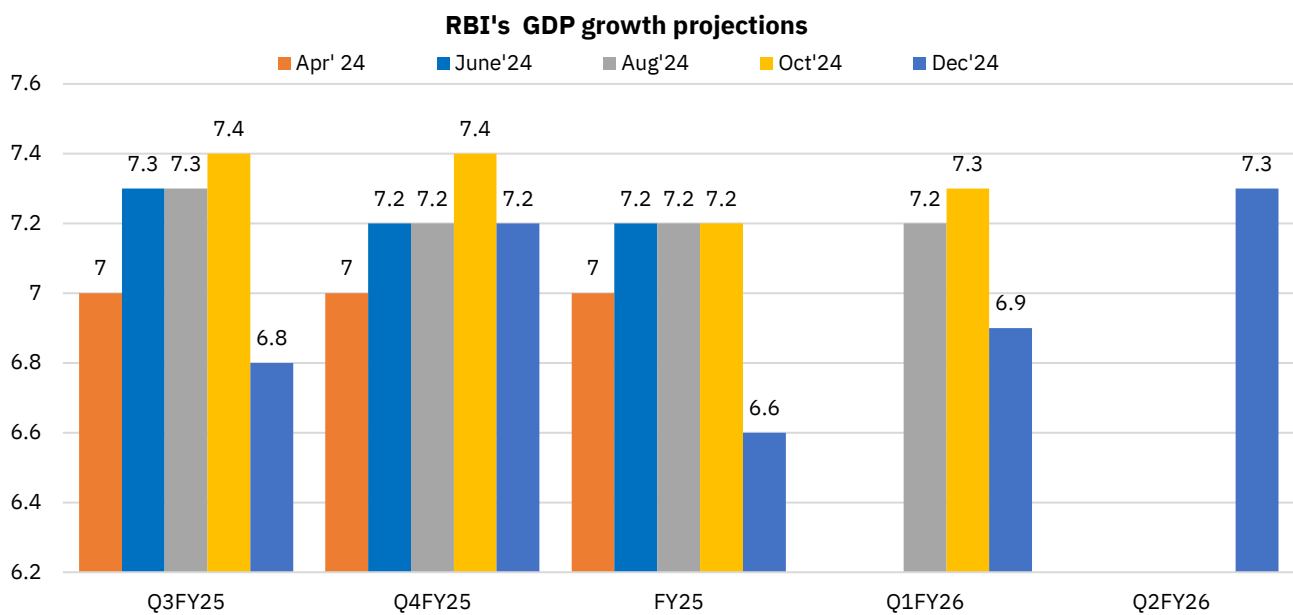
Source: RBI, NSE EPR.

Figure 85: GDP growth trend and RBI's estimates

The GDP growth projection for FY25 has been revised lower by 60bps to 6.6%.



Source: CMIE Economic Outlook, RBI, NSE EPR. RBIe = RBI estimate, PE= Provisional Estimate.

Figure 86: RBI's quarterly and annual GDP growth forecasts


Source: RBI, NSE EPR.

Retail inflation moderates to a sub-6% print

Headline retail inflation moderated to 5.5% YoY in November, down from a 14-month high of 6.2% in the previous month, reflecting the impact of easing food prices, particularly vegetables. Sequentially, the CPI index recorded its first month-on-month contraction (-0.2%) in ten months, reflecting improved winter supplies and favourable seasonal dynamics. Food & beverages inflation eased to 8.2% YoY (vs. 9.7% in Oct), led by a 4.6% MoM decline in vegetable prices, alongside moderation in fruits, pulses, and sugar prices. However, upward pressures persist in certain categories like oils & fats and eggs, and non-vegetable food inflation remains relatively elevated. Core inflation held steady at 3.7% YoY, driven primarily by persistently high personal care & effects inflation, though there are early signs of stabilization as monthly core price growth slowed.

In the wholesale space, WPI inflation softened to 1.9% YoY (vs. 2.4% in Oct), as food inflation receded and offset a modest uptick in manufactured goods prices. During the first eight months of FY25, retail inflation averaged 4.9% YoY, though the latest reading below 6% and the steady arrival of winter crops raise hopes of further easing. Should these improvements in food supply sustain and broader price pressures remain contained, the door may open for a potential rate cut in the coming quarter.

- **Headline retail inflation inches downwards...:** CPI inflation decelerated to 5.5% YoY in November from a 14-month high of 6.2% YoY in the previous month. The moderation in inflation was primarily led by food inflation which fell to 8.2% YoY in November from 9.7% YoY in Oct'24. Headline inflation fell 0.2% MoM, marking the first sequential contraction in ten months, reflecting the impact of decline in vegetable prices, thanks to improved summer harvest and better mandi arrivals. Despite the recent fall, the food basket continues to see upward pressure from vegetables, fruits, oil & fat and cereal components. Headline inflation ex-veggies continued to remain at benign levels of 3.7%YoY, down from 4.7% YoY in November last year. Core inflation remained steady at 3.7% YoY, driven by subdued trends in most sub-components, except for elevated gold (+26.6% YoY) and silver (+26.5% YoY) inflation. Geographically, both urban and rural inflation has eased, however rural inflation continues to be relatively higher.
- **...as seasonal supply of vegetables brings relief:** Food & beverages inflation moderated to 8.2%YoY in November from a 15-month high of 9.7%YoY in October, primarily on account of 4.6% MoM fall in vegetable prices and a high base effect. Apart from veggies, prices of fruits (-1.1% MoM), meat and fish (-0.3% MoM), pulses (-0.2% MoM) and sugar (-0.1% MoM) also fell on a sequential basis in November. Part of this drop can be attributed to good monsoons and arrival of the winter supplies. On the other hand, eggs and oils & fats saw prices rise by 2.8% MoM and 3.1% MoM respectively in November, as India experiences winter and strong demand for the products. Since August, oils & fats prices have risen by 12.5% on the back of strong rally in international prices of palm and soyabean oil and an increase in customs duty. While vegetable prices showed moderation in November, the extent of moderation has slowed down based on daily prices data in the first two weeks of December, thereby exhibiting stickiness in prices.
- **Core inflation remains stable:** Core inflation remained steady at 3.7% YoY in November. This was mainly driven by the personal care & effects segment, which remained elevated at 10.4% YoY, albeit seeing moderation from 11% YoY last month, due to the higher gold and silver prices. The only segment to see moderation in the core segment was transport & communications at 2.6% YoY (vs

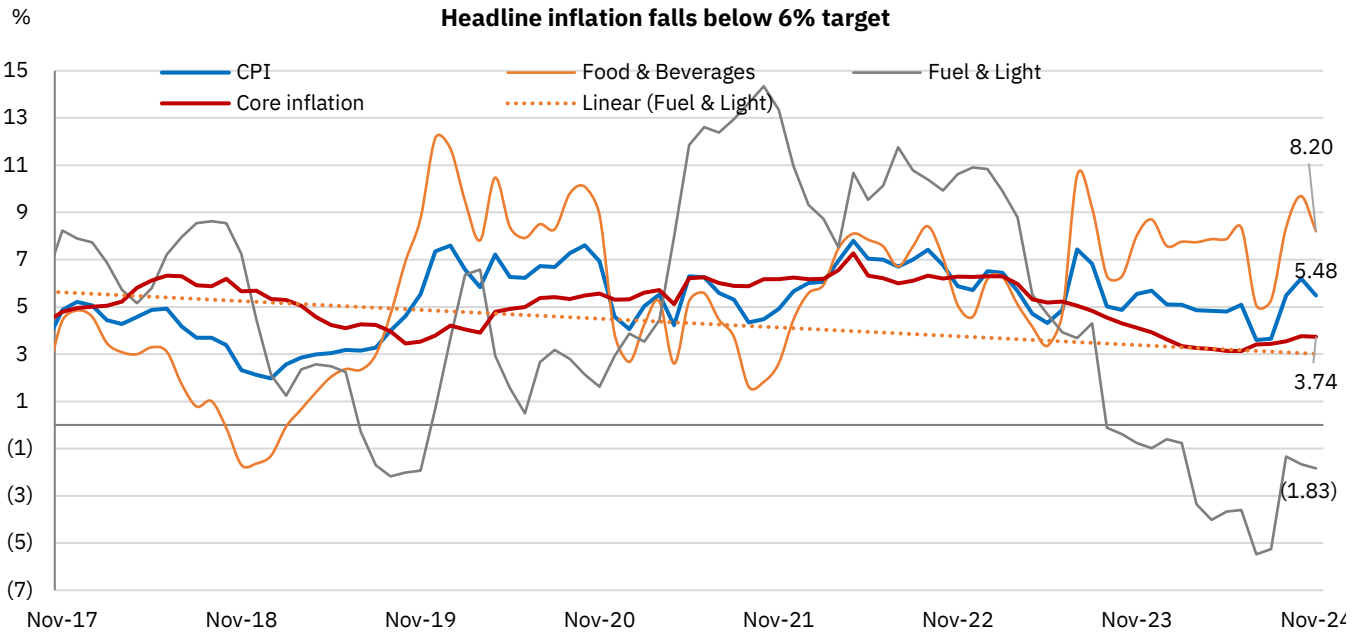
2.8% in Oct'24), thanks to contraction in petrol and diesel prices. On the other hand, housing at 2.9% YoY (vs. 2.8% in Oct'24), household goods & services at 2.8% YoY (vs. 2.7% in Oct), and recreation & amusement at 2.7% YoY (vs 2.4% in Oct) saw a mild increase. Clothing, footwear and education remained largely flat. Sequentially, core inflation increased 0.2% MoM in November (vs. 0.5% MoM in October). The higher food price inflation has not spilled over to the core segment indicating that the headline numbers remain a supply driven phenomenon.

- Wholesale inflation come down based on softer food costs:** WPI inflation eased to a three-month low 1.9% YoY in November from 2.4% YoY in October, translating into an average inflation of 2.1% in the first eight months of FY25. The moderation was led by a sharp reduction in food inflation to 8.6% YoY from a 15-month high of 13.5% YoY in the previous month. Inflation in manufacturing products rose to a 22-month high of 2% YoY (vs. 1.5% YoY in Oct'24), highlighting emerging cost pressures in certain industrial segments. That said, manufacturing product inflation continues to remain benign with deflation in basic metals, fabricated metals, other non-metallic mineral products. Meanwhile, the fuel & power component remained in deflationary territory for the fourth consecutive month, underscoring the muted global energy price environment and stable domestic fuel costs.
- Headline inflation seeing moderation; rate cuts possible:** Although retail inflation in FY25TD remains elevated at 4.9% YoY (vs 5.5% YoY in FY24TD), the recent softness in food prices and headline CPI dipping below 6% offer some respite. With stable winter crop arrivals and early signs of a growth slowdown, the monetary policy stance could turn more accommodative if inflation shows sustained moderation. A potential rate cut in the next quarter would, however, hinge on further corrections in key food segments, ensuring headline inflation durably remains around the median inflation target of 4%.

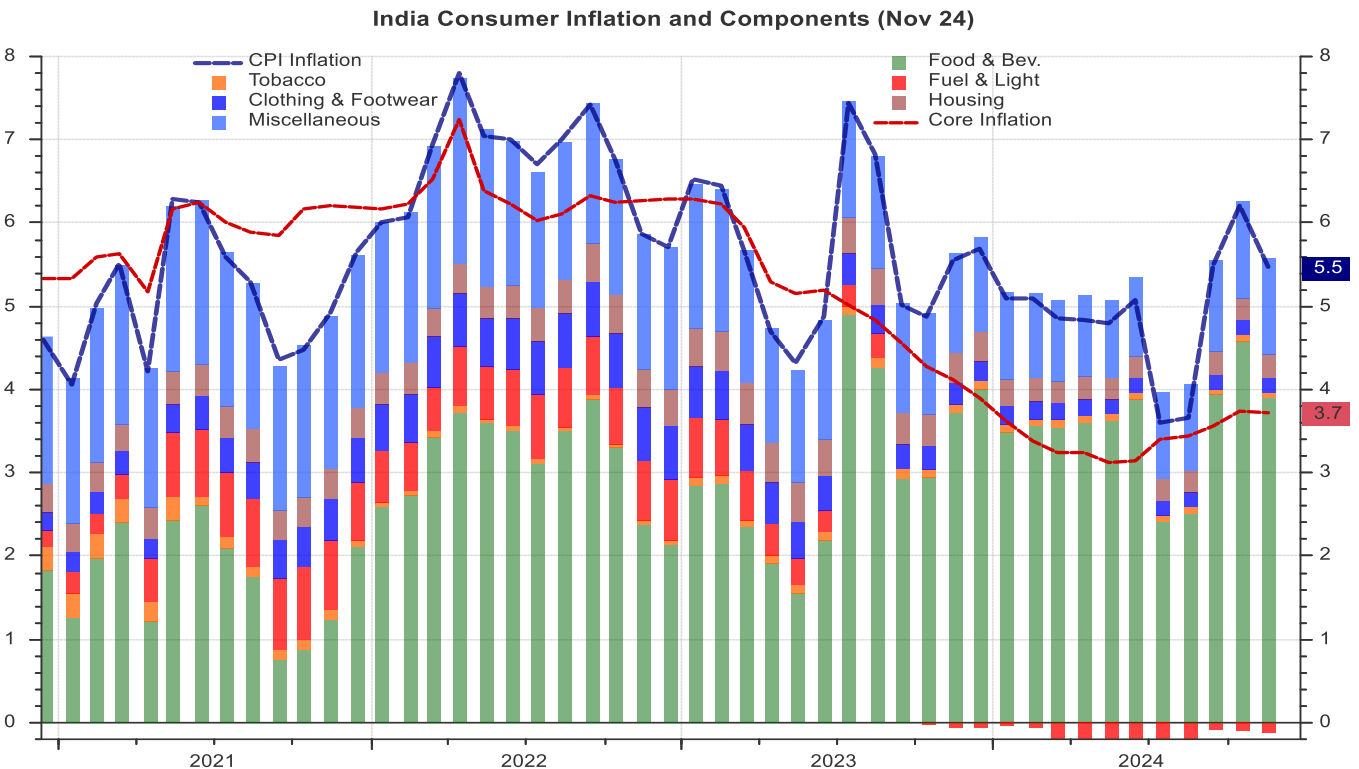
Table 32: Consumer Price Inflation in November 2024 (%YoY)

%YoY	Weight (%)	Nov-24	Oct-24	Nov-23	FY25TD	FY24TD
CPI		5.5	6.2	5.6	4.9	5.5
Food & Beverages	45.9	8.2	9.7	8.0	7.6	6.6
Pan, Tobacco & Intoxicants	2.4	2.3	2.5	3.8	2.8	3.8
Clothing & Footwear	6.5	2.7	2.7	3.9	2.7	5.5
Housing	10.1	2.9	2.8	3.6	2.7	4.3
Fuel & Light	6.8	(1.8)	(1.7)	(0.8)	(3.4)	2.6
Miscellaneous	28.3	4.3	4.3	4.4	3.8	4.8
Core CPI inflation¹	44.9	3.7	3.8	4.1	3.4	4.8

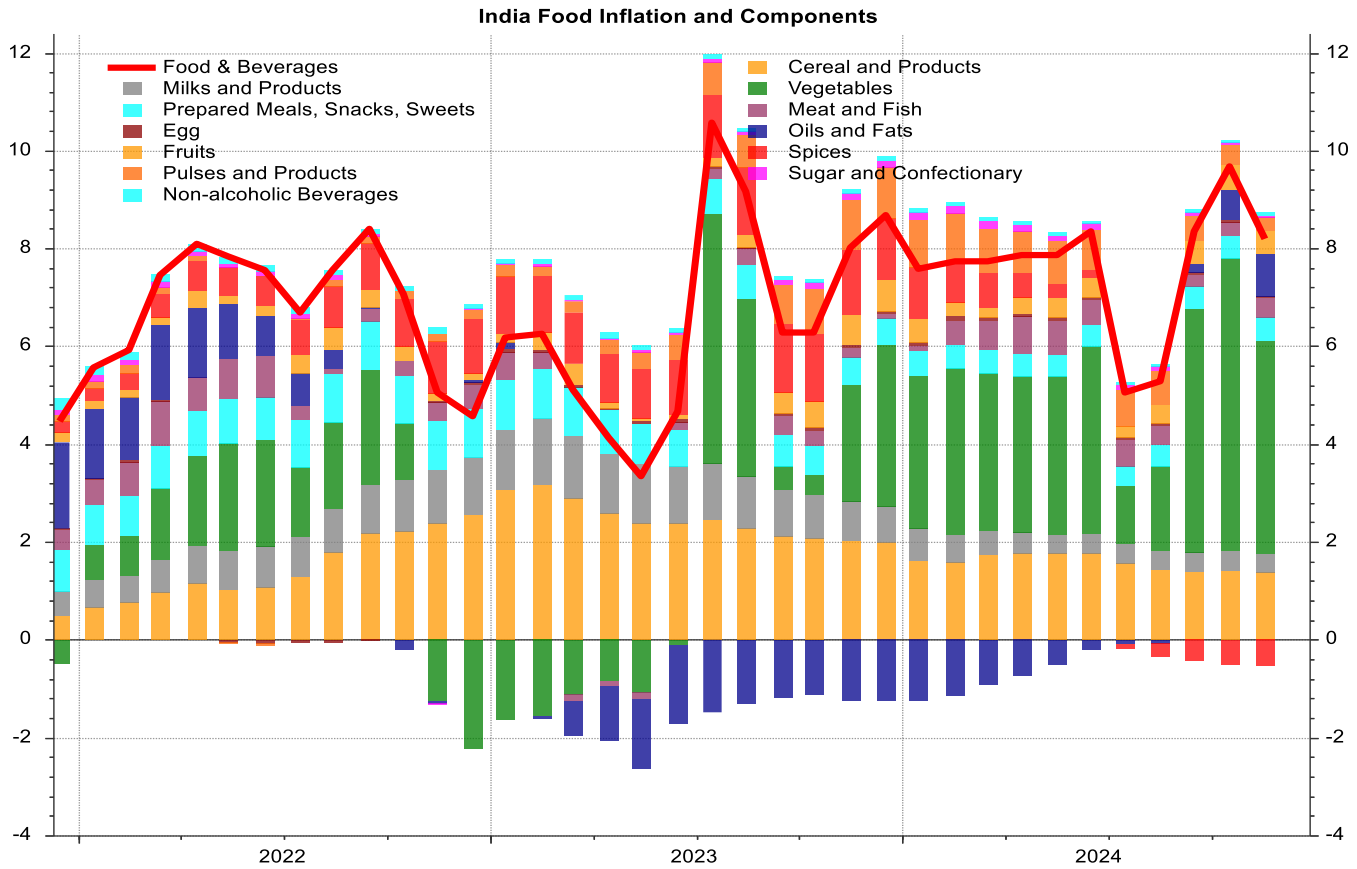
Source: CSO, NSE EPR; Note: ¹ Headline inflation excluding food & beverages, pan, tobacco & intoxicants and fuel & light.

Figure 87: Headline CPI inflation trend


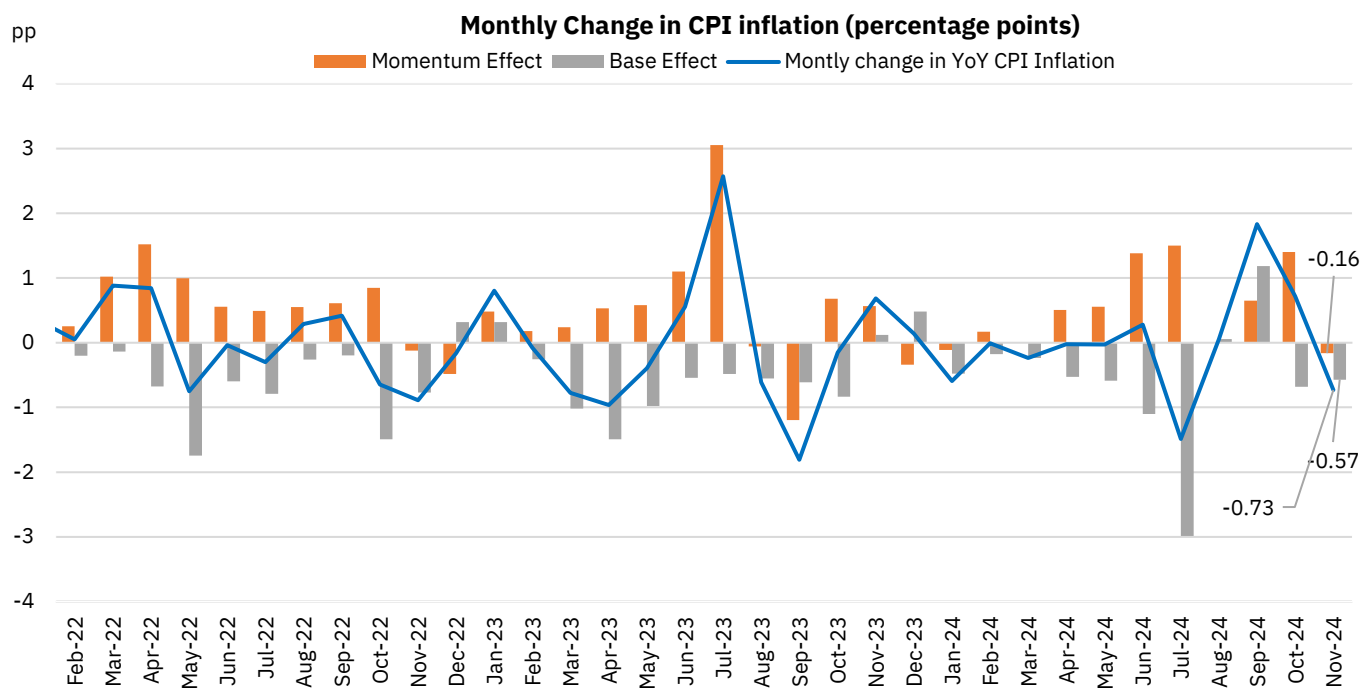
Source: CMIE Economic Outlook, NSE EPR.

Figure 88: Category-wise contribution to India consumer price inflation (CPI)


Source: LSEG Datastream, NSE EPR.

Figure 89: Category-wise contribution to India Food and Beverages inflation (CPI)


Source: LSEG Datastream, NSE EPR.

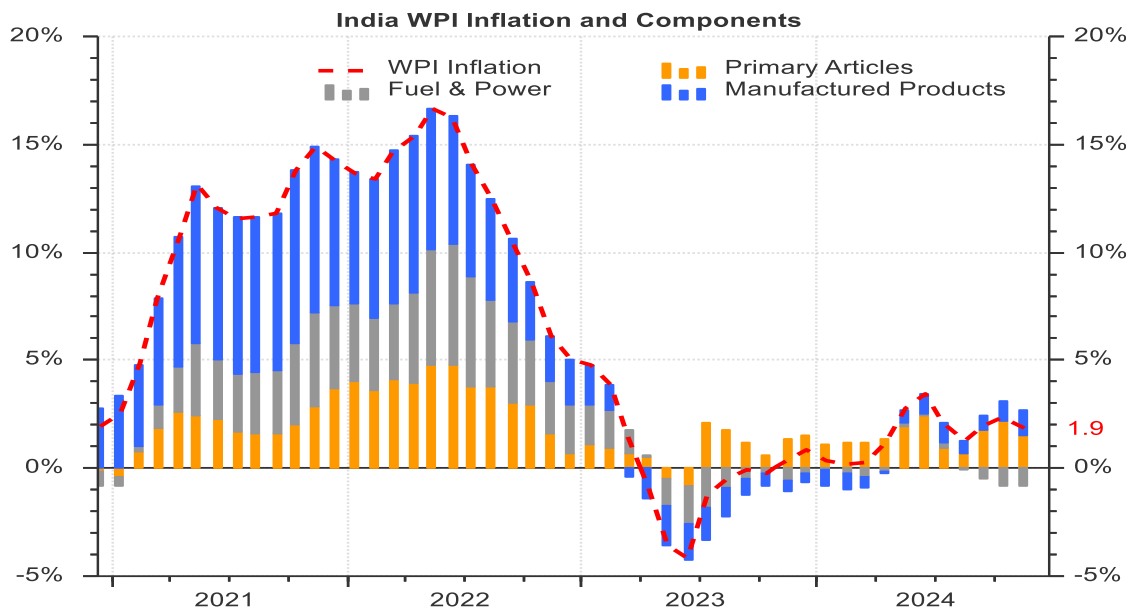
Figure 90: Monthly Change in CPI inflation broken down by base and momentum


Source: CMIE Economic Outlook, NSE EPR

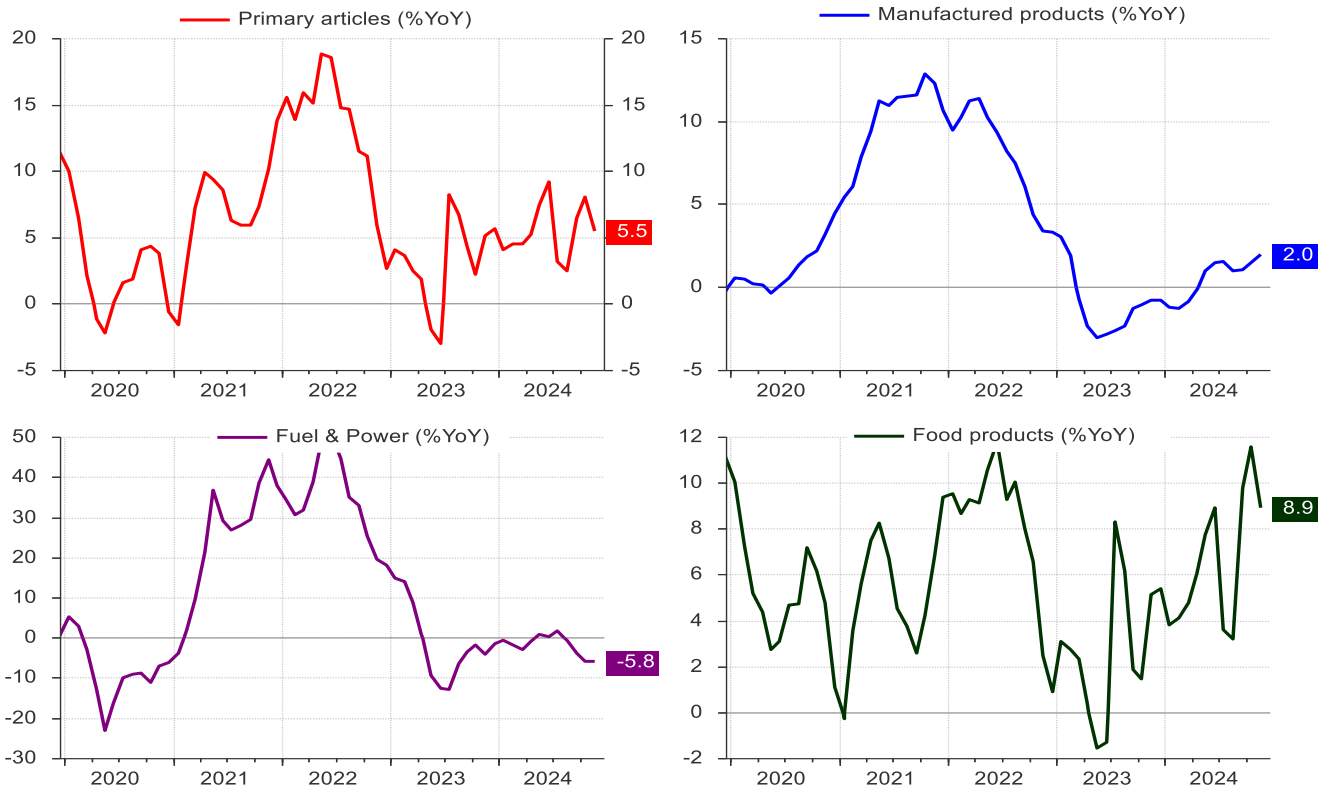
Table 33: Wholesale price inflation for November 2024 (%YoY)

	Weight (%)	Nov-24	Oct-24	Nov-23	FY25TD	FY24TD
WPI		1.9	2.4	0.4	2.1	-1.3
Primary articles	22.6	5.5	8.1	5.2	5.8	3.0
Food articles	15.3	8.6	13.5	8.8	8.5	6.1
Non-food articles	4.1	-1.0	-1.7	-3.0	-2.5	-5.7
Minerals	0.8	5.9	1.9	8.7	4.9	8.0
Crude petroleum & natural gas	2.4	-8.1	-12.2	-7.1	0.0	-5.9
Fuel & power	13.2	-5.8	-5.8	-4.1	-1.7	-6.2
Coal	2.1	-0.9	-0.9	1.8	-0.7	3.0
Mineral oils	8	-5.2	-7.7	-5.7	-1.6	-10.5
Electricity	3.1	-10.4	-3.6	-2.9	-2.8	1.7
Manufactured products	64.2	2.0	1.5	-0.8	1.2	-2.0
Food group	24.4	8.9	11.6	5.1	7.4	2.6

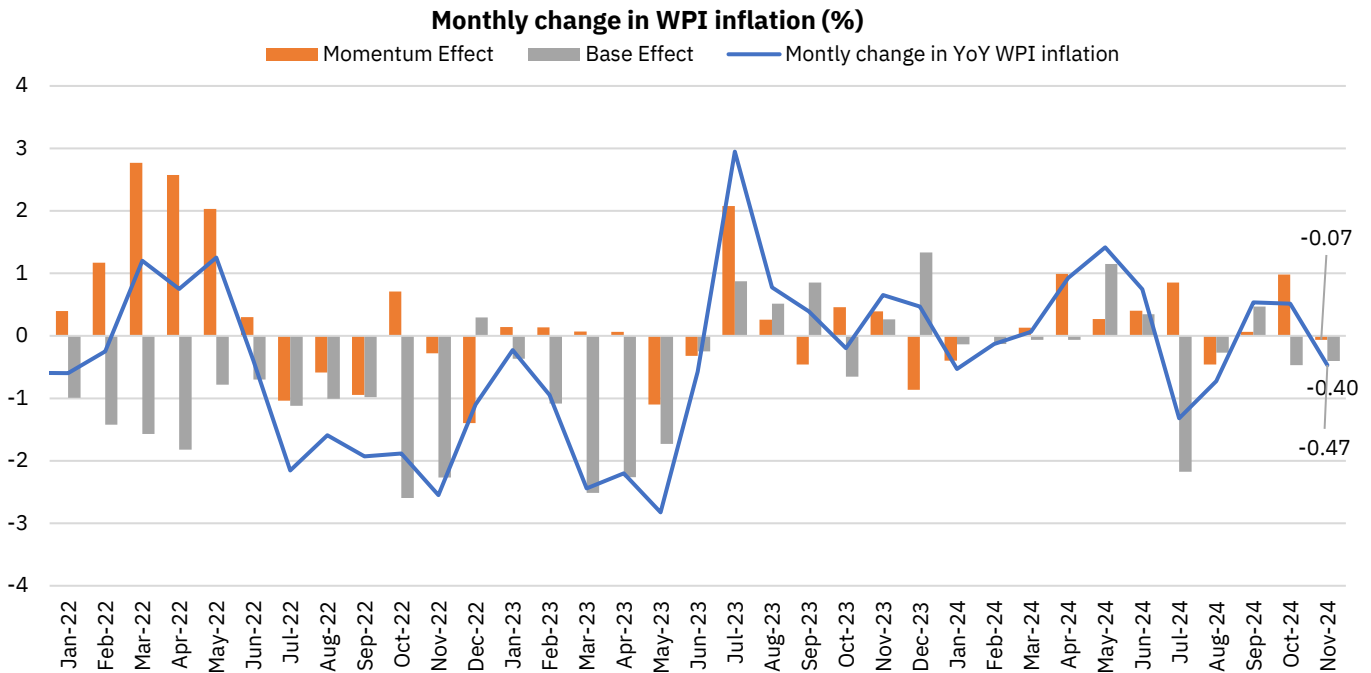
Source: CSO, CMIE Economic Outlook. NSE EPR.

Figure 91: Category-wise contribution to India wholesale price index (WPI)


Source: LSEG Datastream, NSE EPR.

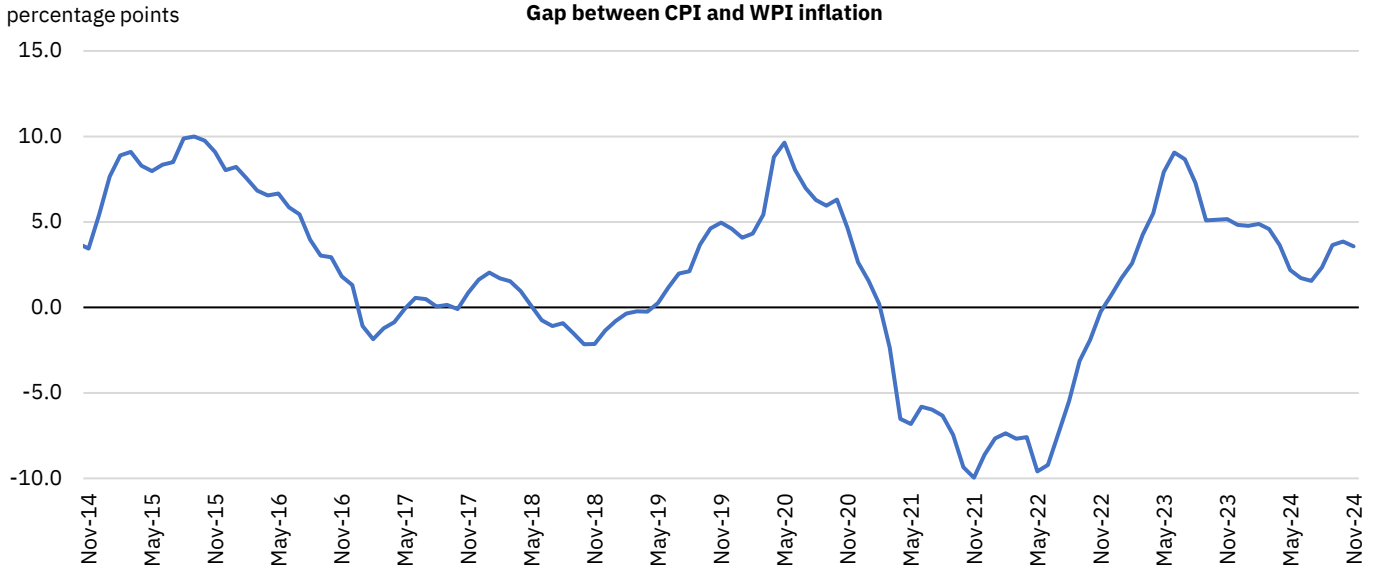
Figure 92: India wholesale price inflation (WPI)


Source: LSEG Datastream, NSE EPR.

Figure 93: Monthly Change in WPI inflation broken down by base and momentum


Source: CMIE Economic Outlook, NSE EPR.

Figure 94: Gap between retail and wholesale inflation



Source: CMIE Economic Outlook, NSE EPR.

Trade deficit widens to record high levels on higher gold imports

India's merchandise trade deficit surged to an all-time high of US\$37.8bn in November (vs. US\$26.9bn in October), driven by a pronounced drop in exports and a sharp rise in gold imports following the recent import duty cut. On a YoY basis, merchandise exports fell by 4.8% to a 25-month low of US\$32.1bn, pressured by a steep 50% YoY decline in oil exports. Nonetheless, non-oil exports continued to show resilience, rising by 7.8% YoY and supported by strong performance in electronics and engineering goods, together constituting nearly 39% of total exports. Imports, meanwhile, soared by 28.4% YoY to a record US\$70bn in November, driven predominantly by a 330% YoY spike in gold imports to US\$14.9bn, primarily attributed to festival-related demand and the recent cut in import duties. Oil imports also witnessed an increase due to reduced discounts on crude from Russia. Beyond these volatile categories, non-oil, non-gold imports moderated sequentially, signaling some tempering in underlying domestic demand.

The services trade surplus, on the other hand, rose to a record high of US\$17.9bn, as services exports surged by 27% YoY to US\$35.7bn, acting as a counterbalance to weakening goods exports. Overall, goods and services exports grew by 9.6% YoY to US\$67.8bn, while imports rose by 28.6% YoY to US\$87.6bn, translating to a significantly higher overall trade deficit. For the fiscal year to date (Apr–Nov 2024), India's merchandise trade deficit stands at US\$202.4bn, up from US\$170.4bn in the same period last year.

- **Merchandise trade deficit reaches historic highs in November...:** Merchandise trade deficit surged to historical high of US\$37.8bn in November from US\$26.9bn in October. This rise was led by a decline in exports at the lowest levels since October 2022 as well as a surge in gold imports to record levels of US\$ 14.9 bn on higher festive demand and import duty cut. The oil deficit declined marginally to US\$ 12.4bn (vs. US\$13.7bn in Oct'24) as both imports and exports have seen moderation while non-oil non-gold trade deficit rose to US\$12.7bn in November from US\$9.1 bn in October. As a consequence, the cumulative merchandise trade deficit for April–November FY25 reached US\$202.4bn, well above the US\$170.4bn recorded in the same period of FY24, mainly reflecting elevated net imports of crude oil and gems & jewellery.
- **... while exports are under pressure amidst slowing external demand:** Exports fell sharply by 4.8% YoY in November to a 25-month low US\$32.1 bn in November (vs. US\$39.2bn in October). The decline was led by oil exports which fell sequentially by 18.9% (50% YoY) to US\$3.7bn (vs. US\$4.6bn in Oct'24), owing to fluctuations in oil prices. Similarly, non-oil exports also fell by 17.9% MoM with a broad-based decline in engineering, gems & jewellery and electronic goods. That said, on a YoY basis, engineering and electronic goods (share: 39% of overall exports) exhibited noteworthy growth of 21.5% and 45.4% YoY respectively, highlighting the impact of the Government's PLI scheme. However, export growth remains muted at 2.2% in FYTD25, reflecting weak external demand.
- **Imports rise on the back of strong gold demand:** Imports in November grew sharply by 28.4% YoY to an all-time high of US\$70 bn (vs US\$66.2 bn in Oct'24), The increase was mainly driven by higher gold imports which have been rising recently due to changes in duty structure along with higher oil imports on account of lower discount on imports from Russia. Oil imports grew by 7.9% YoY to US\$16.1 bn while non-oil imports exhibited a growth of 36.1% YoY to US\$53.8 bn (vs US\$47.8 bn in Oct'24). Gold imports spiked by +330% YoY to a record high of US\$14.9 bn (vs. US\$7.1 bn in Oct'24) reflecting festival-related demand and impact of import duty cut. On a sequential basis, non-oil, non-gold imports, a good

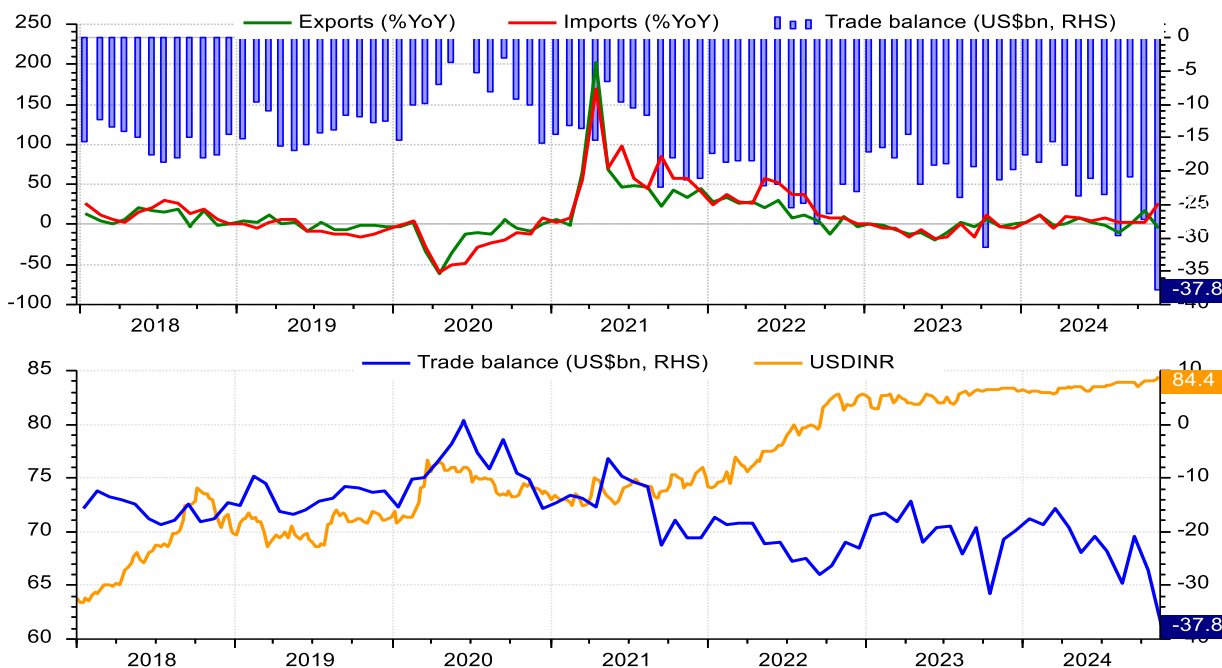
proxy for domestic demand, were lower by US\$1.8bn reflecting moderation in internal demand.

- Services surplus continues to provide support to the external balance:** Contrary to merchandise trade balance, the service trade surplus widened to an all-time high in November at US\$17.9 bn, higher than US\$17.1 bn in October. While goods exports are falling, services exports are providing upward support, rising by ~27% YoY to a record high of USD 35.7bn in November, thereby keeping the CAD under check. In FYTD25, services surplus has risen to US\$119.5bn from US\$104.1bn in FYTD24. On a broader scale, overall goods and services exports rose by 9.6% YoY to US\$ 67.8bn in November while imports grew much faster by 28.6% YoY to US\$87.6bn.

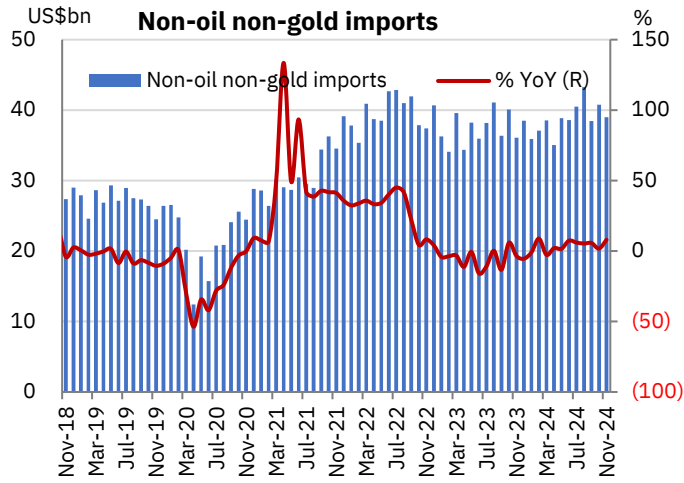
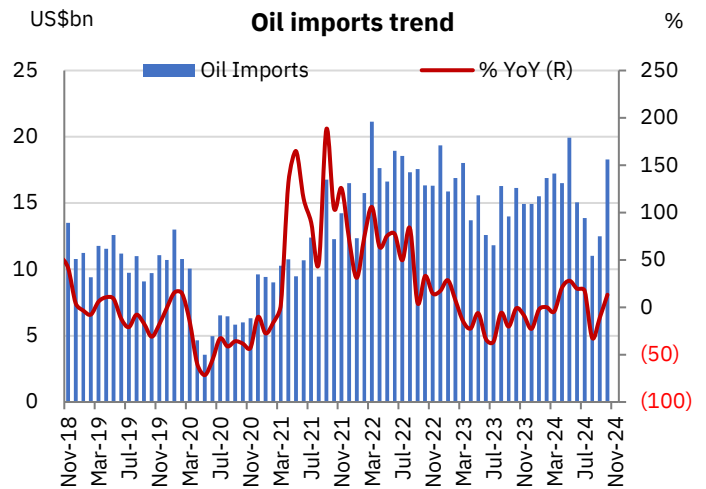
Table 34: India monthly trade balance for November 2024

	Exports		Imports								Trade balance
	US\$ bn	%YoY	Total (US\$ bn)	%YoY	Oil imports (US\$ bn)	%YoY	Non-oil imports (US\$ bn)	%YoY	Gold Import (US\$ bn)	%YoY	US\$ bn
Nov-24	32.1	-4.8	70.0	28.4	16.1	7.9	53.8	36.1	14.9	331.4	-37.8
Oct-24	39.2	17.2	66.2	3.6	18.3	13.3	47.9	1.3	7.1	-1.4	-27.0
Nov-23	33.7	-3.3	54.5	-4.3	14.9	-8.5	39.6	-2.7	3.4	6.2	-20.7
FY24TD	278.3	-6.7	448.7	-7.9	115.0	-17.4	333.2	-4.3	32.9	21.0	-170.4
FY25TD	284.3	2.2	486.8	8.5	123.3	7.2	363.5	9.1	49.1	49.1	-202.4

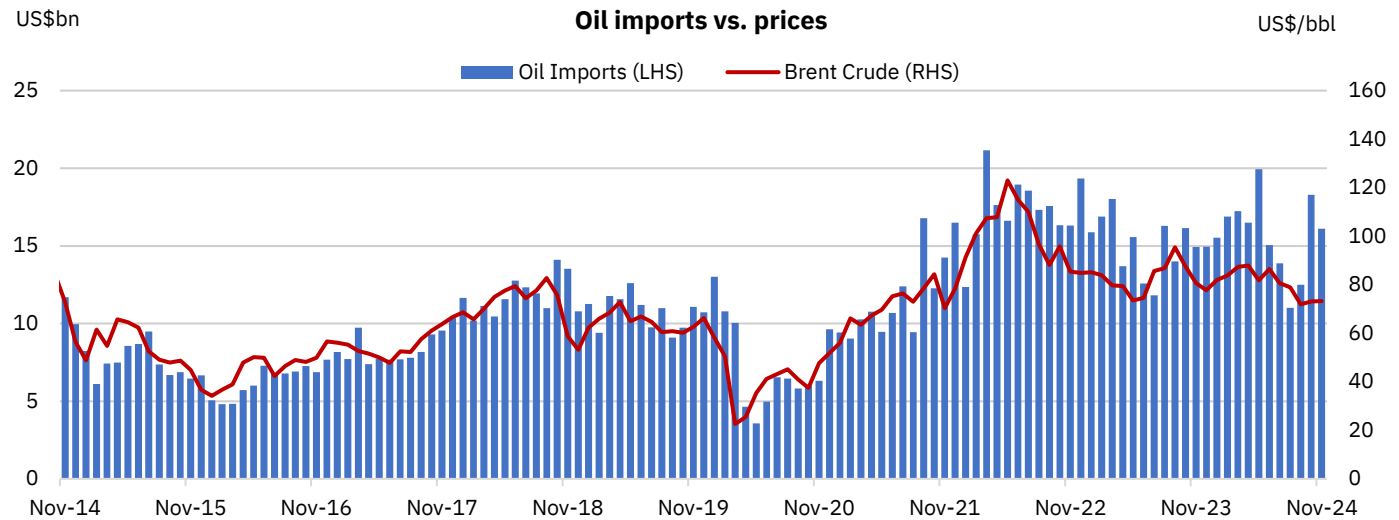
Source: Ministry of Commerce, CMIE Economic Outlook. NSE EPR.

Figure 95: India monthly trade balance trend


Source: LSEG Datastream, NSE EPR.

Figure 96: Non-oil, non-gold imports

Figure 97: Oil imports trend


Source: Ministry of Commerce, CMIE Economic Outlook, NSE EPR.

Figure 98: Oil imports vs. Brent crude oil prices trend


Source: LSEG Datastream, CMIE Economic Outlook, NSE EPR.

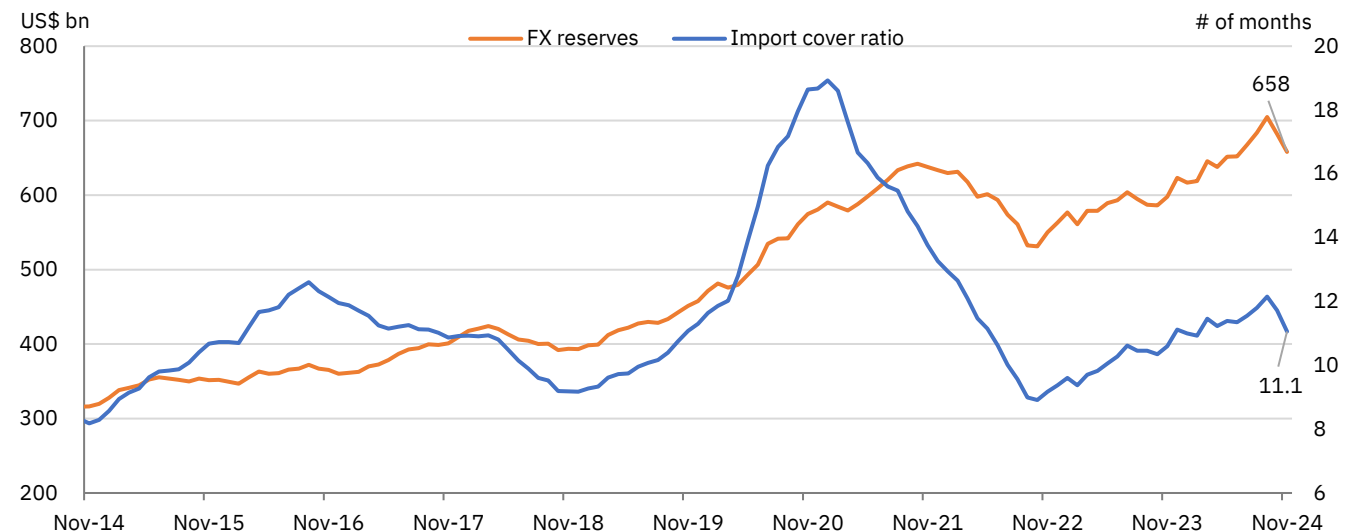
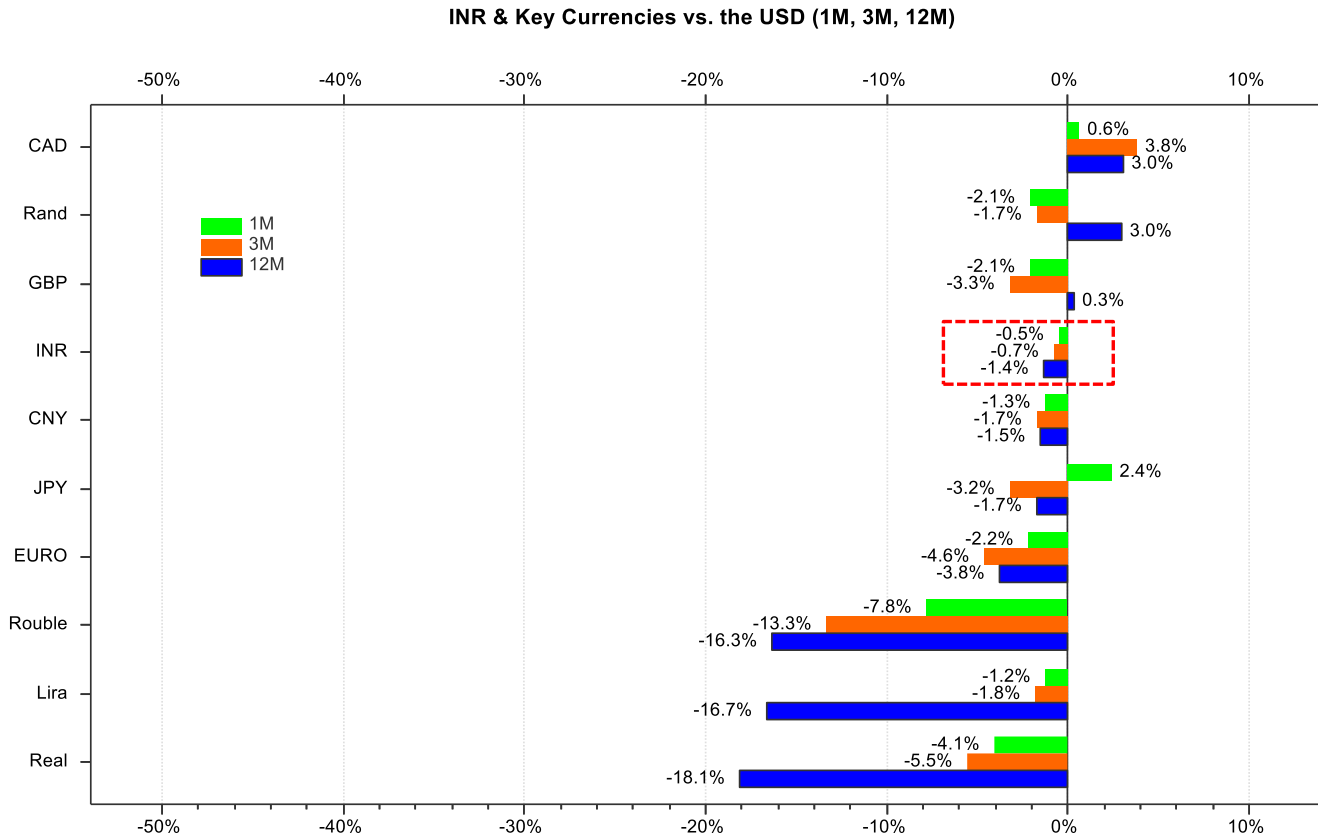
Figure 99: Forex reserves and import cover (months)

 Source: LSEG Datastream, RBI, NSE EPR; Forex reserves as of November 30th, 2024

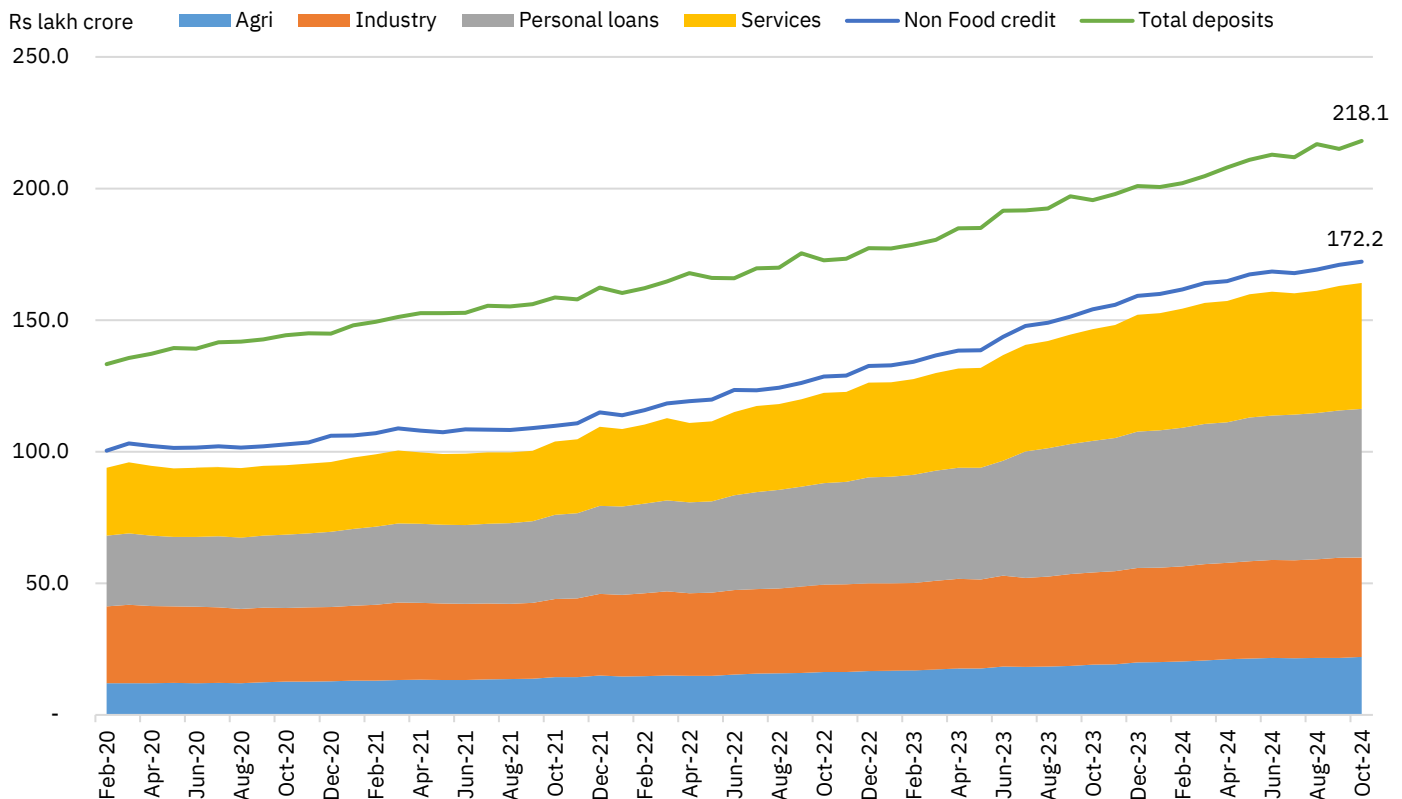
Figure 100: INR vs. other key Asian market currencies

 Source: LSEG Datastream, NSE EPR. As of November 30th, 2024.

Bank credit growth softens further in October

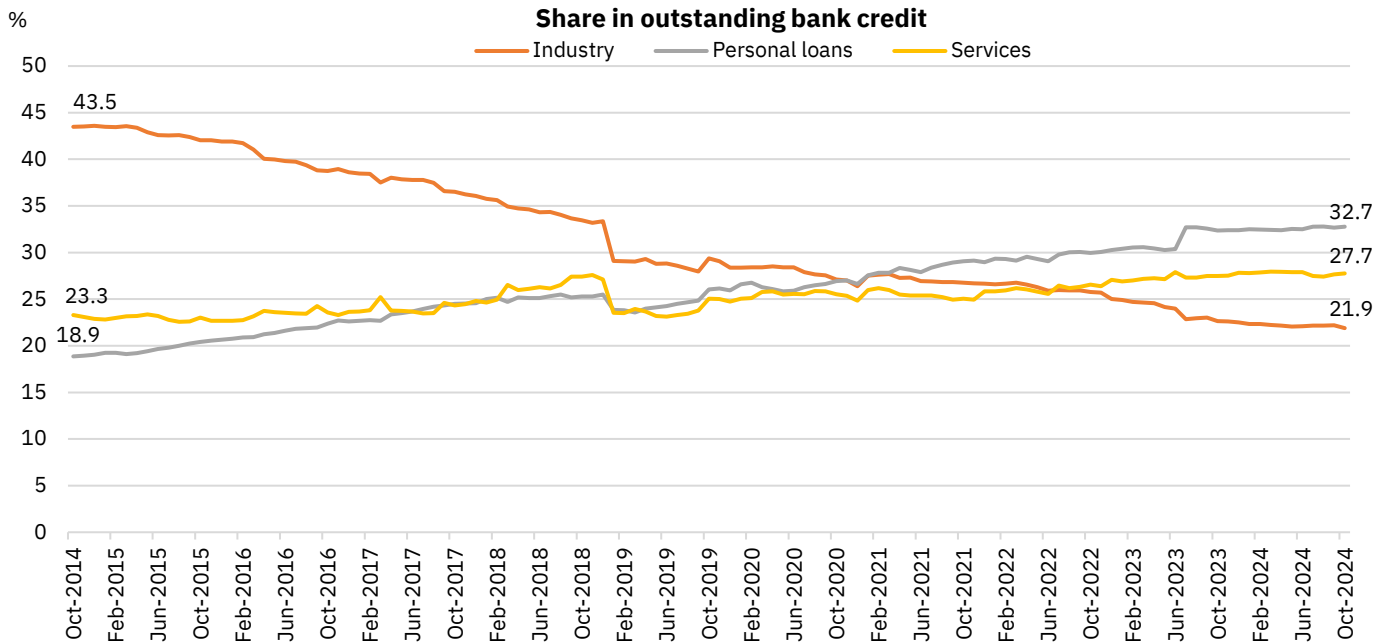
Outstanding bank credit growth witnessed a broad-based moderation to 11.5% YoY in October (as per the RBI's monthly 'Sectoral Deployment of Bank Credit' report), marking a deceleration of 1.5pp from September and the slowest pace in credit expansion since May 2022. The RBI's Weekly Statistical Supplement (WSS) showed further decline to 10.6% YoY (as of November 29th). This translates into a total decline of 8.3pp in outstanding credit growth since May'24. Personal loan growth has moderated specifically in consumer specific categories like housing, credit cards, consumer durables and vehicle loans. Industry credit to large industries remained subdued at a six-month low of 6%, while credit growth to micro & small industries decelerated to 10% YoY in October (vs. 13.4% in September). Loans against gold jewellery grew at 56.2%YoY (+5.2pp), nearly five times the growth of 12% YoY seen in Apr'24. Within the services sector, credit growth to transport operators, wholesale trade, and NBFCs moderated. Total outstanding bank deposits stood at Rs 220.1 lakh crore as of November 29th, 2024, exhibiting a growth of 10.7% YoY and marginally outpacing the bank credit growth of 10.6% YoY. So far, this year, the outstanding bank deposits have grown by 7.5%, higher than 6.6% growth in outstanding bank credit, translating into an increase in the incremental credit-deposit ratio (ICDR) to 69.8% (vs. 60.5% in October).

- **Bank credit growth moderates for the fifth consecutive month...:** Outstanding bank credit growth slowed down further in October to 11.5% YoY, 1.5pp lower than the previous month. As per RBI's WSS, outstanding bank credit growth further eased to 10.6% YoY as of November 29th. There has been a broad-based growth deceleration of 8.3pp since May'24 across sectors led by personal loans (-15.8pp), services (-10.5pp) and agriculture (-6.1pp). Growth in agriculture was the highest among all the sectors at 15.5% YoY(-0.9pp), while credit to the industry sector softened to 7.9% YoY (-1.1pp) as subdued credit growth to large enterprises (6% YoY; -0.5pp)—the lowest since May 2024—was partly offset by robust credit growth to medium enterprises (19.6% YoY). Notwithstanding the double-digit growth in credit offtake to micro & small (10% YoY), the segment witnessed a notable growth deceleration of 3.4pp in a month and 5.5pp since May'24.
- **... as credit to services and personal grows at a slower pace...:** Personal loans grew at a slower pace of 12.9% YoY — the lowest since September 2021, reflecting moderation in consumer specific credit demand (share: 22% in outstanding credit). Growth decelerated across consumer durables (6.6% YoY; -2pp), vehicle loans (11.4% YoY; -1.9pp), credit card outstanding (16.9% YoY; -1.1pp), housing (12.1% YoY; -0.5pp). That said, loans against gold jewellery continued to grow significantly by 56.2% YoY- nearly five times the growth rate of 12% YoY seen in Apr'24 as consumers monetize on their gold assets as their price increases. Credit growth to the services sector eased slightly to 12.7% YoY (-1pp) led by moderation in transport operators (15% YoY; -2pp), trade (12.4%; -2pp) and NBFCs (6.4% YoY; -3pp). Outstanding bank credit to HFCs has contracted by -0.3% YoY, first time in the past 11 months.
- **... alongside subdued growth in bank credit to infrastructure and textiles:** Outstanding bank credit to infrastructure, accounting for nearly one-third of the industrial credit, grew by a modest 1.6% YoY in October. This was partly offset by bank credit to basic metal & products and chemical and products and engineering — cumulatively accounting for 24% of industry credit, which expanded at a robust pace of 15.4%, 12.7% and 14.5% YoY respectively. Bank credit growth to textiles has slowed down to 5.6% YoY in October (vs. 13.2% in the same period last year).

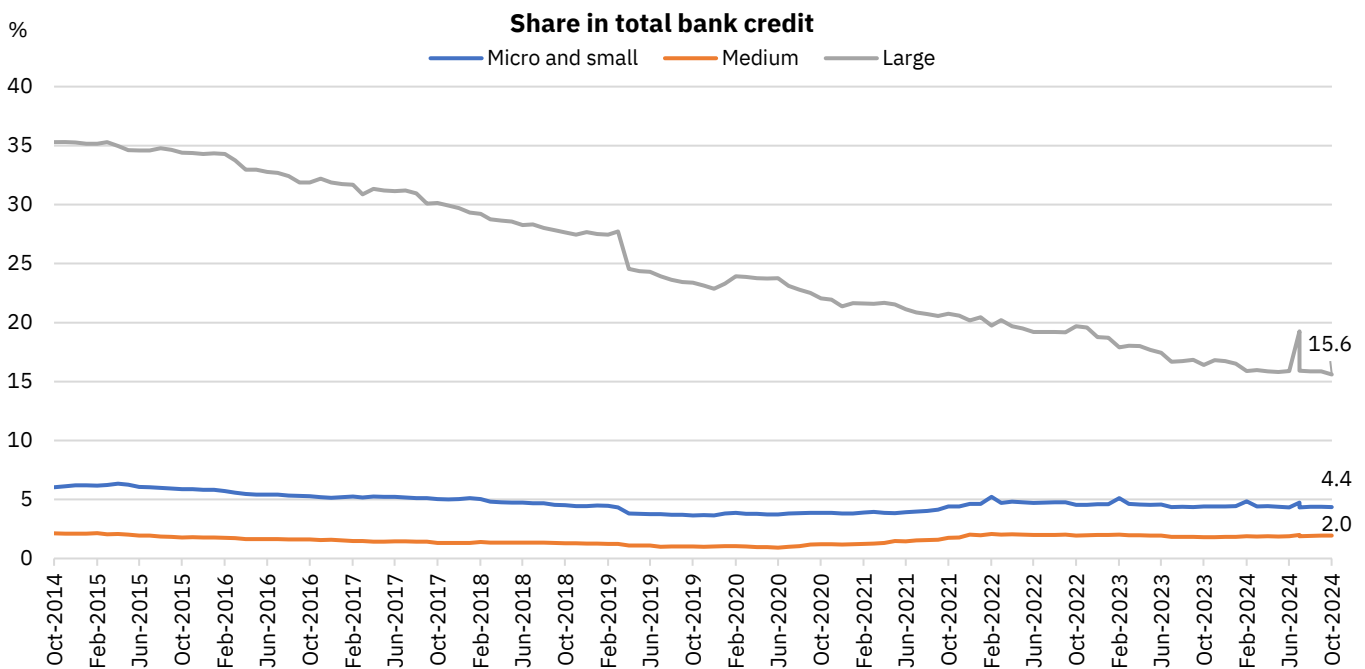
- Banks focus on deposit mobilization:** Total outstanding bank deposits grew by 10.7% YoY as of November 29th, 2024 (as per RBI's WSS), marginally outpacing the outstanding bank credit growth of 10.6% YoY with the CDR relative stable at 79.5%. So far, this year, the bank deposit has grown by 7.5% vs bank credit growth of 6.6%, translating to increase in the ICDR to 69.8% (vs. 60.5% in October) as banks focus on mobilizing deposits. Both time (10.8% YoY) and demand deposit (10.4% YoY) growth has tapered off to some extent from the previous month. Additionally, banks also raised funds through issuing certificate of deposits with outstanding CD amount reaching Rs 4.9 lakh crore as of November 29th, with ~Rs 1 lakh crore raised in November.
- Industry credit share surpasses personal loans:** Over the past decade, the share of industry in outstanding bank credit has declined, with personal loans and services now accounting for a larger share than industry and driving bank credit growth. The shares of industry, personal loans and services in outstanding bank credit currently stand at 21.9%, 32.7% and 27.7% respectively. The fall in the share of industry is on account of a decline in the share of large industries to 15.6% (vs ~35% a decade ago). In recent times, however, credit to personal loans and services sector has moderated with RBI increasingly tightening the lending norms on unsecured retail loans and loans to NBFCs while industry has exhibited a rebound in credit growth.

Figure 101: Outstanding bank credit and deposit


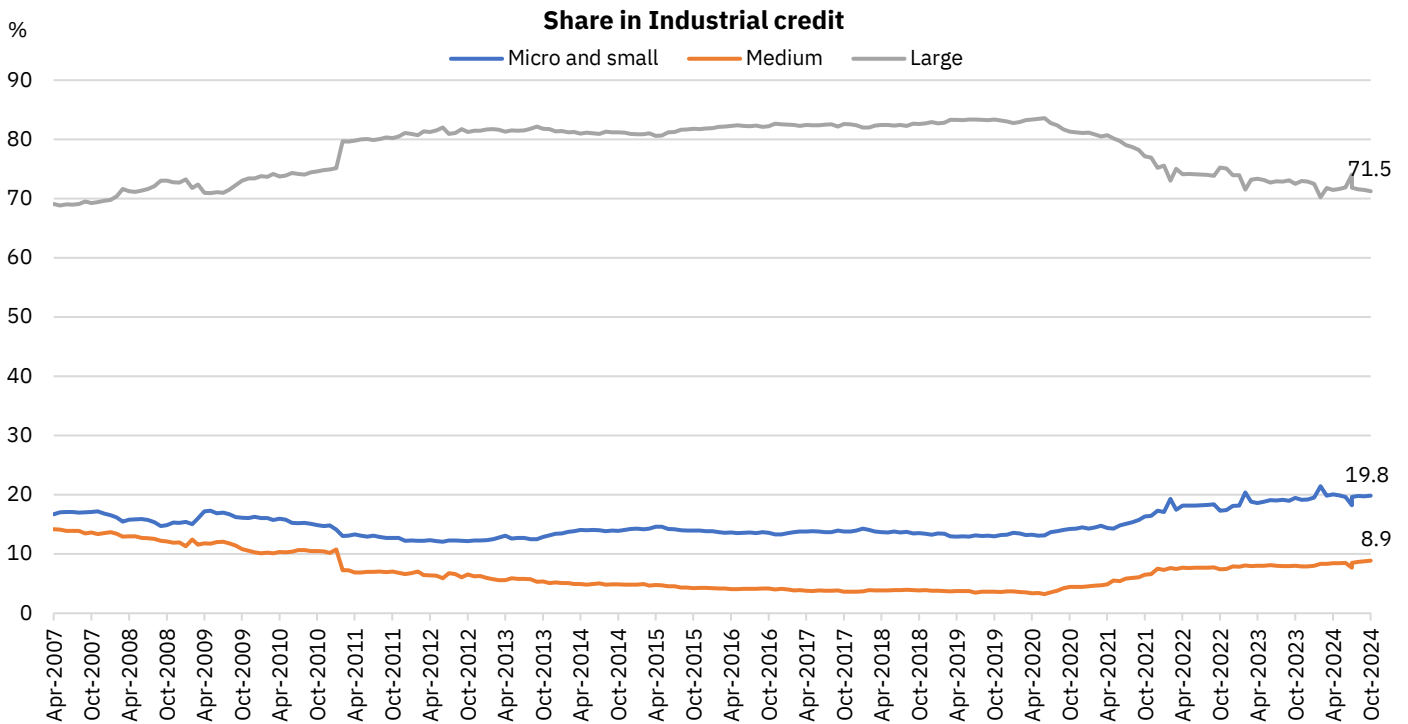
Source: CMIE Economic Outlook, NSE EPR.

Figure 102: Trends in share of total outstanding bank credit across industry, services and personal loans


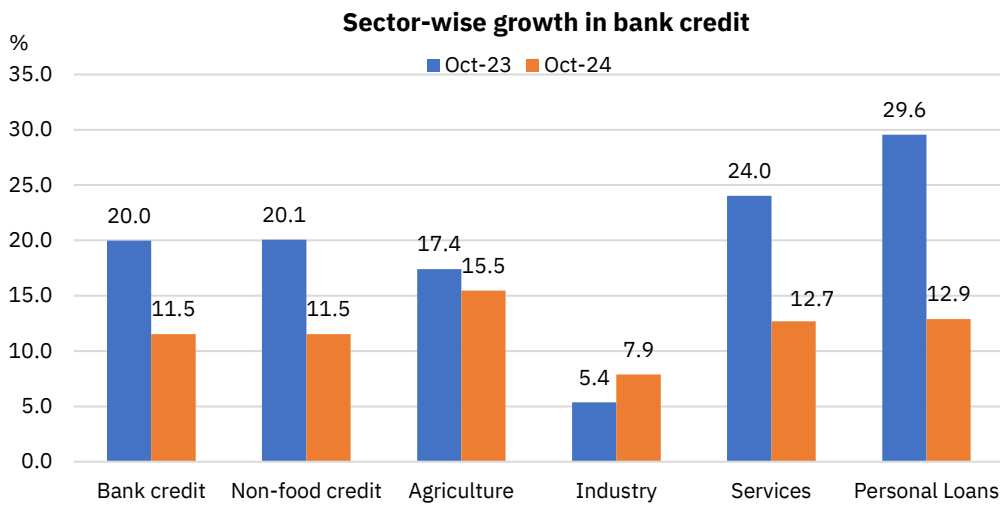
Source: CMIE Economic Outlook, NSE EPR.

Figure 103: Trends in share of micro & small, medium and large enterprises in total outstanding bank credit


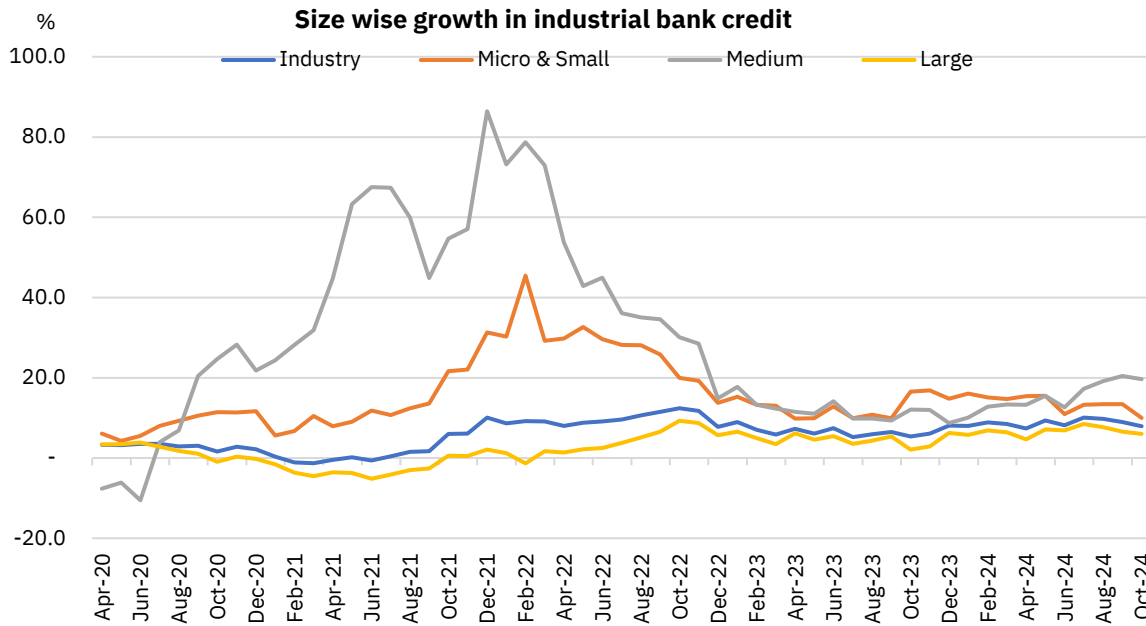
Source: CMIE Economic Outlook, NSE EPR.

Figure 104: Trends in share of micro & small, medium and large enterprises in outstanding industrial credit


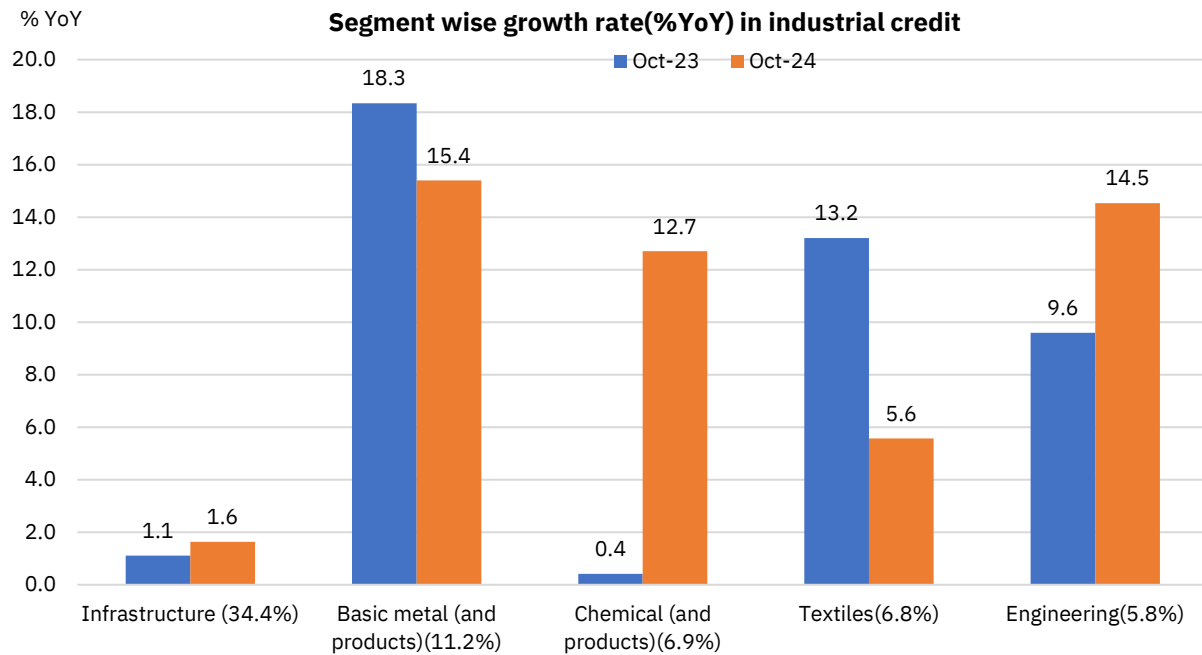
Source: CMIE Economic Outlook, NSE EPR.

Figure 105: Growth in outstanding bank credit across key sectors


Source: CMIE Economic Outlook, NSE EPR.

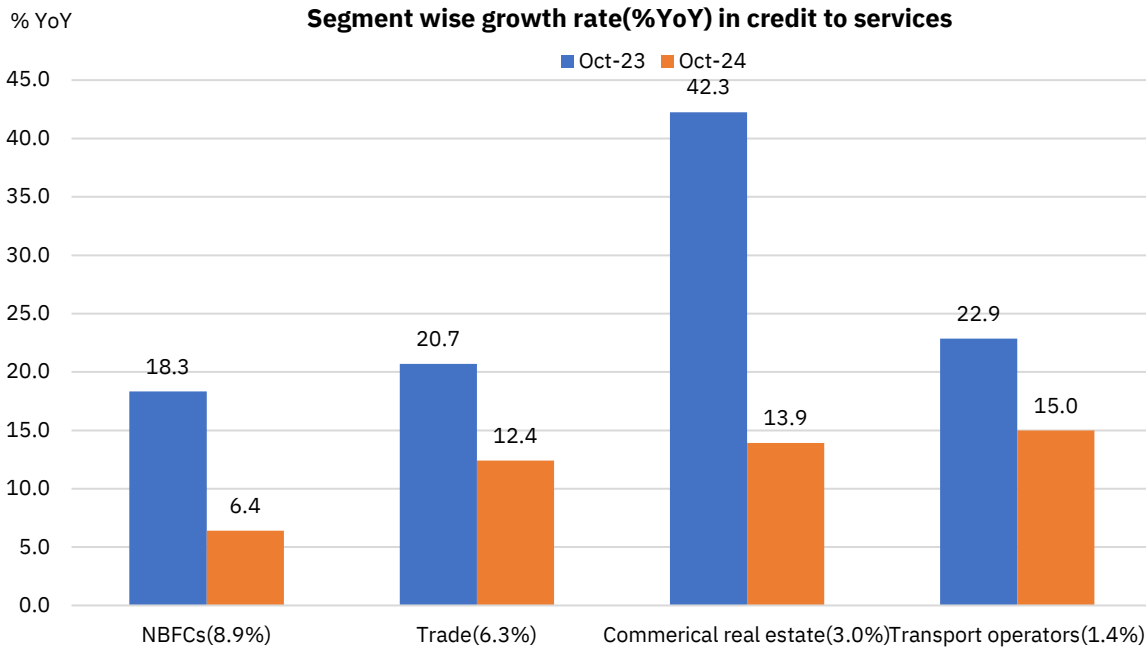
Figure 106: Growth in outstanding industrial bank credit across size


Source: CMIE Economic Outlook, NSE EPR.

Figure 107: Growth in outstanding bank credit across segments of industry


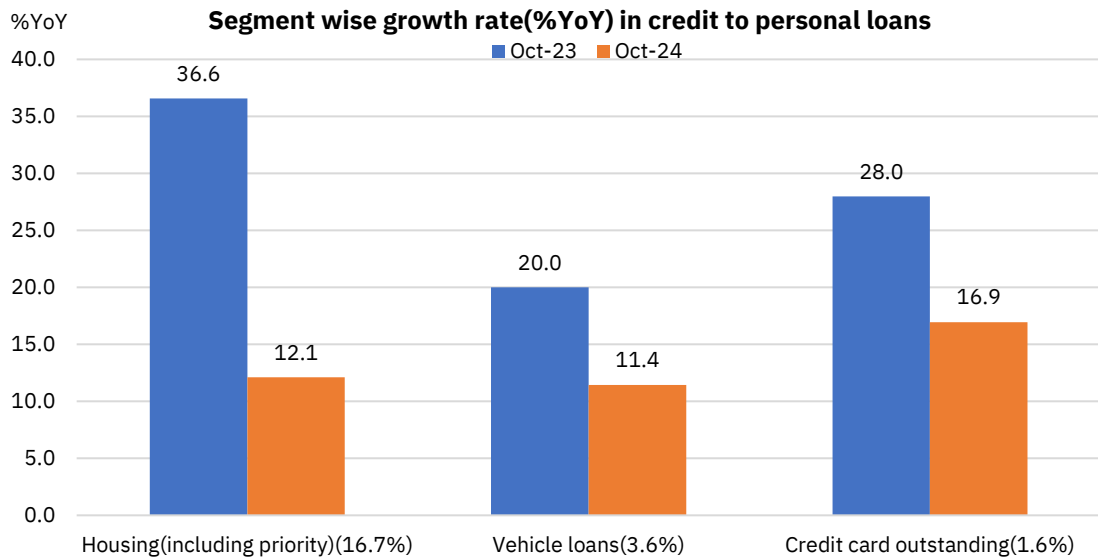
Source: CMIE Economic Outlook, NSE EPR.

Note: Number in parenthesis is share in total credit to industry

Figure 108: Growth in outstanding bank credit across segments of services


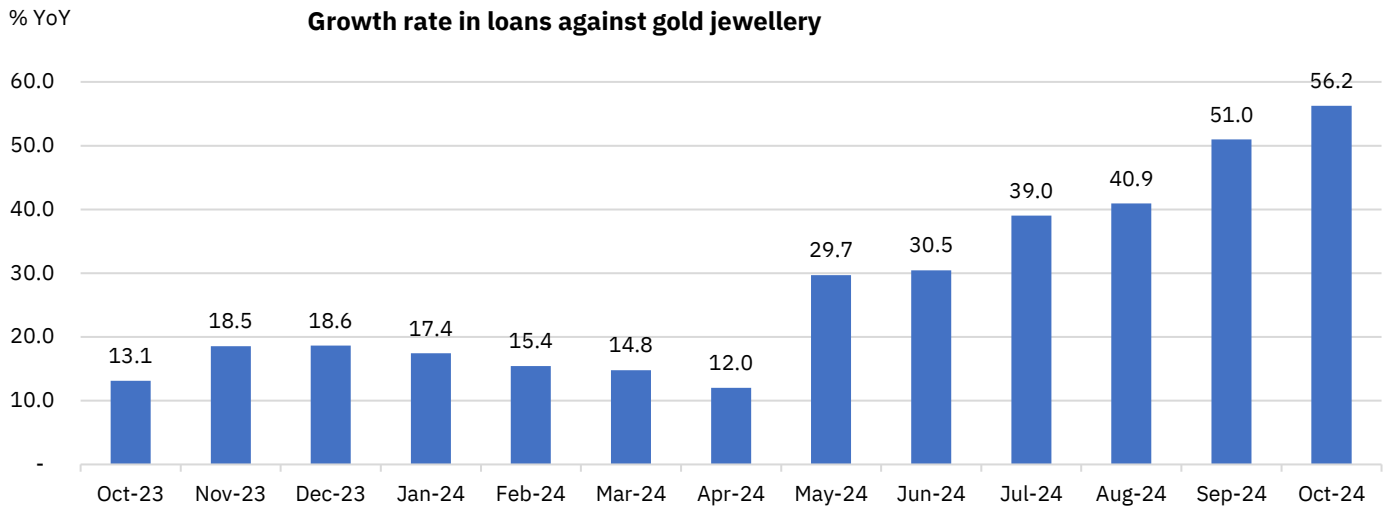
Source: CMIE Economic Outlook, NSE EPR.

Note: Number in parenthesis are shares in total outstanding credit.

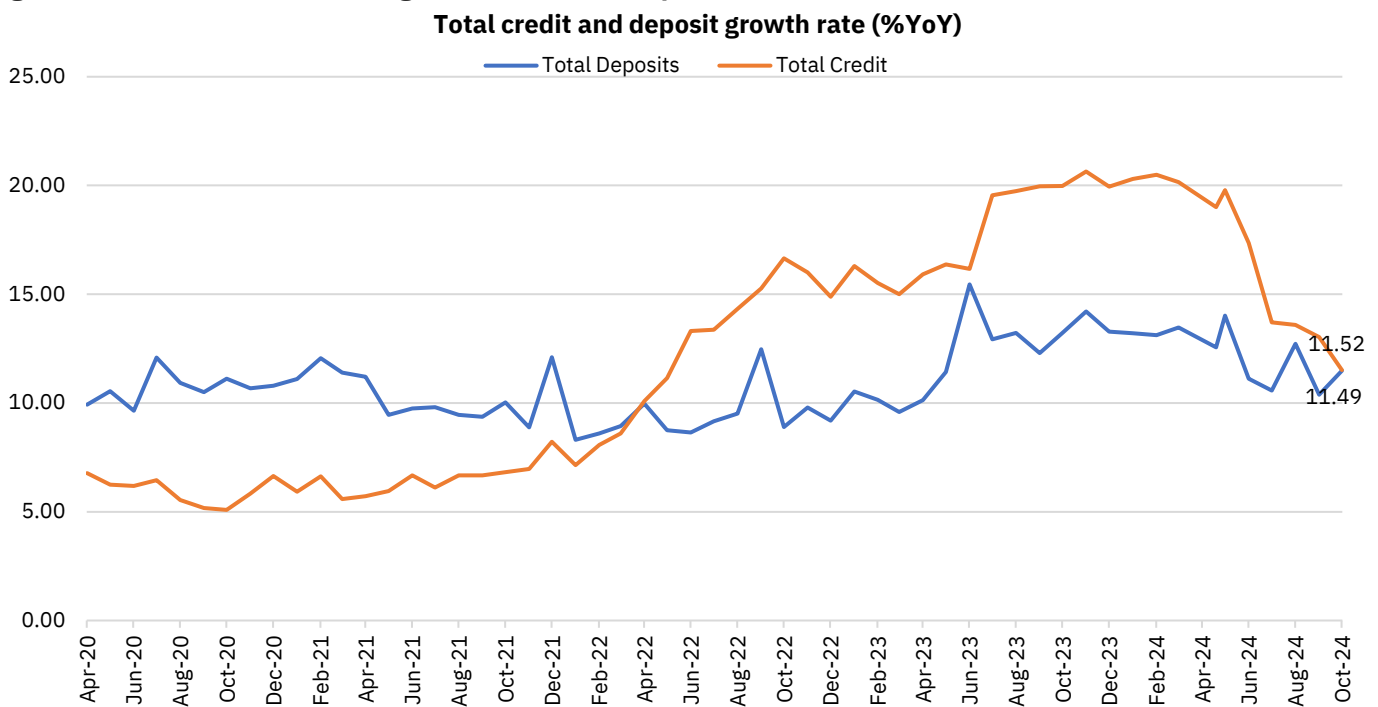
Figure 109: Growth in outstanding bank credit across segments of personal loans


Source: CMIE Economic Outlook, NSE EPR.

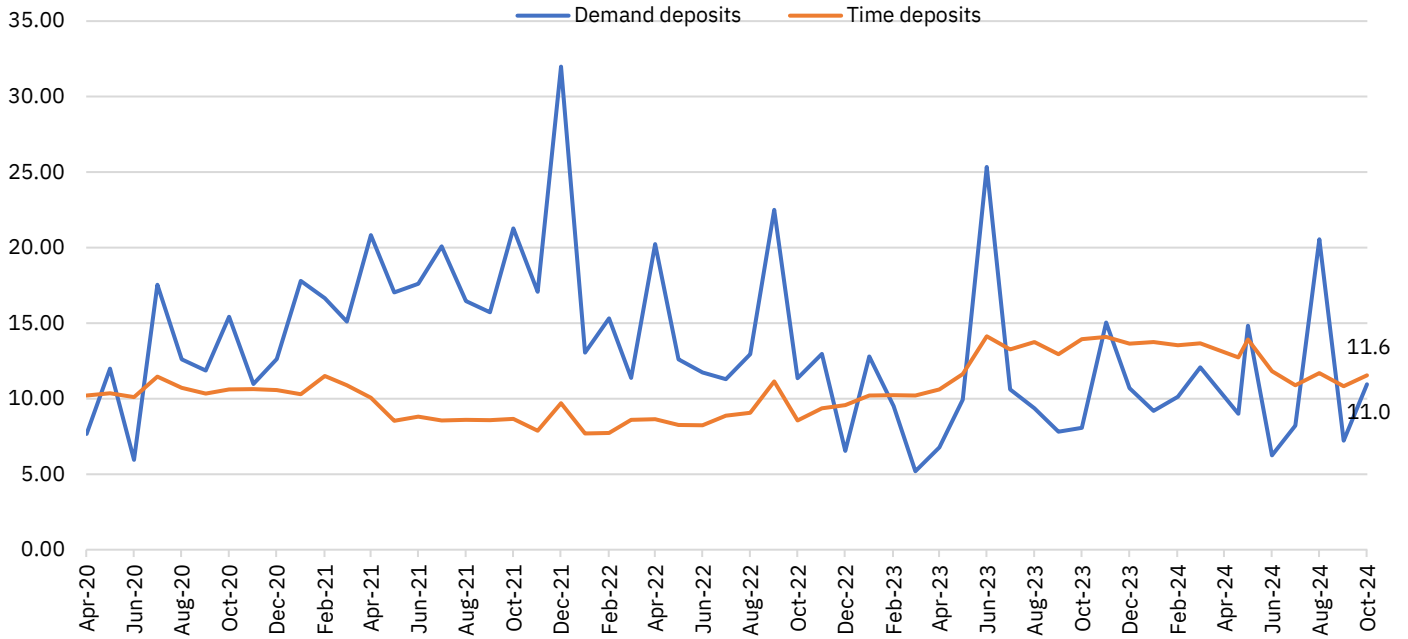
Note: Number in parenthesis are shares in total outstanding credit.

Figure 110: Growth rate in outstanding loans against gold jewellery


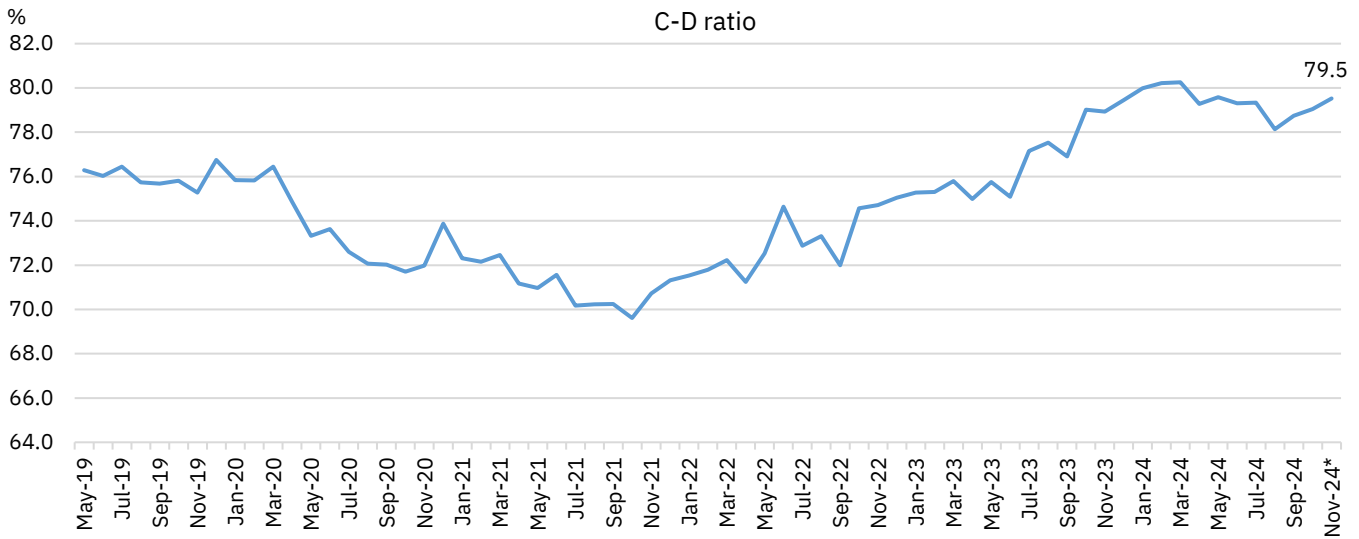
Source: CMIE Economic Outlook, NSE EPR.

Figure 111: Trends in Outstanding Bank Credit and Deposit Growth


Source: CMIE Economic Outlook, NSE EPR.

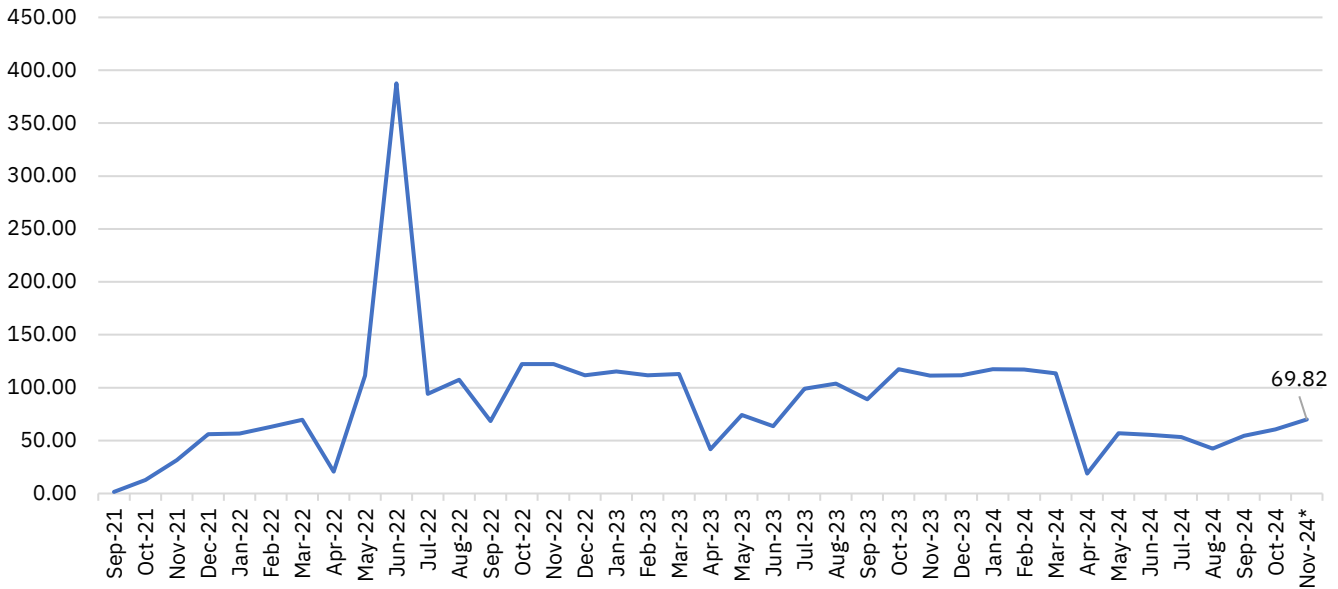
Figure 112: Trends in outstanding demand and time deposits growth


Source: CMIE Economic Outlook, NSE EPR.

Figure 113: Credit to Deposit ratio


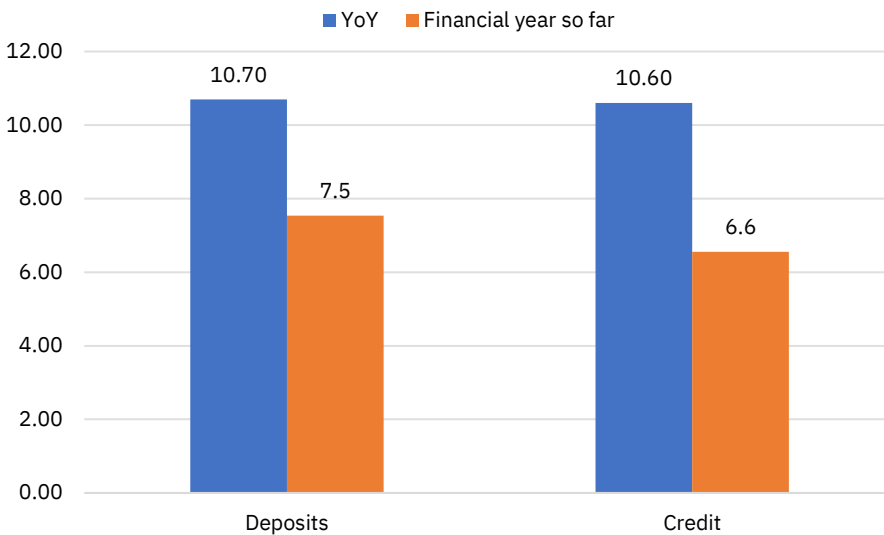
Source: CMIE Economic Outlook, NSE EPR

 Note: Data for Nov-24* is as of November 29th, 2024.

Figure 114: Incremental credit to deposit ratio (ICDR)
Incremental CD ratio


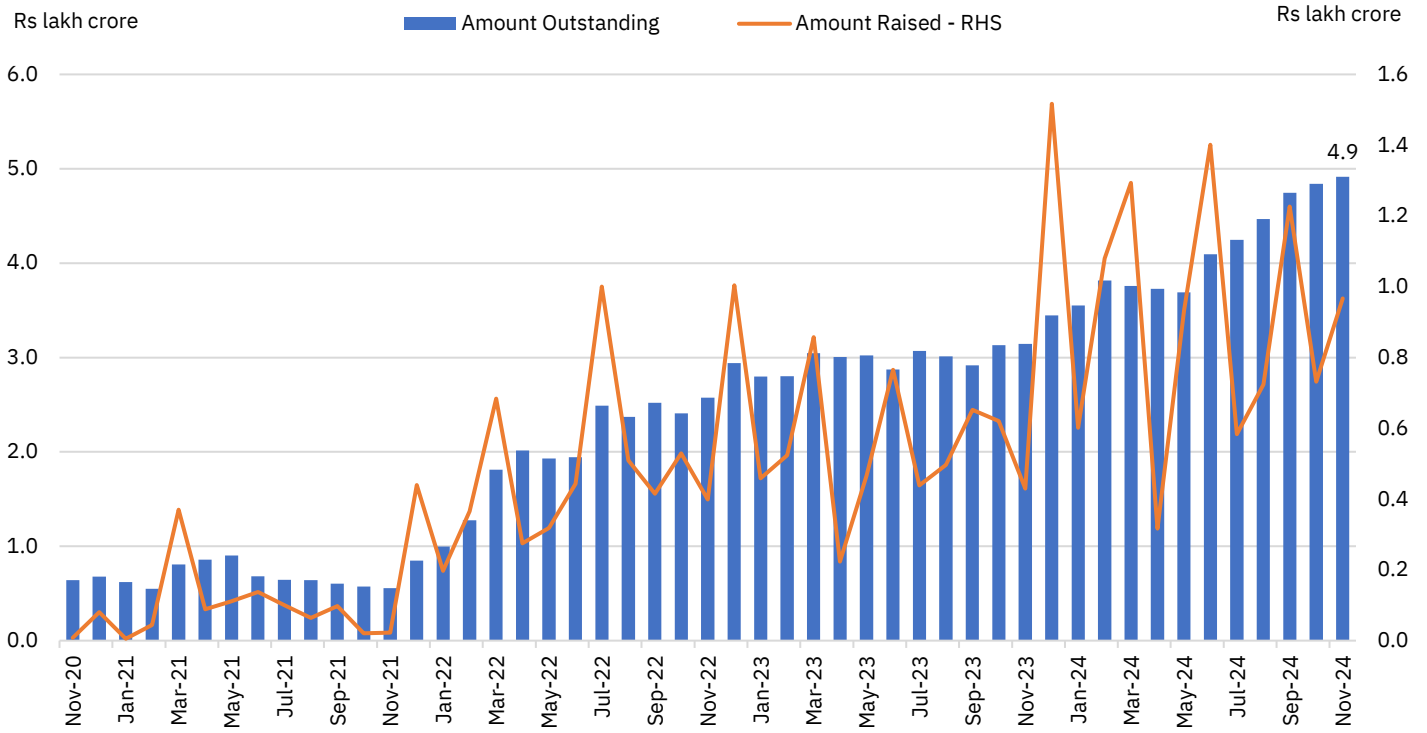
Source: CMIE Economic Outlook, NSE EPR

 Note: Data for Nov-24 is as of November 29th, 2024

Figure 115: Growth rate in outstanding credit and deposits (YoY and FY25 so far)
Growth rate in bank credit and deposits


Source: CMIE Economic Outlook.

 Note: NSE EPR, FY25 so far is as of November 29th, 2024

Figure 116: Issued and outstanding amount of Certificate of Deposits


Source: CMIE, NSE EPR

 Note: Amount raised on the secondary axis; amount outstanding is as of the fortnight ending November 29th, 2024.

Union finances: Fiscal deficit narrows; remains on track to achieve the budget target

The Government's finances during the first seven months of the fiscal reflect slower absorption of budgeted allocations compared to the same period last year, with receipts/expenditure heads depicting lower realization/utilization rates. While all major revenue streams show weaker realisation rate than the previous year's level, the expenditure pattern presents a contrasting picture - revenue expenditure as a % of BE marginally exceeds last year's pace while the proportion of actual capex to budget provision remains lower than the same period last year.

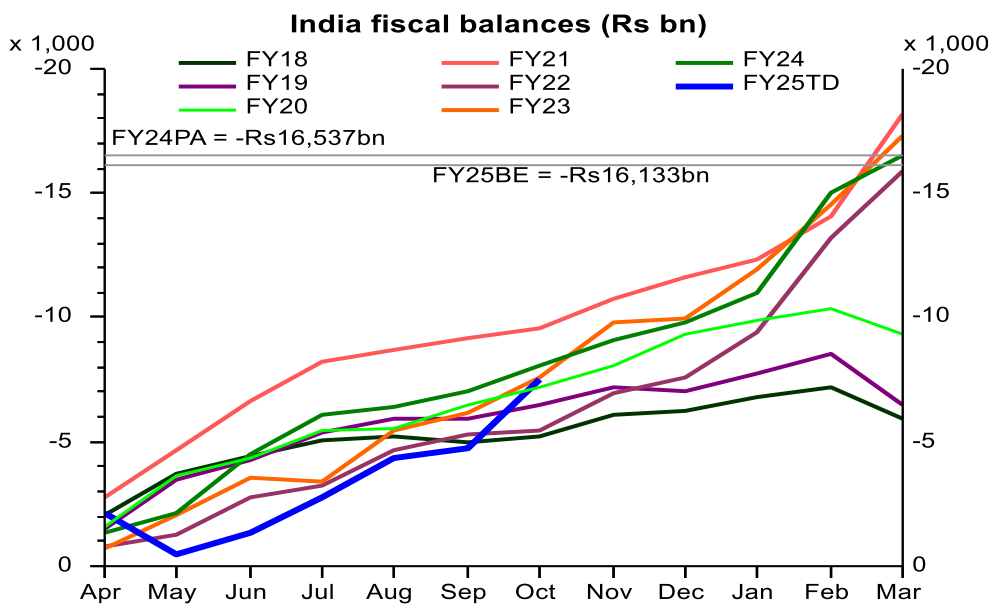
Union Government's total receipts during 7MFY25 rose to (+8.3% YoY) to Rs 17.2 lakh crore, driven by rise in non-tax revenues (+50.2% YoY), primarily from RBI dividends which resulted in dividend proceeds surging substantially. On the tax front, direct taxes witnessed robust growth of +11.1% YoY, supported primarily by a significant growth in personal income tax (+20.2% YoY), while corporate tax collections registered tepid growth (+1.2% YoY) primarily due to weaker Q2FY25 earnings. Furthermore, indirect taxes witnessed positive momentum, with GST collections and customs duties contributing positively. However, non-debt capital receipts declined 18.2% YoY owing to lower loan recoveries and disinvestment proceeds, resulting in revenue receipts reaching 54.5% of the budgeted estimate, as opposed to 59.6% the previous year. On the expenditure side, total spending rose (+3.3% YoY) to Rs 24.7 lakh crore, with revenue expenditure increasing (+8.7% YoY) due to higher interest payments and subsidies, while capital expenditure extends its downward momentum (-14.7% YoY) to Rs 4.7 lakh crore due to election-related fiscal constraints. Consequently, the fiscal deficit narrowed to Rs 7.5 lakh crore, reaching 46.5% of FY25BE (vs 45% of FY24BE), remaining on target to achieve the budgeted limit of 4.9% of the GDP.

- **Strong growth in tax and non-tax revenues propel government receipts:** In April-October'24, the Union Government's total receipts surged (+8.3% YoY) to Rs 17.2 lakh crore, largely driven by robust gross tax revenues (+10.8% YoY) and non-tax revenues (+50.2% YoY). On the tax front, direct taxes maintained a positive momentum (+11.1% YoY), supported by a rise in personal income tax (+20.2% YoY). However, the growth in corporate tax was relatively modest (+1.2% YoY) mainly due to weaker Q2FY25 earnings. Indirect taxes also posted healthy growth (+10.5% YoY), with robust GST collections (+12% YoY) and customs duties (+6.2% YoY) partly offset by subdued growth in excise duties (+0.6% YoY). Furthermore, non-tax revenues were buoyed by dividend proceeds (+112.2% YoY), largely from RBI dividends of Rs 2.1 lakh crore in May'24. During 7MFY25, transfers to states rose by +36.8% YoY to a record high of Rs 7.2 lakh crore (58% of FY25BE vs 52% of FY24BE), underscoring accelerated spending in the latter half of the fiscal. However, non-debt capital receipts continued to slump (-18.2% YoY) primarily due to lower loan recoveries and disinvestment proceeds. Revenue receipts stood at 54.5% of the budgeted estimate, below 59.6% in the same period last year.
- **Uptick in revex partly offset by lower capex:** In the first seven months of the fiscal, the Union's total expenditure rose moderately (+3.3% YoY) to Rs 24.7 lakh crore, as growth in revenue expenditure (+8.7% YoY) was offset by subdued capital spending (-14.7% YoY). On similar lines, the revenue/capital expenditure as a % of FY25BE stands higher/lower than COPPY. Revenue expenditure, which accounts for over three-fourths of the center's total spending, increased to Rs 20 lakh crore, driven primarily by higher interest payments (+9.4% YoY) and other revenue components (+8.6% YoY). Outlay towards subsidies rose by +7.3% YoY, with food subsidies rising by +26.5% YoY to nearly 70% of the FY25BE, petroleum subsidies skyrocketing (+434.8% YoY), while fertilizer subsidies contracted 14.4% YoY during the same period. Conversely, capital expenditure declined by 14.7% YoY to Rs 4.7 lakh crore (vs. Rs 5.5 lakh crore COPPY) – achieving 42% of the capex target

for FY25 (vs 54.6% in 7MFY24), thanks to lower spending in the first quarter on account of fiscal restrictions during the Lok Sabha elections.⁴

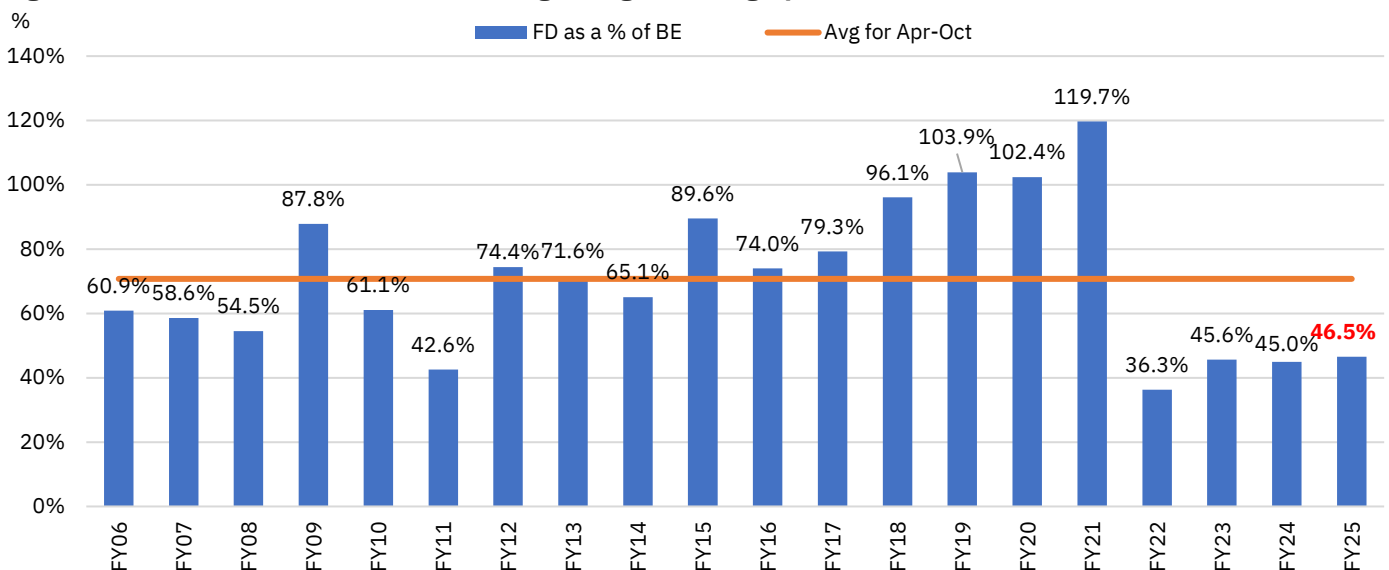
- Fiscal deficit contracts and remains within target:** The fiscal deficit of the Union government remains in check, as the cumulative deficit decreased (-6.6% YoY) to Rs 7.5 lakh crore (46.5% of FY25BE vs 45% of FY24BE) in the first seven months of the fiscal. This reduction is largely driven by lower capital expenditure, partly offset by subdued net tax collections in the backdrop of substantial transfers to states. Even though we expect expenditure to pick up over the next few months, the fiscal deficit remains well within the budgeted target of 4.9%, underscoring the Union government's prudent fiscal management to date in FY25.

Figure 117: Yearly trend of India's fiscal balances



Source: LSEG Datastream, NSE EPR.

Figure 118: Gross fiscal deficit as % of budget targets during April-Oct



Source: CMIE Economic Outlook, CGA, NSE EPR.

Figure 119: Centre's gross fiscal trend (% GDP)

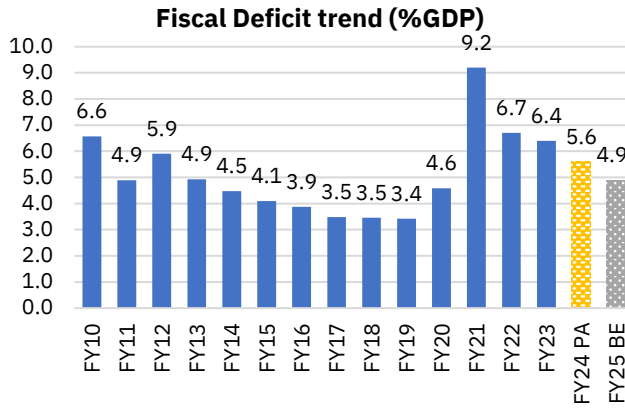
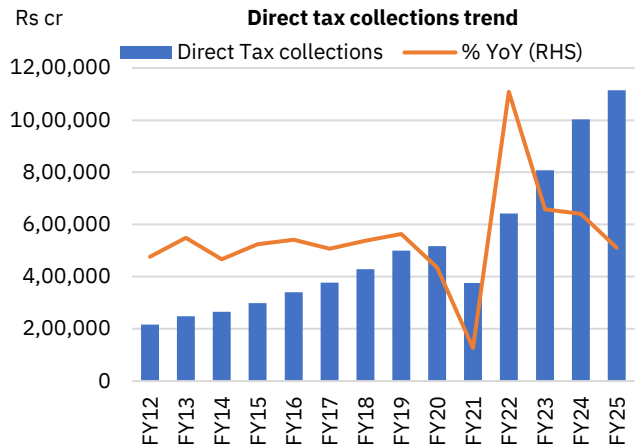


Figure 120: Fiscal Balance Snapshot

Rs crore	FY23	FY24PA	% YoY	FY25BE	% YoY
Net tax rev	20,97,786	23,26,524	10.9%	25,83,499	11.0%
Non-tax rev	2,85,421	4,01,888	40.8%	5,45,701	35.8%
Non-debt cap rec.	72,196	60,461	-16.3%	78,000	29.0%
Total receipts	41,93,158	44,42,543	5.9%	48,20,512	8.5%
Revenue Exp	34,53,132	34,94,036	1.2%	37,09,401	6.2%
Capital Exp	7,40,025	9,48,506	28.2%	11,11,111	17.1%
Total exp.	41,93,157	44,42,542	5.9%	48,20,512	8.5%
Fiscal deficit	17,37,755	16,53,670	-4.8%	16,13,312	-2.4%
GDP	2,69,49,646	2,95,35,667	9.6%	3,26,36,912	10.5%
as a % of GDP	6.4	5.6		4.9	

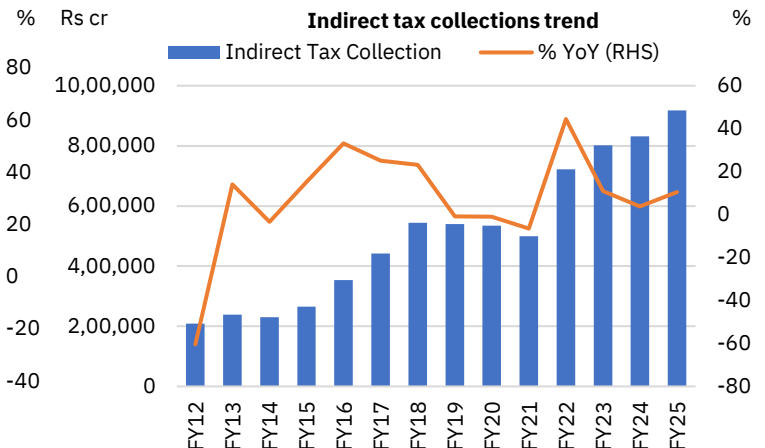
Source: CMIE Economic Outlook, CGA, NSE. BE = Budget Estimates, PA = Provisional Actuals

Figure 121: Direct tax collections during Apr-Oct



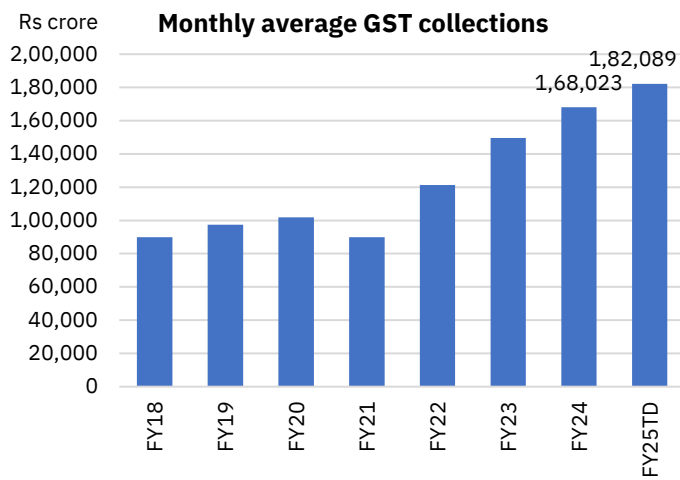
Source: CMIE Economic Outlook, CGA, NSE EPR.

Figure 122: Indirect tax collections during Apr-Oct



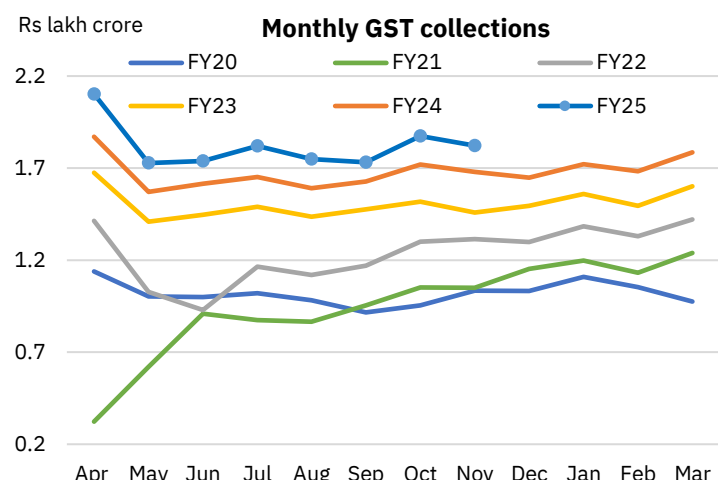
Source: CMIE Economic Outlook, CGA, NSE EPR.

Figure 123: Year average of monthly collections*

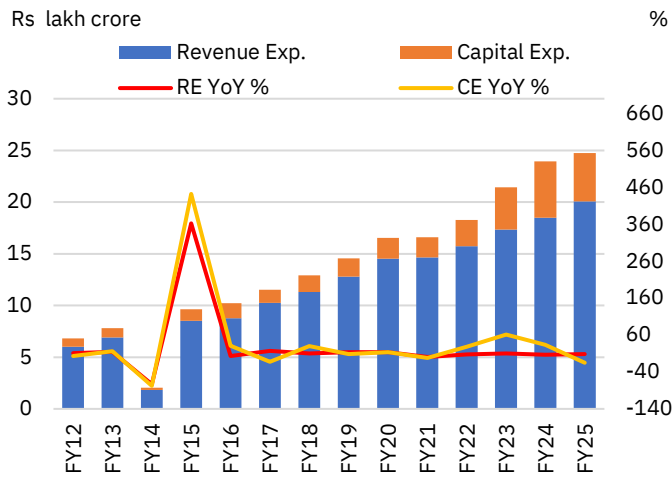


*FY25TD – FY25 Till Date (Apr-Nov)
Source: CMIE Economic Outlook, CGA, PIB, NSE EPR.

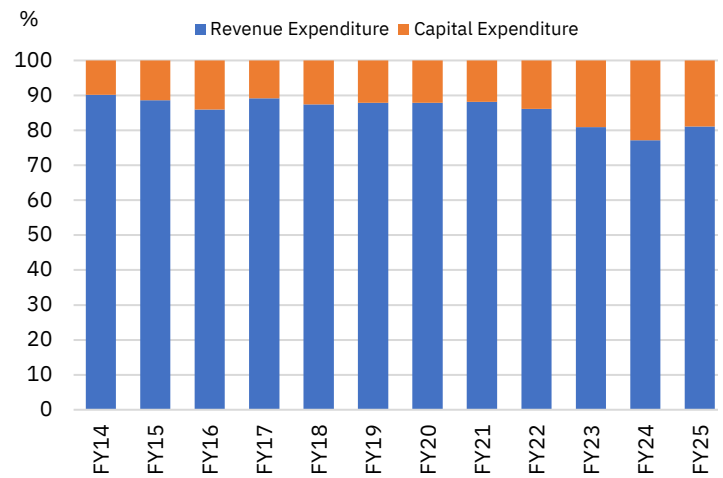
Figure 124: GST collections trend



Source: CMIE Economic Outlook, NSE EPR.

Figure 125: Revenue and capital exp during Apr-Oct


Source: CMIE Economic Outlook, CGA, PIB, NSE EPR

Figure 126: Expenditure mix during Apr-Oct


Source: CMIE Economic Outlook, CGA, PIB, NSE EPR

Table 35: A snapshot of government finances (Apr-Oct FY25)

Items	Apr-Oct'23	Apr-Oct'24		Implied Figure (7MFY25)
	Rs crore	Rs crore	% YoY	Rs crore
Net tax revenues	13,01,957	13,04,973	0.2%	12,78,526
Gross tax revenues	18,34,518	20,32,634	10.8%	18,07,536
Of which:				
Direct Tax	10,03,180	11,14,316	11.1%	10,97,684
Corporation tax	4,81,969	4,87,862	1.2%	5,32,138
Income tax	5,21,211	6,26,454	20.2%	5,60,546
Indirect Tax	8,31,338	9,18,318	10.5%	7,09,852
Goods and service tax	5,35,298	5,99,580	12.0%	4,62,319
Custom Duties	1,24,384	1,32,112	6.2%	1,05,633
Excise Duties	1,50,215	1,51,190	0.6%	1,67,810
States Share	-5,28,405	-7,22,976	36.8%	-5,24,235
Transferred to NCCD	-4,156	-4,685	12.7%	-4,815
Non-Tax Revenue	2,65,765	3,99,294	50.2%	1,46,407
Dividends and profits	1,24,530	2,64,278	112.2%	24,856
Other non-tax revenues	1,41,235	1,35,016	-4.4%	1,21,551
Central govt. revenue receipts	15,67,722	17,04,267	8.7%	14,24,933
Non-Debt Capital Receipts	22,990	18,807	-18.2%	59,193
Recovery of Loans	15,093	13,275	-12.0%	14,725
Misc. receipts (inc. divestment)	7,897	5,532	-29.9%	44,468
Total Receipts	15,90,712	17,23,074	8.3%	14,84,126
Revenue Expenditure	18,47,488	20,07,353	8.7%	17,02,048
Interest Payments	5,45,086	5,96,347	9.4%	5,66,593
Major subsidies	2,31,694	2,48,670	7.3%	1,79,752
Food	1,10,872	1,40,239	26.5%	65,011
Fertilizer	1,19,703	1,02,446	-14.4%	61,554
Petroleum	1,119	5,985		5,940
Other revenue expenditure	10,70,708	11,62,336	8.6%	9,55,703
Capital Expenditure	5,46,924	4,66,545	-14.7%	6,44,566
Total Expenditure	23,94,412	24,73,898	3.3%	23,46,614
Fiscal Deficit	8,03,700	7,50,824	-6.6%	8,62,488

Source: CMIE Economic Outlook, CGA, Budget Documents, NSE EPR.

Table 36: A snapshot of Government finances in 2024-25

Items	FY23		FY24				FY25	
	Rs lakh crore	% YoY	BE (Rs lakh crore)	PA (Rs lakh crore)	% YoY	% chg. from BE	BE (Rs lakh crore)	% YoY over FY24PA
Central govt. net tax revenue	20.9	16.0	23.3	23.3	11.1	0.0	25.8	10.9
Gross tax revenues	30.5	12.6	33.6	34.6	13.6	3.0	38.4	11.0
Of which:								
Direct Tax	16.6	17.8	18.2	19.7	18.7	8.2	22.1	12.3
Corporation tax	8.3	16.0	9.2	9.1	10.3	(1.1)	10.2	12.1
Income tax	8.3	19.7	9.0	10.5	25.4	16.7	11.9	13.0
Indirect Tax	13.9	6.9	15.4	15	7.6	(2.6)	16.3	8.5
Goods and service tax	8.5	21.6	9.6	9.6	12.7	0.0	10.6	10.6
Custom Duties	2.1	6.8	2.3	2.3	9.2	0.0	2.4	3.4
Excise Duties	3.2	(19.2)	3.4	3.1	(4.3)	(8.8)	3.2	2.9
States Share	-9.5	5.6	-10.2	-11.3	19.1	10.8	-12.5	10.4
Transferred to NCCD	-0.1	30.5	-0.1	-0.09	9.7	(10.0)	-0.1	5.6
Non-Tax Revenue	2.9	(18.0)	3.0	4.0	40.8	33.3	5.5	36.4
Dividends and profits	1.0	(37.8)	0.9	1.7	70.6	88.9	2.9	70.1
Central govt. revenue receipts	23.8	9.8	26.3	27.3	14.5	3.8	31.3	14.6
Non-Debt Capital Receipts	0.7	83.4	0.8	0.6	(16.3)	(25.0)	2.9	381.9
Divestment proceeds	0.5	214.5	0.6	0.3	(28.0)	(50.0)	0.5	66.7
Total Receipts	24.5	11.1	27.2	27.9	13.8	2.6	32.1	15.0
Revenue Expenditure	34.5	7.9	35	34.9	1.2	(0.3)	37.1	6.3
Interest Payments	9.3	15.3	10.8	10.6	14.6	(1.9)	11.6	9.7
Subsidy outgo	5.8	14.7	4.0	4.4	(23.8)	10.0	4.3	(2.6)
Capital Expenditure	7.4	24.8	10.0	9.5	28.2	(5.0)	11.1	17.0
Total Expenditure	41.9	10.5	45.0	44.4	5.9	(1.3)	48.2	8.6
Fiscal Deficit	17.4	9.7	17.9	16.5	4.8	(7.8)	16.1	(2.2)
Fiscal Deficit/GDP	6.4		5.9	5.6			4.9	

Source: Budget Documents, NSE EPR. BE: Budget Estimates; RE: Revised Estimates; A = Actual. PA = Provisional Actuals. Growth in FY24PA figures are on FY23 actual figures.

Global macro snippets: COP-29 agrees to triple climate finance by 2035

The recent COP29 in Baku, Azerbaijan, concluded with a major agreement to triple climate finance for developing countries, setting a new target of US\$ 300 bn annually by 2035. This marks a significant increase from the previous US\$ 100 bn goal. The funding, sourced from both public and private channels, aims to support vulnerable nations in addressing climate disasters and benefiting from the clean energy transition. This finance goal was considered essential for equitable global climate action, ensuring that developing countries are not left behind as the world shifts toward cleaner energy solutions. Alongside this, the conference made substantial progress on carbon markets, particularly through implementing Article 6 of the Paris Agreement, which establishes mechanisms for country-to-country trading of carbon credits. This decision is expected to accelerate the implementation of climate plans by making carbon markets more efficient, while also safeguarding human rights, especially for Indigenous Peoples

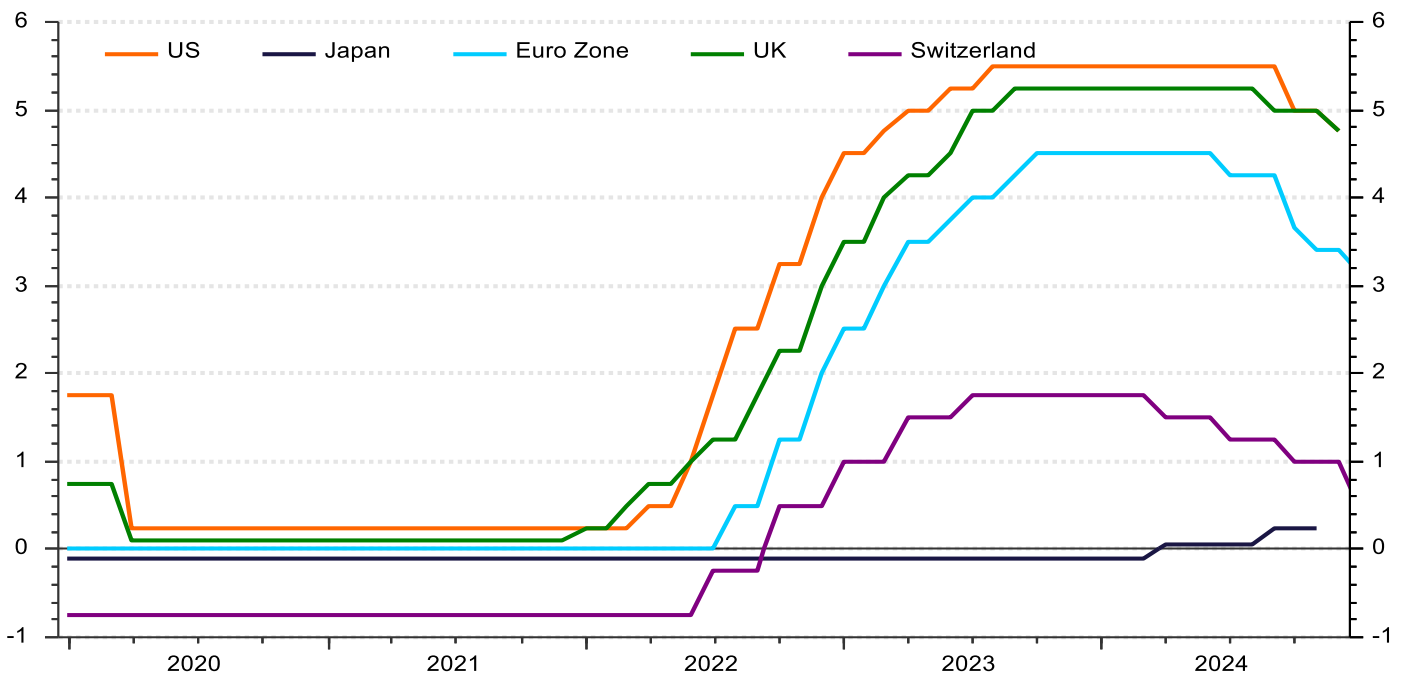
The Conference also emphasized the importance of transparency in climate action, with 13 countries submitting their first Biennial Transparency Reports (BTRs). These reports will provide vital data to track progress on emissions reductions and climate policies, aiding in the identification of financing needs and opportunities. The conference launched tools to support developing nations in meeting reporting requirements, highlighting transparency as a foundation for stronger climate strategies. Finally, a key focus was on supporting the most vulnerable nations, particularly least developed countries (LDCs) and small island developing states, in their adaptation efforts. The conference advanced National Adaptation Plans (NAPs) launched the Baku Adaptation Road Map and reinforced the inclusion of Indigenous People in climate resilience initiatives. The next COP meeting will convene in November 2025 in Belem, Brazil.

- **Tripling climate finance by 2035...:** At COP-29 held in Baku, Azerbaijan, which concluded on November 24th, 2024, an agreement was reached to triple climate finance for developing countries. The new goal aims to provide US\$ 300 bn annually by 2035, an increase from the previous target of US\$ 100 bn. However, this remains significantly below the estimated climate finance needs of developing countries, which are projected to reach US\$ 1.3 trn per year by 2035. This is said to be funded through both public and private sources, aiming to help vulnerable countries protect against climate disasters and benefit from the clean energy transition. The UN Climate Change Executive Secretary emphasized that this finance deal is critical for addressing global climate impacts and ensuring equitable access to the clean energy boom.
- **...with carbon markets fueling adaptation and resilience:** The conference made significant strides on carbon markets, particularly in implementing Article 6 of the Paris Agreement. Countries reached a consensus on carbon crediting mechanisms, allowing for country-to-country trading of carbon credits and establishing clear guidelines for transparency and environmental integrity. This decision is expected to accelerate the implementation of national climate plans by making carbon markets more efficient and affordable. The agreement also includes safeguards to ensure that carbon trading projects respect human rights, particularly for indigenous people. These measures are seen as essential for scaling up global emissions reductions.
- **Enhancing Transparency to drive climate action...:** COP29 also discussed on the progress of enhancing climate transparency, with 13 parties submitting their first Biennial Transparency Reports (BTRs). These reports provide crucial data on emissions and climate actions, helping identify financing needs and opportunities. The conference also launched tools to support developing nations in meeting

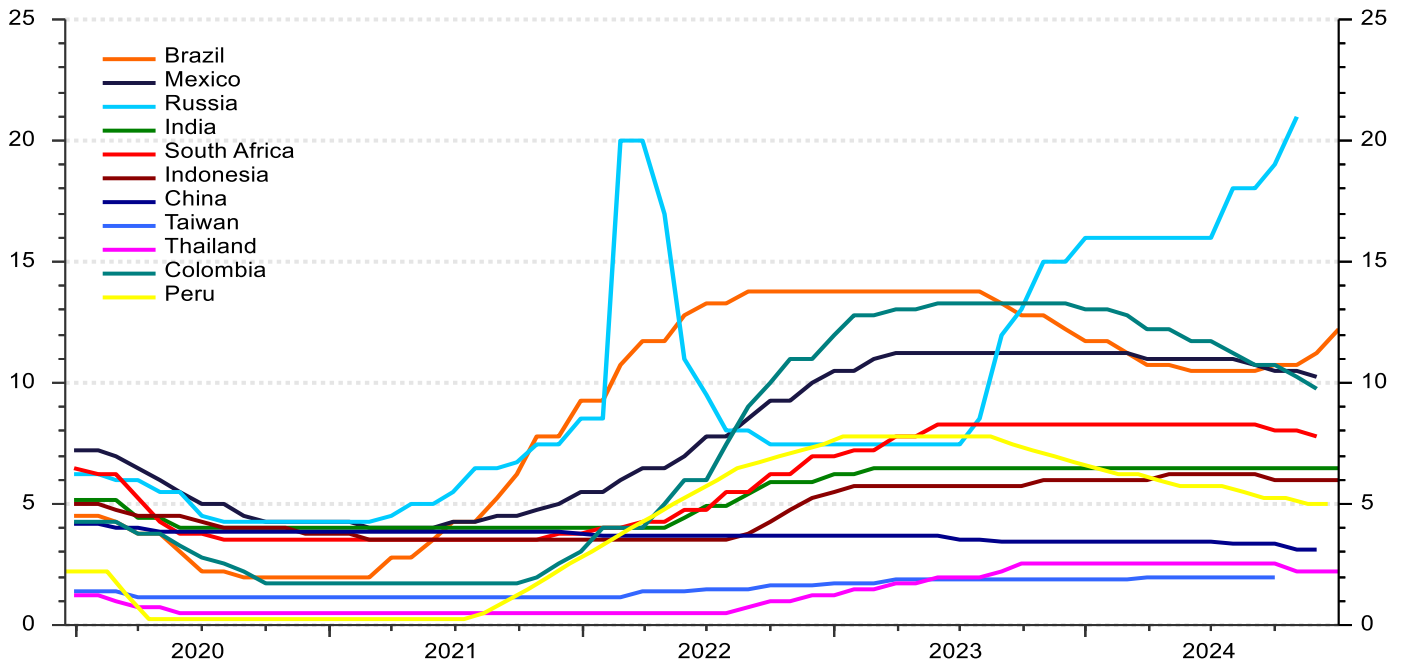
reporting requirements emphasizing that transparency is key to strengthening climate policies and ensuring accountability. The launch of the “Together4Transparency” initiative further underscored the importance of open data in crafting effective climate strategies. This progress sets the stage for better climate planning and more robust international collaboration.

- ...and providing support for vulnerable nations:** At the conference, adaptation was a central issue, particularly for least developed countries (LDCs) and small island developing states. COP-29 advanced key outcomes to support National Adaptation Plans (NAPs), with a focus on innovative financing, technical support, and meeting the June 2025 submission deadline. The Baku Adaptation Road Map was launched, emphasizing the need for transformational adaptation efforts. Additionally, indigenous peoples’ voices were elevated, with a renewed mandate for the Local Communities and Indigenous Peoples Platform (LCIPP). These decisions underscore the need for tailored, inclusive approaches to climate resilience and adaptation, particularly in the most vulnerable regions.

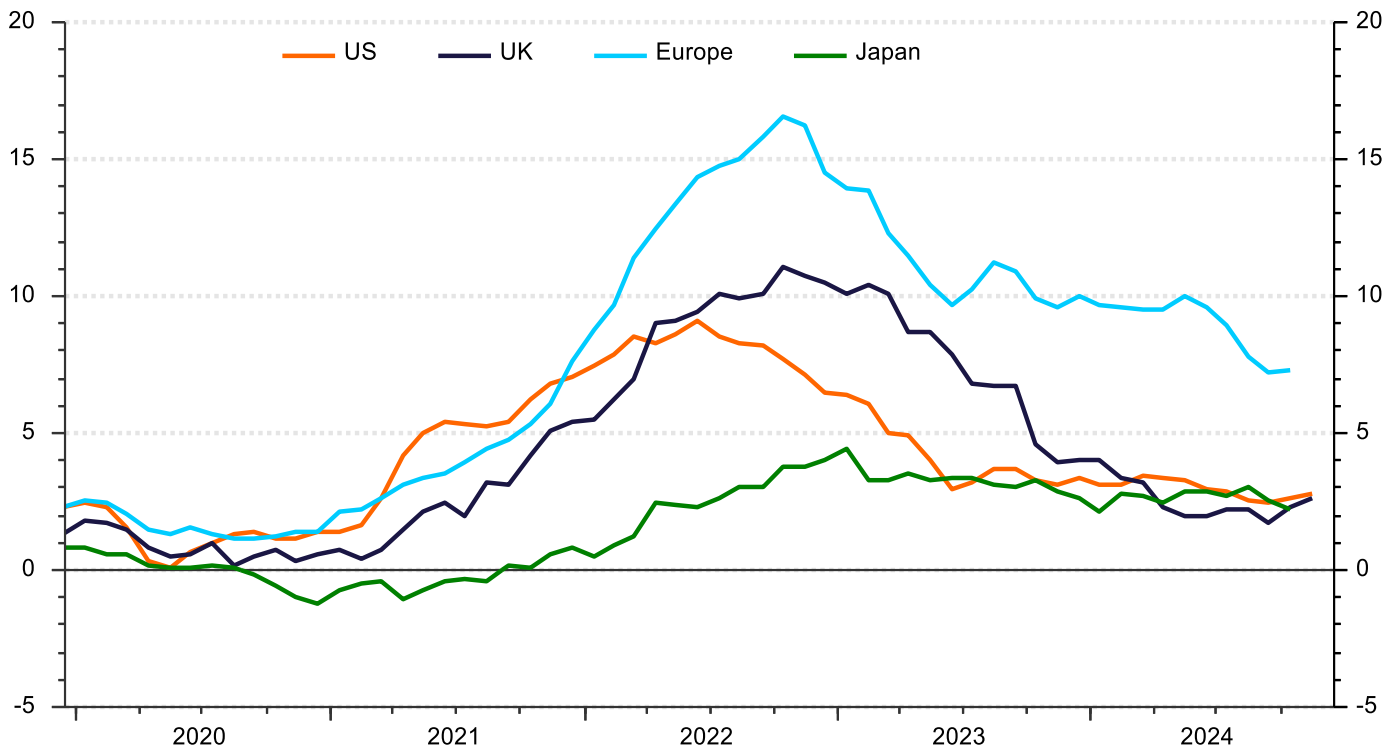
Figure 127: Policy rates across AE central banks



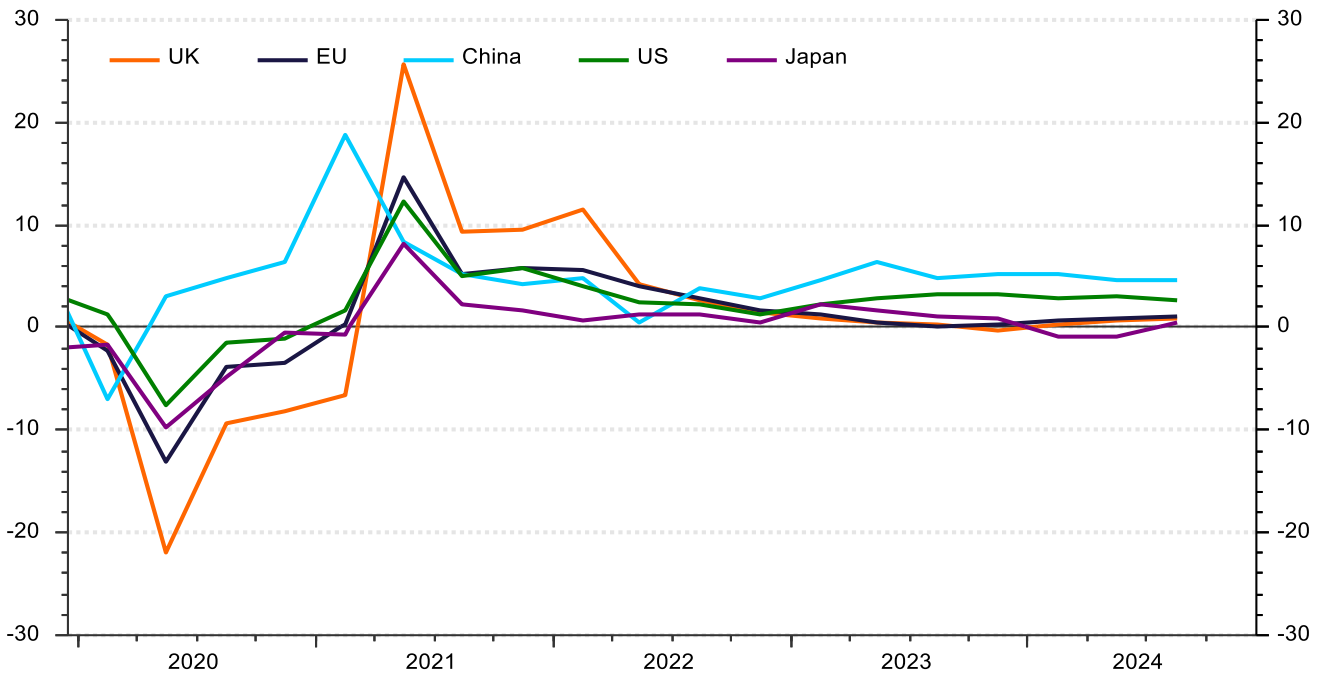
Source: LSEG Datastream, NSE EPR.

Figure 128: Policy rates across emerging markets central banks


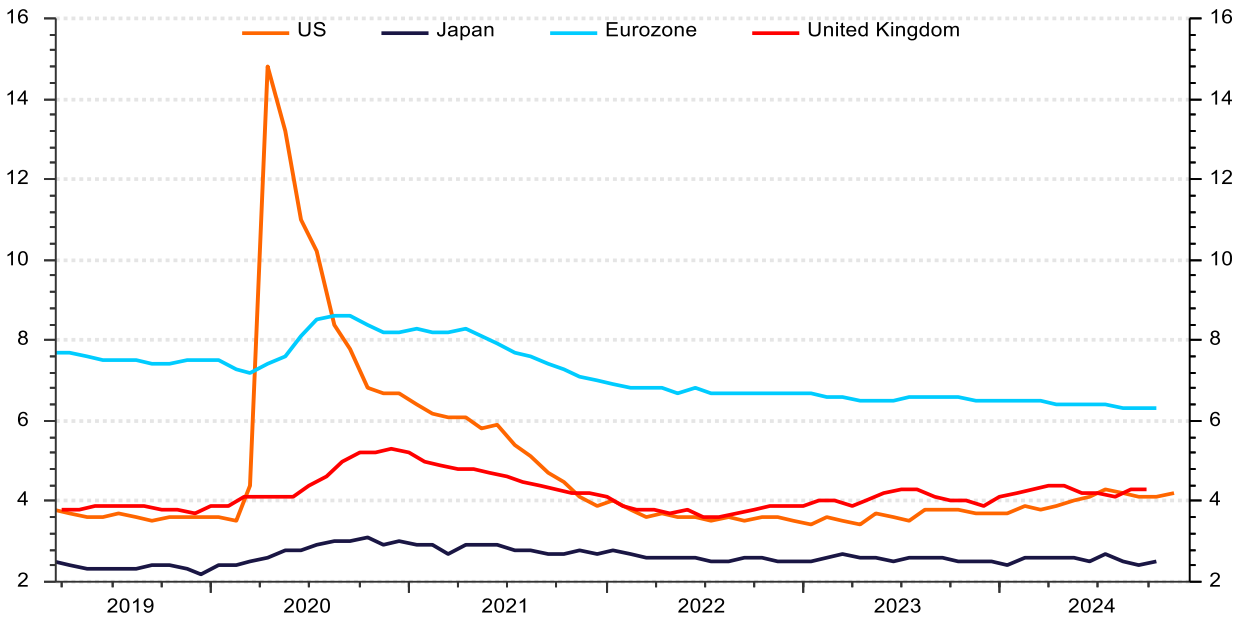
Source: LSEG Datastream, NSE EPR.

Figure 129: Inflation Across Major Economies


Source: LSEG Datastream, NSE EPR.

Figure 130: Growth Across Major Economies


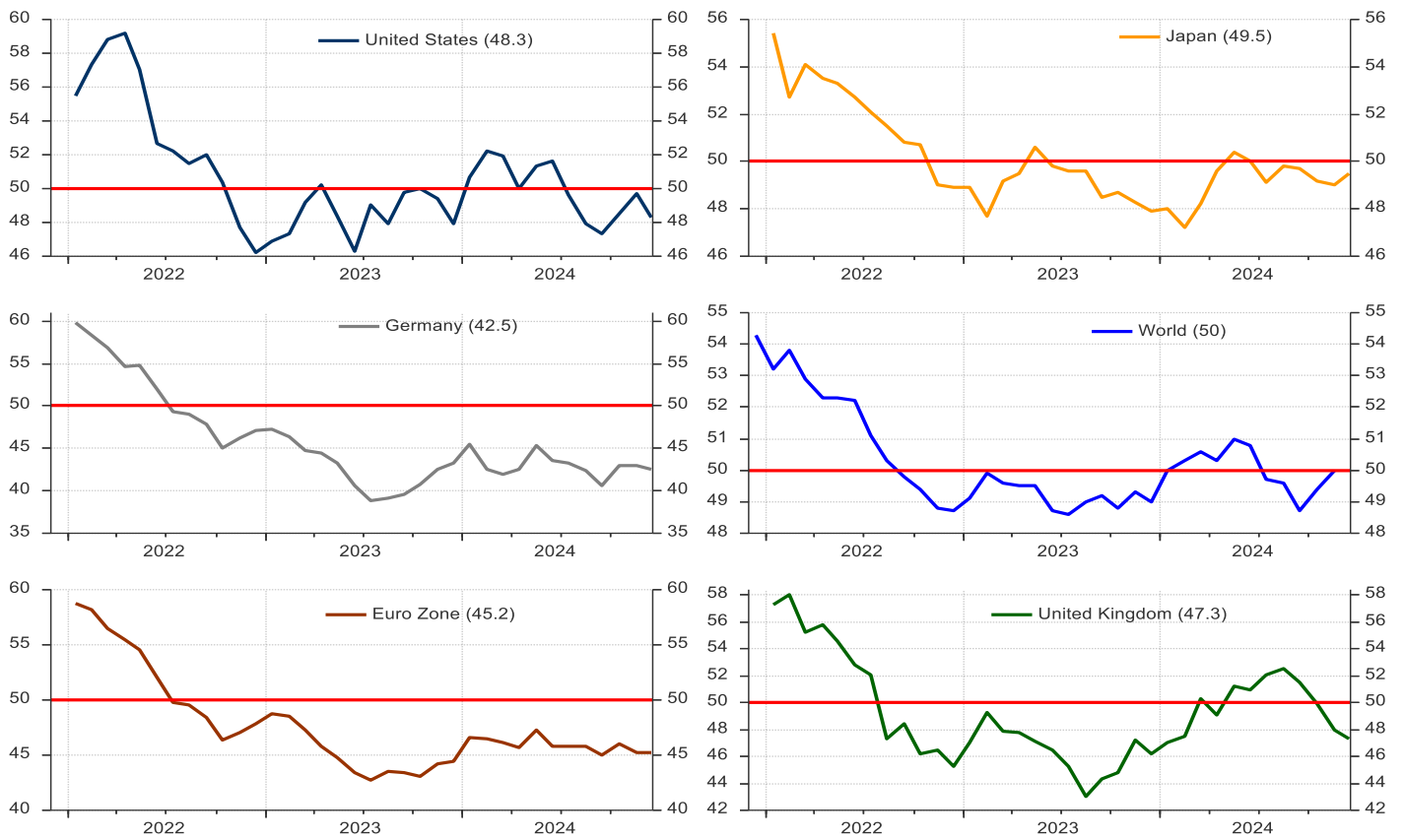
Source: LSEG Datastream, NSE EPR.

Figure 131: Unemployment Rates


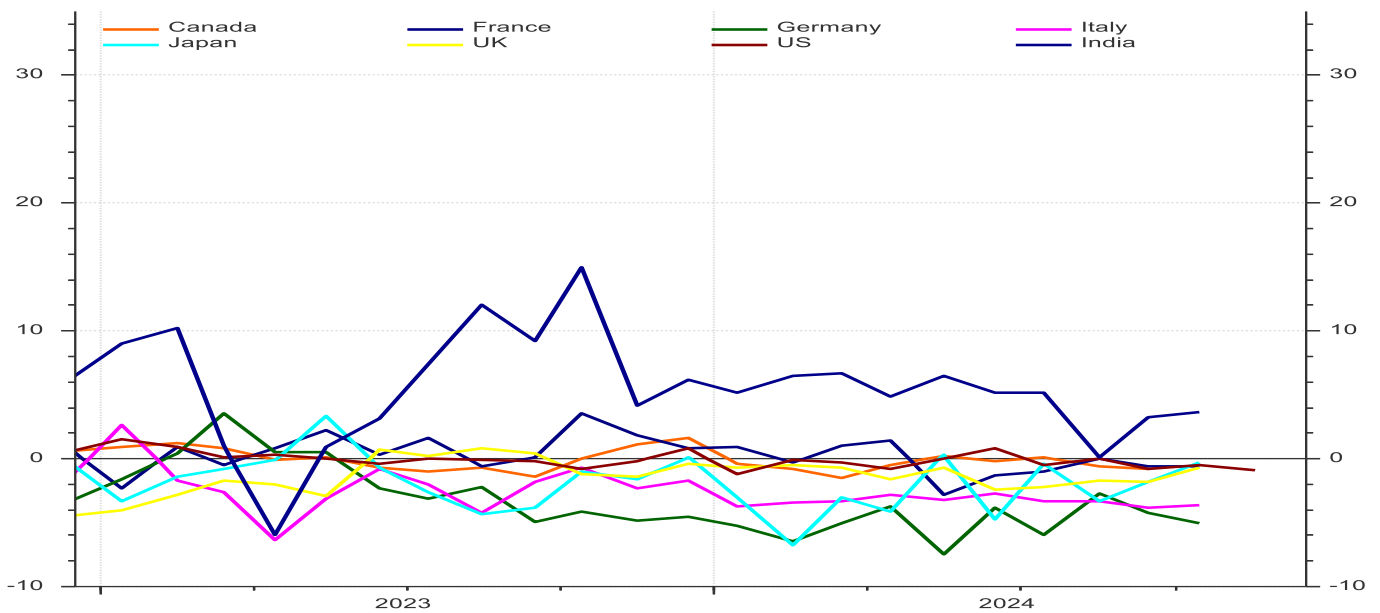
Source: LSEG Datastream, NSE EPR.

Figure 132: Trend in PMI manufacturing across countries

Manufacturing (SA) PMIs: Developed Markets



Source: LSEG Datastream, NSE EPR.

Figure 133: Consumer Confidence Index across major economies


Source: LSEG Datastream, NSE EPR

Insights

Highly cited research paper 1 in the field of Behavioural Science

Pleasure of paying when using mobile payment: Evidence from EEG studies⁷

Manlin Wang⁸ Aiqing Ling⁹ Yijin He¹⁰ Yulin Tan¹¹ Linanzi Zhang¹² Zeyu Chang¹³ Qingguo Ma¹⁴

Research Paper Summary Prepared by Ram Prasad Behera¹⁵ and Varuna Joshi¹⁶

1. Introduction

Global acceptance of mobile payment systems, such as Apple Pay, and Google Pay, has increased dramatically. According to projections, the market value will rise from \$1.7 trillion in 2021 to \$6 trillion by 2027. Although a significant amount of research has been done on the factors that influence the adoption of mobile payments, less has been done on how these factors affect customer behaviors including willingness to pay (WTP), basket value, and happiness with purchases.

In contrast to the conventional "pain of paying" connected with cashless transactions, this research paper presents the idea of "pleasure of paying," a pleasant emotion felt when using mobile payments. Mobile payments differ from bank cards in two important ways: first, they are integrated into multipurpose mobile devices linked to pleasant activities; second, they provide a quicker, more efficient transaction procedure, improving customer satisfaction.

The study investigates the neural correlations of pain and pleasure in payment using electroencephalogram (EEG) techniques. It focuses on two event-related potentials (ERPs): the Late Positive Potential (LPP), which is connected to emotional significance, and the N300, which is linked to cognitive conflict and unpleasantness. The authors predict that using a mobile payment device can lower N300 amplitudes, which indicate less pain, and raise LPP amplitudes, which indicate more pleasure.

2. Hypothesis

The concept of "pleasure of paying" is proposed as an immediate, integral emotion experienced when using mobile payments, contrasting with the "pain of paying." This pleasure is anticipated to increase consumers' motivation to purchase. Research suggests that being in a pleasant state can lead to higher purchase inclinations. The study hypothesises that,

H_{1a}: mobile payments would reduce the pain of paying.

H_{1b}: mobile payments would enhance the pleasure of paying.

H₂: both factors, pain of paying and pleasure of paying, facilitate consumer spending-related behaviours.

⁷ Wang, M., Ling, A., He, Y., Tan, Y., Zhang, L., Chang, Z., & Ma, Q. (2022). Pleasure of paying when using mobile payment: Evidence from EEG studies. *Frontiers in Psychology*, 13, 1004068.

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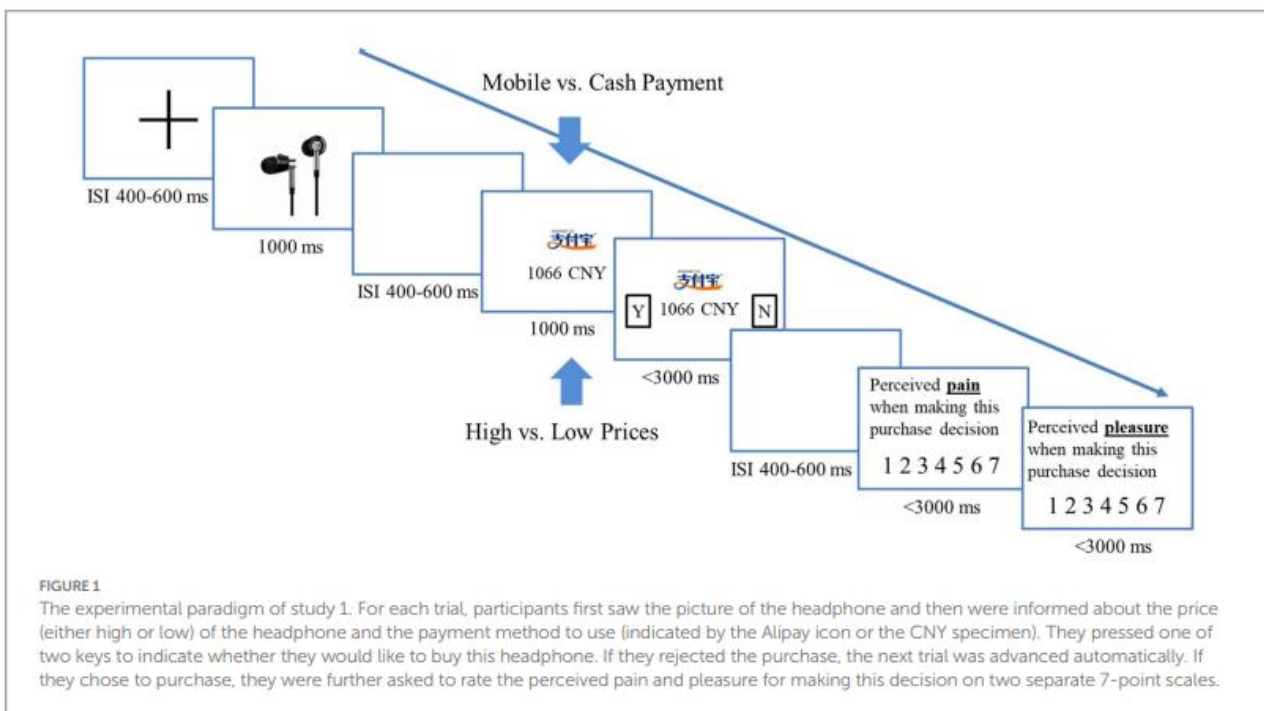
3. Experimental Design and Methodology

Study 1:

The study involved 66 right-handed native Chinese participants (20 females, mean age=22.62). Participants engaged in a hypothetical purchase product of 40 headphones with varying prices presented in a revised SHOP paradigm, using Eprime 2.0, with two price levels – high vs low, and by two payment methods – mobile vs cash. The pictures of the products were gray-scale processed. Participants indicated their purchase intentions and rated their perceived pain and pleasure on a 7-point scale for both mobile and cash payments. EEG recordings measured neural activity to assess the pain (N300) and pleasure (LPP) of paying. The study began with 20 practice trials before progressing to 160 formal trials. The participants' EEG and EOG data were collected using a 64-channel EEG device and electrodes around their eyes.

N300 was calculated using a time window of 260-300 ms, whereas LPP was calculated using a time window of 500-800 ms. The behavioral and ERP data were analyzed in Stata using multilevel mixed-effects regression.

The figure below depicts the sequences and timing of the events in the experiment.

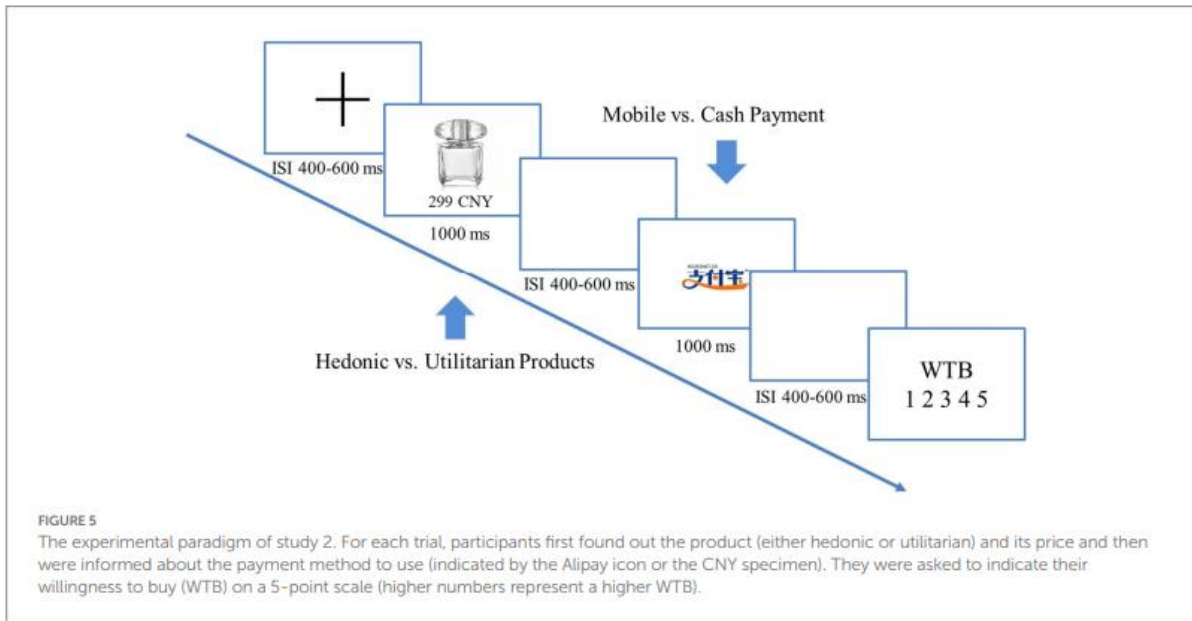


Study 2:

Previous research has found that increased spending caused by bank card payments is mostly connected with hedonic products such as snacks and chocolates. Study 1, which focused on headphones with both functional and hedonic qualities, raised concerns about the generalizability of payment methods across different product types. As a result, Study 2 was designed to investigate whether the stimulation of purchase intention by mobile payments extended to products with hedonic or utilitarian qualities, as well as controlled price levels.

29 right-handed Chinese participants (11 females, mean age = 22.74) were recruited for this study. Products selected were either utilitarian (e.g., printers, hairdryers) or hedonic (e.g., jewellery, chocolates), with prices matched across categories. Participants rated their willingness to buy (WTB) these products using either mobile payment or cash, while EEG data recorded their neural activity. The study employed the same setup as in study 1.

The figure below depicts the experimental paradigm of study 2.



4. Summary of Results

Study 1:

Behavioral data revealed that participants were less likely to purchase high-priced headphones than low-priced ones. Mobile payment dramatically increased purchase intention for high-priced headphones. Price had a considerable impact on felt pain and pleasure, with higher-priced headphones being more painful and enjoyable to purchase. However, the payment mechanism had no meaningful effect on these perceptions.

EEG findings demonstrated that mobile payment significantly lowered N300 amplitudes, indicating less pain while paying, while somewhat increasing LPP amplitudes, indicating more pleasure when paying. These impacts remained consistent independent of product price. Mediation analysis revealed that neither N300 nor LPP alone could explain the higher purchase likelihood owing to mobile payment. However, a sequential mediation model revealed that both reduced pain and increased pleasure of payment influenced purchasing intentions.

The study also explored the processing fluency as a potential cause for the pleasure of paying, finding that mobile payment led to shorter decision times than cash payment.

Study 2:

Results demonstrated that when compared to cash, mobile payments significantly raised WTB for both hedonic and utilitarian goods. Neural data also demonstrated this behavioral effect, with mobile payments raising the LPP component and decreasing the N300 component.

Mediation analyses revealed that the enhanced WTB was jointly mediated by N300 and LPP in a sequential model, indicating that both the reduction in pain and increase in pleasure of paying contribute to the effect of mobile payment on purchase intentions. These findings replicated the results from Study 1 and confirmed the involvement of these psychological processes in influencing WTB.

5. Conclusion

Mobile payment, a rapidly growing cashless payment method, has sparked interest in understanding its adoption and influence on consumer behaviors. Compared to cash, this study found that mobile payment increases the propensity to buy both hedonic and utilitarian goods. Mobile payments decrease the N300 component and enhance the LPP, according to research that used EEG to identify neural causes. This represents a new discovery in the field of cashless payment research as these effects together mediate the increased purchase intention.

This multidisciplinary technique contributes to our understanding of the psychological effects of cashless payments by integrating traditional behavioral metrics with EEG. The results support earlier studies that demonstrated the greater impact of mobile payments than credit cards on WTP, highlighting the overlooked role of the pleasure of paying.

The study emphasizes how crucial payment methods are to the customer's journey and shows how convenient, adaptable payment choices may improve customer experience and build trust. Retailers may use mobile payments to boost sales channels and improve customer experience, while mobile payment providers need to improve transaction fluency across formats. Security and regulation of mobile payments remain critical as these methods integrate deeper into daily life.

Highly cited research paper 2 in the field of Behavioural Science

When Prospect Theory Meets Mean-Reverting Asset Returns: A Behavioral Dynamic Trading Model¹⁷

Jianjun Gao¹⁸ Duan Li¹⁹ Jinyan Xie²⁰ Yiwen Yang²¹ Jing Yao²²

Research paper summary prepared by S Vishwath²³ and Varuna Joshi²⁴

1. Introduction

This paper is a model-based study on how stocks with mean-reverting returns affect investors who base their preferences on prospect theory. Prospect theory also known as ‘loss-aversion theory’ is a behavioral finance concept wherein an investor is more likely to choose a scenario presented in terms of perceived gains rather than one with perceived losses even if the net result of both the scenarios is equal. Mean reversion returns, as the name suggests, means that returns of asset classes end up at their mean however extreme their variance is.

The model of this research focused on how prospect theory investors’ behavior would change when they accounted for mean reversion. The authors found that accounting for mean reversion attenuates the V-shaped demand pattern of prospect theory investors i.e., prospect theory investors’ demand decreased after price increases when mean reversion was considered.

The research found that this shift in investor demand led to an inverse relationship between investor demand and asset price. The authors also showed that combining prospect theory and mean reversion predicted the short-term contrarian behavior and disposition effect of investors more accurately in comparison to models which considered these effects separately.

2. Hypothesis

H1: The model with a combination of prospect theory and mean reversion predicts short term contrarian trading behavior and disposition effect of investors more reliably than benchmark models with only prospect theory or mean-reverting returns.

3. Data and Methodology

The authors developed a dynamic asset allocation model which comprised of both the S-shaped utility function of prospect theory and the mean-reverting asset returns. The authors used Fourier transformation to get their semi-analytical solution for their model. This model was devised to understand how mean-reverting returns changes the V-shaped demand curve of prospect theory.

The specification of the model assumed investor trades in a market which is complete, arbitrage-free, and continuous. The next assumption was that there was a risk-free asset with a positive constant instantaneous interest rate and a risky asset. The risky asset had a positive constant volatility and the instantaneous return rate was assumed to be in a standard Brownian motion.

¹⁷ Gargano, A., & Rossi, A. G. (2022). Goal setting and saving in the fintech era. *The Journal of Finance*. <https://doi.org/10.1111/jofi.13339>

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The instantaneous Sharpe ratio followed an Ornstein-Uhlenbeck process. The rate of mean reversion rate was considered positive and the uncertainty of the instantaneous return rate was considered negative. The instantaneous return rate, also known as return drift, was also considered to follow an Ornstein-Uhlenbeck process.

The authors developed the solution for the model using the martingale approach as a static optimization problem. A random variable known as the 'stochastic discount factor' was considered to be negatively correlated with stock prices. To highlight the difference between a propensity theory investor and a constant relative risk aversion investor, the authors considered two components, a 'break-even component' and a 'gain-seeking component.'

The study considered a special case of the baseline model wherein they incorporated the effects of mean-reversion on the geometric Brownian motion of the propensity theory investor and studied the effects of ignoring and including mean-reversion on the solution of the model. The Sharpe ratio is considered a constant in this new model.

The authors developed sample portfolios and price paths to test the disposition effect. The authors tested a sample of 10,000 traders each holding four stocks. These 40,000 sample paths were given two potential stock price paths and the results were simulated by testing it with individual models of propensity theory and mean reversion, and then combining it and testing with the final model.

4. Summary of Results

The authors observed contrarian trading behavior when accounting for both propensity theory and mean-reversion i.e., investors bought stocks when prices fell and sold stocks when prices rose to manage the demand in the opposite direction and create a negative feedback demand to stock price.

The model incorporating both propensity theory based utility and mean reversion had a higher reliability of prediction when it came to contrarian trading behavior. The authors also showed that their combined model predicted the disposition effect of investors thereby overcoming the limitations of individual models of propensity theory and mean reversion.

5. Conclusion and Implications

According to the authors, this study was the first of its kind within a standard dynamic asset allocation framework i.e., to combine propensity theory-based utility and mean-reverting asset returns under a single model. The portfolio weights derived from the model showed a significant departure from previous models incorporating only one of the two theories considered.

The authors showed that the inclusion mean-reversion into propensity theory models significantly altered the V-shaped demand curve qualitatively. This model also predicted, more reliably, the contrarian trading behavior and disposition effect of investors than previous models.

The authors concluded that ignoring mean-reversion can lead to biased inferences about propensity theory investors. A future research area suggested is to incorporate mean-reversion into disappointment utility theory.

Highly cited research paper 3 in the field of Behavioural Science

Personality differences and investment decision making ²⁵

Zhengyang Jiang ²⁶ Cameron Peng ²⁷ Hongjun Yan ²⁸

Research paper summary prepared by S Vishwath ²⁹ and Varuna Joshi ³⁰

1. Introduction

This study is a survey to understand the relationship between personality characteristics and investment decisions. The paper examines this relationship by considering the big five personality traits – openness, conscientiousness, extraversion, agreeableness, and neuroticism. The authors study the correlation of these personality traits with investors' beliefs about the stock market, economic growth, risk aversion, and social interaction tendencies.

The study aims to explore the explanatory power of equity investments with respect to the big five personality traits. The survey aims to establish, through primary research of participants from the American Association of Individual Investors, the personality traits and the beliefs which can be recorded and checked for correlation. The authors aim to establish literature linking personality traits and investors beliefs using standard and non-standard channels.

2. Hypothesis

Investor beliefs, namely, expected return, risk aversion, economic growth, equity allocation and social interaction are correlated with the big five personality traits, namely, openness, conscientiousness, extraversion, agreeableness, and neuroticism.

3. Data and Methodology

The survey used a twenty-item questionnaire which was designed to elicit the respondent's personality traits in each of the big five dimensions, openness, conscientiousness, extraversion, agreeableness, and neuroticism.

The survey was sent to American Association of Individual Investors (AAII), a non-profit organization which has 150,000 members, on November 22, 2019. The survey yielded 3,325 valid responses, a 2% response rate.

The survey had four sections – personality, belief and preference parameters, equity allocation, and demographics. The personality section had 20 questions from the SAPA Personality Inventory. The second section had three sub-sections.

The first sub-section consisted of questions relating to investor beliefs about their expectations of stock market return, GDP growth and inflation rate. The second sub-section consisted of questions devised to understand extrapolative and contrarian beliefs. The third sub-section consisted of questions designed to capture the social interaction element. The equity allocation section was made up of questions about financial allocation and portfolio choice. The last section had standard questions about demographics.

The majority demographic amongst the survey respondents were white males above the age of 60, making up 80% of the total number. 90% of the respondents had a college degree. The respondent pool was made up of wealthy

²⁵ Jiang, Z., Peng, C., & Yan, H. (2024). Personality differences and investment decision-making. *Journal of Financial Economics*, 153, 103776. <https://doi.org/10.1016/j.jfineco.2023.103776>

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³⁰ Co-ordinator, NSE-Centre for Behavioral Science, Indian Institute of Management Ahmedabad (IIM-A)

individuals, with more than 80% declaring a wealth of above \$1 million. The survey also had around one-third of respondents with an annual income above \$200,000.

The study aimed to determine the correlation between personality traits and investor beliefs by individually pairing up each trait with the variables considered. The authors also wanted to consider demographic variables and their role in the formation of investor beliefs. This step was necessary to then make the demographic variables as controls for the final correlation study.

The study brings in additional data from the Household, Income and Labor Dynamics in Australia (HILDA) survey. This survey was conducted from 2001 to 2017 on economic and personal well-being, labor market dynamics and family life. The authors also brought in data from the German Socio-Economic Panel (GSOEP) survey, which was conducted from 2005 to 2017, on personality and investment data.

Both surveys were carried out to test the result of the study against different demographics and see if the result holds true independent of the demographics of the respondents.

4. Summary of Results

The study finds pairwise correlations between the big five traits. The authors observed that people who are more agreeable tend to be more open and conscientious. On the contrary, people who are more neurotic tend to be less conscientious. All the personality traits were included as regressors to get to the independent effect of each individual trait.

The explanatory power of demographic variables was found to be minimal with R-squared ranging from 3% to 5%. These variables were included as controls in the regressions.

The average expected stock market return by the respondents was 5.57% with the 10th and 90th percentile expecting -10% and 14% respectively with a standard deviation of 9.51%. The respondents were asked to predict extreme events where the stock market rises or falls by more than 20%. The average probabilities from this question were 18.49% and 25.09% respectively. Both the average expected GDP growth and inflation rate were around 2% with the extreme 10 percentiles falling to 1% and 3% respectively.

The respondents were asked three questions to determine their risk appetite by increasing the risk between the choices. 60% of respondents picked the first level of riskiness, while 27% and 6% of the respondents picked the second and third level respectively.

The study then linked personality traits to beliefs and preferences of the investors. The data linked high neuroticism to pessimism in return expectations with a single point increase in neuroticism corresponding to a 79 basis-point drop in one year expected return.

On the contrary, high conscientiousness and extraversion were linked to optimism in expected return. A single point increase in conscientiousness and extraversion corresponded with an increase of 66 and 82 basis-point increase in expected return respectively.

High neuroticism was also linked with increased concern for downside risk with a single point increase correlating to a 102 basis-point increase in the predicted probability of a 20% market crash. High conscientiousness and extraversion had the opposite effect.

Openness was uncorrelated with average beliefs, but higher openness was linked to higher estimated probability of extreme events.

The personality traits showed similar patterns with respect to expected one year GDP growth with higher neuroticism linked to pessimistic beliefs and higher extraversion linked to optimistic beliefs. Higher neuroticism also led to

pessimistic beliefs about the one-year inflation rate. The analysis showed that neuroticism is the only trait that can be linked with beliefs about stock returns, GDP growth, and inflation.

The study analyses correlation between risk aversion and personality traits. The analysis finds that an investor is more likely to be risk averse if they have lower openness, higher agreeableness, or lower extraversion. The regression between social interaction and personality traits found that investors with higher neuroticism and extraversion have higher tendencies to invest in a popular investment product like Bitcoin. This phenomenon is called social herding.

The study focusses on linking investor beliefs and asset allocation. Higher neuroticism and lower openness are linked to low equity allocation. The authors find that personality traits have more explanatory power about investment decisions than the theorized value assigned by the framework of beliefs and preferences. The HILDA and GSOEP surveys also yield similar results to the survey conducted with the AAI proving that personality traits determine investment decisions independent of demographic variables.

The authors aimed to create a unified account for investor behavior and chose two traits to explain cross investor variations – neuroticism and openness. The analysis involves computing the mean of the seven characteristics explored earlier, namely, expected stock return, risk aversion, perceived tail risks, extrapolation, social interaction, and equity allocation.

The meaning of these scores were plotted against the mean neuroticism and openness of the panels. Principle component analysis reveals that all the seven characteristics can be traced to investors' heterogeneity in neuroticism and openness.

5. Conclusion and Implications

The study proves that investor beliefs and expectations are connected to the big five personality traits. The study finds that personality traits affect investment decisions in three channels, namely, beliefs, preferences, and social interaction tendencies.

Two personality traits explain the heterogeneity in investor beliefs in the best possible manner, neuroticism, and openness. This provides the possibility of dimension reduction in the explaining investor behavior. The authors also insist on including personality traits in future frameworks of investment decision making.

The authors suggest a new portfolio model by extending the current standard models with factors such as social interactions and non-pecuniary factors. This study postulates that personality traits affect investor beliefs through channels. However, the exact routes of operation of these channels were not within the scope of this paper.

Further research in determining specific modes of operation for these channels would enhance the understanding of personality traits. Behavioral research also considers personality traits to be a combination of nature and nurture. Further exploration of the difference in these two ways of development of personality traits with respect to investor beliefs will enhance explanatory power.

Highly cited research paper in the field of Finance

Artificial intelligence, firm growth, and product innovation³¹

Tania Babina³² Anastassia Fedyk³³ Alex He³⁴ James Hodson³⁵

Research paper summary prepared by Economic Policy and Research, NSE

Each industrial revolution has been driven by technological advancements, such as how the steam engine fueled the first industrial revolution. In a similar vein, Artificial Intelligence (AI) could usher in another transformative era in industrial development through its commercial applications. The widespread use of AI has sparked significant debate about whether it will be a boon or a bane for society. This paper explores the impact of AI investment on firm outcomes, including growth, employment, and market value. Over the past decade, AI investments have surged, reaching \$140 billion annually. The growth of AI commercialization is attributed to supply-side factors, such as the rapid accumulation of data, declining computation costs, and advancements in methodologies like deep learning. Private sector investments have largely focused on three core areas of AI: machine learning, natural language processing, and computer vision. AI also possesses key economic characteristics, including its role as a prediction technology, a general-purpose technology, and its reliance on human expertise. These properties contribute to the creation of economic value in much the same way as other transformative technologies.

This paper bases its theoretical arguments on two concepts: product innovation and process innovation. First, it suggests that AI investment can drive firm growth by lowering the costs of product innovation. A firm's growth is linked to product innovation and variety expansion, which increases product appeal and demand. AI can facilitate knowledge accumulation and reduce innovation costs by enhancing experimentation. AI algorithms can analyze large datasets, reducing uncertainty and improving efficiency, leading to more experimentation and new products. For instance, Moderna used AI to develop a COVID-19 vaccine in just 65 days. AI can also improve existing products, such as the AI-powered DeepX trading platform by JP Morgan, which tailors products using customer data.

Second, AI can reduce the cost of process innovation by replacing human labor in certain tasks and cutting labor costs. While AI's ability to support decision-making and solve complex problems raises concerns about the displacement of high-skill jobs, its forecasting ability can also improve operational efficiency. These two mechanisms lead to different empirical predictions: product innovation focuses on new products, improved quality, and expanded product portfolios, while process innovation affects operational efficiency but not the product itself.

Data on AI investment at the firm level is not readily available, so the authors measure AI investment by analyzing job postings and employee resumes, specifically focusing on the share of AI workers. Using a sample of 1,993 firms, they conduct regression analysis to address their research questions from 2010 to 2018 in the U.S. context.

First, the authors investigate the factors influencing AI investments. They find that larger firms, both initially and in terms of growth, tend to invest more in AI. Firms with higher cash ratios are also more likely to invest in AI, as are younger firms. However, factors such as R&D ratio, firm productivity, markups, firm valuation, market leverage, and return on assets do not significantly predict AI investment levels.

Next, the authors explore whether AI investments lead to faster growth in sales, employment, and market value. They discover that increased AI investment correlates with higher sales growth. Specifically, a one-standard deviation increase in the share of AI workers leads to a 19.5% rise in sales growth. Similarly, a higher share of AI workers is linked to increased employment growth, suggesting that AI does not displace the workforce, though it may lead to a

³¹ Babina, T., Fedyk, A., He, A., & Hodson, J. (2024). Artificial intelligence, firm growth, and product innovation. *Journal of Financial Economics*, 151, 103745.

<https://www.sciencedirect.com/science/article/pii/S0304405X2300185X>

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shift in job roles. Additionally, the market valuation of firms rises with a higher share of AI workers—by 22-24% for each standard deviation increase. These results hold across various industries.

The authors also examine how firm size affects AI investment and growth. They find that larger firms experience more sales growth, employment growth, and market value increases, suggesting that big data and AI technologies benefit from scale effects. Larger firms can collect vast amounts of data as a byproduct of their economic activity, while smaller firms may face constraints on scaling up product innovation due to limited resources.

While these findings are compelling, the authors acknowledge potential measurement issues. To address this, they revise their AI investment measures, switching from resume-based data to job posting-based data. Both measures are highly correlated, and the consistent results further confirm that increased AI investment boosts sales growth, employment, and market value. The authors also address the skewness of AI investment by creating a dummy variable. They find that the top 25% of firms in AI investment see a 31% greater sales growth than others, while the top 10% see 54% more growth between 2010 and 2018.

Concerns about the possibility of reverse causality, where firm growth drives AI investment, are addressed by using instrument variables. The authors also consider the potential for investment in other technologies, such as IT, to influence their results. By controlling for non-AI investments (IT, robotics, data skills, data analytics), they confirm their findings. To rule out the impact of positive demand shocks, the authors control for industry-fixed effects, with consistent results.

Finally, the authors investigate the dynamic relationship between AI investments and firm growth to resolve reverse causality issues. They find that AI investment leads to increased sales and employment growth, but the benefits take two or three years to materialize. To further address potential concerns, the authors use exposure to AI talent from U.S. universities as an instrument variable, arguing that a shortage of AI-trained workers is a barrier to AI adoption. Universities with strong AI programs have produced more skilled graduates, making it easier for firms to hire AI talent. The instrument variable analysis shows that increased AI investment leads to higher sales, employment, and market value.

Finally, the author establishes the mechanism through which AI investment affects the firm's growth. Firstly, the authors examined AI as a driver of product innovation. The authors used trademarks, product patents and changes in product mix to measure product innovation. The authors found that a one-standard-deviation increase in the share of AI workers is associated with approximately 13% more trademarks. Similarly, a one-standard-deviation increase in the share of AI workers over eight years corresponds to about a 23% increase in the number of product patents. Secondly, the authors explored AI as a driver of lower operating costs. The authors used the costs of goods sold (COGS) and operating expenses and found that AI investment increases COGS and operating expenses. This means that AI investment is not associated with lower operating costs. The authors believe that the impact of AI investment should be reflected in the firm's productivity. The authors found no relationship between AI investment and productivity. Moreover, the authors also use process patents to evaluate AI investment's impact on process innovation but do not find any relationship. Based on these findings, it could be argued that AI technologies benefit firms through product innovations but not through reduction in operating expenses or improvement in productivity. Apart from this, the authors examined the impact of AI investment on industry-level outcomes. The authors found that AI investment affects industry-level sales growth and employment. Surprisingly, the authors found that growth in industry-level AI investment positively affects industry concentration, which suggests that the winner takes the most dynamics.

Based on these findings, we can learn that AI investment increases product innovation, which drives the firm's growth.

Highly cited research paper in the field of Corporate Finance

Digital Payments and Consumption: Evidence from the 2016 Demonetization in India³⁶

Sumit Agarwal³⁷Pulak Ghosh³⁸Jing Li³⁹Tianyue Ruan⁴⁰*Research paper summary prepared by Economic Policy and Research, NSE*

In his book *The World is Flat*, Friedman highlighted the transformative power of the internet and digital technology. While past industrial revolutions were driven by machines focused on manufacturing, the 21st century can be seen as the information era, where digital technologies are central to economic and social progress. This paper explores the impact of digital payments on consumption in India, focusing on two main channels: transaction costs and the subdued endowment effect.

First, the paper argues that cash payments incur transaction costs, such as storage, time spent traveling to a bank or ATM, and the risk of theft. Digital payments, by eliminating these costs, can encourage increased consumer spending, particularly for those most affected by these transaction costs.

Second, cash payments have behavioral implications, such as being effortful, immediate, and memorable. Payments made with cash can act as a decision-making point for consumers, prompting them to evaluate their spending. Digital payments, however, streamline this process, making spending easier by removing these decision points. This leads to the concept of the "pain of paying" or "payment transparency," where the act of parting with physical cash feels painful, but digital payments, with no physical exchange, feel less painful. While cash payments can help with budgeting by providing a tangible sense of available funds, digital payments require visiting a bank or logging into accounts, making budgeting less immediate and more abstract

Establishing a causal link between digital payments and consumer spending is challenging because we can only observe equilibrium outcomes, which are influenced by multiple factors. For instance, the use of digital payments depends on their availability and the level of awareness among both consumers and sellers. Not all consumers have equal access to digital payments, and merchants are not equally comfortable with them. Small and retail merchants, for example, often avoid or place restrictions on digital payments. Even when merchants accept digital payments, consumers tend to use cash for small amounts and digital payments for larger ones, indicating a mechanical relationship. This makes it difficult to establish a clear causal connection between digital payments and consumer spending.

To address this issue, the authors use the Indian government's demonetization policy as a natural experiment. The policy, aimed at reducing corruption and counterfeit currency, was announced on November 8, 2016, by Prime Minister Narendra Modi. It involved withdrawing the 500 and 1,000 rupee notes, which accounted for 86% of the currency in circulation. This was an exogenous shock, as the policy was kept secret, and even banks were not informed in advance, leading to a 75% reduction in currency circulation overnight. In a cash-dependent economy like India, where 87% of transaction value was in cash in 2012, the demonetization had significant implications. Prior to the policy, only 12% of transaction volume was conducted via debit cards, highlighting the low level of digital adoption before the policy.

The authors use data from an Indian supermarket chain with 171 retail stores across 21 districts in five states, covering the period from April 2016 to September 2017. The final sample includes 924,743 individual consumers. The study found that the use of cash dropped from 70% to 57% following the announcement of demonetization. However, this

³⁶ Agarwal, S., Ghosh, P., Li, J., & Ruan, T. (2024). Digital payments and consumption: Evidence from the 2016 demonetization in India. The Review of Financial Studies, hhae005. <https://academic.oup.com/rfs/article-abstract/37/8/2550/7625073>

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decline was offset by an increase in debit card usage, which rose from 24% to 35%, along with a rise in mobile payments and credit card usage. The authors use demonetization as a natural experiment to argue that consumers who were more dependent on cash were more likely to be affected by the shortage of currency notes caused by the policy.

The authors first explored the forced adoption of digital payments due to demonetization, finding that a 10% increase in prior cash dependence led to a 2.94% rise in digital payment usage after the policy. They further decomposed digital payments into debit cards, mobile payments, and credit cards, discovering that the decline in cash usage was compensated by increased use of debit cards and mobile payments, while credit card usage actually declined.

The authors then examined how digital payments impacted consumer spending, finding that a 10% increase in prior cash dependence led to a 2.38% increase in monthly spending. They also compared consumers in the 25th and 75th percentiles of prior cash dependence, discovering that those in the 75th percentile saw an 11.9% higher increase in spending compared to those in the 25th percentile. To address concerns that pre-existing trends in cash usage could influence results, the authors validated the parallel trend assumption.

Next, the authors explored the dynamic patterns of payment choice and its effect on spending. They found that a 1% increase in prior cash dependence resulted in a 0.28 percentage point increase in digital payment usage following demonetization, with usage continuing to rise over time. They also confirmed a positive relationship between prior cash dependence and increased spending.

To address potential econometric issues, the authors used instrument variables. They also considered the possibility that increased spending might have been driven by a shift from wet markets and street stalls to supermarkets. However, they excluded new customers from the sample, ruling out this explanation. Additionally, they explored whether existing customers who had previously shopped at informal markets for certain items might have shifted all their purchases to supermarkets post-demonetization. To test this, the authors examined spending patterns for food and non-food items, finding that non-food spending increased more than food spending, which rules out the shift explanation. Furthermore, customers with a lower share of food spending prior to demonetization increased their food spending more than those with higher pre-existing food expenditures, further dismissing the idea of a shift from informal to formal markets.

The authors also explored the impact of demonetization on the informal market, arguing that the shift to formal markets depends on how the informal market responds. If the informal market adopts digital payments, the impact of this shift would be reduced. They found that the adoption of mobile payments by Kirana stores increased significantly after demonetization, and those Kirana stores that had already adopted mobile payments saw a notable rise in transactions. Additionally, Kirana stores increased their informal credit to mitigate the effects of demonetization.

The authors also considered whether supermarket spending increased at the expense of other types of spending, such as food delivery. They found no decline in other spending categories. Another potential argument is that increased income could have driven higher spending, but the authors found only muted responses to negative income shocks. While credit card usage might have been expected to boost spending, the authors observed that the reduction in cash payments was offset by an increase in debit card usage, but not credit card usage.

The authors also addressed the possibility that increased prices due to digital payments might have led to higher consumer spending. To test this, they created a measure of exposure to cash-dependent consumers for each product, based on the average cash reliance weighted by spending. They found no differential impact on prices for products sold by high versus low exposure firms.

Further, the authors examined both transaction costs and the subdued endowment effect by comparing online and offline purchases using supermarket and online grocery store data. The assumption was that consumers would find online purchases with cash-on-delivery less painful than in-person cash transactions. They found that forced digital

adoption was stronger among consumers who were more reliant on cash before demonetization, even in retail store data, although the increase in spending remained modest.

Additionally, the authors explored the impact on temptation versus non-temptation spending. They found that a 10-percentage point increase in pre-existing cash dependence led to a 0.34 percentage point increase in the likelihood of spending on temptation goods, compared to a 0.8 percentage point increase for non-temptation goods. The increase in temptation spending was more pronounced among lower-spending consumers.

Based on these findings, we can learn that digital payments have transactions costs and subdued endowment effects affect consumer spending.

Highly Influential Paper in the field of Finance

Perpetual Futures Pricing⁴¹

Damien Ackrer⁴² Julien Hugonnier⁴³ Urban Jermann⁴⁴

Research paper summary prepared by Economic Policy and Research, NSE

Introduction

Perpetual futures contracts are innovative financial derivatives that lack an expiration date, allowing traders to speculate on the price movements of underlying assets without needing to roll over contracts. This structure enhances the investment process and liquidity, especially observed in cryptocurrency markets. The price of perpetual futures generally aligns with the spot price, although temporary deviations may arise due to market supply and demand dynamics. These discrepancies lead to "basis" variations, with funding payments from longs to shorts maintaining price alignment through periodic adjustments based on premium and interest terms. Various contract models exist, including standard linear contracts and variations such as inverse and quanto contracts, enabling speculation on exchange rates without actual fiat currency holdings. The paper addresses pricing of perpetual futures under no-arbitrage conditions, exploring both discrete and continuous-time formulations. Specifically, it derives funding specifications that ensure perpetual futures prices match the spot prices, yielding model-free expressions for linear and inverse contracts.

Model

Consider a discrete-time economy with two currencies, denoted as "a" and "b" where investors can freely exchange currencies and invest in two locally risk-free bonds denominated in units of each currency. Investors can invest in two locally risk-free bonds denominated in currency a and b respectively with return is denoted by r_t for period t to $t + 1$. Uncertainty in the model is capture through a probability space $\{\Omega, \mathcal{F}, P\}$ equipped with filtration $F = \{\mathcal{F}_t\}_{t \geq 0}$. The paper assumes the existence of a probability measure, Q^a , which is equivalent to the original probability measure, P , when restricted to any fixed time t , and under which the price of the b-denominated risk-free asset, expressed in units of a and discounted at the a-risk free rate, is a martingale.

A perpetual futures contract provides exposure to one unit of currency b from the perspective of an investor whose unit of account is currency a. The perpetual futures price, f_t , is quoted in units of currency a, and all margining operations are carried out in that currency. There is no fixed maturity of the contract, so it needs an alternative mechanism to ensure that futures prices stay anchored to the underlying spot prices. This is done by a tool called "periodic funding payment", which consists of two components: a premium part and an interest part. The premium part, which is proportional to the difference between the futures price and the spot price, serves as an automatic correction mechanism to keep the futures price anchored to the spot price. The sensitivity of the premium to the differential is denoted by (κ) usually set by the exchange. The interest (i) part reflects the interest rate differential between the two currencies.

If futures price is over the spot price at some time t the investors with long positions will have to pay the difference between the future and spot price moderated by the sensitivity parameter a time $t + 1$. This makes short selling more attractive and increases demand for short positions which ultimately pulls the futures price down. Similar reasoning holds in the other case where future prices are lower than spot prices at time t . In this case, investors holding long

⁴¹ NBER Working Paper September 2024

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positions will receive the difference between the future and spot price moderated by the sensitivity parameter a time $t + 1$. This makes long side more attractive and thus increases demand for it, which in turn pushes its price to spot levels.

Perpetual futures pricing

Authors derive the unique solution for the perpetual futures price that satisfies the no-bubble condition and shows that this solution can be represented as the expected value of the spot price under a random maturity.

The authors also provide a closed-form expression for the perpetual futures when sensitivity parameter governing the premium and interest rates on bonds satisfy a special condition and interest parameter (ι) is lower than the sensitivity parameter (κ). Additionally, they demonstrate that the exchange can choose the interest factor to ensure that the perpetual futures price and the spot price coincide for a sufficiently large premium rate, allowing for a perfect anchoring of the futures price to the spot price. The authors also find conditions where future price remains constant over time.

The paper also addresses alternative funding payment specifications, notably those employed by some exchanges, which involve a predictable funding rate and a mark value correlating closely with the spot price at the end of the funding period. This adjustment necessitates the modification of the cash flow representation⁴⁵ accommodate the new specifications⁴⁶. Despite these changes, the authors assert that the core findings of the study, including the calculation of the perpetual futures price as outlined above remain valid, provided the parameter adjustments are made accordingly.

Inverse futures pricing

The inverse perpetual futures contract offers exposure to the b/a exchange rate, and is quoted in units of currency a but margined and funded in currency b . This contract is particularly well-suited for cryptocurrency investors, as it can be run entirely on-chain without the need to own or transfer fiat currency. The contract size is fixed at 1 unit of a , and the b –denominated cash flow from holding a long position is determined by the inverse perpetual futures price, the price of a in units of b , and the contract-specific funding parameters. The absence of arbitrage requires the inverse futures price to satisfy a recursive equation, which can be solved under the no-bubble condition. This solution can be represented using a random time that follows a geometric distribution.

The inverse futures price behaves similarly to the linear futures price, being above the spot price if the interest spread is positive and converging monotonically to the spot price as the funding rate premium or the interest spread approaches zero. The key difference is that the inverse price is increasing in the interest factor, unlike the linear price, due to the inverse relationship between the currencies.

Similar exercise is done in case of continuous time. The results are similar as discussed above.

Perpetual quanto futures

Authors discuss perpetual quanto futures, which are contracts that provide exposure to the exchange rate between a third currency c and a base currency a , but are quoted, margined, and funded in a different currency b .

- An explicit expression for the perpetual quanto futures price is obtained under the assumption that the premium rate is constant, and the interest factor is zero, showing that the price is given by an exponentially distributed random time with mean inversely proportional to the premium rate.

⁴⁵ $(f_{t+1} - f_t) - \kappa(f_t - x_t) - \iota_t x_t$; where x_t is the exchange rate/spot price at time t and f_t is the futures price

⁴⁶ $(f_{t+1} - f_t) - x_{t+1} \hat{\kappa}_t - x_{t+1} \hat{\kappa}_t \left(\frac{f_t - x_t}{x_t} \right)$

- The paper provides a simple setting to illustrate the required convexity adjustment, showing that the perpetual quanto futures price is decreasing in the interest rate of the currency c and the funding rate, and increasing in the interest rate of the currency a .

Everlasting options

Everlasting options are perpetual futures contracts that track a function of the spot price rather than the spot price itself. Everlasting options work similar to perpetual futures, but the name can be misleading as they are not actually options but perpetual futures.

Authors show that the absence of arbitrage requires the futures price of the everlasting option to evolve according to a specific stochastic differential equation. The unique solution to this equation can be expressed in terms of a random time that follows an exponential distribution.

The paper also derives explicit pricing formulas for everlasting call and put options under the assumption of a geometric Brownian motion for the underlying exchange rate. Pricing of more general everlasting path-dependent options is also discussed, which can be achieved by exploiting the Laplace transform of the prices of corresponding European path-dependent derivatives.

Conclusion

This paper explored the arbitrage pricing of perpetual currency futures contracts. It explores both discrete-time and continuous-time formulations and identifies funding specifications for the linear and inverse contracts that ensure the futures price coincides with the spot price. Under the assumption of constant interest rates and funding parameters, the paper derives explicit model-free expressions for linear and inverse futures prices. It is shown that the perpetual futures price can be represented as the discounted expected value of the underlying price at a random time that reflects the funding specification of the contract. The paper also derives general continuous-time results for perpetual quanto futures and everlasting options, providing closed-form formulae for everlasting calls and puts in a Black-Scholes setting.

Highly Cited paper in the Field of Finance

Business News and Business Cycles⁴⁷

*Leeland Bybee*⁴⁸*Bryan Kelly*⁴⁹*Asaf Manela*⁵⁰*Dacheng Xiu*⁵¹

Research paper summary prepared by Economic Policy and Research, NSE

Introduction

This paper presents an approach to measuring the state of the economy through textual analysis of business news. The authors analysed the full text of 800,000 Wall Street Journal articles from 1984 to 2017 to estimate a topic model that summarizes business news into interpretable topical themes and quantifies the proportion of news attention allocated to each theme over time. They found that news attention closely tracks a wide range of economic activities and can forecast aggregate stock market returns. Using a text-augmented vector autoregression they find a significant incremental role of news text in forecasting macroeconomic dynamics. The study retrieved the narratives that underlie these improvements in market and business cycle forecasts. The authors utilize latent Dirichlet allocation (LDA) as a topic modelling technique to distil the extensive news articles into interpretable topics, offering a quantitative narrative of economic conditions. Their findings highlight that news articles reflect distinct, recurrent, seasonal, and emergent topics that align closely with numerical economic indicators. Key empirical results show that news attention correlates robustly with economic fluctuations, explaining a considerable variation in stock market movements and specific market activities, such as leveraged buyouts and initial public offerings. Importantly, they reveal that the "recession" news topic provides significant predictive power for future economic outcomes beyond standard indicators. The paper illustrates the efficacy of integrating textual analysis into macroeconomic modelling and suggests that narrative retrieval from news articles can enhance understanding of economic fluctuations. Additionally, it contributes to the growing literature on the intersection of text data and economic research, advocating for the utilization of news insights in forecasting and analysis.

Topic Model and Estimation

Authors analyse the structure of economic news text using the *Latent Dirichlet Allocation (LDA)* topic modelling approach. The Wall Street Journal (WSJ) text corpus represented as a "bag-of-words". The LDA topic modelling allows for the extraction of latent topics from the text data, providing a deeper understanding of the content and themes present in economic news articles.

LDA aims to provide a tractable thematic summary of the high-dimensional text data by imposing a factor structure with a smaller number of topics than the size of the vocabulary. Specifically, LDA assumes that the term counts in an article follow a multinomial distribution, where the expected term counts are summarized by two sets of parameters: the topic distributions ϕ_k and the article-specific topic proportions θ_t . The topics ϕ_k represent probability distributions over the vocabulary, capturing the common themes in the corpus, while the article-specific θ_t describes how each article allocates its attention across the topics. Bayesian methods, such as the collapsed Gibbs sampler, are used instead to generate estimates of the topic distributions and the article-topic proportions.

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Data Set

The Wall Street Journal (WSJ) data set consisting of all articles published in the WSJ from *January 1984* through *June 2017*. The authors take several steps to homogenize the data sample and reduce confounding effects of organizational changes to the WSJ over time. However, despite their homogenization efforts, the WSJ is an evolving product that undergoes structural shifts over the course of the sample period.

Topic Model Specification Choice

The selection of the number of topics (K), for *Latent Dirichlet Allocation (LDA)* is done using an unsupervised machine learning technique. The authors estimate models with K ranging from 50 to 250 topics in increments of 10 and selecting the model with the highest Bayes factor. They also use 10 –fold cross-validation, partitioning the data into 10 folds and evaluating the average log-likelihood of each model on the left-out samples. The authors find that a 170-to 180-topic specification approximately optimizes their specification criteria, based on the Bayes factor and cross-validation analyses. Manual inspection of the estimates also indicates that $K = 180$ is a sensible choice, as models with fewer topics produce mixed topics with multiple themes, while larger models have overly specific topics that capture one-off events. The authors note that all models in the neighbourhood of $K = 180$ look very similar in their topic composition.

D. *oLDA* for Avoiding Look-Ahead Bias

Researchers often aim to quantify how variables observable at a given time can forecast future outcomes, such as using topic attention in month t to predict stock market returns at $t + 1$. Look-ahead bias is a common concern in such forecasting analyses, as using variables constructed with information from future periods can bias the forecasting regression estimates. To overcome this bias, the paper utilizes the (*Dynamic Overhead Latent Dirichlet Allocation (D. oLDA)*) estimator, which constructs topic model estimates in a completely backward-looking fashion by processing documents sequentially in batches.

- This ensures that the topic attention estimates at time t are based only on data from periods 1 to t , making them a valid input for forming out-of-sample forecasts of $t+1$ outcomes without look-ahead bias.
- Unlike rolling re-estimation, *oLDA* preserves a coherent topic interpretation over time while accommodating evolving topics. The summary objectively presents the key points regarding the use of *D. oLDA* to address look-ahead bias in forecasting analyses, without any personal opinions or interpretations.

Authors Rescale topic-term weights to emphasize terms unique to each topic and downplay common words in the corpus this is done by sorting elements of term probability vectors, key terms that best represent the thematic content of a topic are identified. These key terms are essential for assigning labels to topics, aiding in their interpretation and classification. The paper demonstrates that in larger models with more topics, the separation of distinct subjects is clearer compared to smaller models where topics tend to mix themes, impacting the model's ability to identify important news events accurately.

Moreover, the paper reveals that most topics represent news subjects without explicitly evaluating whether the news is positive or negative. Some topics carry implicit appraisals, while others focus on sentiment-related aspects. The paper also discusses the advantages of having fine-grained topics that can be combined into broader meta topics, leading to a hierarchical structure of topics. The meta topic hierarchy aids in organizing news into categories such as "*economy*" and "*politics and culture*," enabling a more granular analysis of news topics. The research emphasizes the importance of a coherent and interpretable model for understanding news content accurately.

News Attention by Month

Authors also examine the time-series variation in attention for a subset of six illustrative topics in the Wall Street Journal (*WSJ*) news. The attention to a given topic is measured as a percentage of total monthly *WSJ* news production. The findings highlight several stylized facts about the composition of business news:

- News attention is generally persistent, as evident in the prolonged waves of high and low attention for topics like *"recession"* and *"health insurance."*
- Some topics exhibit seasonal patterns, such as *"elections"* coverage peaking every four years and *"earnings forecasts"* spiking ahead of quarterly earnings announcement seasons.
- Certain topics are characterized by emergent, event-driven coverage, like the *"terrorism"* topic spiking dramatically after 9/11 and the *"natural disasters"* topic rising sharply during events like *Hurricane Katrina*.

Selection via Lasso Regression

Authors use Lasso regression to select influential news topics related to economic activity for measurement purposes. A connection between numerical measurements of economic activity and topical content in news text is established. Due to the high-dimensional nature of the attention vector relative to the time-series observations, ordinary least squares regression is deemed unsuitable, leading to the adoption of Lasso regression with a specified penalty parameter. This choice ensures that only five out of 180 coefficients remain nonzero, enhancing result interpretability and preventing overfitting.

Analysing Macroeconomic Aggregates

Authors analyse the relationship between monthly data of macroeconomic aggregates—specifically output, employment, stock market returns, and volatility—and news attention. Notably, a lasso regression of log industrial production growth reveals that heightened news attention towards *"recession"* and *"oil market"* topics significantly correlates with reduced output growth, with a one-standard-deviation increase in *"recession"* attention leading to a 0.38 standard deviation decrease in output growth. This topic is identified as the most influential across all economic aggregates studied, with a similar increase in *"recession"* attention correlating to a 0.61 standard deviation drop in employment growth.

Further, the study shows that *"recession"* and *"problems"* attention positively affects market volatility, evidenced by large positive coefficients indicating their countercyclical nature, while the *"small business"* topic associates with low volatility. Overall, five selected news topics explain a substantial portion of variations in the aggregates, particularly noting that news attention accounts for 25% of stock market fluctuations. In comparisons with other economic indicators and macroeconomic variables, the news attention variables consistently demonstrate significantly higher explanatory power, highlighting their importance in understanding macroeconomic performance.

Analysing Financing Activity

The analysis focuses on two specific examples: monthly dollar volumes of IPOs and LBOs, and credit risk as measured by the monthly count of bankruptcies among U.S. public companies and average *credit default swap (CDS)* spreads among Eurozone sovereigns.

The results show that news attention closely tracks fluctuations in both IPO and LBO volumes. The news topics most strongly associated with each financing variable are thematically aligned, such as *"IPOs," "venture capital,"* and *"internet"* for IPOs, and *"takeovers," "control stakes," "key role,"* and *"job cuts"* for LBOs.

The analysis of credit risk also finds that news attention explains a significant portion of the variation in bankruptcy and Eurozone sovereign CDS spreads. The topics associated with bankruptcies include *"recession," "accounting," "venture capital,"* and *"small caps,"* while the lone significant topic for Eurozone CDS spreads is *"European sovereign debt."* Overall, it demonstrates the informative value of news attention data in tracking and understanding different aspects of financing activity, from primary markets to credit risk.

Analysing Industry Volatility

The authors use the 49-industry categories from Ken French's website and measure monthly volatility as the standard deviation of daily industry returns within the month. To focus on industry-specific volatility patterns distinct from aggregate market volatility, they perform two adjustments to the raw industry volatility data: orthogonalizing each industry volatility series against the first principal component of the industry volatility panel, and constructing the $AR^{52}(1)$ innovations in the adjusted series. The authors report results from five-regressor lasso regressions of industry volatility innovations on $AR(1)$ innovations in news topic attention. They find that the influential topics in each regression are thematic counterparts for the respective industry. For example, banking sector volatility is linked to news attention on "nonperforming loans" and "mortgages," while computer hardware industry volatility is associated with "retail," "computers," and "software" topic attention. The authors also find some unintuitive but significant topic assignments, such as "cultural life" in the oil and gas industry regression, though these are rare. The results are largely unchanged if the authors use levels of orthogonalized industry volatility rather than $AR(1)$ innovations.

News Attention and Macroeconomic Dynamics

Here the authors examine the potential of news narratives to provide insights into macroeconomic dynamics that extend beyond the information captured by standard numerical indicators. It notes that the previous analyses have focused on the contemporaneous correlations between news narratives and economic time series, which helps validate the usefulness of news data in summarizing the state of the economy. However, the key question addressed in this section is whether news text conveys novel information that is distinct from that contained in standard macroeconomic indicators and whether it can help in modelling longer-term macroeconomic trajectories. The authors indicate that this is an important issue to explore, as it would shed light on the potential value of incorporating news-based measures into macroeconomic analysis and forecasting frameworks. The section suggests that investigating the dynamic relationships between news narratives and macroeconomic variables over time, as well as the incremental predictive power of news-based measures, could yield valuable insights into the role of news in shaping economic outcomes.

Macroeconomic VAR

The authors build upon the five-variable monthly VAR specification studied by *Bloom, Baqaee, Dust (BBD)*, which includes the economic policy uncertainty (EPU) index, log value of the S&P 500 index, Federal Reserve funds rate, log employment, and log industrial production. In the baseline formulation, the authors augment the VAR to include news attention to the "recession" topic, replacing EPU. They estimate the VAR using data from 1985 to 2017 and plot output and employment impulse-response functions for a shock to "recession" news attention. The results show that a shock to "recession" news attention generates a 1.99% drop in industrial production after 17 months and a 0.92% decline in employment after 20 months, which are larger in magnitude compared to the responses to EPU shocks. The authors also consider alternative VAR specifications, such as ordering news attention last or second, controlling for EPU, the Michigan Consumer Sentiment Index, and the VIX index. The findings remain qualitatively unchanged, demonstrating the robustness of the baseline results.

News Attention and Stock Market Dynamics

Here authors analyse the relationship between news attention and stock market dynamics. The key findings are:

- There is a strong contemporaneous correlation between stock market returns and news attention, which is not captured by traditional macroeconomic data. This suggests that news text, like the stock market, reflects agents' expectations of the future macroeconomy in a way that is not well-reflected in numerical data.

⁵² Auto-regressive Order 1

- "Recession" attention contains information about future macroeconomic outcomes that is not fully reflected in stock prices. A positive "recession" attention shock has a large negative impact on future output, even when ordered after the stock market.
- The dynamic association between recession news and stock prices shows that upon a positive "recession" attention shock, stock prices initially drop by about 5%, but continue to drop further over the next year, reaching 7% below pre-shock levels.
- The magnitude of the stock market's response to "recession" attention shocks is about double the response to economic policy uncertainty (EPU) shocks, and these differences are statistically significant. Overall, the paper highlights the informational content of news attention measures and their important implications for understanding stock market dynamics and macroeconomic forecasting.

Avoiding Look-Ahead Bias with oLDA

The study undertakes a VAR analysis using estimates from the *online Latent Dirichlet Allocation (oLDA)* topic model to avoid look-ahead bias present in previous analyses. Researchers identify the topic most akin to "recession" by comparing top word lists and apply the oLDA framework to assess its impact. The impulse-response figures generated from oLDA are contrasted with those derived from full-sample LDA. Results indicate that while the oLDA "recession" news attention shock produces a slightly reduced effect on industrial production and employment compared to full-sample LDA estimates, the differences are not substantial. Specifically, the oLDA output at a fifteen-month horizon shows a decline of 1.27%, which is a lesser drop than the 1.94% observed with full-sample LDA. Employment effects exhibit a similar pattern, decreasing from 0.86% to 0.76% when transitioning from LDA to oLDA. This reduction in effect size could stem from diminished look-ahead bias or increased noise in the estimates due to shorter sample periods. Nonetheless, while the estimates differ in the short term, they converge at longer horizons, indicating similarity in statistical significance.

Over a Century of Business News: 1890 to 2017

The study extends the focus from the 1984 to 2017 period back to earlier years by leveraging the WSJ front-page titles and abstracts collection. To achieve this, the researchers use a topic model from the main sample (1984 to 2017) to estimate topic attention in the abstracts corpus from 1890 to 1983. By combining the attention estimates from both samples, they create a unified time series of topic attention, providing insights into over 20 recessions. The analysis reveals that the WSJ dedicates more coverage to recessions during National Bureau of Economic Research (NBER) recessions. Interestingly, recession attention often anticipates the start and end of recessions. The study then replicates a *Vector Autoregression (VAR)* analysis from 1939 to 2017, comparing the impulse-response functions with more recent data. The results indicate similar short-term responses of industrial production and employment to recession news shocks across samples. However, the longer sample shows more persistent long-run effects, with less reversion compared to the shorter sample. Robustness checks using data from 1937 to 1984 produce similar estimates to those from the main 1984 to 2017 sample, highlighting the consistency of the findings across different time frames.

Attention Selection in a Text-Augmented VAR

The research examines the specification of a *Vector Autoregression (VAR)* model, focusing on "recession" news as the sole news topic variable. This approach is justified statistically, balancing model fit and parameter simplicity. Given the extensive range of news attention series, including all would induce "degrees-of-freedom problems," so the model prioritizes predictors that significantly impact macroeconomic dynamics. Utilizing cross-validated lasso regression, the study begins with key macroeconomic indicators (*S&P 500 index, Fed funds rate, employment, industrial production*) as primary variables. A total of 183 predictors, including various news series, are assessed, with attention to lags of both dependent and independent variables. The method employs group-lasso, promoting the selection of entire groups of predictors for forecasting macroeconomic outcomes, which enhances reliability in variable selection. Results

highlight the dominance of "recession" news in predictive capability, surpassing other predictors such as EPU, VIX, and consumer sentiment. The optimal lasso penalty parameter ($\lambda = 0.054$) is determined through 10-fold cross-validation, confirming that including only recession attention is the best model for this study. Thus, the text-augmented VAR specification effectively employs recession attention as the statistically optimal news variable.

The *Vector Autoregression (VAR)* model employed in the study showcases a significant value in integrating news attention for comprehending economic dynamics. The authors suggest that news media mirrors individuals' perceptions of the economy, encompassing their anticipations of future macroeconomic conditions. This revelation that news media can provide additional insights beyond traditional numerical macroeconomic data highlights the information richness encapsulated in news, reflecting multi-faceted perceptions of the surrounding world distilled into narratives. The paper presents evidence of economic fluctuations emanating from news, illustrating four key phenomena. Firstly, business news offers insights into expectations regarding future productivity. Secondly, the role of noise in business cycle dynamics is highlighted, emphasizing how imperfections in macroeconomic expectations, as reflected in news media summaries, can induce economic activity volatility. Additionally, sentiments of economic agents akin to Keynesian "animal spirits" play a pivotal role in driving fluctuations, reflected in news text through influential figures' interviews. Lastly, the influence of media firm incentives and consumer demand on news production underscores how media slant can impact economic dynamics. The study advocates for the integration of economic models with news attention to enhance inference and interpretation, suggesting potential applications such as leveraging text narratives to decipher survey revisions, forecast errors, or interpreting residuals derived from *Dynamic Stochastic General Equilibrium (DSGE)* models.

Narrative Retrieval

The Authors also propose a narrative retrieval scheme to integrate textual narratives into macroeconomic models, complementing traditional methods. The approach traces future macroeconomic outcomes to prevailing levels of news attention through estimated VAR coefficients, and then further links economic fluctuations to specific textual narratives using topic model estimates. The paper demonstrates this approach in a baseline VAR, studying the narrative determinants of output expectations. It identifies articles with the greatest allocation to the "recession" topic as the largest contributors to month-to-month variation in "recession" attention, and highlights how these articles reflect theories of news-driven business cycles. For example, the *April 2001* article "Consumer Confidence Slides on Fears of Layoffs" suggests a narrative of deteriorating consumer demand arising from declining expectations for future growth. The paper also examines other informative articles, such as the *September 2015* article on the Dow's drop, which points to heterogeneous belief propagation as a potential rationale for news text providing large predictive information above S&P 500 valuations. Overall, the narrative retrieval approach offers a new way to integrate textual narratives into macroeconomic models and analysis.

V. Stock Market Timing

In inefficient markets, some information may not be fully integrated into stock prices, while behavioural biases could drive predictability from specific news topics. Conversely, even in efficient markets, rational responses to heightened news attention—such as recession reports indicating increased disaster probabilities—could lead to higher expected returns. To minimize look-ahead bias in return predictability analysis, the authors employ an out-of-sample Latent Dirichlet Allocation (oLDA) topic attention model alongside traditional LDA estimates. They use a lasso-based forecasting approach with five regressors, focusing on detrended monthly news attention metrics. To assess the economic relevance of their forecasts, the authors develop a market-timing strategy based on the one-month-ahead return forecasts derived from their model. They benchmark this strategy against a buy-and-hold approach and alternative text-based trading strategies involving recession mentions and economic policy indices, all detrended similarly to their LDA attention series.

Out-of-Sample Performance of Market-Timing Strategies

Authors use some conventional strategies and compare them. The buy-and-hold strategy represents a baseline where the market is held continuously. The LDA strategy uses a lasso approach with the full-sample LDA attention series as a predictor, while the *oLDA* strategy uses an out-of-sample version of the LDA predictor. Other strategies include using the frequency of the word "recession" in the Wall Street Journal (R-word), the Economic Policy Uncertainty (EPU) index, and a "kitchen sink" regression with 15 predictors (GW). The GW Lasso strategy applies a lasso procedure to the same 15 predictors. All strategies, except buy-and-hold, hold the forecasted market return for the following month. For the buy-and-hold strategy, the predictors are used to regress the next month's stock market returns during a training period, and the predicted return is then used to determine the position size. The paper compares the annualized performance measures of these different market-timing strategies to evaluate their effectiveness.

The authors report annualized performance statistics, including *Sharpe ratio*, *expected return*, *information ratio*, *alpha*, and *maximum loss*, for different strategies. The key findings are:

- The LDA (Latent Dirichlet Allocation) and *oLDA* (online LDA) strategies generate the highest Sharpe ratio, alpha, and alpha t-statistic, indicating that paying attention to WSJ coverage can be quite rewarding and lucrative to investors.
- The GW (Welch and Goyal "kitchen sink" regression) strategy is the worst performer, even when using a lasso regularization approach, suggesting that the advantage of LDA is not solely due to its use of regularization.
- The ability of the LDA strategy to outperform the market benchmark demonstrates that paying attention to Wall Street Journal (WSJ) coverage can be profitable for investors.
- The unsupervised dimensionality reduction of the newspaper text using LDA effectively summarizes the main themes, enabling the forecasting model to estimate expected market returns based on high-level topics rather than specific word usage. The results highlight the potential of using news attention, particularly the LDA approach, as a valuable signal for market timing and investment strategies.

Conclusion

The paper discusses a novel approach to understanding economic fluctuations by analysing narratives found in business news, rather than relying solely on numerical macroeconomic indicators. The authors argue that news articles serve as a reflective medium of economic conditions, capturing the sentiments and perceptions of consumers and investors. They acknowledge that while news can provide valuable insights, it may also contain biases and noise. Utilizing a topic modelling technique, the study identifies various themes prevalent in financial discussions and measures the attention given to each theme over time. The findings demonstrate a strong correlation between these identified topics and traditional economic indicators such as output, employment, and asset prices. Furthermore, the analysis reveals that news topic attention has a significant impact on economic dynamics, suggesting that these narratives can complement existing economic models. The authors introduce a narrative retrieval method that allows researchers to explore the contextual narratives behind specific economic fluctuations, enabling a more nuanced understanding of the drivers influencing economic expectations.

Market performance

Market round-up

Emerging markets tread Trump's victory with caution

Donald Trump's landslide victory in the US Presidential elections and the Republican party securing a majority in both chambers of the Congress effectively mean a stronger support for the new Government's policies and agenda. As such, strengthened expectations of fiscal stimulus, tax cuts and trade protectionism boosted the US equity markets. Other developed market equities, however, turned cautious and corrected marginally, weighed down by uncertainty about the US trade policy and the extent of tariff hikes. Developed equities (MSCI World Index) rose by 4.5% in November, led by the US, while Europe, UK, Japan and Hong Kong equities ended the month with modest losses. In fact, the US has been the best performing market this year, with the S&P 500 Index rising by 23% in 2024 thus far (As of December 19th, 2024). Emerging markets (EM) navigated Trump's victory with caution, thanks to trade policy uncertainty, strengthening US dollar and receding rate cut expectations, that triggered capital outflows from most emerging markets. The MSCI EM Index declined by 3.7% in November, translating into a 7.9% fall during Oct-Nov'24, only to remain broadly steady in December thus far (YTD: +5.7%).

Notwithstanding a volatile performance in early November following Trump's victory, global debt ended the month in green, aided by rate cuts across the board. The gains, however, were short-lived, as tapered rate cut guidance by the US Fed weighed on global debt markets in December. The US 10-year sovereign yield eased by 9bps in November, but hardened by a steep 37bps in December thus far (As of December 19th) to 4.6%, translating into a total increase of 70bps this year despite a total of 100bps cut in Fed funds rate.

After seeing the highest monthly drop since the pandemic, Indian equities consolidated and ended flat in November, outperforming the broader EM pack. Uncertainty around Trump's trade policies apart, weaker-than-expected corporate earnings in the second quarter and sustained foreign capital outflows weighed on domestic equities, partly offset by strong support by domestic institutional investors. The benchmark Nifty50 Index ended the month of November 0.3% lower and declined further by 0.7% in December thus far (YTD: +10.2%). While the Nifty Mid-cap 50 ended with a modest 1.0% gain, Nifty Small-cap 50 remained flat in November 2024. Echoing the global trend, the Indian bond market also ended in green at 6.75% in November, even as the cautious policy stance by the RBI amid elevated inflation and tapering rate cut expectations in the US kept the gains contained.

- **Indian equities remained volatile in November but ended flat:** After witnessing a sharp sell-off in October, Indian equities continued the trend in the first half of November, translating into a total drop of 10.9% from the September-peak. The trend, however, reversed partly in the second half, with the Nifty50 ending the month with a modest decline of 0.3%. Stretched valuations, weak second quarter corporate earnings, continued sell-off by foreign investors and uncertainty around assembly elections (Maharashtra and Jharkhand) kept investor sentiments jittery. On the global front, persistent geopolitical tensions, and policy uncertainty in the US added to the caution. Strong buying by DIIs, however, provided the much-needed downside support for the second month in a row. The benchmark Nifty50 Index ended the month of November 0.3% lower and fell by a further 0.7% in December thus far (As of December 19th, 2024), translating into a 10.2% gain in 2024 till date. While the Nifty Mid-cap 50 Index rose by a modest 1% in November, rising further by 4.0% in December thus far, the Nifty Small-cap 50 Index ended the month of November flat, only to rise by 2.2% in December thus far.

The benchmark Nifty 50 Index remained volatile, only to end flat in the month of November, even as YTD return (As of December 19th, 2024) remains decent at 10.2%.

Average daily turnover (ADT) in NSE's cash market declined for the fifth month in a row by 5.7% MoM to Rs 1.0 lakh crore—the lowest in this fiscal year, but rose by

6.3% to Rs 1.07 lakh crore in December till date (As of December 19th, 2024). This has translated into ADT of Rs 1.2 lakh crore in FY25 till date, nearly 46.3% higher than that in FY24. ADT in the equity options segment (premium) also declined by 12.8% MoM to a 12-month low of Rs 61,000 crore, and further by 10.4% to Rs 54,664 crore in December thus far, reflecting the impact of discontinuation of weekly expiries on all but Nifty contracts w.e.f. November 20th. This translates into an ADT of Rs 66,973 crore in FY25 thus far (As of December 19th, 2024), nearly 8.4% higher than that in the whole of FY24. In the equity futures segment, ADT fell for the second month in a row by 8.3% MoM in November and further by a steep 28.2% MoM in December thus far to a 13-month low of Rs 1.22 lakh crore. Notwithstanding the recent decline, ADT in the equity futures segment in the fiscal year thus far at Rs 1.93 lakh crore is 28.7% higher than that in the whole of FY24.

- **Indian yields moved lower in November:** Global debt, after selling off sharply in October and exhibiting a volatile trend in early November, ended in modest green, aided by monetary easing by some global central banks. The US Fed slashed the Fed funds rate by 25bps in November after a 50bps cut in September, translating into a total cut of 100bps this year. The Bank of England also reduced its policy rate by 25bps as investors turned cautious ahead of the US presidential elections. The rally, however, was contained, thanks to incrementally strengthening expectations of the quantum and the pace of rate cuts reducing next year owing to potentially expansionary fiscal policies adopted in the Trump administration. This resulted in yields hardening across the board in December. The US 10-year sovereign yield fell by 9bps in December but rose by 37bps in December thus far to 4.6%, translating into total increase of 70bps in the year till date. Other developed markets echoed into this trend, with the 10-year sovereign yields in the EU, and UK falling by 30bps and 20bps in November, only to rise by 22bps and 33bps in December thus far (As of December 19th, 2024) to 2.3% and 4.6% respectively. The Indian debt market echoed the global trend, exhibiting volatility due to US elections. Initially the 10-year benchmark rose to 6.9% before dropping to 6.7% as the month ended. The decline was partly led by a softer Q2 GDP print which came in at 5.4%, slowing down considerably from 6.7% last quarter. The modest downward bias in November was also supported by easing domestic inflation and global commodity prices. Yields, however, remained range-bound in December, as receding rate cut expectations in the US were partly offset by liquidity support provided by the RBI in the form of a 50bps CRR cut.
- **DIIs compensated continued selling by FPIs:** The selling spree by FPIs, that was at an all-time high in October, continued in November, as an expected implementation of an increasingly protectionist trade policy by the new Government in the US triggered flight of capital away from emerging markets to the US. India felt the brunt too, with weaker-than-expected second quarter earnings adding to the cautious sentiments. Net FPI outflows stood at US\$2.6bn in November, taking the total net outflows to US\$13.8bn during Oct-Nov'24. FPIs, however, reentered the Indian markets after the correction, and injected a net amount of US\$2.7bn in December thus far (As of December 19th, 2024). DIIs, however, fully compensated for the FPI outflows over the last two months, investing a net amount of US\$18.0bn (Rs 1.5 lakh crore), thereby providing downside support to the markets, and another US\$1.8bn in December thus far. In fact, December marked the 17th consecutive month of positive net investments by

DII, translating into net inflows of US\$ 47.7bn or Rs 4 lakh crore in the fiscal year thus far (As of December 19th, 2024)—the highest ever. FPI activity in the debt market remained muted for the fourth month in a row, with net inflows since September coming in at a mere US\$306m, translating into net FPI inflows of US\$6.7bn in Indian debt markets in FY25 thus far.

- **Global equities exhibit diverging trends in November:** Global equities showed a mixed performance in November, with the US markets leading the gains, driven by the Republican's clean sweep in the elections and optimism surrounding Donald Trump's policies, including tax cuts, deregulation, and fiscal expansion. Developed equities (MSCI World Index) expanded by 4.5% in November. US equities surged, bolstered by a 25bps rate cut by the Federal Reserve and robust macroeconomic data, including strong retail sales. In contrast, European markets faced headwinds, particularly from trade concerns, political instability, and weak economic data, resulting in a decline in US dollar terms. Emerging markets underperformed, with Latin America and parts of Asia seeing the steepest declines due to a stronger dollar, trade concerns, and weak commodity prices. Asian markets, especially South Korea, and Hong Kong, were also pressured by concerns over potential US tariffs and weaker-than-expected stimulus measures.

US: The US markets surged following the landslide victory of Republicans in the US Presidential elections. The S&P 500 Composite Index displayed its best monthly performance of the year as it grew by 5.7% in November, though it dropped by 2.7% in December thus far, translating into YTD return of 23.0% (As of December 19th, 2024). The Dow Jones Index outperformed the S&P 500 Composite Index as it rose by 7.5% MoM, though it fell by 5.7% in December thus far, reflecting YTD gain of 12.3% (As of December 19th, 2024). The strong equity performance was supported by sectors that stand to benefit from Trump's pro-growth policies, including Financials, Consumer Discretionary, and Energy. Further, expectations of inward investments driven by protectionist measures and domestic firms being the primary beneficiaries of the new administration's focus on deregulation and tax cuts led to a robust performance by small companies.

On the macro front, the S&P Global US manufacturing PMI expanded for the second consecutive month as it inched upwards to 49.7 in Nov'24 (vs. 48.5 in Oct'24). Services PMI marked a substantial growth in the services sector activity since Mar'22 as it expanded to 56.1 in November (vs. 55.0 in Oct'24). The US economy added 227k jobs in Nov'24, substantially higher than the revised 36k jobs in October, and the expected 200k jobs. The unemployment rate increased to 4.2% in November, up from 4.1% in October. Further, the number of unemployed people increased by 161k to 7.1 million. The annual rate of inflation inched up to 2.7% in November from 2.6% in the previous month.

Europe: In stark contrast to the US, the Eurozone struggled to gain momentum. European equities saw modest declines, reflected by a 0.5% fall in the Euro Stoxx 50 Index in November, though it grew by 1.6% in December thus far, resulting in YTD return of 7.9% (As of December 19th, 2024). The weak performance can be attributed to a combination of domestic economic fragility and concerns over potential US tariffs. Political instability also weighed on sentiment, particularly in Germany and France. Notably, despite these challenges, some sectors performed

better than others. Information Technology and Communication Services saw gains, while Materials and Consumer Staples lagged. Exporters faced headwinds from the specter of US tariffs and weaker demand from China. However, the stronger dollar did offer some relief to European exporters. Following a sequential decline for two consecutive months, UK equities witnessed a rebound in November, reflected by the 2.2% rise in the FTSE 100 in November, followed by a moderation of 2.2% in December thus far, resulting in YTD returns of 4.8% (As of December 19th, 2024).

On the macro front, the Eurozone's HCOB Eurozone Manufacturing PMI slipped to 45.2 in November, signaling a sharp decline in production and fresh orders in the Euro Area's manufacturing sector. The HCOB Eurozone Services PMI fell to 49.5 in Nov'24 (vs. 51.6 in Oct'24), the first contraction since Feb'24, even as employment in the sector continued to grow. For the first time since May'24, a reduction in manufacturing output was observed owing to a jagged fall in fresh orders. Although the volume of new orders grew for the 13th consecutive month, employment fell for two months in a row, in the backdrop of the fastest acceleration in cost inflation since Apr'24. The Eurozone's Q3 GDP increased by 0.4% on a quarter-on-quarter basis. The annual inflation in the Euro Area increased to 2.2% in Nov'24 (vs. 2.0% in Oct'24), primarily due to services and food.

Asia: Asian equities underperformed in November amidst a backdrop of heightened trade uncertainty. The potential for Trump's re-election to reignite trade tensions, particularly with China, weighed on market sentiment. India benefited from domestic buying amidst concerns over rising inflation and a depreciating rupee. Indian equities (Nifty 50) fell by 0.3% in November, and further moderated by 0.7% in December thus far, translating into YTD gains of 10.2% (As of December 19th, 2024). On the contrary, the Shanghai SE Composite Index grew by 1.4% in November, and further by 1.3% in December, translating into YTD gain of 13.3%. Hong Kong equities were the least resilient among its Asian peers, evident by a 4.4% drop in the Hang Seng Index in Nov'24, though it recovered some of its losses as it grew by 1.7% in December so far, resulting in YTD returns of 15.9%. South Korean equities moderated by 3.9% in November, and further by 0.8% in December thus far, translating into YTD loss of 8.3%. Taiwanese equities shared a similar fate, demonstrated by a 2.4% fall in November, but surged by 3.0% in December thus far, translating into a YTD gain of 27.9%. Following a noteworthy performance in October, Japanese equity markets contracted in November, indicated by a 2.2% drop in Nikkei 225 Index, though it rose by 1.6% in December so far, resulting into a YTD gain of 16.0% (As of December 19th, 2024).

On the macro front, India's manufacturing and services sectors showed strong growth, though at a slower pace. The Manufacturing PMI dropped to 56.5, reflecting solid but decelerating expansion in output and new orders, with rising competition and price pressures. Employment continued to rise, and while input costs increased, manufacturers remained positive about future demand and new product launches. Similarly, the Services PMI was revised to 58.4, indicating continued growth in activity, driven by strong demand and new business, including a rise in export orders. Employment hit a record high, but cost pressures, particularly from food and wages, led to higher prices. Despite these challenges, business confidence improved, with firms optimistic about sustained demand and

upcoming marketing efforts. Further, the headline inflation eased to 5.5% in Nov'24, aided by a fall in food prices, while unemployment rate fell to 8.0% in November (vs. 8.7% in Oct'24).

- **Commodity prices show mixed performance:** The S&P GSCI Index rose by 0.3% MoM in November 2024, reflecting a modest improvement in the overall commodity market, primarily led by select hard and agri commodities. Oil prices remained broadly steady, ending the month of November at US\$73.2/barrel. The performance of precious metals was lacklustre, with gold and silver prices falling by 3.0% and 6.3% MoM respectively. Palladium saw the most significant decline of 12.6% MoM, while Platinum prices fell by 5.5% MoM. Industrial metals showed mixed performance, wherein Lead (+3.4% MoM), Nickel (+1.4% MoM), Zinc (+2.6% MoM) and Iron Ore (+1.0% MoM) experienced gains while Tin (-7.5% MoM), Aluminium (-0.6% MoM) and Copper (-5.1% MoM) continued to experience headwinds. Except for Raw Sugar (-6.0% MoM), agricultural commodities fared well as Soyabean (+1.4% MoM), Wheat (+9.0% MoM), Corn (+2.9% MoM) and Cotton (+4.3% MoM) registered a rise in prices.
- **Dollar strength continues to pressure EM currencies:** The rupee breached the 85-level mark, touching a new historic low of 85.1 against the greenback on Dec 19th, while registering sequential declines (-0.5% MoM in Nov'24 vs -0.3% in Oct'24). This downward movement was driven by a strengthening dollar index (+5.0% since September-end) amid the Fed's hawkish stance and President-elect Trump's tariff threats, which heightened expectations of increased US capital flows. Despite these headwinds, the INR maintained its position as one of the most stable currencies, with the lowest average annualized volatility among peers at 1.5% for the third consecutive month, supported by strong domestic fundamentals and RBI intervention. The currency's sustained overvaluation, as evidenced by the 40-currency trade-weighted REER of 107.2 (+2% YoY) and NEER of 90.9 (-0.9% YoY), has continued for the 17th consecutive month. Meanwhile, the one-year forward premia edged down marginally (-6 bps) to 2.1%, reflecting expectations of an imminent Fed rate cut, though remaining below the post-pandemic peak of 5.3%, amid record high trade deficit of US\$37.8 bn and sustained FPI outflows during Oct-Nov'24.

The S&P GSCI Index increased by 0.3% MoM in November, posting a marginal growth for two consecutive months (As of November 30th, 2024).

Market performance across asset classes

Table 37: Performance across equity, fixed income, currency, and commodity markets (As on Nov 30th, 2024)

Indicator Name	Nov-24	1M ago	3M ago	12M ago	1M (%)	3M (%)	6M (%)	12M (%)	YTD (%)
Equity Indices									
NIFTY 50	24,131	24,205	25,236	20,133	-0.3	-4.4	7.1	19.9	11.0
NIFTY 500	22,687	22,689	23,735	17,988	-0.0	-4.4	7.5	26.1	16.8
MSCI INDIA	2,889	2,890	3,059	2,306	-0.0	-5.5	6.3	25.3	16.2
India Volatility Index (%)	14	16	13	13	-7.2	7.7	-41.4	13.7	-0.5
MSCI WORLD	3,810	3,647	3,661	3,024	4.5	4.1	10.6	26.0	20.2
S&P 500 COMPOSITE	6,032	5,705	5,648	4,568	5.7	6.8	14.3	32.1	26.5
DOW JONES INDUSTRIALS	44,911	41,763	41,563	35,951	7.5	8.1	16.1	24.9	19.2
HANG SENG	19,424	20,317	17,989	17,043	-4.4	8.0	7.4	14.0	13.9
FTSE 100	8,287	8,110	8,377	7,454	2.2	-1.1	0.1	11.2	7.2
NIKKEI 225	38,208	39,081	38,648	33,487	-2.2	-1.1	-0.7	14.1	14.2
Fixed Income									
India 10YR Govt Yield (%)	6.75	6.84	6.86	7.28	-9bps	-11bps	-23bps	-53bps	-43bps
India 5YR Govt Yield (%)	6.71	6.77	6.77	7.29	-7bps	-7bps	-35bps	-58bps	-36bps
India 1YR Govt Yield (%)	6.72	6.61	6.74	7.23	10bps	-3bps	-22bps	-51bps	-40bps
India 3Month T-Bill Yield (%)	6.65	6.69	6.82	7.18	-4bps	-17bps	-42bps	-52bps	-43bps
US 10YR Govt Yield (%)	4.19	4.28	3.92	4.34	-9bps	28bps	-29bps	-15bps	33bps
Germany 10YR Govt Yield (%)	2.09	2.39	2.29	2.45	-30bps	-20bps	-56bps	-36bps	6bps
China 10YR Govt Yield (%)	2.05	2.15	2.18	2.69	-9bps	-13bps	-27bps	-63bps	-53bps
Japan 10YR Govt Yield (%)	1.05	0.95	0.89	0.67	10bps	16bps	-3bps	38bps	42bps
Currency									
USD/INR	84.5	84.1	83.9	83.4	0.5	0.7	1.2	1.3	1.5
EUR/USD	1.1	1.1	1.1	1.1	-2.7	-4.6	-2.7	-3.2	-4.4
GBP/USD	1.3	1.3	1.3	1.3	-1.1	-3.3	-0.2	0.4	-0.3
USD/YEN	150.2	152.3	145.6	147.8	-1.4	3.1	-4.4	1.6	6.5
USD/CHF	1.1	1.2	1.2	1.2	-1.9	-3.7	2.4	-1.3	-4.5
USD/CNY	7.2	7.1	7.1	7.1	1.6	2.0	-0.2	1.4	2.0
Commodities									
Brent Crude Oil (US\$/bbl)	73.2	73.2	78.9	80.7	0.0	-7.2	-10.5	-9.3	-5.8
LME Aluminium (US\$/MT)	2,576.7	2,591.6	2,423.7	2,155.8	-0.6	6.3	-1.2	19.5	9.9
LME Copper (US\$/MT)	8,891.9	9,373.6	9,118.1	8,387.5	-5.1	-2.5	-10.3	6.0	5.1
LME Lead (US\$/MT)	2,047.6	1,979.5	2,021.3	2,092.2	3.4	1.3	-7.6	-2.1	0.7
LME Nickel (US\$/MT)	15,671.3	15,452.6	16,538.7	16,438.0	1.4	-5.3	-19.5	-4.7	-4.3
LME Tin (US\$/MT)	28,695.2	31,012.0	32,506.0	22,984.0	-7.5	-11.7	-12.5	24.9	14.0
LME Zinc (US\$/MT)	3,108.7	3,031.2	2,846.7	2,466.8	2.6	9.2	6.7	26.0	17.8
SHC Iron Ore Spot (US\$/MT)	106.0	105.0	102.5	132.5	1.0	3.4	-9.4	-20.0	-25.6
Gold Spot Price (US\$/troy ounce)	2,659.5	2,740.8	2,505.3	2,037.8	-3.0	6.2	14.1	30.5	28.8
Silver Spot Price (US\$/troy ounce)	30.6	32.7	28.9	25.3	-6.3	6.1	0.8	21.2	28.8
Platinum Spot Price (US\$/ounce)	940.0	995.0	940.0	937.0	-5.5	0.0	-10.3	0.3	-6.6
Palladium Spot Price (US\$/ounce)	983.0	1,125.0	980.0	1,025.0	-12.6	0.3	3.6	-4.1	-12.2
Soyabeans (US\$/bushel)	9.6	9.5	9.7	13.0	1.4	-0.4	-18.4	-26.1	-24.1
Corn (c/lb)	423.3	411.3	378.5	460.5	2.9	11.8	-5.1	-8.1	-10.1
Wheat (US\$/bushel)	5.5	5.1	4.7	5.9	9.0	18.1	-17.8	-6.3	-13.0
Cotton (US\$/lb)	0.7	0.7	0.7	0.8	4.3	4.0	-6.2	-11.9	-13.5
Raw Sugar (c/lb)	20.0	21.3	19.3	25.1	-6.0	3.7	8.9	-20.3	-2.3

Source: LSEG Workspace, Cogencis, NSE EPR

Table 38: Performance (total returns) across global asset classes (As on November 30th, 2024)

Asset performance (Ranked by % change each year)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024TD
SSE Comp 52.9	Bitcoin 34.2	Bitcoin 122.7	Bitcoin 1,394.5	Nifty 50 4.6	Bitcoin 94.1	Bitcoin 304.5	Bitcoin 59.4	WTI Crude 6.7	Bitcoin 153.5	Bitcoin 66.9
Nifty 500 39.3	STOXX 600 10.2	WTI Crude 45.0	MSCI EM \$ 37.8	Nasdaq 100 0.0	Nasdaq 100 39.5	Nasdaq 100 48.9	WTI Crude 55.8	Nifty 50 5.7	Nasdaq 100 55.1	Gold 32.7
Nifty 50 32.9	Nasdaq 100 9.8	FTSE100 19.1	Nifty 500 37.7	Gold -1.7	WTI Crude 35.3	Gold 24.8	Nifty 500 31.6	FTSE100 4.7	Nifty 500 26.9	S&P500 21.0
Nasdaq 100 19.4	SSE Comp 9.4	DJIA 16.5	Nasdaq 100 33.0	Nifty 500 -2.1	S&P500 31.5	Russell 1000 21.0	S&P500 28.7	Nifty 500 4.3	Russell 1000 26.5	Russell 1000 20.3
S&P500 13.7	S&P500 1.4	Russell 1000 12.1	Nifty 50 30.3	DJIA -3.5	Russell 1000 31.4	MSCI EM \$ 18.7	Nasdaq 100 27.5	Gold -0.4	S&P500 26.3	Nasdaq 100 19.0
Russell 1000 13.2	Russell 1000 0.9	S&P500 12.0	DJIA 28.1	S&P500 -4.4	MSCI World 28.4	S&P500 18.4	Russell 1000 26.5	DJIA -6.9	MSCI World 24.4	Nifty 500 17.8
DJIA 10.0	Nifty 500 0.2	MSCI EM \$ 11.6	MSCI World 23.1	Russell 1000 -4.8	STOXX 600 27.6	Nifty 500 17.9	Nifty 50 25.6	STOXX 600 -10.1	Nifty 50 21.3	MSCI World 16.9
STOXX 600 7.8	DJIA 0.2	Gold 9.0	S&P500 21.8	MSCI World -8.2	DJIA 25.3	MSCI World 16.5	STOXX 600 25.5	SSE Comp -15.1	STOXX 600 16.5	Nifty 50 12.6
MSCI World 5.5	MSCI World -0.3	MSCI World 8.2	Russell 1000 21.7	FTSE100 -8.7	SSE Comp 22.3	Nifty 50 16.1	MSCI World 22.4	MSCI World -17.7	DJIA 16.2	DJIA 12.5
FTSE100 0.7	FTSE100 -1.3	Nasdaq 100 7.3	Gold 12.6	STOXX 600 -10.2	MSCI EM \$ 18.9	SSE Comp 13.9	DJIA 21.0	S&P500 -18.1	Gold 13.8	MSCI EM \$ 12.2
Gold -1.8	Nifty 50 -3.0	Nifty 500 5.1	WTI Crude 12.5	MSCI EM \$ -14.2	Gold 18.7	DJIA 9.7	FTSE100 18.4	Russell 1000 -19.1	MSCI EM \$ 10.3	SSE Comp 10.3
MSCI EM \$ -1.8	Gold -10.5	Nifty 50 4.4	FTSE100 12.0	SSE Comp -24.6	FTSE100 17.3	STOXX 600 -1.5	SSE Comp 4.8	MSCI EM \$ -19.7	FTSE100 7.9	STOXX 600 8.7
WTI Crude -45.9	MSCI EM \$ -14.6	STOXX 600 2.4	STOXX 600 11.2	WTI Crude -25.3	Nifty 50 13.5	FTSE100 -11.6	MSCI EM \$ -2.2	Nasdaq 100 -32.4	SSE Comp -3.7	FTSE100 8.3
Bitcoin -56.2	WTI Crude -30.5	SSE Comp -12.3	SSE Comp 6.6	Bitcoin -74.2	Nifty 500 9.0	WTI Crude -21.0	Gold -4.0	Bitcoin -64.1	WTI Crude -10.4	WTI Crude -3.2

Source: LSEG Workspace, NSE EPR. Note: Returns for equity indices are based on total return index values except for Shanghai SE Composite Index.

Equity market performance and valuations

Table 39: Performance across NSE equity indices (As on November 30th, 2024)

Nov-24 Index Name	PR Index Returns (%)					TR Index Returns (%)				
	1M	3M	1Y	3Y	5Y	1M	3M	1Y	3Y	5Y
Broad Market Indices										
Nifty 50	-0.3	-4.4	19.9	12.4	14.9	-0.3	-4.2	21.3	13.8	16.2
Nifty Next 50	1.2	-6.1	47.3	19.2	19.9	1.2	-6.0	48.2	20.2	20.9
Nifty 100	0.0	-4.6	24.0	13.2	15.5	0.0	-4.5	25.3	14.5	16.8
Nifty 200	0.1	-4.7	25.2	14.7	17.0	0.1	-4.5	26.4	15.9	18.2
Nifty 500	0.0	-4.4	26.1	15.7	18.3	0.1	-4.3	27.3	16.9	19.5
Nifty Midcap 50	1.0	-5.5	28.7	24.2	27.2	1.1	-5.5	29.3	25.3	28.4
Nifty Midcap 100	0.5	-4.9	31.4	23.9	26.8	0.6	-4.8	32.1	24.8	27.8
Nifty Midcap 150	0.1	-4.7	31.0	23.0	27.0	0.2	-4.5	31.7	23.9	28.0
Nifty Midcap Select	2.2	-4.1	30.3	20.0	23.6	2.3	-4.0	31.2	20.9	24.6
Nifty Smallcap 50	0.0	-2.0	37.4	21.0	26.3	0.1	-1.8	38.5	22.0	27.5
Nifty Smallcap 100	0.3	-3.4	31.6	20.5	26.3	0.4	-3.2	32.6	21.5	27.4
Nifty Smallcap 250	-0.2	-2.5	33.7	23.8	29.7	-0.1	-2.4	34.5	24.8	30.8
Nifty LargeMidcap 250	0.1	-4.6	27.5	18.2	21.3	0.1	-4.5	28.5	19.2	22.4
Nifty MidSmallcap 400	0.0	-3.9	32.0	23.4	27.9	0.1	-3.8	32.7	24.3	29.0
Nifty500 Multicap 50:25:25	0.0	-4.1	28.2	18.4	22.0	0.0	-4.0	29.3	19.5	23.2
Nifty Microcap 250	1.1	0.0	40.4	36.7	42.7	1.1	0.1	41.0	37.5	43.8
Nifty Total Market	0.0	-4.3	26.6	16.3	18.8	0.1	-4.1	27.8	17.5	20.0
Thematic Indices										
Nifty India Consumption	-0.3	-5.2	27.4	17.8	18.0	-0.2	-5.1	28.6	19.0	19.4
Nifty MidSmall India Consumption	1.3	-0.6	35.9	19.9	25.2	1.4	-0.5	36.6	20.5	26.1
Nifty Non-Cyclical Consumer	0.3	-5.8	26.8	16.4	18.4	0.5	-5.6	28.0	17.5	19.5
Nifty India Manufacturing	-0.8	-7.1	36.8	22.9	24.4	-0.8	-7.1	37.5	23.9	25.7
Nifty Infrastructure	-1.0	-7.3	32.6	20.8	21.3	-0.9	-7.2	33.7	22.0	22.9
Nifty Services Sector	1.3	-0.3	24.9	10.0	13.4	1.4	-0.1	26.4	11.4	14.6
Nifty Commodities	-4.0	-10.0	24.5	16.5	20.0	-4.0	-9.9	25.4	17.9	21.7
Nifty CPSE	-1.1	-11.8	53.8	42.5	27.4	-0.8	-11.4	57.4	46.6	31.7
Nifty PSE	-0.5	-11.9	49.3	38.4	25.4	-0.2	-11.6	52.0	42.0	29.4
Nifty Energy	-4.6	-14.3	28.0	18.0	18.2	-4.5	-14.1	29.6	19.8	20.7
Nifty MNC	-1.3	-6.9	27.3	15.9	15.9	-1.1	-6.7	28.5	17.3	17.4
Nifty India Digital	6.3	-0.4	39.3	12.5	24.7	6.4	-0.1	40.6	13.8	26.3
Nifty India Defence	5.7	-3.2	83.9	68.8	53.1	5.7	-3.1	85.1	70.6	55.0
Nifty Mobility	-1.2	-10.4	38.2	28.1	24.2	-1.2	-10.4	39.0	29.1	25.4
Nifty100 Liquid 15	-2.0	-8.3	17.0	14.2	10.7	-1.9	-8.3	17.9	15.3	11.8
Nifty Midcap Liquid 15	3.2	-0.8	38.7	25.7	28.4	3.3	-0.7	39.8	27.0	29.6
Nifty Aditya Birla Group	-0.8	-7.7	20.1	13.6	20.7	-0.8	-7.7	20.6	14.2	21.3
Nifty Mahindra Group	7.2	2.8	54.7	27.9	28.1	7.2	3.1	55.9	29.5	30.1
Nifty Tata Group	2.3	-8.9	23.2	13.4	23.1	2.3	-8.8	24.5	14.6	24.6
Nifty Tata Group 25% Cap	0.3	-10.1	27.0	17.4	28.5	0.3	-10.0	28.0	18.5	29.7
Nifty Shariah 25	-0.3	-7.4	23.7	11.3	14.7	-0.1	-7.2	25.5	13.0	16.5
Nifty50 Shariah	-1.0	-8.8	19.1	7.1	15.9	-0.9	-8.6	21.0	8.9	17.8
Nifty500 Shariah	-0.8	-7.0	26.7	13.1	20.6	-0.7	-6.8	28.1	14.4	22.2
Nifty SME EMERGE	-1.2	0.8	54.3	68.0	64.6	-1.2	0.9	54.4	68.3	64.9
Nifty100 ESG	-0.1	-5.8	23.1	11.2	16.4	0.0	-5.6	24.3	12.4	17.7
Nifty100 Enhanced ESG	-0.1	-5.8	23.0	11.2	16.3	0.0	-5.6	24.2	12.4	17.7
Nifty100 ESG Sector Leaders	0.0	-4.5	22.3	11.5	15.2	0.1	-4.3	23.5	12.7	16.5

Nov-24	PR Index Returns (%)					TR Index Returns (%)				
Index Name	1M	3M	1Y	3Y	5Y	1M	3M	1Y	3Y	5Y
Strategy Indices										
Nifty Alpha 50	-0.1	-6.9	43.5	20.3	34.5	0.0	-6.8	44.4	21.2	35.4
Nifty100 Alpha 30	-0.4	-10.7	41.9	15.0	21.0	-0.3	-10.7	43.1	16.2	22.2
Nifty Alpha Low-Volatility 30	-2.4	-8.3	29.5	18.0	18.4	-2.4	-8.3	30.7	19.3	19.8
Nifty Alpha Quality Low-Volatility 30	-0.4	-7.3	31.6	17.7	19.4	-0.3	-7.1	33.2	19.4	21.1
Nifty Alpha Quality Value Low-Volatility 30	-0.4	-7.3	34.9	25.3	23.5	-0.2	-7.1	37.0	27.4	25.8
Nifty200 Alpha 30	0.4	-10.5	38.7	23.2	28.2	0.5	-10.4	39.9	24.5	29.4
Nifty Dividend Opportunities 50	0.5	-6.3	31.9	21.8	20.6	0.7	-5.9	34.5	24.5	23.5
Nifty Growth Sectors 15	1.9	-6.2	17.0	16.2	13.2	2.0	-5.9	19.3	18.2	14.9
Nifty High Beta 50	-0.3	-10.5	23.0	22.2	21.4	-0.2	-10.3	24.0	23.3	22.5
Nifty Low Volatility 50	-1.4	-6.3	23.6	15.3	17.9	-1.3	-6.2	24.8	16.7	19.5
Nifty100 Low Volatility 30	-1.9	-6.4	21.6	14.4	16.8	-1.8	-6.3	23.0	16.0	18.7
Nifty100 Quality 30	-0.2	-6.4	22.3	14.7	16.1	-0.1	-6.1	23.9	16.3	17.8
Nifty Quality Low-Volatility 30	-1.5	-7.8	18.0	12.6	15.3	-1.4	-7.6	19.5	14.2	17.0
Nifty200 Quality 30	-0.2	-6.8	23.7	13.7	16.8	0.0	-6.5	25.6	15.5	18.8
Nifty50 Equal Weight	-2.4	-7.9	20.8	16.6	19.2	-2.4	-7.8	22.1	18.0	20.9
Nifty100 Equal Weight	-0.9	-7.1	31.0	16.9	19.0	-0.9	-6.9	32.0	18.1	20.3
Nifty50 Value 20	0.5	-4.6	27.6	16.7	20.3	0.6	-4.2	30.1	19.1	23.0
Nifty500 Value 50	-0.8	-7.6	42.7	34.5	31.3	-0.6	-7.4	44.5	37.2	34.1
Nifty Midcap150 Quality 50	-0.4	-3.9	26.2	12.0	18.8	-0.3	-3.7	27.2	13.0	20.0
Nifty200 Momentum 30	-0.8	-7.7	36.7	19.8	24.9	-0.7	-7.6	38.1	21.0	26.1
Nifty Midcap150 Momentum 50	1.2	-4.0	39.3	27.5	34.7	1.2	-3.9	40.0	28.3	35.6
Sector Indices										
Nifty Auto	-0.6	-10.7	33.1	30.1	23.7	-0.6	-10.7	34.2	31.3	24.9
Nifty Bank	1.1	1.4	17.0	13.4	10.3	1.1	1.4	18.1	14.4	10.9
Nifty Private Bank	0.4	-1.4	9.5	11.6	7.5	0.4	-1.4	10.3	12.4	8.0
Nifty PSU Bank	1.3	-2.5	35.2	38.6	20.6	1.3	-2.5	36.1	40.3	21.6
Nifty Financial Services	0.5	1.6	19.7	11.0	11.1	0.6	1.6	20.9	12.1	11.9
Nifty Financial Services Ex-Bank	-2.4	-5.6	16.7	12.2	12.9	-2.3	-5.4	17.7	13.2	13.9
Nifty Financial Services 25/50	-0.8	-2.4	21.1	13.9	13.2	-0.7	-2.3	22.4	15.0	14.1
Nifty MidSmall Financial Services	0.2	1.5	26.6	24.0	16.1	0.2	1.6	27.5	25.3	17.3
Nifty FMCG	-2.1	-8.1	9.3	15.7	13.3	-1.9	-7.8	11.4	17.8	15.3
Nifty IT	6.8	0.8	32.4	7.2	23.5	6.8	1.4	35.0	9.3	25.9
Nifty MidSmall IT & Telecom	4.4	-6.6	23.3	15.3	37.7	4.4	-6.5	24.0	16.3	39.2
Nifty Media	-1.1	-5.1	-13.1	-2.8	1.7	-0.8	-4.8	-12.6	-2.2	2.4
Nifty Metal	-3.1	-4.0	28.7	20.2	28.0	-3.1	-3.8	29.5	21.9	30.0
Nifty Pharma	-2.2	-4.2	37.0	17.6	22.1	-2.2	-4.2	37.9	18.5	23.0
Nifty Realty	2.1	-3.2	43.0	27.9	29.3	2.1	-3.1	43.3	28.3	29.8
Nifty Consumer Durables	2.4	-2.8	36.5	12.4	20.3	2.5	-2.7	37.0	12.9	20.8
Nifty Oil & Gas	-2.1	-17.5	31.0	14.5	15.9	-2.1	-17.4	32.0	15.8	17.9
Nifty Healthcare Index	-2.1	-2.6	37.3	17.1	23.4	-2.1	-2.6	38.1	18.0	24.3
Nifty MidSmall Healthcare	-1.6	1.6	44.2	20.5	26.1	-1.5	1.6	44.8	21.1	27.0
Nifty Transportation & Logistics	-0.2	-9.3	37.3	29.2	25.8	-0.1	-9.3	38.1	30.2	27.0
Nifty Housing	-1.6	-4.0	23.6	14.7	18.4	-1.6	-4.0	24.5	15.8	19.6

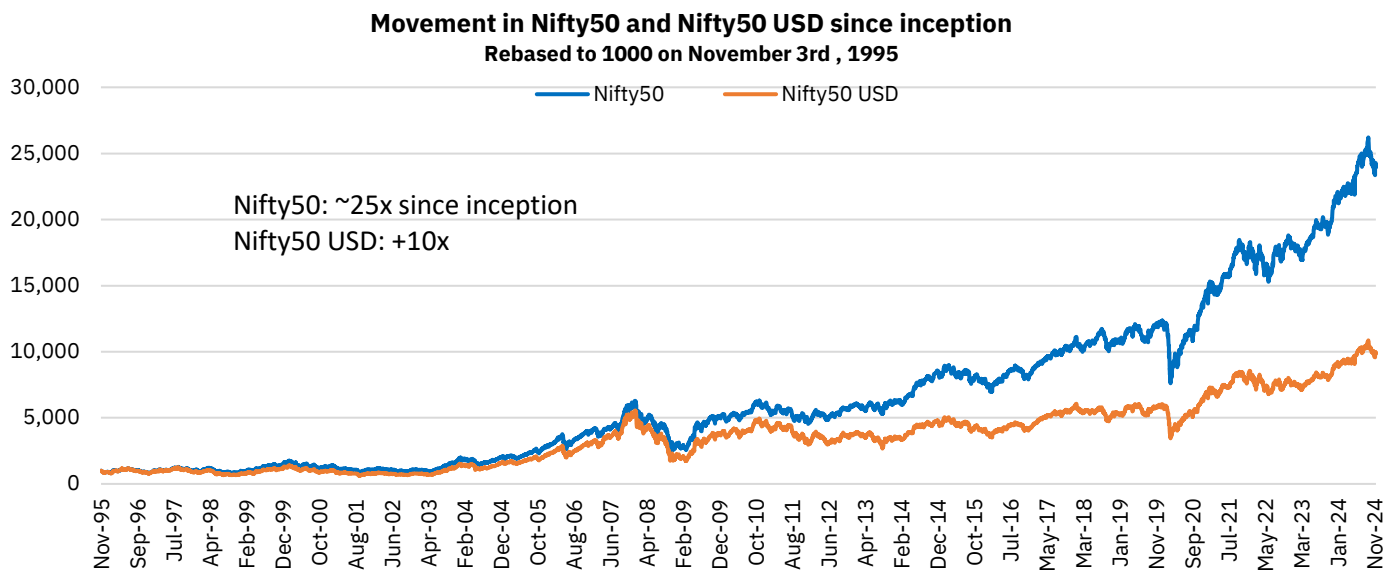
Source: NSE Indices, NSE EPR

Note: Returns for the period up to one year are absolute returns. Returns for a period greater than one year are CAGR returns.

Table 40: Performance across NSE sector indices based on Price Return Index (As on November 30th, 2024)

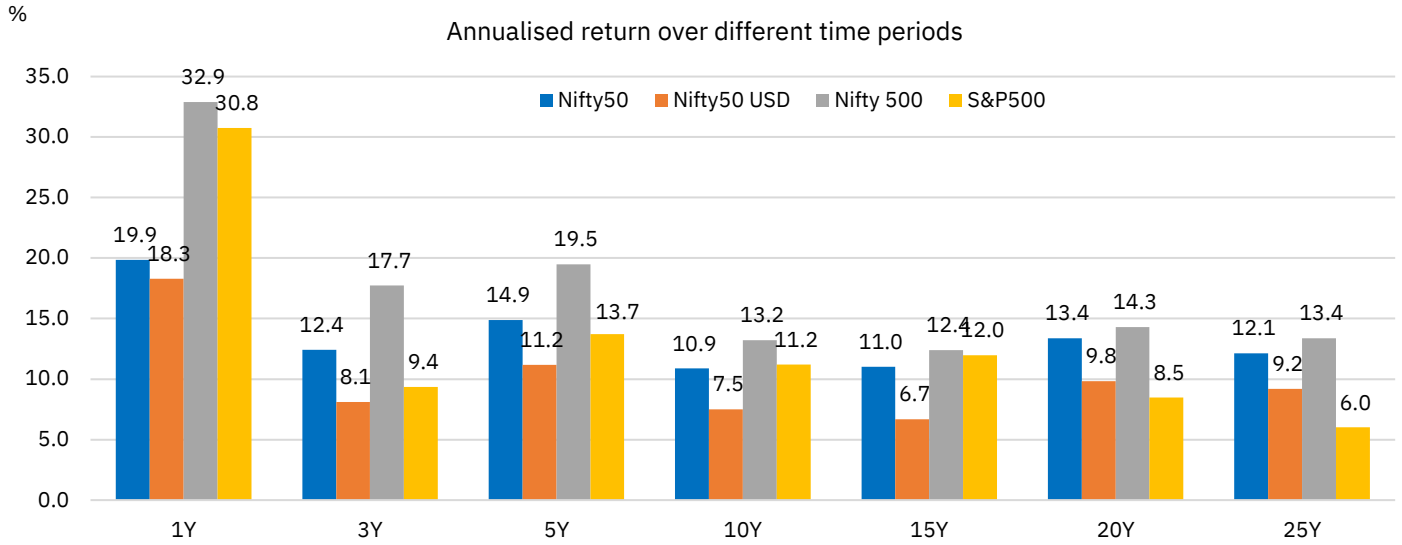
Indicator Name	Nov-24	1M ago	3M ago	12M ago	1M (%)	3M (%)	6M (%)	12M (%)	YTD (%)
Sector indices									
Auto	23,369	23,515	26,173	17,552	-0.6	-10.7	-0.2	33.1	25.5
Bank	52,056	51,475	51,351	44,482	1.1	1.4	6.3	17.0	7.8
Energy	37,482	39,302	43,757	29,295	-4.6	-14.3	-6.9	28.0	12.0
FMCG	57,944	59,203	63,060	53,014	-2.1	-8.1	7.1	9.3	1.7
IT	43,146	40,408	42,788	32,582	6.8	0.8	33.2	32.4	21.5
Infrastructure	8,734	8,823	9,426	6,586	-1.0	-7.3	0.8	32.6	19.6
Media	1,997	2,019	2,105	2,297	-1.1	-5.1	6.8	-13.1	-16.4
Metals	9,034	9,327	9,405	7,017	-3.1	-4.0	-7.1	28.7	13.2
Pharma	22,240	22,736	23,218	16,239	-2.2	-4.2	18.3	37.0	32.1
Real Estate	1,020	1,000	1,053	714	2.1	-3.2	0.1	43.0	30.3
Thematic Indices									
CNX PSE	10,121	10,175	11,494	6,779	-0.5	-11.9	-3.7	49.3	28.9
CNX Consumption	11,447	11,481	12,078	8,987	-0.3	-5.2	9.3	27.4	19.5
CNX Services	31,965	31,547	32,057	25,596	1.3	-0.3	13.4	24.9	15.5

Source: Cogencis, NSE EPR.

Figure 134: Nifty 50 and Nifty 50 USD since inception


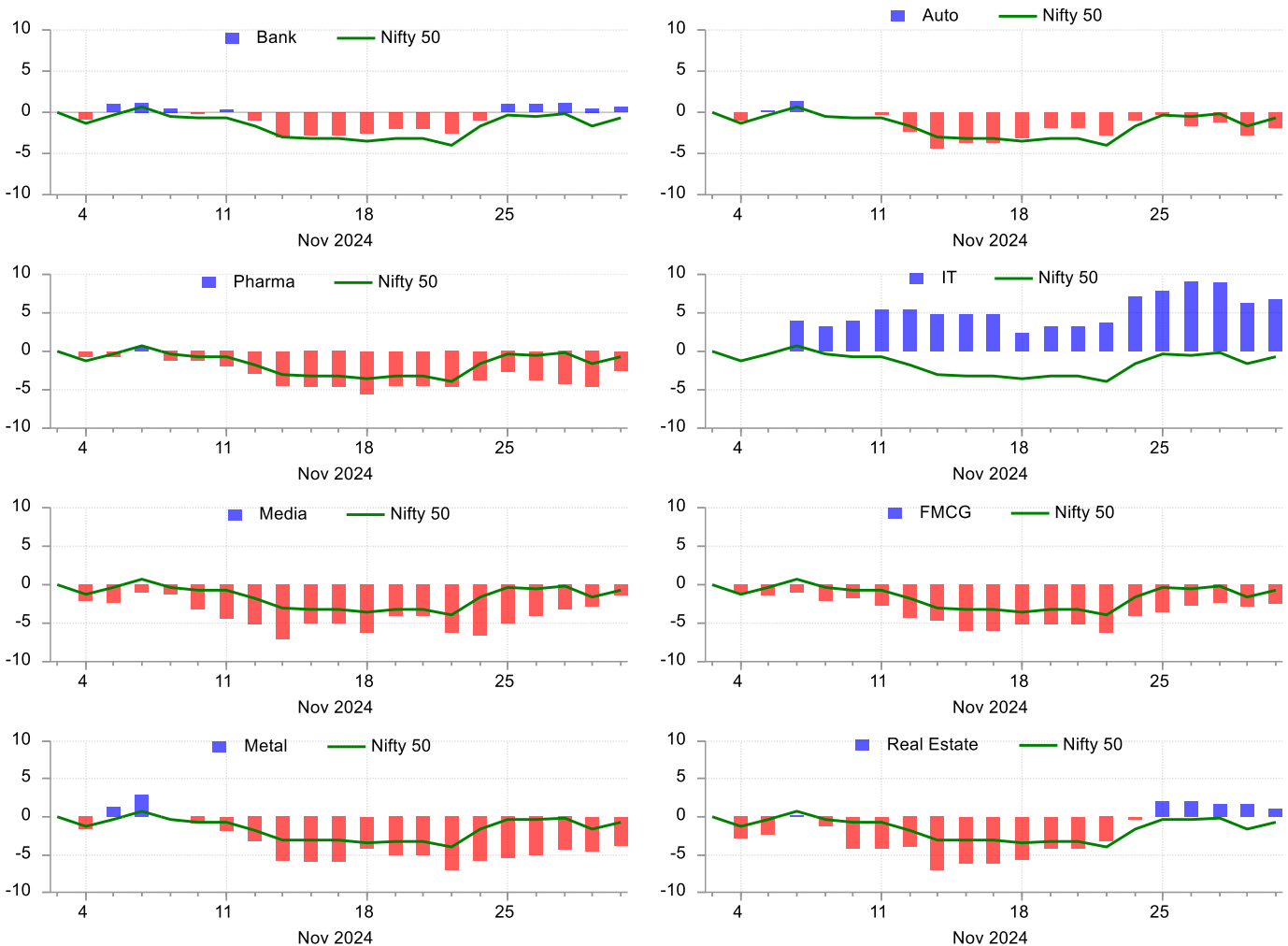
Source: Nifty Indices, NSE EPR.

The Nifty 50 Index was launched on April 22nd, 1996, with a rebasing on November 3rd, 1995. Since the rebasing date, Nifty 50 has risen nearly 25x (As of November 30th, 2024), translating into an annualized return of 12.2% over the last 29 years. During the same period, the Nifty50 Index in USD terms increased by more than 10x, with an annualized gain of about 8.8%. In the last 25 years, the Nifty50 USD Index has generated an annualized return of 9.2%, higher than 6.0% and 8.2% recorded by S&P500 and NASDAQ respectively.

Figure 135: Annualised return of major indices across different time periods (As of November 30th, 2024)


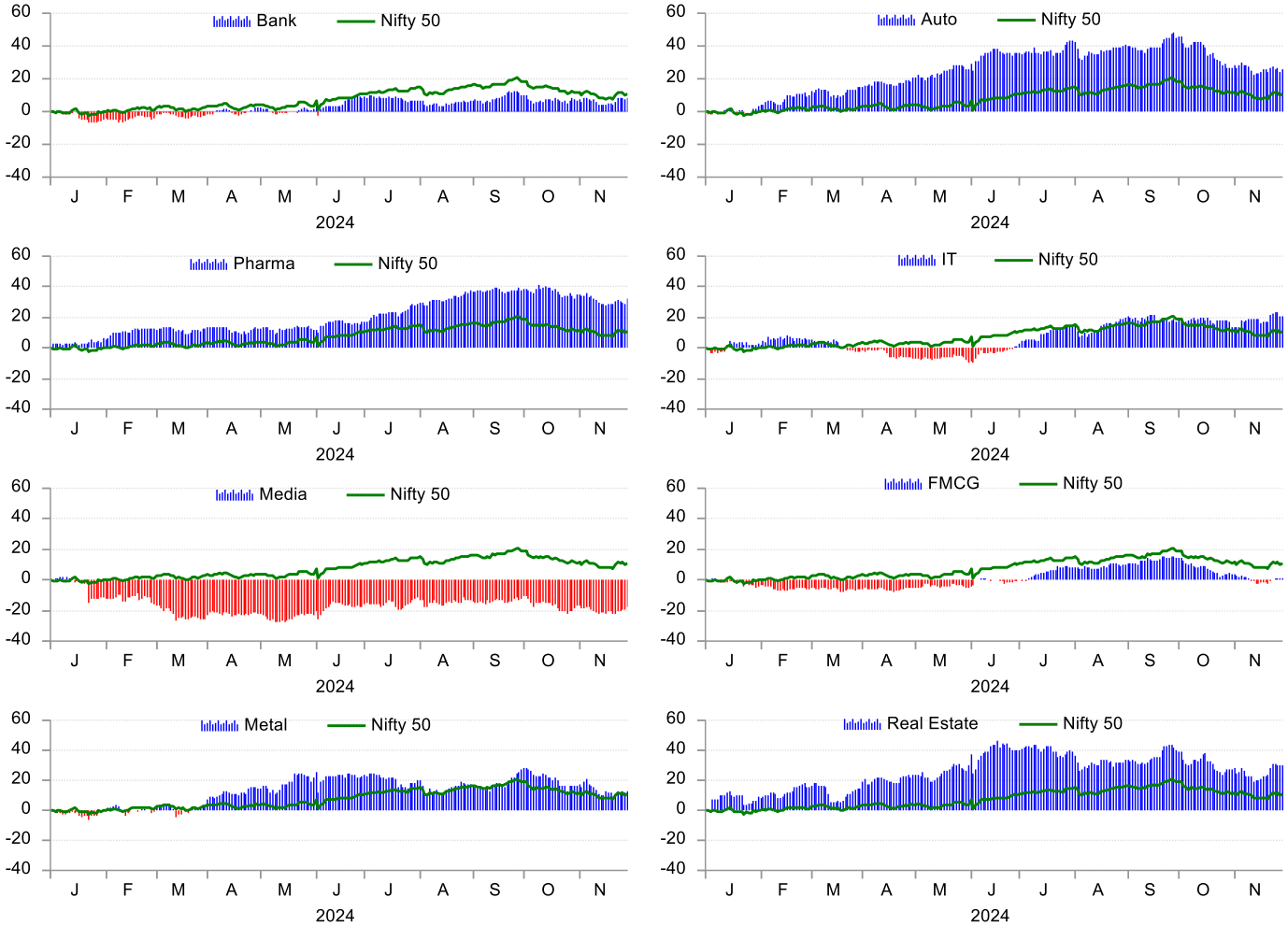
Source: Nifty Indices, LSEG Workspace, NSE EPR.

Figure 136: NIFTY sector performance in November 2024

 Rebased to 0 on November 1st, 2024


Source: LSEG Workspace, NSE EPR.

Figure 137: NIFTY sector performance in 2024 till date
 Rebased to 0 on January 1st, 2024

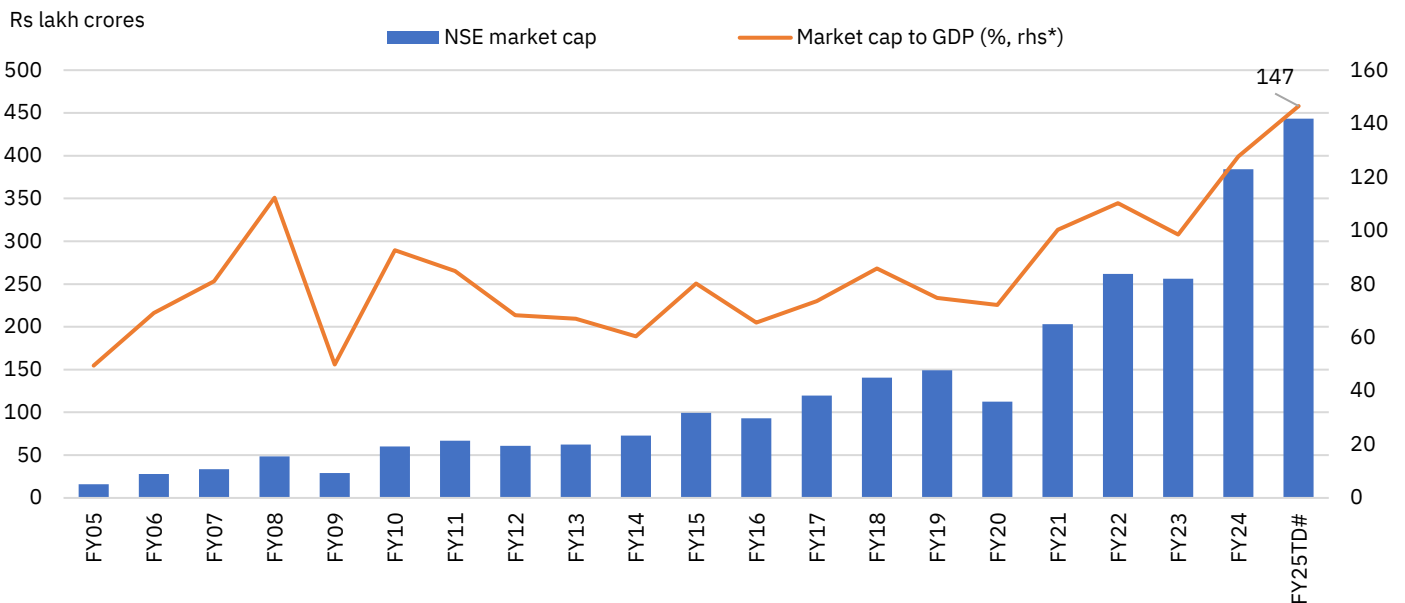


Source: LSEG Workspace, NSE EPR.

Market growth and concentration

Market cap to GDP at 20+ year high levels: After registering the steepest monthly drop since the pandemic, the market capitalization of NSE listed companies remained broadly steady in November but fell by a modest 0.1% in USD terms. That said, it is still up 15.4% and 13.9% in the first eight months of the fiscal in rupee and dollar terms, translating into a 20-year CAGR of 18.7% and 14.9% respectively. The market cap to GDP ratio, calculated based on three-month rolling market capitalization and available nominal GDP for the latest four quarters, remained high at 147% as of the end of November 2024.

Figure 138: Market cap to GDP ratio trend (NSE listed companies)



Source: CMIE Economic Outlook, NSE EPR. # As of November 30th, 2024. * Based on average market cap over the last three months of the period and actual nominal GDP for the last four quarters.

Share of Nifty50 Index drops to record low levels in November 2024: The share of Nifty50 Index in NSE listed companies fell by 57bps MoM to 42.2% as of Nov'24, translating into a decline of 3.4pp in the fiscal thus far. This is the lowest share of top 50 companies in terms of market capitalization in the NSE listed universe. A marginal increase last month was on account of the outperformance of large-cap companies. While a large part of the drop in Nifty50 share in total market capitalization over the last two decades is a consequence of an increase in the number of listed companies on the exchange, from 422 in FY96 to 2,643 as of November 2024, the relative outperformance of mid and small-cap companies over the last decade has also contributed in a meaningful manner. For instance, the Nifty Midcap 150 and Nifty Smallcap 250 have generated annualized returns of 17.8% and 15.7% as compared to 10.9% for the Nifty50 Index in the last 10 years ending November 2024.

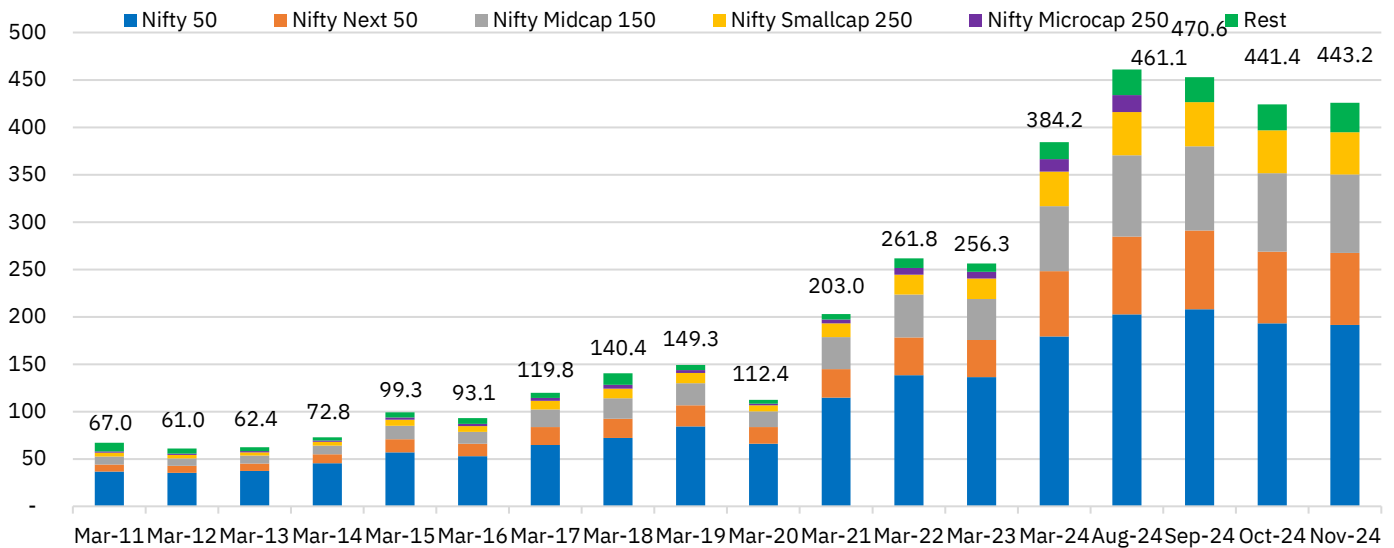
Table 41: Index-wise distribution of total market cap of NSE listed companies (Rs lakh crore)

Year	Nifty 50	Nifty Next 50	Nifty Midcap 150	Nifty Smallcap 250	Nifty Microcap 250	Rest	Total
Mar-11	36.7	7.6	8.4	3.9	1.5	9.0	67.0
Mar-12	35.2	7.4	8.0	3.7	1.3	5.4	61.0
Mar-13	37.5	7.5	8.6	3.5	1.2	4.2	62.4
Mar-14	45.3	9.6	9.3	4.0	1.3	3.3	72.8
Mar-15	56.9	14.0	14.1	6.3	2.3	5.6	99.3
Mar-16	52.8	13.2	12.7	5.8	2.4	6.2	93.1
Mar-17	64.6	19.1	18.5	9.0	3.1	5.4	119.8
Mar-18	72.3	20.3	21.5	10.2	4.0	12.1	140.4
Mar-19	84.3	22.2	23.3	10.8	3.3	5.4	149.3
Mar-20	66.2	17.4	16.7	6.4	1.7	4.1	112.4
Mar-21	114.6	30.2	34.0	14.3	4.1	5.8	203.0
Mar-22	138.3	39.9	45.3	21.0	7.1	10.2	261.8
Mar-23	136.2	39.4	43.1	21.6	7.3	8.7	256.3
Mar-24	179.1	69.1	68.4	36.6	13.2	17.8	384.2
Nov-24	191.5	76.0	82.7	44.5	17.2	31.2	443.2
Oct growth (% MoM)	-0.9	0.7	-0.3	-1.3	0.7	13.4	0.4
FY25TD* growth (%)	6.9	9.9	20.9	21.7	30.6	75.5	15.4
CAGR (FY14-FY24TD)	14.5	21.4	22.8	25.4	27.3	23.5	18.5

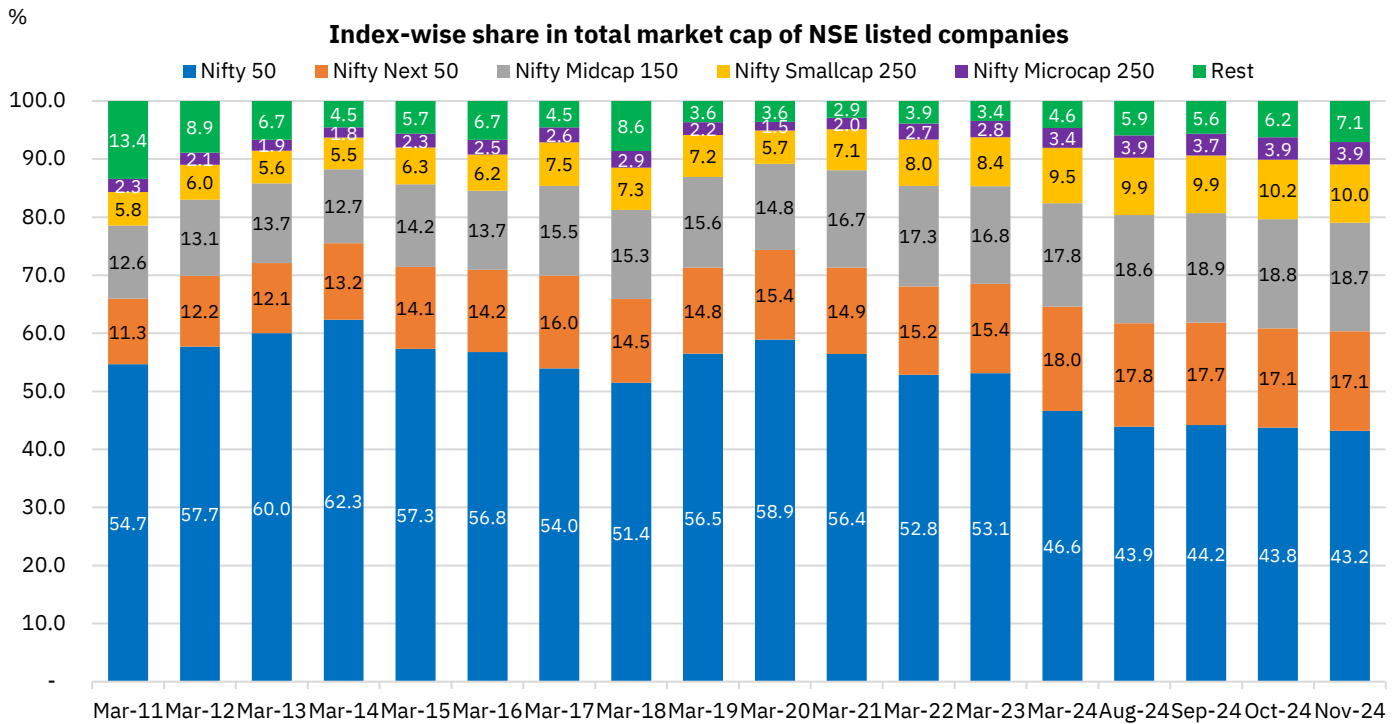
 Source: Nifty Indices, NSE EPR. * As of November 30th, 2024.

Figure 139: Index-wise distribution of total market cap of NSE listed companies (Rs lakh crore)

Rs lakh crore

Index-wise market cap distribution of NSE listed companies


Source: Nifty Indices, NSE EPR.

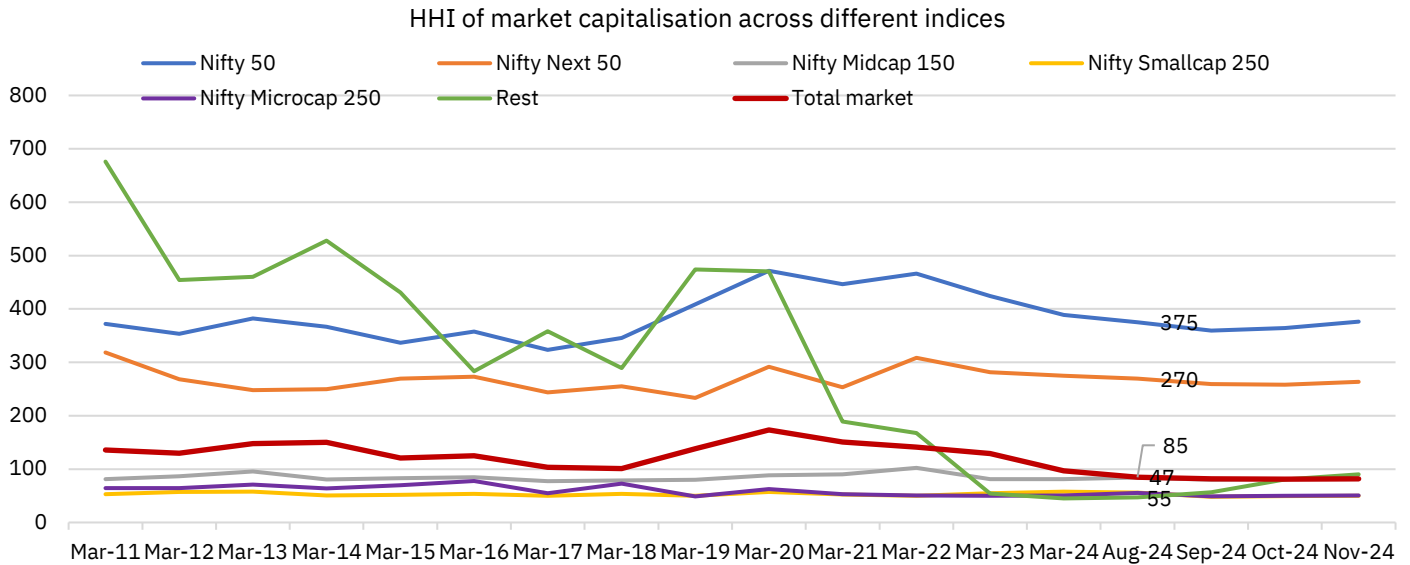
Figure 140: Index-wise share in total market cap of NSE listed companies


Source: Nifty Indices, NSE EPR.

Index-wise HHIs have fallen steadily since the pandemic: To assess market concentration, we calculate the Herfindahl-Hirschman Index (HHI) based on the market capitalization of NSE-listed companies as well as major equity indices over the past two decades. After a steady decline from 2010 to 2018, the HHI for the total market saw a sharp increase in 2019, reaching an 11-year high of 173 in March 2020, following the onset of the pandemic. However, it has been on a downward trend since then. As of November 2024, the market capitalization-based HHI for NSE-listed companies has fallen to a 22-year low of 81, partly reflecting the outperformance of smaller companies in recent years, which signals a greater degree of market fragmentation⁵³.

Looking at major indices, which include the top 750 stocks, the Nifty 50 expectedly has the highest HHI at 376 as of October 31st, 2024, that has risen for the second month in a row but is much lower than 476 as of March 2009. This is followed by the Nifty Next 50 with an HHI of 264, inching up marginally from the previous month. The HHIs of the Nifty Midcap 150, Nifty Smallcap 250, and Nifty Microcap 250 have also been steadily decreasing since the pandemic, currently ranging between 50 and 80. Overall, the analysis indicates that while the market remains fragmented, this fragmentation has intensified over the past few years, driven by stronger performance from mid, small, and microcap companies.

⁵³ HHI value ranges from 0 to 10,000. An HHI near 0 indicates a highly fragmented market with many firms holding small market shares (i.e., very low concentration). An HHI near 10,000 indicates a monopoly or a market dominated by a single firm (i.e., very high concentration). HHI value interpretation: HHI below 1,500 is considered low and implies a competitive, diversified and fragmented market; HHI between 1,500 and 2,500 is considered moderate, indicating some degree of competition but with a few firms holding a significant share; HHI above 2,500 is considered high, and reflects a highly concentrated market, with fewer firms dominating the market.

Figure 141: Index-wise share in total market cap of NSE listed companies


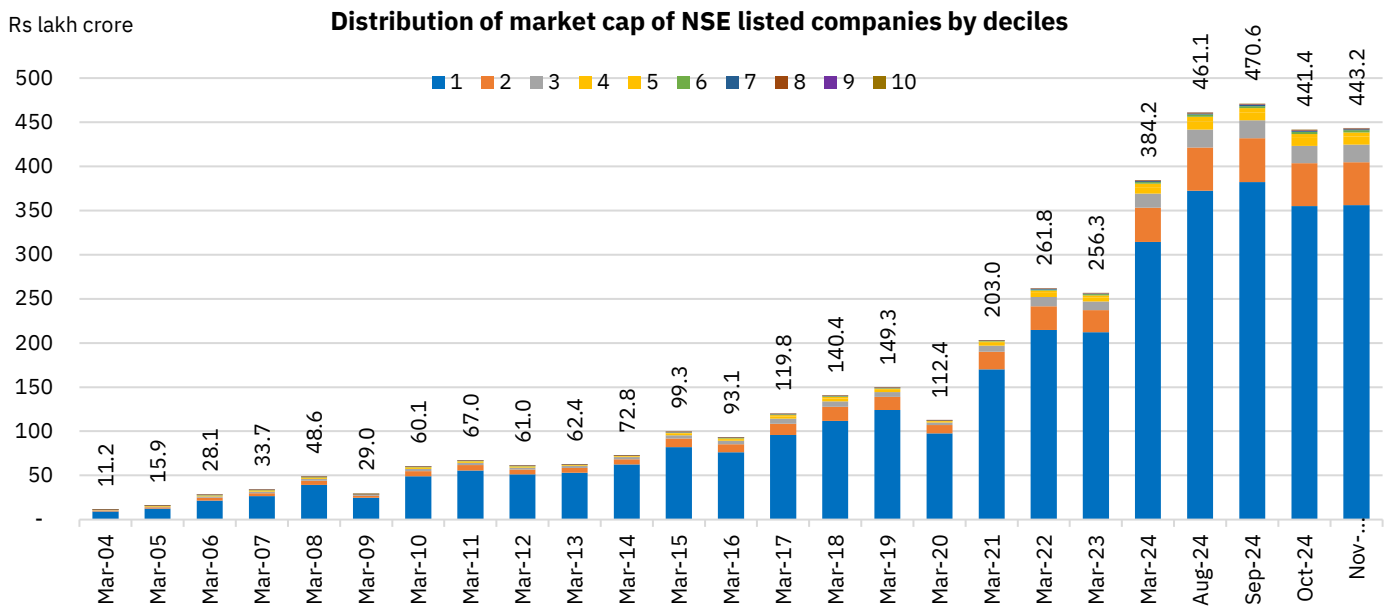
Source: Nifty Indices, NSE EPR.

Decile-wise distribution of total market cap: We also examine the distribution of the total market capitalization of NSE-listed companies across deciles. The analysis reveals that the share of the top decile (the top 10% by market capitalization) reached a record high of 86.8% in FY20, as the pandemic-induced risk-off environment led investors to seek refuge in large-cap stocks. In fact, by March 2020, the top two deciles together accounted for more than 95% of the total market capitalization. However, since then, the share of the top decile has steadily declined, aligning with the downward trend in the HHI for the market capitalization of NSE-listed companies. By March 2024, the top decile's share had decreased to 81.8%, and by November 30th, 2024, it had further fallen by approximately 144bps to 80.4%—the lowest since March 2018. Notably, the share of the bottom five deciles in total market capitalization stood at 1.1% as of November 30th, 2024—more than double the all-time low of 0.5% recorded during the pandemic year (FY20).

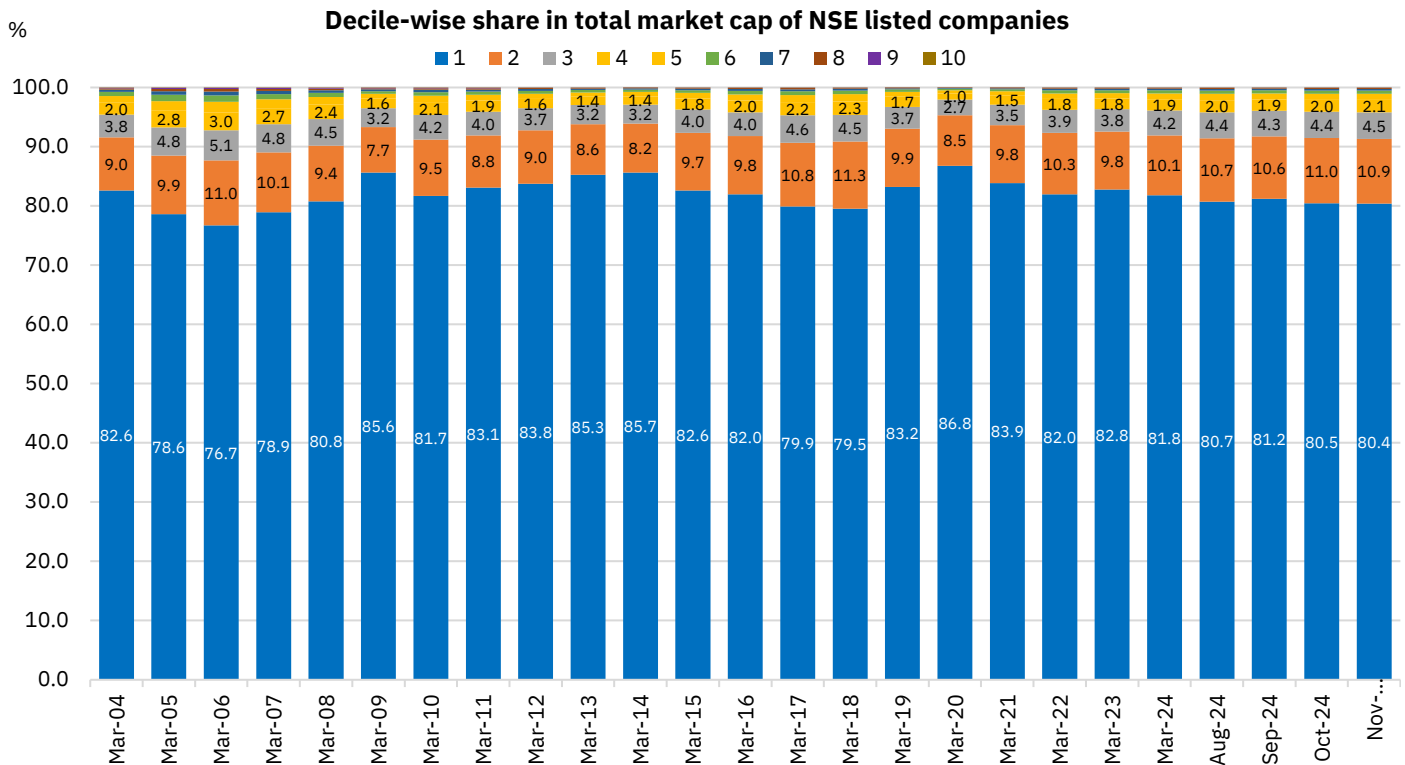
Table 42: Decile-wise distribution of total market cap of NSE listed companies (Rs lakh crore)

Year	Decile1	Decile2	Decile3	Decile4	Decile5	Decile6	Decile7	Decile8	Decile9	Decile10	Total
Mar-04	9.3	1.0	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	11.2
Mar-05	12.5	1.6	0.8	0.4	0.3	0.2	0.1	0.1	0.0	0.0	15.9
Mar-06	21.6	3.1	1.4	0.8	0.5	0.3	0.2	0.1	0.1	0.0	28.1
Mar-07	26.6	3.4	1.6	0.9	0.5	0.3	0.2	0.1	0.1	0.0	33.7
Mar-08	39.2	4.6	2.2	1.2	0.6	0.3	0.2	0.1	0.1	0.0	48.6
Mar-09	24.8	2.2	0.9	0.5	0.2	0.1	0.1	0.1	0.0	0.0	29.0
Mar-10	49.1	5.7	2.5	1.3	0.7	0.4	0.2	0.1	0.1	0.0	60.1
Mar-11	55.7	5.9	2.7	1.3	0.7	0.4	0.2	0.1	0.1	0.0	67.0
Mar-12	51.1	5.5	2.3	1.0	0.5	0.3	0.2	0.1	0.0	0.0	61.0
Mar-13	53.2	5.3	2.0	0.9	0.4	0.3	0.1	0.1	0.0	0.0	62.4
Mar-14	62.3	6.0	2.3	1.0	0.5	0.3	0.1	0.1	0.0	0.0	72.8
Mar-15	82.0	9.7	4.0	1.8	0.9	0.5	0.2	0.1	0.1	0.0	99.3
Mar-16	76.3	9.2	3.7	1.8	1.0	0.5	0.3	0.2	0.1	0.0	93.1
Mar-17	95.7	12.9	5.5	2.7	1.4	0.8	0.4	0.2	0.1	0.0	119.8
Mar-18	111.7	15.9	6.3	3.2	1.7	0.9	0.4	0.2	0.1	0.0	140.4
Mar-19	124.2	14.8	5.5	2.6	1.2	0.6	0.3	0.1	0.1	0.0	149.3
Mar-20	97.6	9.6	3.0	1.2	0.6	0.3	0.1	0.1	0.0	0.0	112.4
Mar-21	170.2	19.8	7.0	3.0	1.5	0.7	0.3	0.2	0.1	0.0	203.0
Mar-22	214.6	27.1	10.3	4.7	2.5	1.4	0.7	0.3	0.2	0.0	261.8
Mar-23	212.2	25.1	9.7	4.5	2.4	1.2	0.6	0.3	0.2	0.0	256.3
Mar-24	314.4	38.8	16.1	7.3	3.9	2.0	1.0	0.5	0.3	0.1	384.2
Nov-24	356.2	48.4	19.9	9.2	4.7	2.4	1.2	0.6	0.3	0.1	443.2
% MoM	0.3	-0.1	1.7	3.2	2.5	1.2	0.2	0.4	0.8	0.4	0.4
Chg. in FY25TD (%)	13.3	24.9	24.1	26.8	21.2	19.2	20.5	27.8	29.7	36.6	15.4
CAGR (FY04-, %)	17.8	21.6	22.4	22.6	22.8	22.2	21.8	21.8	23.4	22.8	18.5

Source: NSE EPR.

Figure 142: Decile-wise distribution of total market cap of NSE listed companies


Source: NSE EPR.

Figure 143: Decile-wise share of total market cap of NSE listed companies


Source: NSE EPR.

Nifty50 performance attribution analysis

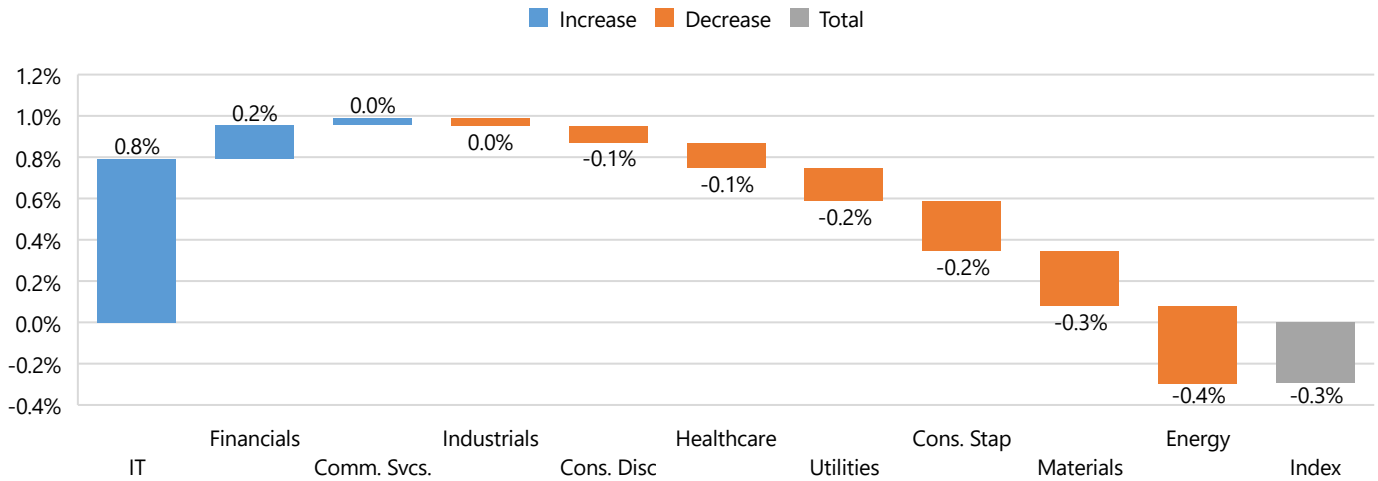
Indian equities remained volatile in November: After witnessing a sharp sell-off in October, Indian equities continued the trend in the first half of November, translating into a total drop of 10.9% from the September-peak. The trend, however, reversed partly in the second half, with the Nifty50 ending the month with a modest decline of 0.3%. Stretched valuations, weak second quarter corporate earnings, continued sell-off by foreign investors and uncertainty around assembly elections (Maharashtra and Jharkhand) kept investor sentiments jittery. On the global front, persistent geopolitical tensions, and policy uncertainty in the US added to the caution. After record-high selling in October, FPIs sold a further US\$2.6bn in November, translating into total net outflows of US\$13.8bn during October-November, only to turn buyers in December (net inflows of US\$2.7bn in December till date, as of December 19th, 2024). DIIs, however, fully compensated for the FPI outflows, investing a net amount of US\$18bn (Rs 1.52 lakh crore) during October-November, and continued the buying spree in December, albeit with a reduced extent. In fact, December marked the 17th consecutive month of net positive investments by DIIs, translating into net inflows of Rs 4.0 lakh crore in the fiscal year thus far (As of December 19th, 2024).

The benchmark Nifty50 Index ended the month of November 0.3% lower and further by 0.7% in December thus far (As of December 19th, 2024), translating into total return of 10.2% in 2024 till date. While the Nifty Mid-cap 50 Index generated a modest increase of 1% in November, rising further by 4.0% in December thus far, the Nifty Small-cap 50 Index ended the month of November flat, only to rise by 2.2% in December thus far.

Sector-wise, the performance was mixed with all sectors, barring IT, Financials and Communication Services, ending the month in the red, with all sectors ending in the red last month, led by commodity sectors such as Energy and Materials.

Figure 144: Sector-wise contribution to Nifty 50 price return in November 2024

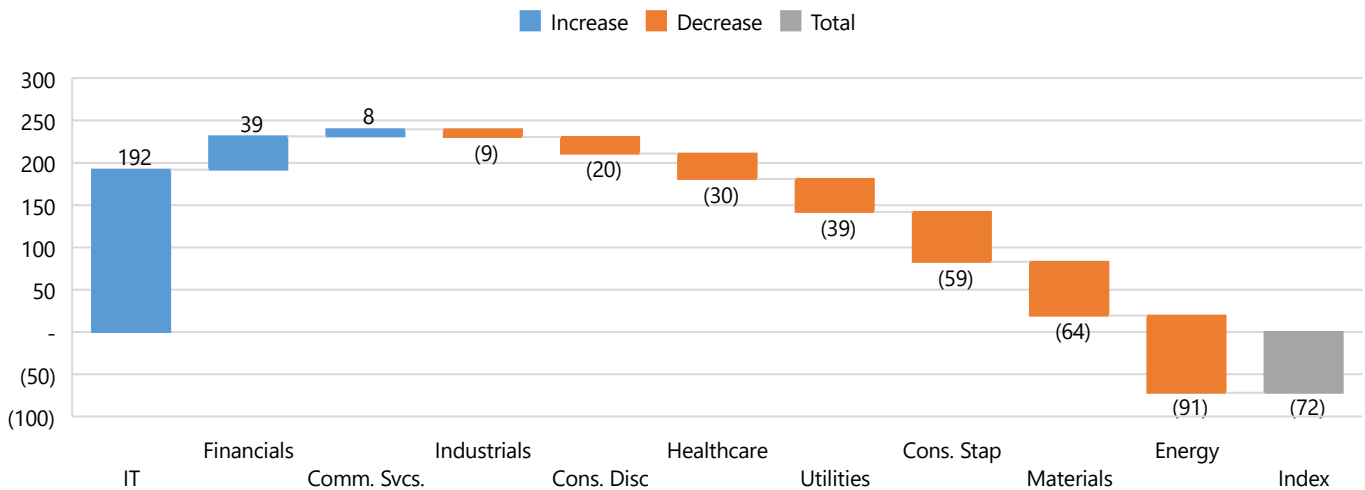
Contribution to Nifty50 Index percentage change (November 2024)



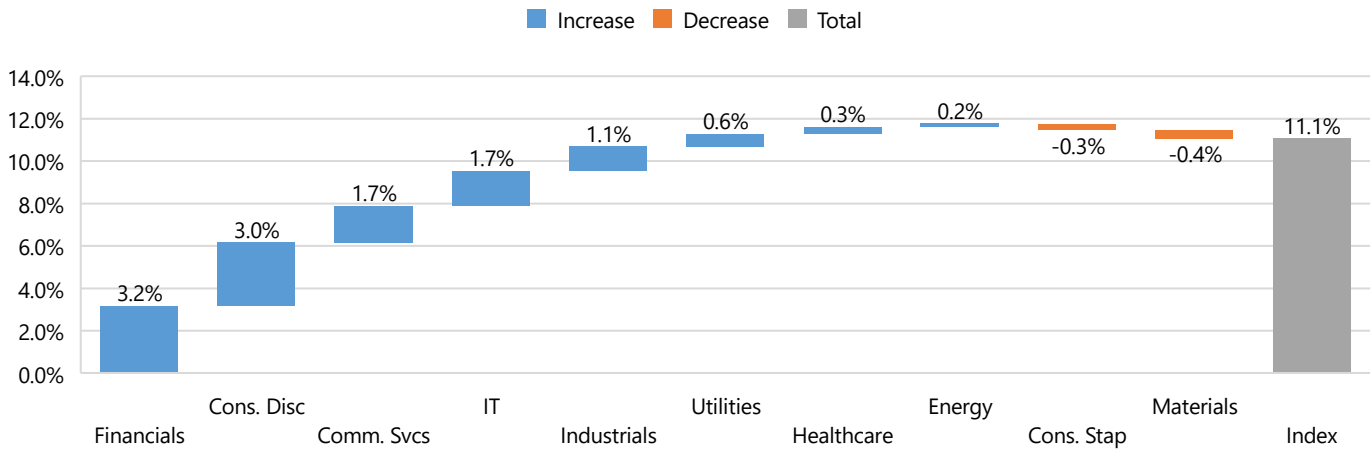
Source: LSEG Workspace, CMIE Prowess, NSE Indices, NSE EPR.

Figure 145: Sector-wise contribution to absolute Nifty 50 Index change (points) in November 2024

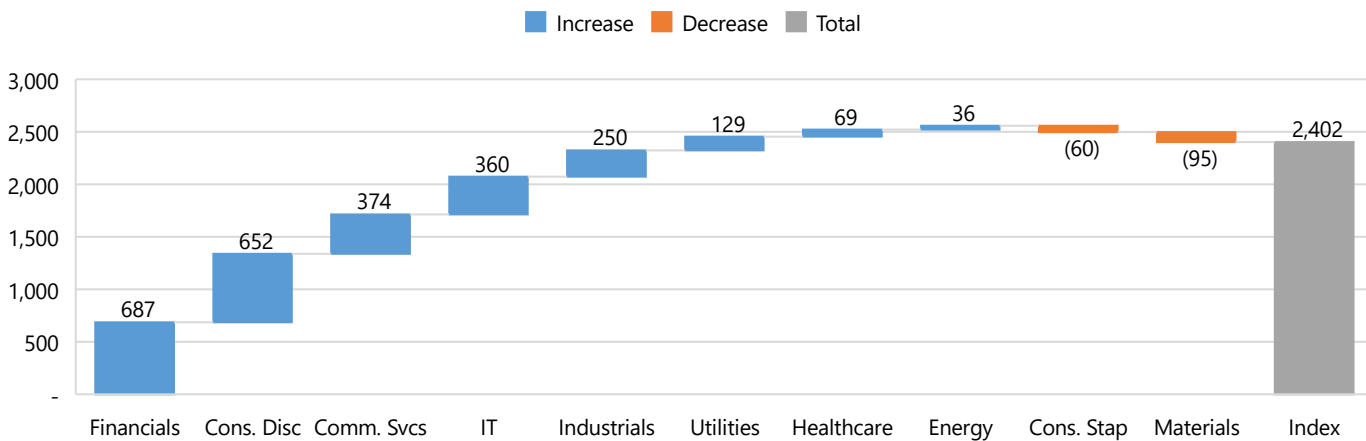
Contribution to absolute Nifty50 Index change (November 2024)



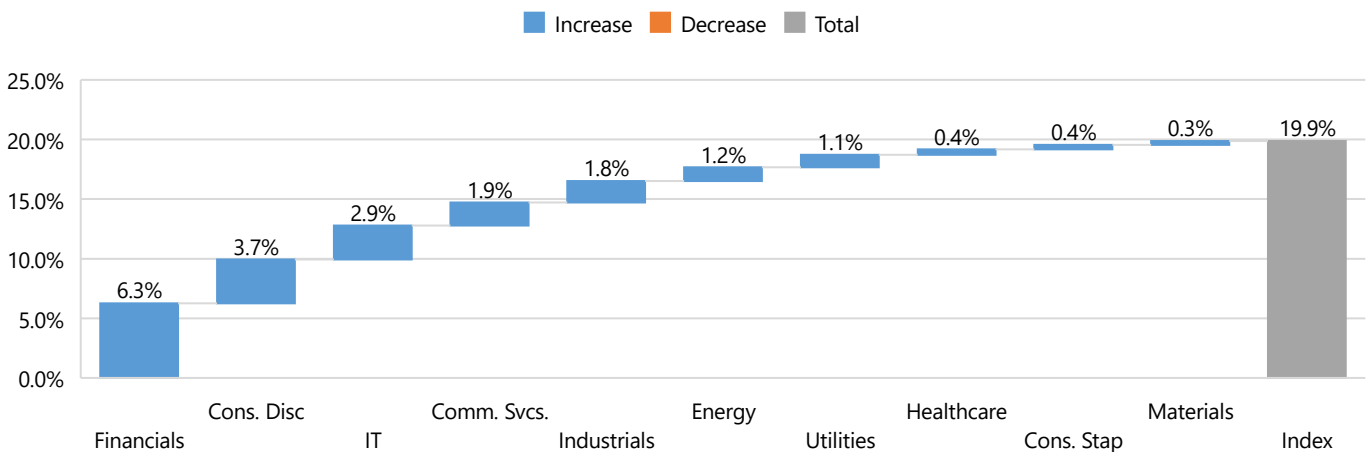
Source: LSEG Workspace, CMIE Prowess, NSE Indices, NSE EPR.

Figure 146: Sector-wise contribution to Nifty 50 price return in 2024 till date (Jan-Nov'24)
Contribution to Nifty50 Index percentage change (YTD)


Source: LSEG Workspace, CMIE Prowess, NSE Indices, NSE EPR.

Figure 147: Sector-wise contribution to Nifty 50 Index change (points) in 2024 till date (Jan-Nov'24)
Contribution to absolute Nifty50 Index change (YTD)


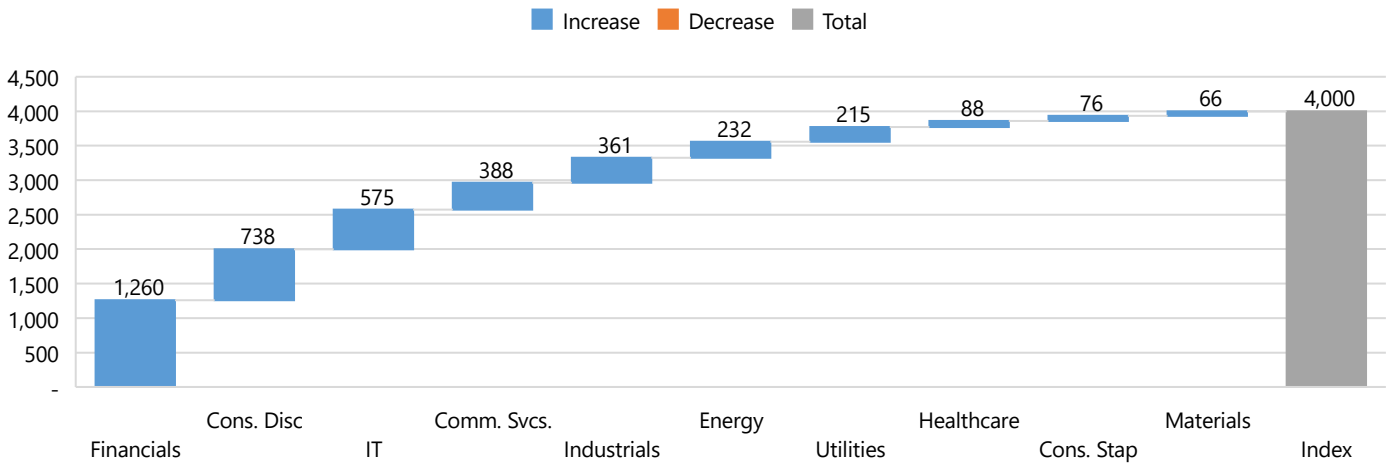
Source: LSEG Workspace, CMIE Prowess, NSE Indices, NSE EPR.

Figure 148: Sector-wise contribution to Nifty 50 price return in last one year (Dec'23-Nov'24)
Contribution to Nifty50 Index percentage change (One-year)


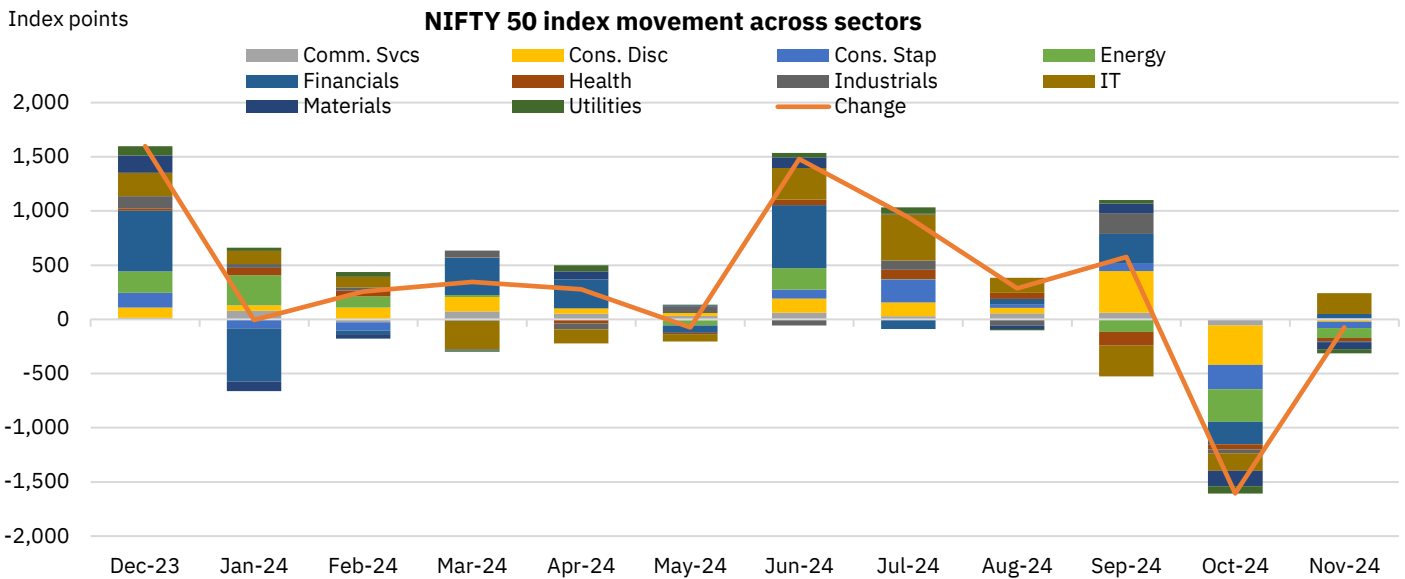
Source: LSEG Workspace, CMIE Prowess, NSE Indices, NSE EPR.

Figure 149: Sector-wise contribution to Nifty 50 Index change (points) in last one year (Dec'23-Nov'24)

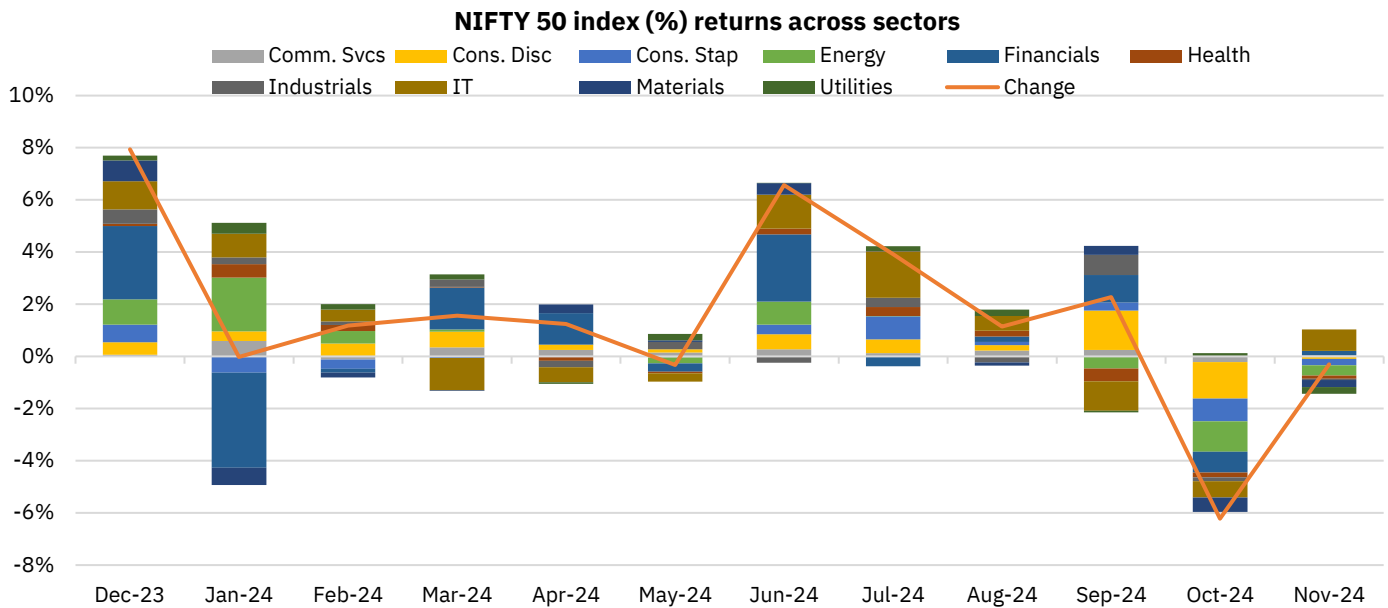
Contribution to absolute Nifty50 Index change (One-year)



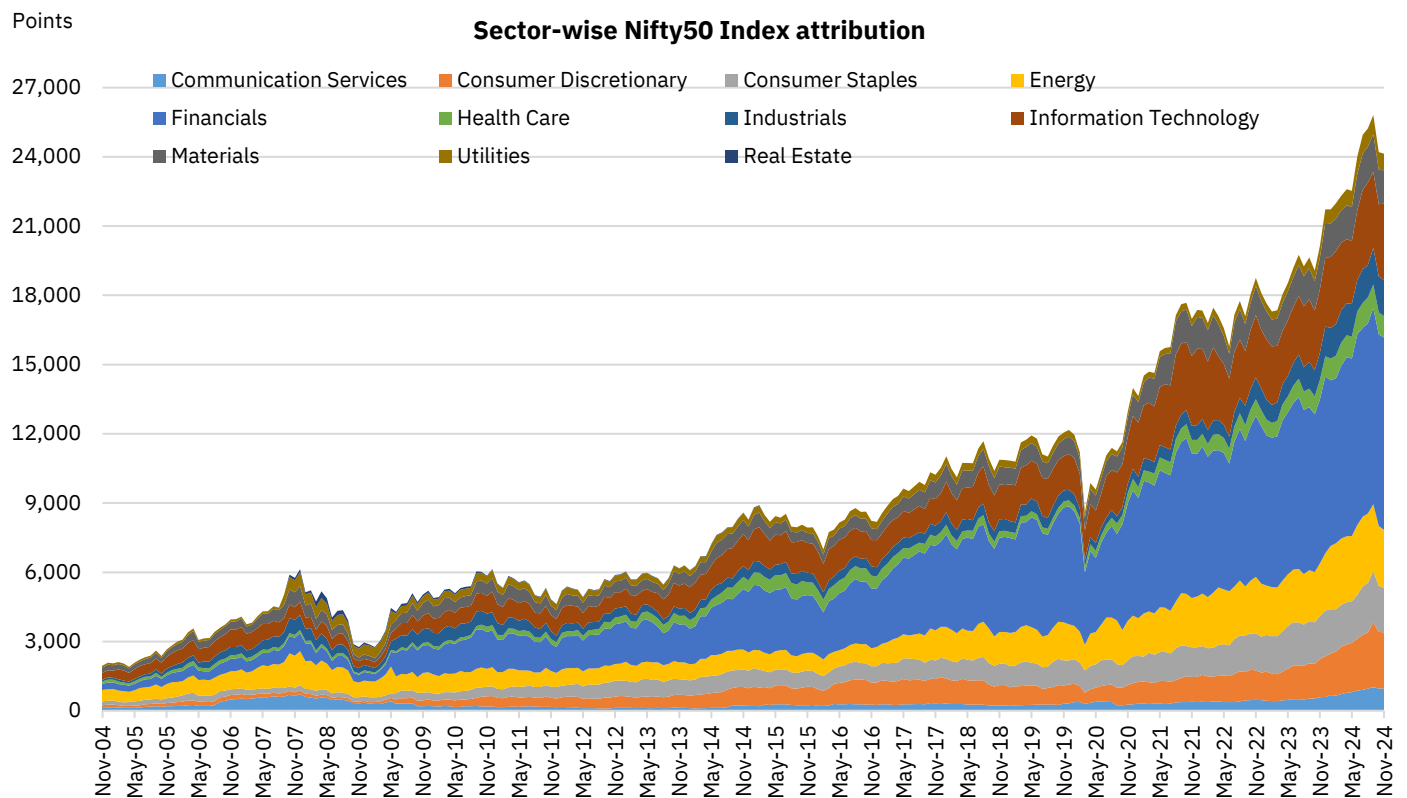
Source: LSEG Workspace, CMIE Prowess, NSE Indices, NSE EPR

Figure 150: Nifty 50 Index monthly movement across sectors over the last 12 months


Source: LSEG Workspace, CMIE Prowess, NSE Indices, NSE EPR.

Figure 151: Nifty 50 Index monthly return across sectors over the last 12 months


Source: LSEG Workspace, CMIE Prowess, NSE Indices, NSE EPR.

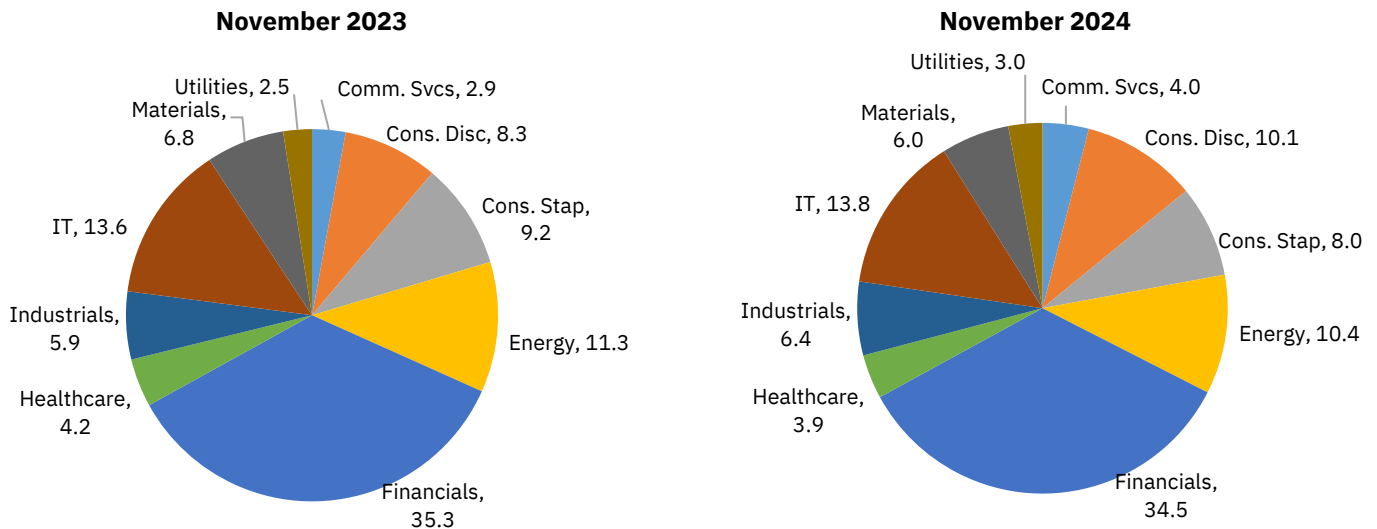
Figure 152: Sector-wise Nifty50 Index attribution (2004-)


Source: LSEG Workspace, CMIE Prowess, NSE EPR.

A strong outperformance of Information Technology and Financials in the month gone by resulted in their weights in the Nifty 50 Index rising by 83bps and 28bps MoM to 11-month and three-month high of 13.8% and 34.5% respectively. This came at the expense of a decline in weights of Energy, Materials, and Consumer Staples. In fact, the weight of the Energy sector at 10.4% as of November-end was the lowest in the last 92 months. In the last 12 months, the relative outperformance of Consumer Discretionary,

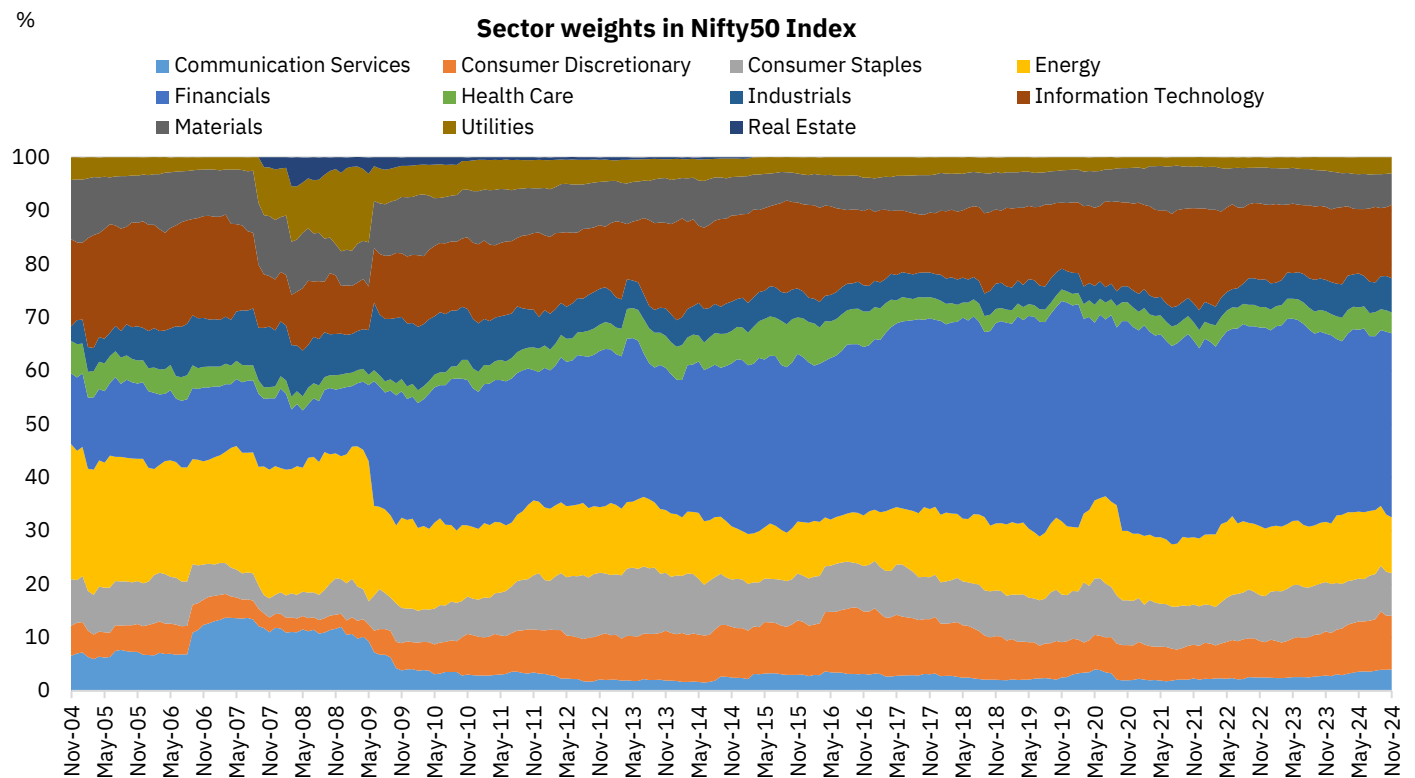
Communication Services and Industrials led to their weights in the Nifty 50 Index rising by 180bps, 113bps and 52bps to 10.1%, 177-month high of 4.0%, and 6.4% respectively. This increase in weight came at the expense of a significant drop of 121bps, 91bps, 85bps and 73bps in Consumer Staples, Energy, Materials and Financials to 8%, 10.4%, 6% and 34.5% respectively as of November-end. Interestingly, Financials weight is now 7.5pp lower than the peak weight of 42% in December 2019.

Figure 153: Nifty 50 sector weightage (November 2023) **Figure 154: Nifty 50 sector weightage (November 2024)**



Source: LSEG Workspace, CMIE Prowess, NSE EPR.

Figure 155: Sector weights in the Nifty 50 Index (2003-)



Source: LSEG Workspace, CMIE Prowess, NSE EPR.

Table 43: Top five Nifty 50 Index gainers in November 2024

Security name	Security symbol	Return (%)	Index % return contribution (%)	Index change contribution (points)
H D F C Bank Ltd.	HDFCBANK	3.5	0.4	104
Infosys Ltd.	INFY	5.7	0.3	81
Tata Consultancy Services Ltd.	TCS	7.6	0.3	70
Mahindra & Mahindra Ltd.	M&M	8.7	0.2	47
Larsen & Toubro Ltd.	LT	2.8	0.1	28
Total			1.4	330
Nifty 50 Index	NIFTY 50	-0.3	-0.3	-74

Source: LSEG Workspace, CMIE Prowess, NSE EPR.

Table 44: Top five Nifty 50 Index gainers in Jan-Nov 2024

Security name	Security symbol	Return (%)	Index % return contribution (%)	Index change contribution (points)
I C I C I Bank Ltd.	ICICIBANK	3.5	2.0	442
Bharti Airtel Ltd.	BHARTIARTL	5.7	1.7	374
Trent Ltd.	TRENT	7.6	1.5	336
Bharat Electronics Ltd.	BEL	8.7	1.1	245
Mahindra & Mahindra Ltd.	M&M	2.8	1.1	235
Total			7.5	1,632
Nifty 50 Index	NIFTY 50	11.0	11.0	2,400

Source: LSEG Workspace, CMIE Prowess, NSE EPR.

Table 45: Top five Nifty 50 Index losers in November 2024

Security name	Security symbol	Return (%)	Index % return contribution (%)	Index change contribution (points)
Reliance Industries Ltd.	RELIANCE	-3.0	-0.2	-59
N T P C Ltd.	NTPC	-10.9	-0.2	-47
Asian Paints Ltd.	ASIANPAINT	-15.5	-0.2	-45
Adani Ports & Special Economic Zone Ltd.	ADANIPTS	-13.5	-0.1	-30
Adani Enterprises Ltd.	ADANIENT	-16.4	-0.1	-26
Total			-0.9	-207
Nifty 50 Index	NIFTY 50	-0.3	-0.3	-74

Source: LSEG Workspace, CMIE Prowess, NSE EPR.

Table 46: Top five Nifty 50 Index losers in Jan-Nov 2024

Security name	Security symbol	Return (%)	Index % return contribution (%)	Index change contribution (points)
Asian Paints Ltd.	ASIANPAINT	-3.0	-0.5	-100
Indusind Bank Ltd.	INDUSINDBK	-10.9	-0.4	-95
Kotak Mahindra Bank Ltd.	KOTAKBANK	-15.5	-0.3	-64
Bajaj Finance Ltd.	BAJFINANCE	-13.5	-0.3	-57
Titan Company Ltd.	TITAN	-16.4	-0.2	-50
Total			-1.7	-366
Nifty 50 Index	NIFTY 50	11.0	11.0	2,400

Source: LSEG Workspace, CMIE Prowess, NSE EPR.

Earnings and valuation analysis

Consensus earnings estimates cut sharply after a weak Q2FY25: Consensus earnings estimate for this as well as the next year have seen cuts in the last three months, reflecting the impact of weak second quarter corporate earnings, signs of domestic economic slowdown and uncertainty around commodity prices and interest rate trajectory. The Nifty50 earnings estimates (Source: LSEG Workspace) for 2024 as well as 2025 were cut by 1.9% and 1.2% in the last three months, translating into a total drop of 4.2% and 1.5% respectively in the year thus far. This implies expected earnings growth of 4.7% and 15.8% for 2024 and 2025 as on November 30th, 2024, vs. 5.5% and 15.9% as of end of the previous month, respectively, resulting in a two-year CAGR (2023-25) of 11.9%, slightly higher than 10.6% as of end of the previous month and 13.8% as of March-end.

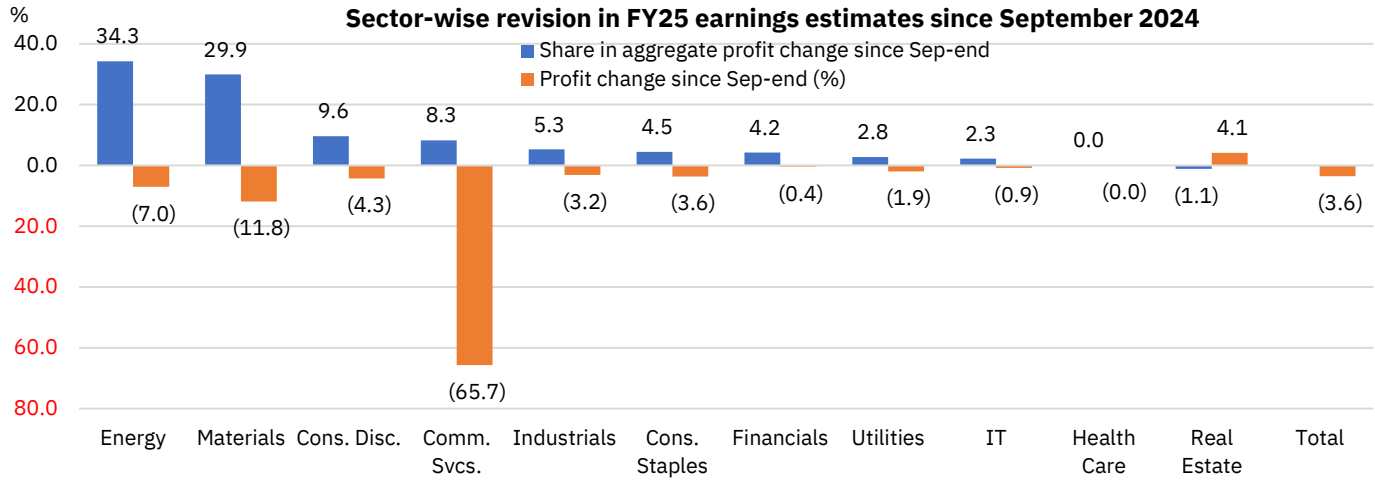
Our analysis of the earnings estimates of the top 200 companies by market cap⁵⁴ painted an even bleaker picture. The aggregate consensus earnings estimate for this universe for FY25 as well as FY26 were curtailed by 3.6% and 2.9% respectively since September-end (As of December 11th, 2024), translating into a drop of 3.6% for FY25 and a modest decline of 0.1% for FY26 in the fiscal year thus far. Sector-wise, steep earnings downgrades since September-end were led by commodity sectors such as Materials and Energy, accounting for ~64% of the absolute change in earnings during this period. While downgrades in the Energy sector were on the back of lower refining margins and inventory losses due to declining crude oil prices, Materials, on the other hand, felt the brunt of slowdown in China, with the expected imposition of tariffs post the Trump victory adding to the woes. In fact, barring Real Estate and Communication Services that saw modest upgrades, all other sectors saw their earnings estimates getting curtailed in the last couple of months

Table 47: Earnings growth and forward-looking multiples for Nifty 50 Index

Metric	Periods	As on 30-Nov-24	Change (%/bps)				
			1M	3M	6M	YTD	1Y
EPS (Rs)	12-month forward	1151.9	1.1%	3.2%	7.3%	9.0%	11.8%
	2023	995.3	0.7%	0.8%	5.4%	3.4%	4.3%
	% YoY	25.0%	89bps	98bps	639bps	513bps	636bps
	2024	1042.0	0.0%	-1.9%	-1.8%	-4.2%	-3.9%
	% YoY	4.7%	-79bps	-292bps	-763bps	-829bps	-893bps
	2025	1206.9	-0.1%	-1.2%	-0.5%	-1.5%	-0.5%
	% YoY	15.8%	-5bps	86bps	147bps	323bps	396bps
Price to earnings (P/E) (x)	12-month forward	21.0	-2.2%	-4.3%	0.8%	3.5%	12.2%
	2024	23.2	-1.1%	0.8%	10.1%	17.8%	30.6%
	2025	20.0	-1.0%	0.1%	8.7%	14.5%	26.1%
Price to Book value (P/B) (x)	12-month forward	3.3	-2.3%	0.3%	0.0%	2.3%	12.2%
	2024	3.6	-1.6%	4.0%	7.1%	13.8%	27.1%
	2025	3.2	-1.3%	4.6%	7.3%	13.8%	26.4%

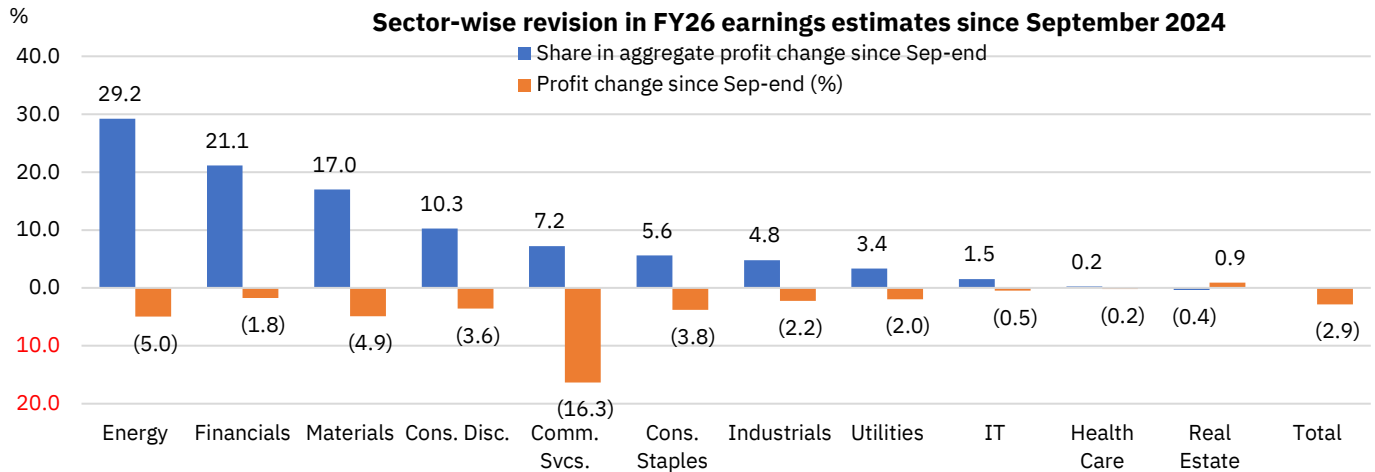
Source: LSEG Workspace, NSE EPR. NTM = Next Twelve Months.

⁵⁴ The sample set consists of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five or more analysts during the previous 12 months using IBES estimates from LSEG Datastream.

Figure 156: Sector-wise revision in FY25 earnings estimates for top 200 companies since September 2024


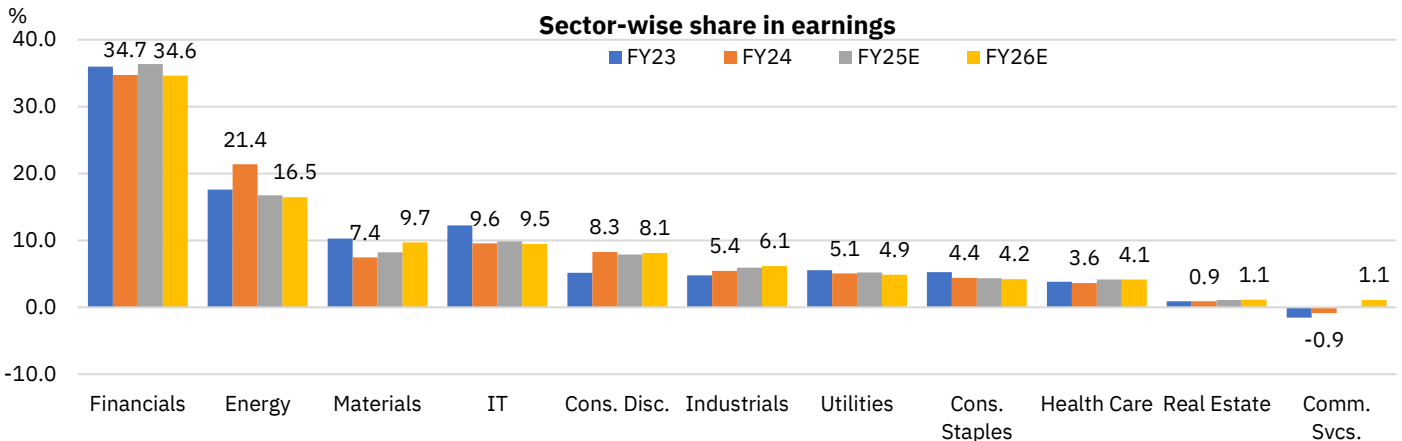
Source: LSEG Workspace, NSE EPR

 Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five analysts at any given point of time over the last one year. Data is as on December 12th, 2024.

Figure 157: Sector-wise revision in FY26 earnings estimates for top 200 companies since September 2024


Source: LSEG Workspace, NSE EPR

 Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five analysts at any given point of time over the last one year. Data is as on December 12th, 2024.

Figure 158: Sector-wise share in earnings


Source: LSEG Workspace, NSE EPR.

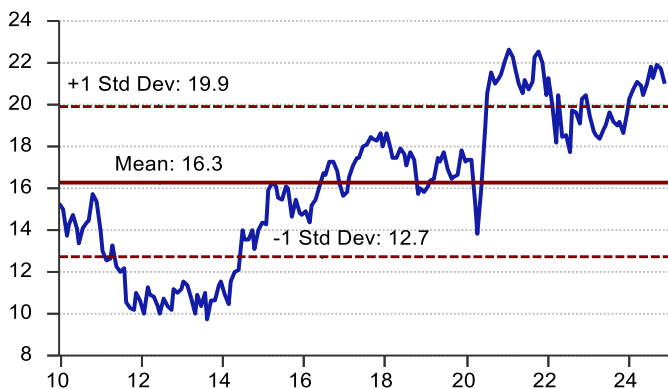
 Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2024, covered by at least five analysts at any given point of time over the last one year. Data is as of December 12th, 2024.

Market valuations correct sin October and November: After rising to nearly three-year high of 22.5x in early October, market valuations have come off sharply in the last six weeks, thanks to a steep sell-off witnessed during this period. The Nifty50 Index currently trades at a 12-month forward P/E of 20.9x, with recent cuts in earnings estimates capping the correction. That said, the current forward P/E is still 28% higher than long-term (Last 15-year) average multiple (16.3x) and 5.6% higher than the one standard deviation above the long-term multiple. Valuations have corrected marginally on a price-to-book (P/B) basis as well, with Nifty50 currently trading at a 12-month forward P/B of 3.3x. This implies a premium of ~32% to the average P/B of 2.5x over the last 15-year period.

...Accompanied with a drop in valuation premium to EM equities: Indian equities have perennially traded at a premium to EM equities, thanks to India's strong economic fundamentals and robust growth outlook. The recent underperformance of Indian equities vis-à-vis other emerging markets, particularly China, however, has resulted in some drop in this premium level, even as it continues to remain much higher than long-term premium. On a 12-month forward P/E, MSCI India trades at a premium of 92% vs. last 15-year average premium of 53%, down from 108% in the previous month. On 12-month forward P/B, MSCI India is trading at a much higher premium of 132%, down from 152% last month, but much higher than the last 15-year average premium of 82%.

Figure 159: Nifty 50 NTM P/E trend for last 15 years

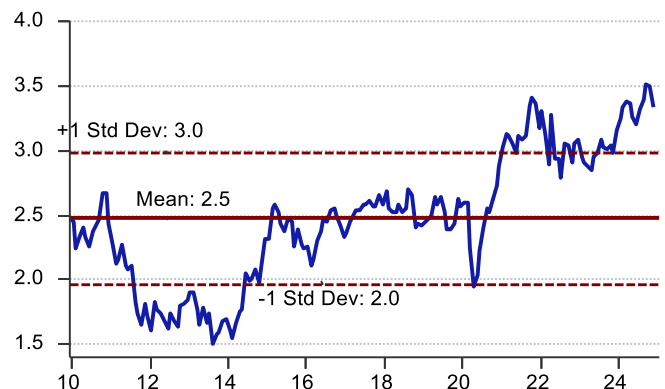
Nifty 50 12-month forward P/E



Source: LSEG Workspace, NSE EPR

Figure 160: Nifty 50 NTM P/B trend for last 15 years

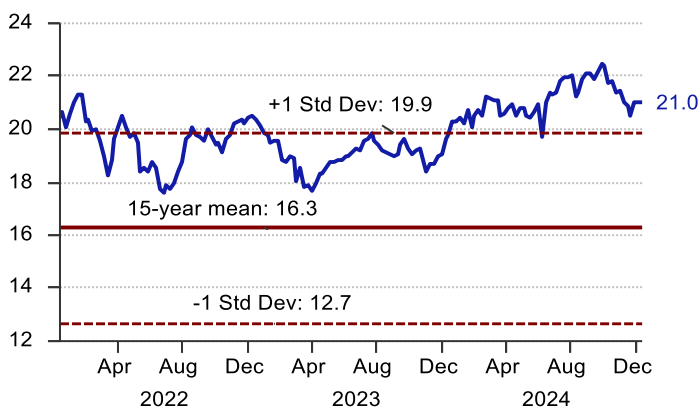
Nifty 50 12-month forward P/B



Source: LSEG Workspace, NSE EPR

Figure 161: Nifty 50 NTM P/E (Last three-year trend)

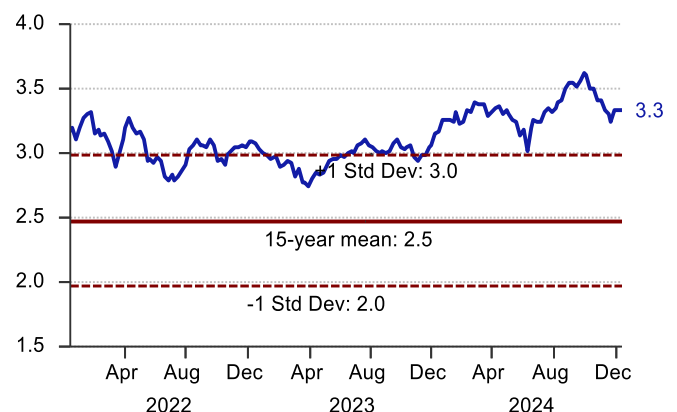
Nifty 50 12-month forward P/E



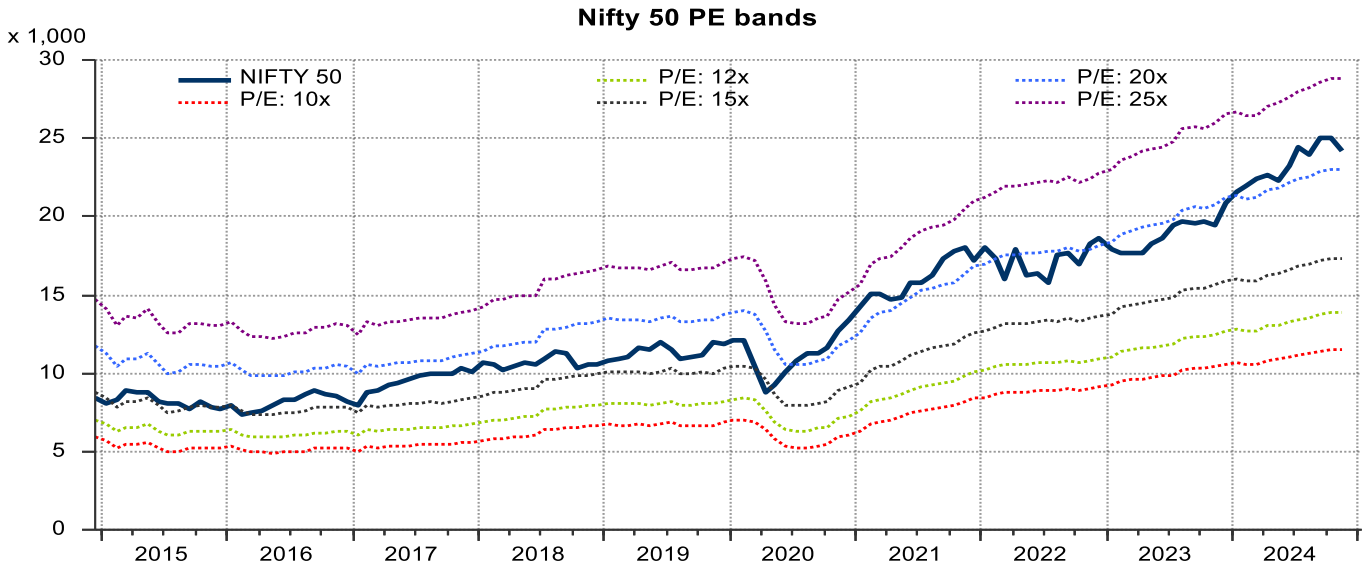
Source: LSEG Workspace, NSE EPR

Figure 162: Nifty 50 NTM P/B (Last three-year trend)

Nifty 50 12-month forward P/B



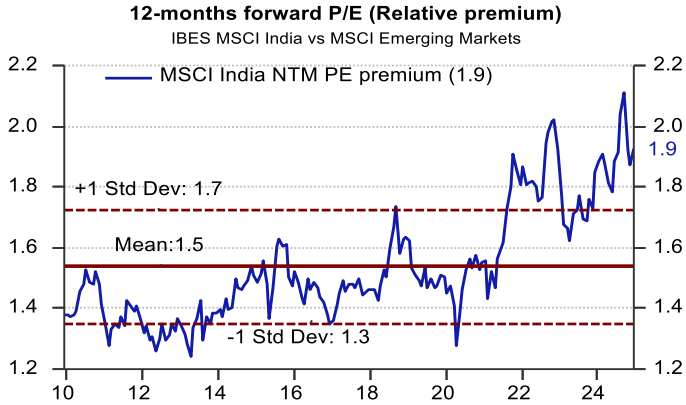
Source: LSEG Workspace, NSE EPR

Figure 163: Five-year trend of Nifty 50 values at different 12-month forward P/E bands


Source: LSEG Workspace, NSE EPR

Figure 164: NTM P/E of MSCI India vs. MSCI EM (15-year trend)

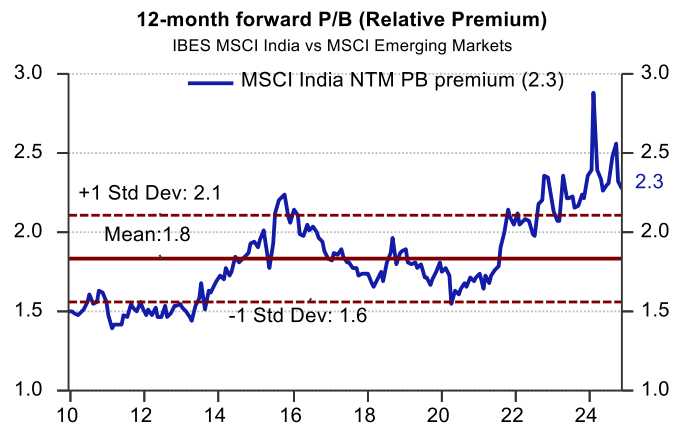
MSCI India currently trades at a premium of 87% to MSCI EM on 12-month forward P/E vs. last 12-month average premium of 53%, down from 105% as of September end.



Source: LSEG Workspace, NSE EPR

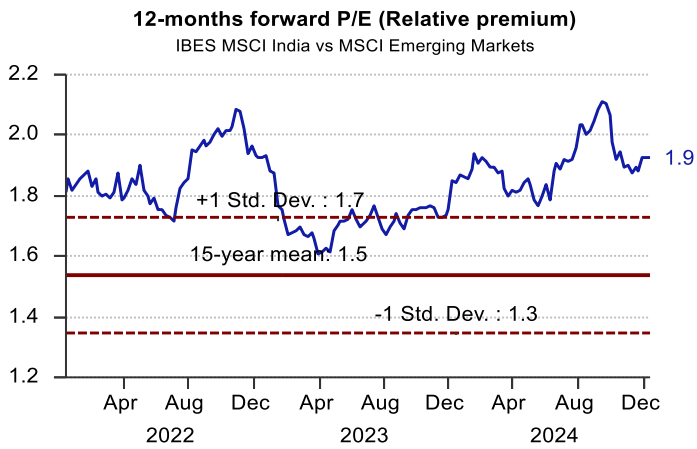
Figure 165: NTM P/B of MSCI India vs. MSCI EM (15-year trend)

On 12m forward P/B as well, India's valuation premium to MSCI EM has fallen from 152% to 130% currently.



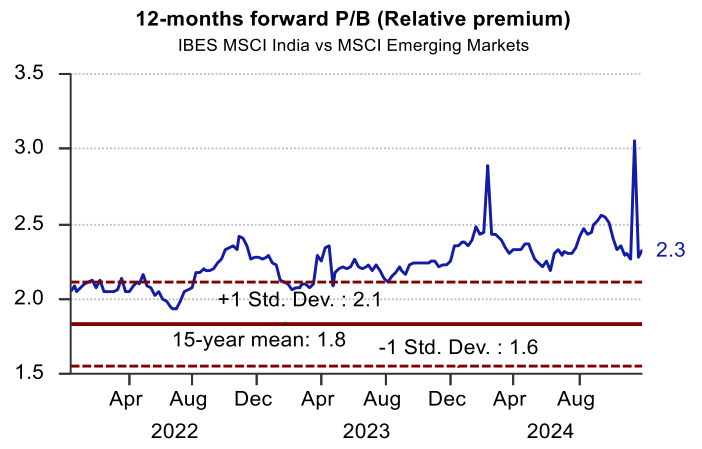
Source: LSEG Workspace, NSE EPR

Figure 166: NTM P/E of MSCI India vs. MSCI EM (Last three-year trend)



Source: LSEG Workspace, NSE EPR

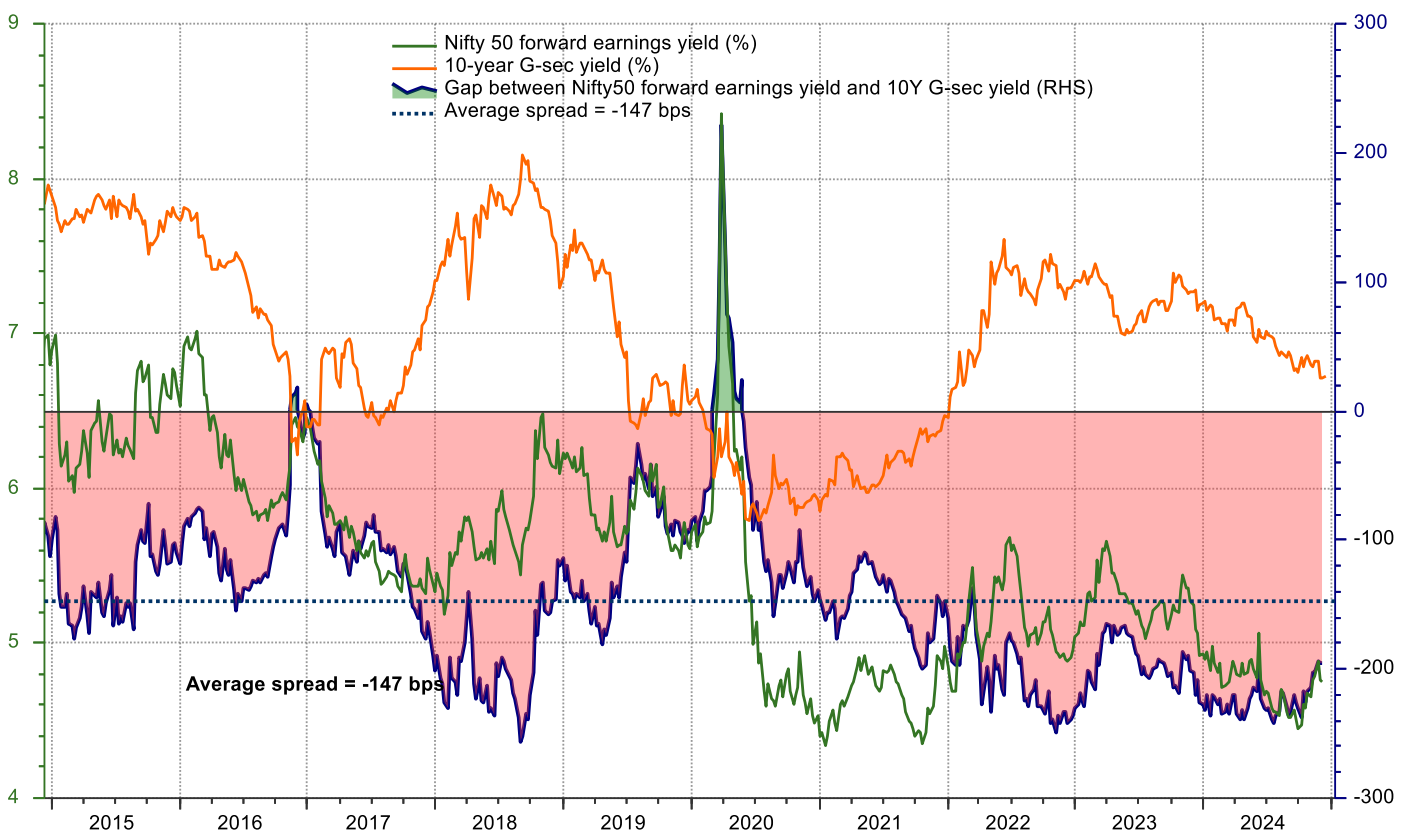
Figure 167: NTM P/B of MSCI India vs. MSCI EM (Last three-year trend)



Source: LSEG Workspace, NSE EPR

Figure 168: Nifty 50 forward earnings yield* vs. 10-year G-sec yield

Spread between Nifty 50 forward earnings yields and 10-year G-sec yield

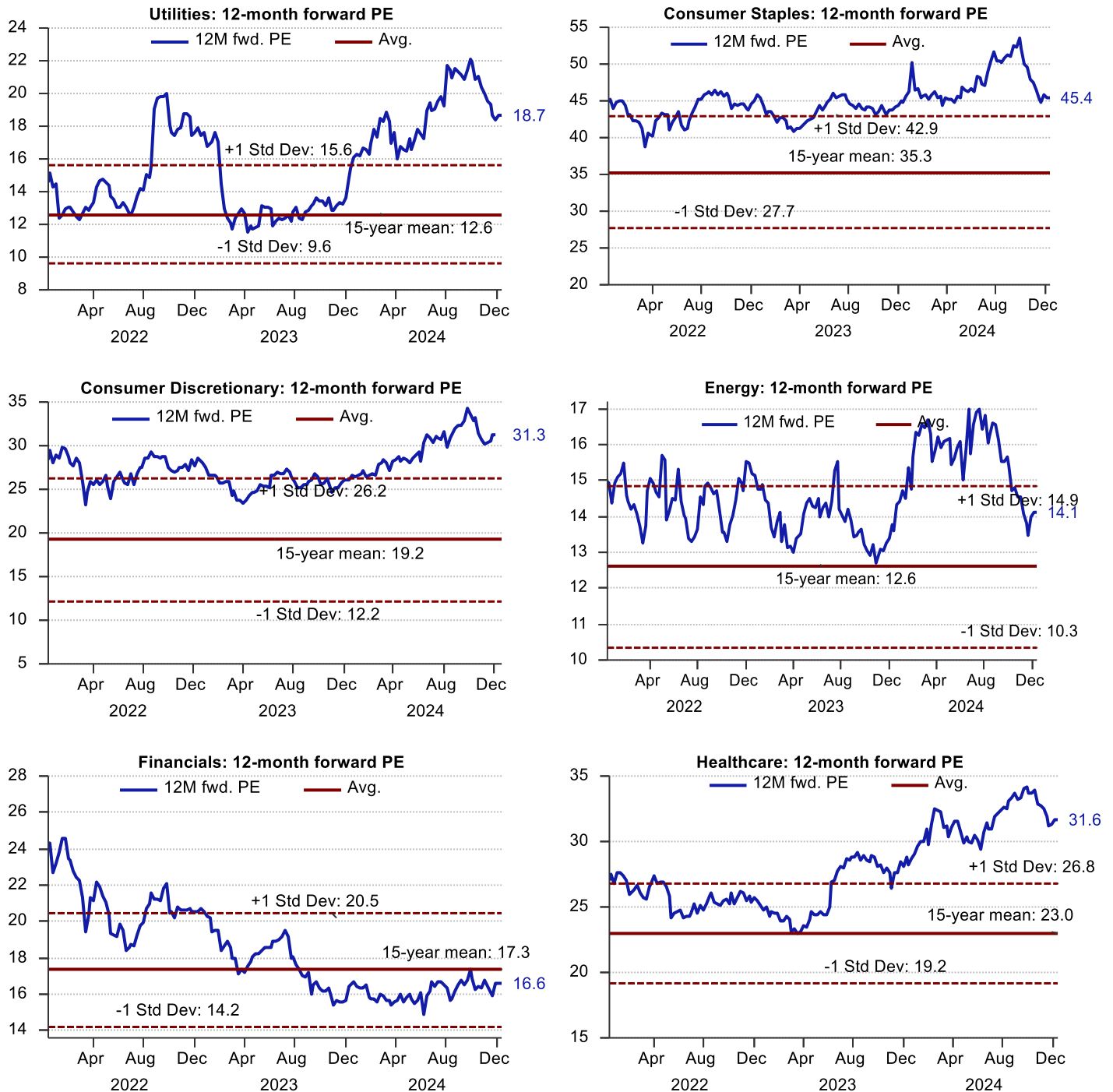


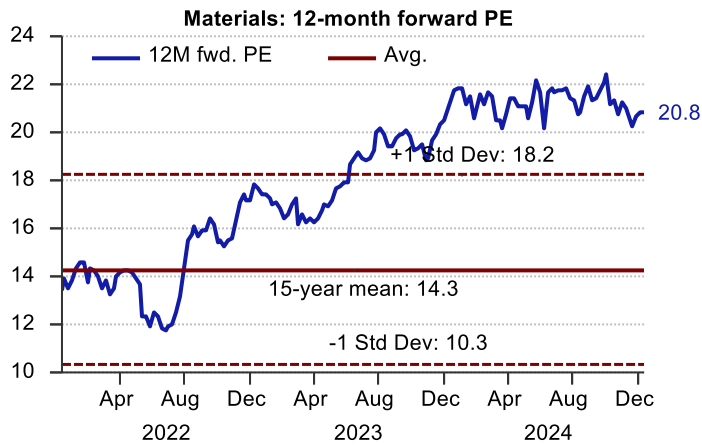
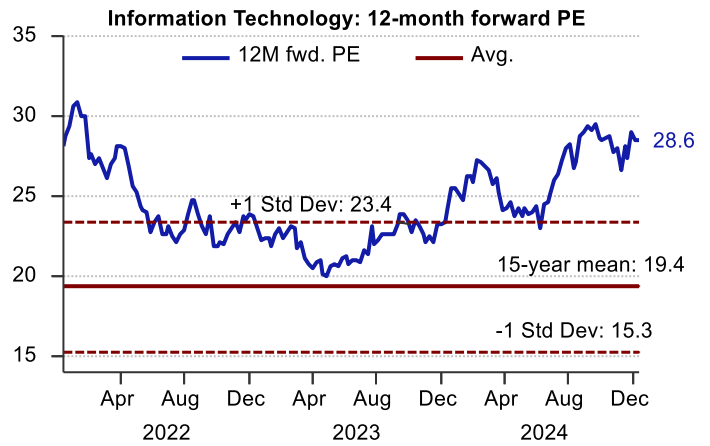
Source: LSEG Workspace, NSE EPR. * Forward earnings yield for Nifty 50 is calculated as (1/12-month forward PE).

Valuation correction was broad-based across sectors: We have also looked at long-term trends of 12-month forward P/E and P/B multiples across MSCI India sector indices. All sectors saw their forward multiples falling in the last couple of months, led by Energy and Consumer Staples. Financials, however, saw the forward multiples correcting only marginally as the sector continues to trade below the long-term multiple, providing limited room for further downside. Notwithstanding the recent correction, valuations of

most sectors, barring Financials and Energy, continue to remain at levels well above their respective long-term average multiples.

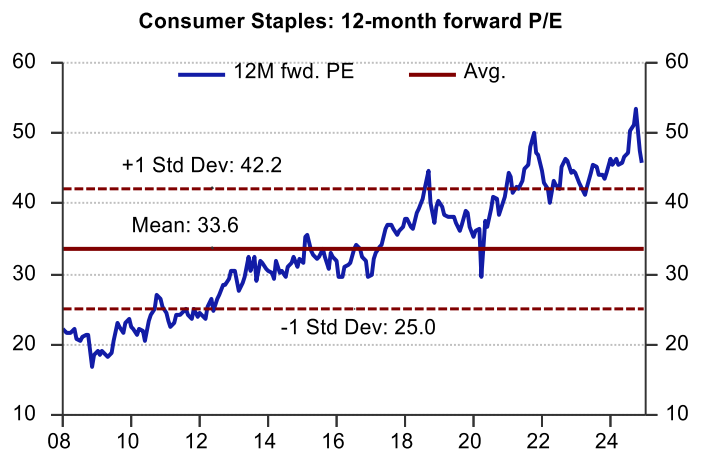
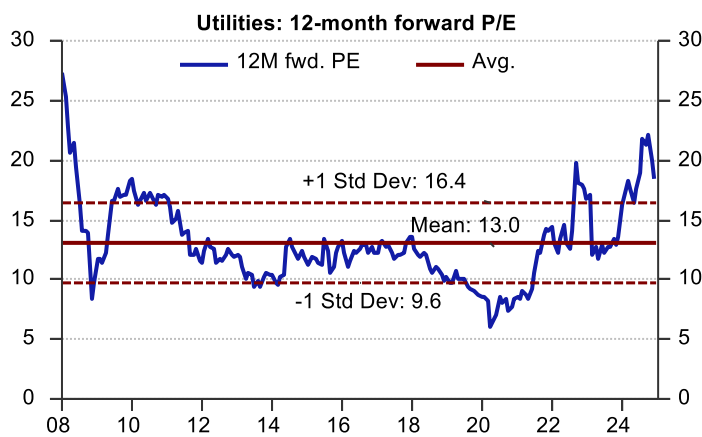
Figure 169: 12-month forward P/E for MSCI India sector indices (Three-year trend)

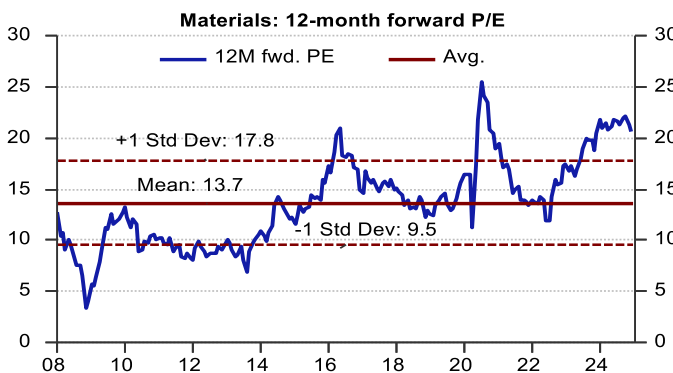
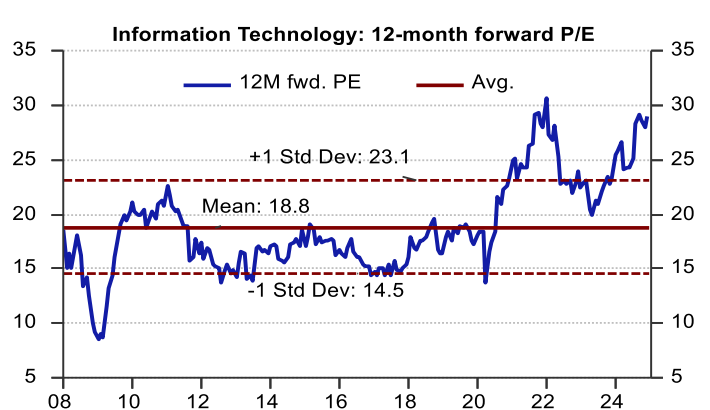
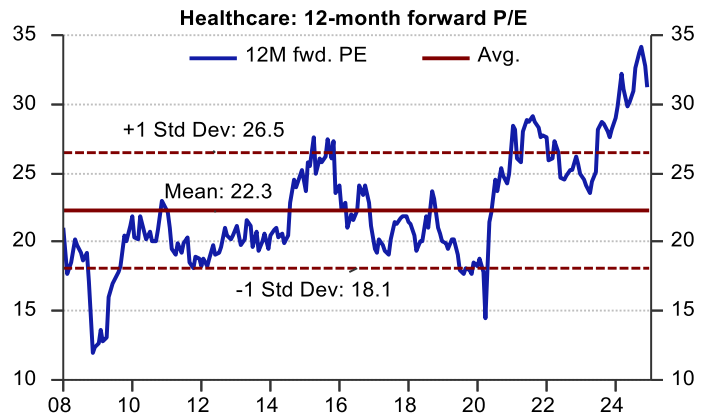
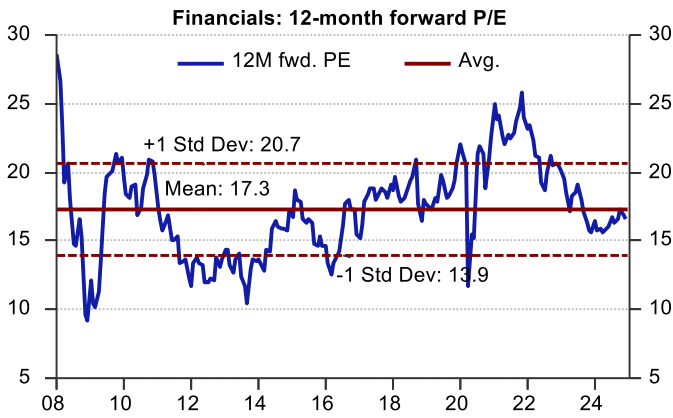
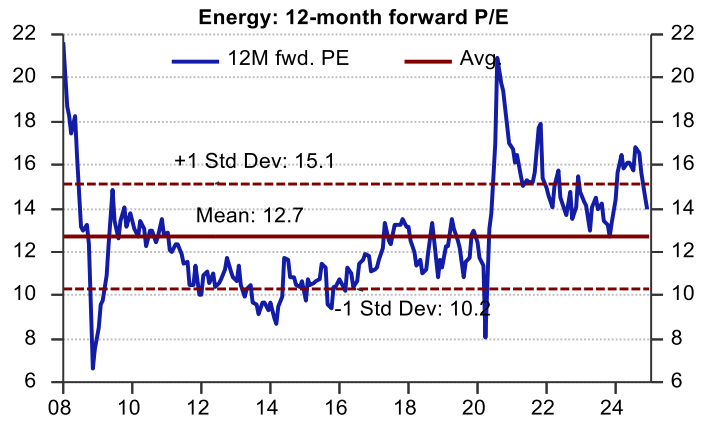
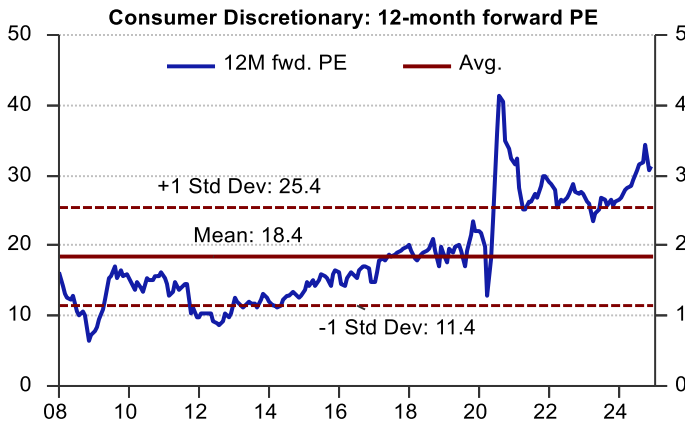




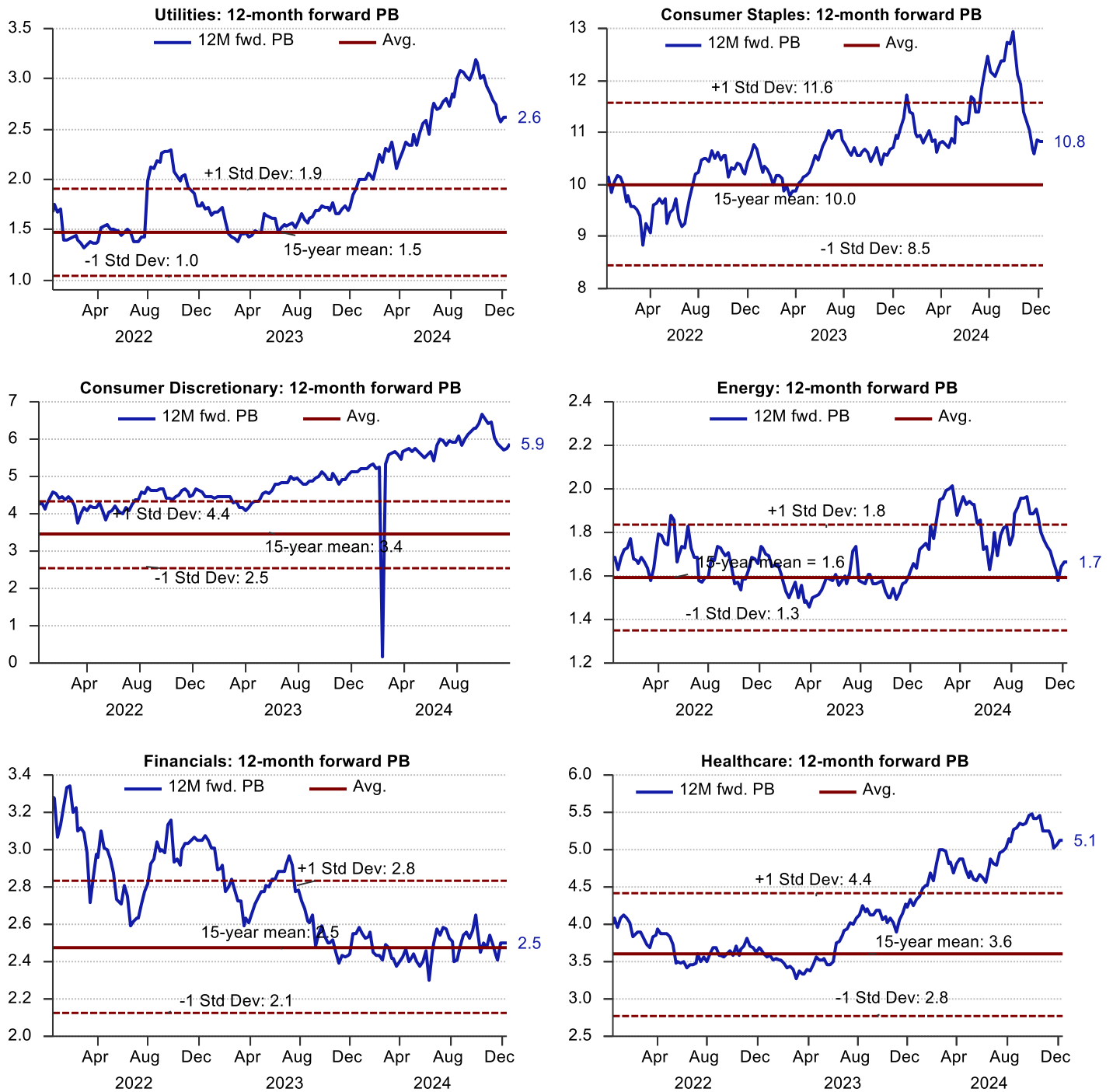
Source: LSEG Workspace, NSE EPR.

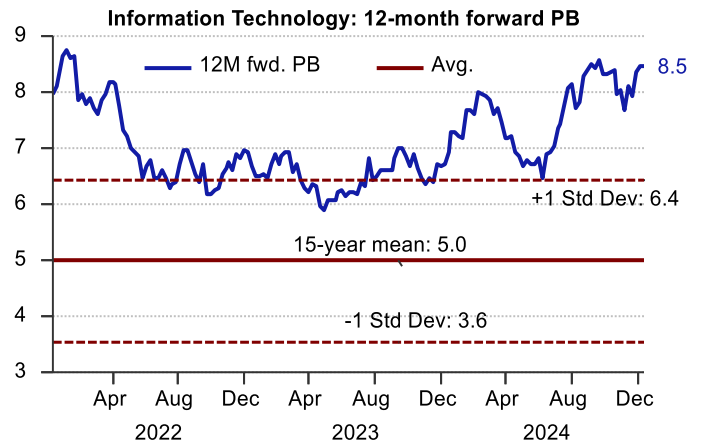
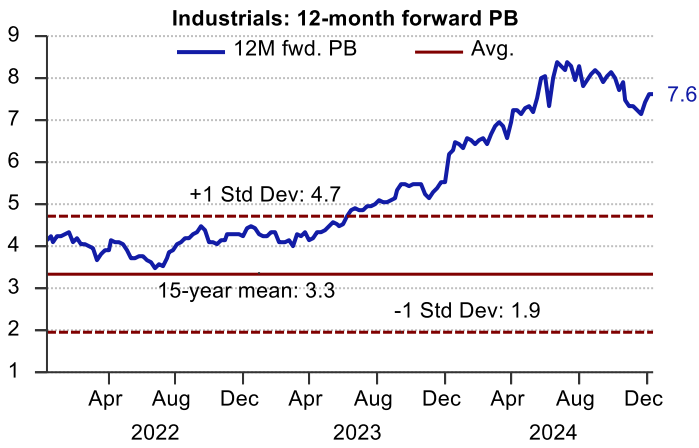
Figure 170: 12-month forward P/E for MSCI India sector indices (Long-term trend)



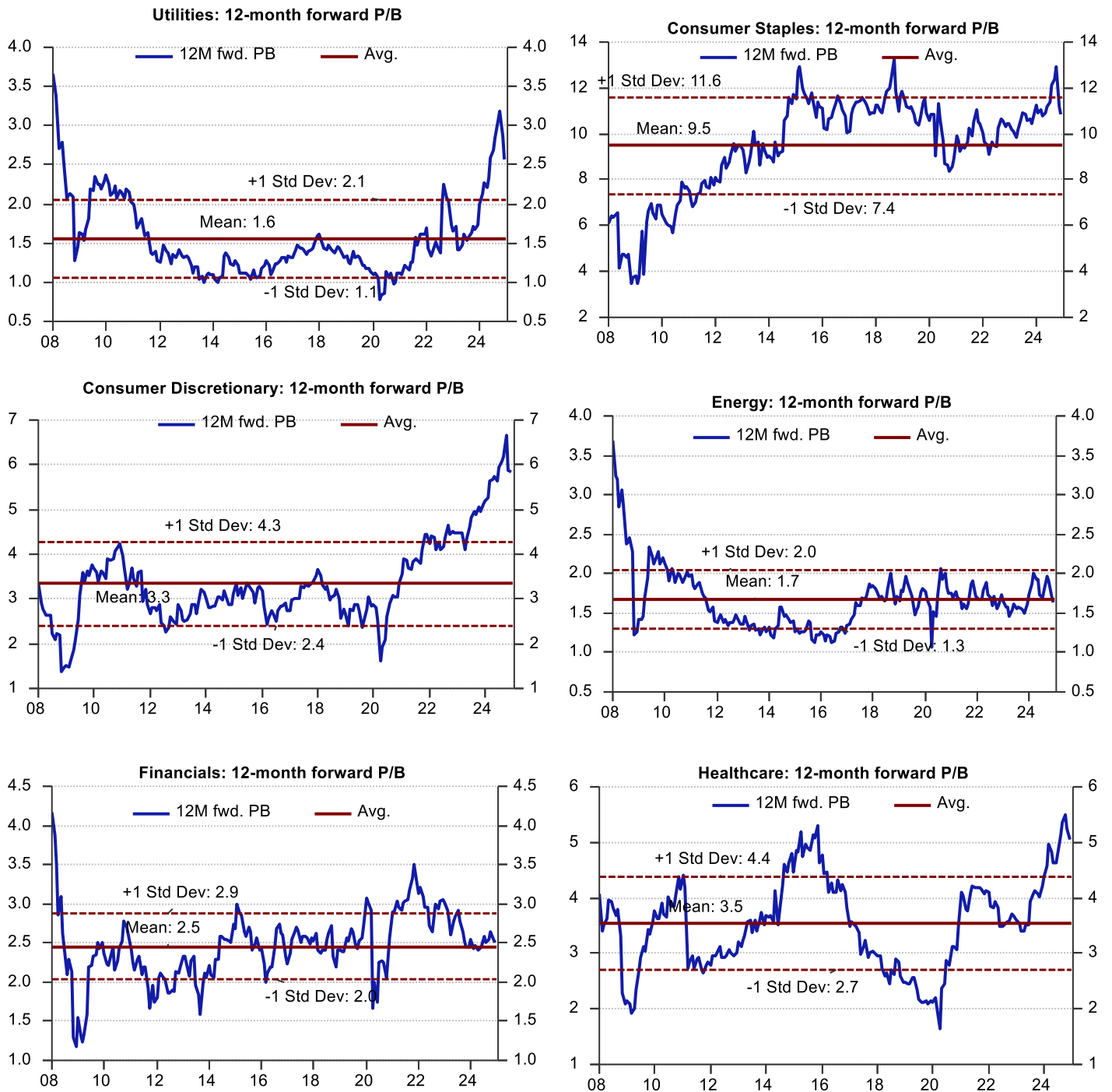


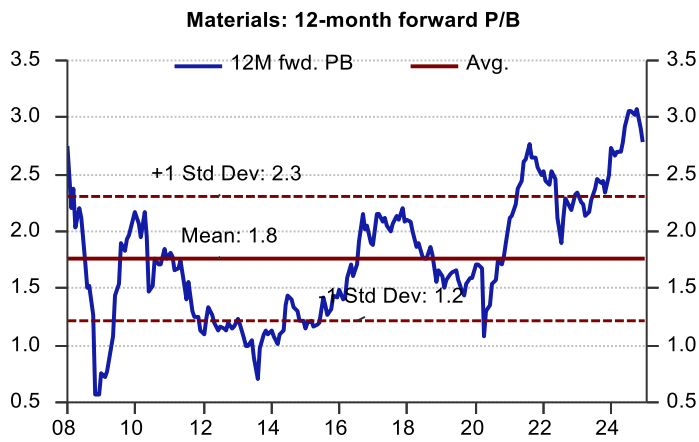
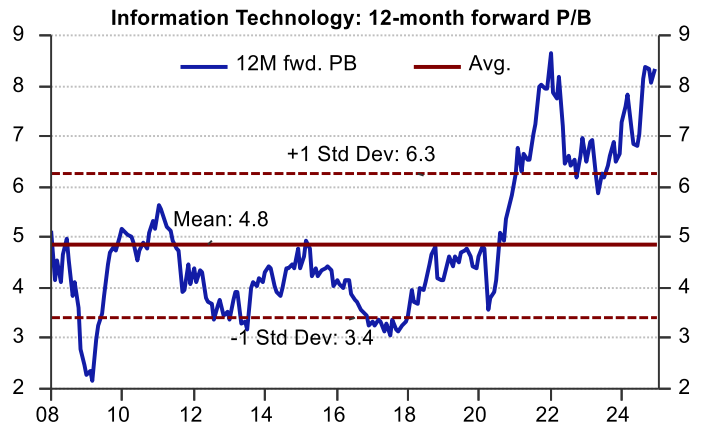
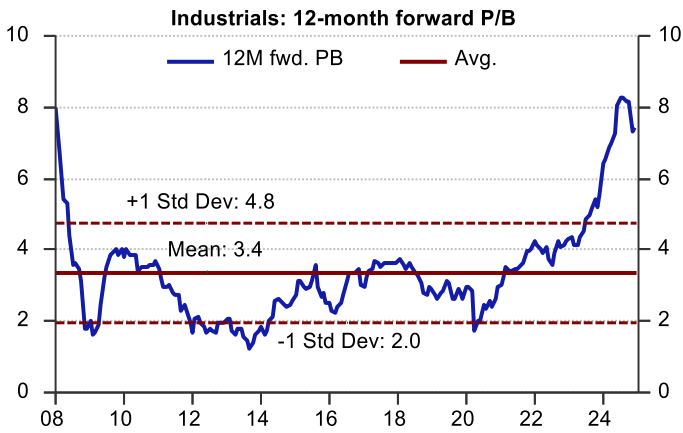
Source: LSEG Workspace, NSE EPR

Figure 171: 12-month forward P/B for MSCI India sector indices (Three-year trend)




Source: LSEG Workspace, NSE EPR.

Figure 172: 12-month forward P/B for MSCI India sector indices (Long-term trend)




Source: LSEG Workspace, NSE EPR.

Fixed income market performance

Table 48: Performance of key debt indices (As of November 30th, 2024)

Category	Index name	Absolute returns (%)					CAGR returns (%)		
		1M	3M	6M	1Y	YTD	2Y	3Y	5Y
G-sec	Nifty 5yr Benchmark G-sec Index	0.8	1.8	4.8	9.3	7.9	8.0	6.0	6.6
	Nifty 10 yr Benchmark G-Sec	0.9	2.1	5.7	10.4	9.0	8.7	5.6	5.4
	Nifty Composite G-sec Index	0.8	2.1	5.1	10.9	9.4	8.9	6.2	6.7
SDL	NIFTY 10 Year SDL Index	0.3	2.0	5.0	11.1	9.8	8.8	6.5	7.3
AAA credit	NIFTY AAA Ultra Short Duration Bond Index	0.6	1.9	3.8	7.9	7.3	7.7	6.8	6.1
	NIFTY AAA Short Duration Bond Index	0.4	1.8	3.7	7.7	6.9	7.1	5.7	6.4
	NIFTY AAA Low Duration Bond Index	0.5	1.8	3.6	7.5	6.9	7.4	6.2	6.0
	NIFTY AAA Medium Duration Bond Index	0.3	1.5	3.8	7.8	7.1	6.9	5.2	6.6
	NIFTY AAA Medium to Long Duration Bond Index	0.3	1.9	4.0	8.5	7.8	7.1	5.3	6.7
	NIFTY AAA Long duration Bond Index	0.2	2.1	4.2	9.6	8.7	7.7	5.4	6.6
Composite	NIFTY Liquid Index	0.6	1.8	3.6	7.5	6.8	7.3	6.5	5.4
	NIFTY Money Market Index	0.6	1.9	3.8	7.8	7.1	7.6	6.6	5.7
	NIFTY Ultra Short Duration Debt Index	0.6	1.9	3.9	8.0	7.4	7.9	6.9	6.1
	NIFTY Short Duration Debt Index	0.5	1.8	3.8	7.8	7.0	7.3	6.0	6.4
	NIFTY Low Duration Debt Index	0.6	1.9	3.7	7.8	7.2	7.7	6.5	6.0
	NIFTY Medium Duration Debt Index	0.5	1.7	4.0	8.1	7.3	7.4	5.7	6.8
	NIFTY Medium to Long Duration Debt Index	0.5	1.9	4.3	9.2	8.2	7.9	5.9	6.9
	NIFTY Long Duration Debt Index	0.4	2.0	4.7	11.1	9.8	8.7	6.4	7.2
	NIFTY Composite Debt Index	0.5	1.9	4.2	9.1	8.1	7.9	6.0	6.9
	NIFTY Corporate Bond Index	0.4	1.8	3.8	7.8	7.0	7.4	6.0	6.8

Source: NSE Indices, NSE EPR.

Global debt market rally as Trump trade fizzles out...: The month gone by saw significant buying across global fixed income markets, despite early uncertainties related to the US presidential election outcome and ongoing policy shifts. In the US, election results initially nudged yields upward as markets priced in potential inflationary pressures linked to the new administration but the US 10-year sovereign yield retreated by 9 bps to 4.2% as investors reassessed the feasibility of proposed fiscal measures and the Federal Reserve delivered a widely anticipated 25bps cut at the start of the month, following its 50bps reduction in September. In Europe, expectations of further easing from the European Central Bank led to a commensurate decline in yields with 10-year dropping by 30bps to reach 2.1%. The UK saw a 25bps policy rate reduction to 4.75%, paired with solid investor appetite for new gilt issuance, supporting decline in yields. Meanwhile, Japanese bond markets remained an exception to the global sentiment, with yields rising as inflation rose moderately and economy showed signs of recovery with the Bank of Japan expected to ease its accommodative stance.

...with softer Indian yields at key tenors reflecting improved inflation dynamics: Indian bond yields displayed a similar trend as US yields, exhibiting volatility due to US elections. Initially the 10-year benchmark rose to 6.9% before dropping to 6.7% as the month ended. The decline was partly led by a softer Q2 GDP print which came in at 5.4%, slowing down considerably from 6.7% last quarter. The modest downward bias in November was also supported by easing domestic inflation and global commodity prices. As inflation gradually moves towards the RBI's 4% target, the RBI is likely to move towards a policy rate cut as the focus shifts to supporting growth. This environment encouraged investors to extend duration, leading to a mild decline in yields across the intermediate to longer end of the curve, even as some shorter tenors experienced mixed

movements. Overall, the yield curve's gentle flattening reflected a recalibration of growth and inflation expectations, underscoring a more constructive outlook for the Indian fixed income market.

Figure 173: India 10Y G-sec yield—long-term trend

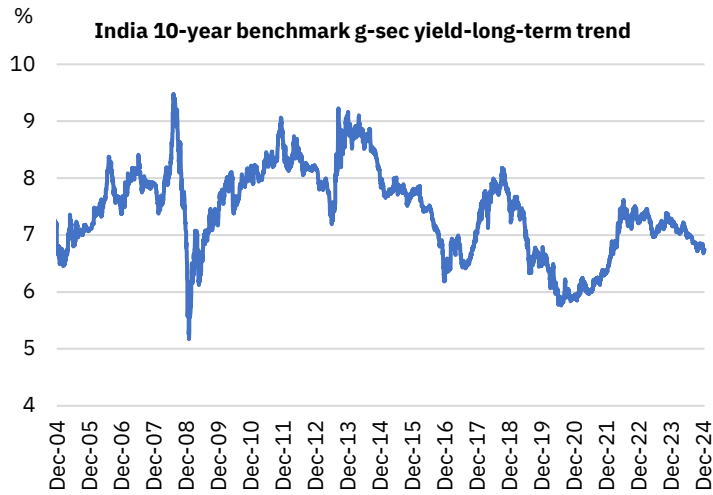
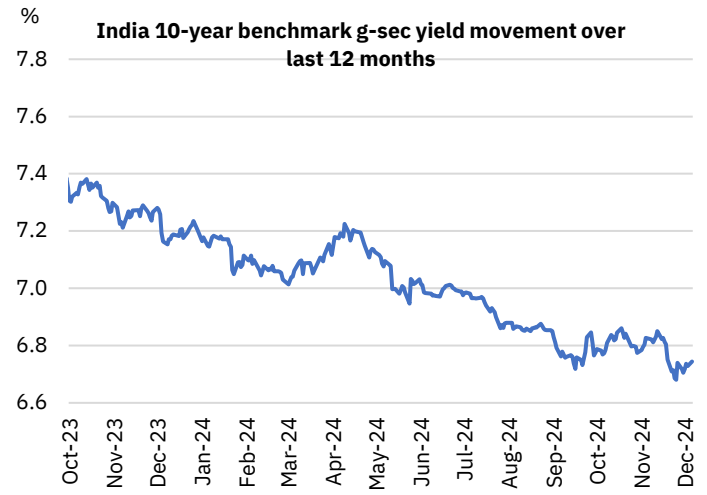
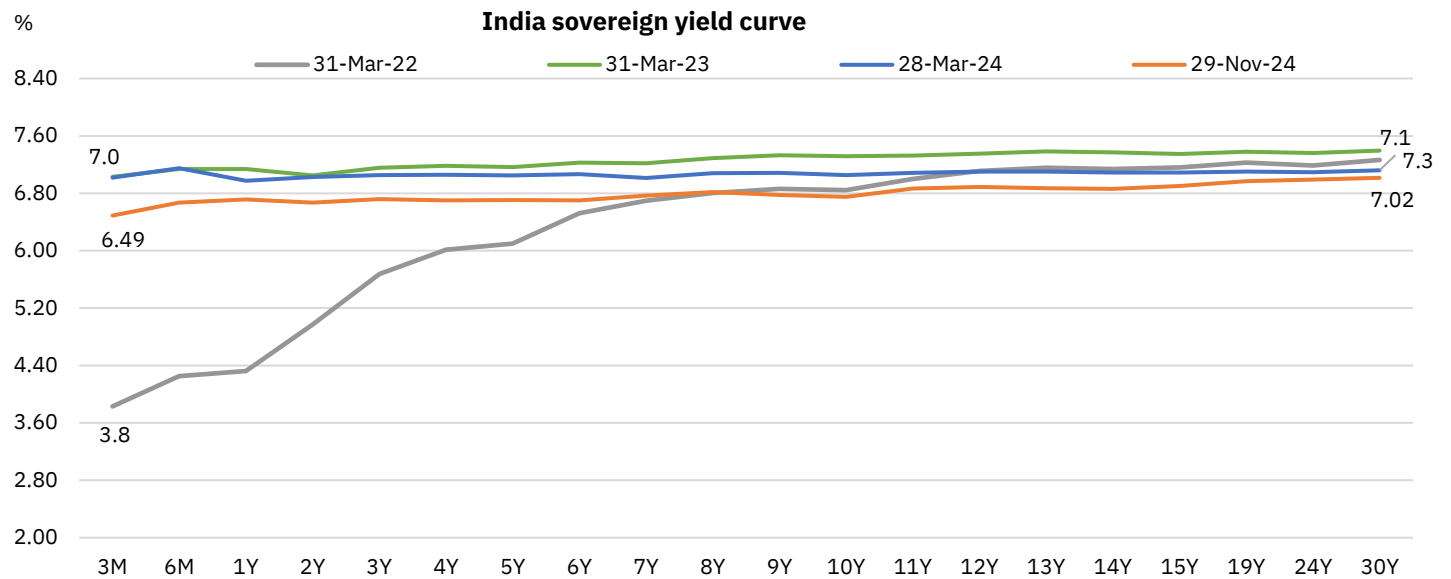


Figure 174: India 10Y G-sec yield—last one-year trend



Source: Cogencis, NSE EPR

Figure 175: India sovereign yield curve



Source: Cogencis, NSE EPR.

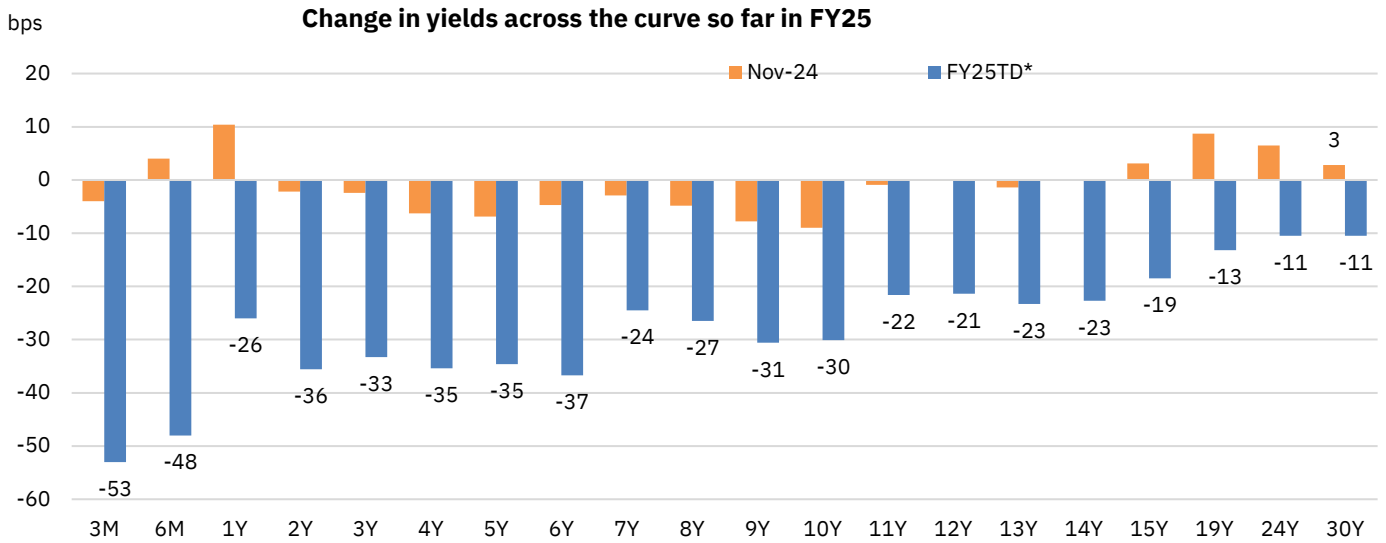
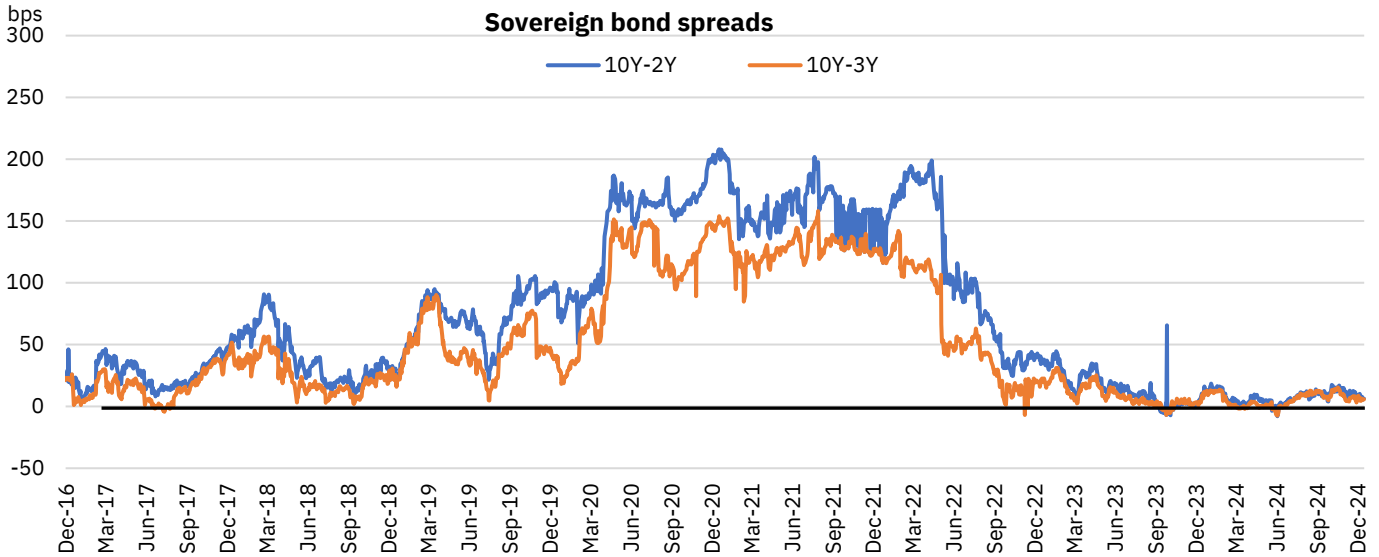
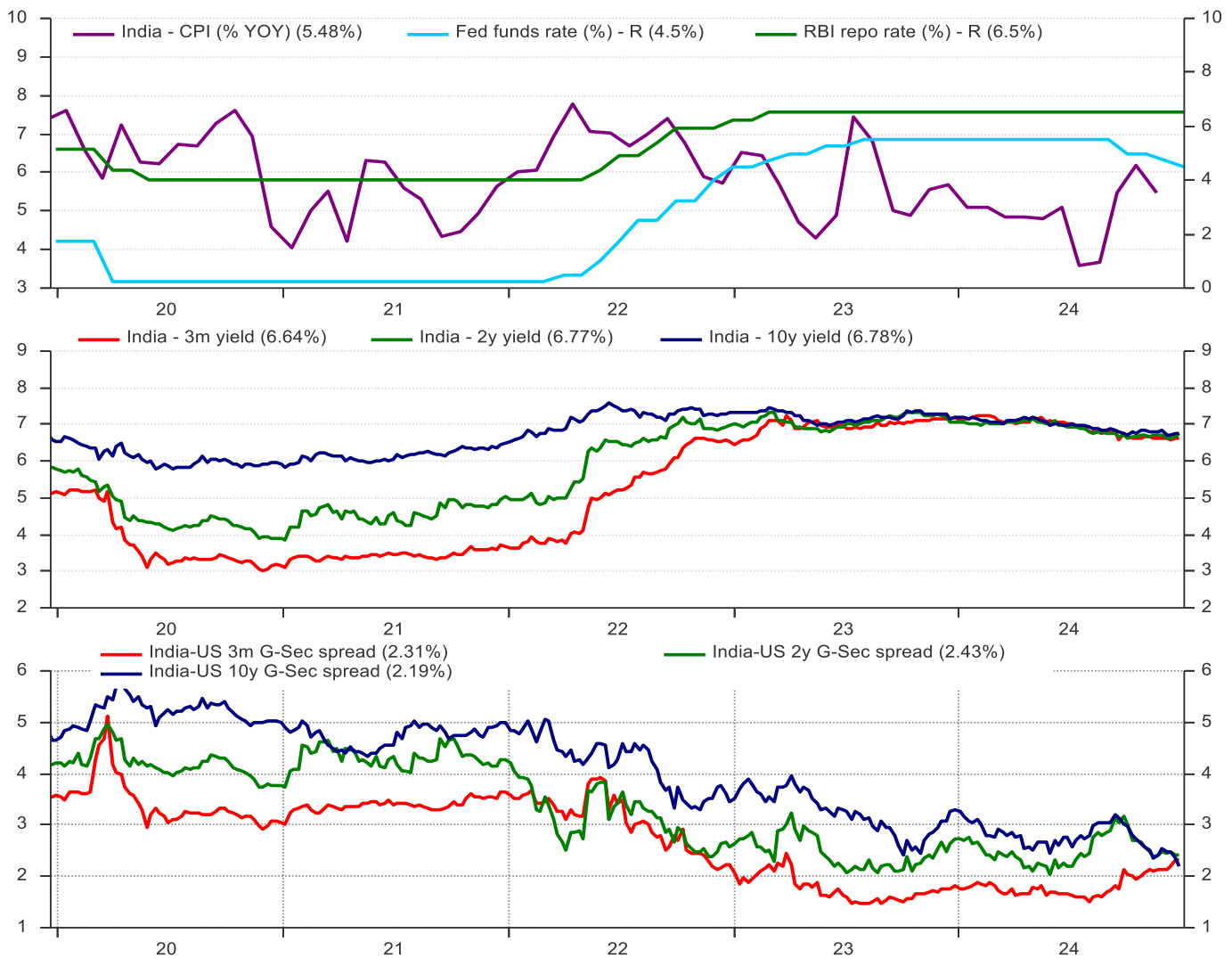
Figure 176: Change in sovereign yields across the curve

 Source: Cogencis, NSE EPR. * As of November 30th, 2024.

Figure 177: India sovereign bonds term premia


Source: Cogencis, NSE EPR.

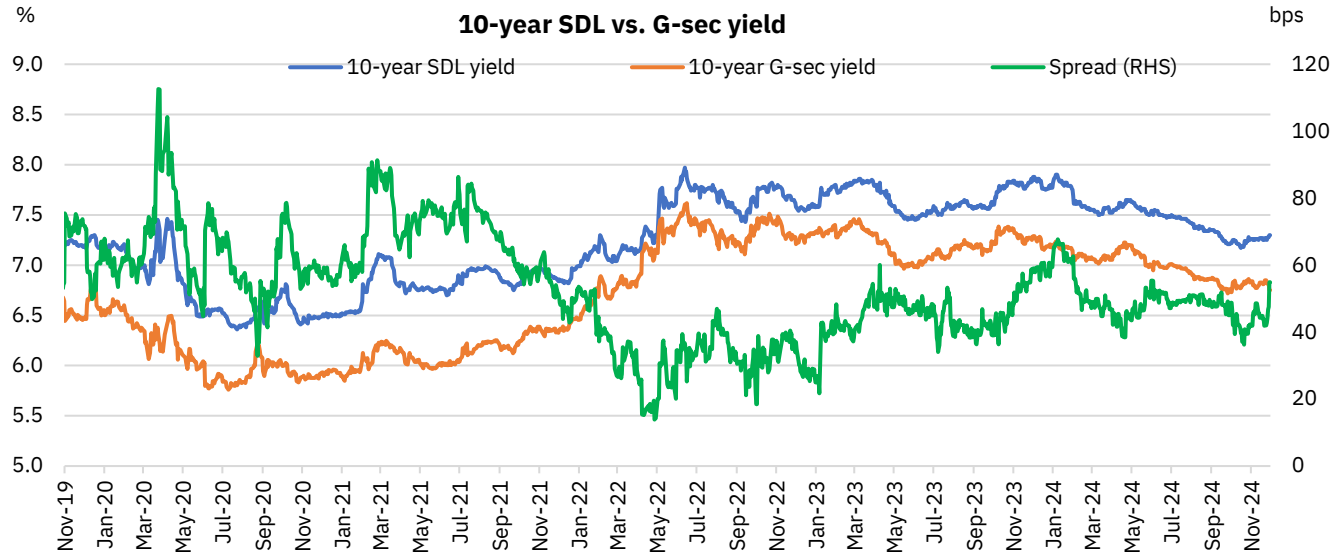
Figure 178: Inflation, yields and spreads in India vs. US


Source: LSEG Datastream, NSE EPR.

SDL spreads rise amid falling government yields: In November, yields on 10-year SDLs rose by a modest 4bps to 7.3%, following a rise by a similar quantum last month. The 10-year G-sec yields stayed largely flat throughout the month but ended with a drop in yield by 9bps to 6.75%. The late movement led to the broadening of the SDL-G-sec spread from 42bps at the start of the month to 55bps by its end, led by divergence in movement. Issuance activity likely played a role in yield movements. The Centre decreased its borrowing to Rs 89k crore in November (from Rs 1.33 lakh crore in October), thereby contributing to the downward pressure on G-sec yields, among other macro-led and global factors. State borrowings fell sharply to Rs 56.2k crore in November, down from Rs 84.8k crore in October, potentially moderating the rise in SDL yields. For FY25TD, total Centre borrowings stood at Rs 8.86 lakh crore, 20% lower than the same period last year

reflecting a shortfall in spending and the capex numbers. State borrowings have reduced to Rs 5.3 lakh crore, marking a 2% YoY fall.

Figure 179: Spreads between 10-year SDL and G-sec yields

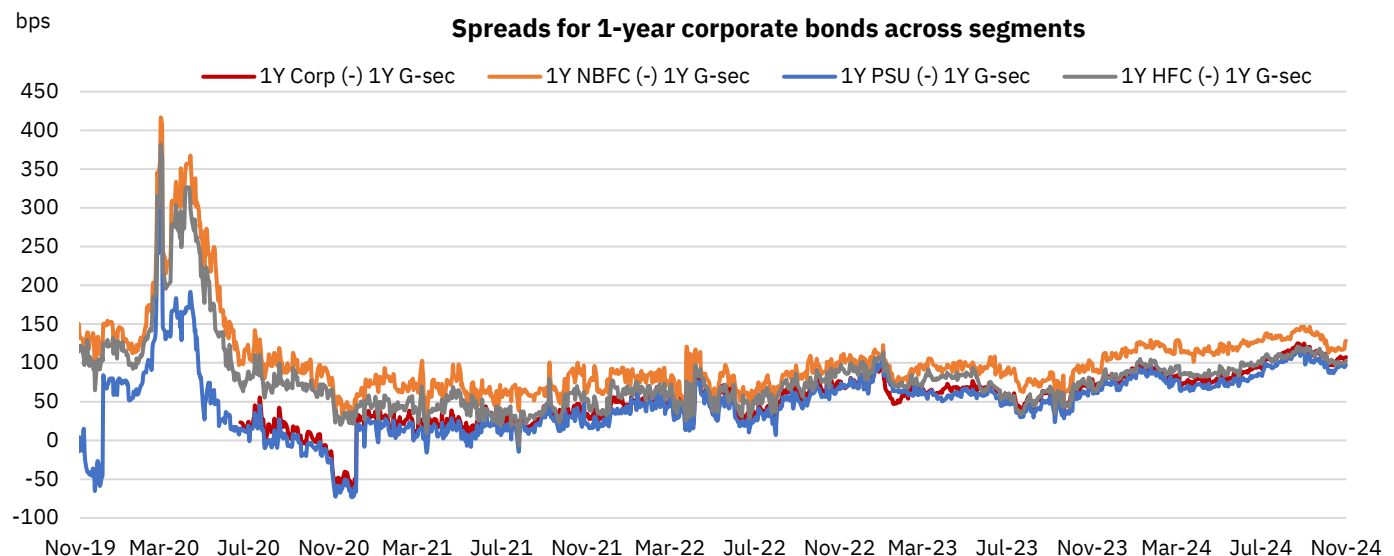


Source: NSE Data and Analytics (NDAL), Cogencis, NSE EPR.

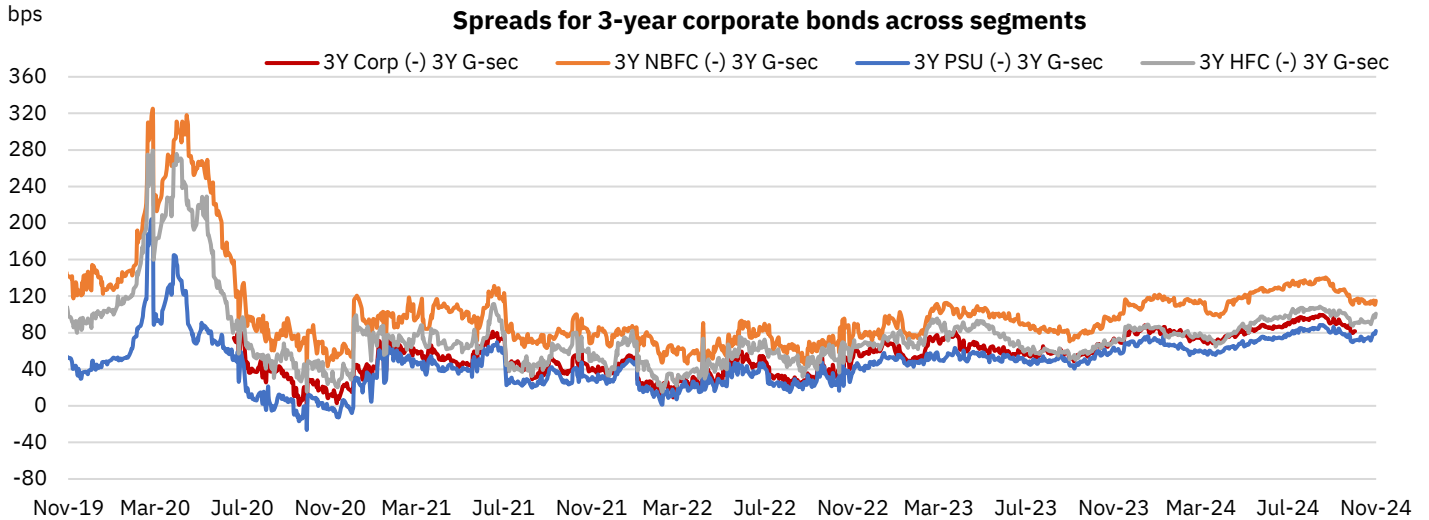
Corporate bond market performance

In contrast to the broad rise in sovereign yields, corporate bond yields rose in November. While the yield rose across tenors, it was more prominent for shorter maturities. The gap between 10-year and 1-year AAA corporate bonds increased further during the month while the yield curve continued to remain inverted. As the two markets moved in opposite directions, credit spreads widened and did so more prominently at the shorter end, reflecting the sharper movement in shorter-tenor yields as compared to longer-tenor spreads which showed a slower increase.

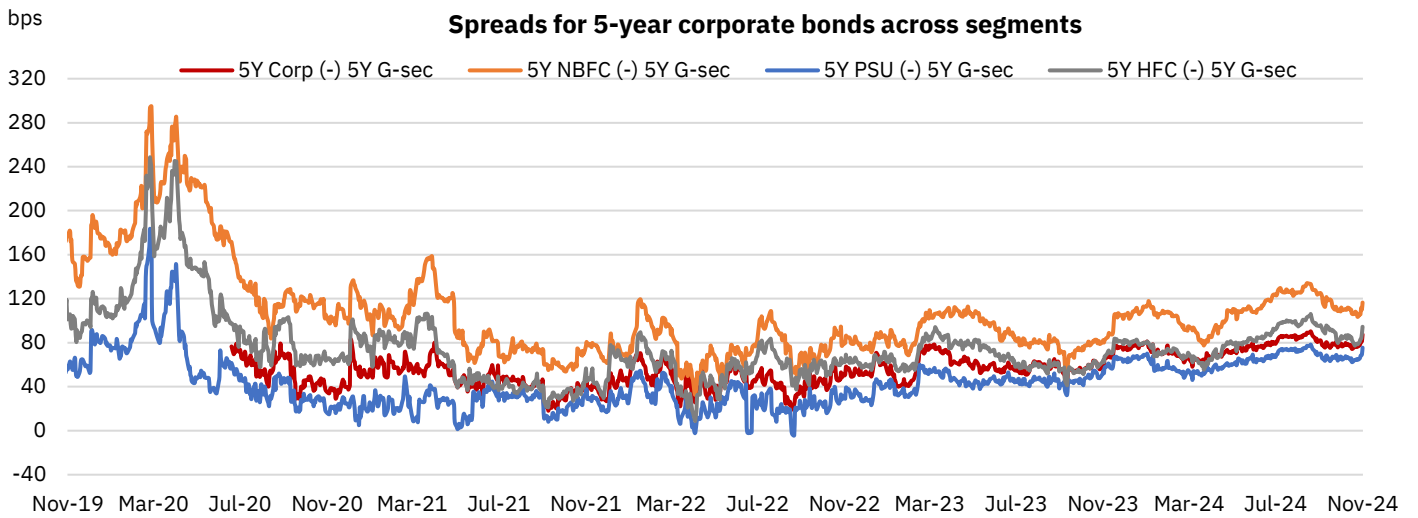
Figure 180: Spreads for one-year AAA-rated corporate bonds across segments



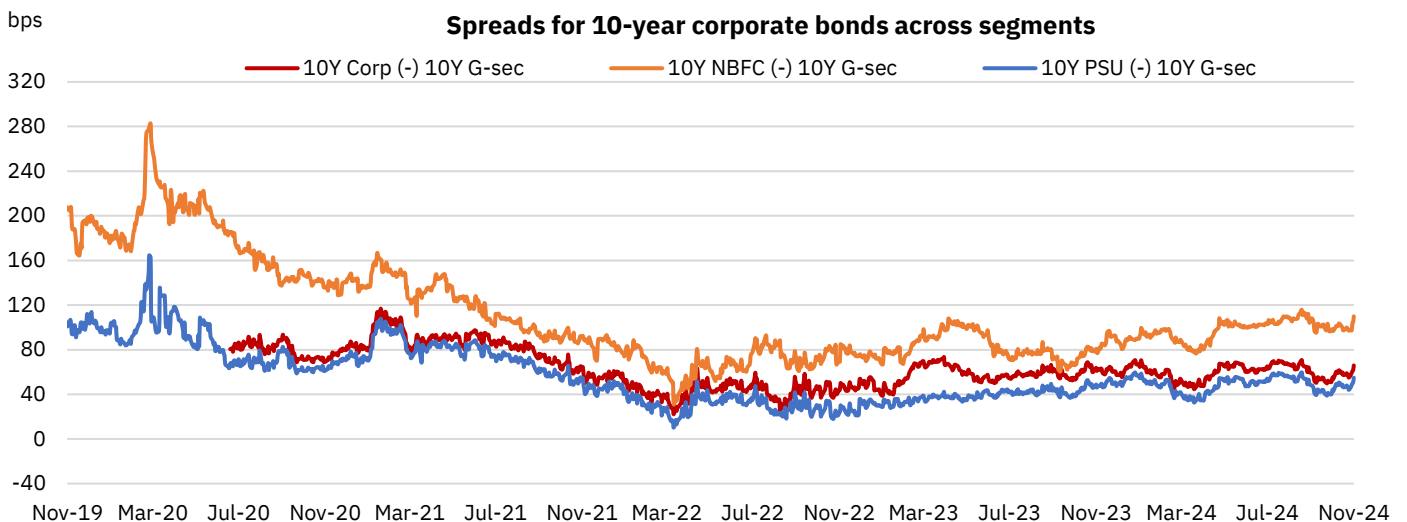
Source: NSE Data and Analytics (NDAL), Cogencis, NSE EPR.

Figure 181: Spreads for three-year AAA-rated corporate bonds across segments


Source: NSE Data and Analytics (NDAL), Cogencis, NSE EPR.

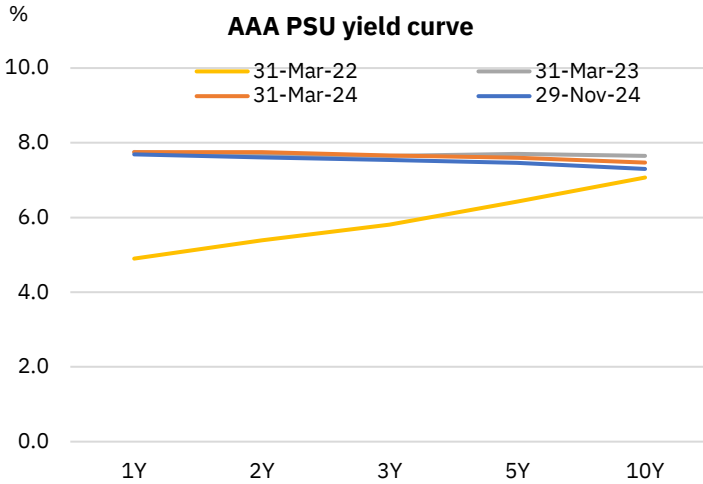
Figure 182: Spreads for five-year AAA-rated corporate bonds across segments


Source: NSE Data and Analytics (NDAL), Cogencis, NSE EPR.

Figure 183: Spreads for 10-year AAA-rated corporate bonds across segments


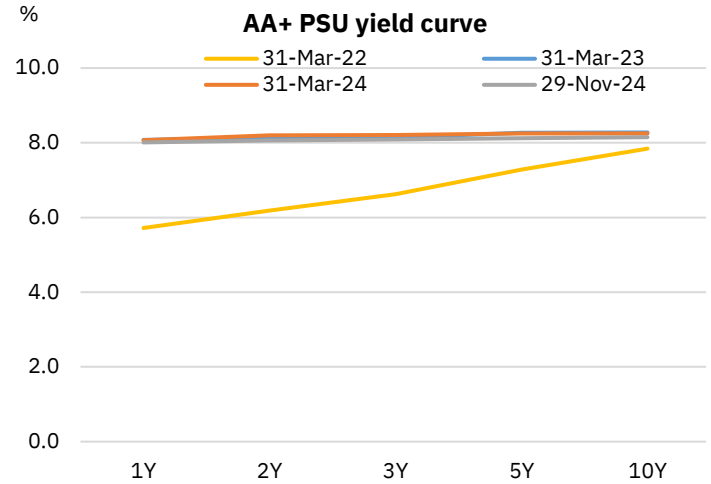
Source: NSE Data and Analytics (NDAL), Cogencis, NSE EPR

Figure 184: AAA-rated corporate bond yield curve



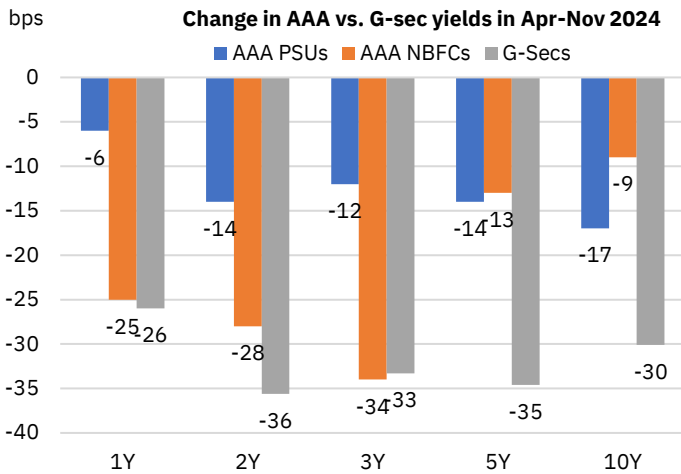
Source: NSE Data and Analytics (NDAL)

Figure 185: AA+ rated corporate bond yield curve



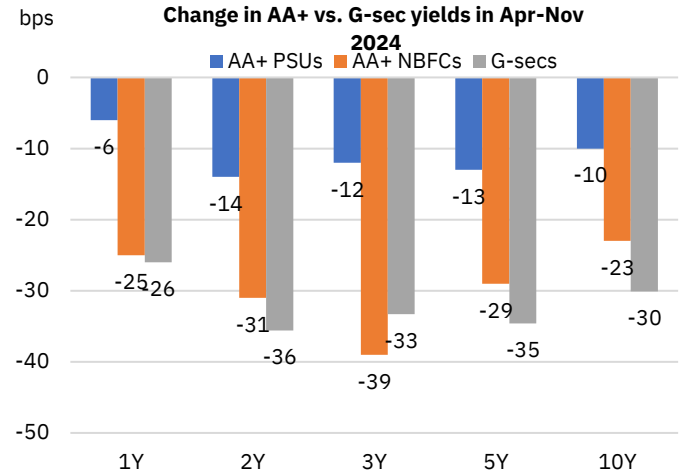
Source: NSE Data and Analytics (NDAL)

Figure 186: Change in AAA corporate bond and G-sec yields in FY25 till date



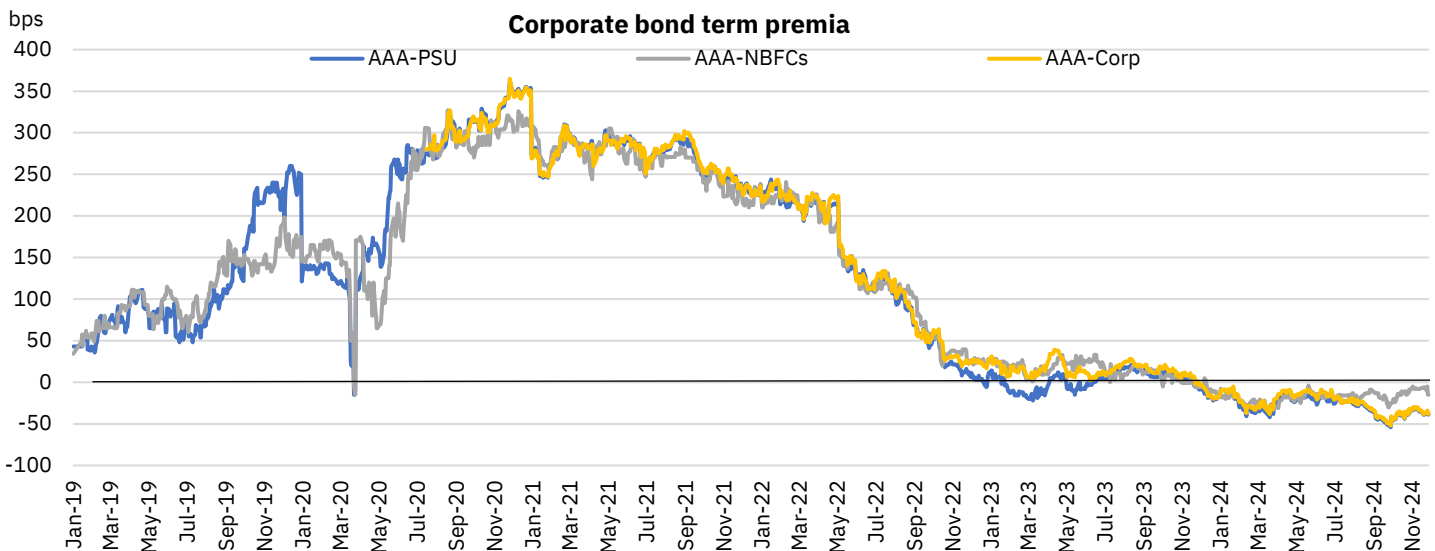
Source: NSE Data and Analytics (NDAL), Cogencis, NSE EPR

Figure 187: Change in AA+ corporate bond and G-sec yields in FY25 till date



Source: NSE Data and Analytics (NDAL), Cogencis, NSE EPR

Figure 188: Corporate bond term premia between 10-year and 1-year yields



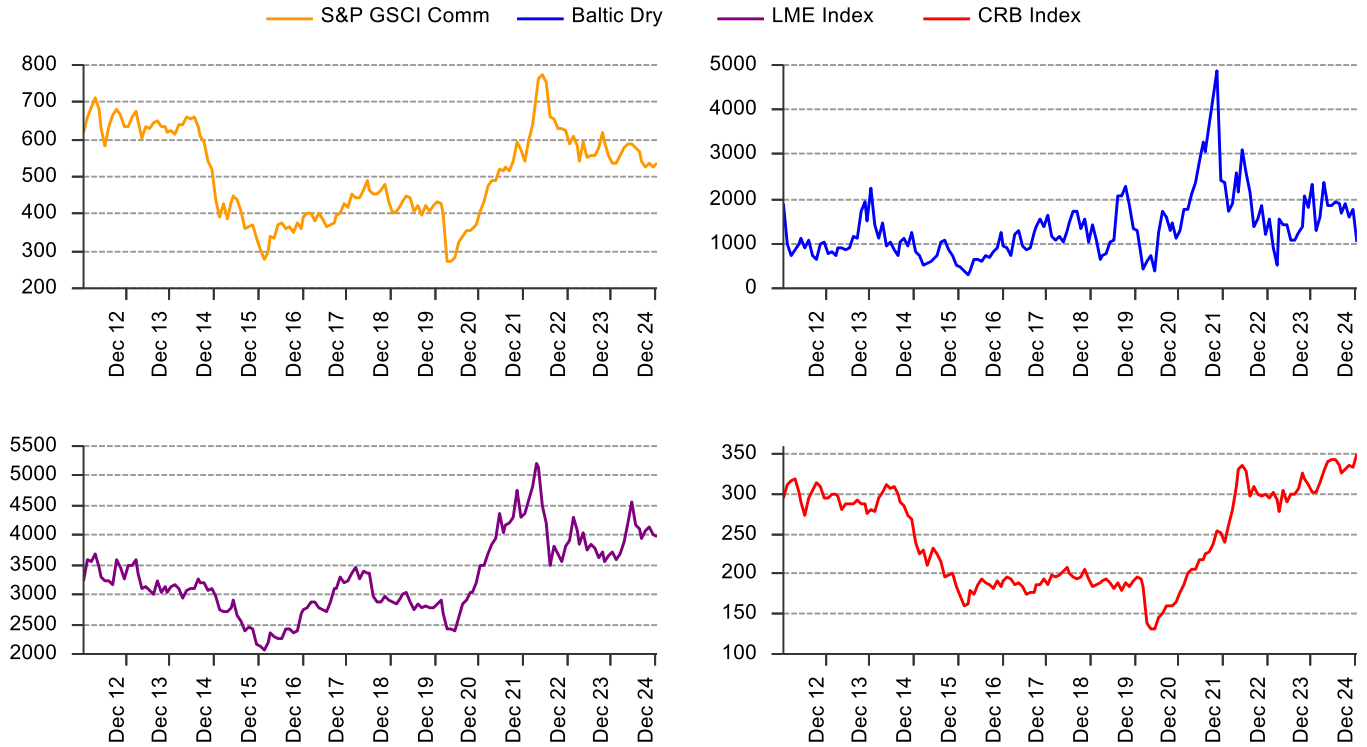
Source: NSE Data and Analytics (NDAL), NSE EPR

Commodity market performance

Mixed performance in the commodity market: The S&P GSCI Index rose by 0.3% MoM in November 2024, reflecting a modest improvement in the overall commodity market, albeit with a decline of 3.6% YoY. However, the commodity market showed mixed trends with precious metals incurring declines while agriculture faring well amid a varied performance by Industrial metals.

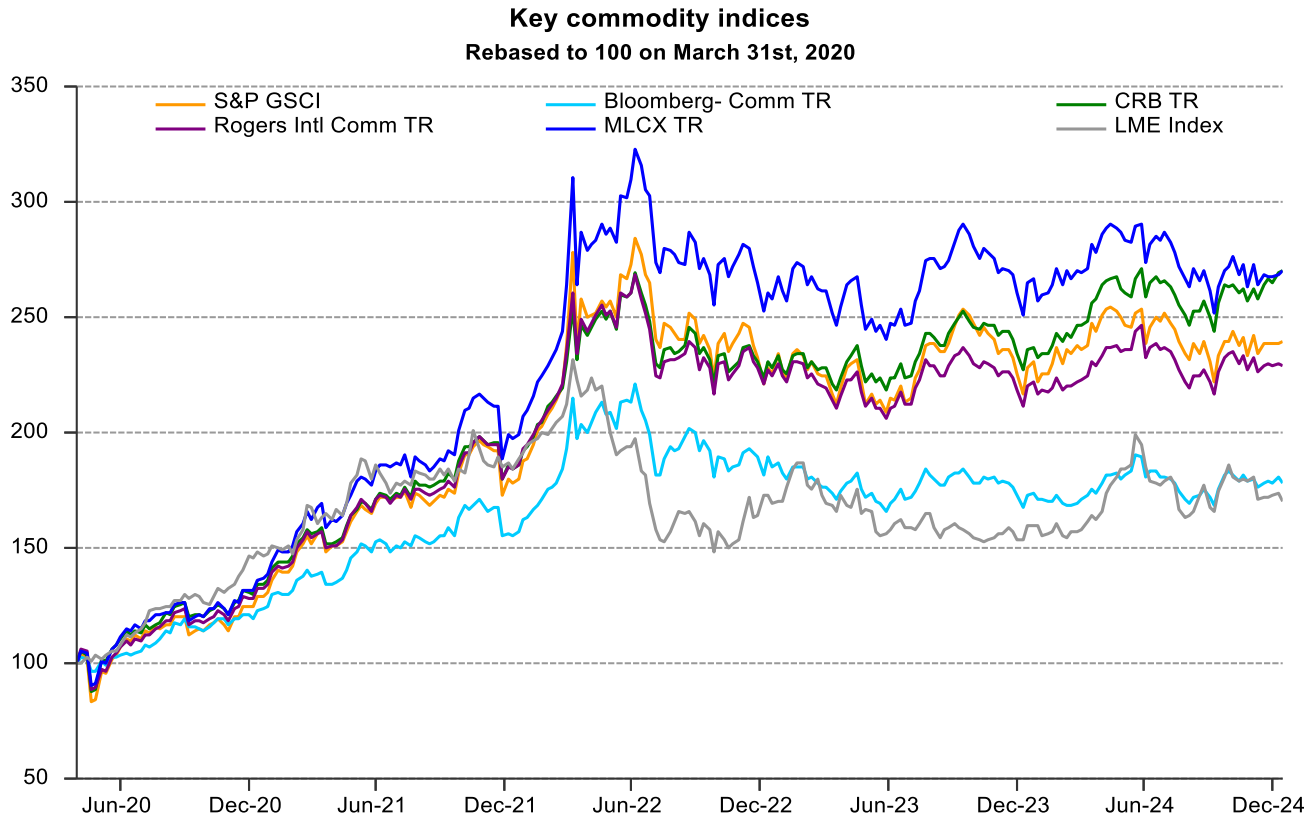
- **Energy Sector:** Oil prices remained broadly steady in November, ending the month at US\$73.2/bbl. This comes on the backdrop of a ceasefire deal to end the Israel-Hezbollah conflict while OPEC+ countries continue to cut production.
- **Precious Metals:** The performance of precious metals was lacklustre in the month of November. Gold and Silver posted 3.0% MoM and 6.3% MoM loses respectively. These downward movements can be attributed to two major factors—first, Donald Trump's victory in the US Presidential election is expected to reduce geopolitical risks, with hopes for an end to conflicts in the Middle East and the Russia-Ukraine war. Second, a stronger dollar puts pressure on assets such as gold. Among the precious metals, Palladium took the biggest hit in prices (-12.6% MoM), while Platinum's price dropped by 5.5% in November.
- **Industrial Metals:** Industrial metals displayed a varied performance in November 2024. Lead experienced a price increase of 3.4% MoM, owing to a strengthened demand by the automobile sector for batteries, following the stimulus measures announced by China. Copper prices continued to fall in November, majorly due to a weaker demand in the Asian market with both China and Thailand experiencing pressure. Tin continued the declining run, with a further fall in 7.5% MoM due to a prolonged effect of supply side disruptions. Expectations of an additional stimulus by Chinese government played a catalyst in increase of Iron ore prices by 1% MoM. Aluminium's price moderated by 0.6% MoM.
- **Agricultural Sector:** Except for Raw Sugar (-6.0% MoM), agricultural commodities registered a growth in prices in the month gone by. Soyabeans (+1.4% MoM), Wheat (+9.0% MoM), Corn (+2.9% MoM) and Cotton (+4.3% MoM) registered a rise in prices.

Figure 189: Movement in key commodity indices

 (As on December 18th, 2024)


Source: LSEG Datastream, NSE EPR.

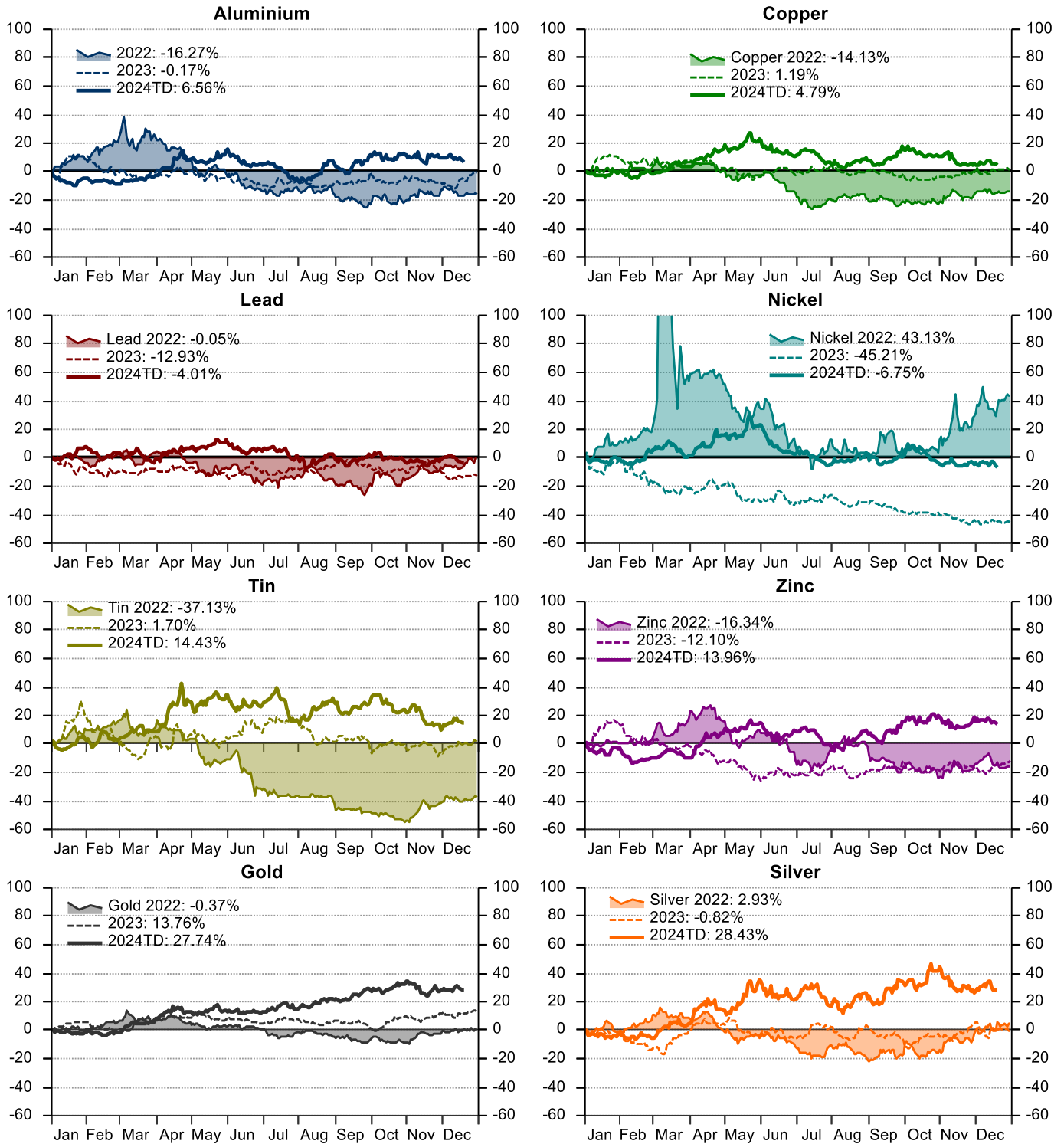
Figure 190: Movement in key commodity indices since 2020
 Rebased to 100 on March 31st, 2020 (As of December 18th, 2024)



Source: LSEG Datastream, NSE EPR.

Figure 191: Returns of key hard commodities in 2022, 2023 and 2024 till date
 (As of December 18th, 2024)

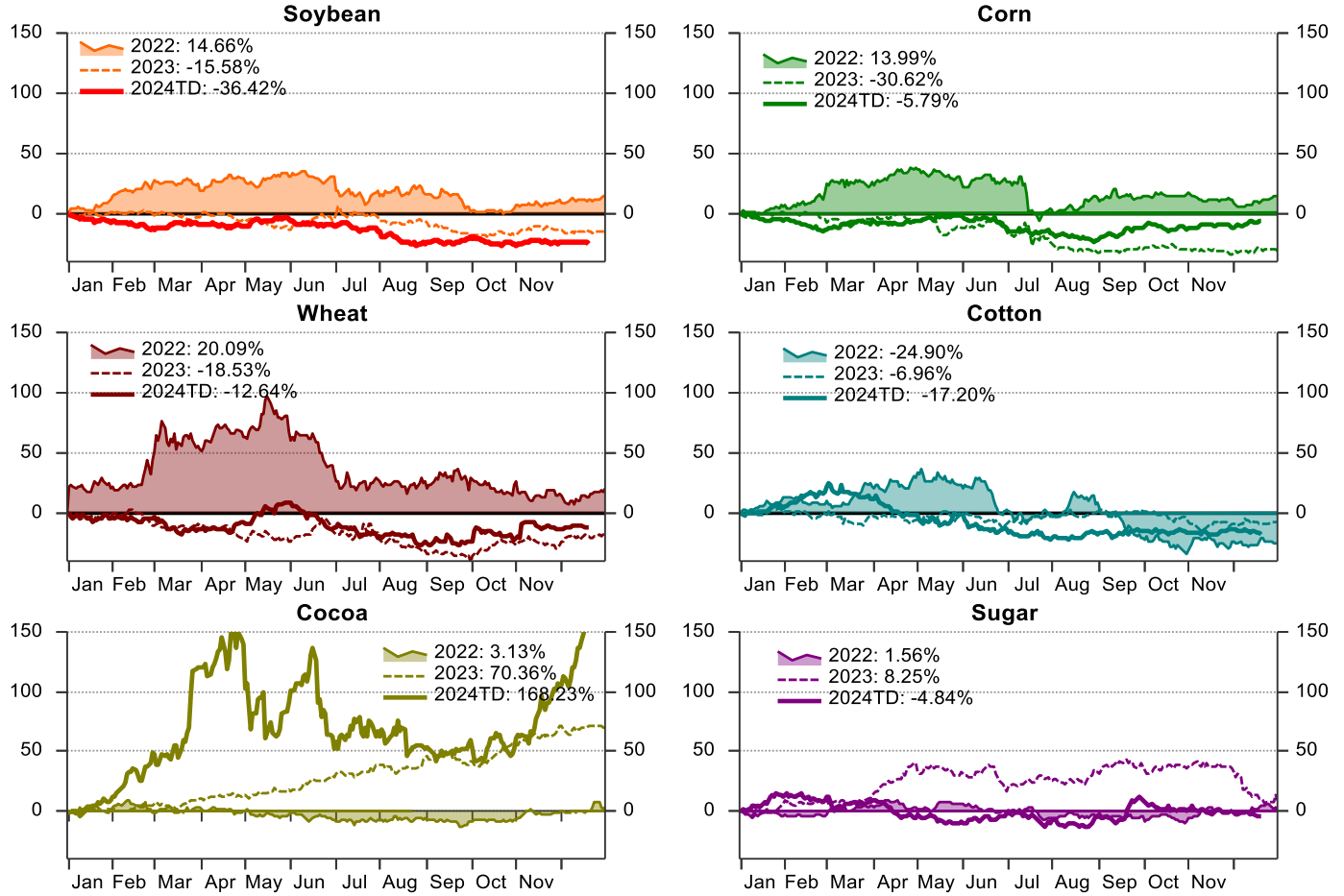
Returns of key hard commodities



Source: LSEG Datastream, NSE EPR.

Figure 192: Returns of key agricultural commodities in 2022, 2023 and 2024 till date
 (As of December 18th, 2024)

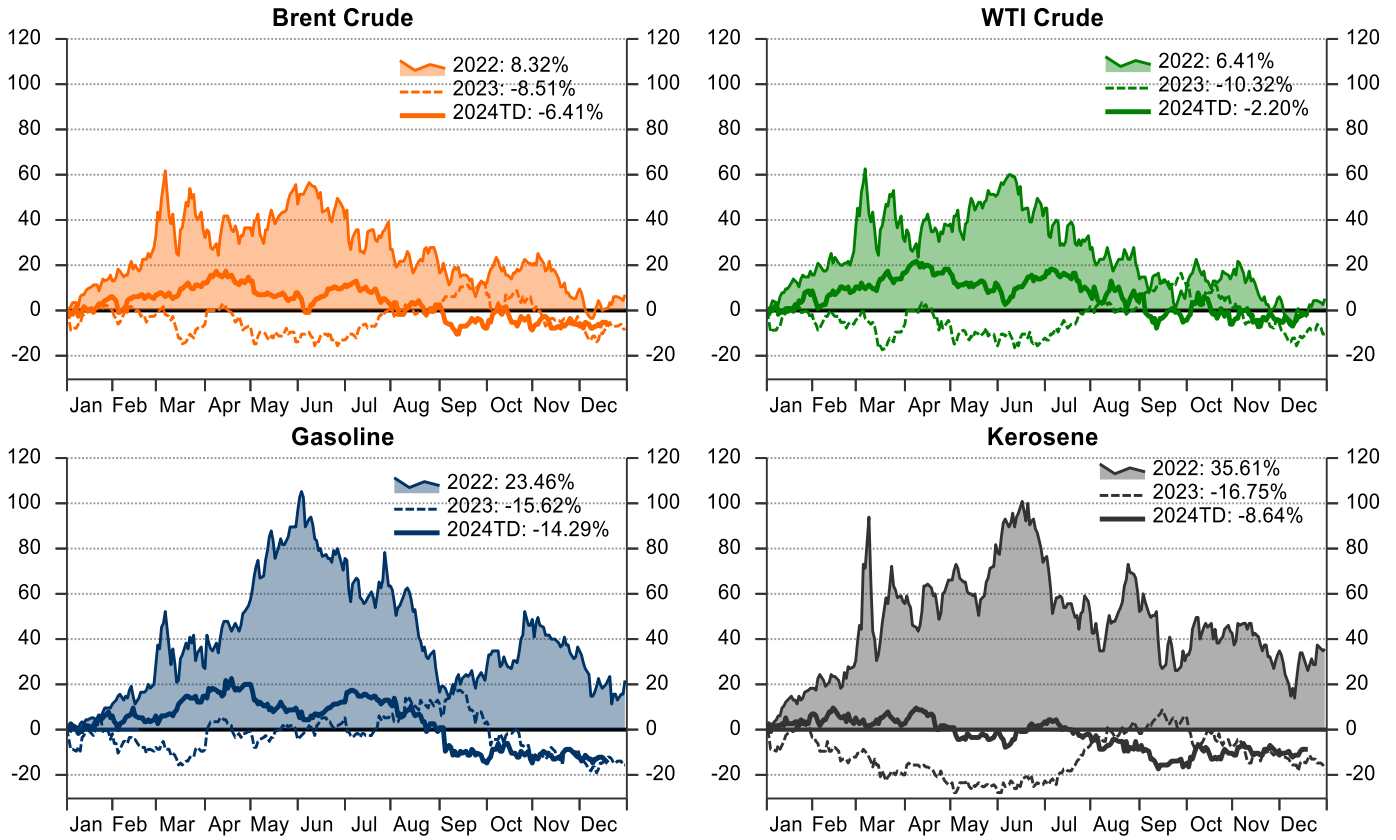
Returns of key agri commodities



Source: LSEG Datastream, NSE EPR.

Figure 193: Returns of key energy commodities in 2022, 2023 and 2024 till date
 (As of December 18th, 2024)

Returns of key energy commodities



Source: LSEG Datastream, NSE EPR.

Table 49: Annual performance across commodities

 (As of December 18th, 2024)

Annual performance across commodities (Ranked by % change each year)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024TD
Palladium 13.3	Lead -2.5	Zinc 60.6	Palladium 57.6	Palladium 19.6	Palladium 52.0	Silver 47.8	Tin 91.7	Nickel 43.1	Gold 13.8	Silver 28.4
Nickel 9.0	Gold -10.5	Brent Crude 54.5	Aluminium 32.4	Gold -1.7	WTI 35.3	Copper 26.0	WTI 55.8	Brent Crude 8.3	Tin 1.7	Gold 27.7
Zinc 5.6	Silver -11.8	Tin 45.3	Copper 30.5	Tin -2.9	Nickel 31.6	Gold 24.8	Brent Crude 51.1	Platinum 7.5	Copper 1.2	Tin 14.4
Aluminium 4.0	Aluminium -17.8	WTI 45.0	Zinc 30.5	Silver -8.6	Brent Crude 24.8	Palladium 22.0	Aluminium 42.2	Palladium 7.5	Aluminium -0.2	Zinc 14.0
Gold -1.8	Tin -24.9	Palladium 20.7	Nickel 27.5	Platinum -14.4	Platinum 22.3	Zinc 19.7	Zinc 31.5	WTI 6.7	Silver -0.8	Aluminium 6.6
Platinum -11.1	Copper -26.1	Copper 17.4	Lead 24.3	Nickel -16.5	Gold 18.7	Tin 19.6	Nickel 26.1	Silver 2.9	Platinum -2.4	Copper 4.8
Tin -13.0	Zinc -26.5	Silver 15.1	Brent Crude 17.5	Aluminium -17.4	Silver 15.2	Nickel 18.7	Copper 25.7	Lead -0.1	Palladium -2.4	WTI -2.2
Copper -13.7	Platinum -28.0	Aluminium 13.6	Gold 12.6	Copper -17.5	Copper 3.4	Aluminium 10.8	Lead 18.3	Gold -0.4	Brent Crude -8.5	Lead -4.0
Lead -15.9	WTI -30.5	Nickel 13.5	WTI 12.5	Lead -19.2	Aluminium -4.4	Platinum 10.0	Gold -4.0	Copper -14.1	WTI -10.4	Brent Crude -6.4
Silver -19.3	Palladium -31.6	Lead 11.3	Silver 6.4	Brent Crude -20.2	Lead -4.7	Lead 3.3	Platinum -10.2	Aluminium -16.3	Zinc -12.1	Nickel -6.8
WTI -45.9	Brent Crude -35.1	Gold 9.0	Platinum 3.2	Zinc -24.5	Zinc -9.5	WTI -21.0	Palladium -10.2	Zinc -16.3	Lead -12.9	Platinum -7.4
Brent Crude -48.9	Nickel -41.8	Platinum 3.5	Tin -5.2	WTI -25.3	Tin -12.0	Brent Crude -21.8	Silver -11.7	Tin -37.1	Nickel -45.2	Palladium -7.4

Source: LSEG DataStream, NSE EPR.

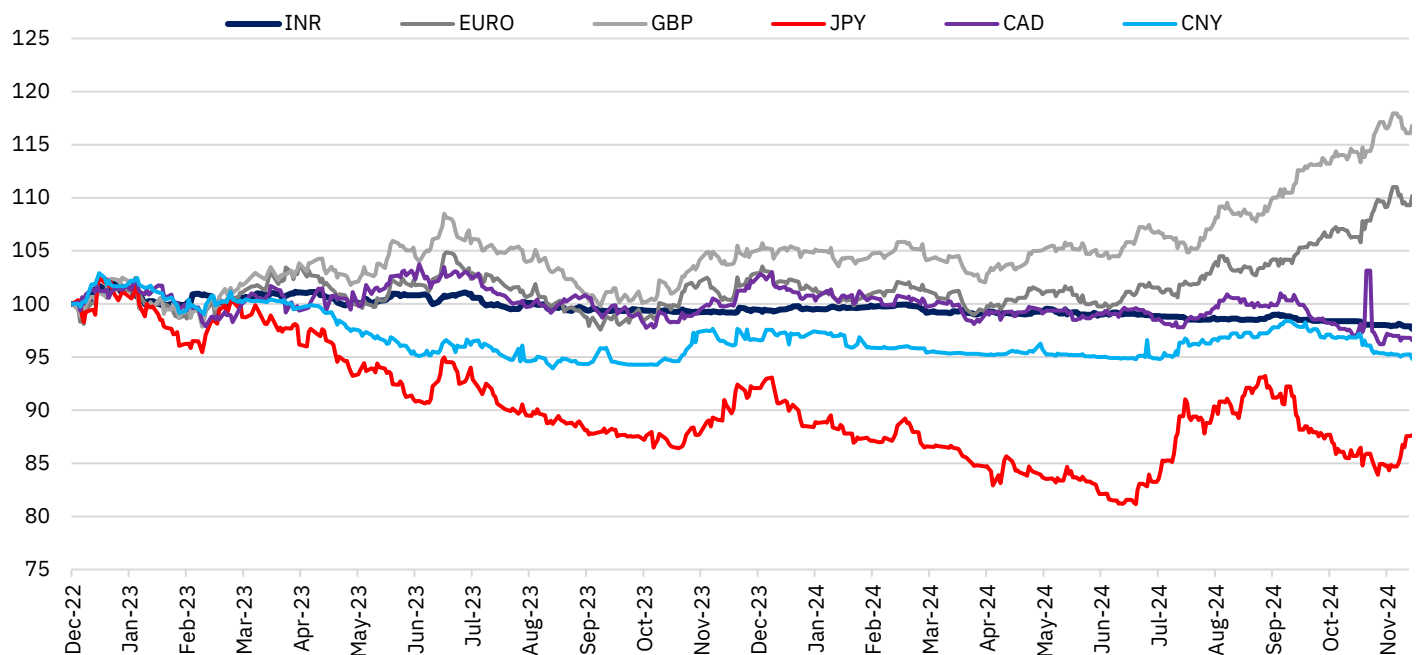
Currency market performance

Dollar strengthening weighed on EM currencies in November: During the past month, the INR remained under pressure, closing marginally lower against the greenback (-0.5% MoM in Nov'24 vs -0.3% in Oct'24). This was primarily driven by a significant strengthening in the dollar index (+5.0% since September-end) and rise in US bond yields (+70bps in 2024 thus far). On Dec 19th, the INR yet again hit record low and breached the 85-mark, closing at 85.1, primarily weighed down by the Federal Reserve's hawkish stance on interest rates for 2025, along with President-elect Trump's ongoing threats of tariff hikes on China, Mexico, and Canada, which accounts for approximately 43% of US imports.⁵⁵ These factors raised the likelihood of increased capital inflows into the US amid rising trade tensions, as reflected in a significant selling by FPIs during Oct-Nov'24. Additionally, the widening of merchandise trade deficit to a record high of US\$37.8 bn in Nov'24 from US\$27.1 bn in the previous month, led by surge in gold imports, also added to the depreciating bias. Despite the INR's depreciation, its decline was less pronounced compared to other currencies. Meanwhile, the RBI's foreign exchange reserves stood at US\$675.7 bn as of November 8th (-3.6% MoM). In the context of a stronger dollar, most major global currencies depreciated against the greenback last month.

Among major currencies, the Canadian Dollar experienced the smallest decline (-0.6% MoM), followed by the Chinese Yuan (-1.3% MoM), Pound Sterling (-2.1% MoM), Euro (-2.2% MoM), and Japanese Yen (-2.4% MoM). Among emerging market currencies, the Indonesian Rupiah saw the smallest decline (-0.5% MoM), followed by the Turkish Lira (-1.2% MoM), South African Rand (-2.1% MoM), Brazilian Real (-4.1% MoM), and Russian Ruble (-7.8% MoM).

Figure 194: Movement in INR vs. major DM currencies since beginning of 2023

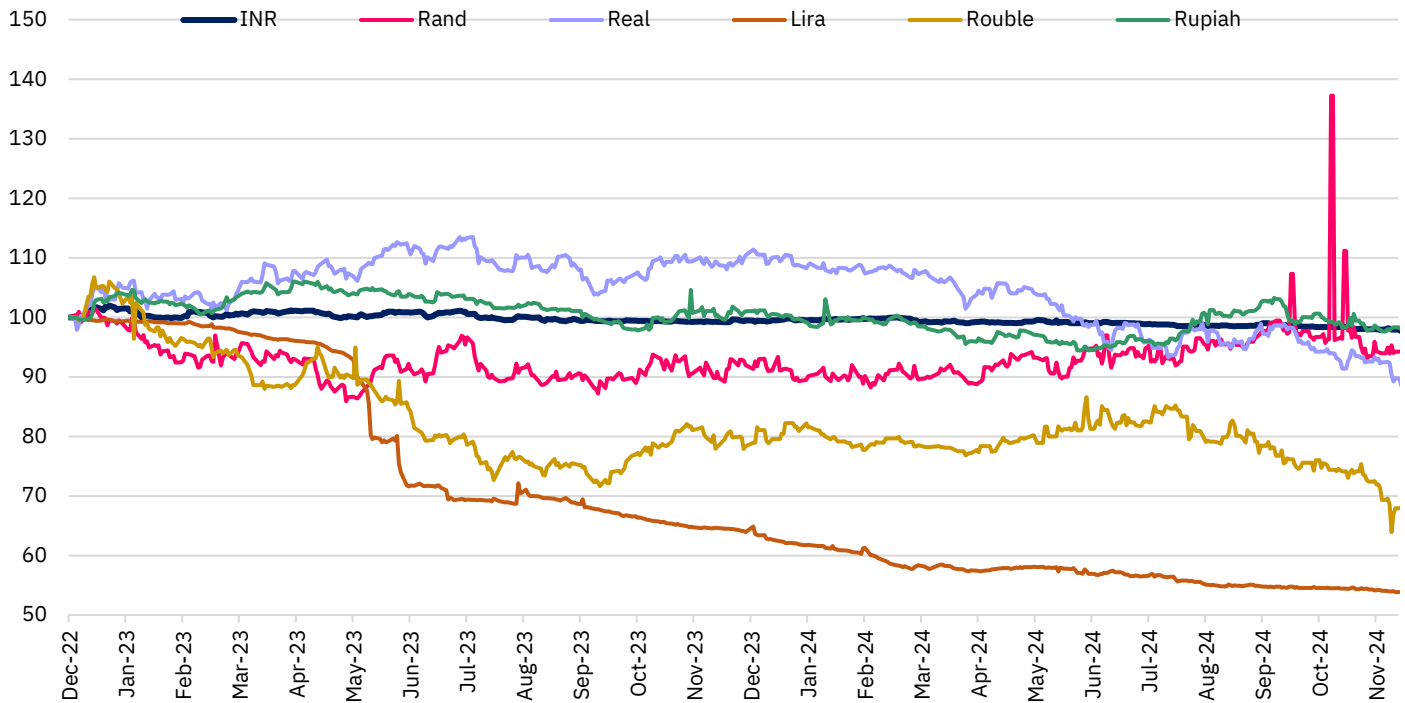
(Rebased to 100 on December 30th, 2022)



Source: Cogencis, NSE EPR.

⁵⁵ World Integrated Trade Solution (WITS). World Bank. USA trade profile: Imports by country.

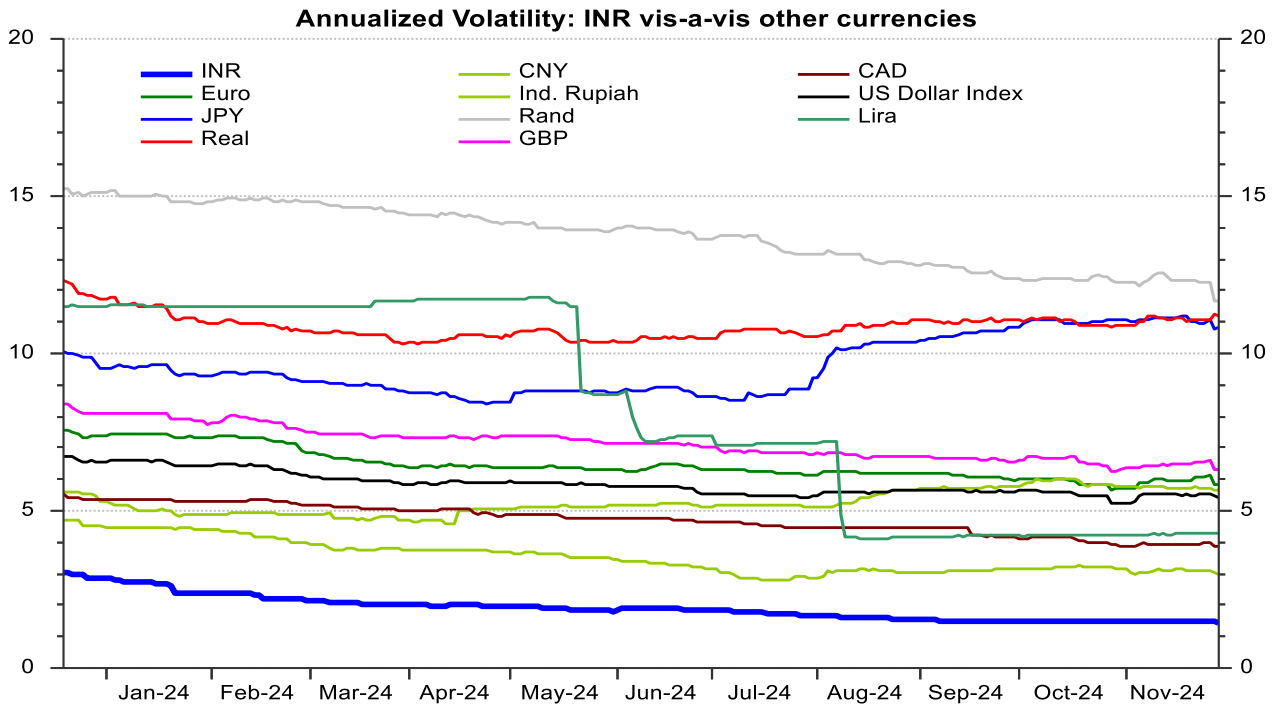
Figure 195: Movement in INR vs. major EM currencies since the beginning of 2023

 (Rebased to 100 on December 30th, 2022)


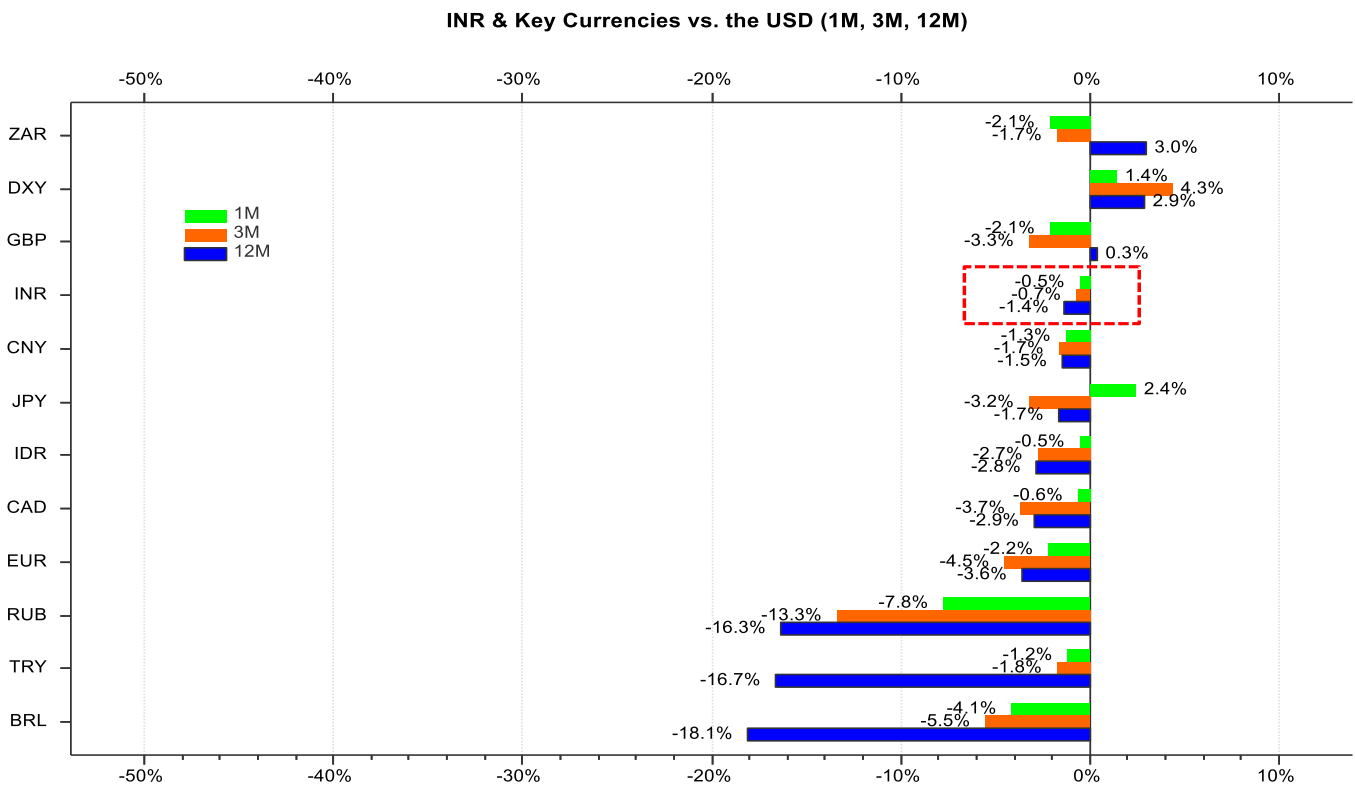
Source: Cogencis, NSE EPR.

INR volatility is the lowest among peers despite heightened tariff risk:

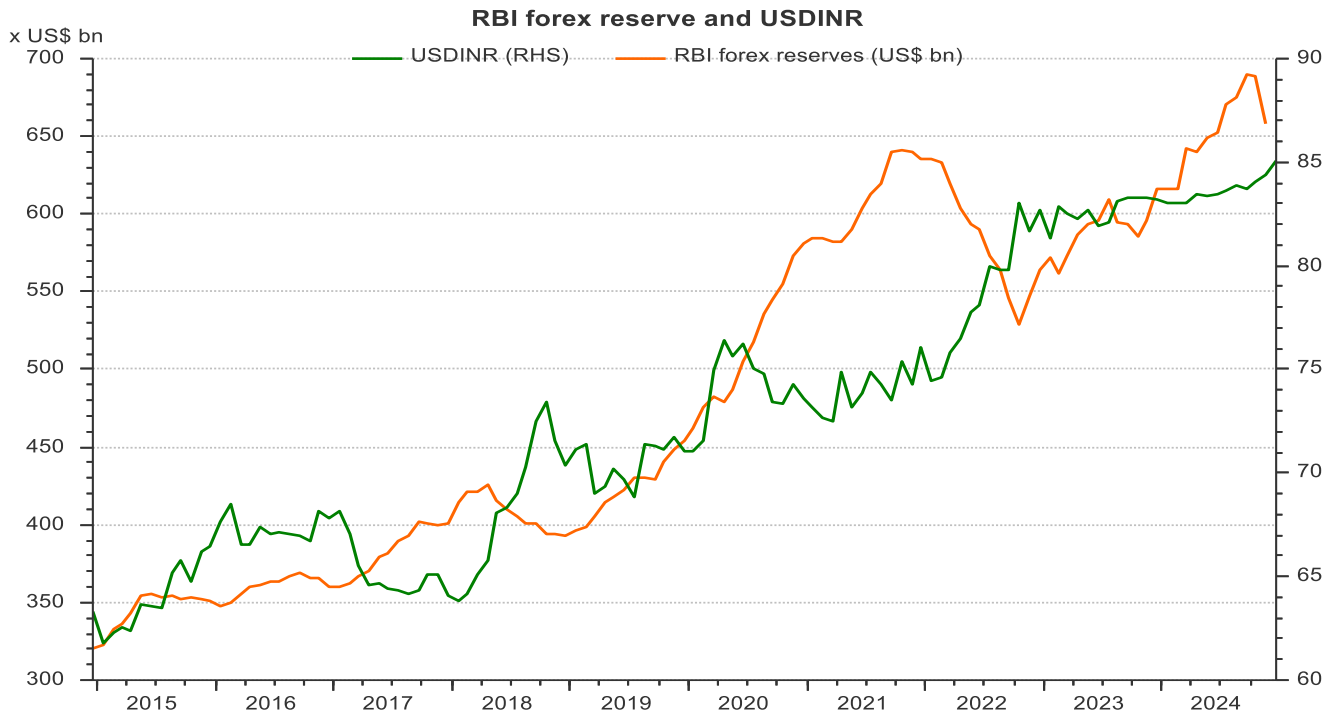
Notwithstanding the significant dollar strengthening in the last few months, the INR's average annualized volatility remained unchanged at 1.5% in November 2024, marking the third consecutive month at this level and continuing to be the lowest among its peers. Among major emerging market currencies, the Russian Ruble displayed the highest volatility at 14.7%, followed by the South African Rand (12.3%), Brazilian Real (11.1%), Indonesian Rupiah (5.7%), Turkish Lira (4.3%), and Chinese Yuan (3.1%). In developed markets, the Japanese Yen saw the highest volatility at 11.1%, increasing by a modest 8 bps, followed by the Pound Sterling (6.4%), Euro (5.9%), and Canadian Dollar (3.9%). This volatility divergence is largely driven by domestic uncertainties, particularly surrounding Trump's re-election. The INR's unchanged volatility highlights India's strong macroeconomic fundamentals and the RBI's effective forex management.

Figure 196: Annualized volatility of INR vs other developed and EM currencies


Source: LSEG Workspace, NSE EPR.

Figure 197: Change in INR vs other major currencies (as on November 30th, 2024)


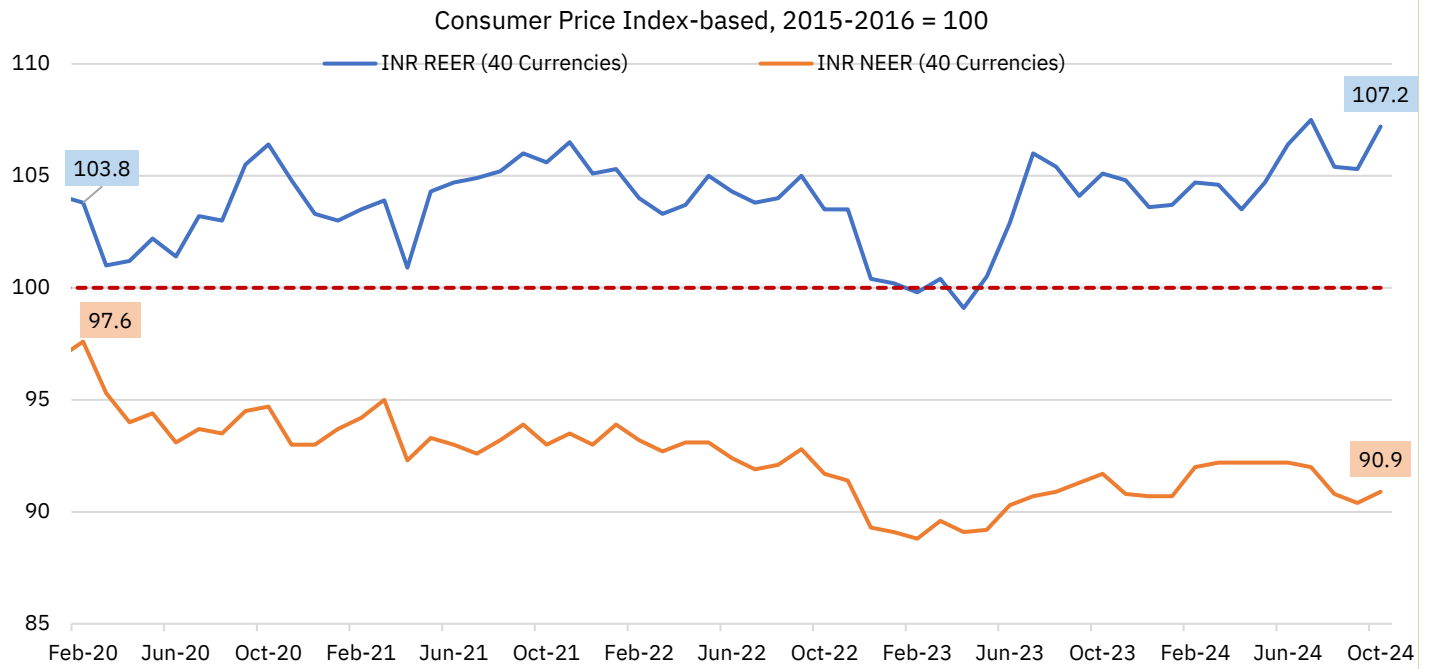
Source: LSEG Workspace, NSE EPR.

Figure 198: RBI forex reserves and USDINR


Source: LSEG Workspace, NSE EPR.

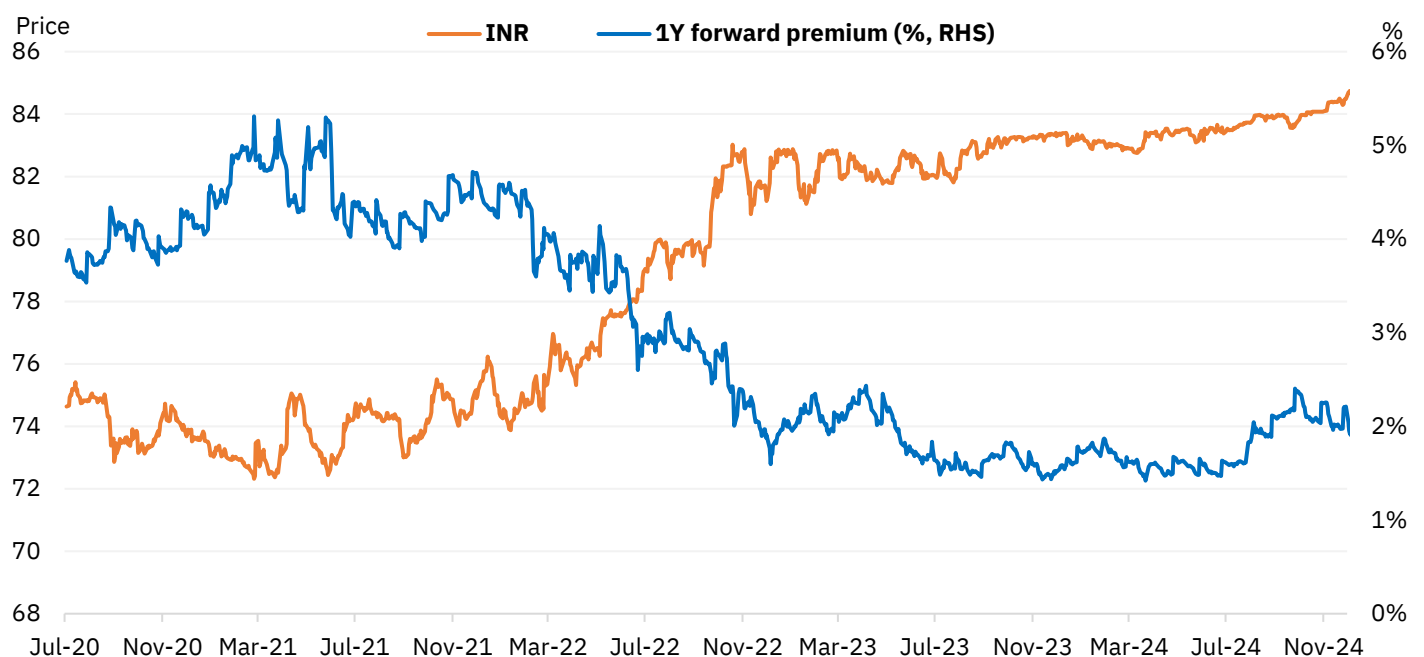
INR remains overvalued amid contrasting REER and NEER movement: In the month before last, the INR remained overvalued for the 17th consecutive month, with the 40-currency trade-weighted Real Effective Exchange Rate (REER) reaching 107.2 in October (+2% YoY), approaching a six-year high, while the Nominal Effective Exchange Rate (NEER) declined marginally (+0.9% YoY) to 90.9 (vs. 91.7 in Oct'23). On a sequential basis, the rupee appreciated by 1.9pp in REER and 0.5pp in NEER, driven by rupee depreciation and a favorable inflation differential. This divergence reflects findings from the RBI's bulletin on *Estimating Equilibrium Exchange Rates*, which notes that since the early 2000s, India's REER has averaged an annual appreciation of 1%, while the NEER has depreciated by approximately 2% annually.⁵⁶ The gap between the INR's real and nominal exchange rates continues to widen, with real appreciation outpacing nominal depreciation, potentially impacting India's trade position and external accounts.

⁵⁶ Michael Debabrata Patra, Harendra Behera, Dharendra Gajbhiye, Sujata Kundu, & Rajas Saroy, A Suite of Approaches for Estimating Equilibrium Exchange Rates for India, RBI Bulletin, November 2024.

Figure 199: Real and nominal effective exchange rates of INR


Source: CMIE Economic Outlook, NSE EPR.

One-year forward premium inches down: Over the past month, the INR's one-year forward premium eased by 6 bps, settling at 2.1% after peaking at 2.2% in September this year. This marginal shift occurred amid expectations of a 25 bps Fed rate cut next month, the US presidential election outcome, and significant FPI outflows, partially offset by robust forex reserves. Despite the modest increase in premium, it remained well below the post-pandemic high of 5.3%, reflecting India's resilient macroeconomic fundamentals. Throughout the period, the premium fluctuated between 165.5 paise and 189.8 paise, ending the month at 186.8 paise against the greenback.

Figure 200: USDINR and 1-year forward premium


Source: Cogencis, NSE EPR.

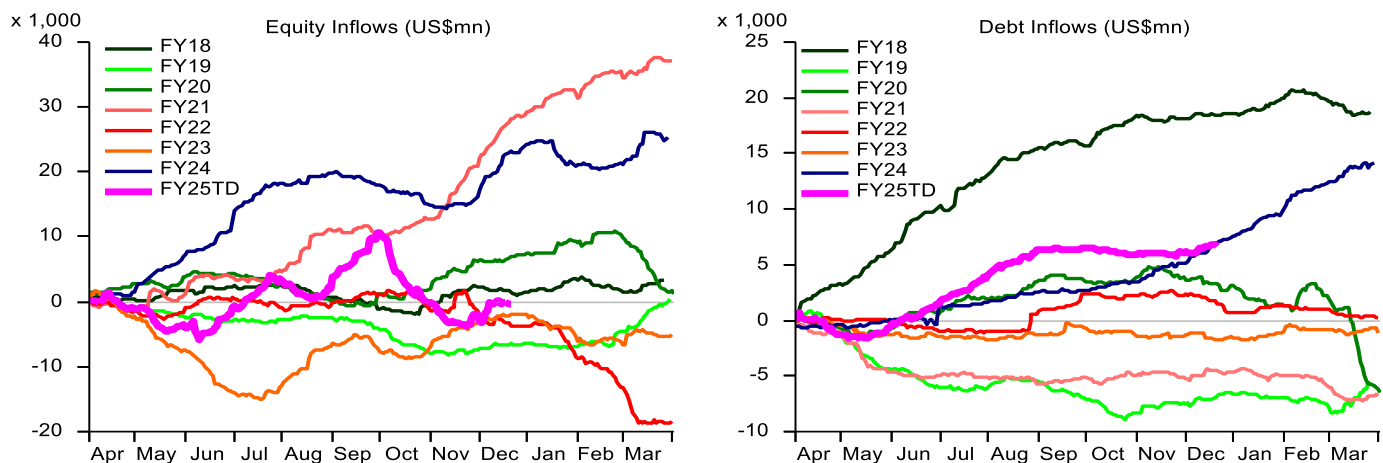
Institutional flows across market segments in India

FPIs continued the selling momentum in Indian equities in November...: FPIs continued their selling momentum for the second consecutive month in November by offloading US\$ 2.6 bn after selling a record US\$ 11.1 bn in the previous month. Global factors that triggered flight of capital away from emerging markets including India over the last couple of months included strong US bond yields, strengthening US dollar, escalating tensions in the Middle East, and election uncertainty in the US. Back home, weaker-than-expected corporate earnings in the second quarter and the slowdown in GDP growth also added to the caution. The trend, however, has reversed marginally in December, with FPIs buying Indian equities worth US\$ 2.7 bn in December thus far (as of December 19th, 2024), translating into modest net outflows of US\$ 368m in the fiscal thus far (As of December 19th, 2024).

..and remained on sidelines in Indian debt: After remaining strong buyers in the first five months of the fiscal, FPIs trimmed their purchases in September, with the trend continuing over the subsequent three months. Net FPI inflows in the Indian debt markets stood at US\$145m in November, rising marginally to US\$530m in December 2024 (as of December 19th, 2024), translating into total net inflows of US\$306m only in the last four months. Notwithstanding the recent drop, cumulative net FPI inflows in debt markets at US\$6.7bn are much higher than that seen in the equity markets.

Figure 201: Net inflows by FIIs in Indian equity and debt markets

Cumulative FII net inflows over last eight years (FY)

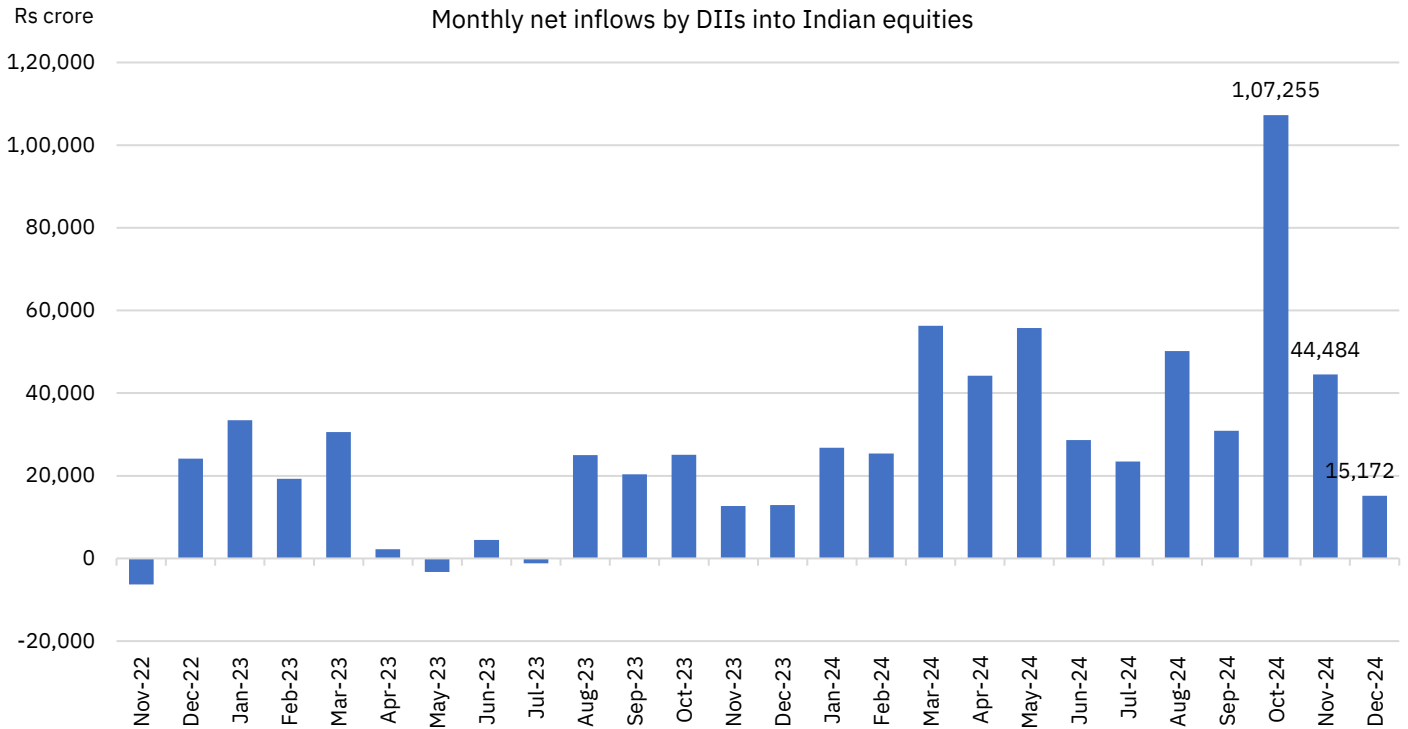


Source: LSEG Datastream, NSE EPR.

DIIs continued to remain strong buyers in Indian equities and net sellers in Indian debt: After a record net investment of Rs 1.1 lakh crore (US\$ 12.8 bn) in October 2024, DIIs continued the buying momentum with further investment of Rs 44,484 crore (US\$ 5.26 bn) and Rs 15,172 crore (US\$ 1.8bn) in November and December (as of December 19th, 2024) respectively, which more than off-set the impact of FPI sell-off in November 2024. This translates into cumulative inflows of Rs 4 lakh crore or US\$47.7bn in FY25TD (as of December 19th, 2024). Net investments by Domestic mutual funds remained robust, with inflows of Rs 35,633 crore in November and Rs 1,09,71 crore in December 2024 (as of December 18th, 2024), bringing the cumulative flows in FY25 TD to a record level of Rs 3.4 lakh crore. DMFs have been net sellers in the Indian debt markets since August 2023, except for April 2024, as investments into debt funds slowdown after the

revision in taxation rules for debt MFs effective April 1, 2023, which led to the removal of Indexation benefit on LTCG. Net DMF outflows for FY25TD (as of December 18th, 2024) stand at Rs 2.4 lakh crore.

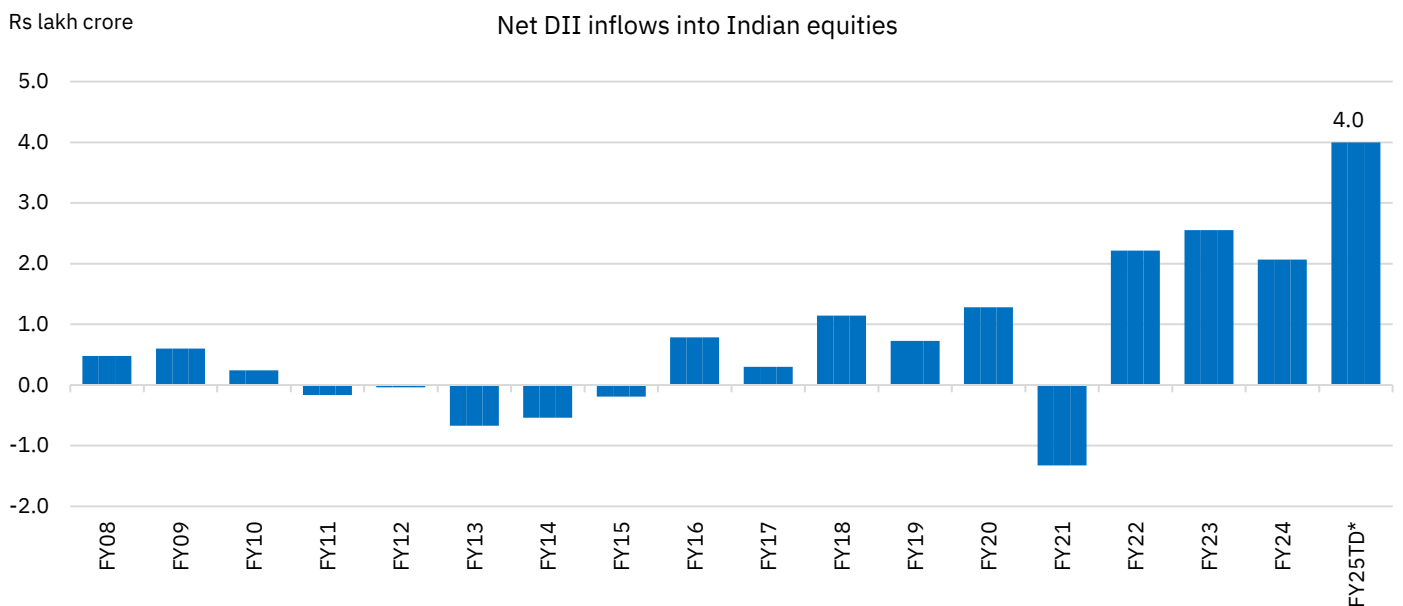
Figure 202: Monthly net inflows by DIIs in Indian equity markets



Source: LSEG Datastream, NSE EPR. Data for December is as of December 19th, 2024.

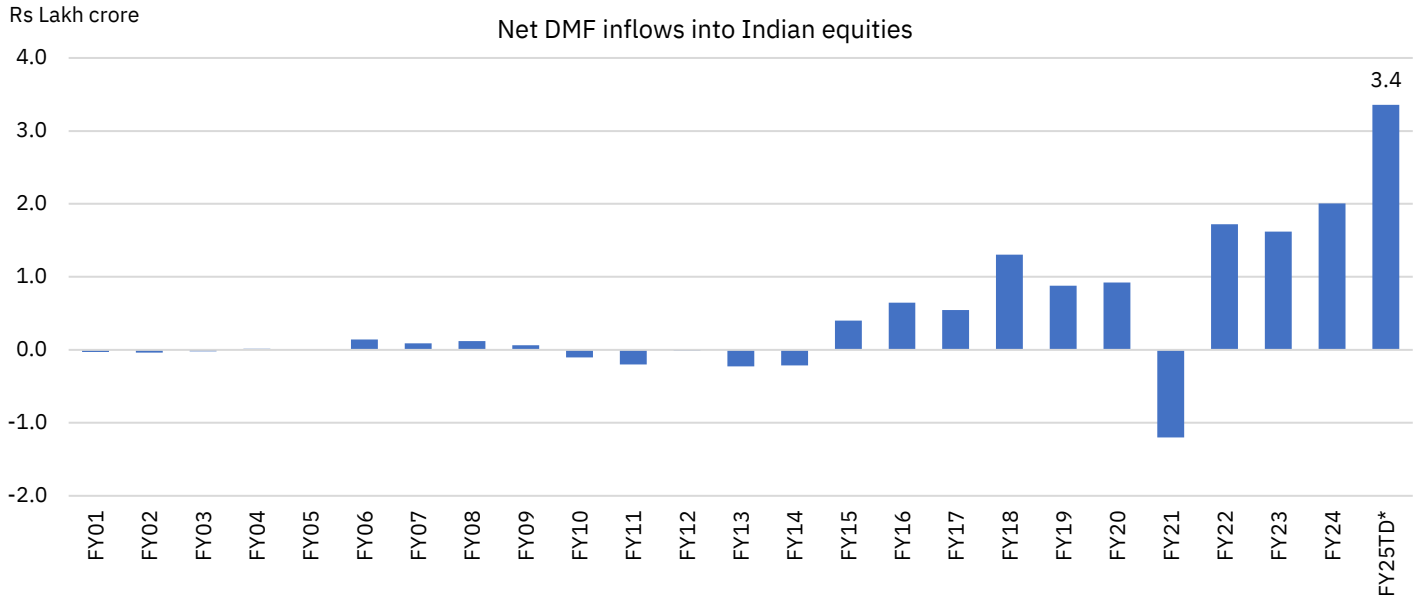
Note: The figure above shows total traded value executed by DIIs across exchanges, compiled based on trading codes entered by Trading Members at the time of order entry and corresponding client category classification provided by trading members.

Figure 203: Annual net inflows by DIIs in Indian equity markets

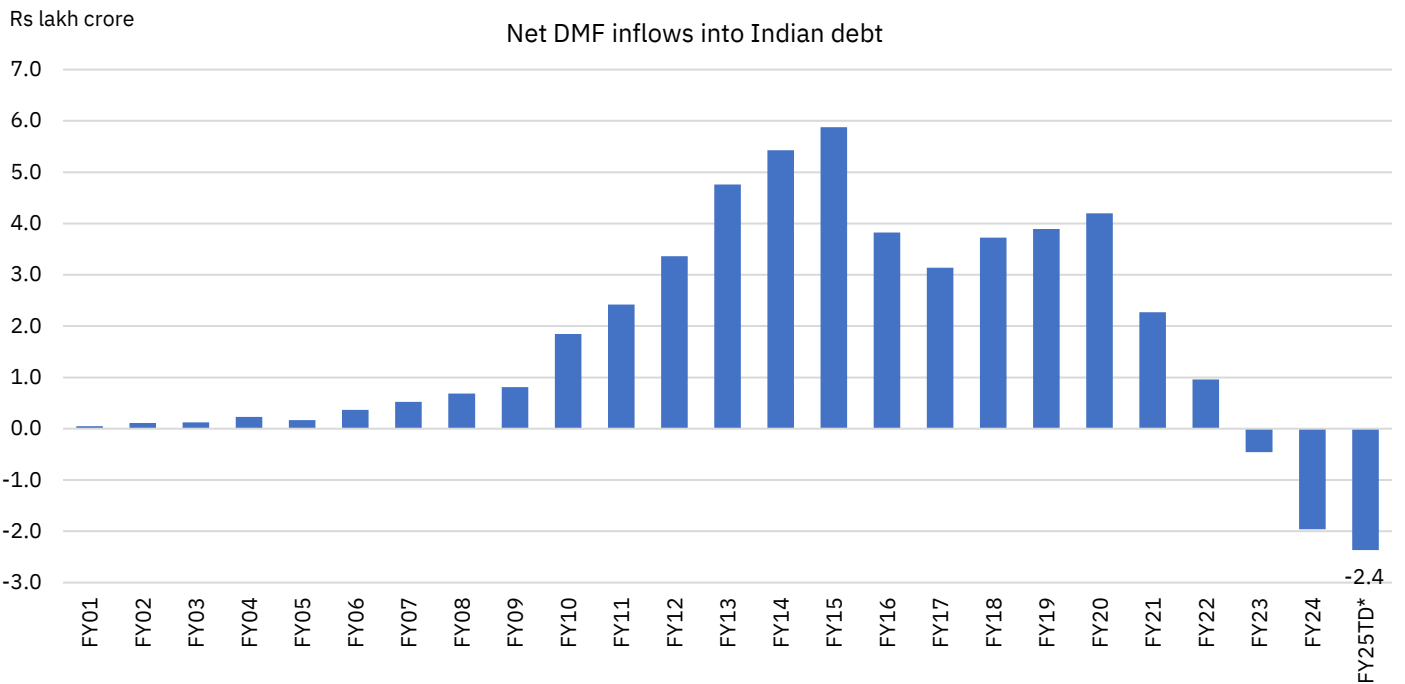


Source: LSEG Datastream, NSE EPR. *Data for FY25TD is as of December 19th, 2024.

Note: The figure above shows total traded value executed by DIIs across exchanges, compiled based on trading codes entered by Trading Members at the time of order entry and corresponding client category classification provided by trading members.

Figure 204: Annual net inflows by domestic mutual funds in Indian equity markets


Source: CMIE Economic Outlook, NSE EPR. *Data for FY25TD is as of December 18th, 2024.

Figure 205: Annual net inflows by domestic mutual funds in Indian debt markets


Source: CMIE Economic Outlook, NSE EPR. *Data for FY25TD is as of December 18th, 2024.

Primary markets

Market Statistics: Fund mobilisation

Mainboard IPO issuances at a three-year high in November 2024: Overall fund raising through equity issuances expanded by 1.7% MoM to Rs 55,651 crore in November 2024. Within equity, mainboard IPO issuances stood at a 36-month high of Rs 35,729 crore, up 5.8% MoM, of which 56.2% were through new equity issuances and the balance through offloading of shares by existing shareholders (OFS). On the contrary, capital raising through IPO issuances on NSE Emerge, declined substantially to Rs 104 crore (-89.4% MoM). Notably, two (2) new listings, namely Swiggy Limited and NTPC Green Energy Limited, accounted for nearly 60% of the total equity raised through mainboard, with both of them having an issue size of over Rs 10,000 crore. Equity issuances through follow-on offerings (Rights, Preferential and QIPs) registered a 29.1% MoM decline in Nov'24. The overall debt raising increased to Rs 1.09 lakh crore (+8.6% MoM), of which 53.5% was through private NCDs and the balance through commercial papers.

Table 50: Fund mobilisation through equity and debt during the last six months

Segments	Modes	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24
Equity (Main Board) - Primary markets	Fresh listing	777	3,113	8,954	8,018	4,816	20,066
	OFS	1,180	1,765	5,746	6,807	28,943	15,663
	Fresh listing + OFS	1,957	4,878	14,700	14,825	33,759	35,729
	FPO	-	-	-	-	-	-
	Rights	805	2,295	3,185	336	311	229
	Preferential allotment	6,068	3,731	593	4,977	1,952	1,042
	QIPs	2,750	13,699	12,033	18,333	15,539	11,150
Equity (SME) - Primary markets	Fresh listing	380	873	653	1,140	966	104
	OFS	22	157	6	54	14	-
	Fresh listing + OFS	402	1,030	659	1,194	980	104
	FPO	-	150	-	-	-	-
	Rights	-	300	-	49	25.0	48.9
	Preferential allotment	105	103	149	148	146	227
	QIPs	25	-	-	150	-	40
Secondary markets	OFS	82	806	4,908	8,667	2,026	7,082
Total equity raised		12,193	26,993	36,227	48,678	54,738	55,651
InvITS	Fresh listing	-	-	-	-	-	-
	Rights	-	-	-	-	-	-
	Preferential allotment	501	-	400	-	694	-
	QIPs	-	-	-	-	-	-
REITs	Fresh listing	-	-	-	-	-	-
	Rights	-	-	-	-	-	-
	Preferential allotment	1,228	-	-	-	-	-
	QIPs	-	-	-	-	-	-
Total business trusts raised		1,729	-	400	-	694	-
Debt	CPs	90,408	49,218	54,424	62,735	53,856	50,846
	NCDs (Private)	42,209	64,565	53,288	73,470	46,766	58,618
	NCDs (Public)	334	-	-	996	200	-
Total debt raised		1,32,951	1,13,782	1,07,712	1,37,201	1,00,821	1,09,464
Total fund mobilization		1,46,874	1,40,775	1,44,339	1,85,879	1,56,253	1,65,115

Source: NSE EPR

Note: Debt issuances include reissuances.

In the first eight months of FY25, the overall capital raising through equity issuances increased to Rs 3.2 lakh crore—the highest ever equity capital raised in a year. Notably, capital raised through IPOs (Mainboard and NSE Emerge) in the first eight months of FY25, amounting to a whopping Rs 1.26 lakh crore, was the highest in the last fifteen years (annual comparison), of which nearly 39% was contributed by three companies alone i.e., Hyundai Motor India Limited, Swiggy Limited, and NTPC Green Energy Limited. Including fund mobilisation through debt, that amounted to Rs 8.6 lakh crore in the first eight months of FY25, total capital raising during this period stood at Rs 11.8 lakh crore.

Table 51: Annual trend of resource mobilization through equity and debt during the last four years

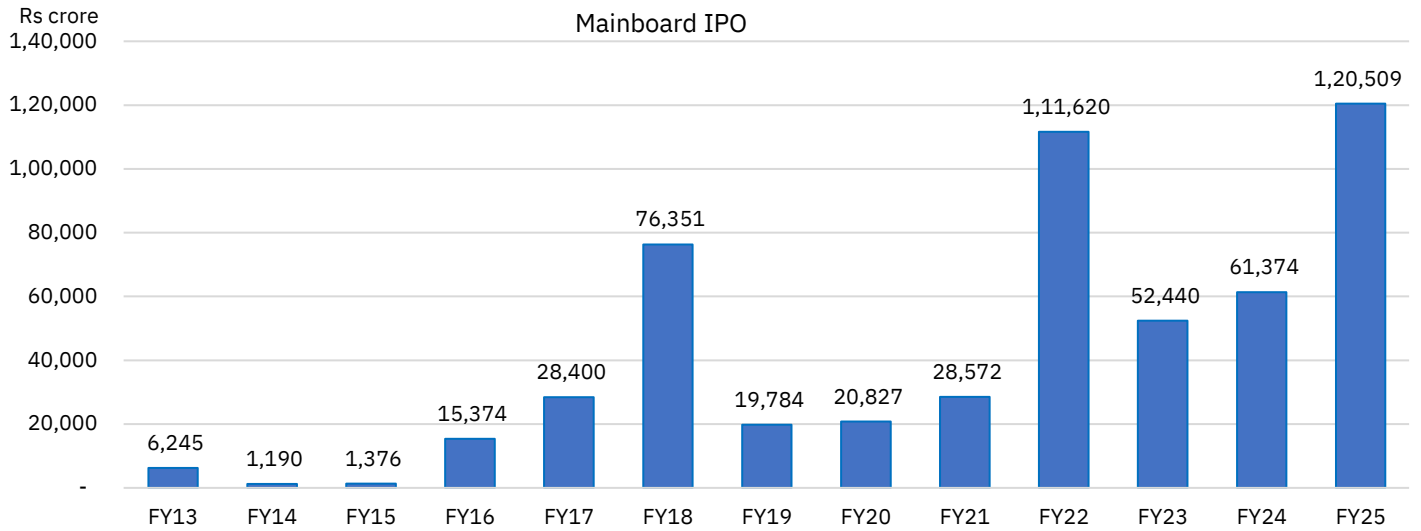
Segments (Rs crore)	Modes	FY22	FY23	FY24	FY25TD
Equity (Main Board) - Primary markets	Fresh listing	40,641	14,359	28,763	49,588
	OFS	70,979	38,080	32,611	70,921
	Fresh listing + OFS	1,11,620	52,440	61,374	1,20,509
	FPO	-	4,300	-	18,000
	Rights	25,555	5,267	13,437	10,219
	Preferential allotment	57,883	80,952	34,549	48,538
Equity (SME) - Primary markets	QIPs	31,441	8,212	66,891	88,016
	Fresh listing	481	1,181	4,348	5,058
	OFS	23	149	273	259
	Fresh listing + OFS	504	1,330	4,622	5,317
	FPO	-	-	27	150
	Rights	355	149	120	423
Secondary markets	Preferential allotment	79	119	371	977
	QIPs	-	-	80	215
	OFS	14,210	11,033	21,769	23,570
	Total equity raised	2,41,646	1,63,803	2,03,239	3,15,933
	InvITs	Fresh listing	13,841	1,166	10,868
Rights		1,284	-	5,629	-
Preferential allotment		-	1,088	8,978	1,595
QIPs		-	1,216	6,850	-
REITs	Fresh listing	-	-	3,200	-
	Rights	-	-	-	-
	Preferential allotment	950	-	400	1,228
	QIPs	-	-	2,305	-
Total business trusts raised	16,075	3,470	38,230	2,823	
Debt	CPs	8,31,120	7,03,755	5,90,582	4,74,763
	NCDs (Private)	3,58,911	5,09,338	5,40,350	3,85,831
	NCDs (Public)	5,398	4,343	11,145	2,530
Total debt raised	11,95,428	12,17,436	11,42,077	8,63,125	
Total fund mobilization	14,53,148	13,84,709	13,83,547	11,81,881	

Source: NSE EPR.

Notes:

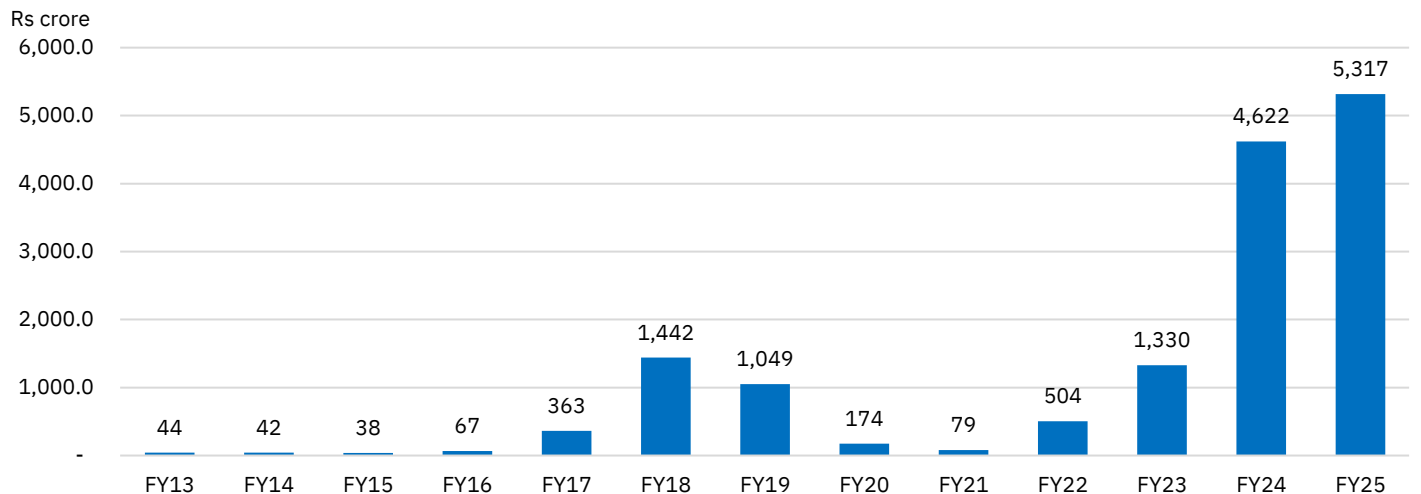
1. Debt issuances include reissuances.

2. FY25TD data is as of November 2024.

Figure 206: Annual trend on equity raised through IPOs on Mainboard


Source: NSE EPR.

Note: FY25 data is as of November 2024.

Figure 207: Annual trend on equity raised through IPOs on NSE Emerge


Source: NSE EPR.

Note: FY25 data is as of November 2024.

QIBs held a major share of allocation for Mainboard issuances in November 2024:

In November 2024, equity share allocation to Qualified Institutional Buyers (QIBs) stood at Rs 25,800 crore or 72.2% of the total capital raised by eight (8) newly listed companies on the Mainboard of the Exchange. Notably, of these eight companies, six (6) new issuances were qualified under Regulation 6(2) of the SEBI ICDR Regulations, attributing to the high QIB allocation during the month. However, the allocation to Retail Individual Investors (RIIs) fell to 13.9% of the total allocations, compared to 18.8% in the previous month when 100% of the funds raised were under Regulation 6(1).

Remarkably, 54 new companies have been listed in FY25 thus far (Apr'24 to Nov'24) on the Mainboard, raising total equity capital of Rs 1.2 lakh crore. Of these, 39 companies came under regulation 6(1) and raised Rs 68,608 crore (56.9% of the total IPO consideration in FY25 till date) while 15 companies came under regulation 6(2) and raised Rs 51,900 crore (43.1% of the total IPO consideration in FY25 till date).

Under regulation 6(1), minimum allotment to Retail and NII is 35% and 15%, respectively, and allotment to QIB is capped at 50%.

Under regulation 6(2), maximum allotment to Retail and NII is 10% and 15%, respectively, while allotment to QIB is minimum 75%

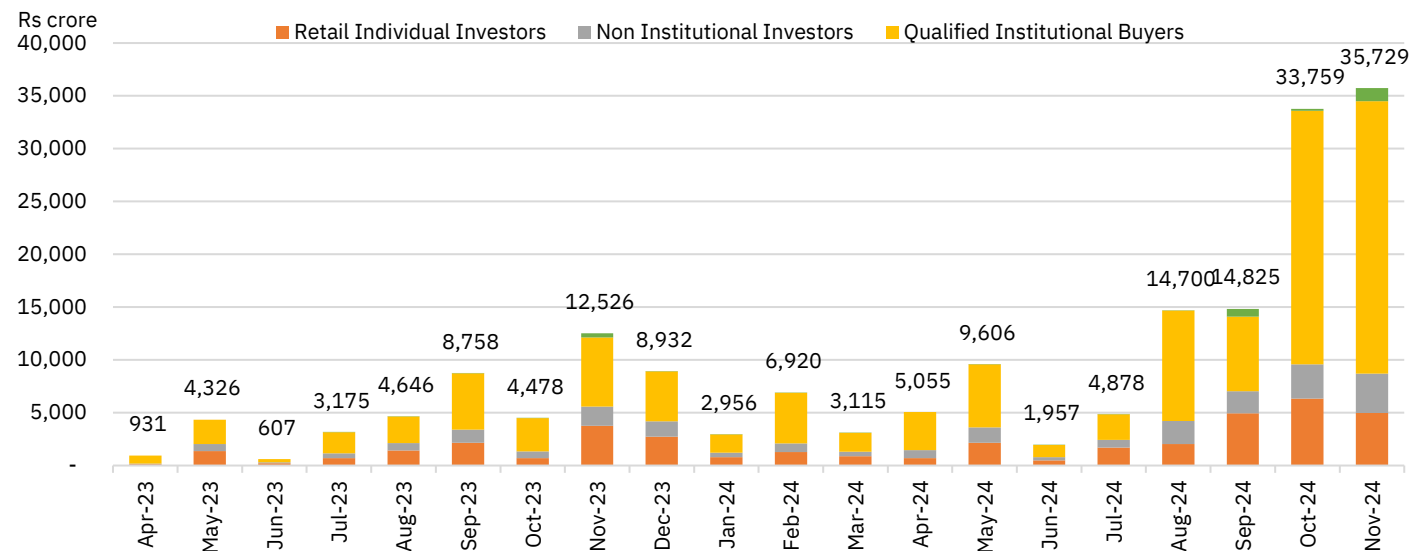
Table 52: Fund mobilization through equity issuance and allocation on Mainboard

Month	No. of issuances	Amount raised (Rs crore)			Allocation by categories (Rs crore)				
		Under section 6(1) ⁵⁷	Under section 6(2) ⁵⁸	Total	Retail Individual Investors	Non-Institutional Investors	Qualified Institutional Buyers	Market Maker	Others
Apr-23	2	66	865	931	112	68	751	-	0
May-23	1	4,326	-	4,326	1,354	686	2,286	-	0
Jun-23	1	607	-	607	212	91	303	-	0
Jul-23	6	1,516	1,659	3,175	688	480	1,989	-	18
Aug-23	6	3,766	880	4,646	1,425	703	2,506	-	12
Sep-23	11	5,320	3,438	8,758	2,155	1,257	5,333	-	13
Oct-23	6	967	3,511	4,478	690	659	3,126	-	3
Nov-23	9	10,825	1,701	12,526	3,749	1,821	6,571	-	385
Dec-23	12	7,732	1,200	8,932	2,747	1,440	4,727	-	19
Jan-24	4	1,955	1,000	2,956	784	443	1,724	-	5
Feb-24	9	6,920	-	6,920	1,283	810	4,782	-	44
Mar-24	8	2,262	853	3,115	881	436	1,791	-	7
Apr-24	3	780	4,275	5,055	700	758	3,596	-	0
May-24	5	4,842	4,764	9,606	2,164	1,437	5,982	-	23
Jun-24	5	1,217	740	1,957	499	293	1,162	-	3
Jul-24	5	4,878	-	4,878	1,703	730	2,433	-	13
Aug-24	8	2,228	12,473	14,700	2,023	2,201	10,449	-	28
Sep-24	13	14,825	-	14,825	4,934	2,115	7,049	-	727
Oct-24	7	33,759	-	33,759	6,341	3,248	23,996	-	175
Nov-24	8	6,080	29,649	35,729	4,979	3,709	25,800	-	1,241

Source: NSE EPR.

Notes:

- Anchor investors are included in qualified institutional buyers (QIB).
- Others include shareholders, employees, policy holders, underwriters, and promoter contribution.

Figure 208: Monthly trend of IPO allocation to investors on Mainboard (Rs crore)


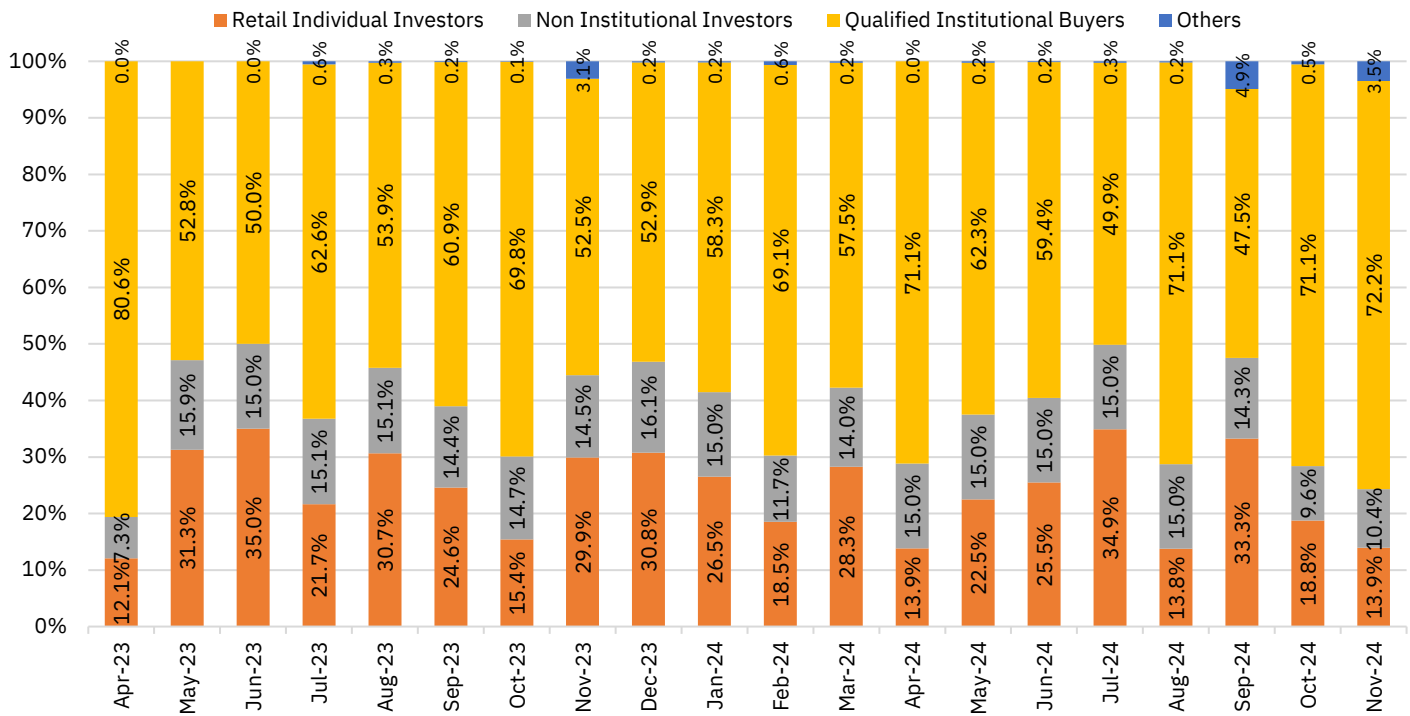
Source: NSE EPR

Notes:

- Anchor investors are included in qualified institutional buyers (QIB).
- Others include shareholders, employees, policy holders, underwriters, and promoter contribution.

⁵⁷ SEBI | Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018 [Last amended on May 17, 2024]

⁵⁸ SEBI | Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018 [Last amended on May 17, 2024]

Figure 209: Monthly trend in IPO allocation (%) to investors on Mainboard


Source: NSE EPR.

Notes:

- Anchor investors are included in qualified institutional buyers (QIB).
- Others include shareholders, employees, policy holders, underwriters, and promoter contribution.

Allocation to RIIs in SME IPO issuances increased in November: In November 2024, equity share allocation to Retail Individual Investors (RIIs) reached Rs 58 crore or 56% of the total capital raised by three new listings on the NSE Emerge platform. The allocation to QIBs fell to 19% from 44% in Oct'24, while that to NIIs increased to 20% from 15% during the same period. The share of market makers stood at 5.4% in the total IPO proceeds in this fiscal thus far, marginally lower than 5.8% in FY24.

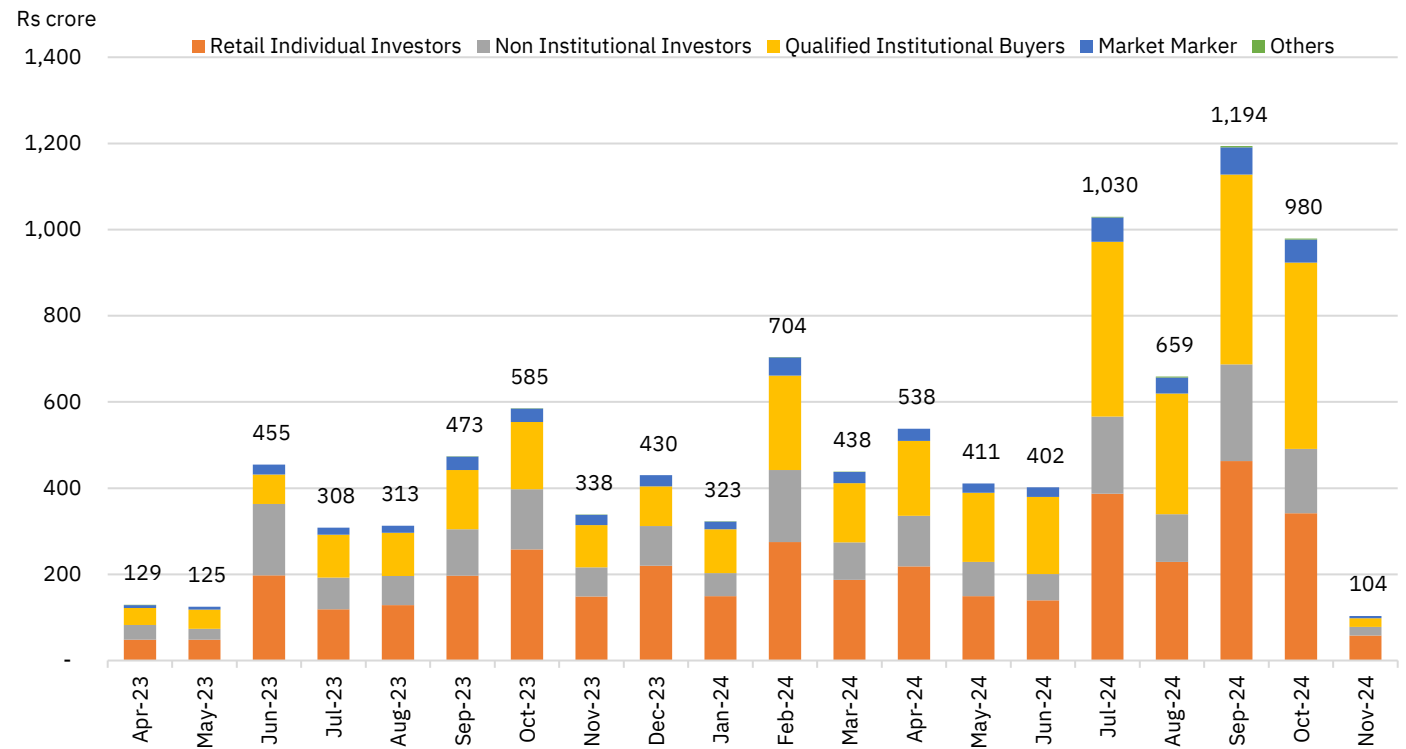
Table 53: Fund mobilization and category-wise allocation through equity issuance on Emerge platform

Month	No. of issuances	Amount raised (Rs crore)	Allocation by categories (Rs crore)				
			Retail Individual Investors	Non-Institutional Investors	Qualified Institutional Buyers	Market Marker	Others
Apr-23	5	129	48	34	40	7	1
May-23	5	125	48	26	44	7	0
Jun-23	11	455	198	165	68	23	0
Jul-23	9	308	119	74	100	17	0
Aug-23	10	313	129	68	100	16	0
Sep-23	17	473	197	108	137	31	0
Oct-23	20	585	258	140	156	31	0
Nov-23	11	338	149	68	98	24	0
Dec-23	12	430	220	92	92	26	0
Jan-24	10	323	149	53	102	18	0
Feb-24	16	704	275	167	219	42	0
Mar-24	12	438	187	87	137	26	0
Apr-24	15	538	218	118	174	28	0
May-24	14	411	150	79	160	22	0
Jun-24	10	402	140	61	179	22	0
Jul-24	22	1,030	387	179	406	56	2
Aug-24	19	659	229	111	280	38	2
Sep-24	28	1,194	463	224	441	63	3
Oct-24	17	980	342	149	432	54	3
Nov-24	3	104	58	20	20	5	-

Source: NSE EPR

Notes: 1. Anchor investors are included in qualified institutional buyers (QIB).

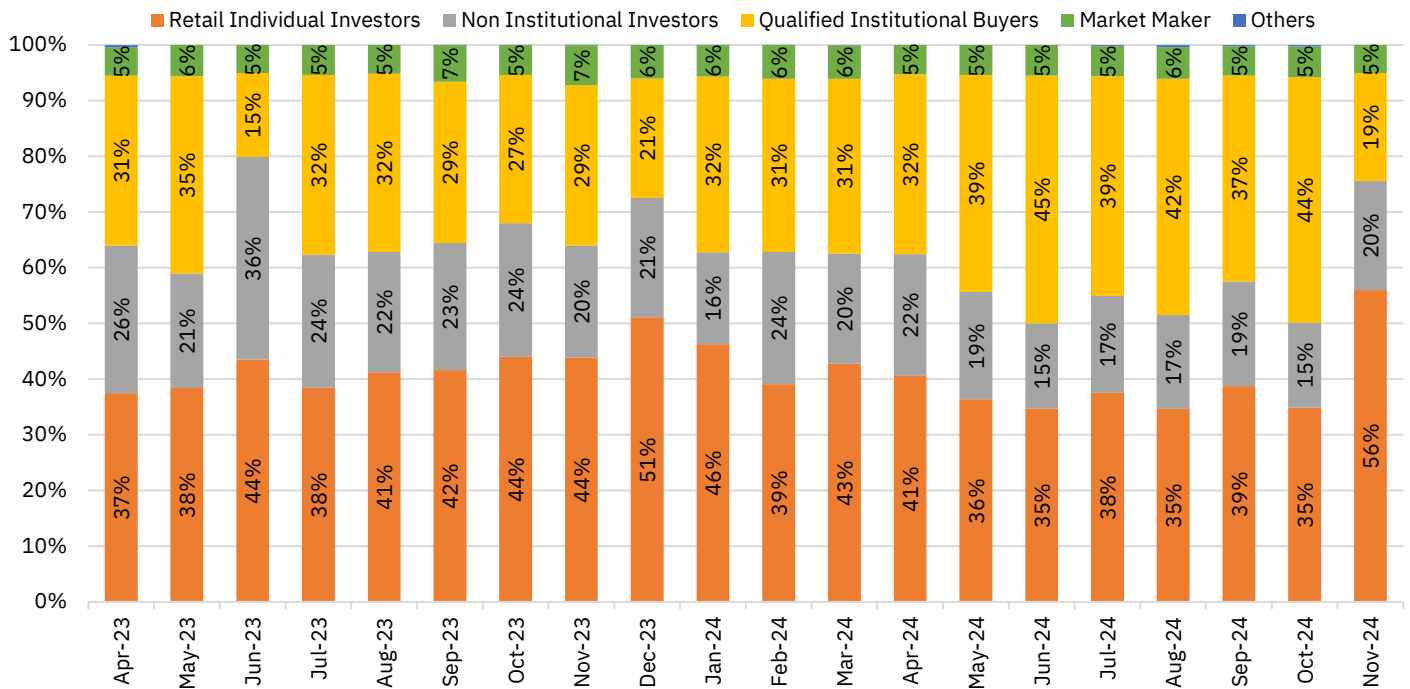
2. Others include shareholders, employees, policy holders, underwriters, and promoter contribution.

Figure 210: Monthly trend in IPO allocation to investors on Emerge platform (Rs crore)


Source: NSE EPR.

Notes: 1. Anchor investors are included in qualified institutional buyers (QIB).

2. Others include shareholders, employees, policy holders, underwriters, and promoter contribution.

Figure 211: Monthly trend of IPO allocation (%) to investor on Emerge platform


Source: NSE EPR. Note: Others include shareholders, employees, policy holders, underwriters, and promoter contribution

Eligibility requirements and allocation criteria for mainboard IPOs

Regulation 6(1) and 6(2) of the SEBI ICDR Regulations lay down the framework for initial listing of companies on the main board.

Eligibility criteria for an issuer to make an initial public offering under regulation 6(1):

- Net tangible assets of at least Rs 3 crore in each of the preceding three full years (of twelve months each), of which not more than 50% are held in monetary assets
- Average operating profit of at least Rs 15 crore during the preceding three years (of twelve months each), with operating profit in each of these preceding three years
- Net worth of at least Rs 1 crore in each of the preceding three full years (of twelve months each)
- In case of name change in the last one year, at least 50% of the revenue for the preceding one full year has been earned by it from the activity indicated by its new name.

Note: The thresholds mentioned above are based on restated and consolidated figures.

For issuers satisfying the eligibility criteria under regulations 6(1), the following allotment criteria would apply.

- Minimum allotment to Retail and NII is 35% and 15%, respectively. Allotment to QIBs is capped at 50%, 5% of which shall be allocated to mutual funds.

Regulation 6(2) of the ICDR Regulations specifically allows issuer companies who do not satisfy the asset/net worth/operating profit criteria listed under Regulation 6(1) to make an initial public under. This is subject to a minimum allotment of 75% to qualified institutional buyers (“QIBs”) and refund of the full subscription money if it fails to do so. Such issues are mandatorily required to be made through the book-building process. Accordingly,

New listings in the month

Sixteen companies got listed on NSE: In November 2024, 16 companies got listed on NSE, out of which three (3) companies debuted on Emerge platform and raised Rs 103.5 crore. Of the 13 companies that got listed on the Mainboard of the Exchange, eight (8) companies were newly listed through IPO issuances amounting to Rs 35,729 crore. Of the remaining five companies, four companies were added through direct listing, and one company migrated from BSE. Of the 16 companies listed, 10 recorded gains on their respective listing dates. Remarkably, the newly listed companies in the month gone by added a cumulative market capitalisation of Rs 3 lakh crore of which nearly two-third was contributed by only two companies.

Table 54: Listings on NSE Emerge platform in November 2024

Listing Date	Name of the company	Fresh Issuances (Rs crore)	Offer for sales (Rs crore)	Capital raised (Rs crore)	Offer Price (Rs)	Listing Gain (%)	Market Cap (Rs Crore)
Nov 18, 24	Neelam Linens and Garments (India) Limited	13.0	-	13.0	24	66.9	102
Nov 22, 24	Onyx Biotec Limited	29.3	-	29.3	61	(11.4)	98
Nov 29, 24	Lamosaic India Limited	61.2	-	61.2	200	(18.0)	178

Source: CMIE Prowess, NSE EPR

Note: Data for market capitalization is as of Nov 29th, 2024

Table 55: Listings on NSE Mainboard in November 2024

Listing Date	Name of the company	Fresh Issuances (Rs crore)	Offer for sales (Rs crore)	Capital raised (Rs crore)	Offer Price (Rs)	Listing Gain (%)	Market Cap (Rs Crore)
Nov 04, 24	Afcons Infrastructure Limited	1,250.0	4,180.0	5,430.0	463	(8.0)	18,531
Nov 06, 24	Aditya Vision Limited*	-	-	-	-	0.1	6,117
Nov 12, 24	Sagility India Limited	-	2,106.4	2,106.4	30	3.5	17,330
Nov 12, 24	Master Trust Limited*	-	-	-	-	3.1	1,913
Nov 13, 24	ACME Solar Holdings Limited	2,395.0	505.0	2,900.0	289	(13.1)	16,598
Nov 13, 24	Swiggy Limited	4,499.0	6,828.4	11,327.4	390	7.7	1,05,375
Nov 14, 24	Niva Bupa Health Insurance Company Limited	800.0	1,400.0	2,200.0	74	5.6	13,774
Nov 14, 24	K.P. Energy Limited*	-	-	-	-	0.9	4,135
Nov 14, 24	Knowledge Marine & Engineering Works Limited [#]	-	-	-	-	(3.1)	2,299
Nov 22, 24	Zinka Logistics Solutions Limited	550.0	564.7	1,114.7	273	2.9	4,784
Nov 27, 24	NTPC Green Energy Limited	10,000.0	-	10,000.0	108	3.2	1,05,194
Nov 27, 24	RACL Geartech Limited*	-	-	-	-	(1.2)	994
Nov 29, 24	Enviro Infra Engineers Limited	572.3	78.0	650.3	148	48.6	3,635

Source: CMIE Prowess, NSE EPR

Notes: 1. Data for market capitalization is as of Nov 29th, 2024

2 # BSE to NSE Migration

3 * Data has been provided for direct listing.

Maharashtra tops with the highest number of listings and equity raised in FY25 on both Mainboard and NSE Emerge:

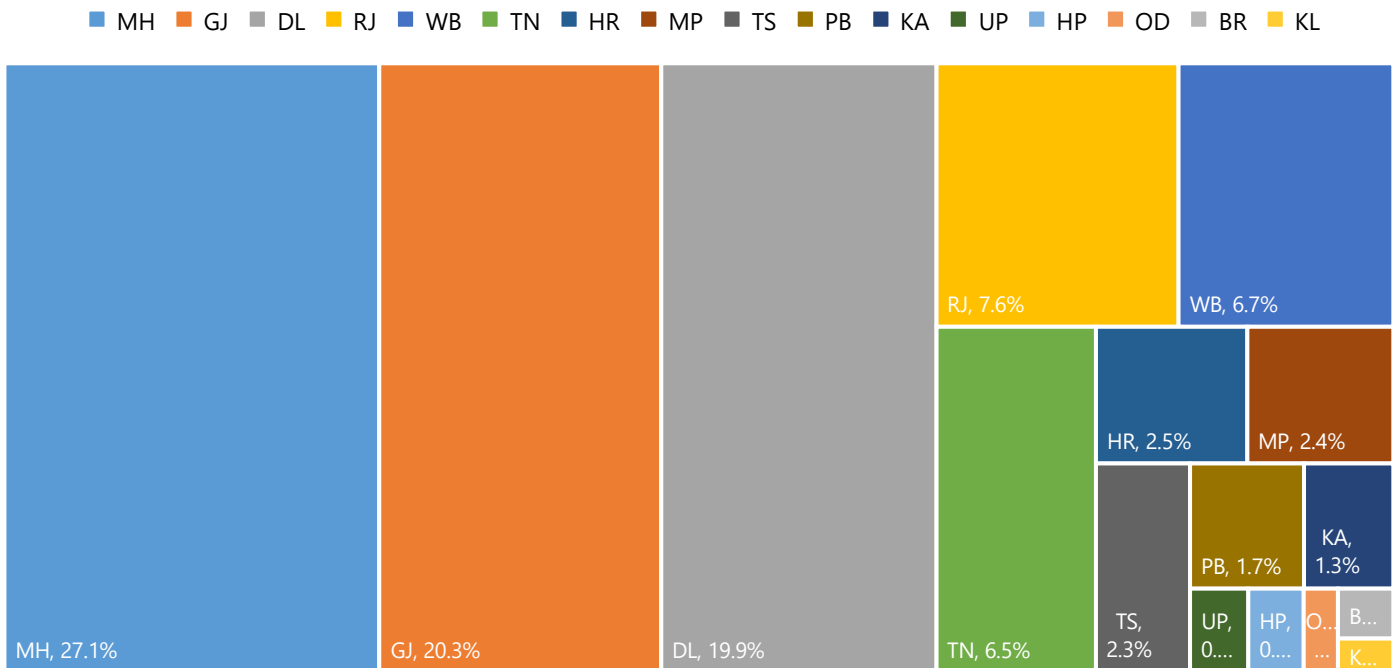
In the first eight months of FY25, Maharashtra and Gujarat accounted for 51.6% of the number of companies listed on the Emerge platform, raising Rs 2,515 crore, followed by Delhi at Rs 1,053 crore, Rajasthan at Rs 401 crore, and West Bengal at Rs 356 crore. The total number of companies listed on the Emerge platform since inception stood at 575 as of November 30th, 2024. Furthermore, in the first eight months of FY25, out of the 128 newly listed companies on the Emerge platform, 51

companies belonged to the Industrials⁵⁹ sector, raising a total of Rs 2,152 crore (40.5% share of total funds raised), followed by Consumer Discretionary⁶⁰ (21 companies) and Materials (20 companies) sector, together raising a total of Rs 1,497 crore. Interestingly, the top three sectors accounted for 68.6% of the total amount raised on the NSE Emerge platform in FY25 till November 2024.

In the first eight months of FY25, NSE's mainboard witnessed 54 new listings. Maharashtra topped the list with the highest number of companies (16) and amount raised (Rs 29,847 crore). Tamil Nadu (TN) and Karnataka (KA) followed Maharashtra, raising Rs 28,636 crore and Rs 26,628 crore by two (2) and eight (8) companies respectively. The top three states accounted for over 70.6% of the total capital raised on the Mainboard in the first eight months of FY25. Sector-wise, Consumer Discretionary accounted for 45% of the total capital raised, followed by Financials, which accounted for another 13%.

Out of 575 companies listed on the NSE Emerge platform since its inception, 321 are based out of Maharashtra and Gujarat. Furthermore, 38 companies from Maharashtra and 44 companies from Gujarat have migrated to the mainboard, followed by 15 companies from Delhi.

Figure 212: State-wise issuances on NSE Emerge Platform (based on equity raised) in FY25 (Apr'24-Nov'24)



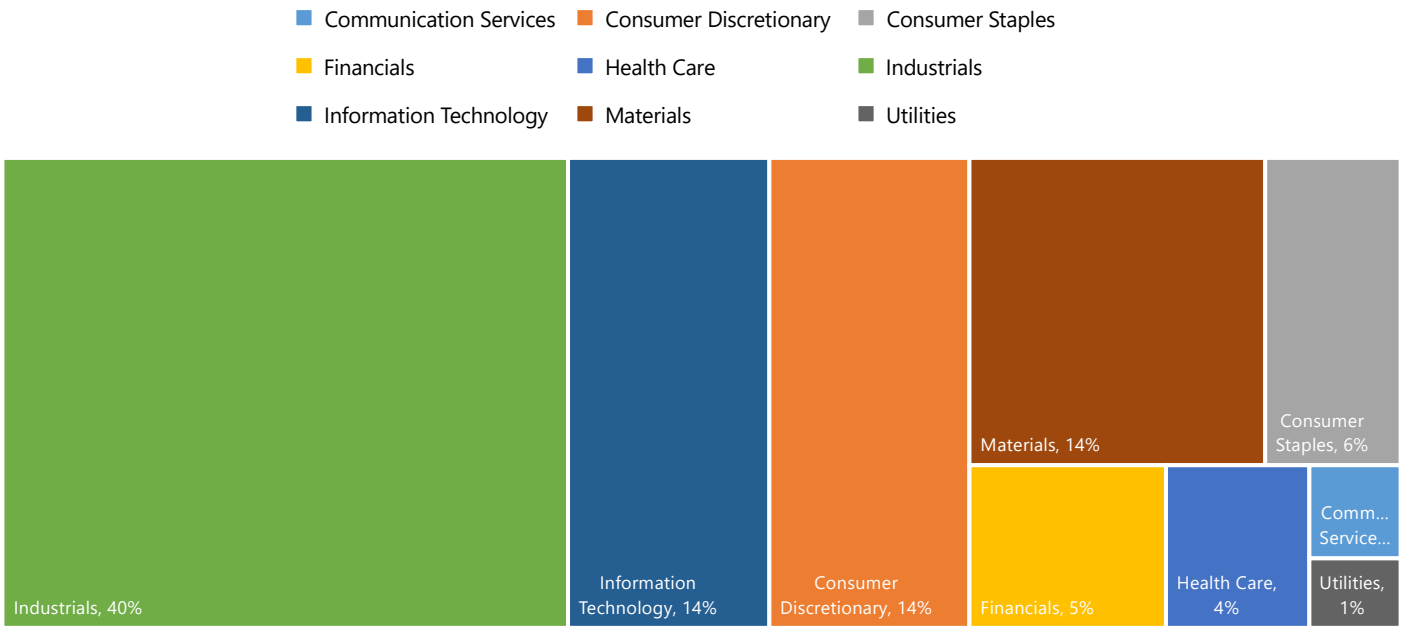
Source: NSE EPR

Notes:

1. Abbreviation of State; MH – Maharashtra, GJ – Gujarat, DL – Delhi, WB – West Bengal, RJ – Rajasthan, TN – Tamil Nadu, HR – Haryana, MP – Madhya Pradesh, TS – Telangana, KA – Karnataka, UP – Uttar Pradesh, PB – Punjab, OD – Odisha, BR – Bihar, KL – Kerala
2. Data has been presented based on respective states' shares in the total amount raised on Emerge platform
3. Data is as of FY25 till date (as of November 30th, 2024)
4. Registered office mentioned in the Offer document has been considered for presenting the state-wise data

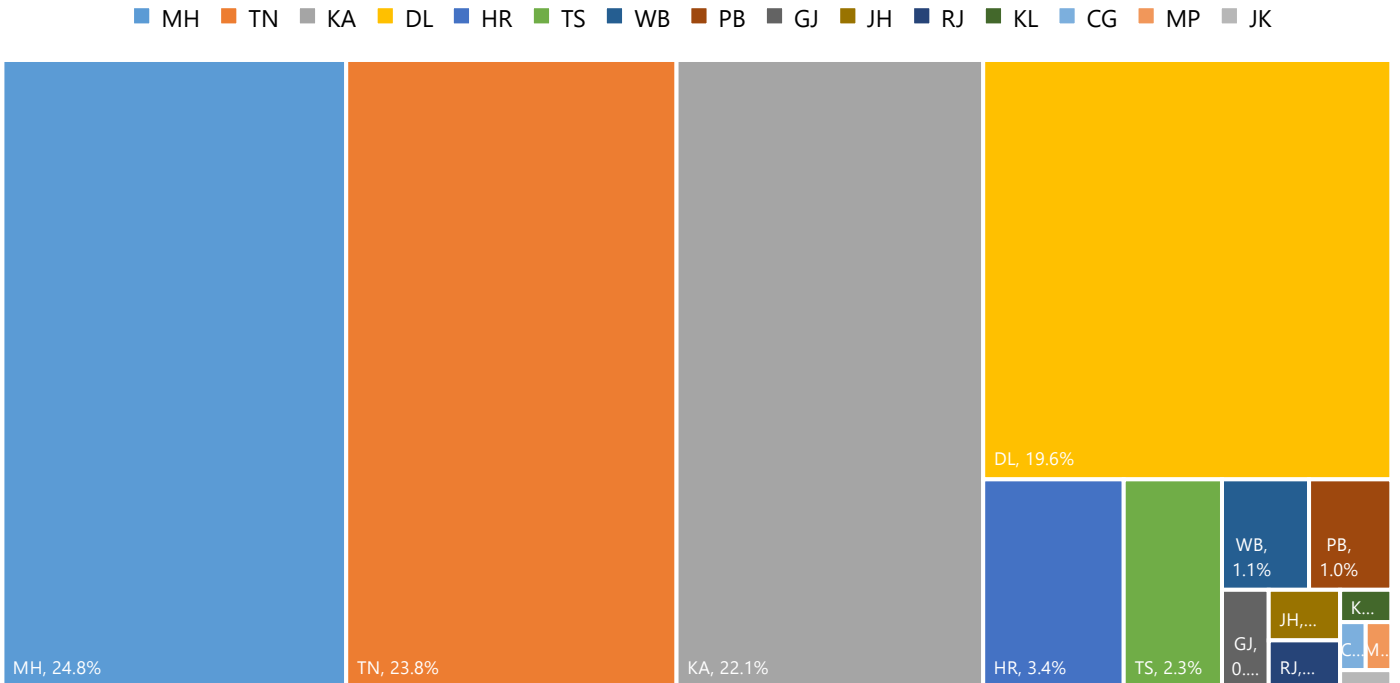
⁵⁹ The industrials sector encompasses companies involved in the production of goods and services related to manufacturing, construction, and transportation, providing essential infrastructure and equipment.

⁶⁰ The consumer discretionary sector consists of companies that offer goods and services, such as apparel, automobiles, and entertainment, which consumers purchase based on their disposable income and economic confidence.

Figure 213: Sector-wise issuances on NSE Emerge Platform (based on equity raised) in FY25 (Apr'24-Nov'24)


Source: NSE EPR

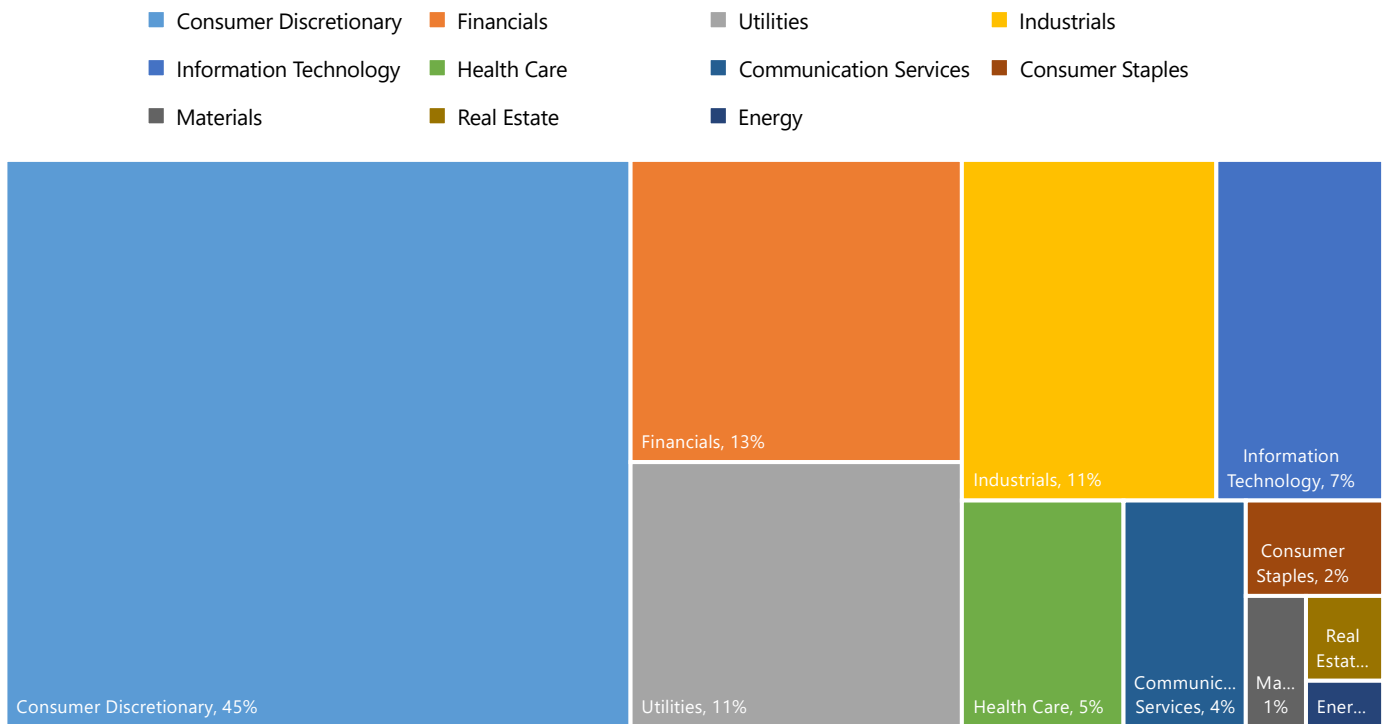
 Notes: 1. The percentages displayed represent the respective states' shares in the total amount raised through IPOs in FY25 till date (as of November 30th, 2024)
 2. Sector classification is based on Global Industry Classification Standard (GICS)

Figure 214: State-wise issuances on Mainboard (based on equity raised) in FY25 (Apr'24-Nov'24)


Source: NSE EPR

Notes: 1. Abbreviation of State; MH – Maharashtra, KA – Karnataka, DL – Delhi, TS – Telangana, WB – West Bengal, PB – Punjab, HR – Haryana, TN – Tamil Nadu, GJ – Gujarat, JH – Jharkhand, KL – Kerala, CG – Chhattisgarh, MP – Madhya Pradesh, RJ – Rajasthan, JK – Jammu and Kashmir

 2. The percentages displayed represent the respective states' shares in the total amount raised through mainboard IPOs in FY25 till date (as of November 30th, 2024)
 3. Registered office mentioned in the Offer document has been considered for presenting the state wise data

Figure 215: Sector-wise issuances on Mainboard (based on equity raised) in FY25 (Apr'24-Nov'24)


Source: NSE EPR

 Notes: 1. The percentages displayed represent the respective states' shares in the total amount raised through IPOs in FY25 till date (as of November 30th, 2024)
 2. Sector classification is based on Global Industry Classification Standard (GICS)

Table 56: Top 10 State-wise issuances on NSE Emerge

State	No of issuances	Issue size (Rs crore)	M-Cap (Rs crore)
Maharashtra	167	4,112	53,637
Gujarat	154	3,677	49,334
Delhi	77	2,611	47,460
Tamil Nadu	17	782	8,241
West Bengal	29	678	8,012
Rajasthan	27	653	9,569
Madhya Pradesh	27	627	14,783
Karnataka	13	434	3,837
Telangana	17	417	3,404
Haryana	12	278	4,107
Others	35	803	15,218
Grand Total	575	15,072	2,17,602

Source: CMIE Prowess, NSE EPR

Notes:

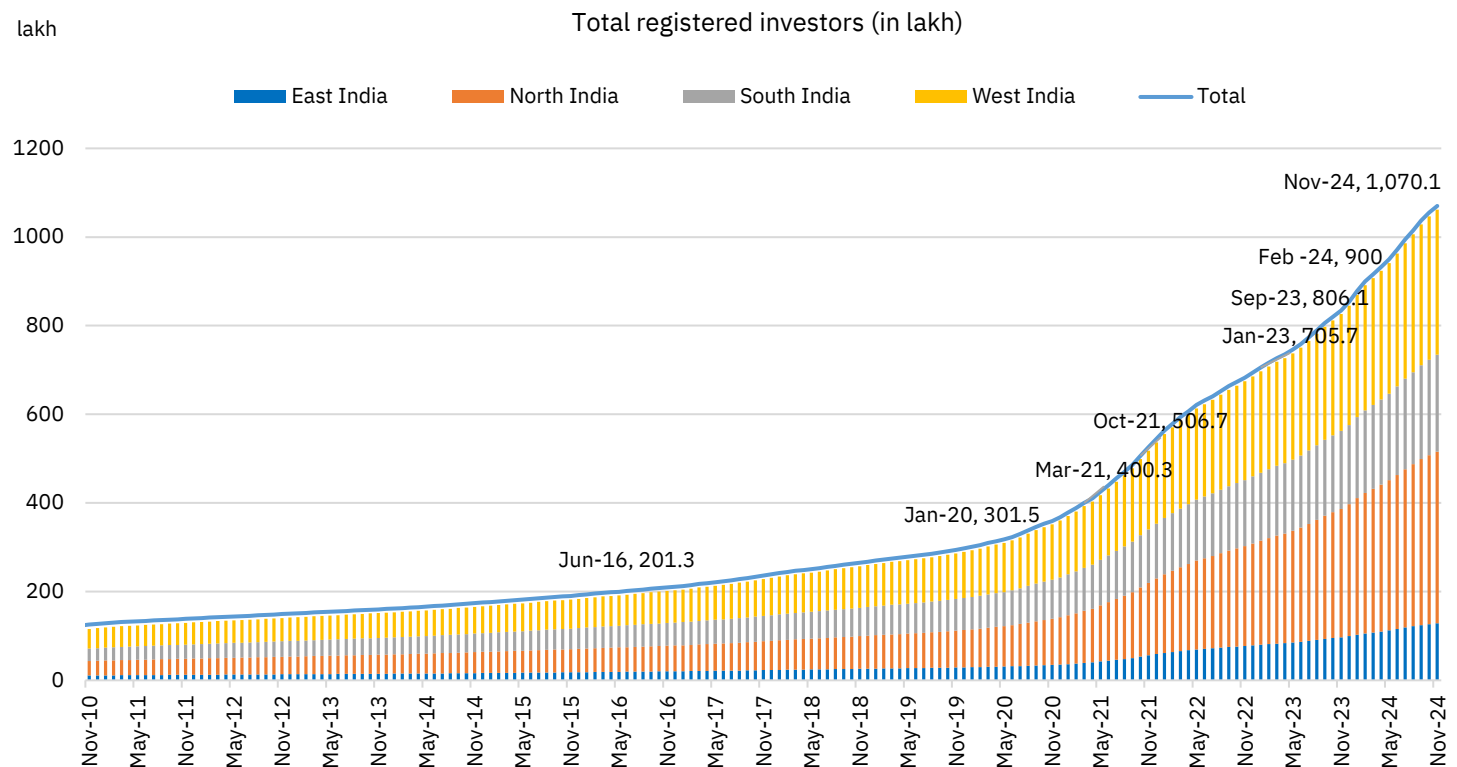
- Registered office address mentioned in the DRHP has been considered for state-wise data
- Market cap values are as on November 29th, 2024
- Above data includes companies that have migrated to Mainboard of the exchange.

Investor growth

Region-wise distribution of total registered investors

Total registered investors stood at 10.7 crore in Nov'24: The year so far has seen an accelerating growth in the registered investors base, crossing the 9-crore milestone in Feb'24 and the 10-crore mark just after 5 months in Aug'24. The registered investor base rose further to end the month of November at 10.7 crore. Region-wise, North India remained on top with a registered investor base of 3.9 crore, followed by West India at 3.3 crore, South India at 2.2 crore, and East India at 1.3 crore. North and East India have seen a remarkable increase of 33.8% and 32.2% over the last twelve months (Nov'23 vs Nov'24), followed by 24.2% YoY increase in West India and 24.1% YoY in South India.

Figure 216: Region-wise distribution of total registered investors- Long term trend



Source: NSE EPR.

Note: East India includes Mizoram, Odisha, West Bengal, Assam, Manipur, Arunachal Pradesh, Tripura, Nagaland, Meghalaya, Sikkim, Chhattisgarh; West India includes Maharashtra, Gujarat, Madhya Pradesh, Daman & Diu, Goa, Dadra & Nagar Haveli; North India includes Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Haryana, Delhi, Punjab, Jammu & Kashmir, Himachal Pradesh, Chandigarh And Rajasthan; South India includes Telangana, Kerala, Andhra Pradesh, Tamil Nadu, Karnataka, Pondicherry, Lakshadweep and Andaman & Nicobar.

Table 57: Region-wise distribution of total registered investors at end of each fiscal year (in lakhs)

Region	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25TD*
East India	21.2	24.1	27.0	30.4	39.3	65.7	82.8	107.7	128.7
North India	59.9	68.2	76.7	88.4	117.6	189.4	243.5	324.0	387.3
South India	53.1	59.7	66.6	75.1	97.0	132.5	157.3	189.2	218.7
West India	75.3	87.2	96.7	108.4	139.0	198.1	234.8	286.0	326.9
Others#	7.9	7.8	7.8	7.7	7.5	8.0	8.4	9.0	8.5
Total	217.3	247.0	274.9	310.0	400.3	593.7	726.9	915.8	1,070.1

Source: NSE EPR. *Data for FY25 is as of November 2024. #Others include Army Personnel Officers and investors for whom state mapping is unavailable.

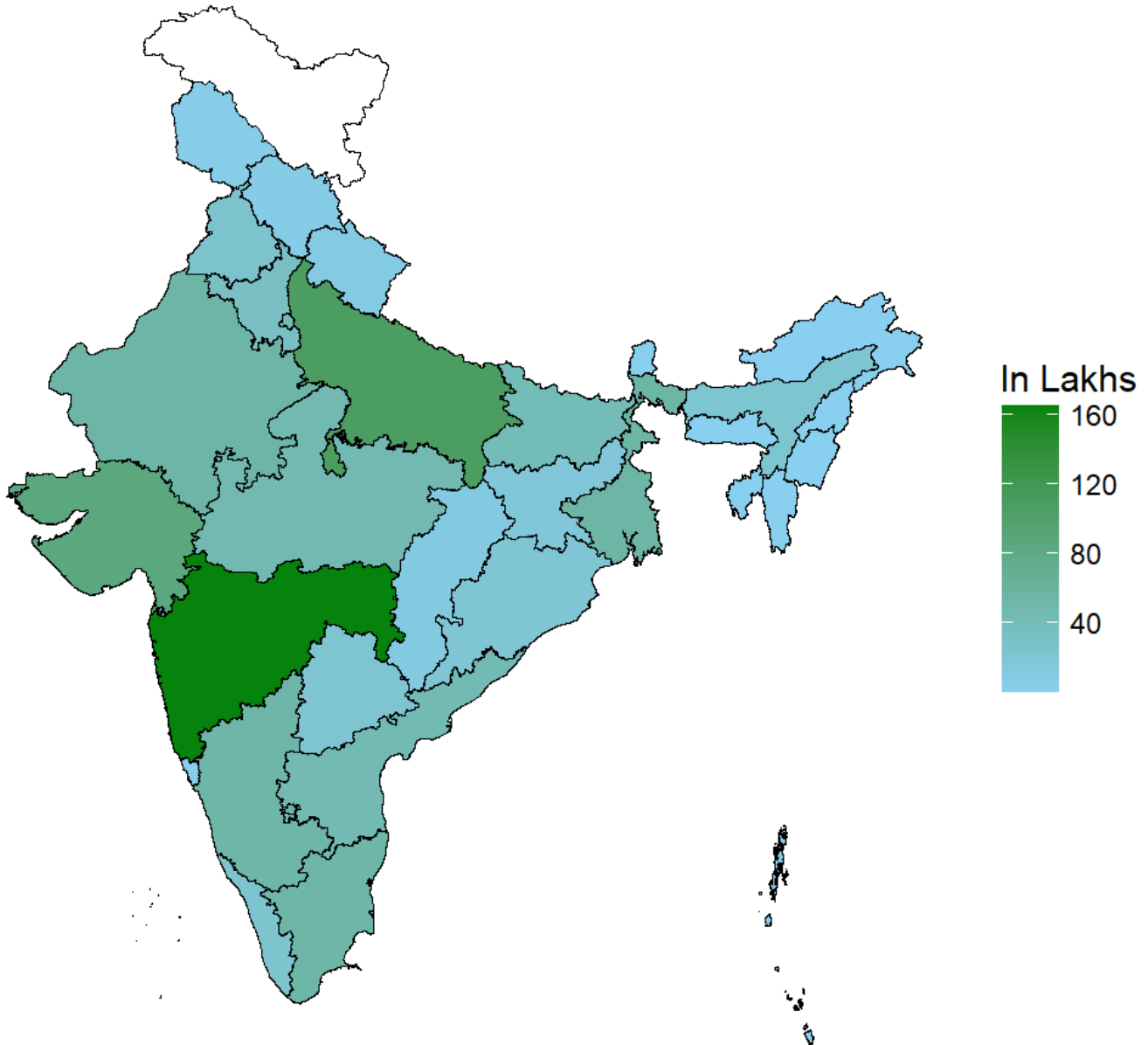
Maharashtra continues to have the highest share of registered investors: Maharashtra continued to lead in terms of registered investors, accounting for close to 1.8 crore investors, although the state's share has been gradually coming off from ~20% in FY15 to 16.5% in Nov'24. Uttar Pradesh retained its second position, having surpassed the milestone of 1 crore registered investors in the month of April, touching 1.2 crore investors by November-end, representing 11.3% (Vs 6.9% in FY15) of the registered unique investor base at NSE. This was followed by Gujarat at 94.9 lakhs, West Bengal at 62.5 lakh and Rajasthan at 61.4 lakh. These five states together accounted for 48.3% of the investor base as of Nov'24. Interestingly, states beyond the top 10 now account for 27% of the registered investor base as of Nov'24, vs. 23% in FY20. This increase over the last four years is in part due to higher contributions from Bihar and Assam.

Table 58: State-wise distribution of total registered investors at end of each fiscal year

States	FY10		FY15		FY20		FY25TD*	
	Count ('000)	Share (%)	Count ('000)	Share (%)	Count ('000)	Share (%)	Count ('000)	Share (%)
Maharashtra	2,277	19.7	3,575	19.9	5,963	19.2	17,699	16.5
Uttar Pradesh	701	6.1	1,248	6.9	2,302	7.4	12,059	11.3
Gujarat	1,498	13.0	2,055	11.4	3,797	12.2	9,490	8.9
West Bengal	711	6.2	1,175	6.5	1,990	6.4	6,247	5.8
Rajasthan	426	3.7	667	3.7	1,328	4.3	6,140	5.7
Karnataka	708	6.1	1,165	6.5	1,949	6.3	5,918	5.5
Tamil Nadu	747	6.5	1,287	7.2	2,182	7.0	5,809	5.4
Madhya Pradesh	289	2.5	518	2.9	984	3.2	5,193	4.9
Andhra Pradesh	583	5.0	1,002	5.6	1,581	5.1	4,823	4.5
Delhi	780	6.8	1,197	6.7	1,853	6.0	4,727	4.4
Bihar	145	1.3	294	1.6	670	2.2	4,753	4.4
Haryana	327	2.8	531	3.0	971	3.1	3,666	3.4
Punjab	229	2.0	389	2.2	704	2.3	2,820	2.6
Kerala	345	3.0	583	3.2	942	3.0	2,650	2.5
Telangana	156	1.3	279	1.6	813	2.6	2,532	2.4
Assam	55	0.5	109	0.6	221	0.7	2,436	2.3
Orissa	121	1.1	250	1.4	494	1.6	2,313	2.2
Jharkhand	140	1.2	258	1.4	444	1.4	1,879	1.8
Chhattisgarh	67	0.6	129	0.7	252	0.8	1,340	1.3
Uttarakhand	66	0.6	123	0.7	234	0.8	1,131	1.1
Himachal Pradesh	31	0.3	60	0.3	123	0.4	715	0.7
Jammu & Kashmir	40	0.3	65	0.4	112	0.4	604	0.6
Chandigarh	38	0.3	63	0.3	100	0.3	236	0.2
Goa	30	0.3	48	0.3	82	0.3	239	0.2
Tripura	7	0.1	13	0.1	4	0.1	171	0.2
Manipur	1	0.0	5	0.0	18	0.1	118	0.1
Pondicherry	12	0.1	22	0.1	41	0.1	111	0.1
Meghalaya	3	0.0	6	0.0	12	0.0	70	0.1
Nagaland	1	0.0	3	0.0	8	0.0	59	0.1
Arunachal Pradesh	1	0.0	2	0.0	6	0.0	53	0.0
Dadra & Nagar Haveli	3	0.0	6	0.0	9	0.0	45	0.0
Sikkim	1	0.0	3	0.0	7	0.0	38	0.0
Andaman & Nicobar Islands	2	0.0	3	0.0	5	0.0	27	0.0
Daman & Diu	3	0.0	4	0.0	6	0.0	23	0.0
Mizoram	0	0.0	1	0.0	3	0.0	24	0.0
Lakshwadeep	0	0.0	0	0.0	0	0.0	2	0.0
Ladakh	0	0.0	0	0.0	0	0.0	2	0.0
Others	1,007	8.7	823	4.6	773	2.5	849	0.8
Total	11,549	100	17,960	100	31,004	100	1,07,012	100.0

Source: NSE EPR. Note: Data for FY25 is as of Nov 30th, 2024.

Figure 217: State-wise distribution of total registered investors as of November 2024



Source: NSE EPR

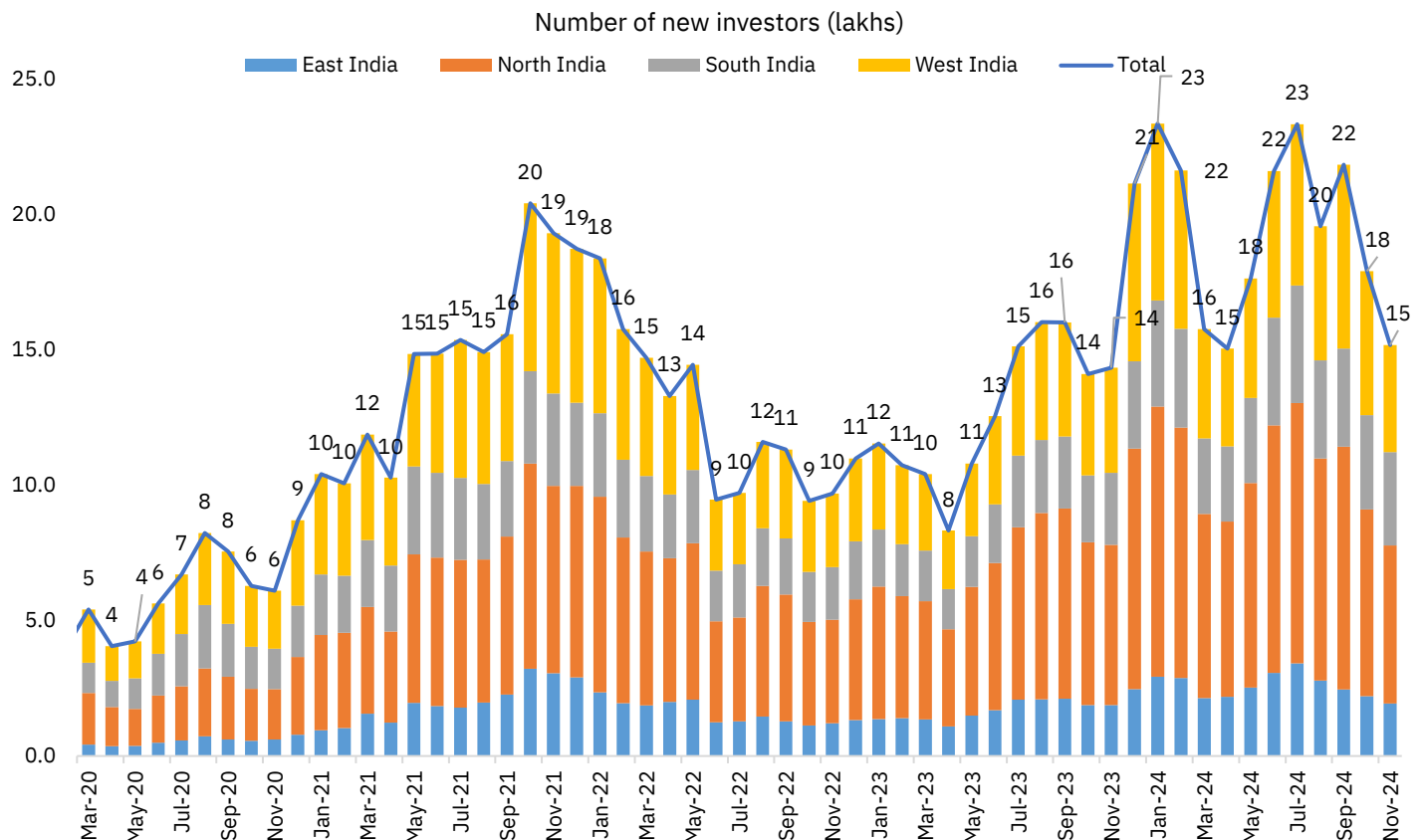
Note: The maps above are created using the state-level shapefile from <https://geographicalanalysis.com/gis-blog/download-free-india-shapefile-including-kashmir-and-ladakh/>

Region-wise distribution of new investor registrations

New investor registrations drop to seven-month lows in November: Sell-off in equity markets and concerns of a slowdown in economic growth, as reflected in muted corporate earnings and weaker-than-expected GDP growth, have resulted in moderation of new investor additions over the last couple of months. New investor registrations in November fell by 15.2% MoM to a seven-month low of 15.2 lakh, marking the second drop in a row. Notwithstanding the recent moderation, the monthly run-rate of new investor registrations remained robust at 19 lakh in the first eight months of the fiscal, vs. 13.4 lakh in FY24.

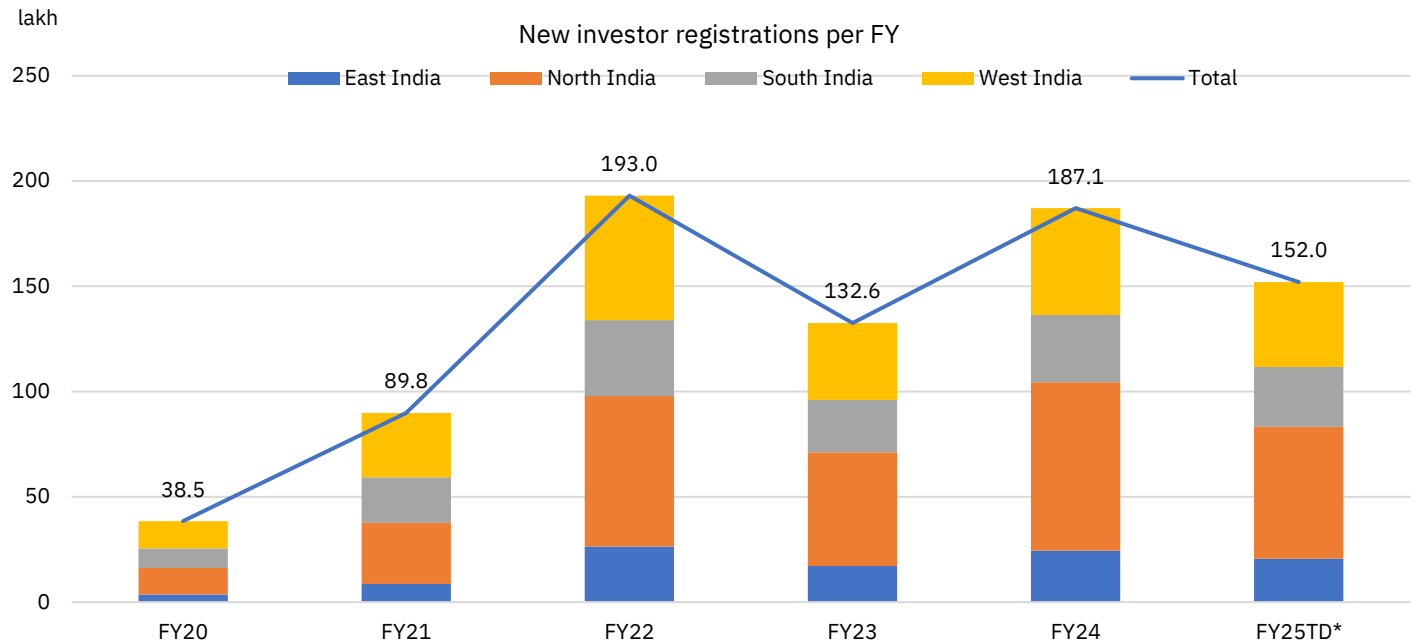
This decline in new investor registrations in November was seen across regions, with a 25.5% MoM decrease in registrations from West India (5.3 lakh to 4 lakh), followed by 15.5% decrease in North India (6.9 lakh to 5.8 lakh). Eastern India saw new investor registrations decline by 11.8% MoM to 1.9 lakh, while that from South India dropped by a mere 1.1% to 3.4 lakh in Nov'24, resulting in the latter's share in new investor registrations increasing from 19.5% to 22.7% in November. Share of East India also increased from 12.3% to 12.8%, at the expense of decline in other regions. West India's share dipped the most from 29.7% in October to 26.1% in November, followed by North India from 38.5% in October to 38.4% in November.

Figure 218: Region-wise distribution of new investors registered each month



Source: NSE EPR.

Note: East India includes Mizoram, Odisha, West Bengal, Assam, Manipur, Arunachal Pradesh, Tripura, Nagaland, Meghalaya, Sikkim, Chhattisgarh; West India includes Maharashtra, Gujarat, Madhya Pradesh, Daman & Diu, Goa, Dadra & Nagar Haveli; North India includes Bihar, Jharkhand, Uttar Pradesh, Uttarakhand, Haryana, Delhi, Punjab, Jammu & Kashmir, Himachal Pradesh, Chandigarh And Rajasthan; South India includes Telangana, Kerala, Andhra Pradesh, Tamil Nadu, Karnataka, Pondicherry, Lakshadweep and Andaman & Nicobar.

Figure 219: Region-wise distribution of new investors registered each financial year


Uttar Pradesh leads again in new investor registrations: Uttar Pradesh continues to lead in new investor registrations, recording 2.1 lakh new registrations (-12.3% MoM from 2.4 lakh in Oct'24) and accounting for ~13.7% (Vs 13.3% in Oct'24) of all new registrations across the country. Maharashtra stood second with 1.9 lakh new investors (-18.3% MoM), with its share of new investors declining to 12.7% (Vs 13.2% in Oct'24), while Gujarat stood third, with 1.3 lakh new investors (-38.4% MoM) and an 8.4% (Vs 11.5% in Oct'24) share of new investors.

West Bengal also saw a significant 10.7% MoM decrease in new investor registrations from 1.1 lakh in Oct'24 to 1 lakh in Nov'24, while its share in total investor registrations during the month increased from 6.3% in Oct'24 to 6.6% in Nov'24. Among other top 10 states, only Andhra Pradesh saw a rise in its new investor registrations, with 72k new registrations (+12.4% MoM), resulting in its share increasing to 4.8% (Vs 3.6% in Oct'24). While Rajasthan was the only state that experienced a decline in its share of new registrations from 6.5% in Oct'24 to 5.7% in Nov'24 (-25.8 MoM, 86k new investors). Tamil Nadu (5.6% share, 85k new investors), Karnataka (5.4% share, 82k new investors) and Madhya Pradesh (4.8% share, 72k new investors) saw a rise in their share of new registrations pan-India, while Bihar's share (5.6% share, 85k new investors) remained the same. The top five states together contributed 47.1% of new registrations in September 2024.

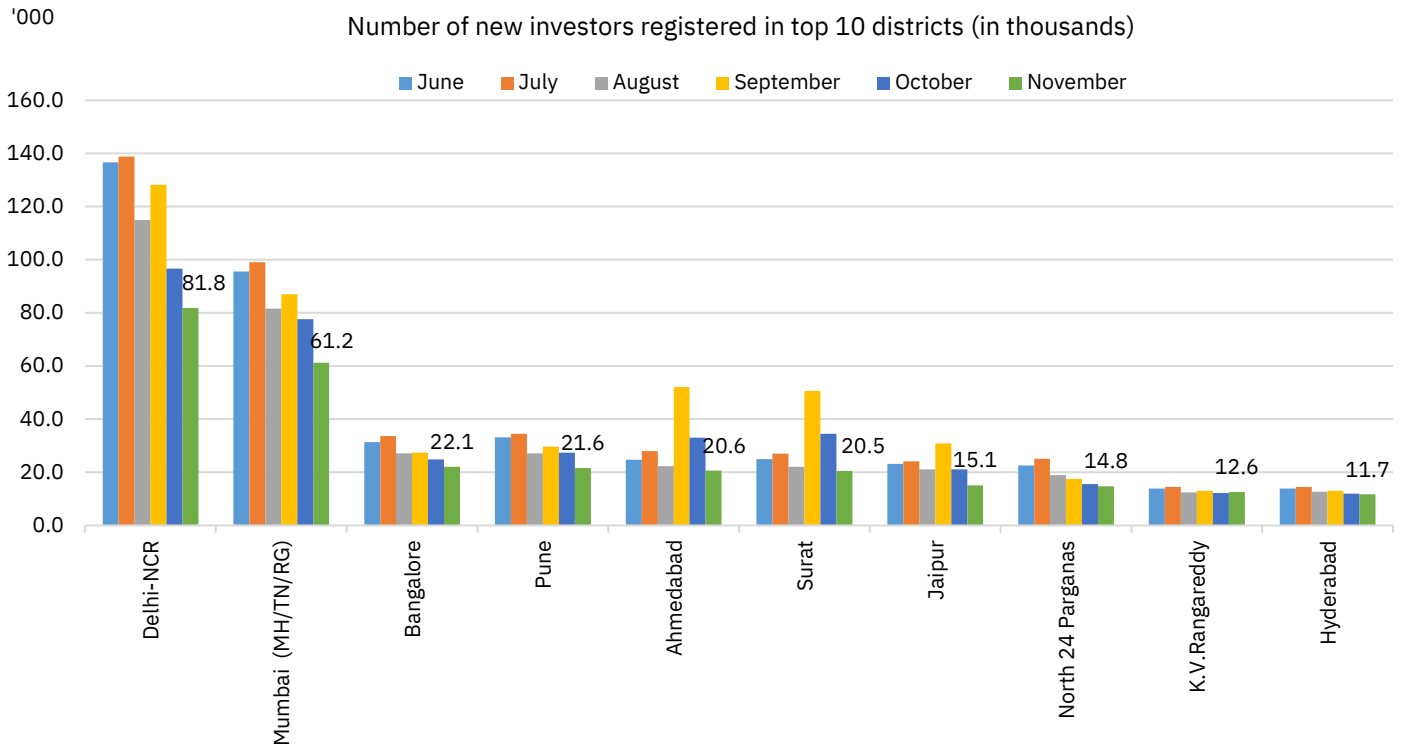
Table 59: Number of new investors registered in top 25 states (in '000)

State	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24
Uttar Pradesh	318.4	334.2	290.8	296.3	237.6	208.4
Maharashtra	281.2	307.8	254.2	262.1	236.8	193.4
Gujarat	139.1	158.2	128.4	302.7	205.9	126.8
West Bengal	158.5	174.2	133.9	124.0	112.1	100.1
Rajasthan	137.3	143.8	125.2	165.7	115.8	85.9
Tamil Nadu	101.7	113.2	97.3	95.6	91.1	85.5
Bihar	125.9	128.9	114.4	117.8	99.4	85.0
Karnataka	114.0	128.1	102.3	98.8	89.7	81.9
Andhra Pradesh	62.1	69.1	58.6	65.4	64.4	72.4
Madhya Pradesh	115.6	123.1	107.9	108.9	84.4	72.2
Telangana	56.0	59.9	51.2	55.6	52.1	55.4
Kerala	61.3	61.9	49.9	45.2	49.5	48.1
Delhi	83.1	83.1	68.6	77.7	57.1	46.9
Haryana	75.1	79.9	63.3	80.8	55.7	46.5
Punjab	64.9	74.3	59.1	59.9	43.4	40.5
Odisha	46.1	52.4	46.7	44.1	40.0	35.1
Jharkhand	44.7	46.7	40.7	40.9	36.1	29.1
Assam	51.0	61.6	52.8	35.7	31.4	26.6
Chhattisgarh	33.6	34.9	28.6	28.9	24.2	21.6
Uttarakhand	27.9	30.0	24.9	25.1	19.1	17.2
Himachal Pradesh	18.1	18.8	15.1	15.2	11.5	10.8
Jammu & Kashmir	15.1	17.3	16.0	13.8	11.5	10.5
Tripura	6.1	6.0	4.4	3.7	3.5	3.4
Goa	5.0	5.3	4.3	3.7	3.6	3.0
Chandigarh	3.2	3.5	2.7	3.1	2.3	1.9
Others	14.4	16.2	13.8	11.5	11.4	9.4
Total	2,159	2,332	1,955	2,182	1,790	1,518

Source: NSE EPR.

Note: Top 25 states are chosen based on last month's data.

Contribution of top 10 districts declined further in November 2024: New investor registrations continued to remain concentrated in a few districts, with the contribution of top 10 districts declining from 19.8% in October to 18.6% in Nov'24, as the number of registrations in these districts decreased by 20.6% MoM to 2.8 lakh. Delhi recorded the highest number of new investor registrations in November, with over 82k registrations (-15.3% MoM), followed by Mumbai with 61k registrations (-21.1% MoM). Average drop in the top 10 districts was recorded at 18% MoM in November, led by Surat (-40.7% MoM to 20k registrations), Ahmedabad (-37.8% MoM to 21k registrations), Jaipur (-28.1% MoM to 15k registrations) and Pune (-21.2% MoM to 22k registrations). While K.V. Rangareddy (+3.3% MoM to 13K) was the only district in the top 10 that saw an increase in its new registrations, it was also the first time K.V. Rangareddy appeared in the top 10 district. In the month of November, 502 districts saw a negative MoM change, while there were 50 districts which saw a positive MoM growth.

Figure 220: Number of new investors registered in top ten districts (in '000)


Source: NSE EPR

Note: Top 10 districts are chosen based on last month's data.

Investor profile

Decline in Mean Age and Steady Median Reflect Growing Interest Among Younger Investors:

The median age of investors remained stable at 32 years in November 2024, while the mean age further declined to 35.8 years from 36.8 years in March 2024. This emphasizes the influx of younger investors, making the investor base younger on average. The share of investors under 30 years of age remained steady at 39.9% in November 2024, slightly down from 40.0% in March 2024. This age group has consistently shown a rising interest in investing, increasing from 22.9% in March 2018 to its current share, underlining the growing trend of younger investors entering the market. In contrast, the share of investors in the 40-49 years age group remained stable at 15.6% in November 2024, up marginally from 15.4% in March 2024. Meanwhile, the share of investors above 50 years of age continued to decline. The share of investors aged 30-39 years saw a slight uptick to 29.4% from 29.1% in March 2024, suggesting a modest increase in investment activity within this middle-aged group.

Table 60: Distribution of registered individual investor base by age

Age category	Share of registered investor base (%)							
	Mar'18	Mar'19	Mar'20	Mar'21	Mar'22	Mar'23	Mar'24	Nov'24
Less than 30 years	22.9	22.6	23.5	29.4	37.5	38.5	40.0	39.9
30-39 years	31.0	31.1	31.2	30.4	28.9	29.2	29.1	29.4
40-49 years	20.3	20.1	19.7	17.9	15.8	15.6	15.4	15.6
50- 59 years	13.1	13.1	12.6	11	9.1	8.6	8.1	8.0
60 years and above	12.7	13.1	13	11.2	8.7	8.1	7.4	7.1

Source: NSE EPR

Note: Only individuals and sole proprietorship firms have been considered in the above table.

2. FY25 data is as on November 31st, 2024.

Table 61: Mean and median age of registered individual investors

Age (years)	Mar'18	Mar'19	Mar'20	Mar'21	Mar'22	Mar'23	Mar'24	Nov'24
Median	38	38	38	36	33	33	32	32
Mean	41.2	41.3	41.1	39.2	36.8	36.4	36.8	35.8

Source: NSE EPR

Note: 1. Only individuals and sole proprietorship firms have been considered in the above table.

2. FY25 data is as on November 31st, 2024

Female participation has increased gradually since FY22: Female participation in individual investor registrations has shown a gradual increase since FY22, to slightly shy of a quarter as of November 2024. Among large states, Delhi (29.9%), Maharashtra (27.9%) and Tamil Nadu (27.6%) exhibit higher female representation than the pan India average of 24% in FY25TD, while states such as Bihar (15.5%), Uttar Pradesh (18.3%) and Odisha (19.6%) had sub-20% female share in their respective registered investor bases. Despite these regional variations, the overall progress highlights a steady improvement in gender inclusion within financial markets across the country.

Figure 221: State-wise gender classification of registered investors (in %)

States	FY22		FY23		FY24		FY25TD*	
	Female	Male	Female	Male	Female	Male	Female	Male
Andaman and Nicobar	19.4%	80.6%	19.9%	80.1%	21.1%	78.9%	22.6%	77.4%
Andhra Pradesh	19.6%	80.4%	20.4%	79.6%	21.5%	78.5%	22.9%	77.1%
Arunachal Pradesh	21.6%	78.4%	22.7%	77.3%	23.7%	76.3%	26.0%	74.0%
Assam	31.8%	68.2%	31.0%	69.0%	30.0%	70.0%	29.8%	70.2%
Bihar	13.7%	86.3%	13.8%	86.2%	14.6%	85.4%	15.5%	84.5%
Chandigarh	30.7%	69.3%	30.7%	69.3%	31.0%	69.0%	31.7%	68.3%
Chhattisgarh	18.8%	81.2%	19.1%	80.9%	20.4%	79.6%	22.0%	78.0%
Dadra and Nagar Haveli	18.0%	82.0%	17.8%	82.2%	18.2%	81.8%	19.5%	80.5%
Daman and Diu	19.0%	81.0%	18.8%	81.2%	19.4%	80.6%	20.4%	79.6%
Delhi	27.4%	72.6%	27.8%	72.2%	28.7%	71.3%	29.9%	70.1%
Goa	29.8%	70.2%	30.3%	69.7%	31.0%	69.0%	32.2%	67.8%
Gujarat	27.5%	72.5%	26.7%	73.3%	26.6%	73.4%	27.5%	72.5%
Haryana	21.8%	78.2%	21.7%	78.3%	22.9%	77.1%	24.2%	75.8%
Himachal Pradesh	16.4%	83.6%	16.9%	83.1%	18.3%	81.7%	20.2%	79.8%
Jammu and Kashmir	14.0%	86.0%	13.9%	86.1%	14.3%	85.7%	15.7%	84.3%
Jharkhand	18.0%	82.0%	18.1%	81.9%	18.9%	81.1%	20.3%	79.7%
Karnataka	24.4%	75.6%	24.8%	75.2%	25.8%	74.2%	27.0%	73.0%
Kerala	25.4%	74.6%	25.7%	74.3%	26.4%	73.6%	27.2%	72.8%
Lakshadweep	9.1%	90.9%	10.6%	89.4%	13.3%	86.7%	14.9%	85.1%
Madhya Pradesh	18.3%	81.7%	18.7%	81.3%	20.2%	79.8%	21.5%	78.5%
Maharashtra	25.5%	74.5%	25.7%	74.3%	26.5%	73.5%	27.9%	72.1%
Manipur	21.6%	78.4%	22.0%	78.0%	23.1%	76.9%	24.4%	75.6%
Meghalaya	25.6%	74.4%	25.2%	74.8%	25.2%	74.8%	26.0%	74.0%
Mizoram	27.4%	72.6%	28.2%	71.8%	30.0%	70.0%	31.4%	68.6%
Nagaland	25.4%	74.6%	25.8%	74.2%	26.5%	73.5%	28.1%	71.9%
Odisha	16.6%	83.4%	17.3%	82.7%	18.2%	81.8%	19.6%	80.4%
Pondicherry	26.1%	73.9%	26.6%	73.4%	27.2%	72.8%	28.0%	72.0%
Punjab	22.9%	77.1%	23.3%	76.7%	24.8%	75.2%	26.0%	74.0%
Rajasthan	19.4%	80.6%	18.8%	81.2%	19.0%	81.0%	20.0%	80.0%
Sikkim	25.0%	75.0%	25.8%	74.2%	27.2%	72.8%	29.4%	70.6%
Tamil Nadu	24.9%	75.1%	25.7%	74.3%	26.9%	73.1%	27.6%	72.4%
Telangana	21.7%	78.3%	22.3%	77.7%	23.3%	76.7%	24.4%	75.6%
Tripura	15.0%	85.0%	15.4%	84.6%	16.2%	83.8%	17.9%	82.1%
Uttar Pradesh	17.3%	82.7%	17.0%	83.0%	17.3%	82.7%	18.3%	81.7%
Uttarakhand	19.1%	80.9%	19.3%	80.7%	20.3%	79.7%	21.8%	78.2%
West Bengal	22.4%	77.6%	22.2%	77.8%	22.2%	77.8%	23.0%	77.0%
India	22.7%	77.3%	22.5%	77.5%	23.0%	77.0%	24.0%	76.0%

Source: NSE EPR

Note: The gender classification is based on investor data where the gender was disclosed. The mapping is based on India Post's pincode level mapping (GoI).

* Data for FY25 is as of Nov'24.

Market activity across segments and investor categories

Total turnover across segments

CM segment turnover moderated in November: The CM segment turnover declined for the fourth consecutive month to Rs 19.2 lakh crore (-18.6% MoM) in Nov'24, even as it rose 29.2% on a YoY basis. The decline in turnover can be attributed to several factors including global economic and geopolitical uncertainties, consistent selling by FPIs and muted corporate earnings. Notwithstanding the recent decline, the cumulative turnover in the CM segment in the first eight months of FY25 amounted to Rs 200 lakh crore, nearly 2x the cumulative turnover during the corresponding period in the last fiscal year.

Equity futures and options (premium) turnover contracted substantially in November:

In line with the CM segment, Index options monthly premium turnover fell by 24.6% MoM to Rs 10.3 lakh crore, while index futures notional turnover eased by 16.7% MoM to Rs 6.3 lakh crore. Single stock options premium turnover fell by 25.9% MoM to Rs 1.3 lakh crore, and stock futures notional turnover fell by 21.7% MoM to Rs 26.2 lakh crore. In addition to the macroeconomic factors mentioned above, the decline in equity derivatives turnover is primarily attributed to regulatory measures taken by SEBI to curb excessive speculation in the segment. These measures include discontinuation of weekly expiries except one per exchange, increase in contract sizes and enhanced margin requirements in the form of extreme loss margin on short index option contracts on the day of the expiry.

Turnover in currency derivatives witnessed a notable decline in November: The monthly turnover in currency dropped significantly to Rs 1.0 lakh crore (-30.9% MoM) in Nov'24 following a substantial rise in October. Similarly, premium turnover in currency options fell by 14.2% MoM to Rs 1.1 crore. Additionally, the monthly turnover in interest rate futures also decreased, reaching Rs 2,238 crore (-17% MoM) in November, after rising to an 11-month high in the previous month.

Commodity derivatives turnover witnessed moderation in activity in November: The monthly premium turnover in commodity options declined 35.2% MoM to Rs 262.2 crore in Nov'24. Similarly, the turnover in commodity futures contracted 31% MoM reaching Rs 13.9 crore for the month. Trading activity in the segment was primarily concentrated in Silver, Crude Oil, and Natural gas contracts.

Table 62: Total turnover across segments in the last six months (Jun'24–Nov'24)

Segment (Rs crore)	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24
Cash market	29,05,226	30,61,577	26,38,157	25,59,376	23,53,098	19,16,210
Equity Futures	46,45,873	46,56,835	41,19,112	41,27,438	41,04,371	32,50,775
Stock Futures	36,62,528	38,31,730	33,66,229	34,14,779	33,43,153	26,16,407
Index Futures	9,83,344	8,25,104	7,52,883	7,12,659	7,61,218	6,34,368
Equity Options (Premium)	16,77,678	15,10,073	13,80,676	13,11,066	15,39,425	11,58,998
Stock Options (Premium)	1,91,370	1,97,877	1,61,998	1,74,393	1,71,991	1,27,497
Index Options (Premium)	14,86,308	13,12,196	12,18,678	11,36,673	13,67,433	10,31,502
Currency derivatives						
Currency Futures	1,09,312	45,606	1,08,395	64,015	1,50,597	1,03,989
Currency Options (Premium)	3.4	1.5	1.4	1.1	1.3	1.1
Interest rate derivatives	2,231	1,786	1,688	2,307	2,698	2,238
Commodity derivatives						
Commodity Futures	11.0	11.1	17.5	28.6	20.1	13.9
Commodity Options (Premium)	126.9	178.1	246.3	290.2	404.4	262.2

Source: NSE EPR

Table 63: Total turnover across segments in the last six years (FY20 to FY25TD)

Segment (Rs crore)	FY 20	FY 21	FY 22	FY 23	FY24	FY25TD
Cash market	89,98,811	1,53,97,908	1,65,66,237	1,33,05,073	2,01,03,439	2,00,21,781
Equity Futures	2,15,52,041	2,71,46,011	2,94,68,316	2,85,92,989	3,29,64,084	3,30,27,465
Stock Futures	1,48,74,729	1,80,98,365	2,10,38,938	1,90,72,304	2,55,46,967	2,68,58,172
Index Futures	66,77,312	90,47,646	84,29,378	95,20,685	74,17,117	61,69,293
Equity Options (Premium)	13,07,932	32,08,778	68,81,160	1,18,88,256	1,51,97,594	1,12,89,863
Stock Options (Premium)	2,28,353	5,79,352	10,38,830	9,32,701	13,78,031	13,67,683
Index Options (Premium)	10,79,578	26,29,426	58,42,330	1,09,55,556	1,38,19,564	99,22,180
Currency derivatives						
Currency Futures	48,43,160	57,17,820	70,56,916	1,01,15,658	72,01,742	9,04,502
Currency Options (Premium)	13,202	14,764	24,994	47,540	30,405	371
Interest rate derivatives	3,60,818	97,391	26,357	26,296	29,571	16,960
Commodity derivatives						
Commodity Futures	6,362	5,484	2,273	14	5,429	127
Commodity Options (Premium)	-	284	131	112	523	1,901

Source: NSE EPR. FY25TD is as of Nov'24.

Table 64: Notional to premium turnover ratio for equity options at NSE

Month	Index options			Stock options		
	Notional turnover (Rs lakh crore)	Premium turnover (Rs lakh crore)	Ratio	Notional turnover (Rs lakh crore)	Premium turnover (Rs lakh crore)	Ratio
Nov-24	6,245	10.3	605	91	1.3	71
Oct-24	8,602	13.7	629	125	1.7	72
Sep-24	8,097	11.4	712	129	1.7	74
Aug-24	7,768	12.2	637	116	1.6	72
Jul-24	8,215	13.1	626	119	2.0	60
Jun-24	7,226	14.9	486	112	1.9	58
May-24	7,154	12.8	557	110	1.9	59
Apr-24	7,072	10.8	652	99	1.6	64
Mar-24	7,098	11.3	629	87	1.3	68
Feb-24	8,452	15.1	561	104	1.7	61
Jan-24	8,720	15.0	581	102	1.8	58
Dec-23	7,444	12.4	602	102	1.8	56
Nov-23	6,452	8.9	729	70	0.9	75

Source: NSE EPR. FY25TD is as of Nov'24.

Table 65: Notional to premium turnover ratio for equity options at BSE

Month	Index options			Stock options		
	Notional turnover (Rs lakh crore)	Premium turnover (Rs lakh crore)	Ratio	Notional turnover (Rs lakh crore)	Premium turnover (Rs lakh crore)	Ratio
Nov-24	2,031	1.6	1,300	0.000393	0.000004	106
Oct-24	2,643	2.0	1,329	0.001362	0.000026	52
Sep-24	3,015	2.0	1,503	0.001024	0.000011	95
Aug-24	2,603	1.6	1,627	0.001069	0.000014	74
Jul-24	2,543	1.6	1,546	0.000356	0.000003	115
Jun-24	2,064	1.6	1,285	-	-	-
May-24	2,197	1.6	1,383	-	-	-
Apr-24	1,695	1.2	1,444	-	-	-
Mar-24	1,519	1.0	1,550	-	-	-
Feb-24	1,553	1.1	1,434	-	-	-
Jan-24	1,264	0.8	1,565	-	-	-
Dec-23	1,423	0.8	1,765	-	-	-
Nov-23	739	0.4	1,949	-	-	-

Source: NSE EPR. FY25TD is as of Nov'24.

Average daily turnover (ADT) across segments

Average daily turnover declined across segments in November: In line with the segment's total turnover, average daily turnover in the equity cash segment witnessed a decline for the fifth consecutive month, falling to an eight-month low of Rs 1.0 lakh crore (-5.7% MoM) in Nov'24. Global economic instability, geopolitical tensions, ongoing FPI sell-offs, sluggish corporate earnings and regulatory measures have led to the downturn in trading activity across segments in Indian financial markets.

The ADT of equity futures fell to Rs 1.7 lakh crore (-8.3% MoM), while that for equity options (premium) moderated significantly, falling by 12.8% MoM to Rs 61,000 crore. Index futures ADT dropped by a modest 3.5% MoM to Rs 33,388 crore, while that of stock futures fell by 9.4% MoM to Rs 1.4 lakh crore during the month. The average daily premium turnover (ADPT) of index options contracted 12.7% MoM to Rs 54,290 crore, while stock options premium turnover fell by 14.2% MoM to Rs 6,710 crore.

The ADT of currency futures declined steeply to Rs 5,473 crore (-20% MoM), while ADPT of currency options saw a marginal decline, down 0.6% MoM to Rs 5.7 lakh (-0.6% MoM). The ADT in interest rate futures also fell to Rs 117.8 crore (-3.9% MoM) during the month.

In the commodity derivatives segment, the ADT of commodity futures fell to a 4-month low of Rs 66 lakh, while the ADPT of commodity options moderated 32.1% MoM to a 3-month low of Rs 12.5 crore.

Table 66: Average daily turnover across segments in the last six months (Jun'24–Nov'24)

Segment (Rs crore)	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24
Cash market	1,52,907	1,39,163	1,25,627	1,21,875	1,06,959	1,00,853
Equity Futures	2,44,520	2,11,674	1,96,148	1,96,545	1,86,562	1,71,093
Stock Futures	1,92,765	1,74,170	1,60,297	1,62,609	1,51,962	1,37,706
Index Futures	51,755	37,505	35,852	33,936	34,601	33,388
Equity Options (Premium)	88,299	68,640	65,746	62,432	69,974	61,000
Stock Options (Premium)	10,072	8,994	7,714	8,304	7,818	6,710
Index Options (Premium)	78,227	59,645	58,032	54,127	62,156	54,290
Currency derivatives						
Currency Futures	5,753	2,073	5,162	3,201	6,845	5,473
Currency Options (Premium)	0.2	0.1	0.1	0.1	0.1	0.1
Interest rate derivatives	117	81	80	115	123	117.81
Commodity derivatives						
Commodity Futures	0.5	0.5	0.8	1.4	0.9	0.7
Commodity Options (Premium)	6.3	7.7	11.7	13.8	18.4	12.5

Source: NSE EPR.

Table 67: Average daily turnover across segments (FY20 to FY25TD)

Segment (Rs crore)	FY 20	FY 21	FY 22	FY 23	FY24	FY25TD
Cash market	36,432	61,839	66,799	53,434	81,721	1,20,613
Equity Futures	87,255	1,09,020	1,18,824	1,14,831	1,34,000	1,98,961
Stock Futures	60,222	72,684	84,834	76,596	1,03,849	1,61,796
Index Futures	27,034	36,336	33,989	38,236	30,151	37,164
Equity Options (Premium)	5,295	12,887	27,747	47,744	61,779	68,011
Stock Options (Premium)	925	2,327	4,189	3,746	5,602	8,239
Index Options (Premium)	4,371	10,560	23,558	43,998	56,177	59,772
Currency derivatives						
Currency Futures	19,931	23,338	29,282	41,288	29,883	5,618
Currency Options (Premium)	54	60	104	194	126	2.3
Interest rate derivatives	1,485	398	109	107	123	105
Commodity derivatives						
Commodity Futures	24.6	21.5	8.8	0.1	21.4	0.7
Commodity Options (Premium)	-	1.1	0.5	0.4	2.1	11

Source: NSE EPR. FY25TD data is as of Nov'24.

Average trade size inched up in the cash equity and equity option segments; declined in equity futures in November: The average trade size (ATS) in the CM segment increased marginally to Rs 27,908 (+0.5% MoM) in Nov'24, while equity derivatives segment exhibited mixed responses. Equity futures' average trade size declined by 11.8% MoM, wherein index futures fell by 0.3% MoM and stock futures by a steep 13.8% MoM to Rs 14.2 lakh and Rs 8.2 lakh, respectively. However, the average trade size of equity options (based on premium turnover) observed a modest growth of 4.7% MoM, led by index options which witnessed a 5.8% MoM increase in ATS to Rs 5,574. On the contrary, stock options witnessed a drop in the average trade size for the fifth consecutive month to Rs 12,373.

An annual comparison of the average trade size yields some interesting results. The average trade size of equity futures has been volatile, with frequent increase and declines over the years. A similar pattern is observed in the average trade size of equity options. The average trade size in the cash segment exhibited a recovery trend in FY25TD, reaching Rs 30,446, up from Rs 29,510 in FY24, though it remained below the peak of Rs 33,237 in FY21. In the equity derivatives segment, the average trade size for index futures declined marginally in FY25TD, while equity options also experienced slight reductions. Average trade size in stock options witnessed a slight uptick in FY25TD – the highest in the last three years.

Table 68: Average trade size in NSE cash and equity derivatives segment (Jun'24-Nov'24)

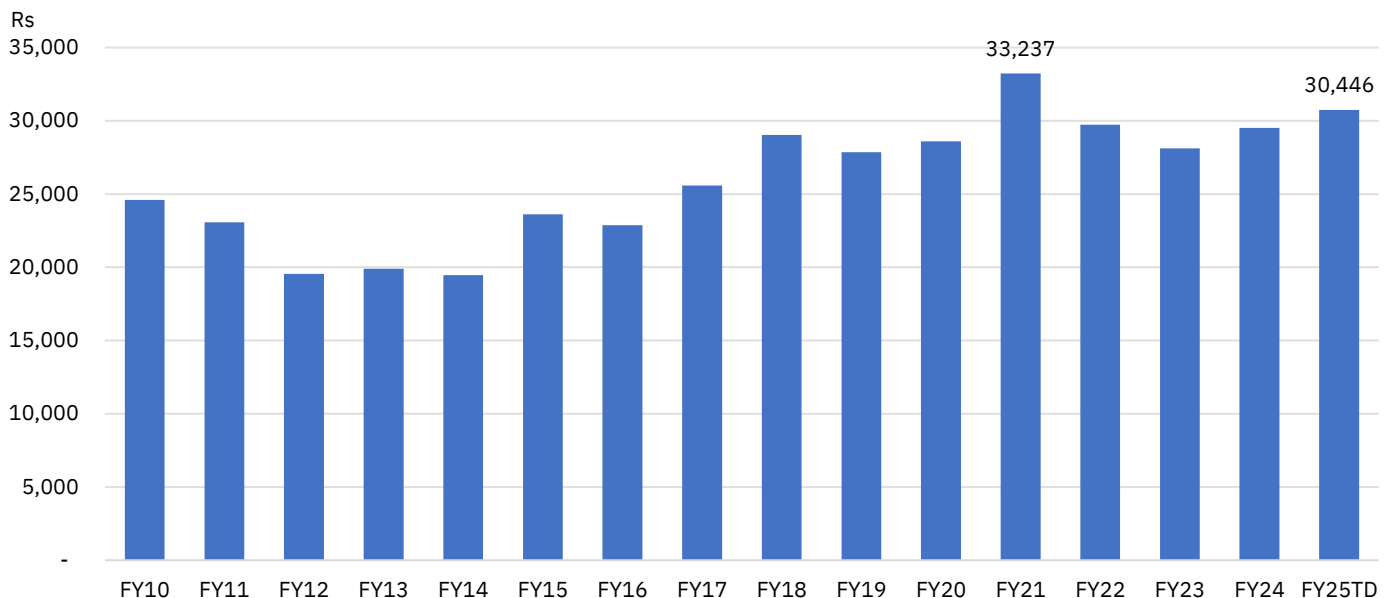
Segment wise (Rs)	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24
Cash market	33,356	31,081	29,695	30,156	27,768	27,908
Equity Futures	10,13,743	10,16,741	10,28,769	10,33,518	10,16,890	8,96,713
Index Futures	13,39,132	14,37,973	14,19,100	14,47,901	14,21,289	14,16,500
Stock Futures	9,51,658	9,56,412	9,69,149	9,75,267	9,55,018	8,23,450
Equity Options	6,648	5,869	5,502	5,403	5,668	5,933
Index Options	6,147	5,342	5,079	4,925	5,267	5,574
Stock Options	18,102	17,011	14,738	14,703	14,331	12,373

Source: NSE EPR. Note: Premium has been considered for calculating average trade size for options contracts.

Table 69: Average trade size in NSE cash market and equity derivatives segments (FY19 to FY25TD)

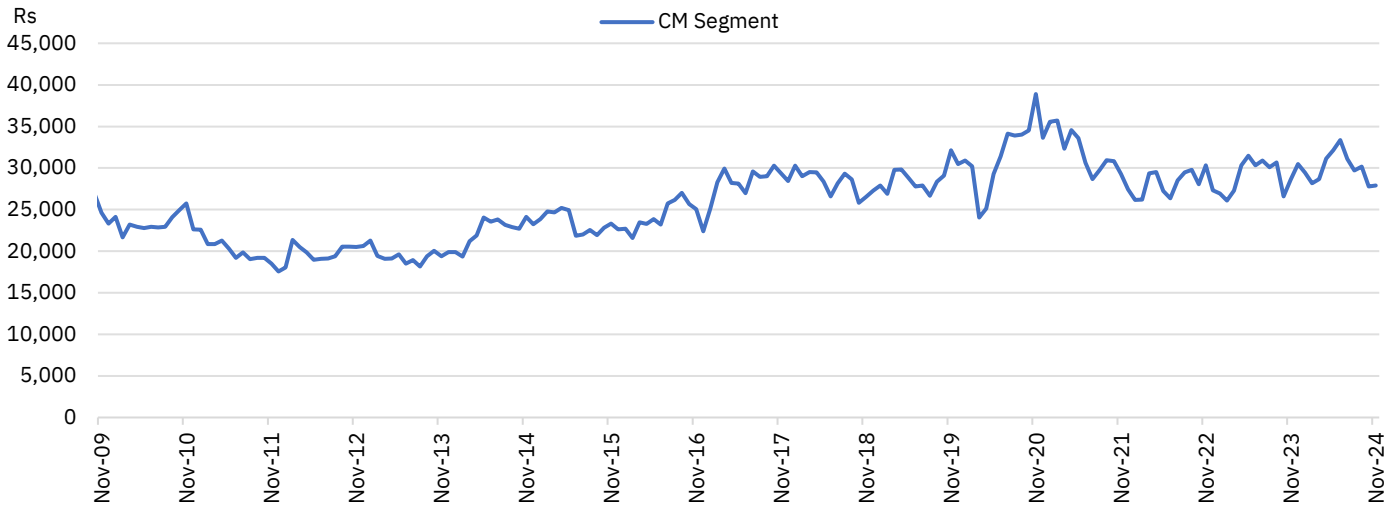
Segment wise (Rs)	FY19	FY20	FY21	FY22	FY23	FY24	FY25TD
Cash market	27,860	28,604	33,237	29,737	28,111	29,510	30,446
Equity Futures	8,56,295	8,04,724	9,00,620	10,42,174	9,57,044	10,40,196	10,12,630
Index Futures	13,24,701	11,42,535	10,44,759	13,70,261	14,39,592	15,37,923	14,09,272
Stock Futures	7,63,220	7,10,431	8,42,512	9,50,949	8,19,859	9,50,852	9,51,140
Equity Options	7,516	6,812	8,255	8,315	7,886	6,246	5,901
Index Options	6,655	6,146	7,302	7,585	7,603	5,897	5,433
Stock Options	13,028	13,926	20,274	18,126	13,994	15,381	15,756

Source: NSE EPR. FY25TD data is as of Nov'24. Note: Premium has been considered for calculating average trade size for options contracts.

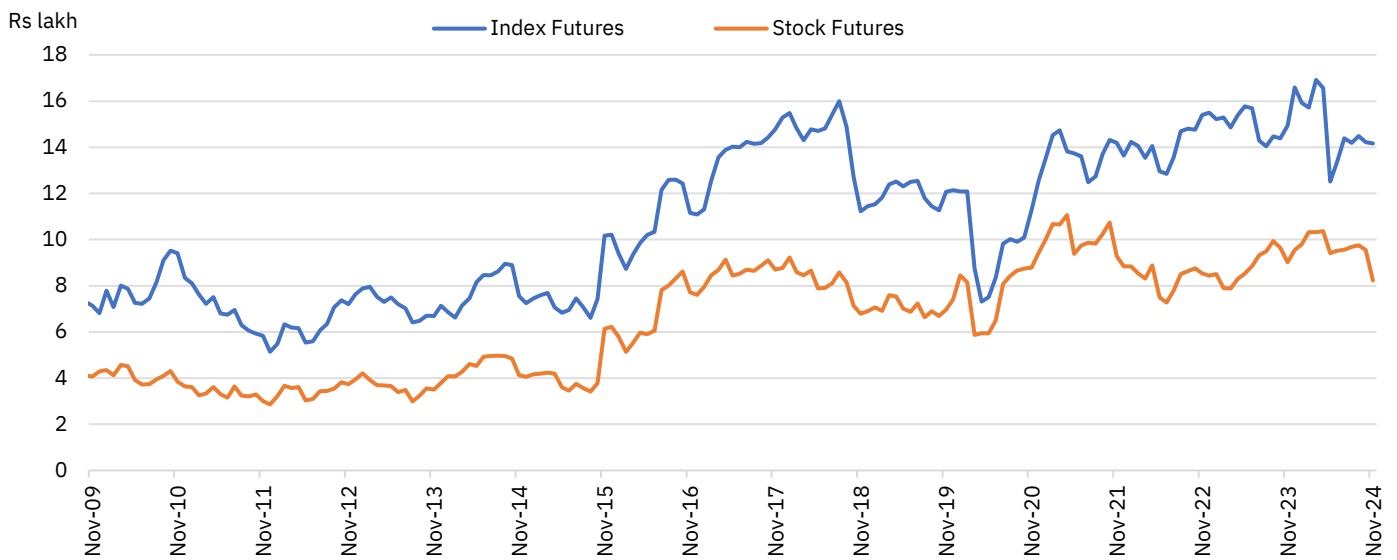
Figure 222: Annual trend in average trade size in NSE cash market segment


Source: NSE EPR.

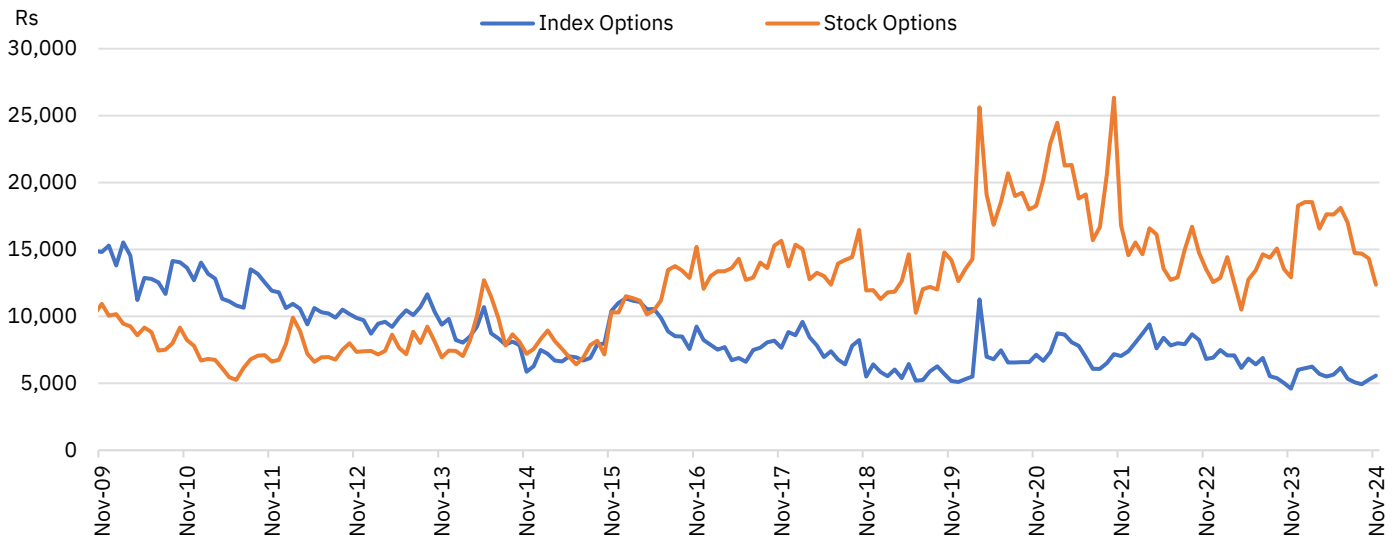
Note: FY25TD is as of Nov'24.

Figure 223: Monthly trend in average trade size in NSE CM segment


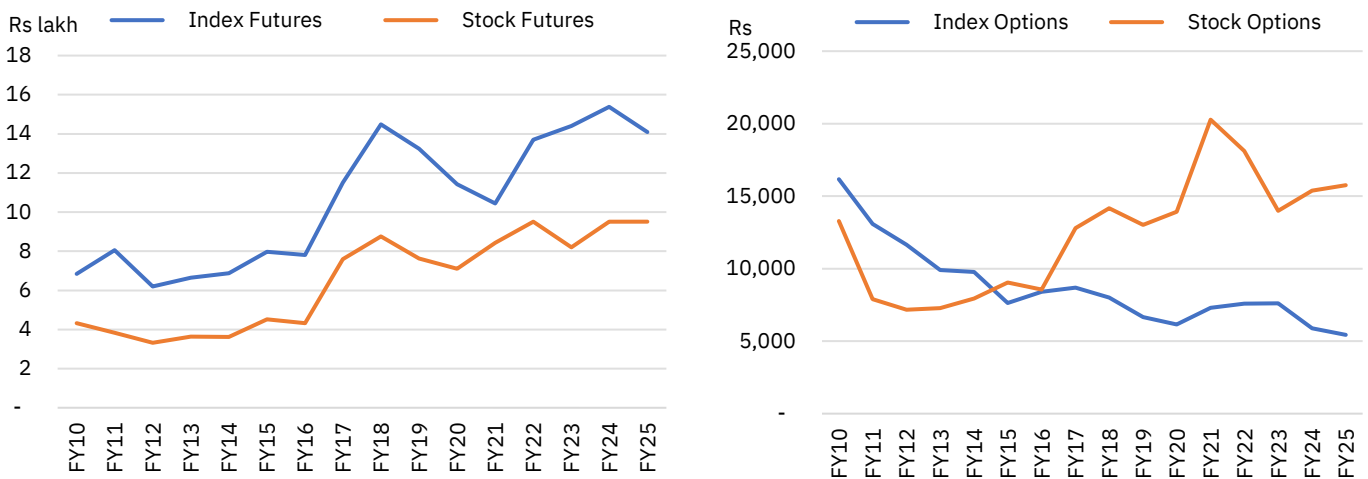
Source: NSE EPR.

Figure 224: Monthly trend in average trade size in equity futures


Source: NSE EPR.

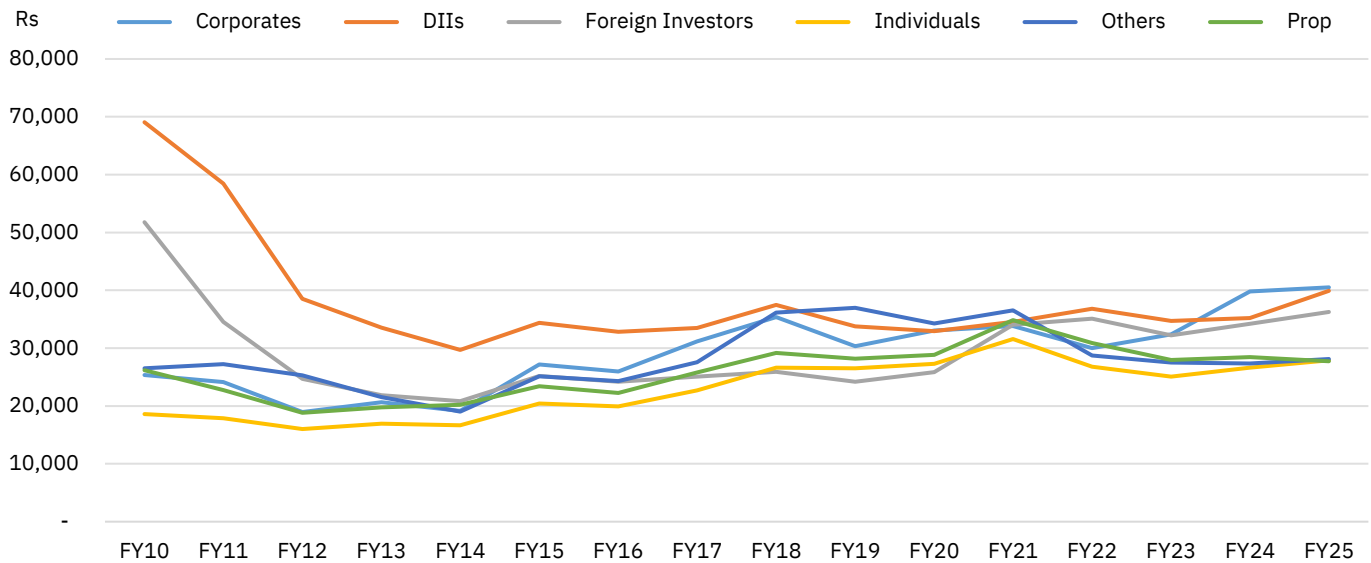
Figure 225: Monthly trend in average trade size in equity options


Source: NSE EPR

Figure 226: Annual trend in average trade size in NSE equity derivatives segment


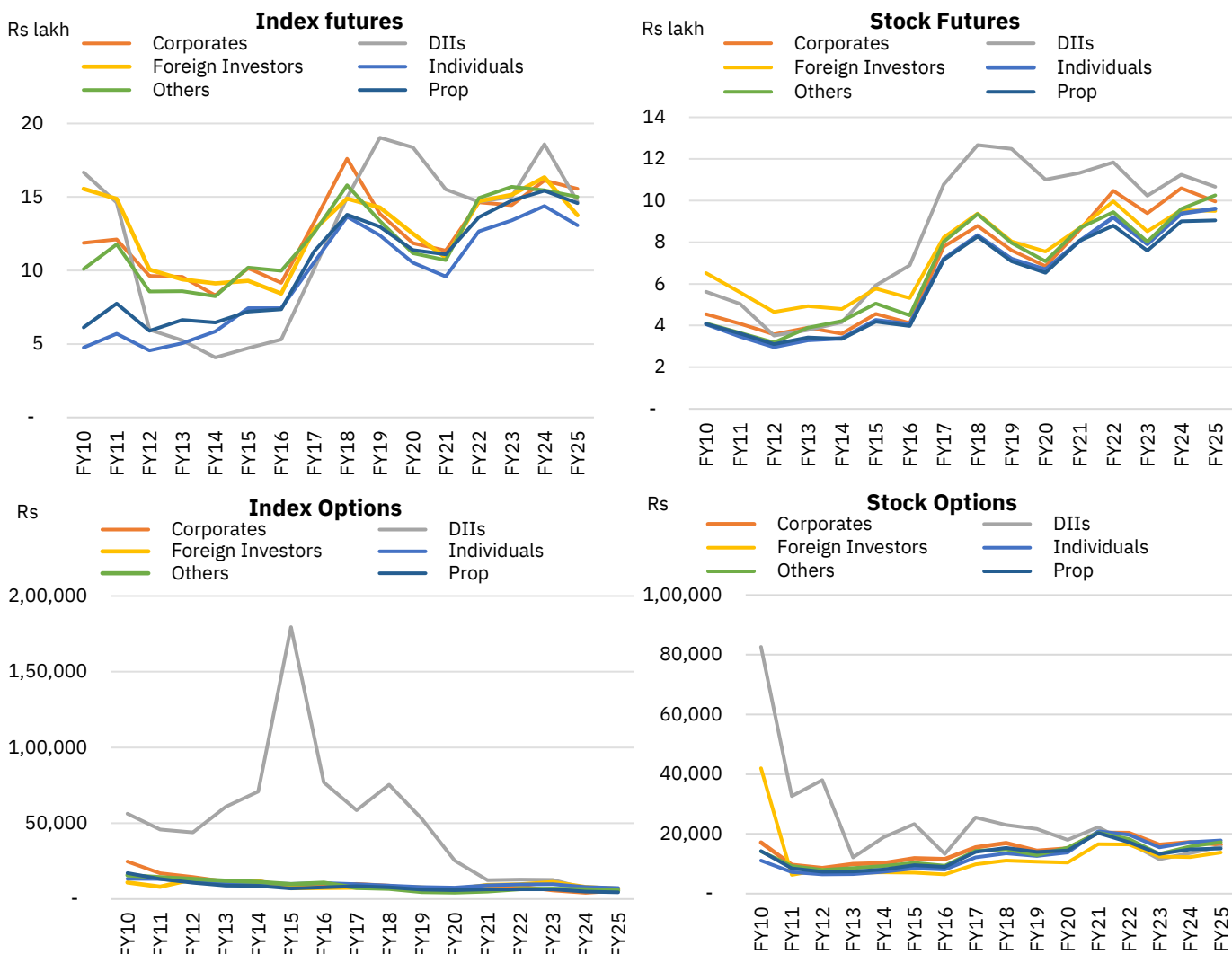
Source: NSE EPR.

 Note: FY25 is as of November 30th, 2024

Figure 227: Annual trend in average trade size across categories in NSE CM segment


Source: NSE EPR.

 Note: FY25TD is as of November 30th, 2024

Figure 228: Annual trend in average trade size across categories in NSE equity derivatives segment

 Source: NSE EPR. Note: FY25TD is as of November 30th, 2024

ADT in the CM segment declined for five months straight in November: Except SGBs and InvITs, where ADT rose by 10.9% and 1.2% MoM to Rs 12 crore and Rs 21 crore respectively, ADT declined across other products in Nov'24. The ADT for mainboard equities declined by 5.5% MoM to an eight-month low of Rs 98,851 crore, and that of SME Emerge fell by 6% MoM to a seven-month low of Rs 342 crore. ETFs and REITs shared a similar trend as they witnessed substantial reductions during the month. Notwithstanding the recent moderation in trading activity, ADT in the first eight months of the fiscal year witnessed a strong growth across segments, led by SME Emerge (+297.7% YoY) and ETFs (+146% MoM).

Table 70: Average daily turnover in NSE's CM Segment

Products (Rs crore)	Nov-24	Oct-24	% MoM change	FY25TD	FY24TD	% YoY Change	FY24	CY24TD
Capital Market	100,853	106,959	(5.7)	120,613	68,402	76.3	81,721	117,665
Equities (Main Board)	98,851	104,564	(5.5)	118,305	67,422	75.5	80,551	115,547
Exchange Traded Funds	1,534	1,870	(18.0)	1,544	628	146.0	754	1,409
SME Emerge	342	364	(6.0)	418	105	297.7	145	370
Sovereign Gold Bonds	12	11	10.9	13	8	59.8	9	13
InvITs	21	21	1.2	64	31	102.9	36	60
REITs	49	68	(27.9)	88	39	125.3	49	81
Others	44	61	(27.2)	181	169	7.1	177	186

Source: NSE EPR

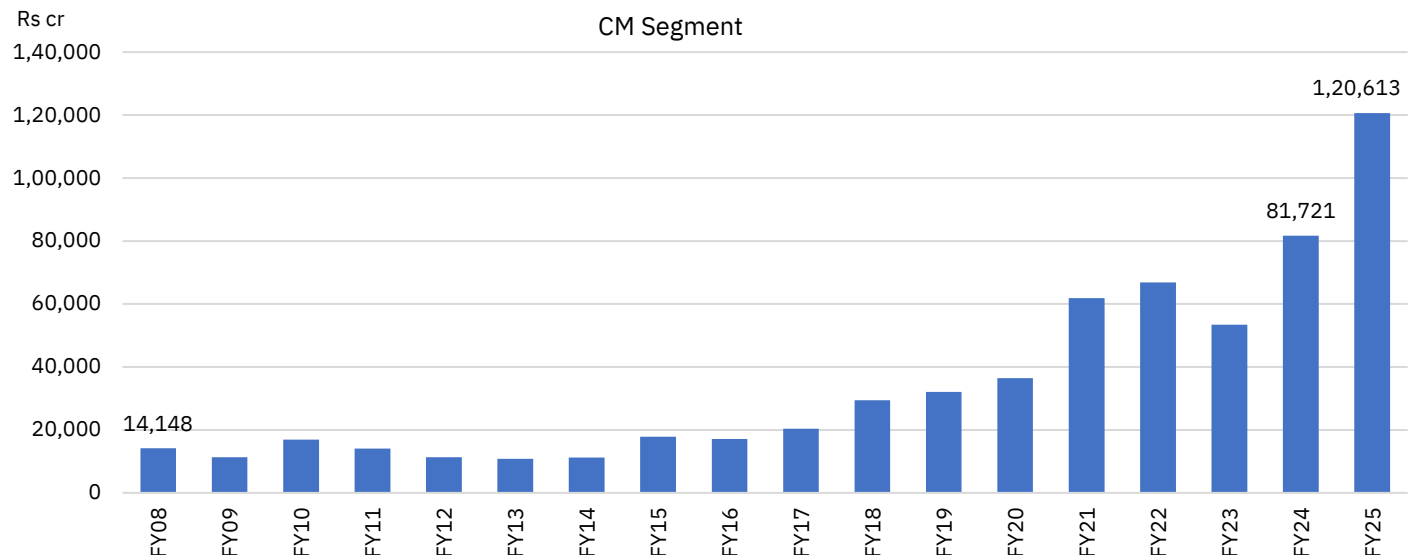
Notes: 1. Average daily turnover (ADT) excludes auction market turnover. Equities (Main Board) include stocks in EQ, BE, BL and BZ series.

2. Others include corporate and government debt instruments (excl. SGBs), preferential shares, partly paid-up shares, warrants etc., among others.

3. Figures in brackets indicate negative numbers.

4. FY25TD is as of Nov'24 and FY24TD is as of Nov'23.

Figure 229: Trends in average daily turnover in NSE cash market segment



Source: NSE EPR.

Note: Average daily turnover (ADT) excludes auction market turnover. FY25 data is as of Nov'24.

ADT of equity derivatives segment moderated across instruments: Average daily turnover (ADT) in index futures and average daily premium turnover (ADPT) in index options fell to Rs 33,388 crore (-3.5% MoM) and Rs 54,290 crore (-12.7% MoM) respectively in Nov'24. Further, ADT in stock futures and ADPT in stock options observed reductions of 9.4% and 14.2% MoM respectively in Nov'24. Among index futures contracts, FINNIFTY witnessed the highest contraction of 30.9% MoM, followed by NIFTYNXT50 (-26.9% MoM). Within index options, NIFTYNXT50 (+25.9% MoM) and NIFTY50 (+14.9% MoM) registered a growth in ADT, while the rest saw moderation in trading activity. SEBI's recent regulatory measures aimed at curbing excessive speculation in the derivatives segment have resulted in a noticeable reduction in trading activity within the segment.

On annual comparison, the ADT of both stock and index derivatives exhibited sizeable growth, except for BANKNIFTY options contracts, which exhibited a 4.9% YoY drop in the first eight months of FY25 as compared to the same period last year. A highlight would be the ADT growth of MIDCPNIFTY contracts, which grew 778% and 442.6% YoY in index futures and index options respectively.

Table 71: Average daily turnover in NSE's equity derivatives segment

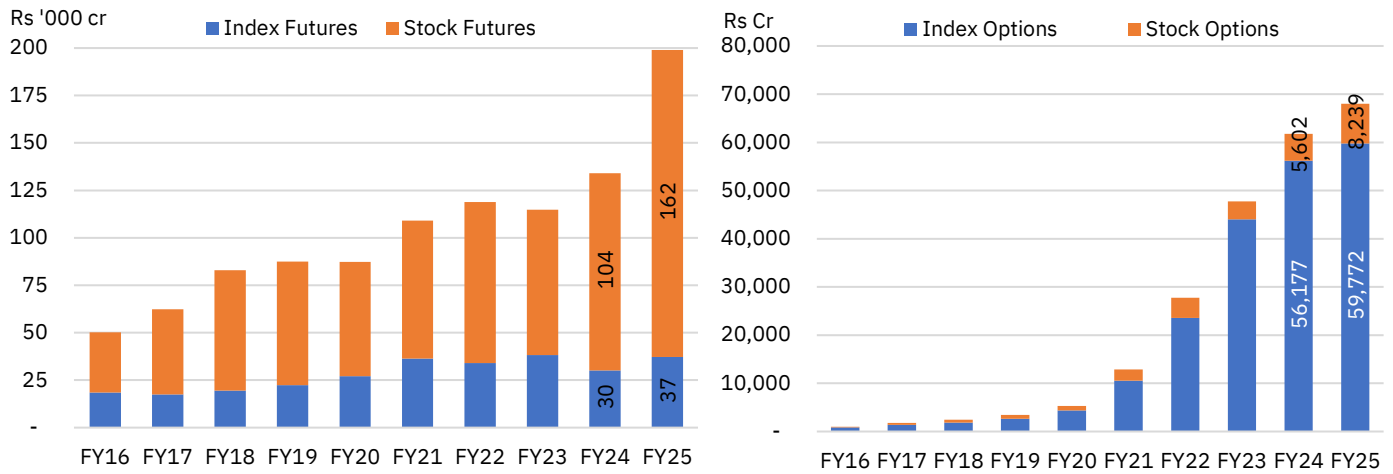
Product (Rs crore)	Nov-24	Oct-24	MoM Change (%)	FY25TD	FY24TD	YoY Change (%)	FY24	CY24TD
Equity Futures	1,71,093	1,86,562	(8.3)	1,98,961	1,14,666	73.5	1,34,000	1,92,972
Stock futures	137,706	151,962	(9.4)	161,796	88,209	83.4	103,849	155,328
Index futures	33,388	34,601	(3.5)	37,164	26,457	40.5	30,151	37,645
BANKNIFTY	11,908	13,487	(11.7)	14,282	12,673	12.7	13,841	15,001
NIFTY50	20,234	19,470	3.9	21,366	13,448	58.9	15,742	21,228
FINNIFTY	197	285	(30.9)	290	203	43.0	228	289
MIDCPNIFTY	993	1,283	(22.6)	1,167	133	778.0	339	1,082
NIFTYNXT50	56	76	(26.9)	61	0	NA	0	44
Equity Options	61,000	69,974	(13)	68,011	55,920	21.6	61,779	69,736
Stock options	6,710	7,818	(14.2)	8,239	4,399	87.3	5,602	8,088
Index options	54,290	62,156	(12.7)	59,772	51,521	16.0	56,177	61,648
BANKNIFTY	21,053	28,380	(25.8)	27,358	28,771	(4.9)	30,145	28,922
NIFTY50	24,499	21,324	14.9	21,915	16,000	37.0	18,502	22,500
FINNIFTY	6,181	7,039	(12.2)	6,484	6,011	8	6,088	6,467
MIDCPNIFTY	2,554	5,411	(52.8)	4,011	739	442.6	1,441	3,755
NIFTYNXT50	2.90	2	25.9	4	0	NA	0	3

Source: NSE EPR. NM means not measurable.

Notes:

1. The above table reports premium turnover for Options contracts.

2. FY25TD is as of Nov'24 and FY24TD is as of Nov'23.

Figure 230: Trends in average daily turnover in NSE's equity derivatives segment


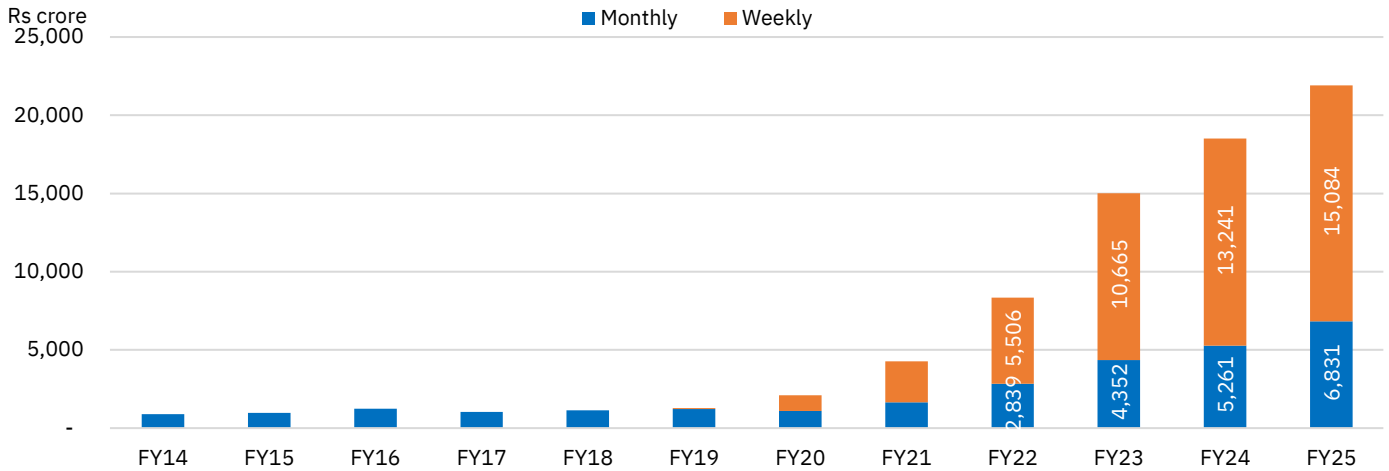
Source: NSE EPR.

Note: 1. The above figure reports premium turnover for options contracts.
 2. FY25 data is as of Nov'24.

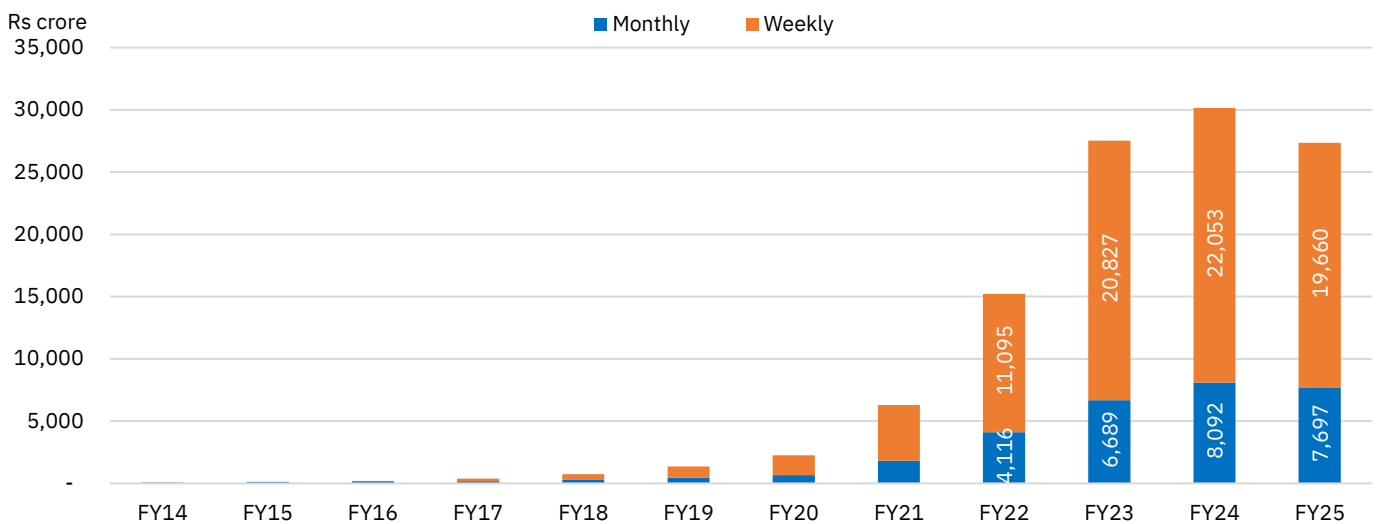
NSE provides derivatives contracts in five major indices and 223 stocks. Over the last 10 years, average daily turnover in equity options has grown multifold, from Rs 3,444 crore in FY19 to Rs 61,779 crore in FY24. In FY25 (As of November 30th, 2024), average daily turnover in equity options stood at Rs 68,011 crore, of which index options accounted for 87.9% of the share, compared to 12.1% for single stock options.

In FY25 thus far, among index options, BANKNIFTY held the largest share at 45.8%, followed by NIFTY at 36.7%, FINNIFTY at 10.8%, and MIDCPNIFTY at 6.7% during the current fiscal year. Notably, NSE introduced weekly options contracts for BANKNIFTY in FY17 and NIFTY in FY19. After the recent SEBI guidelines that mandated discontinuation of weekly contracts on all but one index effective November 20th, weekly options contracts are now only available on Nifty 50. While weekly options contracts contributed to 73.0% of the ADT in index options in FY24, their contribution in FY25 (As of November 30th, 2024) reduced to 71.5%.

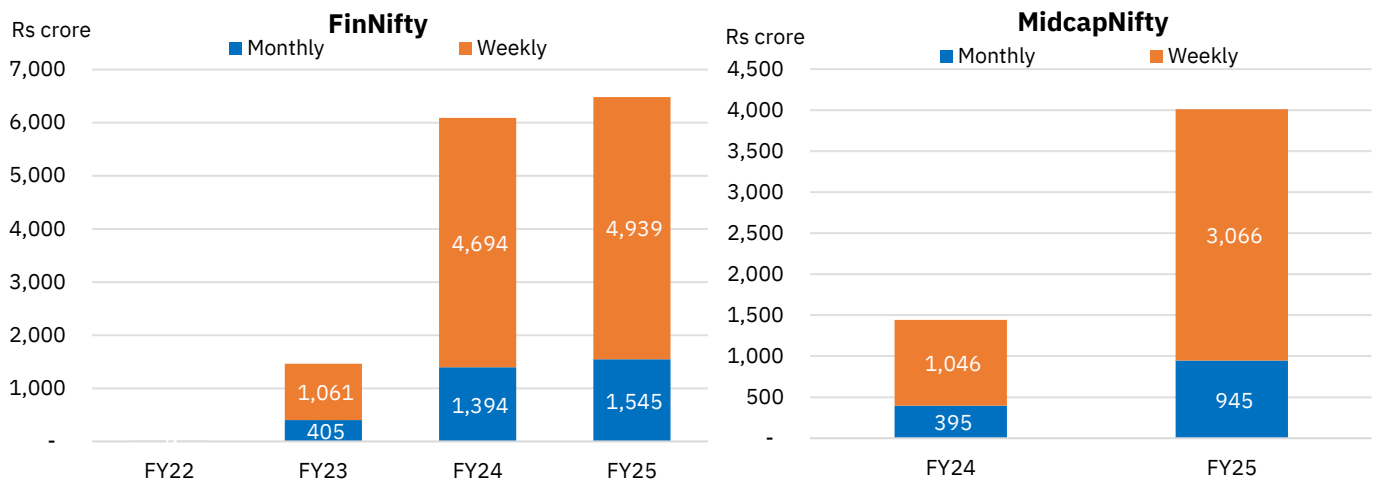
In November, the average daily turnover (ADT) in equity options saw a significant decline. Index options continued to dominate the segment, with Nifty 50 contracts contributing the most (45.1%) to the overall ADT in index options, followed by Bank Nifty contracts (38.8%). Weekly options accounted for over 60% of the total ADT in index options, with Nifty 50 weekly contracts leading at 28%, up from their average share of 25% during the April-October 2024 period. In contrast, the share of Bank Nifty weekly options contracts dropped to 20% of the ADT, compared to an average share of 34% during the same period.

Figure 231: Annual trend in average daily turnover of Nifty 50


Source: NSE EPR
 Note: FY25 is as of November 30th, 2024

Figure 232: Annual trend in average daily turnover of Bank Nifty


Source: NSE EPR
 Note: FY25 is as of November 30th, 2024

Figure 233: Annual trend in average daily turnover of FINNIFTY and MIDCPNIFTY


Source: NSE EPR
 Note: FY25 is as of November 30th, 2024

Average daily open interest (OI) in equity derivatives declined across products: The average daily value of open interest (OI) in equity futures fell by 7.7% MoM, while equity options recorded a slightly higher 10.2% MoM drop in Nov'24, owing to reduced trading activity in equity derivatives segment. In stock derivatives, the average daily OI in stock options moderated to Rs 2.6 lakh crore (-27.3% MoM) and that in stock futures dropped to Rs 4.1 lakh crore (-6.8% MoM).

On annual comparison, equity futures average daily OI value rose by 68.8% YoY while that of equity options grew by 25.3% YoY in the first eight months of FY25 as compared to the same period last year.

Table 72: Average daily open interest in NSE's equity derivatives segment

Product (Rs crore)	Nov-24	Oct-24	MoM Change (%)	FY25TD	FY24TD	YoY Change (%)
Equity Futures	4,59,570	4,97,697	(7.7)	4,59,109	2,71,913	68.8
Stock Futures	4,10,007	4,40,030	(6.8)	4,06,536	2,37,415	71.2
Index Futures	49,563	57,667	(14.1)	52,573	34,499	52.4
NIFTY	31,698	38,047	(16.7)	35,532	22,705	56.5
BANKNIFTY	15,077	16,420	(8.2)	14,203	11,490	23.6
FINNIFTY	163	240	(32.0)	190	124	53.4
MIDCPNIFTY	2,518	2,826	(10.9)	2,564	180	1328.2
NIFTYNEXT50	107	134	(20.1)	84	-	NM
Equity Options	15,88,411	17,69,151	(10.2)	15,71,755	12,54,871	25.3
Stock Options	2,64,007	3,63,044	(27.3)	2,97,233	1,87,215	58.8
Index Options	13,24,403	14,06,107	(5.8)	12,74,522	10,67,656	19.4
NIFTY	8,41,275	8,55,009	(1.6)	7,54,335	5,68,977	32.6
BANKNIFTY	4,11,032	4,61,962	(11.0)	4,35,570	4,14,435	5.1
FINNIFTY	49,473	49,550	(0.2)	53,043	76,860	(31.0)
MIDCPNIFTY	22,464	39,269	(42.8)	31,263	7,385	323.3
NIFTYNEXT50	159	317	(49.7)	310	-	NM

Source: NSE EPR. NM means not measurable.

Notes: 1. The above table reports notional turnover.

2. FY25TD is as of Nov'24 and FY24TD is as of Nov'23.

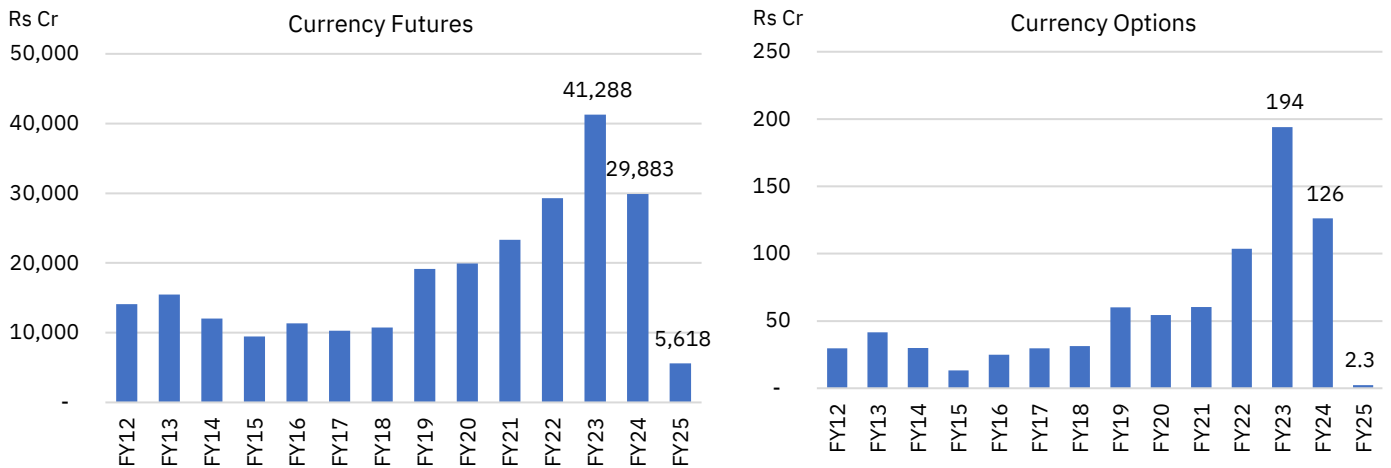
ADT in currency derivatives declined in November: The ADT in the currency derivatives segment moderated substantially in the month gone by, fueled by a 20% MoM fall in currency futures. Further, the ADPT of currency options fell to Rs 5.8 lakh (-0.6% MoM). In currency futures, USDINR was the highest-traded currency pair, followed by GBPINR and EURINR. The European currency pairs, EURUSD (+94.6% MoM) and EURINR (+11.6% MoM), along with USDJPY (+64.8% MoM) saw a rise in their respective ADT. In currency options, USDINR observed a marginal drop in ADT (-0.6% MoM) to Rs 5.8 lakh.

Table 73: Average daily turnover in currency derivatives segment

Product (Rs lakhs)	Nov-24	Oct-24	MoM change (%)	FY25TD	FY24TD	YoY Change (%)	FY24	CY24TD
Currency futures	5,47,308	6,84,530	(20.0)	5,61,809	30,36,533	(81.5)	29,88,275	11,70,972
EURINR	5,617	5,034	11.6	8,177	1,98,130	(95.9)	1,99,573	56,996
EURUSD	1,259	647	94.6	854	1,317	(35.1)	1,441	959
GBPINR	7,794	9,212	(15.4)	12,617	3,34,830	(96.2)	3,36,657	1,03,604
GBPUSD	304	231	(31.6)	686	999	(31.4)	1,147	803
JPYINR	330	350	(5.8)	1,798	55,467	(96.8)	59,177	16,854
USDINR	5,31,961	6,69,030	(20.5)	5,37,616	24,45,424	(78.0)	23,89,973	9,91,689
USDJPY	43	26	64.8	60	367	(83.6)	306	67
Currency options	6	6	(0.6)	230.4	13,784.6	(98.3)	12,616	2,949
EURINR	-	-	-	0.1	2.5	(97.4)	3.1	1.5
EURUSD	-	-	-	-	-	-	-	-
GBPINR	-	-	-	0.9	101.8	(99.2)	116.8	39.3
GBPUSD	-	-	-	-	-	-	-	-
JPYINR	-	-	-	-	0.2	(100.0)	0.2	0.0
USDINR	5.8	5.8	(0.6)	229.4	13,680.2	(98.3)	12,495.9	2,908.0
USDJPY	-	-	-	-	-	-	-	-

Source: NSE EPR

Note: Above table reports premium turnover for Options contracts. FY25TD is as of Nov'24 and FY24TD is as of Nov'23.

Figure 234: Trends in average daily turnover in currency derivatives segment


Source: NSE EPR

 Note: 1. The above figure reports premium turnover for options contracts. 2. Data for FY25 is as of November 30th, 2024.

ADT of interest rate futures moderated in November: The average daily turnover (ADT) in the interest rate futures segment fell by 3.9% MoM to Rs 117.8 crore in Nov'24. On annual comparison, ADT of interest rate futures observed a 22.8% YoY decline to Rs 105.3 crore in the first eight months of FY25 as compared to the same period last year.

Table 74: Average daily turnover in Interest rate derivatives

Product (Rs Lakhs)	Nov-24	Oct-24	% MoM change	FY25TD	FY24TD	% YoY Change	FY24	CY24TD
Interest rate futures	11,781	12,264	(3.9)	10,534	13,641	(22.8)	12,270	10,120

Source: NSE EPR.

Note: Above table reports premium turnover for Options contracts. Figures in brackets indicate negative numbers. FY25TD data is as of November 30th, 2024.

Average daily premium turnover (ADPT) of commodity derivatives moderated in November: The ADPT of commodity options increased by 32.1% MoM to Rs 12.5 crore, while the ADT of commodity futures fell to Rs 66 lakh in Nov'24. On annual comparison, ADT of commodity futures exhibited a 97.6% YoY decline, while commodity options' ADPT exhibited a notable 34x growth in the first eight months of FY25 as compared to the same period last year.

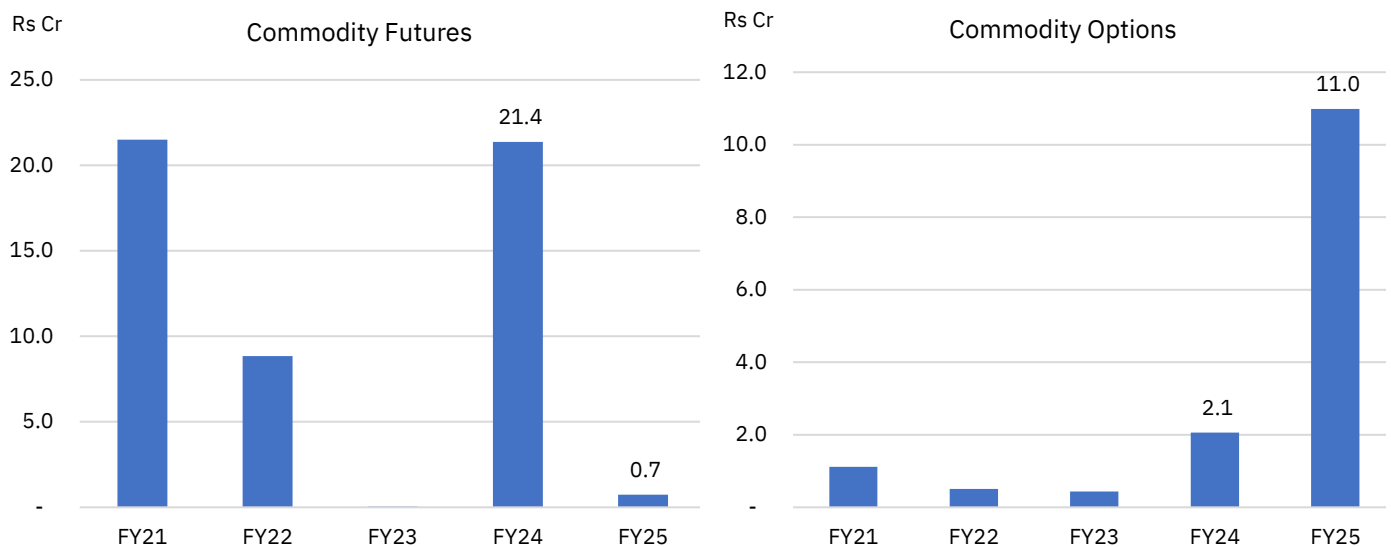
Table 75: Average daily turnover in commodities derivatives

Product (Rs Lakhs)	Nov-24	Oct-24	% MoM change	FY25TD	FY24TD	% YoY Change	FY24	CY24TD
Commodity futures	66	91	(27.7)	73	3,097	(97.6)	2,138	84
Commodity options	1,248.5	1,838	(32.1)	1,099	32	3,349.4	206	984

Source: NSE EPR.

Notes: Above table reports premium turnover for Options contracts; Figures in brackets indicate negative numbers; FY25TD data is as of November 30th, 2024.

Figure 235: Trends in average daily turnover in commodity derivatives segment



Source: NSE EPR

Notes: Above figure reports premium turnover for options contracts; FY25 data is as of November 30th, 2024.

Category-wise turnover and investments in NSE's CM segment

DII continued their buying streak for the 16th consecutive month amid sell-off by foreign investors: DIIs remained net buyers for the 16th consecutive month, with their net buy traded value in the NSE's cash segment standing at Rs 49,140 crore in November. This translates into net inflow of Rs 3.6 lakh crore in FY25 till date, reflecting their consistent confidence in the Indian capital market. Foreign investors continued their selling spree in November, with an outflow of Rs 49,166 crore, as trade policy uncertainty in the US, persistent geopolitical tensions, rising US bond yields and weak domestic corporate earnings resulted in reallocation of funds to other markets. However, buying by domestic investors has counterbalanced the selloff by foreign investors, providing essential support to the markets. Barring Jul'24 and Sep'24, foreign investors have been net sellers in FY25, resulting in cumulative outflow of over Rs 2.5 lakh crore in FY25 thus far. Individual investors remained net buyers with an inflow of Rs 15,574 crore in Nov'24, resulting in cumulative net investment of over Rs 1.0 lakh crore in the current fiscal.

Table 76: Category-wise buy and sell traded value in NSE's CM segment in the last three months

(Rs crore)	Nov-24			Oct-24			Sep-24		
Category	Buy Value	Sell Value	Net Value	Buy Value	Sell Value	Net Value	Buy Value	Sell Value	Net Value
Corporates	83,917	84,336	(418)	1,02,202	1,05,852	(3,649)	1,15,476	1,28,433	(12,957)
DIIs	2,47,466	1,98,325	49,140	3,57,477	2,50,141	1,07,336	3,32,630	3,07,161	25,469
FIs	3,13,969	3,63,135	(49,166)	2,97,456	4,14,735	(1,17,279)	4,01,595	3,88,293	13,302
Individuals	6,37,957	6,22,383	15,574	7,92,164	7,62,570	29,594	8,77,549	8,82,280	(4,731)
Others	91,860	97,691	(5,831)	1,18,294	1,22,045	(3,751)	1,21,969	1,28,553	(6,584)
Prop	5,41,040	5,50,339	(9,300)	6,85,505	6,97,756	(12,251)	7,10,158	7,24,657	(14,499)
Total	19,16,210	19,16,210		23,53,098	23,53,098		25,59,376	25,59,376	

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc. 2. DII –Bank, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors (FIs) – Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate - Public & Private Companies / Bodies Corporate; Individual – Individual / Proprietorship firms, HUF and NRI; Others – Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop – PRO Trades. 3. Figures in brackets indicate negative numbers.

Table 77: Category-wise buy and sell traded value in NSE's CM segment during FY24 and FY25TD

(Rs crore)	FY25TD			FY24		
Category	Buy Value	Sell Value	Net Value	Buy Value	Sell Value	Net Value
Corporates	9,54,764	9,99,977	(45,213)	11,05,673	11,47,170	(41,497)
DIIs	25,28,370	21,73,133	3,55,237	22,98,940	21,41,733	1,57,207
FIs	28,37,012	30,88,281	(2,51,270)	29,70,760	29,86,228	(15,468)
Individuals	70,32,932	69,30,675	1,02,257	71,52,033	71,04,792	47,241
Others	9,13,902	9,63,723	(49,821)	9,53,295	9,91,704	(38,410)
Prop	57,54,802	58,65,992	(1,11,190)	56,22,737	57,31,811	(1,09,074)
Total	2,00,21,781	2,00,21,781		2,01,03,438	2,01,03,438	

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc. 2. DII –Bank, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors (FIs) – Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate - Public & Private Companies / Bodies Corporate; Individual – Individual / Proprietorship firms, HUF and NRI; Others – Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop – PRO Trades. 3. Figures in brackets indicate negative numbers. 4. FY25TD is as of Nov'24.

Category-wise turnover in NSE's derivatives segment

Individual investors' trading activity moderated across instruments in November:

The turnover by individuals witnessed a notable decline across products in Nov'24. In index futures, individuals' gross turnover declined by 15.3% MoM to Rs 4.2 lakh crore contributing 30% to the decline in the turnover in instrument, while in stock futures, individuals contributed 16% to the decline in the turnover in the instrument resulting in a decline of 24.3% MoM to Rs 7.2 lakh crore. Individuals were the main drivers behind the drop in index futures turnover, while prop traders led the decline in stock futures turnover. Proprietary traders and individuals cumulatively contributed 78% and 75% to the decline in stock options and index options premium turnover in Nove'24.

Table 78: Category-wise turnover in equity derivatives

(Rs crore)	Nov-24		Oct-24		FY25TD		FY24	
Category wise	Buy Value	Sell Value	Buy Value	Sell Value	Buy Value	Sell Value	Buy Value	Sell Value
Index Futures	6,34,368	6,34,368	7,61,218	7,61,218	61,69,293	61,69,293	74,17,117	74,17,117
Corporates	72,178	72,556	1,04,715	96,961	8,19,409	8,08,534	8,66,663	8,59,339
DIIs	29,201	26,746	31,140	30,652	1,97,551	1,96,497	2,52,024	2,54,039
Foreign Investors	84,655	83,815	87,424	1,18,921	9,14,763	9,16,616	10,29,423	10,34,622
Individuals	2,08,933	2,10,756	2,58,185	2,37,213	19,10,238	18,95,469	22,52,031	22,45,226
Others	35,192	34,483	47,085	45,919	3,70,024	3,67,052	5,53,345	5,51,145
Prop	2,04,209	2,06,012	2,32,668	2,31,552	19,57,309	19,85,125	24,63,632	24,72,745
Stock Futures	26,16,407	26,16,407	33,43,153	33,43,153	2,68,58,172	2,68,58,172	2,55,46,966	2,55,46,966
Corporates	1,88,224	1,91,832	2,66,464	2,61,124	19,97,306	20,01,921	18,31,649	18,36,717
DIIs	3,06,431	3,01,423	3,13,507	3,41,645	24,61,475	25,03,431	22,40,985	23,06,857
Foreign Investors	7,96,365	7,87,632	9,78,920	9,68,915	74,81,483	74,20,878	61,40,115	60,77,935
Individuals	3,60,188	3,62,361	4,78,257	4,76,090	42,77,425	42,65,176	42,54,504	42,27,680
Others	1,20,775	1,20,321	1,60,663	1,58,423	13,03,675	12,98,461	18,85,711	18,86,624
Prop	8,44,423	8,52,837	11,45,342	11,36,957	93,36,809	93,68,305	91,94,002	92,11,154
Index Options	10,31,502	10,31,502	13,67,433	13,67,433	99,22,180	99,22,180	1,38,19,564	1,38,19,564
Corporates	31,769	32,445	80,488	81,806	4,37,605	4,45,349	3,59,796	3,65,396
DIIs	1,039	1,128	1,229	1,639	8,919	7,889	10,266	9,761
Foreign Investors	1,01,473	1,02,420	1,24,769	1,26,103	9,80,424	9,89,385	12,39,326	12,55,559
Individuals	3,73,567	3,68,768	4,95,045	4,88,307	35,06,784	34,63,853	48,68,556	48,16,950
Others	28,678	29,109	39,059	39,601	3,03,735	3,08,962	6,23,829	6,29,650
Prop	4,94,976	4,97,631	6,26,844	6,29,978	46,84,712	47,06,742	67,17,790	67,42,248
Stock Options	1,27,497	1,27,497	1,71,991	1,71,991	13,67,683	13,67,683	13,78,031	13,78,031
Corporates	5,486	5,503	11,294	11,341	68,937	70,519	45,728	47,270
DIIs	171	524	223	577	1,448	3,754	1,169	3,013
Foreign Investors	13,191	13,735	16,256	17,202	1,12,794	1,15,003	65,710	66,229
Individuals	32,667	31,458	45,987	43,583	3,83,132	3,74,287	4,13,213	4,05,530
Others	1,918	1,964	2,745	2,746	25,423	25,999	29,210	29,842
Prop	74,065	74,313	95,486	96,541	7,75,949	7,78,122	8,23,002	8,26,146

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above table reports premium turnover for Options buy and sell value.

4. FY25TD is as of Nov'24.

Proprietary traders scaled back their trading in currency futures significantly:

Proprietary traders substantially reduced their trading activity in currency futures (-35.3% MoM), contributing to over 98% of the reduction in the turnover. While proprietary traders reduced their participation in currency futures, their participation in currency options increased 39% MoM. Corporates, on the other hand, contributed largely to the decline in currency options turnover. While individual investors' turnover in currency futures declined 7%, the decline in their currency options turnover was at a higher rate of 12% MoM.

Table 79: Category-wise turnover in currency derivatives in the last three months (Sep'24-Nov'24)

(Rs crore)	Nov-24		Oct-24		Sep-24	
Category	Buy Value	Sell Value	Buy Value	Sell Value	Buy Value	Sell Value
Futures	1,03,989	1,03,989	1,50,597	1,50,597	64,015	64,015
Corporates	7,184	7,321	6,181	6,931	7,801	6,115
DIIIs	1,070	1,051	1,070	854	1,146	895
Foreign Investors	7,350	6,868	8,575	7,874	8,058	7,249
Individuals	3,495	3,374	4,047	3,331	4,559	4,434
Others	1,151	866	1,216	1,209	1,233	1,176
Prop	83,738	84,509	1,29,507	1,30,397	41,219	44,146
Options	1.1	1.1	1.3	1.3	1.1	1.1
Corporates	0.4	0.4	0.6	0.6	0.5	0.4
DIIIs	-	-	-	-	-	-
Foreign Investors	-	-	-	-	-	-
Individuals	0.3	0.7	0.4	0.7	0.4	0.5
Others	-	0.0	-	0.0	0.0	0.0
Prop	0.4	0.0	0.3	0.0	0.2	0.1

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above table reports premium turnover for Options contracts.

Table 80: Category-wise trading turnover in currency derivatives during FY25TD and FY24

(Rs crore)	FY25TD		FY24	
Category	Buy Value	Sell Value	Buy Value	Sell Value
Futures	9,04,502	9,04,502	72,01,771	72,01,771
Corporates	75,688	71,175	4,21,444	4,22,361
DIIIs	19,519	11,862	72,761	74,017
Foreign Investors	66,036	60,703	6,26,681	6,35,845
Individuals	55,115	49,130	10,95,914	10,94,033
Others	17,979	16,847	1,82,192	1,79,167
Prop	6,70,165	6,94,785	48,02,778	47,96,348
Options	370.9	370.9	30,404.5	30,404.5
Corporates	32.7	47.1	1,114.0	1,144.5
DIIIs	0.1	1.4	14.8	0.4
Foreign Investors	14.9	28.2	1,483.9	1,156.9
Individuals	200.0	72.0	6,593.8	6,853.0
Others	3.7	2.1	1,030.0	1,085.5
Prop	119.5	220.0	20,168.0	20,164.3

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc. 2. DII –Bank, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors (FIs) – Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate - Public & Private Companies / Bodies Corporate; Individual – Individual / Proprietorship firms, HUF and NRI; Others – Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop – PRO Trades. 3. Above table reports premium turnover for Options contracts. 4. FY25TD is as of Nov'24.

Corporates and individual investors witnessed a fall in interest rate futures turnover:

Corporates recorded a 13.0% MoM decline in gross turnover in interest rate futures to Rs 3,505 crore in November 2024, while individual investors recorded a 15.8 MoM fall to Rs 675 crore. Interest rate futures turnover decline 17% MoM in the month of Nov'24, led largely by the decline in trading activity by corporates contributing over 50% of the decline in the overall turnover. Proprietary traders witnessed a 45.1% MoM drop, equal to 16% of the decline in gross turnover, to Rs 176 crore.

Table 81: Category-wise trading turnover in interest rate futures in the last three months (Sep'24-Nov'24)

(Rs crore)	Nov-24		Oct-24		Sep-24	
Category	Buy Value	Sell Value	Buy Value	Sell Value	Buy Value	Sell Value
Futures	2,238	2,238	2,698	2,698	2,307	2,307
Corporates	1,773	1,732	1,981	2,050	1,802	1,682
DIIIs	-	-	-	-	5	5
Foreign Investors	2	2	2	2	2	2
Individuals	347	328	415	387	388	367
Others	2	114	125	114	42	2
Prop	114	62	175	145	68	249

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc. 2. DII –Bank, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors (FIs) – Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate - Public & Private Companies / Bodies Corporate; Individual – Individual / Proprietorship firms, HUF and NRI; Others – Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop – PRO Trades.

Table 82: Category-wise trading turnover in interest rate futures during FY25TD and FY24

(Rs crore)	FY25TD		FY24	
Category	Buy Value	Sell Value	Buy Value	Sell Value
Futures	16,960	16,960	29,571	29,571
Corporates	11,575	12,147	12,597	13,581
DIIIs	5	5	321	296
Foreign Investors	19	19	66	66
Individuals	2,519	2,432	2,255	1,915
Others	342	314	66	62
Prop	2,498	2,043	14,266	13,651

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. There were no trades in the interest rate options segment.

4. FY25TD is as of Nov'24.

Prop traders and individuals contributed to the entire reduction in commodity derivatives turnover: Commodity options premium turnover witnessed a 35.2% MoM drop, driven by moderation in the turnover of proprietary traders (-34.6% MoM) and individual investors (-32.3% MoM). Similarly, Commodity futures turnover declined by 31.0% MoM, majorly due to the decline in turnover by proprietary traders (-34.6% MoM) and individuals (-32.3% MoM).

Table 83: Category-wise trading turnover in commodity derivatives in the last three months (Sep'24-Nov'24)

(Rs crore)	Nov-24		Oct-24		Sep-24	
Category	Buy Value	Sell Value	Buy Value	Sell Value	Buy Value	Sell Value
Futures	13.9	13.9	20.1	20.1	28.6	28.6
Corporates	-	-	-	-	-	-
DIIIs	-	-	-	-	-	-
Foreign Investors	-	-	-	-	0.3	-
Individuals	1.1	0.6	3.3	2.6	6.9	8.3
Others	0.2	4.3	4.2	0.1	0.3	0.3
Prop	12.6	9.1	12.7	17.4	21.1	20.0
Options	262.2	262.2	404.4	404.4	290.2	290.2
Corporates	0.9	0.9	2.6	2.6	1.4	1.4
DIIIs	-	-	-	-	-	-
Foreign Investors	0.4	0.6	4.1	1.4	3.8	5.0
Individuals	29.4	28.9	43.0	43.2	34.4	33.7
Others	0.2	0.1	1.8	1.9	2.9	2.9
Prop	231.3	231.7	352.9	355.3	247.8	247.2

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above table reports premium turnover for options contracts.

Table 84: Category-wise turnover in commodity derivatives during FY25TD and FY24

(Rs crore)	FY25TD		FY24	
Category	Buy Value	Sell Value	Buy Value	Sell Value
Futures	126.6	126.6	5,429.3	5,429.3
Corporates	1.1	5.1	138.4	138.5
DII's	-	-	5.5	5.5
Foreign Investors	0.3	-	14.0	13.1
Individuals	19.0	18.4	724.6	723.6
Others	5.9	6.1	56.4	57.0
Prop	100.3	97.0	4,490.4	4,491.6
Options	1,900.9	1,900.9	523.1	523.1
Corporates	7.6	7.6	4.6	4.5
DII's	-	-	-	-
Foreign Investors	9.4	8.5	0.1	0.0
Individuals	205.0	203.4	48.2	48.2
Others	20.7	20.8	6.4	6.5
Prop	1,658.2	1,660.6	463.8	463.9

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above table reports premium turnover for options contracts.

4. FY25TD is as of Nov'24.

Category-wise participation in turnover across segments

This section gives a detailed analysis of client-wise participation in the total trading activity across all segments at NSE. The clients are broadly classified into six categories, viz. corporates, domestic institutional investors (DIIs), foreign investors, proprietary traders, individuals, and Others. The individual category includes individual domestic investors, NRIs, sole proprietorship firms and HUFs. The category Others include Partnership Firms/LLP, Trust / Society, Depository Receipts, Statutory Bodies, etc. which are not included in any other categories mentioned above.

Foreign investors' share in the CM segment turnover witnessed a substantial increase: The share of foreign investors in the total turnover of the CM segment expanded by 253bps MoM to an 8-month high of 17.7% in November. However, on a YoY basis, it moderated by 52bps YoY to 14.8% in FY25 (till Nov'24). The share of individuals (-15bps MoM) contracted marginally to 32.9% in Nov'24, although they remained the major contributor of the segment's turnover. The share of DIIs in the overall turnover in the CM segment fell by 128bps MoM to 11.6% in the previous month, while their share in the current fiscal year (As on November 30th, 2024) touched an all-time high of 11.7%.

The share of foreign investors in the CM segment has seen an interesting journey over the years. In FY10, foreign investors accounted for 13.7% of the segment's turnover, and their share continued to increase until FY14 as it reached a peak of 23.7%, followed by a brief variation in FY15 and FY16. Thereafter, their share continued to decline until FY21, when it reached a 17-year low of 11.5%. Subsequently, their share increased until FY24, when it witnessed a reduction in share to 14.8%, and stands at 14.8% in FY25 thus far.

Table 85: Share of client participation in NSE cash market segment (%)

Client category	Nov-24	Oct-24	MoM Change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	4.4	4.4	(3)	4.9	5.6	(69)	5.6	5.1
DIIs	11.6	12.9	(128)	11.7	11.4	36	11.0	11.4
Foreign Investors	17.7	15.1	253	14.8	15.3	(52)	14.8	14.7
Individuals	32.9	33.0	(15)	34.9	35.0	(10)	35.5	35.1
Prop	28.5	29.4	(91)	29.0	27.8	120	28.2	29.0
Others	4.9	5.1	(16)	4.7	4.9	(25)	4.8	4.7

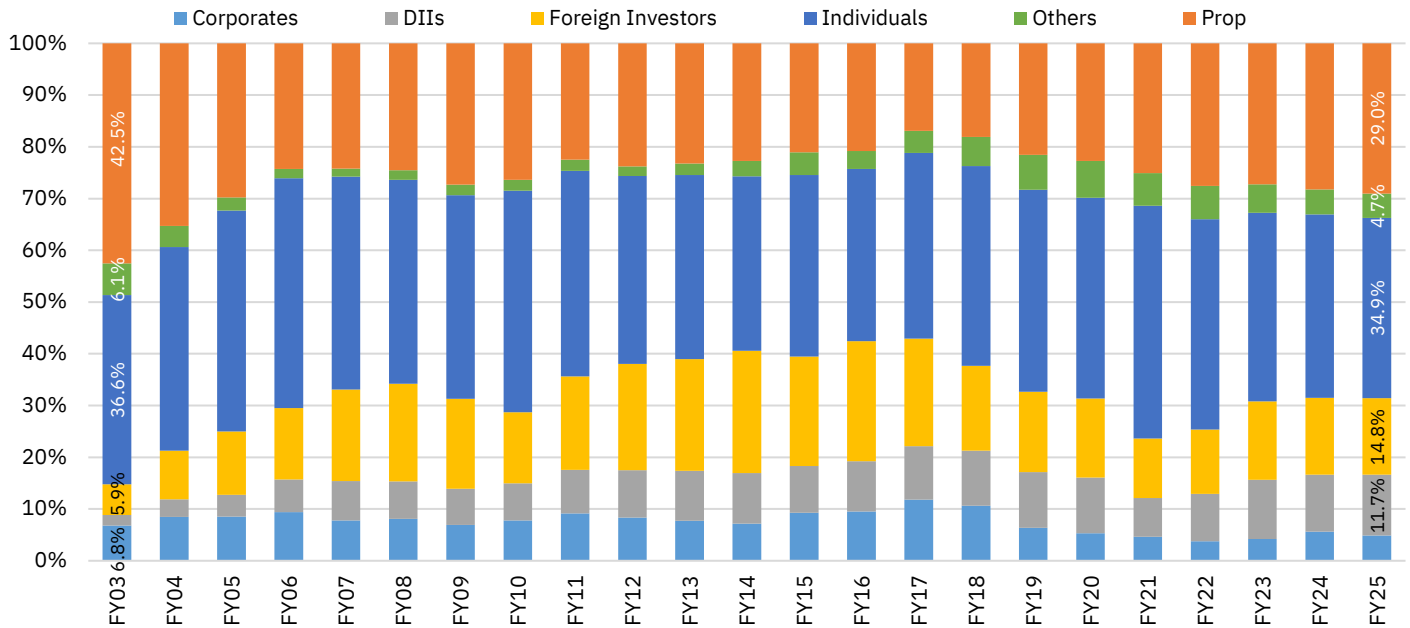
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

2. DII –Bank, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors (FIs) – Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate - Public & Private Companies / Bodies Corporate; Individual – Individual / Proprietorship firms, HUF and NRI; Others – Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop – PRO Trades.

3. Above data represents share in gross turnover i.e., buy-side turnover + sell-side turnover.

4. FY25TD is as of Nov'24.

Figure 236: Trends in share of client participation in NSE cash market segment (%)


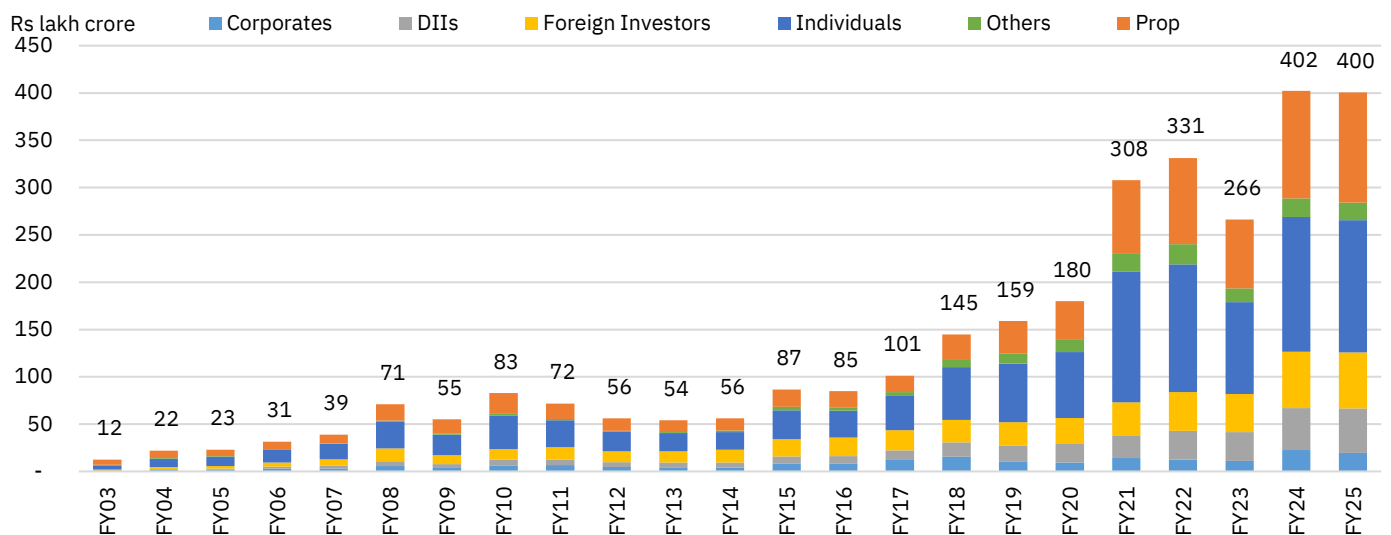
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents share in gross turnover i.e., buy-side turnover + sell-side turnover.

4. FY25 is as of Nov'24.

Figure 237: Trends in client category-wise gross turnover in NSE cash market segment


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents gross turnover i.e., buy-side turnover + sell-side turnover.

4. FY25 is as of Nov'24.

Foreign investors' share in equity futures touched record levels in FY25TD: The share of foreign investors expanded 351bps YoY to 25.3% in equity futures in the first eight months of FY25, the highest on record. Within equity futures, FPIs witnessed 82bps YoY rise to 14.8% in index futures and 359bps YoY rise to 27.7% in stock futures during the same period. Further, their share also recorded 226bps YoY gain to 9.7% in equity options (based on premium turnover) during the current fiscal year, aided by a 432bps YoY rise to 8.3% in stock options and 216bps YoY rise to 9.9% in index options. On monthly comparison, their share increased by 71bps MoM to 27.0% in equity futures and 72bps MoM to 10.0% in equity options (based on premium turnover).

Proprietary traders continued to dominate equity futures even as their share witnessed a substantial reduction in equity futures (-104bps MoM), while they witnessed a significant increase (+216bps MoM) in equity options. Interestingly, individual investors continued to dominate in index futures with a share of 33.1% (+54bps MoM) during the previous month. Notably, their share in overall equity derivatives notional turnover fell by 132bps MoM to 24.5% while proprietary traders' share recorded a 267bps MoM rise to 61.9%.

On annual comparison, the share of individuals in equity futures stood at a 23-year low of 18.7% in the first eight months of FY25. Within equity futures, however, the share of corporates in index futures reached a six-year high of 13.2%, while that of DIIs in stock futures stood at a 23-year high of 9.2%. In equity options, the share of foreign investors in equity options (premium) turnover reached a four-year high of 9.7%. Within equity options, the share of corporates in stock options (premium) stood at a three-year high of 5.1%, while that of individuals reached a 23-year low of 27.7% in the first eight months of FY25.

Table 86: Share of client participation in Equity Derivatives segment (Notional turnover) of NSE (%)

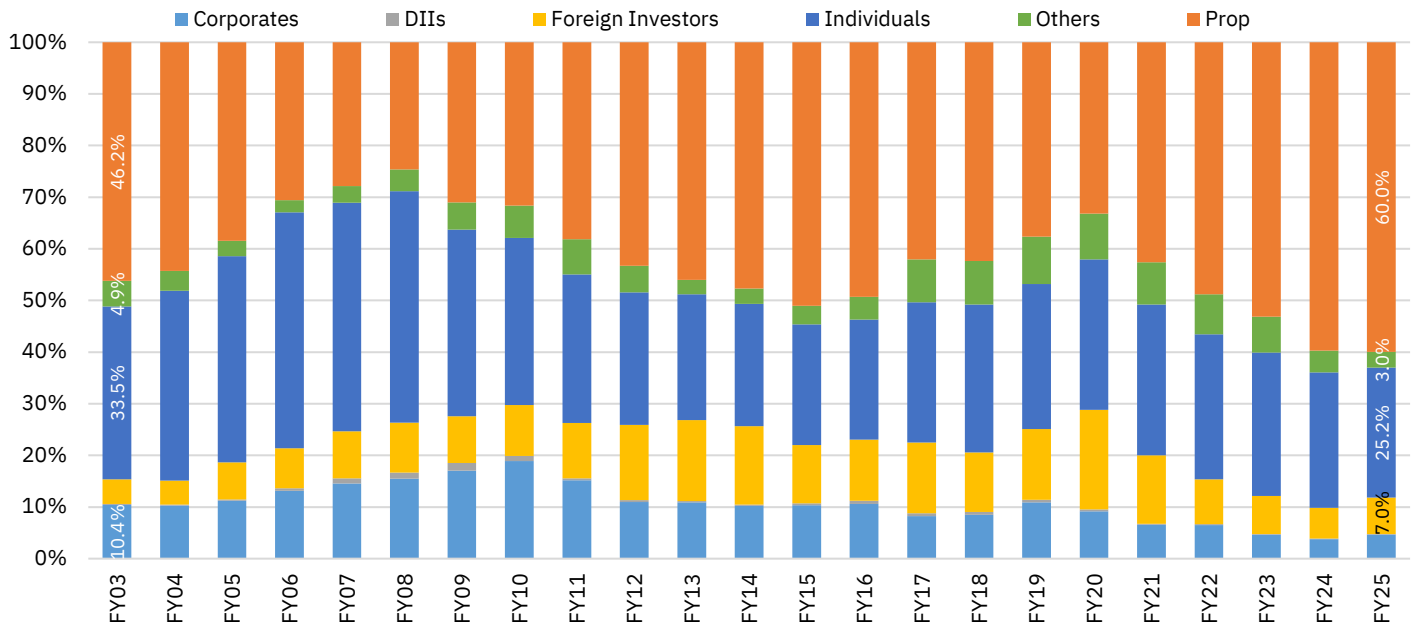
Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	3.2	5.0	(187)	4.7	3.5	118	3.8	4.5
DIIs	0.1	0.1	1	0.1	0.1	2	0.1	0.1
Foreign Investors	7.7	7.1	62	7.0	5.6	147	6.0	7.0
Individuals	24.5	25.8	(132)	25.2	26.9	(177)	26.2	25.1
Prop	61.9	59.3	267	60.0	59.5	45	59.7	60.1
Others	2.6	2.7	(11)	3.0	4.4	(135)	4.2	3.3

Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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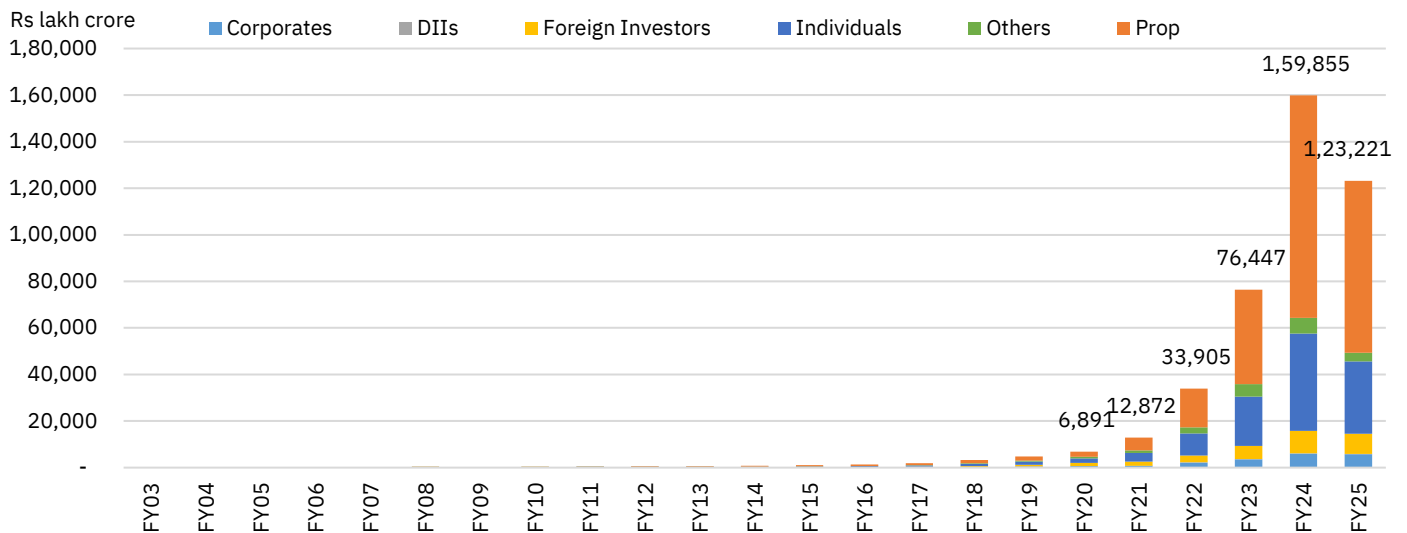
3. Above data represents share in gross notional turnover i.e., buy-side turnover + sell-side turnover.

4. FY25TD is as of Nov'24.

Figure 238: Trends in share of client participation in Equity Derivatives (Notional Turnover) at NSE (%)


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
 4. FY25 is as of Nov'24.

Figure 239: Trends in client category-wise gross notional turnover in Equity derivatives at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
 4. FY25 is as of Nov'24.

Table 87: Share of client participation in Equity futures (Notional Turnover) segment of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	8.1	8.9	(81)	8.5	8.1	45	8.2	8.5
DII's	10.2	8.7	148	8.1	7.8	31	7.7	7.9
Foreign investors	27.0	26.2	71	25.3	21.8	351	21.7	24.5
Individuals	17.6	17.7	(9)	18.7	19.4	(73)	19.7	19.0
Prop	32.4	33.5	(104)	34.3	35.1	(83)	35.4	34.6
Others	4.8	5.0	(24)	5.1	7.8	(271)	7.4	5.4

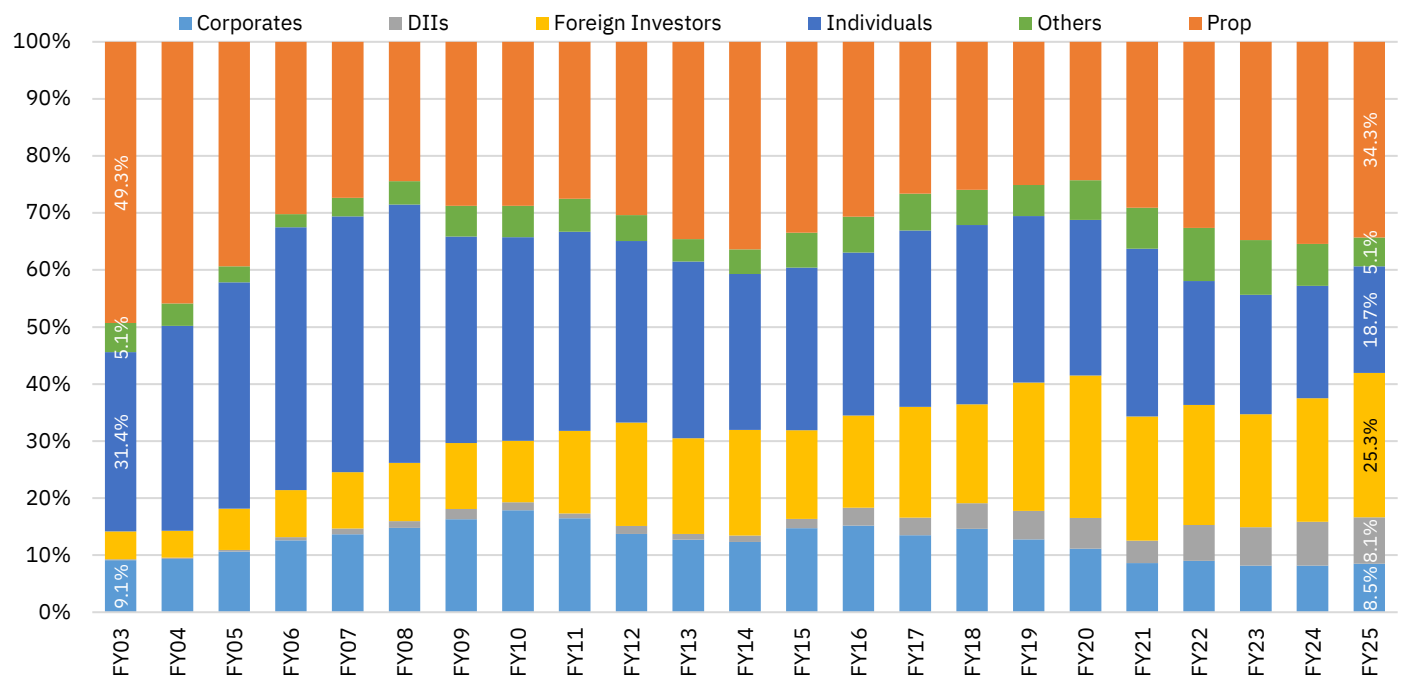
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents share in gross notional turnover i.e., buy-side turnover + sell-side turnover.

4. FY25TD is as of Nov'24.

Figure 240: Trends in share of client participation in Equity futures (Notional Turnover) at NSE (%)


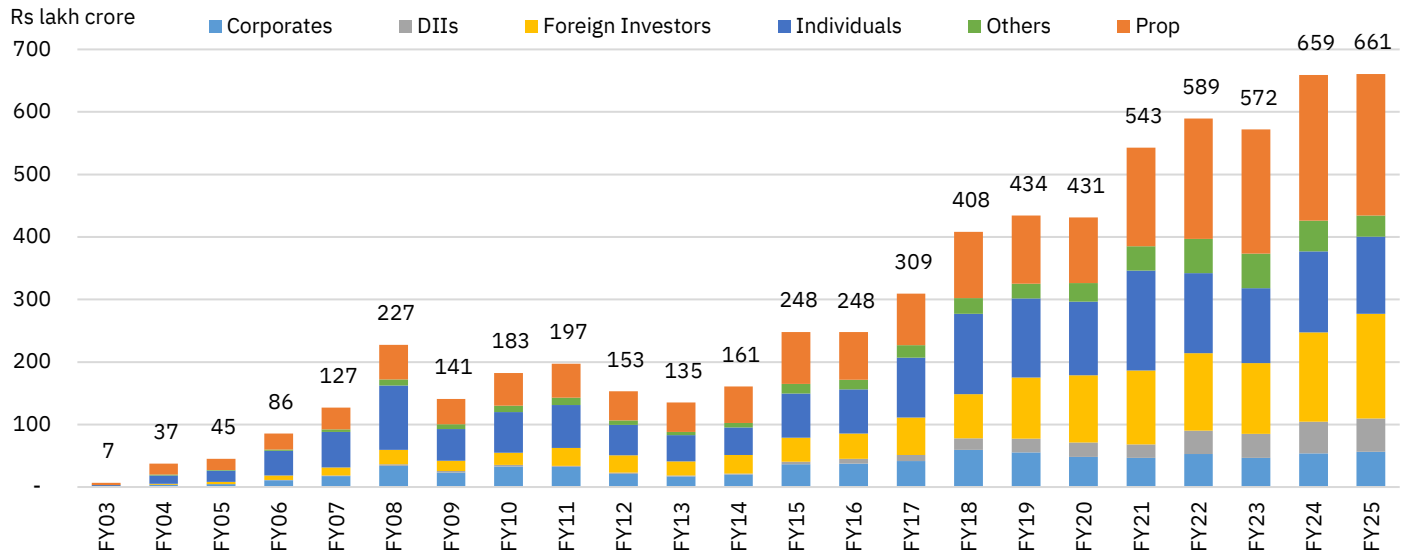
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 data is as of Nov'24.

Figure 241: Trends in client category-wise gross turnover in Equity futures at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 is as of Nov'24.

Table 88: Share of client participation in Equity options segment (Premium Turnover) of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	3.2	6.0	(276)	4.5	2.8	177	2.7	4.0
DIIs	0.1	0.1	0	0.1	0.1	2	0.1	0.1
Foreign investors	10.0	9.2	72	9.7	7.5	226	8.6	10.0
Individuals	34.8	34.8	(6)	34.2	34.8	(59)	34.6	34.2
Prop	49.2	47.1	216	48.5	50.2	(172)	49.7	48.6
Others	2.7	2.7	(7)	2.9	4.7	(174)	4.3	3.2

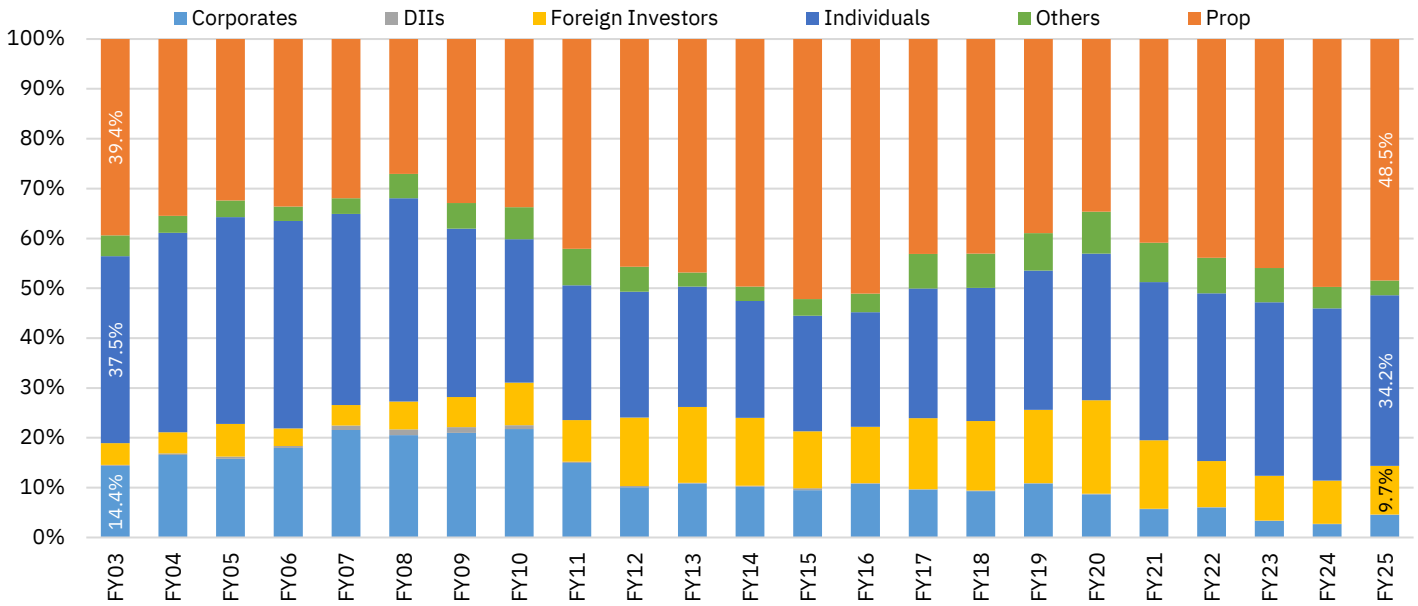
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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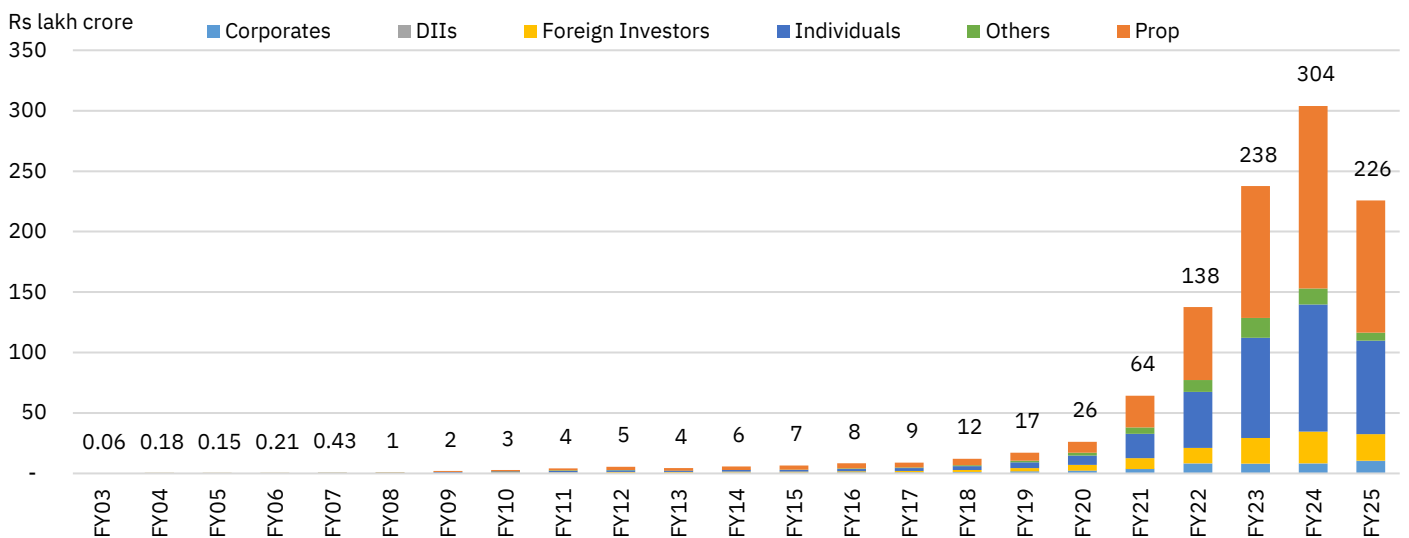
3. Above data represents share in gross notional turnover i.e., buy-side turnover + sell-side turnover.

4. FY25TD is as of Nov'24.

Figure 242: Trends in share of client participation in Equity options (Premium Turnover) at NSE (%)


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
 4. FY25 is as of Nov'24.

Figure 243: Trends in client category-wise gross turnover in Equity options (Premium Turnover) at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
 4. FY25 is as of Nov'24.

Table 89: Share of client participation in Index Futures of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	11.4	13.2	(184)	13.2	11.3	194	11.6	12.9
DIIs	4.4	4.1	35	3.2	3.5	(29)	3.4	3.2
Foreign investors	13.3	13.6	(28)	14.8	14.0	82	13.9	14.4
Individuals	33.1	32.5	54	30.8	30.5	39	30.3	30.7
Prop	32.3	30.5	184	32.0	33.3	(130)	33.3	32.5
Others	5.5	6.1	(62)	6.0	7.5	(155)	7.4	6.3

Source: NSE EPR.

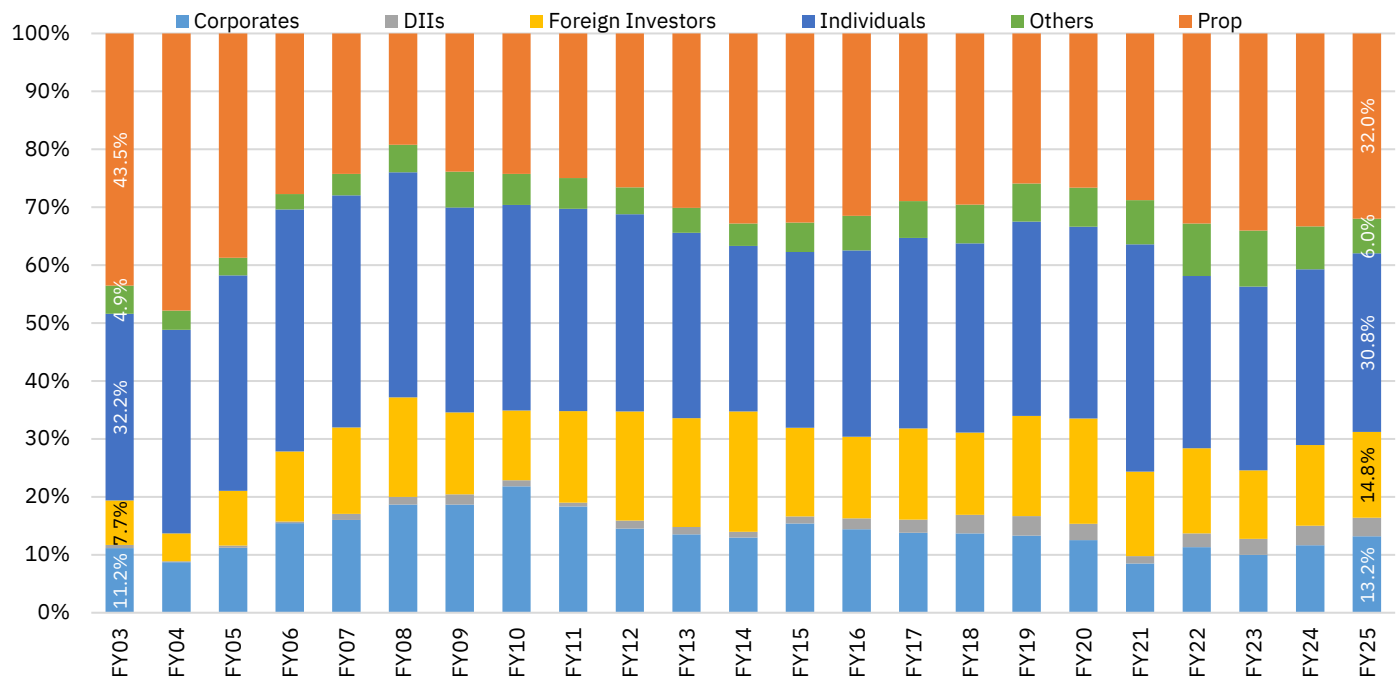
Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Figures in brackets indicate negative numbers.

4. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

5. FY25TD is as of Nov'24.

Figure 244: Trends in share of client participation in Index Futures at NSE (%)


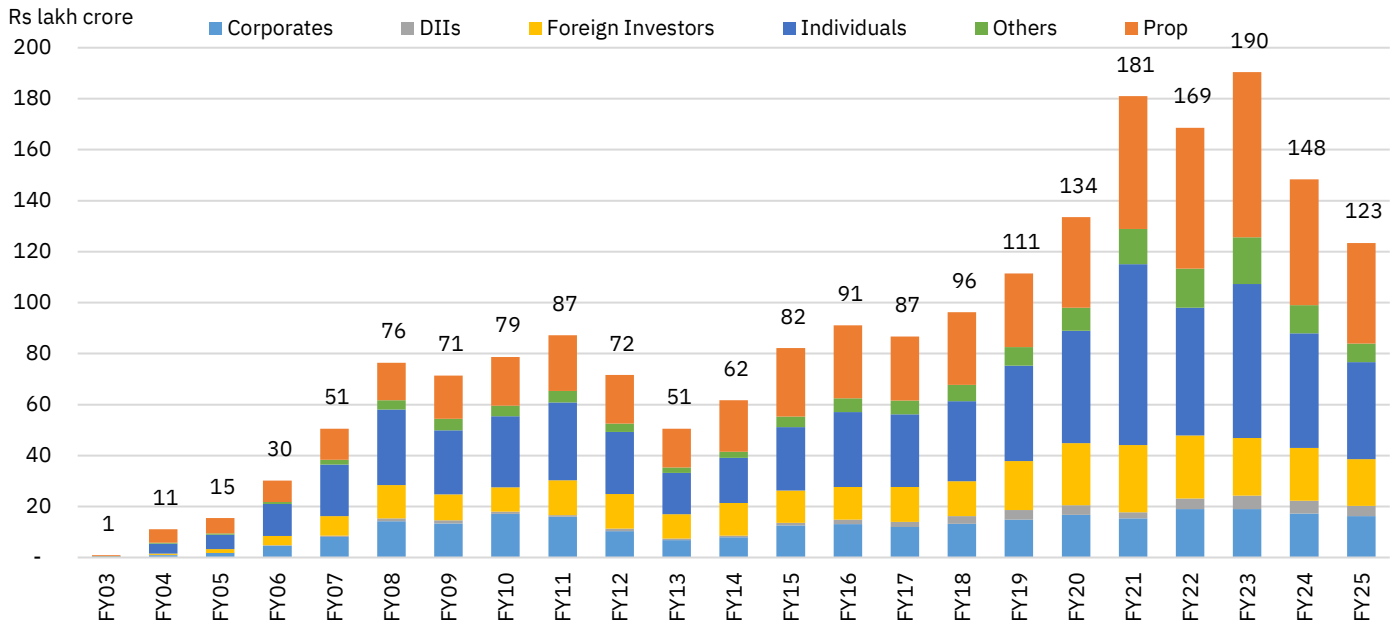
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 is as of Nov'24.

Figure 245: Trends in client category-wise gross turnover in Index Futures at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc. 2. DII –Bank, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors (FIs) – Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate - Public & Private Companies / Bodies Corporate; Individual – Individual / Proprietorship firms, HUF and NRI; Others – Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop – PRO Trades.

3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 is as of Nov'24.

Table 90: Share of client participation in Stock Futures of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	7.3	7.9	(63)	7.4	7.1	33	7.2	7.4
DIIs	11.6	9.8	182	9.2	9.1	14	8.9	9.1
Foreign investors	30.3	29.1	114	27.7	24.2	359	23.9	26.9
Individuals	13.8	14.3	(47)	15.9	16.1	(21)	16.6	16.2
Prop	32.4	34.1	(170)	34.8	35.7	(86)	36.0	35.2
Others	4.6	4.8	(16)	4.8	7.8	(299)	7.4	5.2

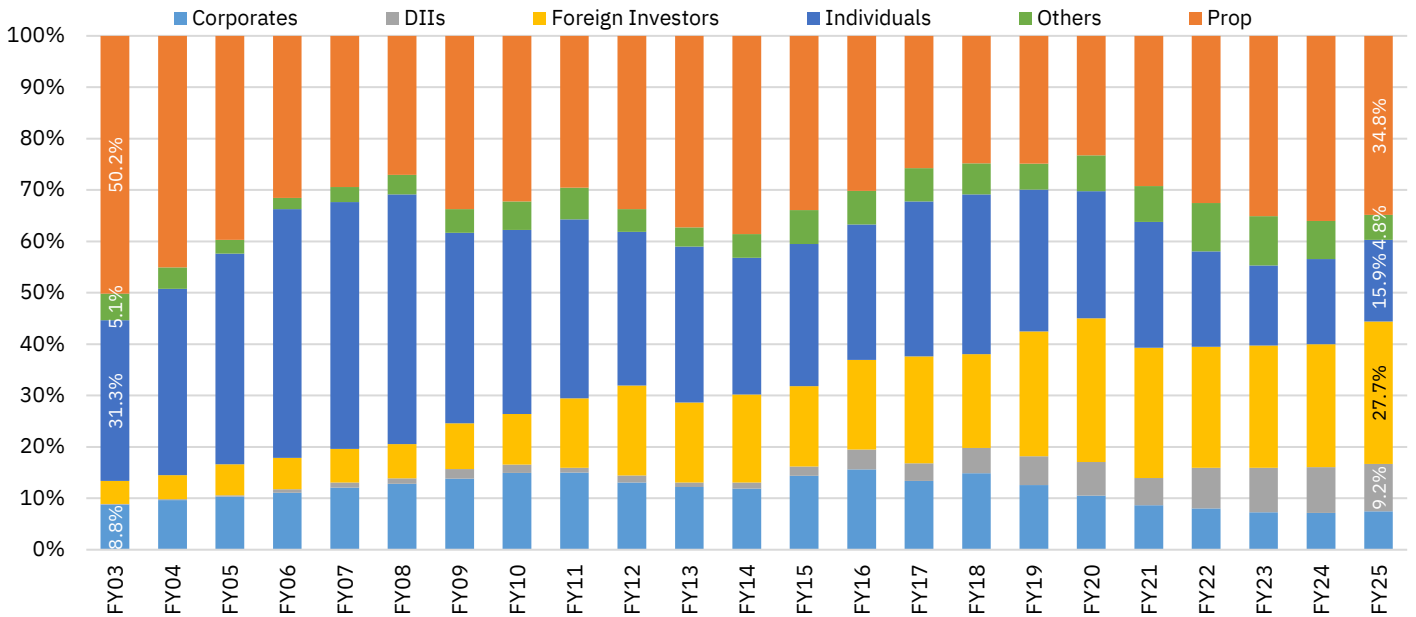
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc. 2. DII –Bank, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors (FIs) – Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate - Public & Private Companies / Bodies Corporate; Individual – Individual / Proprietorship firms, HUF and NRI; Others – Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop – PRO Trades.

3. Figures in brackets indicate negative numbers.

4. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

5. FY25TD is as of Nov'24.

Figure 246: Trends in share of client participation in Stock Futures at NSE (%)


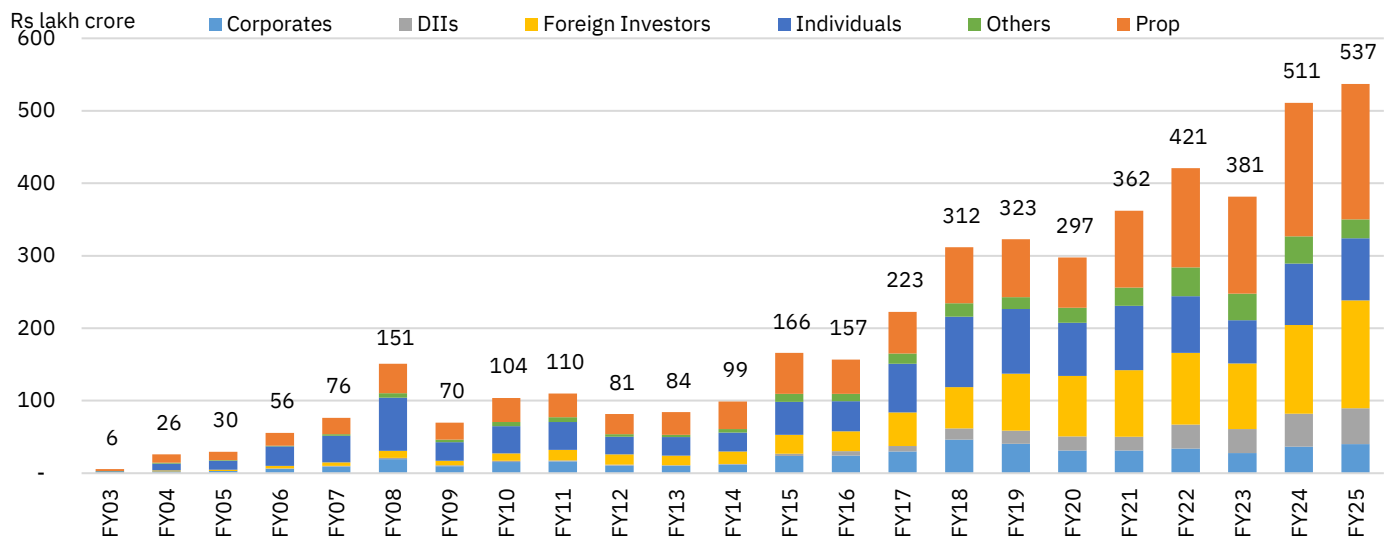
Source: NSE EPR.

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3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 data is as of Nov'24.

Figure 247: Trends in client category-wise gross turnover in Stock Futures at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 is as of Nov'24.

Table 91: Share of client participation in Index Options (Premium Turnover) of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	3.1	5.9	(282)	4.4	2.7	176	2.6	3.9
DIIIs	0.1	0.1	0	0.1	0.1	1	0.1	0.1
Foreign investors	9.9	9.2	71	9.9	7.8	216	9.0	10.3
Individuals	36.0	36.0	3	35.1	35.2	(5)	35.0	35.0
Prop	48.1	46.0	216	47.3	49.4	(209)	48.7	47.4
Others	2.8	2.9	(8)	3.1	4.9	(179)	4.5	3.4

Source: NSE EPR.

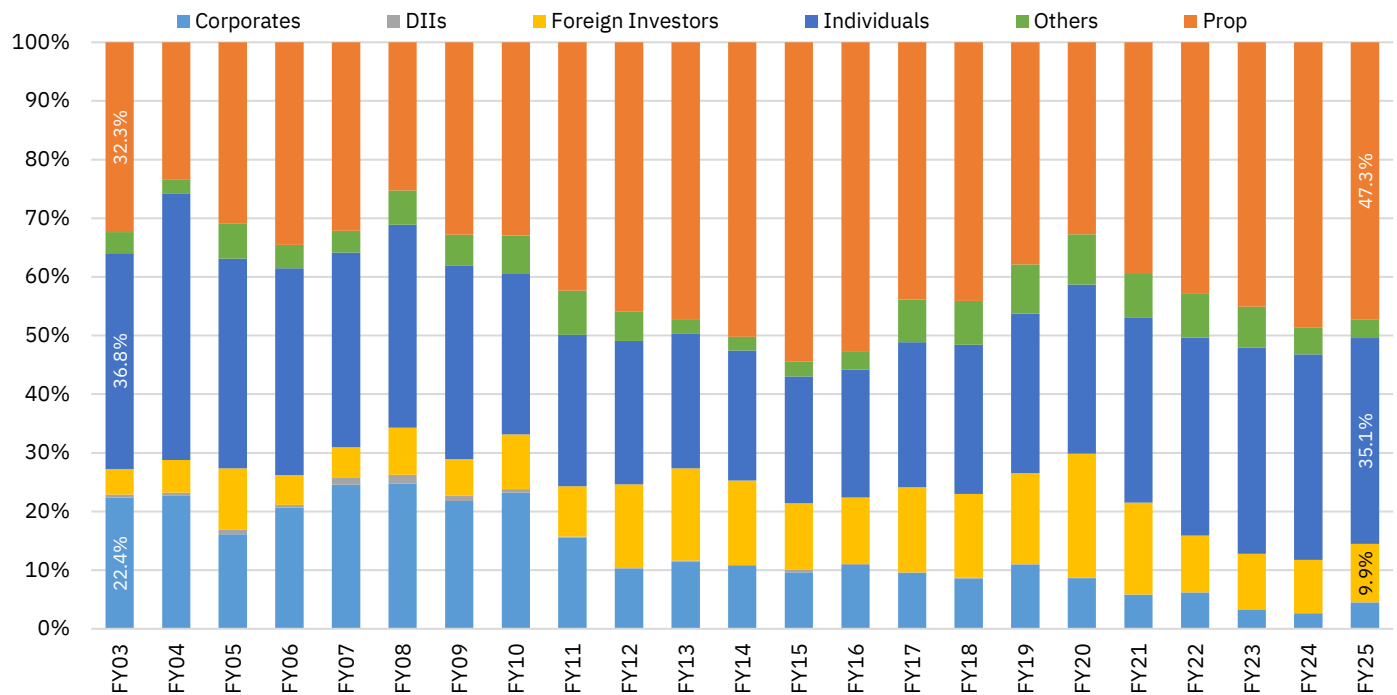
Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Figures in brackets indicate negative numbers.

4. Above data represents share in gross premium turnover i.e., buy-side premium turnover + sell-side premium turnover.

5. FY25TD data is as of Nov'24.

Figure 248: Trends in share of client participation in Index Options (premium turnover) at NSE (%)


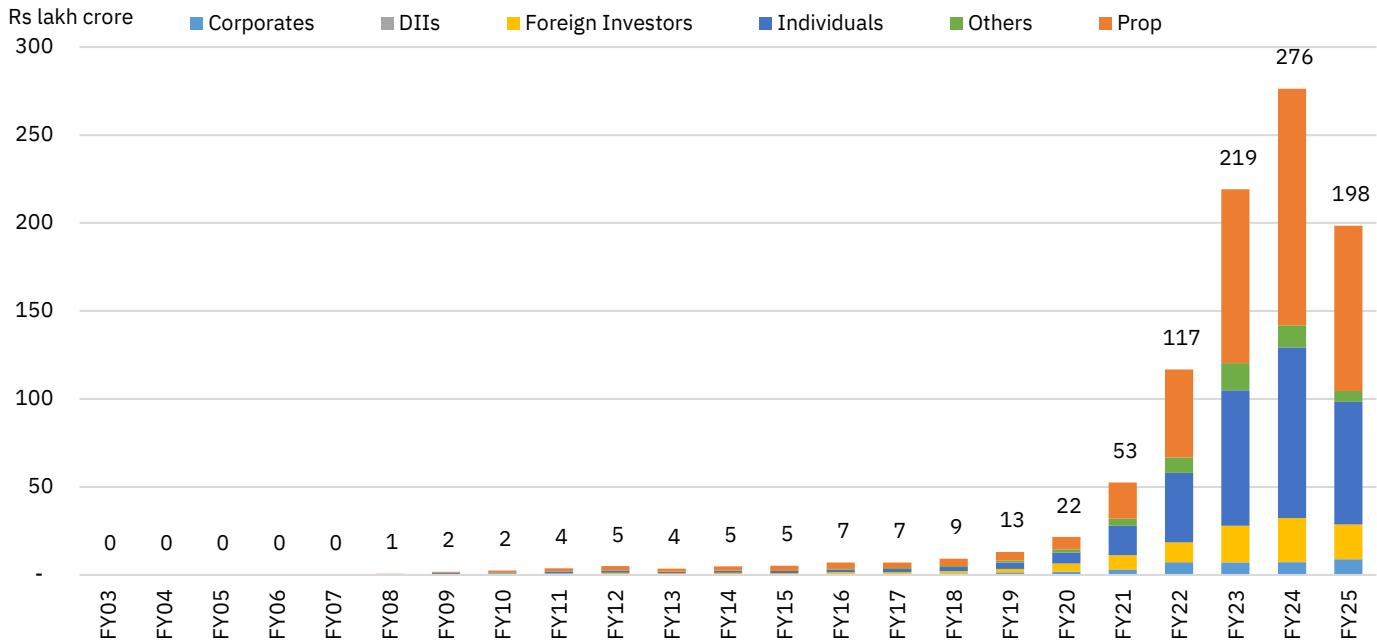
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents share in gross premium turnover i.e., buy-side premium turnover + sell-side premium turnover.

4. FY25 data is as of Nov'24.

Figure 249: Trends in client category-wise gross premium turnover in Index Options at NSE


Source: NSE EPR.

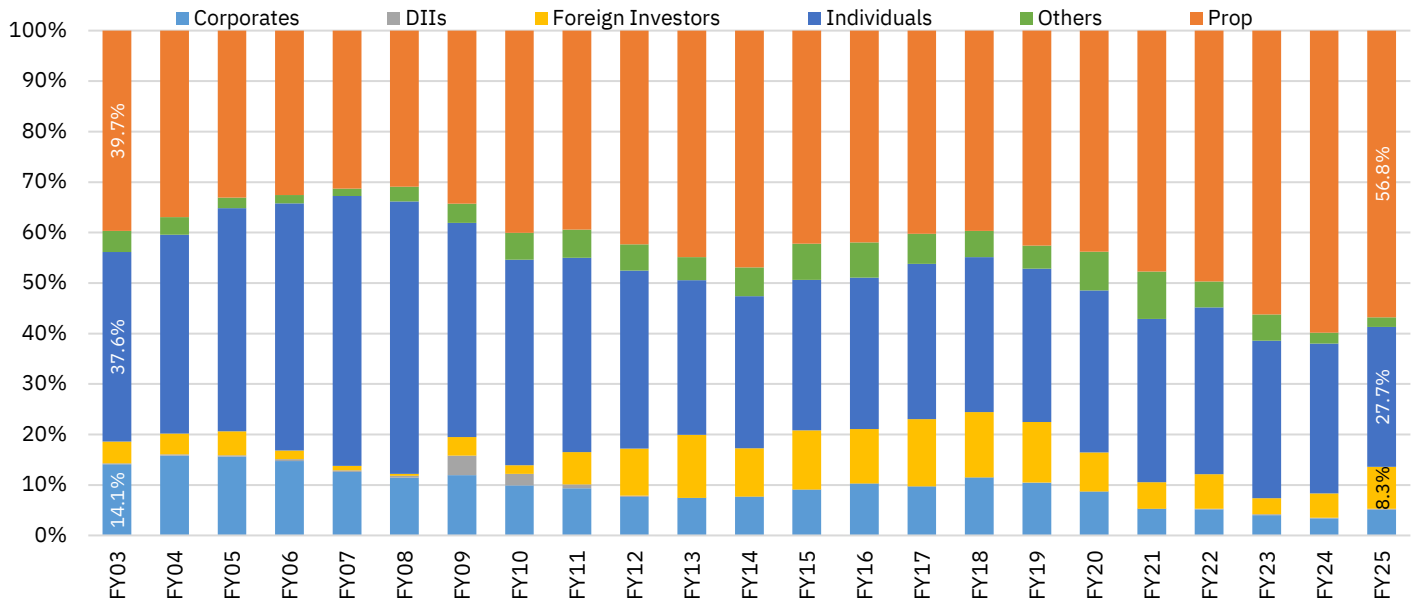
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3. Above data represents share in gross premium turnover i.e., buy-side premium turnover + sell-side premium turnover.
4. FY25 is as of Nov'24.

Table 92: Share of client participation in Stock Options (Premium Turnover) of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	4.3	6.6	(227)	5.1	3.6	154	3.4	4.6
DIIs	0.3	0.2	4	0.2	0.2	3	0.2	0.2
Foreign investors	10.6	9.7	83	8.3	4.0	432	4.8	7.8
Individuals	25.1	26.0	(89)	27.7	30.6	(292)	29.7	27.9
Prop	58.2	55.8	236	56.8	59.3	(246)	59.8	57.7
Others	1.5	1.6	(7)	1.9	2.4	(51)	2.1	1.9

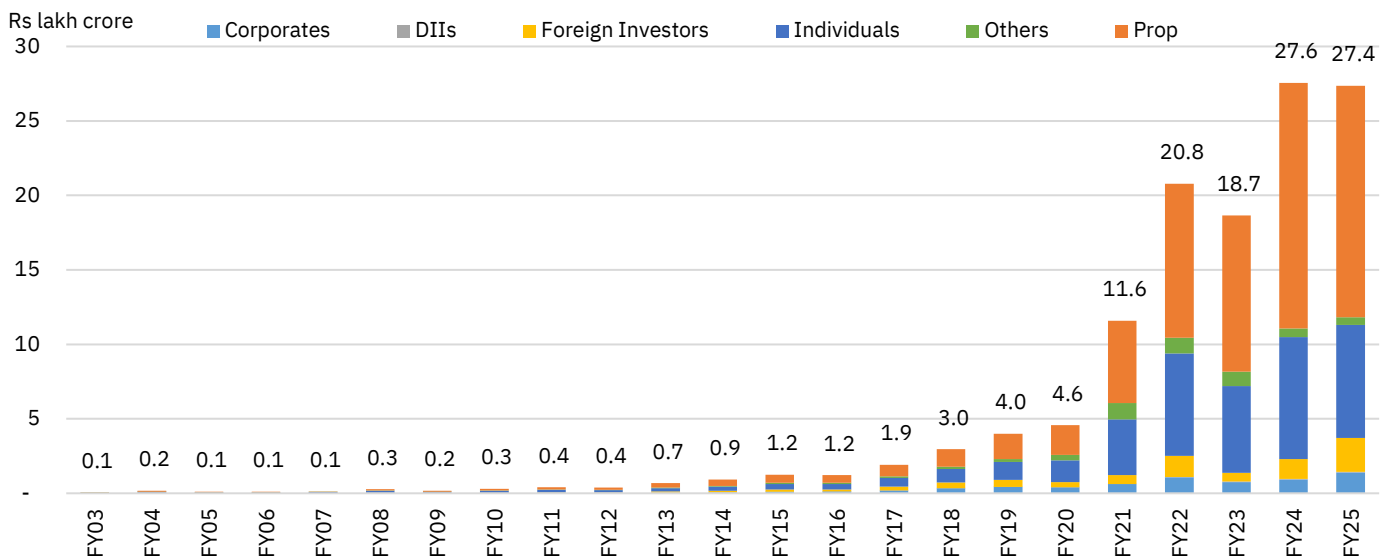
Source: NSE EPR.

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3. Figures in brackets indicate negative numbers.
4. Above data represents share in gross premium turnover i.e., buy-side premium turnover + sell-side premium turnover.
5. FY25TD is as of Nov'24.

Figure 250: Trends in share of client participation in Stock Options (Premium Turnover) at NSE (%)


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents share in gross premium turnover i.e., buy-side premium turnover + sell-side premium turnover.
 4. FY25 is as of Nov'24.

Figure 251: Trends in client category-wise gross premium turnover in Stock Options at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 4. FY25 data is as of Nov'24.

Share of individuals in currency options (premium) turnover reached an all-time high

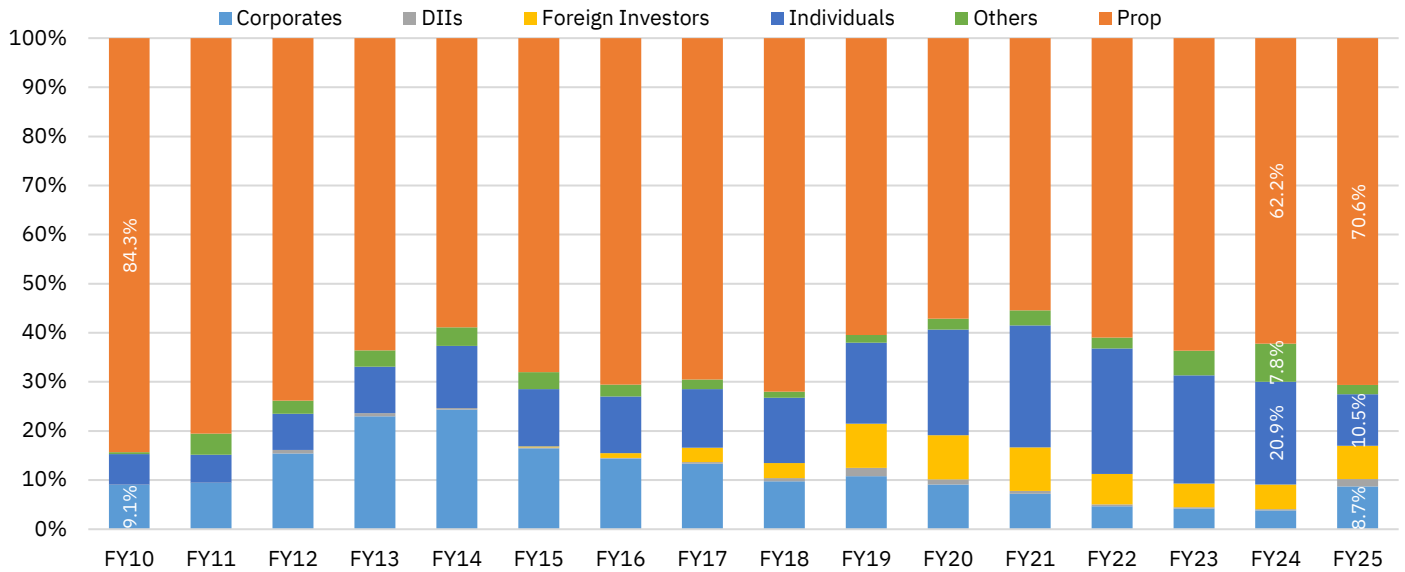
(annual comparison): Proprietary traders' share exhibited a 554bps MoM fall to 80.1% in the currency derivatives segment turnover. The reduction in their share was primarily driven by a 539bps fall in currency futures during the month. On the contrary, corporates' share grew by 2644bps MoM to 7.3% of the segment's notional turnover. On annual comparison, the share of individuals in currency options (premium) turnover reached an all-time high of 36.7%, and that of corporates reached a six-year high of 10.8% in the first eight months of FY25. The share of foreign investors in currency futures saw a steady decline since FY20, and reached a seven-year low of 7%, while that of individual investors reached a 14-year low of 5.8% in.

Table 93: Share of client participation in Currency Derivatives segment (Notional Turnover) of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	7.3	4.7	264	8.7	3.8	491	3.8	4.5
DIIIs	1.0	0.6	37	1.5	0.2	127	0.2	0.4
Foreign investors	6.8	5.4	134	6.8	4.7	208	5.1	6.0
Individuals	3.8	2.8	102	10.5	21.9	(1,142)	20.9	17.6
Prop	80.1	85.6	(554)	70.6	61.6	901	62.2	64.2
Others	1.0	0.8	16	1.9	7.8	(585)	7.8	7.3

Source: NSE EPR.

- Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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3. Figures in brackets indicate negative numbers.
4. Above data represents share in gross turnover i.e., buy-side turnover + sell-side turnover.
5. FY25TD is as of Nov'24.

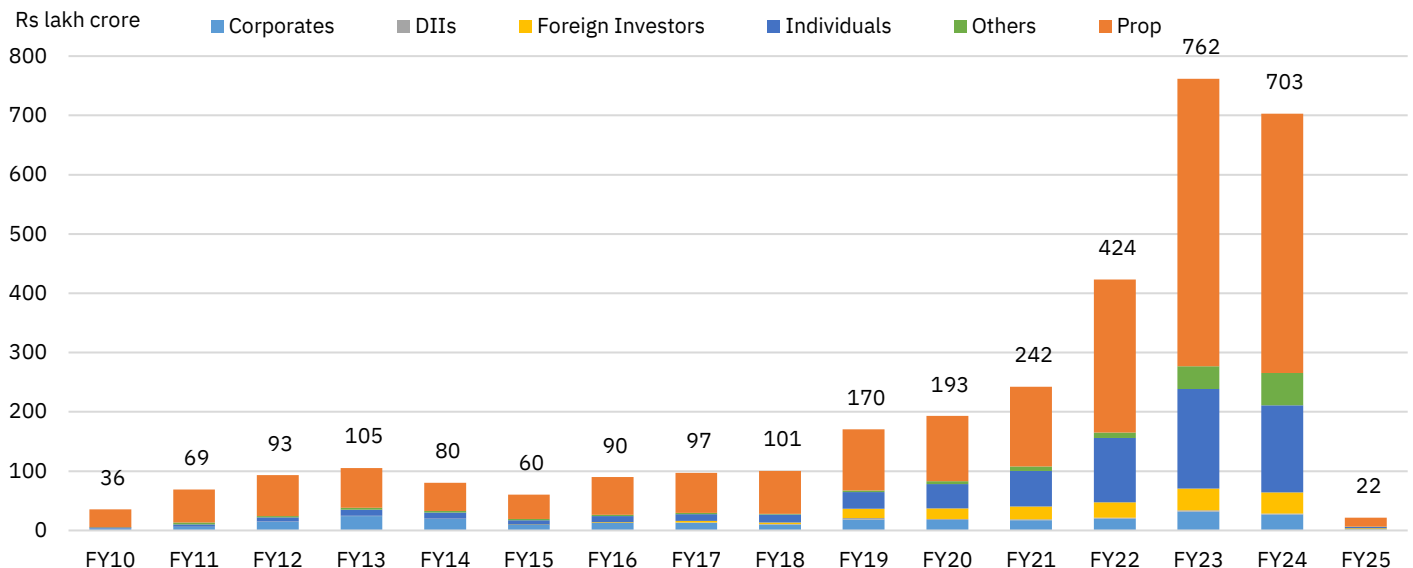
Figure 252: Trends in share of client participation in Currency Derivatives (Notional Turnover) at NSE (%)


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 is as of Nov'24.

Figure 253: Trends in client category-wise gross notional turnover in Currency Derivatives at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 is as of Nov'24.

Table 94: Share of client participation in Currency Futures of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	7.0	4.4	262	8.1	5.4	274	5.9	7.7
DIIs	1.0	0.6	38	1.7	1.0	78	1.0	1.4
Foreign investors	6.8	5.5	138	7.0	8.5	(149)	8.8	8.9
Individuals	3.3	2.4	85	5.8	15.7	(989)	15.2	11.2
Prop	80.9	86.3	(539)	75.5	67.1	831	66.6	68.3
Others	1.0	0.8	16	1.9	2.4	(45)	2.5	2.6

Source: NSE EPR.

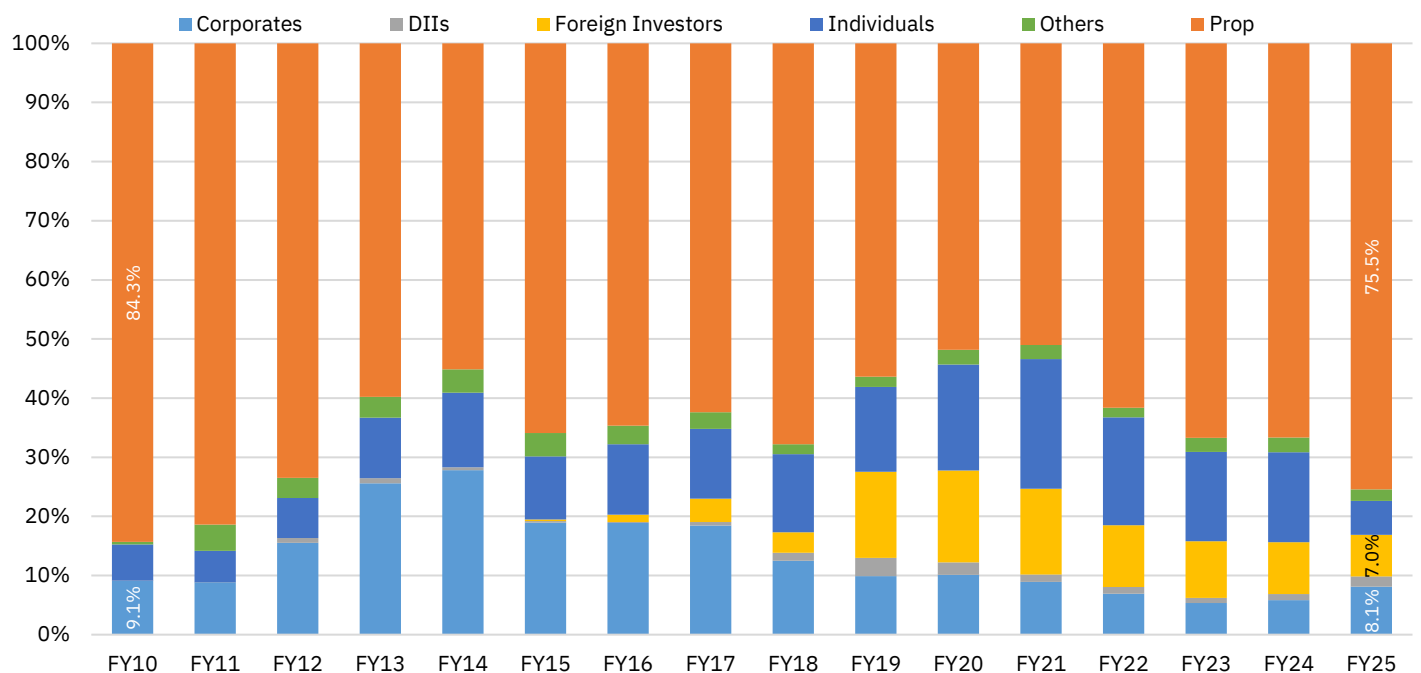
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3. Figures in brackets indicate negative numbers.

4. Above data represents share in gross turnover i.e., buy-side turnover + sell-side turnover.

5. FY25TD is as of Nov'24.

Figure 254: Trends in share of client participation in Currency Futures at NSE (%)


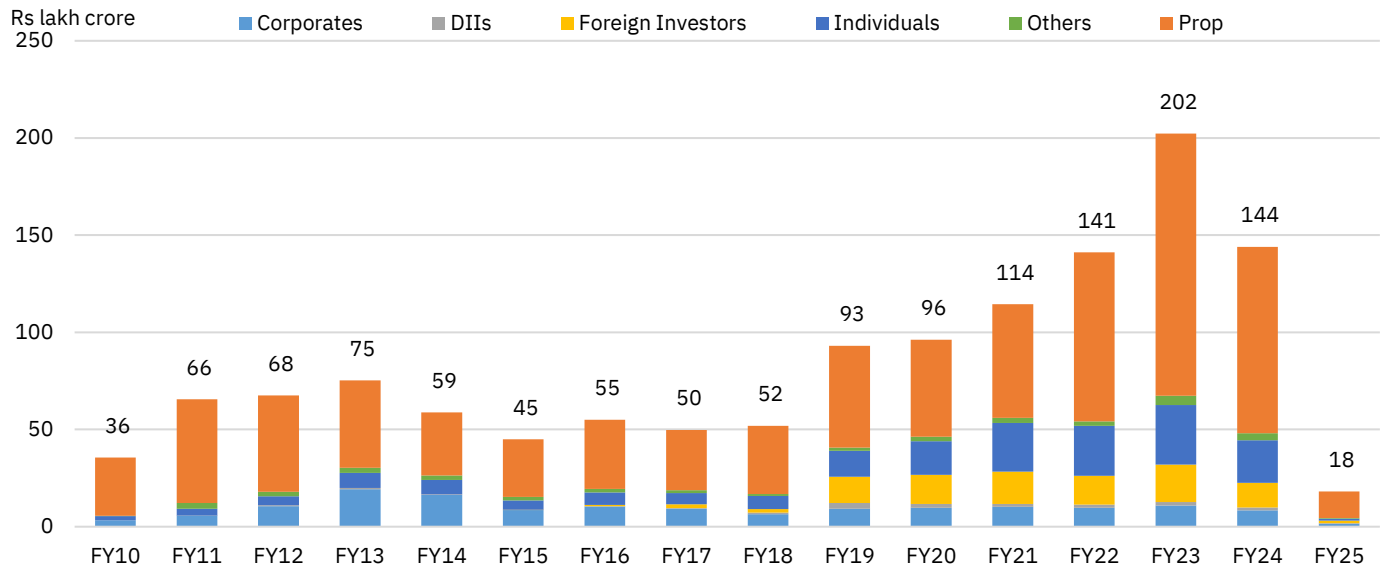
Source: NSE EPR.

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3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 is as of Nov'24.

Figure 255: Trends in client category-wise gross turnover in Currency Futures at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25 is as of Nov'24.

Table 95: Share of client participation in Currency Options (Premium Turnover) of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	37.2	45.3	(818)	10.8	3.6	715	3.7	4.5
DIIs	0.0	0.0	-	0.2	0.0	17	0.0	0.0
Foreign investors	0.0	0.0	-	5.8	4.2	163	4.3	4.9
Individuals	44.1	43.2	96	36.7	22.7	1,396	22.1	20.9
Prop	18.5	11.4	709	45.8	65.8	(2,006)	66.3	66.7
Others	0.3	0.1	13	0.8	3.6	(286)	3.5	3.0

Source: NSE EPR.

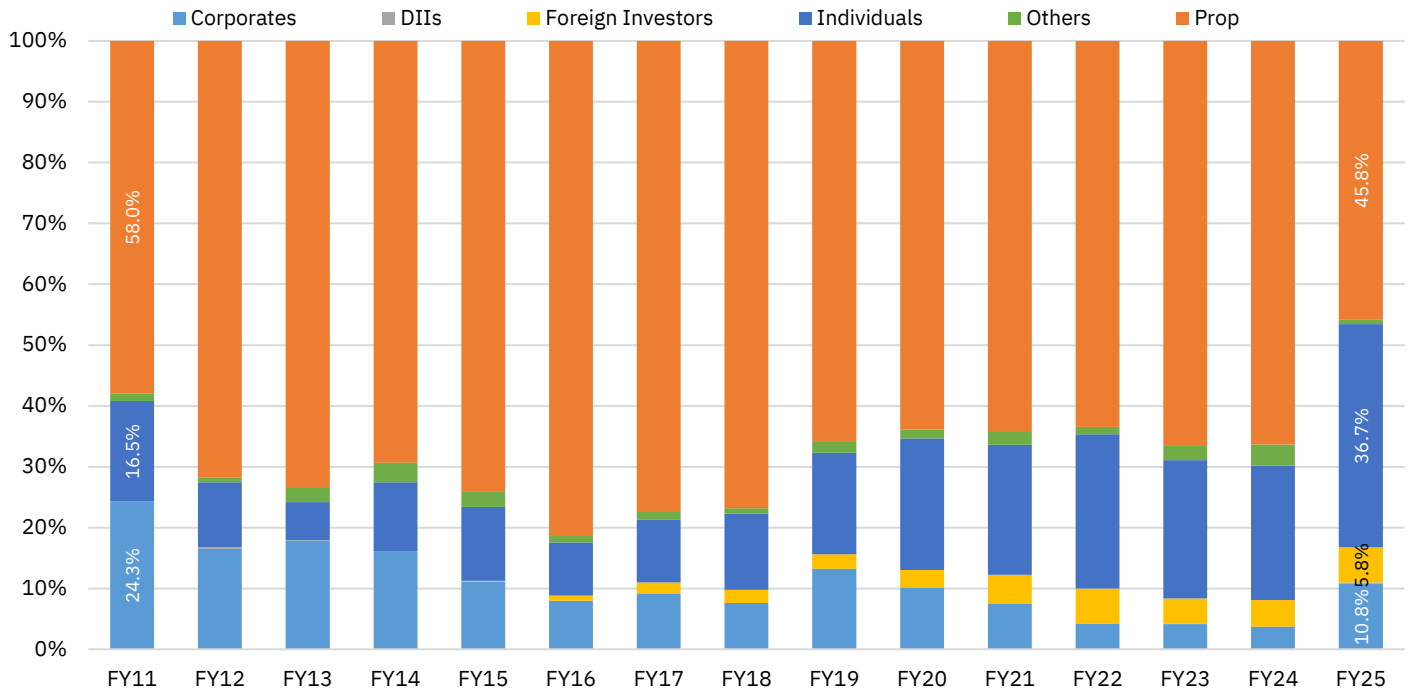
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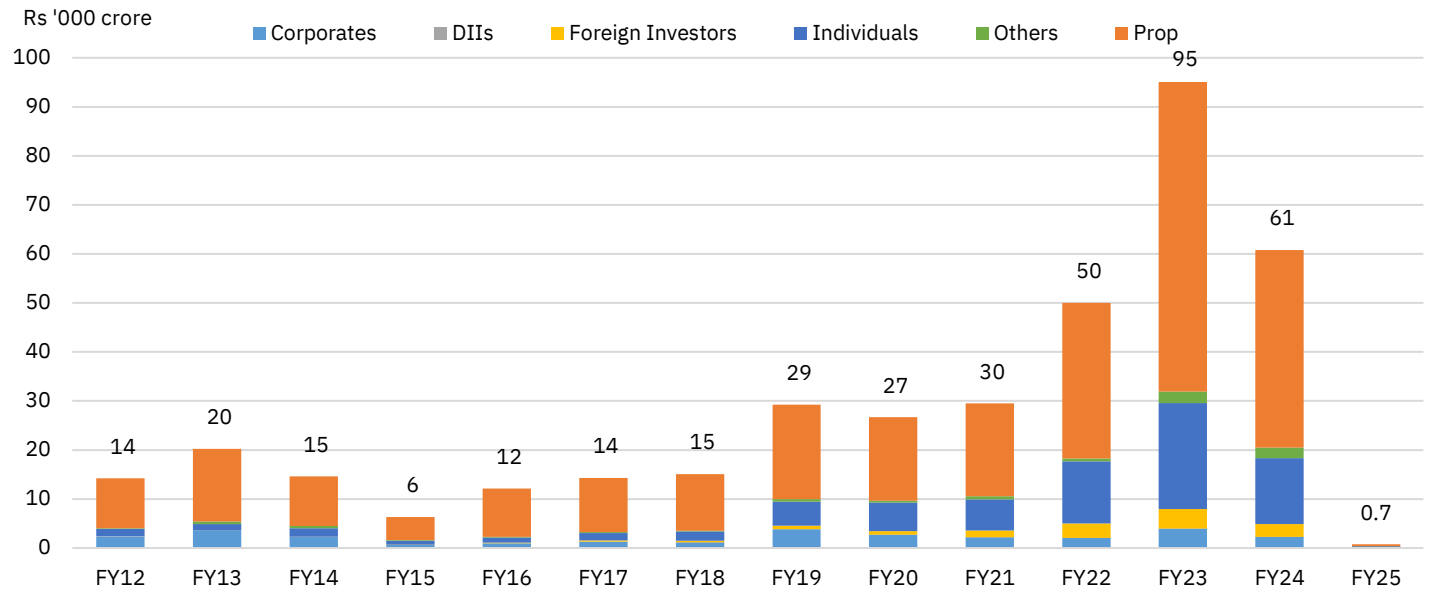
4. Above data represents share in gross turnover i.e., buy-side turnover + sell-side turnover.

5. FY25TD is as of Nov'24.

Figure 256: Trends in share of client participation in Currency Options (Premium Turnover) at NSE (%)


Source: NSE EPR.

- Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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3. Above data represents share in gross premium turnover i.e., buy-side premium turnover + sell-side premium turnover.
4. FY25 is as of Nov'24.

Figure 257: Trends in client category-wise gross premium turnover in Currency Options at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
 2. DII –Bank, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors (FIs) – Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate - Public & Private Companies / Bodies Corporate; Individual – Individual / Proprietorship firms, HUF and NRI; Others – Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop – PRO Trades.
 3. Above data represents share in gross premium turnover i.e., buy-side premium turnover + sell-side premium turnover.
 4. FY25 is as of Nov'24.

Share of corporates in interest rate futures at a 12-year high (annual comparison):

Corporates continued to dominate interest rate futures, bolstered by a 360bps MoM rise in their share in turnover. On annual comparison, the share of corporates increased substantially to 69.9% (+3,030bps MoM) in FY25 till Nov'24 – the highest in last 12 years.

On annual comparison, the share of corporates reached a 12-year high of 69.9% in the first eight months of FY25, while that of proprietary traders reached a 12-year low of 13.4%. Notably, proprietary traders dominated interest rate futures in FY14 with a share of 73.9%. However, over the years, the turnover of proprietary traders in IRFs saw frequent variation, with a substantial reduction since FY20 (barring a marginal uptick in FY24). A similar trend was observed in the turnover of corporates.

Table 96: Share of client participation in Interest Rate Futures of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Corporates	78.3	74.7	360	69.9	39.6	3,030	44.3	67.1
DIIs	0.0	0.0	-	0.0	1.2	(113)	1.0	0.2
Foreign Investors	0.1	0.1	1	0.1	0.2	(11)	0.2	0.1
Individuals	15.1	14.9	23	14.6	5.0	963	7.1	14.9
Prop	3.9	5.9	(201)	13.4	53.8	(4,045)	47.2	16.1
Others	2.6	4.4	(182)	1.9	0.2	176	0.2	1.6

Source: NSE EPR.

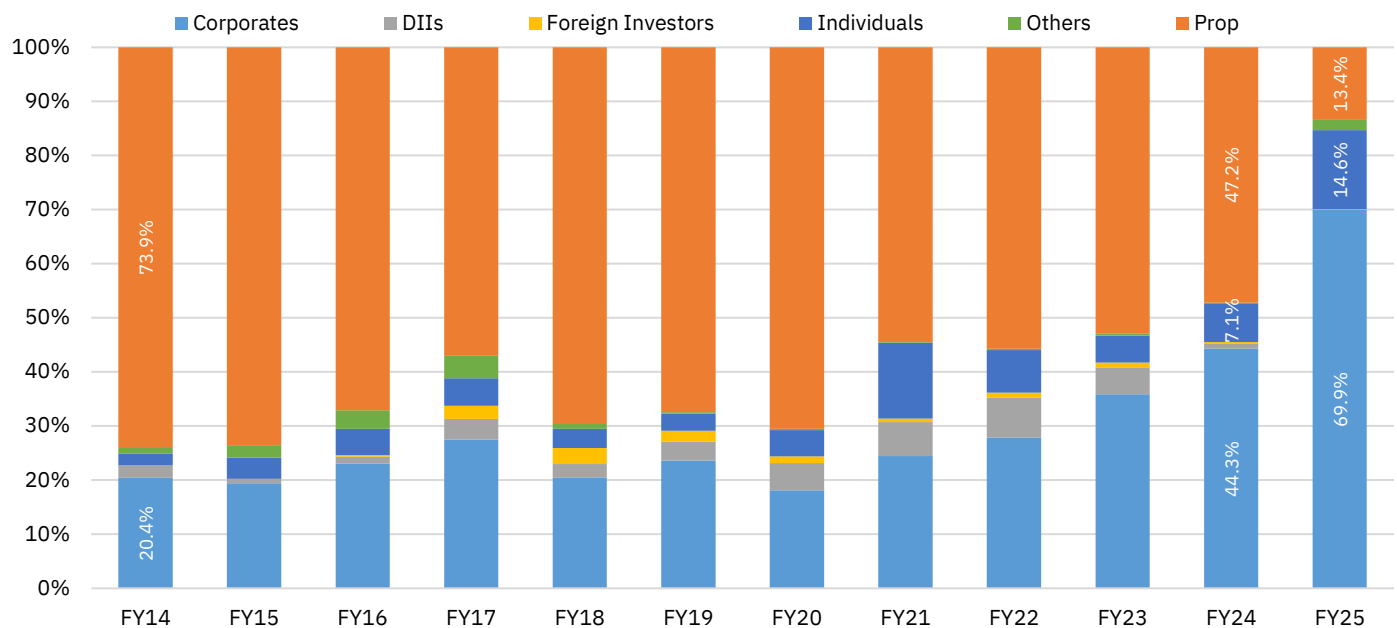
Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Figures in brackets indicate negative numbers.

4. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

5. FY25TD is as of Nov'24.

Figure 258: Trends in share of client participation in Interest Rate Futures at NSE (%)


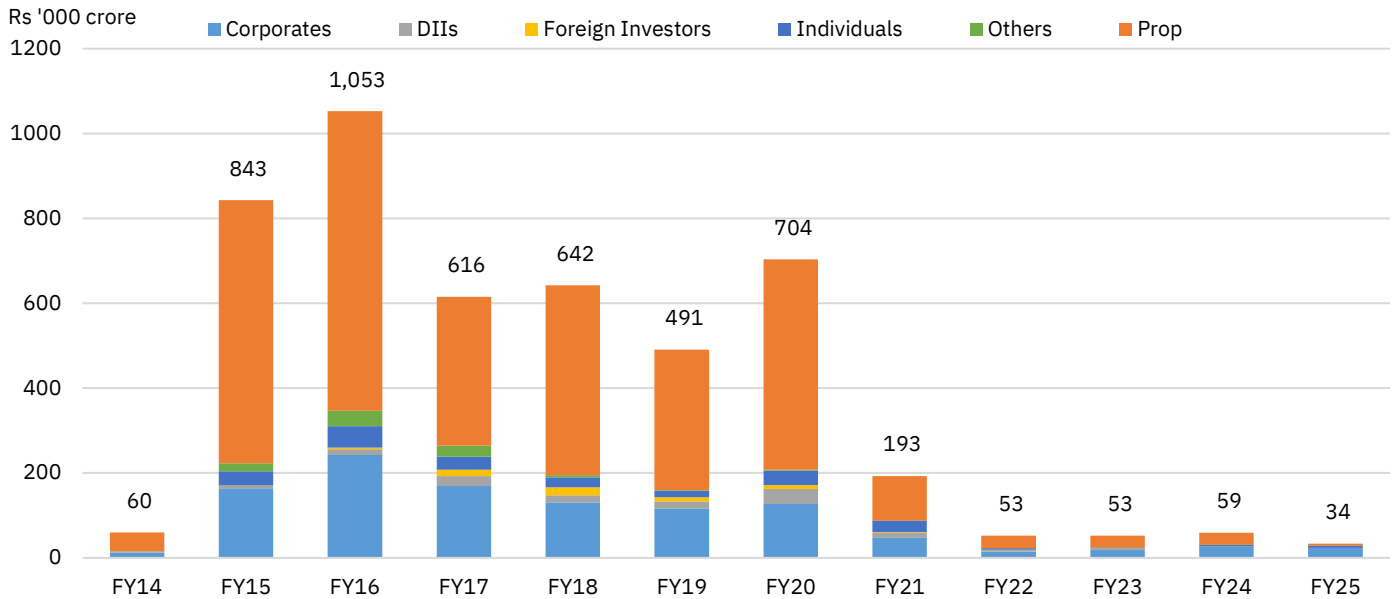
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.

4. FY25TD is as of Nov'24.

Figure 259: Trends in client category-wise gross turnover in Interest Rate Futures at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
 4. FY25 is as of Nov'24.

Share of proprietary traders in commodity futures turnover expanded in November:

The share of proprietary traders recorded a 327bps MoM rise to 78.1% in futures contracts and 71bps MoM rise to 88.3% (based on premium turnover) in options contracts during the last month. On the contrary, individuals (-857bps MoM) recorded a massive reduction in their share in commodity futures turnover.

An annual comparison yields that the share of individuals in commodity options (premium) turnover reached a four-year high of 10.7% in the first eight months of FY25, while their share reached a seven-year high of 14.8% in commodity futures, individuals' share.

Table 97: Share of client participation in Commodity derivatives segment of NSE (%)

Client category	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Commodity Futures								
Corporates	0.0	0.0	-	2.4	2.6	(19)	2.6	1.6
DIIIs	0.0	0.0	-	0.0	0.1	(10)	0.1	0.0
Foreign investors	0.0	0.0	-	0.1	0.3	(14)	0.2	0.1
Individuals	5.9	14.5	(857)	14.8	13.4	133	13.3	12.7
Prop	78.1	74.8	327	77.9	82.6	(464)	82.7	81.9
Others	16.0	10.7	530	4.8	1.0	373	1.0	3.7
Commodity Options (Premium Turnover)								
Corporates	0.4	0.6	(28)	0.4	1.6	(116)	0.9	0.4
DIIIs	0.0	0.0	-	0.0	0.0	-	0.0	0.0
Foreign investors	0.2	0.7	(49)	0.5	0.0	47	0.0	0.4
Individuals	11.1	10.7	47	10.7	4.9	582	9.2	10.6
Prop	88.3	87.6	71	87.3	91.8	(449)	88.7	87.6
Others	0.1	0.5	(40)	1.1	1.7	(64)	1.2	1.0
Commodity Derivatives (Notional Turnover)								
Corporates	0.6	0.9	(30)	0.5	2.5	(201)	0.8	0.5
DIIIs	0.0	0.0	-	0.0	0.1	(6)	0.0	0.0
Foreign investors	0.1	0.1	(3)	0.1	0.1	(4)	0.0	0.1
Individuals	11.9	10.3	165	10.0	9.1	93	10.2	10.1
Prop	87.4	88.6	(126)	88.3	87.0	134	88.2	88.3
Others	0.0	0.1	(6)	1.1	1.3	(17)	0.9	1.0

Source: NSE EPR.

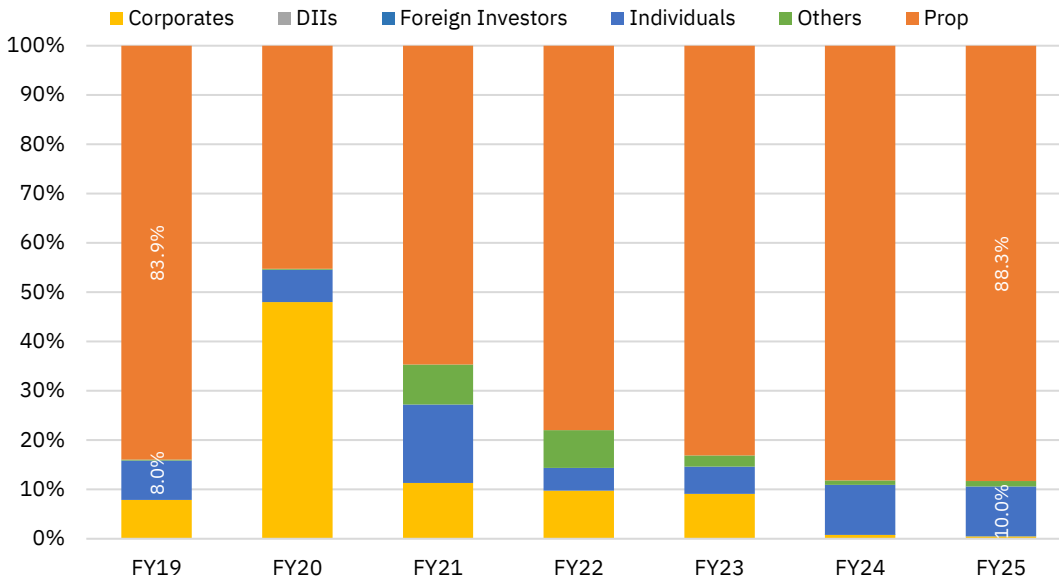
Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

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3. Figures in brackets indicate negative numbers.

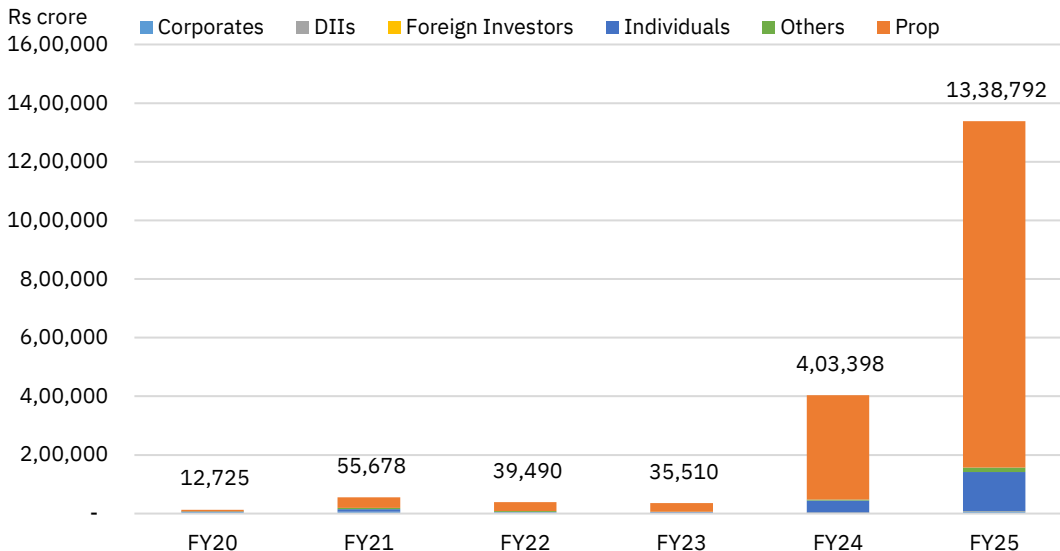
4. Above data represents share in gross turnover i.e., buy-side turnover + sell-side turnover.

5. FY25TD data is as of Nov'24 and FY24TD data is as of Nov'23.

Figure 260: Trends in share of client participation in Commodity Derivatives (Notional Turnover) at NSE (%)


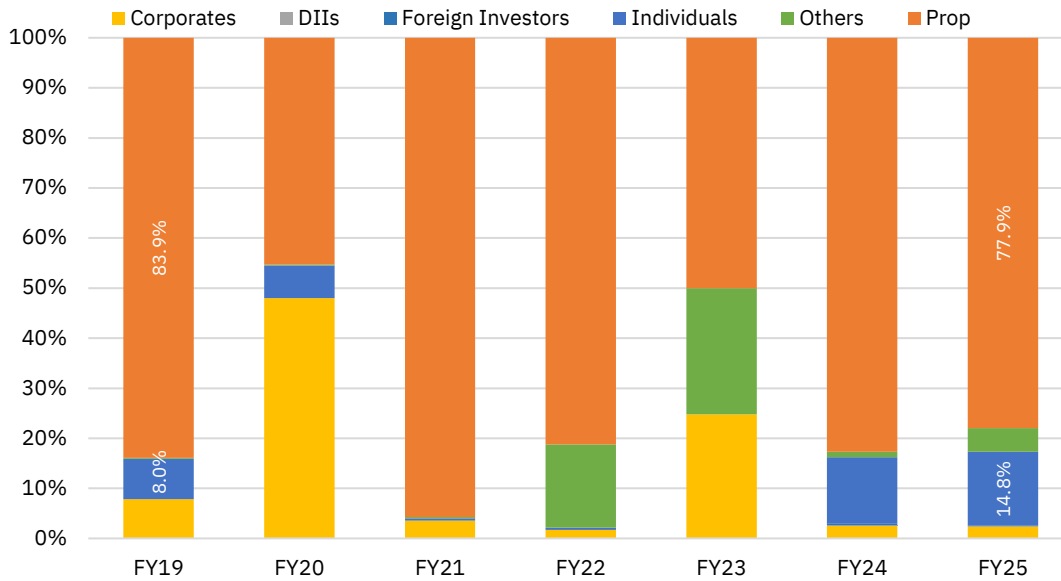
Source: NSE EPR.

- Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
4. FY25 is as of Nov'24.

Figure 261: Trends in client category-wise gross notional turnover in Commodity Derivatives at NSE


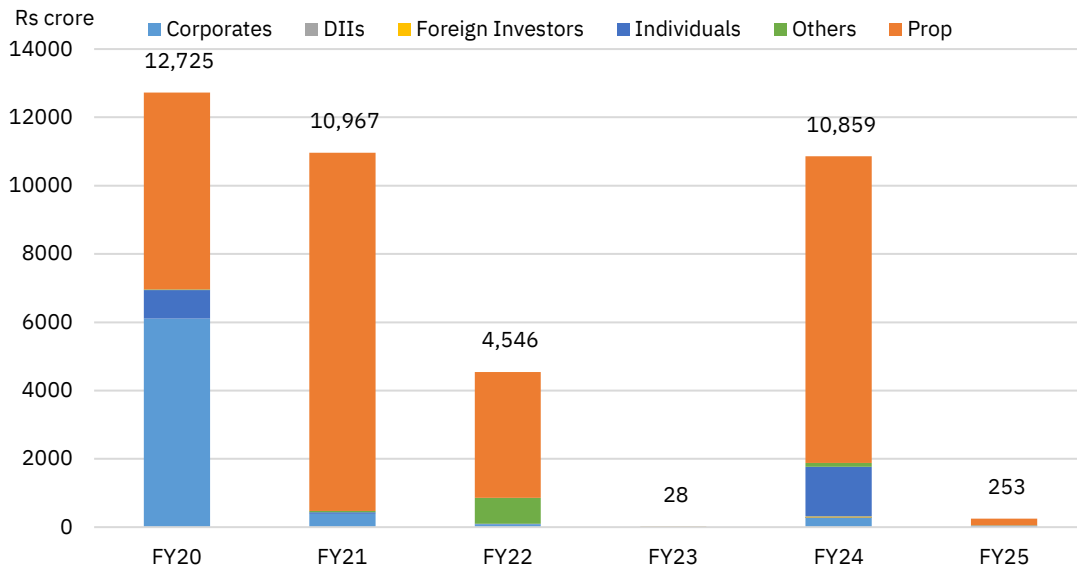
Source: NSE EPR.

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3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
4. FY25 data is as of Nov'24.

Figure 262: Trends in share of client participation in Commodity Futures at NSE (%)


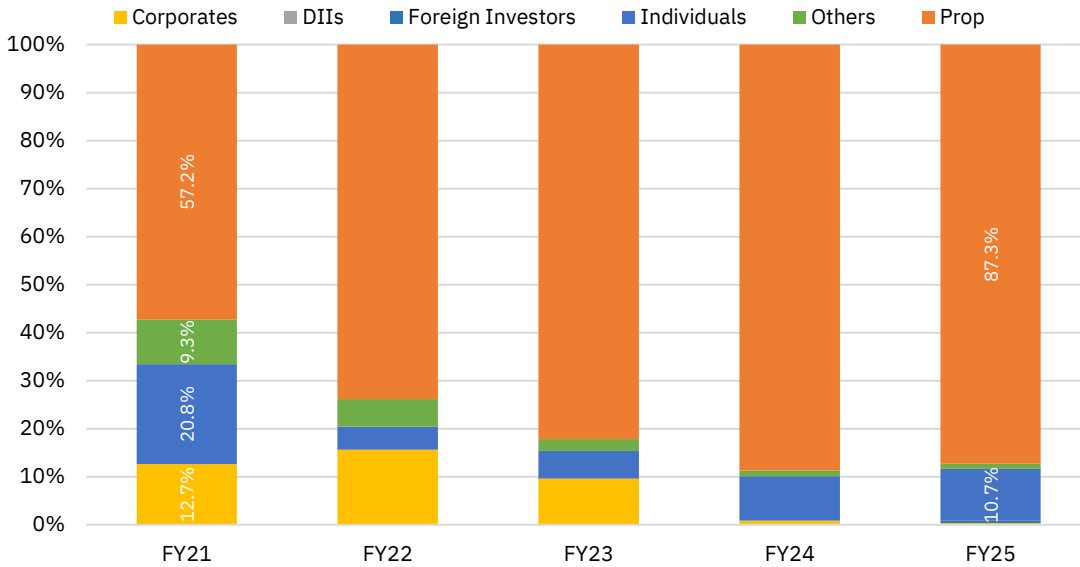
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
 4. FY25 is as of Nov'24.

Figure 263: Trends in client category-wise gross turnover in Commodity Futures at NSE


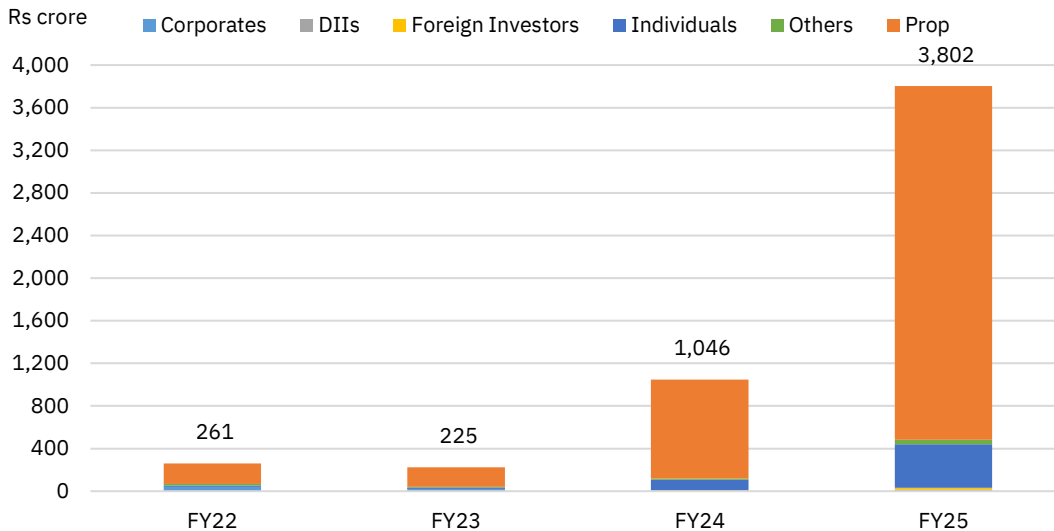
Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
 4. FY25 is as of Nov'24.

Figure 264: Trends in share of client participation in Commodity Options (Premium Turnover) at NSE (%)


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
 4. FY25 is as of Nov'24.

Figure 265: Trends in client category-wise gross premium turnover in Commodity Options at NSE


Source: NSE EPR.

Notes: 1. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.
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 3. Above data represents share in gross notional turnover i.e., buy-side notional turnover + sell-side notional turnover.
 4. FY25 data is as of Nov'24.

Distribution of turnover by modes of trading

Share of DMA stood at record high in NSE's CM segment: During the month gone by, the share of DMA, algo and mobile expanded as the share of other modes declined. It is noteworthy that the share of DMA at 7.8% (+61bps MoM) in November in the NSE's segment is the highest ever monthly share. On annual terms, DMA's share increased meaningfully from a mere 1.3% in FY14 to 5.8% in FY24 and further to 6.9% in the first eight months of FY25 (Apr'24 to Nov'24), highest on annual terms.

The share of Colo continues to be the preferred mode of trading in the NSE CM's segment despite a slight decline by 42bps MoM to 37% in Nov'24. Notwithstanding the decline, Colo's share is still up 206bps YoY to 35.7% in FY25 till date (Apr'24 to Nov'24).

The share of mobile trading stood at 20.2% during the month gone by as the second most preferred mode of trading. On annual comparison, its share rose by 194 bps YoY to 20.8% in the first eight months of FY25, as compared to the same period last year, the highest in the last four years. On the other hand, the shares of non-algo, IBT (Internet-based trading), and SOR (Smart Order Routing) recorded a modest MoM decline. Notably, the share of non-algo trades exhibited a declining trend, accounting for 15.2% of the turnover in FY25 till date.

Table 98: Share of different modes of trading in Capital Market segment of NSE (%)

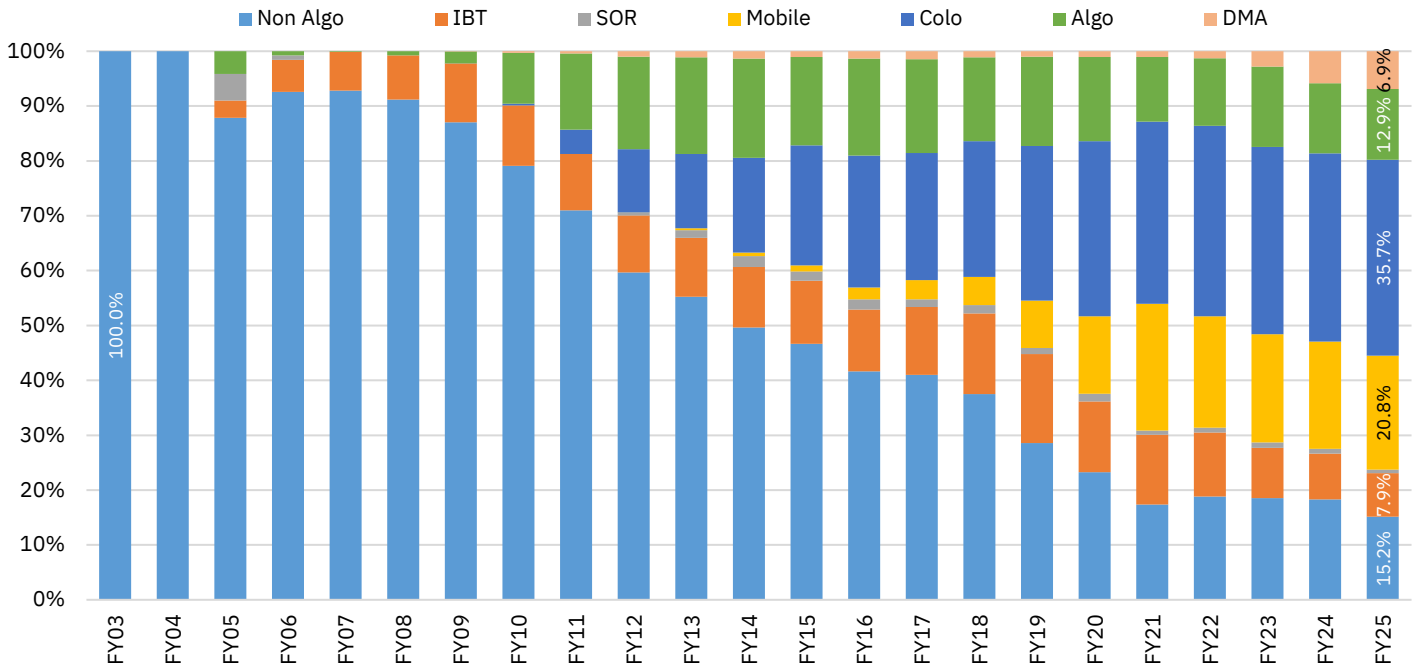
Mode	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Non Algo	12.8	13.3	(55)	15.2	19.0	(385)	18.3	15.6
IBT	7.5	7.6	(7)	7.9	8.4	(50)	8.4	8.0
SOR	0.9	0.9	(3)	0.7	1.0	(32)	0.9	0.7
Mobile	20.2	20.2	2	20.8	18.8	194	19.5	20.6
Colo	37.0	37.4	(42)	35.7	33.6	206	34.3	35.7
Algo	13.8	13.4	44	12.9	13.5	(65)	12.8	12.7
DMA	7.8	7.2	61	6.9	5.6	132	5.8	6.7

Source: NSE EPR

Note: 1. The above figures have been computed on the basis of gross turnover.

2. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access. The above figures are based on gross turnover.

3. FY25TD is as of Nov'24.

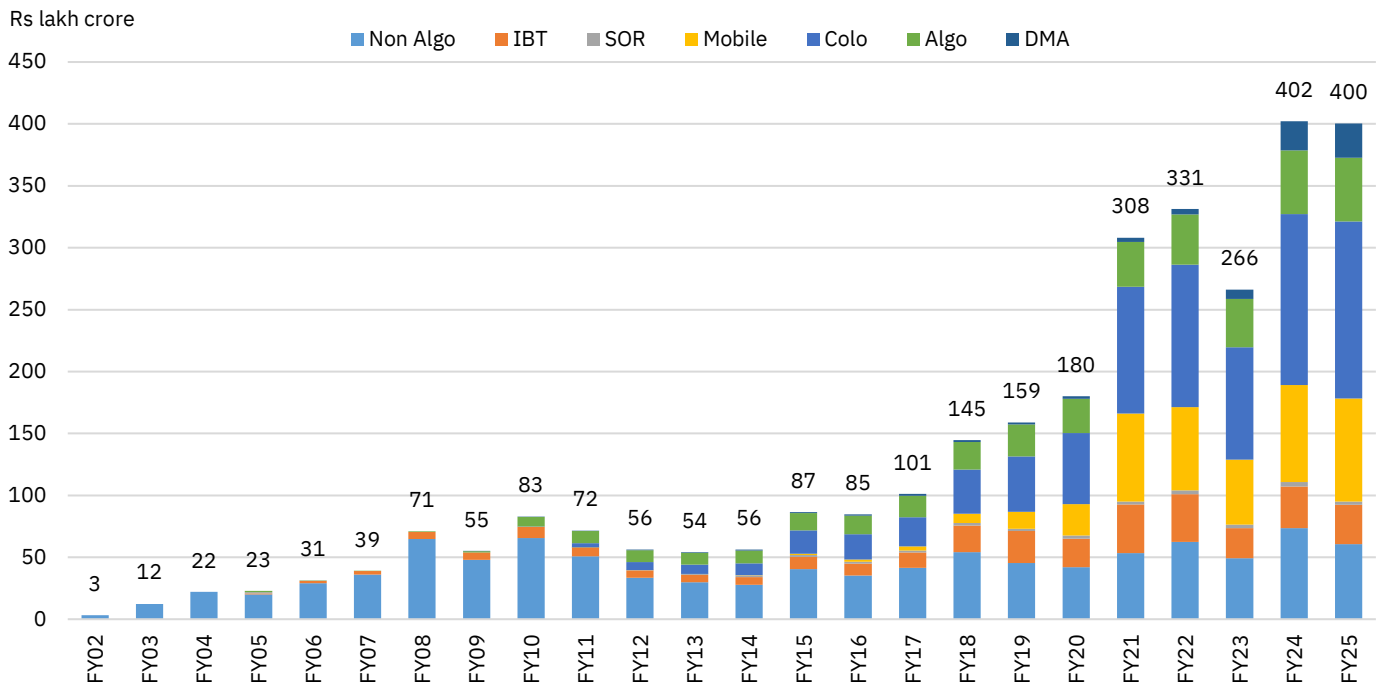
Figure 266: Trends in share of different modes of trading in Capital Market segment at NSE (%)


Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. FY25 is as of Nov'24.

Figure 267: Trends in mode of trading gross turnover in NSE cash market segment


Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. FY25 is as of Nov'24.

Share of Colocation expanded while the share of other modes declined in equity derivatives:

The share of Colo in equity derivatives turnover increased by 248bps MoM to 62.8% in Nov'24 after three consecutive monthly declines. Notably, its share was the highest on monthly basis in the last eight months. Colocation has been the dominant mode of trading since FY15, with its share steadily rising over the years. On annual comparison, the share of Colocation trading increased 130bps YoY to 61.7% in FY25 till date (Apr'24 to Nov'24), the highest on annual terms.

On the contrary, all other modes of trading experienced a MoM decline. Mobile trading, which holds the second-largest share, registered a decline of 105bps MoM after consecutive three-month increase. Non-Algo, which was a dominant mode of trading until FY14, has seen its share decline steadily, now standing at just 4.4% in the first eight months of FY25 – the lowest since its inception. The share of IBT has also been gradually declining over the years. On a YoY basis, its share declined 115 bps to 7.8% in FY25 till date (Apr'24 to Nov'24), while it declined 31 bps MoM to 7.5% during the month gone by.

Table 99: Share of different modes of trading in Equity Derivatives segment (Notional turnover) of NSE (%)

Mode	Nov-24	Oct-24	MoM chg (bps)	FY25TD	FY24TD	YoY Chg (bps)	FY24	CY24TD
Non Algo	3.8	3.9	(9)	4.4	7.4	(304)	6.4	4.5
IBT	7.5	7.8	(31)	7.8	9.0	(115)	8.6	7.8
Mobile	16.9	17.9	(105)	17.2	17.7	(50)	17.4	17.1
Colo	62.8	60.3	248	61.7	60.4	130	61.6	62.2
Algo	2.1	2.1	(3)	2.2	1.0	121	1.4	2.2
DMA	7.0	8.0	(100)	6.7	4.5	219	4.6	6.1

Source: NSE EPR

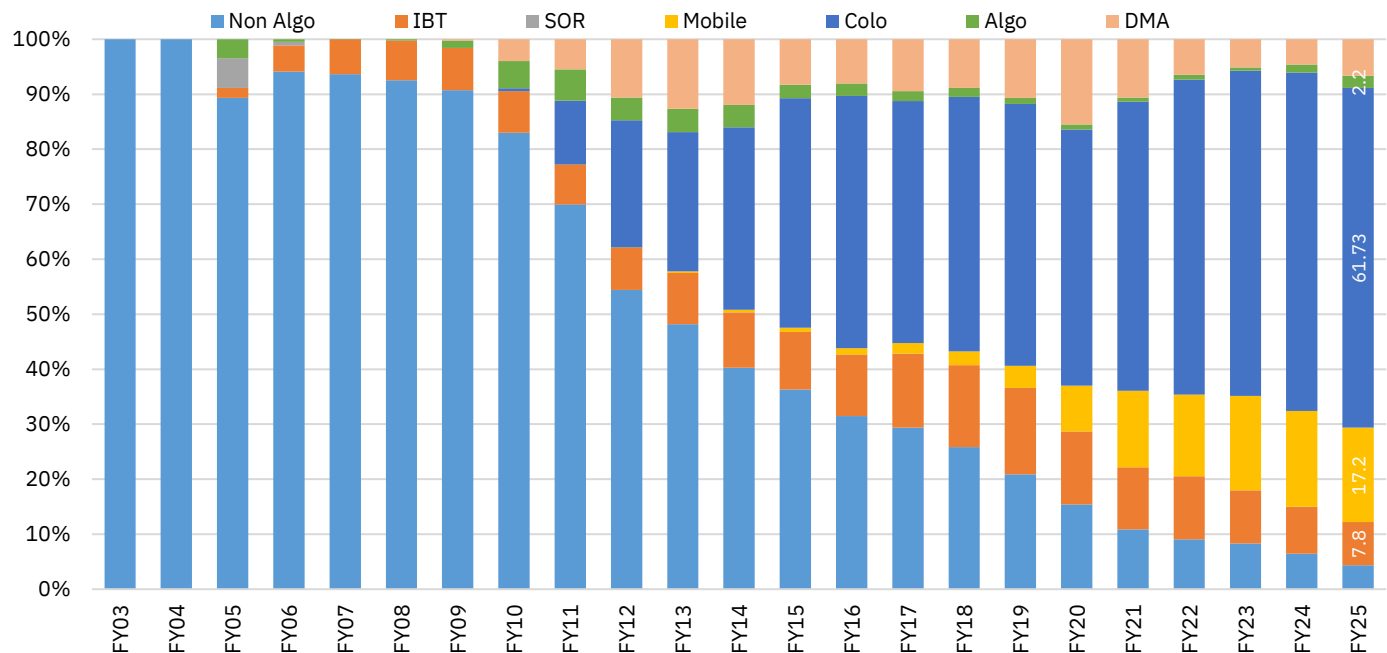
Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. Notional turnover considered in the case of futures and options.

4. FY25TD is as of Nov'24.

Figure 268: Trends in share of different modes of trading in Equity Derivatives segment at NSE (%)



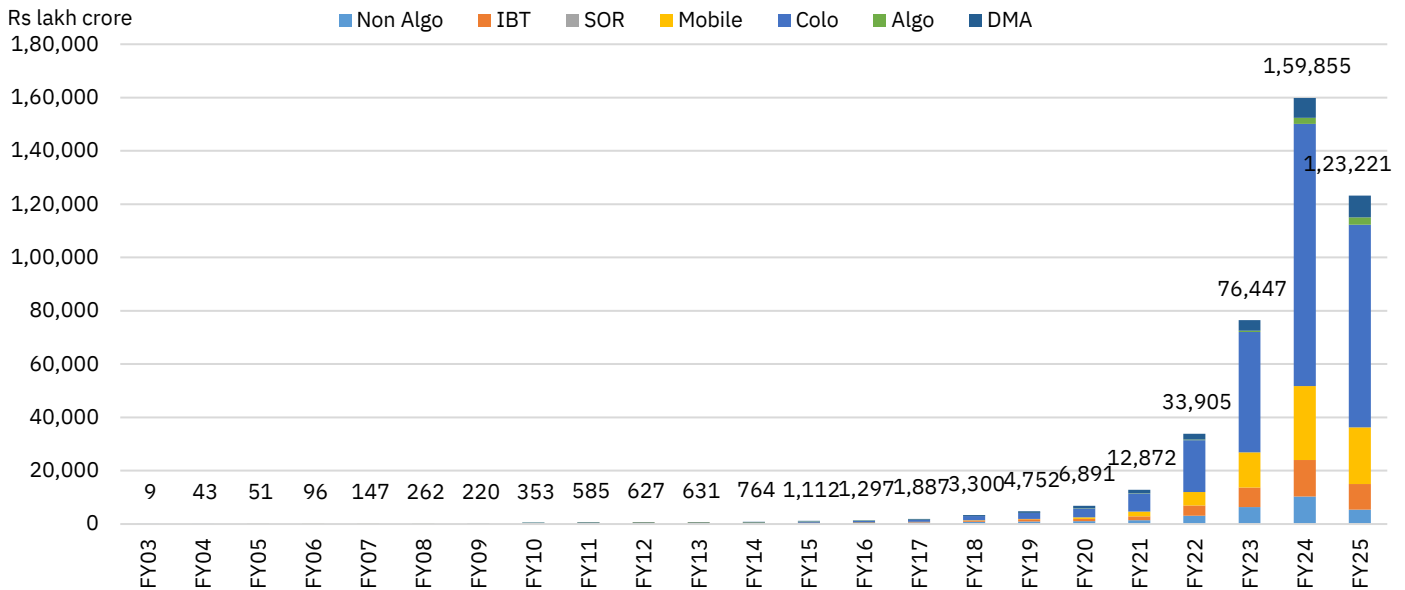
Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. Notional turnover considered in the case of futures and options.

4. FY25 data is as of Nov'24.

Figure 269: Trends in mode of trading in terms of gross notional turnover in NSE equity derivatives segment


Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. FY25 is as of Nov'24.

Share of non-algo trades declined in currency derivatives segment in November: The share of non-algo mode of trading recorded 380bps MoM decline to 88.7% in Nov'24. However, on annual comparison, its share surged to 72.6% (+4,658bps YoY), the highest level in the last thirteen years. Non-Algo held a dominant position in currency derivatives until FY15, when it accounted for 51.2% of the market share. However, its share declined steadily thereafter, dropping to 26.1% in FY24, before resurging in FY25. It is also noteworthy that during the period from FY15 to FY24, the share of Colocation, Mobile, IBT & DMA increased as the turnover of the segment increased, however, the trend reversed as the overall turnover declined in the first eight months of FY25. Colocation, that had been a dominant trading mode from FY16 to FY24, has seen its share steadily decline reaching just 10.1% in the first eight months of FY25.

Table 100: Share of different modes of trading in Currency Derivatives segment of NSE (%)

Mode	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Non Algo	88.7	92.5	(380)	72.6	26.1	4658	26.1	31.6
IBT	2.3	1.6	72	6.3	9.6	(336)	9.3	8.3
Mobile	3.0	2.0	99	6.5	11.9	(534)	11.3	9.3
Colo	3.0	1.7	130	10.1	46.2	(3611)	46.7	43.5
Algo	0.9	0.6	30	0.9	1.3	(40)	1.3	1.8
DMA	2.1	1.6	50	3.6	4.9	(137)	5.2	5.6

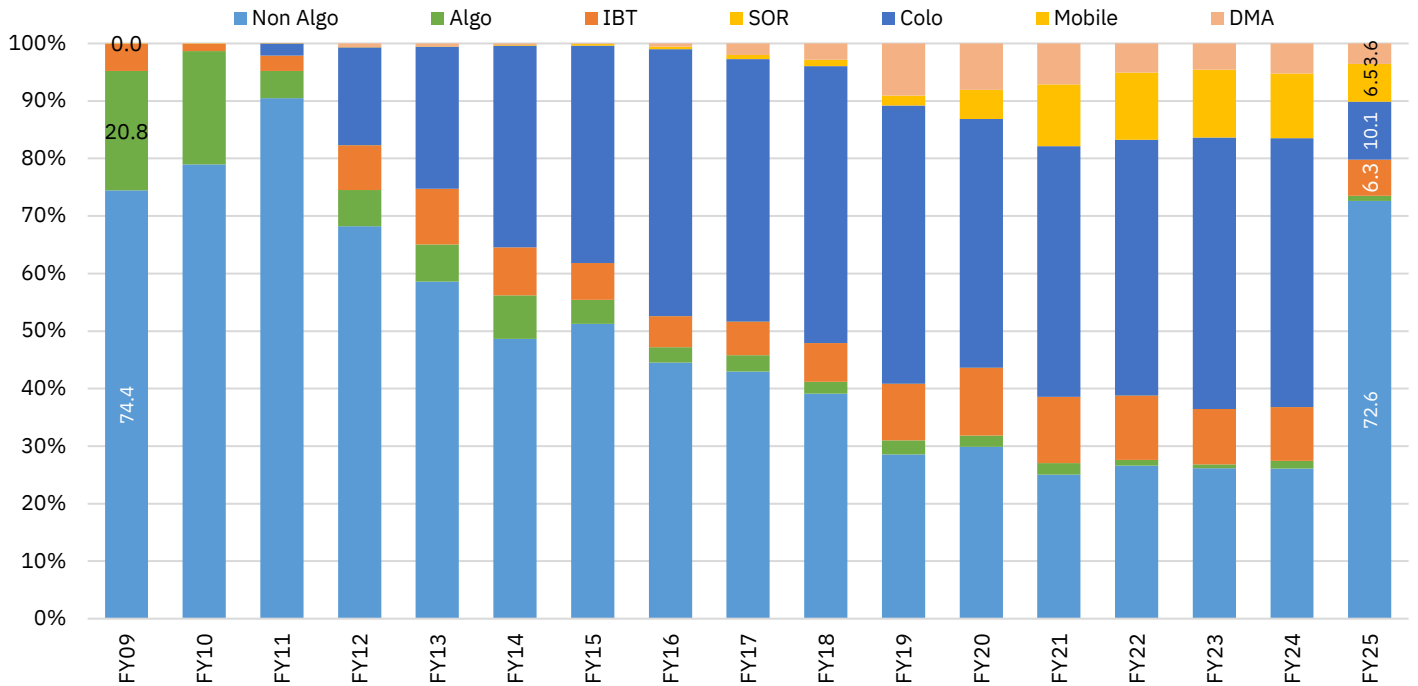
Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. Notional turnover considered in the case of futures and options.

4. FY25TD is as of Nov'24.

Figure 270: Trends in share of different modes of trading in Currency Derivatives segment at NSE (%)


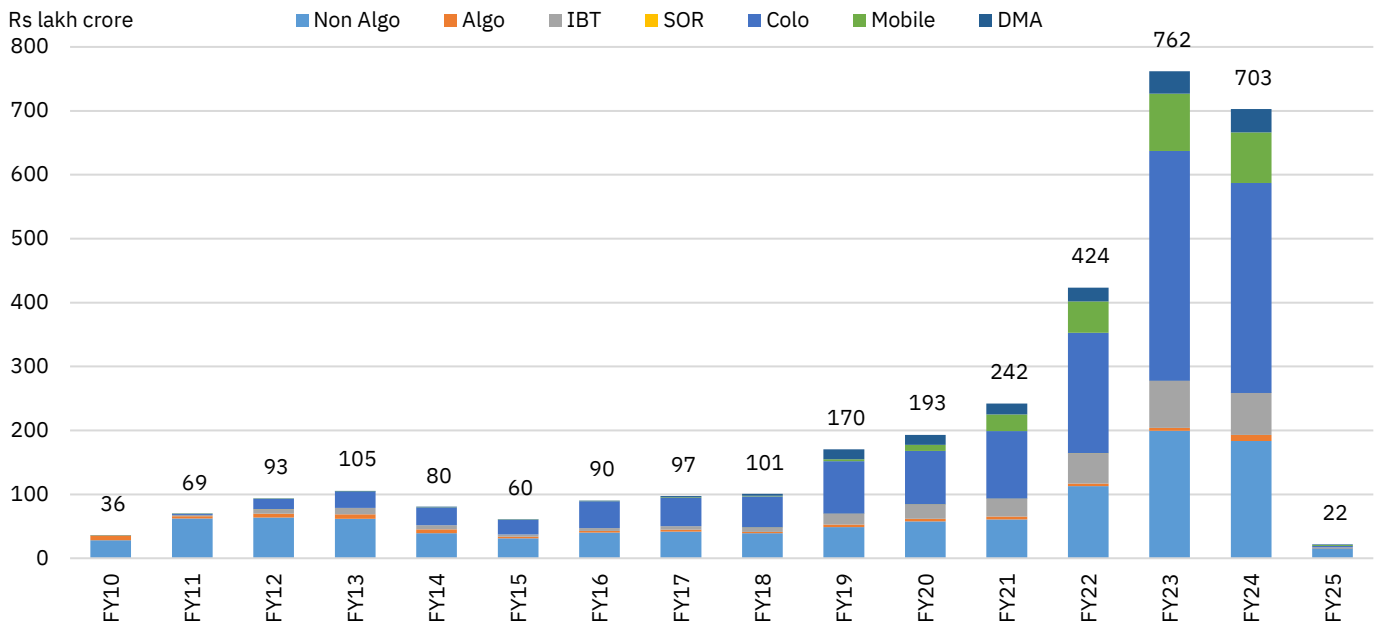
Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. Notional turnover considered in the case of futures and options.

4. FY25 is as of Nov'24.

Figure 271: Trends in mode of trading in terms of gross notional turnover in NSE currency derivatives segment


Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. FY25 is as of Nov'24.

Non Algo continued to dominate Interest rate derivatives segment: Non-Algo trading continued to dominate the interest rate derivatives segment, even as its share declined to 54.2% (-138bps MoM) in November. An annual comparison yields an overall decline in the share of Non-Algo mode of trading, from 86% in FY19 to 48.1% in FY25, reflecting a gradual shift away from traditional trading methods

On the contrary, the share of DMA inched up to 19.8% (+233bps MoM) in the previous month. DMA's share has rapidly increased from 2.5% in FY19 to 14.8% in FY24, and further to 19.1% in the first eight months of FY25, reflecting its growing popularity. Meanwhile, Colo saw a marginal decline of 70 bps MoM to 16.4% in Nov'24. However, its share in the first eight months of FY25 (19.7%) is higher than the 15.8% in FY24, indicating growth over the past year. Mobile trading, which was negligible until FY17, has steadily gained ground and reached 2.1% in FY25, highlighting the rise in adoption of mobile platforms for trading.

Table 101: Share of different modes of trading in Interest Rate Derivatives segment of NSE (%)

Mode	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Non Algo	54.2	55.6	(138)	48.1	56.3	(824)	54.3	47.9
IBT	8.8	8.8	4	11.1	12.1	(103)	13.1	11.9
Mobile	0.8	1.1	(29)	2.1	1.6	51	2.0	2.5
Colo	16.4	17.1	(70)	19.7	16.1	354	15.8	18.8
Algo	-	-	0	-	0.0	(1)	0.0	0.0
DMA	19.8	17.4	233	19.1	13.9	524	14.8	18.9

Source: NSE EPR.

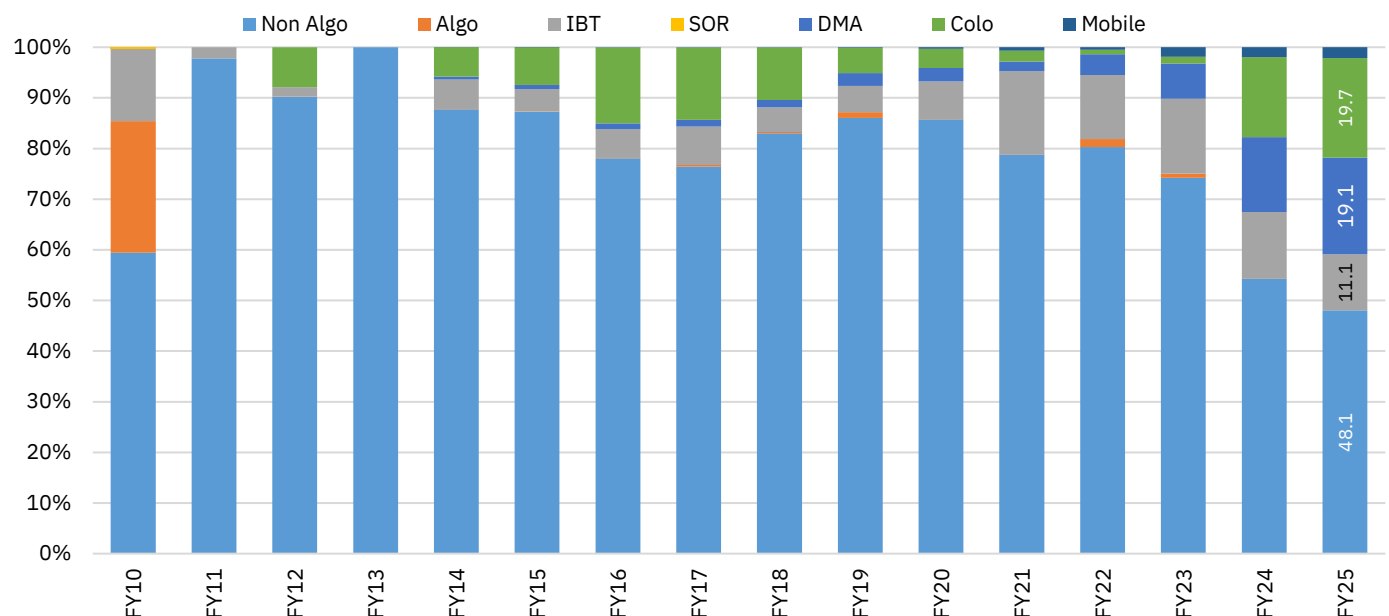
Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. Notional turnover considered in the case of futures and options.

4. FY25TD is as of Nov'24.

Figure 272: Trends in share of different modes of trading in Interest Rate Derivatives segment at NSE (%)



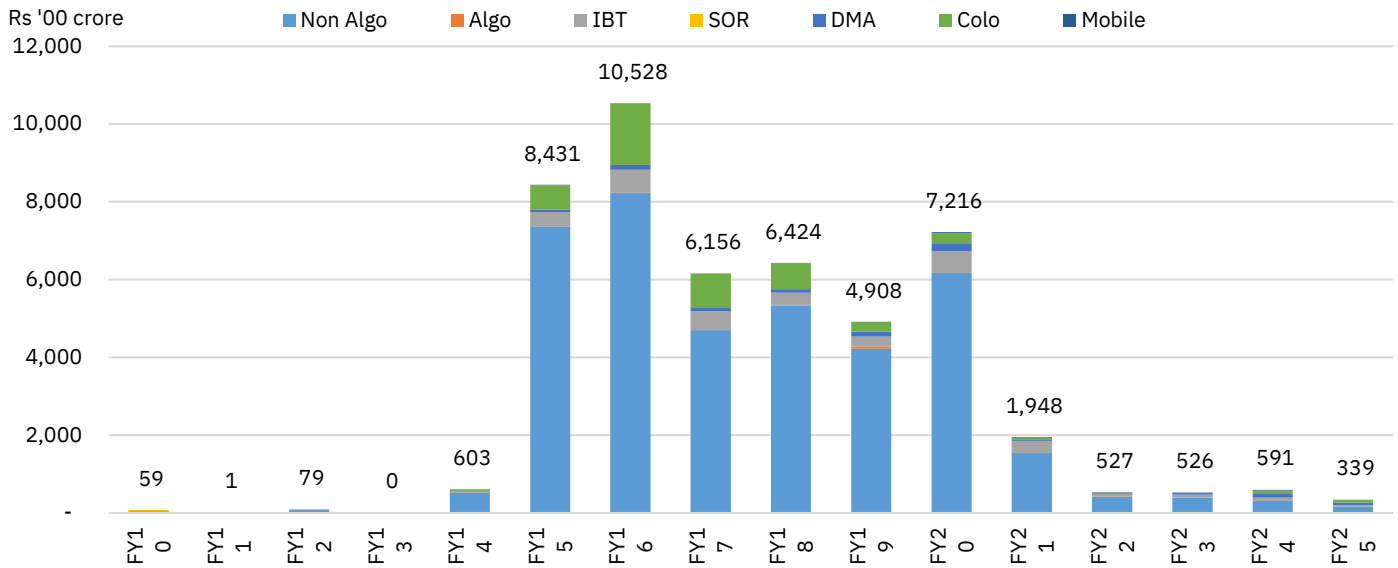
Source: NSE EPR.

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. Notional turnover considered in case of futures and options.

4. FY25 is as of Nov'24.

Figure 273: Trends in mode of trading in terms of gross notional turnover in Interest Rate Derivatives segment


Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. FY25 is as of Nov'24.

Non-Algo continued to dominate the Commodity Derivatives segment, albeit with a reduced share in Nov'24: Non-Algo, which was the second-largest mode of trading until FY23, experienced a significant shift in recent years. Its share gradually declined from 38.5% in FY19 to 23.9% in FY23. However, in FY24, Non-Algo trading mode's share more than doubled to 65.8% and further increased to 66.7% in the first eight months of FY25, indicating a strong resurgence. On the other hand, Algo, which had been the dominant mode of trading until FY23, saw a dramatic decline in its share. Its share declined from 71.6% in FY23 to 33.2% in FY24 and fell further to 31% in FY25. Despite this decline, Algo's share on a MoM basis stood at 35.3% in November 2024, marking a three-month high.

Mobile trading and IBT hold smaller shares in the market. Mobile trading, which has grown over the years, reached 1.1% in the first eight months of FY25 and 2.1% (123 bps MoM) during the month gone by – highest on monthly comparison. In contrast, IBT experienced a decline of 108 bps compared to the same period last year, however, gained on monthly basis. This trend highlights the significant shift in the trading landscape, with non-Algo emerging as the dominant mode of trading, while Algo sees a continued decline.

Table 102: Share of different modes of trading in Commodity Derivatives segment (%)

Mode	Nov-24	Oct-24	MoM change (bps)	FY25TD	FY24TD	YoY Change (bps)	FY24	CY24TD
Non Algo	61.3	63.7	(239)	66.7	41.0	2576	65.8	67.1
IBT	1.3	0.9	39	1.1	2.2	(108)	1.0	1.0
Mobile	2.1	0.9	123	1.1	0.1	104	0.1	0.9
Algo	35.3	34.5	77	31.0	56.7	(2574)	33.2	30.9
DMA	0.0	-	0	0.0	0.0	1	0.0	0.0

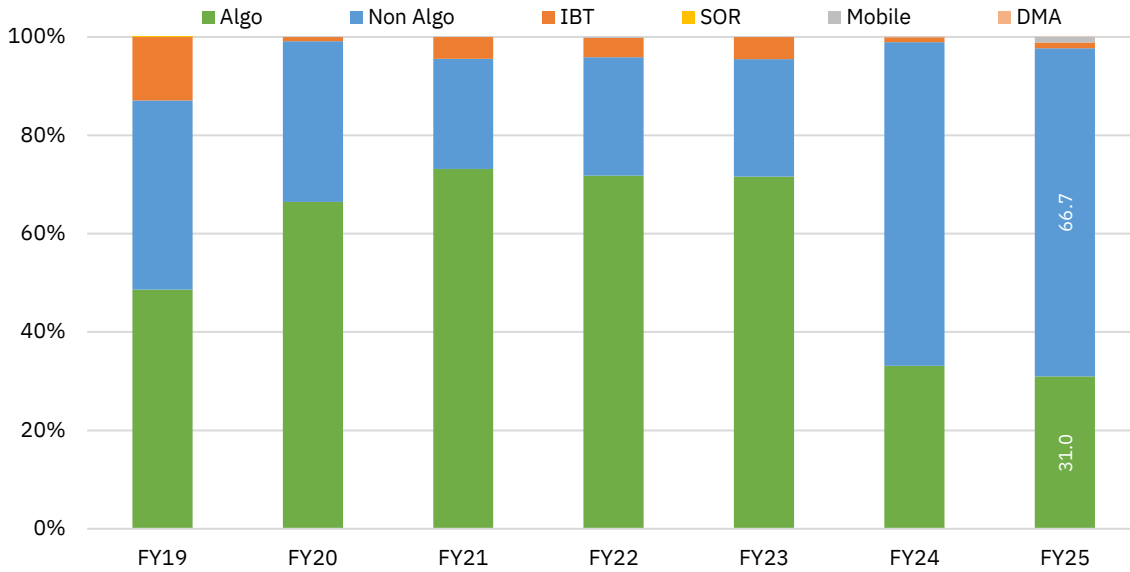
Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. Notional turnover considered in case of futures and options.

4. FY25TD is Nov'24.

Figure 274: Trends in share of different modes of trading in Commodity Derivatives segment at NSE (%)


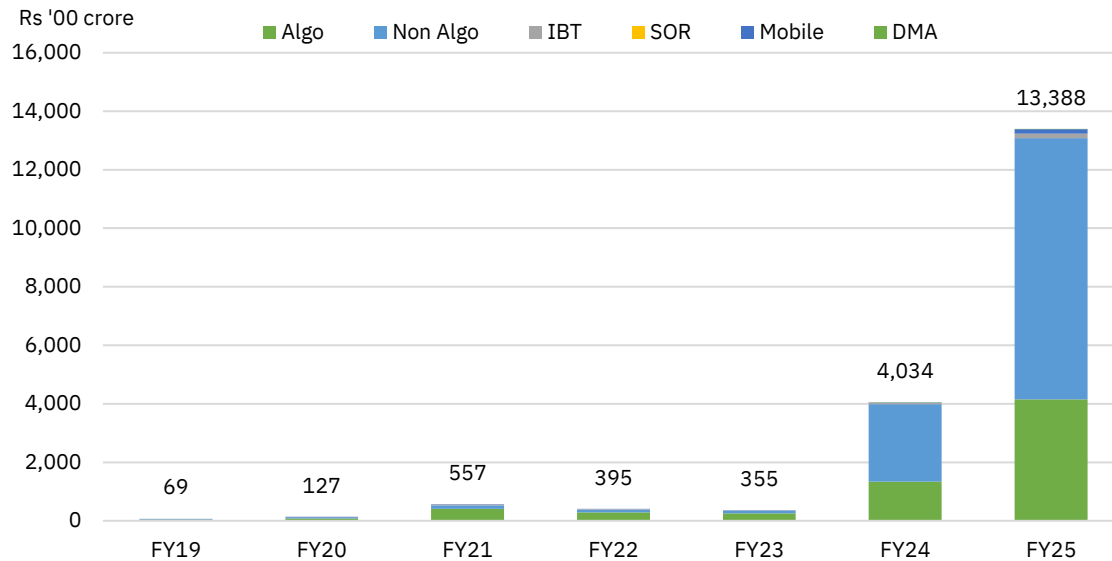
Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

2. The above figures have been computed on the basis of gross turnover.

3. Notional turnover considered in the case of futures and options.

4. FY25TD is as of Nov'24.

Figure 275: Trends in mode of trading in terms of gross notional turnover in Commodity Derivatives segment


Source: NSE EPR

Note: 1. IBT- Internet-based Trades, SOR – Smart Order Routing, Colo – Colocation, DMA – Direct Market Access.

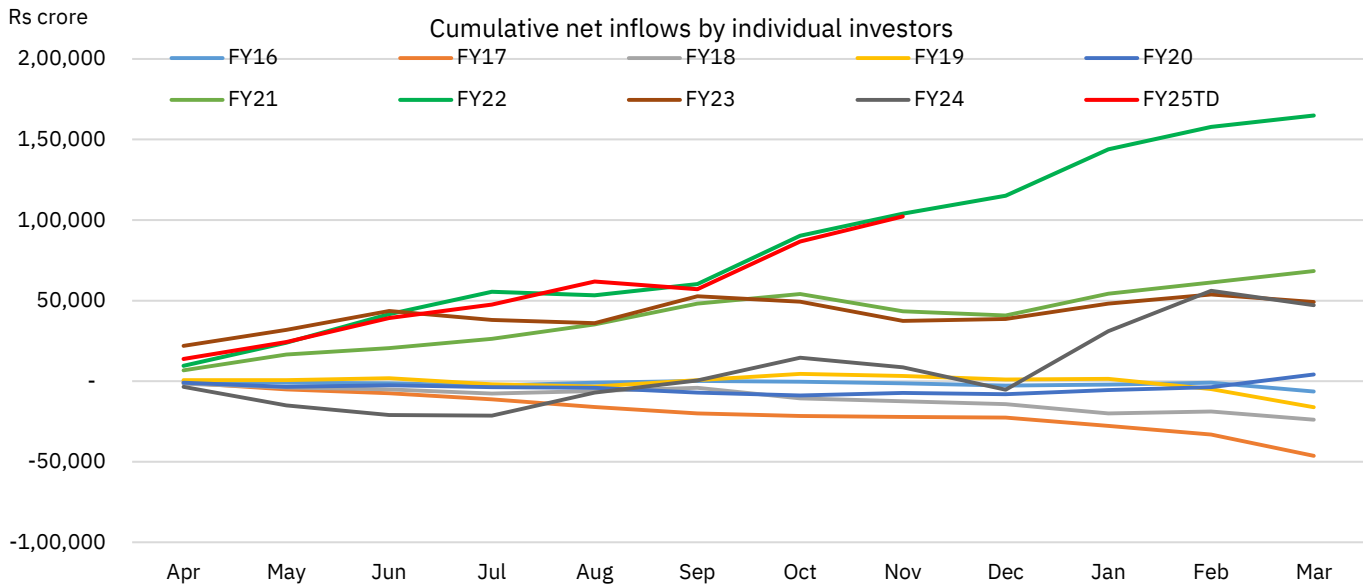
2. The above figures have been computed on the basis of gross turnover.

3. FY25TD data is as of Nov'24.

Individual investors' activity in NSE's CM and derivatives segment

Net inflows by individual investors in NSE's CM segment witnessed a strong recovery in FY25: After reaching a peak of Rs 1.65 lakh crore in FY22 driven by heightened participation during the pandemic, individual investors' inflows moderated in the subsequent two years reflecting a shift from direct participation to indirect avenues such as mutual funds. However, individuals' participation picked up again in FY25, with net inflows rising to Rs 1.02 lakh crore during the first eight months of the fiscal year (As on November 30th, 2024), nearly twice the inflows seen in the whole of the previous fiscal year. The long-term cumulative trend highlights a remarkable shift in individual investors' participation post the pandemic, with FY21 and FY25 emerging as standout years, underscoring the growing retail engagement in Indian equity markets.

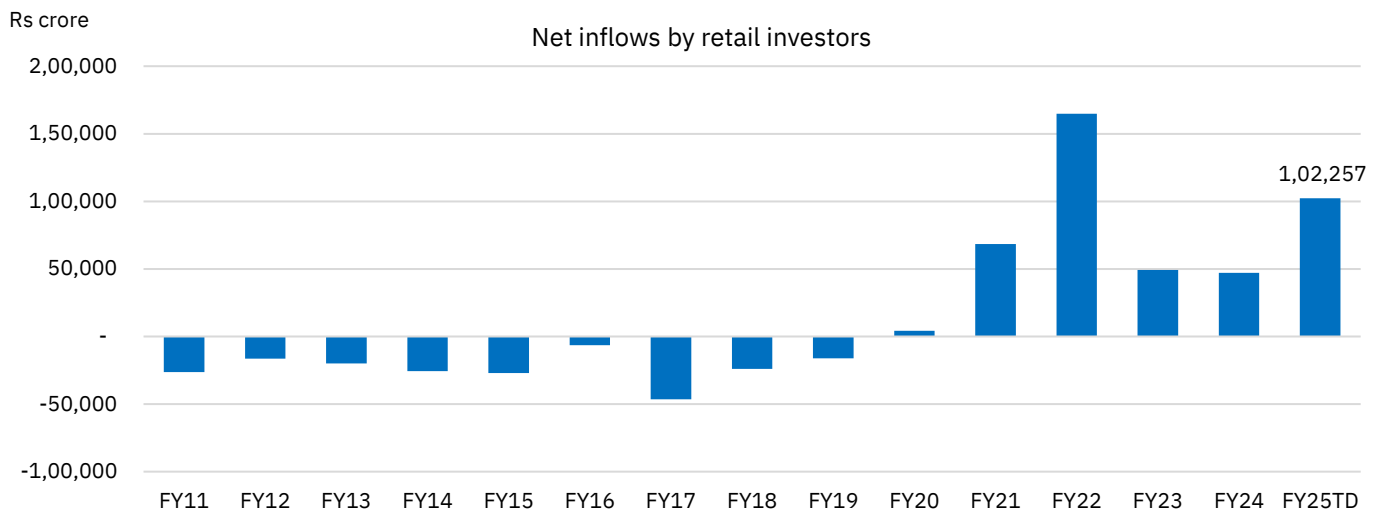
Figure 276: Overall cumulative net inflows of individual investors in NSE's CM segment in last ten fiscal years



Source: NSE EPR

Note: 1. Individual investors include individual domestic investors, NRIs, sole proprietorship firms and HUFs.
2. FY25TD data is as of Nov'24.

Figure 277: Annual trend of net inflows of individual investors in NSE's CM segment



Source: NSE EPR.

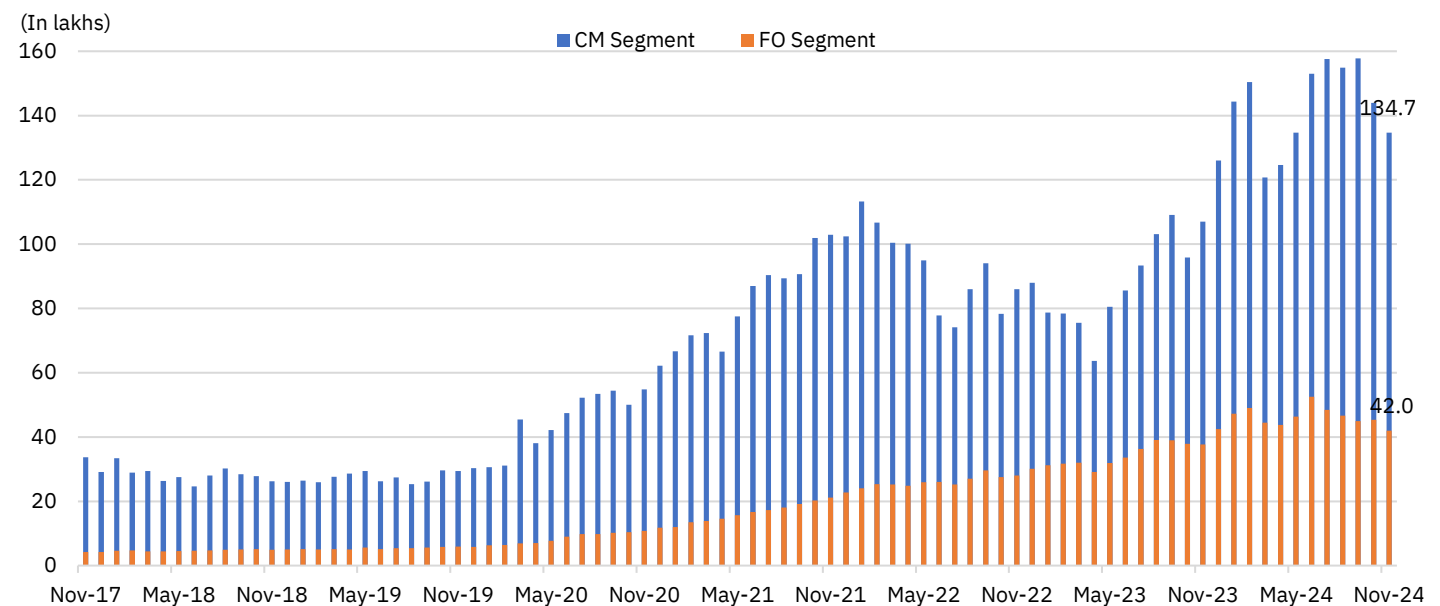
Note: 1. Individual investors include individual domestic investors, NRIs, sole proprietorship firms and HUFs.
2. FY25TD data is as of Nov'24.

Number of individual investors participating in the CM segment declined further in Nov'24:

The number of individual investors participating in the CM segment declined for the second month in a row, falling from a peak of 1.58 crore in Sep'24 to 1.44 crore in Oct'24 and further to 1.34 crore in Nov'24. Notwithstanding the recent moderation, average monthly run-rate of individuals participating in the equity cash segment during the first eight month of the fiscal year stood at 1.45 crore, much higher than the average monthly figure of 92 lakh during the corresponding period last year. During this period, 3.28 crore individuals traded at least once in the equity cash segment, surpassing the 3.07 crore such investors in the whole of the previous fiscal year.

Participation in the equity derivatives segment also declined by 7.4% MoM in November 2024, falling to 42 lakh from 45.3 lakh in the previous month. Like the cash market segment, the average monthly participation of individual investors in the equity derivatives segment during the first eight months of FY25 touched 46.2 lakh, up from 35.6 lakh during the same period last year. Overall, individual investor participation in FY25 (till Nov'24) remains almost at par with FY24 levels.

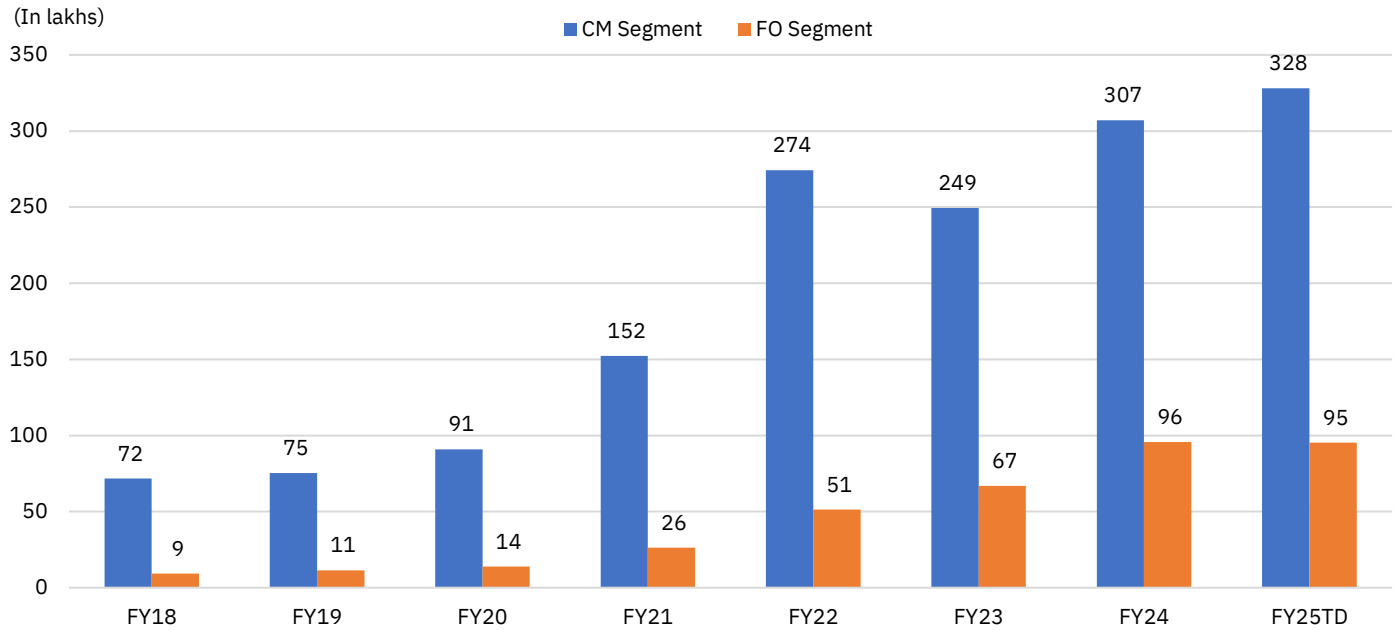
Figure 278: Monthly trend of individual investors participation in NSE cash and equity derivative segments



Source: NSE EPR

Notes:

1. Individual investors include individual domestic investors, NRIs, sole proprietorship firms and HUFs.
2. The chart above gives the count of individual investors who traded at least once in the month.

Figure 279: Annual trends of individual investors participation in NSE cash and equity derivative segments


Source: NSE EPR

Note: 1. Individual investors include individual domestic investors, NRIs, sole proprietorship firms and HUFs.

2. The chart above gives the count of investors who traded at least once during the year.

3. FY25TD data is as of Nov'24.

Table 103: Annual trend of individual investors participation in NSE cash and equity derivatives segment

(In Lakhs)	CM Total	FO Total	CM Alone	FO Alone	CM & FO Both
FY18	71.6	9.3	63.4	1.1	8.3
FY19	75.2	11.5	65.2	1.4	10.0
FY20	91.0	13.8	78.8	1.6	12.2
FY21	152.1	26.2	128.2	2.3	24.0
FY22	274.2	51.4	228.4	5.6	45.8
FY23	249.3	67.0	194.7	12.3	54.6
FY24	307.0	95.7	230.2	18.9	76.8
FY25TD	328.1	95.4	253.7	20.9	74.4

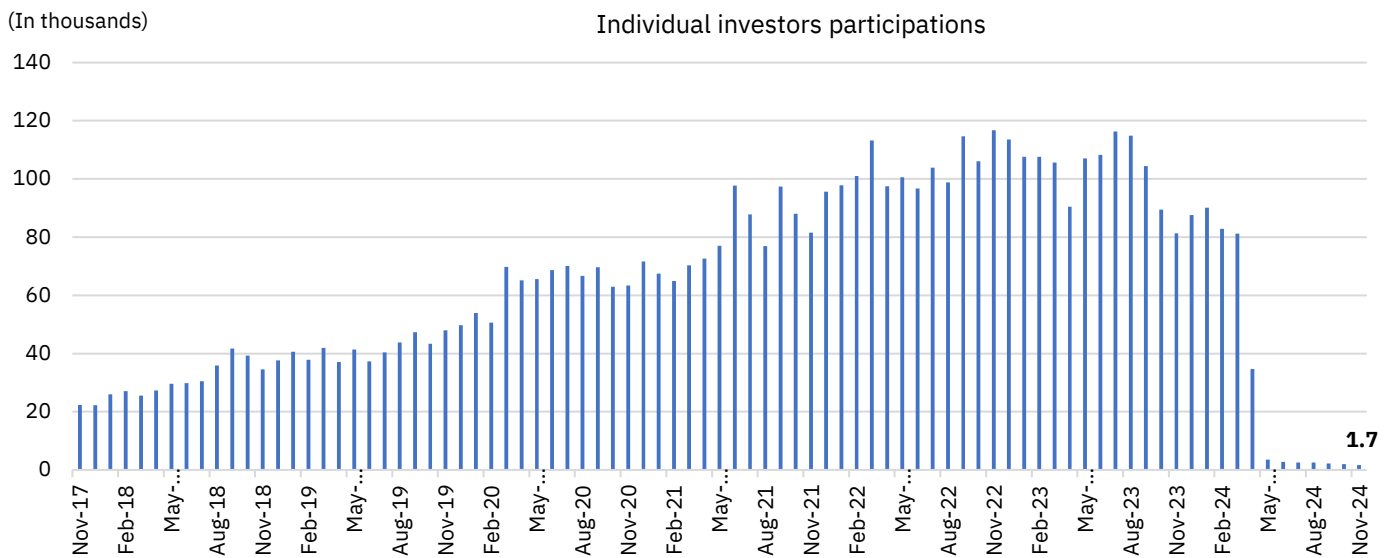
Source: NSE EPR

Notes: 1. Individual investors include individual domestic investors, NRIs, sole proprietorship firms and HUFs.

2. FY25TD data is as of Nov'24.

Individual investors' participation in the currency derivatives segment continues to decline: Since the introduction of new regulatory guidelines in May 2024, which required investors to adhere to additional conditions for trading in currency derivatives segment, participation in the currency derivatives segment has been steadily declining. As of November 2024, individual investor participation in the currency derivatives market fell 14.8%, dropping to just 1,659 investors from 1,948 in October 2024. This represents a staggering 98% YoY drop compared to November 2023, indicating a sharp decline in retail participation in this segment due to regulatory changes. The recent guidelines have had a significant impact, reshaping investor behavior in the segment.

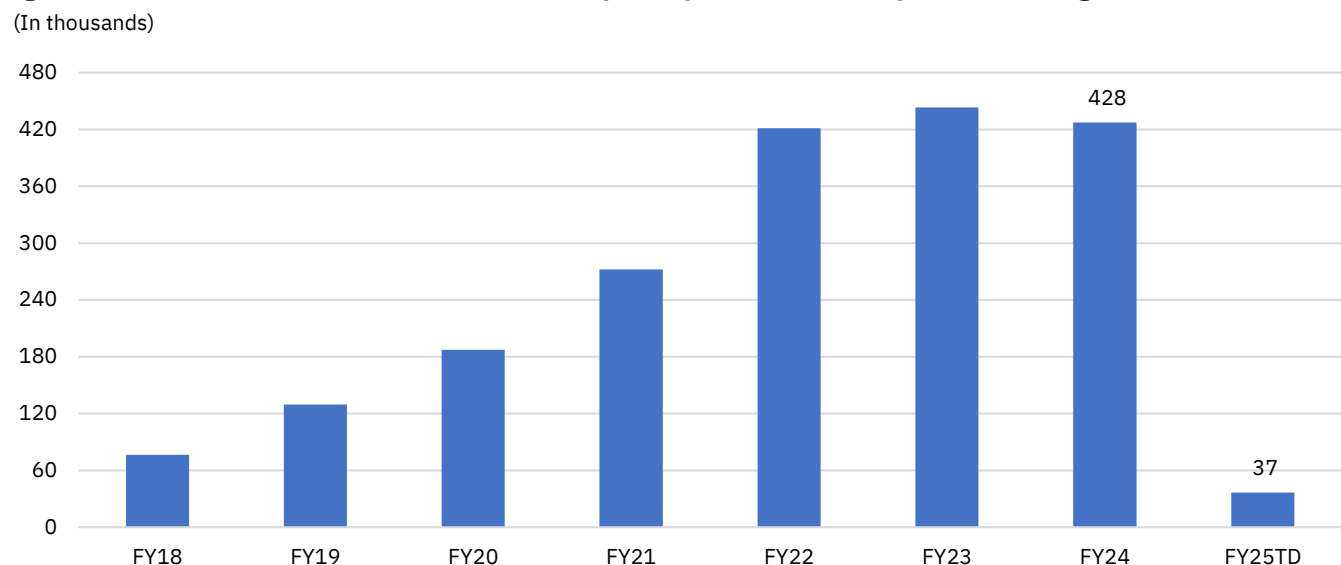
Figure 280: Monthly trend of individual investors participation in currency derivative segments of NSE



Source: NSE EPR

Note: 1. Individual investors include individual domestic investors, NRIs, sole proprietorship firms and HUFs.
2. The chart above provides the number of investors who traded at least once during the month.

Figure 281: Annual trend of individual investors participation in currency derivative segments of NSE



Source: NSE EPR

Note: 1. Individual investors include individual domestic investors, NRIs, sole proprietorship firms and HUFs.
2. The chart above provides the count of investors who traded at least once during the year.
3. FY25 data is as of Nov'24.

Distribution of trading activity by turnover

A small number of investors contribute to a significant share of the cash market turnover: The turnover distribution in the equity cash market for November 2024 showed a continued concentration of trading among a small group of investors. Investors who traded above Rs 1 crore continued to dominate the turnover, accounting for 77.4% of the total turnover in November 2024, a marginal decline from 78% in the previous month, with turnover of this category of investors falling to Rs 14.8 lakh crore from Rs 18.4 lakh crore in the previous month. Moreover, the number of investors in this range also dipped to 0.2 lakh in November 2024. The number of investors trading between Rs 1 crore to Rs 10 crore decreased marginally to 1.8 lakh from 2.2 lakh in October 2024, making up just 1.4% of the total investors that traded during the month.

In contrast, a large portion of the investors continued to trade in lower turnover ranges. Investors trading between Rs 10,000 to Rs 1 lakh, comprising 36.6% of the total investor base, contributed only 0.48% to the total turnover, amounting to Rs 9,243 crore in November. Similarly, 35.4% of investors traded below Rs 10,000, accounting for just 0.04% of the total turnover.

The turnover distribution highlights the dominance of individual investors in the lower turnover ranges, particularly below Rs 1 crore. In the Rs 10 crore+ monthly category, however, proprietary traders led with a contribution of 36.8%, partly due to their ability to execute large trades swiftly while leveraging advanced trading strategies. Individual investors in this high-value range contributed only 14.1% to the total turnover in November.

The turnover concentration is also reflected in the Lorenz curve and Gini Coefficient of turnover in the cash segment, graphical and mathematical measures of inequality in a system respectively. Market participation by turnover in November 2024 has a Gini coefficient of 0.98, reflecting a high degree of inequality and concentration.

Table 104: Distribution of turnover by range in cash market for all investors

Turnover range	Sep-24		Oct-24		Nov-24			
	Turnover (Rs cr)	Unique investors (In lakh)	Turnover (Rs cr)	Unique investors (In lakh)	Turnover (Rs cr)	Share in turnover	Unique investors (In lakh)	Share in investors
<Rs 10,000	737	48.9	715	45.8	720	0.04%	47.9	35.4%
Rs 10,000 - Rs 1 lakh	11,523	59.1	10,257	53.8	9,243	0.48%	49.5	36.6%
Rs 1 lakh - Rs 10 lakh	59,737	35.6	53,205	32.1	44,356	2.3%	27.2	20.1%
Rs 10 lakh - Rs 1 cr	1,79,772	11.9	1,55,008	10.3	1,29,117	6.7%	8.5	6.3%
Rs 1 cr – Rs 10 cr	3,37,456	2.5	2,97,331	2.2	2,50,533	13.1%	1.8	1.4%
>Rs 10 cr	19,70,150	0.3	18,36,582	0.3	14,82,241	77.4%	0.2	0.15%
Total	25,59,376	158.2	23,53,098	144.4	19,16,210	100.0%	135.1	100.0%

Source: NSE EPR

Notes

1. Turnover ranges are based on gross turnover.
2. Investor categorization is based on gross turnover i.e. buy traded value + sell traded value
3. Data has been provided for single side i.e. (Buy traded value + sell traded value)/2

Table 105: Category-wise share in turnover across different turnover ranges in NSE's cash market in Nov'24

Turnover range	Turnover (Rs cr)	Share in turnover (%)	Client category-wise turnover share (%)					
			Corporates	DIIs	Foreign investors	Individuals	Prop	Others
<= Rs 10,000	720	0.04%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Rs 10,000 - Rs 1 lakh	9,243	0.48%	0.0%	0.0%	0.0%	99.9%	0.0%	0.0%
Rs 1 lakh - Rs 10 lakh	44,356	2.3%	0.2%	0.2%	0.0%	99.5%	0.0%	0.1%
Rs 10 lakh - Rs 1 cr	1,29,117	6.7%	0.8%	0.3%	0.0%	98.4%	0.0%	0.4%
Rs 1 cr - Rs 10 cr	2,50,533	13.1%	2.0%	0.4%	0.3%	96.1%	0.1%	1.1%
> Rs 10cr	14,82,241	77.4%	5.3%	14.9%	22.8%	14.1%	36.8%	6.2%
Total	19,16,210	100.0%	4.4%	11.6%	17.7%	32.9%	28.5%	4.9%

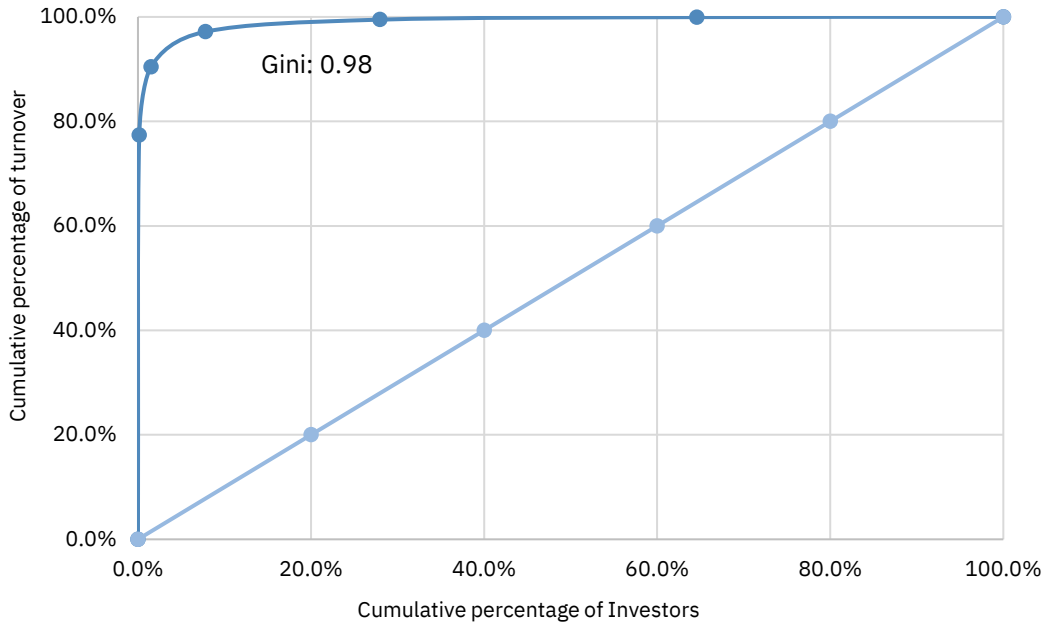
Source: NSE EPR.

Notes: 1. Turnover ranges are based on gross turnover.

2. Data has been provided for single side i.e. (Buy traded value + sell traded value)/2

3. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

4. DIIs include Banks, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors include Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate includes Public & Private Companies / Bodies Corporate; Individuals include Individual / Proprietorship firms, HUF and NRI; Others include Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop include PRO Trades.

Figure 282: Lorenz Curve of turnover in the NSE's Cash Market (Nov'24)


Source: NSE EPR.

Lorenz Curve and Gini Coefficient

The Lorenz Curve—a concept in Economics developed by the American Economist Max O. Lorenz in 1905—is a graphical representation of the distribution of income or wealth. In other words, it graphically explains the income or wealth inequality across a population. The graph plots percentiles of population on the x-axis according to income or wealth, and cumulative income or wealth on the y-axis.

The line of equality—referred to as the baseline—is demonstrated by a straight, upward-sloping, 45-degree line, which represents perfect equality in income or wealth. The farther the curve is from the baseline, the higher is the level of inequality.

The Gini coefficient is a mathematical way of expressing the extent of inequality. It ranges from 0 to 1, where 0 points to complete equality and 1 points to complete inequality. It is calculated as the ratio of area between the baseline and the Lorenz curve and total area under the baseline.

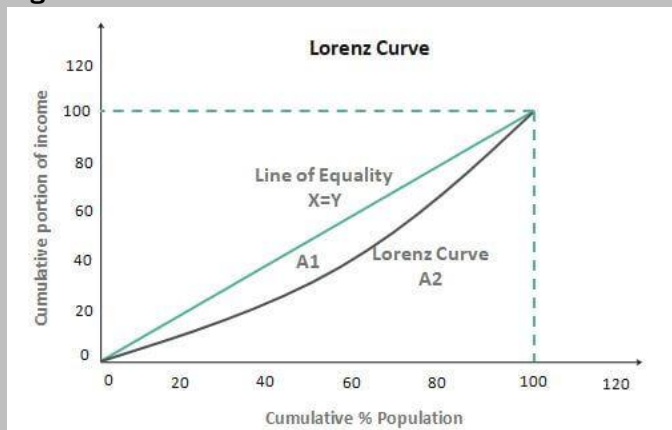
$$\text{Gini coefficient} = A_1 / (A_1 + A_2)$$

Where:

A1 is the area between the baseline and the Lorenz curve,

A2 is the area under the Lorenz curve.

Figure 283: Illustration of a Lorenz curve



Over 96% of investors contributed only 12% of the premium turnover in equity options in Nov'24: The equity options market turnover declined by 24.7% in Nov'24 compared to the previous month as highlighted in the section “Total turnover across segments”. The turnover distribution remains highly skewed, with a large number of investors contributing very little to the overall turnover. Notably, over 78% of investors, predominantly individual investors, contributed only 2.3% of the turnover in the month of November. On the other hand, approximately 4% of investors accounted for more than 87% of the turnover last month, with the share of individuals falling as the turnover value increases.

The highest turnover range in the equity derivatives segment (Rs 10 crore and above) was dominated by proprietary traders, that contributed 68.7%. Overall, proprietary traders were the largest contributors, accounting for 49.2% of the total turnover in the equity options segment, followed by individuals at 34.8%. The contribution from Domestic Institutional Investors (DIIs) remains minimal in this segment.

Interestingly, the turnover concentration in the equity option segment, as measured by Gini coefficient, while remaining quite high at 0.95, is lower than that seen in the equity cash segment.

Table 106: Distribution of turnover by range in equity options market for all investors

Turnover range	Sep-24		Oct-24		Nov-24			
	Turnover (Rs cr)	Unique investors (In lakh)	Turnover (Rs cr)	Unique investors (In lakh)	Turnover (Rs cr)	Share in turnover	Unique investors (In lakh)	Share in investors
<Rs 10,000	142	8.6	139	8.6	134	0.0%	8.4	20.5%
Rs 10,000-Rs 1 lakh	2,408	11.4	2,325	11.1	2,250	0.2%	10.7	26.2%
Rs 1 lakh - Rs 10 lakh	26,778	14.0	26,794	13.9	24,682	2.1%	13.0	31.6%
Rs 10 lakh - Rs 1 cr	1,28,256	8.1	1,40,212	8.7	1,15,599	10.0%	7.3	17.9%
Rs 1 cr – 10 cr	2,05,972	1.6	2,51,729	2.0	1,86,452	16.1%	1.5	3.6%
>Rs 10 cr	9,47,509	0.1	11,18,225	0.1	8,29,882	71.6%	0.1	0.2%
Total	13,11,066	43.9	15,39,425	44.3	11,58,998	100%	40.9	100%

Source: NSE EPR

Notes:

1. Turnover ranges are based on gross premium turnover.
2. Investors categorization is based on gross premium turnover i.e. buy premium turnover + sell premium value
3. Data has been provided for single side i.e. (Buy premium turnover + sell premium turnover)/2

Table 107: Distribution of turnover and the share of investors categories in equity options in Nov'24

Turnover range	Turnover (Rs cr)	Share in turnover (%)	Client category-wise share in premium turnover (%)					
			Corporates	DIIs	Foreign investors	Individuals	Prop	Others
<= Rs 10,000	134	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Rs 10,000 - Rs 1 lakh	2,250	0.2%	0.1%	0.0%	0.0%	99.9%	0.0%	0.0%
Rs 1 lakh - Rs 10 lakh	24,682	2.1%	0.1%	0.0%	0.0%	99.8%	0.0%	0.1%
Rs 10 lakh - Rs 1 cr	1,15,599	10.0%	0.3%	0.0%	0.0%	99.5%	0.0%	0.2%
Rs 1 cr - Rs 10 cr	1,86,452	16.1%	1.0%	0.0%	0.1%	98.1%	0.2%	0.7%
> Rs 10cr	8,29,882	71.6%	4.3%	0.2%	13.9%	9.4%	68.7%	3.5%
Total	11,58,998	100%	3.2%	0.1%	10.0%	34.8%	49.2%	2.7%

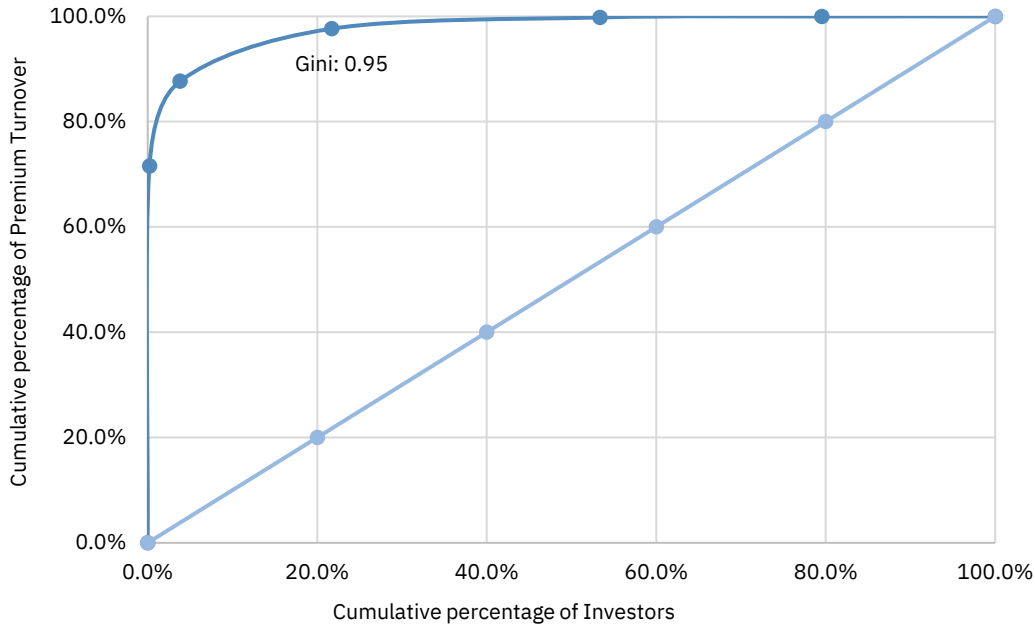
Source: NSE EPR.

Notes: 1. Turnover ranges are based on gross turnover.

2. Data has been provided for single side i.e. (Buy traded value + sell traded value)/2

3. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

4. DIIs include Banks, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors include Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate includes Public & Private Companies / Bodies Corporate; Individuals include Individual / Proprietorship firms, HUF and NRI; Others include Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop include PRO Trades.

Figure 284: Lorenz Curve of turnover in Equity Options (Nov'24)


Source: NSE EPR.

Over 92% of investors, trading below Rs 10 crore, contributed 7% of the equity futures turnover in Nov'24: In Nov'24, the equity futures market saw a turnover distribution that continued to remain highly skewed. The turnover in the Rs 1 lakh to Rs 10 lakh range amounted to Rs 768 crore, contributing only 0.02% of the segment's total turnover last month. Despite making up 6.8% of the investor base, these investors continued to have a minimal impact on the overall turnover. The Rs 10 lakh to Rs 1 crore range accounted for Rs 32,986 crore, contributing 1.0% of the total turnover. This segment was largely dominated by individual investors, who contributed 98.8% of the turnover, with minimal participation from other investor categories. In the Rs 1 crore to Rs 10 crore range, turnover was Rs 1,88,511 crore, representing 5.8% of the total turnover, where individual investors contributed the majority (97.2%), with proprietary traders making up a smaller portion (1.0%).

The highest turnover range, Rs 10 crore and above, saw significant dominance by proprietary traders, contributing 34.8% to the segment's turnover last month. Foreign investors followed with 28.9%, while individual investors contributed 11.7%. This segment accounted for 93.2% of the total turnover in the equity futures market, continuing to reflect a market structure where a small proportion of high-value investors drive most of the trading volume.

Table 108: Distribution of turnover by range in equity futures market for all investors

Turnover range	Sep-24		Oct-24		Nov-24			
	Turnover (Rs cr)	Unique investors (In lakh)	Turnover (Rs cr)	Unique investors (In lakh)	Turnover (Rs cr)	Share in turnover	Unique investors (In lakh)	Share in investors
Rs 1 lakh - Rs 10 lakh	577	0.2	733	0.2	768	0.02%	0.2	6.8%
Rs 10 lakh - Rs 1 cr	34,277	1.7	34,523	1.7	32,986	1.0%	1.6	50.0%
Rs 1 cr - 10 cr	2,34,077	1.4	2,15,514	1.3	1,88,511	5.8%	1.2	36.1%
>Rs 10 cr	38,58,507	0.3	38,53,602	0.3	30,28,510	93.2%	0.2	7.1%
Total	41,27,438	3.6	41,04,371	3.5	32,50,775	100.0%	3.3	100.0%

Source: NSE EPR.

Notes: 1. Turnover ranges are based on gross turnover.

2. Investors categorization is based on gross turnover i.e. buy turnover + sell value

3. Data has been provided for single side i.e. (Buy turnover + sell turnover)/2

Table 109: Distribution of turnover and the share of investors categories in equity futures in Nov'24

Turnover range	Turnover (Rs cr)	Share in turnover (%)	Client category-wise share in premium turnover (%)					
			Corporates	DII's	Foreign investors	Individuals	Prop	Others
Rs 1 lakh - Rs 10 lakh	768	0.2	0.5%	0.0%	0.0%	99.2%	0.0%	0.3%
Rs 10 lakh - Rs 1 cr	32,986	1.6	0.7%	0.0%	0.0%	98.8%	0.0%	0.5%
Rs 1 cr - Rs 10 cr	1,88,511	1.2	1.7%	0.0%	0.0%	97.2%	0.1%	1.0%
> Rs 10cr	30,28,510	0.2	8.6%	11.0%	28.9%	11.7%	34.8%	5.1%
Total	32,50,775	3.3	8.1%	10.2%	27.0%	17.6%	32.4%	4.8%

Source: NSE EPR.

Notes: 1. Turnover ranges are based on gross turnover.

2. Data has been provided for single side i.e. (Buy traded value + sell traded value)/2

3. Client categories provided here are based on client category classification uploaded by the trading members in the UCC (Unique Client Code) system. The turnover data is based on client codes entered by trading members at the time of order entry and the corresponding client category classification provided by trading members in the UCC system. This is provisional data and subject to change, inter-alia, on account of custodial trade confirmation process, client code modifications etc.

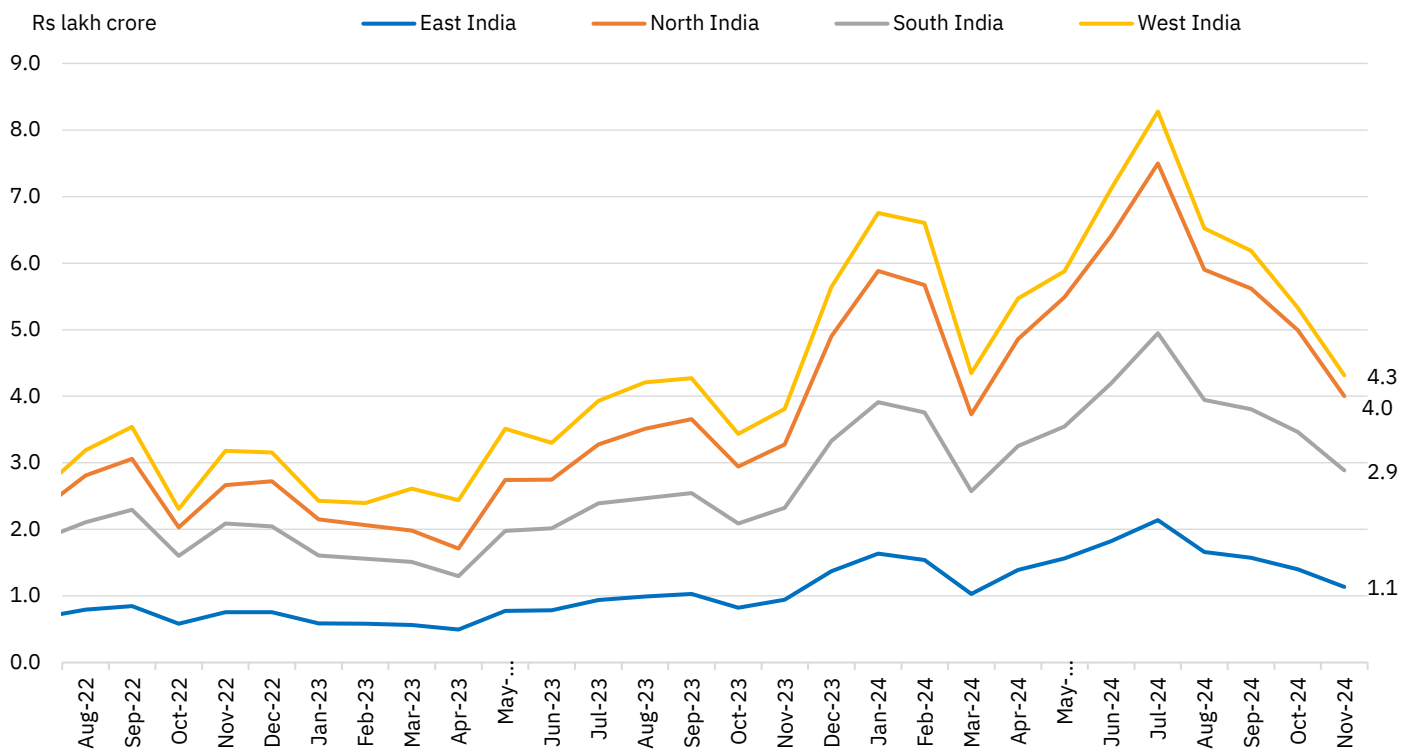
4. DII's include Banks, Insurance companies, Mutual Funds, Domestic Financial Institution (Other than banks & insurance), Domestic Venture Capital Funds, AIFs, PMS clients, New Pension Systems and NBFC; Foreign investors include Foreign Institutional Investors, Foreign Portfolio Investors all categories, Foreign Direct Investors, Foreign Venture Capital Investors, Depository receipts, Foreign Nationals (FN), Qualified foreign investor, Eligible Foreign Entity and OCBs; Corporate includes Public & Private Companies / Bodies Corporate; Individuals include Individual / Proprietorship firms, HUF and NRI; Others include Partnership Firm/ Limited Liability Partnership; Trust / Society, Statutory Bodies, Non Govt Organization etc.; Prop include PRO Trades.

Spatial distribution of individual investor activity in the cash market

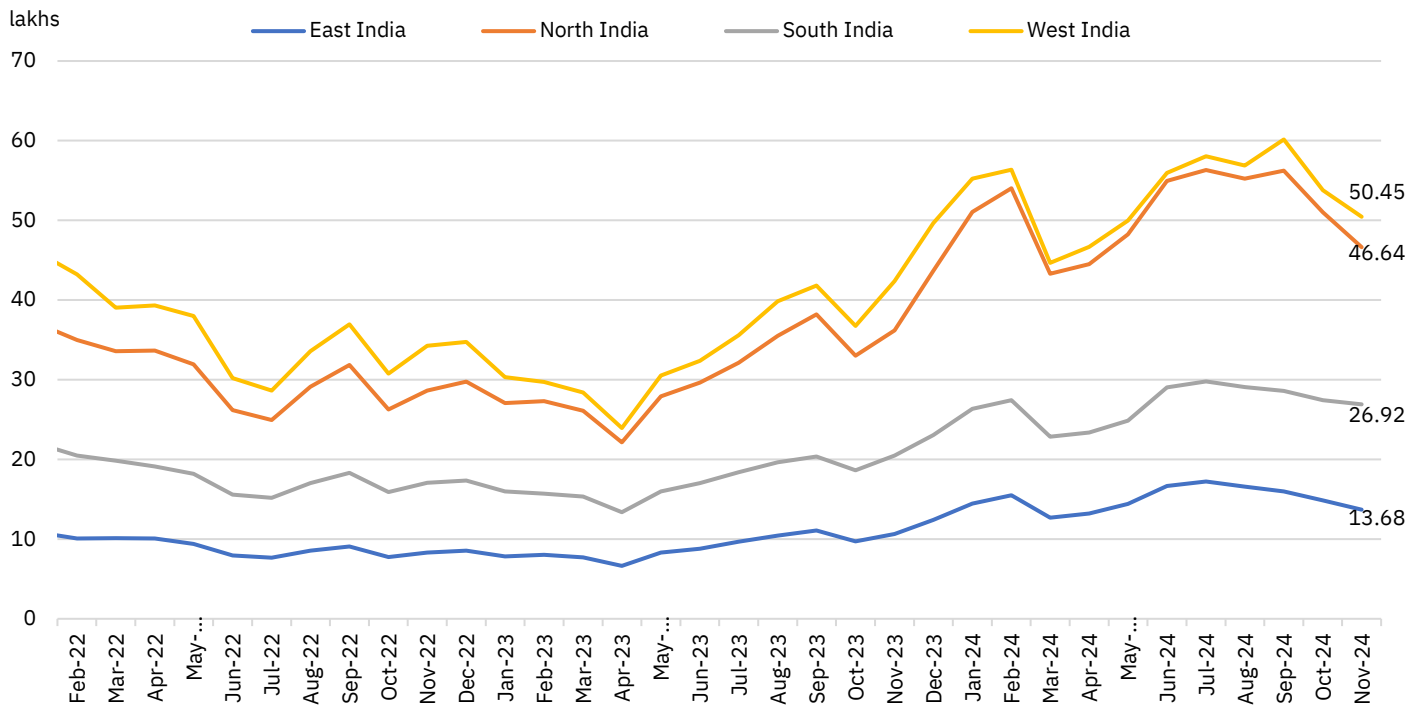
Individual investors' turnover continued to decline for the fourth consecutive month across all regions in November 2024: In November 2024, individual investor turnover continued to experience a decline, marking the fourth consecutive month of decreasing activity across all regions. Total turnover by individual investors dropped by 18.1% MoM, settling at Rs 12.6 lakh crore in November, down from Rs 15.4 lakh crore in October. Every region saw a reduction, with the highest drop observed in the Northern region (-19.9%), followed closely by the Western region (-19.1%), Eastern region (-18.8%), and Southern region (-16.7%).

...accompanied with a broad-based decline in number of investors who traded at least once in the last month: In November 2024, the number of individual investors who traded at least once continued to decrease across all regions, following the trend observed in October. The total number of active individual investors fell by 6% MoM to 1.4 crore (vs. 1.5 crore in Oct'24). Region-wise, the Northern region saw the steepest drop of 8.6%, with the active investor base shrinking to 46.6 lakhs. East India and West India followed closely with an 7.9% and 6.2% decrease. South India experienced the smallest decline of 1.9%.

Figure 285: Region-wise distribution of monthly individual investors' turnover in the cash market



Source: NSE EPR. Note: Individual investors include Individual / Proprietorship firms and HUF.

Figure 286: Region-wise distribution of individual investors traded in the cash market


Source: NSE EPR. Note: Individual investors include Individual / Proprietorship firms and HUF.

Region-wise distribution of individual turnover saw some shift in November 2024:

The shares of Northern, Western, and Eastern India in individual investors' turnover fell in the month gone by, while Southern India's share increased slightly. Northern India's share decreased by 72 bps to 31.7%. Western India, largest contributor to total turnover, witnessed a decline in share to 34.2%, down by 43 bps. East India's share fell to 9%, down by 9 bps. In contrast, Southern India's share rose by 36bps to 22.9%.

Distribution in terms of investors who traded at least once in the last month again showed a significant rise for Southern region:

The distribution of investors who traded at least once in the past month saw significant regional shifts in November 2024. Southern India experienced an uptick for the third consecutive month, with its share rising by 81 bps to 19.2%. Eastern India saw its share in active investors falling by 20 bps MoM to 9.8%. Northern India's share decreased by 96 bps to 33.3%, while Western India's share fell by 9 bps to 36.0%.

Figure 287: Region-wise share of individual investors' turnover in cash market (%)

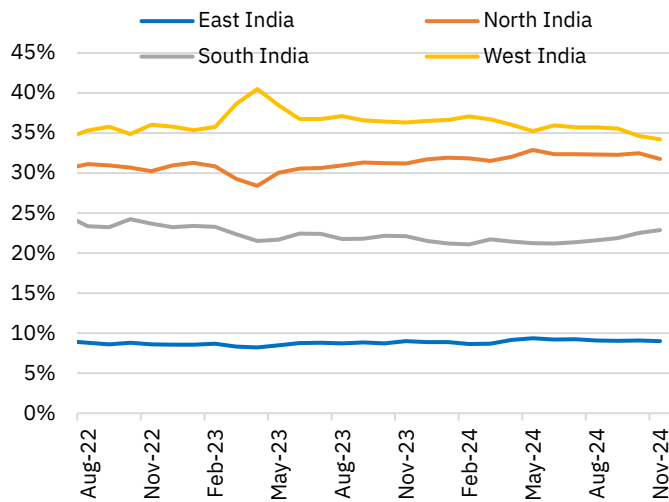
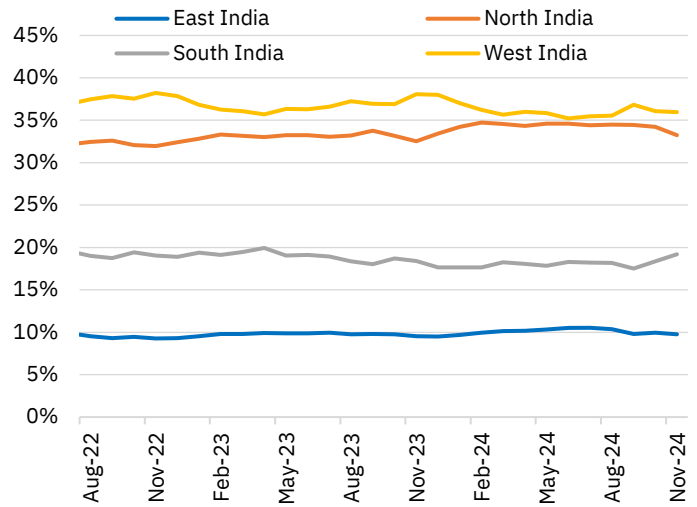


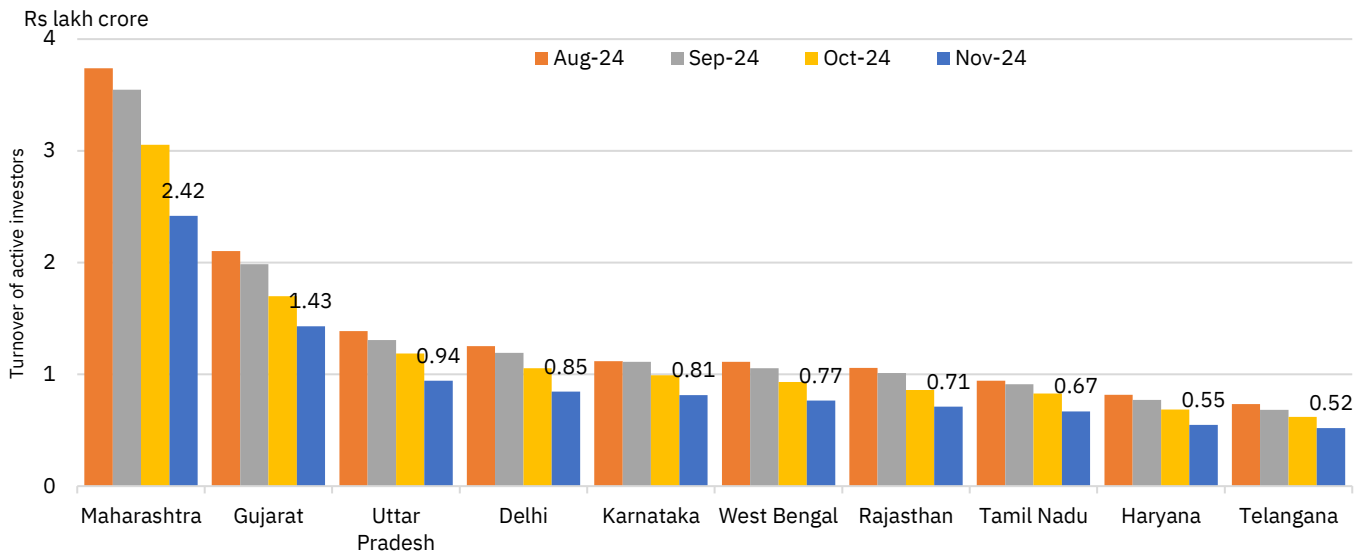
Figure 288: Region-wise share of individual investors traded in cash market (%)



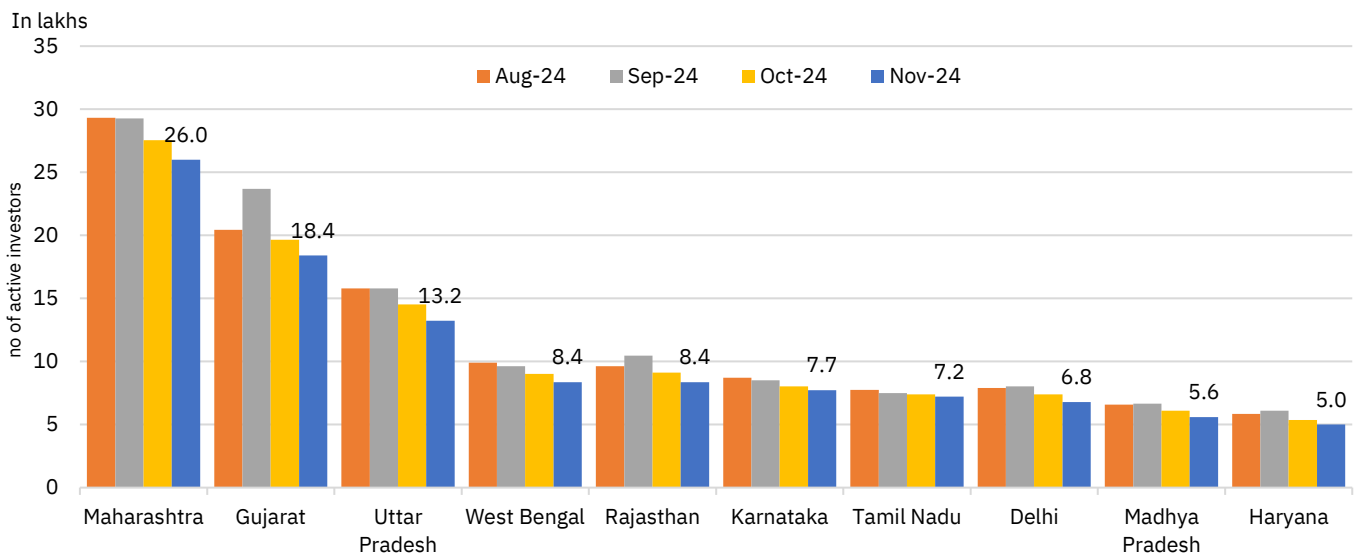
Source: NSE EPR. Note: Individual investors include Individual / Proprietorship firms and HUF.

Turnover from individuals in all the top 10 states saw a substantial decline in November 2024: In November 2024, the turnover from individuals in the top 10 states fell by 18.8% MoM to Rs 9.7 lakh crore, continuing the trend of significant reductions in trading activity since Jul'24. This follows a 12.3% drop in October, marking a pronounced slowdown. Despite the sharp decline, the top 10 states still contributed 76.7% of the total turnover in the CM segment. Maharashtra, Gujarat, and Uttar Pradesh remained the top three states by turnover, but all saw steep drops. Maharashtra's turnover plunged by 20.8% to Rs 2.4 lakh crore, while that of Gujarat decreased by 15.8% to Rs 1.4 lakh crore. Uttar Pradesh also experienced a sharp decline of 20.6%, bringing its turnover to Rs 0.94 lakh crore. The remaining states in the top 10, including Delhi, Karnataka, and West Bengal, also registered significant reductions in turnover, reflecting a continued slowdown in individual investor activity.

...accompanied by drop in the number of investors who traded at least once in the month across all top 10 states: In November 2024, the number of active traders across the top 10 states fell by 6.5% MoM to 1.07 crore, reflecting a continued reduction in investor participation. Maharashtra, the largest contributor, experienced a notable drop of 5.6%, with its active investor count decreasing to 26 lakhs. Gujarat also saw a decline of 6.4%, bringing its count down to 18.4 lakh, while Uttar Pradesh saw an 8.9% fall, dropping to 13.2 lakh. West Bengal, Rajasthan, and Delhi registered similar reductions, with West Bengal down to 8.4 lakh (-7.2% MoM), Rajasthan to 8.4 lakh (-8.5% MoM), and Delhi to 6.8 lakh (-8.3% MoM). Other states, including Karnataka and Tamil Nadu, also showed declines in active traders. Overall, the top 10 states saw a sharp reduction in investor activity, continuing the trend of decreasing market participation across key states.

Figure 289: Top 10 states based on turnover of individual investors in the cash market


Source: NSE EPR. Note: Individual investors include Individual / Proprietorship firms and HUF. The top ten states are chosen based on last month's data.

Figure 290: Top 10 states based on individual investors traded in the cash market


Source: NSE EPR. Note: Individual investors include Individual / Proprietorship firms and HUF. The top ten states are chosen based on last month's data.

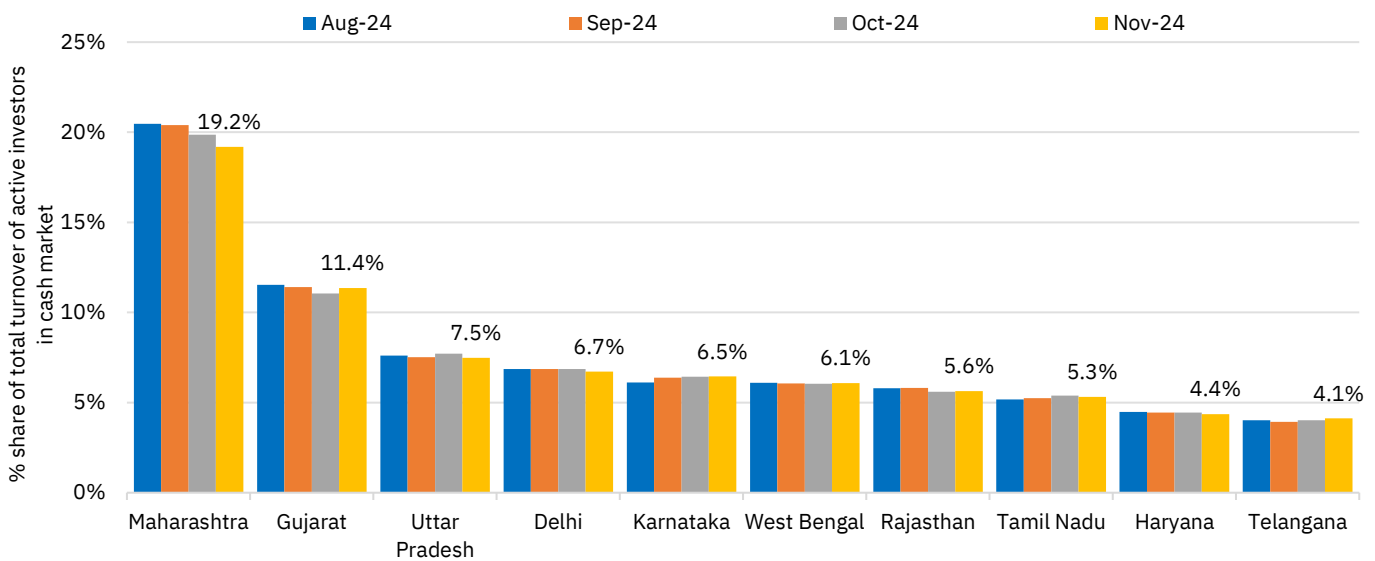
Contribution of the top 10 states to individuals' turnover in the CM segment dropped further in November 2024...

The share of the top 10 states fell to 76.7%, a further drop of 0.74% from 77.4% in October. This decline was primarily driven by a reduction in the shares of Maharashtra, Uttar Pradesh, and Delhi. Maharashtra's share dropped by 67 bps to 19.2%, while Uttar Pradesh saw a 24bps decline to 7.5%, and Delhi's share fell by 14 bps to 6.7%. On the other hand, Gujarat, Karnataka, West Bengal, Rajasthan and Telangana saw slight increases in their contributions, wherein Gujarat experienced the highest MoM growth of 30 bps, increasing its share to 11.4%. Despite the overall decline, the ranking of the top 10 states remained unchanged, with Maharashtra, Gujarat, and Uttar Pradesh continuing to hold the top three positions.

...And so is their contribution to number of active individual investors: The share of the top 10 states in the number of individuals who traded at least once in the CM segment in

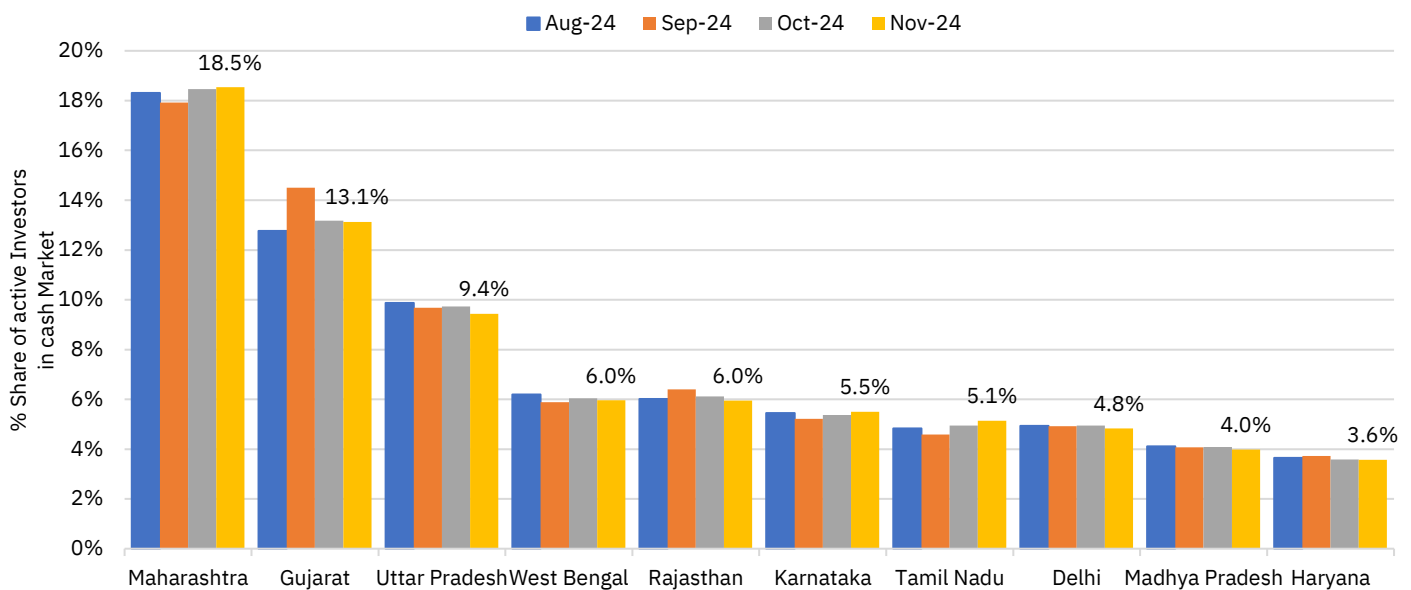
November decreased to 76%, down from 76.5% in October. Maharashtra's share saw a modest 8bps rise to 18.5%, maintaining its position at the top. Gujarat's share declined for the second consecutive month, dropping by 6 bps to 13.1%. Uttar Pradesh experienced a sharp decrease of 30 bps, bringing its share down to 9.4%. West Bengal, Rajasthan, and Delhi also saw slight reductions, while Karnataka (+13bps MoM) and Tamil Nadu (+19bps MoM) experienced minor increases. Despite the overall dip, Maharashtra, Gujarat, and Uttar Pradesh continue to dominate the CM segment, together accounting for over 40% of the individual investors in the CM segment.

Figure 291: Share of the top 10 states based on turnover of individual investors in the cash market



Source: NSE EPR. Note: Individual investors include Individual / Proprietorship firms and HUF. The top ten states are chosen based on last month's data.

Figure 292: Share of the top 10 states based on number of individual investors traded in the cash market



Source: NSE EPR.

Note: Individual investors include Individual / Proprietorship firms and HUF. The top ten states are chosen based on last month's data.

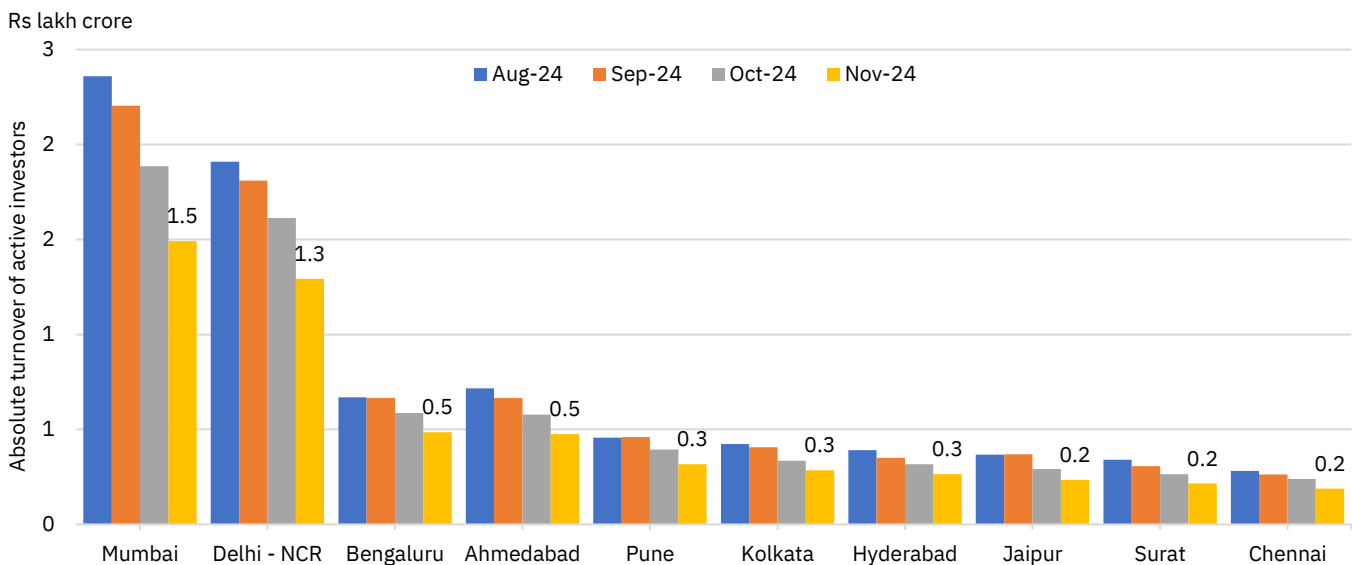
Turnover of individual investors from the top 10 districts dipped in November 2024:

The turnover of individual investors from the top 10 districts fell by 19.3% MoM to Rs 5.2 lakh crore (-19.3% MoM), slightly higher than 18.9% MoM drop in individuals' total turnover in the segment. Mumbai recorded a 21.0% drop to Rs 1.5 lakh crore, while Pune recorded 19.9% drop to Rs 1.3 lakh crore. Except Kolkata, which experienced a 38.8% MoM growth to Rs 0.3 lakh crore, all the top 10 districts saw substantial reduction in turnover of individual investors in the month gone by.

Number of individual investors who traded at least once across the top 10 districts saw a further decline in November 2024:

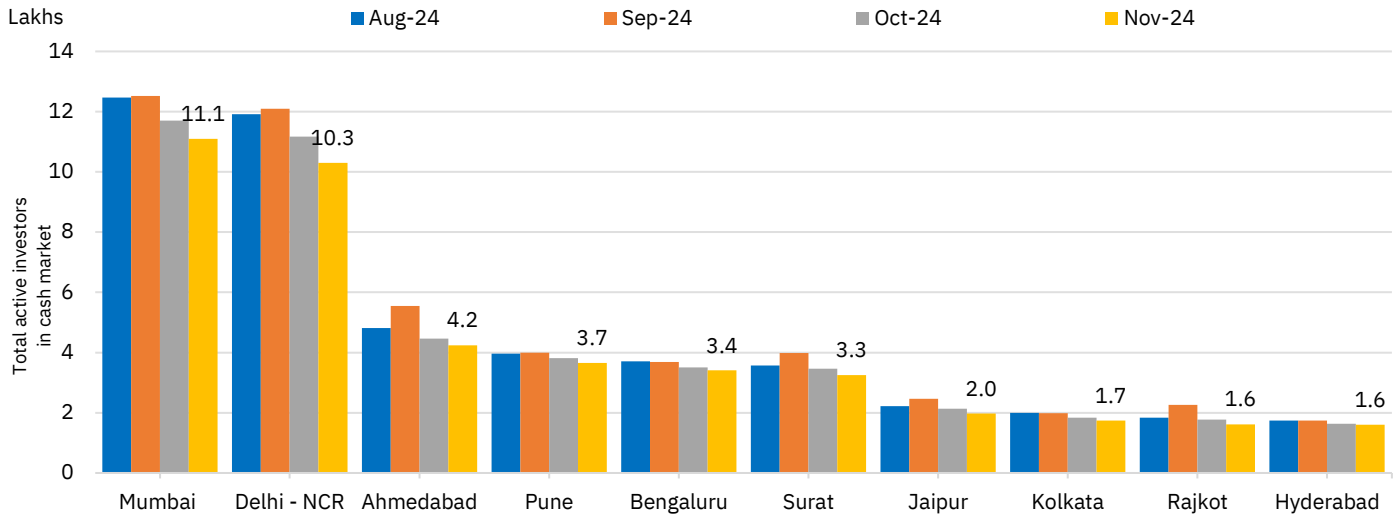
The total number of active investors in top 10 districts dropped by 5.8% MoM, reaching 42.9 lakh in November. Mumbai and Delhi-NCR, although continued to lead the rankings, despite experiencing a noticeable decline. Mumbai saw a 5.1% MoM reduction, with 11.1 lakh investors who traded at least once in the NSE's cash segment from this district, while Delhi-NCR recorded a steeper drop of 7.8%, falling to 10.3 lakh active investors. Ahmedabad, Pune, and Surat also witnessed declines, wherein Ahmedabad saw a 5.1% decrease to 4.2 lakh, Pune dropped by 4.3% to 3.7 lakh, and Surat fell by 6.0% to 3.3 lakh active investors.

Figure 293: Top 10 districts based on cash turnover of individual investors



Source: NSE EPR.

Note: 1. Mumbai includes Mumbai (MH/TN/RG); 2. Individual investors include Individual / Proprietorship firms and HUF. The top ten districts are chosen based on last month's data.

Figure 294: Top 10 districts based on individual investors traded in the cash market


Source: NSE EPR.

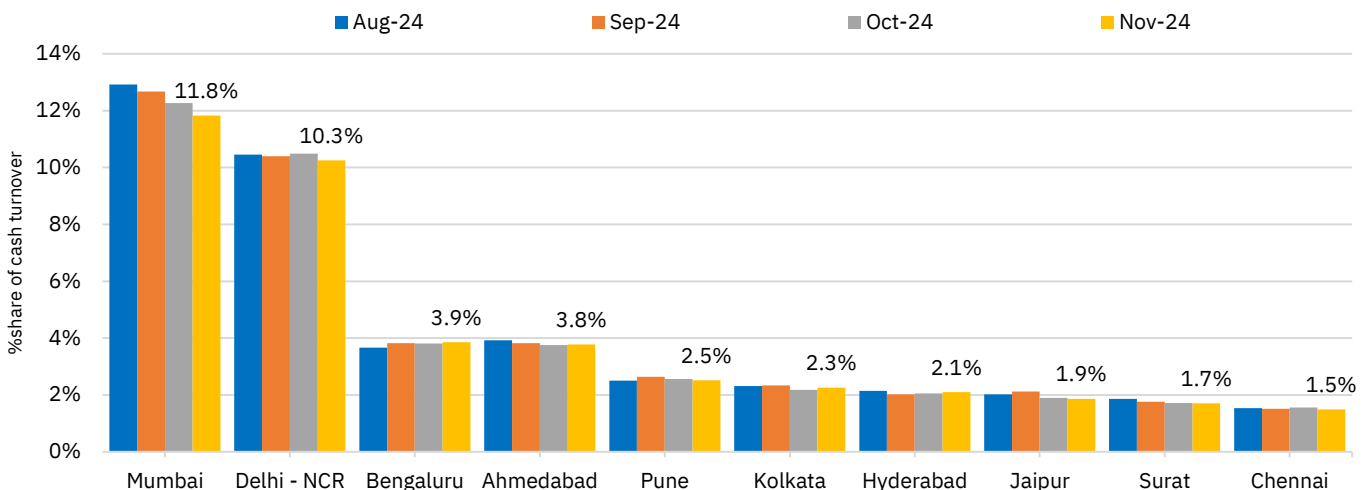
Note: 1. Mumbai includes Mumbai (MH/TN/RG); 2. Individual investors include Individual / Proprietorship firms and HUF. The top ten districts are chosen based on last month's data.

Share of the top 10 districts in individual turnover remained stable in November 2024:

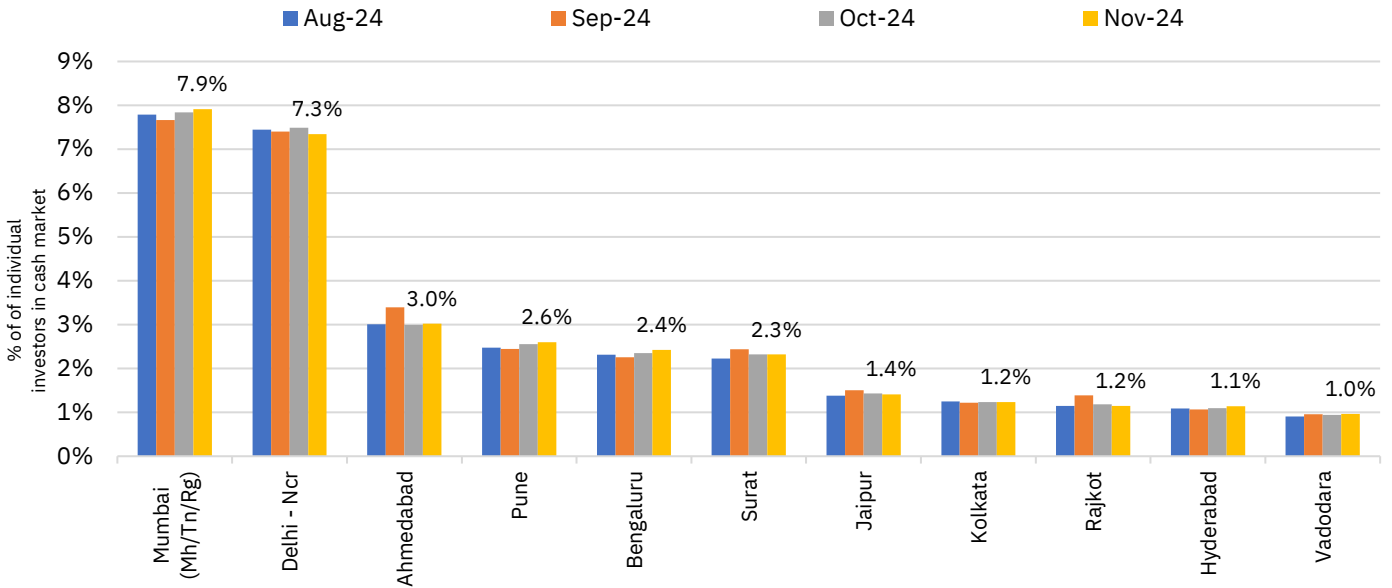
The total contribution of these districts increased to 43.8% (vs. 43.5% in Oct'24). Mumbai and Delhi-NCR, which together accounted for 22.1% of the turnover, witnessed drops. Mumbai's share dropped by 44 bps to 11.8%, while Delhi-NCR's share decreased by 24 bps to 10.3%. Bengaluru and Ahmedabad experienced marginal growth, while Pune's share fell to 2.5%. Hyderabad's share saw a modest increase of 4bps.

Share of active individual investors across the top 10 districts saw a slight increase in November 2024:

The total share of the top 10 districts in the number of individuals who traded at least once in the cash segment rose to 31.0%, up from 30.5% in October. However, this is mainly due to fall in active investors from other parts of the country (as the overall count has fallen significantly). Mumbai continued to lead with a steady increase to 7.9%, while Delhi-NCR's share saw a slight dip to 7.3%. Ahmedabad's share remained stable at 3.0%, and Pune's share held firm at 2.6%. Bengaluru's share also remained steady at 2.4%, while Surat's share remained steady at 2.3%.

Figure 295: Share of the top 10 districts based on individual investors' turnover in the cash market


Source: NSE EPR. Note: 1. Mumbai includes Mumbai (MH/TN/RG); 2. Individual investors include Individual / Proprietorship firms and HUF. The top ten districts are chosen based on last month's data.

Figure 296: Share of the top 10 districts based on individual investors traded in the cash market


Source: NSE EPR. Note: 1. Mumbai includes Mumbai (MH/TN/RG); 2. Individual investors include Individual / Proprietorship firms and HUF. The top ten districts are chosen based on last month's data.

Turnover of top 10 traded companies during the month

The aggregate turnover of the top 10 scrips on the NSE declined by 1.1% MoM, totaling Rs 3,22,436 crore in November 2024. This decrease was relatively mild compared to the significant 18.6% MoM decline in total turnover in NSE's CM segment. In fact, three of the top ten stocks registered a MoM uptick in the cash market turnover. Several noteworthy changes occurred in the composition of the top 10 scrips. Waaree Energies Limited and Mahindra & Mahindra Limited entered the list of top 10 scrips in November. Adani Enterprises marked the highest MoM increase in turnover, surging 180.9%. HDFC Bank Limited, which continues to hold the top position as the most traded share on the NSE, also saw a notable rise of 37.6% in turnover. Zomato moved two notches higher to the 3rd position, despite a 9.1% drop in turnover. Despite the decline in the turnover of individual scrips, the share of these top 10 scrips in the overall market turnover increased, accounting for 16.8% – a rise of 3pp from the previous month.

Table 110: Top 10 companies of NSE CM segment in November 2024

Securities (Rs Cr)	Nov-24	Oct-24	%Change	% Deliverable quantity
HDFC Bank Limited	84,444	61,358	37.6	70%
Reliance Industries Limited	35,815	54,949	(34.8)	60%
ICICI Bank Limited	30,712	39,114	(21.5)	63%
Zomato Limited	28,189	31,651	(10.9)	42%
Waaree Energies Limited	26,637	11,078	140.4	21%
BSE Limited	26,342	45,406	(42.0)	31%
Adani Enterprises Limited	25,368	9,031	180.9	15%
State Bank of India	23,526	24,443	(3.8)	40%
Mahindra & Mahindra Limited	20,973	24,147	(13.1)	50%
Tata Motors Limited	20,429	24,766	(17.5)	41%
Top 10 scrips turnover	322,436	325,942	(1.1)	
Total turnover	1,916,210	2,353,098	(18.6)	
% share of Top 10 scrips	16.8	13.9	3.0	

Source: NSE EPR. Figures in brackets indicate negative numbers.

Note: 1. The scrip-wise turnover data for the previous month is based on the current month's top 10 scrips.

2. NM means not measurable.

3. Deliverable quantity is calculated as a percentage of total traded quantity in the month of Nov'24.

In line with the trends observed in the CM segment, the total turnover of the top ten scrips in stock futures declined by 16.8% MoM in November 2024. This decline was relatively smaller than the overall market turnover drop of 21.7% MoM. HDFC Bank remained the most traded scrip in stock futures, even as the futures turnover in the stock fell by 9.8% MoM. ICICI Bank, which had been in a stronger position previously, slipped to the 4th place in November 2024, registering a decline of 29% in turnover. Bharti Airtel and Kotak Mahindra entered the list of the top 10 scrips in November, even after registering a decline in turnover on a MoM basis. Overall, with only one of the top 10 scrips experiencing an increase in turnover, the top 10 scrips reflected a weaker performance compared to last month.

Table 111: Top 10 companies of stock futures in November 2024

Securities (Rs Cr)	Nov-24	Oct-24	%Change
HDFC Bank Limited	145,087	160,907	(9.8)
Reliance Industries Limited	102,498	122,459	(16.3)
State Bank of India	77,147	74,979	2.9
ICICI Bank Limited	76,677	108,019	(29.0)
Infosys Limited	48,939	64,444	(24.1)
Axis Bank Limited	44,478	62,007	(28.3)
Mahindra & Mahindra Limited	43,347	47,088	(7.9)
Tata Motors Limited	42,861	50,567	(15.2)
Bharti Airtel Limited	38,887	39,798	(2.3)
Kotak Mahindra Bank Limited	36,851	59,055	(37.6)
Top 10 scrips turnover	6,56,772	7,89,323	(16.8)
Total Turnover	26,16,407	33,43,153	(21.7)
% share of Top 10 scrips	25.1%	23.6%	1.49

Source: NSE EPR. Figures in brackets indicate negative numbers.

Note: The scrip-wise turnover data for the previous month is based on the current month's top 10 scrips

The premium turnover in the stock options segment stood at Rs 1.3 lakh crore in November 2024, marking a significant 22.3% MoM decline from Rs 1.7 lakh crore in October 2024. Similarly, the share of the top 10 scrips in total premium turnover fell by 22.3% MoM to Rs 31,863 crore. While HDFC Bank was the top scrip in cash market and stock futures segment, Reliance Industries held the top position in stock options segment. Only two out of the top 10 scrips recorded an increase in turnover, with no new scrips entering the list during the month.

Table 112: Top 10 companies (based on premium turnover) of stock options in Nov-2024

Securities (Rs Cr)	Nov-24	Oct-24	%Change
Reliance Industries Limited	5,290	6,902	(23.4)
Adani Enterprises Limited	5,286	3,302	60.1
State Bank of India	4,410	3,397	29.8
HDFC Bank Limited	4,027	4,677	(13.9)
Adani Ports and Special Economic Zone Limited	3,268	854	282.8
Dixon Technologies (India) Limited	3,251	4,788	(32.1)
Tata Motors Limited	2,900	3,682	(21.2)
Trent Limited	2,670	2,577	3.6
Mahindra & Mahindra Limited	2,539	2,658	(4.5)
Hindustan Aeronautics Limited	2,244	2,759	(18.6)
Top 10 scrips premium turnover	35,885	35,596	0.8
Total premium turnover	1,27,497	1,71,991	(25.9)
% share of Top 10 scrips	28.1	20.7	7.45

Source: NSE EPR. Figures in brackets indicate negative numbers.

Note: The scrip-wise turnover data for the previous month is based on the current month's top 10 scrips.

Record statistics

Total traded contracts in commodity derivatives hit a record high: On November 14, 2024, the total number of contracts traded in commodity segment reached an all-time high of 1,21,194, reflecting rising interest in commodity derivatives. Incidentally commodity options on futures also registered a record of Rs 26.4 crore in the previous month on October 18th, 2024. The equity derivatives segment and cash market segment showed strong activity earlier this year, with the number of trades reaching 24.25 crore on June 19, 2024 and 8.85 crore on June 4, 2024, respectively.

Table 113: Segment-wise record turnover till December 23rd, 2024

Particulars	Value	Date of Record
Total traded contracts in commodity derivatives	1,21,194	14-Nov-24
Commodity options on futures (Rs crore)	26.4	18-Oct-24
Nifty50	26,216.	26-Sep-24
Market Cap (Rs crore)	4,73,83,695	27-Sep-24
Capital market turnover (Rs crore)	2,71,245	04-Jun-24
Number of trades in cash market segment (In crore)	8.85	04-Jun-24
Index futures turnover (Rs crore)	1,57,036	04-Jun-24
Index options turnover (Rs crore)	2,13,406	04-Jun-24
Stock futures turnover (Rs crore)	3,98,161	23-Jul-24
Stock options turnover (Rs crore)	20,683	04-Jun-24
Number of trades in equity derivatives segment (In crore)	24.25	19-Jun-24
Currency futures turnover (Rs crore)	99,346	22-Mar-24
Commodity options turnover (Rs crore)	21	18-Mar-24
Currency options turnover (Rs crore)	635	11-Nov-22
Commodity futures turnover (Rs crore)	145	29-Aug-19

Source: NSE EPR

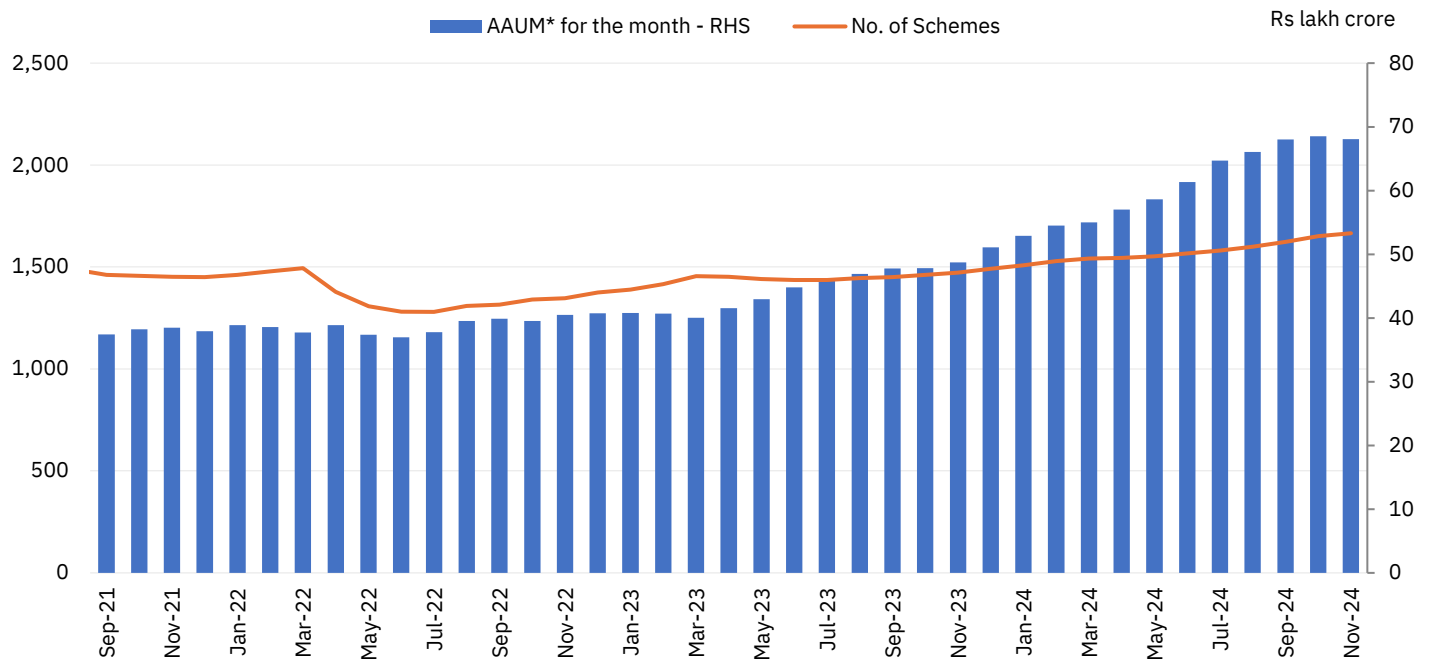
Note: Premium turnover has been considered for options contracts.

Investment through mutual funds in India

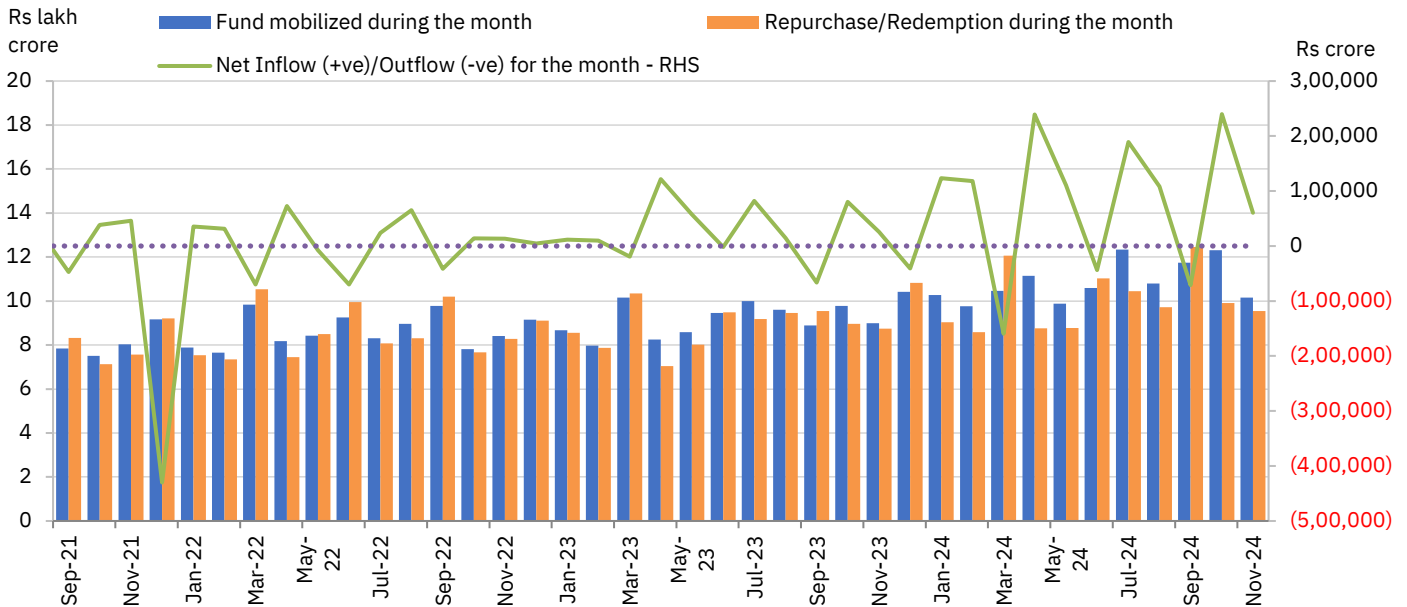
Mutual funds' AUM declined marginally for the first time in 21 months: Average net assets under management (AUM) of Indian mutual funds declined by a modest 0.7% MoM to Rs 68 lakh crore in November. The decline was primarily led by pure equity-linked funds, with their AUM falling by 1.8% MoM to Rs 38.1 lakh crore, marking the first drop in the last three months, even as pure debt funds saw the AUM rising by 1.6% MoM to Rs 19.4 lakh crore. Sequentially lower fund mobilisation through existing and new schemes (across both debt and equity), that fell by 17.6% MoM to a six-month low of Rs 10.2 lakh crore, coupled with high redemptions, resulted in net inflows into mutual funds in November dropping to a quarter of that seen in the previous month. That said, this decline should be seen in conjunction with the record-high net inflows of Rs 2.4 lakh crore seen in the month of October. Notwithstanding reduced fund mobilisation, SIP inflows into mutual funds remained broadly steady at Rs 25,320 crore in Nov'24, with the SIP AUM at Rs 13.5 lakh crore now comprising nearly one-fifth of the overall industry's AUM.

In November, the AUM of close-ended schemes experienced a slight dip, settling at Rs 26,567 crore, continuing its downward trend, even as their share in the total mutual fund AUM remain miniscule at 0.4%. Of the total number of schemes, 1,552 are open-ended, 102 are close-ended, and the remaining 12 are interval schemes.

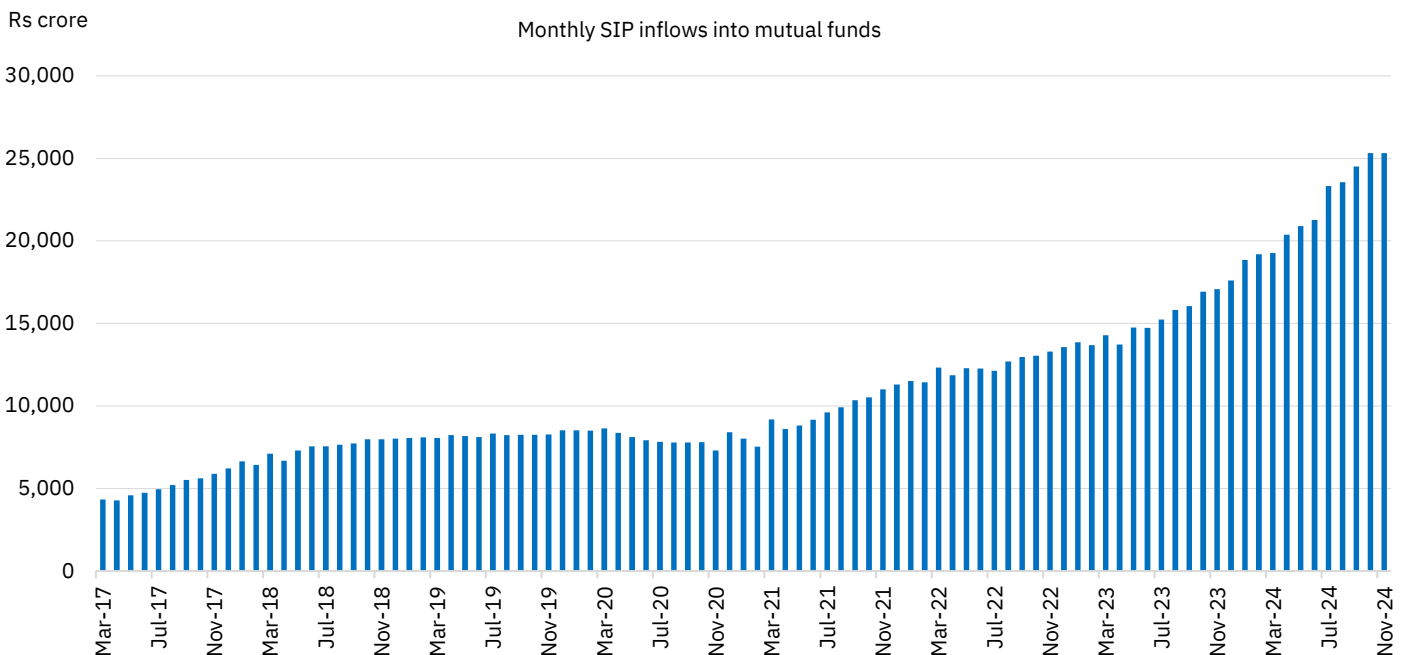
Figure 297: Monthly trend of total MF schemes and average AUM



Source: AMFI, NSE EPR. *AAUM-Average Assets under Management.

Figure 298: Monthly trend of total investment through mutual funds


Source: AMFI, NSE EPR.

Figure 299: Monthly trend of total investment through mutual funds


Source: AMFI, NSE EPR.

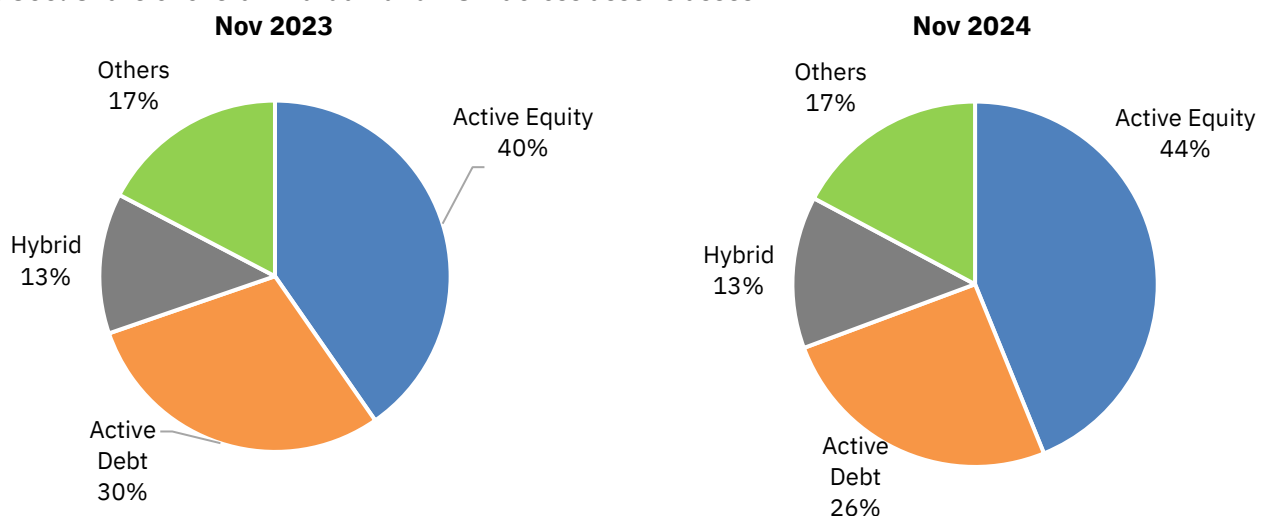
A large portion of the mutual fund AUM is actively managed: Actively managed funds across both debt and equity comprised of 82.8% (Rs 56.3 lakh crore) of the total mutual fund industry AUM. Within equity, the AUM of passively managed funds stood at Rs 8.3 lakh crore (-1.4% MoM), accounting for 21.7% of the equity AUM, with the balance Rs 29.8 lakh crore (-2% MoM) being actively managed. Within debt, only 10.5% or Rs 2 lakh crore (-0.5% MoM) is managed passively, with the balance Rs 17.3 lakh crore (+1.9% MoM) being actively managed. For the first time in the last 21 months, the AUM of hybrid funds declined marginally to Rs 9.2 lakh crore (-0.6% MoM) in November, even as its share held broadly steady.

Table 114: Monthly trend of average AUM of mutual funds across categories

Rs crore	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	% share
Total MF AUM	6,133,227	6,470,664	6,604,057	6,800,486	6,850,321	6,804,913	100.0
Equity	3,431,691	3,646,416	3,731,334	3,914,552	3,883,527	3,812,040	56.0
Active	2,687,142	2,854,590	2,923,249	3,070,667	3,043,146	2,983,715	43.8
Passive	744,548	791,826	808,086	843,884	840,382	828,324	12.2
Index funds	125,731	139,127	145,194	155,035	158,565	159,080	2.3
Domestic	121,036	134,267	140,245	149,949	153,310	153,668	2.3
International	4,695	4,860	4,950	5,086	5,255	5,413	0.1
ETFs	618,818	652,699	662,891	688,849	681,816	669,244	9.8
Domestic	607,133	640,658	651,181	676,869	669,183	656,193	9.6
International	11,685	12,041	11,711	11,980	12,633	13,051	0.2
Debt	1,748,162	1,829,390	1,856,849	1,840,812	1,907,806	1,938,510	28.5
Active	1,540,597	1,617,213	1,644,029	1,632,115	1,702,362	1,734,064	25.5
Passive	207,566	212,177	212,820	208,697	205,444	204,446	3.0
Index funds	109,098	109,584	109,768	107,290	106,234	106,449	1.6
ETFs	98,468	102,593	103,052	101,407	99,210	97,997	1.4
Hybrid	833,978	871,986	890,464	914,360	922,558	916,644	13.5
Others*	119,396	122,873	125,410	130,761	136,430	137,720	2.0

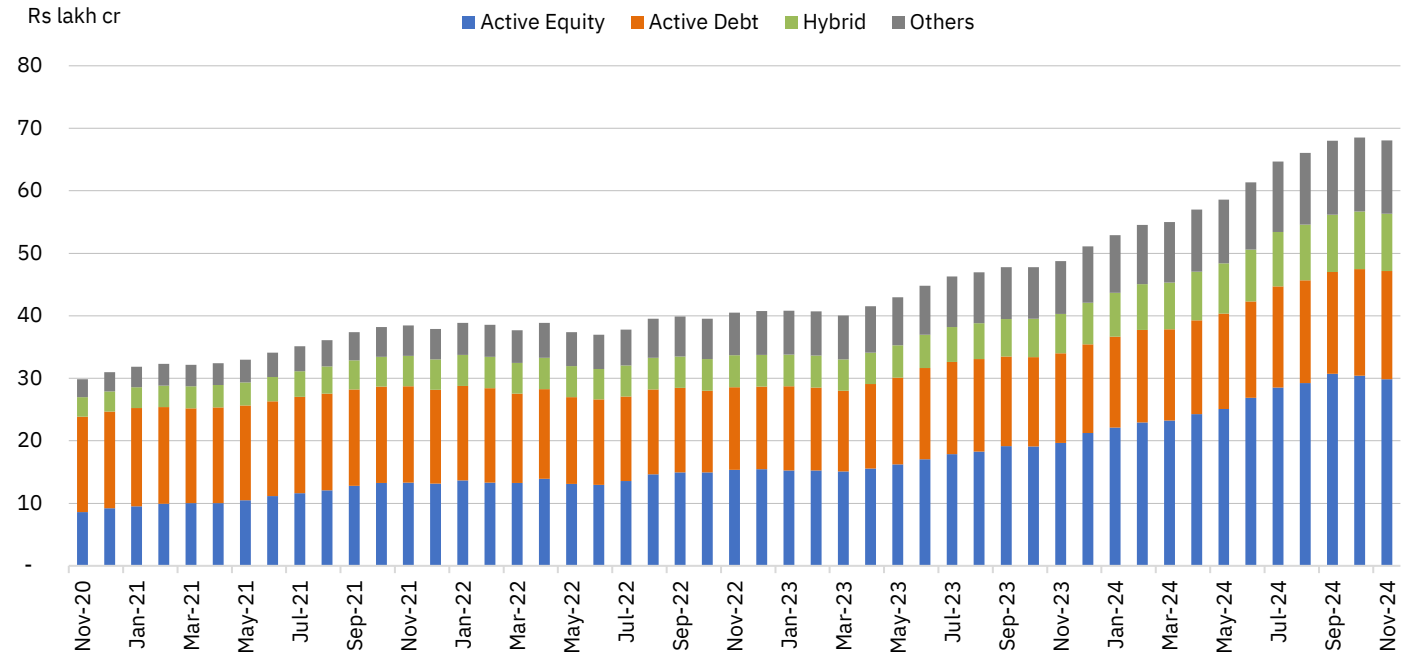
Source: AMIF, NSE EPR. *Others include Gold and silver ETFs, other ETFs and index funds, solution-oriented schemes, interval schemes, FoFs investing overseas in active and passive funds.

Share of active equity funds in total AUM fell for the second month in a row: The share of active equity funds in the overall AUM dropped for the second month in a row from an all-time high of 45.2% in September to 44.4% in October and further to 43.8% in November, even as the share is still up 3.8pp in the last 12 months. The share of active debt AUM, on the other hand, increased for the second consecutive month to a six-month high of 25.5%, partly reversing the declining trend seen over the previous fifteen months. Notwithstanding the recent increase, the share of debt AUM is still down 4pp as compared to the year-ago period. This significant decline in share of active debt AUM can be attributed to the removal of indexation benefits introduced in 2023.

Figure 300: Share of overall mutual fund AUM across asset classes


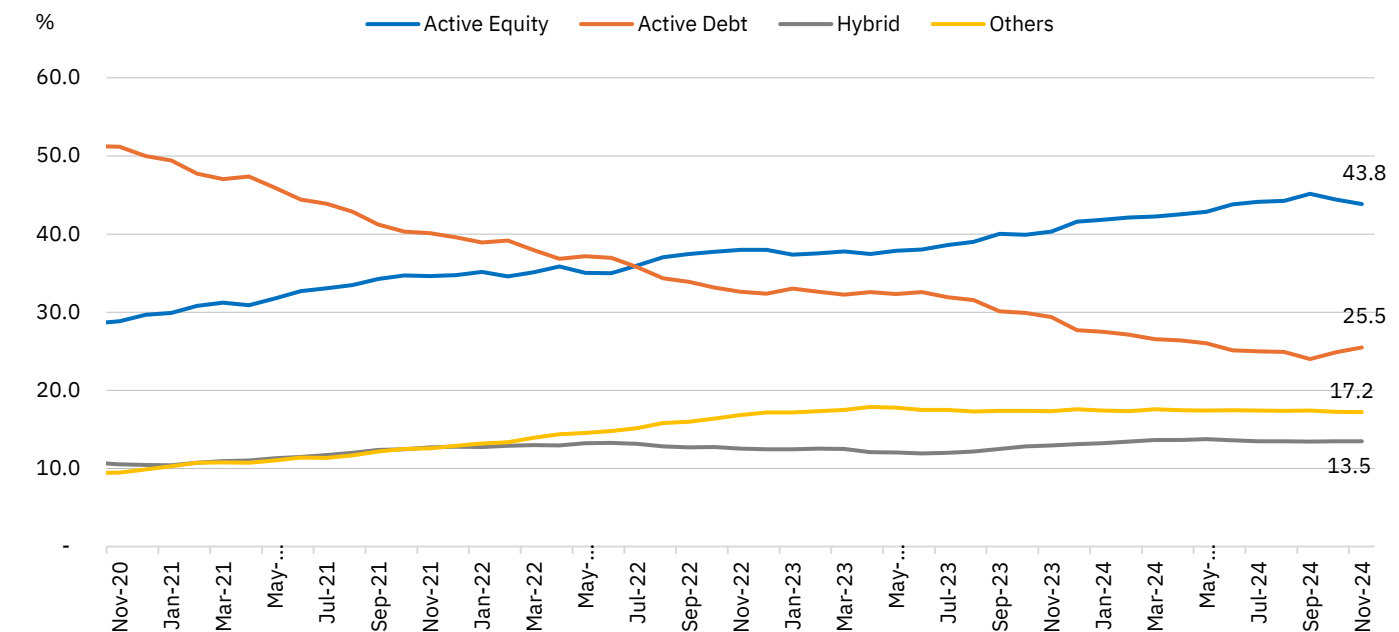
Source: CMIE Economic Outlook, AMFI, NSE EPR

Note: Others include all passive funds (Index funds and ETFs), solution-oriented schemes, interval schemes, fund of funds investing overseas in active and passive funds.

Figure 301: Category-wise AUM split*


Source: CMIE Economic Outlook, AMFI, NSE EPR

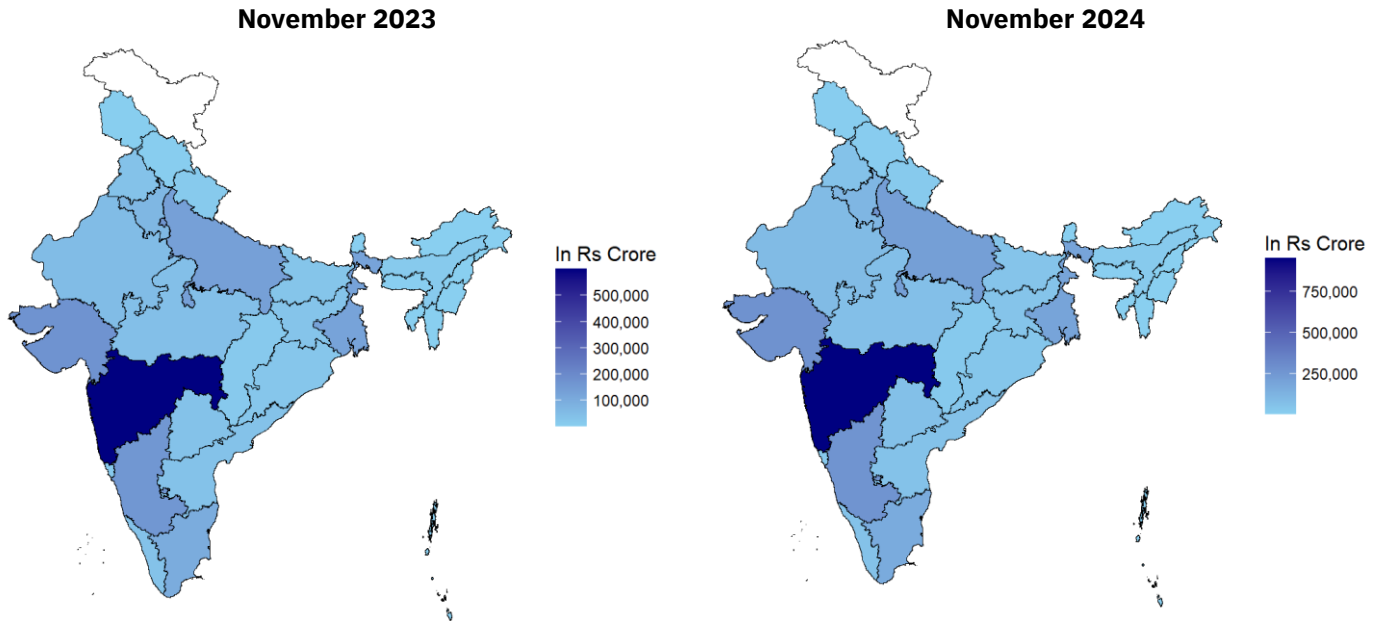
* Others include all passive funds (Index funds and ETFs), solution-oriented schemes, interval schemes, fund of funds investing overseas in active and passive funds.

Figure 302: Category-wise share in MF AUM*


Source: CMIE Economic Outlook, AMFI, NSE EPR

*Others include all passive funds (Index funds and ETFs), solution-oriented schemes, interval schemes, fund of funds investing overseas in active and passive funds.

Equity AUM remained concentrated in a few states: Maharashtra and Gujarat together accounted for 36.9% of the total equity mutual fund AUM in November 2024, showing no change from the previous month. Among the top five states, Karnataka (+2bps, 8.1%), Uttar Pradesh (+1 bps, 6.6%), and Delhi (+1bps, 7.7%) witnessed a slight increase in their share, while Gujarat (-1bps, 8.3%) experienced a decline. Maharashtra's share remained unchanged at 28.7%. All other states, except West Bengal, contributed less than 5% each to the total equity AUM of the mutual fund industry.

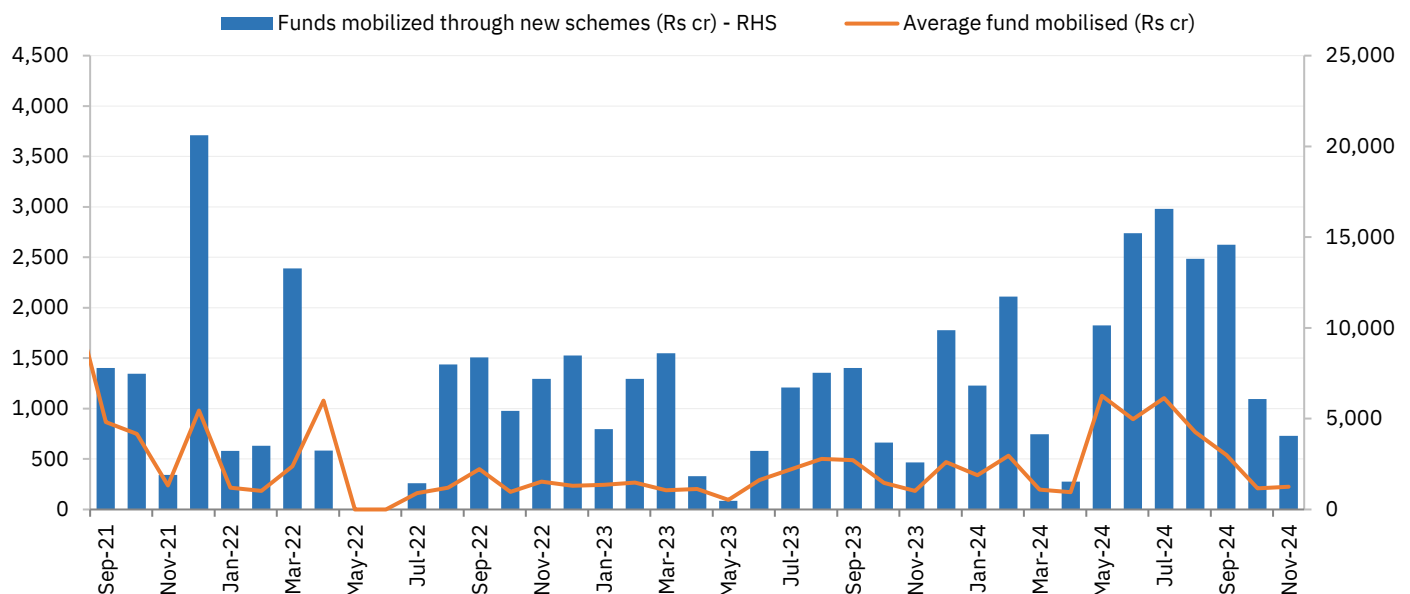
Figure 303: State-wise distribution of Equity schemes AUM in Jul'23 and Jul'24


Source: AMFI, NSE EPR.

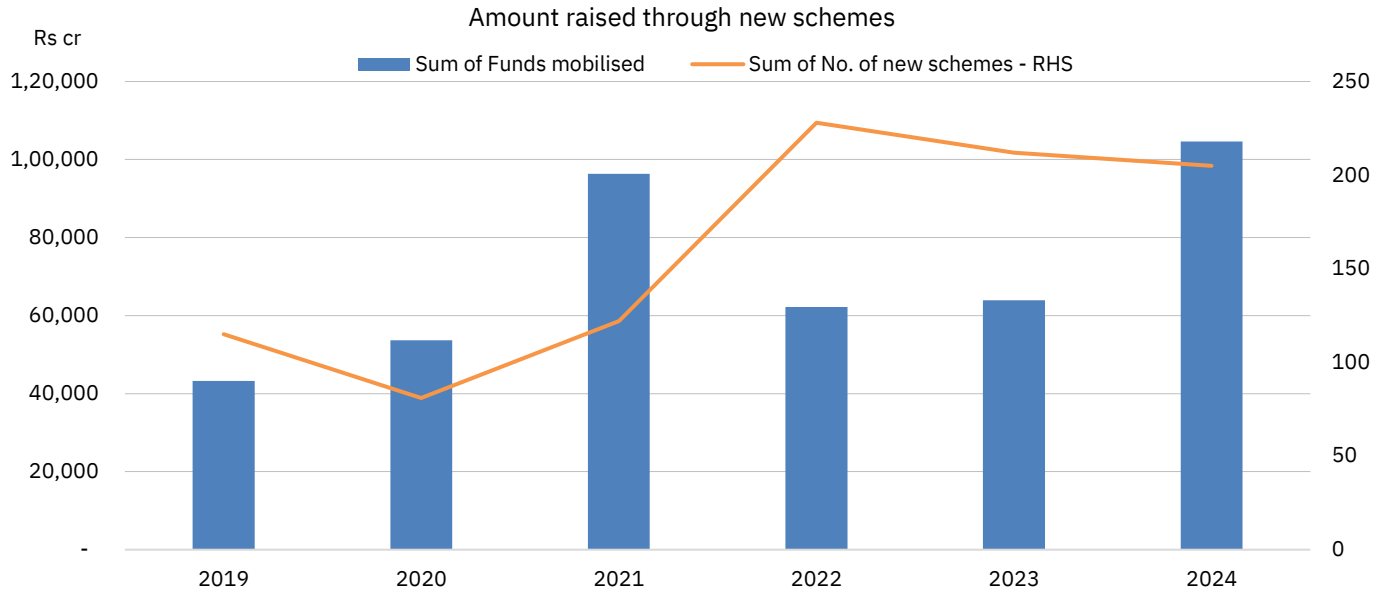
 Note: The maps are created using the state-level shapefile (<https://github.com/AnujTiwari/India-State-and-Country-Shapefile-Updated-Jan-2020>)

Fund mobilization through new schemes saw an increase due to a reduction in the

number of schemes: In November, the number of new schemes decreased to 18, a sharp decline from the previous month. Also, the total fund mobilization in November amounted to Rs 4,052 crore, marking a considerable fall from Rs 6,078 crore in the preceding month. Interestingly, this led to per scheme fund mobilization rising from Rs 209.6 crore in Oct'24 to Rs 225.1 crore in Nov'24 despite a decline in fund mobilisation. In the first eight months of FY25, total fund mobilization stood at Rs 81,984 crore, up 142.2% on a YoY basis, with fund mobilization per scheme rising by a steep 72% from that in FY24 to Rs 577.4 crore.

Figure 304: Monthly trend of total investment through new schemes


Source: AMFI, NSE EPR.

Figure 305: Annual trend of fund mobilization through new schemes*


Comparison of trading activities across major exchanges globally

Global equities witnessed a transformative November, with a clear divergence between developed and emerging markets as the MSCI World Index posted strong gains (+4.5% MoM). The U.S. markets led the pack, with the S&P 500 delivering robust returns (+5.7% MoM), driven by Donald Trump's presidential victory and Republican control of both Congress chambers, which sparked optimism around potential tax cuts, expansionary fiscal policies, and protectionist measures. The U.S. economy maintained its "soft-landing" trajectory, supported by steady consumer spending and continued investments in AI and infrastructure, despite persistent challenges from sticky inflation and tighter credit conditions. Adding to this momentum, the DXY strengthened to its highest levels in over two years, while Japanese large-cap exporters benefited from a weakening yen.

In contrast, emerging markets faced significant headwinds, with the MSCI EM Index declining (-3.7% MoM) as China's equities struggled amid insufficient government support for its real estate sector and broader confidence crisis. Indian markets experienced some volatility, with the Nifty50 slightly declining (-0.3% MoM) under external pressures, despite strong macro fundamentals and infrastructure initiatives. Other emerging economies, including Brazil, Korea, and Taiwan, also underperformed as they grappled with foreign equity outflows and global trade tensions, with Korea's central bank implementing an unexpected 25bps interest rate cut in response to growth concerns. European markets similarly struggled, with Eurozone equities declining (-1.9% MoM), affected by low growth and cautious consumer spending, though inflation showed signs of moderation.

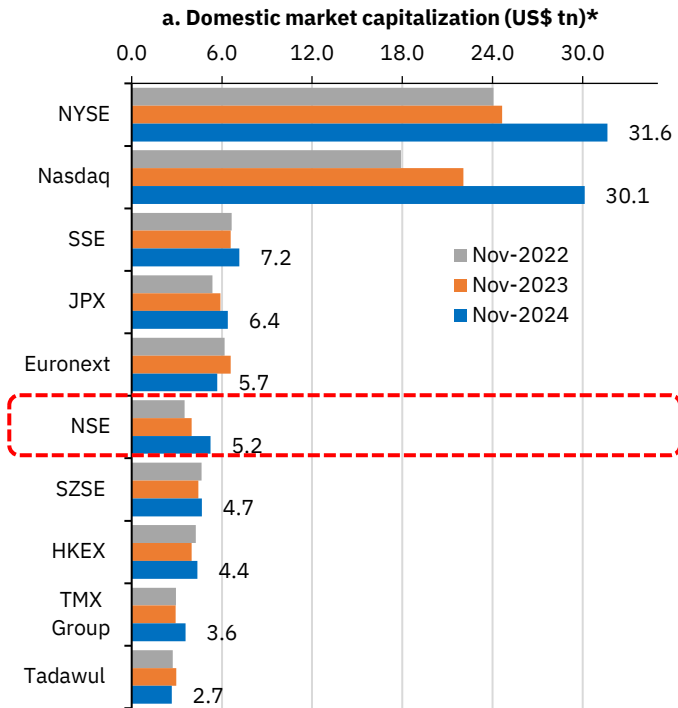
This section explores the overall trend of trading patterns and shifts in the securities market over the past three years in various segments across global stock exchanges. We used data from the World Federation of Exchanges (WFE) over the period Jan'14-Nov'24, covering a total of 148 exchanges, the majority of which are from EMEA region, followed by Asia-Pacific, and the rest from the Americas. We have also highlighted NSE's share across asset classes in cash and spot markets based on market capitalization and trading activity. The key takeaways of the analysis are as follows.

- **Market capitalization of major exchanges showed mixed performance:** In November, only half of the top ten exchanges experienced an expansion in market capitalisation on a MoM basis, with the overall market capitalisation of these exchanges rising sequentially (+4.1% MoM). However, the remaining half saw declines during the same period. On a YoY basis, eight of the top ten exchanges recorded growth in market capitalisation, ranging from 5.4% to 36.6%. In contrast, Euronext, and Saudi Arabia's Tadawul saw declines of -13.5% and -10% during the same period, respectively. Meanwhile, Nasdaq posted the highest annual growth (+36.6% YoY), followed by NSE (+31.5% YoY) and NYSE (+28.4% YoY).
- **NSE maintained sixth spot globally with US\$5.2 tn market cap:** In the month gone by, NSE retained its sixth position globally with a market capitalization of US\$5.2 tn (-0.1% MoM). The NYSE remained the largest stock exchange in the world with a market cap of US\$31.6 tn (+6.5% MoM), followed by Nasdaq at US\$30.1 tn (+6.9% MoM). SSE and JPX continued to hold their positions with market capitalizations of US\$7.2 tn (-0.2% MoM) and US\$6.4 tn (+0.6% MoM), respectively. Euronext maintained its fifth position with a market cap of US\$5.7 tn, reflecting a 2% MoM growth. Following NSE, SZSE and HKEX secured the seventh and eighth spots with market caps of US\$4.7 tn (-0.4% MoM) and US\$4.4 tn (-3.4% MoM), respectively. TMX Group and Tadawul completed the top 10 list with market capitalizations of US\$3.6 tn (+4.8% MoM) and US\$2.7 tn (-0.4% MoM), respectively.

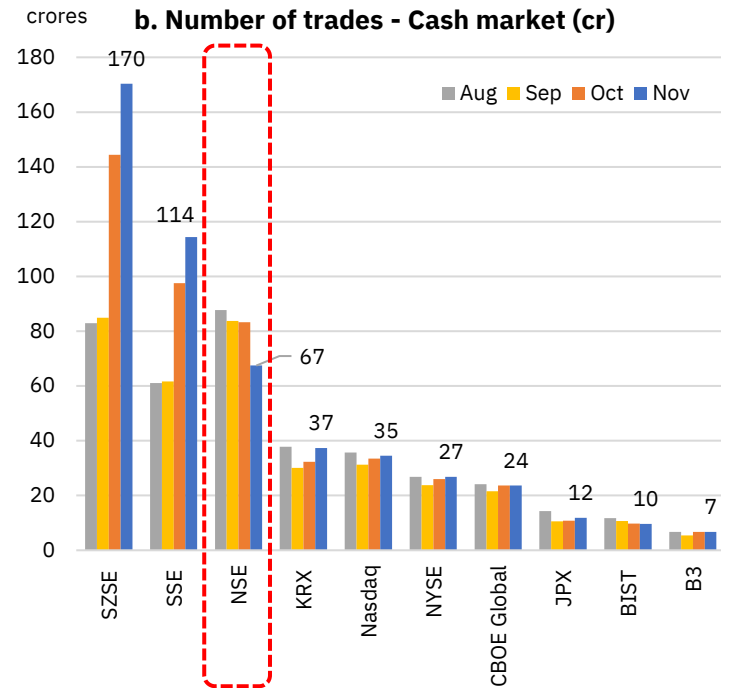
- **NSE retained third position in equity market trades:** Both SZSE and SSE continued to grow following the stimulus, recording significant increases in contracts traded to 170 crore (+17.9% MoM) and 114 crore (+17.3% MoM), respectively. In contrast, NSE saw a decline in activity, with contracts traded dropping to 67 crore (-19.0% MoM). KRX and Nasdaq maintained the fourth and fifth positions, trading 37 crore (+15.3% MoM) and 35 crore (+3.3% MoM) contracts, respectively. NYSE and CBOE Global Markets followed in sixth and seventh positions, trading 27 crore (+3% MoM) and 24 crore (no change) contracts. Overall, most of the top 10 exchanges witnessed a rise in contracts traded during November, with the exceptions of NSE and Borsa Istanbul, which experienced declines compared to the previous month.
- **NSE secured top position in equity derivatives segment:** NSE has seen a remarkable increase in its global market share of contracts traded, climbing from 14.1% in 2014 to 74.1% in 2023, and further expanding to an impressive 82.4% in 2024, with 11,732 crore contracts traded in the first eleven months of the year. Interestingly, B3 retained its second position, trading 697 crore contracts—less than one-tenth of NSE’s traded contracts during the same period—while its market share among the top ten exchanges dropped from 6.3% in 2023 to 4.9% in 2024. CBOE Global maintained its third position with 230 crore contracts traded, though its share declined from 2.4% in 2023 to 1.7% in 2024. In November, KRX and Nasdaq secured fourth and fifth positions, trading 220 crore and 197 crore contracts, respectively.
- **NSE slipped to the fourth position in the stock options segment:** NSE slipped to fourth position in the stock options segment in the previous, trading 13.4 crore contracts, registering a decline (-12.7% MoM). TSE moved to the top spot, trading 31.9 crore contracts (+95.9% MoM), followed by Nasdaq with 19.2 crore contracts (+1.5% MoM). CBOE Global Markets secured the third position with 14.5 crore contracts traded (+5.1% MoM). Most exchanges, except for NSE and ISE, saw a rise in the number of contracts traded. Notably, KRX and DBAG recorded substantial growth, with KRX registering 3 crore contracts traded (+31.4% MoM) and DBAG experiencing a 25% MoM rise 1.7 crore contracts traded (+25% MoM).
- **NSE moved to fourth position in stock futures segment:** NSE slipped to the fourth position in the stock futures segment in Nov’24, with contracts traded decreasing to 4 crore (-6.7% MoM). The top three positions were held by Borsa Istanbul (19.6 crore contracts traded, +28.7% MoM), KRX (15 crore contracts traded, +10.8% MoM), and B3 (12 crore contracts traded, no change). Among the top ten exchanges, BME saw significant growth largely owing to a low base effect, rising from 40 thousand contracts in October to 23 lakh contracts in November this year.
- **NSE continued to lead the global markets in index options segment:** NSE maintained its lead in the index options segment, trading 959.6 crore contracts in the past month, albeit registering a decline (-24.7% MoM). Despite this, NSE captured a significant market share of 96.6% in the past month and traded a total of 11,531.6 crore contracts in the first eleven months, reflecting strong growth (+65% YoY). Nasdaq jumped to the second spot with notable growth, trading 11.2 crore contracts during the month. CBOE Global Markets held the third position, with 8.3 crore contracts traded, although this marked a decline (-9.4% MoM). KRX and

DBAG secured the fourth and fifth positions, with 5.8 crore contracts traded (+17.6% MoM) and 3.1 crore contracts traded (+13.8% MoM), respectively. Notably, TASE experienced remarkable growth, trading 30 lakh contracts (+55.9% MoM).

- **NSE slides to the ninth position in index futures segment:** In the past month, six out of the top ten exchanges witnessed declines in contracts traded. As a result, NSE slipped to the ninth position in the index futures segment, trading 1 crore contracts, which marked a decline (-14% MoM). However, despite this monthly decline, NSE demonstrated significant growth in the first eleven months of the year, registering a remarkable rise (+55.2% YoY). Meanwhile, B3 maintained its position at the top, with 36.1 crore contracts traded, showing no change from the previous month. Following B3, the CME Group traded 9.9 crore contracts, experiencing a decline (-3.2% MoM), while DBAG secured the third spot with 2.8 crore contracts traded (+10% MoM).
- **NSE slipped to the sixth position in the currency options segment:** In the month gone by, NSE slipped to the sixth position, trading 1 lakh contracts, registering a decline (-1.9% MoM). This continued downward trajectory can be attributed to the RBI's directive on currency derivative trading issued in April. Meanwhile, JSE held on to its top position, trading 12 lakh contracts and capturing nearly a third of the market share. Close behind, the CME Group secured the second spot, trading 11.2 lakh contracts, reflecting a growth of +15.5% MoM. TASE followed in third position, with 9 lakh contracts traded, marking a significant rise (+48.4% MoM). Barring NSE, most of the top ten exchanges saw growth during the same period.
- **NSE occupied the fourth position in the currency futures segment:** In the past month, NSE occupied the fourth position with 1.2 crore contracts traded, although it registered a decline of -31.2% MoM. B3 and CME Group maintained their positions at the top, with 6.6 crore contracts traded (no change) and 1.9 crore contracts traded (+9.9% MoM), respectively. Meanwhile, KRX and Matba Rofex secured the third and fifth positions, trading 1.3 crore contracts (+15.4% MoM) and 1.1 crore contracts (-14.1% MoM), respectively. Notably, while TFEX remained at the bottom of the rankings, it experienced significant growth, trading 10 lakh contracts (+33% MoM) increase. Remarkably, despite the decline in November, NSE held the second position overall, with 22.6 crore contracts traded, reflecting a modest growth (+0.1% YoY) in the first eleven months of the year.
- **NSE retained top spot with nearly 250 new listings:** NSE continues to hold the top spot with 241 new listings through IPOs in 11MCY24, reflecting strong growth (+56.5% YoY). Following NSE, Nasdaq and KRX secured the second and third positions, with 135 new listings (+42.1% YoY) and 65 new listings (-5.8% YoY), respectively, during the same period. On a sequential basis, NSE witnessed 11 IPOs the past month, as compared to 24 the month before. Interestingly, Nasdaq, which ranks second, had nearly half the number of listings compared to NSE, highlighting the surge in new listings at NSE this year. Meanwhile, JPX and HKEX occupied the fourth and fifth positions, with 64 new listings (-13.5% YoY) and 60 new listings (+11.1% YoY), respectively. Notably, NYSE, in sixth position, registered an impressive growth (+145% YoY), with 49 new listings in the first eleven months.

Figure 306: Domestic market cap of top ranked exchanges*


Source: WFE monthly statistics, NSE EPR

Figure 307: Number of trades in Cash market of top ten exchanges*


Source: WFE monthly statistics, NSE EPR

Table 115: No. of trades (cr) in the top 10 exchanges in cash market*

Exchange	2022	2023	2024 (Jan-Nov)
SZSE	1,129.9	1,063.6	1,132.8
NSE	495.6	553.5	883.3
SSE	810.9	749.9	827.2
KRX	398.6	472.6	423.0
Nasdaq	454.2	391.2	371.5
NYSE	361.7	302.9	285.6
CBOE Global #	382.6	297.6	266.1
BIST	88.4	165.8	138.8
JPX	91.9	102.8	122.8
B3 #	77.2	65.9	63.1

Source: WFE monthly statistics, NSE EPR

Note: Oct'24 data has been used B3 and CBOE Global Market for Nov'24 due to its unavailability on the WFE portal.

Table 116: Global market share of trades in the top 10 exchanges in cash market*

Exchange	2022	2023	2024 (Jan-Nov)
SZSE	26%	26%	25%
NSE	12%	13%	20%
SSE	19%	18%	18%
KRX	9%	11%	9%
Nasdaq	11%	9%	8%
NYSE	8%	7%	6%
CBOE Global #	9%	7%	6%
BIST	2%	4%	3%
JPX	2%	2%	3%
B3 #	2%	2%	1%

Source: WFE monthly statistics, NSE EPR

Note: Oct'24 data has been used B3 and CBOE Global Market for Nov'24 due to its unavailability on the WFE portal.

Table 117: No. of contracts traded (cr) in the top 10 exchanges in equity derivatives segment*

Exchange	2022	2023	2024 (Jan-Nov)
NSE	3,378	8,021	11,732
B3 #	729	680	697
CBOE Global	226	239	230
KRX	187	185	220
Nasdaq	179	178	197
TSE	21	122	193
BIST	259	195	167
CME Group	192	167	158
NYSE	109	106	124
DBAG	123	114	101

Source: WFE monthly statistics, NSE EPR

Note: Oct'24 data has been used B3 for Nov'24 due to its unavailability on the WFE portal.

Table 118: Global market share of contracts traded in the top 10 exchanges in equity derivatives segment*

Exchange	2022	2023	2024 (Jan-Nov)
NSE	63%	80%	84.9%
B3 #	13%	7%	5.0%
CBOE Global	4%	2%	1.7%
KRX	3%	2%	1.6%
Nasdaq	3%	2%	1.4%
TSE	0%	1%	1.4%
BIST	5%	2%	1.2%
CME Group	4%	2%	1.1%
NYSE	2%	1%	0.9%
DBAG	2%	1%	0.7%

Source: WFE monthly statistics, NSE EPR

Note: Oct'24 data has been used B3 for Nov'24 due to its unavailability on the WFE portal.

Table 119: Number of contracts traded (cr) traded in Stock futures of top-ranked exchanges*

Exchange	2022 (Jan-Nov)	2023 (Jan-Nov)	2024 (Jan-Nov)	% YoY
BIST	226.5	173.9	160.3	-7.8
B3 #	125.5	132.7	133.1	0.3
KRX	83.9	85.2	130.5	53.1
NSE	26.7	26.1	44.4	70.2
DBAG	9.1	8.5	12.4	45.2
PSE	4.4	4.2	7.4	77.1
TAIFEX	5.0	4.7	6.1	30.3
TFEX	5.0	4.0	3.4	-15.5
ICE Futures Europe	2.1	1.5	1.5	3.8
BME Spanish	0.6	1.0	1.1	3.5

Source: WFE monthly statistics, NSE EPR

Note: Oct'24 data has been used B3 for Nov'24 due to its unavailability on the WFE portal.

Table 120: Number of contracts traded (cr) traded in Stock options of top-ranked exchanges*

Exchange	2022 (Jan-Nov)	2023 (Jan-Nov)	2024 (Jan-Nov)	% YoY
TSE	16.9	103.5	193.4	86.9
Nasdaq	165.1	162.1	184.8	14.0
B3 #	154.2	141.5	161.1	13.8
NSE	73.6	88.9	144.3	62.3
CBOE Global	142.6	132.6	135.7	2.3
NYSE	100.6	96.2	123.7	28.6
MIAX	70.7	86.2	91.4	6.1
ISE	48.0	54.0	74.6	38.2
DBAG	15.9	15.9	16.1	1.4
KRX	3.4	5.4	14.6	172.0

Source: WFE monthly statistics, NSE EPR

Note: Oct'24 data has been used B3 for Nov'24 due to its unavailability on the WFE portal.

Table 121: Number of contracts traded (cr) in Index futures of top ranked exchanges*

Exchange	2022 (Jan-Nov)	2023 (Jan-Nov)	2024 (Jan-Nov)	% YoY
B3 #	387.1	359.9	400.9	11.4
CME Group	149.4	121.6	121.2	-0.3
JPX	31.4	30.3	37.1	22.4
DBAG	48.4	42.4	36.6	-13.6
SGX	16.8	14.2	15.5	8.9
HKEX	12.6	12.6	13.5	6.7
TAIFEX	11.8	8.9	12.3	38.7
NSE	10.2	7.6	11.8	55.2
CFFEX	6.8	6.2	10.7	72.5
KRX	11.2	10.7	10.1	-5.8

Source: WFE monthly statistics, NSE EPR

Note: Oct'24 data has been used B3 for Nov'24 due to its unavailability on the WFE portal.

Table 122: Number of contracts traded (cr) in Index options of top ranked exchanges*

Exchange	2022 (Jan-Nov)	2023 (Jan-Nov)	2024 (Jan-Nov)	% YoY
NSE	2,842.3	6,987.2	11,531.6	65.0
Nasdaq	64.7	87.0	94.7	8.9
CBOE Global	75.1	71.2	64.9	-8.9
KRX	28.0	32.6	37.2	13.8
DBAG	39.3	37.6	35.9	-4.7
CME Group	18.5	16.3	18.0	10.4
TAIFEX	0.6	0.9	12.3	1299.3
CFFEX	3.6	4.7	7.1	51.2
TASE	2.8	3.1	3.3	6.2
HKEX	2.6	2.5	2.7	9.8

Source: WFE monthly statistics, NSE EPR

Table 123: Number of contracts traded (cr) in Currency futures of top ranked exchanges*

Exchange	2022 (Jan-Nov)	2023 (Jan-Nov)	2024 (Jan-Nov)	% YoY
B3 #	84.2	67.7	66.6	-1.6
KRX	114.6	87.7	30.4	-65.3
NSE	21.6	20.7	22.6	9.1
CME Group	11.7	10.0	12.2	21.4
MTR.BA	15.9	18.2	11.8	-35.1
SGX	3.2	3.7	5.4	44.6
JSE #	6.6	5.7	4.8	-15.8
BIST	2.8	3.1	4.2	34.4
HKEX	0.4	0.9	2.2	155.4
TFEX	0.9	1.1	1.0	-3.9

Source: WFE monthly statistics, NSE EPR

Note: Oct'24 data has been used B3 for Nov'24 due to its unavailability on the WFE portal. Sep'24 data has been used JSE for Nov'24 due to its unavailability on the WFE portal.

Table 124: Number of contracts traded (cr) in Currency options of top ranked exchanges*

Exchange	2022 (Jan-Nov)	2023 (Jan-Nov)	2024 (Jan-Nov)	% YoY
NSE	275.5	336.3	83.2	-75.3
JSE #	1.8	3.2	1.9	-42.5
CME Group	1.0	0.9	1.0	14.3
TASE	0.9	0.8	0.8	-0.2
B3 #	0.5	0.5	0.4	-17.5
BIST	0.0	0.1	0.2	247.0
MX	0.0	0.0	0.0	631.5
SGX	0.0	0.0	0.0	-64.1
BMV	0.0	0.0	0.0	58.1
MTR.BA	0.0	0.0	0.0	-44.0

Source: WFE monthly statistics, NSE EPR

Note: Oct'24 data has been used B3 for Nov'24 due to its unavailability on the WFE portal. Sep'24 data has been used JSE for Nov'24 due to its unavailability on the WFE portal.

Table 125: Number of Total New Listings in IPO of top ranked exchanges*

Exchange	2022 (Jan-Nov)	2023 (Jan-Nov)	2024 (Jan-Nov)	% YoY
NSE	78	152	241	58.6
Nasdaq	82	95	135	42.1
KRX	63	69	65	-5.8
JPX	64	74	64	-13.5
HKEX	62	54	60	11.1
NYSE	23	20	49	145.0
Bursa Malaysia	33	29	41	41.4
SZSE	174	124	40	-67.7
IDX	53	78	36	-53.8
Tadawul	30	34	34	0.0
Others	1,316	1,136	292	-74.4

Source: WFE monthly statistics, NSE EPR

Note: The new listing data for NSE excludes REITs.

Table 126: Global share of Total New Listing in IPO of top ranked exchanges*

Exchange	2022	2023	2024 (Jan-Nov)
NSE	6%	14%	23%
Nasdaq	6%	8%	13%
KRX	4%	6%	6%
JPX	6%	7%	6%
HKEX	5%	5%	6%
NYSE	2%	2%	5%
Bursa Malaysia	2%	3%	4%
SZSE	13%	11%	4%
IDX	4%	6%	4%
Borsa Istanbul	2%	3%	3%
Others	49%	35%	26%

Source: WFE monthly statistics, NSE EPR

* ASX -Australian Securities Exchange, BIST -Borsa Istanbul, BME -Spanish Exchanges, BMV-Bolsa Mexicana de Valores, BET-Budapest Stock Exchange, BYMA -Bolsa y Mercados Argentinos, CBOE -Chicago Board Options Exchange, CFFEX-China Financial Futures Exchange, DBAG -Deutsche Boerse AG, Euronext-Euronext, HKEX -Hong Kong Exchanges and Clearing, IDX-Indonesia Stock Exchange, IFB-Iran Fara Bourse Securities Exchange, India INX -India International Exchange, ISE -International Securities Exchange, JPX -Japan Exchange Group, JSE -Johannesburg Stock Exchange, KRX -Korea Exchange, MIAx -MIAx Exchange Group, MOEX -Moscow Exchange, MTR.BA-Matba Rofex, MX -Bourse de Montreal, Nasdaq- US - Nasdaq, NSE-National Stock Exchange of India, NYSE-NYSE, SET-The Stock Exchange of Thailand, SGX -Singapore Exchange, SIX-SIX Swiss Exchange, SSE -Shanghai Stock Exchange, SZSE -Shenzhen Stock Exchange, Tadawul -Saudi Exchange (Tadawul), TAIEX-Taiwan Stock Exchange, TAIFEX -Taiwan Futures Exchange, TASE -Tel-Aviv Stock Exchange, TFEX -Thailand Futures Exchange, TMX Group-TMX Group, TSE -Tehran Stock Exchange, LSE Group-LSE Group London Stock Exchange, PSE-Pakistan Stock Exchange, CME Group-CME Group, CBOE Europe-CBOE Europe, B3-B3 - Brasil Bolsa Balcão, DG CX-Dubai Gold and Commodities Exchange, CBOE Global-CBOE Global Markets, ICE Futures US-ICE Futures US, MSE-Metropolitan Stock Exchange of India, CBOE Futures-CBOE Futures Exchange, ICE Futures Europe-ICE Futures Europe, Athens-Athens Stock Exchange, GPW-Warsaw Stock Exchange, IFEU-ICE Futures Europe, BME -BME Spanish, IFUS-ICE Futures US, NSX-National Stock Exchange of Australia, BSE-BSE India Limited, BVC-Bolsa de Valores de Colombia, NSEIX-NSE IX India. Only WFE member exchanges are included in the analysis.

Policy developments

India

Key policy measures by the SEBI during November 2024

Nov 11, 2024	<p>Reclassification of FPI investment to FDI procedure</p> <p>Now, if the investment made by FPI reaches 10% or more of paid-up capital of a company and FPI wants to reclassify its FPI as FDI, it should follow FEMA rule. On receipt of such a request the custodian shall report the same to the board and freeze purchase transactions till the completion of classification.</p>
Nov 11, 2024	<p>Trading supported by Blocked Amount in Secondary Market</p> <p>Earlier trading happened through transfer of fund to the trading member by the clients. However, it creates default risk therefore, SEBI introduced a supplementary process for trading in secondary market based on blocked funds in investors bank account, instead of transferring them upfront to the trading members. This was a non-mandatory circular. After seeing the benefit, SEBI decided that qualified stockbrokers shall provide either the facility of trading supported by blocked amount in the secondary market (cash segment) using UPI block mechanism or the 3-in-1 Trading Account facility, to their clients. Clients will have option to choose among these facilities or can continue with the existing facilities.</p>
Nov 28, 2024	<p>Business Continuity for Interoperable Segments of Stock Exchanges</p> <p>This circular addresses how exchanges should handle outages during trading hours to protect market participants and investors, particularly when multiple exchanges are involved. Following measures should be taken by the stock exchanges:</p> <ol style="list-style-type: none"> 1. If identical products are available on another trading venue, then in case of outage participants can hedge their open position on non-outage trading venue. 2. Create a reserve contract for scribs of other stock exchange where scrib is traded only on one of the stock exchanges. 3. Index derivatives which are not traded on another stock exchange, in such cases stock exchanges may consider creating such an index and introducing derivatives contracts on it. 4. Exchanges should comply with regulatory requirements in case of outage and inform the same within 75 minutes to the SEBI and alternative trading venue. Also, the alternative trading venue would invoke the business continuity plan as per the Standard Operating Procedure (SOP) within 15 minutes from such intimation.

Nov 04, 2024**Investments in Overseas Mutual Funds/ Unit Trusts by Indian Mutual Funds**

Indian Mutual Funds are permitted to invest in overseas Mutual Funds (MF) and Unit Trusts (UT), including those with exposure to Indian securities. However, the exposure to Indian securities in these overseas funds must not exceed 25% of their assets. If the exposure exceeds 25%, a six-month observation period is granted for rebalancing. No new investments can be made during this period. If the exposure is not reduced, the Indian Mutual Fund must liquidate its investments within the following six months. If the exposure falls below 25% during the liquidation period, liquidation is not required. In case of failure to comply with exposure limit, no new subscriptions are allowed in the scheme, no new schemes can be launched, no exit load will be charged on investors exiting the scheme.

Annual macro snapshot

	FY18	FY19	FY20	FY21	FY22	FY23	FY24*	FY25#
National income								
GDP (Current) (Rs lakh crore)	170.9	189.0	201.0	198.5	236.0	269.5	295.36	326.4
GDP (Current) Growth (%)	11.0	10.6	6.4	-1.2	18.9	14.2	9.6	10.5
GDP (Constant) Growth (%)	6.8	6.5	3.9	-5.8	9.7	7.0	8.2	
IIP (Constant) Growth (%)	6.2	5.8	3.9	-4.2	8.8	7.0	7.6	
Agriculture growth (%)	6.6	2.1	6.2	4.0	4.6	4.7	1.4	
Industry growth (%)	5.9	5.3	-1.4	-0.4	12.2	2.1	9.5	
Services growth (%)	6.3	7.2	6.4	-8.4	9.2	10.0	7.6	
Per Capita GDP (Curr) (Rs)	1,31,743	1,44,620	1,52,504	1,48,586	1,72,422	1,94,879	2,11,725	
Prices								
CPI Inflation (%)	3.6	3.4	4.8	6.2	5.5	6.7	5.4	
Food & beverages (%)	2.2	0.7	6.0	7.3	4.2	6.7	7.0	
Core inflation (%)	4.5	5.8	4.0	5.3	6.1	6.3	4.4	
WPI Inflation (%)	2.9	4.3	1.7	1.3	13.0	9.4	(0.7)	
Primary articles (%)	1.4	2.7	6.8	1.7	10.3	10.0	3.5	
Fuel & power (%)	8.2	11.5	-1.8	-8.0	32.5	28.1	(4.6)	
Manuf. prods (%)	2.8	3.7	0.3	2.8	11.1	5.6	(1.7)	
Money, banking & interest rates								
Money supply (M3) growth (%)	9.2	10.5	8.9	12.2	8.8	9.0	11.2	
Aggregate deposit growth (%)	6.2	10.0	7.9	11.4	8.9	9.6	13.5	
Bank credit growth (%)	10.0	13.3	6.1	5.6	8.6	15.0	20.2	
Non-food credit growth (%)	10.2	13.4	6.1	5.5	8.7	15.4	20.2	
Cash Reserve Ratio (% eop)	4.0	4.0	4.0	3.0	4.0	4.5	4.5	
Bank Rate (% eop)	6.25	6.50	4.65	4.25	4.25	6.75	6.75	
Public Finance								
GOI rev. receipts growth (%)	4.4	8.2	8.5	-3.0	32.8	9.8	13.6	14.7
Gross tax receipts growth (%)	11.8	8.4	-3.4	0.9	33.7	12.7	13.5	10.8
GOI Expenditure growth (%)	8.4	8.1	16.0	30.7	8.1	10.5	6.1	8.5
Subsidies growth (%)	-4.4	-0.7	17.7	189.0	-33.5	14.7	-22.1	-2.8
Interest expense growth (%)	10.0	10.2	5.1	11.1	18.5	15.3	14.6	9.3
External transactions								
Exports growth (%)	10.1	8.8	-5.2	-7.1	45.1	6.7	-3.0	
POL exports growth (%)	18.8	24.5	-11.6	-37.6	162.8	43.9	-13.5	
Non-POL exports (%)	9.0	6.6	-4.1	-2.5	33.7	-0.4	-0.1	
Imports growth (%)	21.2	10.5	-7.8	-17.1	56.2	16.3	-5.7	
Non-POL imports growth (%)	20.1	4.6	-7.9	-9.6	45.4	12.1	-2.0	
POL imports growth (%)	25.0	29.9	-7.5	-36.9	96.7	29.1	-14.2	
Net FDI (US\$bn)	30.3	30.7	43.0	44.0	38.6	28.0	9.8	
Net FII (US\$bn)	22.1	-2.4	1.4	36.1	-16.8	-5.2	44.1	
Trade Balance: RBI – (US\$bn)	-160.0	-180.3	-157.5	-102.2	-189.5	-265.3	-242.1	
Current Acc. Balance (US\$bn)	-48.7	-57.2	-24.6	24.0	-38.8	-67.1	-23.3	
Forex Reserves (US\$bn)	424.4	411.9	475.6	579.3	617.6	578.4	645.6	
Exchange rate (USDINR)	64.5	69.9	70.9	74.2	74.5	80.4	83.4	

Source: CMIE Economic Outlook, NSE; *FY24 public finance data and national income data is as per PE; #FY25 public finance data and national income data are budget estimates.

Glossary

Indicators	Definition
General	
Compounded Annual Growth Rate (CAGR)	Average annual rate of return on an investment over a specified time period, assuming the profits are reinvested each year.
Fiscal Year (FY)	The 12-month period from April 1 to March 31 of the following year, used by Indian government and businesses for financial reporting and budgeting.
Month to Date (MTD)	The period from the beginning of the current month up to the current date, used to measure performance or track data over the partial month so far.
Month-over-Month (MoM)	A comparison of data from one month to the previous month.
Year to Date (YTD)	The period from the beginning of the current calendar or fiscal year up to the present date, used to assess performance or analyse data for the year in progress.
Year-over-Year (YoY)	A comparison of data from one year to the previous year.
Macro	
Balance of Payments (BOP)	A comprehensive record of a country's economic transactions with the rest of the world, including trade, investment, and financial transfers.
Capital Expenditure (Capex)	The amount of money used by a company to acquire, upgrade, and maintain physical assets such as property, buildings, or equipment over a specific period. It is essential for business operations and growth.
Capital Account	A component of the balance of payments that records all transactions involving the purchase and sale of assets, including foreign investments and loans.
Consumer Price Index (CPI)	A measure of average change in prices paid by consumers for a basket of goods and services over time.
Crowding Out	A situation where increased government spending leads to a reduction in private sector investment, often due to higher interest rates resulting from increased borrowing.
Current Account Deficit	A situation where a country's total imports of goods, services, and transfers exceed its total exports, indicating a net outflow of domestic currency to foreign markets.
Deflation	A decrease in the general price level of goods and services, often associated with a reduction in the supply of money or credit.
Economic Cycle	Natural fluctuation of the economy between periods of expansion (growth) and contraction (recession), typically measured by changes in GDP growth.
Exchange Rate	The value of one currency for the purpose of conversion to another, which affects international trade and investment flows.
Fiscal Deficit	The financial situation when a government's total expenditure exceeds its total revenues, excluding money from borrowings.
Fiscal Policy	The use of government spending and taxation to influence the economy with an aim to manage economic fluctuations and promote economic growth.
Foreign Direct Investment (FDI)	Investment made by a company or individual in business interests in another country, typically through establishing business operations or acquiring assets. It indicates a long-term interest in the foreign economy.
Gross Domestic Product (GDP)	The total monetary value of all finished goods and services produced within a country's borders in a specific time-period. It is a comprehensive measure of a nation's overall economic activity and health.
Gross Value Added (GVA)	The monetary value of goods and services produced by an economy after subtracting the cost of intermediate goods and services used.
Index of Industrial Production (IIP)	A measure of change in the production of a basket of industrial products during a given period with respect to that in a chosen base period.
Monetary Policy	The process by which a central bank manages the money supply and interest rates to achieve macroeconomic objectives such as controlling inflation, consumption, growth, and liquidity.
Monetary Stance	The central bank's position on monetary policy, typically classified as hawkish (favouring higher rates to control inflation), dovish (preferring lower rates), neutral (balanced approach), or accommodative (expanding money supply to boost growth).
Nominal Effective Exchange Rate (NEER)	An unadjusted weighted average rate at which a country's currency is exchanged for a basket of multiple foreign currencies.
Policy Rates	Interest rates set by central banks to influence monetary policy, affecting costs, inflation, and overall economic activity.
Public Debt	The total amount of money that a government owes to creditors, resulting from borrowing to finance budget deficits and other expenditure.

Real Effective Exchange Rate (REER)	A measure of the value of a country's currency against a basket of other currencies, adjusted for inflation, reflecting its competitiveness in international trade.
Trade Balance	Difference between a country's total value of exports and total value of imports over a specific period.
Wholesale Price Index (WPI)	A measure of average change in prices of goods at the wholesale level before retail sale over time.
Markets	
Algorithmic (Algo) Trading	A trading strategy based on computer programming, where orders are placed automatically based on pre-defined sets of conditions and algorithms, often used for high-frequency trading.
Average Daily Turnover (ADT)	Average value of securities traded on the exchange each day, indicating the liquidity and activity level of the market over a specific period.
Average Trade Size	Average monetary value of individual trades executed on an exchange, calculated by dividing the total traded value by the number of trades over a specific period.
Bonds	Debt securities where investors lend money to an entity (typically a corporation or government) for a defined period at a variable or fixed interest rate.
Cash Market (CM)	A marketplace where financial instruments, such as stocks and bonds, are bought and sold for immediate delivery and payment.
Colocation (Colo) Trading	The practice of positioning trading servers near exchange servers to minimize data transmission delays and optimize trade execution speed.
Credit Rating	An assessment of the creditworthiness of an individual, corporation, or government, evaluating their ability to repay borrowed funds.
Derivatives	Financial instruments whose value is derived from an underlying asset, such as stocks, bonds, and commodities, among others.
Direct Market Access (DMA)	A facility allowing investors to directly access exchange trading systems through their broker's infrastructure without manual intervention.
Domestic Institutional Investors (DII)	Financial institutions based within a country that invest in that country's financial markets, including mutual funds, insurance companies, and pension funds.
Equity Derivatives	Financial instruments whose value is derived from the value of an underlying equity securities, such as stock.
Equity Futures	Financial contracts obligating parties to buy or sell the underlying asset at a predetermined price on a specified future date.
Equity Options	Financial contracts giving the holder the right, but not obligation, to buy (call) or sell (put) a specific quantity of stocks at a predetermined price within a set timeframe.
Follow-on Public Offering (FPO)	A process through which a company that is already publicly traded issues additional shares to raise more capital, allowing existing shareholders to sell their shares as well.
Foreign Portfolio Investment (FPI)	Investments made by foreign investors in financial assets in another country, primarily in stocks and bonds, without acquiring significant control or influence over the companies.
Index Options	Contracts that give the buyer the right but not the obligation to buy or sell a specified quantity of a stock market index at a predetermined price on a specified expiration date.
Initial Public Offering (IPO)	Process through which a private company offers its shares to the public for the first time, allowing it to raise capital, and/or provide an exit opportunity for existing investors.
Institutional Investors	Organizations that pool and invest large sums of money on behalf of others, such as pension funds, mutual funds, and insurance companies.
Internet Based Trading (IBT)	A process of buying and selling financial securities through online platforms, enabling direct trading of various financial instruments via the internet without traditional brokers.
Liquidity	The ease with which an asset can be quickly bought or sold in the market without affecting its price, indicating how quickly an asset can be converted into cash.
Market Capitalization	Total market value of a company's outstanding shares, calculated by multiplying the current share price by the total number of outstanding shares.
Market Maker	A financial intermediary that provides liquidity by continuously quoting buy and sell prices for specific securities, facilitating smooth trading in financial markets.
Market Volatility	The degree of variation in the price of a financial asset or market over time.
Mutual Funds	An investment vehicle that pools money from multiple investors to buy a diversified portfolio of stocks, bonds, or other securities.
Nifty50 Index	A benchmark Indian stock market index representing the weighted average of 50 of the largest Indian companies listed on the National Stock Exchange.
Offer for Sale (OFS)	A method through which existing shareholders, typically promoters or large stakeholders, sell their shares to the public or institutional investors.
Option Premium	Price paid by an investor to purchase an option contract, comprising both its intrinsic value and time value.

Preferential Allotments	The issuance of shares or securities to specific investors, usually at a predetermined price, to raise funds for a company while bypassing public offerings.
Price-to-Book Value (P/B)	A ratio comparing a company's market capitalization to its book value, indicating how much investors are willing to pay for each unit of net assets.
Price-to-Earnings (P/E)	A ratio comparing a company's current share price to its Earnings per Share (EPS), indicating how much investors are willing to pay for each unit of earnings.
Qualified Institutional Buyers (QIB)	Institutional investors that meet certain criteria set by regulators, allowing them to invest in unregistered securities and participate in private placements.
Retail Individual Investors	Non-professional, individual investors who buy and sell securities, such as stocks and bonds, primarily for personal investment purposes rather than for institutional or commercial reasons.
Rights Issue	An offer to existing shareholders to purchase additional shares at a discounted price, typically to raise capital for the company.
Smart Order Routing (SOR)	A technology that automatically directs trade orders to the most favourable venues, optimizing execution by considering factors such as price, speed, and liquidity.
Turnover	The total value of all transactions (buying and selling) that occur within a specific period, reflecting the volume of trading activity on the exchange.
Unique Client Code (UCC)	Unique identification code allocated to each client by a stockbroker for the purpose of trading in the securities market.
Unique Registered Investors	The total number of distinct investors registered with an exchange based on their Permanent Account Number (PAN).
Valuation	The process of determining the current worth or fair market value of an asset, company, or investment.
World Federation of Exchanges (WFE)	A global trade association representing publicly regulated stock, futures, and options exchanges, as well as central counterparties, fostering collaboration and standardization in the financial markets industry.

Note: This glossary provides concise definitions for key Economic and Financial terms. While these definitions aim to capture the essence of each concept, many of these terms have nuanced meanings that may vary slightly depending on context or specific applications in Economics, or Financial market analysis. For more comprehensive understanding, readers are encouraged to consult specialized literature or seek advice from domain experts. It's important to note that this glossary may not be exhaustive or holistic in its current form. We aim to expand and refine these definitions in future editions to provide a more comprehensive resource.

Our reports on the economy and markets since January 2022

Sr. No.	Date	Report
1	17-Dec-24	NSE-CFA BRSR Report
2	06-Dec-24	Macro Review: RBI Monetary Policy
3	30-Nov-24	Macro Review: Q2FY25 India GDP
4	18-Nov-24	India Ownership Tracker Q2FY25
5	15-Oct-24	State of States: Capex pace moderates in FY25BE
6	09-Oct-24	Macro Review: RBI Monetary Policy
7	01-Oct-24	Macro Review: Q1FY25 Balance of Payments
8	02-Sep-24	Macro Review: Q1FY25 India GDP
9	16-Aug-24	NSE-Assocham Corporate Bond Report 2024
10	16-Aug-24	Market Pulse August 2024: Markets take a breather; Indian investors over 10 crore
11	10-Aug-24	India Ownership Tracker Q1FY25
12	08-Aug-24	Macro Review: RBI Monetary Policy
13	31-Aug-24	Market Pulse July 2024: Citius, Altius, Fortius!
14	24-Jul-24	Indian Capital Market: Transformative shifts achieved through tech and reforms
15	23-Jul-24	Union Budget 2024-25: Roadmap to Viksit Bharat
16	17-Jul-24	EY-NSE The Cost of Capital Survey 2024
17	28-Jun-24	Market Pulse June 2024: The last mile on the inflation path
18	28-Jun-24	Q4FY24 Corporate Earnings Review
19	25-Jun-24	Macro Review: Q4FY24 Balance of Payments
20	07-Jun-24	Macro Review: RBI Monetary Policy
21	01-Jun-24	Macro Review: Q4FY24 India GDP
22	29-May-24	Market Pulse May 2024: US\$5trn and beyond
23	22-May-24	India Ownership Tracker Q4FY24
24	26-Apr-24	Market Pulse April 2024: Markets and macro in the year that was
25	05-Apr-24	Macro Review: RBI Monetary Policy
26	26-Mar-24	Market Pulse March 2024: Indian investors cross the 9-crore mark
27	24-Mar-24	India Ownership Tracker Q3FY24
28	01-Mar-24	Macro Review: Q3FY24 India GDP
29	27-Feb-24	Market Pulse February 2024: On a high: Markets, investors, flows, and Generative AI
30	12-Feb-24	Macro Review: RBI Monetary Policy
31	01-Feb-24	Macro Review: Union Budget FY2024-25
32	26-Jan-24	Market Pulse January 2024: January effect...as January goes, so does the year?
33	22-Dec-23	Market Pulse Nov-Dec 2023: Hope smiles from the threshold of the year

34	15-Dec-23	India Ownership Tracker Q2FY24
35	08-Dec-23	Macro Review: RBI Monetary Policy
36	01-Dec-23	Macro Review: Q2FY24 India GDP
37	30-Nov-23	Q2FY24 Corporate Earnings Review
38	30-Oct-23	Market Pulse October 2023: Israel-Palestine redux, and the need for cooperation
39	06-Oct-23	Macro Review: RBI Monetary Policy
40	05-Oct-23	State of states: Will major states push capex in FY24
41	29-Sep-23	Macro Review: Q1 FY24 India Balance of Payments
42	12-Sep-23	Market Pulse September 2023: India@G20, Nifty@20k
43	01-Sep-23	Macro Review: Q1 FY24 India GDP
44	10-Aug-23	Macro Review: RBI Monetary Policy
45	27-Jun-23	India Ownership Tracker December 2022
46	18-Jul-23	Market Pulse July 2023: A monthly review of Indian economy and markets
47	15-Jul-23	Q4FY23 Corporate Earnings Review
48	28-Jun-23	Macro Review: Q4FY23 Balance of Payments
49	27-Jun-23	India Ownership Tracker December 2022
50	13-Jun-23	Market Pulse June 2023: A monthly review of Indian economy and markets
51	08-Jun-23	Macro Review: RBI Monetary Policy
52	01-Jun-23	Macro Review: Q4FY23 India GDP
53	12-May-23	Market Pulse May 2023: A monthly review of Indian economy and markets
54	12-Apr-23	Market Pulse Apr-May 2023: A monthly review of Indian economy and markets
55	06-Apr-23	Macro Review: RBI Monetary Policy
56	29-Mar-23	India Ownership Tracker December 2022
57	24-Feb-23	Market Pulse February 2023: A monthly review of Indian economy and markets
58	08-Feb-23	Macro Review: RBI Monetary Policy
59	01-Feb-23	Macro Review: Union Budget FY2023-24
60	25-Jan-23	Market Pulse January 2023: A monthly review of Indian economy and markets
61	23-Dec-22	Market Pulse Nov-Dec 2022: A monthly review of Indian economy and markets
62	07-Dec-22	Macro Review: RBI Monetary Policy
63	05-Dec-22	Q2FY23 Corporate Earnings Review
64	30-Nov-22	Macro Review: Q2FY23 India GDP
65	21-Oct-22	Market Pulse October 2022: A monthly review of Indian economy and markets
66	30-Sep-22	Macro Review: RBI Monetary Policy
67	28-Sep-22	Market Pulse September 2022: A monthly review of Indian economy and markets
68	22-Sep-22	India Ownership Tracker June 2022

69	26-Aug-22	Market Pulse August 2022: A monthly review of Indian economy and markets
70	25-Aug-22	Q1FY23 Corporate Earnings Review
71	05-Aug-22	Macro Review: RBI Monetary Policy
72	28-Jul-22	Market Pulse July 2022: A monthly review of Indian economy and markets
73	29-Jun-22	Market Pulse June 2022: A monthly review of Indian economy and markets
74	27-Jun-22	Q4FY22 Corporate Earnings Review
75	24-Jun-22	India Ownership Tracker March 2022
76	24-Jun-22	Macro Review: Q4FY22 Balance of Payments
77	08-Jun-22	Macro Review: RBI Monetary Policy
78	03-Jun-22	Macro Review: State Budget Analysis
79	01-Jun-22	Corporate Governance: ESG scores of NIFTY 50 companies
80	01-Jun-22	Macro Review: Q4FY22 India GDP
81	24-May-22	Market Pulse May 2022: A monthly review of Indian economy and markets
82	05-May-22	Macro Review: RBI Monetary Policy
83	29-Apr-22	Market Pulse April 2022: A monthly review of Indian economy and markets
84	11-Apr-22	India Ownership Tracker December 2021
85	08-Apr-22	Macro Review: RBI Monetary Policy
86	03-Apr-22	Macro Review: Q3FY22 Balance of Payments
87	31-Mar-22	Quarterly Briefing: Mandatory Board Governance in India
88	26-Mar-22	Market Pulse March 2022: A monthly review of Indian economy and markets
89	28-Feb-22	Market Pulse February 2022: A monthly review of Indian economy and markets
90	24-Feb-22	Q3FY22 Corporate Earnings Review
91	18-Feb-22	Quarterly Briefing: Related Party Transactions: Implications for Investor Protection
92	10-Feb-22	Macro Review: RBI Monetary Policy
90	01-Feb-22	Union Budget FY2022-23
91	29-Jan-22	Market Pulse January 2022: A monthly review of Indian economy and markets
92	03-Jan-22	Macro Review: Q2FY22 Balance of Payments

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