


# Global reflation trade spills bouts of volatility; India's improved external position to help avoid repeat of the "2013 taper-tantrum"





- India continues to tread on its V-shaped economic recovery path, despite some mixed data in recent weeks.
- The key risk to economic recovery continues to stem from the rise in COVID cases in the country. Daily COVID cases in India have been on the rise since mid-February, though they are still concentrated in certain states such as Maharashtra.
- Ongoing pick up in vaccination pace and targeted measures to control COVID cases at the state level may help prevent sustained disruption to economic recovery.
- The global economic outlook has improved, thanks to ongoing COVID vaccination progress and additional stimulus announced in recent months, primarily the sizeable US fiscal measures.
- While this is a piece of positive news, it has also led to rising expectations of future inflation, including a jump in commodity prices.
- This in turn, has caused market repricing of normalization/withdrawal of monetary and credit measures, raising concerns about a repeat of the "2013 taper-tantrum", global market turmoil, and the ensued tightening of financial conditions in emerging markets, including India.
- While India is not immune to global market volatility, its improved macro-economic fundamentals, especially a strong external account position, in terms of the fourth largest foreign exchange (FX) reserves globally and a current account surplus, provides policymakers the flexibility to manage policy response in a non-disruptive manner and curtail volatility during global market events.
- Further, the risk of pass-through from global food prices is limited but pass-through from energy prices remains high. However, the Reserve Bank of India (RBI) may tolerate temporary spikes in inflation given the negative output gap and low money velocity.
- We expect the RBI to continue its accommodative policy stance into early FY22. It is expected to change the stance to "Neutral" sometime in Q2 FY22, with a possibility of a reverse repo hike by 25 basis points in H2 FY22 as part of the normalization of liquidity. We presently expect the repo rate hike to start towards the end of FY22/early FY23.

**Pramod Chowdhary**  
Chief Economist  
pramod.chowdhary@dmifinance.in

**Ashray Ohri**  
Economist  
ashray.ohri@dmifinance.in

  
[www.dmifinance.in](http://www.dmifinance.in)

  
+91 11 4120 4444

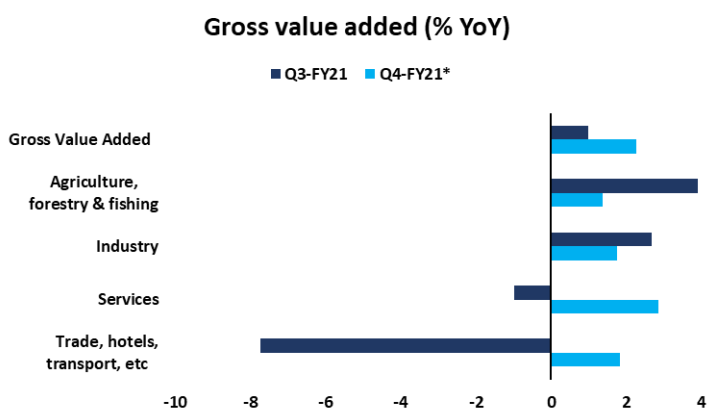
  
**DMI Finance Pvt Ltd.**  
Express Building, 9-10, 3rd Floor,  
Bahadur Shah Zafar Marg, New  
Delhi- 110002

## India trends on the path of economic recovery

India continues to advance on its V-shaped recovery path. The recently released Q3 FY21 GDP data entailed a shift to growth by 0.4% YoY after two consecutive quarters of contraction. Real GVA also returned to growth, 1% YoY, from a 7.3% YoY contraction in the prior quarter. The recovery was led by agriculture and industrial sectors, while the services sector continued to contract as certain contact intensive sectors (trade, hotel, transport, communication, etc.) remained sharply below the previous year's levels. However, the pace of growth is expected to increase further and broaden according to the second advance estimate that implies GVA growth of 2.5% YoY in Q4 FY21. This is primarily led by a return to growth of the trade, hotel, transport, communication, etc. segments, in Q4 FY21 as economic activity normalizes further and entails all the three sectors to reflect growth (please refer to the chart below). However, the pace of growth for agriculture and industry is estimated to taper compared to the previous quarter.

Meanwhile, the pace of government expenditure is also expected to improve in Q4 FY21, compared to a contraction in Q3 FY21, and is likely to support growth further. Implied real GDP in Q4 FY21 is estimated, based on a projection by the National Statistical Office (NSO), to contract by 1.1% YoY. However, this is due to statistical aberrations related to higher subsidy outlays in the final quarter. The NSO revised the FY21 real GVA projection to -6.5% YoY from the earlier estimate of -7.0% YoY and real GDP number to -8.0% YoY from the previous estimate of -7.7%. The divergence in the direction of revisions in estimated real GVA and real GDP numbers for FY21 is again likely due to higher subsidies accounted for in the final quarter, bringing down the GDP number compared to GVA.

## Economic recovery expected to broaden in Q4 FY21

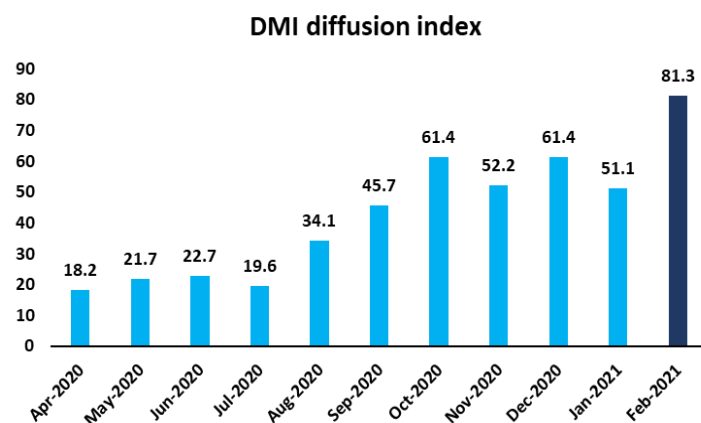


Source: MOSPI, \* Q4 FY21 data is implied from 2<sup>nd</sup> advance estimates

High-frequency indicators in the current quarter show mixed signals, with some moderation indicating that recovery remains fragile. Our Diffusion Index recorded a print of 51.1

in January 2021 compared to 61.4 in December 2020. Although early signs from February data indicate a more robust growth, with the Index reaching 81.3 (1/3rd of the total set of variables that we track). The sustainability of this will have to be watched, going ahead. In January 2021, the Index of Industrial Production (IIP) slipped back to a contraction of 1.6% YoY after growing by 1.6% YoY in December (revised higher from 1% YoY earlier). The contraction was led by manufacturing (-2% YoY) and mining (-3.7% YoY), while electricity production continued to perform well (5.5% YoY). The weakness looks broad-based within manufacturing, with only 5 out of 23 industries managing to register growth in January compared to 9 industries in the prior month. On a positive note, IHS Markit India's Manufacturing Purchasing Managers' Index (PMI) was steady at 57.5 in February, remaining above the critical threshold of 50 for the seventh consecutive month, supported by a rise in new orders leading producers to lift production, input buying and stocks of purchases. This suggests industrial recovery should resume in the coming months. Non-oil non-gold imports also showed robust expansion in January-February, suggesting continued domestic demand normalization.

## Mixed signals as per DMI Diffusion Index; after moderation in January 2021, partial data suggests resumption of recovery in February 2021



Source: DMI Finance; Diffusion Index shows the % of indicators demonstrating above/equal growth to pre-COVID levels (January-December 2019 average); February 2021 data is based on ~1/3<sup>rd</sup> of the data.

As far as the services sector is concerned, the incoming high-frequency indicators in the current quarter point towards a return to growth, consistent with the 2<sup>nd</sup> advance estimate. The services PMI survey rose to 55.3 in February, its highest level in nearly a year, supported by the rise in new orders, sales, and output. Mobility levels for retail & recreation & groceries and pharmacies also improved to just 3.4% below the baseline in February, which was its highest since March of last year when data became available. Other

indicators such as E-way bills registration (11.6% YoY), rail freight traffic (7.8% YoY), automobile sales excluding commercial vehicles (4.4% YoY), continued to expand in February. Meanwhile, credit to services remained steady at 8.4% YoY in January, reaching ~1.6% above pre-COVID levels. A key risk to overall recovery, and the services sector in particular, continues to stem from the rise in COVID cases. Recent localized containment measures amidst a rise in COVID cases in some states could curtail the pace of recovery.

**The risk of a second COVID wave is inching closer, though the rise in cases is presently concentrated in certain regions.**

India seems to be in an early phase of a possible, hopefully mini, second COVID wave. Daily new cases have increased steadily, rising to over 25,000 (7dma) by mid-March, up from the lows of this year at ~11,100 in mid-February. Consequently, active cases increased to 2.2 lakhs from the lows of 1.3 lakhs in early February. Other measures such as the positivity rate and death rate remained contained around 2.7% and 1.4%, respectively, and still fare among the best across the globe. Cases continue to be concentrated in a few states, with around 85% of new cases being reported in only six states, while 77% of active cases have been reported in only three states. Maharashtra remains the worst affected state, with daily cases increasing from its lows of ~2,500 earlier this year to more than 13,500 cases by mid-March and contributes more than 50% of daily cases in the country. Other states such as Tamil Nadu, Punjab, Gujarat, Madhya Pradesh, Delhi, Haryana, and Karnataka are also witnessing a steady increase in fresh cases from relatively low levels. The rise in daily cases led to a resumption of state restrictions, especially in Maharashtra, and may impede economic activity.

According to our State Activity Index, the weighted India Activity Index gained further traction in February 2021, with the index increasing to 99.1 compared to 98.6 in January 2020. Among states, 12 of the 21 states/UTs noted sequential improvement in February 2021. Delhi, Madhya Pradesh, Karnataka, and Tamil Nadu led the recovery, buoyed by a sharp improvement in their mobility levels, government support, and employment conditions. On a sequential basis, Himachal Pradesh, Rajasthan, Haryana, Goa, and Jharkhand registered a drop in their respective index values in February, driven by deterioration in their employment conditions. Maharashtra's economic recovery has moderated in the past few months and risks falling back amidst rising COVID cases, and tighter restrictions/imposed local lockdowns. States will need targeted containment measures and speed up their vaccination drives to prevent the situation from deteriorating further.

## State Activity Index

State Activity Index (Comparison to previous year levels, indexed to 100)						
State	GDP Share (%)	Q1-FY21	Q2-FY21	Q3-FY21	Jan-21	Feb-21
Maharashtra	13.7	72.7	89.4	97.8	99.4	99.2
Uttar Pradesh	8.7	77.6	93.5	95.8	100.5	101.9
Tamil Nadu	8.5	70.4	91.9	100.5	98.6	100.5
Karnataka	8.0	73.1	84.3	91.5	95.8	97.8
Gujarat	7.8	76.5	92.3	95.9	98.7	98.6
West Bengal	5.7	77.1	88.9	100.1	101.7	101.8
Rajasthan	4.9	77.3	91.2	87.6	92.8	90.3
Andhra Pradesh	4.5	91.9	96.8	99.8	100.4	100.3
Telangana	4.5	83.9	91.6	95.8	98.9	99.9
Madhya Pradesh	4.2	85.8	98.3	102.0	100.2	102.3
Kerala	4.1	84.0	91.6	99.2	102.3	103.9
Delhi	4.0	64.8	83.5	93.0	90.2	95.4
Haryana	3.8	71.2	86.7	90.3	95.5	93.3
Bihar	2.8	71.0	95.0	101.5	100.4	100.5
Punjab	2.7	77.2	91.5	97.8	98.9	99.4
Odisha	2.6	80.3	91.2	97.3	99.5	99.5
Chhattisgarh	1.6	79.8	90.8	97.3	100.5	100.0
Jharkhand	1.5	66.2	96.0	100.6	100.6	98.7
Uttarakhand	1.3	81.8	89.9	98.4	100.1	100.9
Himachal Pradesh	0.8	83.0	95.1	102.3	102.4	99.4
Goa	0.4	78.5	84.4	90.7	87.6	86.1
India activity index		76.4	90.9	96.7	98.6	99.1

**Note – The above 21 state/UTs contribute ~96% of the total GDP of India. 7 North-Eastern states and J&K have been excluded from the above analysis; quarterly index levels are monthly averages**

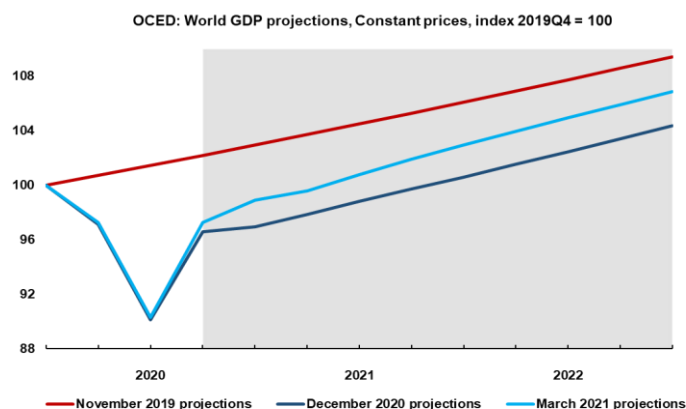
Meanwhile, India's vaccination drive advances with more than 3 crore vaccines having been administered at present. India's vaccine coverage ratio has improved sharply since the private sector's involvement and the launch of the next phase of the vaccination drive that commenced on March 1, 2021 (people over 60 years of age and 45 and above with specified co-morbid conditions). As such, the coverage ratio has improved significantly to ~58% from its lows of ~46.7% earlier in mid-February. Nevertheless, despite the increase in the vaccination rate, India runs behind its target of inoculating 30 crore people by the end of August this year. At the current rate, ~35 lakh vaccinations will have to be administered daily to achieve this target compared to the current rate of ~14 lakh vaccines administered daily.

## Global economic outlook improves further with the ongoing vaccination drive and fresh stimulus

The global economic outlook has improved, thanks to the ongoing COVID vaccination progress, faster-than-expected recovery, and additional stimulus announced in recent months, primarily the sizeable US fiscal measures. Following the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD) recently revised its global growth forecasts higher by 1.4 percentage points to 5.6% YoY for 2021 and by 0.3 percentage points to 4% for 2022. The improved global economic outlook is also consistent with high-frequency indicators such as the increasing global PMI surveys and rising international trade volumes. A broadening of recovery is visible with the Global PMI services survey witnessing more traction in February as new business activity

increased to its fastest pace in more than a year. The uptick in the daily vaccination rate, along with the advent of new vaccines, has further enhanced mobility and allowed governments across the world to ease restrictions further (according to the Oxford COVID-19 Stringency Index - 15 of the G-20 nations eased restrictions since the beginning of this year).

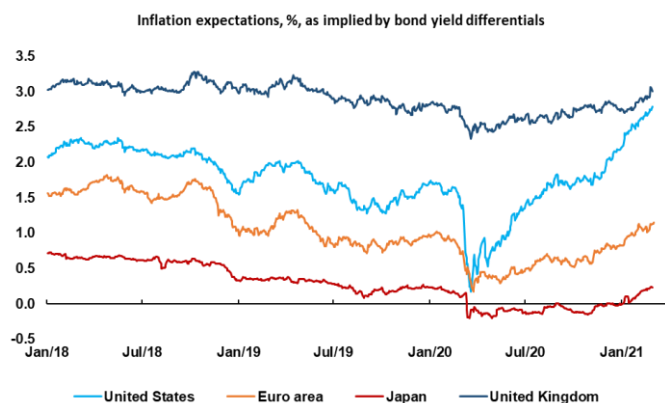
### OECD revises GDP projections upwards



Source: OECD

While all this is positive news, it has also led to rising expectations of future inflation, including a jump in commodity prices. This, in turn, has caused market repricing of normalization/withdrawal of monetary and credit measures, which were deployed in response to the unprecedented macro-economic shock brought on by the pandemic.

### Inflation expectations have risen, especially in the US

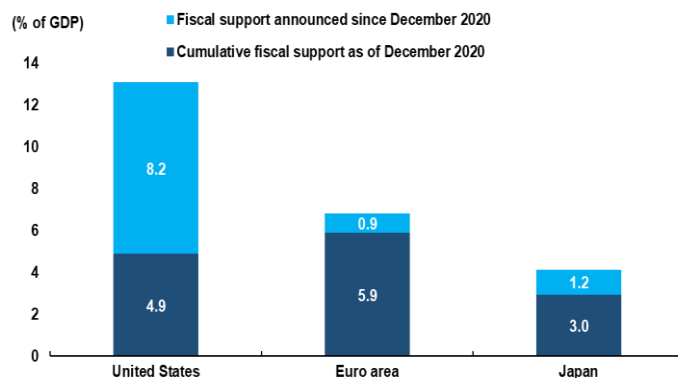


Source: OECD, Note: Expected inflation implied by the yield differential between 10-year government benchmark bonds and 10-year inflation-indexed bonds.

A large US fiscal stimulus has also led to prospects of a better US economic recovery than other advanced peers and emerging economies. As per the OECD, the significant fiscal stimulus in the US (with new measures of ~USD 1.9 trillion set out in the American Rescue Plan), along with faster vaccination, could boost US GDP growth to 6.5%

YoY, which is ~3 percentage points higher compared to the earlier projection. This is likely to have a positive spillover on the global economy but could also mean divergence in the pace of monetary policy normalization in the US v/s the rest of the world.

### Additional US fiscal stimulus in 2021 outweighs that of advanced peer nations



Source: OECD

Central banks will have to carefully navigate market reaction to incoming data (inflated by a favourable base) and normalize policy stance as economic activity gathers pace without derailing the recovery. Major central banks have, so far, reaffirmed their accommodative stance to support fragile economic recovery and growth. Central bankers may like to keep policy support in place until the spare capacity in economies persists. Moreover, the vaccination drive is still far from completion, despite the steady pick up in pace, and it will be a while before herd immunity is achieved. Any resurgence in COVID cases in the interim is likely to pose risks to economic recovery and warrant policy support.

### Is India ready to withstand a possible "taper-tantrum" 2.0 in 2021?

Recent global market volatility raised concerns about a repeat of the "2013 taper-tantrum" (Please refer to the box on page 6 for more details) and the ensued tightening of financial conditions in emerging markets, including India. The yields on the US 10Y have increased by more than 65 basis points (bps) so far this year. The spillover effects are being felt across equity markets, with the MSCI Emerging Market Equity Index correcting by nearly 7% (between the end of February and its peak levels in mid-February) while the NIFTY Index fell by over 5% in the same period. The Indian Rupee also came under pressure with the volatility on the 3M USD/INR increasing to its highest levels in end-February since the early part of last year. Further, according to the Bloomberg Commodity Index, global commodity prices have risen by ~7.8% above pre-COVID levels<sup>1</sup> in

<sup>1</sup> Pre-COVID levels refer to average of January 2020

early March 2021 and risk spilling over to general price levels and clawback policy support sooner than expected.

**Below, we take a closer look at the risks of spillover to the Indian economy from a possible increase in global commodity prices and global market volatility in 2021, which could force domestic policy actions. Our analysis shows that India will not be immune to a rise in commodity prices and global market volatility. However, policy buffers in terms of large foreign exchange reserves and improved external accounts position compared to 2013 provide room to manage policy response in a non-disruptive manner and curtail volatility, unlike during the 2013 taper-tantrum. Further, there is a risk of pass-through from global commodity prices to domestic inflation, though the RBI may show patience and overlook temporary inflation jumps given the output gap and low money velocity. We discuss these points in the following sections.**

**Firstly**, compared to 2013, India has repaired and strengthened macroeconomic fundamentals. This provides policymakers flexibility and space to manage policy response in a non-disruptive manner and curtail volatility during global market events. In sharp contrast to the 2013 taper-tantrum episode - India stands out among peer economies and fares the best in 4 of the 5 key indicators mentioned in the table. More notably, India's FX reserves have nearly doubled to ~\$585 billion presently from around \$300 billion before the taper-tantrum and stand the fourth highest in the world. India is also expected to record a current account surplus this fiscal year after a gap of more than 25 years. These provide a robust first line of defence if rising US bond yields trigger a reversal of foreign capital flows that could generate higher volatility in Indian financial markets and thereby force policy actions similar to the 2013 taper-tantrum period.

### India holds a much stronger external account position compared to the taper-tantrum period

External vulnerability - Peer comparison										
	Current Account as % GDP*		Foreign Exchange reserves (USD bn) <sup>^</sup>		External Debt stocks as % GNI		CPI % YoY#		Growth % YoY**	
	FY13	FY21	FY13	FY21	CY13	CY19	FY13	FY21	CY13	CY21E
Brazil	-3.3	-1.5	366	344	19.8	31.8	5.6	3.3	1.9	3.6
Indonesia	-2.3	-1.3	98	131	29.8	37.0	4.2	1.7	6.0	6.1
India	-4.7	1.0	293	585	23.3	19.7	10.0	6.2	5.5	11.5
Turkey	-6.0	-3.7	104	41	41.1	58.9	8.1	12.8	2.2	5.0
South Africa	-4.6	0.3	41	44	39.3	55.0	5.6	3.0	4.8	2.8
India Rank	4	1	2	1	2	1	5	4	2	1

Source: Bloomberg, World Bank, and IMF; Note – 1) Rank for external debt as % of Gross National Income (GNI) and Consumer Price Index (CPI) is measured in descending order (the lowest number is the best

rank); the rest of the indicators are ranked in ascending order (highest number is the best rank), 2) FY refers to a fiscal year (April-March), and CY refers to a calendar year (January-December)

\* FY21 is an average of the April-December 2020 period for all countries

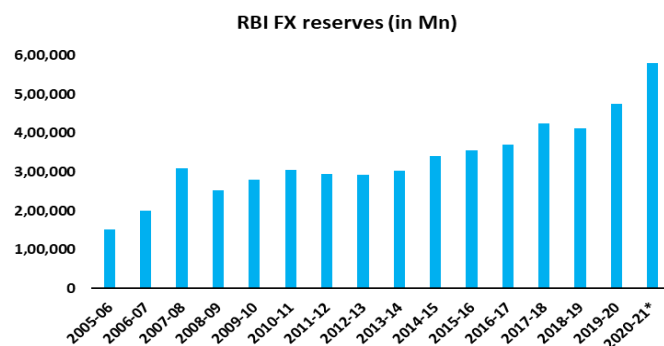
<sup>^</sup> FY13 data is as on end-March 2013 and FY21 data is as on end-Feb 2021 for all countries

# FY21 data is average of April 2020-February 2021

\*\* 2021 growth estimates are from IMF; for India, it is for FY22.

**Second**, the Rupee looks less vulnerable to external shocks than in 2013, when it fell by ~22% during April-August 2013. During most of FY21, the Rupee has witnessed an appreciation bias, as a result of a stronger current account and continued foreign capital inflows. However, RBI's aggressive intervention has prevented it from appreciating to preserve competitiveness vis-à-vis peers (RBI has added over \$100 billion to its reserves this fiscal year). In the event of a taper-tantrum like episode in 2021, we expect the RBI to use its sizeable FX reserves to curtail volatility, balancing its need to manage competitiveness (as peer currencies may still see more depreciation pressures) and inflation pass-through (a 1% change in INR translates into 15 bps change in headline inflation on average as per an RBI study).

### RBI added over \$100 billion to its forex reserves in FY21

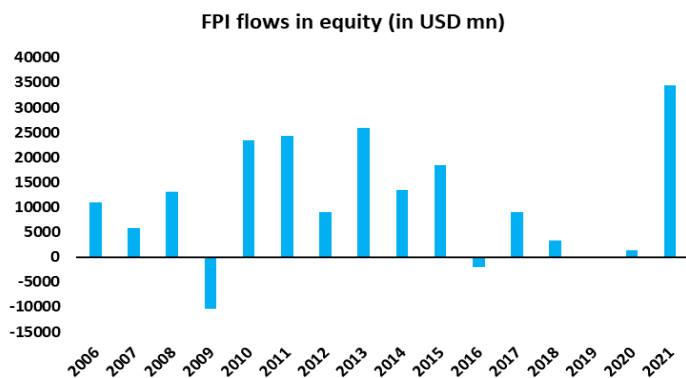


Source: RBI; \* 2020-21 as of March 5, 2021

**Third**, capital outflows from the equity markets remain a possibility during a global 'risk-off' sentiment period. During the 2013 taper-tantrum episode, the NIFTY 50 index had crashed by ~12% at a particular period of time (that was eventually reversed with a return of capital flows into the equity markets). In FY21, India received more than USD 35 billion of foreign capital inflows in the equity market between May 2020 and February 2021 after central banks across the globe started injecting liquidity. This helped push valuations of Indian equities to elevated levels (the P/E ratio for NIFTY hovers around its historic highs at over 40). Considering these factors, we do not rule out shocks to Indian equities in the near term. However, we expect them to be limited this time/equity market to resume recovery sooner as India stands out in terms of expected growth this year. The IMF expects India to grow by 11.5% YoY in FY22, and it is worth

noting that portfolio rebalancing by global investors in favour of economies with stronger fundamentals can be expected, which could favour India. As such, we expect Foreign Portfolio Investment (FPI) flows to continue supporting Indian equities.

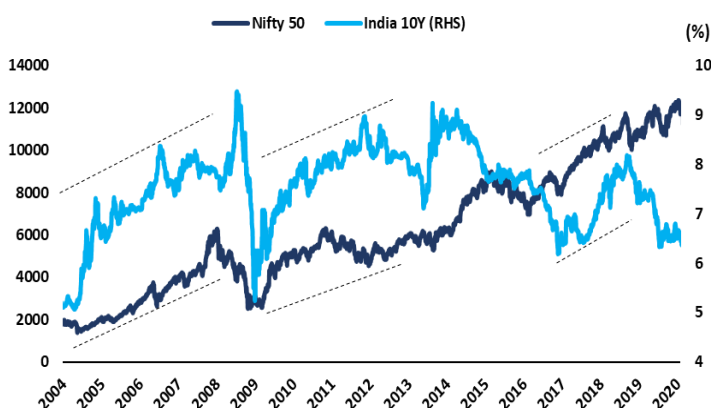
### Indian equities witness record FPI inflows in FY21



Source: CMIE; above mentioned years are fiscal years (April-March) 2021 data is from April 2020-Feb 2021

Furthermore, historically, equity markets have usually moved positively during episodes of a sustained increase in bond yields as they are primarily backed by the reflation trade and coincide with economic recovery and garner optimism. The previous three episodes (2004-06, 2009-12, and 2017-19) of a sustained increase in benchmark yields on the NIFTY 50 Index have shown a high positive correlation of 76%, 63%, and 78%, respectively. As such, we expect equities to ride the reflation wave as long as India's economic growth outlook remains positive.

### Indian equities show a positive correlation with periods of sustained increase in bond yields



Source: Bloomberg

India also remains a bright spot in an otherwise shadowy year for Foreign Direct Investments (FDIs), as global inflows plunged by 42% YoY in 2020, the lowest level since the 1990s, according to United Nations Conference on Trade and Development's latest 'Investment Trends Monitor'. India clocked a 13% YoY rise in FDI flows, the highest growth among nations. These flows are sticky in nature and are

driven by fundamental factors which are unlikely to change due to short-term spikes in market volatility.

### Box: "Taper-Tantrum-2013"- An unforgettable summer

In response to the 2008-09 Global Financial Crisis (GFC), major central banks had cut rates to an all-time low and launched unconventional assets purchase programs. The resultant comfortable global monetary conditions transmitted to emerging economies in the form of capital inflows, with India receiving more than USD 28 billion annually on average in the FY10-FY13 period. The sudden and significant change in global monetary and financial conditions followed the US Federal Reserve's taper talk. On May 22, 2013, Federal Reserve Chairman Ben Bernanke first spoke of the possibility of the Fed tapering its security purchases. This had a sharp negative impact on financial conditions of emerging markets', including India. During May 22-August 30, 2013, India witnessed sustained outflows of foreign capital; the Rupee depreciated sharply, bond spreads increased, and equity prices fell.

Effect of taper tantrum on Emerging Economies (April-August 2013)

	Exchange rate depreciation (%)	% change in stock prices	% change in reserves
Brazil	19.2	-10.6	-3.1
Indonesia	12.3	-16.7	-14.1
India	22.1	-7.7	-7.0
Turkey	13.7	-22.8	-4.6
South Africa	14.6	11.1	-5.4

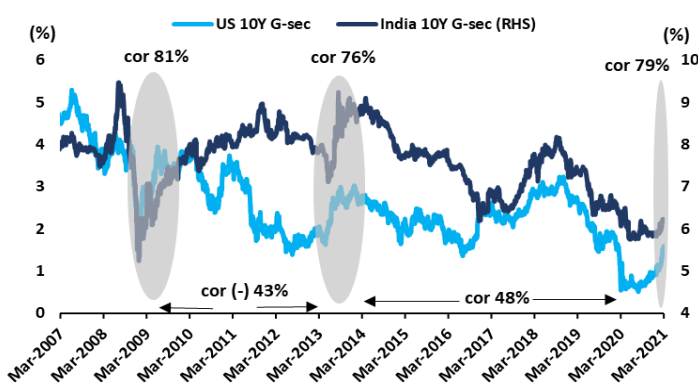
Source: Bloomberg; Calculated from end April 2013 to end August 2013; exchange rate is vs the US Dollar

India's vulnerability to external shocks was exacerbated by its relatively weak macro and mainly external accounts positions, including high current account deficit, relatively low FX reserves, high inflation, and elevated fiscal deficit. This led to India's classification among the fragile five economies during that period. Even within this group, India had the largest exchange rate depreciation and the second largest decline in reserves. "Facing risks of currency turmoil due to the taper-tantrum, the RBI judged that spillovers could endanger financial stability and growth and gave priority to stabilization of the Rupee in the conduct of monetary policy (RBI, 2014)" Accordingly, an unconventional policy response had to be deployed. Liquidity operations ensured that money market rates were tightened, FX reserves were augmented by overseas borrowings and swaps, and gold imports were restricted. These measures helped stabilize the Rupee in the ensuing months. However, inflation pressures persisted, warranting a more conventional monetary policy response in the form of policy rate increases in Sept-Oct 2013 even as the unconventional measures began to be wound down.

#### Fourth, India's bond yields could rise in tandem with a rise in the US yields, tightening domestic financial conditions.

In the past, Indian bond yields have usually moved in tandem with their US counterparts. This correlation is observed to become stronger during crisis periods (as seen during the GFC and taper-tantrum) with capital flows in/out of the bond market acting as a key transmission channel. The India-US yield differential that initially narrows with the surge in US yields (before its Indian counterpart) results in capital outflows as investors chase higher returns - eventually pushing the Indian yields higher.

#### India-US bond yields show a strong correlation, particularly during crisis periods



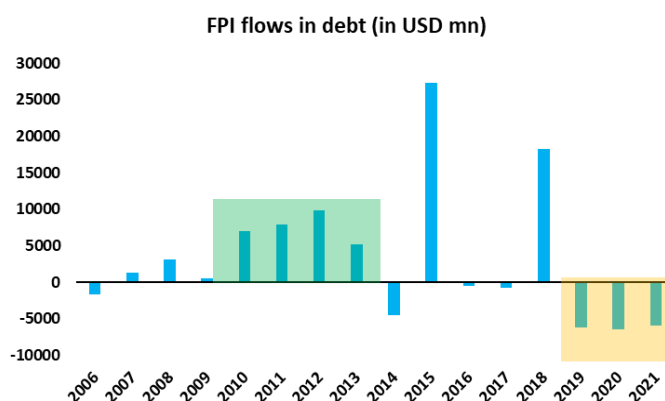
Source: Bloomberg

The transmission channel of foreign capital flows in/out of the bond market has weakened in FY21. Before the taper-tantrum episode (FY10-FY13), more than USD 23 billion of capital flows had entered Indian debt markets – more than 55% of which was withdrawn in six months (from June-November 2013) as the India-US yield differential narrowed by ~55 basis points on an average during this period. However, this time ~USD 6 billion of capital has already flown out from Indian debt markets in the 11 months of this fiscal year. Moreover, this has mounted after two consecutive years of outflows in FY19 and FY20 respectively (USD 12.5 billion combined). Consequently, the debt utilization level by FPIs for government and corporate bonds has fallen to ~28% and ~24.5%, respectively of the overall limit at present. This compares to ~95.6% and ~45% of limit utilization by FPIs for government and corporate papers, respectively in April 2013, just prior to the taper tantrum episode. This entails a relatively lower scope and fear from a reversal of flows on a larger scale (only ~USD 34 billion of capital is invested by foreign investors in Indian debt markets, which is ~6% of the total FX reserves held by the RBI). As such, we expect domestic factors to be the primary driver of bond prices this time than global ones. This was observed in the early part of this year when the India-US 10Y spreads tightened as domestic yields increased sharply ahead of the rise in US yields,

driven by a higher fiscal deficit and the scare of an early move towards normalization by the RBI. The spreads eased again in subsequent months as the India 10Y yield held steady due to intervention by the RBI while the US 10Y bonds have witnessed sharp selloffs. As such, while the US 10Y yields have rallied by more than 65 bps this year, India 10Y has increased by ~35 bps.

Nevertheless, given the outlook for economic recovery and inflation, we expect domestic yields to rise in FY22. The growth policy rate differentials in India and major economies sit at their highest since World War II. This, coupled with a high budget deficit, implies that India's bond yields are likely to rise. India's G-sec 10-year has already moved up from around 5.86% in end-December 2020 to more than 6.2% at present (daily average of first fifteen days in March 2021). We expect the G-sec 10-year to trade in the range of 6.15%-6.4% in Q1 FY22.

#### Debt markets continue to see FPI outflows in recent years



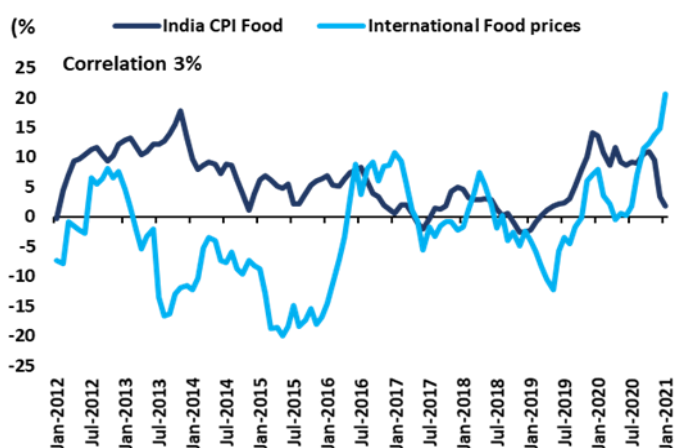
Source: CMIE; above mentioned years are fiscal years (April-March) 2021 data is from April 2020-Feb 2021

Lastly, the domestic monetary policy stance could also be affected due to spillover from global commodity prices. While the risk of pass-through from global food prices is limited, there persists a high risk of pass-through from higher global energy prices and input materials to domestic inflation. However, the RBI may tolerate temporary spikes in inflation given the output gap and low money velocity, as discussed below.

The CPI basket's biggest component is related to food, where the prices of most food items are predominantly affected by domestic supply conditions and the government's pricing policy rather than global trends. India's share in world food trade in terms of exports (~2.5%) and imports (~1%) has remained very low; therefore, the pass-through from global prices should be weak, barring select items. According to an RBI report, the short-term price transmission elasticity for food price is estimated to be 0.07, implying that a 10% increase in global food prices could lead

to a 0.7% increase in Indian food CPI and impact headline CPI by ~27 bps. As such, we expect any spike in international food prices to have a limited impact on domestic inflation in the near term, with local factors primarily driving inflation. Recent months also reflect a sharp increase in international prices even as domestic food inflation fell sharply due to the easing of supply side constraints and a base effect. Given a positive outlook for the agriculture sector and normalization of domestic supply channels, we presently do not expect domestic food prices to revisit last year's elevated level, barring events of domestic supply/monsoon failure shocks.

### International food prices have a low correlation with domestic prices



Source: CMIE, World Bank

Given India's high dependence on oil imports, the pass-through risk from global energy prices to domestic prices remains high, though governments can curtail the impact through tax cuts. Brent price has already reached ~105% of pre-COVID levels in mid-March 2021. According to our estimates, a 10% increase in Brent prices is estimated to translate into a 44 bps impact on the headline CPI, ceteris paribus. Nevertheless, the pass-through of international prices to domestic prices is also dependent on center and state taxes which together account for ~56% and ~63% of the total diesel and petrol prices respectively at present (price build of Delhi taken, these levels can vary across states, given different VAT rates). During COVID shock, as other revenue sources dried up, center and state governments hiked fuel taxes. However, their non-fuel reserves are picking up with ongoing recovery, which could offer the flexibility to partly absorb some increase in Brent prices and minimize the full pass-through. Still, this remains one of the key risks to overall inflation from a global price spillover perspective. Besides oil, prices of basic metals have also risen, with World Bank's Base Metal Index rising by 7% since December 2020. According to our estimates, a 10% shock to global base metal price impacts headline CPI by ~6 bps (assuming a pass-through of 20 bps from non-

food manufacturing Wholesale Price Index to CPI core). As demand conditions improve, producers may try to pass on the built-up cost to consumers.

### Price sensitivity of international commodity prices to domestic CPI

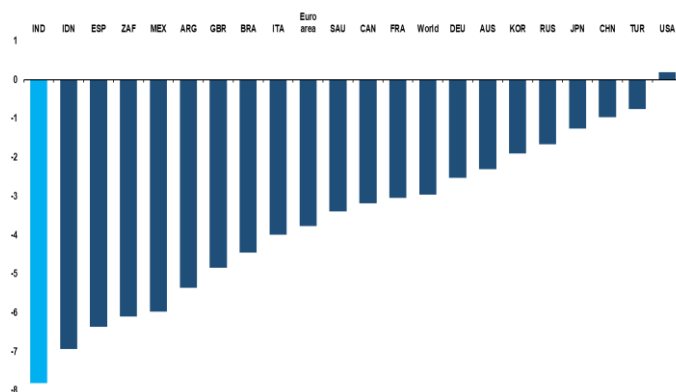
Commodity	Weight in CPI (in %)	International prices	% change in prices from December 2020	Impact on CPI from 10% shock to prices (in basis points)	Impact on CPI from build up in prices from Dec 20 (in basis points)
Brent (\$/bbl)	9.2	67.3	34.9	44	154
Food Index	39.1	114.3	8.0	27	22
Base Metals Index*	9.7	105.0	7.1	6	4

**Note – Index price levels are from the World Bank commodity pink sheet report as of February 2021. Brent prices are a daily average of H1 March 2021 levels. \*Weight is on the WPI basket; a pass-through of 20 bps from core WPI to core CPI has been assumed to calculate the impact on headline CPI**

Recent CPI and WPI data indicate the risk of upward surprise in inflation due to previous cost build-up and pass-through from a recent rise in global energy and basic metals prices. CPI inflation rebounded in February to 5% YoY, up from 4.1% YoY in January 2021. Rising fuel prices made their presence felt in petrol and diesel prices as they increased by 20.6% YoY and 22.5% YoY, respectively (v/s 12.5% YoY and 12.8% YoY in January 2021 respectively). A rise in WPI inflation (4.2% YoY in February v/s 2% in January) led by manufactured goods (5.8% YoY v/s 5.1% in January) raises concerns about the pass-through of cost build-up to CPI inflation.

**While there is a risk of an inflation surprise**, the RBI, like other major central banks, may not rush to raise interest rates. In 2021, central banks will have to be careful in distinguishing underlying genuine inflation pressures from a jump in inflation due to a favourable base. Two key ingredients of sustained inflation are still missing - closing of the output gap and pick up in money velocity. Despite the ongoing economic recovery, considerable economic slack is likely to remain in a number of countries, especially in India.

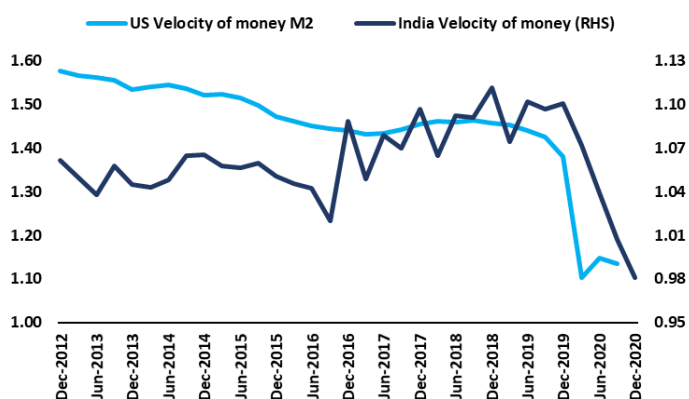
### GDP in Q4 2022 relative to the November 2019 projection, % difference



Source: OECD



## Velocity of money remains low



Source: RBI, Federal Reserve Economic Data

Further, the velocity of money (NGDP/M3) has fallen sharply, given the hit to demand due to COVID and the output contraction. The US and India's velocities of money have fallen to historic lows. While a part of the velocity is likely to rebound as economic activity moves towards normalization and restrictions are lifted, it will be some time before normalcy is resumed, contingent on COVID and vaccine developments across the globe.

Overall, we expect the RBI to continue its accommodative policy stance into early FY22. It is expected to change the stance to "Neutral" sometime in Q2 FY22, with a possibility of a reverse repo hike by 25 bps in H2 FY22 as a part of policy normalization. We presently expect repo rate hike to start towards the end of FY22/early FY23. While a temporary inflation spike should not change RBI's policy stance much, if inflation were to surprise on the upside for a sustained period of time, the timeline of policy normalization could be advanced. On the other hand, if economic recovery were to disappoint (e.g., due to a rise in COVID cases), the policy stance could remain accommodative for a bit longer than presently expected.

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