

# The worst phase of the second COVID wave is behind us; expected pick-up in vaccination pace to support economic recovery



- India's second COVID wave continues to trend downward, with daily cases now down by over 80% compared to the peak in early May.
- It is further encouraging to see that the decline is broad-based, with most states reporting daily cases at levels that are lower than even the peak of the first COVID wave of last year.
- But daily cases in the eastern, north-eastern, and southern parts of India remain higher, albeit falling, compared to the northern and western parts.
- States have started relaxing virus containment restrictions, allowing the economic activity normalization process to resume.
- Global experiences of countries with relatively higher levels of vaccination show reduced COVID risks and signs of economic behaviour of the kind that took place pre-COVID.
- India is on track to fully vaccinate around 68% of the adult population by Dec'21, thanks to the recent centralization of the vaccine procurement and distribution process and expected higher supplies in the pipeline.
- Pick up in vaccination pace, coupled with other factors such as export demand, should help economic recovery gather momentum in the coming quarters, supporting our projection of 9.9% YoY real Gross Domestic Product (GDP) growth in FY22.
- The government could also announce demand boosting measures around the festive season, which will add to fiscal slippage risk of more than 0.5% of GDP already factored in due to two recent policy steps.
- The Reserve Bank of India's (RBI) support remains critical for a relatively smooth run of the government's borrowing program as last year. It announced a 20% higher Government Securities Acquisition Programme (G-SAP) amount for Q2 FY22 compared to Q1.
- However, the recent jump in inflation can complicate RBI's focus on economic growth revival if pressures persist.

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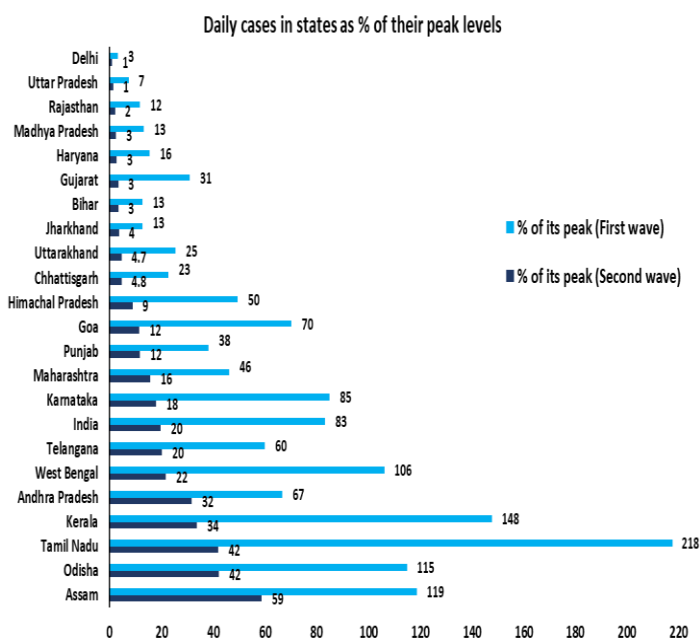


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## The worst of the second COVID wave is over; COVID-appropriate behaviour of critical importance

India's daily COVID cases peaked on May 08 and have been trending downward since then. It is further encouraging to see that the decline is broad-based, with most of the states reporting daily cases at levels that are lower than even the first COVID wave of last year. India's daily cases had fallen to 77,700 (7-day moving average, 7-dma) by mid-June compared to the recent peak of 3,91,280 (7-dma) cases in early May. This is an over 80% fall from the second wave peak and over 16% compared to the first wave peak (~93,200 7-dma, September'20). Daily recoveries have also increased steadily, far exceeding the daily case count, and reduced active cases by nearly 1 lakh per day. As a result, the active caseload has reduced significantly, with outstanding active cases dropping to below 9 lakhs by mid-June from a peak of 37.4 lakhs in mid-May. The case positivity rate had dropped to 4.3% compared to 22.7% at the peak of the second wave and 12.7% at the peak of the first wave. However, the fatality rate remains high, given the spread of the virus in semi-urban and rural areas with relatively weaker health infrastructure and medical facilities.

### Daily cases improve significantly from the peak in May



Source: covid19india.org

In terms of daily cases, the improvement has been across states: Delhi, UP, Rajasthan, Haryana, MP, Bihar, Gujarat, Jharkhand, Uttarakhand, and Chhattisgarh, bringing down cases to less than 5% from their respective second wave peak levels. Nearly 25 states/UTs have also witnessed improvement relative to their peaks of the first wave of last year (which was less severe in comparison to the second wave). However, daily cases in the eastern, north-eastern,

and southern parts of the country remain elevated, albeit falling, compared to northern and western India. States such as Karnataka, Tamil Nadu, Kerala, West Bengal, Assam, and Odisha continue to report relatively higher daily cases. Nonetheless, most states have started to gradually announce relaxations in lockdown/partial restrictions, given the improvement in the COVID situation. As vaccination levels are still relatively low, the risk of virus cases flaring up could re-emerge. Following precautions and COVID-appropriate behaviour remains critical in this context to prevent a third COVID wave.

### Global experience shows the effectiveness of vaccinations in slowing infection transmission, allowing economic activity normalization

As India emerges from its COVID second wave and begins to move beyond the latest bout of widespread suffering and loss of life and – less importantly – the temporary hit to economic activity, the blunting of any potential third wave and paving the way back to pre-COVID life depends largely on continued, sustained vaccination progress. Much remains unknown regarding COVID – the conditions that ignite exponential infection, the potency of the virus at any point in time, variation in the virus' infectiousness and potency across geographies, the potential role of seasonality, the effectiveness (or lack thereof) of non-pharmaceutical interventions (NPIs) such as mask-wearing, social distancing, and so-called lockdowns.

Nonetheless, evidence in hand from countries with relatively high adult vaccination rates (plus whatever natural immunity is prevailing from COVID infection) provides ample reasons to be confident that as India's vaccination efforts scale in H2-2021 that the types of economic behaviour and activity that have been disrupted by COVID will be able to return to pre-COVID norms. Whether the trajectory toward normalcy will be a straight line or one with bumps along the way is impossible to predict. But barring a heretofore COVID event, the expanding vaccination program will help facilitate the re-emergence of pre-COVID norms.

A key underpinning of this judgment is the real-world effectiveness of the various vaccines being deployed around the globe. Clinical trials on vaccine effectiveness (as measured by a vaccine developer's respective government's health authorities) were remarkably elevated, outstripping even the most optimistic hopes. But the real test – especially in an environment where clinical trials were run at historic speed – is in real-world effectiveness. On this score, the various vaccines to date have proved remarkably effective at ameliorating the most severe effects of COVID and in preventing infection/slowing transmission.

Consider that:

- The so-called breakthrough infection rate – where a vaccinated person is diagnosed with COVID, including asymptomatic cases that show up in antigen/PCR tests – is de minimis. In the United States, where robust data exists on this front, the Centers for Disease Control and Prevention (CDC) reported just 3,459 breakthrough infections out of more than 139 million fully vaccinated adults as of June 7.<sup>1</sup> That is a breakthrough infection rate of just 0.002%.
- In countries such as Chile and the United Kingdom (UK), where more than 60% of the adult population is fully vaccinated,<sup>2</sup> there currently are some very mild, localized flare-ups in infection rates and hospitalizations. Importantly, however, these cases are concentrated in *unvaccinated* individuals, and deaths continue to hover at rock bottom levels.
- In locales with more than half the adults who have received at least a single COVID inoculation, the virus' rate of transmission has fallen below 1.0. A transmission rate below 1.0 means that each infected individual is infecting less than 1 other individual, resulting in an exponential decay of the virus's spread (the opposite of the 2020 global experience).
- In Canada, the 'first dose for all' approach has been a success, with only 0.15% of Canadians getting infected after getting vaccinated (13% of the population was fully vaccinated, and 65% received at least one dose).

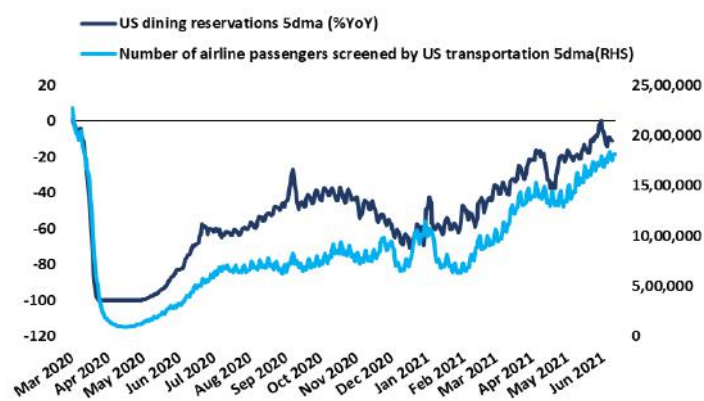
Recognizing the considerable differences in healthcare infrastructure vis-à-vis India, the experiences of Israel, the United Kingdom, and the United States in the past four to five months is illustrative of the qualitative direction of travel to pre-COVID norms that likely lies ahead for India assuming continued vaccination efforts. These three countries are vastly different in their climate, population density, underlying health conditions (e.g., obesity, heart disease, etc.) of their populations, median household income, median age, and the like. Yet, all three have mounted an effective vaccination campaign that in less than half a year and amidst considerable global supply constraints until about 60 days ago, have succeeded in inoculating more than 50% of their respective adult populations fully.

Coincident with those rapid vaccination efforts have been outsized drops across all three countries in COVID cases,

transmission rates, hospitalizations, and – most importantly – fatalities. Moreover, in Israel and now the bulk of the United States, public health measures restricting people's movements, size of gatherings, and similar activities have been set aside, and despite the surge in interactions, the trend improvement in COVID metrics has persisted unabated.

With COVID risks greatly diminished in countries with sufficiently elevated vaccination rates, there are signs of aplenty of economic behaviour of the kind that took place pre-COVID. 'Close contact' economic activity is rebounding rapidly, as consumers are comfortable being in close quarters with others and as businesses are permitted to eliminate capacity constraints with public health measures being attenuated. Sporting events – including those happening indoors – are at full capacity, and there are no reported COVID infection spikes to date due to such activities. Restaurant activity had climbed rapidly higher since late 2020 when vaccinations began. Likewise, the number of travellers passing through security checks in US airports has returned to 90% of its 2019/early 2020 level. Prices for goods and services tied to such activities are moving higher in response to strengthening activity, a development underscoring the demand for such activities.

### Contact intensive services rebounding in the US



Source: Bloomberg

### Expected pick up in India's vaccination drive to provide tailwinds to the economic recovery in coming quarters.

India today is a long way from having the breadth of COVID immunity that countries such as Israel, the US, the UK, Canada, and Chile have, even when accounting for the natural immunity conferred from the infection. India has administered ~26 crore vaccine doses as of June 15, 2021, and as a result, inoculated ~15.5% of the population with at

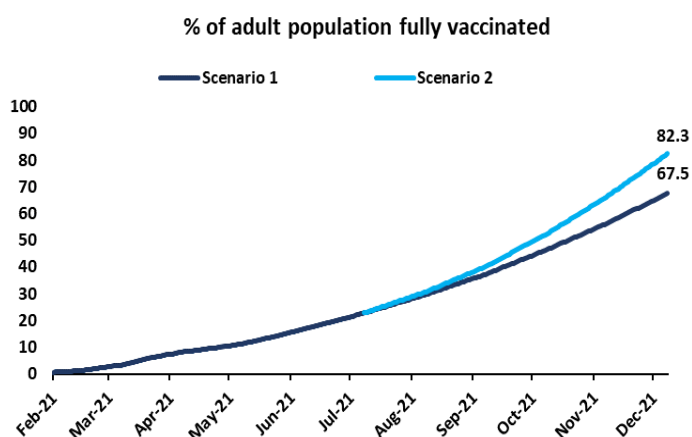
<sup>1</sup> See <https://www.cdc.gov/vaccines/covid-19/health-departments/breakthrough-cases.html>

Note that page is subject to update by the CDC and beyond the control of DMI.

<sup>2</sup> See [https://ourworldindata.org/covid-vaccinations?country=OWID\\_WRL](https://ourworldindata.org/covid-vaccinations?country=OWID_WRL). Note that grouping of data is subject to update by the website and beyond the control of DMI.

least one dose and ~3.6% of the total population has been fully vaccinated. Quickening that pace would be beneficial to the society at large and, especially, for the pace of economic activity. There is more to do but with the second wave receding, policymakers have the opportunity to focus intently on vaccination and the benefits therein. In this regard, the central government's recent actions to streamline the vaccine procurement and distribution process are helpful. Starting June 21, 2021, the central government will procure 75% of COVID-19 vaccines and distribute them to states for free. The remaining 25% of the supply will be made available for private hospitals, as per the existing policy. This will reverse the earlier policy under which states were asked to buy doses for the 18-44 age group, creating a fiscal burden on states and logistical issues.

### The target of 'herd immunity' by year-end looks achievable



Source: PIB, media reports.

**Scenario 1: The supply of three approved vaccines is taken at ~61% of levels projected by the government for August-December.**

**Scenario 2 additionally assumes 42% of the supply of new vaccines, which the government projected for August-December. Vaccine wastage is assumed at the current national rate of 6.3% under both scenarios.**

There is already a visibly renewed push on the vaccination front, with supply constraints easing. India's pace of daily vaccination more than doubled from its lows of less than 1.5 million (7-dma) in mid-May to ~3.3 million (7-dma) by June 15, 2021. The pace of vaccination is likely to improve further with higher vaccine supplies reported in the pipeline ahead. The government is expecting vaccine supply to rise to 51.6 crore doses by July (including 26 crore doses already administered) and increase further to more than 216 crore doses between August and December. Given high uncertainty related to approval/production, the government's target looks very ambitious. However, it is still possible to make considerable progress. In a scenario where the production of currently approved vaccines is scaled up to at

least 60-65% of the supply target, it is possible to have enough doses to fully vaccinate ~68% of the adult population by December'21. In a second scenario (optimistic case), where new vaccines are approved, and the government is able to secure at least 42% of the targeted supply of these new vaccines (adding to supply assumed under the first scenario), it should be possible to fully vaccinate ~82% of the adult population by the year-end. Over half of the states should be able to achieve 100% vaccination of respective adult populations under the assumption of this supply pipeline and proportionate scaling-up of the vaccination drive. Vaccine hesitancy might also be at play, as presently, which could taper off the vaccination pace before herd immunity levels are achieved. Nonetheless, a reasonably high proportion of vaccination levels is likely to slow infection transmission and boost economic activity normalization, as being noted in other countries.

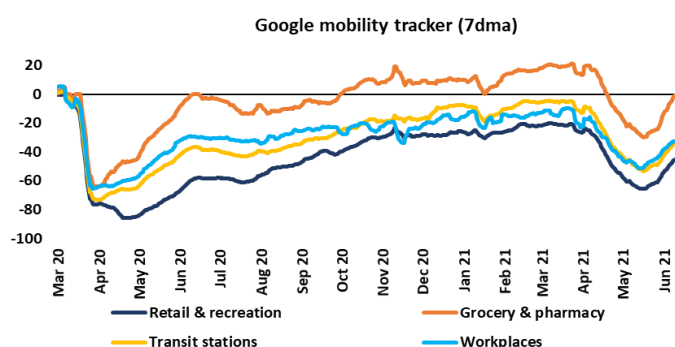
### High-frequency indicators suggest a turnaround in economic activity has started

The second COVID wave has hit a gradual build-up of economic recovery momentum. In Q4 FY21, real GDP grew by 1.6% YoY compared to 0.5% YoY in Q3. Gross Value Added (GVA) also grew by a solid 3.7% YoY in Q4 FY21 compared to the 1% YoY expansion in Q3. Economic recovery was broad-based, driven by the manufacturing and construction sectors, while the agriculture sector maintained a good pace of growth. Contact intensive services remain the worst affected, but they also showed sequential recovery.

The second COVID wave weighed on this recovery process, though it is likely to be a temporary hit. Early data for April-May shows sequential deterioration across indicators; however, the impact in most cases is lower compared to last year for the same period. The outlook for agriculture remains bright, given the normal monsoon forecast. The country received 28% above average rainfall by June 14, 2021. On the manufacturing side, the Purchase Manager's Index (PMI) survey remained in the expansionary territory at 55.8 and 50.8 in April and May, respectively, as manufacturing activities were broadly exempt from localized restrictions. On an annualized basis, the index of industrial production (IIP) rose by an exceptionally high rate of 134.4% YoY in April, with major sub-heads showing high expansion rates, thanks to the favourable base effect (-57.3% YoY in April'20). Compared to pre-COVID levels of April'19, the IIP managed to register a small gain of 0.1%, supported by mining and electricity, while the manufacturing sector contracted. On a sequential basis, IIP contracted by 13%, which is slightly higher than the average 11.5% contraction seen in April compared to March in pre-COVID years, indicating the

impact of local lockdowns. With state lockdowns widening in May, the IIP print will likely exhibit weakness in May before showing recovery from June onward. On the services side, the PMI services index remained resilient in April 2021 at 54; however, it dipped into the contraction territory at 46.4 in May with the impact of the second COVID wave. Other indicators such as rail freight traffic and e-way bill registrations remained resilient in April; however, they noted a sequential dip in May. External demand remained favourable, with exports rising by 13% in April-May'21 compared to April-May'19, while imports dipped by ~5% over the same period.

### Mobility levels rebounding at a fast pace led by grocery & pharmacy



**Source: Google; Google mobility measures visitor numbers to specific categories of location and compare this change relative to the baseline day before the pandemic outbreak**

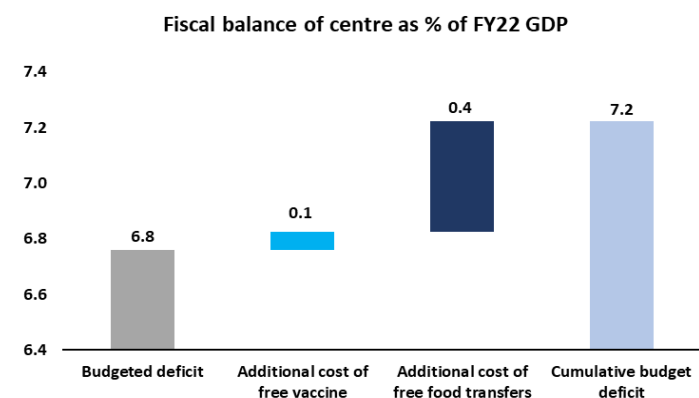
However, looking at the ultra-high frequency indicators of June, the worst from the second COVID wave appears to have passed. With the peaking of COVID cases, state governments have moved towards easing restrictions into June. This is evident in mobility levels (average of retail & recreation, grocery & pharmacy, transit stations, and workplaces) that have improved to ~28% (7-dma) below baseline by June 12 from its troughs of ~50% below baseline levels around mid-May. Electricity consumption rose by 10.6% YoY in the first half of June'21 compared to 1.1% YoY in the second half of May'21. We expect other indicators to also show a resumption of recovery from June/July onwards. Assuming the COVID situation remains under control, we expect the economic impact of the second wave to be limited mostly to Q1 FY22 itself. In terms of its magnitude, we reiterate our view that a sequential disruption to economic activity is inevitable due to the reimposition of localized restrictions. However, the scale of this disruption is likely to be less severe compared to the first quarter of last year. Accordingly, we expect Q1 FY22 GDP to increase by 16% YoY. This is captured in the evolving high-frequency indicators; however, as before, there is a disproportionate impact on the industrial sector that is relatively more resilient, while the services sector continues to face a larger brunt from pandemic-induced restrictions. We continue to

expect a faster rebound in the rest of FY22, which should help the economy register expansion of ~9.9% YoY in FY22. Pick up in the pace of vaccination, continued support from external demand, and likely front-loading of government spending, among other factors, should support the rebound of economic activity.

### The government is likely to time the fresh stimulus around the festive season

The government has adopted a wait-and-watch approach with regard to providing fresh stimulus in response to the second COVID wave, although incremental steps on a need basis have been announced. We expect the government to announce demand-side focused stimulus measures when the unlocking process has advanced. This could be around the festival season to get a better multiplier effect. Meanwhile, the government's focus remains on supporting the economy through front-loading capital spending. The budget estimates (BE) for FY22 project the expenditure to remain elevated at 15.6% of GDP (assuming a 13% nominal GDP growth in FY22). This would be lower than the previous year but would be higher compared to the previous year's trends (total expenditure as a % of GDP averaged ~13.8% between FY2010-2020).

### Two recent policy steps add to the risk of fiscal slippage in FY22



**Source: PIB**

The expenditure push subsumes the government's bent towards higher infrastructure and capital allocation with capital expenditure budgeted to increase to 2.5% of GDP (again its highest ratio in over 15 years) and the ratio of capital to revenue expenditure estimated to increase to nearly 19% in FY22. This appeared to continue at the start of the new fiscal year, with capital expenditure increasing by ~67% YoY in April 2021 while revenue expenditure contracted by ~36% in the same period. However, the government will have to step up support for vulnerable sections while keeping the focus on productive CAPEX. The government has already extended free food transfers for the

poor under its Pradhan Mantri Garib Kalyan Ann Yojana until Diwali (November 2021). The government also reversed its vaccination policy, centralizing the procurement of doses again and will be bearing the entire cost by itself (leaving 25% to be procured by private hospitals). Still, higher outlays will need to be directed towards schemes like Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) to support rural demand.

Additional expenditure needs and likely hit to receipts due to the second COVID wave, the risk of fiscal slippage compared to the target of 6.8% of GDP has increased. Last year, the government was able to keep the budget deficit (at 9.2% of GDP) below the revised target of 9.5% of GDP (from 3.5% of GDP) thanks to higher-than-projected revenue collection even as expenditure overshoot revised targets. In the current year, the additional cost due to free food and vaccination policy changes so far added 0.5% of GDP to the fiscal deficit, which could push the deficit target to 7.2% of GDP in FY22 (assuming no expenditure cut for other heads). The finance minister has also proposed extra borrowing to the tune of Rs 1.58 trillion in FY22 to compensate states for the Goods and Service Tax (GST) shortfall. However, measures by the RBI are likely to support additional borrowing by the centre and complement fiscal policy by keeping interest costs in check.

### **Inflation scare, if it persists, may complicate RBI's focus on growth revival**

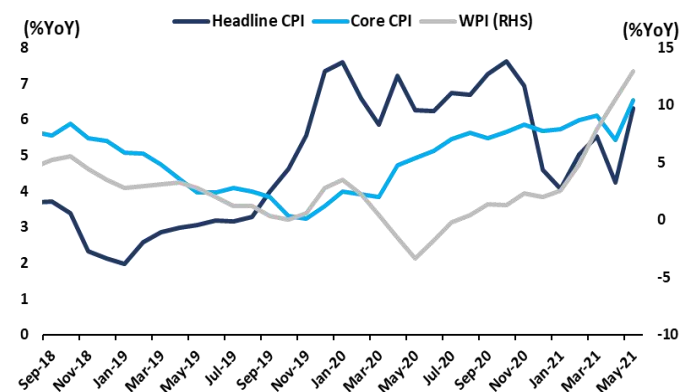
The RBI's support remains critical for a relatively smooth run of the government's borrowing program as last year. The central bank is taking the challenge head-on. To manage the yield curve, the RBI, in its June policy meeting, announced G-SAP 2.0 to be conducted in Q2 FY22 worth Rs 1.2 lakh crores (20% higher than G-SAP 1.0). This is likely to support state government borrowing programs that are already facing the brunt of the second COVID wave.

In view of the second wave's impact on the economy/sectors, the central bank also maintained its focus on economic growth revival, overlooking likely future inflation. As expected, the RBI kept policy rates unchanged and maintained the accommodative stance "as long as necessary to revive and sustain growth on a durable basis" in its policy meeting. Recognizing the renewed stress from the second wave since the previous meeting, the RBI also slashed the growth forecast to 9.5% YoY from 10.5% YoY for FY22. It augmented the previously announced targeted measures (May 05, 2021) and continued to extend support to sectors disproportionately hit by the second COVID wave. It announced further relief measures, including providing on-tap liquidity to contact intensive sectors worth Rs 15,000

crores, expansion of Restructuring 2.0 to include a larger set of borrowers by increasing the maximum aggregate exposure threshold from Rs 25 crores to Rs 50 crores, and extension of liquidity facility to Small Industries Development Bank of India (SIDBI) to the tune of Rs 16,000 crores to aid funding requirements of MSMEs.

The RBI governor also stated that talks of normalization of policy stance are premature and that the Monetary Policy Committee (MPC) is presently not considering it. However, the recent surge in inflationary pressures has raised the prospects of policy normalization discussion to start sooner than previously anticipated. Inflation pressures soared in May, exceeding expectations. The CPI print for May 2021 came in at 6.3% YoY, breaching the upper tolerance of RBI's 4% (+/-2%) inflation target band. While some base effect (unfavourable) was at play, the headline Consumer Price Index (CPI) increased by 1.6% MoM on a sequential basis. Given that May was a month experiencing a hit in demand, the rise in inflation is primarily reflective of the cost pressure built up due to supply disruptions from the second wave of the virus that is analogous to the sequential increase witnessed during nationwide lockdown last year. Supply disruptions amplified elevated input prices that have increased on account of the reflation trade across the globe (this was captured in the wholesale prices inflation [WPI] that increased to a high of 12.9% YoY in May, with manufactured products increasing by 10.8% YoY). CPI food inflation increased by 1.9% MoM, which was more to do with supply disruptions (as the WPI food index contracted by 0.2% MoM) and the summer seasonality, although it remained relatively curtailed on an annual basis (5% YoY) due to a favourable base. Core inflation, on the other hand, continued to march up due to a broad-based increase in prices and saw a sharp sequential increase of 1.4% MoM (v/s 1.1% MoM in April 2020 during the first lockdown), pushing the annual print to 6.5% YoY, its highest in nearly 7 years.

### **Supply disruptions amplified input cost pressures to push CPI inflation above 6%**



Source: CMIE

We believe the recent surge in inflationary pressures, if they persist, may bring forward the discussion of the normalization of policy. In the near term, we expect the RBI to remain accommodative and overlook inflation until growth recovery becomes more sustained. As supply disruptions start to normalize June onwards, the outlook for monsoon remains positive, and the base becomes favourable going ahead; we expect CPI inflation to fall back within the RBI's target band. However, if inflation pressures persist, a change in the RBI's accommodative stance could come before the presently anticipated Q4 FY22, which could take the form of sterilization of liquidity through variable reverse repo operations and/or a hike in reverse repo rate. However, the first repo rate hike is likely to be announced only in the next financial year.

### Market section

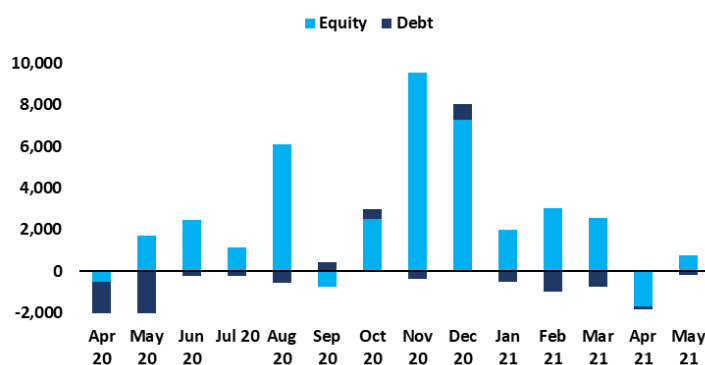
Indian bond markets traded in a tight range in May as continued support and active intervention from the RBI placated rising borrowing pressures and inflation scares amid the second COVID wave. The yields on the benchmark G-sec 10-year remained anchored around the 6% threshold as it averaged 5.99% in May (lower than 6.07% in April). Proactive support from the RBI in terms of a higher G-SAP quantum for Q2; continued Open Market Operations (OMOs), and additional liquidity support broadly nullified the pressure from extra borrowing of Rs 1.6 lakh crores that markets were pricing in on account of the GST cess shortfall. The RBI has also been actively intervening in the pricing of bonds as it devolved numerous weekly auctions across tenors, refusing to accept higher yields from primary dealers. The RBI partially devolved both the weekly auctions in June so far, and as such, yields have remained steady in June. Although, the recent CPI print that exceeded market expectations has put some upward pressure on yields. However, we expect continued support from the RBI along with the likely easing of inflation in the coming months (as discussed in the previous section) to keep yields from overshooting. With the RBI committed to ensuring ample liquidity in the system, we expect yields to trade around the 6%-6.20% range in the near future. If inflation pressures proved to be sticky and/or global oil prices sustained at a higher level, yields could inch up faster than presently anticipated.

Indian equity markets resumed their upward roll in May as both the indices - NIFTY and SENSEX increased by 6.5% sequentially. An improving COVID scenario along with a favourable corporate performance in Q4 FY21 aided the gains for domestic equity markets. The turning COVID scenario managed to reverse capital flows from foreign institutional investors (that primarily transpired in the second

half of May with the improving COVID situation) as equity markets witnessed ~\$750 million of inflows in May against \$1.7 billion of outflows in April. The equity indices continued to break fresh highs in June (the NIFTY index rallied to over 15,800 points), buoyed by the ongoing optimism along with continued liquidity flow from governments across the globe. Moreover, despite the record moves, the valuations of the indices improved with the P/E ratio of the NIFTY 50 index reducing from 29.2 in May from close to 40 in February earlier this year.

### Foreign investors return as the COVID situation improves

FPI flows in (USD million)



Source: CMIE

The India Rupee appreciated sharply against the Dollar in May, primarily on account of a weaker greenback. The accommodative stance by the US central bank and the revival of risk sentiments weighed on the Dollar. As such, the dollar index weakened by 1.7% on average in May compared to April. Accordingly, the USD/INR pair averaged 73.2 in May v/s 74.4 in April while also reaching a low of 72.4 towards the end of May. Improvement in India's trade deficit that narrowed to \$6.3 billion in May (v/s ~\$15.1 billion in April) also aided the domestic currency. Moreover, the improving COVID situation reversed capital flows to the tune of \$560 million (primarily driven by inflows in equity) in Indian markets and supported the Rupee. RBI intervention also remained muted, allowing the currency to appreciate, which was a departure from the RBI's previous stance, which could possibly be in an attempt to control imported inflation. However, the Rupee has weakened moving into June (compared to May-end levels), and further risen above the 74 level after the Federal Reserve moved ahead its timeline to note 50 basis points of rate hikes in 2023 in its 'dot-plot' (from no rate hikes earlier). As such, we expect the depreciation pressures to continue, given rising oil/commodity prices and a possible earlier-than-expected reversal in the Fed's accommodative stance.

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