July 2021
Volume 3, Issue 7

Market Pulse

A monthly review of Indian economy and markets

NSE

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A Monthly Review

Indian Economy and Markets

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This monthly publication is a review of major developments in the economy and financial markets during the month.

Online: www.nseindia.com

NSE

NATIONAL STOCK EXCHANGE OF INDIA LIMITED

Market Pulse

Published by Economic Policy and Research, National Stock Exchange of India Ltd.

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Exchange Plaza, Bandra Kurla Complex
Bandra (East), Mumbai 400 051 INDIA

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Executive Summary

Reflation trade over macro uncertainty

Global markets continued their rise upwards in June, as hopes of a strong economic recovery—supported by continued fiscal and monetary stimuli—outweighed fears of rising inflationary pressures with many economies melding vaccination programs with easing restrictions. A hawkish FOMC commentary did incite fears of summer 2013's taper tantrum but turned out to be a hiccough after reassuring comments from the Fed chair. Questions on sustainability of growth in developed markets prevail for now over worries of asset inflation, and the reflation trade continues. Developed markets outperformed, with the MSCI World Index ending June 1.4% higher (13.5% YTD on July 9th). Indian markets lost steam on benchmark indexes after a sterling May, but positive sentiments continue among the small and midcap segments and in daily market turnover, despite rising macro uncertainty.

Meanwhile, mutations of the Coronavirus—a grim reminder of high-school Latin alphabet—continue to pose complications, with even countries with a decent vaccination spread like Israel and the UK seeing a renewed jump in new cases, albeit with lower mortality. Our COVID analysis across the country finds a significant rise in jabs since the third week of June with central procurement, amidst a steady rise in the asking rate towards meeting year-end goals. Despite over 304m shots since January, ~5% of us are vaccinated; the global figure is 12%. Barring the North-East and Kerala, most parts of the country have had a protracted drop in active cases, but renewed gatherings have led to a rise in the R0 number of infections. A measure of where we are can be had from the fact that while the Second Wave peaked in early May, average deaths continue to hover at the peak of the First Wave in September 2020—over a thousand a day.

As the country continues to inch its way out of the Second Wave, several macro indicators now provide some clarity on the path ahead, although the overall economic picture remains cloudy. Growth indicators show some signs of recovery, inflation threatens to rise further—partly led by domestic auto fuels—and could pose problems for the MPC even as it tries to continue supporting growth in wake of hardening inflationary expectations. Led by a graduated approach, manufacturing activity stayed put through the lockdowns, and farm sector performance is likely to be satisfactory for yet another year, with plentiful rains. Even as these give cause for comfort, aggregate demand is weighed down by weak incomes and rising expenses that force households to dig into their savings, sell gold, and defer discretionary consumption. The RBI's FSR points to rising risk to MSMEs with easing regulation. We expect FY22 GDP growth at 9.2% on a low base, but an aggressive, accelerated vaccination program remains the key to alleviating economic uncertainty. Consider the positive aspects here. India's corporate, and bank balance-sheets are getting better, leverage is contained, and policy support is the highest in a long while. There are long-term benefits here that presuppose swift control on the pandemic in the short-term, and a hitherto unmatched focus on public health infrastructure.

Even as the economy remains on a precarious perch in near- to medium-term, markets are close to life-time highs. Such divergence is generally temporary but has grown more persistent globally since the global financial crisis (GFC) in 2008. We examine the phenomenon in greater detail, and point out several explanatory factors, like unusual monetary and lately fiscal support, the asymmetry in how the pandemic has affected large and small firms, and natural differences in sector-wise representation of the economy and the markets. All of these affect global equities, while increased retail equity participation is local. What is important to point out here is that the markets are forward-looking, and discount future earnings, rewarding positive surprises. Corporate performance in Q4FY21 has been strong (see our detailed review), with FY21 earnings growth at 25% beating consensus expectations of 18% in April'20 and slated to rise at a CAGR of 28% over FY21-23. At current levels, Indian markets are at ~21x forward consensus earnings.

Our July edition of the Market Pulse has several sections that take a deeper look at each segment of the economy and the markets. Apart from a comprehensive coverage of the macro, our deep dive into markets goes beyond the major asset classes to study investor behaviour with participation by each of the major categories. As always, we welcome comments and suggestions.

Dr. Tirthankar Patnaik
Chief Economist

Stories of the month

Q4FY21 Earnings Review: Another upbeat quarter; Commodities drive profit upgrades

Corporate performance in Q4FY21 pointed to a strong rebound in sales as well as profitability. Aggregate net sales grew by 15.7%/18% YoY in the March quarter for the Nifty 50/Nifty 500 universe[1]—the highest in eight quarters, with recovery being broad-based across consumption and investment-oriented sectors, even as annual figures pointed to a modest contraction in FY21. Steady consumption demand, easing supply-side bottlenecks, higher commodity prices and a favourable base benefited the top-line growth during the quarter. Profit at the *operating level*, however, grew by an optically higher 66.1%/60.6% YoY for the Nifty 50/Nifty 500 companies (ex-Financials), albeit off a low base. Savings on administration/marketing and rental expenses as compared to the year-ago period, thanks to adoption of the work-from-home working model by several companies during the pandemic, have partly offset the sharp surge in input costs.

Robust operating profits, along with lower interest costs—a result of corporate deleveraging and decline in market interest rates, translated into a 145%/227% YoY jump in adjusted PAT for Nifty 50/Nifty 500 universe in Q4FY21. Earnings in Q4FY21 were led by Financials (strong show by PSU Banks), commodity-oriented sectors viz. Energy (higher margins, inventory gains) and Materials (higher metal prices) and Industrials (recovery in capex cycle).

Following a strong beat in FY21, the Consensus earnings estimates (from Refinitiv) for FY22 and FY23 for the top 200 covered companies by market cap has been revised upwards by 4-6% since April-beginning. Aggregate profit for these companies came in at 24.9% in FY21 vs. 17.8% estimated in April-beginning and is now projected to grow at a strong 28% CAGR over the next two years (FY21-23). The upgrades over the last three months, however, were primarily led by Materials and to some extent Financials, excluding which profit estimates were marginally curtailed for the current fiscal year. This is also reflected in the Earnings Revision Indicator[2] (ERI) trend for the Nifty 50 universe, which has been on a steady downward trajectory since the onset of the deadlier second wave in Feb'21 and is now hovering at near-zero levels, implying equivalent number of upgrades and downgrades. Barring Materials, all other sectors have seen a sharp rise in downgrades over the last few months. Prolonged weakness in consumption demand in the wake of an impending third wave and strengthening inflationary pressures, surge in NPA recognition by banks leading to higher provisioning requirements and a deterioration in global growth outlook are key downside risks to earnings estimates.

- Favourable base and higher commodity prices drove top-line growth in Q4: Aggregate net sales for Nifty 50/Nifty 500 companies grew by a strong 15.7%/18% YoY in Q4FY21–the highest in eight quarters, albeit off a low base (-6.2%/6% in Q4FY20), even as it dropped by 3.7%/4.2% in FY21. Persistent weakness in consumption demand before the onset of COVID-19 pandemic was further impacted by a strict nation-wide lockdown in the same quarter last year. On a QoQ basis, net sales grew by a strong 9.3%/8.0% for Nifty 50/Nifty 500 companies, aided by higher realisations on surging commodity prices, a steady improvement in consumption demand post the festive season and vaccination roll-out and easing supply-side bottlenecks amid limited lockdown restrictions during the quarter.

  Sectors that led an otherwise broad-based recovery in sales included Consumer Discretionary (improved demand for autos/consumer durables), Materials (higher realisations), Consumer Staples (steady demand for essentials), Communication Services (better realisations and customer additions) and Financials (higher net interest income). After witnessing contraction for six quarters, Energy sector posted 7% YoY growth in Q4 amid improving demand from manufacturing/

Aggregate net sales for Nifty 50/Nifty 500 companies grew at an eight-quarter high of 15.7%/18% in Q4FY21.

[1] 489 companies in the Nifty 500 Index reported earnings data for Q4FY21 as on June 30th, 2021.

[2] *Earnings Revision Indicator* over a period is calculated as (no of upgrades – no of downgrades)/(total number of upgrades and downgrades). A value less than zero indicates downgrades outnumbering upgrades and *vice versa*.

industrial units and inventory gains resulting from higher crude oil prices. Export-led sectors viz. IT and Healthcare also reported decent revenue growth.

- Operating profits improved further on a lower base and higher revenues: EBITDA for the Nifty 50/Nifty 500 companies (ex-Financials) grew by a healthy 66.1%/60.6% YoY in Q4FY21 vs. 17.4%/19.8% YoY growth in the previous quarter. While this was off a very low base (-20.8%/-20.2% YoY in Q4FY20), lower administration/marketing and rental expenses as compared to the year-ago period partly compensated for the sharp surge in raw material expenses during the quarter—the first YoY increase in the last four quarters. As such, EBITDA margin expanded by 654bps/590bps on an YoY basis to 21.4%/20.6% for the Nifty 50/Nifty 500 universe (ex-Financials) but contracted by 45bps/35bps on a sequential basis (QoQ), thanks to rising commodity inflation. Barring Utilities, all other sectors have reported a YoY expansion in operating profits, led by Energy, Consumer Discretionary, Materials and Communication Services.

EBITDA margin expanded on a YoY basis in Q4FY21, thanks to savings in administration and marketing costs, office rentals and other expenses, even as raw material costs and wage bill increased.

- Strong revenue growth and lower interest costs aided profitability: Aggregate adjusted PAT for the Nifty 50/Nifty 500 universe grew by a much higher 145%/ 226% YoY in Q4FY21. Favourable base effect, lower interest costs, deleveraging exercise by Indian corporates, higher realisations by commodity companies and lower provisioning by banks have contributed to a strong rebound in profitability. PAT margins also expanded by 592bps/665bps YoY (56bps/14bps QoQ) to touch 11.2%/10.4%. The earnings expansion was largely broad-based with most sectors registering strong growth in profitability, led by Financials (lower credit cost and provisioning), Energy (higher inventory gains due to surge in crude oil prices) and Materials (higher realisations due to increase in metal prices). Excluding these sectors, adjusted PAT grew by 61.6% YoY for the Nifty 500 universe.

Aggregate adjusted PAT for the Nifty 50/Nifty 500 universe grew by a much higher 145%/ 226% YoY in Q4FY21, aided by strong top-line performance and lower interest costs.

- Earnings estimates upgraded further: Better-than-expected corporate earnings in FY21 and a sharp surge in commodity prices has translated into upward revisions in corporate earnings for FY22 and FY23 by 6.6% and 4.3% respectively for top 200 covered companies by market capitalisation. This was despite the deadlier second wave of COVID-19 and attendant ramifications on the economic recovery that was underway during the second half of FY21. With this, the aggregate earnings of top 200 companies in during FY21-23 is expected to grow at a CAGR of 27.6%. That said, the upward revisions were primarily led by Materials and Financials—accounting for ~43% of the aggregate profit—excluding which profit estimate for FY22 saw a cut of 1.8% in FY22 since March-end and were broadly retained for FY23. Prolonged weakness in consumption demand in the wake of an impending third wave and rising inflationary pressures, surge in NPA recognition by banks leading to higher provisioning requirements and a deterioration in global growth outlook are key downside risks to earnings estimates.

Consensus earnings estimates for FY22 and FY23 for the top 200 covered companies by market cap has been revised upwards by 4-6% since April-beginning, translating into a earnings CAGR of 27.6% during FY21-23.

- ERI dropped post the onset of second wave: Following a meaningful improvement between September 2020 and January 2021, the ERI has been on a downward trajectory since the onset of the second wave of COVID-19 in February 2021. Except for Materials which has continued to see far upgrades far outnumbering downgrades, reflecting a sharp surge in metal prices and improvement in industrial demand, all other sectors have seen a sharp drop in the ERI levels. In fact, the ERI has dropped to sub-zero levels for Consumer Staples,

Consumer Discretionary, Communication Services and Information Technology, implying higher number of downgrades than upgrades.

Nifty 50 Q4FY21 results

Corporates witnessed robust revenue growth in the fourth quarter: The recovery in revenue growth that started in the September quarter of FY21 after a sharp pandemic-induced contraction in the first quarter, continued through the third and was stronger in the fourth quarter. Aggregate net sales growth for the Nifty 50 universe stood at a robust 15.7% YoY (9.3% QoQ) in Q4FY21, but off a low base (-6.2% in Q4FY20)–marking the third sequential expansion in a row and the highest YoY growth in eight quarters. This strong top-line performance can be attributed to a) improved realisations because of higher commodity prices, b) ramping up of business activities on considerable easing of lockdown restrictions following a further drop in COVID infections in the early part of the quarter, and c) steady recovery in discretionary spending, aided by vaccination roll-outs. Within the Nifty 50 universe, 45 of the 50 companies posted a YoY growth in net sales.

While the recovery in net sales was broad-based, sectors that led the growth in net sales in Q4FY21 included: a) Consumer Discretionary: an improved demand environment for auto and consumer durables; b) Materials: Persistent rise in metal prices and higher demand from businesses as manufacturing and construction activities gained traction in the fourth quarter; c) Consumer Staples: Increased demand for essential items, especially for household and personal care products, due to limited restrictions on mobility; and d) Financials: Improved net interest income due to lower credit costs in case of banks and higher premium collection for insurance companies.

Other sectors that also contributed to the recovery in revenue growth, albeit marginally, include: a) Industrials: Increased cargo handling on higher exports and pick up in construction and infrastructure activities; b) Information Technology: Increased demand for digital transformation services (cloud services, automation, data migration and security etc., by companies to strengthen their IT infrastructure as they continued to adopt remote-working in a post-COVID environment; and c) Energy: Improved demand and inventory gains as crude oil prices have nearly tripled from Mar'20 levels.

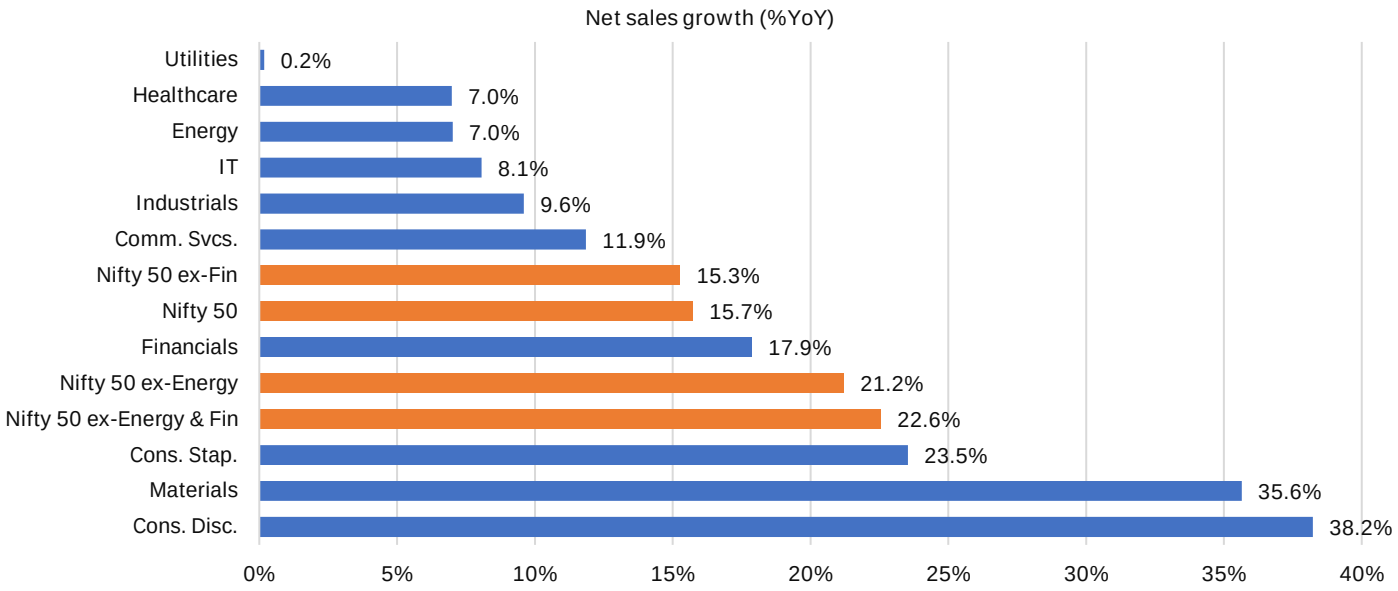
Corporates have delivered a robust performance in the fourth quarter because of improvement in the demand environment and rally in commodity prices. Significant easing of lockdown restrictions, lower infection rate and increased mobility has helped corporates bounce-back from last year's lows. While the fourth quarter results have ended the year on a good note, the impact of the second wave and imposition of lockdowns by major states in the months of April and May is expected to weigh on corporate performance in the June 2021 quarter. Rural demand which provided succour last year when urban demand was weak is likely to be impacted despite normal monsoons as the second wave of infections has hit the hinterland much harder than that seen during the first wave. Continued surge in commodity prices, while positive for the top-line, may hurt margins if demand fails to regain strength post the deadlier second wave.

Figure 1: Net sales growth of Nifty 50 companies in Q4FY21/FY21

Sector	QoQ growth (%)			YoY growth (%)			FY21	
	Q4FY20	Q3FY21	Q4FY21	Q4FY20	Q3FY21	Q4FY21	(Rsbn)	Growth (%)
Communication Services	7.8	5.8	(2.9)	11.7	24.2	11.9	10,126	17.4
Consumer Discretionary	(13.6)	30.6	7.9	(25.8)	10.7	38.2	48,786	(4.7)
Consumer Staples	(6.4)	4.3	4.7	(3.2)	10.4	23.5	13,467	9.8
Energy	(6.2)	18.1	18.8	(5.4)	(15.5)	7.0	151,163	(19.9)
Financials	(10.3)	7.5	(7.5)	(5.2)	14.3	17.9	99,602	15.3
Health Care	0.4	2.0	(4.7)	9.1	12.7	7.0	7,867	7.9
Industrials	20.5	15.9	31.4	1.7	0.5	9.6	14,853	(5.3)
Information Technology	0.7	4.4	2.7	7.4	6.0	8.1	43,983	5.6
Materials	2.6	13.4	18.8	(11.8)	17.1	35.6	56,067	7.7
Utilities	13.1	1.2	7.8	21.6	5.1	0.2	15,117	2.7
Nifty 50	(4.5)	13.5	9.3	(6.2)	1.1	15.7	461,033	(3.7)
Nifty 50 ex-Energy	(3.4)	11.3	4.6	(6.6)	11.9	21.2	309,869	6.9
Nifty 50 ex-Financials	(3.2)	15.2	13.8	(6.4)	(1.9)	15.3	361,431	(7.8)
Nifty 50 ex-energy ex-fin	(0.3)	13.2	10.2	(7.2)	10.8	22.6	210,267	3.3

Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 2: Sector-wise net sales growth of Nifty 50 companies in Q4FY21



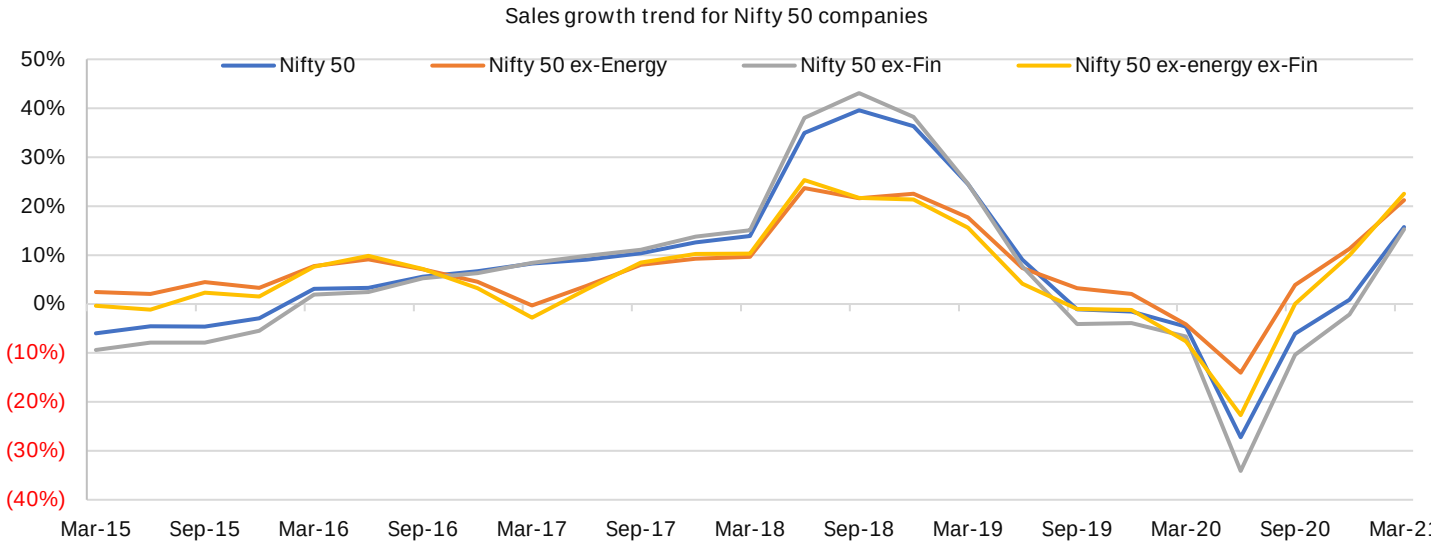
Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 3: Sector-wise contribution of Nifty 50 companies to net sales growth in Q4FY21

Sectors	Net sales (Rsbn)	Contribution to net sales growth	
		% QoQ	% YoY
Communication Services	257	(0.1)	0.2
Consumer Discretionary	1,618	1.0	3.8
Consumer Staples	366	0.1	0.6
Energy	4,869	6.2	2.7
Financials	2,454	(1.6)	3.2
Health Care	197	(0.1)	0.1
Industrials	517	1.0	0.4
Information Technology	1,156	0.2	0.7
Materials	1,799	2.3	4.0
Utilities	406	0.2	0.0
Nifty 50	13,639	9.3	15.7
Nifty 50 ex-Energy	8,770	5.3	13.0
Nifty 50 ex-Financials	11,185	18.4	12.6
Nifty 50 ex-energy ex-fin	6,316	8.0	9.9

Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 4: Net sales YoY growth trend of Nifty 50 companies in last five years



Source: CMIE Prowess, Refinitiv Datastream, NSE.

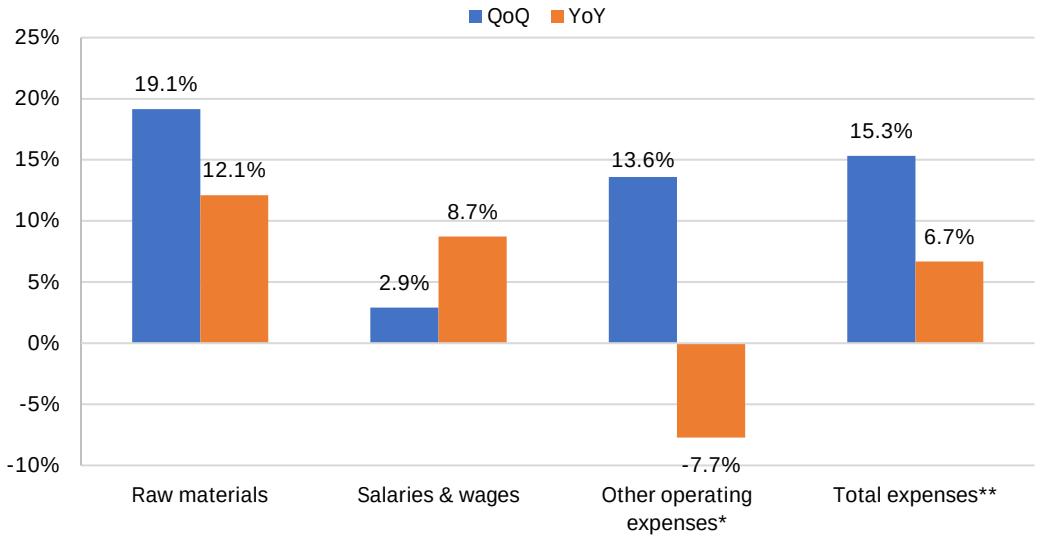
Higher revenues and a favourable base improved operating profit in Q4: EBITDA for the Nifty 50 universe excluding Financials grew by 66.1% YoY in Q4FY21 vs. 17.4% YoY growth in the previous quarter and -20.8% YoY in the March quarter last year. While savings in operating costs due to persistent cost-cutting measures have helped Nifty 50 companies improve operating profits in the September and December quarter of current fiscal, higher than expected revenue growth in the March quarter and a favourable base have helped register highest growth in operating profits in the last six years.

Notably, raw material (RM) costs and salaries & wages have increased on an YoY and QoQ basis marginally offsetting the cost-rationalisation efforts of the previous quarter. The input costs for the Nifty 50 companies (excl. financials) increased by 12.1% YoY and

19.1% QoQ, thanks to ramping up of manufacturing and construction activities in the fourth quarter and surge in commodity prices. While RM to sales ratio of Nifty 50 non-financial companies declined by 126bps YoY from 52% to 49.7%, the ratio has increased 201bps on an QoQ basis. Total operating expenses (excluding interest and depreciation) rose by 6.7% YoY (15.3% QoQ). As a result, while EBITDA margins have increased 603bps YoY in the March quarter, the rise in operating costs have compressed operating margins by 96bps on an QoQ basis.

Except Utilities, all other sectors reported a growth in operating profits, primarily led by Energy, Consumer Discretionary and Materials sectors. Within the Nifty 50 universe, 32 of the 39 non-financial companies posted a YoY growth in EBITDA.

Figure 5: Change in expenses for Nifty 50 companies (ex-Financials) in Q4FY21



Source: CMIE Prowess, NSE. * Other operating expenses include selling, general & administrative expenses, rental expenses and other operating costs. ** Total expenses exclude interest expenses and depreciation.

Figure 6: EBITDA growth of Nifty 50 companies in Q4FY21/FY21

Sector	QoQ growth (%)			YoY growth (%)			FY21	
	Q4FY20	Q3FY21	Q4FY21	Q4FY20	Q3FY21	Q4FY21	(Rsbn)	Growth (%)
Communication Services	16.9	9.2	8.9	50.4	34.7	25.5	4,676	25.5
Consumer Discretionary	(51.9)	40.1	1.1	(51.5)	27.7	168.5	7,329	18.8
Consumer Staples	(7.5)	0.8	2.0	(3.6)	3.0	13.7	3,954	1.7
Energy	(54.5)	(0.1)	26.8	(61.8)	(1.1)	175.7	24,825	17.2
Financials	(13.6)	0.8	(0.6)	2.0	(5.0)	9.2	53,726	0.8
Health Care	(19.0)	4.3	(27.6)	(3.6)	34.8	20.4	2,059	15.7
Industrials	(2.6)	20.4	18.0	(11.0)	11.3	34.8	3,729	7.3
Information Technology	(1.6)	7.7	(2.2)	6.4	16.7	15.9	12,552	12.4
Materials	19.9	24.1	25.1	(11.7)	74.1	81.6	12,172	34.1
Utilities	11.3	7.8	(8.9)	497.1	6.1	(13.2)	7,733	2.5
Nifty 50	(17.9)	6.7	6.8	(11.6)	7.5	39.7	132,755	9.4
Nifty 50 ex-Energy	(9.2)	8.3	2.5	4.5	9.5	23.7	107,930	7.8
Nifty 50 ex-Financials	(21.3)	10.8	11.4	(20.8)	17.4	66.1	79,029	16.2
Nifty 50 ex-energy ex-fin	(4.0)	16.0	5.3	7.4	26.9	39.2	54,204	15.8

Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 7: EBITDA margin of Nifty 50 companies in Q4FY21

Sector	EBITDA Margin (%)	QoQ change (bps)	YoY change (bps)
Communication Services	50.3	546	547
Consumer Discretionary	15.8	(107)	764
Consumer Staples	28.5	(73)	(246)
Energy	16.1	101	982
Financials	55.4	383	(438)
Health Care	21.9	(696)	245
Industrials	23.5	(268)	440
Information Technology	28.4	(143)	193
Materials	24.6	123	622
Utilities	45.5	(837)	(700)
Nifty 50	27.5	(65)	472
Nifty 50 ex-Energy	33.8	(70)	68
Nifty 50 ex-Financials	21.4	(45)	654
Nifty 50 ex-energy ex-fin	25.5	(120)	305

Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 8: Sector-wise EBITDA growth of Nifty 50 companies in Q4FY21

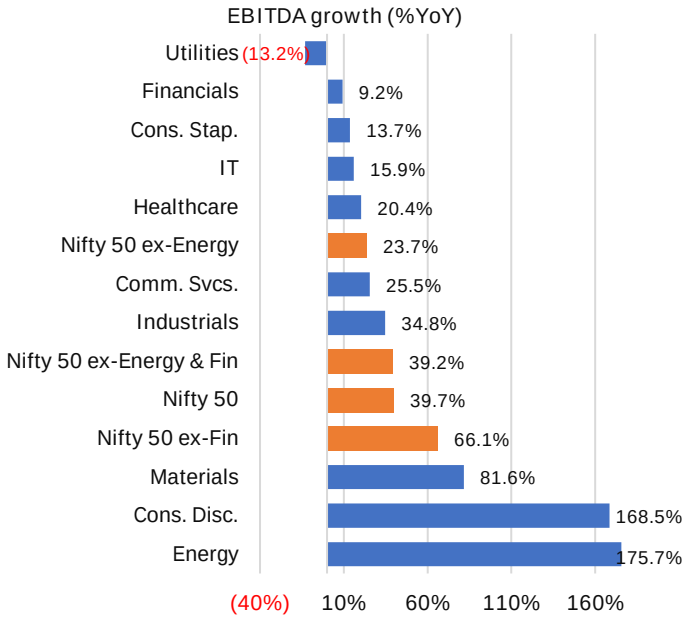
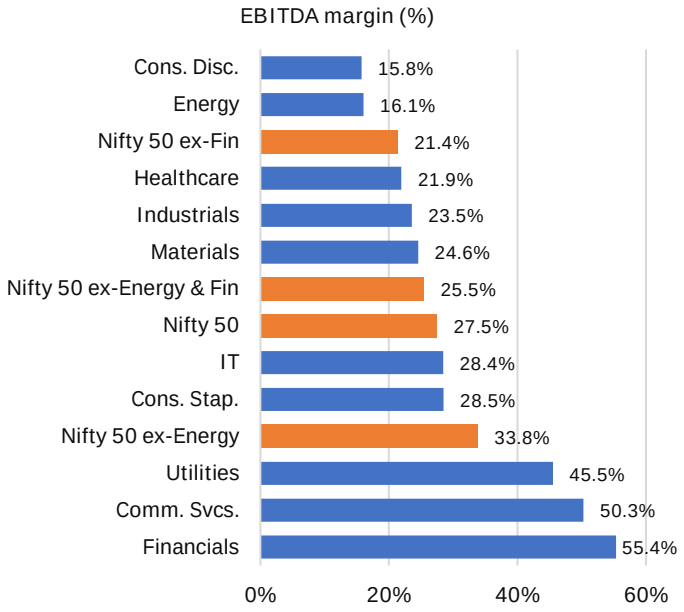


Figure 9: Sector-wise EBITDA margin of Nifty 50 companies in Q4FY21



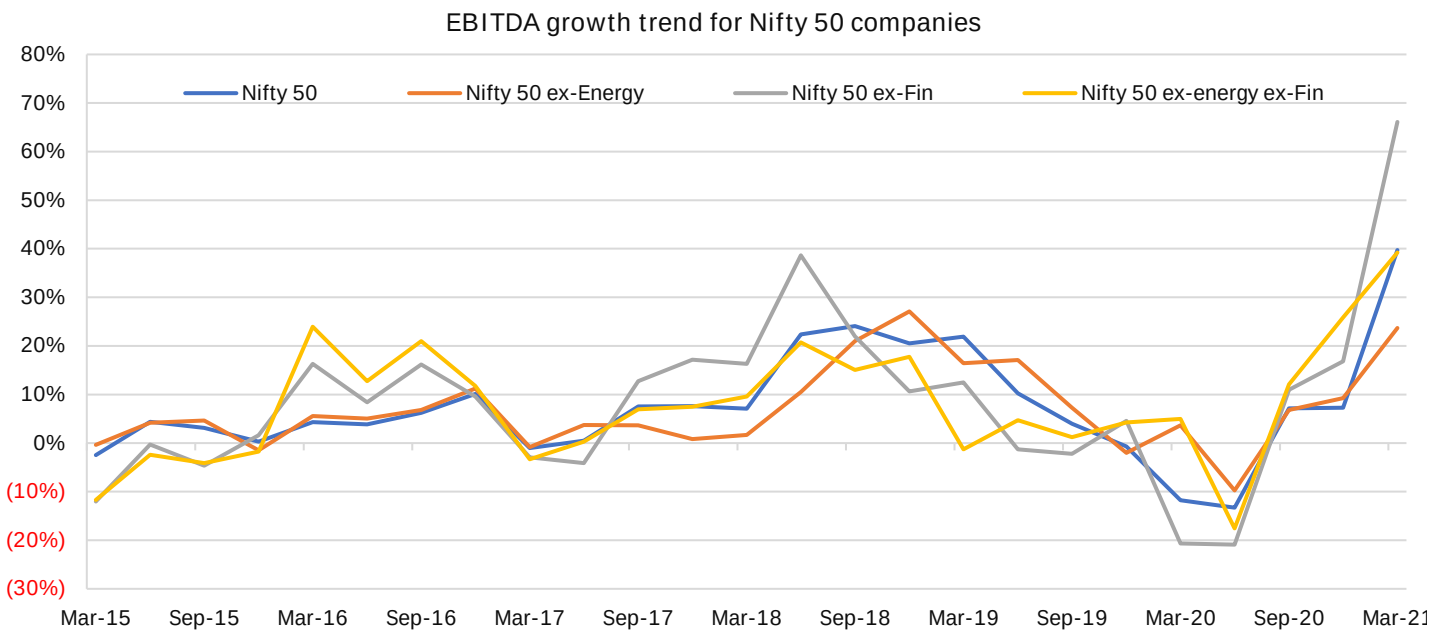
Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 10: Sector-wise contribution of Nifty 50 companies to EBITDA growth in Q4FY21

Sector	EBITDA (Rsbn)	Contribution to EBITDA growth	
		% QoQ	% YoY
Communication Services	129	1.5	1.0
Consumer Discretionary	255	0.4	6.1
Consumer Staples	104	0.3	0.5
Energy	579	(5.3)	14.2
Financials	1,359	(1.0)	4.5
Health Care	43	(2.4)	0.3
Industrials	122	2.7	1.2
Information Technology	329	(1.1)	1.7
Materials	442	12.8	7.6
Utilities	185	(2.6)	(1.1)
Nifty 50	3,548	5.3	36.2
Nifty 50 ex-Energy	2,968	10.6	21.9
Nifty 50 ex-Financials	2,189	6.3	31.6
Nifty 50 ex-energy ex-fin	1,609	11.6	17.4

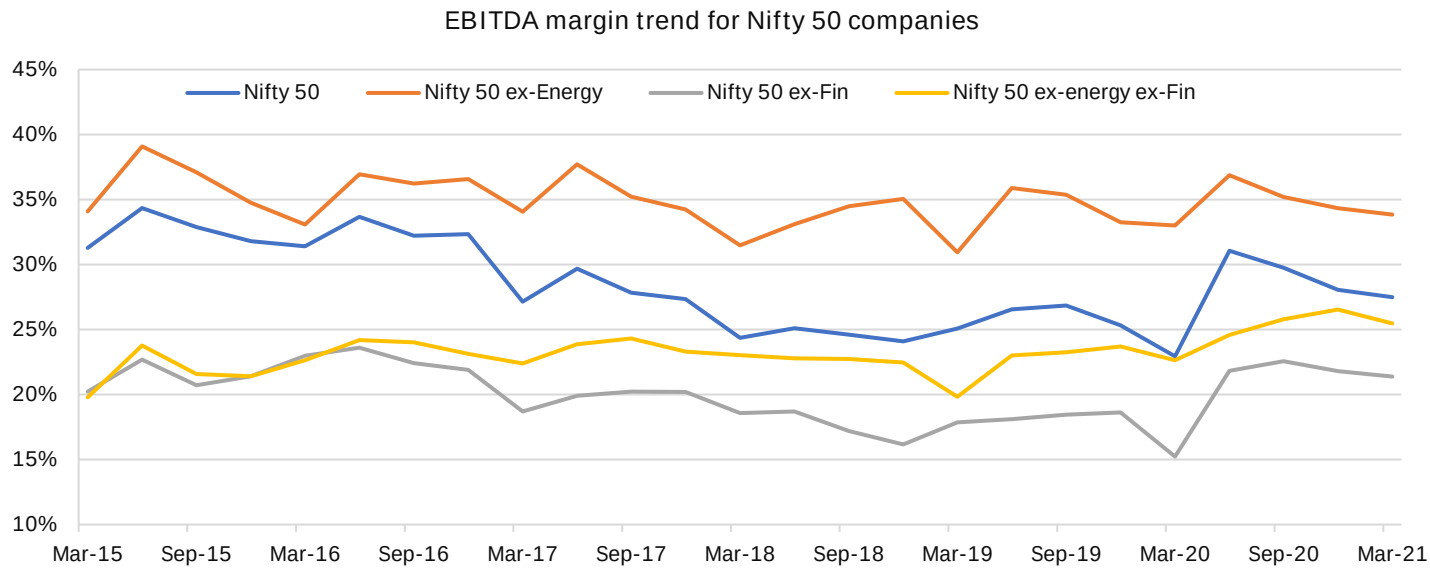
Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 11: EBITDA growth trend of Nifty 50 companies



Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 12: EBITDA margin trend of Nifty 50 companies



Source: CMIE Prowess, Refinitiv Datastream, NSE.

Adjusted profits surged aided by higher revenues and savings in borrowing costs: Aggregate adjusted PAT for the Nifty 50 companies grew by a much higher 145% YoY vs. 20.3% YoY growth in the previous quarter and a 42% YoY contraction in the same period last year. Robust growth in top-line and operating profits apart, lower interest expenses owing to a sharp drop in market interest rates following the RBI's monetary easing measures as well as deleveraging exercise by corporates contributed to the robust growth in corporate profitability. Interest cost for non-financial companies in the Nifty 50 universe fell by 16.7% YoY and 1.8% QoQ. Consequently, PAT margin improved by 592bps YoY (56bps QoQ) to 11.2% in Q4FY21—the highest in 27 quarters.

Except Communication Services, all sectors posted a growth in net profits on a YoY basis. Sectors that led the profit growth included a) Materials: Higher realisations from rising commodity prices b) Financials: Lower credit costs and provisioning in the fourth quarter, and c) Energy: Improved demand from ramping up of industrial activities and inventory gains from higher crude prices. Excluding Financials and Energy companies, PAT growth of Nifty 50 companies was 80% YoY. Within the Nifty 50 universe, 40 of the 50 companies posted a YoY growth in PAT. All sectors except Consumer Discretionary and Industrials have reported reduction in interest outgo for the March quarter vis-à-vis the same period last year.

Figure 13: PAT growth of Nifty 50 companies in Q4FY21/FY21

Sector	QoQ growth (%)			YoY growth (%)			FY21	
	Q4FY20	Q3FY21	Q4FY21	Q4FY20	Q3FY21	Q4FY21	(Rsbn)	Growth (%)
Communication Services	NA	NA	NA	NA	NA	(36.1)	356	NA
Consumer Discretionary	(144.8)	89.8	20.7	(155.3)	32.6	NA	1,838	92.6
Consumer Staples	(6.6)	(1.7)	5.4	2.2	2.0	15.0	2,657	3.3
Energy	(100.2)	(4.3)	46.6	(100.1)	10.3	NA	11,526	54.6
Financials	(41.2)	10.0	3.2	0.7	(0.0)	75.5	12,651	22.0
Health Care	(21.1)	(2.8)	(39.3)	9.2	50.5	15.8	1,232	19.3
Industrials	(5.5)	41.3	21.7	(25.5)	7.9	38.9	1,343	0.9
Information Technology	(1.4)	9.4	(12.3)	2.5	16.2	3.3	7,953	7.9
Materials	102.0	44.0	42.9	(14.3)	285.4	172.7	4,471	61.2
Utilities	(15.9)	0.4	(13.2)	(38.4)	20.3	24.2	2,765	19.8
Nifty 50	(43.5)	12.6	15.0	(42.0)	20.3	145.1	46,791	29.4
Nifty 50 ex-Energy	(26.4)	18.3	6.5	(15.6)	23.3	78.5	35,265	22.8
Nifty 50 ex-Financials	(44.6)	13.6	19.3	(52.1)	29.8	179.7	34,140	32.3
Nifty 50 ex-energy ex-fin	(15.9)	22.9	8.2	(21.9)	39.9	80.0	22,615	23.3

Source: CMIE Prowess, Refinitiv Datastream, NSE. NA: Not Applicable

Figure 14: PAT margin of Nifty 50 companies in Q4FY21

Sector	PAT Margin	QoQ change (bps)	YoY change (bps)
Communication Services	3.6	374	(271)
Consumer Discretionary	7.6	80	1049
Consumer Staples	19.4	13	(143)
Energy	8.5	162	852
Financials	14.8	153	487
Health Care	11.6	(662)	88
Industrials	9.9	(79)	210
Information Technology	16.8	(289)	(77)
Materials	12.0	203	604
Utilities	15.5	(375)	300
Nifty 50	11.2	56	592
Nifty 50 ex-Energy	12.7	22	408
Nifty 50 ex-Financials	10.4	48	612
Nifty 50 ex-energy ex-fin	11.9	(23)	379

Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 15: Sector-wise PAT growth of Nifty 50 companies in Q4FY21

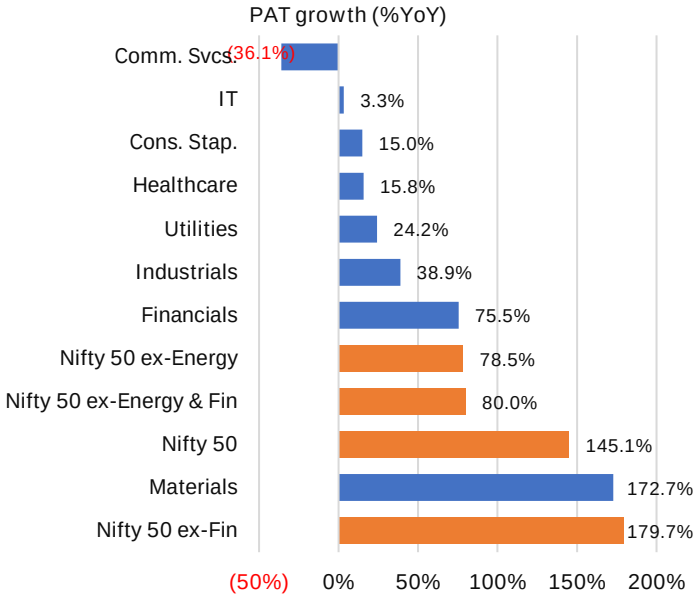
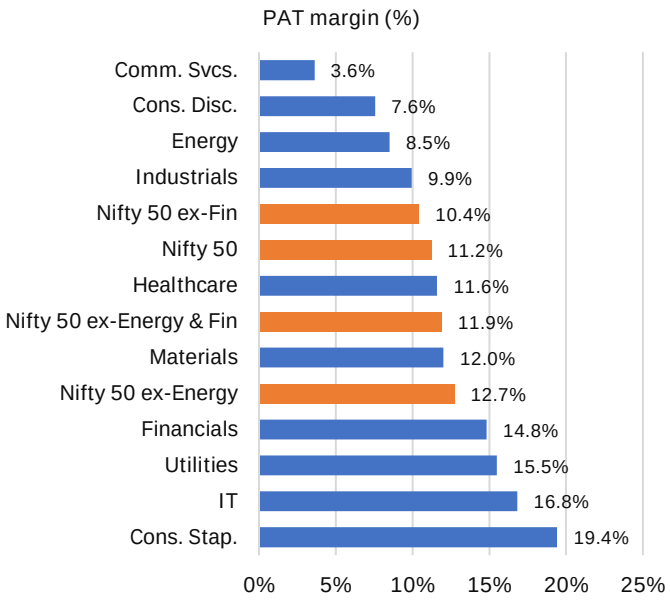


Figure 16: Sector-wise PAT margin of Nifty 50 companies in Q4FY21



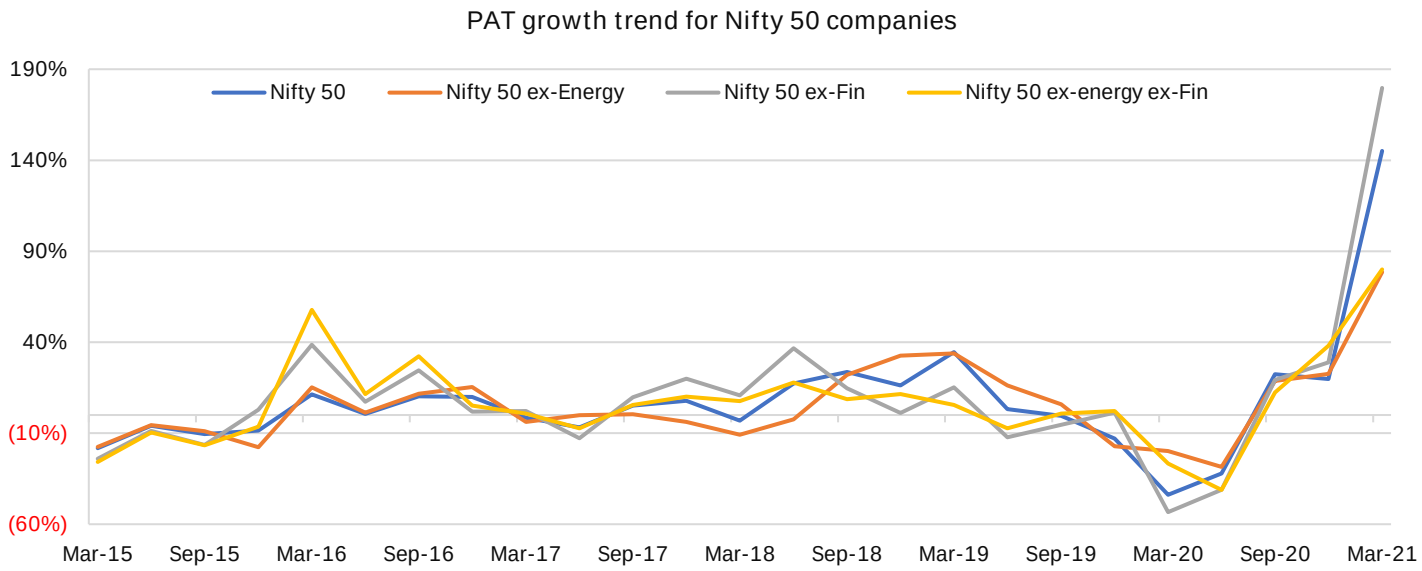
Source: CMIE Prowess, Refinitiv Datastream, NSE

Figure 17: Sector-wise contribution of Nifty 50 companies to PAT growth in Q4FY21

Sector	PAT (Rsbn)	Contribution to PAT growth	
		% QoQ	% YoY
Communication Services	9	0.7	(0.8)
Consumer Discretionary	122	1.6	25.1
Consumer Staples	71	0.3	1.5
Energy	415	9.9	66.5
Financials	364	0.8	25.1
Health Care	23	(1.1)	0.5
Industrials	51	0.7	2.3
Information Technology	195	(2.1)	1.0
Materials	216	4.9	21.9
Utilities	63	(0.7)	2.0
Nifty 50	1,528	15.0	145.1
Nifty 50 ex-Energy	1,114	5.1	78.6
Nifty 50 ex-Financials	1,165	14.2	120.0
Nifty 50 ex-energy ex-fin	750	4.3	53.5

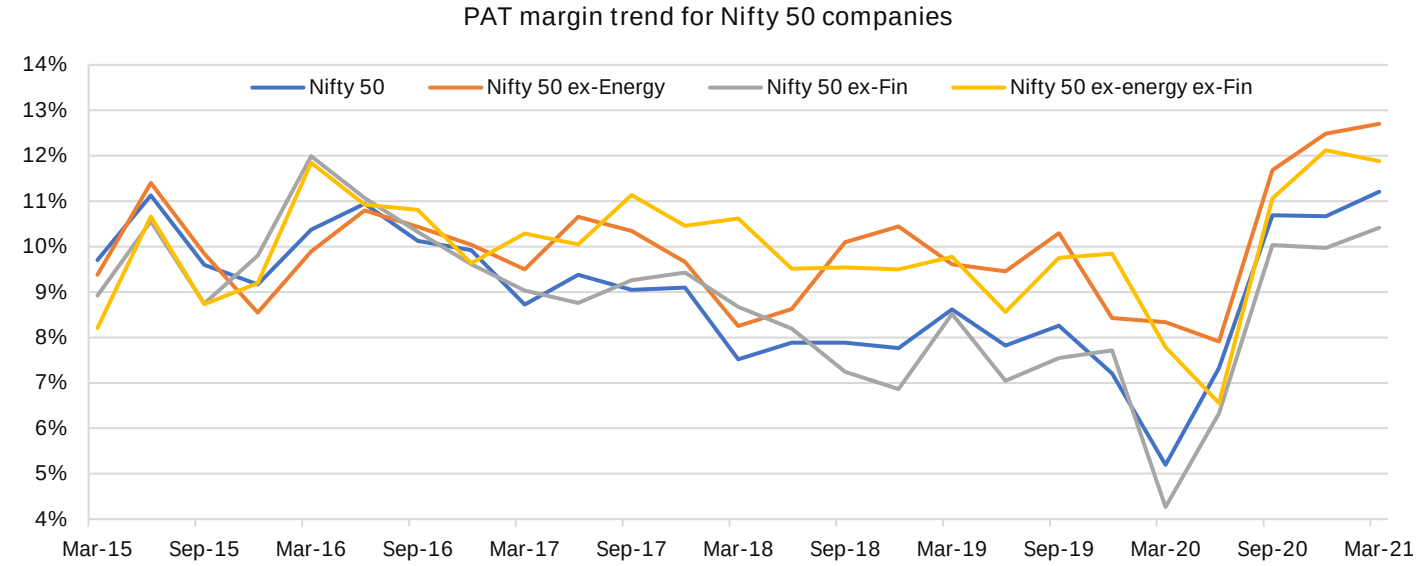
Source: CMIE Prowess, Refinitiv Datastream, NSE

Figure 18: PAT growth trend of Nifty 50 companies



Source: CMIE Prowess, Refinitiv Datastream, NSE

Figure 19: PAT margin trend of Nifty 50 companies



Source: CMIE Prowess, Refinitiv Datastream, NSE

Nifty 500 Q4FY21 results

Aggregate net sales for Nifty 500 companies registered highest growth in eight quarters: Aggregate top-line for the Nifty 500 companies also grew at an eight-quarter high of 18.1% YoY. An uptick in consumption demand and business activities, thanks to realisation of pent-up demand, significant easing of lockdown restrictions, and vaccination roll-out, has facilitated a significant recovery in top-line performance from the sharp contraction witnessed in the March and June quarters of last year. Within the Nifty 500 universe, 383 out of the 489 companies that have reported Q3 results (as of June 30th) have recorded a YoY expansion in sales in the March quarter. This was higher than the number of companies that reported growth in net sales in the December quarter (310 companies), highlighting that the recovery has broadened sequentially.

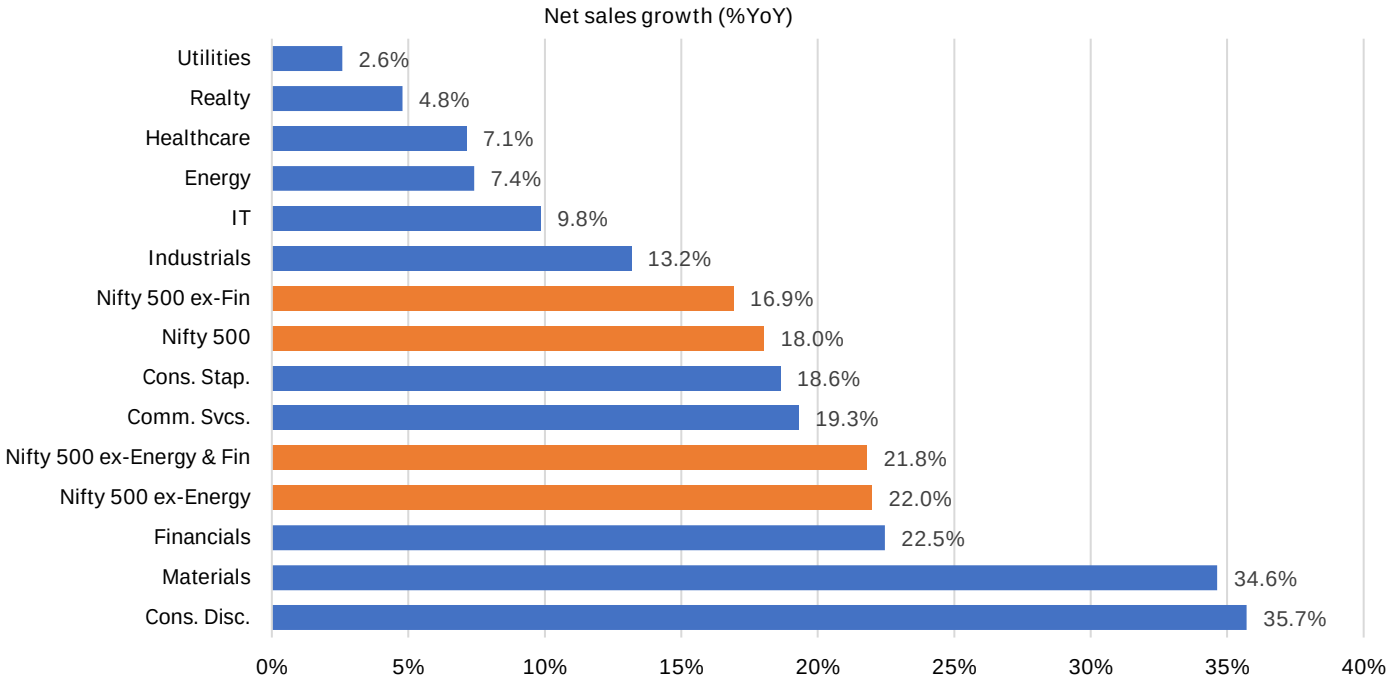
While most companies reported robust top-line growth largely because of favourable base, some sectors that have benefited from strengthened commercial activities in the March quarter included: a) Consumer Discretionary: Pent up demand nudged higher sales of automobiles and consumer durables, b) Materials: Global rally in commodity prices especially steel, aluminium and copper and higher demand because of boost in manufacturing and construction activities that has in turn resulted in to higher realisations, c) Consumer Staples: Increased mobility has elevated demand for essential items, which was hit by supply bottlenecks last year, d) Financials: An improvement in net interest income as a result of lower borrowing costs and an increase in retail credit as consumption demand improved, and e) Industrials: Increased government spending in infrastructure projects.

Figure 20: Net sales growth of Nifty 500 companies in Q4FY21/FY21

	QoQ growth			YoY growth			FY21	
Sector	Q4FY20	Q3FY21	Q4FY21	Q4FY20	Q3FY21	Q4FY21	(Rsbn)	Growth (%)
Communication Services	3.6	11.9	2.0	3.1	14.6	19.3	19,475	1.0
Consumer Discretionary	(7.5)	26.2	6.8	(14.8)	(6.3)	35.7	82,648	(23.5)
Consumer Staples	(7.6)	6.1	2.7	(1.1)	6.7	18.6	28,273	3.7
Energy	(5.9)	21.1	17.7	(5.0)	(14.1)	7.4	182,690	(19.4)
Financials	(10.3)	6.5	(6.5)	(5.2)	17.5	22.5	205,849	16.2
Health Care	(0.8)	0.5	(2.0)	6.2	7.6	7.1	27,691	5.9
Industrials	9.2	20.3	27.6	(8.8)	0.7	13.2	60,981	(10.1)
Information Technology	(1.0)	6.9	1.8	6.4	6.8	9.8	57,998	6.2
Materials	(2.8)	10.9	15.2	(12.0)	13.8	34.6	122,217	6.2
Real Estate	(10.5)	38.1	11.8	(31.7)	(16.1)	4.8	2,288	(26.7)
Utilities	6.3	2.0	8.9	10.1	0.2	2.6	33,671	(4.5)
Nifty 500	(4.4)	13.0	8.0	(6.0)	2.2	18.0	823,782	(4.2)
Nifty 500 ex-Energy	(3.8)	10.9	5.2	(6.3)	8.1	22.0	641,091	1.2
Nifty 500 ex-Financials	(2.8)	15.3	12.7	(6.2)	(1.9)	16.9	617,932	(9.6)
Nifty 500 ex-energy ex-fin	(1.2)	13.0	10.5	(6.7)	4.3	21.8	435,242	(4.7)

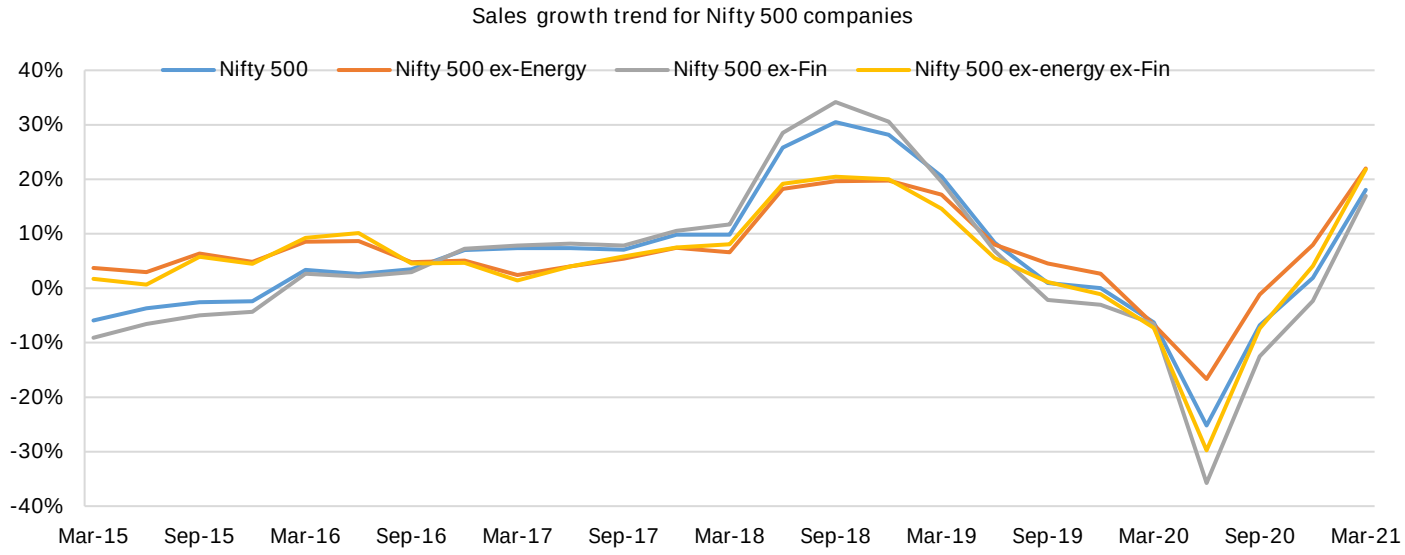
Source: CMIE Prowess, Refinitiv Datastream, NSE

Figure 21: Sector-wise net sales growth of Nifty 500 companies in Q4FY21



Source: CMIE Prowess, Refinitiv Datastream, NSE

Figure 22: Net sales YoY growth trend of Nifty 500 companies



Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 23: Sector-wise contribution of Nifty 500 companies to net sales growth in Q4FY21

Sector	Net sales (Rsbn)	Contribution to net sales growth % QoQ	% YoY
Communication Services	445	(0.6)	0.4
Consumer Discretionary	2,686	0.9	3.5
Consumer Staples	768	0.1	0.6
Energy	5,912	4.9	2.0
Financials	5,022	(2.5)	4.5
Health Care	708	(0.0)	0.2
Industrials	2,048	1.8	1.2
Information Technology	1,545	0.2	0.7
Materials	3,811	2.8	4.8
Real Estate	79	0.0	0.0
Utilities	930	0.4	0.1
Nifty 500	23,955	8.0	18.0
Nifty 500 ex-Energy	18,043	7.1	16.0
Nifty 500 ex-Financials	18,933	23.6	13.5
Nifty 500 ex-energy ex-fin	13,021	12.7	11.5

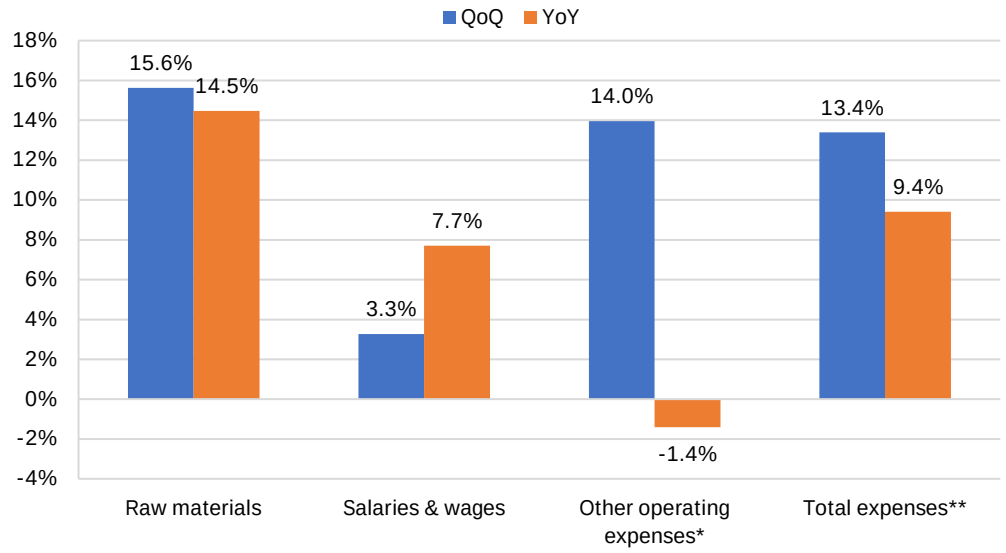
Source: CMIE Prowess, Refinitiv Datastream, NSE

Operating profits surged on robust revenue growth and favourable base effect: Aggregate EBITDA for the Nifty 500 universe excluding Financials grew by an optically higher rate of 60.6%YoY as compared to 19.8% YoY growth in December quarter and 20.2% YoY drop in the March quarter last year. The sequential (QoQ) growth in operating profits was also quite decent at 10.6% despite the surge in input costs. This was primarily on the back of double-digit growth in revenues, further supported by a favourable base.

Aggressive efforts in cutting operating costs which were stepped up by corporates in the first three quarters of this fiscal were partly offset by the sharp surge in raw material expenses during the March quarter. Total RM costs for the Nifty 500 universe excluding Financials rose by 14.5% YoY and 15.6% QoQ, leading to RM to sales ratio expanding by 89bps YoY and 172bps QoQ. Salaries and wage bill also rose by a modest 7.7% YoY. This was partly offset by continued savings on selling, general & administrative expenses, rental expenses and other operating costs. Consequently, EBITDA margins compressed by 38bps QoQ to touch 20.6% in the March quarter.

Within the Nifty 500 universe, 317/408 non-financial companies reported a YoY growth in EBITDA in the March quarter. Except Utilities, all other sectors reported a YoY expansion in operating profit and operating margins, with Energy, Consumer Discretionary and Materials leading the pack.

Figure 24: Change in expenses for Nifty 500 companies (ex-Financials) in Q4FY21



Source: CMIE Prowess, NSE. * Other operating expenses include selling, general & administrative expenses, rental expenses and other operating costs. ** Total expenses exclude interest expenses and depreciation.

Figure 25: EBITDA growth of Nifty 500 companies in Q4FY21/FY21

	QoQ growth			YoY growth			FY21	
Sector	Q4FY20	Q3FY21	Q4FY21	Q4FY20	Q3FY21	Q4FY21	(Rsbn)	Growth (%)
Communication Services	4.5	26.6	12.4	38.6	40.1	51.0	8,254	14.9
Consumer Discretionary	(40.8)	39.2	1.1	(39.7)	22.8	113.9	11,525	3.1
Consumer Staples	(12.2)	2.9	(0.4)	(8.7)	6.5	20.8	6,512	3.2
Energy	(61.0)	(1.6)	28.3	(68.4)	0.7	231.4	28,113	23.9
Financials	(9.8)	(1.6)	(3.8)	2.4	16.3	23.7	115,191	13.9
Health Care	(21.2)	3.4	(15.8)	(12.2)	18.4	27.0	7,108	14.6
Industrials	(7.0)	18.4	14.0	(26.8)	2.9	22.8	9,644	(9.0)
Information Technology	(1.5)	8.8	(1.3)	6.4	17.0	17.4	14,486	12.9
Materials	13.4	25.8	18.7	(7.8)	63.0	70.4	28,556	31.5
Real Estate	(17.7)	37.2	3.9	(32.6)	(9.0)	14.9	839	(26.6)
Utilities	11.2	3.6	(1.9)	112.2	5.8	(6.6)	13,745	0.8
Nifty 500	(14.0)	6.3	4.1	(10.8)	18.2	42.8	243,972	13.7
Nifty 500 ex-Energy	(7.3)	7.3	1.2	0.2	20.7	31.4	215,860	12.5
Nifty 500 ex-Financials	(17.5)	13.6	10.6	(20.2)	19.8	60.6	128,781	13.5
Nifty 500 ex-energy ex-fin	(4.5)	18.0	6.3	(2.1)	25.5	39.5	100,669	10.9

Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 26: EBITDA margin of Nifty 500 companies in Q4FY21

Sector	EBITDA Margin	QoQ change (bps)	YoY change (bps)
Communication Services	44.4	411	933
Consumer Discretionary	15.3	(86)	559
Consumer Staples	22.3	(69)	41
Energy	15.0	124	1014
Financials	55.6	151	55
Health Care	23.4	(383)	367
Industrials	15.8	(188)	124
Information Technology	24.9	(78)	161
Materials	26.0	76	546
Real Estate	34.2	(260)	301
Utilities	37.5	(410)	(370)
Nifty 500	28.0	(106)	486
Nifty 500 ex-Energy	32.2	(128)	232
Nifty 500 ex-Financials	20.6	(38)	562
Nifty 500 ex-energy ex-fin	23.2	(92)	295

Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 27: Sector-wise EBITDA growth of Nifty 500 companies in Q4FY21

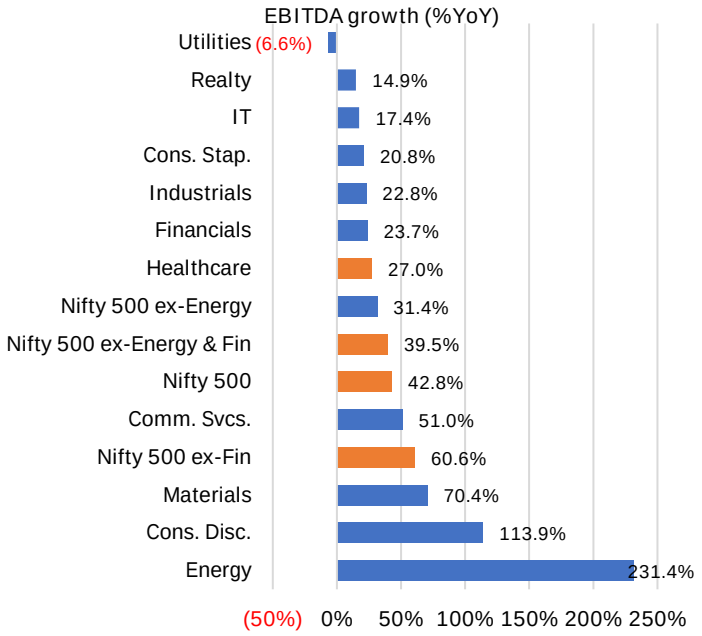
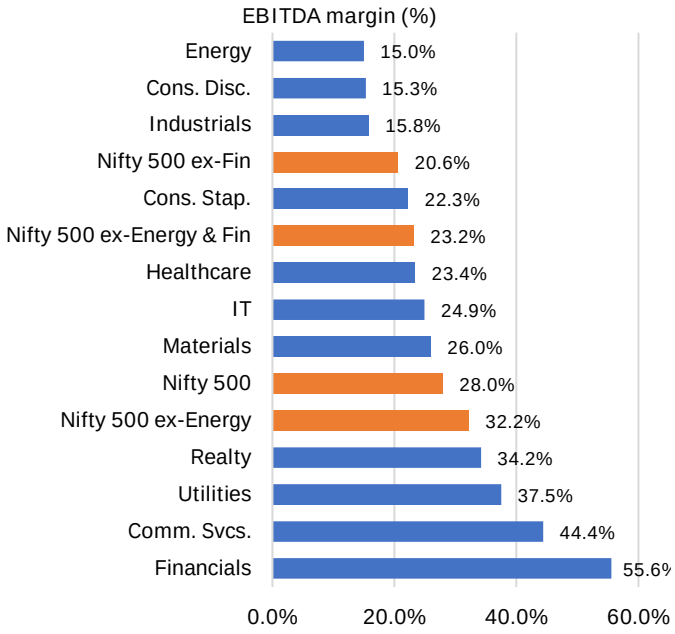


Figure 28: Sector-wise EBITDA margin of Nifty 500 companies in Q4FY21



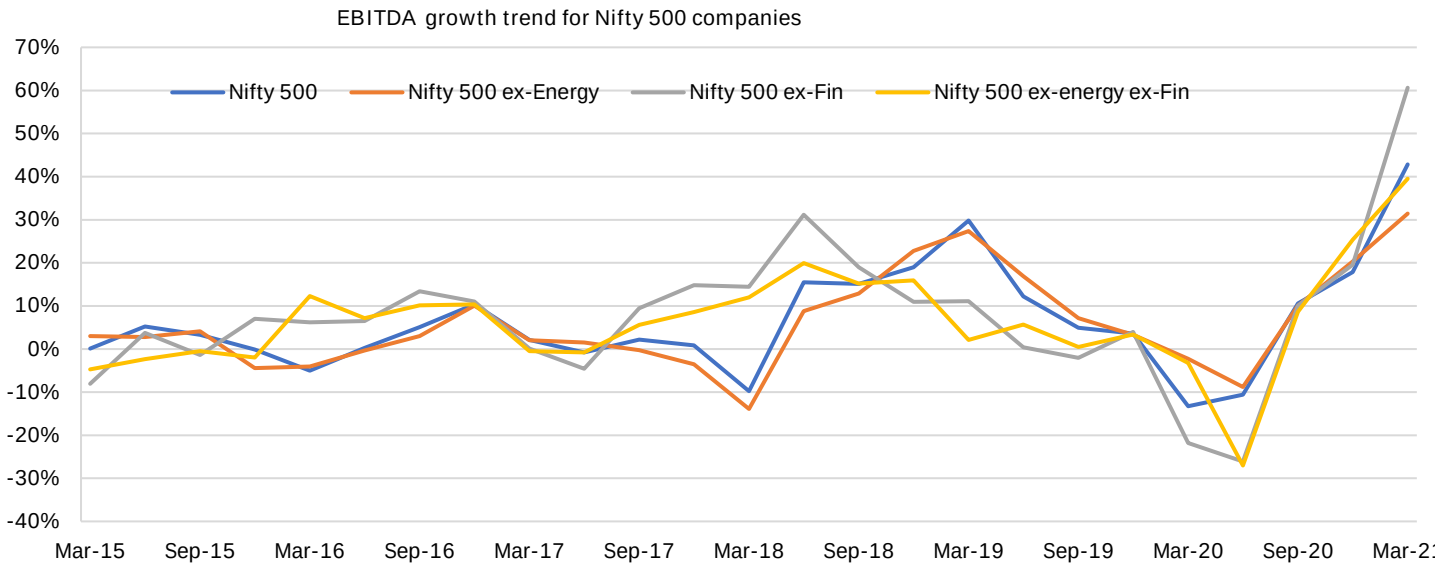
Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 29: Sector-wise contribution of Nifty 500 companies to EBITDA growth in Q4FY21

Sector	EBITDA (Rsbn)	Contribution to EBITDA growth	
		% QoQ	% YoY
Communication Services	197	(1.0)	1.4
Consumer Discretionary	411	0.1	4.7
Consumer Staples	171	(0.0)	0.6
Energy	887	4.1	13.2
Financials	2,793	(2.5)	11.4
Health Care	166	(0.6)	0.8
Industrials	324	0.8	1.3
Information Technology	385	(0.0)	1.2
Materials	990	3.3	8.7
Real Estate	27	0.0	0.1
Utilities	349	(0.1)	(0.5)
Nifty 500	6,701	4.1	42.8
Nifty 500 ex-Energy	5,814	0.0	29.6
Nifty 500 ex-Financials	3,908	6.6	31.4
Nifty 500 ex-energy ex-fin	3,021	2.5	18.2

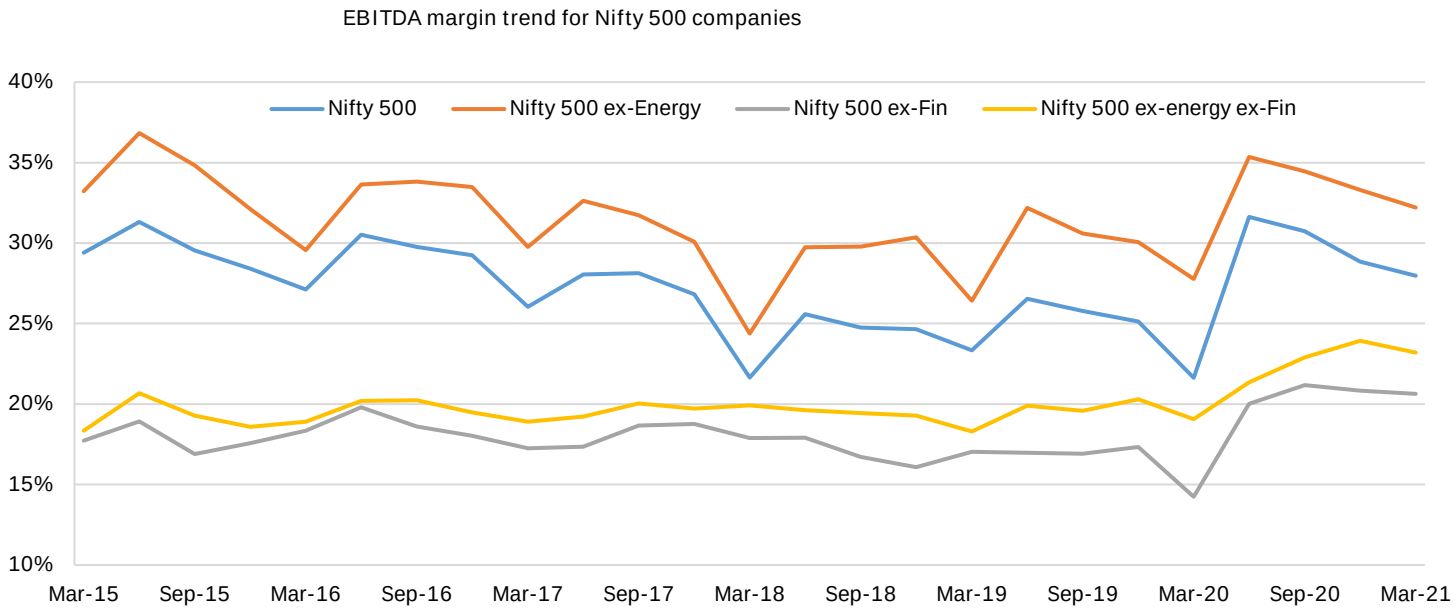
Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 30: EBITDA growth trend of Nifty 500 companies



Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 31: EBITDA margin trend of Nifty 500 companies



Source: CMIE Prowess, Refinitiv Datastream, NSE.

Adjusted PAT recorded more than 3x jump in the March quarter: Aggregate adjusted PAT for Nifty 500 companies grew by a robust 227% YoY in the March quarter–the highest growth in last six years, albeit off a low base (-50% YoY in the same quarter last year). The sharp YoY rise in PAT from the lows of last year was a result of a recovery in aggregate demand translating into higher revenue, coupled with savings from lower interest rates. Interest costs of the Nifty 500 universe (excluding Financials) declined 17.1% YoY and 2.1% QoQ due to multi-year low interest rates thanks to ultra-loose monetary policy by the RBI and deleveraging exercise by corporates. Consequently, PAT margin improved by 596bps YoY to 10.4% in Q4—the highest in six years.

The expansion in net profit was largely broad-based with all sectors registering a growth in net profits. Sector-wise, profit growth was primarily led by Financials (lower credit costs) and Materials (higher metal prices), as these sectors contributed nearly 62% and 51% respectively to the overall surge in profits in Q4.

Figure 32: PAT growth of Nifty 500 companies in Q4FY21/FY21

Sector	QoQ growth (%)			YoY growth (%)			FY21	
	Q4FY20	Q3FY21	Q4FY21	Q4FY20	Q3FY21	Q4FY21	(Rsbn)	Growth (%)
Communication Services	NA	NA	72.5	NA	NA	166.2	(475)	NA
Consumer Discretionary	(111.2)	104.8	12.7	(112.6)	29.3	NA	2,579	(1.4)
Consumer Staples	(13.9)	3.0	1.1	(14.9)	7.6	26.3	4,151	5.1
Energy	(112.1)	(6.5)	46.1	(108.7)	13.8	NA	13,167	71.8
Financials	(74.5)	3.3	(13.5)	23.7	224.9	1392.8	20,874	124.3
Health Care	(24.7)	3.6	(21.5)	(19.8)	49.4	55.5	3,785	31.4
Industrials	(29.2)	49.7	29.5	(57.7)	0.8	63.8	2,702	(21.8)
Information Technology	(1.7)	10.9	(9.5)	1.9	16.7	8.1	9,109	9.5
Materials	14.0	54.9	38.0	(22.7)	166.3	221.7	12,759	78.3
Real Estate	(32.3)	173.3	(25.6)	(54.5)	11.9	23.0	199	(42.4)
Utilities	10.8	4.3	0.9	7.5	16.7	6.3	5,316	5.9
Nifty 500	(46.5)	18.3	10.9	(49.9)	65.6	226.8	74,166	51.0
Nifty 500 ex-Energy	(28.8)	24.0	5.1	(27.3)	79.7	153.9	60,999	47.1
Nifty 500 ex-Financials	(42.0)	25.1	19.6	(51.9)	40.1	172.4	53,292	33.8
Nifty 500 ex-energy ex-fin	(19.0)	36.7	13.2	(29.3)	48.7	98.6	40,125	24.8

Source: CMIE Prowess, Refinitiv Datastream, NSE. NA: Not applicable.

Figure 33: PAT margin of Nifty 500 companies in Q4FY21

Sector	PAT Margin	QoQ change (bps)	YoY change (bps)
Communication Services	9.0	366	494
Consumer Discretionary	7.0	37	761
Consumer Staples	14.4	(23)	88
Energy	7.9	154	853
Financials	10.1	(87)	923
Health Care	12.2	(303)	380
Industrials	6.7	10	206
Information Technology	14.9	(187)	(24)
Materials	14.8	245	861
Real Estate	9.8	(492)	145
Utilities	15.3	(122)	53
Nifty 500	10.4	26	662
Nifty 500 ex-Energy	11.2	(3)	579
Nifty 500 ex-Financials	10.4	61	596
Nifty 500 ex-energy ex-fin	11.6	28	448

Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 34: Sector-wise PAT growth of Nifty 500 companies in Q4FY21

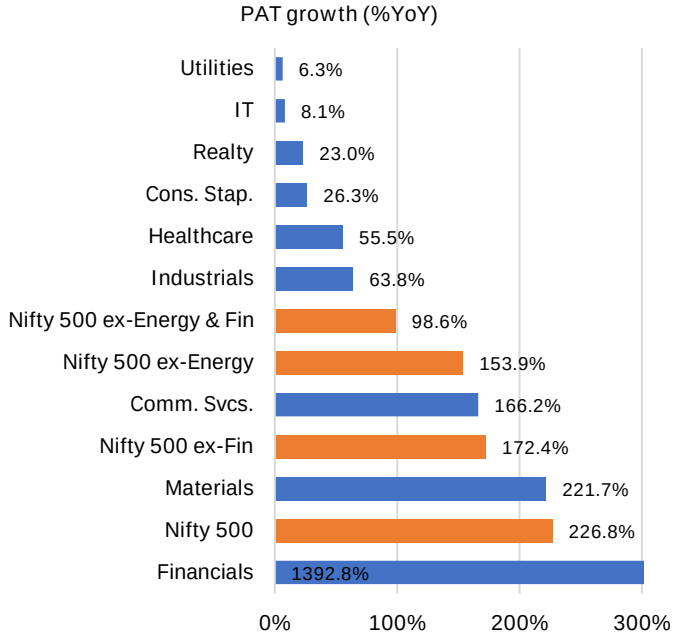
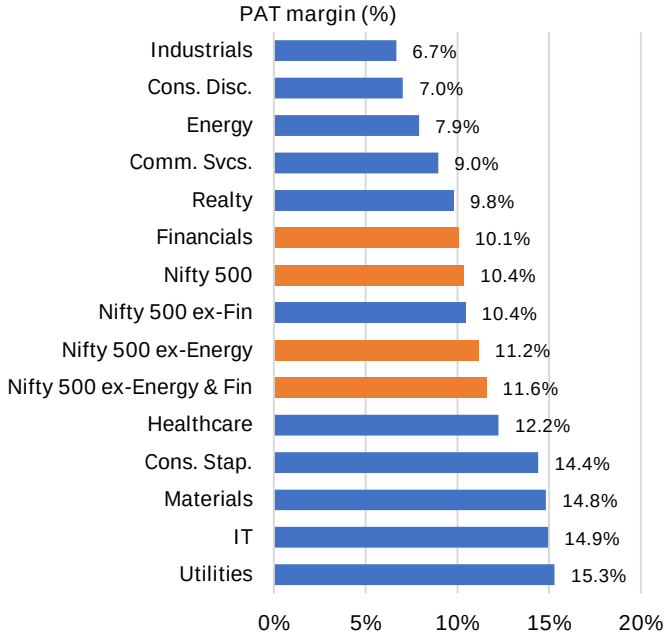


Figure 35: Sector-wise PAT margin of Nifty 500 companies in Q4FY21



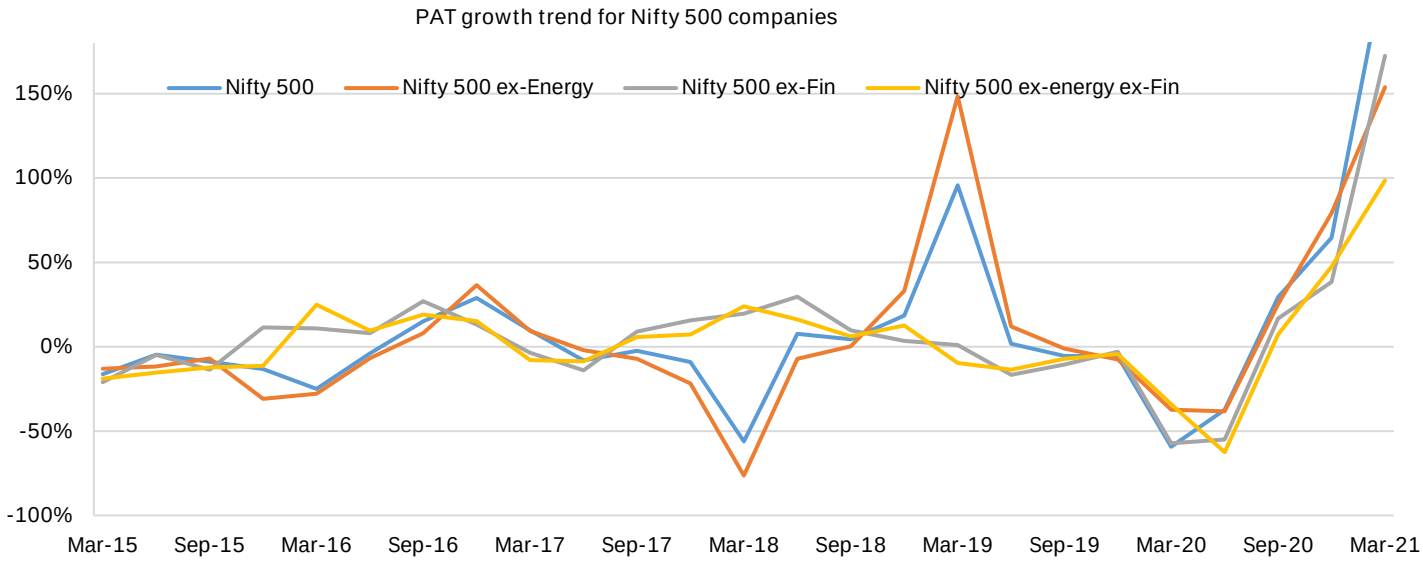
Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 36: Sector-wise contribution of Nifty 500 companies to PAT growth in Q4FY21

Sector	PAT (Rsbn)	Contribution to PAT growth	
		% QoQ	% YoY
Communication Services	40	2.2	3.3
Consumer Discretionary	189	1.1	26.4
Consumer Staples	111	0.0	3.0
Energy	468	5.5	66.1
Financials	508	(3.3)	62.1
Health Care	87	(0.9)	4.1
Industrials	137	1.3	7.0
Information Technology	231	(0.8)	2.3
Materials	564	5.8	51.2
Real Estate	8	(0.1)	0.2
Utilities	142	0.0	1.1
Nifty 500	2,483	10.9	226.8
Nifty 500 ex-Energy	2,015	5.4	160.7
Nifty 500 ex-Financials	1,976	14.2	164.7
Nifty 500 ex-energy ex-fin	1,508	8.7	98.6

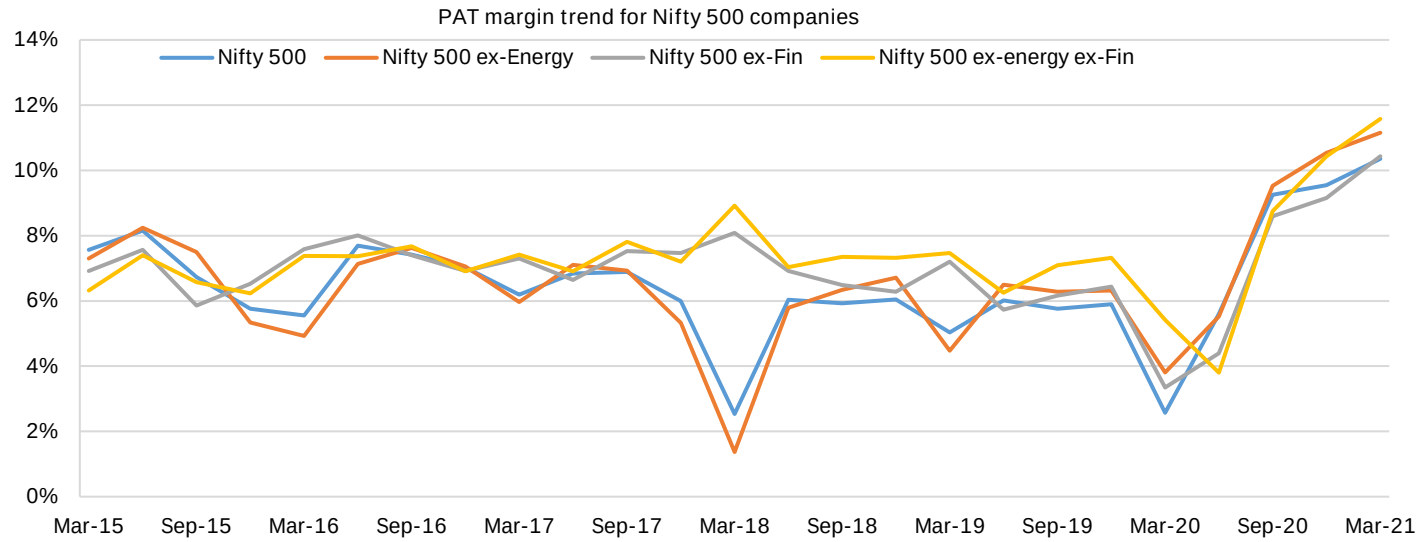
Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 37: PAT growth trend of Nifty 500 companies



Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 38: PAT margin trend of Nifty 500 companies



Source: CMIE Prowess, Refinitiv Datastream, NSE.

Earnings revision analysis

FY21 PAT beat estimates and fell only marginally short of pre-COVID estimate: Corporate earnings in Q4FY21 have beaten expectations yet again, thanks to ramping up of business activities, steady consumption demand and higher commodity prices. Our analysis of earnings performance of top 200 covered companies by market capitalisation[3] show a beat of 6.9% in FY21 aggregate profits vs. estimates at the end of March 2021. In fact, the FY21 profit growth of 24.9% for this universe is only a tad lower than ~30% estimated in early 2020 before the COVID-19 pandemic hit the country. Corporates have managed to report healthy profits in FY21 despite the demand- and supply-side bottlenecks brought in by the pandemic by significantly curtailing variable costs and benefiting from lower commodity prices during the first half of the year—a situation not so favourable for the economy at large. Additionally, low base (-7% in FY20 for the same universe) also supported profit growth in FY21.

Profit beat in FY21 primarily led by commodities: Inventory gains for oil marketing companies following a sharp surge in crude oil prices in the second half of the year and higher realisations earned by metal companies on account of rising global metal prices led to a significant beat in earnings for Energy and Materials sectors. A recovery in private capex cycle as well as Government investment—also reflected in the National Accounts data—significantly curtailed the profit contraction for the Industrials sector. Earnings for defensive sectors including IT, Healthcare and Consumer Staples in FY21 were broadly in-line with estimates.

Figure 39: Sector-wise profit beat/miss in FY21

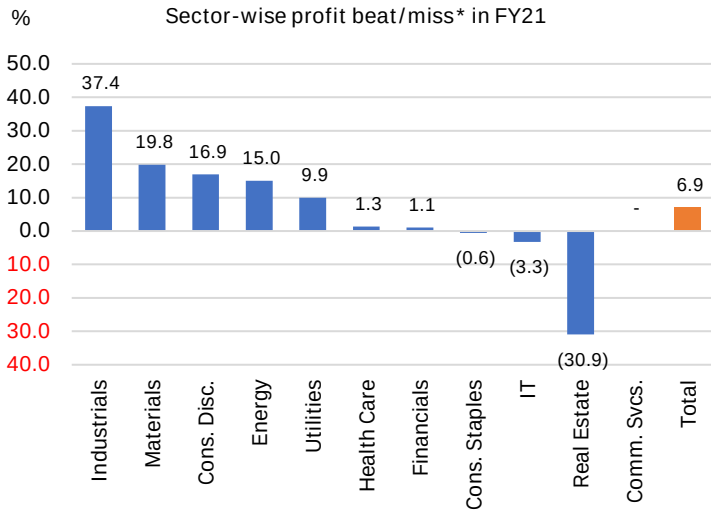
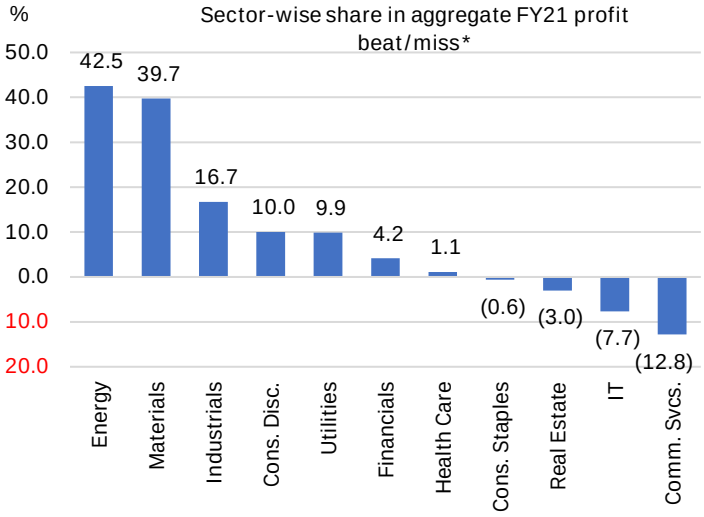


Figure 40: Sector-wise share in aggregate profit beat/miss* in FY21



Source: Refinitiv Datastream, NSE.
Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2020, covered by at least five analysts at any given point of time over the previous one year. * Profit beat/miss has been calculated as the percentage change in actual profit vs. profit estimate as on March 31st, 2021.

[3] The sample set consists of top 200 companies by one-year average market cap ending June 30th, 2020 covered by at least five or more analysts during the previous 12 months using IBES estimates from Refinitiv Datastream.

Figure 41: Monthly trend of sector-wise FY21 consensus earnings growth estimate (% YoY)

Sectors	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21*
Comm. Svcs.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cons. Disc.	25.6	18.4	-0.9	2.6	-14.8	-26.5	-34.0	-32.9	-23.7	-22.8	-21.4	-0.1	2.0	3.3	19.3	19.2
Cons. Staples	15.4	13.5	8.4	6.9	2.4	1.8	2.4	1.7	0.0	0.1	0.1	-0.1	0.0	0.0	0.2	(0.6)
Energy	17.6	11.9	7.6	0.9	-10.4	-14.3	-14.9	-15.0	-10.7	-10.2	-9.8	-2.2	0.0	1.5	9.0	15.0
Financials	49.1	45.1	50.2	49.0	40.2	30.0	28.6	28.4	46.4	48.1	50.8	64.3	65.0	65.9	66.4	66.8
Health Care	18.2	16.1	17.9	11.4	8.7	13.3	13.5	14.1	18.2	18.8	19.3	23.3	23.5	24.0	22.8	25.1
Industrials	16.8	10.5	11.0	-14.9	-22.6	-33.0	-34.6	-34.0	-30.0	-29.4	-28.5	-28.0	-28.2	-28.6	8.3	(2.1)
IT	9.5	4.0	-2.7	-3.6	-2.5	-0.5	0.2	3.6	4.9	5.2	7.8	10.0	10.3	9.6	6.7	6.7
Materials	28.2	9.2	-13.4	-40.3	-49.8	-42.8	-40.6	-38.8	-17.0	-11.2	-4.4	17.9	20.0	23.0	35.2	35.6
Real Estate	32.6	25.4	19.7	159.8	153.5	114.2	112.9	109.6	104.6	106.7	106.5	112.6	114.9	114.1	79.6	48.5
Utilities	10.0	9.3	9.3	4.6	0.5	-1.3	-1.3	-1.6	0.0	0.2	0.8	4.6	5.1	5.0	5.2	15.6
Total	29.7	23.6	18.2	8.3	0.7	-3.2	-3.9	-3.7	4.4	5.9	7.9	16.9	17.8	18.6	23.2	24.9

Source: Refinitiv Datastream, NSE.

Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2020, covered by at least five analysts at any given point of time over the last one year. * figures for June 2021 are actual earnings growth figures.

Consensus FY22/FY23 PAT estimates upgraded despite renewed COVID-induced **uncertainties...**: Better-than-expected corporate earnings in FY21 and expectations of pick-up in consumption demand in the second half has translated into upward revisions in corporate earnings for FY22 and FY23 by 6.6% and 4.3% respectively for top 200 covered companies by market capitalisation. This was despite the deadlier second wave of COVID-19 and attendant ramifications on the economic recovery that was underway during the second half of FY21. With this, the aggregate earnings of top 200 companies in FY22 and FY23 are now expected to grow at 37.9% and 18.1% respectively. That said, the upward revisions were primarily led by Materials and Financials—accounting for ~43% of the aggregate profit—excluding which profit estimate for FY22 saw a cut of 1.8% in FY22 since March-end and were broadly retained for FY23.

A sharp surge in COVID-19 infections in the quarter gone by, that turned out to be much more virulent than the first wave in terms of infection as well as mortality rates, has significantly dampened consumer as well as business sentiments. This is reflected in a several high-frequency indicators including RBI's consumer and business sentiment surveys and manufacturing/services PMI, among others. Even as the restrictions were localised and targeted during the second wave unlike the first wave, the loss of livelihoods seen during the second wave may have a lingering impact on consumers' propensity to spend. Rural demand, which remained fairly resilient last year, may get hit this time given the severity of COVID crisis in hinterlands. Considering this, the profit growth estimates for FY22—that factor in a swift recovery in consumption/investment demand—may face downside risks, particularly in the wake of an impending third wave. On the positive side, improving global growth outlook and a potential weakening of the INR bode well for export-oriented sectors.

Figure 42: Aggregate consensus profit growth estimate for top 200 covered companies (% YoY)

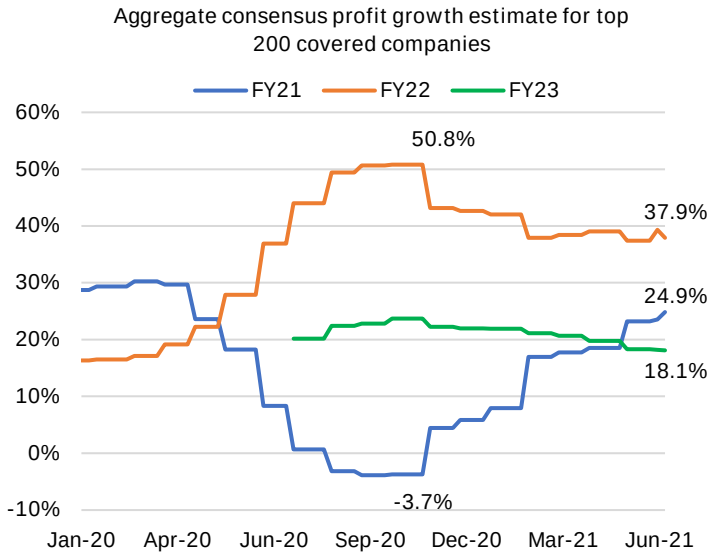
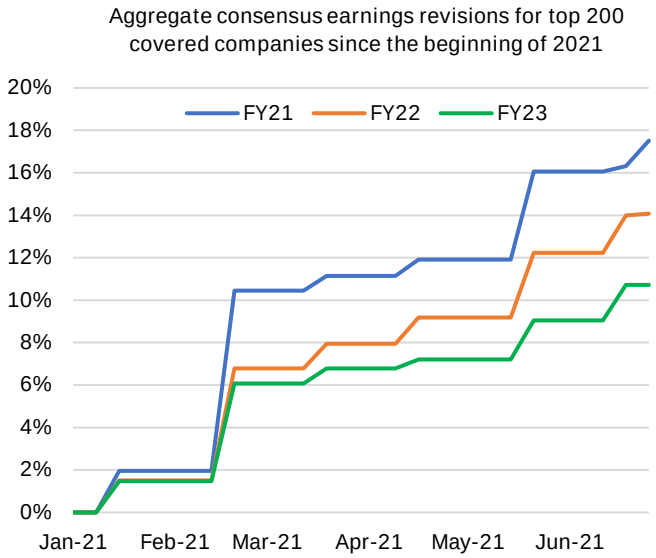


Figure 43: Aggregate consensus earnings revisions in 2021 till date for top 200 covered companies



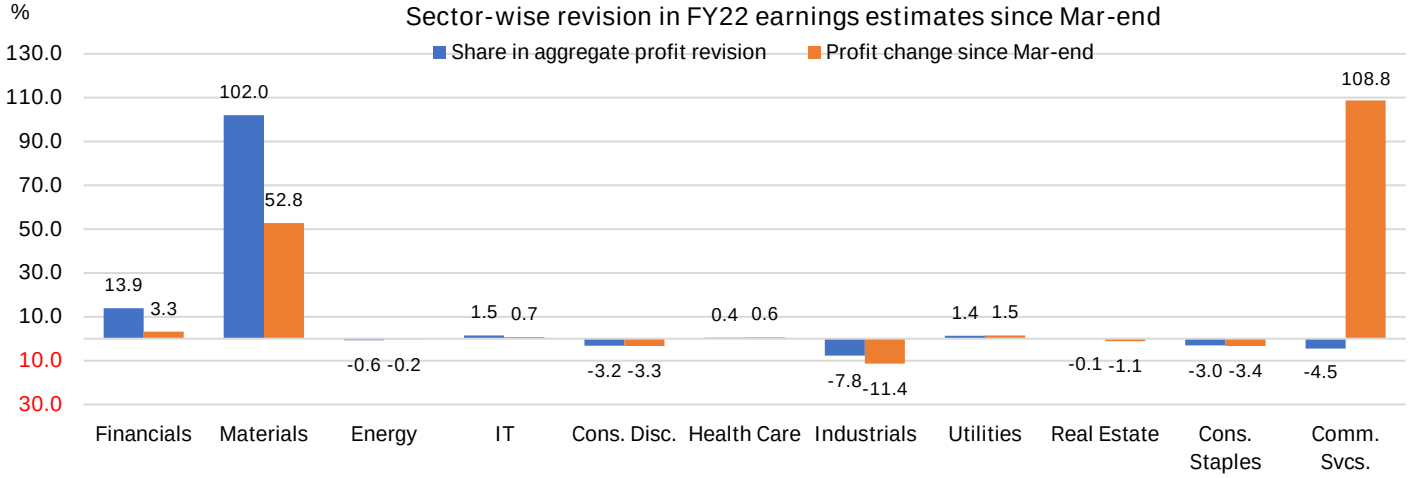
Source: CMIE Prowess, Refinitiv Datastream, NSE.
Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2020, covered by at least five analysts at any given point of time over the last one year. Data is as of June 25th, 2020.

Figure 44: Monthly trend of sector-wise FY22 consensus earnings growth estimate (% YoY)

Sectors	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
Comm. Svcs.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Consumer Disc.	48.6	87.0	113.2	150.1	177.4	173.7	157.6	157.3	153.0	117.5	116.9	115.7	83.6	79.4
Consumer Staples	15.8	17.0	19.6	21.2	20.9	21.6	22.9	23.0	23.1	23.3	23.0	23.0	20.5	19.6
Energy	22.5	28.8	39.1	44.5	46.9	46.6	39.8	38.3	38.4	27.0	27.0	26.5	15.4	10.2
Financials	32.6	39.4	47.9	53.4	54.6	52.6	42.5	42.8	41.5	41.2	41.6	41.6	43.3	44.7
Health Care	17.0	20.1	22.1	21.6	21.8	21.6	19.1	18.7	18.6	14.5	14.4	13.9	14.7	13.5
Industrials	20.9	66.0	76.7	99.9	104.6	105.4	96.8	96.3	95.3	98.7	100.2	101.6	32.5	29.2
IT	12.5	13.2	13.8	12.9	12.9	14.1	13.9	13.9	15.0	14.9	14.5	15.9	19.3	19.3
Materials	58.1	86.4	91.9	81.0	76.8	73.7	41.5	38.5	36.0	25.7	25.9	29.7	43.2	60.6
Real Estate	7.7	10.2	17.1	28.0	27.3	29.5	29.6	29.2	29.0	35.7	36.3	34.1	60.4	95.1
Utilities	11.2	15.0	18.0	20.2	20.1	21.1	18.8	18.7	18.4	18.0	18.3	18.5	18.6	9.3
Total	27.9	36.9	44.0	49.4	50.6	50.8	43.2	42.6	42.0	37.9	38.4	39.1	37.4	37.9

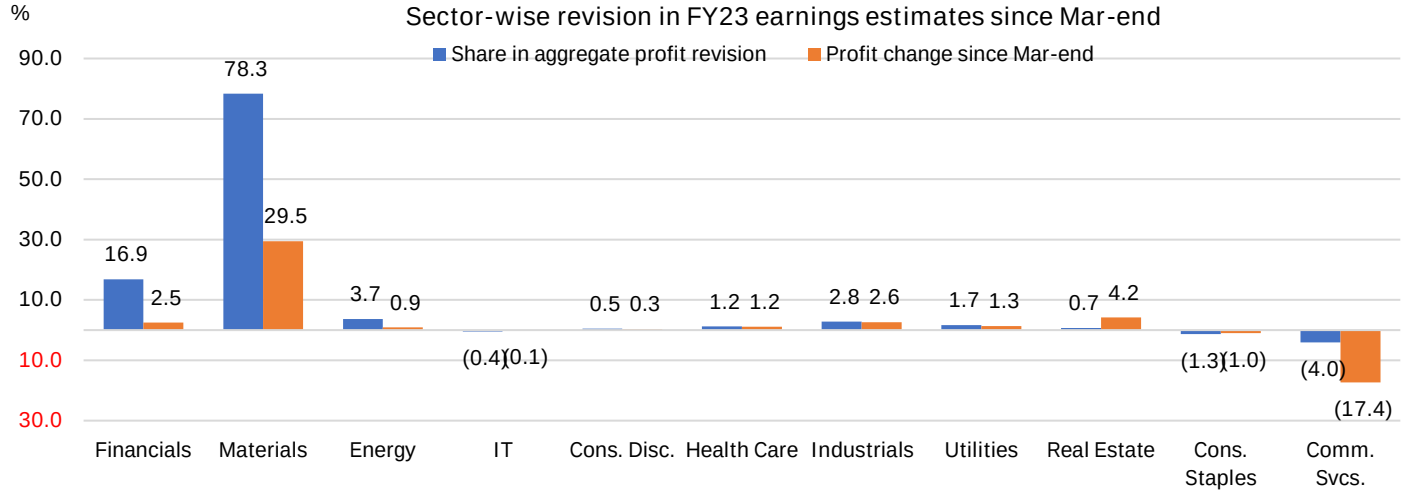
Source: Refinitiv Datastream, NSE.
Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2020, covered by at least five analysts at any given point of time over the last one year. * Data is as of June 25th, 2021.

Figure 45: Sector-wise revision in FY22 earnings estimates since March-end



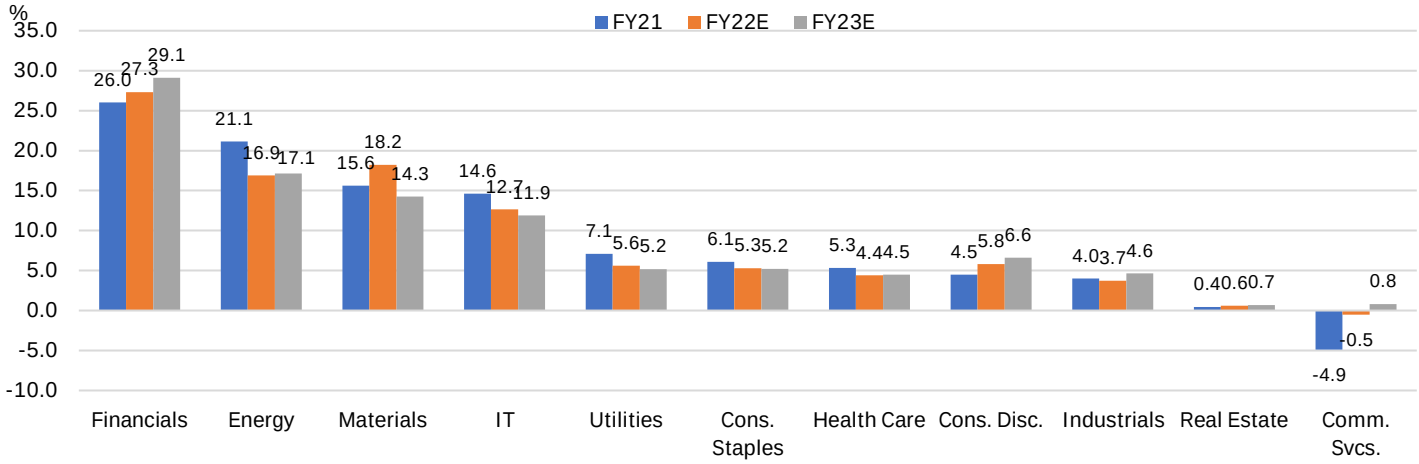
Source: Refinitiv Datastream, NSE. Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2020, covered by at least five analysts at any given point of time over the last one year. Data is as of June 25th, 2021.

Figure 46: Sector-wise revision FY23 earnings estimates since March-end



Source: Refinitiv Datastream, NSE. Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2020, covered by at least five analysts at any given point of time over the last one year. Data is as of June 25th, 2021.

Figure 47: Sector-wise share in earnings (As of June 25th, 2021)

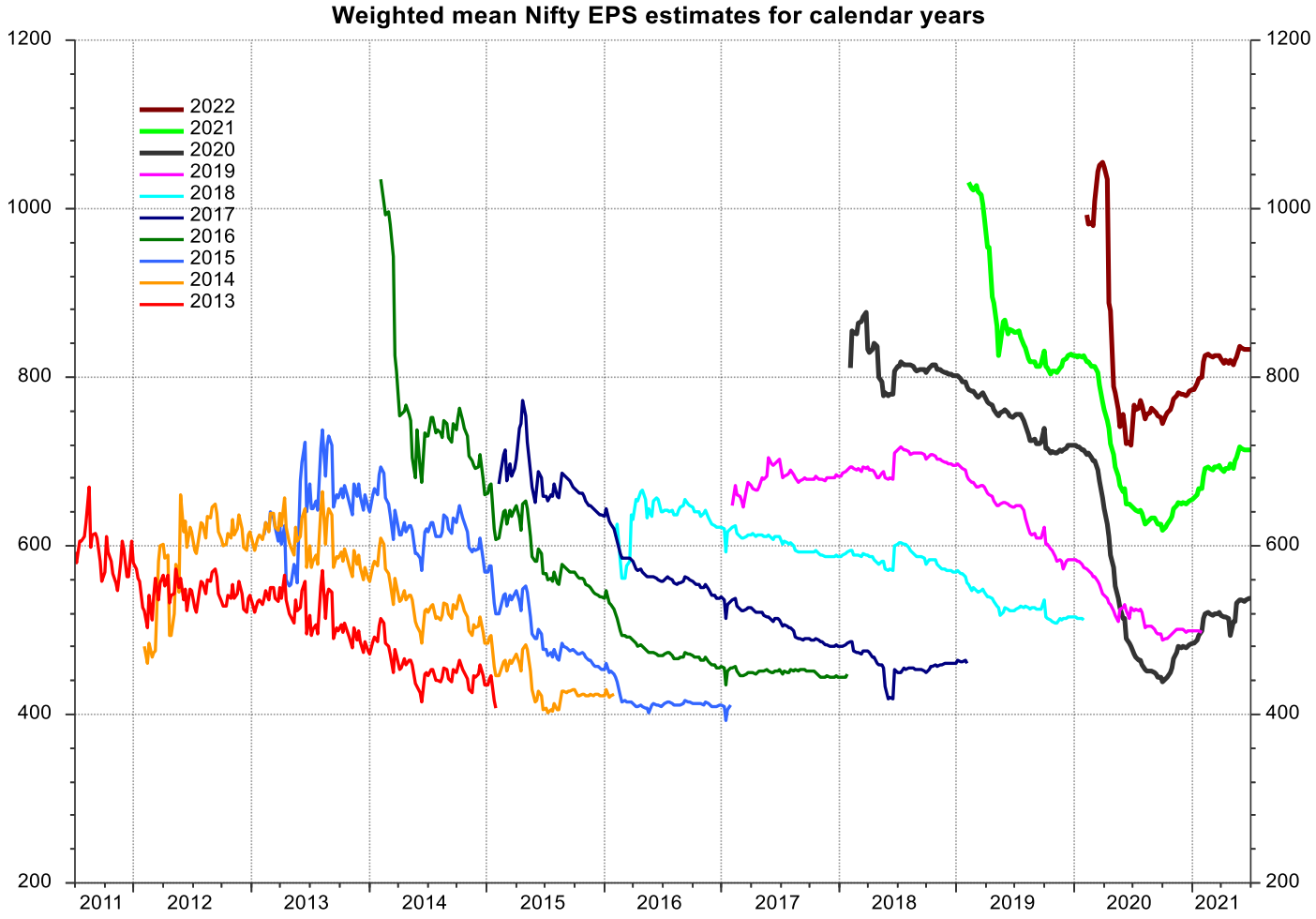


Source: CMIE Prowess, Refinitiv Datastream, NSE. Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2020, covered by at least five analysts at any given point of time over the last one year. Data is as of June 25th, 2021.

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 played out this year with earnings for the Nifty 50 universe, following a steep cut initially after the onset of COVID-19 pandemic, witnessing meaningful upgrades over the last few quarters. Aggressive cost cutting initiatives by companies, ramping up of business activities, rising commodity prices and improvement in consumption demand improved earnings outlook, leading to ~9% and 6.5% increase in Nifty 50 EPS estimates for 2021 and 2022 respectively since the beginning of 2021.

Figure 48: Yearly trend of NIFTY 50 Consensus EPS estimates

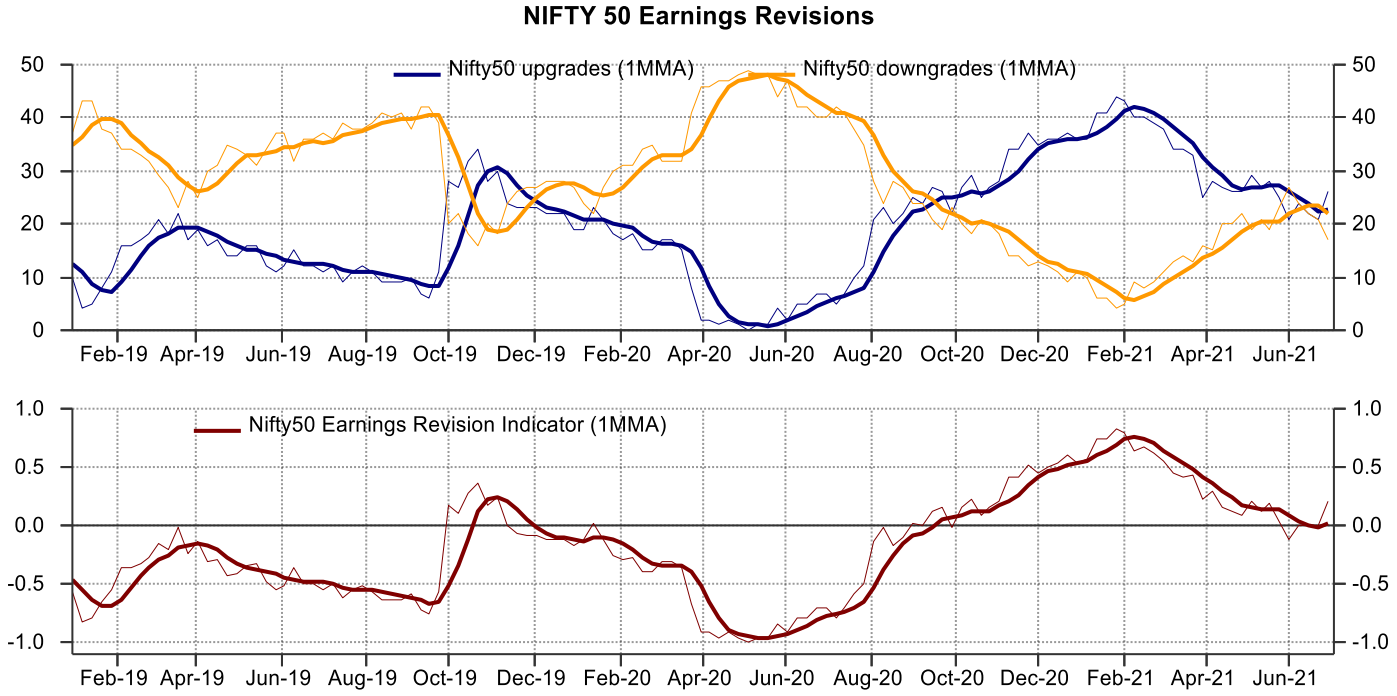


Source: Refinitiv Datastream, NSE.

Nifty 50 Earnings Revision Indicator dropped to near-zero levels: The Earnings Revision Indicator (ERI)[4] for the Nifty 50 universe had remained in the negative zone between 2015 and mid-2020, implying downgrades outnumbering upgrades, albeit for a brief period in late 2019 when profit estimates got upgraded post the cut in corporate tax rate. In fact, the ERI fell even deeper into the negative zone during May-June 2020 to the lowest level since the data is available (2007) as corporate earnings outlook got severely impacted due to massive supply and demand disruptions caused by mass-scale COVID-19-induced lockdowns worldwide.

The ERI, however, improved meaningfully beginning September 2020, as better-than-expected corporate earnings over the last few quarters and a stronger-than-anticipated post-lockdown recovery in business and consumption activities led to upgrades across the board. That said, the ERI has been on a downward trajectory since the onset of the second wave of COVID-19 in February 2021. Except for Materials which has continued to see upgrades far outnumbering downgrades, thanks to a sharp surge in metal prices and improvement in industrial demand, all other sectors have seen a meaningful drop in the ERI levels. In fact, ERI has dropped to sub-zero levels for Consumer Staples, Consumer Discretionary, Communication Services and Information Technology, implying higher number of downgrades than upgrades.

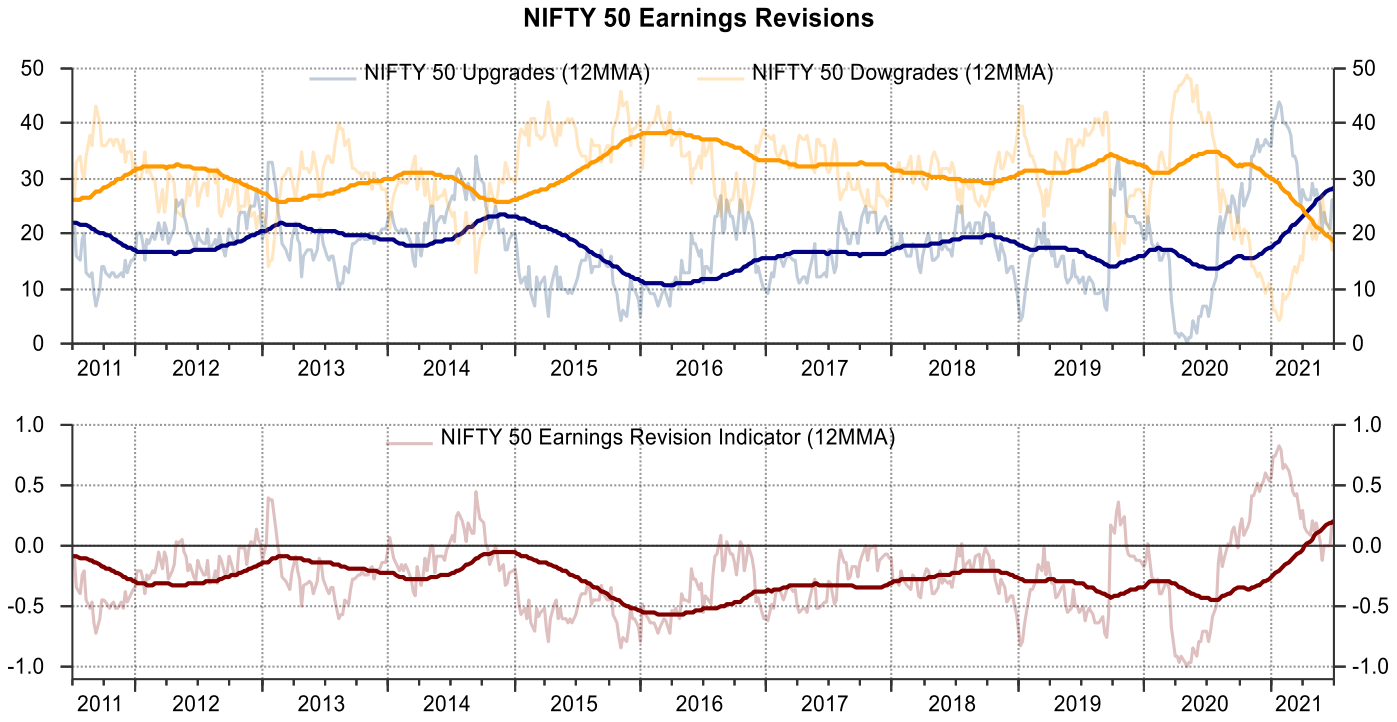
Figure 49: Nifty 50 Earnings Revision Indicator (since January 2019)



Source: Refinitiv Datastream, NSE

[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.

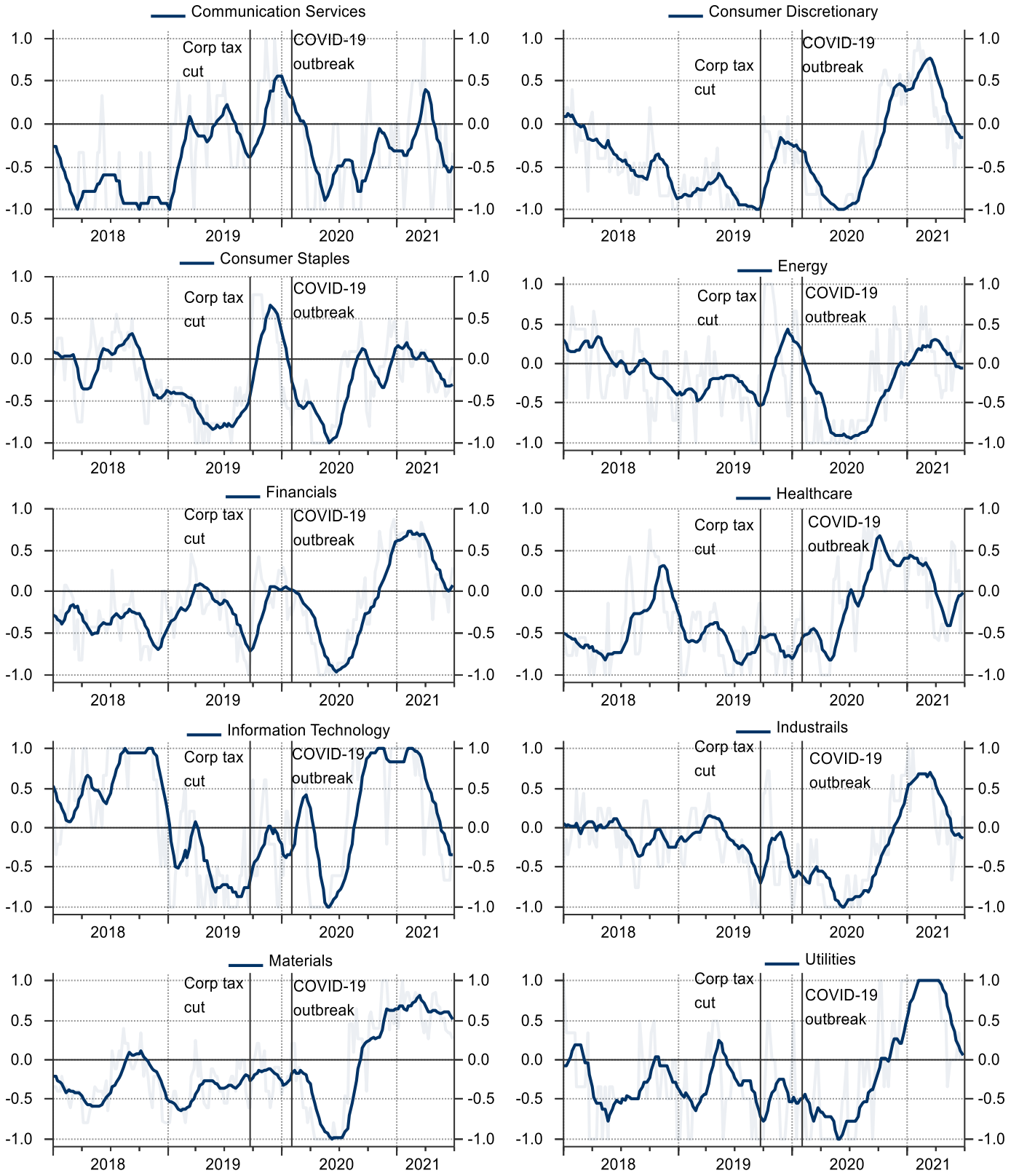
Figure 50: Nifty 50 Earnings Revision Indicator (10-year trend)



Source: Refinitiv Datastream, NSE.

Figure 51: Short-term trend of Earnings Revision Indicator across MSCI sectors

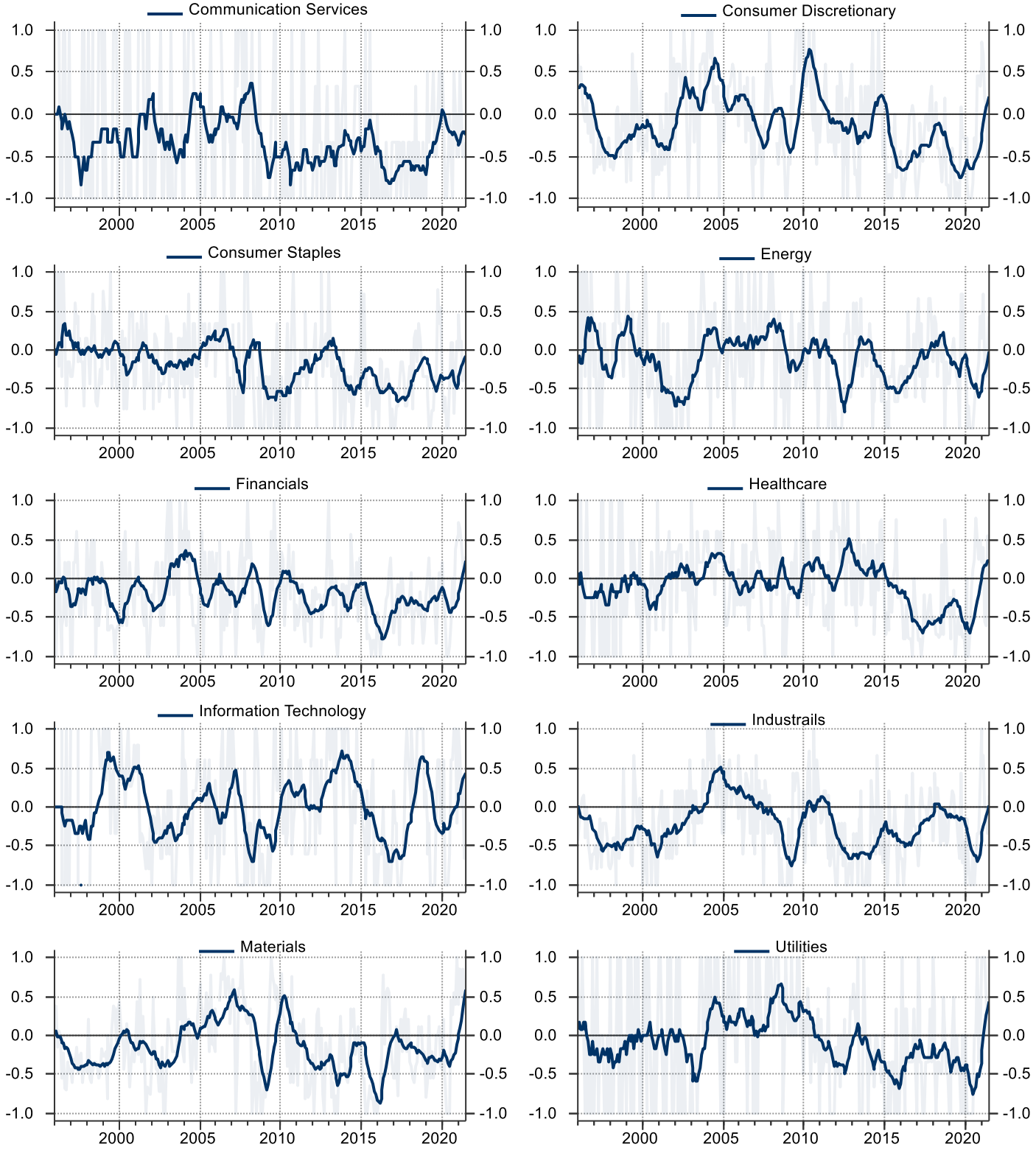
India Earnings Revision Indicator across sectors: Short-term (2MMA)



Source: Refinitiv Datastream, NSE.

Figure 52: Long-term trend of Earnings Revision Indicator across MSCI sectors

India Earnings Revision Indicator (ERI) across sectors: Long-term (12MMA)



Source: Refinitiv Datastream, NSE.

COVID-19 Update: India past the second wave; pace of vaccine drive picks up[5]

Daily infections have been on a steady downward trajectory since reaching the peak of the second wave in mid-May and are now hovering below the peak levels seen in the first wave. This has been accompanied by a drop in casualties, albeit with a substantial lag, as recounting of deaths by certain states led to casualties increasing well after the peak of the second wave. As of July 11th, 2021, daily cases recorded were ~37k, active cases were at ~427k and casualties at ~410k. The current weekly CAGR is -15.8% as opposed to 5.9% seen in June. India is now adding 8.5% to global cases on a daily basis, and 14.4% to daily global casualties, while its share in confirmed cases stands at 16.7%.

The spread has been successfully contained after the second wave and states have increased the pace of vaccinations which will be key in keeping case numbers down as restrictions ease further. States that are recording the highest number of cases include Maharashtra, Kerala, Karnataka, Tamil Nadu and Andhra Pradesh, accounting for ~70%+ to daily caseload. In fact, Maharashtra and Kerala alone have been contributing more than 50% to daily infections. In terms of casualties, Maharashtra, Karnataka, Delhi, and Tamil Nadu lead with an overall share of 52%. Barring Maharashtra and Kerala where daily infections still remain high, all states have successfully flattened controlled the second wave and restrictions are being eased in a phased manner. A rapid vaccination drive in dense areas of the country will be imperative in keeping case numbers low, particularly in the wake of an impending third wave hits.

Daily cases globally are on the rise again, standing at ~430k on July 10th, after falling to ~360k around June 20th. This has been led by rising cases in the UK, even as cases in Brazil and India have fallen for now. Cases in other European countries and the Unites States have stabilized due to rapidly progressing vaccination drives.

The Centre announced a revised vaccine policy on June 7th, 2021 wherein the Central Government decided to take over the procurement of vaccines again and make it free for all above 18 years of age. This policy came into effect on June 21st, 2021 following which the pace of vaccination picked up considerably. As of July 10th, 2021, India had vaccinated over 304.5m people making it the country with the second highest doses of vaccines administered, after China. However, when looked at the share of population being vaccinated, India still lags, having fully vaccinated 5.4% of the population vs. 12.1% for the world.

COVID-19 vaccine roll-out and policy update

The Centre announced a revised vaccine policy on June 7th, 2021 wherein the Central Government decided to take over procurement of vaccines again and make it free for all above 18 years of age. This policy came into effect on June 21st, 2021 following which the pace of vaccination picked up considerably. However, vaccination numbers have fallen since June 27th, 2021.

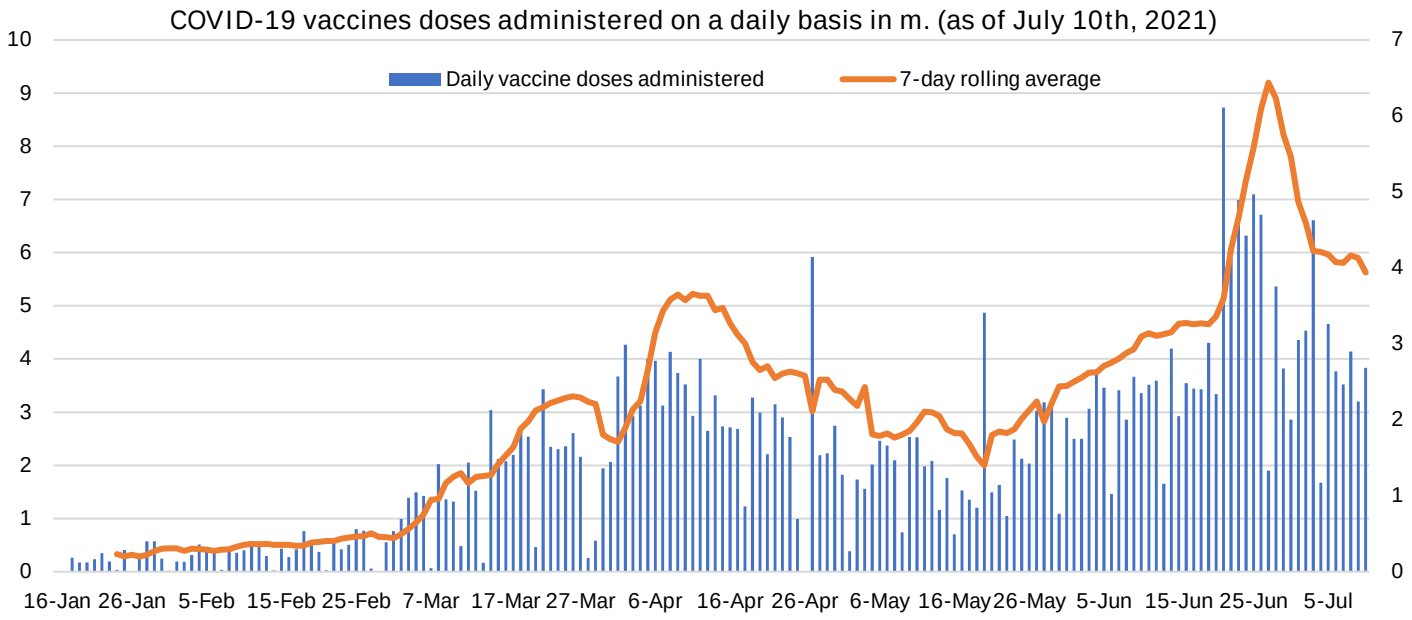
As of July 10th, 2021, India had vaccinated over 304.5 m people making it the country with the second highest doses of vaccines administered, after China. However, when looked at the share of population being vaccinated, India falls behind, having fully vaccinated 5.4% of the population vs. 12.1% for the world. 22.8% of the Indian population is partially vaccinated so the share of fully vaccinated people will pick up once the required gap between doses is completed. The pace of inoculation and coverage of population differs meaningfully across countries and factors viz. access to vaccines, population levels, income levels and health infrastructure.

Uttar Pradesh, Maharashtra, Rajasthan, Gujarat, Karnataka and Madhya Pradesh have vaccinated aggressively since the drive opened up to citizens above 18 years of age. West

[5] The minor variations in data across tables and charts are due to different data sources.

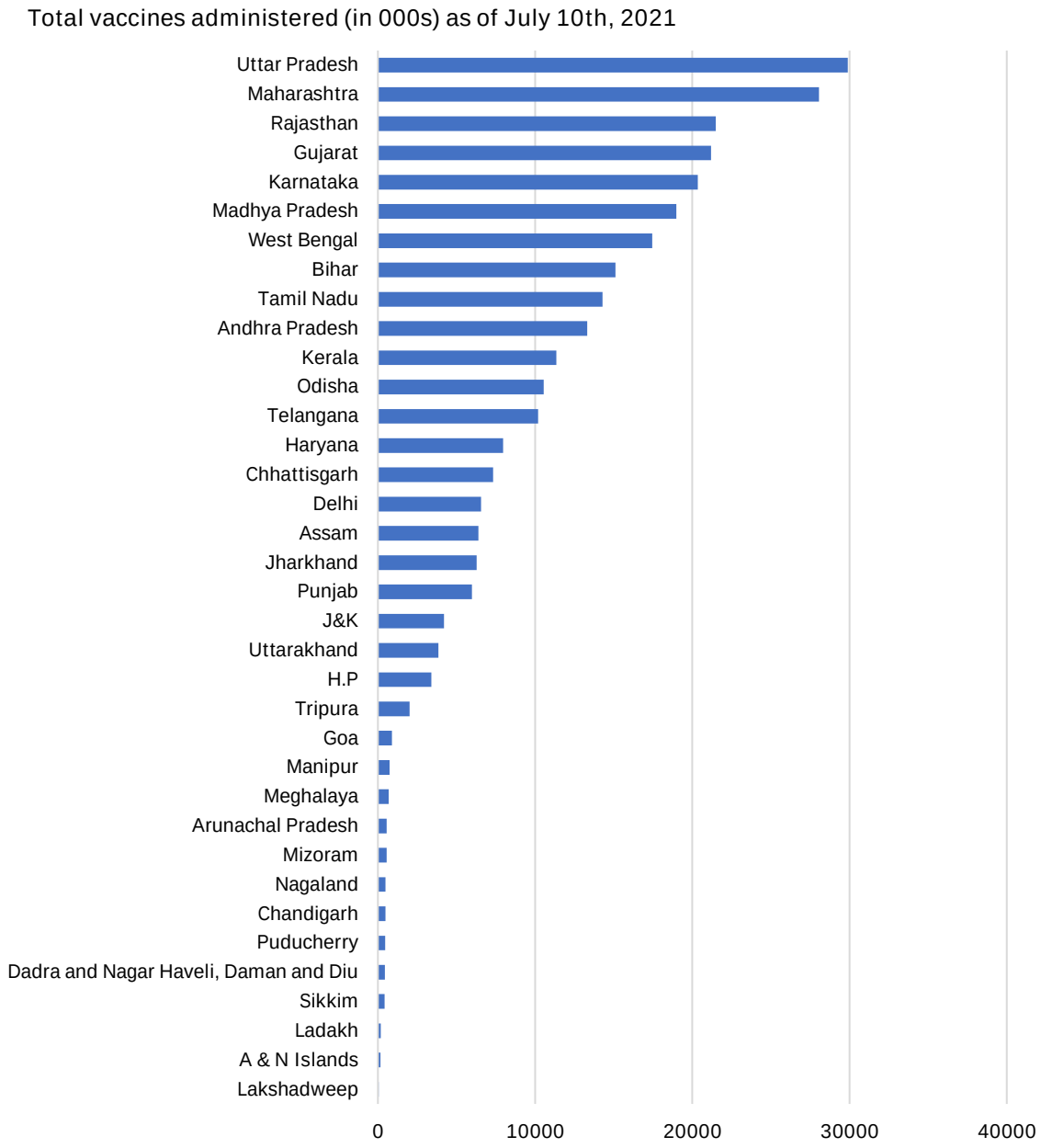
Bengal and Bihar follow closely behind. Fast pace of vaccination drives in such dense areas of the country would be key in reigning in cases if a third wave hits us.

Figure 53: COVID-19 vaccine doses administered in India



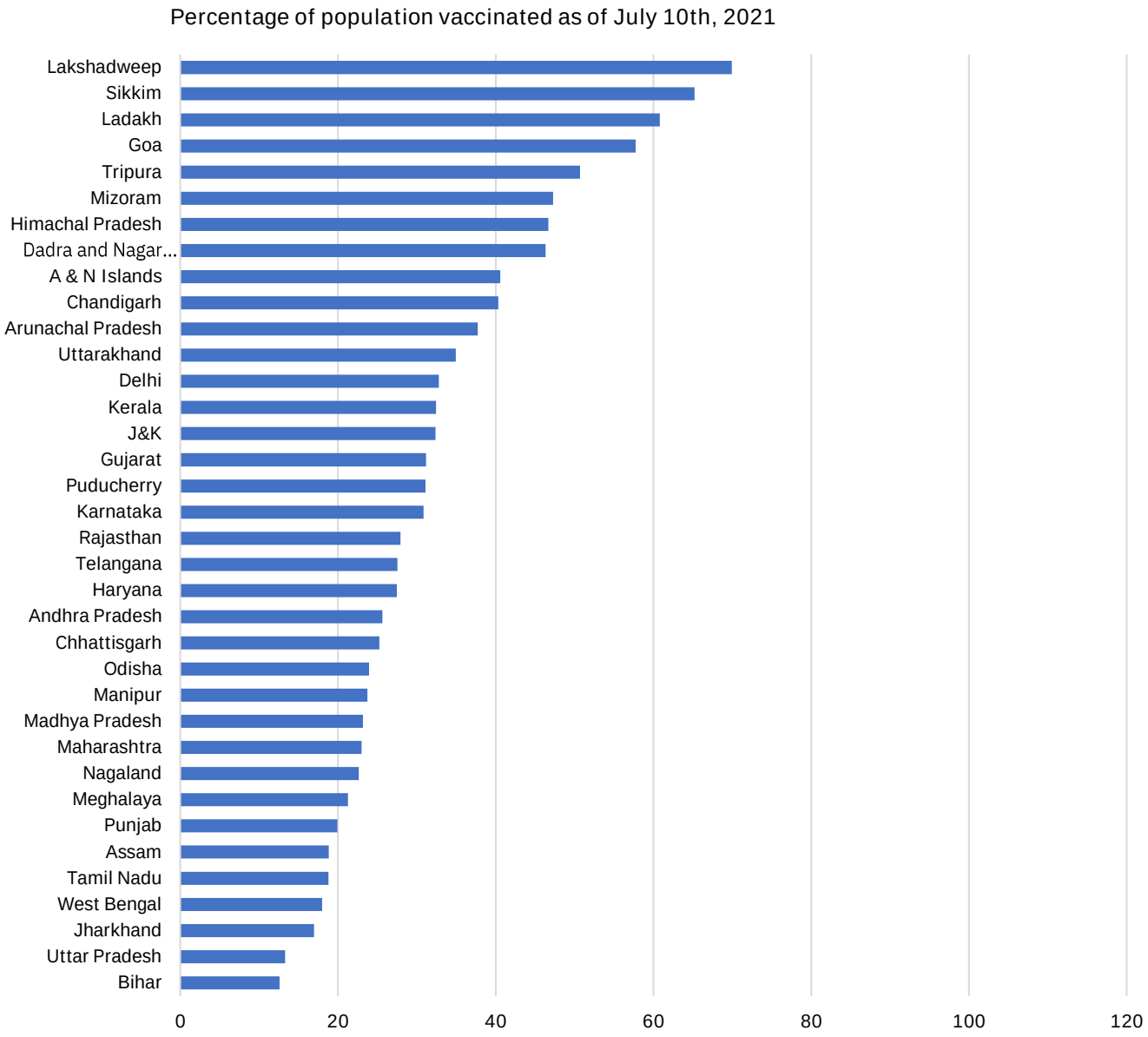
Source: covid19india.org.

Figure 54: State-wise cumulative COVID-19 vaccine does, as of July 10th, 2021



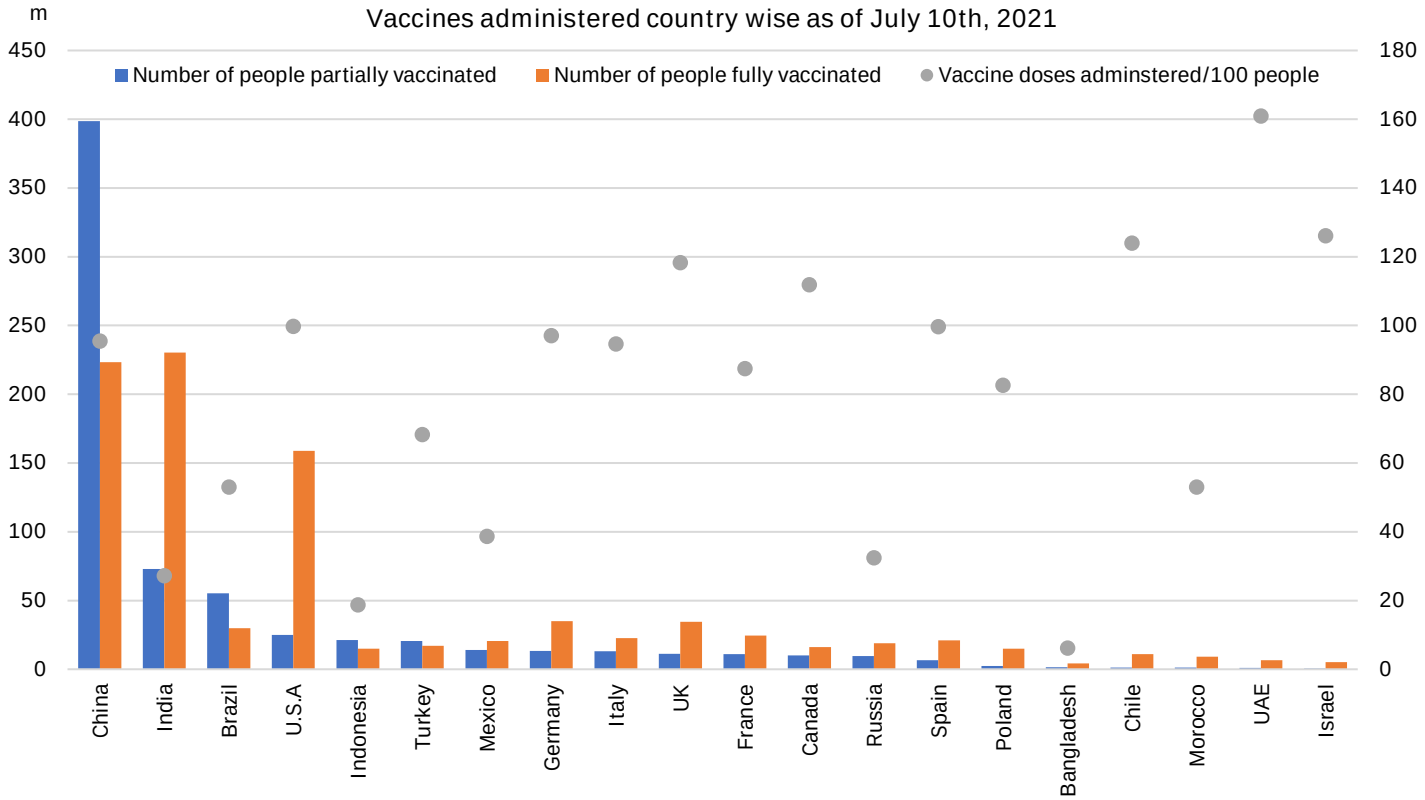
Source: covid19india.org

Figure 55: State-wise percentage of population vaccinated, as of July 10th, 2021



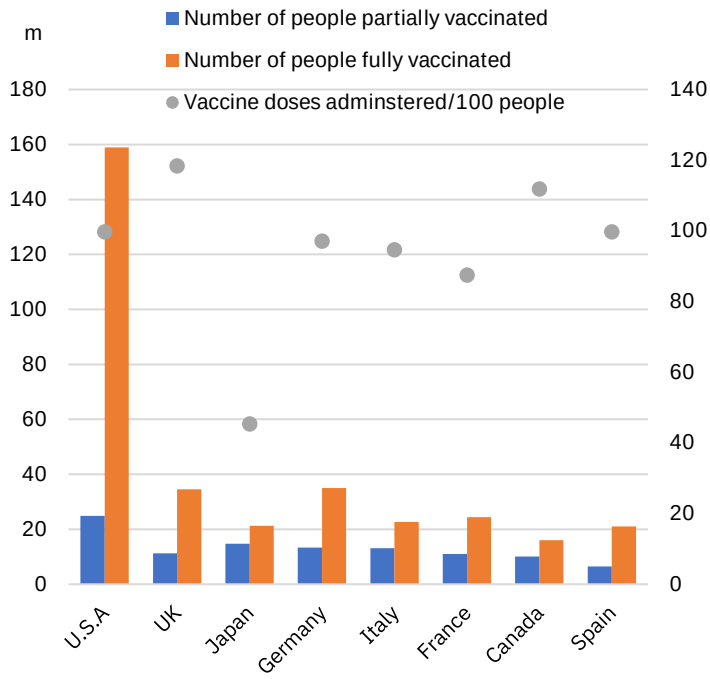
Source: covid19india.org

Figure 56: Covid-19 vaccine doses administered across countries, as of July 10th, 2021



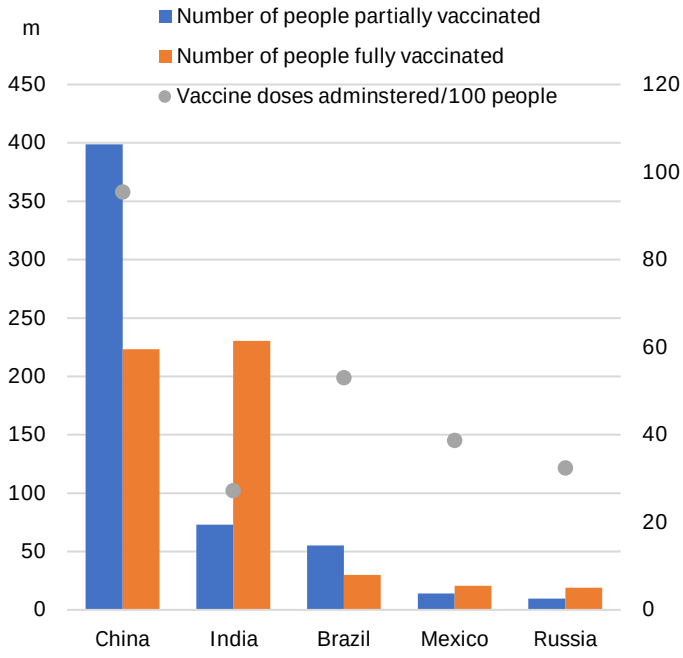
Source: Our World in Data

Figure 57: Total vaccines administered in advanced economies, as of July 11th, 2021



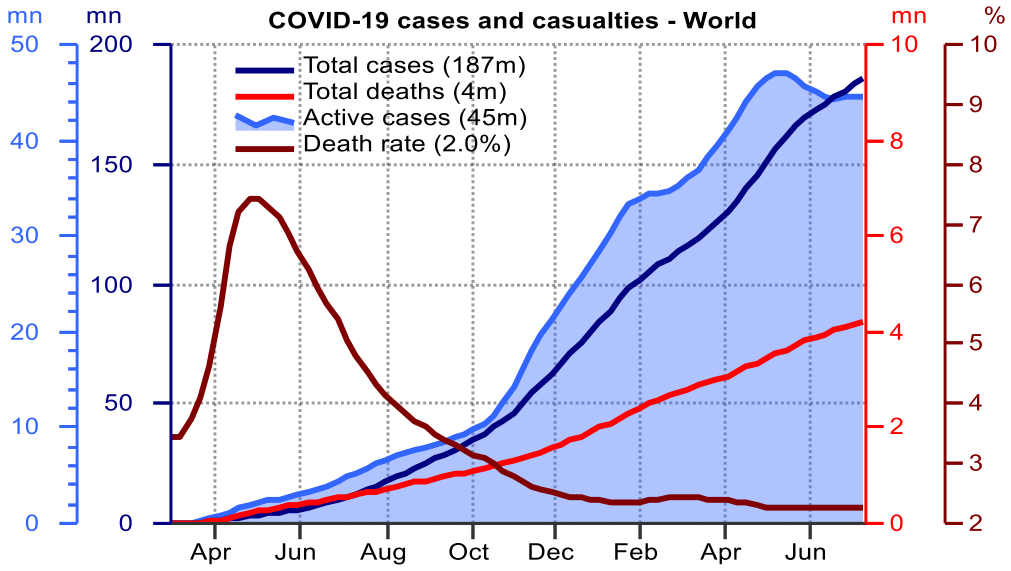
Source: Our World in Data.

Figure 58: Total vaccines administered in EMDEs, as of July 11th, 2021



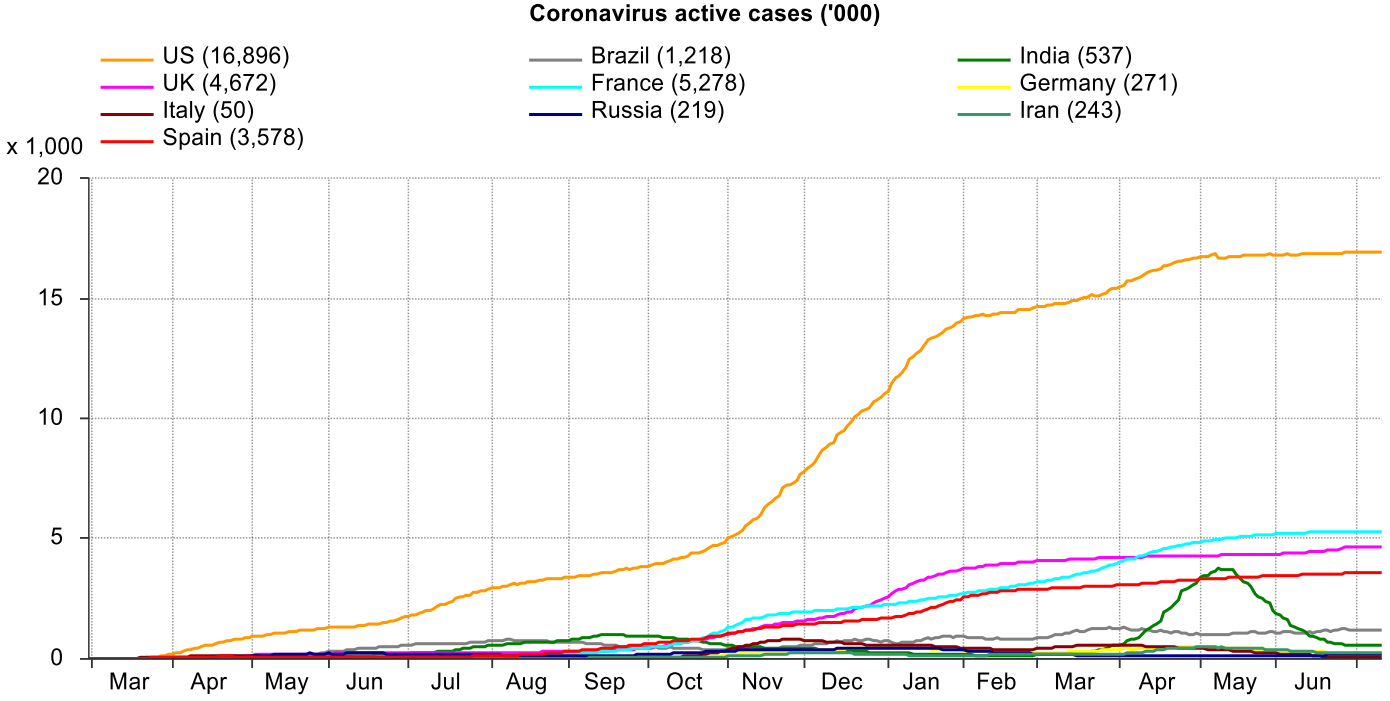
Source: Our World in Data.

Figure 59: COVID-19 status—Worldwide (As on July 11th, 2021)



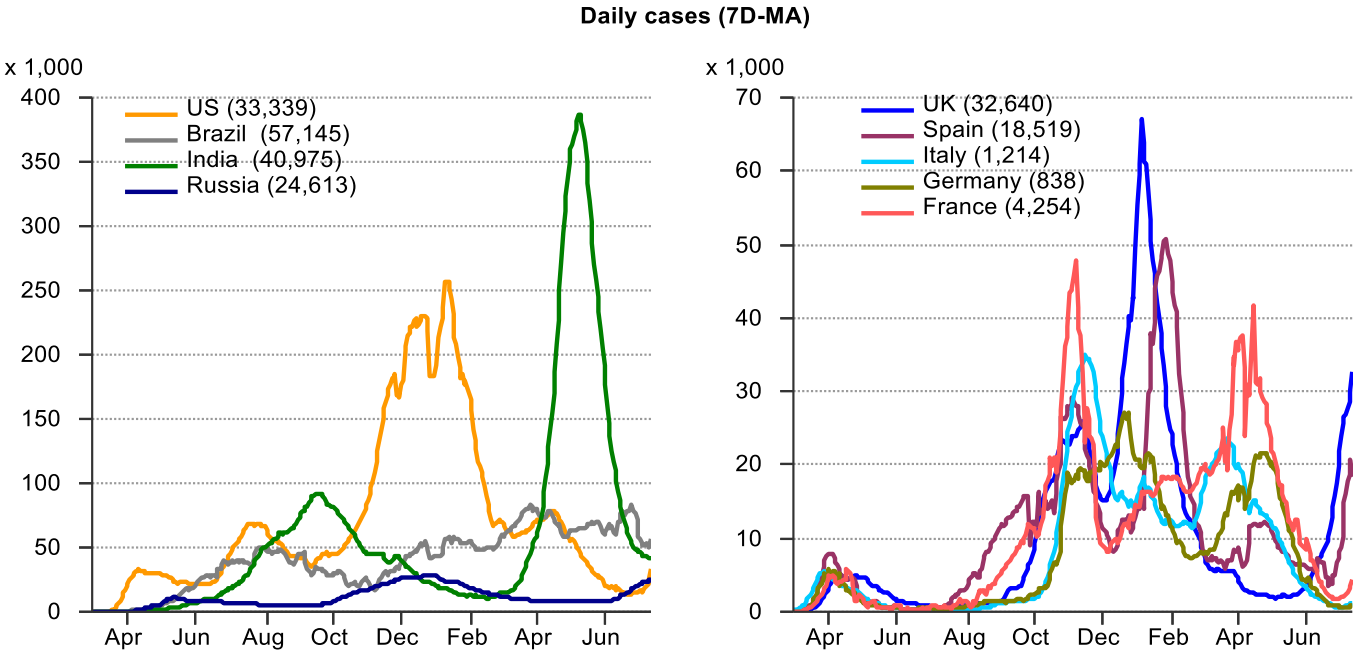
Source: Refinitiv Datastream,

Figure 60: COVID-19 active cases across countries (As on July 11th, 2021)



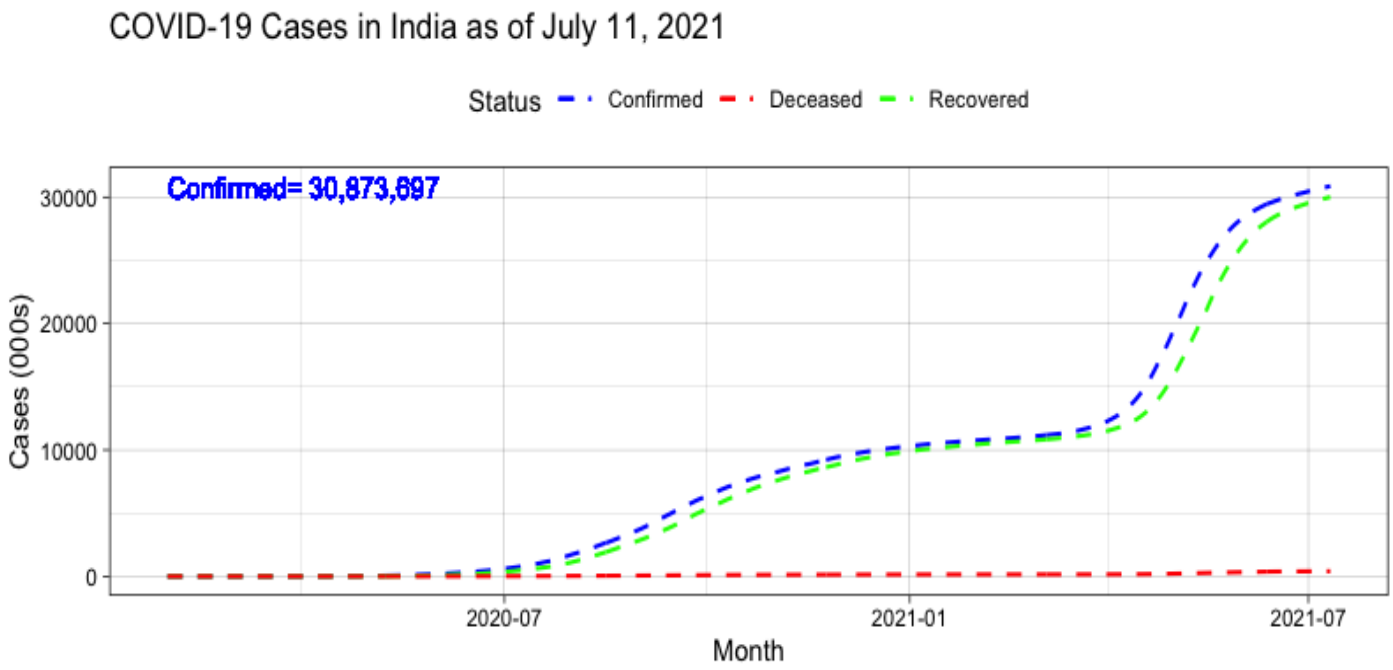
Source: Refinitiv Datastream,

Figure 61: Daily Coronavirus cases across countries (As on July 11th, 2021)



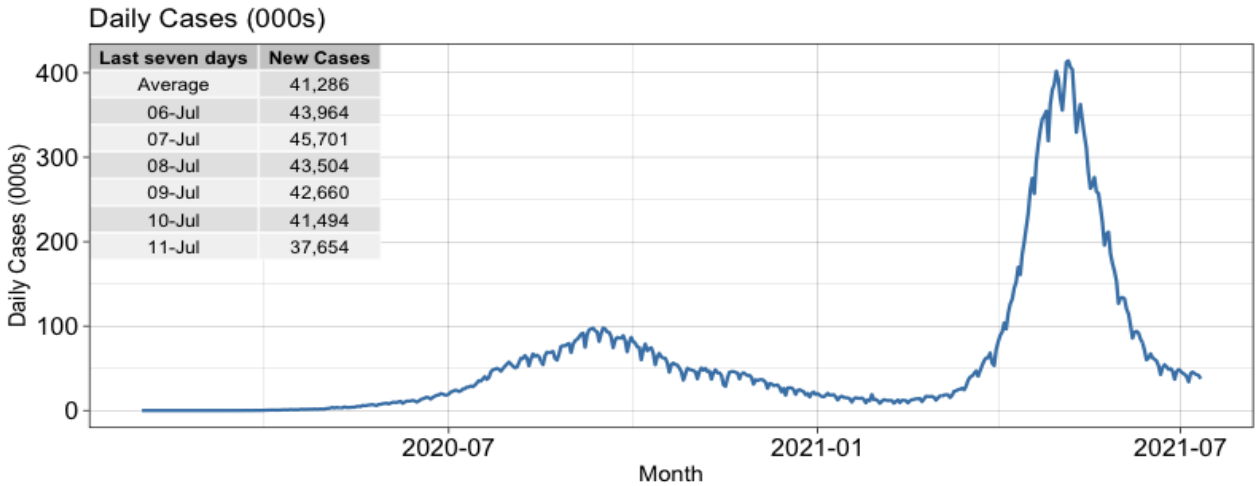
Source: Refinitiv Datastream,

Figure 62: COVID-19 cases in India (as of July 11th, 2021)



Source: covid19india.org.

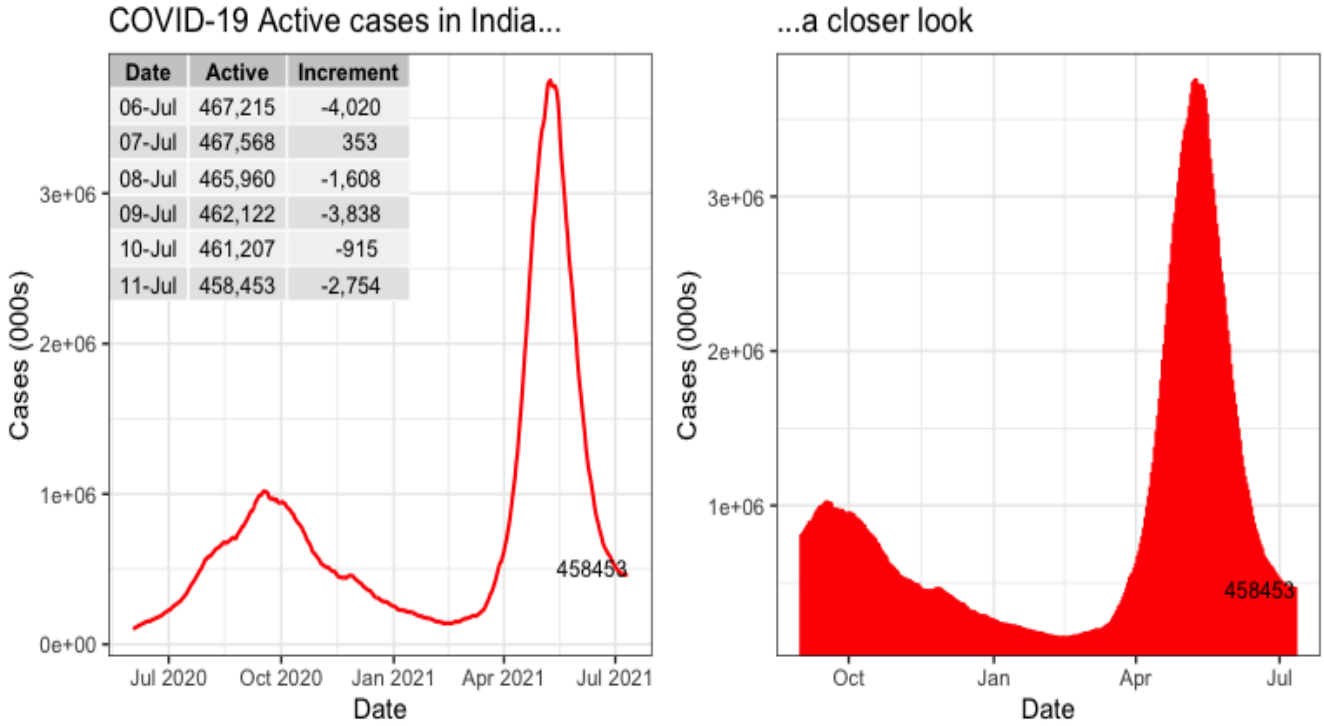
Figure 63: COVID-19 daily cases in India (July 11th, 2021)



Source: covid19india.org

Figure 64: COVID-19 active cases in India (July 11th, 2021)

Active cases in India peaked on May 8th, 2021 and have been on a steady downward trajectory since then Daily cases are now well below the peak of the first wave.



Source: covid19india.org.

Figure 65: Month-wise COVID-19 progression

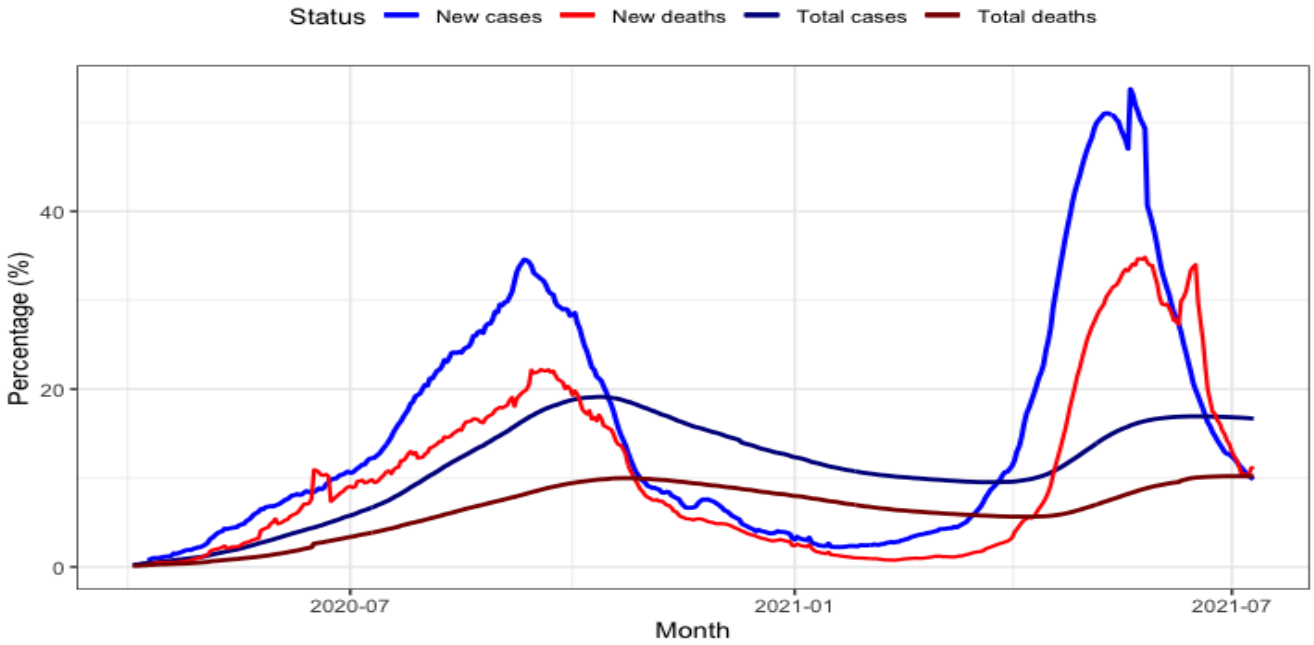
Month	Daily confirmed (average)	Daily recovered (average)	Daily deceased (average)	Cumulative confirmed (eop)
Jan'20	0	0	0	1
Feb'20	0	0	0	3
Mar'20	53	5	2	1,635
Apr'20	1,100	297	37	34,866
May'20	5,000	2,671	137	190,649
Jun'20	13,000	8,533	400	585,795
Jul'20	36,000	24,119	618	1,697,068
Aug'20	64,000	56,188	932	3,687,953
Sep'20	87,000	81,087	1,089	6,310,276
Oct'20	60,000	71,595	756	8,183,317
Nov'20	43,000	46,633	517	9,463,178
Dec'20	27,000	32,037	366	10,286,234
Jan'21	14,313	16,736	164	10,758,551
Feb'21	12,622	12,520	98	11,111,978
Mar'21	35,763	22,191	186	12,220,634
Apr'21	231,211	140,023	1,629	19,156,979
May'21	290,860	331,177	3,873	28,173,666
June'21	74,563	118,072	2253	30,410,549
July'21 *	42,104	47,761	846	30,873,697

Source: covid19india.org. * As of July 11th, 2021

Daily cases in India have continued on a downward trajectory after peaking on May 8th, 2021 and have now fallen below the peak of the first wave in September 2020. Most states curbed the spread of the second wave by imposing state-specific restrictions. As of June 10th, 2021, daily cases recorded were 37,154 (Source: covid19india.org). Karnataka, Tamil Nadu, Maharashtra, and Kerala currently have the highest number of active cases but cases have plateaued in all these states.

The country's total and daily share of incremental cases, as of September 30th , 2020, was 19% and 27% respectively which fell to 10% and 3% respectively by January 31st, 2021. However, India's second wave in cases resulted in a sharp jump in India's daily share to more than 50% and share of total confirmed cases has to 50% and 15.1% on May 15th, 2021 respctively. On July 10th, 2021, these figures were at 8.5% and 16.7%. While India's mortality rate initially dropped from 1.4% to 1.1% during the second wave, it has risen to 1.3%. Our daily share of global deaths was 14.4% on July 10th, 2021, a drop from the 38% share on May 30th, 2021. Total deceased cases could be higher than reported due to limited capacity of testing and the poor condition of health infrastructure in rural areas.

Figure 66: **India's share of the global cases and deaths**



Source: worldometers.info, covid19india.org.

Figure 67: **India's share of the global coronavirus** cases (daily and total)

Date	World Daily	India Daily	India Total	World Total	India Daily Share	India Total Share
29-Feb	1,446	0	3	6,612	0.0%	0.0%
31-Mar	75,337	146	1,397	779,093	0.2%	0.2%
30-Apr	81,818	1,801	34,863	3,130,737	2.2%	1.1%
31-May	105,773	8,782	190,609	5,998,835	8.3%	3.2%
30-Jun	173,337	18,641	585,481	10,239,259	10.8%	5.7%
31-Jul	289,732	61,242	1,695,988	17,356,471	21.1%	9.8%
31-Aug	261,172	69,921	3,691,166	25,233,053	26.8%	14.6%
30-Sep	324,096	86,821	6,312,584	33,685,132	26.8%	18.7%
31-Oct	473,618	46,963	8,184,082	45,711,629	9.9%	17.9%
30-Nov	496,892	31,118	9,462,809	62,778,734	6.3%	15.1%
30-Dec	747,664	21,822	10,266,674	81,926,995	2.9%	12.5%
30-Jan	513,060	13,044	10,747,091	103,130,698	3.0%	10.0%
28-Feb	322,449	15,614	11,111,978	114,644,539	4.8%	9.7%
30-Mar	564,208	53,480	12,149,335	126,974,931	9.5%	9.6%
30-Apr	886,822	386,555	18,762,976	149,019,351	43.6%	12.6%
30-May	388,837	152,734	28,047,534	168,669,044	39.3%	16.6%
30-Jun	382,203	45,951	30,362,848	180,078,454	12.0%	16.9%
09-July	500,825	42,766	30,795,716	184,318,442	8.5%	16.7%

Source: worldometers.info, covid19india.org.

Figure 68: **India's share of the global coronavirus deaths (daily and total)**

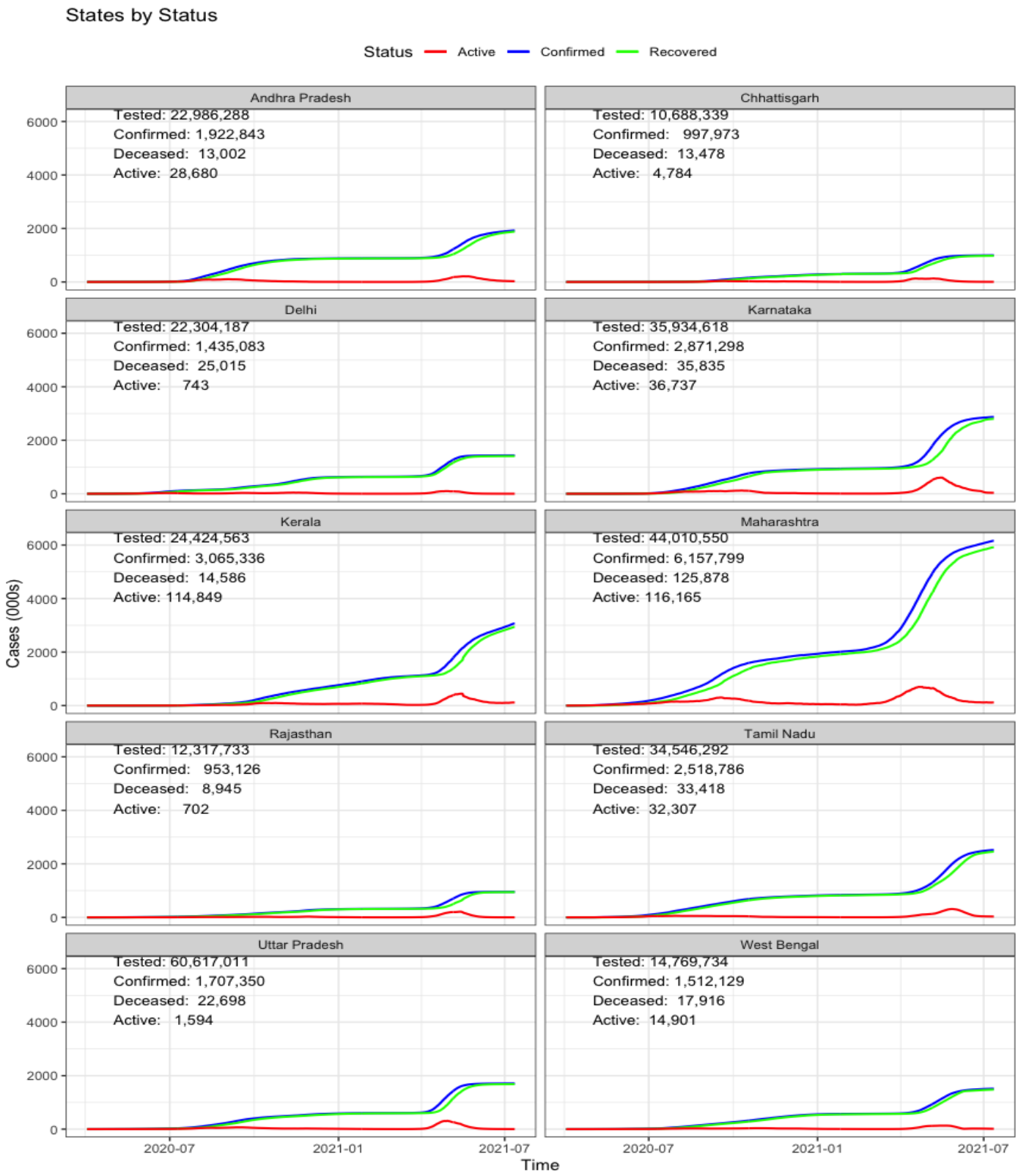
Date	World Daily	India Daily	India Total	World Total	India Daily Share	India Total Share
29-Feb	22	0	0	105	0.0%	0.0%
31-Mar	4,722	3	35	40,947	0.1%	0.1%
30-Apr	5,830	75	1,154	228,555	1.3%	0.5%
31-May	2,768	223	5,408	362,422	8.1%	1.5%
30-Jun	4,907	507	17,400	494,899	10.3%	3.5%
31-Jul	6,194	793	36,511	661,570	12.8%	5.5%
31-Aug	4,198	819	65,288	836,248	19.5%	7.8%
30-Sep	6,399	1,181	98,678	999,643	18.5%	9.9%
31-Oct	6,526	470	122,111	1,179,890	7.2%	10.3%
30-Nov	8,564	482	137,621	1,450,169	5.6%	9.5%
30-Dec	14,976	299	148,738	1,783,126	2.0%	8.3%
30-Jan	14,092	127	154,312	2,230,317	1.0%	7.0%
28-Feb	9,918	108	156,603	2,544,070	1.1%	6.2%
31-Mar	12,174	459	162,927	2,786,089	3.8%	5.8%
30-Apr	14,922	3,498	208,330	3,134,652	23.4%	6.6%
30-May	8,092	3,128	329,100	3,623,115	38.7%	9.1%
30-Jun	8,068	817	398,454	3,904,157	10.1%	10.2%
09-July	8,390	1,206	407,145	3,985,169	14.4%	10.2%

Source: worldometers.info, covid19india.org.

Total confirmed cases in a state can be misleading since area, population and population density need to be taken into account as well. States that saw the virus spreading early on during the first wave include Maharashtra, Kerala and Delhi but were able to bring their case load under control. These states also saw surges after festivals in August and November but were on a steady downward trajectory from December to February, before the second wave began. Maharashtra, Karnataka, Kerala, Tamil Nadu and Andhra Pradesh currently have the highest number of active cases all states have successfully flattened the second wave.

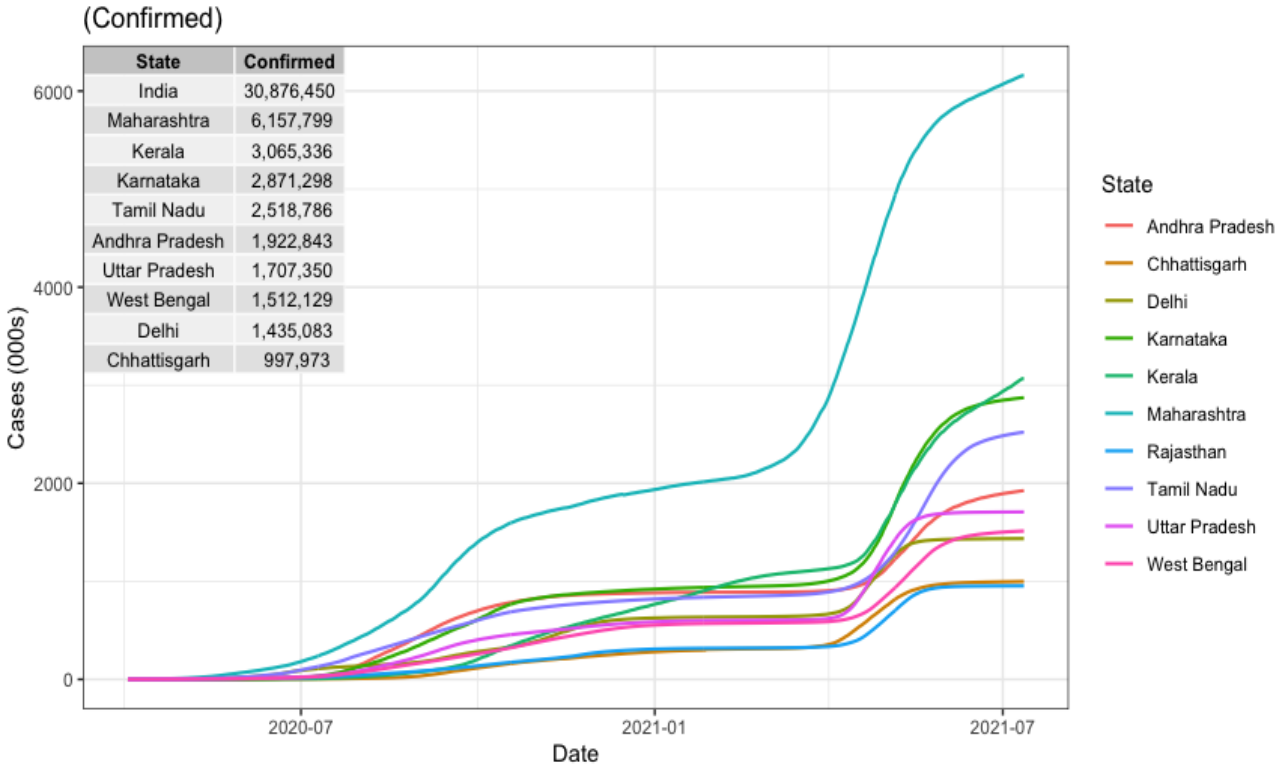
Mortality rates have increased to 1.3% after they fell to 1.2% during the second wave. Recovery rates are now at 97.2% after slipping to ~84% in May. The second wave of COVID-19 led to a great burden on the country's healthcare system and state governments soon began preparations for a third wave, including increasing the pace of vaccination in the country.

Figure 69: COVID-19 Cases in India across States (Confirmed, Recovered, Active) as of July 11th, 2021



Source: covid19india.org

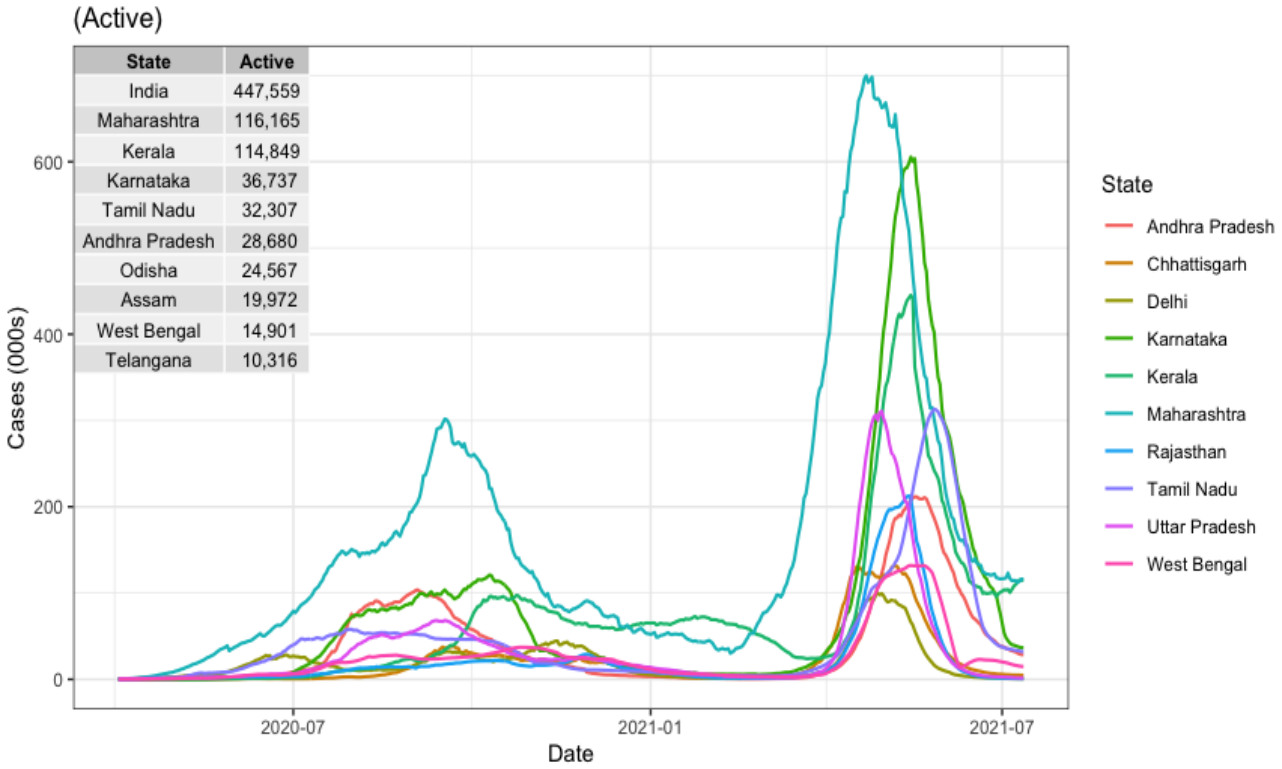
Figure 70: COVID-19 Confirmed cases across major states, as of July 11th, 2021



State	Confirmed
India	30,876,450
Maharashtra	6,157,799
Kerala	3,065,336
Karnataka	2,871,298
Tamil Nadu	2,518,786
Andhra Pradesh	1,922,843
Uttar Pradesh	1,707,350
West Bengal	1,512,129
Delhi	1,435,083
Chhattisgarh	997,973

Source: covid19india.org

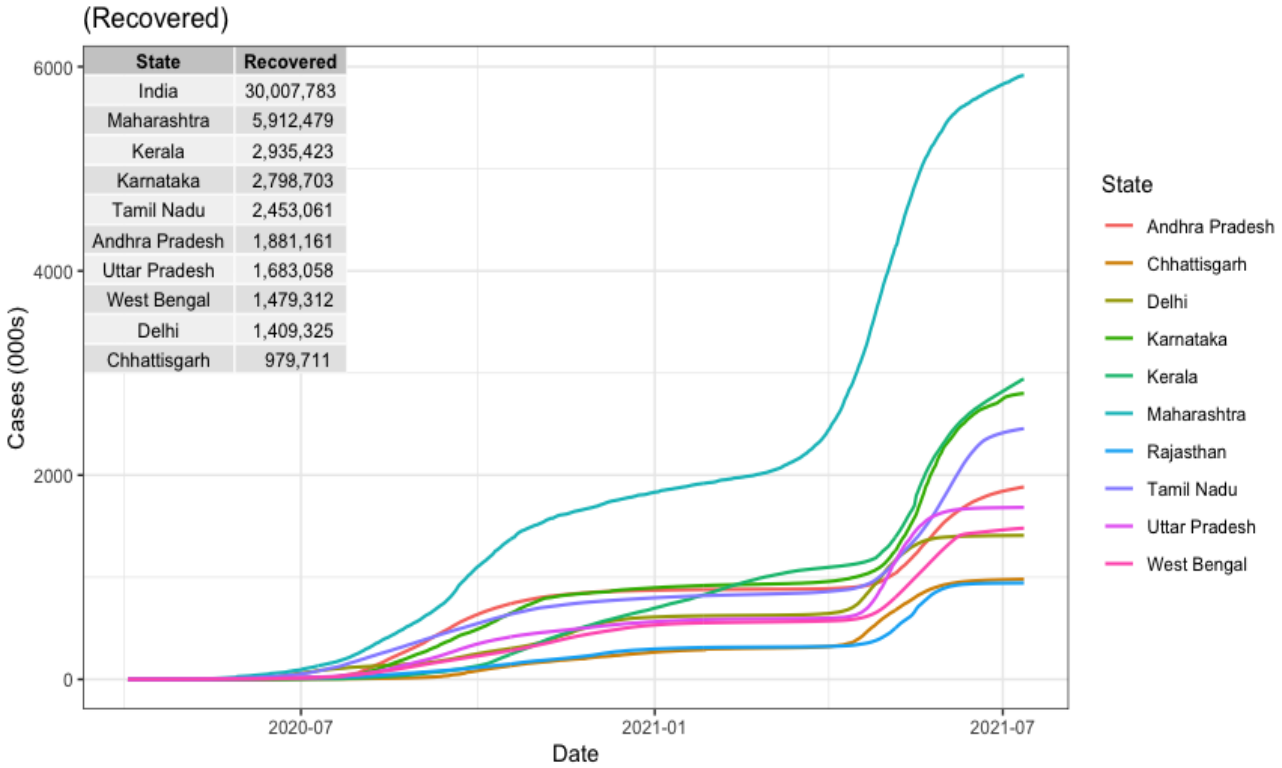
Figure 71: COVID-19 Active cases across major states, as of July 11th, 2021



State	Active
India	447,559
Maharashtra	116,165
Kerala	114,849
Karnataka	36,737
Tamil Nadu	32,307
Andhra Pradesh	28,680
Odisha	24,567
Assam	19,972
West Bengal	14,901
Telangana	10,316

Source: covid19india.org

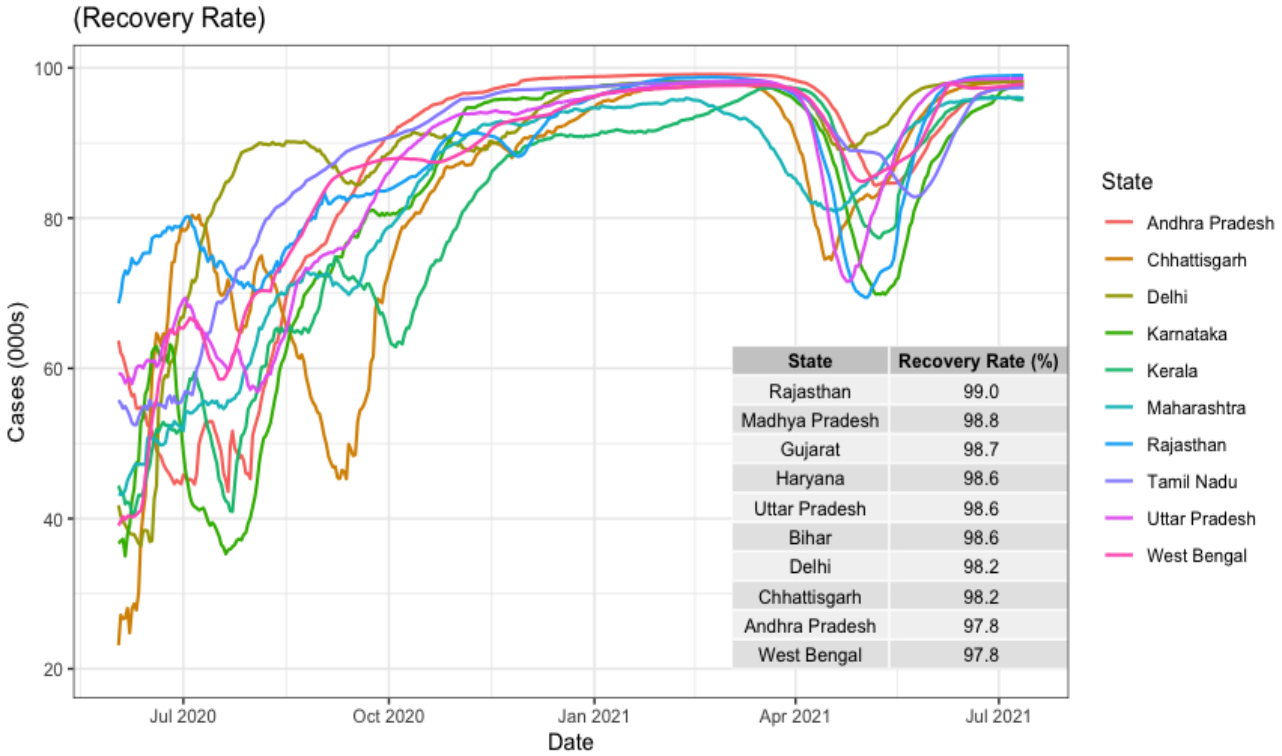
Figure 72: COVID-19 Recovered cases across major states, as of July 11th, 2021



State	Recovered
India	30,007,783
Maharashtra	5,912,479
Kerala	2,935,423
Karnataka	2,798,703
Tamil Nadu	2,453,061
Andhra Pradesh	1,881,161
Uttar Pradesh	1,683,058
West Bengal	1,479,312
Delhi	1,409,325
Chhattisgarh	979,711

Source: covid19india.org

Figure 73: COVID-19 recovery rate across major states, as of July 11th, 2021

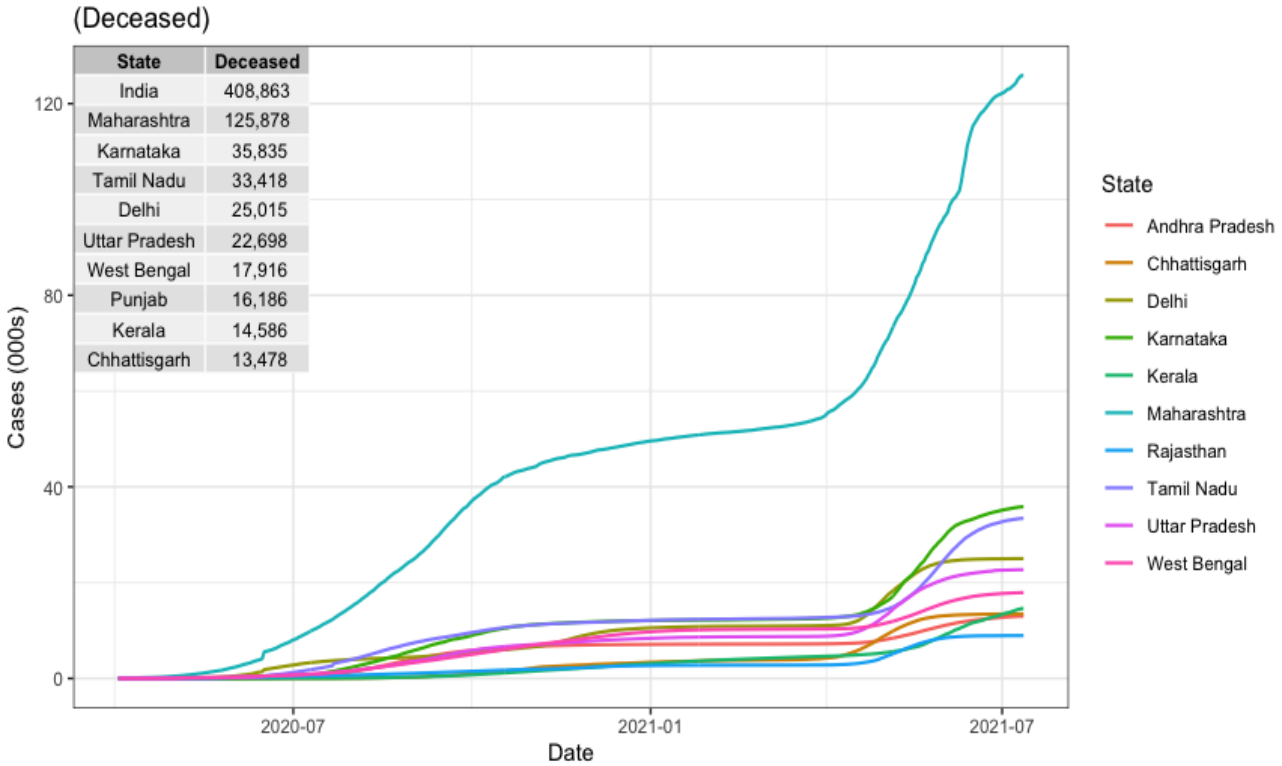


State	Recovery Rate (%)
Rajasthan	99.0
Madhya Pradesh	98.8
Gujarat	98.7
Haryana	98.6
Uttar Pradesh	98.6
Bihar	98.6
Delhi	98.2
Chhattisgarh	98.2
Andhra Pradesh	97.8
West Bengal	97.8

Source: covid19india.org

There remains a divergence between mortality rates of different states. Punjab, Uttarakhand and Maharashtra have recorded noticeably higher fatality rates than the national average with rates of 2.7%, 2.2% and 2%. It is important to note that Punjab has had a worryingly high case fatality rate since the pandemic began. States like Kerala, Odisha and Telangana have managed a low CFR of 0.5%, 0.5% and 0.6% respectively.

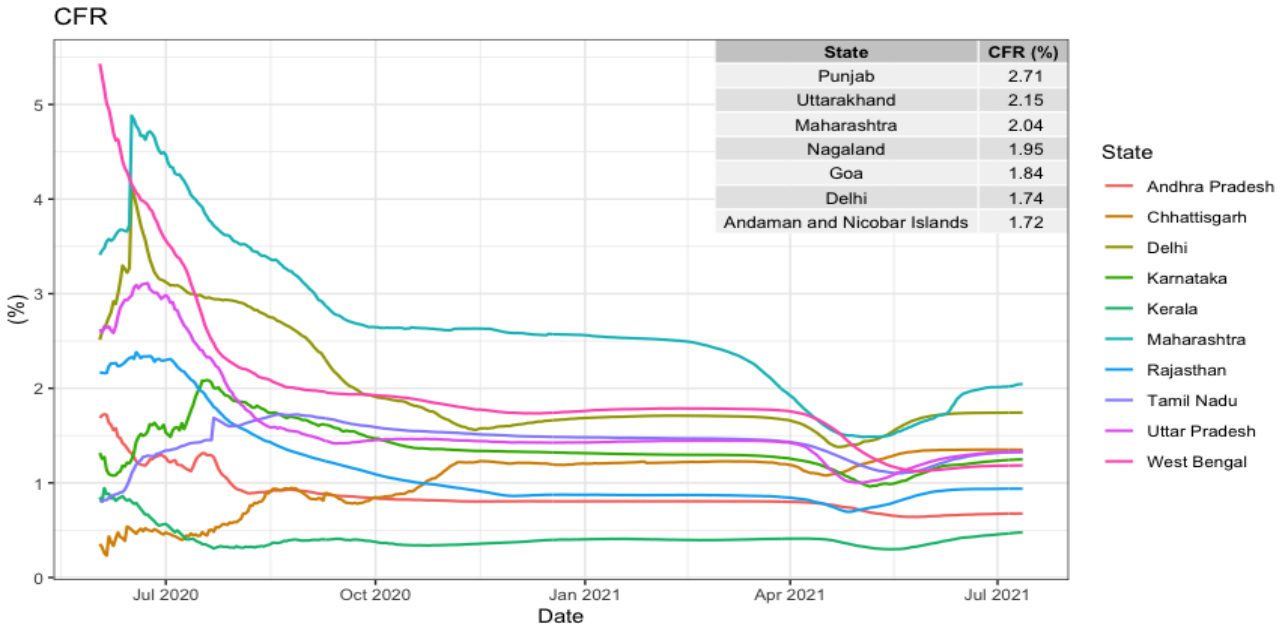
Figure 74: COVID-19 Deceased cases across major states, as of July 11th, 2021



State	Deceased
India	408,863
Maharashtra	125,878
Karnataka	35,835
Tamil Nadu	33,418
Delhi	25,015
Uttar Pradesh	22,698
West Bengal	17,916
Punjab	16,186
Kerala	14,586
Chhattisgarh	13,478

Source: covid19india.org

Figure 75: COVID-19 Case Fatality Rate (CFR) across major states, as of July 11th, 2021

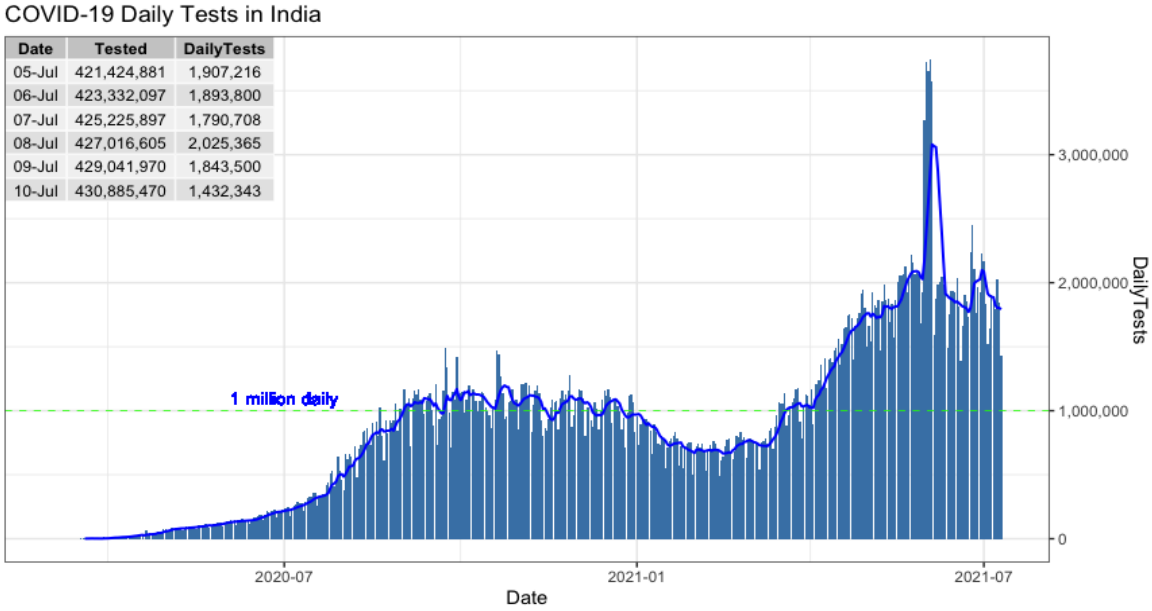


State	CFR (%)
Punjab	2.71
Uttarakhand	2.15
Maharashtra	2.04
Nagaland	1.95
Goa	1.84
Delhi	1.74
Andaman and Nicobar Islands	1.72

Source: covid19india.org

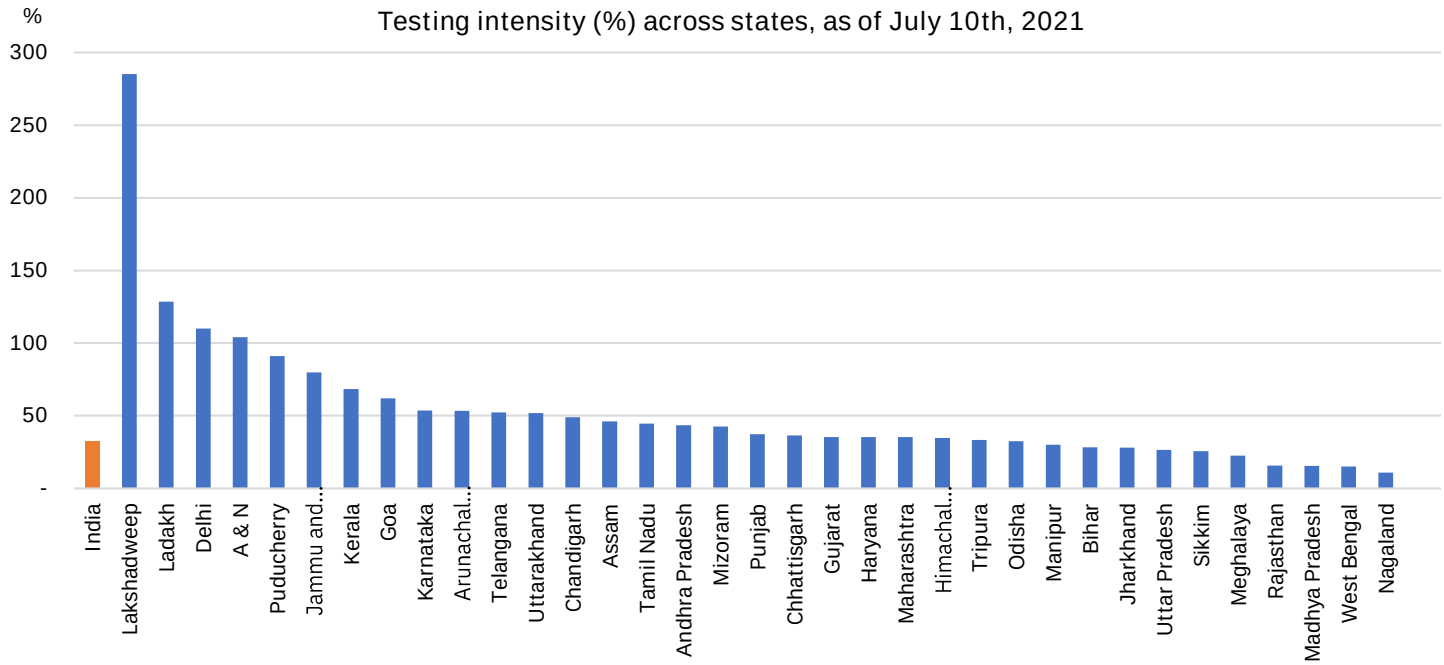
The differentiating factor in containing the spread of the virus across countries continues to be the extent of testing. Uttar Pradesh, Maharashtra, Karnataka and Tamil Nadu have conducted the most number of tests so far but their tesing intensity is low as compared to states like Delhi, Kerala and Goa who have covered 110%, 69% and 62% of their population respectively. Rajasthan, Madhya Pradesh and West Bengal and continue to do poorly with respect to testing with 15.8%, 15.4% and 15% testing intensities respectively.

Figure 76: Daily COVID-19 tests in India, as on July 11th, 2021 (the trend line denotes 7DMA)



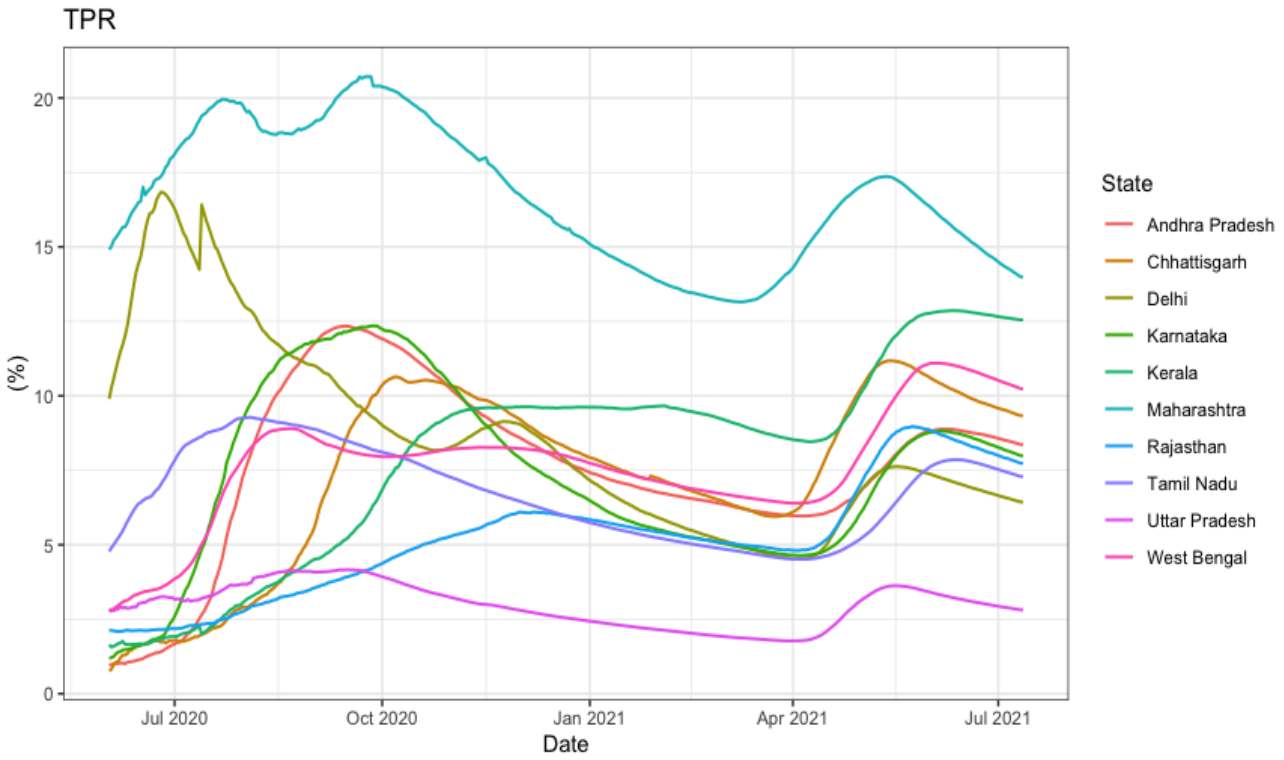
Source: covid19india.org

Figure 77: Testing intensity across states as of July 10th, 2021



Source: covid19india.org

Figure 78: COVID-19 Test Positivity Rate (TPR) across major states, as of July 11th, 2021



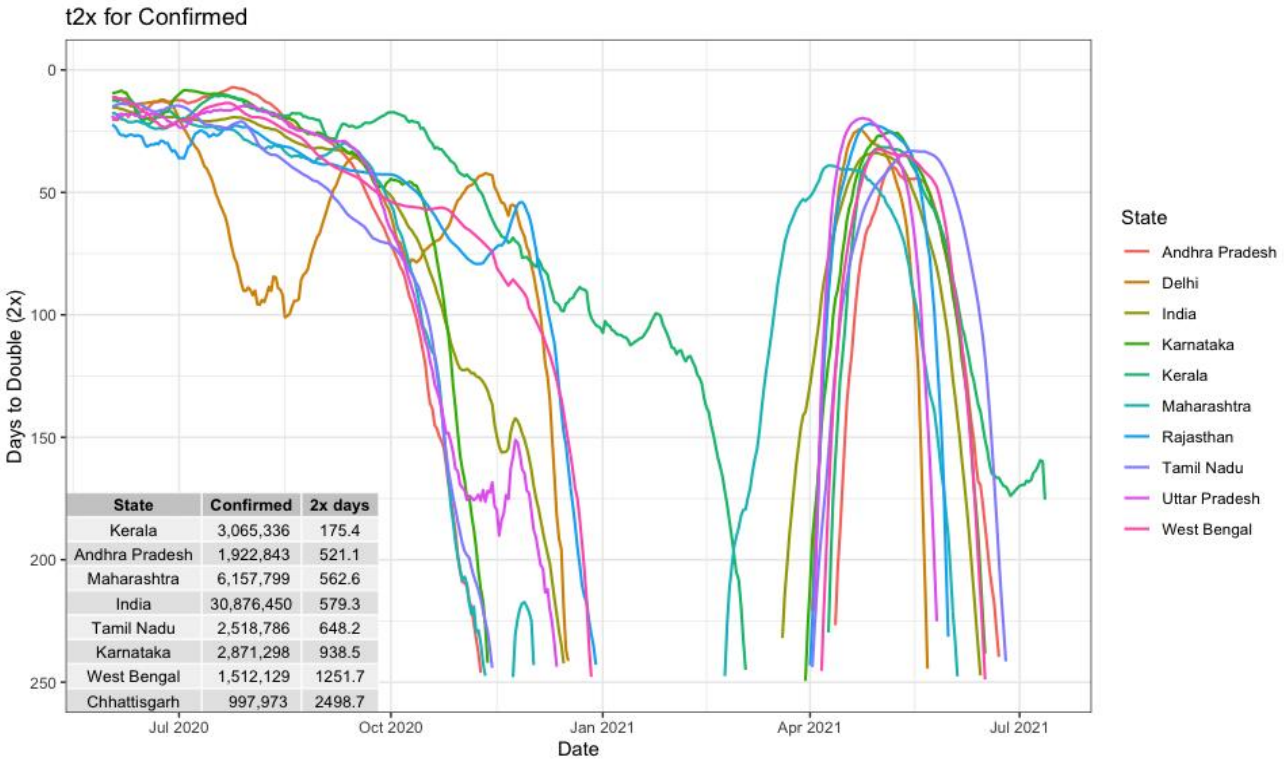
Source: covid19india.org

Infection spread across states

We have highlighted the divergence in the rate of infection across states since the pandemic hit India. In order to understand the growth trends, we consider growth in terms of the number of days it would take to double the cases. The so-called doubling-rate (2x) rate is a widely used metric for measuring rapid growth.

Most states have seen huge rise in the number of days to double their current confirmed cases, after a sharp fall due to the second wave. India's 2x rate has risen to 579 days on as of July 10th, 2021, making steady progress from 188 days as of June 9th as compared to 41 days on May 12th . Kerala's doubling rate, at 175 days, is worryingly lower than the national rate. Andhra Pradesh and Maharashtra are also on the lower end with doubling rates of 521 and 562 days respectively. The doubling rate of deceased cases is the worst in Kerala and Mahrashtra a90 and 355 days respectively. Most states have maintained higher testing numbers but Sikkim, Manipur and Mizoram are recording higher test postivity rates of 20.6%, 15.3% and 11.8% respectively.

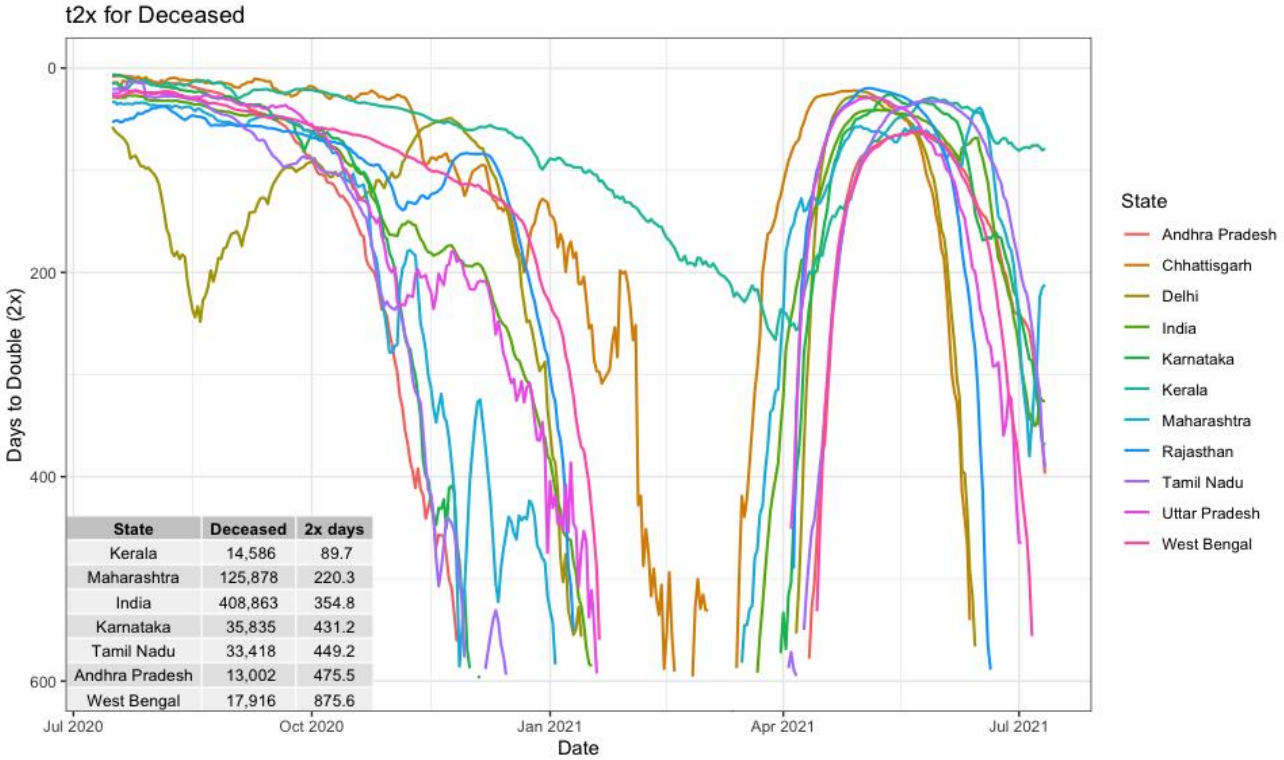
Figure 79: COVID-19 Doubling Rate: Confirmed cases across major states, as of July 11th, 2021



State	Confirmed	2x days
Kerala	3,065,336	175.4
Andhra Pradesh	1,922,843	521.1
Maharashtra	6,157,799	562.6
India	30,876,450	579.3
Tamil Nadu	2,518,786	648.2
Karnataka	2,871,298	938.5
West Bengal	1,512,129	1251.7
Chhattisgarh	997,973	2498.7

Source: covid19india.org

Figure 80: COVID-19 Doubling Rate: Deceased cases across major states, as of July 11th, 2021



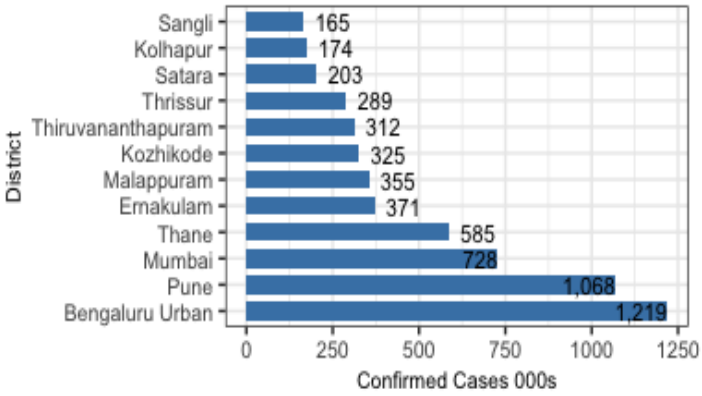
State	Deceased	2x days
Kerala	14,586	89.7
Maharashtra	125,878	220.3
India	408,863	354.8
Karnataka	35,835	431.2
Tamil Nadu	33,418	449.2
Andhra Pradesh	13,002	475.5
West Bengal	17,916	875.6

Source: covid19india.org

District-level trends

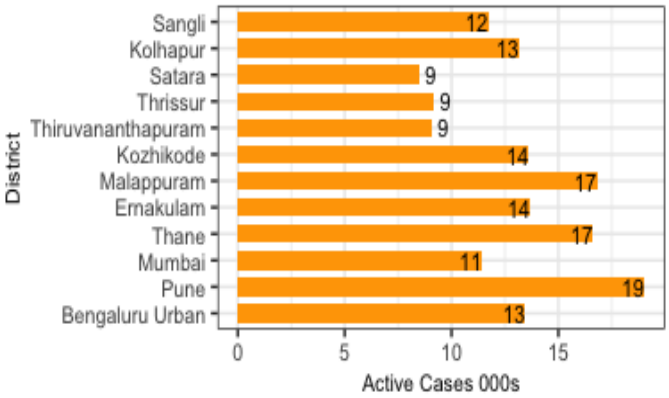
Active cases have now plateaued in all parts of the country, led by the districts that were first hit by the second wave. The number of districts with 1000+ active cases has fallen to 75 os of July 10th, 2021 from 177 on June 9th, 2021 while only 9 districts have more than 10,000 cases. Rural areas were hit harder during the second wave as compared to the first but insufficient testing and vaccine hesitancy might not reveal the true extent of the spread.

Figure 81: COVID-19 confirmed cases across districts, ranked by confirmed cases as of July 11th, 2021



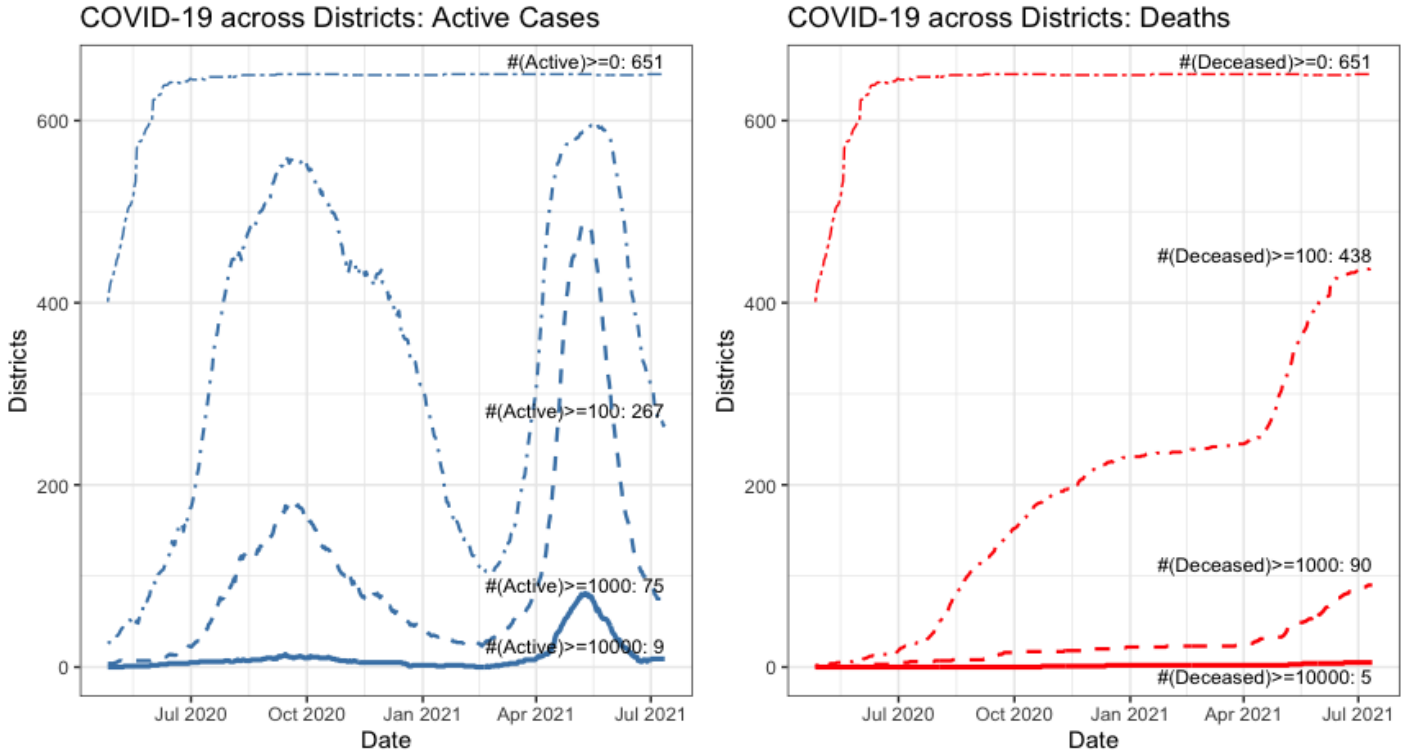
Source: covid19india.org

Figure 82: COVID-19 active cases across districts, ranked by confirmed cases as of July 11th, 2021



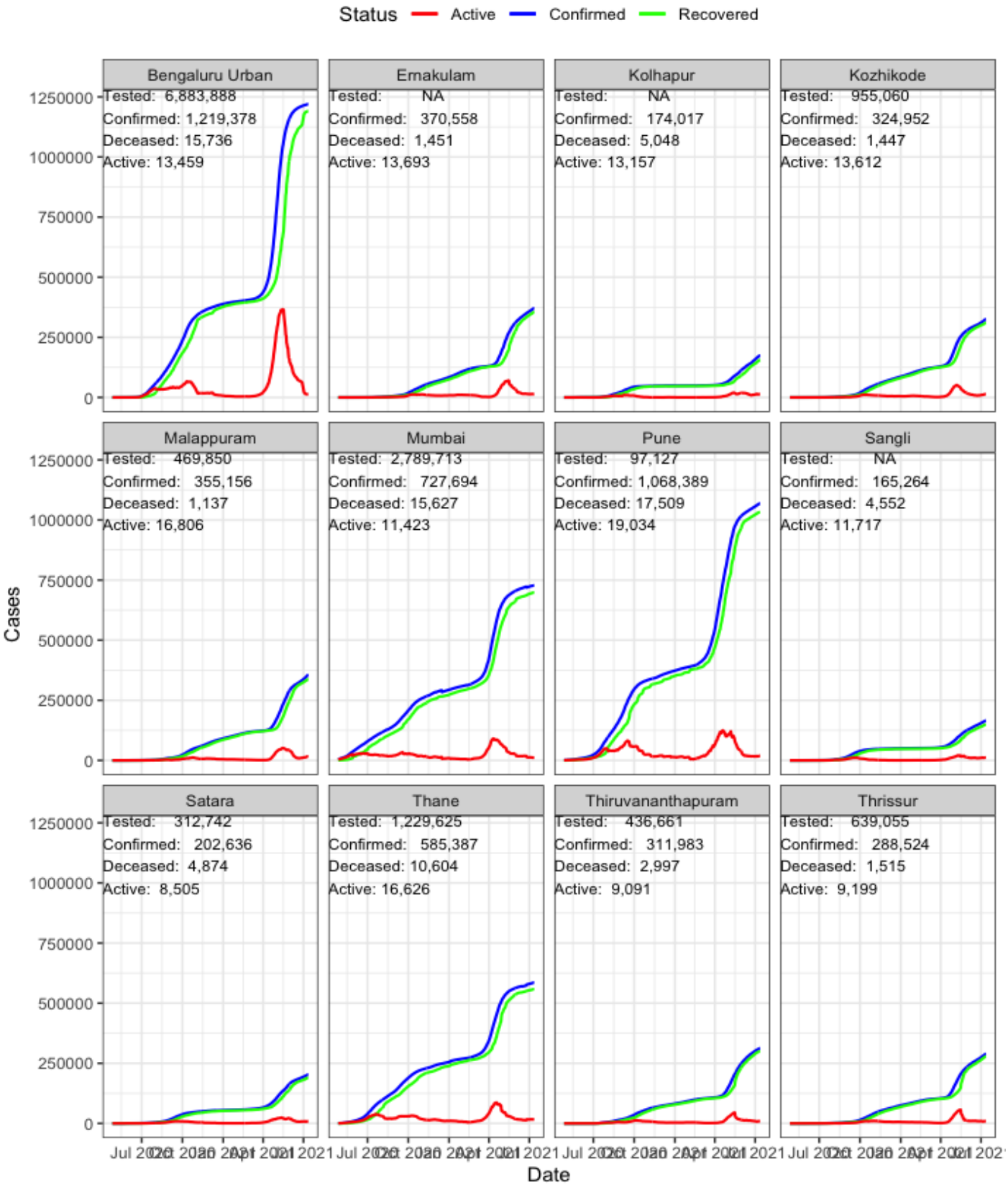
Source: covid19india.org

Figure 83: Dispersion of COVID-19 active cases and deaths across districts



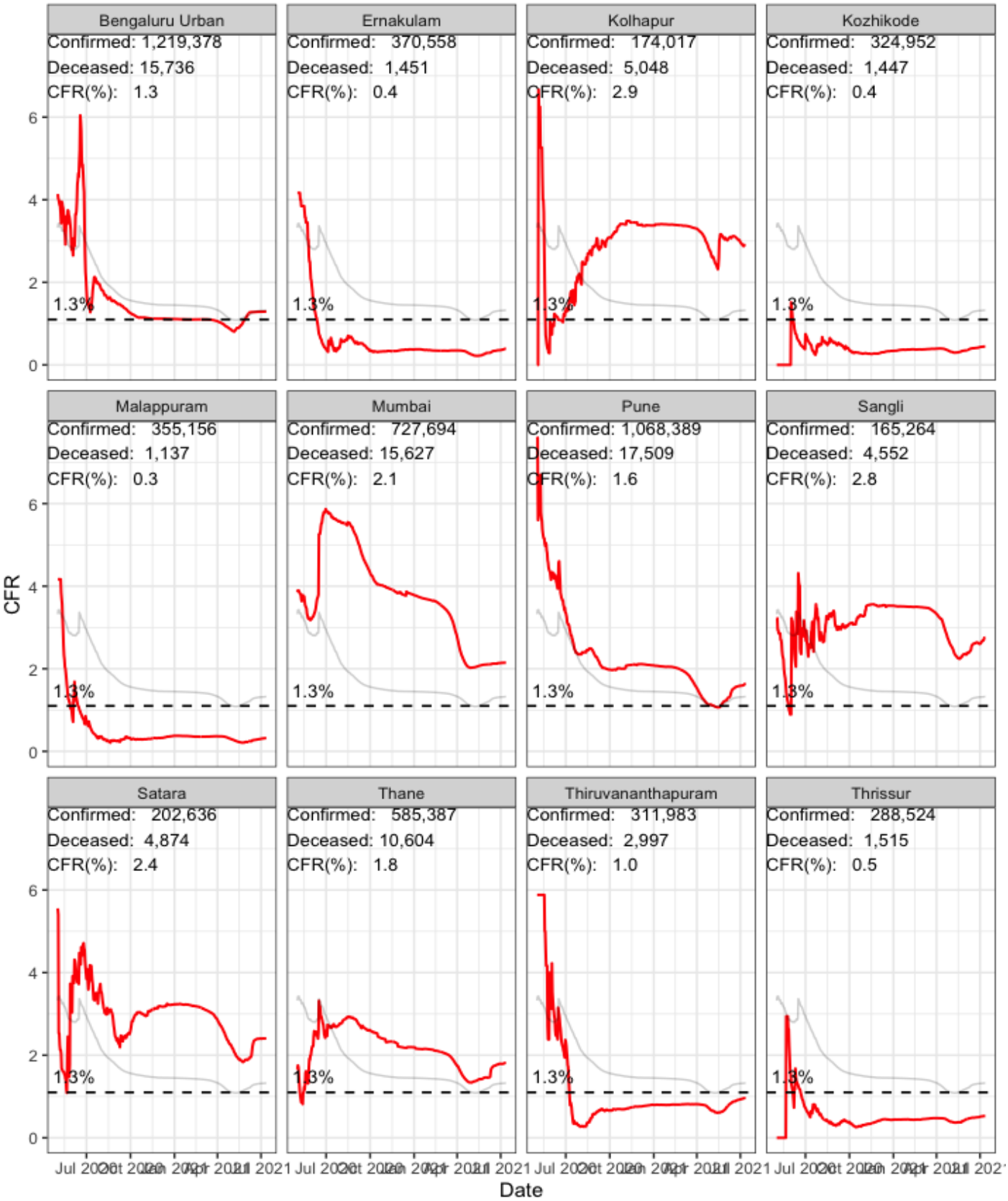
Source: covid19india.org.

Figure 84: COVID-19 cases across districts, ranked by Active Cases as of July 11th, 2021



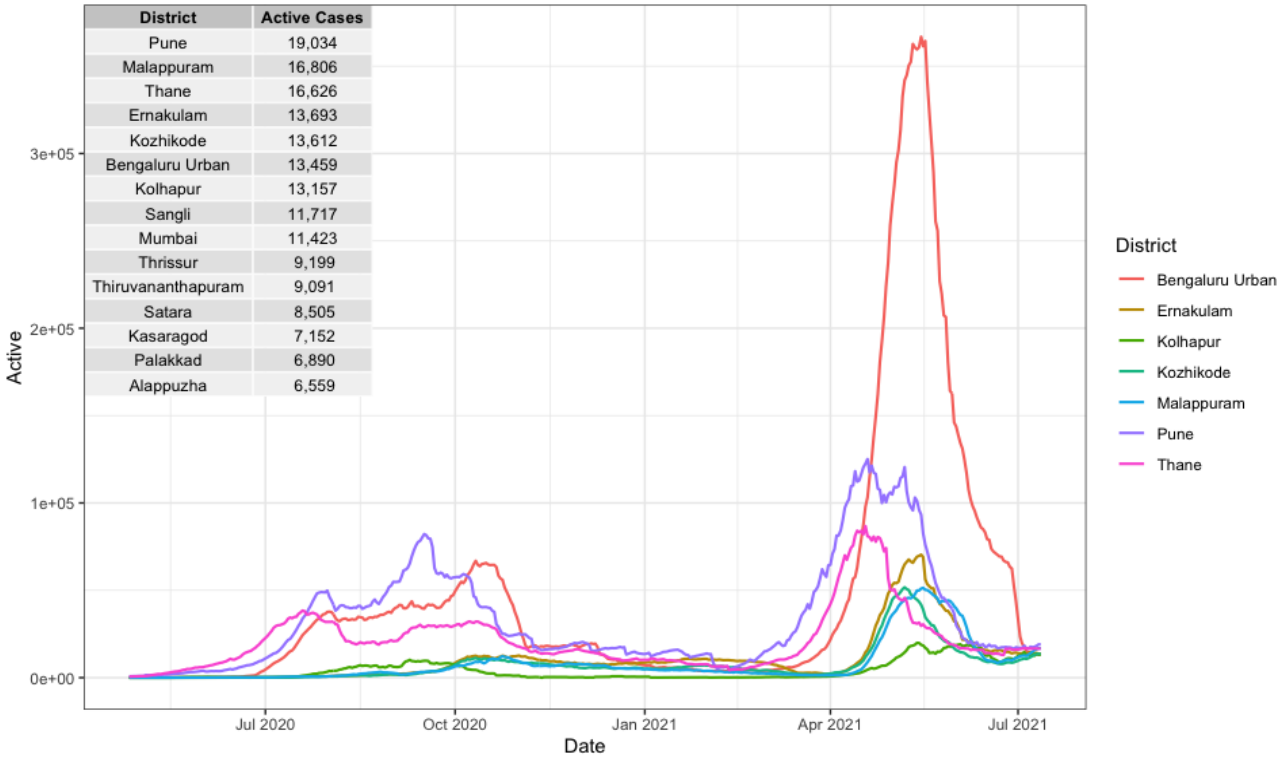
Source: covid19india.org

Figure 85: COVID-19 Case Fatality Rate (CFR) across districts, ranked by Active Cases as of July 11th, 2021



Source: covid19india.org

Figure 86: COVID-19 Active cases trend across districts ranked by Active Cases as of July 11th, 2021



Source: covid19india.org

Chart of the month

The real-financial disconnect

An apparent disconnect between financial markets and the real economy—an otherwise recurrent perennial feature particularly since the Global Financial Crisis (GFC) of 2008—has become starker over the last year or so, becoming a topic of much interest and debate.

The Coronavirus pandemic led global markets to their sharpest fall from life-time highs to a bear-market, in February-March 2020, before rebounding sharply before the global economy could find its feet on an unprecedented fiscal and monetary support. Such divergence between markets and the economy was also quite prominent in the aftermath of the GFC. Apart from the liquidity-led returns, there are other factors at play that prolong such periods of limited correlation between asset (equity) markets and economy, like an inherent forward-looking behaviour, and, for many markets, a diversity in sector composition between the two.

Even as the massive liquidity injection by global central banks post the COVID-19 outbreak has partly found its way into riskier asset classes—including emerging market (EM) equities—historically low interest rates have reduced risk premia, supporting asset prices, and driving valuations higher. Additionally, the size-based impact of the pandemic has been disproportionate on the corporate sector of developing countries, e.g., while corporate earnings have zoomed, this is hardly the case for the MSME sector in India that accounts for ~30% of its GVA. Low cash buffers, limited access to cheap credit, and vulnerable positions in supply chains might have posed significant hurdles on performance, but negligible representation in the listed space precludes any reflection in broad market indices. This phenomenon is readily apparent across multiple sectors in the economy.

It is also pertinent to note that markets discount future earnings, and in this context, the absence of a meaningful recovery in earnings and economic growth trajectory, and/or a premature withdrawal of monetary policy actions, driven by inflationary concerns may in fact trigger valuation de-rating and result in a spike in risk premia.

Massive liquidity injection by global central banks post the COVID-19 outbreak has been the single biggest reason behind rising disconnect between the real economy and the equity market performance.

- Unprecedented monetary and fiscal policy actions at play: The unconventional monetary policy measures that were undertaken in the aftermath of the GFC of 2007-08, followed by the debt crisis in the European Union in 2012, came to fore again with the COVID-19 pandemic last year, but with a much higher magnitude and coverage. Central banks globally responded promptly and massively using a wide range of unprecedented and unconventional measures to mitigate the adverse economic impact caused by the COVID-19 pandemic and to shore up the financial markets. These include a sharp cut in policy rates, easier compliance and reserve requirement norms, lending and repo operations, special credit facilities asset purchase programmes, foreign exchange operations, and a clear forward guidance, among others. The idea was to inject adequately surplus liquidity into the system and ease credit flow to deal with the sudden supply and demand shock brought in by the pandemic.

  The already low policy rates that have been prevalent for more than a decade now were reduced further. While the US Federal Reserve (Fed) and the UK's Bank of England reduced the policy rates by 150bps and 65bps respectively, the near-zero or negative policy rates were retained by the European Central Bank (ECB) and Bank of Japan (BoJ). The World Bank, in its latest Global Economic Prospects, has projected policy rates to remain at current low levels at least until the third quarter of 2022. Additionally, the central banks pumped in huge liquidity into the system through enhanced asset purchase programmes and repo/lending operations, resulting in a sharp surge in their balance sheet sizes—the last seen during the GFC. While the Fed pledged to buy as much government debt as needed to support

markets and extend the asset purchase programme to corporate bonds for the first time ever, the ECB announced the Pandemic Emergency Purchase Programme (PEPP), totalling EUR1.35trn for private and public sector securities. The monetary measures were complimented by coordinated fiscal policy measures in the form of credit guarantees to provide the much-needed credit support for micro, small and medium enterprises (MSMEs) and other vulnerable segments of the economy.

These unprecedented monetary and fiscal policy actions and consequent liquidity glut—aimed at mitigating the economic and financial instability caused by the COVID-19 pandemic—have found its way into financial markets, thereby driving risk premia lower and asset prices and valuations higher.

Figure 87: Movement in policy rates of key central banks

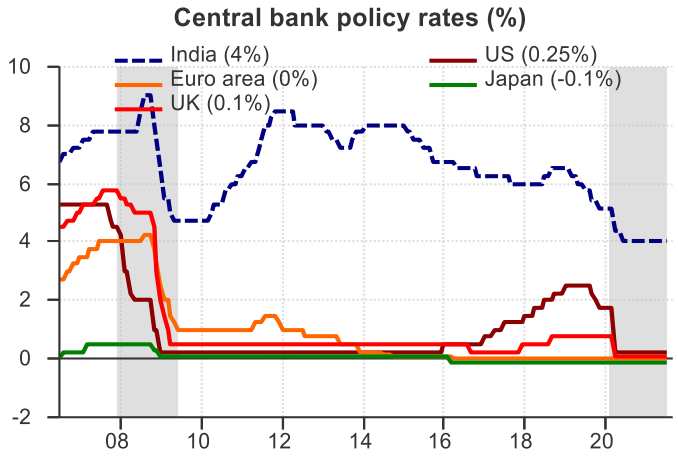
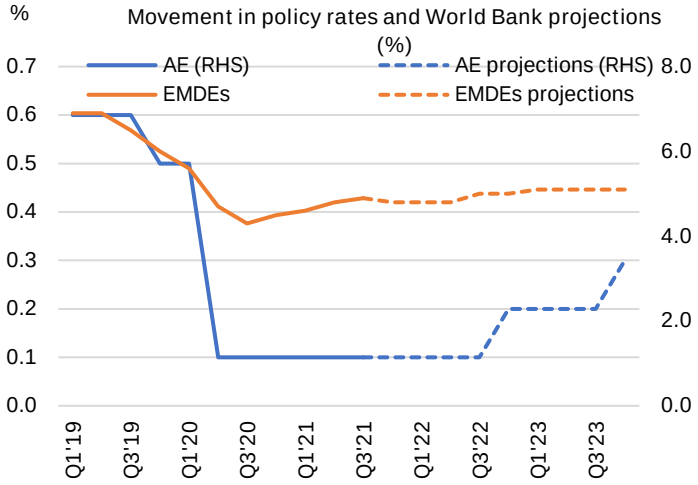
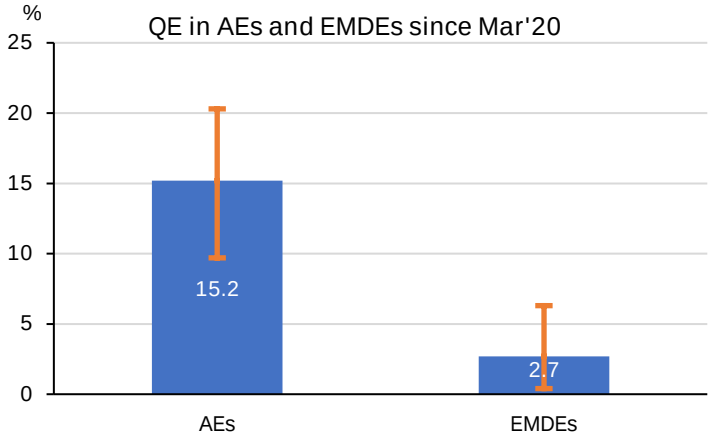


Figure 88: Movement in policy rates and World Bank est.



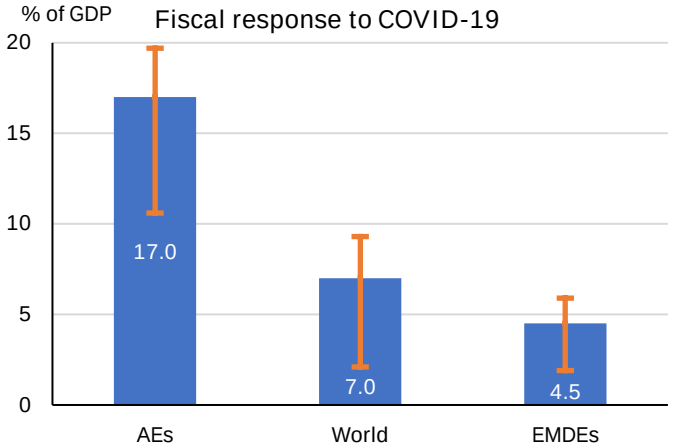
Source: Refinitiv Datastream, Oxford Economic, World Bank.
Note: 1. EMDEs = Emerging Market and Developing Economies. AEs = Advanced Economies. 2. Blue and orange lines in Figure 88 show average policy rates for 27 AEs and 23 EMDEs. Dotted line shows projections as based on Oxford Economics May'21_1 Oxford database.

Figure 89: Quantitative easing in AEs and EMDEs since March 2020



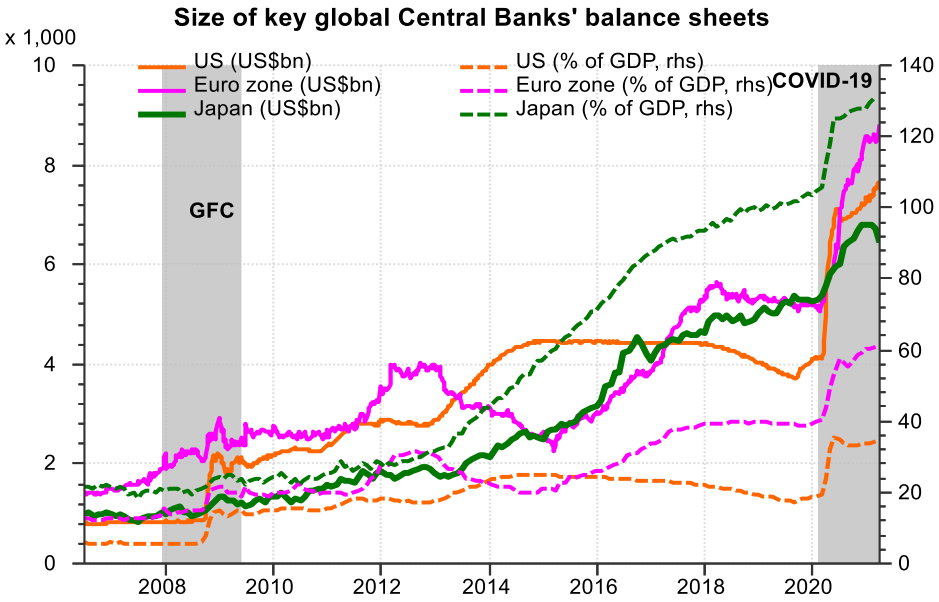
Source: IMF, World Bank.
Note: EMDEs = Emerging Market and Developing Economies. AEs = Advanced Economies. Announced or completed purchases (where no announcement exists) and of sovereign and private sector bonds in percent of nominal as of May 2021. Sample for EMDEs consists of 17 countries. Sample for AEs consists of US, Euro area, Japan, and United Kingdom. Bars shows averages. Orange whiskers show regional range.

Figure 90: Fiscal support measures in response to COVID-19 since January 2020 as % of GDP



Source: IMF, World Bank.
Note: EMDEs = Emerging Market and Developing Economies. AEs = Advanced Economies. Bars show unweighted average of total fiscal support measures in response to COVID-19 pandemic. Sample includes 48 advanced economies and 143 EMDEs.

Figure 91: **Size of key global central banks' balance sheets**



Source: Refinitiv Datastream.

Back home, the RBI followed global central banks and announced a slew of measures, including rate cuts (115bps/135bps in repo/reverse repo rate since Jan'20), surplus liquidity injection through regular and special open market operations (OMOs), long-term repo operations, special credit facilities for vulnerable segments of the economy, and more recently guaranteed purchase of Government securities. Systemic liquidity since April 2020 has remained ~Rs5trn in surplus. The RBI's balance sheet expanded by ~30% in FY20 (fiscal year ending June 2020)—the steepest expansion since the GFC.

RBI followed global central banks and announced a slew of unconventional measures to inject liquidity into the system.

Figure 92: Monetary and liquidity measures announced by the RBI between Feb 6th, 2020 and March 31st, 2021

Measures	Amount (Rsbn)
Long-term Repo Operations (LTROs)	2,000
Variable rate repo	2,250
Special Liquidity Facility for Primary Dealers	72
Cut in Cash Reserve Ratio	1,370
Marginal Standing Facility (dip by 1% in Statutory Liquidity Ratio)	1,370
Targeted Long-term Repo Operations (TLTRO)	1,000
TLTRO-2	500
Net OMO purchases	1,500
Special Liquidity Facility for Mutual Funds	500
Refinance to NABARD, SIDBI, NHB, and Exim Bank	750
Special Liquidity Scheme for NBFCs	300
56-day Term Repo	1,000
On-tap TLTRO	1,000
Total	13,612
As proportion of 2020-21 GDP	6.9

Source: CESP Working Paper-8
Link to the paper: https://csep.org/wp-content/uploads/2021/06/WP_The-response-of-the-Reserve-Bank-of-India-to-Covid-19_17062021.pdf

Figure 93: Net lending under RBI's Liquidity Adjustment Facility

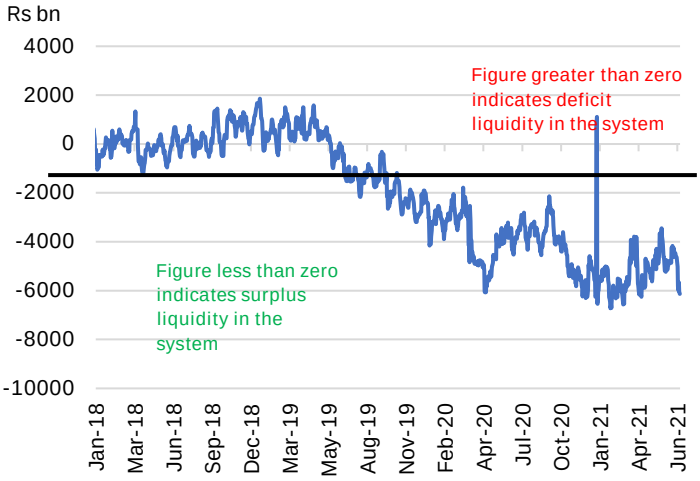
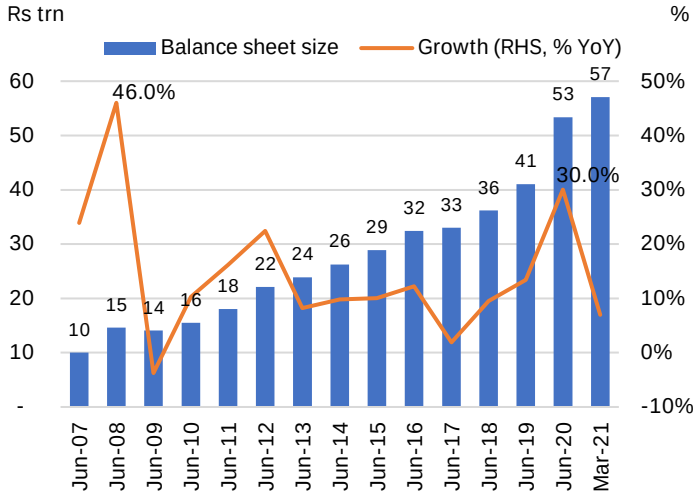


Figure 94: **Annual trend of RBI's balance sheet**



Source: Refinitiv Datastream, Oxford Economic, World Bank.

FIIs (foreign institutional investors) emerged as strong buyers of Indian equities in FY21, with net inflows at record-high levels of US$37bn vs. meagre inflows of US$2.1bn in the previous fiscal year. In fact, India received the highest foreign capital inflows last year in the broader EM pack excluding China. Massive monetary easing by global central banks in the form of huge liquidity injection led to a risk-on environment, translating into flow of capital into riskier asset classes such as emerging market equities including India. The last time India saw such high inflows into equity markets was post GFC when all major global central banks undertook unconventional monetary easing measures including introduction of negative interest rates and large-scale bond purchase programmes to bring about financial stability.

Figure 95: Monthly trend of net FII inflows into emerging market equities

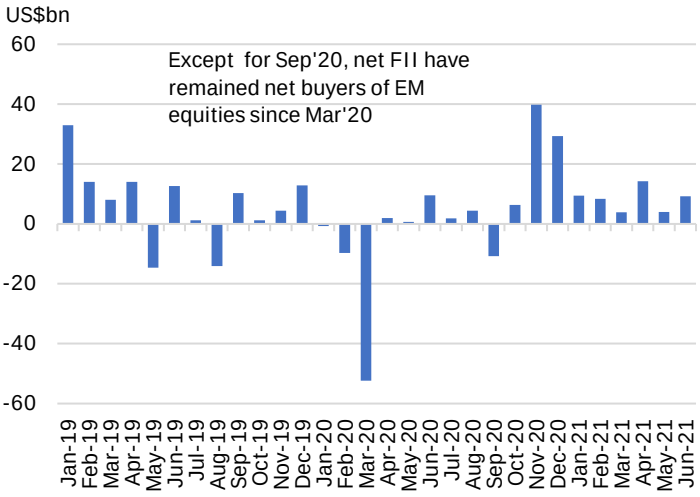
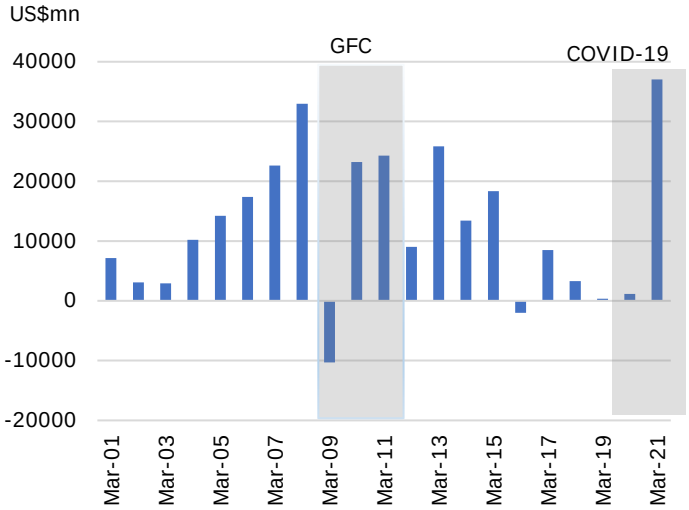


Figure 96: Annual trend of net FII inflows into Indian equities



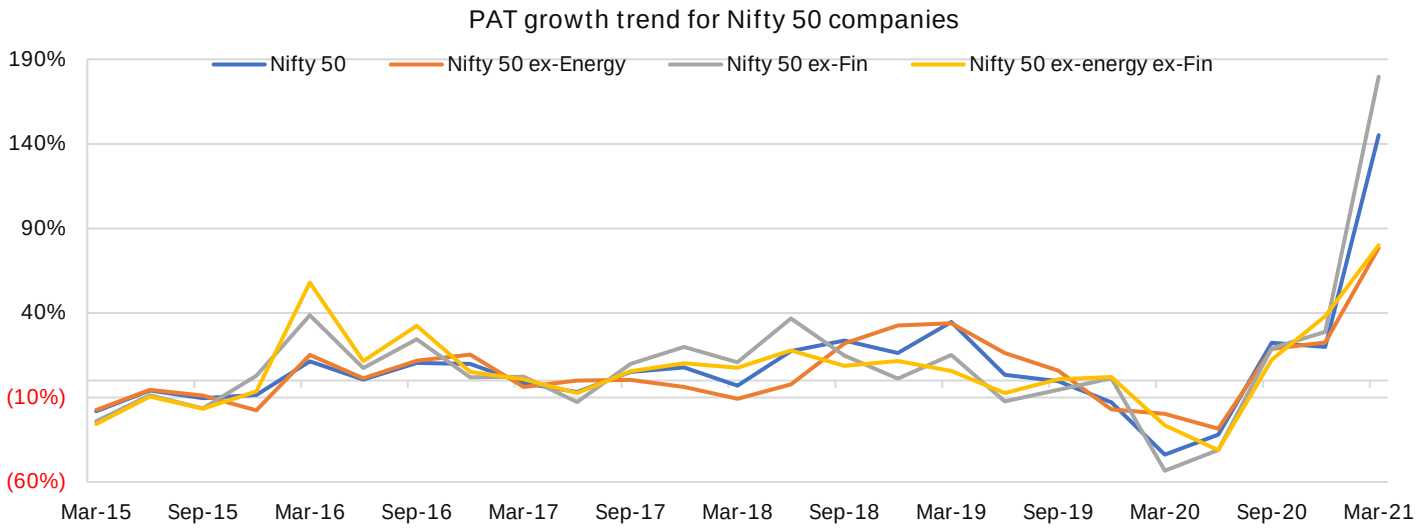
Source: Refinitiv Datastream, IIF.

- Large listed companies relatively less impacted from the COVID-19 pandemic: Large listed companies, that have strong balance sheets and enjoy economies of scale, have benefited at the expense of smaller listed/unlisted companies by capturing market share. They have managed to report strong growth in profitability despite a contraction in India's GDP by changing their business models to suit the new COVID-appropriate environment and capturing market share from unorganized players. They have also meaningfully curtailed costs by cutting salaries/wages, renegotiating with vendors, saving on rental expenses, and minimizing administration/marketing expenses—all of which do not bode well for the smaller listed/unorganized players and the economy at large.

  The MSME sector, comprising of nearly 63m companies and contributing 30% to the country's GVA, has been the worst impacted by the black-swan COVID-19 pandemic, with several small businesses facing financial distress due to sudden halt of business activities caused by the lockdown and other containment measures taken by the Government. This sector, which is the growth engine of the economy and plays a pivotal role in providing employment opportunities, has been particularly affected by COVID-induced supply chain disruptions, plunging demand and liquidity challenges. A survey by Dun & Bradstreet shows that more than three-fourths of the smaller companies have got adversely impacted by the COVID-19 pandemic. Indian equity markets have close to negligible representation of these MSME companies and therefore the adverse impact faced by such companies during a crisis will not be proportionally captured by the market.

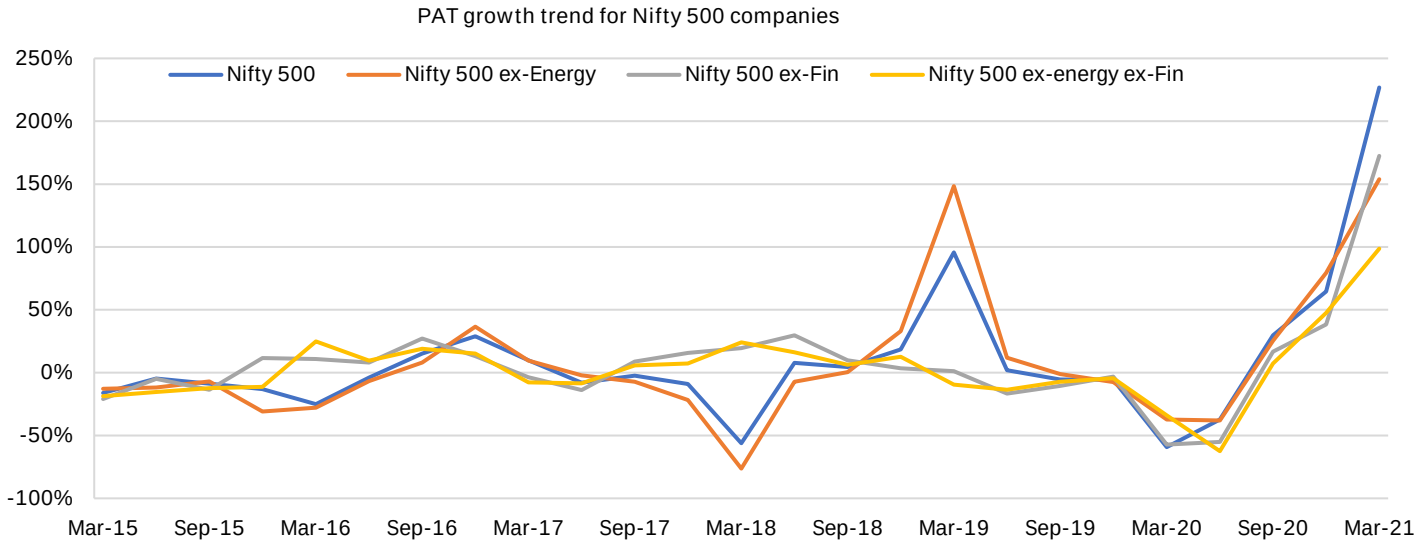
Listed companies have been relatively less impacted from the COVID-19 pandemic as compared to the MSME and unorganised sectors—the latter having no representation in the listed space.

Figure 97: Profit growth trend of Nifty 50 companies (As of June 30th, 2021)



Source: CMIE Prowess, Refinitiv Datastream, NSE.

Figure 98: Profit growth trend of Nifty 500 companies (As of June 30th, 2021)



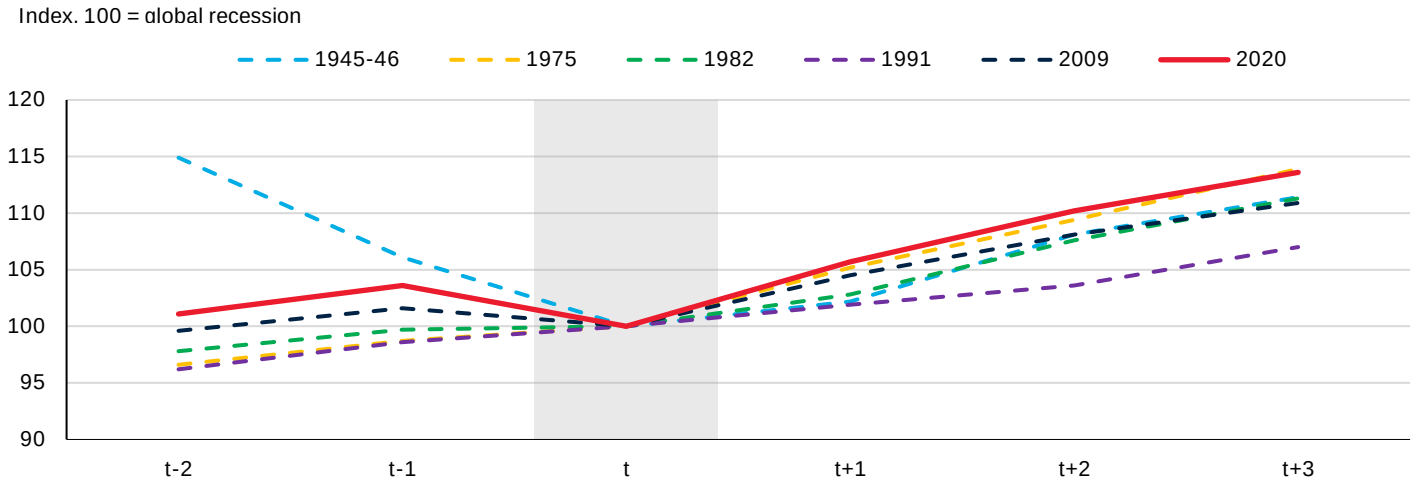
Source: CMIE Prowess, Refinitiv Datastream, NSE.

- Markets are forward looking: The economic data/news are backward looking and report on what has already happened. Equity markets, on the other hand, are forward-looking, and they start pricing in the recovery, or the downfall much sooner than actually seen in real economic indicators. In fact, even in an episode of an expected recession or economic slowdown, markets move up in anticipation of strengthened policy action—as seen during the GFC and the most recent COVID-19 pandemic. Additionally, investors try and identify inflection points or emerging signs of green shoots in the economy that suggest a recovery in the making to ramp up buying into equity markets rather than wait for that to reflect in the real indicators. For instance, during the GFC, markets in the US started rising from March 2009—sooner than the unemployment figures hit the peak. The fair value of a company's stock market capitalization represents the present value of all its future earnings and cash flows. These future earnings estimates depend much more on the future growth outlook of the company/sector/economy and not the current macro situation.

  The World Bank, in its latest Global Economic Prospects publication, expects the global economy to expand by 5.6% in 2021—the strongest post-recession pace of recovery in 80 years, largely led by developed and major developing economies where vaccination drives are progressing well. The chart below shows that compared to previous global recoveries post episodes of global recession, the current recovery cycle is expected to be stronger, even as the extent may vary across economies.

Equity markets are forward looking, and they start pricing in the recovery, or the downfall much sooner than actually seen in real economic indicators.

Figure 99: Global output recoveries over history post episodes of global recession



Source: World Bank. Note: Data for 2021-23 used in the "2020" episode are forecasts. Lines show global recession episodes. Multiple years are used when the global recession lasted for more than one year

Corporate earnings in FY21 have fared better than market expectations, and with increasing pace of inoculations, fast normalizing business activities to pre-COVID levels, lower interest rates and an expected pick-up in consumption demand, earnings are expected to see a meaningful rebound over the next couple of years. Our analysis of earnings performance of top 200 covered companies by market capitalisation[6] show a beat of 6.9% in FY21 aggregate profits vs. estimates at the end of March 2021. This has been consistently translating into upward revisions in corporate earnings forecasts since September 2020. The aggregate corporate earnings for this universe have been revised upwards by for FY22 and FY23 by ~14% and 11% since the beginning of this year, translating into an expected profit CAGR of 28% during FY21-23. This was despite the deadlier second wave of COVID-19 and attendant ramifications on the economic recovery that was underway during the second half of FY21.

Figure 100: Aggregate consensus profit growth estimate for top 200 covered companies (% YoY)

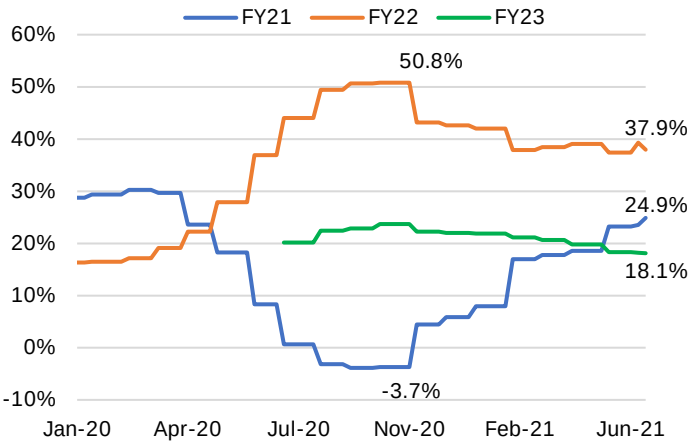
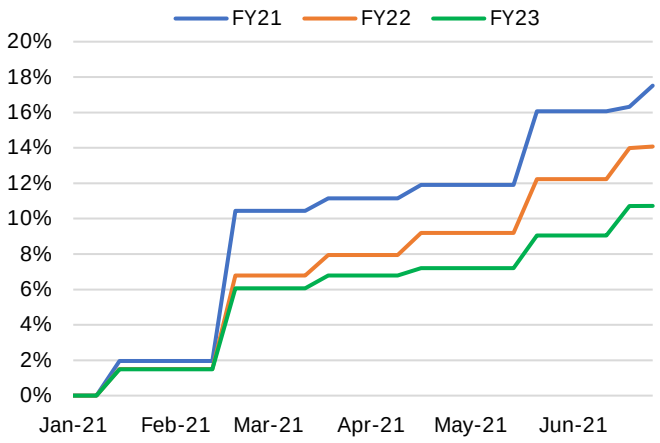


Figure 101: Aggregate consensus earnings revisions in 2021 till date for top 200 covered companies



Source: CMIE Prowess, Refinitiv Datastream, NSE. Note: Based on IBES earnings estimates of top 200 companies by one-year average market cap ending June 30th, 2020, covered by at least five analysts at any given point of time over the last one year. Data is as of June 25th, 2020

[6] The sample set consists of top 200 companies by one-year average market cap ending June 30th, 2020 covered by at least five or more analysts during the previous 12 months using IBES estimates from Refinitiv Datastream.

Expectations of sustained policy support, strong recovery in economic activity and robust corporate earnings trajectory have meaningfully driven asset prices and valuations higher, not just in India but for the overall emerging market pack

Figure 102: MSCI India 12-month forward P/E

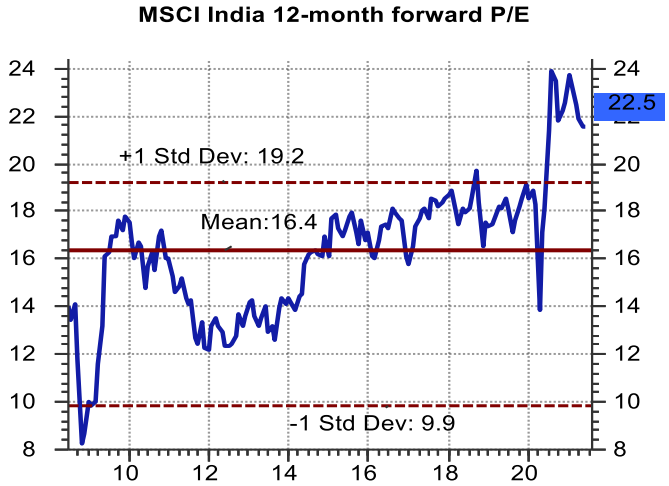
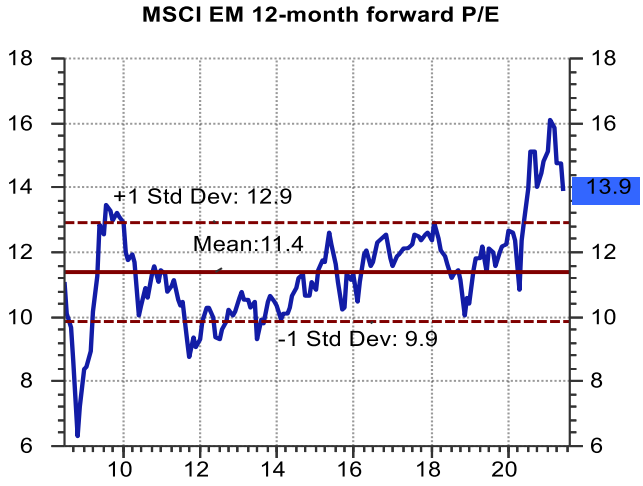


Figure 103: MSCI EM 12-month forward P/E



Source: Refinitiv Datastream.

- The economy is bigger than the markets: Market indices are developed with a clear focus on portfolio diversification, performance, and liquidity and reflect the performance of listed stocks on exchanges. While equity market is considered a barometer of the economy as a well-developed market offers investment opportunities and boosts savings, thereby distributing capital resources to productive investments that eventually bodes well for economic growth, it may not always move in tandem with the economy. This is primarily because of sector disparity that exists between flagship indices and the respective country's GDP.

  The Figure below shows distribution of Nifty 500 companies as per the GVA sector classification as presented by the Central Statistics Office (CSO). The analysis shows a significant disparity in sector weights in the Nifty 500 Index and the GVA composition. For instance, Financials and Manufacturing sectors comprise a big chunk of these flagship indices, while the share of these sectors in the GVA basket is much lower. Similarly, Agriculture sector—contributing ~18% to India's GVA—has barely any representation in the market, with a much lower market cap share in the Nifty 500 Index.

  In this vein, the Nifty 50's Manufacturing sector is concentrated to Consumer Staples, Consumer Discretionary (Autos), Pharmaceuticals and Commodity-oriented companies. While commodity companies have benefited from a sharp surge in global commodity prices, the so-called essential segments of the economy, viz., Consumer Staples and Pharmaceuticals have emerged relatively unscarred from the pandemic. The Index has no representation of companies from the Capital Goods sector which has been far severely hit by the pandemic amid reduced investment and industrial demand.

  Additionally, in India, many unlisted entities that are either largely from SMEs/unorganized sectors or are start-ups contribute reasonably to the country's GDP but do not form part of the capital markets.

Figure 104: **Sector composition of Nifty 500/Nifty 50 Indices and India's GVA**

Sector	Nifty 500		Nifty 50		GVA share (Avg. over FY12-20) *
	No. of companies	Weight in the index (%)	No. of companies	Weight in the index (%)	
Agriculture	44	5.5	4	4.8	18.2
Crops including irrigation	40	5.4	4	4.8	11.0
Livestock	3	0.1	0	0.0	4.6
Forestry and logging	1	0.0	0	0.0	1.5
Fishing and aquaculture	0	0.0	0	0.0	1.1
Industry	261	41.0	27	37.2	29.9
Mining and Quarrying	4	0.6	1	0.6	2.5
Manufacturing	223	35.5	23	32.2	16.5
Electricity, gas, water supply and other utility services	9	2.0	2	1.7	2.5
Construction	25	2.9	1	2.7	8.3
Services	195	53.5	19	58.0	51.9
Trade, hotels, transport, storage and communication	86	19.5	7	19.5	20.3
Financial services, real estate and business services	101	33.5	12	38.5	18.3
Community, social and personal services	8	0.6	0	0.0	13.4

Source: NSE, CSO. * GVA at current prices

Note: Assumptions used in reclassifying Nifty500/50 companies as per the GVA sector classification

1. Sectors which form key inputs to agriculture sector have been reclassified as "Agriculture".
2. Sectors forming key output from agriculture sector and used as direct inputs in manufacturing sectors have been reclassified as "Agriculture".

India is not unique to witness such divergence between representation of sectors in listed equity space and country's GDP. Similar trends are observed in economies like the US, UK and Germany. For instance, in the US, the Industrial sector accounts for ~43% of the flagship index—S&P 500 Index (based on derived weights for SPDR S&P 500 ETF sourced from Refinitiv Datastream) but is a mere ~19% of the country's GDP.

Figure 105: Sector composition of SPDR S&P 500 ETF and US GDP

Sectors	No. of companies in SPDR S&P 500 ETF	Derived weight (%)	Average sector weight in US GDP over 2011-18*
Agriculture	22	2.2	1.1
Crop including irrigation	20	2.1	
Livestock	2	0.1	
Industry	224	42.6	18.8
Mining & quarrying	20	1.2	
Manufacturing	170	38.2	
Electricity, gas, water supply and other utility services	28	2.8	
Construction	6	0.4	
Services	259	56.2	76.5
Trade, hotels, transport, comm. & broadcasting services	108	32.7	
Financial services, real estate & professional services	142	22.7	
Public administration, defence & other services	9	0.9	

Source: Refinitiv Datastream. Statista.

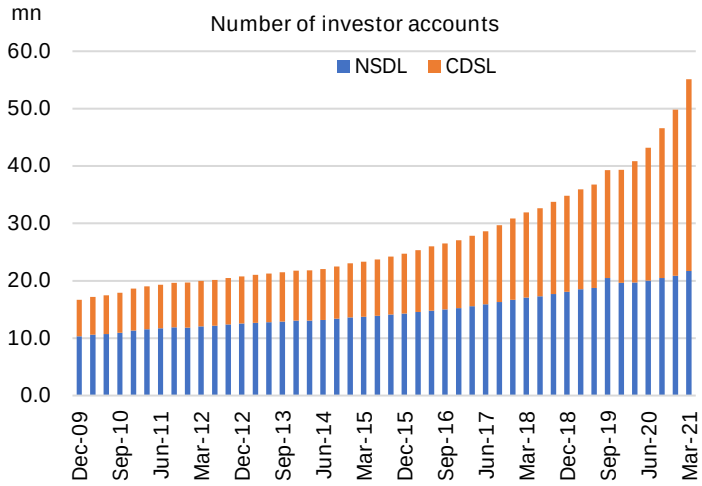
* Distribution of US GDP across economic sectors has been taken from Statista. Link here.

Note: Assumptions used in reclassifying companies of SPDR S&P 500 ETF are listed below:

1. Sectors which form key inputs to agriculture sector have been reclassified as "Agriculture".
2. Sectors forming key output from agriculture sector and used as direct inputs in manufacturing sectors have been reclassified as "Agriculture".

- Historically high retail participation does not hurt: Retail investors emerged as strong buyers of Indian equities last year, adding fuel to the ongoing rally. A sharp market crash in the quarter ending March 2020, thanks to the onset of COVID-19 outbreak and lockdown-induced economic uncertainty, lured retail investors into trading in equity markets, with an ensuing liquidity-led market rally further strengthening their sentiments. This is reflected in an increase in retail ownership in the NSE-listed universe during the last few quarters. This increased buying is also reflected in a sharp rise in new investor accounts added last year and increase in retail share in the cash market turnover. New investor account additions through CDSL as well as NSDL in the last financial year (Apr-March 2021) stood at a record-high 14.3m—representing nearly 26% of the outstanding active investor accounts at the end of the period. Moreover, the share of individual retail investors (Others) shot up from 39% in FY20 to 45% in FY21.

Figure 106: Quarterly trend of number of active investor accounts with depositories



Source: SEBI.

Figure 107: Annual trend of new investor account additions with depositories

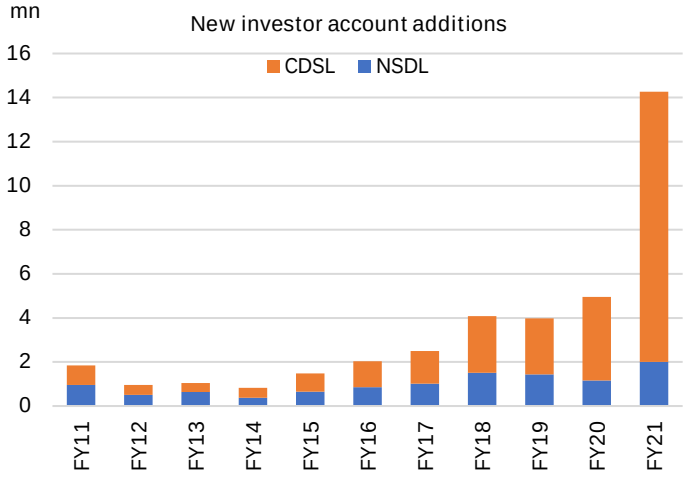
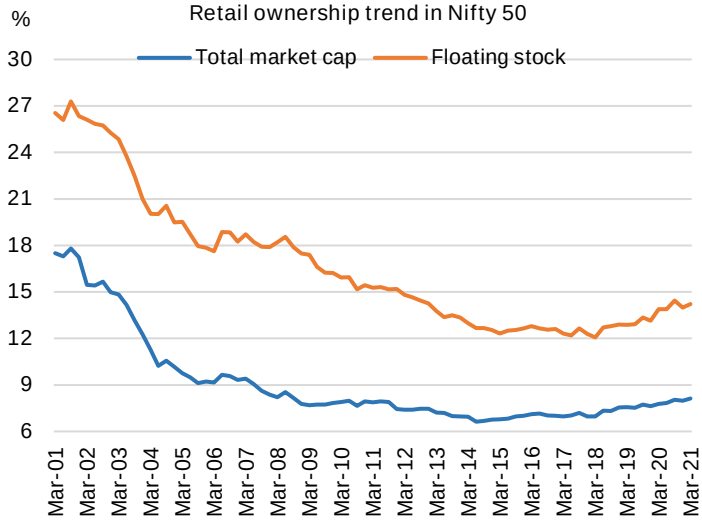
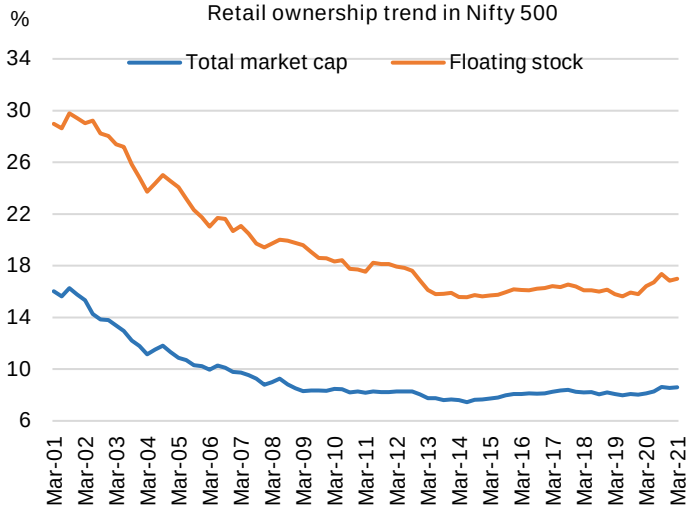


Figure 108: Retail ownership trend in Nifty 50 Index



Source: CMIE Prowess, NSE.

Figure 109: Retail ownership trend in Nifty 500 Index



- Conclusion: While the sharp surge in equity markets, not just in India but across the globe, may seem at odds with each other, they are not. The sector diversity between the flagship market indices and the country's economic output as well as the forward-looking nature of equity markets both point to limited correlation between equity markets and the real economy. What has accentuated the disconnect between the two over the last one year or so, and in historical periods of crises, has been the massive liquidity injection by the global central banks and the unprecedented fiscal stimulus packages announced by the governments. This, in turn, have lowered risk premia and supported asset prices and expensive valuations.

Macro economy

Retail inflation sees a broad-based spike in May

Headline CPI inflation unexpectedly surged to a six-month high of 6.3% in May'21 from 4.2% in the previous month, negatively surprising market expectations (Consensus: 5.3%; Source: Reuters) and breaching the RBI's target band. This was primarily on the back of a broad-based surge witnessed across all major segments of the CPI basket, notably in food, fuel, and healthcare. Core inflation (headline inflation ex food and fuel) jumped to an 82-month high of 6.3% in May—primarily attributed to transportation, health, and personal care & effect segments. The spike in rural inflation was steeper owing to a sharp jump in core inflation, indicating the severe impact of COVID-induced supply disruptions on the rural sector. On a sequential basis (MoM), inflation hardened for the fourth month in a row, and by a much higher quantum in the month gone by, reflecting the impact of global reflationary pressures, increasing fuel prices and pandemic-induced supply-chain bottlenecks.

Notwithstanding a favourable base, renewed COVID-led supply-side bottlenecks, coupled with cost-push pressures emanating from higher commodity prices and logistics costs, are likely to keep inflation trajectory elevated in the near future. A sharp spike in recent WPI inflation readings is a testament of rising cost pressures that may eventually feed into retail inflation. Even as the RBI has a tough task at hand managing the growth-inflation dynamics, it is likely to overlook recent spike in inflation as a large part of this is supply-driven and therefore transitory in nature. Given the economic disruptions caused by the second wave of COVID-19 and risks of an impending third wave, policy support from all sides is required to foster recovery and expedite return to normalcy. Though, mobility indices have inched up and economic activity is showing nascent signs of revival with receding daily cases and easing restrictions, business and consumer sentiments remain weak and fragile. Therefore, until the growth impulses are not revived on a durable basis, we continue to expect RBI to take precedence of growth over inflation. As such, we expect the RBI to stay put on policy rates at least through the current financial year and continue to provide adequate and targeted liquidity support to stressed segments of the economy.

Headline CPI inflation in May surprised significantly on the upside and came in at 6.3% vs. 4.2%YoY in April 2021.

- Retail inflation surges to a six-**month high in May...:** Headline retail inflation for the month of May was largely expected to move upwards from the previous month levels on account of cost push pressures that were triggered by state wide restrictions. However, the surge surpassed the market expectations and witnessed a six-month high print of 6.3% in May from 4.2% in the previous month. This was primarily led by the broad based spike in all the categories. Despite unfavorable base (8.4%YoY in May'20), food and beverage inflation rose to a six month high of 5.4% on an annual basis. However, inflation in fuel and lightening component surged to 11.6% level, highest since March 2012, partly owing to favorable base (1.6%YoY in May'20). Alongside, the core inflation hardened further and surged to 6.4%YoY in May'21- level last witnessed in the July 2014. The overall prices witnessed a strong sequential rebound of 1.7%MoM, thereby mirroring the 1.9% sequential uptick witnessed during Lockdown 1.0 (April'20). The monthly elevation of headline retail prices marked the third highest strong surge witnessed in a month after 2.1%MoM rise in July 2014 and 1.9%MoM rise in April 2020.
- **...primarily led b**y higher food a**nd fuel inflation...:** The surge in retail inflation on a YoY basis was primarily led by higher food inflation, thanks to sharp surge in eggs (15.2%YoY), oils and fat (30.84%YoY), fruits (12%YoY), pulses (9.4%YoY), spices (7%YoY) and prepared meals (5.12%YoY). However, on sequential basis, all the food items witnessed a strong uptick. While vegetable prices continued to witness deflation but the magnitude of contraction in prices reduced sharply from

14.2%YoY in April'21 to mere 1.92%YoY in May'21. Fuel & light inflation jumped to a 9 year high of 11.6%, owing to continuous surge in global energy prices.

- **...accompanied with sticky core infl**ation: Core inflation (headline inflation ex food and fuel) also rose from a 10-month low of 5.1% in Apr'21 to nearly seven-year high of 6.3%. This was primarily attributed to transportation, health, and personal care & effect segments. Within the core basket, clothing and footwear inflation surged to a 35-month high of 5.3%, pan, tobacco and intoxicant prices rose at a three-month high of 10% YoY, housing infaltion surged to a 22-month high of 3.9% and healthcare infaltion shot up to a 26-month high of 8.4%. Transport & communication inflation remained elevated at 12.4%, reflecting the impact of higher fuel prices and consequent pass-through to transport fares. Core inflation excluding vehicle fuels remained rather subdued at 1.6%YoY.

- Expect RBI to remain focused on growth despite rising inflationary pressures: Notwithstanding a favourable base, renewed COVID-led supply-side bottlenecks, coupled with cost-push pressures emanating from higher commodity prices and logistics costs, are likely to keep inflation trajectory elevated in the near future. A sharp spike in recent WPI inflation readings is a testament of rising cost pressures that may eventually feed into retail inflation. That said, the RBI is likely to overlook this as much of the spike in inflation has been supply-driven and therefore transitory in nature. Given the economic disruptions caused by the second wave of COVID-19 and risks of an impending third wave, policy support from all sides is required to foster recovery and expedite return to normalcy. Though, mobility indices have inched up and economic activity is showing nascent signs of revival with receding daily cases and easing restrictions, business and consumer sentiments remain weak and fragile. Therefore, until the growth impulses are not revived on a durable basis, we continue to expect RBI to continue to take precedence of growth over inflation. As such, we expect the RBI to stay put on policy rates at least through the current financial year and continue to provide adequate and targeted liquidity support to stressed segments of the economy.

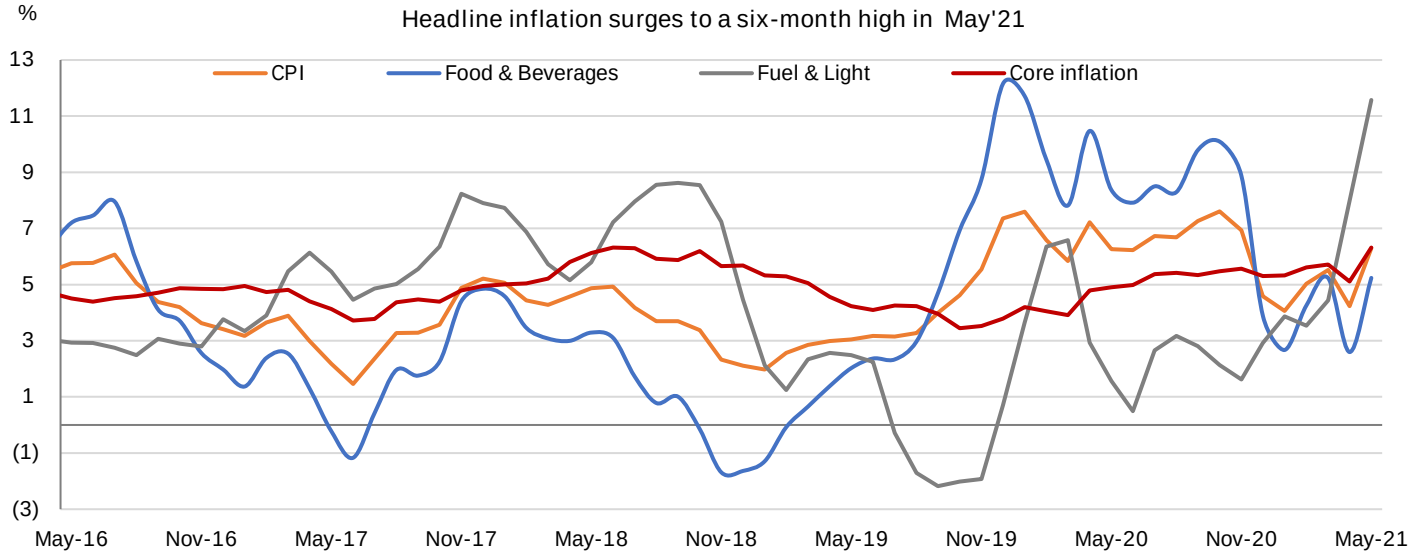
Expect RBI to maintain an accommodative stance all through FY22 and support growth by ensuring adequate liquidity in the system, particularly targeted at stressed segments of the economy.

Figure 110: Consumer price inflation in May 2021 (%YoY)

%YoY	Weight (%)	May-21	April-21	May-20	FY22TD	FY21TD
CPI		6.3	4.2	6.3	5.3	6.8
Food & Beverages	45.9	5.2	2.6	8.4	3.9	9.4
Pan, Tobacco & Intoxicants[2]	2.4	10.0	9.0	6.3	9.5	6.1
Clothing & Footwear[2]	6.5	5.3	3.5	3.4	4.4	3.4
Housing	10.1	3.9	3.7	3.7	3.8	3.8
Fuel & Light	6.8	11.6	8.0	1.6	9.8	2.3
Miscellaneous[2]	28.3	7.5	6.1	5.8	6.8	5.6
Core CPI inflation[1,2]	44.9	6.3	5.1	4.9	5.7	4.9

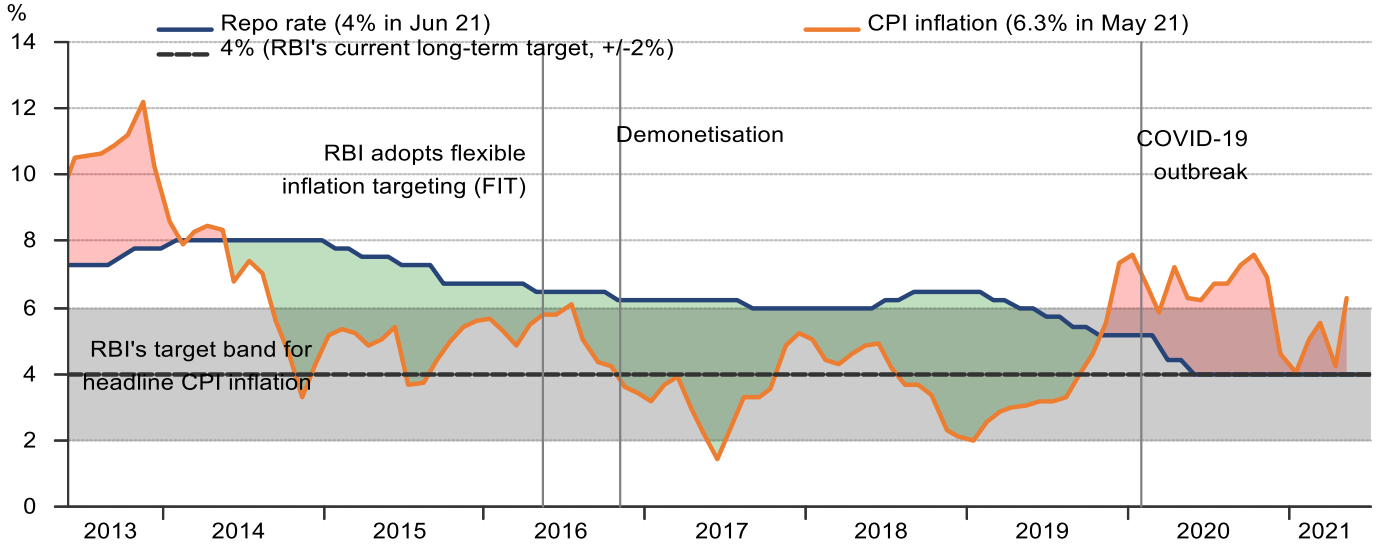
Source: CSO, NSE. NA = Not Available.
Note: [1] Headline inflation excluding food & beverages, pan, tobacco & intoxicants and fuel & light.
[2] Inflation data for these components for April and May 2020 are based on the imputed index calculated by MOSPI.

Figure 111: Headline CPI inflation trend



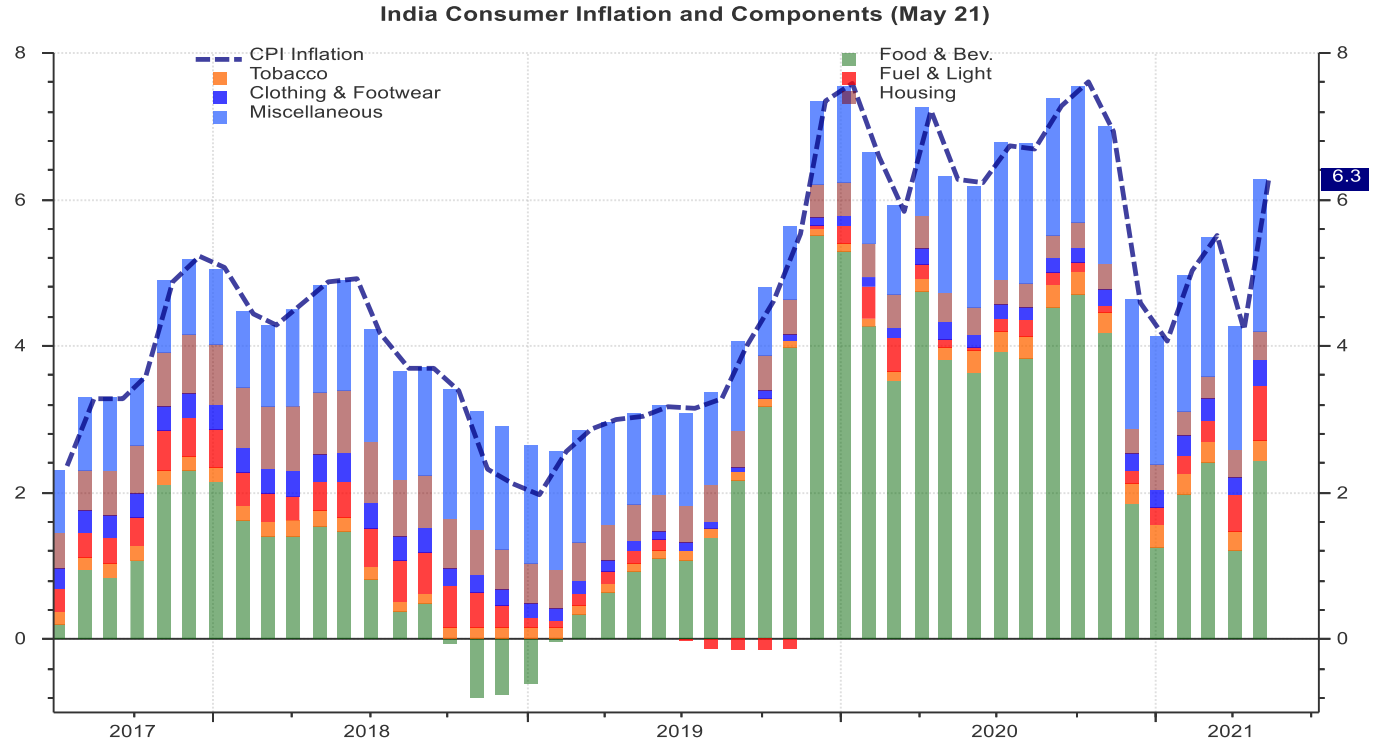
Source: CMIE Economic Outlook, NSE

Figure 112: Real interest rates have remained negative for more than a year now



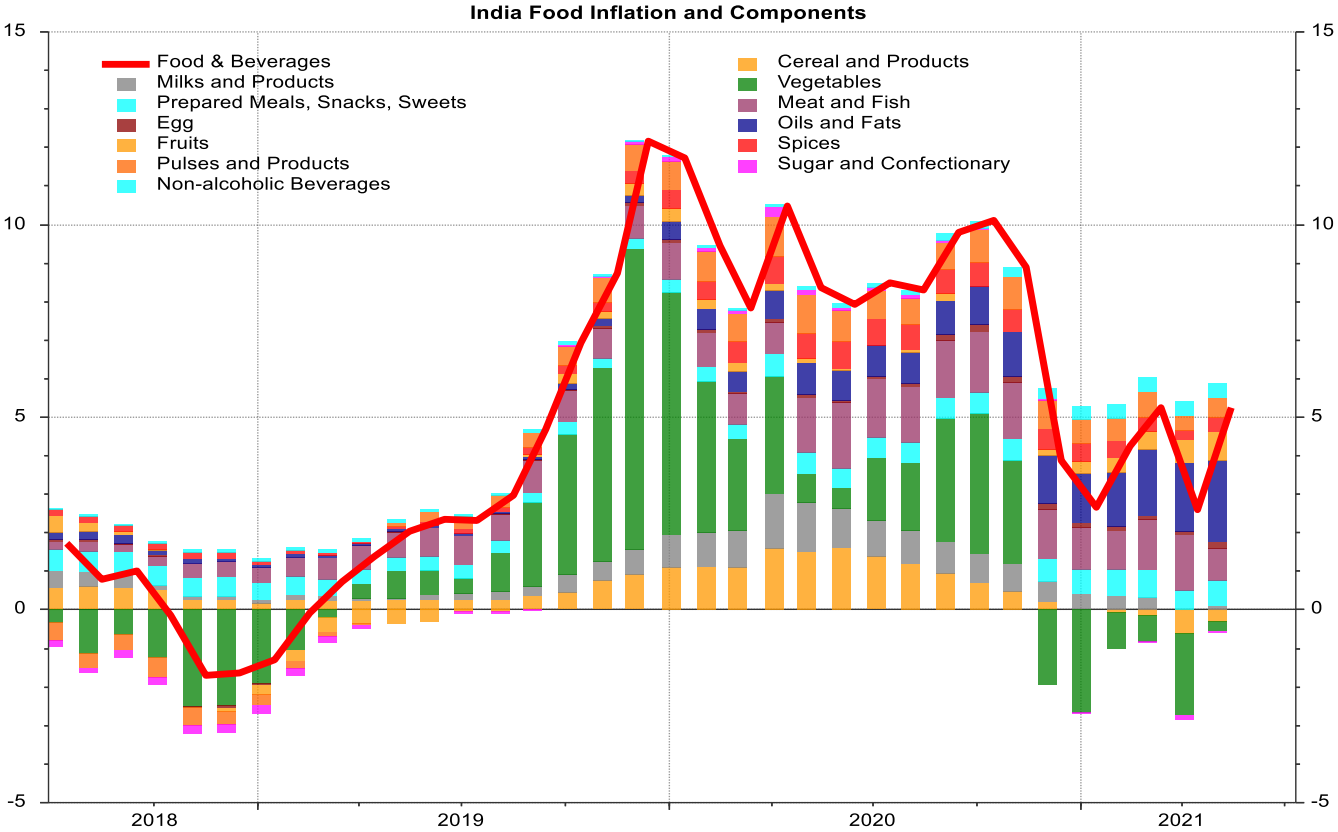
Source: CMIE Economic Outlook, NSE

Figure 113: Category-wise contribution to India consumer price inflation (CPI)



Source: Refinitiv Datastream, NSE.

Figure 114: Category-wise contribution to India Food and Beverages inflation (CPI)



Source: Refinitiv Datastream, NSE.

Wholesale inflation rises to fresh record-highs in May

Wholesale inflation rose for the fifth month in a row to fresh record highs of 12.9% YoY in May 2021, marking the 12th consecutive month of a sequential increase. The spike was primarily led by a huge YoY jump in crude oil, mineral oils, and electricity prices as well as continued increase in manufactured products inflation, albeit off a low base, partly offset by lower food inflation. Notably, the wholesale inflation trajectory has been orthogonal to the retail inflation trend over the last few months, with the gap between the two widening to record-high levels. While a part of this is attributed to an unfavourable base and difference in wholesale and retail consumption baskets (The former has a lower share of food and much higher share of manufactured items), the spike also reflects significant supply-side bottlenecks that have got accentuated by fresh restrictions during the second wave. A low base, higher commodity prices and supply-chain disruptions are likely to keep the wholesale inflation trajectory significantly elevated in the near future. This, in turn, may eventually feed into retail prices, thereby further hurting the inflation trajectory, even as a high base may provide some upside support.

- Wholesale inflation rises to fresh series-high (eight-year) levels in May: Wholesale price inflation (WPI) surprised on the upside for yet another month and rose by a huge 245bps MoM to an eight-year high of 12.9% in May 2021, albeit off a low base (-3.4% YoY in May'20). This is the highest inflation print in the new series (base year: 2011-12), marking the 12th consecutive month to report a sequential jump in wholesale prices. The spike was primarily led by a huge YoY jump in crude oil, mineral oils, and electricity prices as well as continued increase in manufactured products inflation, albeit off a low base, partly offset by lower food inflation.

- Non-food inflation withness a broad-based spike: Primary articles inflation moderated to 9.6% in May'21 from a 16-month high of 10.2% in the previous month. This was primairly on the back of a lower inflaiton in food articles, even as pace of price surge in non-food primary articles and commodities rose further. Within Primary articles, while food prices at the wholesale level rose by a relatively modest 4.3% YoY, down 1.5% on a MoM basis, non-food articles inflation rose to the fresh series-high level of 18.4% YoY. Crude, petroleum & natural gas prices also rose by by a steep 56.1% YoY at the wholesale level, thanks to an extremely low base (-37.5% in May'20) and continued surge in global crude oil prices. Fuel & power inflation moved up further deep into the positive territory to 37.6%—the highest in the series, albeit off an unfavorable base (-23.1% in May'20), with mineral oils and electricity prices rising by 81.2% and 5.8% YoY respectively, even as coal inflation remained steady at 0.7%.

  Manufactured products inflation rose for the 12th consecutive month to touch fresh record-high levels of 10.8% in May'20, led by a spike in food as well as non-food manufactured categories. While manufactured food products recorded an inflation of 15.2%, inflation in non-food manufactured products also rose to 10.0%, both of which were the highest in their respective series. This is partly attributed to continued supply-side pressures that got aggravated by the targeted lockdown restrictions imposed by states to arrest the second wave, as well as rising commodity prices.

- Gap between CPI and WPI inflation falls deeply into the negative territory: The gap between retail and wholesale price inflation fell for the seventh month in a row by another 38bps MoM to -6.6pp in May 2021—the lowest ever seen in last eight

years. This marks the third consecutive month of negative differential between CPI and WPI. A relatively much steeper spike in WPI inflation trajectory over the last few months has been primarily on account of a) a much higher weight of food in the retail basket (45.9%) as compared to the wholesale basket (15.3%), where price rise has been relatively benign over the last few of months, and b) a higher weightage of manufactured goods in the wholesale basket (64.2%) as compared to the retail basket, where prices have witnessed a sharp increase, thanks to an unfavorable base, renewed supply-side pressures and higher commodity prices.

- Wholesale inflation trajectory to remain elevated over the next few months: A low base, higher commodity prices and renewed supply-side bottlenecks are likely to keep the wholesale inflation trajectory significantly elevated in the near future. This, in turn, may eventually feed into retail prices, thereby further hurting the inflation trajectory, even as a high base may provide some upside support.

Figure 115: Wholesale price inflation for May 2021 (%YoY)

	Weight (%)	May-21	Apr-21	May-20	FY22TD	FY21TD
WPI		12.9	10.5	(3.4)	11.7	(2.5)
Primary articles	22.6	9.6	10.2	(2.1)	9.9	(1.6)
Food articles	15.3	4.3	4.9	1.7	4.6	2.7
Non-food articles	4.1	18.4	15.6	(3.9)	17.0	(3.4)
Minerals	0.8	22.1	19.6	(1.6)	20.9	(2.1)
Crude petroleum & natural gas	2.4	56.1	79.6	(37.4)	66.9	(41.8)
Fuel & power	13.2	37.6	20.9	(23.1)	28.8	(17.9)
Coal	2.1	0.7	0.6	2.3	0.7	2.3
Mineral oils	8.0	81.2	45.3	(39.7)	61.6	(32.9)
Electricity	3.1	5.8	(2.5)	(5.1)	1.5	0.4
Manufactured products	64.2	10.8	9.0	(0.3)	9.9	(0.1)
Food group	24.4	8.1	7.6	2.7	7.8	3.6

Source: CSO, CMIE Economic Outlook.

Figure 116: WPI inflation trend

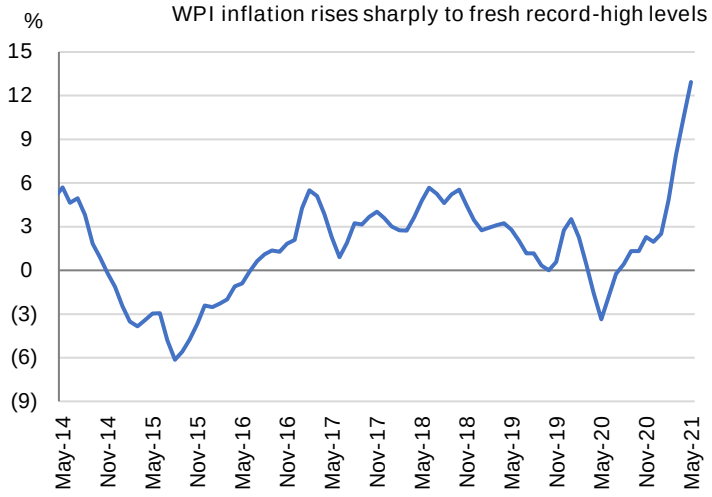
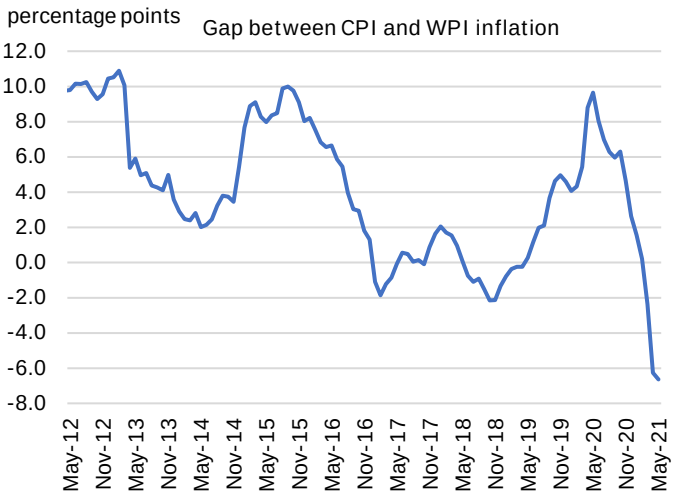
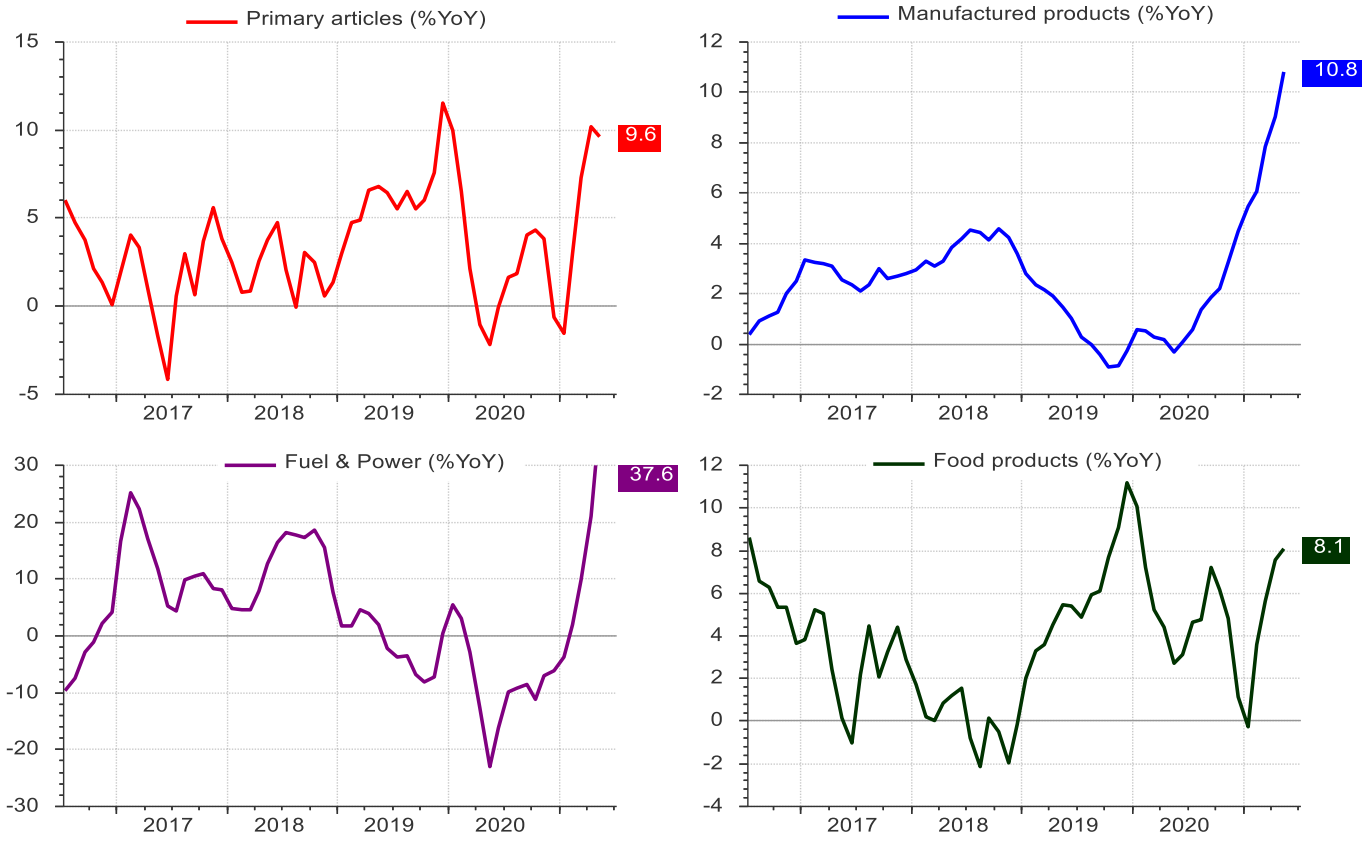


Figure 117: Gap between wholesale and retail inflation



Source: CMIE Economic Outlook.

Figure 118: India wholesale price inflation (WPI)



Source: Refinitiv Datastream, NSE.

Industry output surges on a low base in April

Industrial production (IIP) rose by a strong 134.4% YoY in April but off a very low base (-57.3% in Apr'20), surprising market expectations on the upside (Consensus: 120%). On a sequential basis, IIP declined by 13% MoM, a tad higher than the average MoM drop of 11.5% seen in April during 2013-2019. Decentralised measures and targeted restrictions this time, where manufacturing units were largely allowed to function, limited the downside risks emanating from the second wave on the industrial sector. Consumption demand, however, seem to have got hit harder, as reflected from a much steeper-than-usual drop of 12.9% in Consumer Durables production vs. an average drop of 7.6% during 2013-2019. Additionally, the flat two-year CAGR in April suggests that the industrial sector has just managed to revert to pre-COVID levels, with the deadlier second wave delaying the recovery process further.

Even as the economic ramifications of the second wave on the industrial recovery that was underway until March has been relatively benign, business sentiments remain muted, reflected in a meaningful drop in Manufacturing PMI last month. The impact on contact-intensive services has seemed to be far severe as evident from the Services PMI readings. That said, the impact is likely to be largely concentrated in the first quarter of FY22, with easing restrictions by several states paving way for a recovery ahead. We maintain our FY22 GDP growth estimate at 9.2%. Prolonged weakness in consumption demand particularly in the wake of an impending third wave and rising inflationary pressures, slowdown in pace of vaccinations and deterioration in global growth outlook remain key downside risks to our estimates.

Industrial production growth rose by a higher-than-expected 22.4% in Mar'21 amid a favourable base.

- IIP growth shot up in April on a favorable base: Industrial production rose by a higher-than-expected 134.4% YoY in April 2021, a tad higher than the market expectations. While a part of this is attributed to a supportive base (-57.3% YoY in Apr'20), a steady production levels compared to two-year prior levels and only a modestly steeper sequential contraction as compared to historical trend point to a relatively benign impact of the deadlier second wave on industrial activity. This is primarily because of the decentralised nature of lockdown restrictions which allowed most manufacturing units to remain function during this period.

- Manufacturing and Mining remained broadly steady on a two-year CAGR basis, but Electricity registers a modest rebound: Manufacturing sector grew by a strong 197.1 % YoY but off a very low base (-66.6% YoY in Apr'20) as most of the manufacturing units were shut during the first lockdown, making comparisons difficult. On a two-year CAGR basis, segments that witnessed a decent growth in production include base metals (+7.3%), tobacco products (+7.7%) and food products (+2.8%). Segments that registered a sharp drop in production levels as compared to April 2019 levels include recorded media (-18.8%), beverages (-13.7%), leather products (-9.5%), computer & electronics (-9.3%), wearing apparel (-9.2%), furniture (-9.0%), electrical equipment (-8.0%) and transport equipment (-7.9%). Mining production also witnessed a strong 37.1% YoY growth in April 2021 but was up by a modest 0.9% on a two-year CAGR basis. Electricity sectors has performed rather well since the pandemic and grew by a strong 38.5% YoY in April and 3.4% on a two-year CAGR basis.

- Use-based classification showed a dip in consumption demand: Even as the overall industrial activity has held up despite renewed COVID-led restrictions, the use-based classification showed a sharper dip in consumption demand. This is reflected from a much steeper-than-usual drop of 12.9% MoM in Consumer Durables production vs. an average drop of 7.6% during 2013-2019. On a two-year CAGR basis, Consumer Durables production declined by 6%—the lowest in last eight months, pointing to a significant deterioration in consumption demand.

Capital Goods production also fell by a four-month high of 7.5% on a two-year CAGR basis and has remained in the negative territory for the 22nd consecutive month, indicating persistence of a weak investment demand in the economy. Essential segments of the economy, however, are back to pre-COVID levels, as signalled from a modest two-year CAGR in production of Primary and Intermediate goods as well as Consumer Non-durable Goods.

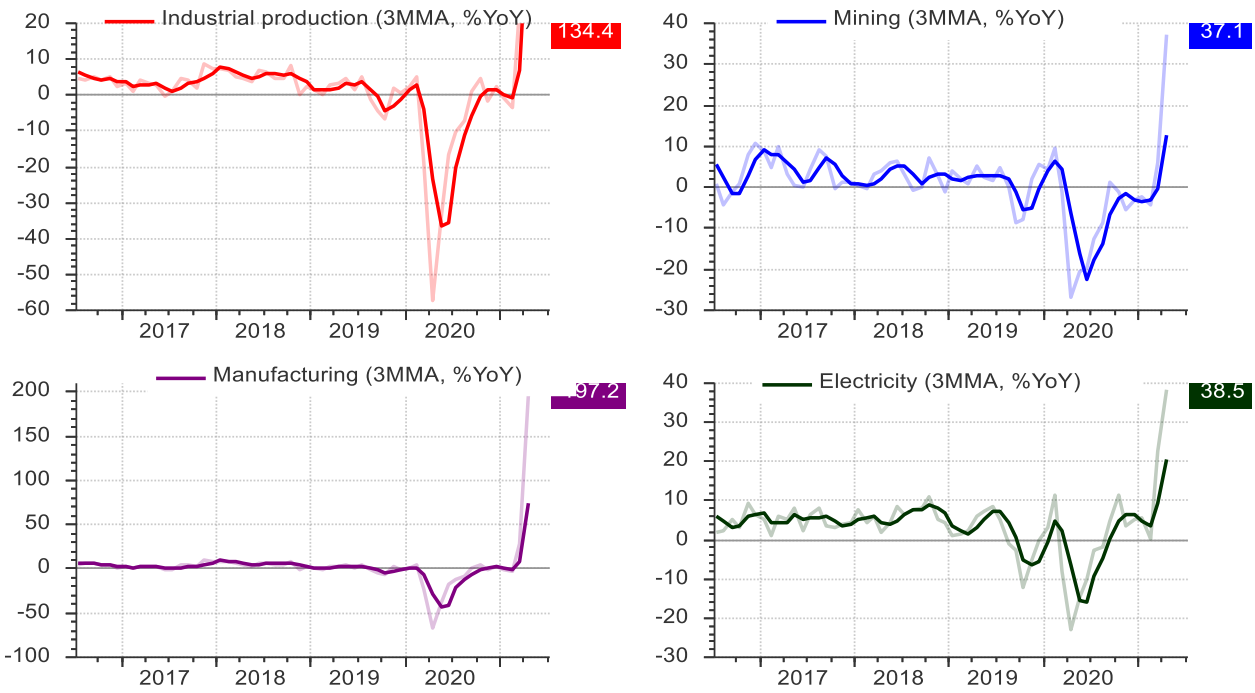
- Disruptions to industrial recovery contained by decentralised lockdowns: Even as the economic ramifications of the second wave on the industrial recovery that was underway until March has been relatively benign, business sentiments remain muted, reflected in a meaningful drop in Manufacturing PMI last month. The impact on contact-intensive services has seemed to be far severe as evident from the Services PMI readings. That said, the impact is likely to be largely concentrated in the first quarter of FY22, with easing restrictions by several states paving way for a recovery ahead. We maintain our FY22 GDP growth estimate at 9.2%. Prolonged weakness in consumption demand particularly in the wake of an impending third wave and rising inflationary pressures, slowdown in pace of vaccinations and deterioration in global growth outlook remain key downside risks to our estimates.

Figure 119: India industrial production for April 2021 (%YoY)

%YoY		Weight (%)	Apr-21	Mar-21	Apr-20	FY21	FY20
	IIP		134.4	24.1	(57.3)	(8.7)	(0.8)
Sector-based indices	Mining	14.4	37.1	5.9	(26.9)	(7.8)	1.6
	Manufacturing	77.6	197.1	28.3	(66.6)	(9.8)	(1.4)
	Electricity	8.0	38.5	22.5	(22.9)	(0.5)	0.9
Use-based Goods	Primary Goods	34.0	37.1	7.8	(26.6)	(7.0)	0.7
	Capital Goods	8.2	1,077.1	48.3	(92.7)	(19.2)	(14.0)
	Intermediate Goods	17.2	209.2	23.2	(63.9)	(9.7)	9.1
	Infra/Construction Goods	12.3	564.0	34.9	(85.0)	(9.0)	(3.6)
	Consumer Goods	28.2	205.6	39.8	(68.6)	(7.6)	(3.8)
	Consumer Durables	12.8	1,943.6	55.0	(95.7)	(15.2)	(8.8)
	Consumer Non-durables	15.3	95.7	31.2	(48.1)	(2.3)	(0.1)

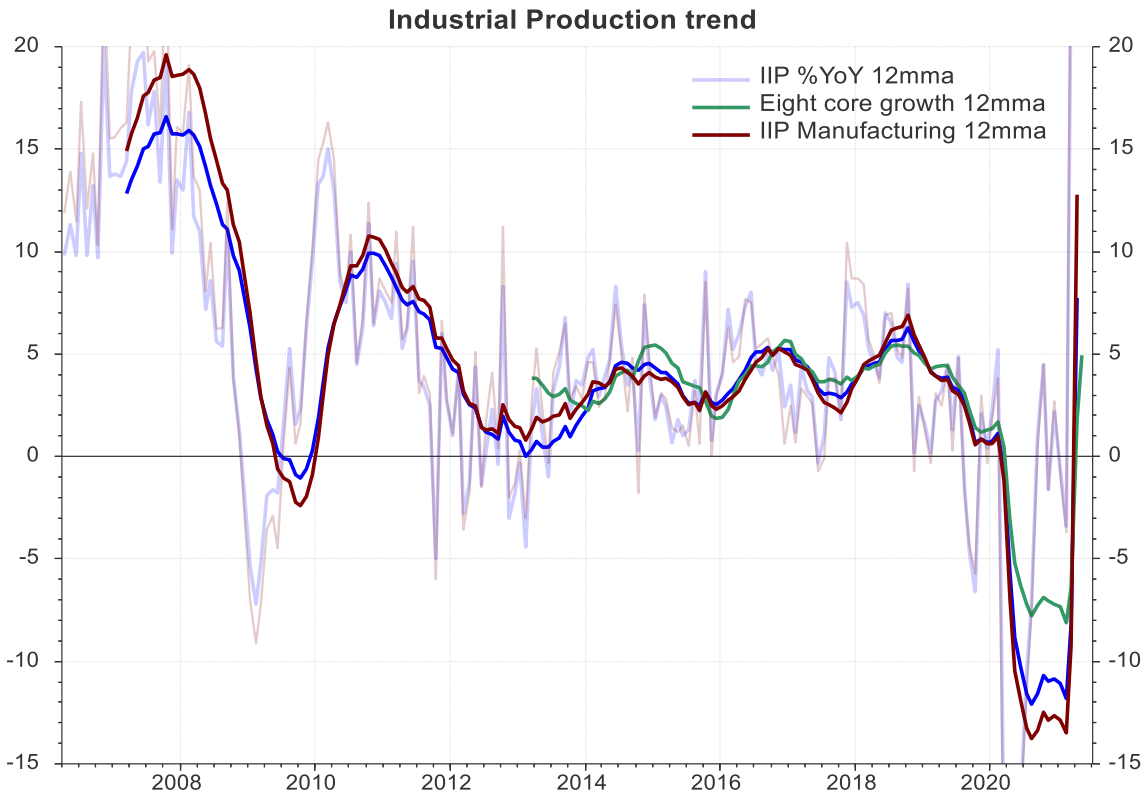
Source: CSO, NSE.

Figure 120: India industrial production (3MMA)



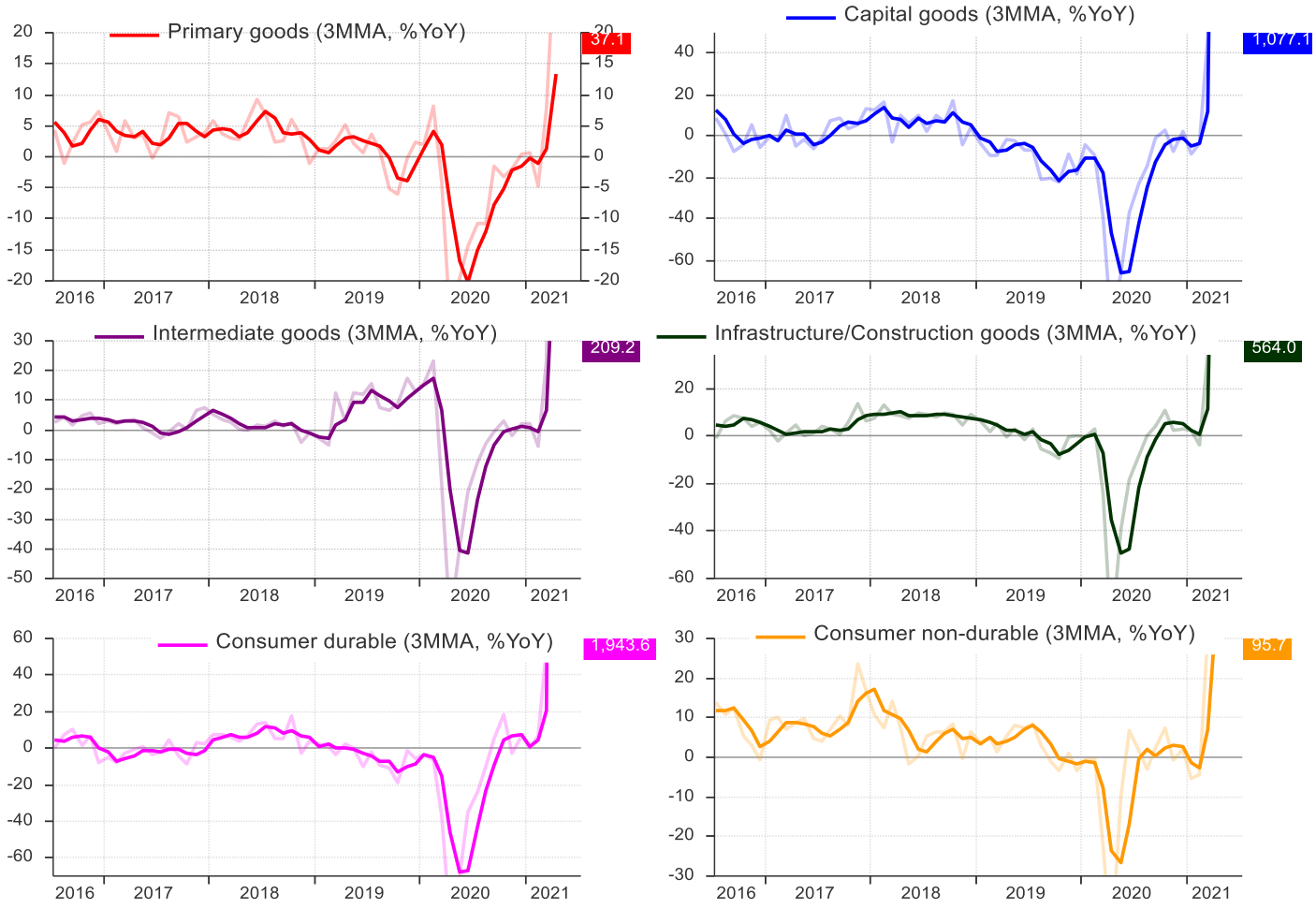
Source: Refinitiv Datastream, NSE

Figure 121: Long-term industrial production trend (12MMA)



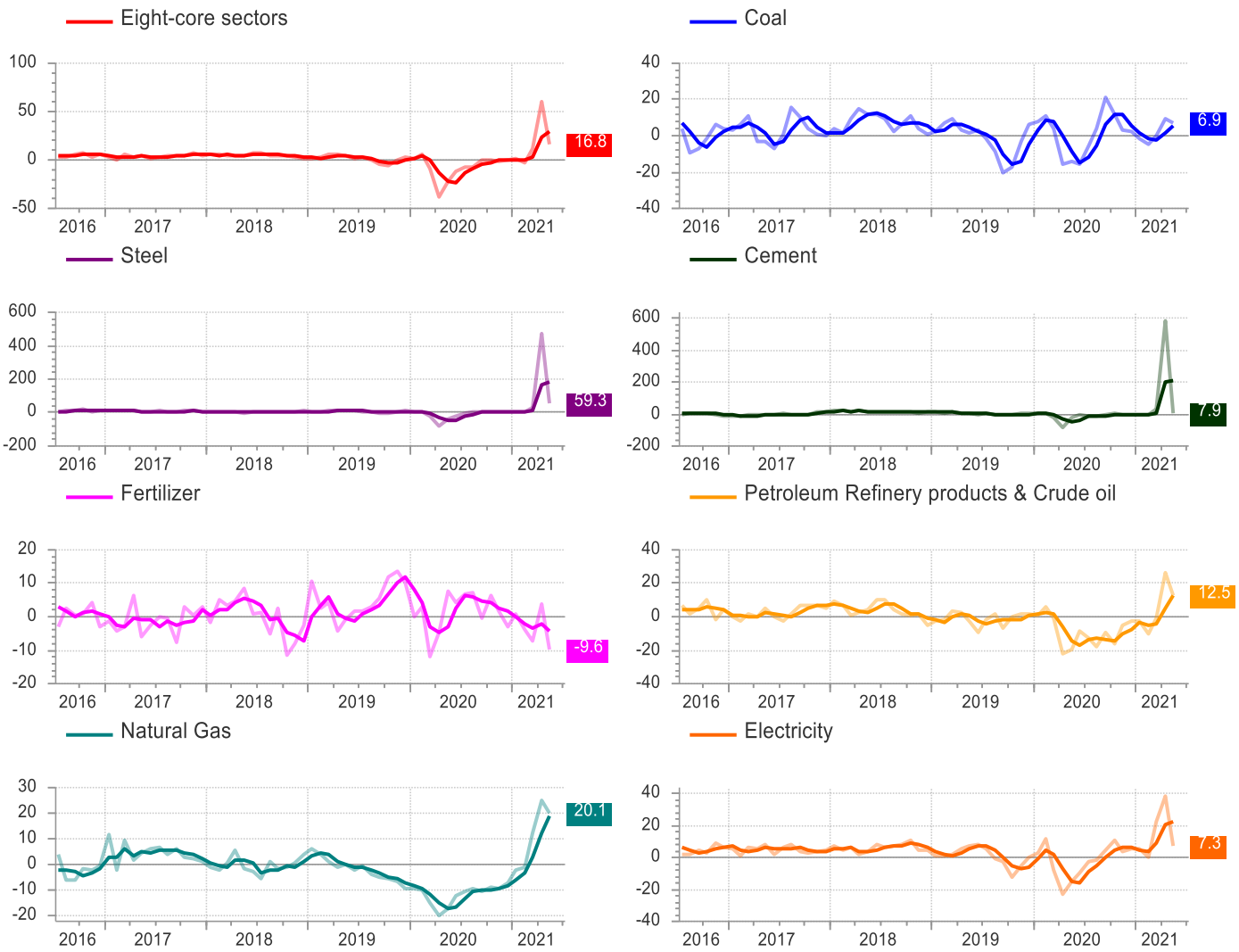
Source: Refinitiv Datastream, NSE

Figure 122: India industrial production use-based goods (3MMA)



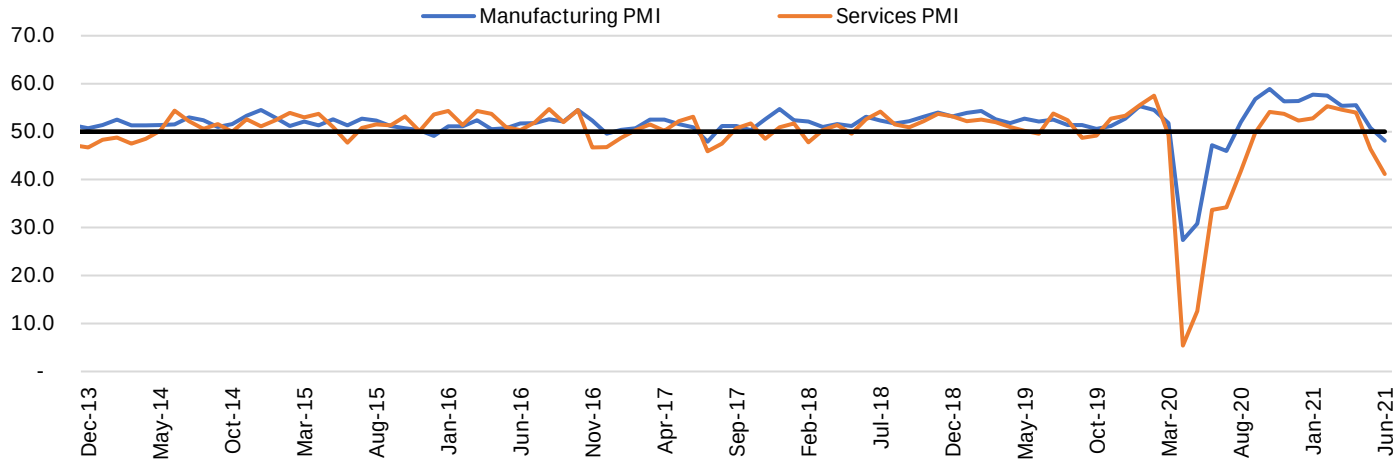
Source: Refinitiv Datastream, NSE

Figure 123: India eight-core sector growth (3MMA)



Source: Refinitiv Datastream, NSE

Figure 124: Manufacturing as well as Services PMI drop after fresh COVID restrictions



Source: CMIE Economic Outlook, NSE.

Trade deficit widens in June as imports surge with easing restrictions

According to the preliminary estimates released by Ministry of Commerce and Industry, India's merchandise trade deficit widened to US$9.4bn in June from an eight-month low of US$6.3bn in the previous month, thanks to a stronger sequential surge in imports than in exports. Imports witnessed a strong rebound of 9% MoM in June 2021 (vs. 16%MoM in May 2021), attributed to a significant easing of lockdown norms across the nation in the wake of receding daily new covid cases. Exports, on the other hand, grew by a modest 0.6% MoM, indicating persistent buoyancy in global demand that in turn is bolstered by a continuous robust economic recovery across the major advanced economies and a few emerging economies. On a YoY basis, both exports and imports registered a strong growth, up 47.3% and 96.3% respectively, thanks to a very low base given stricter lockdown restrictions in the same period last year. The sequential surge in imports was primarily led by oil (13% MoM) and gold (43% MoM). Excluding oil and gold, India's import bill also witnessed a strong sequential surge of 6.3%, thereby indicating nascent signs of a rebound in domestic industrial and consumption demand that was derailed by the ferocious second wave and attendant lockdown restrictions. The two-year CAGR of exports at a 31-month high of 14% far exceeds a mere 1 % CAGR in imports, reflecting a subdued domestic demand environment even before the pre-COVID period.

Going ahead, imports are expected to gain traction on easing lockdown restrictions, receding infections, increasing pace of vaccinations, rising commodity prices and a favourable base. In fact, even as export growth momentum is expected to continue, thanks to strong global recovery and continue policy support, import growth is expected to outpace export growth in the current fiscal year. Consequently, we expect current account balance to slip into deficit again from a surplus of 0.9% of GDP, with our estimate pegged 1% of GDP assuming average crude oil prices at $65/bbl. While foreign capital flows are expected to taper amid expectations of gradual policy normalisation, the Balance of Payments (BoP) is expected to remain in a comfortably surplus position.

- Robust global demand continued to aid export growth momentum: Exports grew by a strong 47.3 YoY in Jun'21, thanks to a favourable base (-12% in Jun'20). While this may provide a distorted picture, the 31-month high two-year CAGR in exports of 14% in June'21 clearly elucidate persistent robustness in exports over the past few months, reflecting the impact of a strong global demand recovery and relatively less restrictions on industrial activity during the second lockdown. On a sequential basis (MoM), exports witnessed a modest uptick of 0.6%, weighed down by a sharp sequential moderation of 26% (vs. +47%MoM in May 2021) in export of petroleum products. On a two-year CAGR basis, exports have registered an expansion of 13.9%, primarily led by strong petroleum exports (+22.4%), even as non-oil exports also reported a strong two-year CAGR of 12.8%. While industrial exports like engineering goods, plastic, electronics and drugs and pharma showed stellar growth over June 2019 levels, consumption exports like leather, textiles and gems remained lacklustre. In Q1FY22, India's merchandise exports were record-high at US$95bn, up 85% YoY and 18% as compared to exports in Q1FY20.

Exports continue to remain robust with a 31-month high two-year CAGR print of 14% because of strong global demand and relatively less restrictions on industrial activity during the second lockdown.

- Imports displayed a strong rebound in June: India's import bill grew by a strong 96.3%YoY in Jun'21 on a very low base (-48% YoY in June'20) and witnessed a strong sequential rebound of 9% MoM (vs. 16% MoM in May 2021), attributed to significant easing of lockdown norms across the nation in the wake of receding daily new covid cases. The sequential surge in imports was primarily led by oil (13% MoM) and gold (43% MoM), excluding which imports grew by 6.3% MoM, indicating nascent signs of a rebound in domestic industrial and consumption demand that was derailed by the ferocious second wave and attendant lockdown restrictions. On a two-year CAGR basis, imports remained subdued and grew by a

Inbound shipments grew by 167%YoY but fell by 5.5% on a MoM basis—a tad higher than the average MoM drop of 4.7% during 2015-2017.

mere 1%, largely attributed to a drop in oil imports (-2.4%) and a sharp contraction in gold imports (-40%). However, the core imports rebounded sharply from a six-month low two-year CAGR of -1.5% in May 2021 to 5.5% in June 2021, signalling resumption in economic recovery following a gradual lifting of lockdown restrictions.

- Trade deficit widened in June but remained benign: Merchandise trade deficit widened from an eight-month low of US$6.3bn in May to US$9.4bn in June, thanks to a much steeper sequential surge in imports as compared to exports. This was against a modest surplus of US$710m reported for the same period last year. Trade deficit during the first quarter of FY22 jumped by more than three times as compared to the year-ago period, as imports were hit much more severely than exports last year owing to the strict nation-wide lockdown.

Trade deficit widened from an eight-month low of US$6.3bn in May to US$9.4bn in June.

- Expect current account deficit at 1% of GDP in FY22: Going ahead, imports are expected to gain traction on easing lockdown restrictions, receding infections, increasing pace of vaccinations, rising commodity prices and a favourable base. In fact, even as export growth momentum is expected to continue, thanks to strong global recovery and continue policy support, import growth is expected to outpace export growth in the current fiscal year. Consequently, we expect current account balance to slip into deficit again from a surplus of 0.9% of GDP, with our estimate pegged 1% of GDP assuming average crude oil prices at $65/bbl. While foreign capital flows are expected to taper amid expectations of gradual policy normalisation, the Balance of Payments (BoP) is expected to remain in a comfortably surplus position.

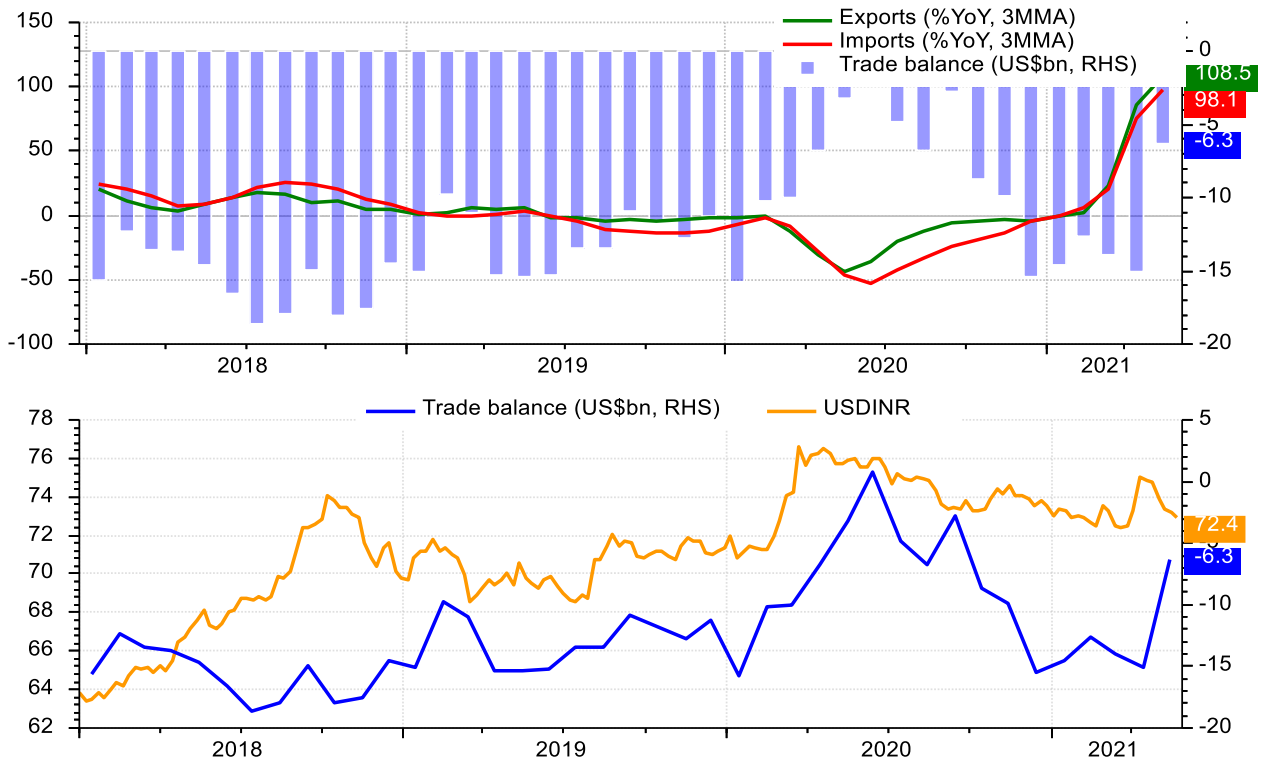
We estimate a current account deficit of 1% of GDP in FY22 against a surplus of 0.9% of GDP in FY21.

Figure 125: India monthly trade balance for June 2021

	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
June-21	32.5	47.4	41.9	96.3	10.7	115.1	31.2	90.7	1.0	59.2	-9.4
May-21	32.3	67.7	38.5	68.6	9.5	164.5	29.1	50.9	0.7	790.0	-6.3
June-20	22.0	-12.0	21.3	-48.0	5.0	-55.7	16.4	-45.2	0.6	-77.4	0.7
FY21	291.2	-7.1	393.6	-17.1	82.7	-36.7	310.9	-9.7	34.6	22.6	-102.4

Source: Ministry of Commerce, CMIE Economic Outlook.

Figure 126: India monthly trade balance trend



Source: Refinitiv Datastream.

Figure 127: Non-oil, non-gold imports trend

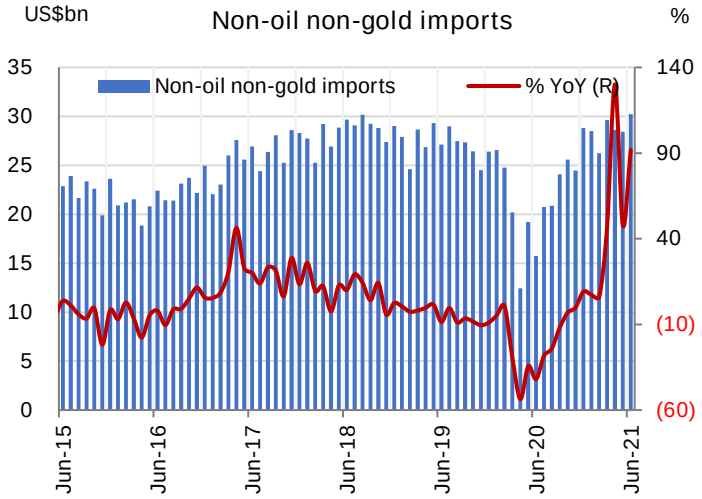
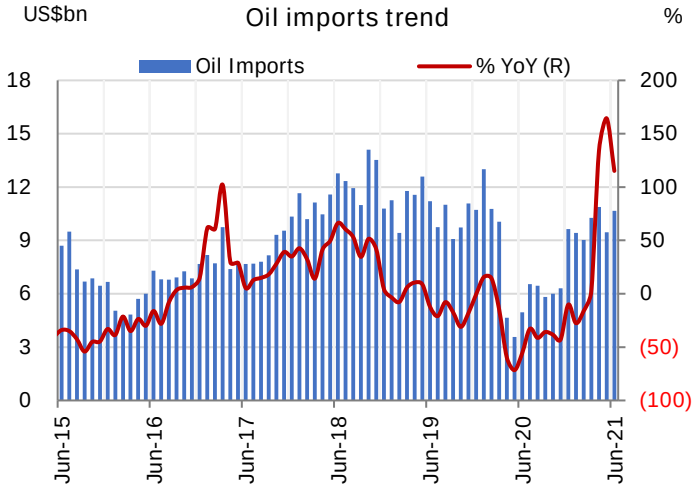
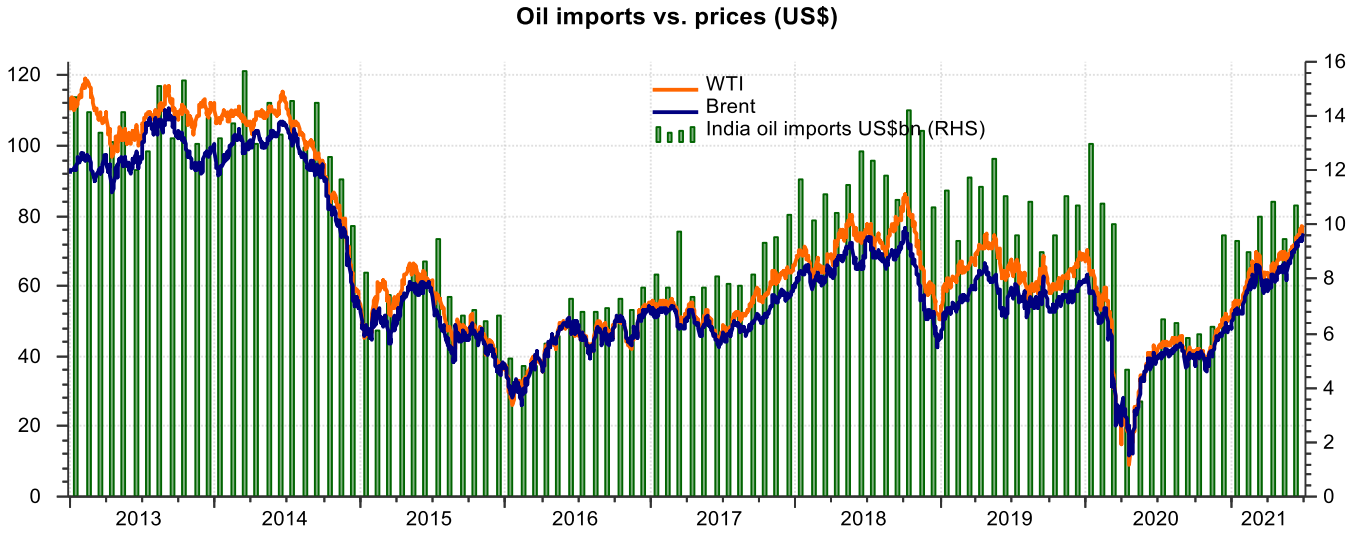


Figure 128: Oil imports trend



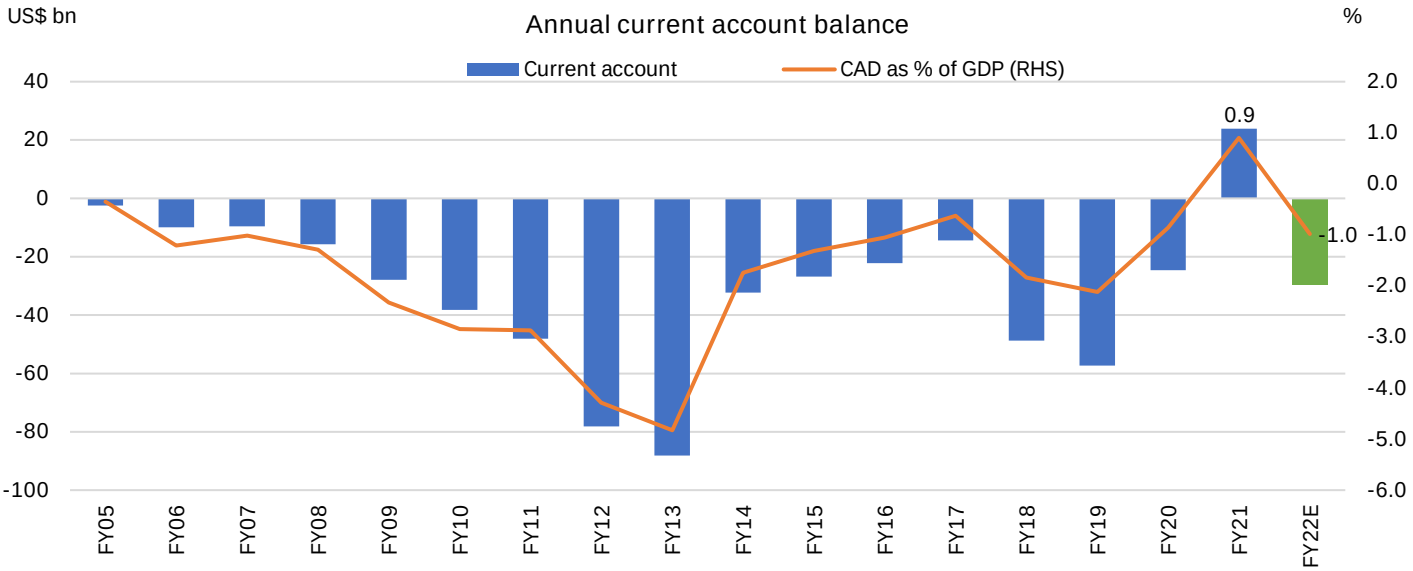
Source: Ministry of Commerce, CMIE Economic Outlook.

Figure 129: Oil imports vs. Brent crude oil prices trend



Source: Refinitiv Datastream.

Figure 130: Current account balance expected at 1% of GDP in FY22



Source: Refinitiv Datastream, NSE. *FY22 figure is NSE estimate.

FY21 Current Account: First surplus in 17 years; unlikely to continue

India's current account deficit (CAD) widened to a seven-quarter high of US$8.2bn or 1% of GDP in Q4FY21, marking the second consecutive quarter to report a deficit following a surplus in the previous three quarters. This was primarily led by a 21% QoQ/19% YoY jump in merchandise trade deficit, thanks to record-high non-oil imports during the quarter and higher crude oil prices, even as exports also registered a strong rebound amid improving global demand. Tepid foreign capital inflows and net outflows by NRIs—the first in 17 quarters—led to a sharp drop in capital account balance, partly offset by higher external commercial borrowings (ECB). Consequently, the Balance of Payments (BoP) surplus moderated sharply (-82% YoY) to a nine-quarter low of US$3.4bn.

Looking at the annual figures, India's current account recorded the first ever surplus since FY04 of US$23.9bn (0.9% of GDP) in FY21 against a deficit of US$24.7bn (0.9% of GDP) in FY20. This was due to a sharp contraction in trade deficit, thanks to the COVID-induced nation-wide lockdown implemented earlier in the year that weighed heavily on domestic demand and therefore imports, and higher software receipts. Record-high FDI inflows and FII inflows into equities in FY21 more than compensated for ECB and banking capital outflows, translating into a BoP surplus of US$87.3bn—the highest since the Global Financial Crisis.

Strengthening external demand, aided by enhanced fiscal support and significant progress in vaccination drives, continues to provide a conducive environment for a sustained export growth momentum. Import growth, however, is expected to outpace exports in the wake of a) easing lockdown restrictions, b) increasing pace of vaccinations, c) rising crude oil and other commodity prices, and d) a favourable base. Consequently, we expect current account balance to slip into deficit again in FY22, with our estimate pegged at 1% of GDP assuming average crude oil prices at $65/bbl. This, along with moderation in foreign capital inflows amid emerging odds of a sooner-than-expected reversal in easy monetary policy conditions in the US, is expected to translate into a significantly lower BoP surplus this year. Deterioration in domestic growth prospects, coupled with lower BoP surplus, narrowing yield differentials amid potential global policy normalisation and a strong dollar, are likely to pose depreciating pressures on the INR. That said, adequate forex reserves (US$604bn as on June 18th, implying ~16 months of import cover), prompt policy intervention and moderate current account deficit should limit the downside.

India's current account deficit widened further to register a seven-quarter high print of US$8.2bn or 1% of GDP in Q4FY21.

FY21 reports the first ever surplus in 17 years of US$23.9bn or 0.9% of GDP

- Higher imports widened trade deficit to a seven-**quarter high in Q4FY21...**: India's trade deficit widened to a seven-quarter high of US$41.7bn in Q4FY21 from US$34.6bn in Q3FY21. This was primarily led by a 19% QoQ expansion in the import bill that outweighed export growth of 18% QoQ. Within imports, oil import growth (+31% QoQ) exceeded non-oil import growth (+16% QoQ), thanks to persistent traction in global commodity prices that surged substantially on weakening dollar index. On a YoY basis, imports surged by 19% owing to a sharp 34%YoY rise in non-oil imports, but off a low base, reflecting strong domestic demand and effective normalisation of economic activities. Exports also rose by an equivalent 19% YoY, thanks to strengthened external demand, particularly in advanced economies, aided by continued policy support and robust vaccination drive. Trade deficit in FY21, however, contracted by a sharp 35% YoY to a 13-year low of US$102bn led by a steep drop in imports—weighed down by a stringent COVID-induced nation-wide lockdown implemented earlier in the year.

- **...But strong invisible receipts limited the downside in curr**ent account deficit: Net invisible receipts grew by 4% QoQ to US$33.6bn in Q4FY21 but fell by 6% on a YoY basis, thanks to strong steady software receipts and remittances as well as lower overseas investment income payments. This partly offset the significant widening of trade deficit in Q4FY21. Consequently, current account deficit widened to a seven-quarter high of US$8.2bn or 1% of GDP in Q4FY21, marking the second

consecutive quarter to report a deficit following a surplus in the previous three quarters. Looking at the annual figures, India's current account recorded the first ever surplus since FY04 of US$23.9bn (0.9% of GDP) in FY21 against a deficit of US$24.7bn (0.9% of GDP) in FY20, led by sharp contraction in trade deficit and higher software receipts.

- BoP surplus in Q4 shrinks to nine-quarter lows but stood at a 13-year high in FY21: The capital account balance moderated significantly to a three-quarter low of US$12bn (-64%QoQ/-29%YoY) led by tepid foreign investment inflows during the quarter, weighed down by global risk off sentiment prompted by surging global bond yields and COVID resurgence in several countries including India. Both net FPI inflows and net FDI inflows moderated significantly by 66%QoQ and 85%QoQ to US$7.3bn and US$2.7bn respectively. Among debt flows, banking capital outflows reduced to US$4.4bn in Q4 against net outflows of US$7.6bn in Q3. Net ECB flows turned positive after three quarters and stood at US$6.1bn in Q4FY21 against an outflow of US$1.1bn in the previous quarter. This led to the Balance of Payments (BoP) surplus moderating by 90%QoQ/82%YoY to a nine-quarter low of US$3.4bn in Q4FY21. In FY21, record-high FDI inflows and FII inflows into equities more than compensated for ECB and banking capital outflows, translating into a BoP surplus of US$87.3bn—the highest since the Global Financial Crisis (GFC).

Widening current account deficit coupled with tepid capital flows resulted in the BoP surplus falling by 90%QoQ/82%YoY to a nine-quarter low of US$3.4bn in Q4FY21.

BoP surplus in FY21 stood at a strong US$87.3bn—the highest since the GFC.

- Expect FY22 CAD at 1% of GDP: Strengthening external demand, aided by enhanced fiscal support and significant progress in vaccination drives, continues to provide a conducive environment for a sustained export growth momentum. Import growth, however, is expected to outpace exports in the wake of a) easing lockdown restrictions, b) increasing pace of vaccinations, c) rising crude oil and other commodity prices, and d) a favourable base. Consequently, we expect current account balance to slip into deficit again in FY22, with our estimate pegged at 1% of GDP assuming average crude oil prices at $65/bbl. This, along with moderation in foreign capital inflows amid emerging odds of a sooner-than-expected reversal in easy monetary policy conditions in the US, is expected to translate into a significantly lower BoP surplus this year.

Expect current account balance to slip into deficit again in FY22, with our estimate pegged at 1% of GDP, assuming average crude oil prices at US$65/bbl through the year.

- INR likely to face depreciating pressures: Emerging market currencies have come under pressure once again in the wake of hardening oil prices and dollar rally, thanks to a stronger US macroeconomic landscape and hawkish Fed commentary. The INR has been no different. Going ahead, deterioration in domestic growth prospects, coupled with lower BoP surplus, narrowing yield differentials amid potential global policy normalisation and a strong dollar, are likely to pose depreciating pressures on the INR. That said, adequate forex reserves (US$604bn as on June 18th, implying ~16 months of import cover), prompt policy intervention and moderate current account deficit should limit the downside.

Figure 131: Balance of Payments – Quarterly account

US$ bn	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21	Q3FY21	Q4FY21
Current account	-4.6	-15.0	-7.6	-2.6	0.6	19.0	15.1	-1.7	-8.2
CAD/GDP (%)	*-0.7*	*-2.1*	*-1.1*	*-0.4*	*0.1*	*3.8*	*2.4*	*-0.2*	*-1.0*
Trade balance	-35.2	-46.8	-39.7	-36.0	-35.0	-10.8	-14.8	-34.5	-41.7
Trade balance/GDP (%)	*-5.0*	*-6.6*	*-5.7*	*-5.0*	*-4.8*	*-2.2*	*-2.3*	*-4.7*	*-5.4*
Merchandise exports	87.4	82.7	80.0	81.2	76.5	52.4	75.6	77.2	91.3
Merchandise imports	122.6	129.5	119.6	117.3	111.6	63.2	90.4	111.8	133.0
Oil imports	32.4	35.4	29.9	31.5	33.8	13.2	18.8	21.9	28.7
Non-oil imports	90.2	94.1	89.7	85.8	77.8	50.0	71.6	89.9	104.3
Invisibles	30.6	31.8	32.1	33.4	35.6	29.8	29.9	32.8	33.6
Net services	21.3	20.1	20.9	21.9	22.0	20.5	20.9	23.6	23.5
Software earnings	19.9	21.0	21.1	21.5	21.1	20.8	22.0	23.4	23.5
Transfers	16.2	18.0	20.0	18.9	18.4	17.0	18.4	19.3	18.8
Investment income	-7.5	-7.0	-9.6	-8.1	-5.6	-8.3	-10.1	-10.9	-9.7
Other invisibles	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.9
Capital account	19.2	28.6	13.6	23.6	17.4	1.2	16.1	33.5	12.3
Capital acc./GDP (%)	*2.7*	*4.0*	*1.9*	*3.3*	*2.4*	*0.2*	*2.5*	*4.5*	*1.6*
Foreign investments	15.9	18.8	9.8	17.6	-1.8	-0.2	31.6	38.2	10.0
FDI	6.4	14.0	7.3	9.7	12.0	-0.8	24.6	17.0	2.7
FII	9.4	4.8	2.5	7.8	-13.7	0.6	7.0	21.2	7.3
Loans	10.3	9.6	3.1	3.1	9.9	2.7	-3.8	0.2	7.7
ECBs	7.5	6.1	3.3	3.2	10.3	-1.2	-3.9	-1.2	6.1
Banking capital	-8.1	3.4	-1.8	-2.3	-4.6	2.2	-11.3	-7.6	-4.4
NRI deposits	3.4	2.8	2.3	0.8	2.8	3.0	1.9	3.0	-0.5
Others	1.2	-3.2	2.5	5.2	13.8	-3.6	-0.4	2.8	-1.0
Errors & Omissions	-0.4	0.4	-0.9	0.6	0.9	-0.4	0.4	0.7	-0.7
Overall balance (BoP)	14.2	14.0	5.1	21.6	18.8	19.8	31.6	32.5	3.4

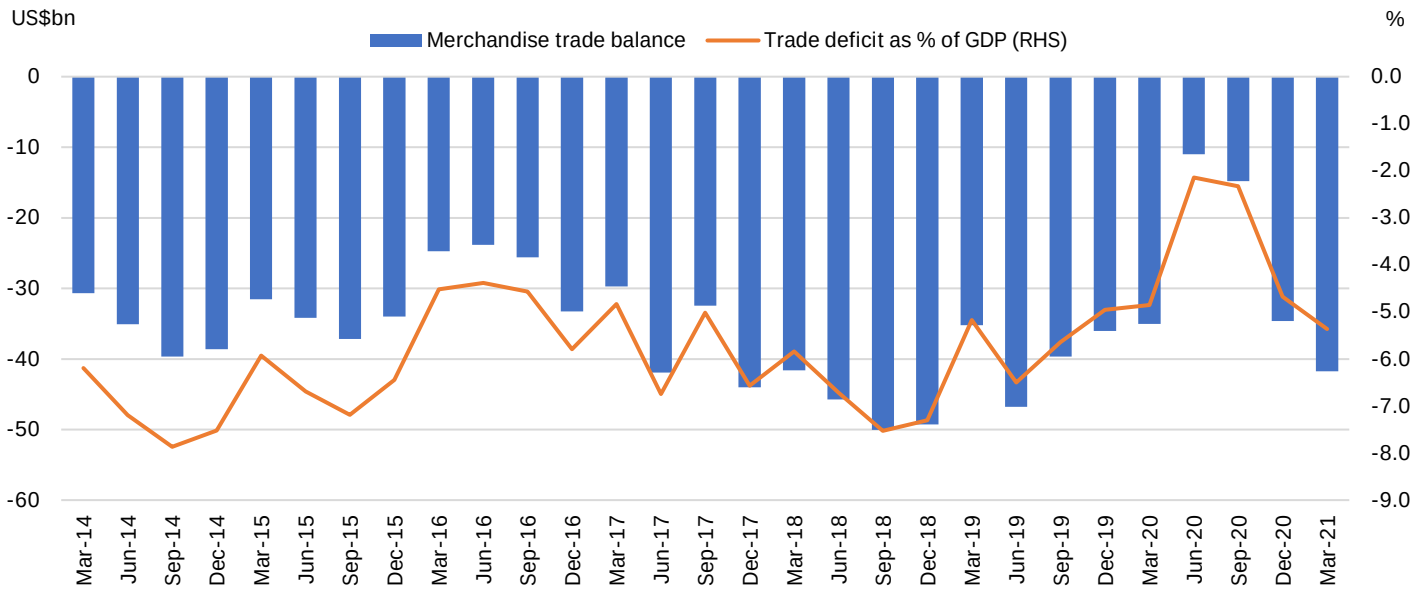
Source: RBI, CMIE Economic Outlook, NSE

Figure 132: Balance of Payments – Annual account

US$ bn	FY16	FY17	FY18	FY19	FY20	FY21	FY22E
Current account	-22.2	-14.4	-48.7	-57.3	-24.7	23.9	-29.8
CAD/GDP (%)	*-1.1*	*-0.6*	*-1.8*	*-2.1*	*-0.9*	*0.9*	*-1.0*
Trade balance	-130.1	-112.4	-160.0	-180.3	-157.5	-102.2	-158.9
Trade balance/GDP (%)	*-6.2*	*-4.9*	*-6.0*	*-6.6*	*-5.5*	*-3.8*	*-5.2*
Merchandise exports	266.4	280.1	309.0	337.2	320.4	296.3	373.1
% YoY	*-15.9*	*5.2*	*10.3*	*9.1*	*-5.0*	*-7.5*	*25.9*
Merchandise imports	396.4	392.6	469.0	517.5	477.9	398.5	532.0
% YoY	*-14.1*	*-1.0*	*19.5*	*10.3*	*-7.6*	*-16.6*	*33.5*
Oil imports	82.6	86.9	108.7	141.1	130.5	82.7	135.2
Non-oil imports	313.9	305.6	360.3	376.4	347.4	315.8	396.8
Invisibles	107.9	98.0	111.3	123.0	132.8	126.1	129.1
Net services	69.7	68.3	77.6	81.9	84.9	88.6	91.2
Transfers	62.6	56.0	62.4	69.9	75.2	73.5	75.7
Other invisibles	-24.4	-26.3	-28.7	-28.9	-27.3	-36.0	-37.8
Capital account	41.1	36.4	91.4	54.4	83.2	63.7	69.0
Capital account/GDP (%)	*2.0*	*1.6*	*3.4*	*2.0*	*2.9*	*2.4*	*2.3*
Foreign investments	31.9	43.2	52.4	30.1	44.4	80.1	52.0
FDI	36.0	35.6	30.3	30.7	43.0	44.0	40.0
FII	-4.1	7.6	22.1	-0.6	1.4	36.1	12.0
Loans	-4.6	2.4	16.7	15.9	25.7	6.9	10.0
Banking capital	10.6	-16.6	16.2	7.4	-5.3	-21.1	5.0
NRI deposits	16.1	-12.4	9.7	10.4	8.6	7.4	10.0
Others	3.2	7.5	6.1	1.0	18.4	-2.2	2.0
Errors & Omissions	-1.1	-0.5	0.9	-0.5	1.0	-0.3	0.0
Overall balance (BoP)	17.9	21.6	43.6	-3.3	59.5	87.3	39.2

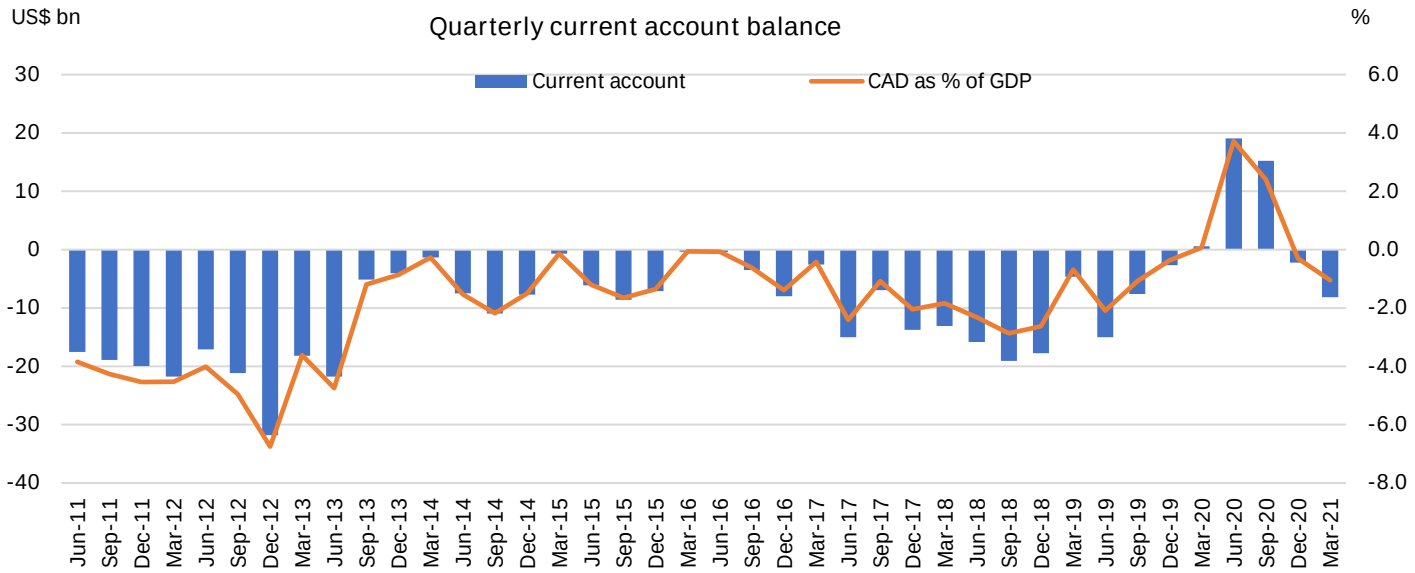
Source: RBI, CMIE Economic Outlook, NSE

Figure 133: Trade deficit widened further in Q4FY21...



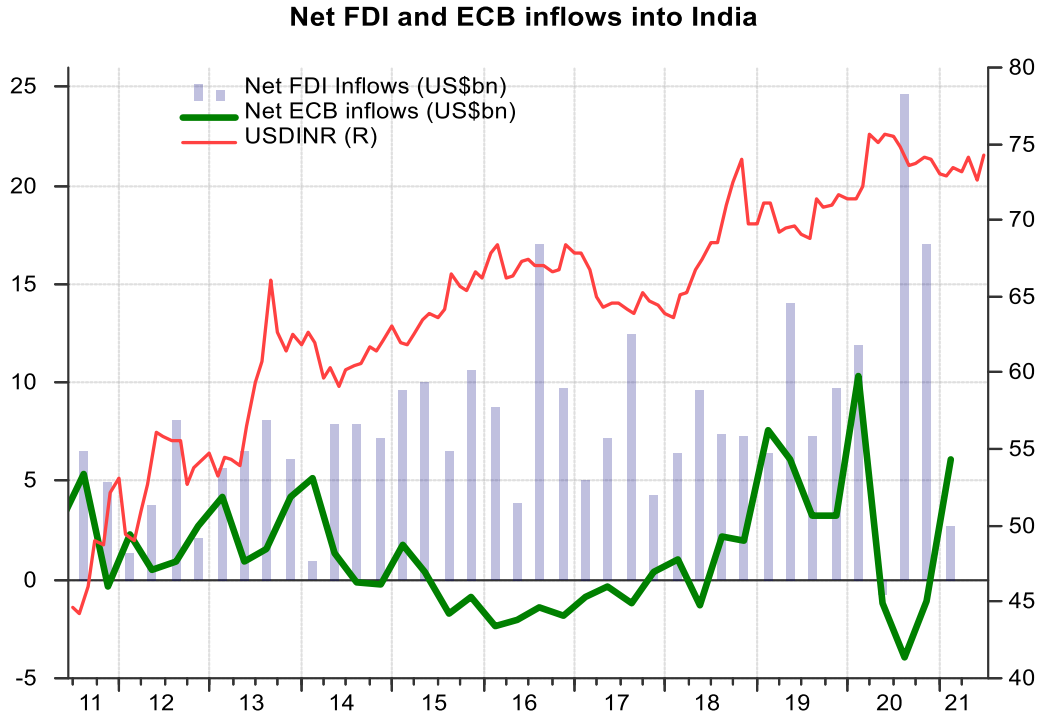
Source: RBI, CMIE Economic Outlook, NSE.

Figure 134: **...**pushing current account deficit to a seven-quarter high



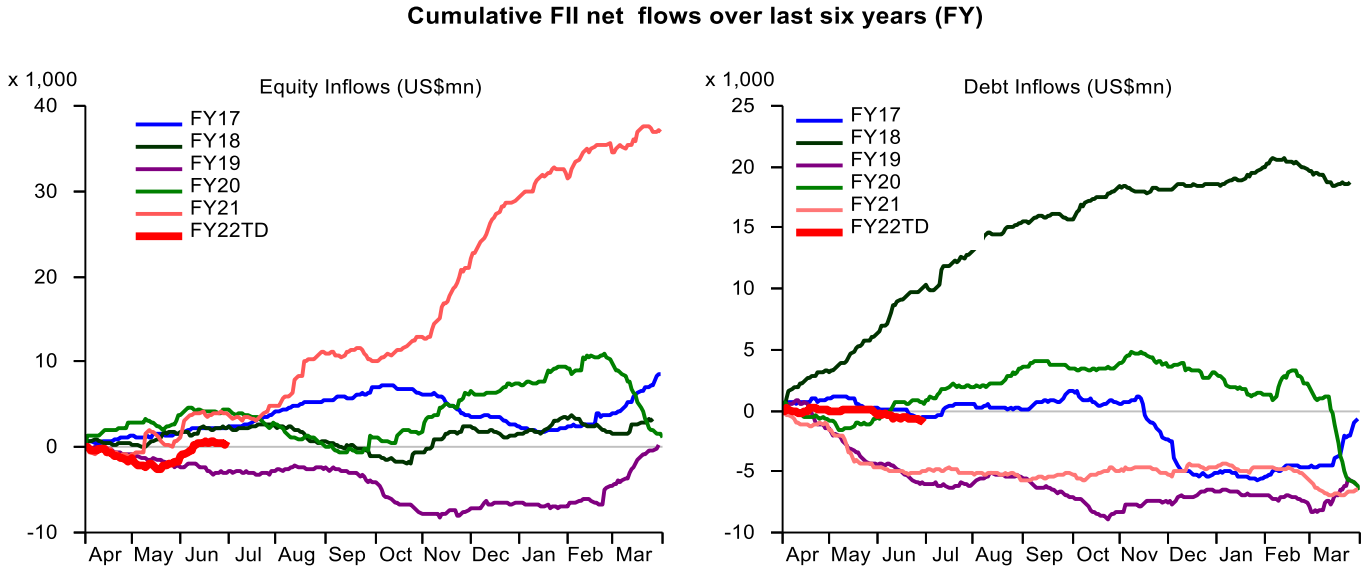
Source: CMIE Economic Outlook, NSE

Figure 135: After surging to record-high levels in Q2FY21, FDI inflows have been moderating since then



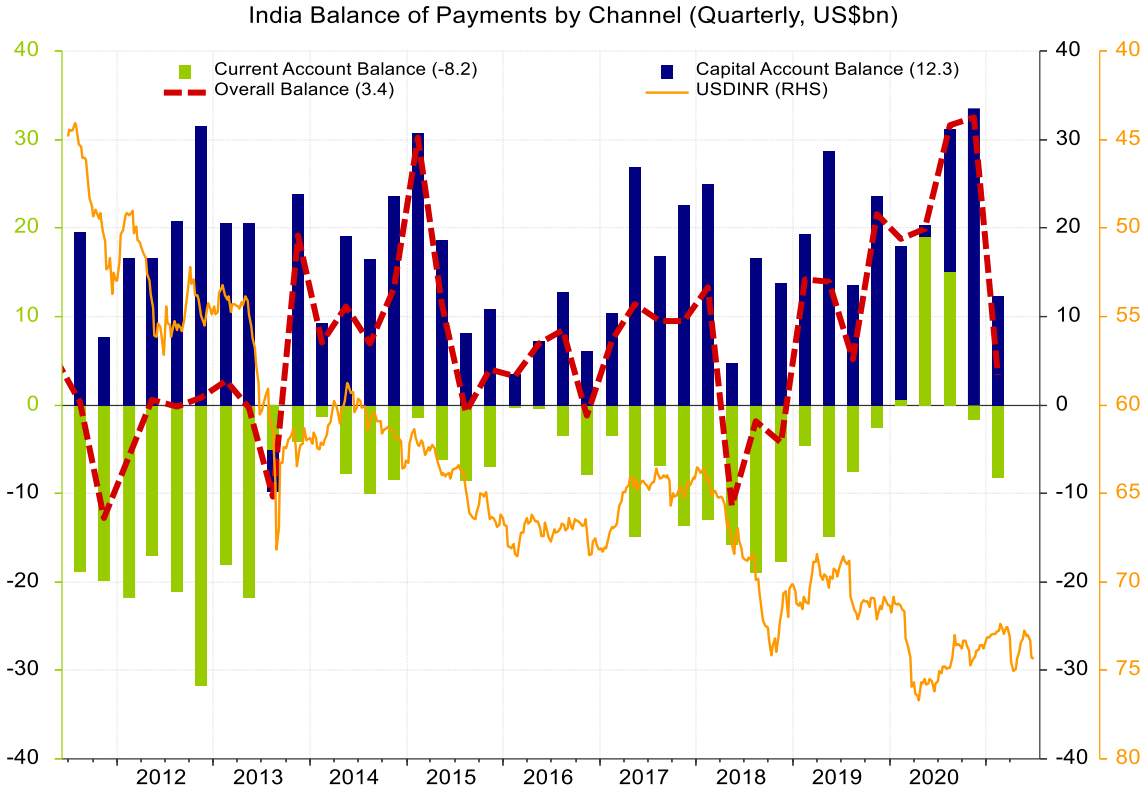
Source: Refinitiv Datastream, NSE

Figure 136: While FPI flows moderated in Q4FY21, cumulative flows into Indian equities where the highest ever in FY21



Source: Refinitiv Datastream, NSE

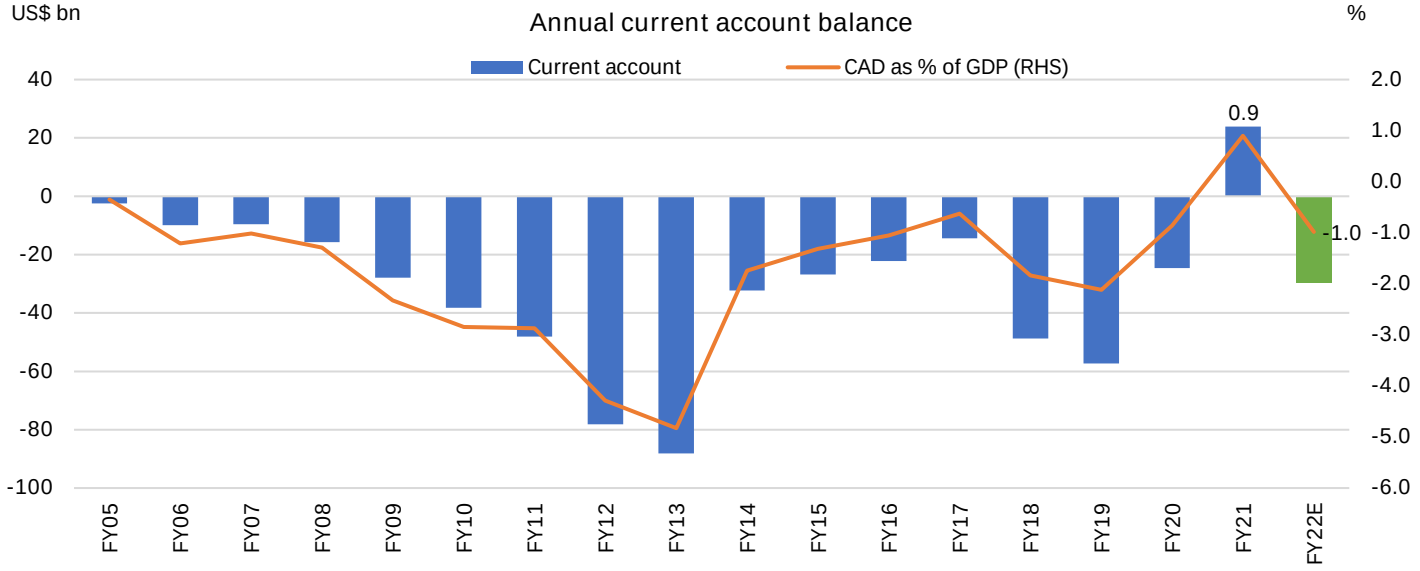
Figure 137: BoP surplus moderated sharply in 4QFY21 on widened trade deficit and tepid capital flows



Source: Refinitiv Datastream, NSE

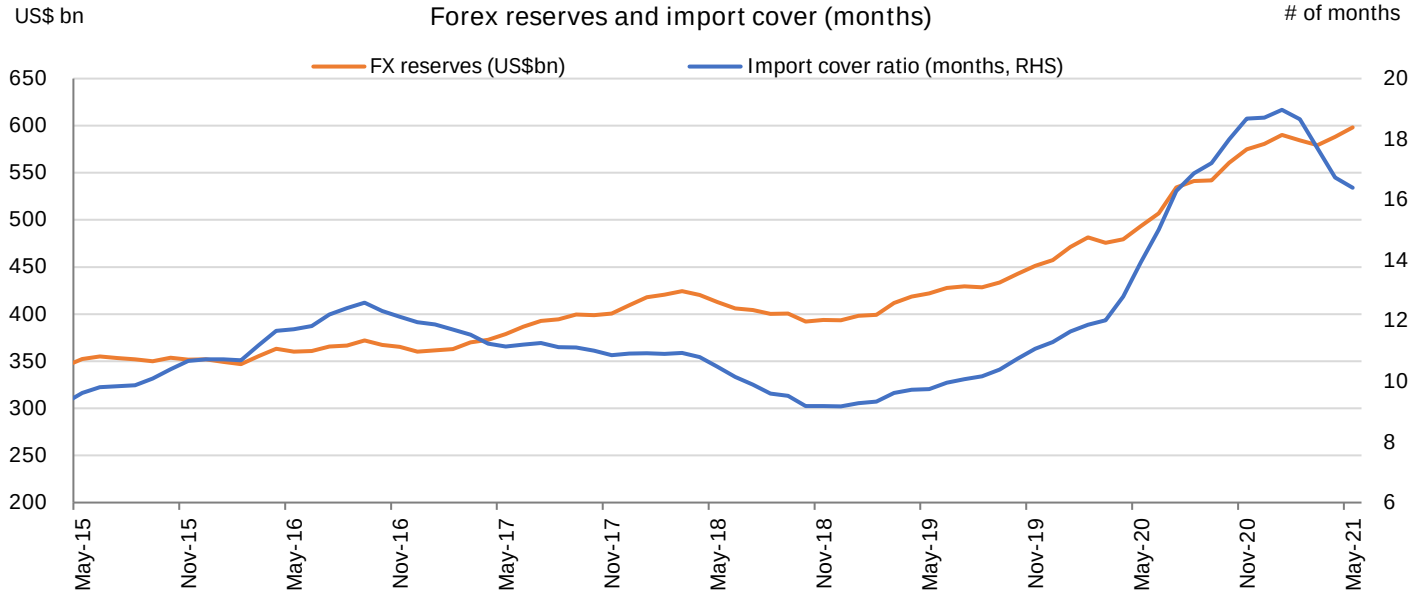
Figure 138: Current account surplus came in at 0.9% of GDP in FY21; expect deficit of 1.0% of GDP in FY22

India's current account recorded the first ever surplus since FY04 of US$23.9bn (0.9% of GDP) in FY21 against a deficit of US$24.7bn (0.9% of GDP) in FY20, primarily attributed to lower trade deficit and higher software receipts. In FY22, we expect current account to slip into deficit again, with our estimate pegged at 1.0% of GDP, reflecting higher non-oil imports and rising crude oil prices.



Source: Refinitiv Datastream, NSE

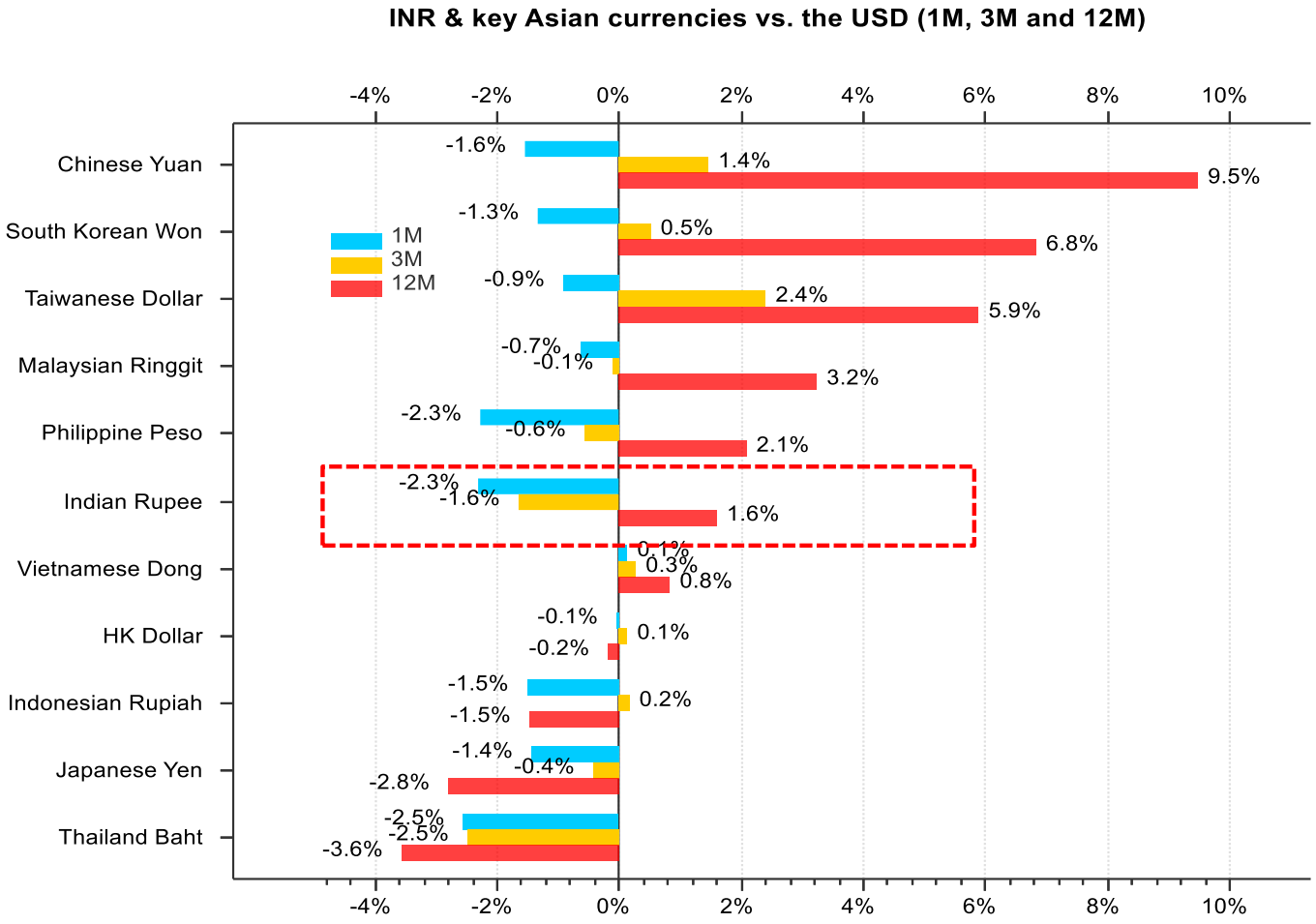
Figure 139: Forex reserves remain at more-than-adequate levels despite the recent drop



Source: Refinitiv Datastream, NSE

Figure 140: INR vs. other key Asian market currencies

Emerging market currencies have come under pressure once again in the wake of hardening oil prices and a stronger US macroeconomic landscape accompanied with hawkish Fed commentary, that has translated into dollar rally again. The INR has been no different. We expect INR to trade with a depreciating bias in the near future.



Source: Refinitiv Datastream, NSE

RBI MPC Minutes: Accommodative stance and liquidity support to continue

In the last policy review meeting, the RBI's Monetary Policy Committee (MPC) unanimously voted to keep the policy repo rate unchanged at 4% and maintain an accommodative stance for as long as necessary (Refer to our note titled "RBI Monetary Policy: Dovish pause; liquidity support strengthened and widened" for details). While expressing concerns about growth-related uncertainties and worrying results from recent surveys, the MPC members noted that the economic ramifications of the second wave have been relatively contained. Decentralized lockdowns prevented a major fall in economic activity as mobility indicators, e-way bills and digital payments have remained at higher levels as compared to last year. They expect economic activity to gather pace from Q2FY22 onwards, thanks to increasing vaccinations, strong performance of the agri sector, an expected recovery in exports and sustained policy support.

On inflation, the members expect the trajectory to remain within the MPC's tolerance band at 5.1% in FY22. That said, they reiterated the need for close monitoring of inflation levels to ensure implementation of timely policy measures to ease price pressures. The MPC members also addressed the growth-inflation tradeoff, noting that flexible inflation targeting allows for inflation to lie within a band while the committee support growth. The trade-off between growth and inflation might become significant when the CPI inflation starts setting in and elevated inflation expectations begin reflecting in inflation levels. We expect the RBI to overlook the recent spike in inflation trajectory and remain focused on reviving growth particularly in the wake of an impending third wave.

- Growth-related uncertainties **loom large...**: The RBI's survey of Consumer Confidence conducted in the last week of April and up to May 10th, 2021 indicated that a larger proportion of respondents considered economic conditions to be worse than a year ago, as compared to the same survey two months ago. Almost half of the respondents also believed that conditions would be a worse a year from now. Additionally, early results of the RBI's Industrial Outlook Survey for June 2021 indicate that the summary index of current business conditions for Q1FY22 while the index of expectations has also declined for Q2FY22. Estimated growth for FY22 has fallen to 9.8% from 11%, as forecasted in March 2021 by the RBI. On the positive side, Agriculture sector is expected to continue to do well like FY21, while export growth momentum is likely to remain strong thanks to strong economic recovery seen in India's major trading partners. This, along with increasing pace of vaccinations and sustained policy support, should lead to an improvement in economic activity from Q2FY22 onwards.
- **...**even as impact is expected to remain contained: The MPC members believe that the economic impact of the second wave will be limited. Decentralized lockdowns, increased vaccination in denser parts of the countries, normalized agricultural activity with a good monsoon and available migrant labour will make this possible. Loss of momentum in activity will be restricted to the first two quarters of FY22 as mobility indicators, e-way bills and digital payments have remained at higher levels as compared to last year
- Spike in inflation largely supply driven: Inflation rates have been above the 4% target for some time, but a large parto of this has been led by supply-side bottlenecks and rising fuel and global commodity prices. Easing of movement restrictions and efficient trade and logistics infrastructure will lead to reduced price pressures. Projected headline inflation rate for FY22 is 5.1% which falls within the tolerance band of the MPC. The RBI Governor felt that the inflation rate must be closely monitored given the uncertainties to the baseline path. Timely policy measures to address the second-order effect of higher fuel prices as well as edible oil and pulses will play an important role in bringing down inflation. MPC

members also felt robust surveys taken in normal times will give a clearer indication of whether increased household inflation expectations will create persistence in inflation.

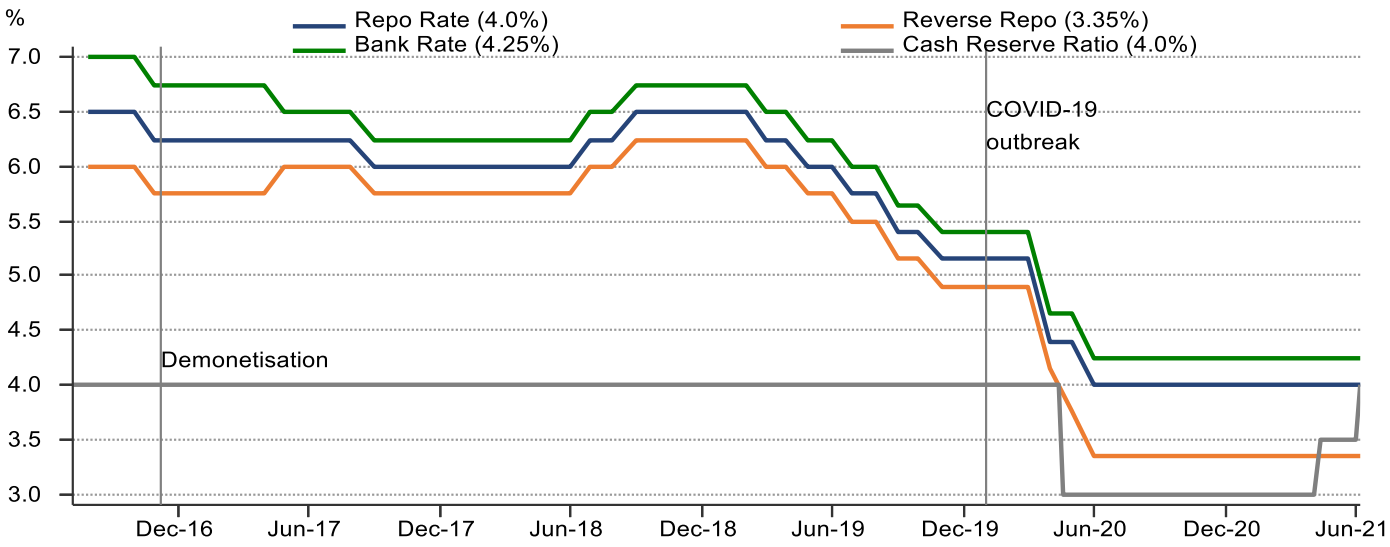
- Growth inflation trade-off: The MPC can continue to support growth since flexible inflation targeting allows inflation levels to be within a tolerance band. Even though there are risks due to price pressures at the WPI level, pass-through of cost push inflation has remained muted and credit growth remains low. The growth-inflation trade-off might become significant when the CPI inflation starts setting in and elevated inflation expectations begin reflecting in inflation levels.
- Implications for monetary policy: The MPC must continue to wait data on actual outcomes to respond wisely to shocks in the future. The adjustment must be gradual while also keeping in mind that monetary policy acts with long lags. The members also acknowledged two important implication for monetary policy going forward. Since the fall in demand is greater than the fall in supply, demand side pressures on inflation will ease due to a widening output gap. Also, weak demand coupled with a somewhat normal supply side can reduce firms' pricing power. Global price pressures might be temporary but global recovery is uneven and riddled with uncertainties. Policy support will be required to support growth and encourage a quicker return to normalcy. The members also noted the need for forward guidance to help with reviving growth.

Figure 141: Current policy rates

Key rates	Current value
Repo Rate	4.0%
Reverse Repo Rate	3.35%
Marginal Standing Facility (MSF) Rate	4.25%
Bank Rate	4.25%
Cash Reserve Ratio (CRR)	3.0%
Statutory Liquidity Ratio (SLR)	18.0%

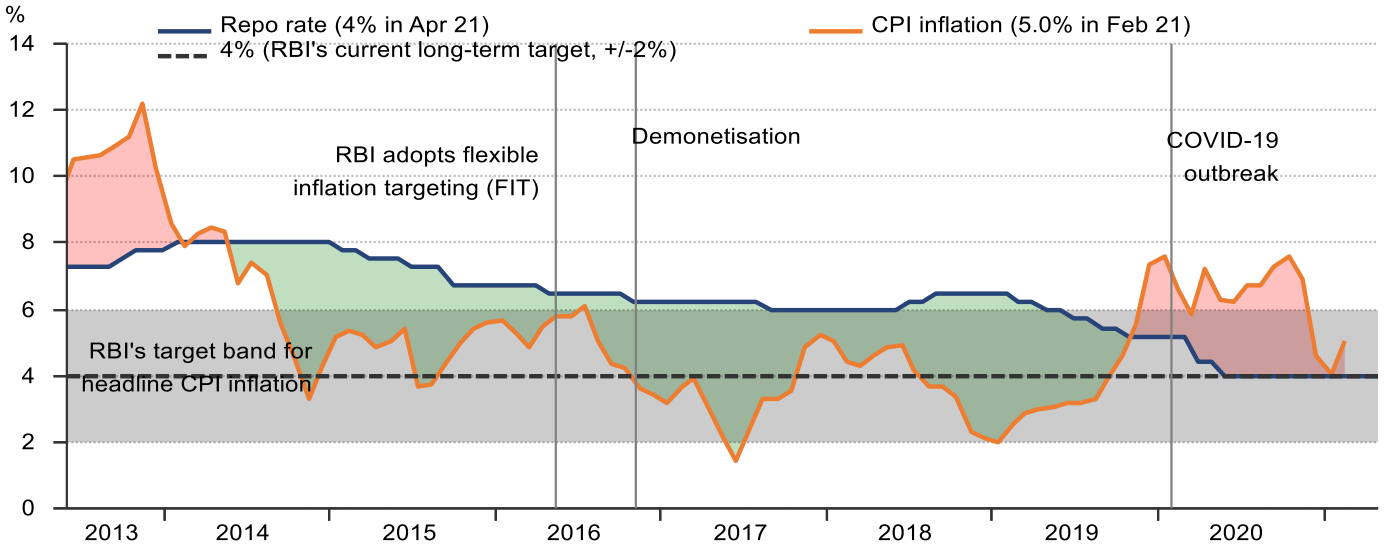
Source: RBI

Figure 142: Policy rates kept unchanged in the June review meeting



Source: Refinitiv Datastream.

Figure 143: Real interest rates have remained negative for more than a year now



Source: Refinitiv Datastream.

Figure 144: Views of erstwhile MPC members from December 2019 to August 2020 review meetings

Members	December 2019 MPC	February 2020 MPC	March 2020 MPC	May 2020 MPC	August 2020 MPC
Dr. Chetan Ghate					
Growth	Weakness in growth remains broad-based. Industrial Outlook Survey shows persistence of pessimistic demand conditions in Q3FY20.	Broader economic activity is beginning to show preliminary signs of a turn-around. Tighter monetary conditions important to meet the 4% target.	Acute downside risks to growth have mounted due to COVID-19 and lockdown measures. A large decline in global growth to also affect exports adversely.	Since the last review, several high frequency indicators have declined sharply. This has not only led to a large negative output gap but also a drop in potential output.	Since the last review, economic activity has seen a gradual. In terms of output loss, the worst is behind us even as the underlying damage is difficult to diagnose.
Inflation	Inflationary expectations have risen sharply on account of spike in food prices. Low service inflation is unlikely to sustain.	Inflationary expectations have moderated. The current spike in CPI inflation is temporary, but future prints should be carefully watched	New disinflationary pressures have emerged due to drop in crude oil prices and demand slowdown. Supply-side disruptions in the food sector poses an upside risk	Supply-side pressure in the food sector remains a concern. COVID-19 imparting a deflationary shock is unclear. Both 3-month and 1-year ahead inflationary expectations have spiked sharply.	Inflation has remained above the RBI's upper band of 6% for the last six months. There are different inflationary and deflationary pressures that need to be watched carefully going forward.
Policy action	Pause; stance: accommodative	Pause; stance: accommodative	50bps cut; stance: accommodative	25bps cut; stance: accommodative	Pause; stance: accommodative
Dr. Pami Dua					
Growth	Consumption and investment activity remain weak. Steeper decline in imports vs. exports indicates a more acute slowdown in domestic vs. global demand.	There are some signs of a modest revival, even as overall economic activity continues to remain weak. Credit flow to the commercial sector has picked up in last two months.	Lockdown has brought economic activity to a standstill. There are ramifications stemming from supply side disruptions, demand contraction, slowdown in global growth and a loss in consumer/ investor confidence.	COVID-19 induced lockdown has led to a collapse in economic activity, which has come to a near standstill. Except for agri, economic activity may continue to remain sluggish even after the lifting of the lockdown.	Some signs of recovery were visible in June but localised lockdowns have been restraining growth. The restoration of economic activity depends on how soon supply disruptions are repaired and demand revives.
Inflation	Headline inflation is projected to rise in the near-term, but moderate to below target by Q2FY21.	Inflation is expected to moderate but remain at elevated levels. Supply disruptions in China poses upside risk.	CPI inflation trajectory is heading downwards on easing food prices, collapse in crude oil prices and weakening aggregate demand.	Headline inflation is expected to ease in H2 FY21 and fall to sub-4% led by low crude oil prices, and weak demand.	Inflation is expected to remain high in Q2 and then moderate in H2. Prints over the next few months are crucial to

					gauge supply/demand disruptions on prices.
Policy action	Pause; stance: accommodative	Pause; stance: accommodative	50bps cut; stance: accommodative	40bps cut; stance: accommodative	Pause; stance: accommodative
Dr. Ravindra H. Dholakia					
Growth	Green shoots visible. RBI's forecast points at growth slowdown bottoming in Q2FY20 and recovering gradually in Q3/Q4 and FY21.	Growth slowdown may be prolonged, and the real growth may remain sub-7.5% for the next couple of years leading the negative output gap to expand.	Prolonged lock-down has adverse economic and social implications. FY21 GDP growth may range between 4 to 4.5%, leading to further widening of output gap.	FY21 growth to fall into the negative zone for the first time in 40 years. Nominal GDP may also fall -reflected in fall in demand, and high unemployment.	The economy is caught in a deep stagflation where the supply shock is much more adverse than demand shock.
Inflation	Headline inflation expected to remain above the 4% target and closer to the upper bound of the target range over next 2-3 months.	Inflationary expectations of households and businesses show a diverging trend. RBI's inflation est. four quarters down is 3.2%.	Headline CPI inflation by Q4FY21 is expected to be only around 2.5%, making the current real policy rate unduly high.	Inflation to fall to 2.8% in Q4FY21. Real policy rate in India is very high at ~1.2-1.6% vs. other countries where it is zero or negative.	Easing policies during stagnation first leads to higher inflation and then output expansion. Imputed inflation for Mar-May ignores the huge change in consumption patterns during lockdown, thereby providing misleading signals.
Policy action	Pause; stance: accommodative	Pause; stance: accommodative	75bps cut; stance: accommodative	40bps cut; stance: accommodative	Pause; stance: accommodative
Dr. Mridul Saggar					
Growth					Downside risks to growth forecasts are high. "The recovery path is linked to the course the pandemic might take and a full normalisation will be difficult till pandemic is overcome."
Inflation					Recent inflation prints have elements of fuzziness. "Risks to inflation arise from price stickiness and supply disruptions." "It remains to be seen how much inflation falls later in the year due to demand destruction, base effects and improved supplies."
Policy action					Pause; stance: accommodative
Dr. Michael Debabrata Patra					
Growth	Weakness in overall activity may likely prolong into Q3. However, the upturn in retail inflation calls for a pause, leaving scope for calibrated policy actions in future.	Activity remains weak, with some signs of growth stabilising, but they are far from gaining economy-wide traction. Coronavirus outbreak poses new risks.	Economic dislocations due to COVID-19 are severe. Prospects for the economy now hinge around how pervasive and severe COVID-19 turns out to be, and how long it lasts.	"The damage due to COVID-10 is so deep and extensive that India's potential output has been pushed down, and it will take years to repair."	Outlook remains grim, with recovery expected to be slow and hesitant. The situation is likely to worsen before it gets better, with sustained policy support crucial for a durable recovery.
Inflation	Inflation is expected to rise further over next 2-3 months. Persistence of high food inflation	"The breach in the upper tolerance band of the MPC's inflation target band in the Dec	"..Inflation has peaked and will likely ease well below the target in the second half of 2020-21."	Persisting drop in GDP growth to keep core inflation benign. Spike in food prices can be	"..inflation surprises of recent months are undermining the MPC's actions.." "Imputation of headline inflation,

	and its spill-over into non-food is a key risk.	print may well recur in the months ahead."		looked through for policy purposes	supply disruptions and continual cost push interventions in price formation has complicated the MPC's conduct"
Policy action	Pause; stance: accommodative	Pause; stance: accommodative	75bps cut; stance: accommodative	40bps cut; stance: accommodative	Pause; stance: accommodative
Shri Shaktikanta Das					
Growth	Activity has weakened further with GDP growth in Q2 declining for the 6th quarter in a row. Beyond Q2, however, some positive signs have emerged.	Demand conditions remain weak, even as some green shoots are visible. Global activity has slowed down, with weakened prospects due to Corona virus.	Growth impulses face strong headwinds from sluggish demand and disruptions in supply of labour and key inputs. Erosion of consumer/ investor confidence may worsen the growth outlook even further.	Growth in FY21 to fall into negative zone. While supply side is expected to ease gradually as lockdown is lifted, demand side will continue to weigh on economic activity for some time to come.	Economic outlook remains uncertain even as the recent data has shown some recovery. Recovery going forward would depend on containment of COVID-19 and unlocking of economic activities.
Inflation	Inflation has surged in last 3 months reflecting a spike in vegetable prices, leading to rise in inflationary expectations. Benign core inflation suggests weak demand.	Headline inflation rose for the 5th consecutive month led by a surge in vegetable prices but is expected to moderate. Nevertheless, inflation uncertainty remains high.	Weak demand outlook and lower crude oil prices should keep upside risks to inflation firmly contained, even in the face of temporary supply chain disruptions.	Price pressures to moderate amid weak demand conditions, easing of supply issues in the food sector and a sharp drop in crude oil prices.	Near-term price pressures are likely to continue due to cost-push factors and supply disruptions. Generalised inflationary pressures in times of recession is a matter of concern.
Policy action	Pause; stance: accommodative	Pause; stance: accommodative	75bps cut; stance: accommodative	40bps cut; stance: accommodative	Pause; stance: accommodative
Dr. Janak Raj					
Growth		Domestic activity has remained weak due to reduced investment and consumption demand. Some high-frequency indicators, however, show a modest turnaround.	"..Though difficult to quantify, it is clear that aggregate demand will weaken significantly in the near future, which will impact the growth prospects for the year as a whole."	"..Economic activity is expected to contract in 2020-21. While supply lines are likely to be restored as lockdown is relaxed, demand would take far longer to revive to pre-COVID levels."	
Inflation		Headline inflation surged due to spike in vegetable prices. Inflation expectations have moderated but still remain elevated.	Barring near-term pressure, inflation outlook has turned benign due to demand slowdown and a sharp drop in crude oil prices.	Inflation over the medium-term is expected to be benign due to fall in crude oil prices and collapse in domestic demand.	
Policy action		Pause; stance: accommodative	75bps cut; stance: accommodative	40bps cut; stance: accommodative	
Shri Bibhu Prasad Kanungo					
Growth	Q2 GDP growth was weaker than projected earlier. High frequency indicators point to continued weakness in Q3. Some green shoots are emerging.				
Inflation	Temporary demand-supply imbalance led to a spike in food inflation. CPI inflation to rise in H2 but fall below the target in Q2FY21.				
Policy action	Pause; stance: accommodative				

Source: RBI.

Figure 145: Views of new MPC members during last four review meetings

Members	October 2020 MPC	December 2020 MPC	February 2021 MPC	April 2021 MPC	June 2021 MPC
Dr. Shashanka Bhide					
Growth	Macro indicators point towards a recovery in Q2. RBI surveys indicate an expected improvement in capacity utilization and demand conditions. GDP is expected to see a sustained revival, with growth turning positive by Q4.	Recovery in Q2 over Q1 was broad-based. Sustenance of this requires support from domestic demand amidst uncertain external demand conditionsm, which in turn requires both fiscal support and decline in COVID threat.	Sustained growth is dependent on agri growth and output levels of industry and services reaching levels of H2FY20. Recovery is still nascent and requires internal and external support while the pattern of recovery across sub-sectors indicates that it will be sustainable.	Substantial pace of output recovery needed to offsset economic impact of the pandemic. Agriculture and allied activities have been an important source of growth during FY21. Broad based recovery needed to sustain revival seen in Q3FY21.	Disruption in economic activities due to the second wave have required revaluation of growth prospects in the medium term. RBI surveys indicate a dip in consumer and business sentiments.
Inflation	Food and fuel main cause of elevated inflation trajectory. Measures to fix supply-side bottlenecks needed to reduce cost pressures on prices.	Supply chain disruptions are largely responsible for high inflation, which is primarily led by food inflation. Indirect taxes on petroleum fuels have kept transport costs high.	Core inflation has remained between 5.4-5.9% between Jul-Dec'20. Good rabi crop likely to put downward pressure on food prices. Easing non-food inflation will require supply chain improvement and increase in consumer demand.	Headline inflation dropped below 6% for three months in a row since December 2020. RBI's Inflation Expectations Survey indicate higher inflation expectations for the next three months and one year ahead as compared to the previous survey.	Rising fuel and global commodity prices increase production and distribution costs. Easing inflation will require reduced movement restrictions and better trade and logistics infrastructure.
Policy action	Pause; stance: accommodative	Pause; stance: accommodative	Pause; stance: accommodative	Pause; stance: accommodative	Pause; stance: accommodative
Dr. Ashima Goyal					
Growth	Sharp fall in growth due to COVID but this is a chance to loosen current financial conditions. Greater demand needed to bridge output gap. The Govt. has some room to increase spending and encourage private investment.	Measures to ensure availabilty of liquidity helped firms survive and revive demand so growth in Q2 is above expectations. Firms have begun to invest but will take a year to reach pre-COVID GDP level.	Growth has exceeded market expectations since Dec'20 but output remains below 2019 levels. There continues to be excess capacity and supply chains have room to normalize further.	Growth uncertainty has increased with the second wave of COVID-19. Growth in FY22 must make for widespread employment and drop in income levels seen in FY21.	Economic impact of second wave is limited due to decentralized nature of lockdowns. Normalized agriculture with a good monsoon and available migrant labour will help boost economic activity.
Inflation	Above target but recovery of supply-side issues, good rainfall and appropriate reforms should ease inflation.	Headline inflation came in above expectations due to supply shocks but forecasted to soften in H2FY21.	Headline inflation come in below expectations on lower food prices. Core inflation remains near the upper band due to global supply chain disruptions and cost-push factors	Headline inflation expected to stay within the RBI MPC's tolerance band but core inflation has seen an upward trend. Oil prices seem to have stabilized. Higher WPI inflation is a concern.	Surveys conducted under more normal circumstances will give a better understanding of consumer sentiments and the effect of a prolonged increase in inflation expectations on inflation levels.
Policy action	Pause; stance: accommodative.	Pause; stance: accommodative.	Pause; stance: accommodative	Pause; stance: accommodative	Pause; stance: accommodative
Prof. Jayanth R Varma					
Growth	Investments were weak pre-COVID requiring a long term response in interest rates. Concern	Sectors with more competition have been badly affected while larger, more prominent	Growth has fallen within the range of expectations of the MPC.	Economic recovery is uneven and incomplete, and the second wave is	We are past the peak of the second wave and economic recovery should

	about high long-term rates harming the economy.	firms have stayed afloat. Short term rates below 3% come at a risk of speculatory inventory build-up.		a risk to the growing momentum of recovery.	resume soon. Increased precautionary savings due to the health shock could reduce demand for several quarters going forward.
Inflation	"One of the hallmarks of a credible inflation targeting regime is a substantial compression of the inflation risk premium."	Reduction in short term rates and failure to comply with the policy corridor comes at a risk of higher inflation.	Inflation outcomes have fallen within the range of expectations of the MPC.	Inflation rates have been above the RBI's 4% target and projected to stay elevated for some time.	Inflation rates have been above the 4% target for a while and are forecasted to stay elevated. Supply side pressures seem to be the driving force.
Policy action	Pause; stance: accommodative.	Pause; stance: accommodative.	Pause: stance: accommodative	Pause: stance: accommodative	Pause; stance: accommodative
Dr. Mridul K Saggar					
Growth	Improvement in macroeconomic indicators is encouraging but well below pre-COVID levels. Expect output gap to close only in H2FY22.	Growth might turn positive by Q4 but will remain below trend. Improvement in high-frequency indicators could be a result of pent-up demand. Higher fiscal spending by end of FY21 could provide additional support to growth.	Growth has been faster than expected. Majority of manufacturing/ rural indicators have normalised past pre-pandemic levels but services dependent on tourism and transport are well below those levels. Output gap is likely to close only by FY22-end efforts directed towards output expansion should continue.	Projected growth of 10.5% in FY22 is primarily off a low base. Consumption and investment must be encouraged as well as capacity utilization, which remains below the long-term average. The economic recovery seen in Q3FY21 is beginning to lose steam.	Mobility indicators, e-way bills and digital payments have remained higher on a year-on-year basis than last year. Impact on informal eocnomy might be greater than indicated by the GDP estimates.
Inflation	Currently above the upper limit of the tolerance band and caused by supply-side disruptions, rising gold prices and fuel taxes.	Inflationary pressures have persisted primarily led by food inflation due to unseasonal rains and remain supply driven.	Most of the food-price correction in CPI has already happened. Cost-push increases from higher crude oil prices might feed into costs. Upside risk to inflation from core inflation remaining sticky at an elevated level.	Inflation has been on an upward trend led by core and fuel inflation. The FAO price index for food is higher by 275% and for edible oils by 89.4%.	
Policy action	Pause; stance: accommodative.	Pause; stance: accommodative.	Pause: stance: accommodative	Pause: stance: accommodative	Pause; stance: accommodative
Dr. Michael D Patra					
Growth	Indian economy has entered a technical recession for the first time ever and growth post the pandemic could follow a different pattern. Monetary and fiscal policy face tightening constraints.	"Economic activity is recovering but hesitantly and unevenly. This warrant continuing policy support till it is set on a firm trajectory of self-sustaining expansion."	Est. GDP growth may have turned positive in Q3 following a jump in Govt. expenditure and recovering exports. Capacity utilization is rising but growth will require continued policy support until investment and consumption stabilize.	Risks to economic recovery have increased after the second wave. Monetary policy must remain supportive of the economy until the recovery is even.	Supply conditions have remained robust through the second wave but aggregate demand has been affected.
Inflation	Headline inflation, above upper limit since June 2020, led by supply	Inflation will remain on an elevated trajectory while firms keep margins high in order to earn	Headline inflation can fall further if vegetable prices continue to ease, while core inflation	Inflation was aligned with the 4% target during Dec-Jan'21 but rose in Feb'21,	Input pressures will keep core inflation elevated but pass through to

	pressures and cost pushes.	income lost during the pandemic.	remains elevated and will require close monitoring.	reflecting input cost pressures; FY22 figure to stay within the target band.	retail inflation will probably be incomplete and delayed with weak demand conditions.
Policy action	Pause; stance: accommodative.	Pause; stance: accommodative.	Pause: stance: accommodative	Pause: stance: accommodative	Pause; stance: accommodative
Shri Shaktikanta Das					
Growth	High-frequency indicators indicate an improvement, most likely to be led by rural demand. Improvement in capacity utilization is encouraging but risk of a second COVID wave could slow recovery. Expect growth to turn positive by Q4.	High-frequency indicators signal recovery led by higher rural demand but remain below FY20-levels. Hopes of an early vaccine have been encouraging. Capacity utliization has improved in manufacturing but investment demand needs to gain momentum.	Growth is uneven but gathering momentum. High frequency indicators signal a fast recovery in urban and rural areas. Agricultural sector has stayed resilient while manufacturing activity is picking up. Policy support needed to ensure recovery is broad-based.	Global growth is recovering, reflecting divergence in COVID scenarios, vaccination drives and fiscal packages announced. Indian economic recovery continues—agriculture remains strong while manufacturing and services continue to normalize.	Decentralized retsrictions allowed manufacturing and industrial activity to continue. The pause in economic activity will be temporary and restricted to Q1FY22. Agriculture is expected to perform well in FY22 as well.
Inflation	Above 6% threshold led by food inflation, additional costs borne by firms and shortage of labour. Expect food inflation to moderate in the coming months.	Inflation has been unrelenting and highlights crucial role played by monetary policy in these times. Need measures to curb supply side pressures and dampen food inflation.	Softening of inflation has been led by food inflation levels while non-food and fuel inflation has remains elevated. Near term headline inflation outlook has improved.	Correction in food inflation helped headline inflation normalize, before increasing in February again. Core inflation remains on an elevated trajectory.	Inflation must be monitored closely with timely policy measures to bring about a softening of price pressures when needed.
Policy action	Pause; stance: accommodative.	Pause; stance: accommodative.	Pause: stance: accommodative	Pause: stance: accommodative	Pause; stance: accommodative

Source: RBI.

RBI Financial Stability Report: Significant risk to asset quality in the next year

The RBI's half-yearly Financial Stability Report (FSR)[7] highlights the macro-financial risks faced by the domestic and global economy. Government debt, as a response to the pandemic-induced economic damage, touched record highs in 2021. MSME sectors in many countries are at potential risk due to a rise in non-performing loans (NPAs) as regulatory support eases. In India, credit growth has remained weak due to continued risk aversion and weak demand conditions and continues to be driven by growth in personal loans. Probability of default for corporate and retail obligors rose in FY21, with the latter showing the highest rise. The FSR notes that asset quality has largely remained the same in FY21 and there was no major restructuring by banks under the COVID-19 resolution framework. Stress tests conducted by the RBI, however, indicate that the GNPA is expected to rise to 9.8% even under the baseline scenario. Asset quality of the NBFC sector showed an improvement even as downside risks remain significant. The System Risk Survey (SRS) revealed that most respondents expected the condition of the banking sector to deteriorate in the next year. Potential risks to financial stability include continued accommodative monetary policy and higher inflation expectations, as well as restrictions imposed in states that are significant contributors to GDP and GST collections.

- Credit growth remained weak due to continued risk aversion and subdued demand: The general environment for bank credit continued to be weak through the pandemic, thanks to risk aversion amongst borrowers and muted demand for loans. Over the last few years, the share of the industrial sector in total bank credit has seen a fall, from 42.7% in 2014 to 28.9% in 2021, while credit growth has been driven by a rise in personal loans, from 16.2% in 2014 to 26.3% in 2021. Bank credit to the private corporate sector has fallen for the second consecutive year while credit growth in the MSME sector was boosted by the ECLGS scheme, with private sectors banks (PVBs) and public sector banks (PSBs) recording a credit growth of 0.9% and 9.2% respectively.

Bank credit growth fell marginally from 5.9% in Mar'20 to 5.4% in Mar'21.

- **India's relative** position worsened in FY21: A comparison between France, Germany, Italy, UK, Canada, US, and India indicates that the adjusted probability of default (weighted average) for overall corporate obligors increased for all listed countries except Italy. Probability of default for SME obligors remained largely the same, barring France, Italy and India. The same indicator shows a significant increase in probability of default for retail obligors for India while other countries have performed well, partly reflecting the support extended during the pandemic.

- Asset quality remained stable in FY21 but expected to worsen in FY22: The overall Gross NPA ratio remained at 7.5% as on March-end, same as reported in Sep'20, but fell noticeably from 8.4% in Mar'20. The Net NPA ratio, however, has marginally increased from 2.1% in Sep'20 to 2.4% in Mar'21, thanks to lower provisioning. There was no major restructuring by banks under the COVID-19 resolution framework. In absolute terms, gross NPAs fell by 5.9%, primarily led by an 8.4% fall in PSBs' bad loans. Sector-wise, agriculture and industry witnessed a fall in their GNPA ratio while that for personal loans inched up. Stress tests conducted by the RBI indicate that the GNPA ratio is expected to jump to 9.8% under the baseline scenario and 11.2% under a scenario of severe stress.

Asset quality at the system level remained stable in FY21 and a fall in PSBs bad loans is noted. RBI's macro stress tests point to GNPA ratio rising from 7.5% in Mar'21 to 9.8% in Mar'22 under the baseline scenario.

  The FSR also notes that the share of Special Mention Accounts (SMA) in the MSME sector have increased for PSBs since Dec'20. The share of SMA-0 and SMA-1 increased from 7.8% and 5.6% in Dec'20 to 10.6% and 9.2% in Mar'21

[7] Please refer to the detailed report here.

respectively, indicating worsening asset quality. Thus, there remains a high degree of stress in the MSME portfolio of public sector banks.

- Capital position improved in FY21 and expected to remain strong even under severe stress: There has been an observed improvement in the capital to risk weighted assets ratio (CRAR) in FY21 due to a recorded increase from 14.7% in Mar'20, 15.8% in Sep'21 and 16% in Mar'21. CRAR in Mar'22 is expected to fall marginally to 15.5% under the RBI's baseline scenario and remain at comfortable levels even under medium stress and severe stress scenarios. The RBI reports that all banks would be able to maintain a CRAR above the minimum requirement even under the severe stress situation. Banks' provision coverage ratio (PCR) has held up well, falling only slightly from 72.4% in Sep'20 to 68.9% in Mar'21 led by a decline in provision coverage ratios at private sector and foreign banks.

CRAR is expected to decline from 16% in Mar'20 to 15.5% by Mar'22 under the baseline scenario.

- Systemic Risk Survey (SRS) revealed worries about banking sector and impact of second wave: The RBI conducted the System Risk Survey (SRS) in April-May 2021 and broad categories of risks to the financial system were perceived as 'medium' by the panellists. However, risks for sub-categories such as commodity price risk, domestic growth and inflation, fiscal deficit, corporate vulnerabilities, equity price volatility credit growth, banks' asset quality, capital requirements and cyber were perceived to be 'high'. The survey revealed that a majority of the respondents expected a deterioration in growth of the Indian banking sector over the next year along with a fall in credit demand over the next three months due to restrictions and delayed discretionary spending by consumers. Respondents of the survey also had very clear sentiments about the second wave having an adverse effect on employment, productivity, and wages in the short-term.

- Asset quality of NBFC sector improved but risks remain significant: The GNPA and NNPA ratios for NBFCs fell from 6.8% and 3.4% in Mar'20 to 6.4% and 2.7% in Mar'21 respectively. The capital adequacy ratio for NBFCs also improved in FY21, from 23.7% in Mar'20 to 25% in Mar'21. There was also an 8.8% growth on a YoY basis in credit extended by NBFCs during FY21. This followed a year of weak demand due to major events in the sector. The GNPA and capital adequacy ratio in Mar'22 is expected to improve further to 5.2% and 25.1% respectively, under a baseline scenario. The RBI conducted a system level stress test of the NBFC sector which indicated a rise in the GNPA ratio to 6.3% and a largely stable capital adequacy ratio under a high-risk situation.

Asset quality of the NBFC sector improved but stress tests indicate a rise in the GNPA ratio to 6.3% in FY22.

- Pandemic related risks to financial stability: The report raises a few concerns about potential risks to financial stability going forward. Accommodative monetary policy and fiscal stimuli provided by many governments to address the pandemic-induced damage have raised concerns around higher inflation expectations, thereby shaking up global bond markets. With varied paces of vaccination drives and meaningful differences between the number of active COVID-19 cases, there has a been a divergence in economic recovery across the world. This could result in a jump in inequality in emerging economies. Domestic risks include deterioration in credit demand, worsening of asset quality of financial institutions and restrictions in Indian states that make sizeable contributions to the country's GDP and GST collection.

Domestic risks to financial stability include an adverse effect on GDP and GST numbers due to restrictions imposed in states making a significant contribution.

Figure 146: YoY credit growth trend—distribution by bank groups

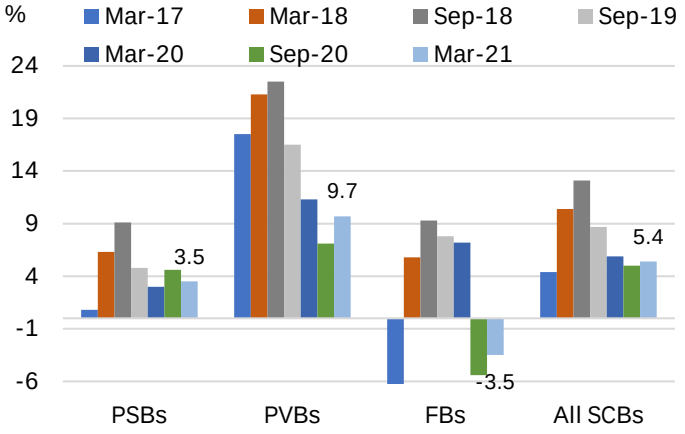
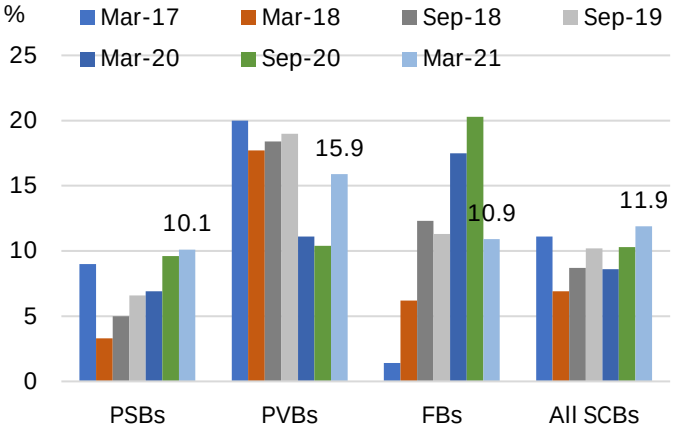


Figure 147: YoY deposit growth trend—distribution by bank groups



Source: RBI Financial Stability Report, NSE. PSBs = Public Sector Banks, PVBs = Private Sector Banks, FBs = Foreign Banks

Figure 148: Adjusted probability of default by country of counterparty for corporate obligors

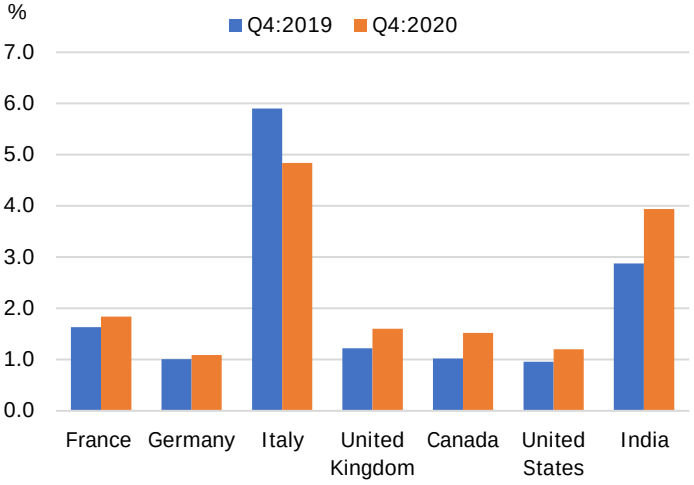
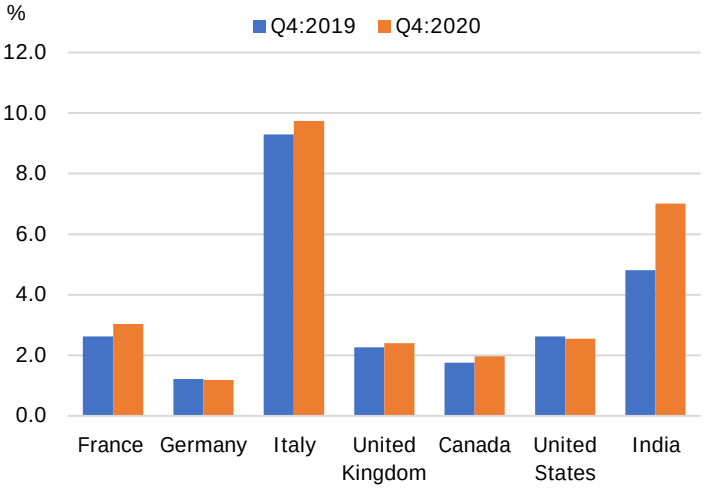


Figure 149: Adjusted probability of default by country of counterparty for SME corporate obligors



Source: RBI Financial Stability Report

Figure 150: Adjusted probability of default by country of counterparty for retail obligors

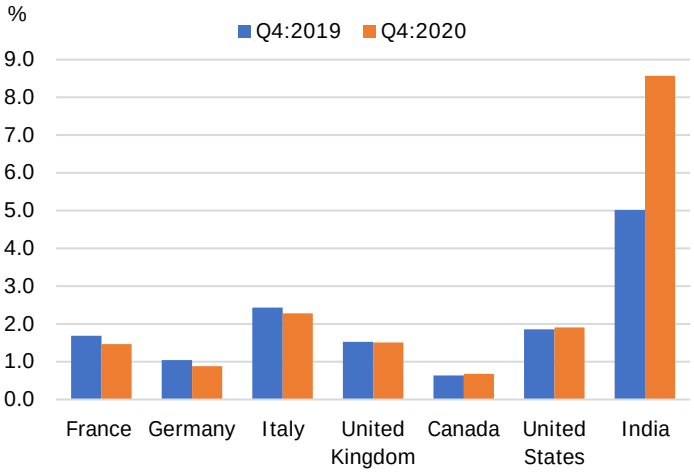
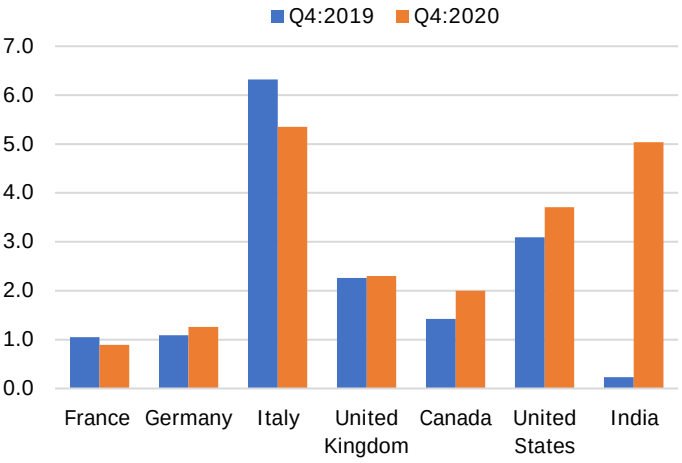


Figure 151: Adjusted probability of default by country of counterparty for retail obligors ex. real estate



Source: RBI Financial Stability Report

Figure 152: Adjusted probability of default by country of counterparty for retail obligors

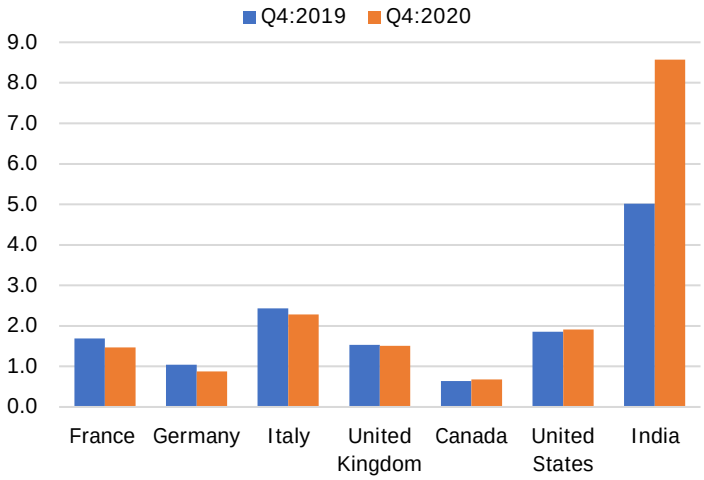
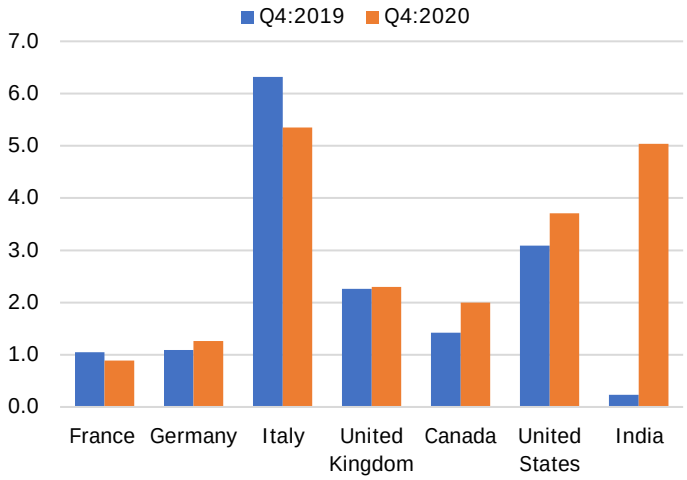
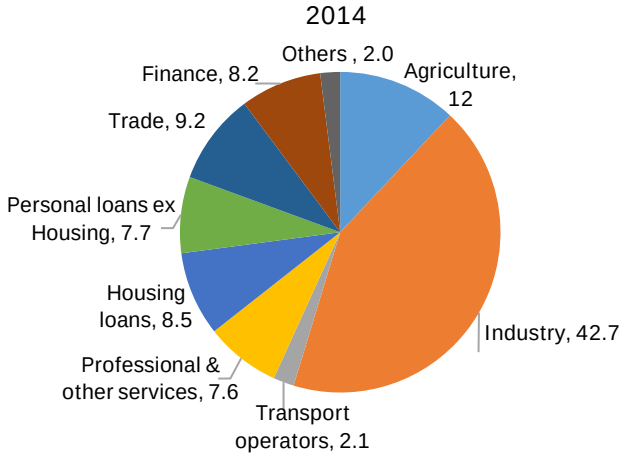


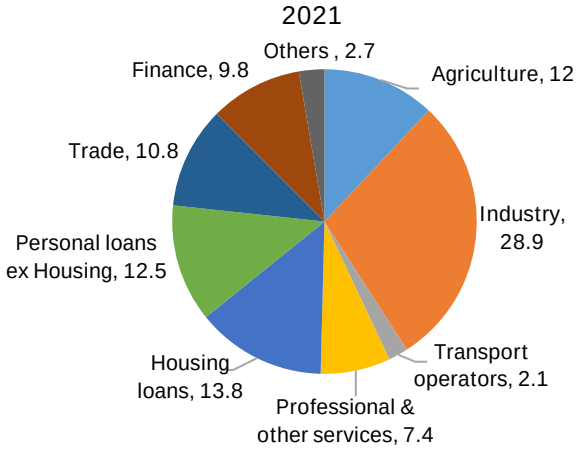
Figure 153: Adjusted probability of default by country of counterparty for retail obligors ex. real estate



Source: RBI Financial Stability Report

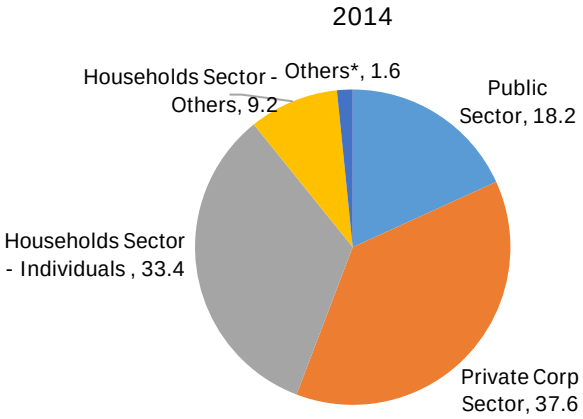
Figure 154: Sectoral share in credit by SCBs in economics sector

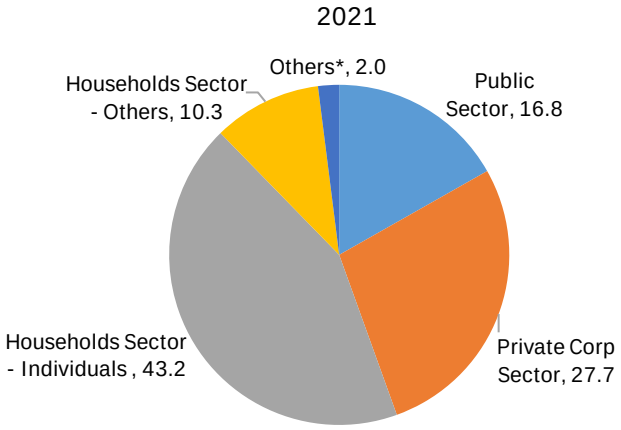




Source: RBI Financial Stability Report.

Figure 155: Sectoral share in credit by SCBs in organizational sector





Source: RBI Financial Stability Report. * Others include Micro finance Institutions (MFIs), Non-profit institution serving household (NPISH) and Non-resident Indians (NRIs)

Figure 156: SMA Distribution of MSME portfolio - Bank Group Wise (%)

	PSBs					PVBs				
	0 days past due	SMA-0	SMA-1	SMA-2	NPA	0 days past due	SMA-0	SMA-1	SMA-2	NPA
Mar-20	65.0	6.9	5.7	4.2	18.2	88.6	4.4	1.9	0.7	4.3
Jun-20	63.3	18.2	2.2	2.6	13.7	88.6	7	0.9	0.6	2.9
Sep-20	65.9	13.4	3.2	2.6	14.9	87.9	8.1	0.9	0.6	2.6
Dec-20	65.7	7.8	5.6	7.8	13.1	88.1	4.8	2.6	2.4	2
Mar-21	65.7	10.6	9.2	3.6	15.9	89.6	3.7	2.4	0.8	3.6

Source: RBI Financial Stability Report, NSE. PSBs = Public Sector Banks, PVBs = Private Sector Banks

Figure 157: Asset quality of SCBs improved in H2 FY21 but expected to deteriorate in FY22

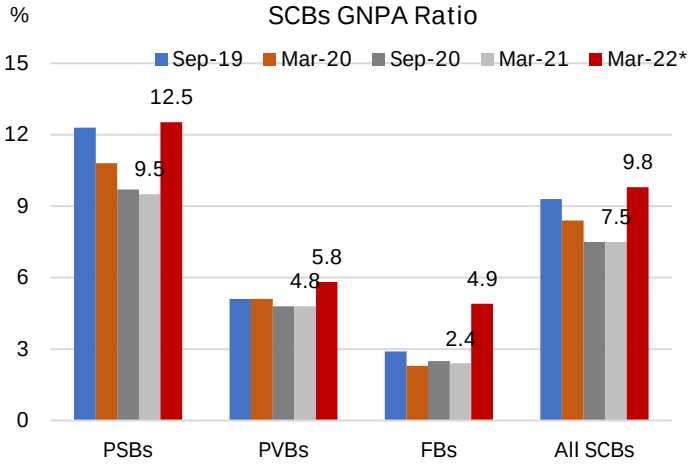
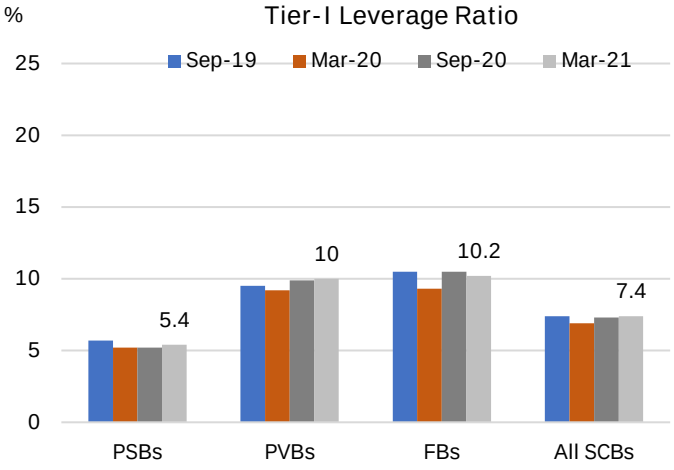


Figure 158: Tier-I Leverage Ratio



Source: RBI Financial Stability Report, NSE. PSBs = Public Sector Banks, PVBs = Private Sector Banks, FBs = Foreign Banks. * RBI's macro stress tests predictions under the baseline scenario.

Figure 159: Provisions fell marginally in FY21

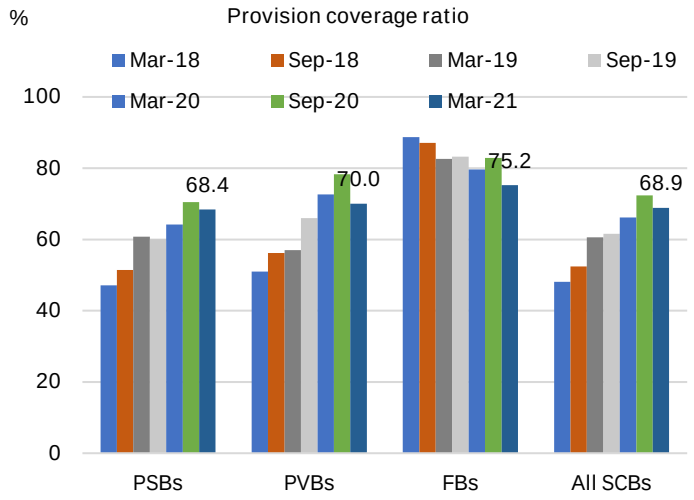
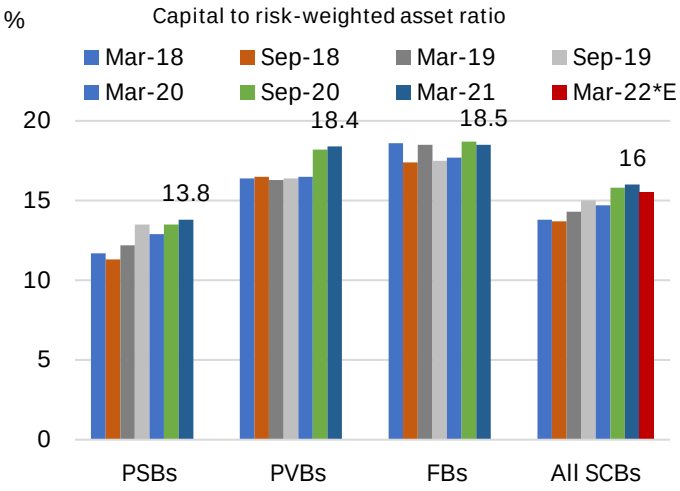


Figure 160: Capital position improved in FY21 but expected to fall marginally in FY22



Source: RBI Financial Stability Report, NSE. PSBs = Public Sector Banks, PVBs = Private Sector Banks, FBs = Foreign Banks. * RBI's macro stress tests prediction under the baseline scenario.

Figure 161: Asset quality trend of NBFCs

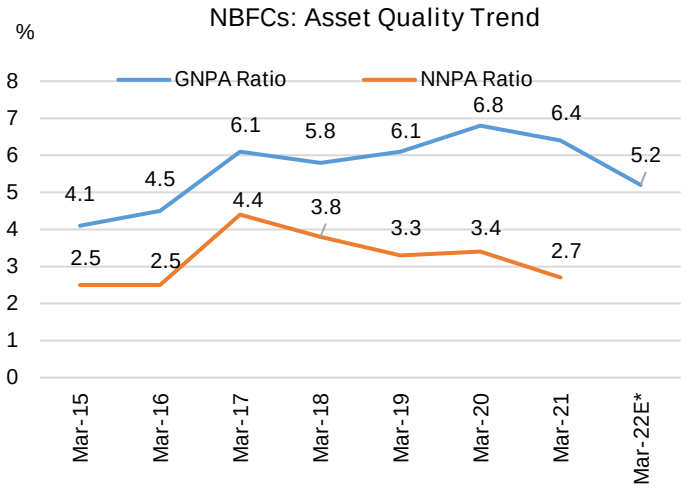
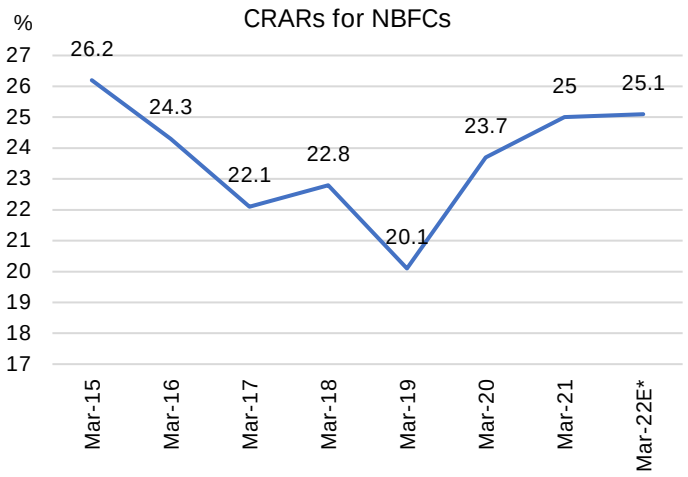


Figure 162: CRAR for NBFCs



Source: RBI Financial Stability Report, NSE, * RBI's macro stress tests prediction under the baseline scenario

Figure 163: Total bilateral exposures between entities in the financial system

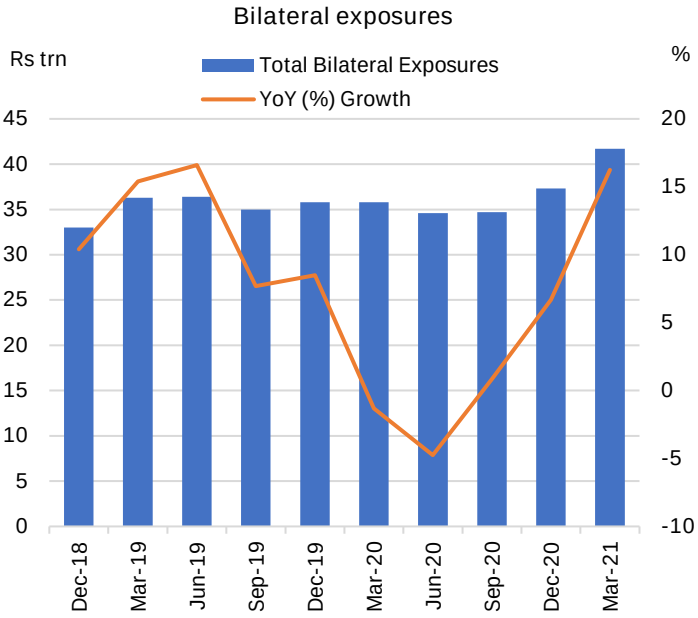
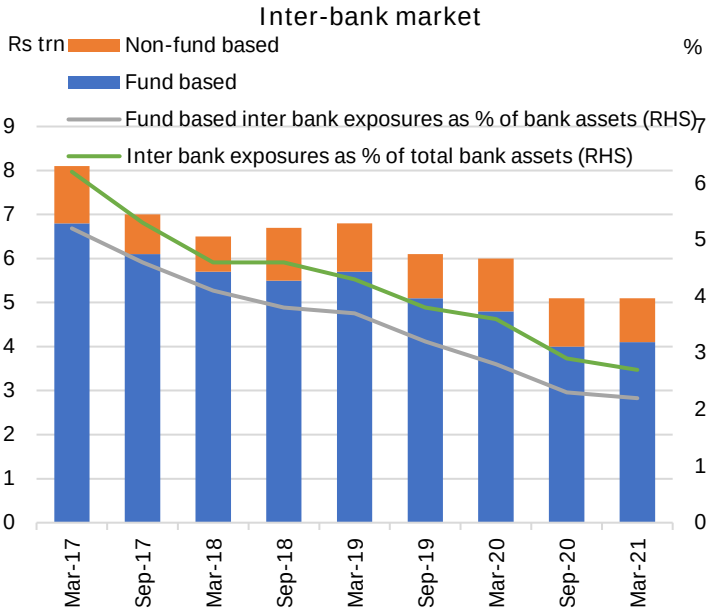


Figure 164: Fund and non-fund based inter-bank market



Source: RBI Financial Stability Report, NSE.

Centre's cumulative fiscal deficit in 2MFY22 stood lowest ever at 8% of BE

The Centre's gross fiscal deficit for April-May 2021 came in at mere Rs1.2trn or 8% of the budget estimate (BE) vs. Rs4.6trn in the same period last year. This is the lowest cumulative fiscal deficit ever reported during the first two months of the fiscal. This primarily indicates significant traction in receipts coupled with the retrenchment in spending from Apr-May FY21 levels as the severity of lockdowns imposed during the first and second wave varied substantially. We had a strict nation-wide lockdown in the same period last year, which in turn brought the economic activity to a near-complete halt, consequently hurting the Centre's tax kitty. Severe attendant economic ramifications, on the other hand, prompted the Government to front load expenditure and announce stimulus measures too. However, despite the more virulent second wave that was accompanied with attendant lockdown measures imposed by states, the Centre's tax revenues did not witness any debilitating impact this time because of the implementation of localised and targeted restrictions, better preparedness, and the strong intent of state governments to keep manufacturing units operational.

Within receipts, the Government accounts for the month of April-May 2021 point to a strong 148% jump in gross tax revenues, owing to an extremely depressed base and buoyancy in broader economic activity. Though, GST collections collected in the month of May'21 for activities occurring in Apr'21 moderated from an all-time high of Rs1.4trn in the previous month, it remained north of Rs1trn mark for the eighth consecutive month, thanks to better compliance and relatively less stringent restrictions in place. Alongside, a sharp surge of 976%YoY in non-tax revenues was on account of RBI's surplus transfer of Rs991bn to the Centre, that further bolstered the Government's kitty. On the expenditure side, while capital expenditure grew by a robust 14%YoY, revenue expenditure contracted by 9%YoY on account of lower fertilizer and petroleum subsidy transfer. As a result, fiscal deficit remained restrained at Rs1.2trn. Robust capital spending clearly exhibits the Government's strong intent to support and revive growth on a durable basis.

On expected lines, GST collections in June, recorded for May's economic activity, exhibited further sequential moderation, and slipped below Rs1trn mark for the first time since September 2020 to Rs929bn, reflecting re-imposition of more restrictions across the nation in May. Going forward, GST collections in July are expected to show a sequential rebound on account of easing restrictions across the board, as indicated by 18%MoM uptick in E-way bills for June 2021 from 32%MoM moderation observed in the previous month.

- **Centre's cumulative fiscal deficit (Apr**-May) dropped by 74%YoY in FY22: The Centre's gross fiscal deficit for April-May FY22 plunged by 74% YoY to a mere Rs1.2trn or 8% of the budget estimate, marking the lowest print ever for this period. The sharp YoY drop in fiscal deficit indicates significant traction in receipts coupled with the retrenchment in spending from Apr-May FY21 levels. Despite the lockdown measures re-imposed by states in the wake of second wave, the Centre's tax revenues for Apr-May'21 did not witness any debilitating impact and rather remained resilient (better than even pre-covid levels)—a consequence of targeted and localised lockdown measures, better preparedness, and the strong intent of state governments to keep manufacturing units operational.

Cumulative Gross fiscal deficit for Apr-May FY22 at Rs.1.2trn is equivalent to 8% of the budget estimate.

- **Sharp surge in revenue receipts...**: Within receipts, gross tax revenues during Apr-May'21 grew by a strong 148%YoY, thanks to an extremely depressed base, buoyancy in broader economic activity and better compliance as depicted in robust GST collections of April and May. On an annual basis, within direct taxes (126%), corporate and income tax revenues grew by 156% and 111% respectively. Growth in indirect tax collections was much higher at 164% YoY, with customs, excise, and GST collections rising by 216%, 237% and 138% YoY respectively. Alongside, a sharp surge of 976%YoY in non-tax revenues was on account of RBI's surplus transfer of Rs991bn to the Centre, that further bolstered the Government's kitty. Lower tax devolution to states this year led to a much higher 590% YoY growth in

Revenue receipts increased by 684% in Apr-May FY22 on an annual basis and recorded 56% growth on a two-year CAGR.

net tax revenues. Revenue generation through the disinvestment route stood at Rs40bn against nil divestment of Apr-May FY21. Consequently, total revenue receipts during Apr-May 2021 registered a strong 684% YoY expansion.

Even while looking at a two-year CAGR, gross tax revenues exhibited a strong growth of 21%, with direct and indirect taxes expanding by 39% and 13% respectively, with the former largely led by strong growth in corporate tax revenues. Strong surplus transfer by the RBI to the Government over the last two years led to a strong 102% CAGR in non-tax revenues during this period. Overall revenue receipts have grown at a two-year CAGR of 56%.

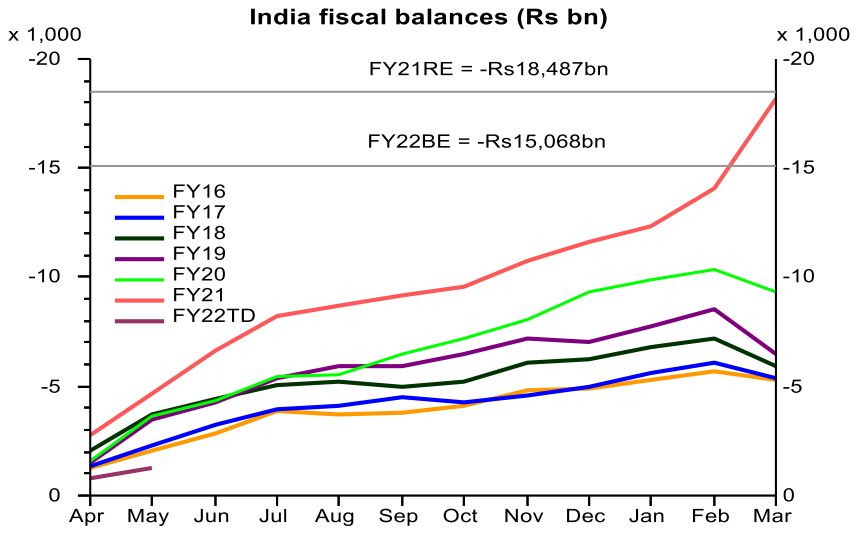
- **...And lower expenditure** contained fiscal deficit for Apr-May FY22: Overall expenditure fell by 6.6% YoY during Apr-May 2021 largely led by a fall in revenue expenditure even as capital spending registered a strong expansion. Revenue expenditure—accounting for 88% of total expenditure—fell by 9% YoY in Apr-May 2021, primarily led by lower subsidy outgo. While interest payments witnessed 13%YoY expansion, subsidies fell by 7% YoY due to 99% and 71% drop in petroleum and fertilizer subsidy bill, respectively, partly offset by a 55% YoY jump in food subsidy bill. Capital expenditure, on the other hand, exhibited a robust expansion of 14%YoY, signalling the Government's strong intent to keep pushing capex to revive growth on durable basis. This was largely attributed to strong spending towards commerce, electronics, defence, home affairs, road transport, housing, and railways (26%).

On the expenditure side, while capital expenditure exhibited a robust expansion of 14%YoY, revenue expenditure recorded moderation by 9%YoY on account of lower fertilizer and petroleum subsidy transfer.

- GST collections in June fell to sub-1trn mark for the first time in nine months: On expected lines, June GST collections at Rs929bn, recorded for May's economic activity exhibited further sequential moderation and thus, slipped below Rs1trn mark for the first time since September 2020, on account of the re-imposition of more restrictions across the nation in May. Going forward, July GST collections recorded for June's economic activity is likely to show a sequential rebound on account of easing restrictions across the board, as indicated by 18%MoM uptick in E-way bills for June 2021 from 32%MoM moderation observed in May 2021.

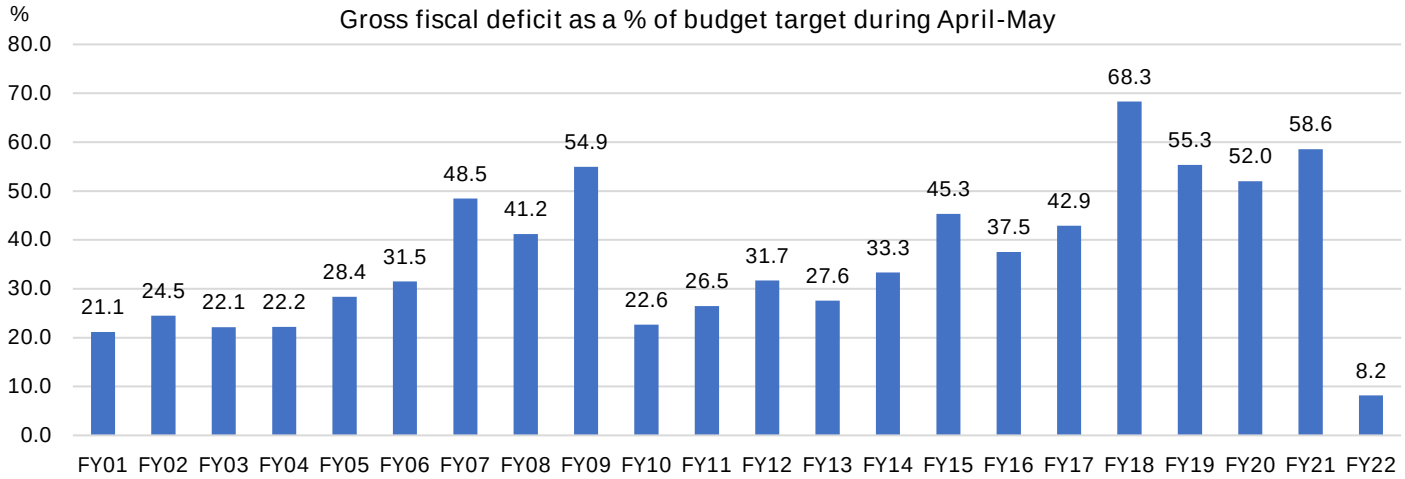
- Concluding Remarks: Lower-than-expected contraction in FY21 nominal GDP, coupled with higher-than-expected revenue receipts, has resulted in pulling down the expectations of growth required to attain FY22 budget targets. Similarly, required tax revenue growth for FY22 is now pegged at 8.5% against 14.9% pencilled earlier. Alongside, the overshooting of food subsidy bill by Rs1trn in FY21 provisional figures, incurred because of earlier than predicted disbursement of loans to NSSF, coupled with higher than anticipated surplus transfer of Rs991bn by RBI to government (against Rs535bn budgeted) provides some fiscal headroom amidst uncertainties. However, with higher expenditure on account of recent relief measures announced by government coupled with uncertainty around meeting divestment target might push the fiscal deficit on the upside.

Figure 165: **Yearly trend of India's fiscal balances**



Source: Refinitiv Datastream.

Figure 166: Gross fiscal deficit as % of budget targets during April-May over the last 20 years



Source: CMIE Economic Outlook, CGA, NSE.

Figure 167: **Centre's gross fiscal trend (% GDP)**

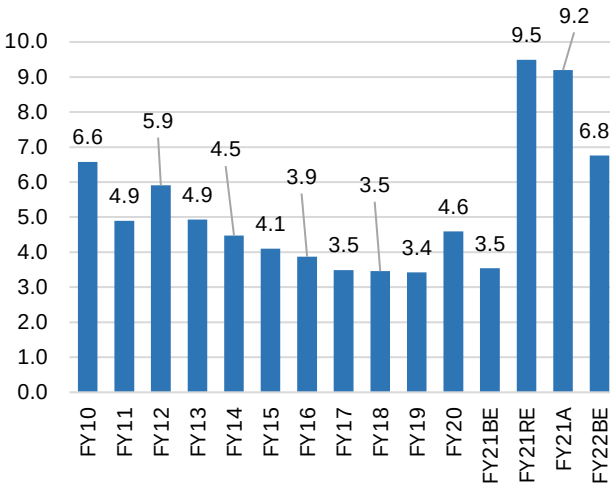
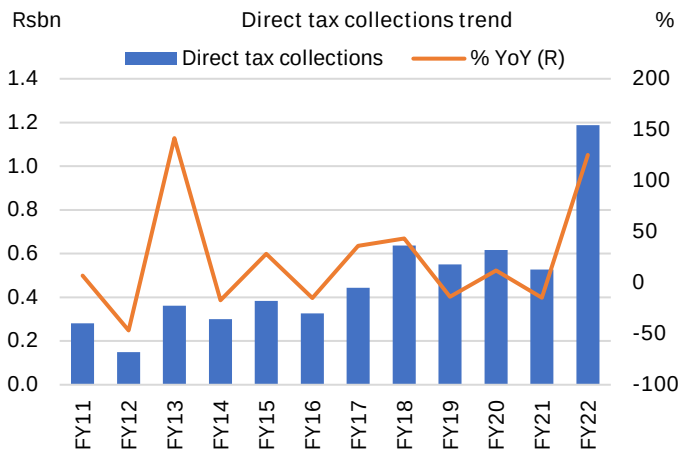


Figure 168: A quick glance at FY21 fiscal balances

Rs bn	FY20A	FY21RE	FY21A*	Growth as per FY21 RE	Growth as per FY21 A
Net tax revenues	13,569	13,445	14,240	(0.9)	4.9
Non-tax revenues	3,272	2,107	2,081	(35.6)	(36.4)
Non-debt cap rec.	686	465	576	(32.2)	(16.0)
Total receipts	17,527	16,017	16,897	(8.6)	(3.6)
Revenue Exp	23,513	30,111	30,864	28.1	31.3
Capital Exp	3,356	4,392	4,248	30.9	26.6
Total expenditure	26,869	34,503	35,112	28.4	30.7
Fiscal deficit	9,342	18,487	18,215	98.0	95.0
% of GDP	4.6	9.5	9.2		

Source: CMIE Economic Outlook, CGA, NSE. BE = Budget Estimates, RE = Revised Estimates, A = Actual. * FY21 actual figures are provisional number released by CGA.

Figure 169: Direct tax collections trend during Apr-May



Source: CMIE Economic Outlook, CGA, NSE.

Figure 170: Indirect tax receipts trend during Apr-Mar

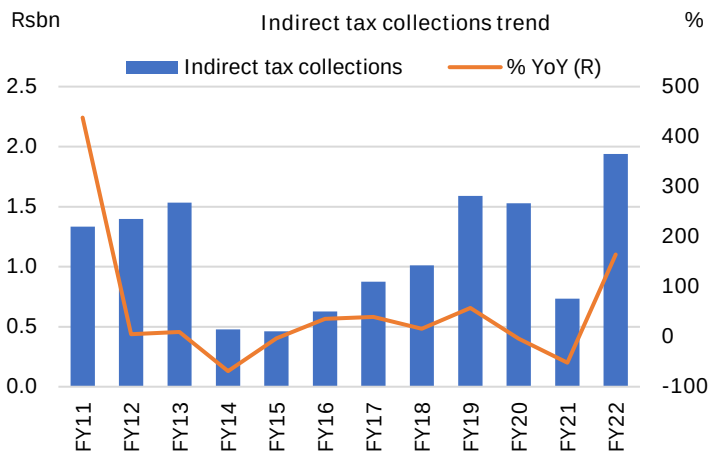
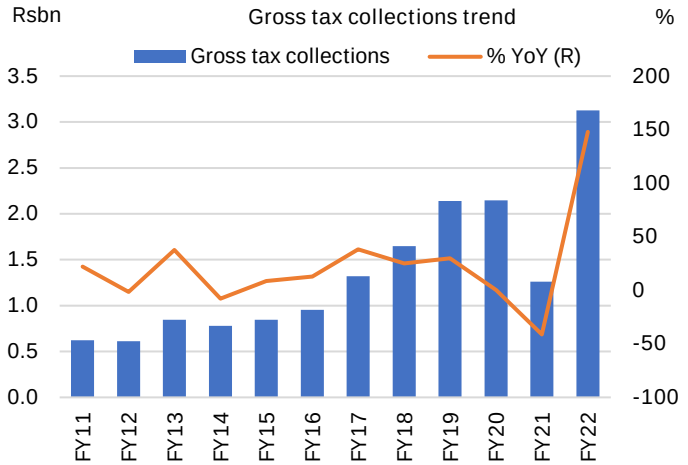


Figure 171: Gross tax collections trend during Apr-May



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

Figure 172: GST collections trend

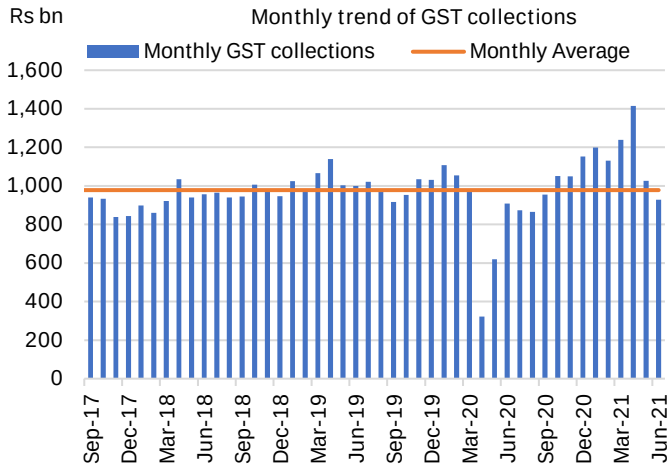


Figure 173: Revenue and capital exp during Apr-May

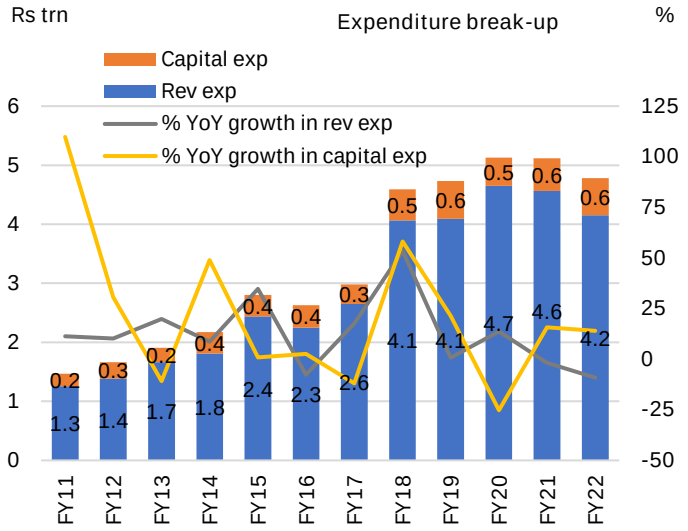
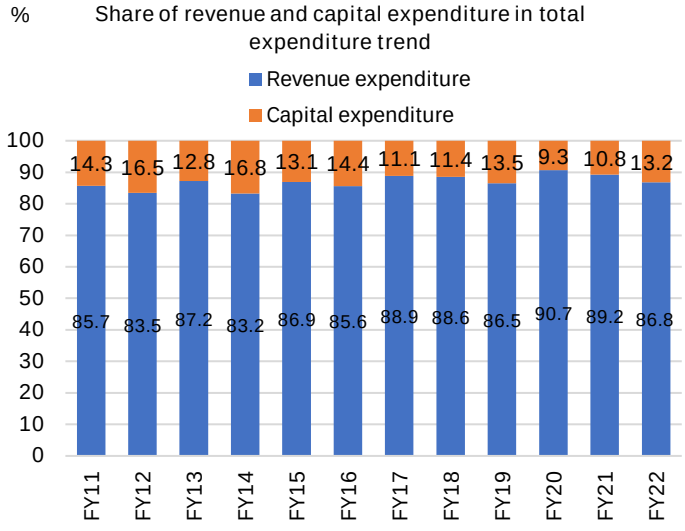


Figure 174: Expenditure mix during Apr-May



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

Figure 175: A snapshot of government finances for April-May FY22

Items (Rs bn)	FY20A		FY21A		April-May FY22		Implied Jun-**Mar'22**	
	Rs bn	% YoY	Rs bn	% YoY	Rs bn	% YoY	Rs bn	% YoY
Net tax revenues	13,569	2.9	14,240	4.9	2,326	590.0	13,118	(5.6)
Gross tax revenues	20,101	(3.4)	20,249	0.7	3,127	147.9	19,044	0.3
Of which:								
Direct Tax	10,372	(7.8)	9,264	(10.7)	1,188	125.5	9,892	13.2
Corporation tax	5,569	(16.1)	4,572	(17.9)	435	155.9	5,035	14.4
Income tax	4,803	4.0	4,692	(2.3)	754	111.0	4,856	12.0
Indirect Tax	9,728	1.8	10,984	12.9	1,938	164.1	9,152	(10.7)
Goods and service tax	6,018	2.9	5,512	(8.4)	1,223	137.7	5,077	1.6
Custom Duties	1,093	(7.3)	1,348	23.3	302	215.6	1,058	(15.5)
Excise Duties	2,395	3.7	3,897	62.7	370	237.4	2,980	(21.3)
States Share	(6,507)	(15)	(5,950)	(8.6)	(783)	(14.9)	(5,872)	16.8
Transferred to NCCD	(25)	84.4	(58)	134.7	(8)	315.8	(53)	(5.3)
Non-Tax Revenue	3,271	38.3	2,081	(36.4)	1,164	976.2	1,266	(35.8)
Dividends and profits	1,861	64.1	970	(47.9)	996.3	4,524.7	39	(95.9)
Other non-tax revenues	1,401	14.5	1,111	(21.2)	168	93.7	1,227	19.8
Central govt. revenue receipts	16,841	8.3	16,321	(7.7)	3,500	683.5	14,385	(9.4)
Non-Debt Capital Receipts	686	(39.1)	576	(16.0)	48	478.8	1,832	222.5
Recovery of Loans	183	2.0	197	7.7	8	(1.9)	122	(35.5)
Misc. Receipts (inc. divestment)	503	(46.9)	379	(24.7)	40	(14.9)	1,710	351.2
Total Receipts	17,527	5.1	16,897	(3.6)	3,548	679.8	16,217	(1.4)
Revenue Expenditure	23,513	17.0	30,864	31.3	4,150	-9.1	25,140	(4.4)
Interest Payments	6,121	4.9	6,821	11.4	886	13.2	7,211	19.4
Major subsidies	2,232	13.3	6,895	208.9	627	(7.1)	2,738	(56)
Food	1,087	6.7	5,254	383.4	558	55.2	1,870	(61.8)
Fertilizer	811	14.9	1,279	57.7	68	(70.6)	727	(30.6)
Petroleum	334	36.0	362	8.3	1	(99.2)	140	(49.7)
Other revenue expenditure	15,160	23.4	17,147	13.1	2,638	(15.2)	14,856	5.8
Capital Expenditure	3,356	9.7	4,248	26.6	630	14.0	4,913	32.9
Total Expenditure	26,869	16.0	35,112	30.7	4,780	-6.6	30,053	0.2
Fiscal Deficit	9,342	44.1	18,215	95.0	1,232	-73.6	13,836	2.1
Fiscal Deficit/GDP	4.6		9.2					

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

Figure 176: Fiscal math: FY22 fiscal deficit budgeted at 6.8% of GDP

Items (Rs bn)	FY20A	FY21					FY22		
	Rs bn	RE (Rs bn)	% YoY	Actuals (Rs bn)	% YoY	% of RE	BE (Rs bn)	% YoY over FY21R	% YoY over FY21A
Net tax revenues	13,569	13,445	(0.9)	14,240	4.9	105.9	15,454	14.9	8.5
Gross tax revenues	20,101	19,003	(5.5)	20,249	0.7	106.6	22,171	16.7	9.5
Of which:									
Direct Tax	10,372	9,050	(12.7)	9,264	(10.7)	102.4	11,080	22.4	19.6
Corporation tax	5,569	4,460	(19.9)	4,572	(17.9)	102.5	5,470	22.6	19.6
Income tax	4,803	4,590	(4.4)	4,692	(2.3)	102.2	5,610	22.2	19.6
Indirect Tax	9,728	9,953	2.3	10,984	12.9	110.4	11,091	11.4	1.0
Goods and service tax	6,018	5,151	(14.4)	5,512	(8.4)	107.0	6,300	22.3	14.3
Custom Duties	1,093	1,120	2.5	1,348	23.3	120.3	1,360	21.4	0.9
Excise Duties	2,395	3,610	50.8	3,897	62.7	107.9	3,350	(7.2)	(14.0)
States Share	(6,507)	(5,500)	(15.5)	(5,950)	(8.6)	108.2	(6,656)	21.0	11.9
Transferred to NCCD	(25)	(58)	134.7	(58)	134.7	100.0	(61)	4.8	4.8
Non-Tax Revenue	3,271	2,107	(35.6)	2,081	(36.4)	98.8	2,430	15.4	16.8
Dividends and profits	1,861	965	(48.1)	970	(47.9)	100.4	1,035	7.2	6.8
Central govt. revenue receipts	16,841	15,552	(7.7)	16,321	(3.1)	104.9	17,884	15.0	25.6
Non-Debt Capital Receipts	686	465	(32.2)	576	(16.0)	123.9	1,880	304.3	9.6
Misc. Receipts (inc. divestment)	503	320	(36.4)	379	(24.7)	118.4	1,750	446.9	361.8
Total Receipts	17,527	16,017	(8.6)	16,897	(3.6)	105.5	19,764	23.4	17.0
Revenue Expenditure	23,513	30,111	28.1	30,864	31.3	102.5	29,290	(2.7)	(5.1)
Interest Payments	6,121	6,929	13.2	6,821	11.4	98.4	8,097	16.9	18.7
Major subsidies	2,232	5,954	166.7	6,895	208.9	115.8	3,699	(43.0)	(51.2)
Capital Expenditure	3,356	4,392	30.9	4,248	26.6	96.7	5,542	26.2	30.5
Total Expenditure	26,869	34,503	28.4	35,112	30.7	101.8	34,832	1.0	(0.8)
Fiscal Deficit	9,342	18,487	97.9	18,215	95.0	98.5	15,068	(18.5)	(17.3)
Fiscal Deficit/GDP	4.6	9.5		9.2			6.8		

Source: Budget Documents, CGA. BE: Budget Estimates; RE: Revised Estimates; A = Actual

Government's response to second COVID wave: Expansion in the scope of ECLGS

After taking cognizance of the ferocious second wave and attendant lockdowns imposed by several states, Finance Minister on June 28th, 2021, announced a slew of relief measures worth Rs6.3trn with the clear objective of providing much-needed support to the virus-ravaged economy. The measures were broadly on similar lines of the Rs17trn fiscal stimulus package announced last year, with some of them being mere extensions of previously announced measures. These measures were classified under three broad categories: (i) economic relief from pandemic (ii) strengthening public health, and (iii) impetus for growth and employment.

Credit guarantees took the centerstage of the reform package yet another time. The Government announced Rs1.1trn loan guarantee scheme for COVID-affected sectors including healthcare infrastructure in non-metro cities and tourism among others. Alongside, the Emergency Line Credit Guarantee Scheme (ELCGS) was expanded by Rs1.5trn to Rs4.5trn and Rs75bn was allocated to facilitate loans to 2.5m people through Micro Finance Institutions (MFIs). To ameliorate hardships faced by the poor in the rural areas that were far severely hit this time, measures such as extension of free distribution of food (Rs940bn) and enhancement of fertiliser subsidy (Rs140bn) were announced. Besides supporting the health sector through credit guarantee scheme, a new scheme for strengthening public health infrastructure and human resources with outlay of Rs150bn was also announced. Medium-term growth supportive measures included a) export-promoting measures viz. extension of the electronics PLI scheme by a year, enhanced allocation for boosting project exports and export insurance, b) allocation of Rs976bn for reform-based result-linked power sector distribution scheme, and c) allocation of Rs19bn for broadband to each village through Bharat Net PPP Model.

Given the limited fiscal headroom, the Government has once again resorted to supply-side measures rather than direct cash transfers for alleviating the stress re-ignited by the second wave of pandemic. As a result, they are unlikely to have a meaningful fiscal bearing as some of these measures under "impetus to growth and employment" category are spread across years (including FY22) and other measures are credit guarantees. Thus, on balance, measures such as fertilizer subsidy allocation, free food grains extension and new public health scheme, are likely to result in an immediate fiscal outgo of Rs1.24trn (~0.6%GDP).

Measures worth Rs6.3tn were announced of which 43% were in the form of loan guarantees for MSMEs, healthcare, tourism, and MFIs.

- Centre announced a slew of measures worth Rs6.3trn: After taking cognizance of the ferocious second wave, the Finance Minister announced a slew of relief measures worth Rs6.3trn with the clear objective of providing much-needed support to the virus-ravaged economy. The announced set of relief measures are broadly on similar lines of the Rs17trn fiscal stimulus package announced last year. The measures include extension of already existing credit guarantees coupled with the announcement of new ones for affected sectors like health, tourism, and MFIs. Alongside, fiscal allocations in the form of fertiliser and food subsidies and some medium-term measures were also announced. As per the press release by Ministry of Finance, these measures are classified under three broad categories: (i) economic relief from pandemic (ii) strengthening public health and (iii) impetus for growth and employment.
- Credit guarantees took the centre stage yet again: The government announced Rs1.1trn loan guarantee scheme for COVID-affected sectors of which Rs500bn has been allotted for the healthcare infrastructure creation in non-metro cities and Rs600bn has been allocated for other affected sectors including tourism. The health sector component is aimed at up scaling medical infrastructure targeting underserved areas. Guarantee cover will be available both for expansion and new projects related to health/medical infrastructure in cities other than eight metropolitan cities. While the guarantee cover will be 50% for expansion and 75% for new projects, in case of aspirational districts, the guarantee cover of

75% will be available for both new projects and expansion. Maximum loan admissible under the scheme is Rs1bn and guarantee duration is up to three years. Banks can charge a maximum interest of 7.95% on these loans. Loans for other sectors will be available with an interest cap of 8.25% p.a. Thus, the loans available under the scheme will be much cheaper compared to the normal interest rates without guarantee of 10-11%. Alongside, government has also expanded ECLGS by Rs1.5trn to Rs4.5trn. Under the expanded scheme, limit of admissible guarantee and loan amount is proposed to be increased above the existing level of 20% of loan outstanding. The Government has also allocated Rs75bn to facilitate loans to 2.5m people through MFIs, whereby guarantee will be provided to banks for loans to new or existing NBFC-MFIs or MFIs for on lending of up to Rs1.25lakh to such small borrowers. Interest on such loans to MFIs from banks—80% of which must be utilised for on lending—will be capped at MCLR plus 2%, with maximum loan tenor at three years.

- Measures that are likely to have an immediate fiscal bearing: Along with the announcement of credit guarantee schemes for COVID-distressed sectors, other measures such as extension of free distribution of food (Rs940bn) and enhancement of fertiliser subsidy (Rs140bn) were also announced in order to ameliorate the hardships faced by the poor in rural areas that were adversely affected by the second wave as the spread and intensity of cases in rural areas this time around was immense. Besides supporting the health sector through credit guarantee scheme, a new scheme for strengthening public health infrastructure and human resources with outlay of Rs150bn was also announced.
- Medium term measures to bolster growth and employment: With regards to the medium-term growth-supportive measures, the Government announced extension of the electronics PLI scheme by a year, allocated Rs976bn for reform-based result-linked power sector distribution scheme, Rs19bn for broadband to each village through Bharat Net PPP Model and have also laid emphasis on promoting exports by announcing Rs33bn allocation for boosting project exports along with an export insurance cover worth Rs88bn. Additionally, a revival package of ~Rs1bn will be provided to North-eastern Regional Agricultural Marketing Corporation (NERAMAC).

In terms of announced size, medium term growth measures under the ambit of "impetus to growth and employment', accounts for Rs 2.37trn or 38% of the package.

- Focus on supply-side measures ensures limited fiscal outgo: Given the limited fiscal headroom, the Government has once again resorted to supply-side measures rather than direct cash transfers for alleviating the stress re-ignited by the second wave of pandemic. As a result, they are unlikely to have a meaningful fiscal bearing as some of these measures under "impetus to growth and employment" category are spread across years (including FY22) and other measures are credit guarantees. Thus, on balance, measures such as fertilizer subsidy allocation, free food grains extension and new public health scheme, are likely to result in an immediate fiscal outgo of Rs1.24trn (~0.6%GDP).

Figure 177: Financial Details of the Relief Package 2.0

Scheme	Period	Amount Rs bn	Remarks
I. Economic Relief from Pandemic			
Loan Guarantee Scheme for COVID Affected Sectors	FY22	1,100	
Emergency Credit Line Guarantee Scheme (ECLGS)	FY22	1,500	Expansion
Credit Guarantee Scheme for Micro Finance Institutions	FY22	75	
Scheme for tourist guides/stakeholders	FY22		Covered under loan guarantee scheme
Free One Month Tourist Visa to 5 Lakh Tourists	FY22	1	
Extension of Atma Nirbhar Bharat Rozgar Yojana	FY22		
Additional Subsidy for DAP & P&K fertilizers	FY22	148	
Free food grains under PMGKY from May to November, 2021	FY22	939	
II. Health			
New Scheme for Public Health	FY22	150	Scheme outlay: Rs232bn; Central Share: Rs150bn
III. Impetus for Growth and Employment			
Release of Climate resilient special traits varieties	FY22		
Revival of North-eastern Regional Agricultural Marketing Corporation (NERAMAC)	FY22	1	
Boost for Project Exports through NEIA	FY22-FY26	330	
Boost to Export Insurance Cover	FY22-FY26	880	
Broadband to each village through Bharat Net PPP Model	FY22-FY23	190	
Extension of Tenure of PLI Scheme for Large Scale Electronic Manufacturing			Time extension
Reform Based Result Linked Power Distribution Scheme (Budget Announcement)	FY22-FY26	976	Scheme outlay: Rs3trn; Central Share: Rs976bn
Total		6290	Immediate Fiscal impact restrained at ~Rs1238bn; 0.6%GDP

Source: Ministry of Finance, PIB

Southwest Monsoon Update: Bountiful showers in June support *Kharif* sowing

The Southwest monsoon season made a timely onset and recorded a 10% surplus rainfall vis-à-vis the long-period average (LPA) in June but lost steam in July, with cumulative rainfall recording a deficit of 5% as on July 8th. This is significantly lower than the 13% surplus rainfall observed in the same period last year. Though, the season's onset in Kerala was delayed by two days, it made rapid progress subsequently, covering many parts of east, west, south, and central India in June. However, the momentum faltered in July, with 14/36 divisions reporting deficient rainfall as on July 8th, 2021, and only seven divisions reporting excess rainfall. Spatially, except for South Peninsula, which reported a 2% surplus rainfall, all other three sub-divisions including Central India, Northwest India and East and Northeast India have had a deficit cumulative rainfall until July 8th as compared to the LPA as against a surplus position until June-end.

Current live storage as on July 8th, 2021 was 53.5bn cubic meters (31.3% of the storage capacity at full reservoir level), a tad lower than 58bn cubic meters last year, but much higher than the last 10-year average of 40.2bn cubic meters. A good start to the season and bountiful showers in June, coupled with adequate reservoir water levels, kept the kharif sowing activity buoyant, with actual area sown being ~19% of the normal area sown. This is lower than 24.3% as of same date last year but much higher than 14.5% and 15.4% in the previous two years. The last year's *kharif* season saw exceptionally strong sowing activity, thanks to COVID-induced reverse migration and rising economic uncertainty. While most of the *Kharif* crops saw lower sown area this year, some of the exceptions were rice, maize, select pulses, sugarcane, and sunflower seeds.

Going ahead, we will remain watchful of the precipitation and spatial distribution of rainfall in month of July as it accounts for more than half of the season's sowing activity given these factors remain critical in assessing the growth trajectory in the agricultural sector. The timely onset of normal monsoon in June, adequate water reservoir levels, good start to the kharif sowing, easing restrictions with receding daily cases even in rural areas, and anticipation of equally good precipitation for the upcoming monsoon months auger well for farm incomes and thus, rural demand recovery. However, weak consumer sentiments, dented by the ferocious second wave that penetrated at a much larger scale in the hinterland than the previous wave, are likely to hold back the swift rebound in rural consumption impulses, particularly in the wake of heightened uncertainty around the subsequent waves.

- Rainfall activity lost some momentum in July post a strong start in June: After recording 10% surplus outturn vis-à-vis the long period average (LPA) in the month of June, cumulative rainfall surplus eased substantially in July thus far, recording a deficit of 5% as on July 8th, 2021. This is significantly lower than the 13% surplus rainfall observed in the same period last year. Even as the season's onset in Kerala was delayed by two days, it made a rapid progress subsequently, covering many parts of east, west, south, and central India in June. Post a nearly timely advent, monsoon progressed well in June, with 28/36 sub-divisions or 78% of the country's area receiving normal to excess rainfall till June-end. The monsoon activity, however, lost steam in July, with 14 sub-divisions witnessing deficient rainfall as on July 8th, 2021. Spatially, rainfall in Central India has been 93% LPA (against 117% LPA in Jun'21), Northwest India subdivision has been 84% LPA (against 114% LPA in Jun'21), South Peninsula subdivision has been 102% LPA (against 104% LPA in Jun'21) while it has been 99% of LPA in the East and Northeast Indian subdivision (against 103% LPA in Jun'21).

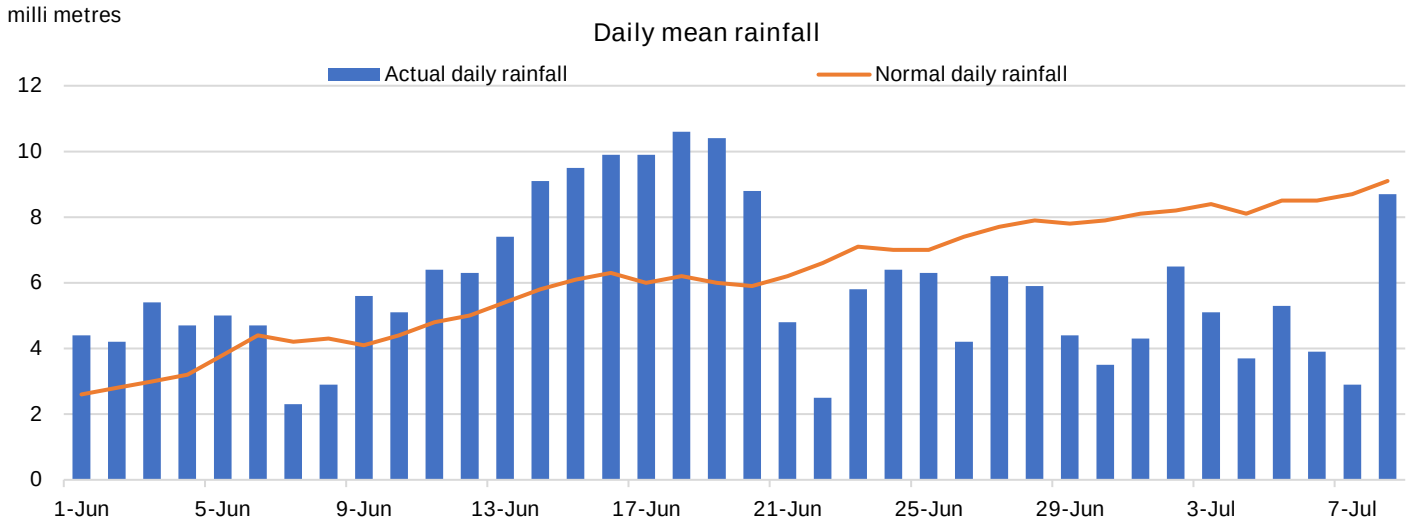
- Sowing activity remains buoyant but lower than previous year levels: Bountiful showers, coupled with adequate reservoir water levels, kept the kharif sowing activity buoyant. However, the actual sown area in 2021 at 202.72 lakh hectare remained well below 258.62 lakh hectare area sown during the corresponding

period of last year, thereby witnessing 22% moderation. This is owing to exceptionally strong commencement of sowing in 2020 (67%YoY), thanks to COVID-induced reverse migration and rising economic uncertainty. All broad categories of Kharif crops like Pulses (-17%YoY), Coarse Cereals (-18%YoY), Oilseeds (-35%YoY) and Cotton (-48%YoY) witnessed moderation from previous years' levels. However, crops like Rice (4%YoY) and Sugarcane (1%) showed an uptick from previous years' levels.

- Reservoir levels remain adequate but mildly lower than previous year levels: Current live storage as on July 8th, 2021 was 53.5bn cubic meters (31.3% of the storage capacity at full reservoir level), a tad lower than 58bn cubic meters last year, but much higher than the last 10-year average of 40.2bn cubic meters. Thus, the live storage available in 130 reservoirs as per July 2 bulletin released by CWC is 99% of the live storage of corresponding period of last year and 138% of storage of average of last 10 years. A normal *Rabi* season rainfall last year, coupled with a good start to the *Kharif* season, kept reservoir live storage at adequate levels, even as the recent dry spell has resulted in a slight drop in this month thus far.

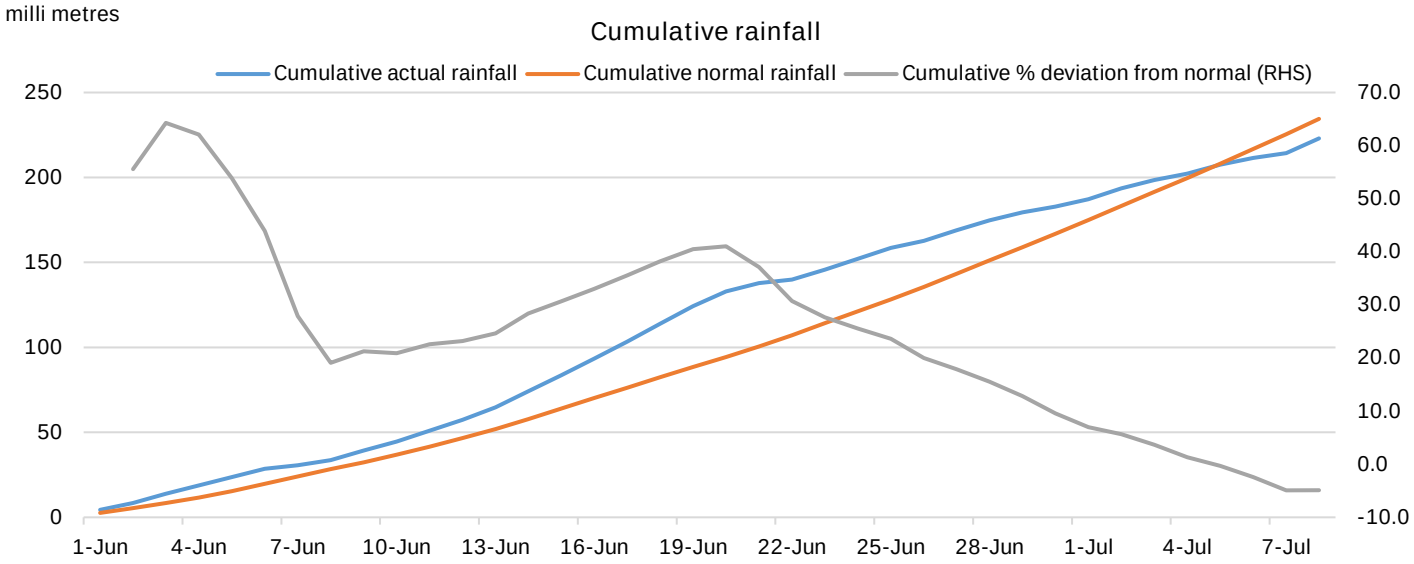
- Normal rainfall crucial for rural demand recovery: Going ahead, we will remain watchful of the precipitation and spatial distribution of rainfall in month of July as it accounts for more than half of the season's sowing activity given these factors remain critical in assessing the growth trajectory in agricultural sector. The timely onset of normal monsoon in June, adequate water reservoir levels, good start to the kharif sowing and easing restrictions with receding daily cases even in rural areas coupled with the anticipation of equally good precipitation for the upcoming monsoon months and stable MSP hikes recently announced auger well for farm incomes and thus, for rural demand recovery. However, weak rural consumer sentiments, dented by the ferocious second wave that penetrated at a much larger scale in the hinterland than the previous wave is thus, likely to hold back the swift rebound in rural consumption impulses given the households have already incurred substantial medical expenses during the second wave and there is uncertainty around the subsequent waves.

Figure 178: Daily mean rainfall



Source: CMIE Economic Outlook, IMD, NSE.

Figure 179: Cumulative rainfall (period: June 1st, 2021, to July 8th, 2021)



Source: CMIE Economic Outlook, IMD, NSE.

Figure 180: Subdivision-wise distribution of cumulative rainfall

Subdivisions	Cumulative rainfall (Period: June 1st to June 30th)			Cumulative rainfall (Period: June 1st to July 8th)		
	Actual (mm)	Normal (mm)	% Deviation	Actual (mm)	Normal (mm)	% Deviation
East and Northeast India	357.3	347.1	3.0%	454.1	460.9	-1.0%
Northwest India	85.7	75.3	14.0%	97.8	116.4	-16.0%
Central India	198.8	169.2	17.0%	231.3	248.5	-7.0%
South Peninsula	166.2	160.2	4.0%	217.2	212.1	2.0%
Total	182.9	166.9	10.0%	223.0	234.5	-5.0%

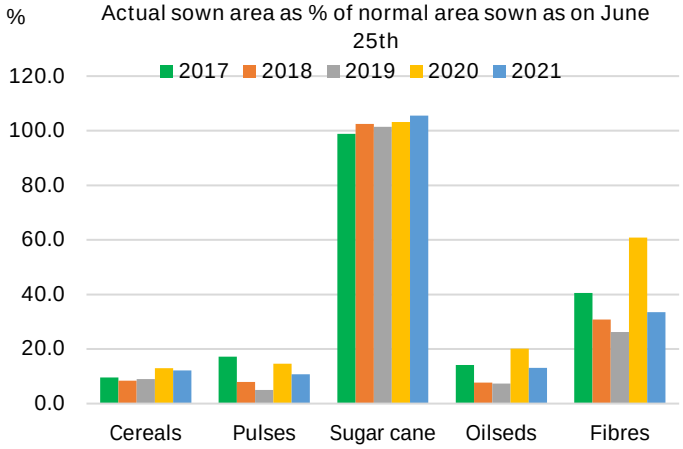
Source: CMIE Economic Outlook, IMD, NSE.

Figure 181: Category-wise number of subdivisions and % area (sub-divisional) of the country

Category	Period: June 1st to June 30th		Period: June 1st to July 8th	
	No. of subdivisions	% Area of the country	No. of subdivisions	% Area of the country
Large excess	3	9%	3	9%
Excess	13	42%	4	12%
Normal	12	30%	15	47%
Deficient	8	19%	14	32%
Large Deficient	0	0%	0	0%
No rain	0	0%	0	0%

Source: IMD, NSE.

Figure 182: Actual sown area as % of normal area sown.



Source: CMIE Economic Outlook, NSE.

Figure 183: YoY change in actual sown area

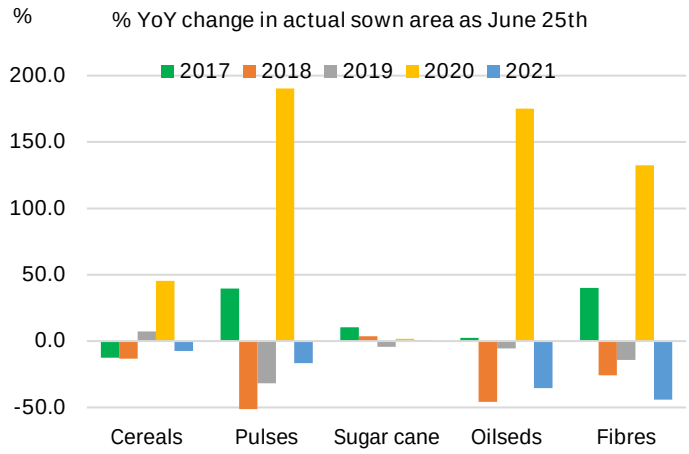
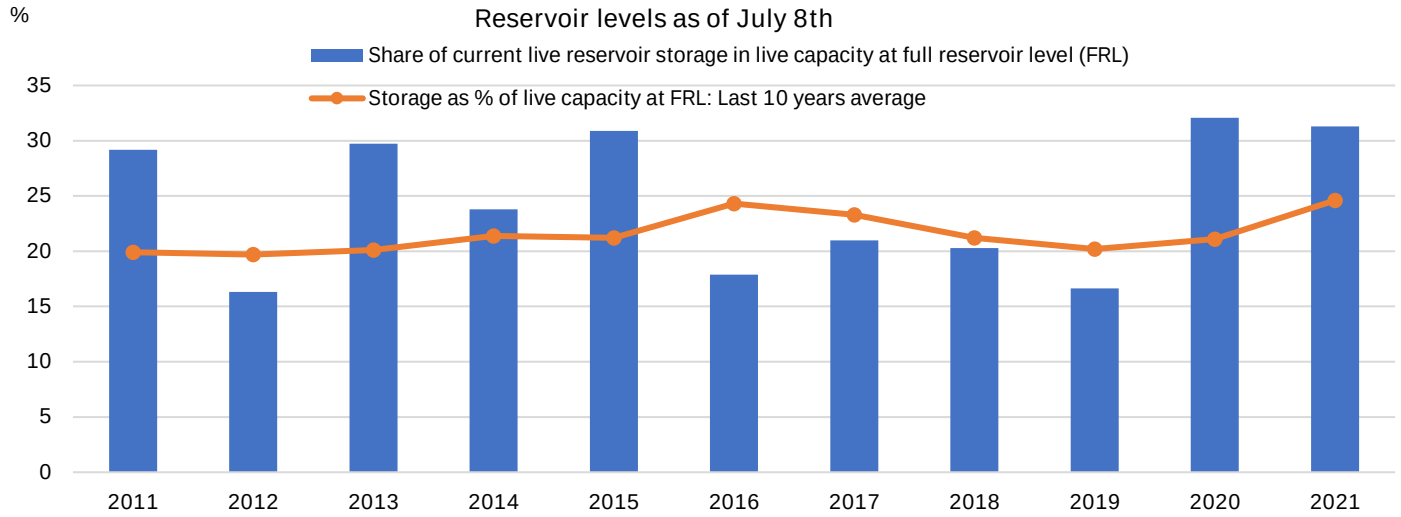
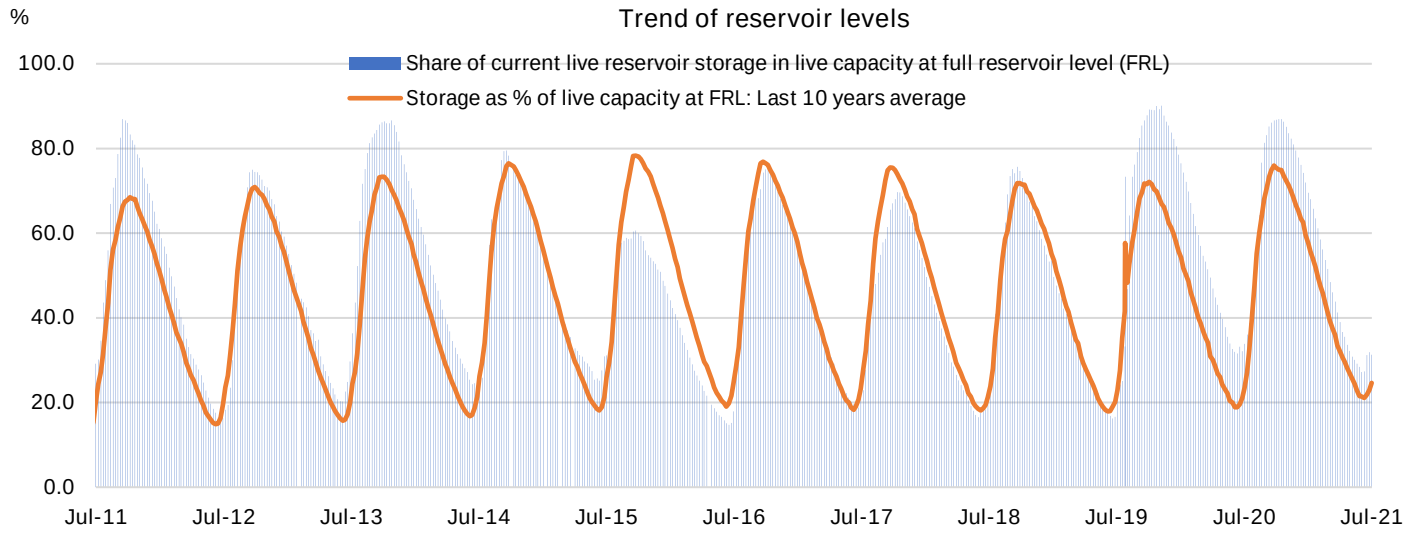


Figure 184: Live reservoir storage levels



Source: CMIE Economic Outlook, NSE.

Figure 185: Trend of reservoir storage levels



Source: CMIE Economic Outlook, NSE.

STOP PRESS: Macro data update (Data released between July 1st and 15th)[8]

IIP for May 2021: Industrial production moderates sequentially

Industrial production (IIP) rose by a strong 29%YoY in May but off a very low base (-33.4% in May'20), negatively surprising market expectations (Consensus: 32%). On a sequential basis, IIP declined by 8% MoM, lower than the pace of sequential moderation observed in April'21 (-13%MoM) given few states eased restrictions in the last week of May. From a 2 -year CAGR, industrial production dropped to an eleven-month low of -7%, depicting the halt in recovery momentum. All the categories not only witnessed sequential moderation but also remained subdued on 2-year CAGR. As per economic activity, capital goods and consumer durables suffered the most, showing moderation by more than 20% on 2-year CAGR. However, the severity of contraction was curtailed as fewer restrictions were imposed relative to last year and robust external demand also provided significant downside support. Going ahead, industrial production is most likely to inch sequentially north owing to easing of restrictive measures across the nation coupled with the persistent buoyancy in external demand.

CPI for June 2021: Retail inflation surprises positively

Headline CPI inflation remained broadly steady at 6.3% in June, positively surprising market expectations (Consensus: 6.6%; Source: Reuters). Increase in food & beverages and fuel inflation was almost entirely offset by a sharp drop in pan, tobacco & intoxicant inflation. Within food, the surge was primarily led by egg, oils & fats, fruits and pulses, even as most other categories have seen a moderation in price build-up. Core inflation rose by a modest 7bps MoM to a 35-month high of 6.3%, thanks to higher inflation in household goods & services, transport & communication, and education, partly offset by lower YoY increase in prices for recreation & amusement and personal care & effects. On a sequential basis (MoM), inflation hardened for the fifth month in a row, albeit at a moderated pace, reflecting gradual normalisation of supply chains that were disrupted by the deadlier second wave. We expect the RBI to remain accommodative at least through the current financial year and continue to support the nascent economic recovery by providing adequate and targeted liquidity support. Sustenance of an elevated inflation trajectory for a prolonged period and reversal of an easy global monetary policy backdrop remain key downside risks.

[8] A detailed note on these would be included in the next month's edition of Market Pulse.

Insights

Fire-sale spillover: Aggregate vulnerability index to predict systemic risk[9]

The paper "Fire-Sale Spillover and Systemic Risk" by Fernando Duarte and Thomas M. Eichenbach looked into factors that make the financial system vulnerable to fire sales. The authors constructed an index of aggregate vulnerability to fire sales of large bank holding companies. The index is composed of factors that influence this vulnerability and is used to answer the question of identifying these weak links prior to a crisis. Results in the papers indicate that the index increases gradually in 2000 and then faster in 2004 prior to the introduction of important systemic risk measures which slows down its progression. The index doubles at the end of 2006 and touches a record high in 2008, at three times its original value. Post the financial crisis, the aggregate vulnerability fell at a significantly fast rate and eventually stabilized in 2015. The measure is able to predict a shortfall in actual capital during the financial crisis in 2004, which would have been a useful tool to have when these cracks were emerging. The paper adapts the "cross-sectional' vulnerable framework of Greenwood, Landier and Thesmar (2015) to a panel analysis format.

Fire sale spillovers are identified as a potential cause of contagion in financial markets, which may rise systemic risk at an alarming rate. The paper "Fire-Sale Spillovers and Systemic Risk" by Fernando Duarte and Thomas M. Eisenbach addresses a host of questions regarding fire sales. Detecting vulnerability in advance will allow for intervention before fire sales materialise but there are challenges to be overcome before that. Some of them are identifying factors that make the financial system vulnerable due to rise in the probability of fire sales, the ability to track them over a period of time along with predicting when the weak links develop as well as where they lie.

The authors tackle the identified challenges by building an aggregate vulnerability index (AV) to fire sales of large bank holding companies. The index is made up of factors that influence vulnerability to fire sales and results indicate that it increased gradually in 2000 and then faster in 2004 prior to the introduction of important systemic risk measures which slows down its progression. The index doubles at the end of 2006 and touches a record high in 2008, at three times its original value. Post the financial crisis, the AV fell at a significantly faster rate and eventually stabilized in 2015. The measure is able to predict a shortfall in actual capital during the financial crisis in 2004, which would have been a useful tool to have when these cracks were emerging.

Duarte and Eisenbach used the cross-sectional "vulnerable banks" framework of Greenwood, Landier and Thesmar (2015) by extending it to a panel analysis format to track and analyse vulnerabilities. The original framework used leverage, asset holdings, asset liquidation behaviour and price impact of liquidating assets of the given banks. It then added a hypothetical negative shock that would cause a jump in leverage. In this paper, authors applied their aggregate vulnerability framework to a list of US bank holding companies on a quarterly basis. They assumed a straightforward scenario with the following assumptions – an exogenous shock to asset leads to banks facing losses who then sell assets to deleverage. These aggregate fire sales then lead to fire-sale spillovers in the form of a price impact.

The constructed index has several useful advantages. The measure has, since its inception, been useful for policymakers and regulators. This analysis can be looked at as

[9] The section gives a summary of the following paper:
Federal Reserve Bank of New York Staff Reports (October 2013) Fire-Sale Spillover and Systemic Risk
https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr645.pdf

a tweaked macro-prudential stress test with an easily implementable framework with a larger number of shocks. Finally, it allows counterfactuals to analyse policies implemented in the past or for analysis of future reforms to be introduced. The AV index is compared to other aggregate systemic risk measures, but the authors concluded that only a small number of these measures can gauge the gradual development of risk prior to a crisis. To predict bank systemic risk, it is also found that the index is useful with time-series data. The contribution of individual banks to the index are concluded to be good predictors of five commonly used measures of systemic risk specific to a firm. These results would have been useful tools as indicators of cracks forming in the financial system.

Research Insights from the NSE-ISB Trading Lab

Funding Liquidity and Market Liquidity in Government Bonds

Prachi Deuskar[10] Timothy C Johnson[11]

1. Introduction

The emphasis on importance of funding conditions in maintaining the stability of markets for risky assets is extant in the asset pricing literature. The hypothesis that the financing environment for intermediaries promotes market liquidity is widely held. To know the setting where this hypothesis holds and the channels through which this hypothesis operates, the authors exploit the availability of a comprehensive data for activity in the Indian government bond market to find evidence on funding liquidity - market liquidity hypothesis in government bonds.

They find no evidence that lower short-term interest rates boost market liquidity. However, they find that the measures of market liquidity have a significant positive correlation with primary dealers' short- term borrowing that supports the models that emphasize the role of intermediary capital. They provide evidence linking these firms' borrowing to their balance sheet strength and secondary market participation. The authors find that the localized funding conditions specific to the marginal suppliers of intermediation services hold more importance for market liquidity than the economy-wide funding environment.

2. Data and setting

The Reserve Bank of India (RBI) conducts monetary policy mainly by controlling the short-term interest rates. The government bond market is large and plays a major role in the Indian financial system. The Negotiated Dealing System (NDS) is the primary platform for trading in the government bonds. In 2005, an anonymous order-driven electronic module called NDS-OM was added to the NDS. All trading is centrally cleared by the Clearing Corporation of India (CCIL). The authors use trade and order book data from this high frequency data source which is maintained by the RBI. The sample period goes from May 21,2007 to April 20,2014. The idea behind using this data is that the ability of participants to finance positions with short-term borrowing is very vital for government bond markets and thus will likely offer a better idea of the funding liquidity effects.

The measurement of funding liquidity is challenging as the shadow costs faced by intermediaries is unobservable. The authors focus on two distinct formulations of hypothesis where the first focuses on level of interest rates i.e., monetary policy's tool being the determinant of funding conditions. The second formulation focuses on the balance sheets of specialized intermediaries. i.e., the primary dealers (PDs) in the government bonds markets. This approach is more of a localized view than the monetary policy approach which is related to the broader economic conditions pertaining to the funding environment. The designated primary dealers play a vital role in the Indian market and are obligated to participate in both the primary and secondary government securities trading. So, the PDs may have large funding requirements and are subject to capital adequacy norms from time to time. Motivated by existing literature that the broker-dealers' leverage is positively correlated with the size of their balance sheet and that borrowing is procyclical, the authors use net money market borrowing by PDs in the government bond market as a proxy for funding conditions. The data for this measure is available at monthly frequency from CCIL. Financial statement data on stand-alone PDS has been collected for the sample period.

The order and trade data form NDS-OM is combined to construct the complete limit order book at every minute. A limit order book at a given point in time is the collection of all orders open at that time. Using the snapshots, the midpoint of the best bid and ask quotes is taken as the price at that time. The authors defined per-minute returns as the difference

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between midpoint price at the end of current minute and that of the previous minute. For every minute, the net order flow is defined as the difference between total quantity for buyer-initiated and seller-initiated trades in terms of the bond face value (INR Billions).

To summarize the limit order book information, a slope measure of the line through cumulative quantities against limit order prices is constructed. This measure is called as the Inverse Limit Order Book Slope (ILOBS) and the calculation is as follows:

$$ILOBS = \frac{\sum_{s=Bid,Ask} \sum_{i=1}^{K} Mdist_{s,i} \,.\, Mdist_{s,i}}{\sum_{s=Bid,Ask} \sum_{i=1}^{K} Mdist_{s,i} \,.\, CQ_{s,i}}$$

Where K = Number of limit order prices on each side, s = sides of limit order book i.e., bid or ask.

$Mdist_{s,i}$ = Difference between the ith limit order price on side s and the mid-price, where mid-price is the midpoint of the best bid and best ask

$CQ_{s,i}$ = Cumulative quantity in billions of INR of the bond face value of all limit order between the mid-price and the ith limit order price on side s.

In line with the convention for order flow calculation, bid side quantities are treated as negative values. ILOBS is a measure of price impact as it helps capture the expected effect of market orders on prices.

Using the ILOBS to measure the market illiquidity and examining the conditional versions, the authors identify the contribution of funding liquidity conditions to price impact. They run lagged vector autoregression[12] based analysis with the proxies of funding conditions i.e., repo rate and PDs borrowing (net money market borrowing).

3. Results

The authors find the following results:

a) The findings show no support for the widely held funding liquidity hypothesis (FLH) when RBI repo rate is used as the measure of funding liquidity. In fact, the relationship between Repo Rate and price impact is found to be negative which stands opposite to the supposition of the hypothesis. However, using PD borrowing as the funding liquidity measure, the authors find evidence that strongly supports the FLH. A one-standard deviation lower PD borrowing implies a higher price impact by 0.41 basis points in response to an order flow of 1 billion INR.
b) The authors test the possibility that the lack of support for FLH using RBI Repo Rate is due to the absence of daily measure in this proxy but find no evidence supporting the same. They test using the MIBOR (Mumbai Interbank Offer Rate), the market repo rate and the call rate and find that the results are like those using RBI Repo Rate.
c) They find that there is positive relation between Primary Dealers' borrowing and bond market liquidity or trading volume. The positive association is statistically significant and mechanism behind this is that changes in the net worth of balance sheet or risk-bearing capacity of specific segment of marginal suppliers of intermediation services may experience change in their funding conditions which are different from those in the overall economy.

The authors show that the above findings consistently apply to the high frequency and low frequency analysis of price impact and limit order book, respectively. The results are robust across subperiods, maturity of bonds examined and other methodological variations.

4. Conclusion

Using a unique and comprehensive dataset from the Indian government market, this study explores the funding liquidity hypothesis, and the results are imperative in terms of policy implication. Surprisingly, the authors find little evidence that direct costs of funding bond positions affect market liquidity. They find that repo rate does affect the funding costs

[12] The authors estimate the simultaneous system of returns and flows using identification through heteroskedasticity (ITH) with the system being defined on different periods. They then estimate the Vector Autoregressions (VARs) using ILOBS, funding liquidity measure and components of bond volatility estimated.

of Primary Dealers, but it does not capture their overall funding environment conditions. Especially, in a setting where the short-term interest rate is the primary tool of monetary policy this finding is important in understanding that the looser or tighter monetary policy conditions feeding into asset market intermediation services directly, may be an oversimplification. This evidence could be of interest to policymakers concerned about avoiding market fragility in order to prevent the contagion effects that can amplify adverse economic shocks through various channels.

This evidence highlighted by the authors brings forth the segmented nature of liquidity provision and hence, funding environment facing primary dealers' is of more importance than broader economy monetary policy relaxation to ensure stability in asset market during turbulent times. The paper contributes to the market liquidity and funding conditions literature which help in efficient tracking of the market stability and devising response mechanisms to various macroeconomic shocks.

Highly cited research paper

Replicating Anomalies

Kewei Hou[13] Chen Xue[14] Lu Zhang[15]

1. Introduction

The authors replicate a wide range of anomalies documented in the Finance and Accounting literature, only to find that most anomalies do not satisfy the current standards for statistical significance. The authors classify anomalies broadly under the following heads: momentum, value-versus-growth, investment, profitability, intangibles, and trading frictions. Interestingly, 96% of the trading frictions anomalies – mostly liquidity, market microstructure, and other trading friction variables - disappear under rigorous standards.

The authors argue that academic research suffers from agency frictions that lead to publication biases. Editors compete for citation-based impact factors and publish papers with the most significant results. This motivates authors to engage in specification search, selecting sample criteria and test procedures until insignificant results become significant, also known as p-hacking. It is also challenging to publish non-result or replication studies; therefore, replication efforts are quite limited in the finance field. Finally, trillions of dollars are invested in factors-based exchange-traded funds and quantitative hedge funds worldwide, which provides a financial incentive to brute force results.

The above reasons motivate the authors to use more robust sample construction and statistical methodologies to evaluate whether existing anomalies withstand strict examination. The results demonstrate that most anomalies do not survive rigorous examination. This further implies that capital markets are far more efficient than previously believed by the academic and practitioner community.

2. Data and Setting

The authors replicate 452 anomalies, including 57, 69, 38, 79, 103 and 106 anomalies from the momentum, value-versus-growth, investment, profitability, intangibles, and trading frictions categories. The data on monthly returns are obtained from Center for Research in Security Prices (CRSP) and accounting information are obtained from the Compustat Annual and Quarterly Fundamental Files.

The CRSP database is widely used by the financial researcher community for United States setting. The database provides data for NYSE, AMEX and NASDAQ listed securities from Dec 31st ,1925 to present. The AMEX and NASDAQ stocks added to the database in 1962 and 1972 respectively, accounted for very small market capitalization of the entire database. As the number of such microcaps is very high in number but low in aggregate market capitalization, it is recommended to take NYSE stocks as breakpoints for portfolio construction in order to guarantee that the NYSE stocks are provided in each portfolio and to avoid most portfolios including only microcap stocks. The authors use this breakpoints criterion to perform various tests in their replication study.

The authors closely follow the variable definitions in the original studies. But to make the results comparable, they normalize the anomaly variable by subtracting the cross-sectional mean and dividing by cross-sectional standard deviation. The sample criterion is standard across all anomalies. The sample period is from January 1967 to December 2016. Financial firms and firms with negative book equity are excluded. No other screens are imposed.

The authors use two methodologies to evaluate the relationship between the anomaly variable and monthly returns: portfolio sort approach and cross-sectional regression approach. In the portfolio sort approach, the anomaly variable is

[13] Ohio State and CAFR
[14] University of Cincinnati
[15] Ohio State and NBER

measured at year t-1, the stocks are split into deciles at end of June of each year t, and decile returns (both-equal weighted and value-weighted) are computed from July of year t to June of year t+1. The cross-sectional univariate regression uses monthly return as y-variable and anomaly variable as x-variable. The authors use both ordinary least squares (OLS) regression and weighted least squares (WLS) regression with the market equity used as the weights.

The authors argue that (i) portfolio sorts with NYSE-AMEX-NASDAQ breakpoints and equal weighted return and (ii) cross-sectional regression with OLS, both overweight micro-caps. Micro-caps are economically less significant as they constitute only 3% of the market cap but over 60% of the number of stocks in the investment universe. The share of micro-caps in total market cap also has decreasing trend from 6.2% in 1984 to only 1.6% of market cap in 2016. Finally, anomalies in microcaps are difficult to exploit in practice due to high transaction costs. Therefore, they emphasize that (i) portfolio sorts with NYSE breakpoints and value weighted return and (ii) cross-sectional regression with WLS, are more appropriate.

To evaluate the statistical significance of the anomaly variable, Harvey, Liu and Zhou (2016)[16] suggest higher cut-offs for t-values to adjust for multiple testing. Following this, the authors assess the results using both single-test and multiple-test t-cut-offs.

3. Results

The main results in the paper are detailed below:

1. The authors find that only 158 anomalies are significant in sorts with NYSE breakpoints and value-weighted return, implying a low replication success rate of 35%. Cross-sectional regressions with WLS yield similar results with low replication rate of 33.6%
2. Adjusting for multiple testing further reduces the replication rates to 17.9% in sorts with NYSE breakpoints and value-weighted returns. The figure is 13.3% in cross-sectional regressions with WLS.
3. Among different groups of anomalies, replication rates using portfolio sorts are acceptable in the momentum and investment categories at 63.2% and 73.7%, moderate in the value-versus-growth and profitability categories at 42% and 44.3%, but poor in the intangibles and trading frictions categories at 25.2% and 3.8%. Cross-sectional regressions with WLS yield similar results.
4. Finally, the authors show that rank and return correlations are generally large within-category and small across categories for portfolio sorts.

The authors conduct multiple robustness with original samples, removing microcaps, different portfolio breakpoints, etc. The results show that the replication success rate is <60% for all cases. The results for individual anomalies are provided in detail in the paper.

4. Conclusion

The authors comprehensively replicate 452 anomalies documented in the finance and accounting literature to show that most anomalies disappear when evaluated using current empirical standards for statistical significance. They show that all anomalies are not created equal, certain classes of anomalies withstand scrutiny while others do not. They also show that micro-caps explain most anomalies in extant literature. They argue that exploiting these anomalies is not practically possible due to large trading costs and limited investment capacity. Finally, the paper contributes to replication literature on producing credible research in the finance and accounting field, which is more connected with economic theory.

[16] ... and the cross-section of expected returns (Harvey, Liu and Zhou; RFS, 2016)

Market Performance

Market Round-up

Equity markets consolidate in June

Global equity markets ended in green for yet another month, aided by accelerating COVID-19 vaccination rollouts in several advanced economies, strong corporate earnings, enhanced fiscal policy support and robust recovery in economic activity. While gradual reopening of economies has led to a quick rebound in activity levels, it has fuelled inflationary pressures, thereby unnerving investors about a premature withdrawal of easy policy conditions and consequently keeping gains contained. Emerging markets (EMs) underperformed the developed market pack, following an outperformance in the previous month, owing to a laggard pace of vaccinations, policy tightening woes in China and renewed dollar strengthening. While the MSCI World Index ended the month 1.4% higher (YTD: 13.5% as of July 9th), the MSCI EM Index ended marginally in red, with losses further widening in July thus far (YTD: +2.1%).

Following a significant rally in May, Indian equities took a breather in June even as it outperformed the broader EM pack for the second consecutive month. The Nifty 50 Index ended the month 0.9% higher (YTD: 12.2%) but started the month of July on a weaker note, with the rally being sharper in mid- and small-cap companies. This was primarily on the back of steady drop in COVID-19 infections across several states, robust corporate performance, enhanced fiscal and monetary policy support, and a pick-up in pace of vaccination rollout. Investors continued to overlook the near-term economic slowdown caused by the deadlier second wave but remained focused on medium-term growth prospects and future earnings trajectory—the latter point to a 28% CAGR in consensus earnings estimates over the next two years. FIIs also turned big buyers of Indian equities in June, with net inflows of US$2.4bn—the highest in four months.

Global fixed income markets witnessed a divergent performance across economies over the last couple of months. While the US 10-year benchmark yield fell by another 15bps—translating into a total drop of 30bps in the second quarter of 2021—despite rising inflation trajectory and a hawkish Fed, European bond yields declined amid signs of strong economic recovery and accelerating vaccination programme. Corporate bonds outperformed sovereign bonds for yet another month as investors continued to chase yields. Emerging market bonds ended in red, weighed down by a strong dollar. Indian domestic bond markets also fell sharply after holding up well over the last few months, as strengthening concerns about rising inflationary pressures and potential enhancement in the Government's borrowing programme led to a spike in bond yields across the curve. India's 10-year G-sec yield ended the month 3bps higher at 6.05%, but the 1-year and 5-year bond yields surged by 33bps and 15bps respectively. While crude oil prices continued to march higher on strengthening global demand, rally in other commodities took a breather in June. Meanwhile, INR depreciated by 2.4% in June to end the month at 74.3, weighed down by a strong dollar (+2.7%).

- Domestic equity markets outperformed the broader EM pack in June: Following a significant rally in May, Indian equities took a breather in June even as it outperformed the broader EM pack for the second consecutive month. This was primarily on the back of a) steady drop in COVID-19 infections across several states leading to gradual easing of restrictions, b) robust corporate performance, c) enhanced fiscal and monetary policy support, and d) a pick-up in pace of vaccination rollout. As of July 11th, 2021, India has administered, 372.3m vaccination doses, with 5.2% of the population getting fully vaccinated. Investors continued to overlook the near-term economic slowdown caused by the deadlier second wave but remained focused on medium-term growth prospects and future earnings trajectory—the latter point to a 28% CAGR in consensus earnings estimates over the next two years. FIIs also turned big buyers of Indian equities in June, with net inflows of US$2.4bn—the highest in four months. FIIs also turned

Indian equity markets outperformed the broader EM pack in June, with the Nifty 50 Index ending the month 0.9% higher.

big buyers of Indian equities in June, with net inflows of US$2.4bn—the highest in four months.

The Nifty 50 Index ended the month 0.9% higher (YTD: 12.2%) but started the month of July on a weaker note, while the Nifty 500 Index posted marginally higher gains of 1.9% (YTD: 17.5%). Mid- and small-caps outperformed for yet another month, with the Nifty Mid-cap 50 and Nifty Small-cap 50 Index rising by 3.7% (YTD: 29.1%) and 8.4% (YTD: 41.7%) respectively.

Sector-wise, the gains were led by Real Estate (+2.3%), Information Technology (+1.6%) and FMCG (+1.5%). Sectors that ended in red included Automobiles (-3.2%), Media (-3.0%), Metals (-2.7%) and Pharmaceuticals (-0.7%). On a YTD basis, Metal companies have significantly outperformed the market, with the CNX Metal Index rising by 62%.

Average daily turnover in NSE's cash market fell by 9.9% MoM to Rs707bn on top of a 11.9% MoM jump in the previous month. Average daily turnover during the first quarter of FY22 of Rs730bn is nearly 18% higher than the average daily turnover in FY21. Average daily derivative turnover in June fell by 9.0% MoM to Rs1,244bn, marking the fourth consecutive month to report a MoM contraction, with average daily turnover in Q1FY22 being just 2.1% higher than the average daily turnover of Rs1,219bn in FY21.

- Fixed income markets showed divergent performance across economies: Global fixed income markets have witnessed a divergent performance across economies over the last couple of months. While the US 10-year benchmark yield fell by another 15bps—translating into a total drop of 30bps in the second quarter of 2021—despite rising inflation trajectory and a hawkish Fed, European bond yields inched up amid signs of strong economic recovery and accelerating vaccination programme. Corporate bonds outperformed sovereign bonds for yet another month as investors continued to chase yields. Emerging market bonds ended in red, weighed down by a strong dollar. Indian domestic bond markets also fell sharply after holding up well over the last few months, as strengthening concerns about rising inflationary pressures and potential enhancement in the Government's borrowing programme led to a spike in bond yields across the curve. India's 10-year G-sec yield ended the month 3bps higher at 6.05%, but the 1-year and 5-year bond yields surged by 33bps and 15bps respectively.

  On the global front, China 10-year bond yield ended the month of June 1bp higher at 3.08%, while the Japan 10-year bond yield softened by 3bps to 0.05%. The US 10-year benchmark yield fell by 15bps to 1.44%, while German 10-year bund fell by a modest 2bps to -0.20%.

Rising inflationary pressures and a potential increase in the Government's borrowing programme weighed on Indian fixed income markets last month.

- FII turned strong buyers of Indian equities in June; DIIs were modest buyers: Continued drop in COVID cases, consequent easing of lockdown restrictions, strong corporate performance, positive global cues, and relatively benign economic ramifications caused by the second wave thanks to decentralised nature of restrictions led to renewed interest of FIIs into Indian equities. After being net sellers over the previous two months, FIIs turned big buyers into Indian equities in June, with net inflows at US$2.4bn (Source: Refinitiv Datastream)—the highest in

four months. FIIs, however, have remained modest net sellers of Indian fixed income markets for the sixth month a row in May, with net outflows at US$657m during the month. Domestic institutional investors (DIIs) were net buyers of Indian equities for the fourth month in a row in June, partly attributed to net positive inflows into mutual funds and improving SIP inflows.

- Global equity markets ended the month in green in June despite rising concerns on inflation: Global equity markets ended in green for yet another month, aided by accelerating COVID-19 vaccination rollouts in several advanced economies, strong corporate earnings, enhanced fiscal policy support and robust recovery in economic activity. While gradual reopening of economies has led to a quick rebound in activity levels, it has fuelled inflationary pressures, thereby unnerving investors about a premature withdrawal of easy policy conditions and consequently keeping gains contained. Emerging markets (EMs) underperformed the developed market pack, following an outperformance in the previous month, owing to a laggard pace of vaccinations, policy tightening woes in China and renewed dollar strengthening. While the MSCI World Index ended the month 1.4% higher (YTD: 13.5% as of July 9th), primarily led by the US, the MSCI EM Index ended marginally in red, with losses further widening in July thus far (YTD: +2.1%)

Global equity markets ended in green in June, even as performance remained divergent across economies.

While the MSCI World Index ended the month 1.4% higher, primarily led by the US, the MSCI EM Index ended marginally in red.

According to Institute of International Finance (IIF), FIIs were net buyers of EM equities for the ninth consecutive month in June. Net foreign portfolio flows to EMs stood at US$28.1bn in June vs. US$13.8bn in the previous month. Equity and debt inflows into EMs were US$9.2bn and US$18.9bn respectively.

US: The US equity markets continued to climb higher in June, touching all-time high levels towards June-end, supported by strong growth momentum, robust pace of vaccinations and enhanced fiscal support. The US corporate earnings performance in the first quarter was also much stronger-than-expected, elucidating the strength of the ongoing economic recovery. Rising inflationary pressures in the US, however, sparked some concerns about the Fed moving away from an easy monetary policy stance. That said, even as the Fed's mention of reducing asset purchases, its remarks about the current period of high inflation being transitory in nature, emanating from COVID-led supply bottlenecks, unfavourable base, and high pent-up demand, provided some respite to unnerved investors. While the S&P 500 Index ended the month 2.2% higher, Dow Jones remained broadly steady.

On the macro front, high-frequency indicators continued to exhibit signs of continued growth recovery. The Manufacturing Purchasing Managers' Index (PMI) remained elevated at all-time high levels of 62.1 in June. Services PMI fell slightly from an all-time high level of 70.4 in May to 64.6 in June, even as it pointed to the third-fastest expansion since the beginning of data collection. There's a shift in consumer spending to discretionary services, as reflected from a 1.3% MoM drop in retail sales in May. Additionally, vaccination drives are progressing at a fast pace, with nearly 48% of the population getting fully vaccinated and 56% getting at least one dose as on July 10th, 2021 (Source: Centres for Disease Control and Prevention). On the negative side, headline CPI inflation rose further to 5% YoY in May—the fastest pace since August 2008, primarily attributed to a sharp jump in car prices. Recent jobs report also painted a mix picture with a higher-than-

expected jump in non-farm payrolls but an expected increase in unemployment rate to 5.9% in June.

On the monetary policy front, the US Federal Reserve maintained interest rates at near-zero levels despite strengthened economic activity and employment levels. The Fed officials expressed cautious optimism about the recovery, with some members highlighting the scope of reduction in asset purchases at some point if economy continues the path of recovery.

Europe: European equities also extended gains in June, as investor optimism about economic and business outlook strengthened owing to further relaxation in restrictions and a pick-up in pace of vaccination roll-out. Improvement in incoming macro data and strong corporate earnings season as well as ECB's decision to continue with enhanced asset purchases to keep borrowing costs contained further supported investor sentiments. Vaccination progress has picked up pace meaningfully, with nearly 44% of the adult population (18+) in EU member states getting fully vaccinated as of July 11th (Source: European Centre for Disease Prevention and Control) and ~64% getting administered one done. Among key market indices, while the UK's FTSE 100 and Germany's DAX 30 gave modest returns of 0.2% and 0.7% respectively in May, France's CAC 40 outperformed and generated a return of 0.9%.

On the macro front, economic recovery picked up pace further. Manufacturing PMI inched up further to new record-high levels of 63.4 in June 2021 from 63.1 in May, marking the 12th consecutive month of expansion in the manufacturing sector. Services PMI also moved up further high in the expansion zone from 55.2 in May to 58.3 in June—the steepest pace of expansion since July 2007. The Euro area unemployment rate dropped for the fourth month in a row to 7.9% in May'21, with the number of unemployed declining by 306K MoM to 12.79m. The Consumer Confidence Index improved meaningfully to -3.3 in June from -5.1 in the previous month, marking the highest reading since Jan'18, supported by further opening of the economy and increase in pace of vaccinations. Consumption demand is also showing signs of revival, as signalled from a 4.6% MoM surge in retail sales. On the monetary policy front, the ECB signalled on continuing with the stimulus measures despite the improving economic outlook, citing the recovery to be nascent, thereby requiring continued policy support.

In the UK, economic prospects continued to improve amid rising vaccinations and continued unlocking of the economy. The Manufacturing PMI declined marginally from record-high print of 65.6 in May'21 to 63.9 in June, even as it continued to signal a strong pace of recovery in the manufacturing sector. The Services PMI also remained quite strong at 62.4 in June—the second highest reading since October 2013. Consumer Confidence index remained steady at 15-month high of -9 in Jun'21. On the policy front, the Bank of England kept the policy rates (Bank rate at 0.1%) and the bond-buying programme (total target at £895bn) unchanged during the recent meeting. The Committee also reiterated its commitment to maintain an easy policy stance until there is a clear evidence of a meaningful increase in capacity utilisations and sustenance of 2% inflation prints.

Asia: The Asian markets underperformed in June, weighed down by policy tightening and regulatory woes in China, laggard pace of vaccinations and renewed dollar strengthening. India outperformed the broader EM pack, aided by continued drop in infections, accelerating pace of vaccinations and strong corporate performance. Enhanced fiscal and monetary policy support to vulnerable sectors of the economy further bolstered investor sentiments. Japanese equities continued to underperform its developed market peers, thanks to delay in lifting of the state of Emergency until June 20th, slower pace of vaccination roll-out and weak macroeconomic data. While Hang Seng Index (Hong Kong), SSE Composite Index (China) and Nikkei Index reported modest losses of 1.1%, 0.7% and 0.2%, respectively, South Korea's Kospi Index and India's Nifty 50 Index ended the month in green, posting gains of 2.9% and 0.9% respectively.

On the macro front, several high-frequency indicators in India continued to point towards a weak economic environment, even as there have been some signs of green shoot emerging. While India's Manufacturing PMI fell into the contraction zone for the first time in 11 months to 48.1 in June, Services PMI fell deep into the contraction zone to 41.2 in June from 46.4 in May, negatively surprising market expectations. Following a significant drop in May, consumption demand has witnessed signs of revival, thanks to easing lockdown restrictions and increasing pace of vaccinations. This is reflected in ~43% YoY jump in car sales and 90.7% YoY/7.2% MoM increase in non-oil imports. Decentralised nature of restrictions limited to downside risks to the industrial activity, as also reflected from a sharp rebound in e-Way bills and freight traffic.

Macro indicators in China painted a mixed picture, with the Manufacturing PMI falling to 51.3 in June from 52 in the previous month and Services PMI dropping to a 14-month low of 50.3 in June. Recent spike in COVID infections and supply-chain bottlenecks have weighed on manufacturing activity.

- Commodity rally took a breather in June: Following a significant rally over the last few months, commodity markets took a breather in June, weighed down by renewed dollar strengthening. Except for brent crude oil, where prices surged by 8% YoY to US$75/bbl, thanks to strong global demand and tight supply conditions, other commodities remained under pressure. Hard commodities witnessed losses led by Copper and Zinc, even as Iron Ore, Lead and Aluminium reported modest gains. Safe-haven commodities also came under pressure in June, with Gold and Silver prices falling by rising by 7.4% and 7.0% respectively, largely reversing the gains seen in the previous month.

Commodity markets took a breather in June, weighed down by renewed dollar strengthening.

- EM currencies fell against a strong dollar in June: Dollar index—that measures the greenback against a basket of currencies—rallied sharply in June, up 2.7%, reversing a part of the 3.9% drop seen over the previous two months. This is primarily on the back of upward revisions in growth and rate hike forecasts by the US Fed, increasing expectations of a stronger recovery and gradual reversal of monetary easing measures. Both Euro and Pound stumbled by 3% and 2.8% against the dollar last month. EM currencies also suffered from a strong dollar, with the INR depreciating by 2.4% against the dollar last month, more than reversing the gains seen in the previous month.

Dollar Index rose by a sharp 2.7% in June, thereby weighing on the broader EM currency pack, including the INR (-2.4% in June).

Market performance across asset classes

Figure 186: Performance across equity indices, fixed income, currency, and commodities

Indicator Name	June-21	1M ago	3M ago	12M ago	1M (%)	3M (%)	6M (%)	12M (%)	YTD (%)
Equity Indices									
NIFTY 50	15,722	15,583	14,691	10,302	0.9	7.0	12.4	52.6	12.4
NIFTY 500	13,474	13,226	12,314	8,475	1.9	9.4	17.0	59.0	17.0
MSCI INDIA	1,821	1,794	1,680	1,196	1.5	8.4	13.8	52.3	13.8
India Volatility Index (%)	13	17	21	29	-22.7	-36.8	-38.2	-55.2	-38.2
MSCI WORLD	3,017	2,976	2,812	2,202	1.4	7.3	12.2	37.0	12.2
S&P 500 COMPOSITE	4,298	4,204	3,973	3,100	2.2	8.2	14.4	38.6	14.4
DOW JONES INDUSTRIALS	34,503	34,529	32,982	25,813	-0.1	4.6	12.7	33.7	12.7
HANG SENG	28,828	29,152	28,378	24,427	-1.1	1.6	5.9	18.0	5.9
FTSE 100	7,037	7,023	6,714	6,170	0.2	4.8	8.9	14.1	8.9
NIKKEI 225	28,792	28,860	29,179	22,288	-0.2	-1.3	4.9	29.2	4.9
Fixed Income									
India 10YR Govt Yield (%)	6.05	6.02	6.18	5.89	3bps	-13bps	16bps	16bps	16bps
India 5YR Govt Yield (%)	5.72	5.59	5.71	5.28	13bps	1bps	62bps	44bps	62bps
India 1YR Govt Yield (%)	4.09	3.77	3.93	3.73	33bps	16bps	33bps	36bps	33bps
India 3Month T-Bill Yield (%)	3.45	3.45	3.31	3.19	-1bps	13bps	34bps	26bps	34bps
US 10YR Govt Yield (%)	1.44	1.59	1.75	0.65	-15bps	-30bps	53bps	79bps	53bps
Germany 10YR Govt Yield (%)	-0.20	-0.18	-0.30	-0.46	-2bps	9bps	37bps	26bps	37bps
China 10YR Govt Yield (%)	3.08	3.08	3.20	2.90	1bps	-12bps	-12bps	19bps	-12bps
Japan 10YR Govt Yield (%)	0.05	0.08	0.10	0.03	-3bps	-4bps	3bps	3bps	3bps
Currency									
USD/INR	74.3	72.6	73.1	75.5	2.4	1.7	1.7	-1.6	1.7
EUR/USD	1.19	1.22	1.2	1.1	-3.0	0.9	-3.1	5.6	-3.1
GBP/USD	1.38	1.42	1.4	1.2	-2.8	0.1	1.1	11.8	1.1
USD/YEN	111.0	109.4	110.5	107.9	1.5	0.4	7.5	2.9	7.5
USD/CHF	1.1	1.1	1.1	1.1	-2.7	1.8	-4.4	2.5	-4.4
USD/CNY	6.5	6.4	6.6	7.1	1.6	-1.4	-1.2	-8.7	-1.2
Commodities									
Brent Crude Oil (US$/bbl)	75.3	69.7	63.5	41.3	8.0	18.5	45.0	82.4	45.0
LME Aluminium (US$/MT)	2,510	2,459	2,188	1,602	2.1	14.7	27.2	56.7	27.2
LME Copper (US$/MT)	9,352	10,248	8,788	6,005	-8.8	6.4	20.7	55.7	20.7
LME Lead (US$/MT)	2,265	2,196	1,953	1,763	3.1	16.0	14.6	28.5	14.6
LME Nickel (US$/MT)	18,212	18,078	16,022	12,758	0.7	13.7	10.0	42.8	10.0
LME Tin (US$/MT)	32,920	33,000	27,538	16,819	-0.2	19.5	60.2	95.7	60.2
LME Zinc (US$/MT)	2,967	3,044	2,805	2,037	-2.5	5.8	8.7	45.7	8.7
SHC Iron Ore Spot (US$/MT)	216	202	165	102	7.0	30.6	36.0	112.3	36.0
Gold Spot Price (US$/troy ounce)	1,765	1,906	1,705	1,784	-7.4	3.6	-7.0	-1.0	-7.0
Silver Spot Price (US$/troy ounce)	26	28	24	18	-7.0	7.0	-1.0	43.9	-1.0
Platinum Spot Price (US$/ounce)	1,059	1,170	1,182	814	-9.5	-10.4	-0.8	30.1	-0.8
Palladium Spot Price (US$/ounce)	2,707	2,817	2,625	1,905	-3.9	3.1	15.6	42.1	15.6

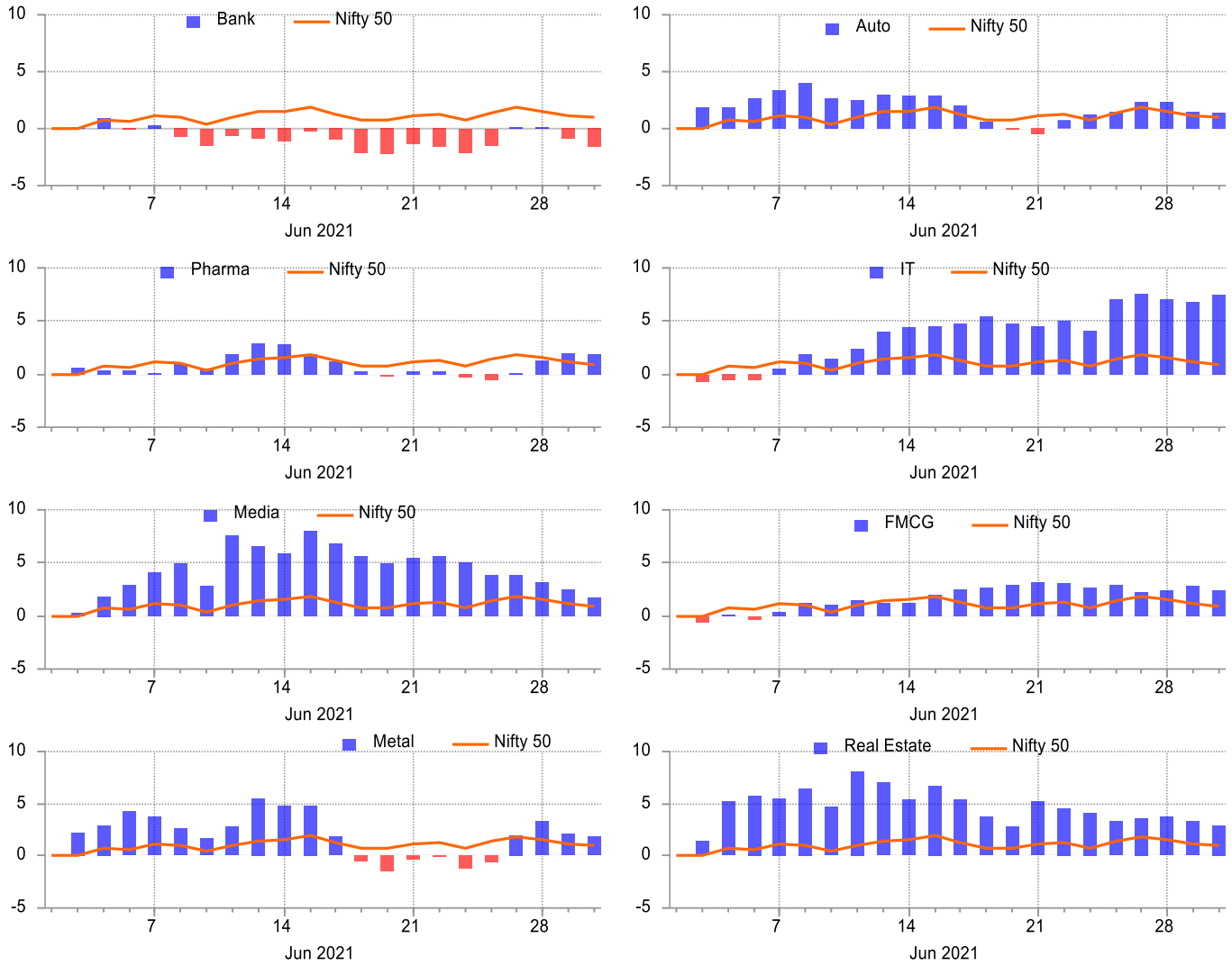
Source: Refinitiv Datastream, NSE.

Figure 187: Performance across NSE sector indices

Indicator Name	June-21	1M ago	3M ago	12M ago	1M (%)	3M (%)	6M (%)	12M (%)	YTD (%)
Auto	10,600	10,492	9,862	6,719	1.0	7.5	15.3	57.8	15.3
Bank	34,772	35,527	33,304	21,370	-2.1	4.4	11.2	62.7	11.2
FMCG	36,093	35,243	34,932	30,063	2.4	3.3	5.6	20.1	5.6
IT	29,168	27,115	25,855	14,754	7.6	12.8	20.3	97.7	20.3
Media	1,798	1,761	1,545	1,343	2.1	16.3	9.0	33.8	9.0
Metals	5,216	5,162	3,977	1,991	1.1	31.1	60.3	161.9	60.3
Pharma	14,309	14,052	12,273	9,985	1.8	16.6	10.8	43.3	10.8
Real Estate	344	336	334	203	2.3	2.9	9.6	69.7	9.6

Source: Refinitiv Datastream, NSE.

Figure 188: NIFTY sector performance during June 2021 (rebased to 0)



Source: Refinitiv Datastream, NSE.

Figure 189: Performance of key Nifty debt indices (As of June 30th, 2021)

Category	Index name	Absolute returns (%)					CAGR returns (%)		
		1M	3M	6M	1Y	YTD	2Y	3Y	5Y
G-sec	Nifty 5yr Benchmark G-sec Index	(0.2)	1.7	0.9	3.9	0.9	8.8	10.3	8.6
	Nifty 10 yr Benchmark G-Sec	0.3	2.3	1.7	4.0	1.7	7.3	9.1	7.1
	Nifty Composite G-sec Index	0.0	1.8	0.4	3.7	0.4	8.1	10.0	8.0
SDL	NIFTY 10 Year SDL Index	(0.4)	1.0	0.8	4.4	0.8	8.9	11.2	9.0
AAA credit	NIFTY AAA Ultra Short Duration Bond Index	0.3	1.0	1.9	4.0	1.9	5.8	6.8	7.1
	NIFTY AAA Short Duration Bond Index	0.1	1.4	1.5	6.0	1.5	9.2	9.1	8.1
	NIFTY AAA Low Duration Bond Index	0.3	1.0	1.8	4.7	1.8	6.9	7.4	7.3
	NIFTY AAA Medium Duration Bond Index	0.1	2.1	1.8	7.2	1.8	10.9	10.2	8.6
	NIFTY AAA Medium to Long Duration Bond Index	0.3	1.9	1.6	5.9	1.6	10.4	9.9	8.2
	NIFTY AAA Long duration Bond Index	0.5	1.7	1.6	5.3	1.6	10.3	11.0	8.4
Composite	NIFTY Liquid Index	0.3	0.9	1.7	3.4	1.7	4.4	5.4	5.9
	NIFTY Money Market Index	0.3	0.9	1.7	3.7	1.7	5.1	6.0	6.4
	NIFTY Ultra Short Duration Debt Index	0.3	1.0	1.9	4.0	1.9	5.6	6.5	6.8
	NIFTY Short Duration Debt Index	0.3	1.5	1.9	6.0	1.9	8.3	8.5	7.8
	NIFTY Low Duration Debt Index	0.3	1.1	2.0	4.6	2.0	6.3	6.9	7.0
	NIFTY Medium Duration Debt Index	0.1	2.0	1.8	6.7	1.8	10.0	9.9	8.4
	NIFTY Medium to Long Duration Debt Index	0.2	2.0	1.5	5.9	1.5	9.7	10.2	8.3
	NIFTY Long Duration Debt Index	0.2	1.7	0.7	4.6	0.7	9.1	10.8	8.4
	NIFTY Composite Debt Index	0.2	1.9	1.4	5.9	1.4	9.4	10.1	8.4
	NIFTY Corporate Bond Index	0.3	1.9	2.1	7.3	2.1	9.7	9.4	8.4

Source: NSE Indices.

Figure 190: India 10Y G-sec yield—long-term trend

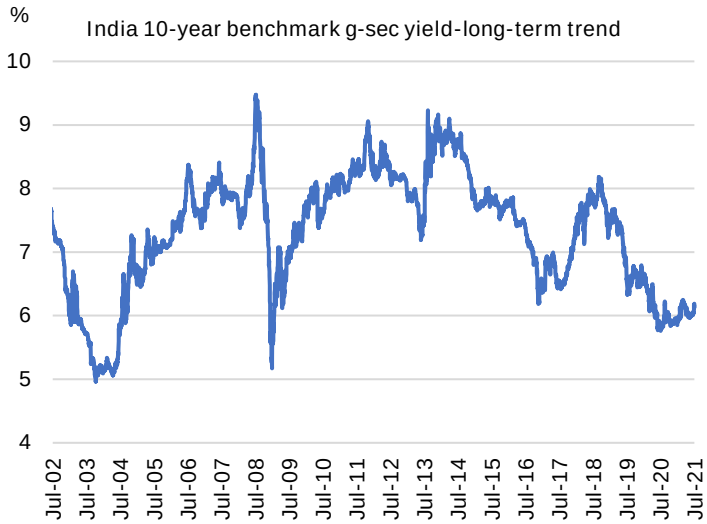
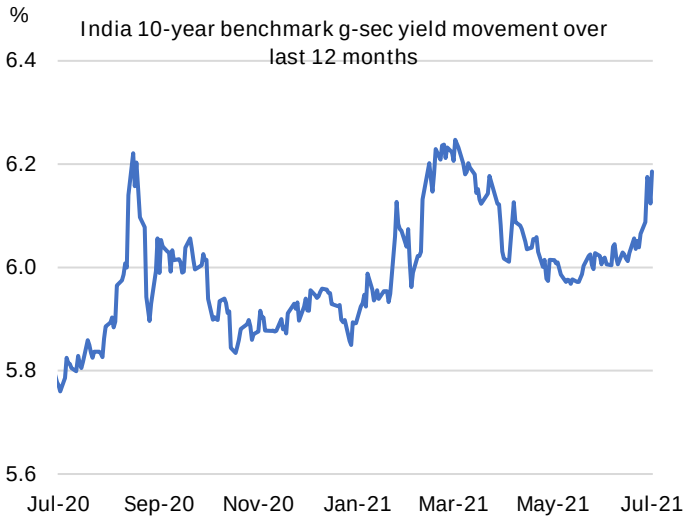


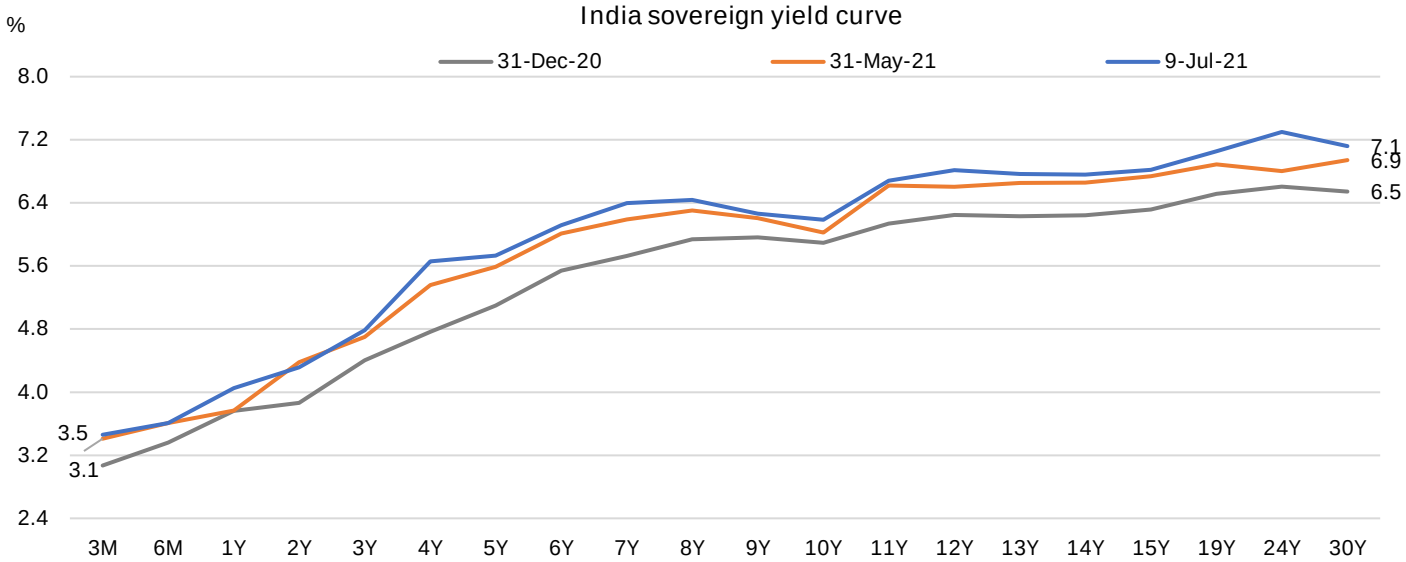
Figure 191: India 10Y G-sec yield—last one-year trend



Source: Refinitiv Datastream.

Figure 192: India sovereign yield curve

Rising inflationary pressures and concerns over higher borrowing requirements by the Government, particularly after the recent fiscal announcements, led to an increase in bond yields across the board. This was despite a sharp drop in US bond yields and sustained RBI's efforts to keep yields low.



Source: Refinitiv Datastream.

Figure 193: Sovereign yield curve across G20 countries as of June 30th, 2021

June 2021	3m	6m	1y	2y	3y	4y	5y	6y	7y	8y	9y	10y	30y
US	0.05	0.06	0.07	0.25	0.46		0.89		1.24			1.47	2.09
Japan	-0.10	-0.10	-0.12	-0.11	-0.12	-0.12	-0.10	-0.08	-0.06	-0.02	0.03	0.05	0.69
Germany	-0.65	-0.63	-0.61	-0.66	-0.69	-0.64	-0.58	-0.51	-0.39	-0.36	-0.34	-0.20	0.29
France	-0.63	-0.63		-0.63	-0.60	-0.51	-0.43	-0.32	-0.22	-0.12	0.04	0.13	0.92
UK	0.07	0.07	0.04	0.06	0.18	0.24	0.33	0.44	0.53	0.66	0.75	0.72	1.24
Italy	-0.54	-0.53	-0.49	-0.36	-0.19	-0.02	0.10	0.33	0.41	0.57	0.74	0.82	1.85
Canada	0.15	0.17	0.24	0.45	0.66	0.88	0.98		1.16			1.39	1.84
EU	-0.65	-0.63	-0.61	-0.66	-0.69	-0.64	-0.59	-0.51	-0.39	-0.36	-0.34	-0.20	0.29
Argentina			37.73			44.50			46.25				
Australia			0.01	0.07	0.43	0.67	0.85	1.03	1.19	1.32	1.48	1.51	2.32
Brazil	4.23	4.84	6.30	7.71	7.97		8.11			8.55		9.12	
China			2.32	2.66	2.75		2.93		3.10			3.08	3.67
India	3.40	3.70	4.09	4.59	4.89	5.65	5.72	6.13	6.27	6.37	6.26	6.05	7.10
Indonesia	3.24	3.33	3.48		4.78		5.43					6.63	7.25
South Korea			0.95	1.30	1.45	1.60	1.74					2.09	2.20
Mexico	4.41	4.84	5.45		5.62		6.15		6.61			6.97	7.55
Russia	6.01	6.45	6.28	6.85	6.92		7.01		7.08			7.20	
South Africa	4.22			5.25			7.43					8.88	10.49
Turkey	18.11	17.82	17.85	17.58	17.72		17.57					16.68	

Source: Refinitiv Datastream.

Figure 194: Sovereign yield curve across G20 countries as of June 30th, 2019

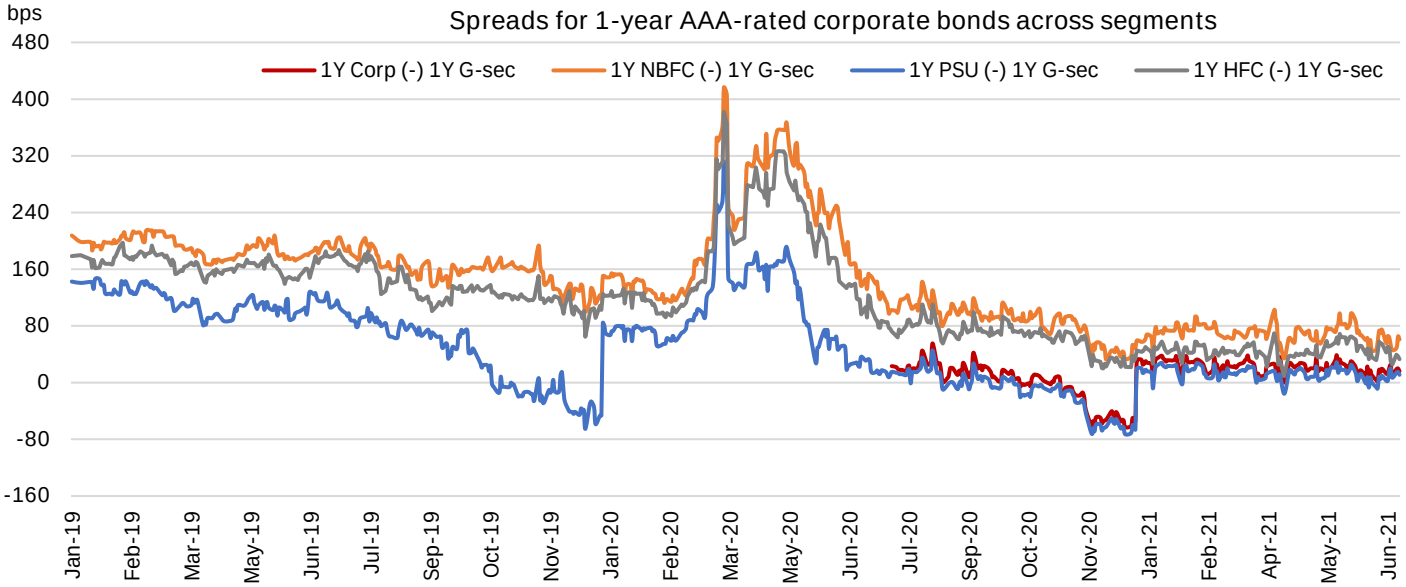
June 2019	3m	6m	1y	2y	3y	4y	5y	6y	7y	8y	9y	10y	30y
US	2.10	2.10	1.93	1.76	1.71		1.77		1.88			2.01	2.53
Japan	-0.13	-0.18	-0.20	-0.22	-0.24	-0.26	-0.26	-0.25	-0.25	-0.24	-0.18	-0.16	0.36
Germany	-0.53	-0.59	-0.67	-0.73	-0.76	-0.73	-0.66	-0.63	-0.57	-0.47	-0.41	-0.33	0.27
France	-0.57	-0.53	-0.60	-0.68	-0.68	-0.62	-0.52	-0.40	-0.31	-0.21	-0.11	0.00	0.94
UK	0.74	0.75	0.69	0.62	0.57	0.61	0.63	0.64	0.68	0.75	0.72	0.83	1.47
Italy	-0.22	-0.13	-0.05	0.22	0.70	0.98	1.27	1.49	1.58	1.76	1.80	2.09	2.95
Canada	1.66	1.69	1.69	1.47	1.43	1.41	1.39		1.43			1.47	1.69
EU	-0.53	-0.59	-0.67	-0.74	-0.76	-0.73	-0.66	-0.63	-0.57	-0.47	-0.41	-0.33	0.27
Argentina			28.60			41.64							
Australia			1.05	0.98	0.96	0.97	1.02	1.10	1.16	1.23	1.30	1.33	1.94
Brazil	6.45	6.23	5.87	5.99	6.33		7.04			7.31		7.47	
China			2.65	2.83	2.95		3.09		3.30			3.28	3.91
India	6.01	6.15	6.19	6.30	6.57	6.65	6.77	6.93	6.91	7.03	7.01	6.88	7.08
Indonesia	5.98	6.33	6.54		6.84		6.87					7.37	8.29
South Korea			1.51	1.49	1.47	1.52	1.51					1.60	1.63
Mexico					7.36		7.36		7.52			7.57	7.86
Russia	7.49	7.45	7.00	7.15	7.24		7.35		7.40			7.41	
South Africa	6.74			6.35			7.24					8.10	9.68
Turkey	21.34	20.41	21.70	18.90	17.89		16.43					16.20	

Source: Refinitiv Datastream.

Corporate bond market performance

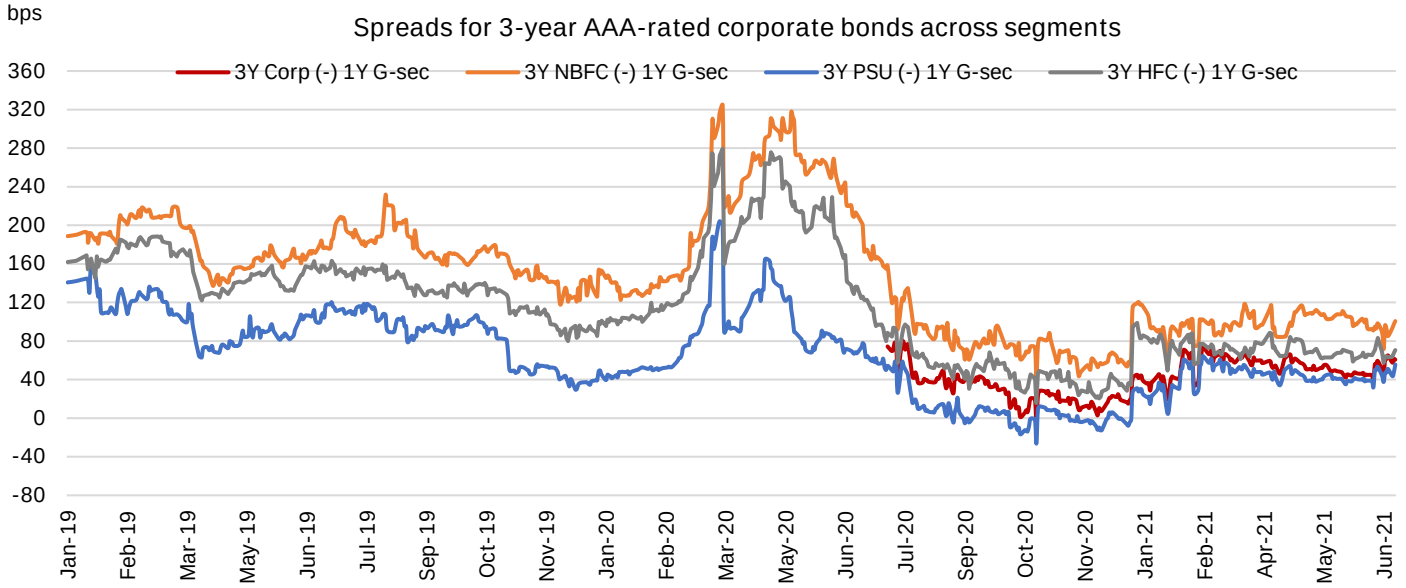
Corporate bond yields have moved up in line with sovereign yields amid expectations of an increase in the Government's borrowing programme and rising inflationary pressures. The AA+ rated bond yields, however, have dropped across the curve over the last one month. That said, lower supply has kept corporate bond spreads fairly stable in the 1-year and 3-year tenors and has led to a meaningful drop in spreads in the 5-year segment.

Figure 195: Spreads for 1-year AAA-rated corporate bonds across segments



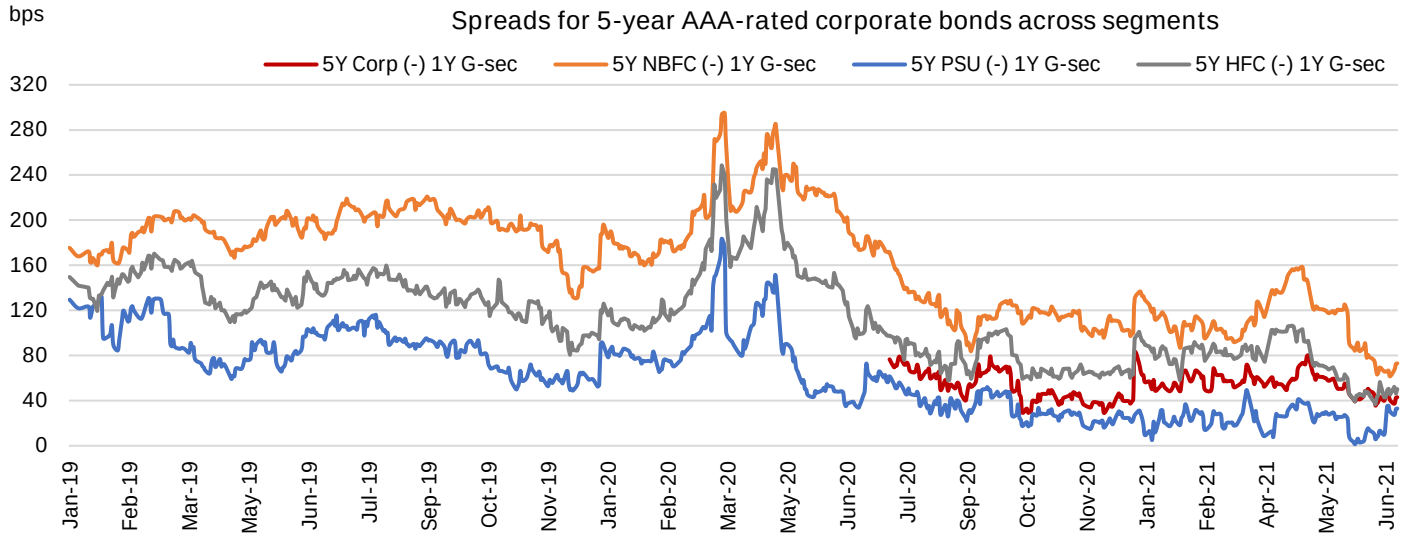
Source: NSE Data and Analytics (NDAL), Refinitiv Datastream.

Figure 196: Spreads for 3-year AAA-rated corporate bonds across segments



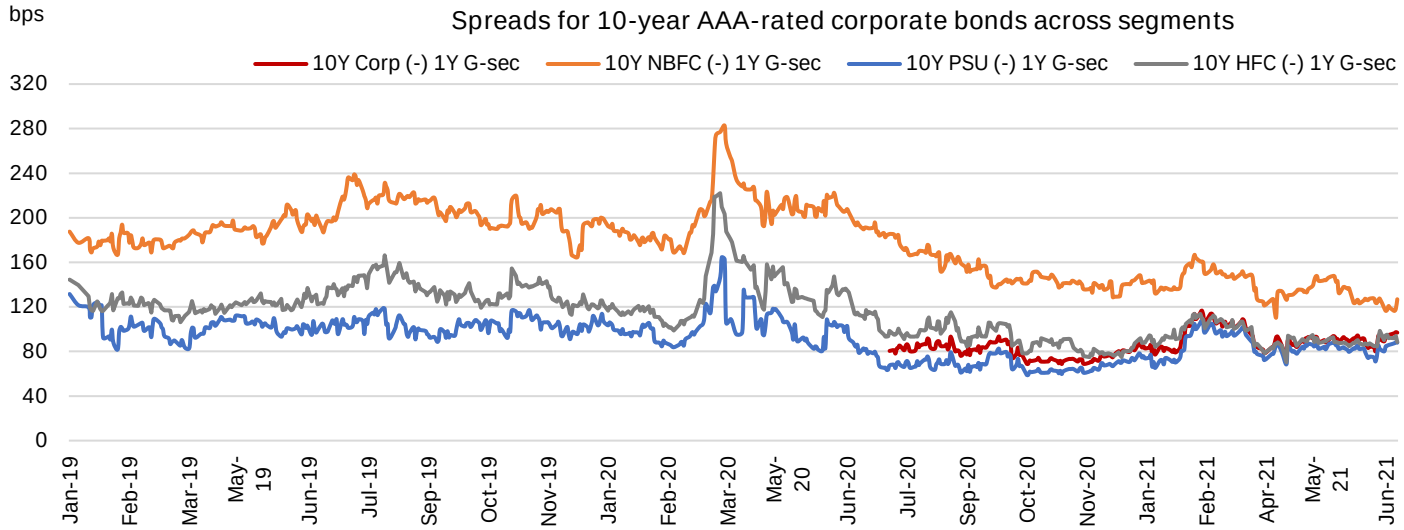
Source: NSE Data and Analytics (NDAL), Refinitiv Datastream.

Figure 197: Spreads for 5-year AAA-rated corporate bonds across segments



Source: NSE Data and Analytics (NDAL), Refinitiv Datastream.

Figure 198: Spreads for 10-year AAA-rated corporate bonds across segments



Source: NSE Data and Analytics (NDAL), Refinitiv Datastream.

Figure 199: AAA-rated corporate bond yield curve

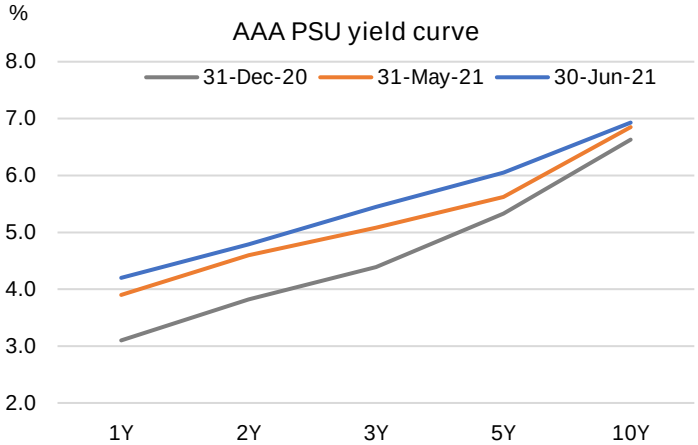
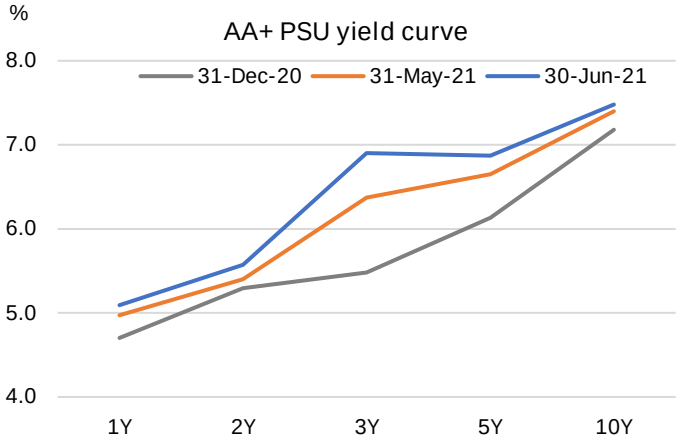


Figure 200: AA+ rated corporate bond yield curve



Source: NSE Data and Analytics (NDAL).

Figure 201: Change in AAA bond yields in June 2021

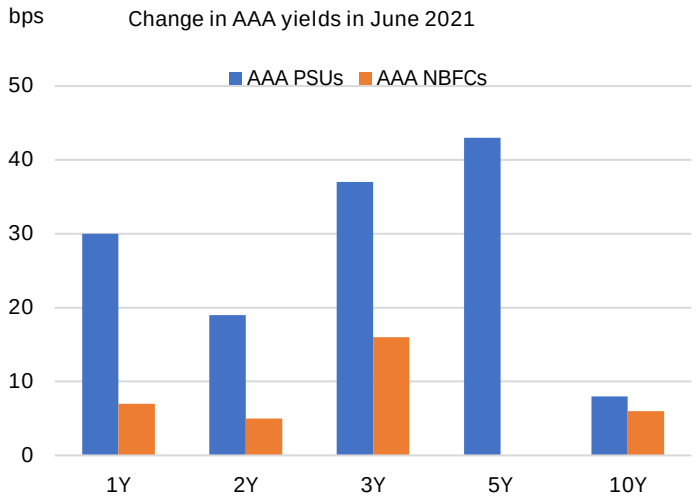
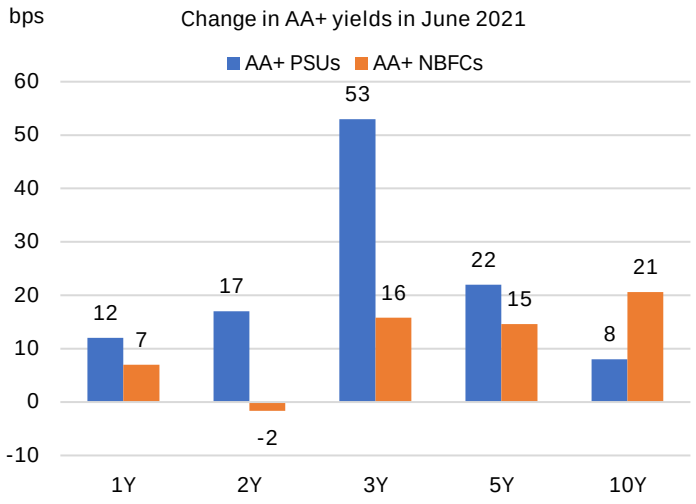
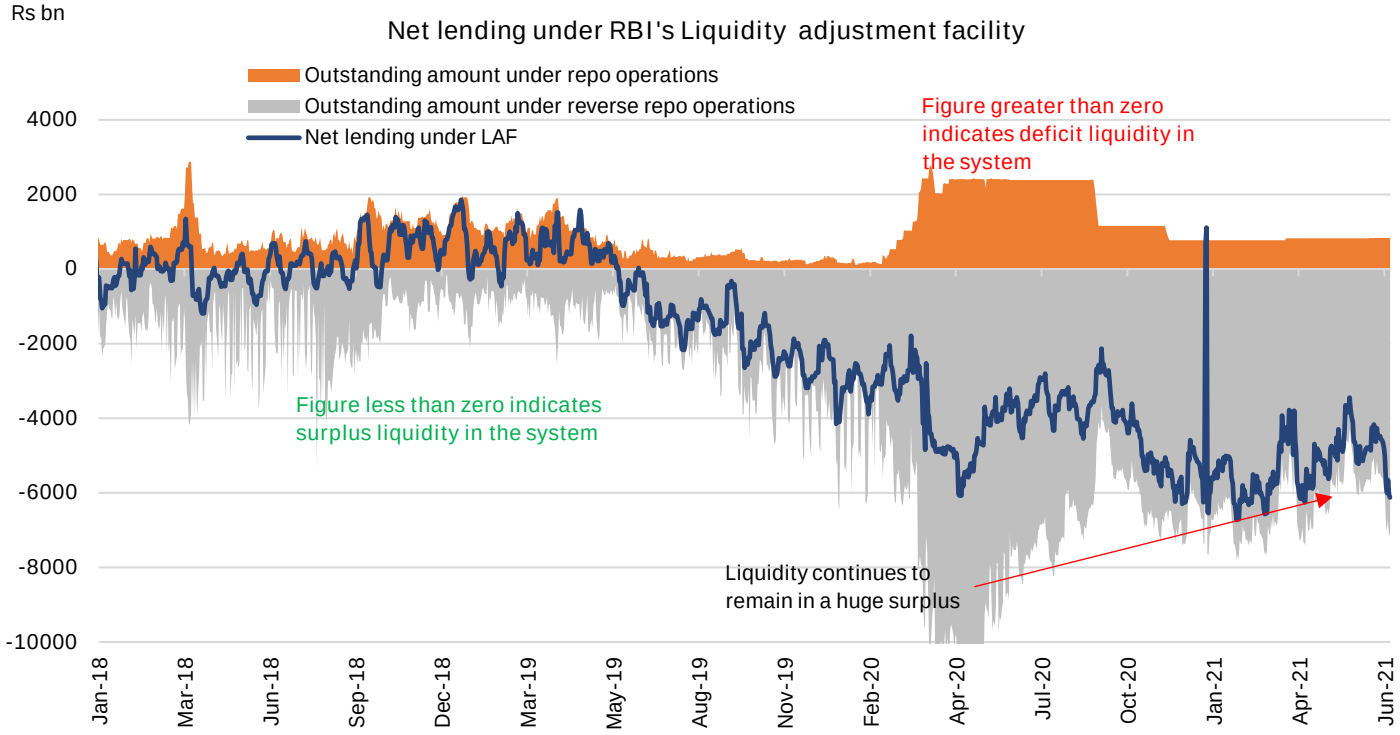


Figure 202: Change in AA+ bond yields in June 2021



Source: NSE Data and Analytics (NDAL).

Figure 203: **Net lending under RBI's liquidity adjust**ment facility
Surplus liquidity in the system has averaged at ~Rs5trn in FY22 thus far.



Source: CMIE Economic Outlook.

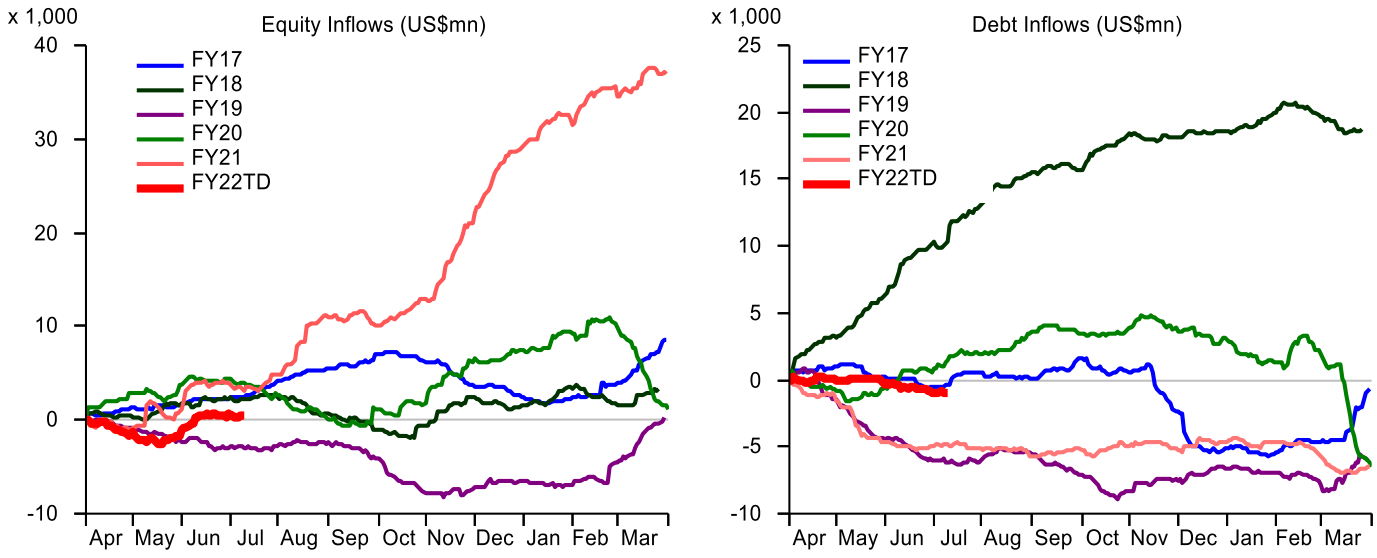
Institutional flows across market segments in India

Post a slight recovery, FIIs' net inflows remained muted in FY22 in the equity segment,...: After recording a magnificent growth in FY21, FIIs' net inflows have started steering into negative zone in FY22, thanks to slow pace of the vaccination drive, multiple waves of Coronavirus cases and slow recovery of high-frequency indicators. Even though there was a temporary increase in net inflows over the second half of May'21 till the mid-June'21 to embark into a positive territory. Since then, FIIs' net inflows remained muted, thanks to the rise in uncertainty over the economic recovery in India, while major developed economies are expected to grow significantly in FY22. As of July 9th, 2021, FIIs' net inflows stood at around US$377m, which is significantly lower than US$3.9bn and US$3.2bn over the over the same period in FY20 and FY21, respectively.

FIIs' net inflows remained muted in the debt segment throughout FY22: Unlike FY18, FIIs net inflows remained somewhat muted and ended in the negative territory over the last six years. FIIs' net inflows reached to a record level with a significant growth in FY18, before turning to negative zone in the following year to decline to record lows in FY19. The pattern had somewhat reversed over a significantly long period of time in FY20, before declining again since March 2020. Henceforth, they remained to be net sellers in the debt segment, and there is no sign of recovery in FY22 thus far. This was largely led by deteriorating India's fiscal health condition, continuous rise in government debt globally, rise in US benchmark yields, significant rise in inflation in US as well as in India, and several spikes in the number of coronavirus cases. At the same time, there are increasing concerns of default of outstanding loans in the private sector. As of July 9th, FIIs' net outflows in the debt segment was US$930m in FY22 as compared to US$4.7bn over the same period in FY21.

Figure 204: Overall net inflows of FIIs in India

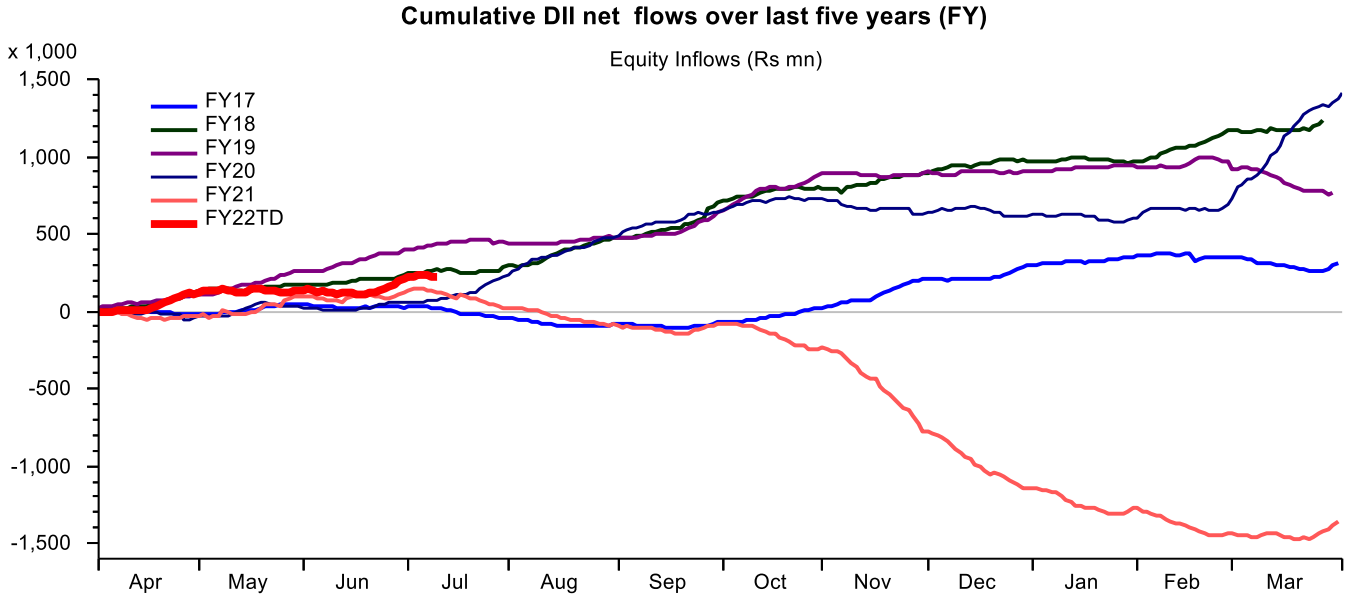
Cumulative FII net flows over last six years (FY)



Source: Refinitiv Datastream.

Domestic institutional investors' (DIIs) net investment in equity rose marginally in **July'21:** Unlike FIIs, DIIs' net purchase remained positive between FY17 and FY20 thanks to continuous rise in passive investment by retailers in India, and significant rally in the equity prices over the period while return from risk free investment remained stagnant. The situation somewhat deteriorated in FY21 with rise in uncertainly and sudden outbreak of the Coronavirus pandemic. Overall, investors return from passive investment declined significantly while they became much more active the equity space with a significant rise in new investor registration over the fiscal year. As a result, net investment fell sharply in FY21 and somewhat muted in FY22 as well except a few months like the second half of April and over the last few days in June. Overall, the net investment of DIIs' was Rs227bn in FY22 as of July 9th, while it was Rs122bn over the same period in FY21.

Figure 205: Overall net inflows by DIIs in Indian equity markets



Source: Refinitiv Datastream.

Fund mobilisation through NSE

Market Statistics: Primary market

Fund-raising through equity issuances were highest in 10 months: The amount of funds raised through equity issuances improved by 43.1% MoM in the month of June as compared +5.2% MoM in the previous month. Companies raised Rs245bn through equity issuances – the highest amount in ten months – *vs* Rs171bn in May. Funds raised through IPOs registered an 18% MoM growth with five listings amounting to ~37% of the overall funds raised through equity issues. Preferential allotment continued to be the preferred mode for raising equity funds in June. Companies raised Rs104bn or 42% of the overall equity issuances through 11 issues of preferential allotment, while Rs44bn (18.2%) was raised through four QIP issues.

Debt fund-raising by corporates also improved in June: Fund raised by corporates through debt issuances registered a robust growth of 91.6% MoM during the month of June as compared to a decline of 9.4% MoM in the previous month. Total funds raised (total equity + total debt excl. public issue of G sec, T-Bills & SDLs and SGBs) by corporates in June improved 73.8% MoM (vs -6.2% MoM in May), with nearly 80% of the total funds or Rs970bn raised from the debt markets (CPs and NCDs) as compared to Rs527bn in May. Private placement of NCDs and CPs continued to be the most preferred option for raising debt among corporates. Companies raised Rs2,658bn in the current fiscal through the NSE platform.

Figure 206: Funds mobilised through NSE platform

Particulars	June-21			May-21		
	No. of Issues	Amount Raised (Rsm)	Amount Raised (USDm)	No. of Issues	Amount Raised (Rsm)	Amount Raised (USDm)
Equity issuances						
IPOs	5	91,274	1,240	1	77,350	1,057
Rights Issue	2	4,041	55	1	250	3
Preferential Allotment	11	104,780	1,424	23	54,815	749
QIPs	4	44,500	605	3	38,472	526
Total equity raised		244,595	3,323		170,887	2,335
Debt issuances						
Public issue of NCDs	-	-	-	12	10,000	137
Public issue of SGBs	3	41,833	568	-	-	
Public issue of G sec, T-Bills & SDLs	100	3,977,244	54,039	68	3,537,754	48,330
Private Placement of NCD	36	258,400	3,511	24	97,030	1,326
Private Placement of CPs	154	711,600	9,668	120	420,955	5,751
Total debt raised		4,989,078	67,786		4,065,740	55,543
Total funds raised (equity + debt)		5,233,673	71,110		4,236,627	57,877

Source: NSE. Note: In case of debt issuances, the above table reports no. of ISINs instead of issues. IPOs in the month of February 2021 includes one (1) REITs issuance.

New listings in the month

NSE witnessed ten new listings in June: Ten (10) new companies debuted on NSE's Main Board in June. While five (5) companies got listed through IPOs, the remaining five (5) companies got listed through direct listing of equity shares. Out of the 10 new listing that debuted on the NSE in the month of June, nine (9) companies gained on their respective listing dates.

Figure 207: Companies listed on NSE in June 2021

Listing Date	Security Name	Listing Gain %	Market Cap (Rsm)	Gross Turnover (Rsm)	Listing
04-Jun-21	Anmol India Limited	8.4	2,137	9	New listing
11-Jun-21	Inox Wind Energy Limited	75.0	2,187	3	New listing
15-Jun-21	Arihant Capital Markets Limited	1.8	2,605	18	New listing
15-Jun-21	Vineet Laboratories Limited	41.9	426	2	New listing
21-Jun-21	Abhishek Integrations Limited	(20.0)	114	1	SME-IPO
24-Jun-21	Shivalik Bimetal Controls Limited	2.2	4,624	15	New listing
24-Jun-21	Shyam Metalics and Energy Limited	24.2	95,949	10,357	IPO
24-Jun-21	Sona BLW Precision Forgings Limited	3.4	210,684	13,878	IPO
28-Jun-21	Dodla Dairy Limited	28.5	36,285	14,571	IPO
28-Jun-21	Krishna Institute of Medical Sciences Limited	22.3	79,784	13,329	IPO

Source: NSE. Note: Figures in brackets indicate negative

Trend of NSE's turnover across different segments

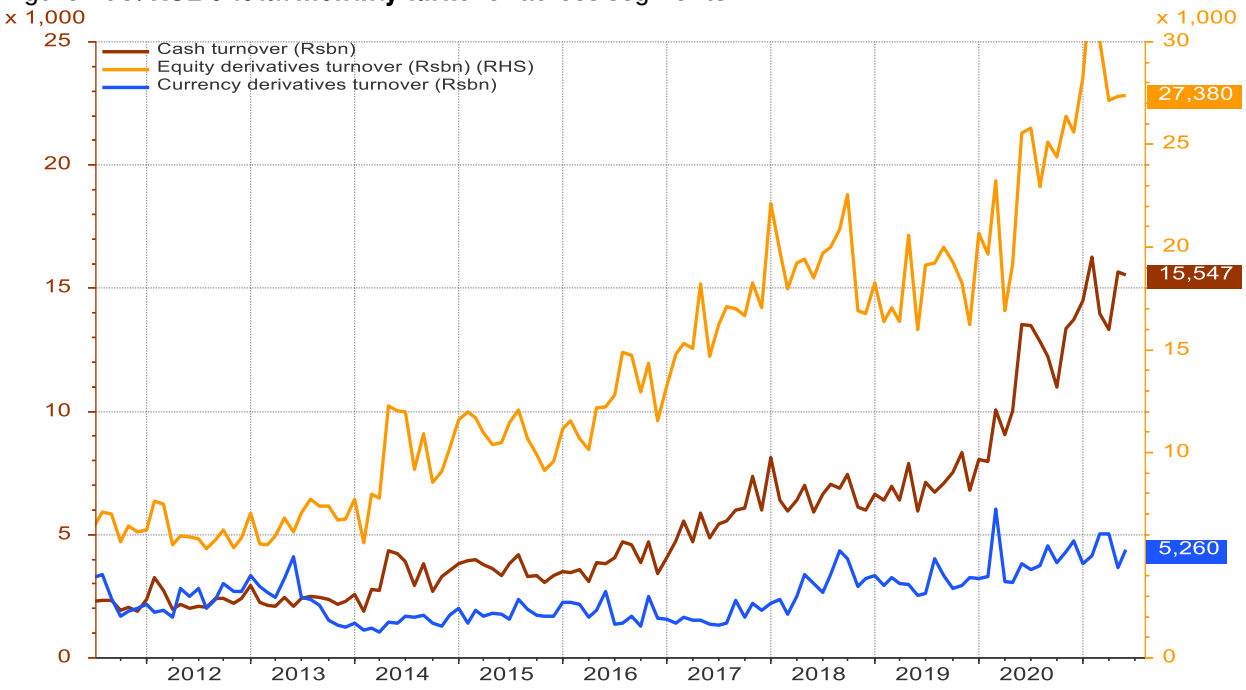
Impact of macro indicators on NSE's turnover

NSE's turnover recorded a sharp rise in the Cash market over the months during FY2020-21 with an average monthly turnover of Rs12.8trn, largely led by surplus liquidity, thanks to policy easing measures by global central banks to counter the economic impact of the COVID-19 pandemic that stalled business activities globally. The monthly turnover in the three months of the current fiscal (FY2021-22) grew at a monthly average growth rate of 39.6% YoY lower than the average monthly growth rate of 65% YoY during the same period last year and the average monthly growth of 73.2% YoY over the period of Apr'20-Mar'21.

NSE's turnover recorded a strong growth in 2020, thanks to a sharp rise in volatility, a strong rally in global equity prices and a significant rise in total liquidity due to monetary policy easing by global central banks. NSE's equity derivatives segment registered a monthly average growth rate of 36.7% YoY in the first quarter of FY2021-22, significantly higher than an average monthly growth of 18.8% YoY during the same period last year and an average monthly growth rate of 33.4% in FY21.

The overall long-term trend in the currency segment, however, has been different. Growth in monthly turnover languished during 2014-17, before rising gradually after 2017. The monthly turnover grew by an average rate of -1.5% on an YoY basis during 2014-17 as compared to 37.5% post 2017 till date. In FY21, total turnover in currency derivatives segment recorded 23.2% growth on YOY basis. In FY22TD, the currency derivatives segment has registered an average monthly growth of 32% YoY, significantly higher than average monthly growth rate of 19% YoY during the same period last year and 23.2% YoY during FY21.

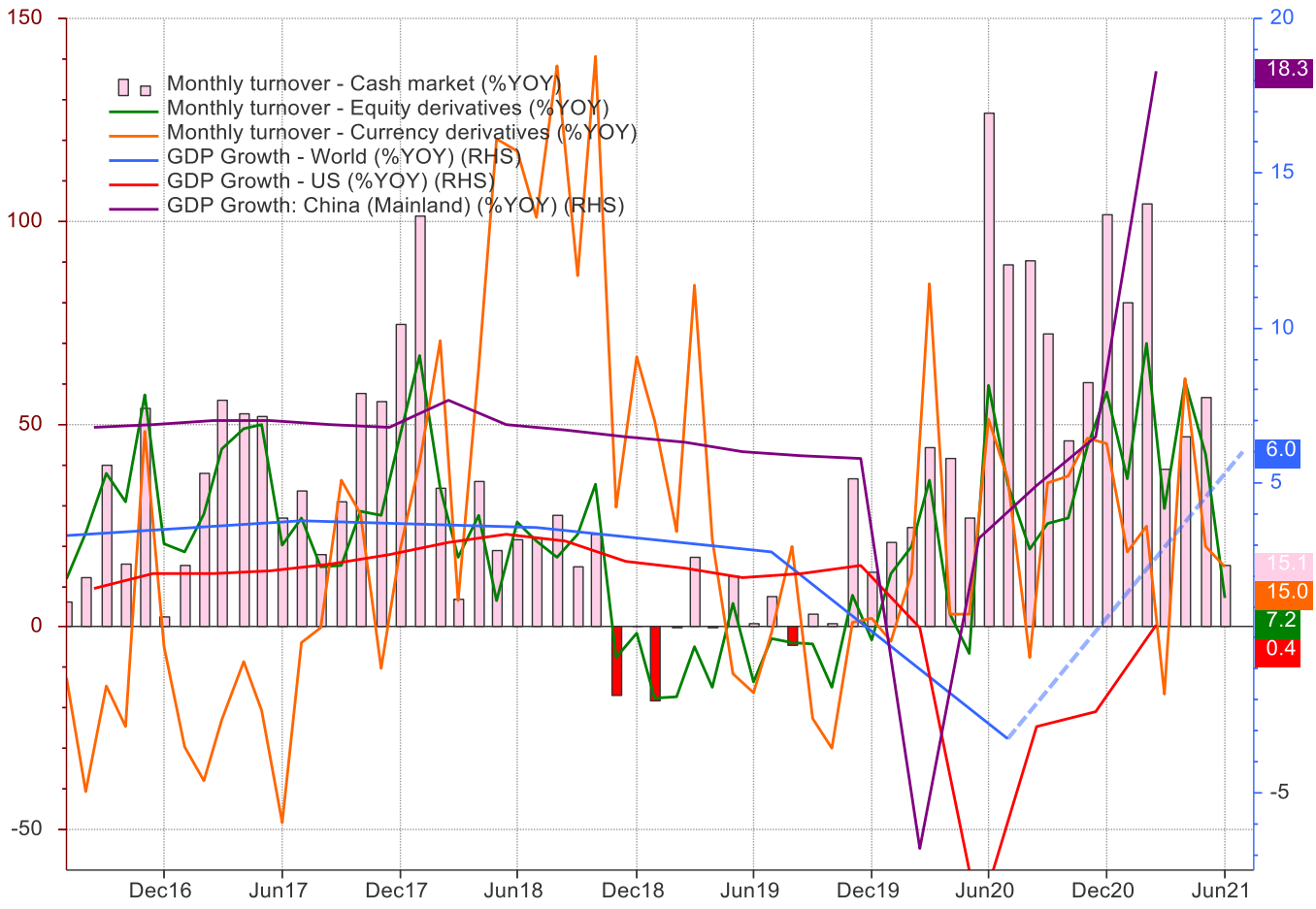
Figure 208: **NSE's total monthly turnover** across segments



Source: NSE. Note: Total turnover for derivatives includes gross traded value of futures and total premium turnover of options.

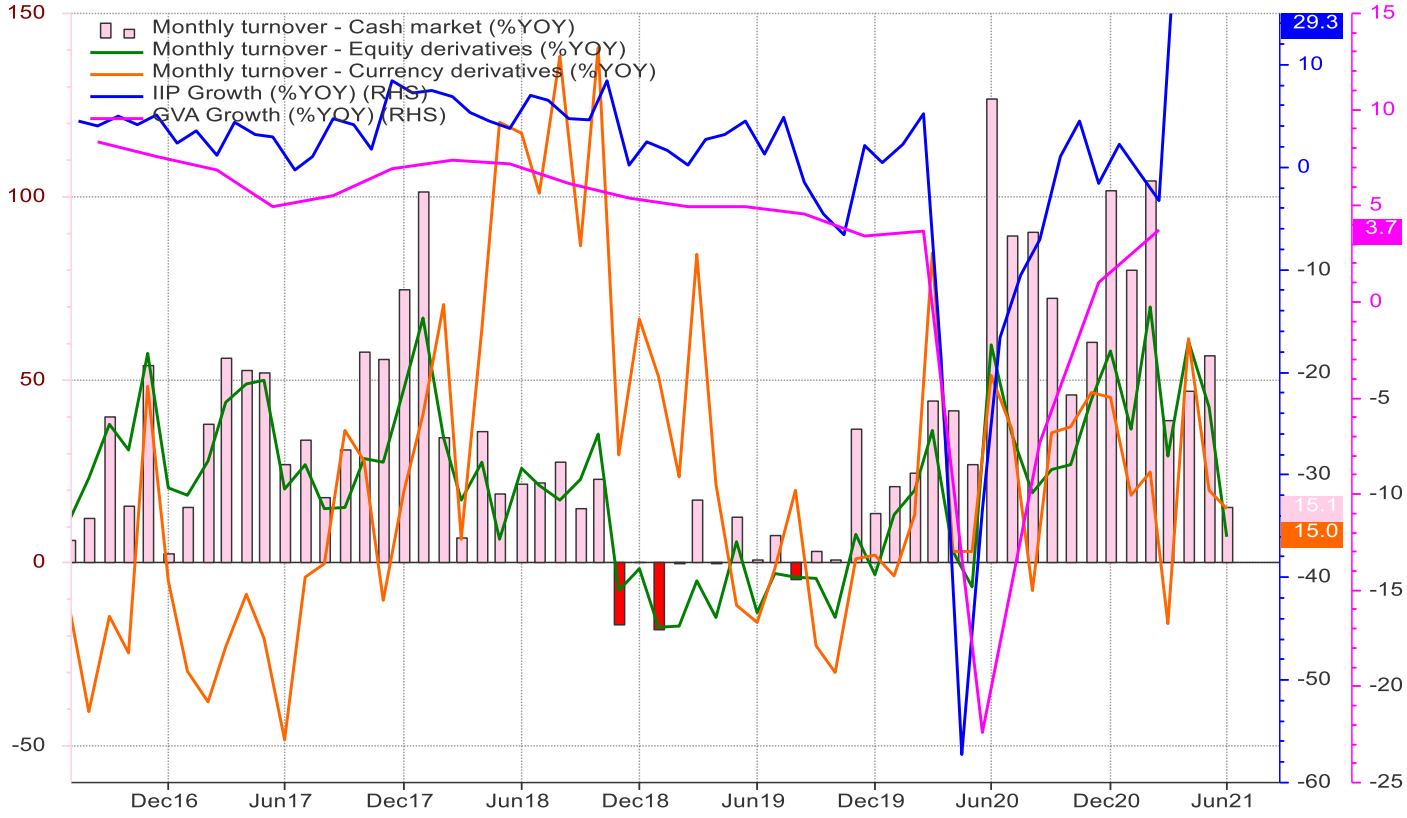
A recovery in economic growth momentum witnessed last year following normalisation of economic activities after the first wave of infections and a liquidity push by global central banks had given a boost to NSE's turnover across all segments in FY2020-21. A surge in trading by retail investors and FIIs, partly offset by substantial DII selling, had led a rally in equity prices post a sharp correction in March'20. The emergence of a second wave of COVID-19 infections since February this year, which intensified further during April - May, imposition of lockdowns in major states to contain the second wave of infections, slow pace of immunisation and growth uncertainty had raised concerns among investors, as witnessed in subdued participation by institutional investors in April and May. However, a decline in caseloads towards the end of May, subsequent easing of lockdowns in major states and improvement in certain high frequency indicators have increased the prospect of a faster recovery in economic activities.

Figure 209: Impact of global and domestic macroeconomic indicators on overall turnover growth across segments



Source: Refinitiv Datastream, NSE.

Figure 210: **Growth rates of NSE's turnover** *vs* IIP and GVA growth

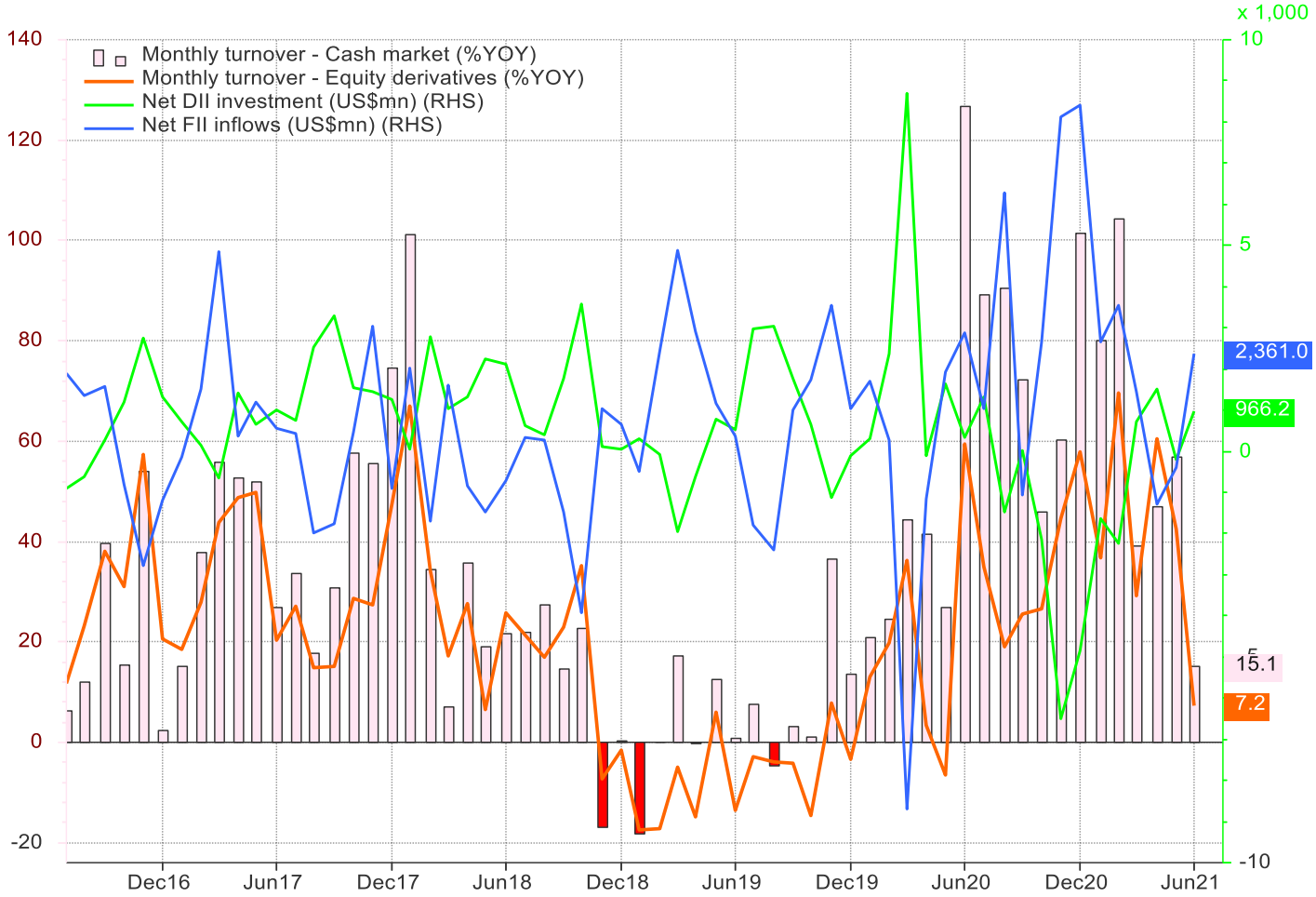


Source: Refinitiv Datastream, NSE

A risk-on sentiment among FIIs amid enhanced policy support, favourable economic outlook and optimism over vaccine roll-out globally and domestically had led to a surge in NSE's turnover growth last year, even as DIIs net investment remained negative during the year due to redemption pressures and profit-booking. While FII net investment had been the highest last fiscal, DII net investment was the lowest in FY21 compared to the last five years. However, a sharp surge in COVID-19 infections since February caused by highly virulent variant of the virus followed by imposition of lockdowns in large states, slow pace of immunisation in India and growth uncertainty have raised concerns among investors.

FIIs sold Indian equities worth US$1.7bn on a net basis in April and May after six months of consecutive buying. DIIs, on the other hand, invested US$1.3bn on a net basis in the current fiscal. However, a decline in caseloads towards the end of May, subsequent easing of lockdowns in major states and improvement in certain high frequency indicators have increased the prospect of a faster recovery in economic activities. As a result, the pace of investments by FIIs in Indian equities picked up in the latter half of May and registered an inflow of US$2.4bn in the month of June.

Figure 211: Growth of NSE**'s turnover vs. Institutional flows**



Source: Refinitiv Datastream, NSE.

Institutional investments through NSE platform

FIIs were net sellers in the secondary markets in June: FIIs were net sellers in the CM segment of NSE for three months in a row after buying sequentially for six months. They sold equities worth Rs108bn in June in the secondary market on a net basis, higher than net sale of Rs19bn in May.

While FIIs were net buyers in March, the buying momentum had tapered compared to the previous months, because of concerns over resurgence in COVID-19 cases resulting in a second wave of infections in India and imposition of strict lockdowns in major states impacting business activities.

While DIIs sold equities in May to the tune of Rs12bn, they were net buyers in the month of June to the tune of Rs45bn. Subsequently, DIIs remain net buyers this fiscal with a net inflow of Rs139bn. During FY21, DIIs sold equities worth Rs1,456bn net in NSE's cash segment.

FIIs and DIIs were net sellers in equity derivatives too: While DIIs sold equity derivatives contracts worth Rs52bn, FIIs sold derivatives contracts worth Rs76bn in the month of June on a net basis. Institutional investors remained net sellers in equity derivatives contracts the whole of FY21.

FIIs were net buyers in currency futures in June: While DIIs continued to sell currency futures contracts in June on a net basis, FIIs turned net buyers for the first time in this fiscal. DIIs sold currency futures contracts worth Rs6bn and FIIs, on the other hand, bought currency futures worth Rs12bn during the month. The institutional investors have been net sellers in currency futures segment during FY21, selling contracts worth Rs111bn on a net basis. Institutional trading activity in the currency options contracts and interest rate derivatives continues to remain negligible.

Figure 212: FII and DII flows (Rs bn) in secondary markets during April – June of FY21 and FY22

	Jun-21			May-21			FY22TD			FY21TD		
Category	Buy	Sell	Net	Buy	Sell	Net	Buy	Sell	Net	Buy	Sell	Net
Cash Market												
DII	1,084	1,038	45	997	1,010	(12)	3,086	2,947	139	2,504	2,444	60
FII	1,488	1,595	(108)	1,627	1,646	(19)	4,458	4,709	(251)	3,831	4,071	(241)
Equity Futures												
DII	1,112	1,163	(52)	1,127	1,158	(31)	3,246	3,372	(126)	2,039	2,147	(108)
FII	4,922	4,998	(76)	4,671	4,771	(100)	14,067	14,201	(134)	15,065	15,071	(7)
Equity Options												
DII	2	3	(0)	3	2	2	8	6	2	2	1	0
FII	410	409	1	432	430	2	1,352	1,349	3	932	935	(2)
Currency Futures												
DII	62	68	(6)	69	70	(1)	263	276	(14)	191	196	(5)
FII	521	509	12	395	433	(37)	1,575	1,624	(48)	1,987	2,052	(65)
Currency Options												
DII	-	-	0	0	-	0	0	-	0	-	-	0
FII	1	1	0	1	1	0	4	3	1	1	0	1
Interest Rate Futures												
DII	1	2	(1)	2	3	(1)	4	5	(2)	20	20	(0)
FII	0	0	0	0	0	0	1	1	0	2	3	(2)
Interest Rate Options												
DII	-	-	0	-	-	0	-	-	0	-	-	0
FII	-	-	0	-	-	0	-	-	0	-	-	0

Source: NSE. * DII – Domestic Institutional Investors includes Banks, Insurance companies, Mutual Funds, NBFCs and Domestic Venture Capital Funds, FII – Foreign Institutional Investors includes Foreign Portfolio Investors, Foreign Direct Investors and Foreign Venture Capital Investors; Above table reports premium turnover for Options contracts. Figures in brackets indicate negative numbers.

Figure 213: Foreign and domestic institutional flows (Rs bn) in secondary markets during FY2020-21 and CY2021

	FY21			CY21TD		
Category	Buy	Sell	Net	Buy	Sell	Net
Cash Market						
DII	10,205	11,661	(1456)	6,161	6,288	(128)
FII	18,308	17,019	1290	9,782	9,772	10
Equity Futures						
DII	9,125	9,351	(226)	6,006	6,254	(248)
FII	58,900	59,205	(305)	28,802	28,984	(181)
Equity Options						
DII	6	5	1	9	7	2
FII	4,413	4,417	(4)	2,921	2,920	0
Currency Futures						
DII	694	740	(46)	486	523	(37)
FII	8,280	8,345	(65)	3,359	3,352	7
Currency Options						
DII	0	-	0	0	-	0
FII	9	5	5	8	5	2
Interest Rate Futures						
DII	61	60	1	15	17	(2)
FII	6	7	(2)	2	2	0
Interest Rate Options						
DII	-	-	0	-	-	0
FII	-	-	0	-	-	0

Source: NSE. * DII – Domestic Institutional Investors includes Banks, Insurance companies, Mutual Funds, NBFCs and Domestic Venture Capital Funds, FII – Foreign Institutional Investors includes Foreign Portfolio Investors, Foreign Direct Investors and Foreign Venture Capital Investors; Above table reports premium turnover for Options contracts. Figures in brackets indicate negative numbers.

Total turnover in capital markets and derivatives segments of NSE

Turnover in CM and equity derivatives segment moderated in June: The turnover in NSE's capital market segment moderated 9.9% MoM in June despite higher number of trading days (22 days in June *vs* 20 days in May), after rising 17.8% MoM in the month of May. NSE's turnover in the cash segment touched Rs15.5tn in the month of June as compared Rs15.7tn. The decline in trading activity in CM segment, resulted in a subsequent decline in average daily turnover from Rs784bn in May to Rs707bn in June, which can be largely attributed to the decline in participation by retail investors. However, in terms of number of trades during the month, NSE registered yet another record of 507 million trades (*vs* 466 million in May) which was the highest in a single month.

The growth in equity derivatives turnover, on the other hand, was flat for two months in a row. The turnover increased marginally by Rs34bn from Rs27.3tn in May to Rs27.4tn in June. The decline in index derivatives turnover (-4.7% MoM) was partially offset by an increase in single stock derivatives turnover (+2.6% MoM), resulting in a flat growth of 0.1% MoM in the overall equity derivatives segment during the month.

The currency derivatives segment, on the other hand, registered a growth of 19.2% MoM in June – the first MoM rise in the current fiscal – to touch Rs5.3tn. The currency derivatives turnover rose 21.7% MoM in March to touch Rs6.1tn – the highest monthly turnover in FY21, thereafter declining sequentially by 0.6% MoM to Rs6tn in April and 26.7% to Rs4.4tn in May. The increase in turnover in June was witnessed in both instruments with currency futures turnover increasing 19.2% MoM and premium turnover in currency options registering a growth of 22.6% MoM in June.

Figure 214: Total turnover in different segments (Rsbn) during 2021 (Jan-June 2021)

Cash Market	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21
Cash Market	14,494	16,275	13,989	13,307	15,679	15,547
Equity futures	24,987	29,034	25,585	23,049	23,464	23,388
Index futures	7,327	9,107	9,132	7,250	6,125	5,713
Stock futures	17,660	19,927	16,453	15,799	17,339	17,675
Equity options	3,270	4,309	4,469	4,114	3,882	3,992
Index options	2,545	3,497	3,884	3,488	3,141	3,116
Stock options	725	812	585	626	741	876
Currency derivatives	4,604	4,978	6,056	6,021	4,414	5,260
Currency futures	4,594	4,966	6,037	5,998	4,401	5,244
Currency options	10	12	20	23	13	16
Interest rate derivatives	41	67	44	24	28	20
Interest rate futures	41	67	44	24	28	20
Interest rate options	NA	NA	NA	NA	NA	NA
Commodity derivatives	8.6	9.5	17.0	6.1	3.2	4.3
Commodity futures	8.4	9.3	16.8	6.0	3.1	4.2
Commodity options	0.2	0.1	0.1	0.1	0.1	0.1

Source: NSE. *NA refers to not applicable as Interest rate options were launched in Dec'19; Above table reports premium turnover for Options contracts and excludes auction market turnover.

Average daily turnover (ADT) in capital markets and derivatives segment of NSE

NSE's ADT in cash market segment moderated MoM in June: NSE's ADT in capital markets segment declined 9.9% MoM or Rs77bn to touch Rs707bn in the month of June after rising sequential for two months in this fiscal i.e., +11.9% MoM in May to touch Rs784bn and +5.1% MoM in April to touch Rs700bn. The ADT in the first quarter of current fiscal, however, remains higher by 32.2% YoY as compared to the same quarter last year.

While trading in Main Board equities, ETF, InvITs, REITs and MFs witnessed a decline in June, SME stocks registered a double-digit growth of 23.5% MoM in ADT. However, all categories of products in the CM segments have witnessed an YoY growth in ADT as compared to the same period last year.

The ADT in CM turnover in FY21 recorded a significant jump of 69.7% YoY over FY20. The increase in average daily turnover in the previous fiscal was broad-based, largely led by trading in SGBs (+246% YoY), InvIts (+109% YoY) and Main Board Equities (+69.5% YoY).

Figure 215: Average daily turnover in NSE Capital Market (Rsm)

Product	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Capital Market	706,679	783,958	(9.9)	730,048	552,024	32.2	618,390	731,898
Equities (Main Board)	701,550	778,741	(9.9)	725,020	548,268	32.2	612,808	725,939
Exchange Traded Funds	2,602	2,633	(1.2)	2,726	2,688	1.4	2,638	2,931
SME Emerge	68	55	23.5	54	17	219.4	37	48
Sovereign Gold Bonds	37	36	2.9	34	19	79.0	36	38
InvITs	216	584	(63.0)	295	39	662.8	107	189
REITs	388	460	(15.8)	373	162	130.1	362	436
Mutual Funds (Close Ended)	1	3	(65.6)	2	1	44.8	2	3
Others	1,818	1,445	25.8	1,544	830	86.0	2,401	2,314

Source: NSE. Note: Average daily turnover (ADT) excludes auction market turnover. Equities (Main Board) include stocks in EQ, BE, BL and BZ series. Others include corporate and government debt instruments (excl. SGBs), preferential shares, partly paid-up shares, warrants etc., among others. Figures in brackets indicate negative numbers.

ADT in equity derivatives trading declined in June: Average daily trading in equity derivatives segment declined for three months in a row. Average daily turnover (ADT) of NSE's equity derivatives declined 9% MoM in June to touch Rs1,245bn, following a decline of 4.4% MoM in May to touch Rs1,367bn and a 0.1% MoM decline in April.

The decline in average daily traded value, was largely led by decline in trading of index futures and index options contracts falling 15.2% MoM and 9.8% MoM respectively in the month of June. ADT of single stock derivatives, on the other hand, declined at a comparatively lower rate of 6.7% MoM registering a turnover of Rs843bn offset by surge in ADT of stock options by 7.5% MoM.

The ADT in equity derivatives in FY21, however, recorded a jump of 32% YoY to touch Rs1,219bn compared to Rs925bn in FY20. While, average daily turnover of single stock derivatives surged 22.7% YoY to touch Rs750bn in the current fiscal, the average daily turnover of index derivatives increased by a much higher 49.4% YoY to touch Rs463bn during the same period.

Figure 216: Average daily turnover in Equity derivatives (Rsm)

Product	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Single stock derivatives								
Stock futures	803,427	866,953	(7.3)	833,011	598,027	39.3	726,842	859,452
Stock options	39,815	37,049	7.5	36,775	14,608	151.7	23,267	35,780
Index futures								
BankNifty	129,912	154,642	(16.0)	155,545	160,727	(3.2)	183,694	182,765
Nifty	129,559	151,077	(14.2)	156,934	194,346	(19.3)	179,320	182,340
FinNifty	198	541	(63.5)	436	0	NA	339	911
NiftyIT	0	0	NA	0	26	NA	6	0
Index options								
BankNifty	93,961	104,413	(10.0)	103,863	39,276	164.4	62,966	102,540
Nifty	47,664	52,572	(9.3)	55,821	38,033	46.8	42,589	58,569
FinNifty	9	43	(79.0)	56	0	NA	45	120
NiftyIT	0	0	NA	0	0	(100.0)	0	0

Source: NSE. Note: Above table reports premium turnover for Options contracts; FINNIFTY was launched on January 11th, 2021; Trading in weekly and monthly derivative contracts of Nifty IT index was discontinued from June 4th, 2020 and June 25th, 2020 respectively. Figures in brackets indicate negative numbers.

Trading in currency futures expanded in June across all contracts: Trading is currency derivatives expanded in June, after witnessing a decline in May, to touch Rs239bn or 2.9% higher than the previous month. While average daily currency futures turnover increased 2.9% MoM to touch Rs238bn, currency options premium turnover increased 5.8% MoM to touch Rs745m during the month. The USDINR contracts continued to be the highly traded contracts in June rising 0.2% MoM and recording an average daily value of Rs183bn, which is nearly 77% of the overall ADT of currency derivatives segments. The rise in currency futures trading was across the board led by USDJPY, GBPUSD, GBPINR and JPYINR.

Figure 217: Average daily turnover in Currency derivatives (Rsm)

Product	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Currency futures								
EURINR	16,282	15,394	5.8	16,785	10,646	57.7	17,195	16,656
EURUSD	135	128	5.7	121	159	(23.9)	229	148
GBPINR	36,469	31,384	16.2	35,581	20,472	73.8	32,364	38,174
GBPUSD	303	235	29.2	233	242	(3.8)	345	304
JPYINR	2,795	2,477	12.8	2,930	3,920	(25.3)	4,189	3,353
USDINR	182,347	181,994	0.2	214,041	174,424	22.7	179,289	206,094
USDJPY	12	6	120.6	9	3	236.8	4	9
Currency options								
EURINR	0.65	0.46	39.9	0.63	0.02068	2966.3	0.46	0.96
EURUSD	0.00	0.00	NA	0.00	0.00	NA	0.00	0.00
GBPINR	2.63	5.38	(51.1)	4.16	0.03	13050.2	1.93	3.82
GBPUSD	0.00	0.00	NA	0.00	0.00	(100.0)	0.02	0.00
JPYINR	0.02	0.07	(79.2)	0.03	0.00	14677.4	0.01	0.02
USDINR	742.27	698.45	6.3	898.92	543.50	65.4	600.22	797.31
USDJPY	0.00	0.00	NA	0.00	0.00	NA	0.00	0.00

Source: NSE. Note: Above table reports premium turnover for Options contracts. Figures in brackets indicate negative numbers.

Trading in interest rate derivatives declined in June: Average daily turnover of interest rate futures declined 39.1% MoM in the month of June to touch Rs900m as compared to an increased 6.3% MoM to touch Rs1,479m in the previous month due to a drop in trading activities by corporates. Three (3) interest rate futures contracts witnessed trading activity in this month; 585GS2030 was the highly traded contract in this segment with ADT touching Rs835m, albeit lower by 38.4% MoM from May.

Figure 218: Average daily turnover in Interest rate derivatives (Rsm)

Product	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Interest rate futures	894	1,479	(39.6)	1,231	6,645	(81.5)	3,940	1,895
Interest rate options	-	-	NA	-	NA	NA	0.8	0.0

Source: NSE. Note: Above table reports premium turnover for Options contracts. Figures in brackets indicate negative numbers.

ADT in commodities derivatives improved significantly: The ADT in commodity derivatives improved 27.2% MoM in the month of June to touch Rs195m, after reaching a 5-month low of Rs153m in the previous Month, owing to increase in trading in degummed soy oil futures contracts. While ADT in Soya Bean Oil futures contracts increased 26.4% MoM, Gold Mini contracts registered a decline of 20.8% MoM in June.

Figure 219: Average daily turnover in commodities derivatives (Rsm)

Product	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Commodity futures	192	149	28.8	209	56	271.1	215	377
Commodity options	2.7	3.9	(32.1)	4	3	13.7	11	5

Source: NSE. Note: Above table reports premium turnover for Options contracts. Figures in brackets indicate negative numbers. NSE commenced trading in Commodity Derivatives with the launch of bullion futures on October 12, 2018. NSE launched commodities options contracts on June 8th, 2020 by introducing options contracts in Gold Mini.

Turnover of top traded symbols over the month

While the turnover in NSE's capital market segment declined 9.9% MoM in June, the turnover of top 10 traded stock in CM segment, however, increased double-digit by 17.9% MoM, resulting in an expansion in the share of these stocks in the overall CM turnover by 330 bps MoM to 20.8% *vs* 17.5% in May. Six (6) out of the top 10 stocks witnessed an uptick in the total traded turnover in June.

Figure 220: Top 10 symbols based on total turnover of Cash market (Rsm)

Symbol	Jun-21	May-21	%Change
ADANIPORTS	518,909	200,094	159.3
RELIANCE	506,235	346,285	46.2
ADANIENT	504,106	204,059	147.0
TATASTEEL	331,407	604,427	(45.2)
SBIN	277,283	502,669	(44.8)
BAJFINANCE	265,198	256,627	3.3
TATAMOTORS	242,311	330,588	(26.7)
INFY	217,642	150,182	44.9
IBULHSGFIN	194,733	71,372	172.8
TATAPOWER	181,635	81,848	121.9

Source: NSE

While the turnover of the top 10 traded stocks in the single stock futures segment increased 12.4% MoM, the of top 10 single stock options expanded a robust 53.5% MoM during the same period. This led to an expansion in the share of top 10 traded stocks in stock futures and options turnover by 69bps MoM and 1047 bps MoM to 29.2% and 45.7% respectively in June. Turnover of five (5) of the top 10 stocks in futures and seven (7) stocks in options segment increased in this month on an MoM basis. Nine (9) stocks were among the top traded stocks across all segments.

Figure 221: Top 10 symbols based on total turnover of Stock futures (Rsm)

Symbol	Jun-21	May-21	%Change
RELIANCE	836,911	542,987	54.1
ADANIENT	766,917	318,757	140.6
TATASTEEL	619,501	797,854	(22.4)
ADANIPORTS	566,138	365,816	54.8
SBIN	421,520	655,749	(35.7)
INFY	398,726	284,813	40.0
TATAMOTORS	391,202	447,634	(12.6)
ICICIBANK	373,484	418,126	(10.7)
BAJFINANCE	347,935	292,998	18.8
HDFCBANK	333,394	373,265	(10.7)

Source: NSE.

Figure 222: Top 10 symbols based on total turnover of Stock options (Rsm)

Symbol	Jun-21	May-21	%Change
ADANIENT	77,426	14,020	452.2
RELIANCE	60,361	31,908	89.2
ADANIPORTS	38,659	13,674	182.7
TATASTEEL	34,389	57,842	(40.5)
BAJFINANCE	29,230	15,818	84.8
TATAMOTORS	28,545	28,563	(0.1)
SBIN	24,383	39,742	(38.6)
TATAPOWER	17,895	5,603	219.4
INFY	14,722	7,309	101.4
IBULHSGFIN	12,836	6,042	112.4

Source: NSE.

Client category-wise participation in total turnover

This section gives a detailed analysis on client-wise participation in total trading activities across all product segments at NSE. The clients are broadly classified into six categories, *viz*. Foreign institutional investors (FIIs), Domestic institutional investors (DIIs), Corporates, Proprietary traders, Individual investors and Others. The Individual investors category includes individual domestic investors, NRIs, sole proprietorship firms and HUFs. The category Others includes Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, FDI, OCB, FNs, QFIs, VC Funds, NBFC, etc. which are not included in any other categories mentioned above.

Share of retail investors in CM segment contracted in June: Retail participation in the CM segment contracted 60bps MoM to 44.7% in June, as traded value by individual investors decreased 2.2% MoM. Other client categories that witnessed a decline in trading activity as compared to previous month include FIIs and DIIs.

The last six (fiscal) years have witnessed a considerable change in the distribution of NSE's total turnover in capital market segment (cash segment) across different client categories. The market share of individual investors rose markedly by 12 percentage points from 33% in FY16 to 45% in FY21, rising sharply in FY21, offsetting the decline in the share of FIIs and public and private corporates during the same period. The significant rise in the share of individual investors in FY21 can be attributed to the increase in new investor registrations witnessed since the beginning of the fiscal, which has led to addition of nearly 90 lakh new investors in FY21 and 40 lakh new investors in the first three months of current fiscal.

While the percentage share of DIIs in the overall turnover was steady during FY16-FY20, it has witnessed a decline in FY21 to 7% of the overall market, as they lost market share to individual investors participating directly in the secondary markets. The percentage share of corporates has halved during this period from 10% to 5%. Notwithstanding a decline in market share for a brief period during FY17 (17%) and FY18 (18%) from 21% in FY16, proprietary traders have maintained their market share between 22%-25% in the last three fiscal years.

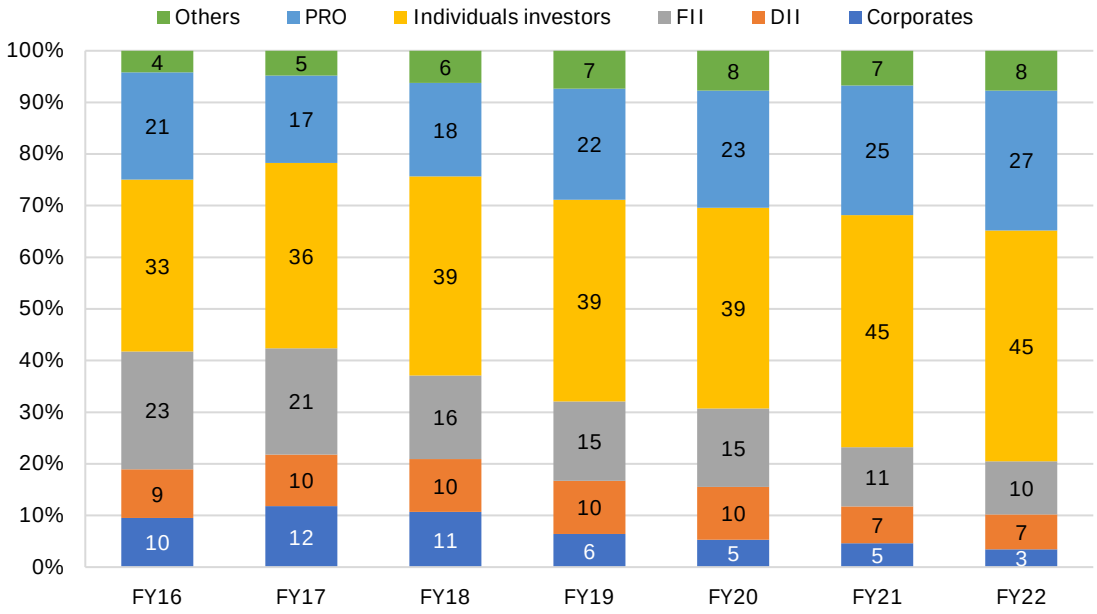
Figure 223: Share of client participation in Capital Market segment of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Capital Market								
Corporates	3.9	3.3	0.6	3.4	5.2	(1.7)	4.6	3.9
DII	6.8	6.4	0.4	6.8	7.6	(0.8)	7.1	7.0
FII	9.9	10.4	(0.5)	10.3	12.1	(1.8)	11.5	10.9
Individuals investors	44.7	45.3	(0.6)	44.7	44.8	(0.1)	45.0	44.1
PRO	27.2	26.9	0.3	27.1	22.6	4.5	25.1	27.2
Others	7.5	7.7	(0.2)	7.7	7.7	0.0	6.7	7.0

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 224: Trends in share of client participation in Capital Market at NSE (%)



Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. FY22 considers data till June 2021.

The share of retail investors contracted MoM in equity derivatives in June: The share of retail investors in equity derivatives turnover contracted 120bps MoM in June in line with the decline in their share in CM turnover to 24.3% as compared to 25.5% in May. This loss in share was offset by modest gains by proprietary traders, FIIs and corporates by 90bps MoM, 80bps MoM and 10bps MoM respectively.

The last six years has witnessed the share of individual investors increase in equity derivatives segment, in-line with the increase in their share in cash segment during this period. While their share in equity derivatives premium turnover has increased nearly two (2) percentage points, their share in notional turnover has increased seven (7) percentage points during this period.

Contrary to the trend in cash segment, the share of FIIs in overall derivatives premium turnover has increased in the last six years. The FIIs share of total premium turnover in the segment jumped up from 16% in FY16 to 25% in FY20 and settling at nearly 21% in FY21. While the share of proprietary traders has declined marginally from 31% to 30%, the percentage share of corporates has nearly halved from 15% to 8% over the same period, which was primarily offset by the rise in participation by individual investors and FIIs. DIIs' contribution, however, remains low over the period due to the extant regulatory restrictions.

Figure 225: Share of client participation in Equity Derivatives segment of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Equity Derivatives (Premium Turnover)								
Corporates	8.0	7.9	0.1	8.0	8.4	(0.5)	8.3	8.2
DII	4.2	4.2	(0.0)	4.0	3.4	0.7	3.0	3.5
FII	19.6	18.8	0.8	18.9	26.0	(7.0)	20.9	18.3
Individuals investors	24.3	25.5	(1.2)	25.0	30.5	(5.5)	29.7	26.0
PRO	35.1	34.2	0.9	34.9	24.9	10.0	30.3	35.0
Others	8.8	9.3	(0.5)	9.1	6.8	2.3	7.8	9.0
Equity Derivatives (Notional Turnover)								
Corporates	6.0	5.4	0.6	5.7	7.5	(1.9)	6.6	5.9
DII	0.1	0.1	(0.0)	0.1	0.3	(0.1)	0.1	0.1
FII	10.4	10.4	(0.0)	10.9	18.0	(7.0)	13.2	11.7
Individuals investors	27.9	28.9	(1.0)	27.9	30.4	(2.6)	29.2	27.5
PRO	48.4	47.9	0.4	48.5	34.3	14.1	42.6	47.7
Others	7.3	7.2	0.1	6.9	9.5	(2.5)	8.2	7.1

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 226: Trends in share of client participation in Equity Derivatives (Notional Turnover) at NSE (%)

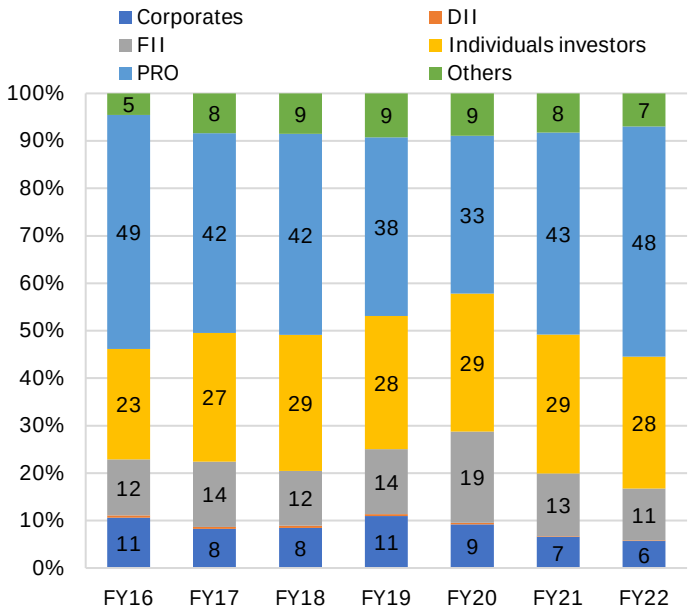
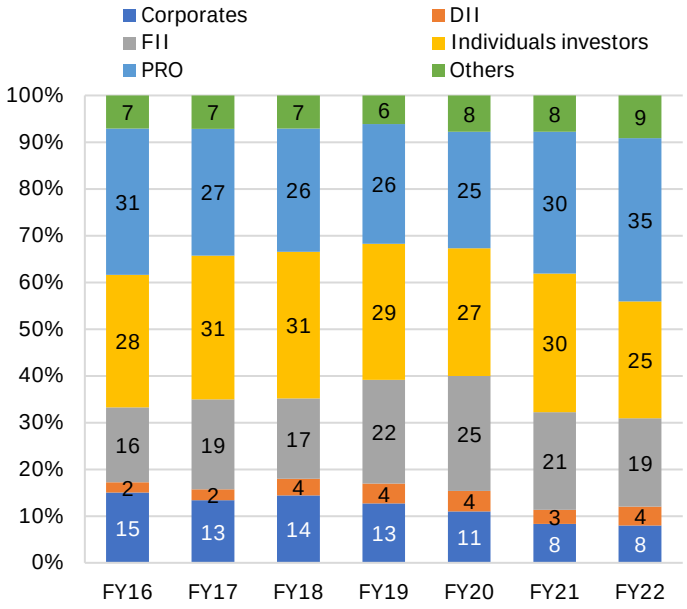


Figure 227: Trends in share of client participation in Equity derivatives (Premium Turnover) at NSE (%)



Source: NSE.

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Share of retail investors in index futures turnover contracted sharply in June: The share of retail investors in contracted 380bps MoM in June. The share of FIIs contracted marginally by 80bps MoM after it touched a 11-month high of 15.9% in the month of May, even as it declined 280bps YoY during the April-June quarter. While, the share of individual investors in index futures contracted 880bps YoY during the April-June quarter, the share of proprietary traders has expanded 580bps YoY during the same quarter.

The market share of proprietary traders has gradually declined in terms of overall index futures notional turnover by three (3) percentage points from 31% in FY16 to 29% in FY21, followed by Corporates whose share has declined by six (6) percentage points from 14% to 8% over the same period. This overall fall in their shares has been largely compensated by an increased participation by individual investors from 32% to 39% during the same period. The share of FIIs rose marginally from 14% in FY16 to 15% in the current fiscal after touching 18% in the previous fiscal – the highest in last six years. The share of DIIs, however, remained low during this period, which can be attributed to the regulatory restrictions on their trading activities in the derivatives segment.

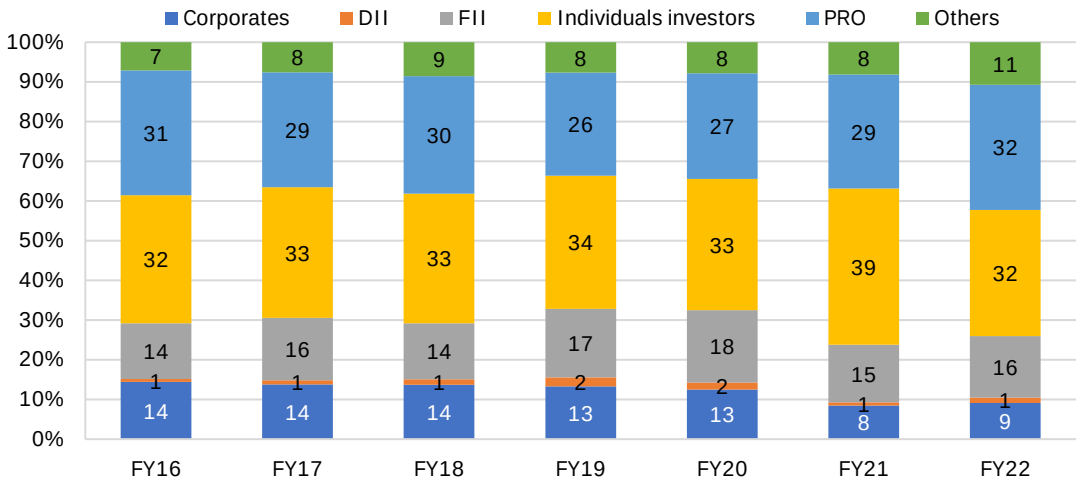
Figure 228: Share of client participation in Index Futures of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Index Futures								
Corporates	10.2	8.6	1.6	9.1	8.2	1.0	8.5	9.0
DII	1.4	1.5	(0.2)	1.3	0.7	0.6	0.8	1.1
FII	15.1	15.9	(0.8)	15.5	18.3	(2.8)	14.6	14.4
Individuals investors	29.8	33.6	(3.8)	31.8	40.6	(8.8)	39.3	33.2
PRO	32.4	29.9	2.4	31.5	25.7	5.8	28.7	31.9
Others	11.2	10.5	0.7	10.7	6.4	4.3	8.1	10.4

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 229: Trends in share of client participation in Index Futures at NSE (%)



Source: NSE.

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The share of FIIs in stock futures declined significantly in the current fiscal: The share of FIIs in the current fiscal till June declined significantly by 980bps YoY to 22% from 31.8% a year ago. The share of retail investors also registered a decline (-380b0s YoY) as compared to the same period last year. This YoY decline in share was largely offset by proprietary traders, who gained a significant 1110bps YoY during this period.

While DIIs' contribution in stock futures turnover has increased marginally from 3% in FY16 to 5% in FY21, the share of FII trading in stock futures during the same period has increased significantly from 17% to 25% Among other categories, Individual investors have maintained their share at 25% of the total trades in FY21 - nearly at same level as FY16 - after rising to 31% in FY18. Proprietary traders and corporates have lost their share in the market, which was mainly offset by FIIs and DIIs. In FY21, Proprietary traders and Corporates accounted for 29% and 9% of total turnover and remaining 8% were traded by Others in the segment.

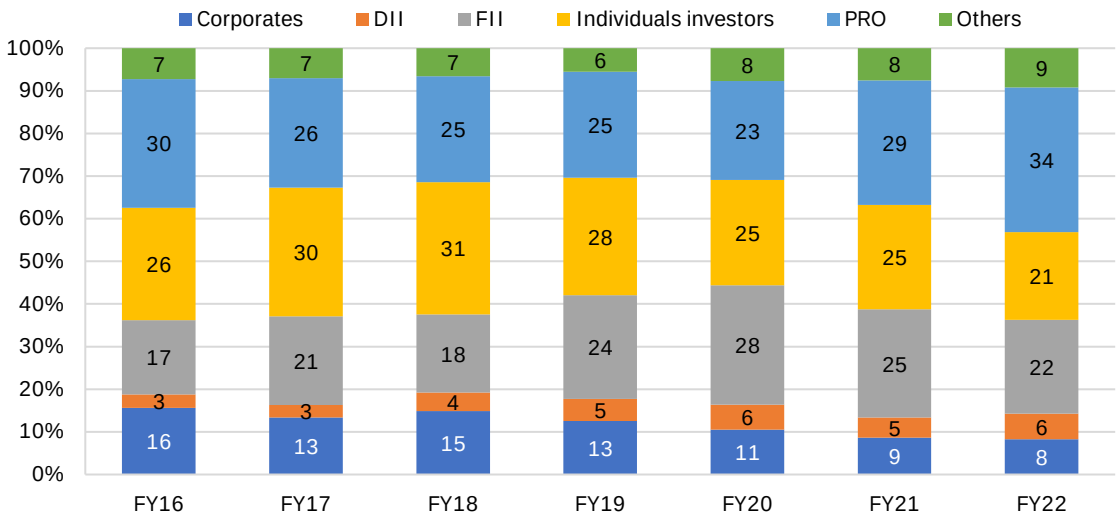
Figure 230: Share of client participation in Stock Futures of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Stock Futures								
Corporates	7.9	8.5	(0.5)	8.3	8.8	(0.5)	8.7	8.6
DII	6.0	6.1	(0.1)	6.0	5.5	0.5	4.7	5.4
FII	23.2	21.6	1.6	22.0	31.8	(9.8)	25.3	21.4
Individuals investors	20.3	20.8	(0.5)	20.6	24.4	(3.8)	24.5	21.5
PRO	33.9	33.5	0.4	33.9	22.8	11.1	29.2	34.3
Others	8.7	9.5	(0.9)	9.2	6.7	2.5	7.5	8.8

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 231: Trends in share of client participation in Stock Futures at NSE (%)



Source: NSE.

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Share of corporates in index options premium turnover touched a 4-month high: The share of corporates expanded 80bps MoM in the month of June to touch a 4-month high of 5.3%. The share of individual investors in index options premium turnover contracted marginally in June and recorded 34.1% after it touched the highest level in last 26 months at 34.2% in May. While share of corporates gained in June, share of proprietary traders and FIIs declined.

While the share of proprietary traders in Index options declined nearly 14 percentage points from 53% of the total premium turnover in FY16 to 39% in FY21, they hold the largest share in index options premium turnover as on date. The fall in market share of prop traders was largely offset by a significant rise (10 percentage points) in the share of individual investors from 22% to 32% over the same period. Among other clients, share of Corporate declined nearly five (5) percentage points from 11% to 6% over the period, whereas FIIs' share increased from 11% to 16%. DIIs' investment remains negligible in the segment throughout the period due to regulatory restrictions in derivatives segment.

Figure 232: Share of client participation in Index Options of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Index Options (Premium Turnover)								
Corporates	5.3	4.5	0.8	4.9	7.2	(2.4)	5.8	5.2
DII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FII	11.2	12.0	(0.8)	12.2	19.5	(7.3)	15.6	13.3
Individuals investors	34.1	34.2	(0.1)	33.1	30.8	2.3	31.5	31.9
PRO	42.4	42.6	(0.2)	43.1	33.9	9.3	39.3	42.5
Others	6.9	6.7	0.2	6.6	8.5	(1.9)	7.7	7.0
Index Options (Notional Turnover)								
Corporates	6.0	5.4	0.6	5.6	7.5	(1.9)	6.5	5.9
DII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FII	10.2	10.2	0.0	10.8	17.8	(7.0)	13.1	11.6
Individuals investors	27.8	28.9	(1.1)	27.8	30.4	(2.5)	29.1	27.5
PRO	48.6	48.2	0.4	48.8	34.7	14.1	43.0	48.1
Others	7.3	7.2	0.1	6.9	9.7	(2.7)	8.2	7.0

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 233: Trends in share of client participation in Index Options (Notional Turnover) at NSE (%)

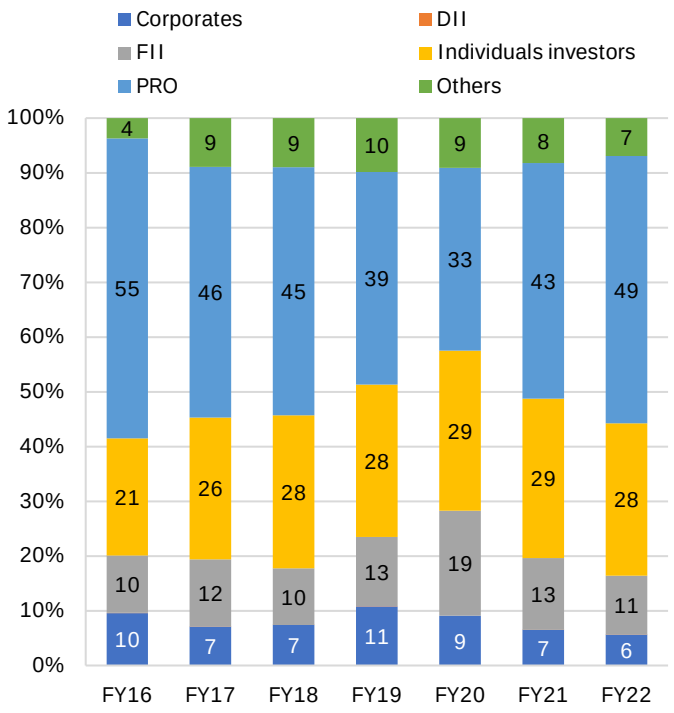
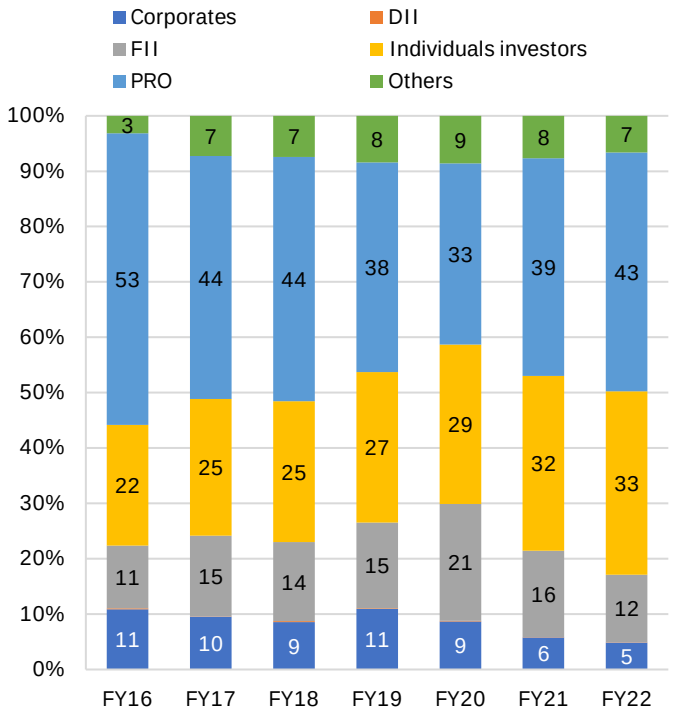


Figure 234: Trends in share of client participation in Index Options (Premium Turnover) at NSE (%)



Source: NSE.

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Share of proprietary traders in stock options premium turnover improved significantly in FY22: While the percentage share of proprietary traders dropped in June, it improved significantly in the first three months of this fiscal, expanding nearly 420bps YoY as compared to same period last year. Turnover of proprietary traders comprises nearly half of the stock options turnover as of end of June this year compared to 46% as of end of June last year and 47.7% in FY21.

While FIIs enjoy double-digit share in equity futures segment and index options segment, their share in stock options turnover has fallen significantly from 11% in FY16 to 5% in FY21, which was offset by proprietary traders and Individual investors. Out of total premium turnover in stock options, around 48% was contributed by Proprietary traders and 32% by Individual investors in FY21, which accounts for the largest share in equity options turnover.

Figure 235: Share of client participation in Stock Options of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Stock Options (Premium turnover)								
Corporates	4.8	4.2	0.6	4.6	6.2	(1.6)	5.3	4.9
DII	0.1	0.2	(0.0)	0.1	0.0	0.1	0.0	0.1
FII	6.9	7.4	(0.5)	7.1	5.0	2.1	5.2	6.8
Individuals investors	33.9	32.7	1.1	32.8	31.9	0.9	32.4	32.1
PRO	49.9	50.0	(0.1)	50.2	46.0	4.2	47.7	49.7
Others	4.4	5.4	(1.0)	5.1	10.8	(5.7)	9.4	6.4
Stock Options (Notional turnover)								
Corporates	4.6	4.0	0.6	4.5	6.8	(2.3)	5.5	4.8
DII	0.1	0.1	(0.0)	0.1	0.0	0.1	0.0	0.1
FII	7.9	8.8	(0.9)	8.4	6.5	1.9	6.8	8.3
Individuals investors	31.7	30.8	0.9	30.9	31.6	(0.7)	31.1	30.4
PRO	50.9	50.5	0.4	50.7	45.0	5.7	47.3	49.8
Others	4.8	5.8	(1.0)	5.5	10.1	(4.6)	9.3	6.6

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 236: Trends in share of client participation in Stock Options (Notional Turnover) at NSE (%)

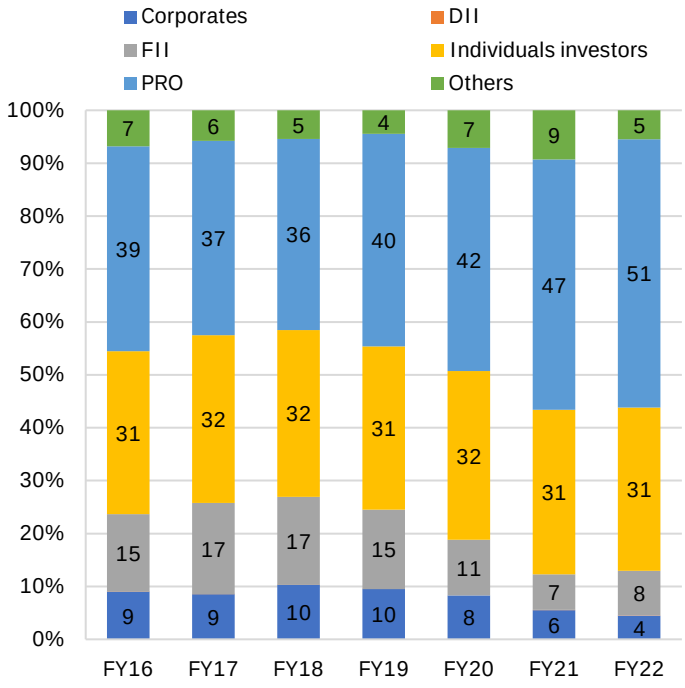
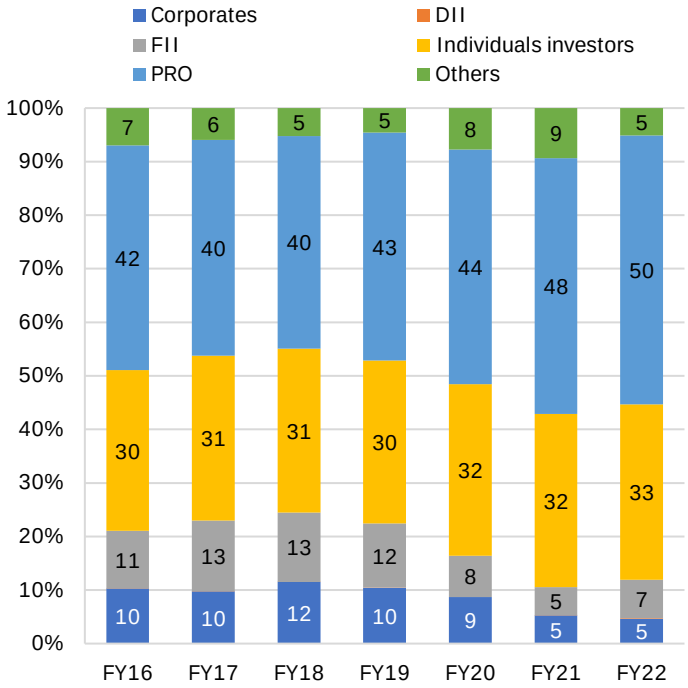


Figure 237: Trends in share of client participation in Stock Options (Premium Turnover) at NSE (%)



Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. FY22 considers data till June 2021.

Share of proprietary traders in currency derivatives touched the highest in June: The share of proprietary traders in currency derivatives touched 51.3% in June – the highest share in last 26 months. The share of individual investors in currency derivatives premium turnover contracted sharply in June by 280bps MoM at 20.9% after touching a 12-month high in May. The share of FIIs, corporates and banks, on the other hand, expanded moderately by 40bps MoM, 20bps MoM and 20bps MoM respectively.

Proprietary traders-excl. banks maintained the highest market share in the currency segment, even as their share declined significantly over the last six years from 49% in FY16 to 43% in FY21, while share of banks' turnover declined from 16% to 8% respectively. Among other categories, individual investors have been able to increase their share in these segments during this period from 12% in FY16 to 22% in FY21. FIIs have gained a significant share in Currency futures since FY19, while DIIs—excluding banks do not have much presence in both futures and options.

Figure 238: Share of client participation in Currency Derivatives segment of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Currency Derivates (Premium Turnover)								
Corporates	7.6	7.5	0.2	7.7	8.4	(0.7)	8.9	8.5
FII	9.8	9.4	0.4	10.2	16.8	(6.6)	14.5	10.7
Banks	8.1	7.9	0.2	8.1	7.6	0.4	8.7	9.3
DII ex-banks	0.4	0.4	0.1	0.4	0.2	0.2	0.2	0.4
PRO ex-banks	51.3	49.3	1.9	50.6	39.9	10.7	43.4	48.2
Individuals investors	20.9	23.7	(2.8)	21.2	23.1	(2.0)	21.9	20.9
Others	1.9	1.9	0.0	1.9	4.0	(2.1)	2.4	1.9
Currency Derivatives (Notional Turnover)								
Corporates	5.1	5.4	(0.3)	5.4	6.7	(1.3)	7.2	6.4
FII	5.7	6.4	(0.7)	6.8	9.6	(2.8)	8.9	7.2
Banks	3.8	4.0	(0.2)	3.9	5.0	(1.1)	5.4	4.8
DII ex-banks	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.2
PRO ex-banks	56.4	54.6	1.8	56.2	48.7	7.5	50.5	54.0
Individuals investors	25.3	26.1	(0.8)	24.2	24.8	(0.5)	24.0	24.0
Others	3.5	3.3	0.1	3.3	5.1	(1.8)	3.9	3.5

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 239: Trends in share of client participation in Currency Derivatives (Notional Turnover) at NSE (%)

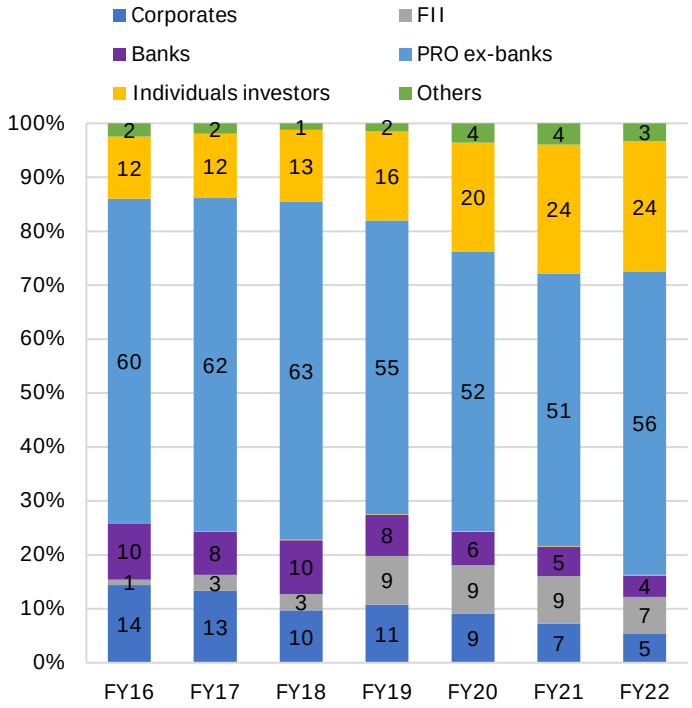
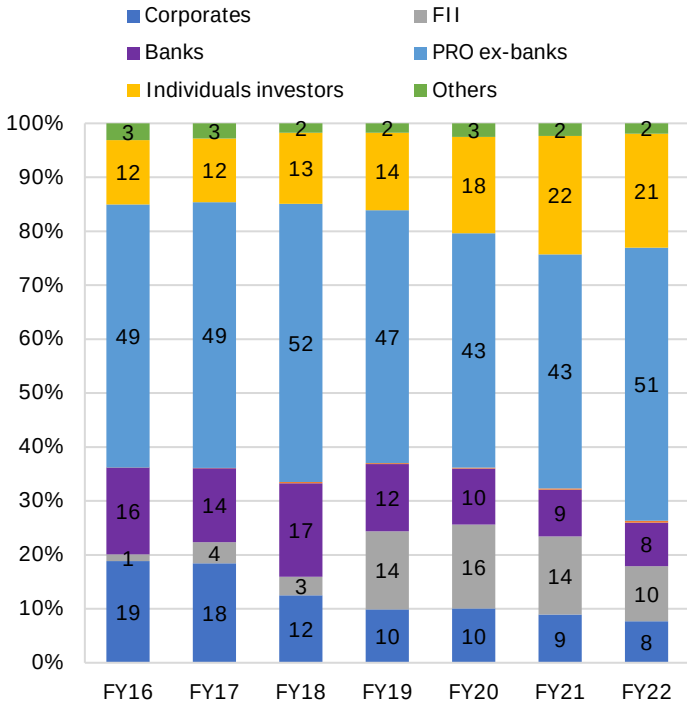


Figure 240: Trends in share of client participation in Currency Derivatives (Premium Turnover) at NSE (%)



Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. FY22 considers data till June 2021. Figures in brackets indicate negative numbers. *percentage points

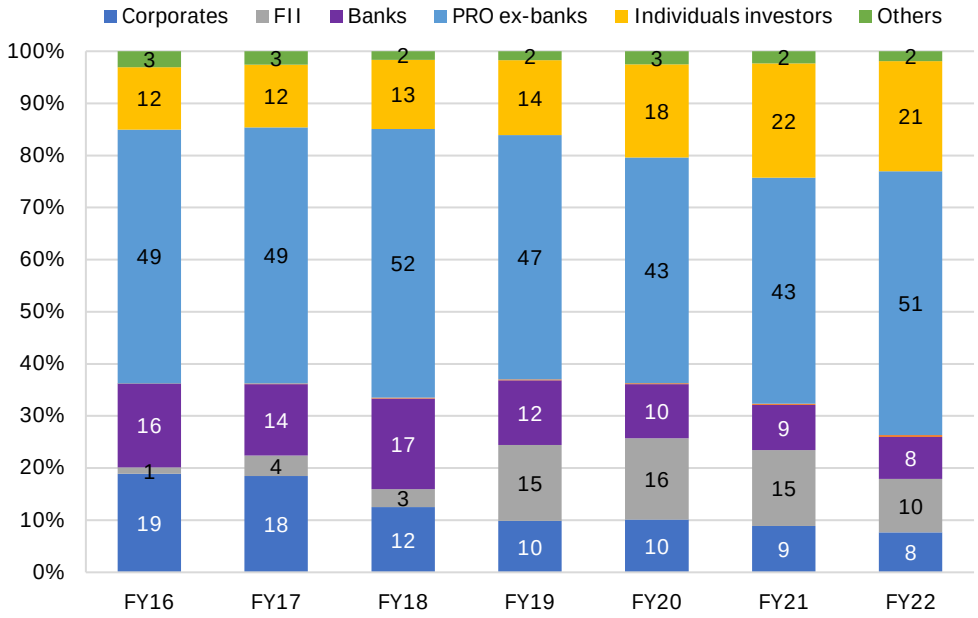
Figure 241: Share of client participation in Currency Futures of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Currency Futures								
Corporates	7.6	7.5	0.2	7.7	8.4	(0.7)	8.9	8.5
FII	9.8	9.4	0.4	10.2	16.9	(6.7)	14.5	10.7
Banks	8.1	7.9	0.2	8.1	7.6	0.5	8.7	9.3
DII ex-banks	0.4	0.4	0.1	0.4	0.2	0.2	0.2	0.4
PRO ex-banks	51.2	49.3	1.9	50.6	39.8	10.8	43.4	48.2
Individuals investors	20.9	23.7	(2.8)	21.1	23.1	(2.0)	21.9	20.9
Others	1.9	1.9	0.0	1.9	4.0	(2.1)	2.4	1.9

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 242: Trends in share of client participation in Currency Futures at NSE (%)



Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. FY22 considers data till June 2021.

Figure 243: Share of client participation in Currency Options of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Currency Options (Premium Turnover)								
Corporates	5.2	5.1	0.1	5.2	6.9	(1.6)	7.5	6.7
FII	4.9	7.2	(2.3)	7.1	2.2	4.9	4.7	7.0
Banks	1.4	1.2	0.2	1.3	2.7	(1.4)	2.5	1.6
DII ex-banks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRO ex-banks	62.8	60.1	2.7	62.3	63.0	(0.7)	61.6	60.8
Individuals investors	24.4	25.0	(0.6)	22.5	22.7	(0.2)	21.4	22.1
Others	1.3	1.4	(0.1)	1.5	2.5	(1.0)	2.2	1.8
Currency Options (Notional Turnover)								
Corporates	3.6	4.0	(0.4)	4.0	5.1	(1.1)	5.6	4.8
FII	3.2	4.5	(1.3)	4.6	2.3	2.3	3.8	4.7
Banks	1.2	1.5	(0.3)	1.2	2.4	(1.1)	2.4	1.5
DII ex-banks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRO ex-banks	59.6	58.0	1.5	59.8	57.7	2.1	57.0	58.2
Individuals investors	29.2	28.9	0.3	27.4	28.4	(1.0)	27.4	27.5
Others	3.2	3.1	0.1	3.1	4.2	(1.1)	3.7	3.3

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 244: Trends in share of client participation in Currency Options (Notional Turnover) at NSE (%)

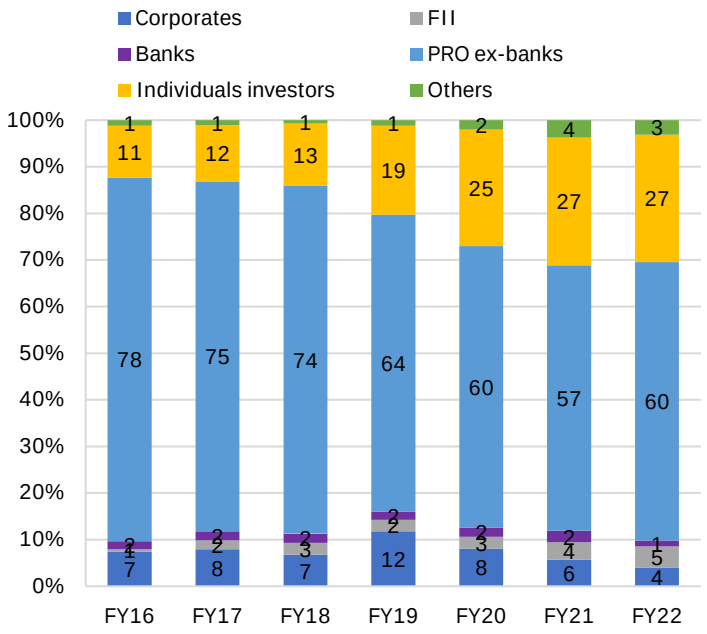
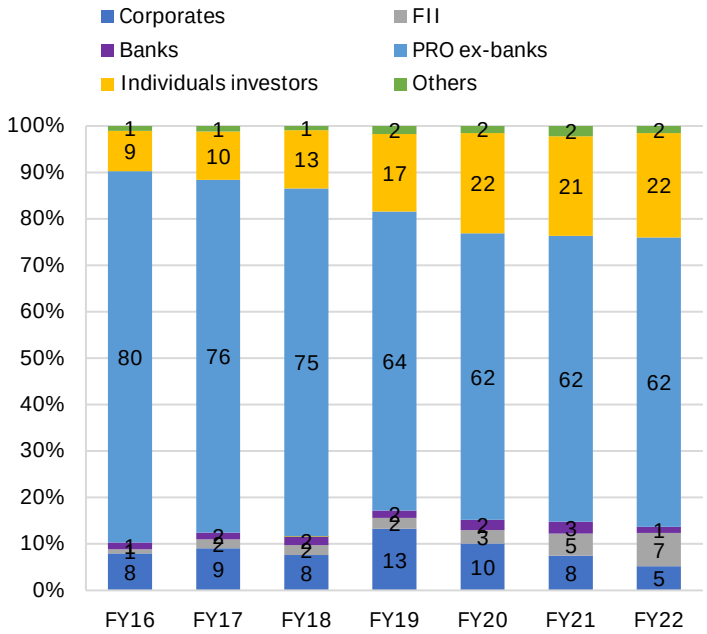


Figure 245: Trends in share of client participation in Currency Options (Premium Turnover) at NSE (%)



Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. FY22 considers data till June 2021.

Share of corporates in interest rate futures contracted sharply in June: The percentage share of corporates in interest rate futures contracted 1050bps MoM in the month June to touch 18.8% from 29.3% in May. The percentage share of Pro (ex-banks) and retail investors, on the other hand, registered a robust gain in interest rate futures turnover expanding 490bps MoM and 570bps MoM respectively, offset by a sharp contraction in the share of corporates. The share of FIIs and Banks also registered modest gain during the month.

The distribution of turnover in interest rate futures across client categories changed significantly, particularly in FY21 as compared to the previous fiscal years. While, the participation of retail clients, banks and corporate in the interest rate futures has inched up in FY21, the share of proprietary traders—excluding banks declined 23 percentage points from 52% in FY19 to 28% in FY21. Notably, the market share of banks has risen from 16% in FY16 to 27% in FY21.

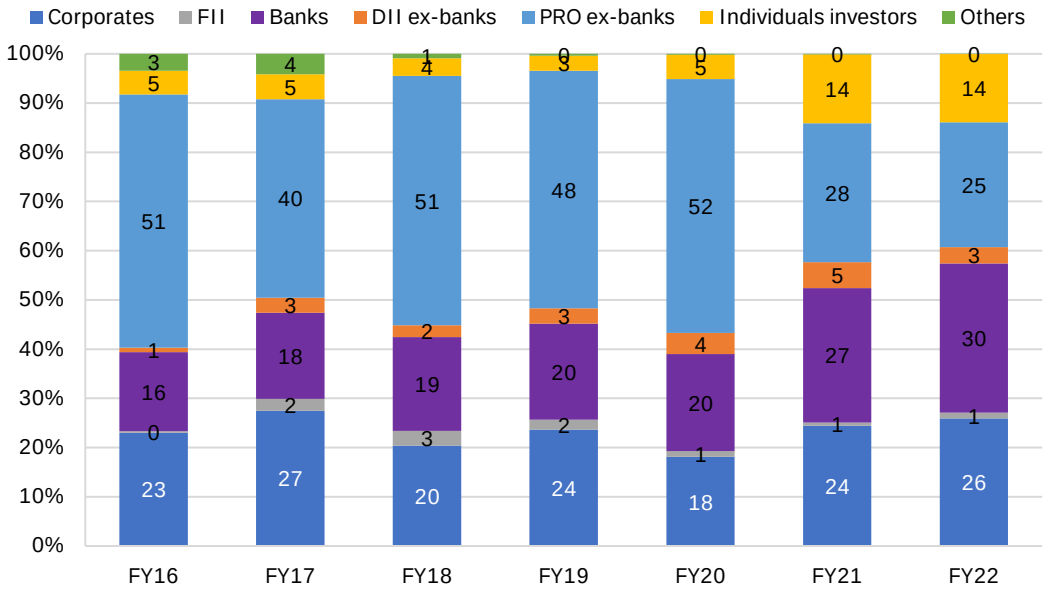
Figure 246: Share of client participation in Interest Rate Futures of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Interest rate futures								
Corporates	18.8	29.3	(10.5)	25.9	25.1	0.8	24.4	24.5
FII	1.1	1.0	0.1	1.2	0.7	0.5	0.7	0.8
Banks	32.8	32.3	0.5	30.3	25.7	4.6	27.3	27.5
DII ex-banks	4.5	5.2	(0.7)	3.3	4.6	(1.3)	5.3	5.2
PRO ex-banks	21.8	16.9	4.9	25.4	32.5	(7.1)	28.2	24.0
Individuals investors	20.9	15.2	5.7	13.9	11.4	2.5	14.0	17.8
Others	0.0	0.0	(0.0)	0.0	0.1	(0.1)	0.1	0.0

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Figures in brackets indicate negative numbers. *percentage points

Figure 247: Trends in share of client participation in Interest Rate Futures at NSE (%)



Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. FY22 considers data till June 2021.

Figure 248: Share of client participation in Interest Rate Options of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Interest rate options (Premium Turnover)								
Corporates	0.0	0.0	NA	0.0	41.8	NA	41.6	0.0
FII	0.0	0.0	NA	0.0	0.0	NA	0.0	0.0
Banks	0.0	0.0	NA	0.0	19.1	NA	18.9	0.0
DII ex-banks	0.0	0.0	NA	0.0	0.0	NA	0.0	0.0
PRO ex-banks	0.0	0.0	NA	0.0	32.9	NA	33.0	0.0
Individuals investors	0.0	0.0	NA	0.0	6.3	NA	6.5	0.0
Others	0.0	0.0	NA	0.0	0.0	NA	0.0	0.0
Interest rate options (Notional Turnover)								
Corporates	0.0	0.0	NA	0.0	47.6	NA	47.2	0.0
FII	0.0	0.0	NA	0.0	0.0	NA	0.0	0.0
Banks	0.0	0.0	NA	0.0	15.7	NA	15.6	0.0
DII ex-banks	0.0	0.0	NA	0.0	0.0	NA	0.0	0.0
PRO ex-banks	0.0	0.0	NA	0.0	30.3	NA	30.5	0.0
Individuals investors	0.0	0.0	NA	0.0	6.4	NA	6.6	0.0
Others	0.0	0.0	NA	0.0	0.0	NA	0.0	0.0

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Interest rate options were introduced in December 2019. Figures in brackets indicate negative numbers. *percentage points.

Figure 249: Share of client participation in Interest Rate Derivatives segment of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Interest rate derivatives (Premium Turnover)								
Corporates	18.8	29.3	(10.5)	25.9	25.1	0.8	24.4	24.5
FII	1.1	1.0	0.1	1.2	0.7	0.5	0.6	0.8
Banks	32.8	32.3	0.5	30.3	25.7	4.6	27.3	27.5
DII ex-banks	4.5	5.2	(0.7)	3.3	4.6	(1.3)	5.3	5.2
PRO ex-banks	21.8	16.9	4.9	25.4	32.5	(7.1)	28.2	24.0
Individuals investors	20.9	15.2	5.7	13.9	11.4	2.5	14.0	17.8
Others	0.0	0.0	(0.0)	0.0	0.1	(0.1)	0.1	0.0
Interest rate derivatives (Notional Turnover)								
Corporates	18.8	29.3	(10.5)	25.9	25.6	0.3	24.6	24.5
FII	1.1	1.0	0.1	1.2	0.6	0.6	0.6	0.8
Banks	32.8	32.3	0.5	30.3	25.5	4.8	27.2	27.5
DII ex-banks	4.5	5.2	(0.7)	3.3	4.5	(1.2)	5.2	5.2
PRO ex-banks	21.8	16.9	4.9	25.4	32.4	(7.0)	28.2	24.0
Individuals investors	20.9	15.2	5.7	13.9	11.3	2.6	13.9	17.8
Others	0.0	0.0	(0.0)	0.0	0.1	(0.1)	0.1	0.0

Source: NSE.

Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. Interest rate options were introduced in December 2019. Figures in brackets indicate negative numbers. *percentage points.

Share of proprietary traders in commodities segment expanded in June: While proprietary traders comprise nearly 90% of the overall commodities derivatives segment, their participation in the commodity options segment is comparatively lower comprising only 57% as on end of FY21 with rest of the share belonging majorly to

individual investors and corporates. Their respective share in commodities futures segment amount to 3.5% and 0.5% during the same period.

June witnessed an expansion in the share of proprietary traders in commodities derivatives segment by 450bps MoM from 93.4% to 97.9%. The increase in share of proprietary traders can be attributed to the rise in futures as well as options contracts.

Figure 250: Share of client participation in Commodity derivatives segment of NSE (%)

Client category	Jun-21	May-21	Change*	FY22TD	FY21TD	Change*	FY21	CY21TD
Commodities futures								
Corporates	0.5	2.0	(1.6)	1.7	34.0	(32.4)	3.5	0.8
DII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Individuals investors	0.9	1.4	(0.5)	0.7	1.5	(0.8)	0.5	0.4
PRO	98.5	94.4	4.1	97.0	64.4	32.5	95.7	98.4
Others	0.2	2.2	(2.0)	0.6	0.0	0.6	0.3	0.3
Commodities options (Premium Turnover)								
Corporates	20.0	30.2	(10.2)	29.7	11.2	18.5	12.7	20.2
DII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Individuals investors	9.9	3.5	6.4	6.3	9.5	(3.2)	20.8	6.3
PRO	57.5	56.2	1.3	54.9	79.2	(24.3)	57.2	58.2
Others	12.6	10.1	2.5	9.0	0.1	8.9	9.3	15.3
Commodities derivatives (Premium Turnover)								
Corporates	0.7	2.7	(2.0)	2.2	32.8	(30.6)	4.0	1.1
DII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Individuals investors	1.0	1.4	(0.4)	0.8	2.0	(1.1)	1.5	0.5
PRO	97.9	93.4	4.5	96.2	65.3	30.9	93.8	97.9
Others	0.3	2.4	(2.1)	0.8	0.0	0.8	0.7	0.6
Commodities options (Notional Turnover)								
Corporates	17.7	14.3	3.4	16.5	12.8	3.8	13.3	14.0
DII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Individuals investors	7.7	3.8	3.9	7.2	10.9	(3.6)	19.7	6.5
PRO	59.9	60.7	(0.8)	58.2	76.2	(17.9)	57.0	59.1
Others	14.7	21.2	(6.5)	18.0	0.2	17.8	10.1	20.4
Commodities derivatives (Notional Turnover)								
Corporates	11.2	11.0	0.2	11.4	16.3	(4.9)	11.3	8.5
DII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FII	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Individuals investors	5.1	3.1	2.0	5.0	9.3	(4.4)	15.9	4.0
PRO	74.5	69.8	4.6	71.7	74.3	(2.5)	64.6	75.5
Others	9.2	16.1	(6.8)	11.9	0.1	11.8	8.1	12.0

Source: NSE. Note: DII: Domestic Institutional Investors include Banks, Mutual Funds, Insurance Companies, NBFCs, Domestic VC Funds etc,, FII: Foreign Institutional Investors include FPIs, FDIs and Foreign VC Funds etc., Prop traders: Proprietary Traders, Individual investors: individual domestic investors, NRIs, sole proprietorship firms and HUFs, Others: Partnership Firms/LLP, Trust / Society, AIF, Depository Receipts, PMS clients, Statutory Bodies, OCB, FNs, etc. NSE commenced trading in Commodity Derivatives with the launch of bullion futures on October 12, 2018. NSE launched commodities options contracts on June 8th, 2020 by introducing options contracts in gold mini. Figures in brackets indicate negative numbers. *percentage points.

Asset category-wise open interest (average daily volume)

Figure 251: Average daily volume of open interest in Equity derivatives (million contracts)

Product	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Equity Derivatives								
FUTSTK	4,704	4,477	5.1	4,472	3,031	47.6	3,541	4,412
OPTSTK	3,644	2,912	25.1	3,140	1,301	141.4	2,190	3,078
Equity Derivatives - Index Futures								
BANKNIFTY	1.9	1.7	10.2	1.8	1.5	21.3	1.8	2.0
NIFTY	11.3	12.2	(7.4)	11.3	11.1	1.7	12.3	12.1
FINNIFTY	0.0	0.0	(45.3)	0.0	-	NA	0.0	0.0
NIFTYIT	-	-	NA	-	0.0	(100.0)	0.0	-
Equity Derivatives - Index Options								
BANKNIFTY	38.6	32.4	19.1	33.6	12.9	160.8	22.9	31.6
NIFTY	159.4	167.5	(4.8)	160.2	102.5	56.2	134.6	156.4
FINNIFTY	0.1	0.2	(55.0)	0.1	0.0	NA	0.1	0.2
NIFTYIT	-	-	NA	-	0.0	(100.0)	0.0	-

Source: NSE Note: FUTSTK: Stock Futures, OPTSTK: Stock Options; Trading in weekly and monthly derivative contracts of Nifty IT index was discontinued from June 4th, 2020 and June 25th, 2020 respectively; Figures in brackets indicate negative numbers.

Figure 252: Average daily volume of open interest in Currency derivatives (no of contracts)

Category	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Futures								
EURINR	142,681	170,151	(16.1)	164,022	125,741	30.4	202,587	187,928
EURUSD	3,076	2,924	5.2	2,834	3,081	(8.0)	5,343	3,144
GBPINR	178,275	216,086	(17.5)	216,864	57,256	278.8	147,064	250,822
GBPUSD	3,905	3,628	7.6	3,440	2,643	30.1	2,845	3,593
JPYINR	33,676	26,900	25.2	29,339	36,059	(18.6)	37,118	34,531
USDINR	3,420,807	3,892,745	(12.1)	3,906,890	3,231,829	20.9	3,248,736	4,179,095
USDJPY	249	129	93.0	282	68	313.9	96	237
Options								
EURINR	4,416	4,684	(5.7)	4,628	158	2836.1	3,664	7,061
EURUSD	0	0	NA	0	0	NA	0	0
GBPINR	10,281	12,665	(18.8)	13,048	197	6519.9	10,551	18,774
GBPUSD	0	0	NA	0	1	(100.0)	5	0
JPYINR	833	696	19.6	563	3	22029.0	100	324
USDINR	4,090,150	4,029,522	1.5	4,112,054	2,495,711	64.8	3,591,791	4,336,312

Source: NSE Note: Figures in brackets indicate negative numbers.

Figure 253: Average daily volume of open interest in Interest rate derivatives (no of contracts)

Category	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Interest rate futures	43,995	51,445	(14.5)	51,041	80,538	(36.6)	67,667	53,443
Interest rate options	-	-	NA	-	6,671	(100.0)	1,579	-

Source: NSE Note: Figures in brackets indicate negative numbers.

Figure 254: Average daily volume of open interest in Commodities derivatives (no of contracts)

Category	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Commodities futures	337	83	307.5	176	26	579.6	34	118
Commodities options	2,423	2,860	(15.3)	2,672	353	655.9	2,868	2,754

Source: NSE Note: Figures in brackets indicate negative numbers. NSE commenced trading in Commodity Derivatives with the launch of bullion futures on October 12, 2018. NSE launched commodities options contracts on June 8th, 2020 by introducing options contracts in gold mini.

Internet-based trading

Average daily gross traded value through internet declined in June: ADT of internet-based trading (IBT) declined 8.3% MoM to touch Rs175bn in CM segment and 13.3% MoM to touch Rs266bn in equity derivatives segment of NSE. The decline in average daily internet-based trades was in-line with the decline in the overall trading activity of retail investors witnessed in the month of June in the respective segments. Internet-based trading in currency derivatives declined 5.4% MoM to touch an ADT of Rs40bn in June *vs* Rs43bn in the previous month. The ADT in interest rate and commodities derivatives also witnessed a decline of 22.1% MoM and 82.6% MoM to touch Rs383bn and Rs1bn respectively.

Barring the declines in the last two months of FY21, trading activity through internet strengthened across all segments of NSE except interest rate derivatives as compared to the same period in the previous fiscal, largely led by increase in retail participation in these segments. On an average, daily turnover through internet-based trading rose by 70% YoY in Cash market to reach Rs154bn in FY21 (vs. Rs91bn over the same period in FY20)

A similar trend was recorded for Equity derivatives segment as well, where the average daily turnover rose by 43.1% YoY over the same period to reach Rs311bn in FY21 *vs* Rs217bn in the previous fiscal year. The trend in IBT has gained momentum since March'20 due to increased retail participation, particularly since the nationwide lockdown, as retail investors and traders started utilising this online platform to trade from their homes.

Figure 255: Average daily gross turnover through internet-based trading (Rsm)

Segment	Jun-21	May-21	% Change	FY22TD	FY21TD	% Change	FY21	CY21TD
Cash Market	175,937	191,815	(8.3)	176,800	139,969	26.3	154,332	172,183
Equity Derivatives	266,291	307,091	(13.3)	295,496	277,110	6.6	311,085	320,562
Index Futures	77,767	100,786	(22.8)	98,522	134,710	(26.9)	132,632	117,041
Stock Futures	141,689	157,820	-10.2	148,660	119,607	24.3	147,547	156,963
Index Options	38,057	40,732	-6.6	40,548	19,546	107.5	26,022	39,247
Stock Options	8,778	7,753	13.2	7,767	3,247	139.2	4,884	7,311
Currency Derivatives	40,872	43,226	(5.4)	45,850	40,737	12.6	39,960	42,482
Currency Futures	40,697	43,060	(5.5)	45,651	40,628	12.4	39,829	42,295
Currency Options	175	166	5.7	200	109	82.5	130	187
Interest Rate Derivatives	383	492	(22.1)	418	1,534	(72.7)	1,195	790
Interest Rate Futures	383	492	(22.1)	418	1,534	(72.7)	1,195	790
Interest Rate Options	0	0	NA	0	0	(100.0)	0	0
Commodity derivatives	0.9	5.0	(82.6)	2.2	0.8	161.2	4.1	2.5
Commodity futures	0.6	4.8	(86.8)	1.9	0.8	133.9	3.1	1.9
Commodity options	0.2	0.2	8.3	0.3	0.0	825.0	1.0	0.5

Source: NSE. Note: Average daily trading turnover is the average of daily gross turnover i.e., buy side turnover + sell side turnover. *Premium turnover is considered in case of options contracts. Cash market turnover excludes auction market turnover.

Record statistics

NSE registered yet another record in June 2021: Stock options premium turnover recorded a new high on June 14th, 2021 when the single day turnover touched Rs64bn. Index options premium turnover touched a new record on January 28th, 2021 of Rs186bn in a single day. Previous record high in Index options were registered on December 22nd, 2020 to touch Rs171bn after creating a record on November 11th, 2020 to touch Rs164bn and on August 31st (Rs160bn) and March 19th (Rs146bn) this year. Stock options premium turnover also touched highest record on January 13th, 2021 to touch Rs56bn after touching Rs33bn on December 21st, 2020.

The volatility in Indian equities measured by India Volatility Index increased 46% in the last 12 months as result of sharp rise in trading across several segments. NSE hit record turnover in the Cash market to touch Rs1,475bn on November 27th, 2020 vs Rs990bn on August 31st and Rs835bn on May 29th in 2020. While other segments have recorded a significant growth in their average turnover this year, they did not cross their previous record levels. Index futures had recorded its highest turnover of Rs860bn on September 20th, 2019 after the Finance Minister slashed the corporate tax rate from 30% to 22%.

Figure 256: Segment-wise record turnover till June 30th, 2021

Segment	Turnover (Rsbn)	Trading Date
Cash market	1,475	27-Nov-20
Index futures	860	20-Sep-19
Stock futures	1,954	25-Jan-18
Index options (premium)	186	28-Jan-21
Stock options (premium)	64	14-Jun-21

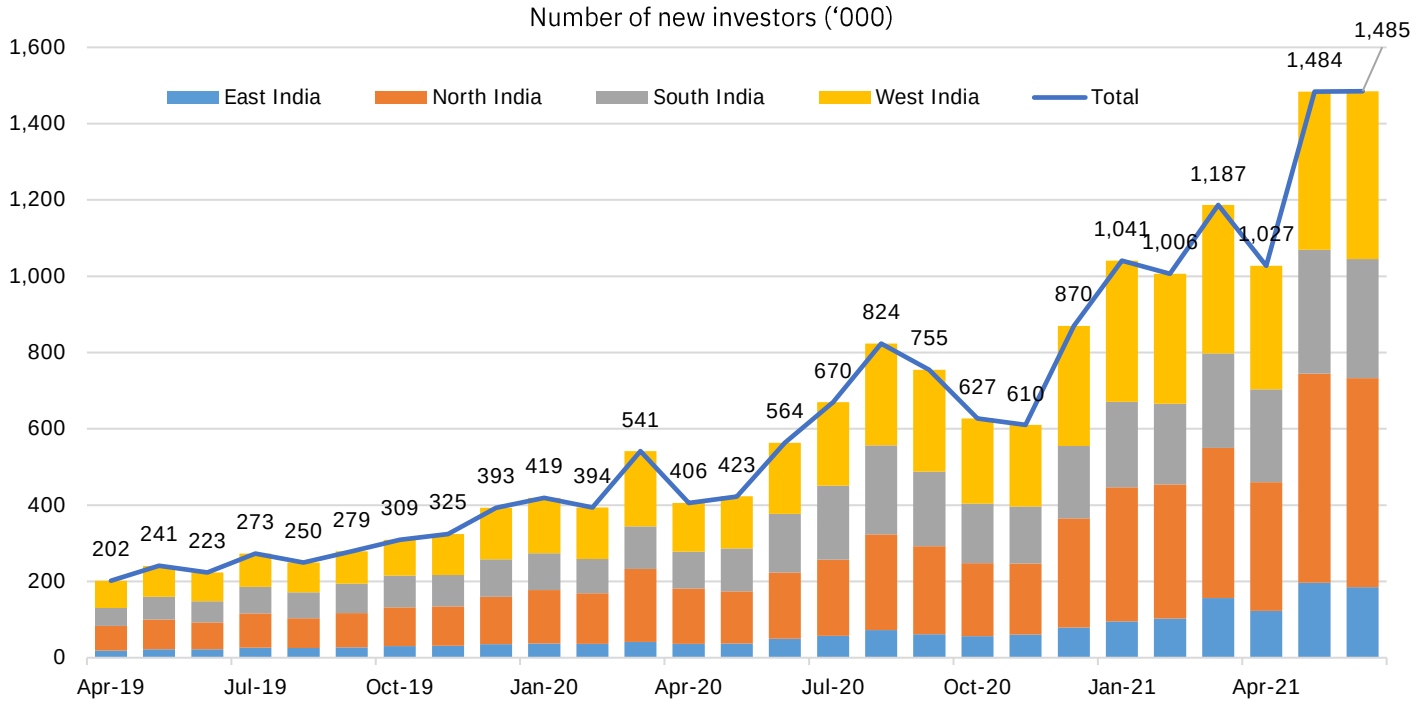
Source: NSE

Spatial distribution of trading activities

Region-wise distribution of new investors registered

India's investors base keeps rising exponentially over the last two fiscal years. Monthly registration of new investors increased to an all-time high of 1.5m in June 2021. There has been a slight increase from May 2021 and a significant rise from 1.0m in April 2021. Except a few months, total number of new registrations maintained a positive trajectory on average over the last two fiscal years. As shown in the following chart, monthly registration jumped up seven times from 223 thousand in June 2019 to 1.5m in June 2021 with a CAGR of 8%.

Figure 257: Region-wise distribution of new investors registered

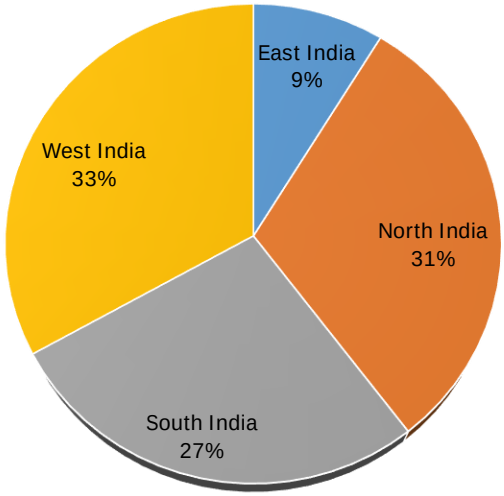


Source: NSE.

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 Telengana, Kerala, Andhra Pradesh, Tamil Nadu, Karnataka, Pondicherry, Lakshadweep And Andaman & Nicobar.

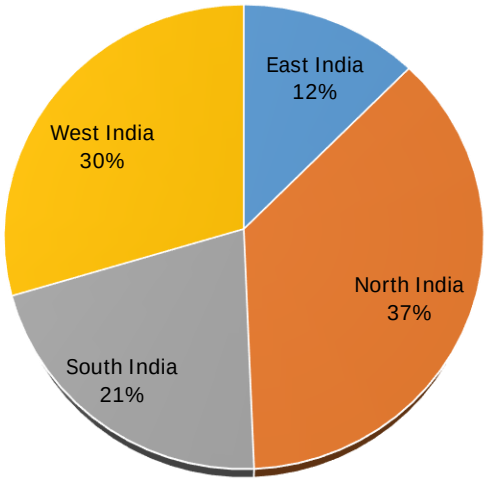
Even as the distributional pattern across regions has changed slightly over the last two years, Northern and Western regions remained to be the front runners in terms of total number of registrations over the last two fiscal years. In June 2021, Northern part contributed around 37% of total registration which is around 6 percentage point lower than June 2020. In contrast, the share has declined in Western and Southern regions from 33% to 30% and 27% to 21% between June 2020 and June 2021. This was partially taken over by the Eastern region with a share of 12% in June 2021 as compared to 9% in the previous year.

Figure 258: Share of new investors across regions in Jun'**20**



Source: NSE.

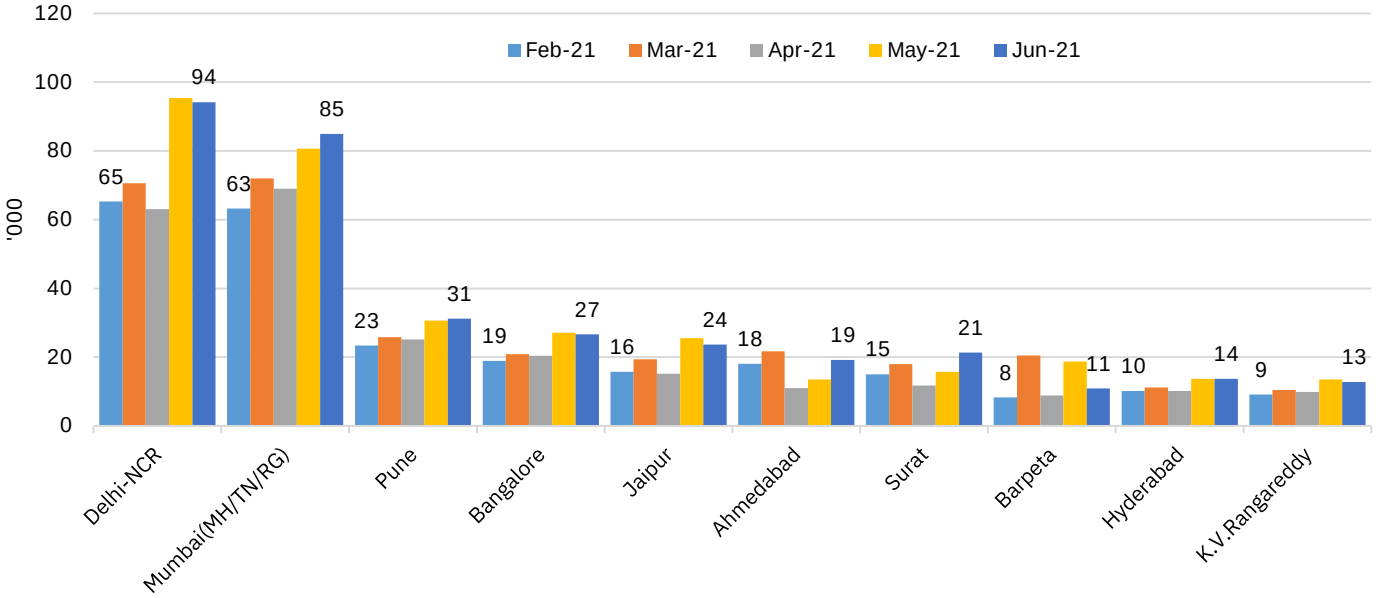
Figure 259: Share of new investors across regions in Jun'**21**



Source: NSE.

New investor registrations are further concentrated in a few districts, as shown in the following chart. Over the month of April, top ten districts have contributed a total of 23% of total registration. Among them, around 6.3% of all new investors are from Delhi region, which is marginally higher than Mumbai (5.7%). Among others, 2.1% of all registration over the month happened in Pune, followed by Bangalore and Jaipur (1.8% and 1.6%). Notably, Barpeta from Assam continued to be one of the top 10 districts since March 2021 and registered 0.3% of total new investors in the country. Besides, Surat, Ahmedabad, Hyderabad and K. V. Rangareddy have registered a significant number of investors in June 2021.

Figure 260: Number of new investors registered in top 10 districts



Source: NSE
Note: Top 10 districts are chosen based on the last month data.

Region-wise distribution of individual investor turnover in the cash market

Western and northern region continued to record largest share of turnover of individual investors: The distributional pattern remained somewhat similar over the last two fiscal years. In Jun'21, Western and Northern regions contributed 36.7% and 29.4% of total turnover by individual investors, which is much higher than the other two regions. While the southern region contributed around 25% of total individual investors' turnover, the eastern region's contribution remained around 9% over the month.

The distributional pattern remained similar for the number of individual investors as well. While West contributed 40.2% in Jun'21, Northern region continues to be the second largest contributor throughout the year, followed by Southern region which has recorded a marginal decline in the share from 22.6% to 21.1% over the period. N

Figure 261: Region-wise distribution of individual **investors' turnover in cash market (%)**

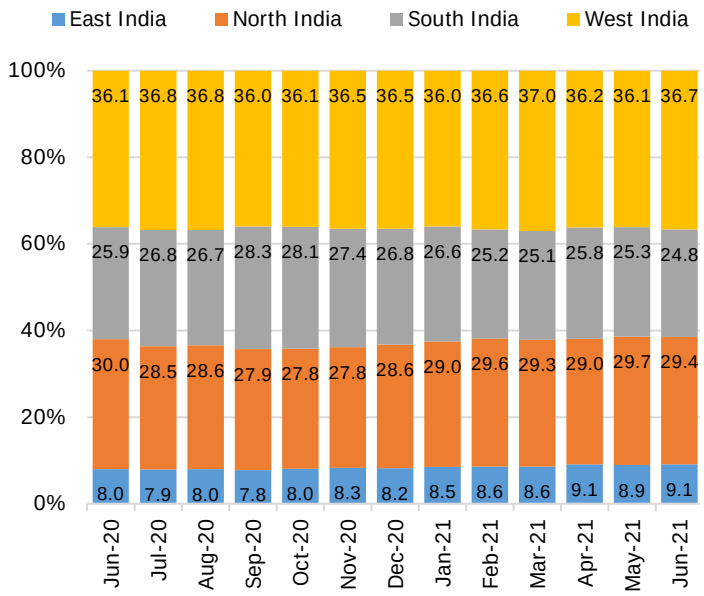
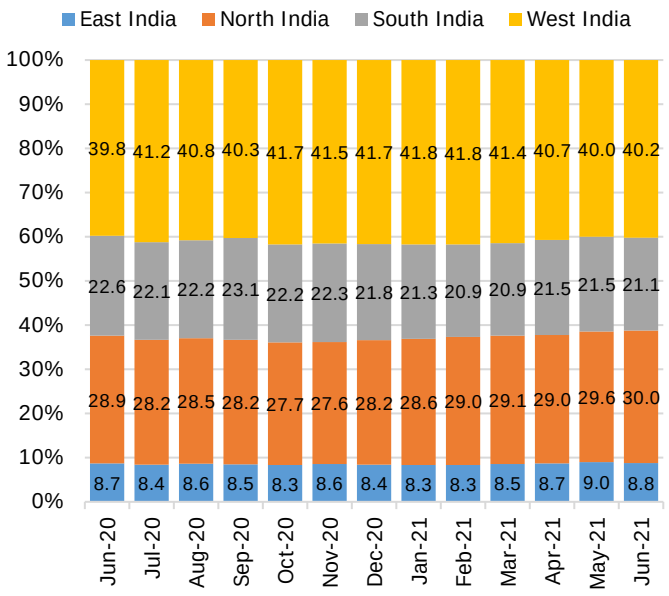


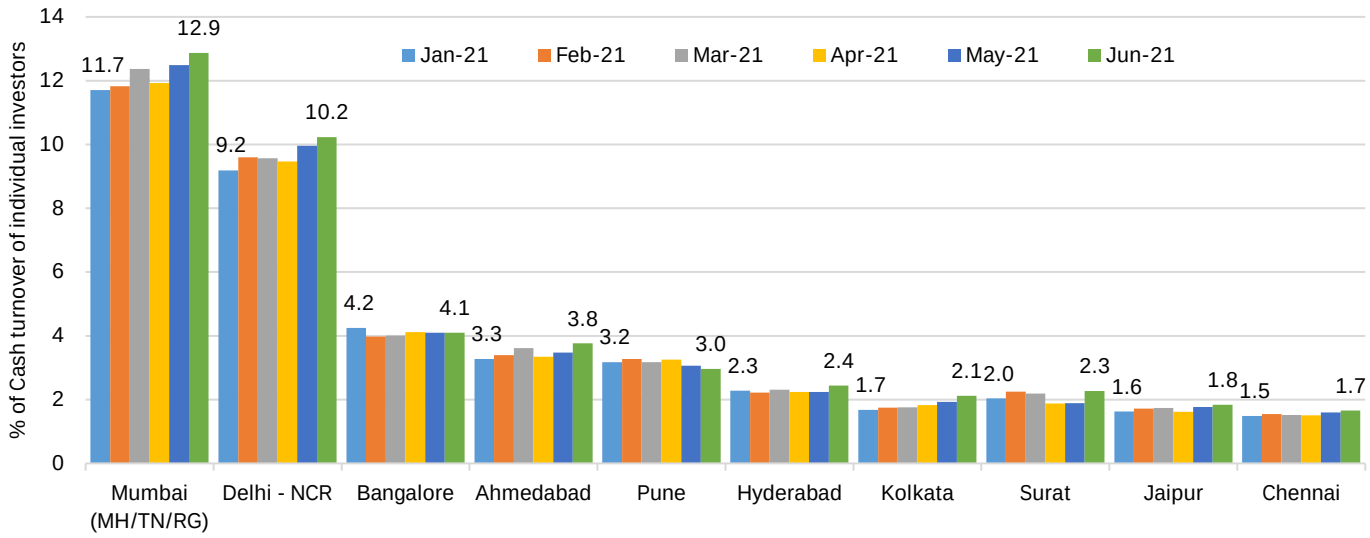
Figure 262: Region-wise distribution of individual investors traded



Source: NSE.

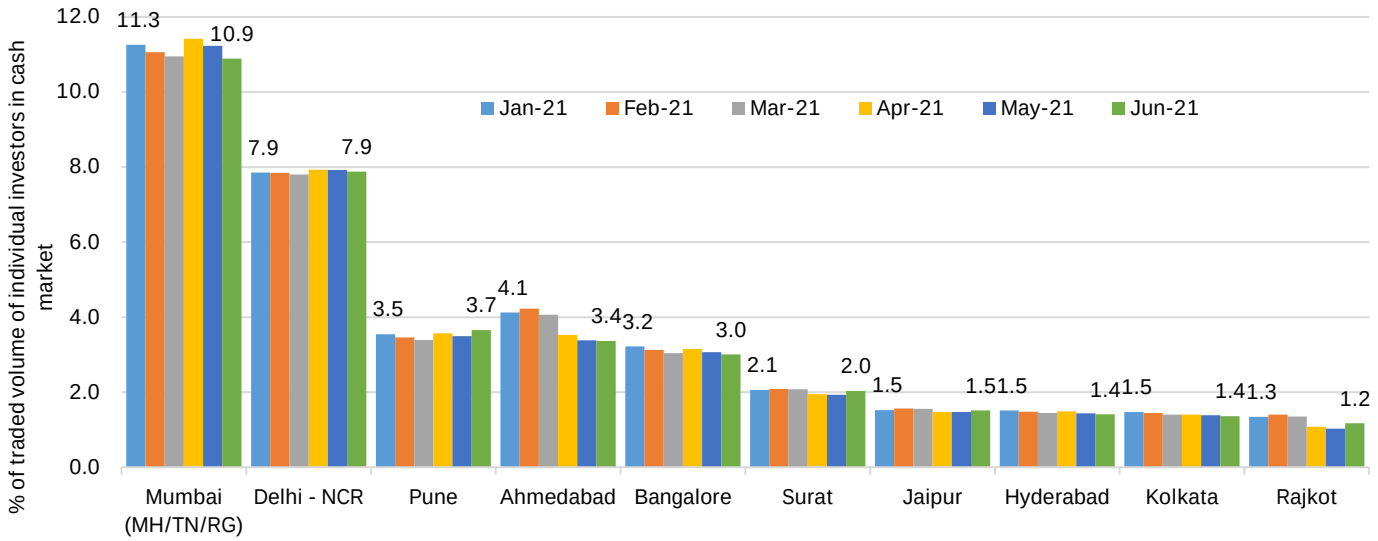
Total turnover and trade volume of individual investors are further concentrated in a few districts over the last fiscal year, as shown in the following chart. Out of total turnover, top ten districts contributed 44.2% in June 2021—comparatively higher lower than 42.5% over the previous month, while they contributed ~36.3% to retail trade volume over both the months. Amongst them, Mumbai and Delhi have contributed around 12.9% and 10.2% of total turnover respectively over the month, which are marginally higher similar than the previous month, while Bangalore contributed 4%, followed Ahmedabad by (3.8%) and Pune (3%) over the month.

Figure 263: Top 10 districts based on Cash turnover of individual investors



Source: NSE.
Note: Individual investors include Individual / Proprietorship firms and HUF. Top ten districts are chosen based on the last month data.

Figure 264: Top 10 districts based on individual investors traded



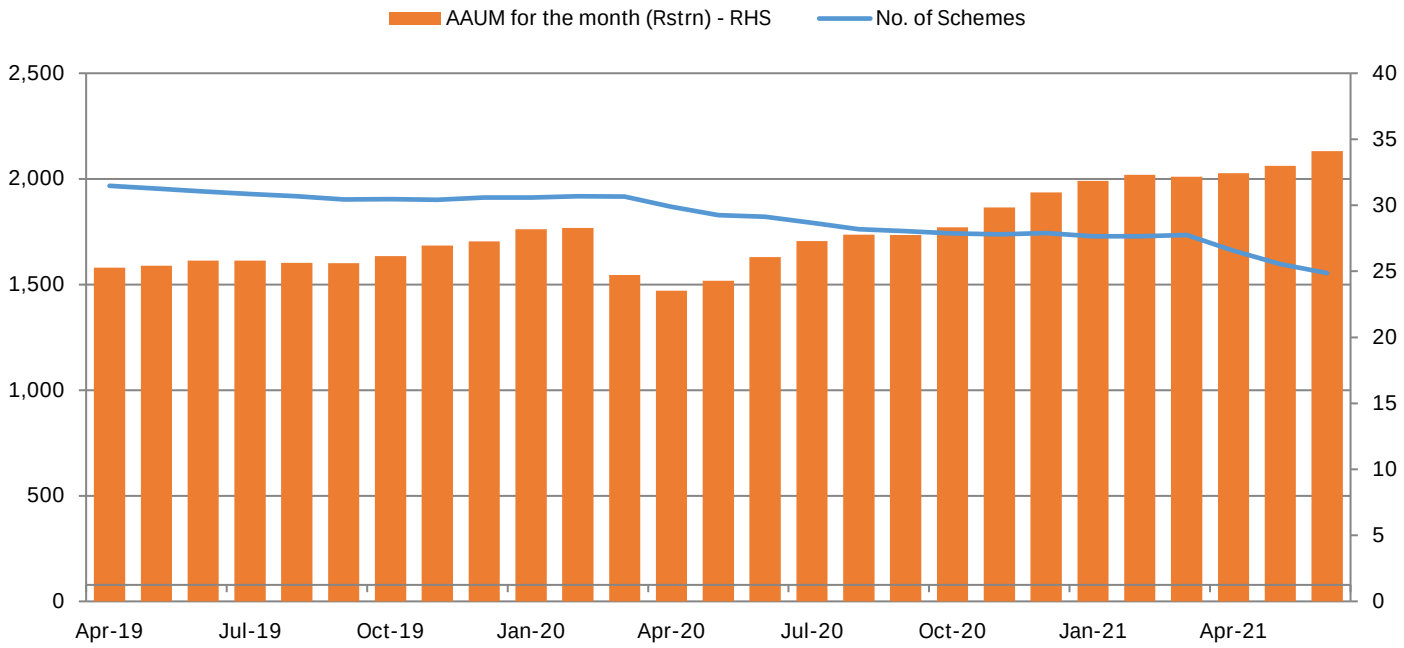
Source: NSE
Note: Individual investors include Individual / Proprietorship firms and HUF. Top ten districts are chosen based on the last month data.

Investment through mutual funds in India

Mutual funds' asset under management (AUM) recorded 3% growth in June 2021,...: Post a significant slowdown during Mar-Apr'20, average AUM of Indian mutual funds recorded a decent growth over the last fiscal year, thanks to the continuous rally in the equity prices both globally and in India with global market rally in equity prices, significant rise in FIIs' net inflows and an overall fall in risk-free return, thanks to prompt fiscal and monetary responses in all major countries over the period. Besides, the recent vaccination drives, recovery in high frequency indicators reflects a sharp economic recovery globally. This may have helped MFs' average AUM to reach at a record level of Rs34.1trn in June 2021.

In contrast, the number of MF schemes fell further by 3% over the month: Unlike AUM of MFs which registered record rise since May'20, total number of MF scheme continues to fall since March'20 from 1,916 to merely 1,735 in Mar'21 and further to 1,554 in Jun'21. This continuous fall was largely due to rise in concentration to recategorization and rationalisation of mutual funds by the market regulator, rise in market uncertainty and weakening debt market over the period.

Figure 265: Monthly trend of total MF schemes and average AUM



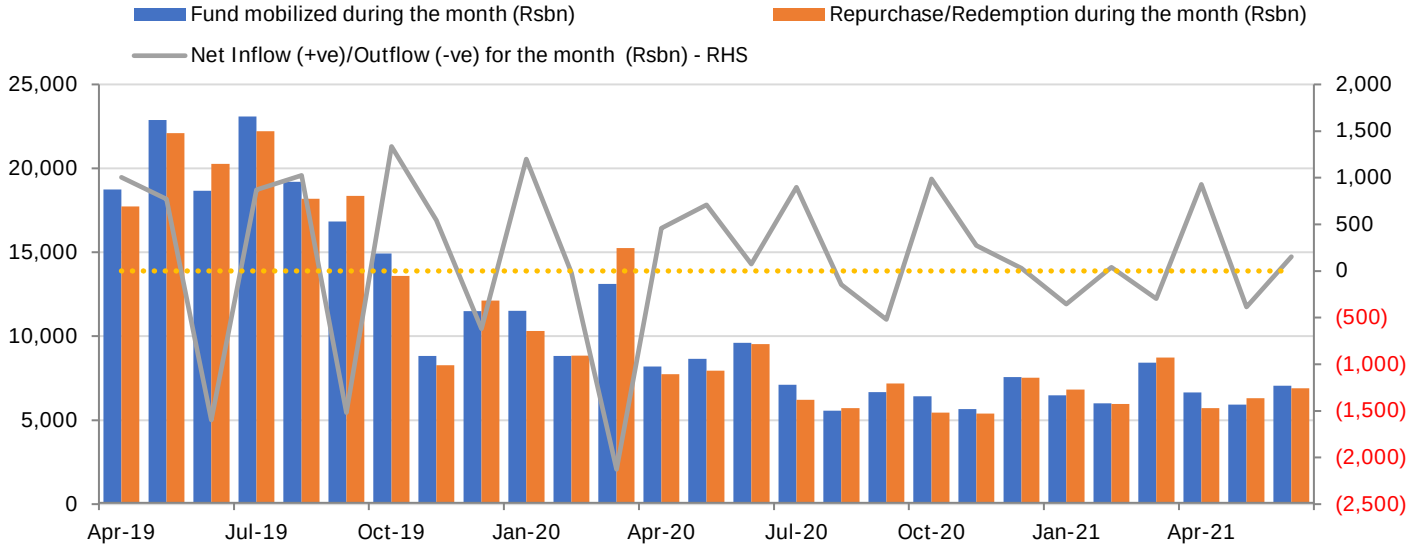
Source: AMFI. *AAUM-Average Asset under Management.

MFs turned net buyers **in June 2021...:** Post a sharp fall in May 2021, MFs' net investment came to positive territory with Rs153bn net purchases as compared to Rs386bn net sells over the previous month. The recent uprise was largely led by the recent improvements in the coronavirus situation, continuous rise in the share of fully vaccinated population and slight improvements high frequency indicators over the month.

Overall, the trend of MFs' net investment remained quite volatile over the previous two fiscal years, as shown in the following chart. Over the period, it got fluctuated between

Rs1.3trn net purchase in October 2019 and Rs2.1trn net sales in March 2020. MFs started the fiscal year FY21 with Rs460bn net purchase and maintained its stand over the next three months, before turning to a negative territory between Aug-Sep'20. The ups and downs continued over the rest of the period. In aggregate, however, MFs net investment has been more than doubled in FY21 to Rs2.1trn as compare to Rs870 in FY20, which has again declined to merely Rs696bn in FY22 thus far till June 2021.

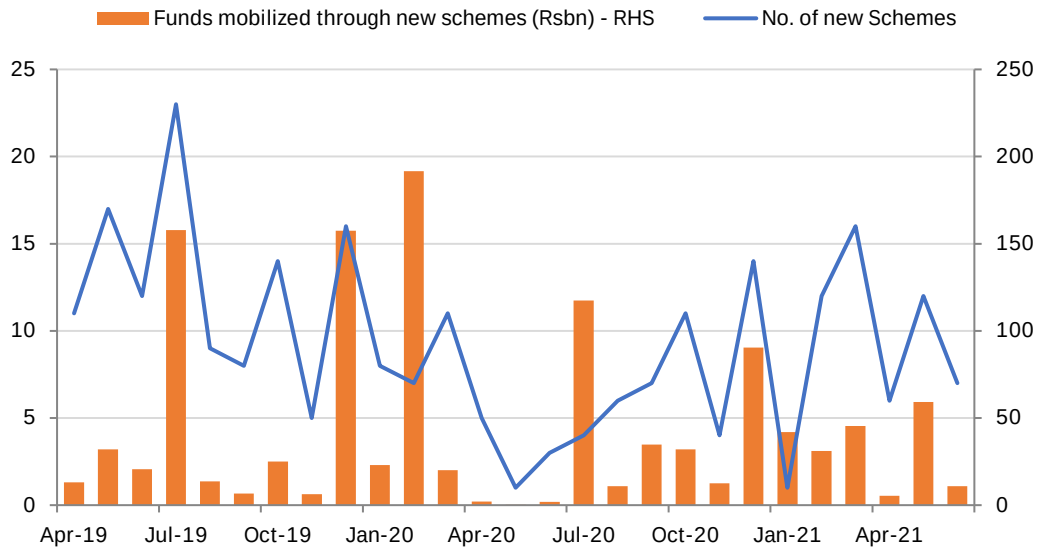
Figure 266: Monthly trend of total investment through mutual funds



Source: AMFI.

...while, fund mobilisation through new schemes saw a sharp fall in Jun'21: MFs' fund mobilisation remained quite volatile over the last two fiscal years. Post significant rise in May 2021, number of new schemes fell by 42% in June 2021 to mobilise Rs10.9bn as compared to Rs59.1bn over the previous month. Overall, total fund mobilisation of MFs through new schemes was Rs75.4bn in Q1FY22, which is significantly lower than the previous quarter of Rs118bn, but 18 times higher than Q1FY21 of Rs4.3bn. On average, there is a slight recovery in fund mobilisation for mutual funds over the last three quarters post the sudden slowdown in Q1FY21, even as the trend remained quite volatile over the period partly due to rise in uncertainty, several spikes in coronavirus cases, slower than expected vaccination drive and investors rising interest towards active investment given low return from mutual funds.

Figure 267: Monthly trend of total investment through new schemes



Source: AMFI.

Policy developments

India

Key policy measures by the SEBI during June 2021[17]

June 1st, 2021	Off-market transfer of securities by FPI With a view of encouraging investment in International Financial Services Centre (IFSC), the Finance Act, 2021 provides tax incentives for relocation of foreign IFSC. SEBI has decided that a FPI ('original fund' or its wholly-owned special purpose vehicle) may approach its DDP for approval of a one-time 'off-market' transfer of its securities to the 'resultant fund'. Relocation request will imply that the FPI has deemed to have applied for surrender of its registration and the DDP may be guided by the guidelines pertaining to surrender of FPI registration. The 'off-market' transfer shall be allowed without prejudice to any provisions of tax laws and FEMA.
June 2nd, 2021	Streamlining the process of IPOs with UPI in ASBA and redressal of investor grievances SEBI vide circular dated March 16th, 2021, which came into effect from May 1st, 2021had put in place measures to have a uniform policy to further streamline the processing of ASBA applications through UPI process among intermediaries/SCSBs and provided a mechanism of compensation to investors. In view of the representations received from stakeholders for additional time for implementation of system changes due to the pandemic situation, the timelines for the provisions of the March 16th circular have been revised.
June 3rd, 2021	Enhancement of Overseas Investment Limits for Mutual Funds SEBI circular dated November 5th, 2020 specified the overseas investment limits per Mutual Fund. Based on the representations received from Mutual Fund industry to enhance the investment limits per Mutual Fund, the limits are being revised. 1. Mutual Funds can make overseas investments subject to a maximum of US$1bn per Mutual Fund, within the overall industry limit of US$7bn. 2. Mutual Funds can make investments in overseas Exchange Traded Fund (ETF(s)) subject to a maximum of US$300m per Mutual Fund, within the overall industry limit of US$1bn.
June 4th, 2021	Settlement of Running Account of **Client's** Funds lying with Trading Member (TM) SEBI vide circular dated December 3rd, 2009 and September 26th, 2016 had issued the guideline for settlement of running account of client's funds/ securities. As per the circulars, the actual settlement of funds and securities shall be done by the member depending on the mandate of the client and a gap of maximum 90 / 30 days (as per the choice of client viz. Quarterly / Monthly) is required between two settlements of running account. The settlement of running account for securities had been later discontinued and therefore the above circulars are now applicable for settlement of running account of client's "funds" only. Further, SEBI had discontinued the title transfer of securities to the demat account of TM for margin purposes and TM shall accept collateral from the clients in the form of securities only by way of 'margin pledge' created in the Depository system. In consultation with the stock

[17] For more details, please visit http://www.sebi.gov.in

	exchanges and industry representatives to devise a framework to mitigate the risk of misuse of client's funds, SEBI has decided to modify certain provisions of the above circulars.
June 16th, 2021	Automation of Continual Disclosures under Regulation 7(2) of SEBI (Prohibition of Insider Trading) Regulations, 2015 -System driven disclosures for inclusion of listed Debt Securities SEBI vide circular dated September 9th, 2020 implemented the System Driven Disclosures in phases, under SEBI (Prohibition of Insider Trading) Regulations, 2015. System Driven Disclosures has been implemented for member(s) of promoter group and designated person(s) in addition to the promoter(s)and director(s)of company (hereinafter collectively referred to as entities) under PIT Regulations pertaining to trading in equity shares and equity derivative instruments. SEBI has now been decided to include the listed debt securities of equity listed companies under the purview of the said System Driven Disclosures.
June 25th, 2021	Alignment of interest of Key Employees of Asset Management Companies (AMCs) with the Unitholders of the Mutual Fund Schemes SEBI vide circular dated April 28th, 2021 had specified provisions with regard to 'Alignment of interest of Key Employees of Asset Management Companies (AMCs) with the Unitholders of the Mutual Fund Schemes. The aforesaid circular was to be applicable with effect from July 1st, 2021. However, based on the feedback received from stakeholders, it has been decided to extend the date of implementation of the circular to October 1st, 2021.

Global policy developments

New SEC Public Service Campaign: Investing Regularly Really Adds Up[18]

Office of Investor Education and Advocacy (OIEA) today unveiled a public service campaign (PSC) to educate investors on the benefits of investing and encourage them to use the free financial planning tools and information on the SEC's online resource – Investor.gov. As part of the campaign, investors can also test their investing knowledge with a new quiz that will be published each month on Investor.gov/quiz.

One of the important goals of the public service campaign is to reach new investors, particularly those who are traditionally underserved, to ensure they are aware of the free resources available to help them make informed financial and investment decisions. The PSC videos provide useful content to provide information to investors on concepts such as the compound interest calculator to determine how much their money can grow using the power of compound interest, and emphasizes how easy it is to diversify an investment portfolio. Additionally, other videos address investing topics including day trading, SPACs (special purpose acquisition companies), ESG (environmental, social, governance) investing, options, index funds, margin accounts, microcap stocks, and fractional shares.

[18] https://www.sec.gov/news/press-release/2021-109

ESMA Launches 2021 Central Counterparties Stress Test[19]

ESMA published the framework for its fourth Stress Test for Central Counterparties (CCPs). ESMA, as required by the European Markets Infrastructure Regulation (EMIR), initiates and coordinates this exercise to assess the resilience and safety of recognised European Union (EU) and Tier 2 Third Country CCPs (TC-CCPs) to adverse market developments and to identify any potential shortcomings.

The 2021 Stress Test addresses credit and concentration risks, and uses improved methodologies, including lessons learned from previous exercises, such as assessing the combination of concentration costs and credit losses when liquidating defaulting portfolios or including an intraday exercise for credit. For the first time, and in line with ESMA's mandate, the exercise also covers operational risk.

FCA consults on further climate-related disclosure rules[20]

The FCA has published new proposals on climate-related disclosure rules for listed companies and certain regulated firms. The proposals follow the introduction of climate-related disclosure rules for the most prominent listed commercial companies in December 2020 which are aligned with the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD). The new proposals are among the FCA's first substantive policy proposals for the UK asset management and asset owner sectors since the end of the EU Withdrawal transition period.

The proposal by FCA includes:

1. to extend the application of its TCFD-aligned Listing Rule for premium-listed commercial companies to issuers of standard listed equity shares.
2. to introduce TCFD-aligned disclosure requirements for asset managers, life insurers, and FCA-regulated pension providers, with a focus on the information needs of clients and consumers.

[19] https://www.esma.europa.eu/press-news/esma-news/esma-launches-2021-central-counterparties-stress-test
[20] https://www.fca.org.uk/news/press-releases/fca-consults-further-climate-related-disclosure-rules

Comparison of trading activities across major exchanges globally

The market cap of major stock exchanges rose significantly in April 2021 on YoY basis, largely led by global rally of equity prices, faster than expected recovery in US economy, and the ongoing vaccination drive in all major economies. Besides, availability of ample liquidity in the system and prompt support in the fiscal and monetary domain. The International Monetary Fund has recently predicted a V-shaped recovery in major countries, and several companies started showing recovery in their balance sheet as well. In this section, we have examined the overall trend of trading pattern in the securities market over the last two years in different segments across exchanges globally.

Here, we used data from World Federation of Exchanges (WFE) over the period April'19-Apr'21 that covers a total of 103 exchanges of which 59 are from the EMEA region, 26 from Asia-Pacific and the rest from the Americas region. We have also highlighted NSE's contribution in different segments globally based on domestic market capitalisation and its trading activity in the cash/spot markets and different derivatives markets—Equity, Index derivatives and Currency segments. The key takeaways of the analysis are:

- Major exchanges recorded a sharp rise in their market sizes over the past year: Major exchanges recorded an exponential growth in their market cap on YoY basis, thanks to the positive momentum in the equity market globally, slowdown in coronavirus cases, successful vaccination drives in major economies and continuous expansionary monetary policy measures taken by the central banks. Notably, National Stock exchange and NASDAQ recorded 64% and 62% YoY growth in April 2021 respectively, followed by TMX Group (54%). Other top exchanges have also recorded magnificent growth over the same period. On average, top 10 exchanges registered 47% growth in April 2021 on YoY basis as compared to 18% decline in April 2020 due to the sudden rise in uncertainty over the unprecedented outbreak in coronavirus cases.

- NSE continued to be one of the largest exchanges globally with US$2.8trn market cap in Apr**'21:** NYSE and Nasdaq-US are continued to be the largest stock exchanges globally, followed by Shanghai, Hong Kong, Japan and Euronext stock exchanges. Among others, Shenzhen, London, TMX Group continued to maintain their ranks in the global market. From India, NSE remained in the top 10 exchanges globally with a market cap of US$2.8trn in April 2021.

- Shenzhen Stock Exchange (SZSE) maintained its top position in the Cash market throughout the last two years globally: Even as all major exchanges recorded several ups and downs over the last two years, SZSE remained to be the largest exchange globally in Cash market with 611m number of trades in April 2021, while Korea Stock exchange (KRX) and SSE were ranked second and third respectively with 535m and 442m trades over the month. Even though most of the major exchanges recorded a MoM decline in the number of trades, Boursa Kuwait and Korean Stock Exchange (KRX) recorded 25% and 7% growth over the month. Among others, NSE was ranked fourth with 383m trades in the segment, even as it recorded 12% decline in number of trades over the month.

- NSE remains as the fifth largest position in Stock futures globally**...:** Distibution of total trade volume is quite diverse across exchanges for Stock futures. Post a magnificent rise in Nov'20, trading activities of the top exchange - Borsa Istanbul's number of contracts traded declined during Dec-Apr'21. Still, the exchange maintains its top position gloablly since Oct'20. Among others, KRX surpassed B3

- Brasil Bolsa Balcão to become the second large with 101m trades in the segment in April 2021, followed by Moscow Stock Exchange (MOEX) and NSE. Over the month, NSE remains the fifth largest exchange globally with 16.9m contracts traded in April 2021 even as it recorded a 5.9% decline over the month.

- **...while it was rank**ed seventh largest stock exchange in Stock options segment: Nasdaq-US maintained its top position in Apr'21 as well with 184m contracts traded in Stock options, which is a decline of 17% lower than the previous month. CBOE Global surpassed B3 - Brasil Bolsa Balcão in April 2021 and ranked second with 121m contracts traded, marginally higher than 120m contracts traded in B3 - Brasil Bolsa Balcão. NSE was ranked seventh over the month with 34m contracts traded in Apr'20, with a 6% growth over the month.

- NSE is leading in the equity index options with more than **80% market share,...**: NSE remains the biggest player in the equity index options segment with 84% market share in April 2021 inspite of a 0.5% drop in the contracts traded in the MoM change. It has maintained its top position in the segment over the last two years. Among others, KRX was ranked second with merely 5% share and 50m contracts traded in Apr'21, followed by CBOE Global and DBAG with 36.7m and 26.5m contracts traded, respectively over the month.

- **In contrast, NSE's rank remained somewhat l**ow in Equity index futures: With merely 7.8m contracts traded, NSE was ranked eighth largest stock exchange globally in Apr'21 that accounted only 1% market share over the month. In the segment, B3 - Brasil Bolsa Balcão retained its top position in this segment over the last two years with 326m contracts traded and 60% market share in April 2021, followed by CME Group, DBAG and JPX.

- NSE retained its top position in the Currency options segment globally, while ranked second in Currency futures segment: NSE continued to be the largest exchange globally in the Currency options segment over the last two years and second largest in Currency futures in Apr'21. In the options segment, NSE captures 96% market share globally with 119m contracts traded over the month, while Moscow Stock Exchange ranked second with 2% market share and 2.4m contracts traded. In the currency futures segment, Moscow Exchange was topped with 87m contracts traded, followed by NSE with 77m and B3 - Brasil Bolsa Balcão with 73m contracts traded over the month and capturing 28% and 26% of market share, respectively.

Figure 268: Domestic market cap of top ranked exchanges**

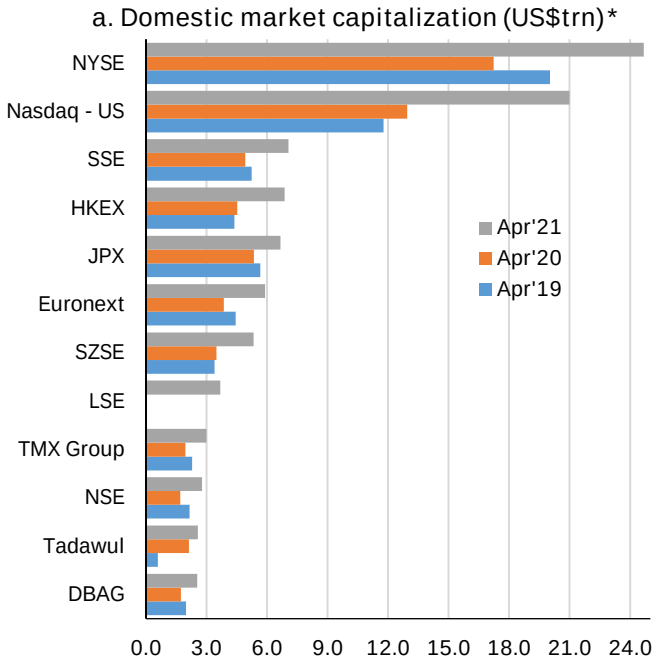


Figure 269: Number of trades in Cash market of top ranked exchanges**

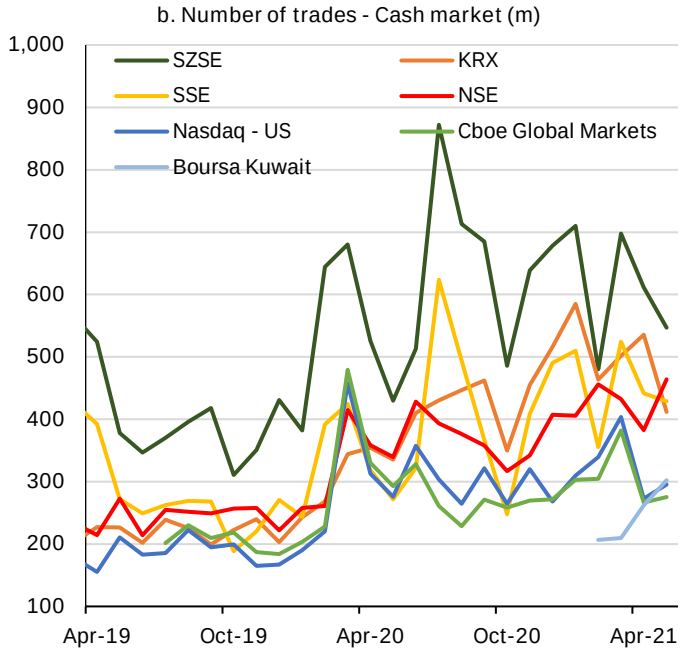


Figure 270: Number of contracts traded in Stock futures of top-ranked exchanges**

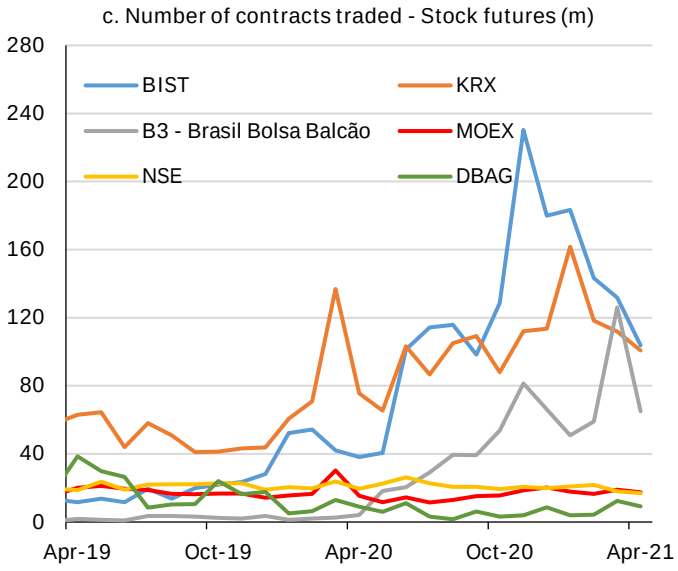


Figure 271: Number of contracts traded in Stock options of top-ranked exchanges**

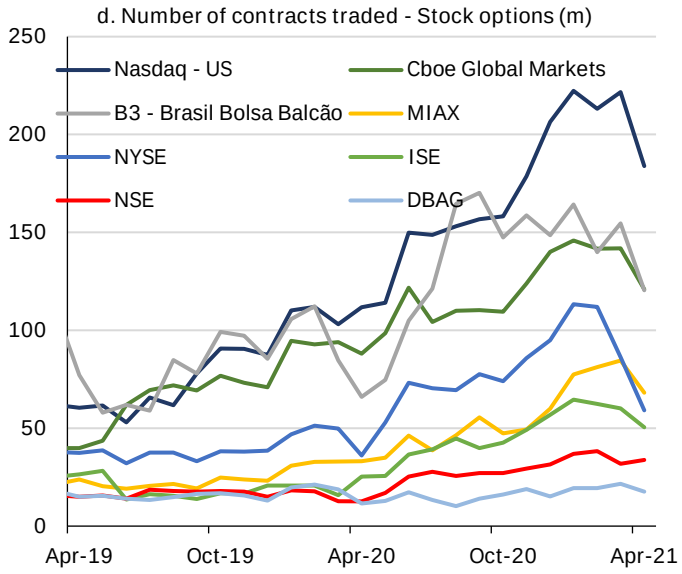


Figure 272: Number of trades in Index futures of top ranked exchanges**

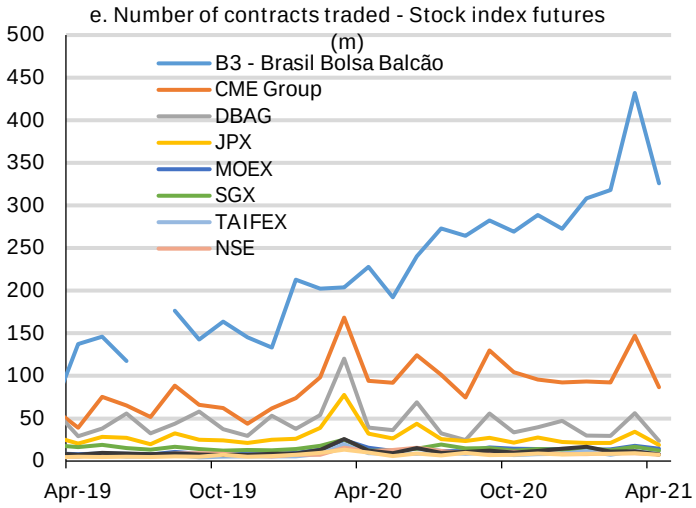


Figure 273: Number of trades in Index options of top ranked exchanges**

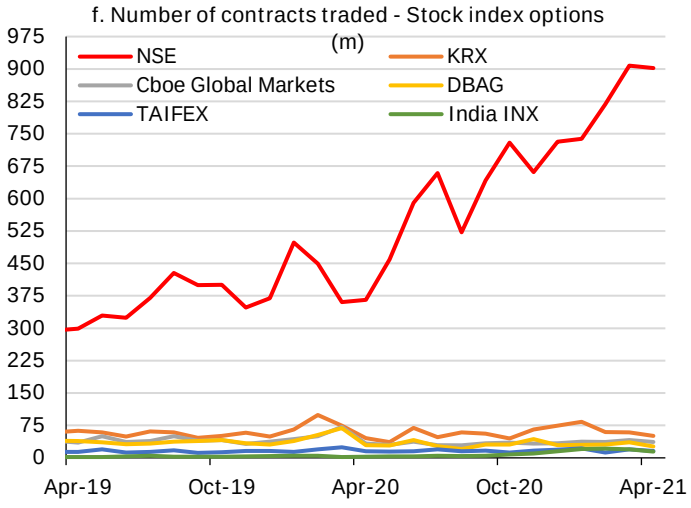


Figure 274: Number of trades in Currency futures of top ranked exchanges**

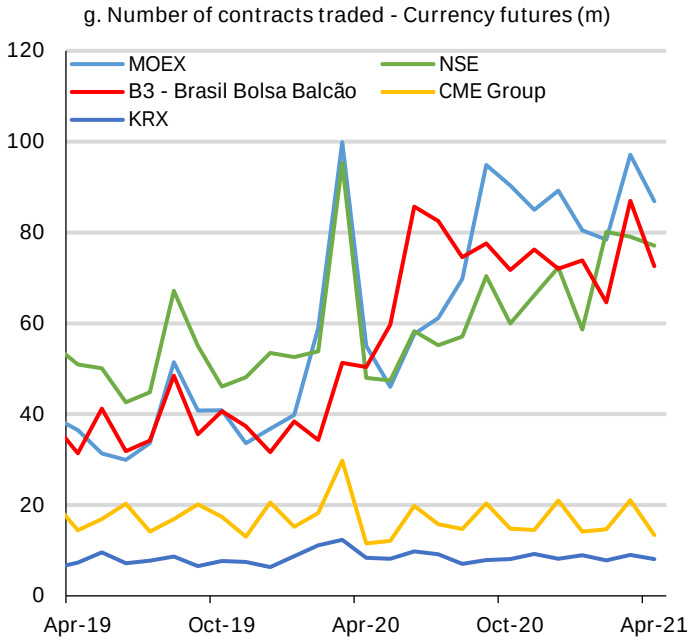
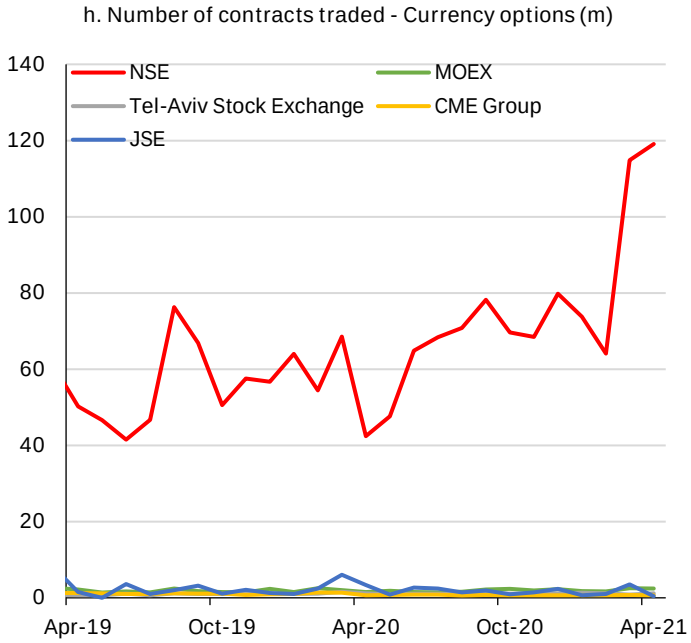


Figure 275: Number of trades in Currency options of top ranked exchanges**



Source: WFE monthly statistics.
Note: * NYSE market capitalisation data is missing for Jan'21.
** ASX - Australian Securities Exchange, BIST - Borsa Istanbul, BME - Spanish Exchanges, BSE - BSE India Limited, HKEX - Hong Kong Exchanges and Clearing, ISE - International Securities Exchange, JPX - Japan Exchange Group Inc., JSE - Johannesburg Stock Exchange, KRX - Korea Exchange, LSE – London Stock Exchange, MOEX - Moscow Exchange, NSE - National Stock Exchange of India Ltd., NYSE – New York Stock Exchange, SGX - Singapore Exchange, SSE - Shanghai Stock Exchange, SZSE - Shenzhen Stock Exchange, TMX – TMX Group, TSE - Tehran Stock Exchange, TFE - Taiwan Futures Exchange, Tadawul - Saudi Stock Exchange (Tadawul), TASE - Tel-Aviv Stock Exchange, MIAX - Miami International Securities Exchange, DBAG - Deutsche Boerse AG, India INX - India International Exchange. Only WFE member exchanges are included in the analysis.

Economic calendar for major countries (July 2021)

Date	Country	Indicator Name	Period	Reuters Poll	Prior Period	Unit
1 Jul 2021	Japan	Jibun Bank Mfg PMI	Jun		51.5	Index (diffusion)
1 Jul 2021	China (Mainland)	Caixin Mfg PMI Final	Jun	51.8	52.0	Index (diffusion)
1 Jul 2021	India	IHS Markit Mfg PMI	Jun	49.5	50.8	Index (diffusion)
1 Jul 2021	Russia	Markit Mfg PMI	Jun		51.9	Index (diffusion)
1 Jul 2021	Euro Zone	Markit Mfg Final PMI	Jun	63.1	63.1	Index (diffusion)
1 Jul 2021	United Kingdom	Markit/CIPS Mfg PMI Final	Jun	64.2	64.2	Index (diffusion)
1 Jul 2021	Brazil	Markit Mfg PMI	Jun		53.7	Index (diffusion)
1 Jul 2021	United States	Markit Mfg PMI Final	Jun		62.6	Index (diffusion)
2 Jul 2021	Brazil	Industrial Output YY	May	25.0%	34.7%	Percent
2 Jul 2021	United States	Unemployment Rate	Jun	5.7%	5.8%	Percent
5 Jul 2021	Japan	Services PMI	Jun		46.5	Index (diffusion)
5 Jul 2021	China (Mainland)	Caixin Services PMI	Jun		55.1	Index (diffusion)
5 Jul 2021	India	IHS Markit Svcs PMI	Jun	48.0	46.4	Index (diffusion)
5 Jul 2021	Russia	Markit Services PMI	Jun		57.5	Index (diffusion)
5 Jul 2021	South Africa	Std Bank Whole Econ PMI	Jun		53.2	Index (diffusion)
5 Jul 2021	Euro Zone	Markit Serv Final PMI	Jun	58.0	58.0	Index (diffusion)
5 Jul 2021	United Kingdom	Markit/CIPS Serv PMI Final	Jun	61.7	61.7	Index (diffusion)
5 Jul 2021	Brazil	Markit Services PMI	Jun		48.3	Index (diffusion)
6 Jul 2021	United States	Markit Svcs PMI Final	Jun		64.8	Index (diffusion)
7 Jul 2021	Russia	CPI YY	Jun	6.3%	6.0%	Percent
8 Jul 2021	Brazil	IPCA Inflation Index YY	Jun	8.40%	8.06%	Percent
9 Jul 2021	China (Mainland)	CPI YY	Jun	1.3%	1.3%	Percent
9 Jul 2021	United Kingdom	Industrial Output YY	May	21.6%	27.5%	Percent
12 Jul 2021	India	CPI Inflation YY	Jun	6.58%	6.30%	Percent
12 Jul 2021	India	Industrial Output YY	May	32.0%	22.4%	Percent
13 Jul 2021	United States	CPI YY, NSA	Jun	4.9%	5.0%	Percent
14 Jul 2021	United Kingdom	CPI YY	Jun	2.2%	2.1%	Percent
14 Jul 2021	India	WPI Inflation YY	Jun	12.23%	12.94%	Percent
14 Jul 2021	Euro Zone	Industrial Production YY	May	22.5%	39.3%	Percent
15 Jul 2021	China (Mainland)	GDP YY	Q2	8.1%	18.3%	Percent
15 Jul 2021	United Kingdom	ILO Unemployment Rate	May	4.7%	4.7%	Percent
15 Jul 2021	United States	Industrial Production MM	Jun	0.7%	0.8%	Percent
16 Jul 2021	Euro Zone	HICP Final YY	Jun	1.9%	1.9%	Percent
16 Jul 2021	Japan	JP BOJ Rate Decision	16 Jul	-0.10%	-0.10%	Percent
20 Jul 2021	Japan	CPI, Overall Nationwide	Jun		-0.1%	Percent
21 Jul 2021	South Africa	CPI YY	Jun		5.2%	Percent
22 Jul 2021	Euro Zone	ECB Refinancing Rate	Jul		0.00%	Percent
22 Jul 2021	South Africa	Repo Rate	Jul		3.50%	Percent
22 Jul 2021	Euro Zone	Consumer Confid. Flash	Jul		-3.3	Net balance
22 Jul 2021	Russia	Industrial Output	Jun	10.1%	11.8%	Percent
23 Jul 2021	Russia	Central bank key rate	Jul	6.00%	5.50%	Percent
27 Jul 2021	United States	Consumer Confidence	Jul		127.3	Index
28 Jul 2021	United States	Fed Funds Tgt Rate	28 Jul			Percent
29 Jul 2021	Russia	Unemployment Rate	Jun	5.0%	4.9%	Percent
29 Jul 2021	United States	GDP Advance	Q2		6.4%	Percent
30 Jul 2021	Japan	Unemployment Rate	Jun		3.0%	Percent
30 Jul 2021	Euro Zone	Unemployment Rate	Jun		7.9%	Percent

Source: Refinitiv Datastream

Annual Macro Snapshot

	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21*
National income										
GDP (Current) (Rs trn)	87.4	99.4	112.3	124.7	137.7	153.9	170.9	188.9	203.5	197.5
GDP (Current) Growth (%)	14.4	13.8	13.0	11.0	10.5	11.8	11.0	10.5	7.8	-3.0
GDP (Constant) Growth (%)	5.2	5.5	6.4	7.4	8.0	8.3	6.8	6.5	4.0	-7.3
GVA (Constant) Growth (%)	5.2	5.4	6.1	7.2	8.0	8.0	6.2	5.9	4.1	-6.2
Agriculture growth (%)	6.4	1.5	5.6	-0.2	0.6	6.8	6.6	2.6	4.3	3.6
Industry growth (%)	3.6	3.3	3.8	7.0	9.6	7.7	5.9	5.3	-1.2	-7.0
Services growth (%)	5.9	8.3	7.7	9.8	9.4	8.5	6.3	7.2	7.2	-8.4
Per Capita GDP (Curr) (Rs)	71,609	80,518	89,796	98,405	1,07,341	1,18,489	1,30,061	1,42,328	1,51,760	145,680
Prices										
CPI Inflation (%)		10.1	9.3	5.9	4.9	4.5	3.6	3.4	4.8	6.2
CPI – Rural (%)		10.7	9.6	6.1	5.5	5.0	3.6	3.0	4.2	6.0
CPI – Urban (%)		9.5	9.1	5.4	4.1	4.0	3.6	3.9	5.4	6.4
WPI Inflation (%)	8.9	6.9	5.2	1.2	-3.7	1.7	3.0	4.3	1.7	1.2
Primary articles (%)	9.8	11.4	9.9	2.2	-0.4	3.5	1.3	2.8	6.8	1.5
Fuel & power (%)	13.9	7.1	7.1	-6.1	-19.7	-0.2	8.1	11.6	-1.8	-8.1
Manuf. prods (%)	7.3	5.3	3.0	2.5	-1.8	1.4	2.8	3.6	0.3	2.6
Money, banking & interest rates										
Money supply (M3) growth (%)	13.5	13.6	13.4	10.9	10.1	10.1	9.2	10.5	8.9	11.8
Aggregate deposit growth (%)	13.5	14.2	14.1	10.7	9.3	15.3	6.2	10.0	7.9	11.4
Bank credit growth (%)	17.0	14.1	13.9	9.0	10.9	8.2	10.0	13.3	6.1	5.6
Non-food credit growth (%)	16.8	14.0	14.2	9.3	10.9	9.0	10.2	13.4	6.1	5.5
Cash Reserve Ratio (%, eop)	4.8	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0
Bank Rate (%, eop)	9.50	8.50	9.00	8.50	7.75	6.75	6.25	6.50	4.65	4.25
Public Finance										
GOI rev. receipts growth (%)	-4.7	17.0	15.4	8.5	8.5	15.0	4.4	8.2	8.4	-7.7
Tax receipts growth (%)	12.1	16.5	9.9	9.3	16.9	17.9	11.8	8.4	-3.4	-5.5
GOI Expenditure growth (%)	8.9	8.1	10.6	6.7	7.6	10.3	8.4	8.1	16.0	28.4
Subsidies growth (%)	25.7	18.0	-1.0	1.4	2.3	-11.1	-4.4	-0.7	17.5	147.3
Interest expense growth (%)	16.7	14.7	19.5	7.5	9.7	8.8	10.0	10.2	5.1	13.2
External transactions										
Exports growth (%)	21.9	-1.8	4.9	-1.5	-15.5	5.1	10.1	8.8	-5.2	-7.5
POL exports growth (%)	34.9	8.7	4.3	-10.7	-46.1	3.4	18.8	24.5	-11.6	-38.2
Non-POL exports (%)	19.3	-4.2	5.1	0.8	-8.6	5.4	9.0	6.6	-4.1	-2.7
Imports growth (%)	32.4	0.2	-8.4	-0.3	-15.0	1.0	21.2	10.5	-7.8	-18.2
POL exports growth (%)	46.4	5.7	0.7	-16.4	-40.1	5.3	25.0	29.9	-7.5	-37.0
Non-POL exports growth (%)	26.8	-2.3	-13.0	9.1	-3.8	-0.2	20.1	4.5	-7.8	-10.9
Net FDI (US$bn)	21.9	19.8	21.6	31.3	36.0	35.6	30.3	30.7	43.0	43.2
Net FII (US$bn)	17.2	26.9	4.8	42.2	-4.1	7.6	22.1	-0.6	1.4	36.8
Trade Balance – RBI (US$bn)	-189.7	-195.7	-147.6	-144.9	-130.1	-112.4	-160.0	-180.3	-157.5	-102.2
Current Acc. Balance (US$bn)	-78.2	-87.8	-32.4	-26.7	-22.1	-15.2	-48.7	-57.2	-24.6	24.0
Forex Reserves (US$bn)	294.4	292.6	303.7	341.4	355.6	370.0	424.4	411.9	475.6	579.3
Exchange rate (USDINR)	47.95	54.45	60.50	61.15	65.46	67.09	64.45	69.89	70.88	74.20

Source: CMIE Economic Outlook, NSE. * FY21 GDP data pertains to Provisional Estimates. FY21 public finance data are revised estimates.

Our reports on the economy and markets since the beginning of 2020

Sr. No.	Date	Report
1	03-Jul-21	Q4FY21 Corporate Performance Review
2	01-Jul-21	Macro Review: Q4FY21 Balance of Payments
3	14-Jun-21	Market Pulse June 2021: A monthly review of Indian economy and markets
4	07-Jun-21	India Ownership Tracker March 2021
5	04-Jun-21	Macro Review: RBI Monetary Policy
6	01-Jun-21	Macro Review: Q4FY21 GDP
7	17-May-21	Market Pulse May 2021: A monthly review of Indian economy and markets
8	13-May-21	Macro Review: IIP and Inflation
9	16-Apr-21	Macro Review: India Monthly Trade
10	16-Apr-21	Market Pulse April 2021: A monthly review of Indian economy and markets
11	12-Apr-21	Macro Review: IIP and Inflation
12	07-Apr-21	Macro Review: RBI Monetary Policy
13	01-Apr-21	Macro Review: Q3FY21 Balance of Payments
14	16-Mar-21	Macro Review: India Monthly Trade
15	16-Mar-21	Market Pulse March 2021: A monthly review of Indian economy and markets
16	25-Mar-21	India Ownership Tracker December 2020
17	12-Mar-21	Macro Review: IIP and Inflation
18	08-Mar-21	Conversations on Corporate Governance: Dialogue 6
19	01-Mar-21	Q3FY21 Corporate Performance Review
20	27-Feb-21	Macro Review: Q3FY21 GDP
21	15-Feb-21	Macro Review: IIP and Inflation
22	12-Feb-21	Market Pulse February 2021: A monthly review of Indian economy and markets
23	08-Feb-21	Conversations on Corporate Governance: Dialogue 5
24	05-Feb-21	Macro Review: RBI Monetary Policy
25	01-Feb-21	Union Budget FY2021-22
26	17-Jan-21	Macro Review: India Monthly Trade
27	11-Jan-21	Market Pulse January 2021: A monthly review of Indian economy and markets
28	11-Jan-21	Macro Review: FY21 GDP Advance Estimates
29	05-Jan-21	India Ownership Tracker September 2020
30	31-Dec-20	Macro Review: Q1FY21 Balance of Payments
31	16-Dec-20	Conversations on Corporate Governance: Dialogue 4
32	07-Dec-20	Market Pulse Nov-Dec 2020: A monthly review of Indian economy and markets

33	05-Dec-20	Macro Review: RBI Monetary Policy
34	28-Nov-20	Macro Review: Q1FY21 GDP
35	26-Nov-20	Q2FY21 Corporate Performance Review
36	13-Nov-20	Macro Review: IIP and Inflation
37	28-Oct-20	Conversations on Corporate Governance: Dialogue 3
38	28-Oct-20	Market Pulse **October** 2020: A monthly review of Indian economy and markets
39	16-Oct-20	Macro Review: India monthly trade
40	13-Oct-20	India Fiscal Stimulus 3.0
41	13-Oct-20	Macro Review: IIP and Inflation
42	09-Oct-20	Macro Review: RBI Monetary Policy
43	06-Oct-20	India Ownership Tracker June 2020
44	05-Oct-20	The State of States in India: A 360-degree view
45	30-Sep-20	Macro Review: Q1FY21 Balance of Payments
46	29-Sep-20	Conversations on Corporate Governance: Dialogue 2
47	28-Sep-20	Market Pulse September 2020: A monthly review of Indian economy and markets
48	16-Sep-20	Macro Review: India monthly trade
49	14-Sep-20	Macro Review: IIP and Inflation
50	01-Sep-20	Macro Review: Q1FY21 GDP
51	28-Aug-20	Conversations on Corporate Governance: Dialogue 1
52	26-Aug-20	Market Pulse August 2020: A monthly review of Indian economy and markets
53	22-Aug-20	Q1FY21 Corporate Performance Review
54	17-Aug-20	Macro Review: India monthly trade
55	14-Aug-20	Macro Review: IIP and Inflation
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61	13-Jul-20	Macro Review: IIP and Inflation
62	01-Jul-20	Macro Review: Q4FY20 Balance of Payments
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68	31-May-20	Market Pulse May 2020: A monthly review of Indian economy and markets
69	29-May-20	India Ownership Tracker March 2020
70	22-May-20	Macro Review: RBI Monetary Policy
71	17-May-20	Macro Review: India COVID-19 Stimulus Package (Fifth Tranche)
72	16-May-20	Macro Review: India COVID-19 Stimulus Package (Fourth Tranche)
73	15-May-20	Macro Review: India COVID-19 Stimulus Package (Third Tranche)
74	14-May-20	Macro Review: India COVID-19 Stimulus Package (Second Tranche)
75	13-May-20	Macro Review: India COVID-19 Stimulus Package (First Tranche)
76	13-May-20	Macro Review: IIP and Inflation
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80	16-Apr-20	Macro Review: India monthly trade
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86	11-Mar-20	A deep dive into Investment in India
87	09-Mar-20	India Ownership Tracker December 2019
88	02-Mar-20	Macro Review: Q3FY20 GDP
89	29-Feb-20	Quarterly Briefing: Takeover and Corporate Governance in India
90	20-Feb-20	Market Pulse February 2020: A monthly review of Indian economy and markets
91	06-Feb-20	Macro Review: RBI Monetary Policy
92	01-Feb-20	Decoding the Union Budget FY2020-21
93	20-Jan-20	Market Pulse January 2020: A monthly review of Indian economy and markets
94	08-Jan-20	Macro Review: FY20 GDP Advance Estimates
95	01-Jan-20	Macro Review: Q2FY20 Balance of Payments

Economic Policy & Research

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We gratefully acknowledge the valuable contribution of Manas Dixit, Gaorima Nahata, Ritika Paul and Chhavi Gupta to this report.

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