

## **MACRO PULSE**

### **SEPTEMBER 2021**



### Contents

Growth	4
Inflation	9
Government Finances	
Rates	17
Rupee	21
Global Overview	25
Coal Shortages and its Implications	30



### From the desk of the Chief Analytical Officer

The **ninth edition** of **Acuité Macro Pulse (Sep 2021)** comes at a juncture when the economy is finally coming out of the shadows of the Covid pandemic and the country is going into the festive season with an expectation of 'vengeance' demand. This monthly publication on the Indian and the global economy has caught the attention of policymakers, banks, investors and also academicians since it makes a 'deep dive' into a wide range of high frequency macroeconomic indicators and emerges with a sharp commentary on the dynamic operating environment of today.

Clearly, there is a reason to be optimistic on the Covid front with the steady progress in vaccinations and the gradual decline in daily mortalities not only in India but also on a global level. For the first time since March 2020 has the daily deaths worldwide come down below 5,000 levels. As regards India, the mortalities per day have sharply dropped from over 5,000 in the peak of the second wave in May'21 to less than 200 in the first week of Oct'21. Further, the needle has finally started to move on the daily caseloads in India with a decline in the intensity of the pandemic in Kerala; while it was around 40,000 in Aug'21, it has come down perceptibly to one third of those levels. The data print on vaccination has also maintained an encouraging trajectory - India is about to reach the landmark of administering 1 bn vaccine doses for Covid-19 by mid of Oct'21. As on Sep 30, 2021, 47% of India's population has already been vaccinated by one dose and 17% by both doses, which increases the likelihood of reaching the 80% level for single dose by Dec'21 significantly. With such a progress in vaccination, the visible revival in industrial activity, continuing buoyancy in exports and also the accommodative policy environment, our FY22 GDP growth forecast of 10.0% seems quite achievable.

Nevertheless, there exist a few clouds on the risk horizon. While RBI has revised the headline CPI inflation to 5.3% for FY22 given the benign food inflation and the favourable kharif crop estimates, downside risks to that forecast are on an increase due to continuously high oil and other commodity prices along with the emergence of industrial raw material shortages starting from semi-conductors to coal. With an expectation of pent up consumption demand playing out over the next 2 quarters, we believe there is a significant likelihood of a pass through of higher production costs to retail prices in some product segments.

Reflecting the challenge of supply constraints in a post pandemic world, we have added a **special chapter on the current coal shortage in India** and its implications. While the government is keen to ramp up the capacity of renewable energy in India quickly, coal based thermal power plants still contribute to around 70% of the gross power generation in the country. Any disruption in power supply particularly to the industrial and the commercial sector even for a temporary period can slow down the momentum of the economic revival and there is also a risk of the coal shortage issue spilling over to other sectors such as cement and aluminium. We sincerely hope that it doesn't assume serious proportions as we have had a disproportionately large share of crises over the last 2 years. Here's wishing you a great festival season! Stay safe,

Suman Chowdhury Chief Analytical Officer



# Growth

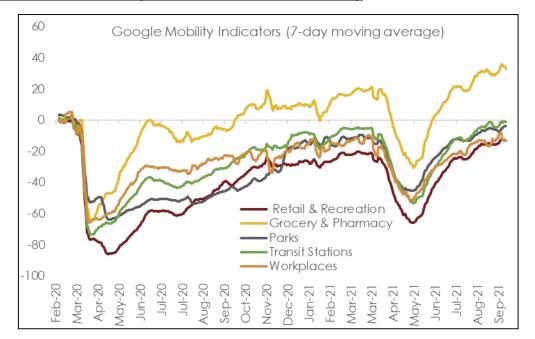
### Vaccinations offer hope

### **KEY TAKEAWAYS**

- Growth recovery continues to remain intact over Aug-Sep-2021, building on the momentum since the second wave of infections waned in May-21.
- Near complete unwinding of lockdown restrictions with several states opening up schools/recreational activities, has led personal mobility to surpass Feb-21 levels across nearly all location subcategories.
- COVID infections continue to remain ranged amidst high level of seroprevalence with vaccination picking up pace in Sep-21.
- This augurs well for sequential growth momentum as the commencement of the festive season supports pent-up demand for goods and vengeance spend on services.
- With an expectation of improved pace of vaccinations to continue into Q3 (amidst ramped up supplies), we now see India inoculating around 75% of its population with one dose of vaccine before the end of 2021.
- Amidst onset of festive season, global support to domestic exports, steady progress in vaccination, and declining probability of severe third Covid wave we continue to hold our FY22 growth forecast at 10.0% albeit with some downside risks that could emanate from energy crisis due to coal shortage which could impact India's industrial activities and decline in auto production due to shortage of semiconductor chips.



Growth recovery continues to remain intact in the months of Aug-Sep-2021, building on the momentum since the second wave of infections waned in May-21. Easing of restrictions on economic activity with several states opening up schools and recreational services, has led personal mobility to surpass Feb-21 levels across nearly all location sub-categories. COVID infections continue to remain ranged amidst high level of seroprevalence with vaccination picking up pace in Sep-21. This augurs well for sequential growth momentum as the commencement of the festive season supports pent-up demand for goods and vengeance spend on services.





### Recap of Q1 FY22 GDP growth: headline up, momentum contracts

- India's annualized Q1FY22 GDP growth came somewhat lower than market expectations, at 20.1% YoY; but the headline was bolstered by an exceptionally favorable base from last year's nationwide lockdown. The second wave of the pandemic proved to be a stumbling block for economic recovery, as GDP contracted by 16.9% QoQ compared to an expansion of 7.5% in Q4 FY21; albeit much lower than 29.7% dip recorded in Q1 FY21.
- Among the sectors, agriculture clocked an above average trend growth of 4.5%YoY despite the rural economy weathering a disproportionately higher impact of the second wave of COVID. The record Rabi harvest followed by Government's procurement activism appear to have aided the sector.
- Expectedly, industry growth outpaced services as less stringent lockdown restrictions permitted continued operations in both manufacturing and construction sub-sectors. Among services sub-sectors, surprise quotient was the stronger than anticipated growth in Trade, Hotels, Transport & Communication sub-sector, at 34.3%YoY - reflecting likely resilience in Transport and logistics sectors in Q1 FY22, and also nascent recovery in tourism sector that began to take shape since Jun-21.



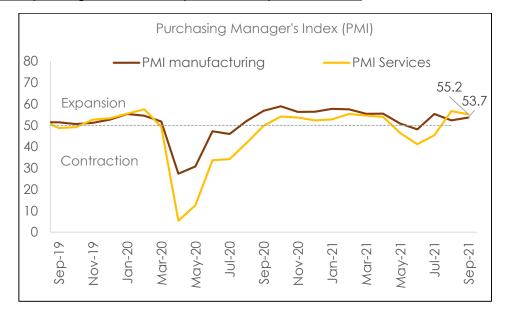
On the demand side, private consumption grew by 19.3%YoY, albeit contracting by 17.4%QoQ compared to an expansion of 2.3% in Q4 FY21. The second wave of infections had taken a heavy toll on consumption, as seen in high frequency indicators of auto sales, tractor sales, fuel consumption – all sequentially slipping in months of Apr-May-21. On the other hand, Investments rose by 55.3%YoY, likely to have found support from higher government capex spending, clocking an annualized growth of 26.3% in Q1 FY21.

### Growth momentum revives in Q2 FY22

On a monthly basis, high frequency indicators underscore sequential recovery continuing into the month of Sep-21, though the pace of incremental improvement has somewhat slowed down, as activity levels inch closer to/surpass Feb-21 levels. To put this in perspective.

- Amidst continued waning of the favorable base, IIP growth moderated further in Jul-21 to 11.5%YoY compared to 13.6% in Jun-21. However, sequentially the index expanded for the second consecutive month led by uptick recorded in manufacturing along with electricity. On the use-based side, all sub-sectors grew sequentially. Strong double-digit momentum was recorded for – Capital and Consumer Durable goods for the second consecutive month. IIP index is now almost at par with Jul-19 level, underscoring a near complete recovery visà-vis pre-pandemic levels. However, at a granular level, there remains significant divergence with consumer durables being the slowest to recover.
- With improving demand scenario, PMI manufacturing in Sep-21 rose to 53.7 from 52.3 in Aug-21. New orders from domestic as well as international market improved from the previous month, prompting manufacturers to significantly ramp-up overall production ahead of festivities and to replenish inventory levels. PMI services, eased marginally to 55.2 in Sep-21 from an 18-month high of 56.7 in Aug-21. Nevertheless, the index continued to stay well above its long run average due to accommodative market conditions and improvement in overall demand.
- GST collections stood at Rs 1.17 th in Sep-21, hitting a 5-month high . In similar vein, E-way bills rose to a 6-month high of Rs 6.8 th in Sep-21 from Rs 6.6 th in Aug-21, as demand gathered pace ahead of festive season.
- As such, sequential GDP growth momentum is likely to post a strong recovery in Q2, even as headline annualized growth moderates as the favorable base wanes.





#### Chart 2: Improving demand keeps PMI in expansion zone

### Outlook

- The first advance estimates for the major kharif crops, a key harbinger for overall performance of India's agriculture sector, has provides indication of a fairly strong kharif output despite a somewhat erratic and backloaded monsoon in the current year. The estimate is broadly in line with the sowing acreage which has been just 1% below last year's level and will support the recovery in rural incomes in the post pandemic environment apart from moderating food inflation and thereby, headline CPI inflation.
- Vaccination momentum gathered significant pace in Sep-21, clocking an average daily pace of 8.0 mn doses compared to 5.9 mn in Aug-21 and 4.3 mn in Jul-21. Given the expectation that this pace will continue into Q3 (amidst ramped up supplies), we now see India inoculating around ~75% of its population with at least one dose of vaccine before the end of 2021. This could lead to a stronger revival in consumer sentiment as seen in case of few developed economies currently.
- Exports have emerged as the strongest growth pillar in FY22, as domestic private consumption recovery remains nascent and tentative and investment growth, being Government led. On a FYTD (Apr-Sep) basis, exports have grown by 67.5% compared to a contraction of 26.3% over the same period in FY21, with sectors such as chemicals, textiles, agri & allied products, gems & jewellery etc. leading the gains. A strong V-shaped global growth recovery along with conscious efforts to implement a China plus one strategy by several nations, is aiding demand for India's exports.



• Central government capex is running at a robust pace of 278%YoY over Apr-Aug FY22 compared to -1.3%YoY growth over the corresponding period in FY21.

With risk of severe third Covid wave ebbing, we expect India's FY22 GDP at 10.0%. However mild downside risk to our forecast could emanate from global energy crisis affecting coal supplies thereby impacting India's industrial activities. That said, we remain watchful of the brewing pressures in auto sector, as the shortage of semiconductor chips has punctured the nascent recovery with auto production contracting by 8.2% in Aug-21.



# Inflation

Comfort and concerns

### **KEY TAKEAWAYS**

- After remaining a source of concern early in the year, India's inflation profile has begun to transmit some degree of relief with CPI inflation moderating to a 4-month low.
- However, there are concerns with respect to i) strong momentum in case of WPI inflation, ii) elevated levels of core inflation, and iii) close to highest levels of inflation expectations since the commencement of the flexible inflation targeting regime.
- There are reasons to be hopeful of moderation in both retail and wholesale inflation pressures in the coming quarters basis monsoon performance and trajectory of international commodity prices.
- However, there is also a possibility of upside pressure from vaccine led temporary surge in pent-up demand and pass through of elevated input price pressures from WPI to CPI inflation.
- For FY22, we continue to expect average CPI inflation to print at 5.5%, moderately lower vis-à-vis the 7-year high level of 6.2% in FY21.



After remaining a source of concern early in the year, India's inflation profile has begun to transmit some degree of relief. Comfort is foremost at the retail level. As per the latest print, CPI inflation moderated to a 4-month low of 5.30% YoY in Aug-21 from 5.59% in Jul-21. Notwithstanding the supportive albeit fading statistical base, moderation in annualized headline inflation was accompanied by softening of sequential momentum with CPI rising by a subdued 0.25% MoM in Aug-21 vis-à-vis 0.74% in Jul-21.

• While that is a welcome development, concerns have not dissipated. First, WPI inflation for Aug-21 inched up on annualized basis (11.39% YoY from 11.16% in Jul-21) accompanied by a strong sequential momentum (1.04% MoM from 0.60% in Jul-21). Second, Core CPI<sup>1</sup> inflation continued to remain sticky at elevated levels at 5.9% YoY over last two months, while Core WPI (non-food manufacturing) inflation created a series high of 11.15% YoY in Aug-21. Third, household inflation expectations as captured by the RBI's survey is close to their highest levels since the commencement of the flexible inflation targeting regime in India.

CPI & WPI Inflation: Key cat	CPI & WPI Inflation: Key categories (%YoY)		
	Aug-20	Jul-21	Aug-21
Headline CPI	6.7	5.6	5.3
Food and Beverages	8.3	4.5	3.8
Consolidated Fuel	5.0	14.9	15.3
Core	5.4	6.0	5.9
Headline WPI	0.4	11.2	11.4
Consolidated Food and Beverages	4.7	4.4	3.3
Fuel	-10.1	27.9	27.9
Core	0.6	10.8	11.2

### Table 1: Snapshot of retail and wholesale inflation

### **Comfort and concerns**

Within this maze of comfort and concern, lies shifting drivers of inflation. At a granular level:

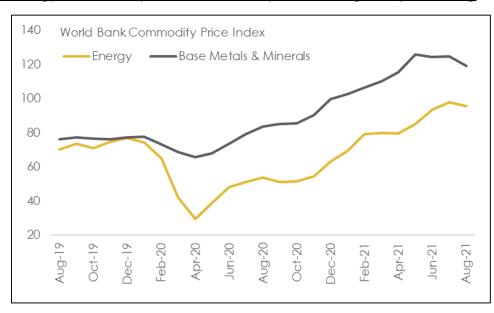
- Food & Beverages inflation appear as the primary source of solace. The annualized rate of inflation under this category on both retail and wholesale front is currently under 4%. More important, the sequential momentum on both retail and wholesale F&B inflation has been subdued for two months in a row. Overall, the summer seasonality appears to be somewhat less severe so far on the F&B index. In addition, government measures on incentivizing supplies in case of select food products appears to be having some early impact.
  - From monsoon perspective, the deficiency seen in the months of Jul-

<sup>&</sup>lt;sup>1</sup> Headline index excluding indices of food & beverages and fuel



Aug'21 now seems to be filling up in Sep-21 with advancement in kharif sowing. Total area sown for the week ending Sep 17, 2021 is now just 0.8% lower vis-à-vis last year, compared to 4.7% lower for week ending Jul 30, 2021 and 1.8% lower for week ending Aug 27, 2021.

- Fuel inflation continues to remain the major stress point on account of elevated levels of international fuel prices. The consolidated fuel inflation at the retail level stood at a series high of 15.3% YoY in Aug-21 while at the wholesale level, it stood elevated at 27.9%. The FYTD average of India Crude Basket currently stands at USD 70 pb, ~56% higher compared to the FY21 average price of USD 45 pb. This got further accentuated by imposition of additional taxes on petroleum products since the beginning of the pandemic - while its direct impact on annualized inflation prints would now get suppressed, the second order impact would continue to linger on.
- Core inflation is the other major area of concern. On retail side, while core inflation has moderated from its post pandemic high of 6.6% YoY in May-21 to 5.8% in Aug-21, the overall level continues to be elevated. In contrast, the wholesale core inflation created a series high of 11.2% YoY in Aug-21. It is important to note that in case of former, the non-tradable services (esp. the contact intensive sectors), had borne the brunt of COVID restrictions. In the latter case, core pressures appear exceptionally high in comparison, as the index predominantly captures the tradable goods in the manufacturing space, which in conjunction with global energy prices, have seen a significant run-up in recent quarters.
  - Going forward, the mix could change somewhat. There are initial signs of plateauing in case of industrial metals & mineral prices (World Bank's



### Chart 1: Energy and metal prices still firm despite some signs of plateauing

Metals & Minerals index stood 7.1% lower in Sep-21 vis-à-vis its 2021 peak in May-21). On the other hand, with pace of vaccination picking up in India, we now see the possibility of around 75% of the population getting inoculated with at least one dose of vaccine by Dec-21. This would aid



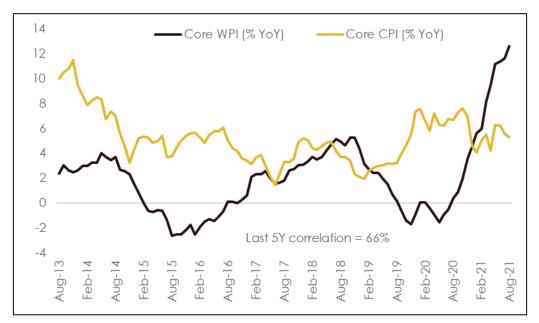
further phasing out of lockdown restrictions while spurring demand side inflation esp. in case of contact intensive services, thereby keeping Core CPI inflation elevated.

### Outlook

We continue to stick to our consensus call of 5.5% CPI inflation in FY22 vis-à-vis 6.2% in FY21. While broad comfort on food prices is likely to be derived from backloaded monsoon performance in Sep-21 and prospects of strong kharif arrivals as per the first advance estimate, there are other two key factors for a close watch for possible changes in the inflation trajectory.

- Growing comfort on tax and non-tax revenue collection by the central government provides some space for partially rolling back petroleum taxes that were introduced in early part of the pandemic in FY21.
- Second is the spill over risk from record high core wholesale to core retail inflation. While the correlation between the two is moderately positive, we need to see how the combination of pent-up demand and elevated input prices play out in the next couple of quarters.

### Chart 2: Record Core WPI inflation could pose some risks for Core CPI inflation





# **Government Finances**

Calm on the fiscal front?

### **KEY TAKEAWAYS**

- India's central government fiscal deficit for the period Apr-Aug stood at 31.1% of budget estimates (BE) for FY22 compared to 47.8% of actuals over the corresponding period in FY21.
- The relatively lower accretion to fiscal deficit this year reflects better revenue collection (barring disinvestments) while the pace of overall expenditure disbursal appears to be relatively stable.
- Revenue expenditure has seen a marginal contraction on FYTD basis while capex continues to get prioritized.
- Budgeted expenditure in FY22 will likely overshoot on account of COVID relief packages, increase in fertilizer subsidy, higher outlay for vaccination, hike in DA/DR, and likelihood of expanding the MGNREGS budget.
- Despite expenditure slippage risks in the offing, risks on headline fiscal position could remain contained due to strong tax and nontax revenue collections and announcement of the monetization pipeline.
- Having said so, the realization of record high disinvestment target of Rs 1750 bn would be crucial in managing the fiscal risks.



India's central government fiscal deficit for the period Apr-Aug stood at 31.3% of budget estimates (BE) for FY22 compared to 47.8% of actuals over the corresponding period in FY21. Prima facie, the relatively lower accretion to fiscal deficit this year reflects better revenue collection (barring disinvestments) while the pace of overall expenditure disbursal appears to be moderating.

### Receipts: Revenue remains healthy

Total receipts have been buoyed by robust tax as well as non-tax revenue accretion.

- On FYTD basis (Apr-Aug), gross tax revenue collection clocked a robust growth of 70.4% YoY despite COVID's second wave. However, it's not just the annualized growth that looks better (which is strongly aided by a favourable statistical base from last year), but gross tax revenue has already clocked 38.9% of BE for the full year (vs. 18.8% of actuals in the corresponding period in FY21), thereby providing a strong starting point. Further, vis-à-vis 2-years ago period (to avoid the pandemic related distortion), gross tax revenue still clocks a healthy growth of 30.0% during Apr-AugFY22 vs Apr-AugFY20.
  - Barring service tax collection that contracted on annualized basis in Apr-Jul FY22, all other key tax sources recorded robust growth in collection, with particularly impressive growth seen in corporate tax and customs.
- Net tax revenue on FYTD basis (Apr-Aug) clocked a robust growth of 126.7% YoY compared to a contraction of 29.0% seen in the corresponding period in FY21 on account of support from gross tax collections and relatively lower tax devolution to states.

Non-tax revenue also recorded a strong annualized growth of 72.6% YoY in Apr-Aug FY22 compared to a contraction of 56.6% seen during the corresponding period in FY21. Notwithstanding the favourable statistical base support, the key reason for robust performance under this category stems from the significantly higher than budgeted dividend from the RBI, transferred in the month of May this year vis-à-vis August last year due to the synchronization of RBI's financial year with the GoI's.

Non-debt capital receipts clocked a healthy expansion of 127.8% YoY in Apr-AugFY22 vis-à-vis a contraction of 63.5% seen in the corresponding period in FY21. The government divested 7.5% stake in HUDCO, thereby garnering Rs 37 bn in the month of Jul-21. Despite low-ticket divestment activity so far, the robust growth rate reflects favourable statistical base effect from last year.

### Expenditure: Revex subdued but capex prioritization commendable

Total expenditure moderated to 2.3% YoY in Apr-Aug FY22 vis-à-vis 6.2% seen in the corresponding period in FY21. However, on BE basis, this translates into 36.7% of the full year target vis-à-vis 35.5% seen in the corresponding period in FY21. Looking at a granular level, there are few notable trends:

• Revenue expenditure contracted by 0.8% YoY (37.7% of FY22 BE) during Apr-Aug FY22 vis-à-vis an expansion of 7.1% (36.1% of FY21 actuals) seen in the corresponding period in FY21. Contraction in revenue expenditure in FY22 so far appears larger if interest payments and subsidies are excluded from the headline revenue spending.



- The slower disbursal in pace of revenue spending in FY22 so far reflects the outsized impact of COVID relief work undertaken by the central government during the nationwide lockdown in Apr-May FY21. With the central government reinitiating some of the earlier programs under the Atma Nirbhar Bharat scheme from May-Jun 2021 onwards (along with DA/DR hikes to be paid from Jul-21 onwards), to provide relief from the second wave of COVID, revenue expenditure could further pick up momentum in the coming months.
- It is encouraging to see a relatively healthy capital expenditure growth of 27.8% YoY (31.0% of FY22 BE) during Apr-Aug FY22 vis-à-vis a contraction of 3.9% (31.6% of FY21 actuals) seen in the corresponding period in FY21. Continued thrust on capex provides comfort and would be important for supporting the economy at a time when private sentiment could remain subdued, at least in the near term. The key sectors where capex has increased during these months are road transport, highways, railways and housing.

### Outlook

The central government fiscal situation has an appearance of a strong performance backed by tax and non-tax revenue collections. However, as highlighted in the August edition of Acuite Macro Pulse, the need for additional spending has escalated post the second wave of COVID. As per our estimates, the combination of vaccination cost, COVID relief program, hike in DA/DR allowance, and higher fertilizer subsidy outgo would entail an additional spending of Rs 1.6-1.7 tn (0.7% of GDP) in FY22. In addition, there is a likelihood of topping up the FY22 MGNREGS budget of Rs 730 bn by an additional Rs 250 bn (0.1% of GDP) in the wake fast pace of fund utilization amid increased demand for rural employment.

While fiscal slippage risks have been stacking up, it would be premature to extrapolate those risks into headline deficit for the year.

- Basis available trend, government's tax as well as non-tax revenue outturn is likely to exceed full year budget estimates.
- The government recently unveiled the National Monetization Pipeline (NMP), developed by the NITI Aayog in consultation with various infrastructure line ministries. NMP estimates aggregate monetisation potential of Rs 6.0 tn through core assets of the central government, over FY22-25 (out of which Rs 882 bn is earmarked for the current financial year). Timely execution on this front could generate additional revenue for the government.

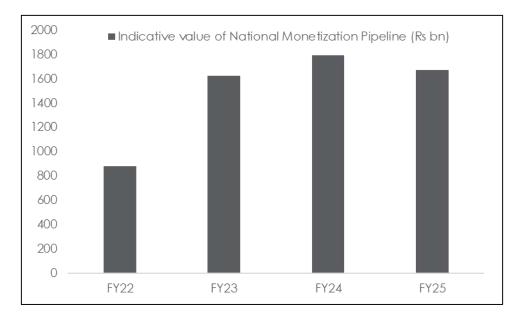
Having said so, we continue to emphasize that the realization of record high disinvestment target of Rs 1750 bn would be crucial in managing the overall fiscal risks.



Key Fiscal Variables (Cumulative Position as of Apr-Aug)				
	%of FY Actual/Target		% YoY	
	FY21	FY22	FY21	FY22
Revenue Receipt	22.7	44.4	-38.6	114.1
Net Tax	20.0	41.7	-29.7	126.7
Non-Tax	41.4	61.2	-56.6	72.6
Non-Debt Capital Receipts	11.6	8.1	-63.5	127.8
Total Receipts	22.3	40.9	-39.3	114.3
Revenue Expenditure	36.1	37.7	7.13	8.51
Capital Expenditure	31.6	31.0	-0.75	17.13
Total Expenditure	35.5	36.7	6.16	2.33
Fiscal Deficit	47.8	31.1	-	-

### Table1: FYTD comparison of key drivers of fiscal deficit

### Chart 1: NMP to generate additional sources of fiscal funding





### **Rates** Central banks anchoring expectations

### **KEY TAKEAWAYS**

- India's 10Y g-sec yield reversed the increasing trend seen over the previous 3-months after peaking out at 6.21% in end Aug-21 and drifting lower towards 6.16%, close to our Sep-21 forecast of 6.15%.
- While relief from concerns over additional borrowing and RBI's aggressive absorption of supply continued to support bonds, downside surprises in CPI inflation and anchoring of global market sentiment by the Fed chief on monetary policy normalization in the US, seems to have provided additional comfort.
- However, the bond yields have firmed up again recently amidst spike in global crude oil prices and RBI refraining from announcing additional G-SAP given the existing liquidity glut.
- While we stick to our assumption of normalization of the LAF corridor width via hike in reverse reportate in Dec-21, the likelihood of the postponement onto next quarter is on the rise given RBI's more gradual approach towards policy normalization, normalizing policy corridor from Dec-21 onwards via upward adjustment in reverse reportate towards the end of FY22.
- We continue to stick to our 10Y g-sec yield forecast of 6.50% by Mar-22 while acknowledging some downside risk amidst undershooting of inflation and possibility of India getting into global bond indices in CY22.



India's 10Y g-sec yield reversed the increasing trend seen over the previous 3-months after peaking out at 6.21% in end Aug-21. Yields have softened in the Sep-21, with the 10Y benchmark trading around 6.16%, close to our forecast of 6.15%.

### Easing of anxiety, short lived?

The g-sec auctions saw varied magnitudes of devolvement on primary dealers in each month between Jan-Jul 2021. However, Aug-21 marked the first month of smooth sailing of weekly g-sec auctions, without any instance of devolvement – this trend continued into the month of Sep-21. During September several factors came together to form a favorable setting for the bond market:

- As per the H2 FY22 borrowing calendar, the gross and net borrowing stands at Rs 5.03 tn (vs Rs 6.04 tn in H2 FY21 and Rs 3.78 tn (vs Rs 4.52 tn in H2 FY21) respectively. While there were no surprises on the market borrowing component, the subsumption of Rs 840 bn GST compensation loan (expected to be provided to states in H2 within the residual market borrowing amount provided comfort to bond market participants.
- CPI inflation stayed within RBI's target band in Jul-Aug 2021 after remaining above the policy tolerance threshold over May-Jun 2021. In addition, compared to market consensus expectations, CPI inflation surprised on the downside for three consecutive months.
- RBI's participation in the g-sec market via partial supply absorption through OMOs (auction based as well as outright) continues at a brisk pace. The central bank absorbed 51.8% of the net g-sec supply between Apr-Aug FY22 compared to the absorption of 24.4% of net g-sec supply in the corresponding period in FY21.
- Last, but not the least, is the anchoring of market sentiment by the US Fed Chair Powell at the much-awaited Jackson Hole symposium towards end Aug-21. Although few FOMC members over Jul-Aug 2021 had indicated their preference for an early taper from Oct-21 onwards, the Fed chief just hinted that taper could begin before the year end while balancing signals from economic data and the spread of the Delta variant. He emphasized that while "substantial further progress" has been made on inflation, there is "much ground to cover to reach maximum employment". He further noted that an "ill-timed policy move unnecessarily slows hiring and other economic activity and pushes inflation lower than desired". In an environment of "substantial" labor market slack this could be "particularly harmful". Further, Powell also made it a point to delineate the anticipated QE tapering from the eventual policy rate hike by explicitly stating that "the timing and pace of the coming reduction in asset purchases will not be intended to carry a direct signal regarding the timing of interest rate liftoff".

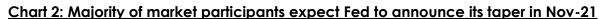


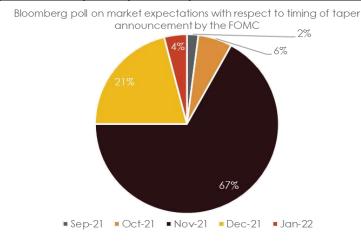


#### Chart 1: CPI inflation has posted three consecutive downward surprise

 With this balanced assessment and guidance, there is now a likelihood that the Fed will commence on the tapering path from Dec-21 onwards. Since this is later than what some of the hawkish FOMC members would have preferred, markets took this as a reassuring signal, manifested in the risk-on sentiment in most asset classes. As far as we are concerned, taper from Dec-21 would be marginally ahead of our expectations (of Q1 2022). Nevertheless, this further strengthens our belief that the beginning of tapering by the US Fed could coincide with gradual normalization in monetary policy by EM central banks, including the RBI.

However, the euphoria proved to be ephemeral with 10-year yields in the month of Oct-21 so far trailing at nearly one and a half year high of 6.31% on the back of domestic inflation fears driven by the recent spike in commodity prices and RBI refraining from announcing additional G-SAP in its Oct-21 policy review given the current liquidity glut.







### Outlook

In a recent interview, the RBI Governor stated that the projected size of the economy in FY22 "would just about be exceeding the pre-pandemic FY20 level. Given that growth is still fragile, the highest priority needs to be given to it at this juncture. We need to be very watchful and cautious before doing anything on the monetary policy front. Further, the RBI Deputy Governor, in-charge of monetary policy department, provided further clarity with respect to the inflation tolerance thought process. He stated that "taking into account the outlook on growth and inflation and keeping in mind the inherent output costs of disinflation, it is pragmatic to envisage a glidepath along which the MPC can steer the path of inflation into the future...the envisaged glidepath should take inflation down to 5.7% or lower in FY22, to below 5% in FY23 and closer to the target of 4% by FY24".

In line with their market commentaries, In line with our expectations, the RBI maintained status quo on the policy rates in Oct-21, while reiterating its accommodative stance. With an aim to gradually moderate the current surplus liquidity of over Rs 9 Lakh Cr, RBI has embarked on the path of a gradual normalization by enhancing the size of fortnightly VRRR (Variable Rate Reverse Repo) from current Rs 4 Lakh Cr to Rs 6 Lakh Cr by end of Dec-21. Depending upon the evolving liquidity backdrop, RBI has also hinted at increasing the tenor of VRRR from current 14-days to 28-days, in order to further calibrate the liquidity levels. Given the liquidity overhang and lower borrowing requirement from the government, the MPC has additionally, abstained from announcing any further G-SAP (government security acquisition programme) at the current juncture. Essentially, the central bank has outlined a broad plan to reduce the surplus system liquidity from the current high levels to around Rs 2-3 Lakh Cr by the end of the current quarter.

While the RBI has maintained that the measures undertaken for rebalancing liquidity shouldn't be construed as a reversal of the accommodative policy stance, we believe that the measures are, in effect a precursor to a formal policy normalization process. However, such a process may take more time than expected given the approach of "gradualism" taken by RBI. While we stick to our assumption of normalization of the LAF corridor width via hike in reverse repo rate in Dec-21, the likelihood of the postponement onto next quarter is on the rise given RBI's more gradual approach towards policy normalization, normalizing policy corridor from Dec-21 onwards via upward adjustment in reverse repo rate towards the end of FY22.

This could provide some hardening in the 10Y g-sec yield towards 6.50% by Mar-22. However, the possibility of some downside risk cannot be ruled out now amidst clarity on the duration of inflation tolerance. Further, few market participants have started expecting India's inclusion in the global bond indices in CY22. We believe the upcoming FY23 Union Budget in Feb-22 would shed some light on the policy aspects and preparedness for the same.



### **Rupee** Uneasy calm continues

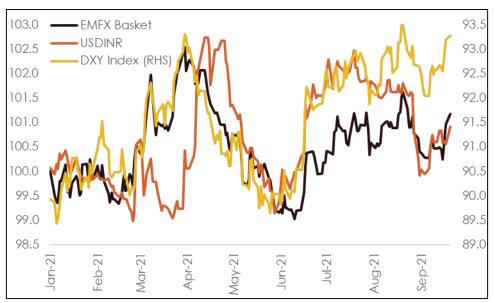
### **KEY TAKEAWAYS**

- After remaining stable for major part of Jul-Aug 2021, the Indian rupee made a sudden dash towards appreciation closer to end Aug-21.
- However, the move is not idiosyncratic, with INR trajectory closely tracking USD and key EM currencies.
- COVID uncertainty and US economic outperformance could continue to buoy USD.
- Credit market uncertainty emanating from China along with clarity on the pace of Fed's QE taper would be key near-term factors impacting USD.
- Domestically, the combination of gradual unlock and progress on vaccination would widen India's merchandise trade deficit.
- We continue to expect USDINR to move up towards 77.0 by Mar-22.
- While INR would face depreciation pressures on account of Fed's taper, the intensity is likely to be moderate vis-à-vis the 2013 episode on account of relatively better domestic macros and strong FX Reserve cover.



After remaining stable between 74.16-74.87 in the previous 8-weeks, the Indian rupee made a sudden dash towards appreciation closer to end Aug-21. Eventually, the INR closed at a 3-month high of 73.00 in end Aug-21, strengthening by 1.9% vis-à-vis the US dollar.

Over the last few weeks, the movement in INR has closely tracked the USD trajectory. After topping out at 93.57 in Aug-21, the DXY Index weakened to 92.04 in Sep-21 as market participants took comfort from Fed chief Powell's Jackson Hole speech, where he outlined his thoughts on QE taper and interest rate normalization in the US. The relatively balanced assessment (vis-à-vis few FOMC members who were keen to push for an earlier announcement on taper) and the delineation of taper decision in the near term with interest rate liftoff in the medium term, drove risk-on sentiment globally, thereby providing a conducive backdrop for strengthening of EM currencies, including INR.



### Chart 1: Recent INR move has been in tandem with USD and EMFX

Note: Currency values indexed to 100 on 1-Jan-21; EMFX basket comprises of currencies of top 10 EMs (excluding India) weighted by the size of their 2020 \$GDP

However, the weakening pressure on USD turned out to be short lived with the DXY Index climbing up to 94.2 levels currently from a low of 92.04 in early part of Sep-21. As highlighted in the Aug-21 edition of the Acuite Macro Pulse, the factors driving USD strength continue to persist:

- COVID related concerns on account of the Delta variant continue to stoke uncertainty with regards to the pace of global economic recovery. While incremental infections have eased from their recent peak, there is still some lingering uncertainty with respect to the same.
- With continuing support from exceptionally accommodative policy mix, the US economic recovery is powering ahead vis-à-vis its DM peers. The IMF in its World Economic Outlook (Jul-21) upgraded US GDP growth forecast for 2021 and 2022 by 60 bps and 140 bps to 7.0% and 4.9% respectively. This would make US

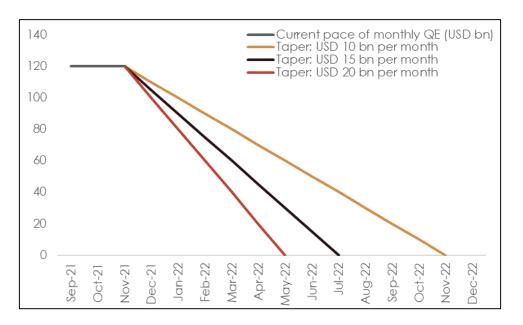


the strongest growth center among DMs over 2021 and 2022. Recall, the US economy surpassed its pre COVID levels in Q2 2021.

In addition, there are additional factors that could drive USD strength in the near term:

The near-term uncertainty with respect to Evergrande's prospects and the degree of policy intervention by China could keep risk aversion sentiment alive. We believe this would be USD positive via its safe haven appeal channel. Over the medium term, prospects of monetary policy normalization in the US vis-à-vis its close DM peers would continue to set the tone for the USD. The Fed chief Powell has already indicated the announcement of taper to happen before end 2021. While that has now been internalized (market consensus expecting an announcement in Nov-21 with commencement of taper from Dec-21), market participants would now focus on the duration/pace of taper. In our baseline case, beginning Dec-21, the Fed could taper its ongoing USD 120 bn per month QE by USD 15 bn per month, implying a conclusion of the current QE program by Jul-22. This will provide ample time for the FOMC to assess the possibility of interest rate normalization from 2023 onwards.

Tracking the strength of the greenback in the overseas market along with the dramatic rise in crude oil prices led the USDINR trajectory to reverse towards the end of Sep-21 with the currency having depreciated by 2.4% as compared to the 73.03 recorded during early Sep-21.



### Chart 2: Scenarios for pace of Fed's tapering of ongoing QE

### Outlook

With the recent depreciation in INR, we continue to stick to call of INR weakening towards 77.0 by Mar-22.

As highlighted earlier, in the near term, the ongoing gradual normalization of domestic economic activity post the second wave of COVID will be one of the most important



factors that would drive INR. With improvement in mobility indicators, demand for imports is seen to be picking up at a faster pace vis-à-vis exports. This would result in further widening of the merchandise trade deficit in the coming months (we highlighted that Aug-21 trade deficit is the widest in 4-months), as progress on vaccination coverage would aid economic recovery. As of Oct 7<sup>th th</sup>, India inoculated ~48% of its total population with at least one dose of COVID vaccine. Going forward, we expect around 75% of the total population to get the partial vaccination cover by Dec-21.

We continue to project FY22 current account deficit at USD 30 bn compared to a surplus of USD 24 bn in FY21. Even as current account balance would normalize, the accompanying balance of payments is likely to see a moderation in surplus from USD 87 bn in FY21 to USD 44 bn in FY22. While per se healthy, the relatively lower BoP surplus could potentially increase INR's sensitivity to global FX volatility. This will be critical as the fate of foreign portfolio flows could get determined by the Fed's policy stance on tapering its asset purchases.

Fed's taper could result in USD remaining strong, at least in the near to medium term, with adverse spillover on EMFX. As highlighted in previous Acuite Macro Pulse reports, we do expect INR to face depreciation pressures on account of the beginning of normalization of US monetary policy. However, the intensity is likely to be moderate vis-à-vis the 2013 episode on account of relatively better domestic macros and strong FX Reserve cover.



Chart 3: Despite import normalization, India's FX Reserve cover is strongest since FY05



# **Global Overview**

Recovery moving forward

### **KEY TAKEAWAYS**

- Global COVID-19 cases once again ebbed in Sep-21 after clocking a rising trend over preceding two months.
- Meanwhile vaccination campaign continues to remain strong at the global level, with nearly 38.6% of the global population fully vaccinated — but the distribution remains lopsided.
- Evidence shows that vaccines do remain effective at preventing hospitalisation and deaths. Leading US health officials have named COVID the 'pandemic of the unvaccinated'.
- Growth continues to remain strong in the US and EU, with UK seeing early signs of stalling amidst renewed restrictions on mobility and selfimposed social isolations.
- In China, post COVID rebound in economic activity has peaked with most indicators registering a faster than anticipated slowdown.
- Central banks continue to anchor expectations, with Fed Chairman alluding to start of taper before the end of the year; ECB reducing its pace of purchases under PEPP and recent inflation print complicating BoE's assessment.



### Overview

Global Covid-19 cases once again ebbed in Sep-21 after clocking a rising trend over the preceding two months. After peaking in early Sep-21, daily confirmed cases have declined by over 33% so far (up to 5<sup>th</sup> Oct-21). This trend has been shared by all regions with the exception of Africa, which has recorded a rise in daily confirmed cases by more than 100%. Meanwhile vaccination campaign continues to remain strong at the global level, with nearly 6.4 bn doses being administered up to 5<sup>th</sup> Oct-21. Enough doses have now been administered to fully vaccinate 38.7% of the global population-but the distribution remains lopsided. Countries and regions with the highest incomes are getting vaccinated 20 times faster than those with the lowest incomes. As per Bloomberg estimates, globally the latest vaccination rate is 33.1 mn doses per day, on average. At this pace, it will take another 6 months to cover 75% of the population. The outbreak in cases owing to the Delta variant notwithstanding, in several countries that had reached high levels of vaccination (such as Israel, US etc.), it is being observed that vaccines do remain effective at preventing hospitalisation and deaths. Unvaccinated people remain more at risk, with leading US health officials calling it the 'pandemic of the unvaccinated'.

#### Daily COVID cases in the world (7dma) 9,00,000 16000 Daily COVID deaths in the world (7dma, RHS) 8,00,000 14000 7,00,000 12000 6,00,000 10000 5,00,000 8000 4,00,000 6000 3,00,000 4000 2,00,000 2000 1,00,000 0 0 Jan-20 Apr-20 May-20 Jun-20 Feb-20 Mar-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Feb-21 Aug-21 Sep-21 Jan-21 Mar-21 Apr-21 Jun-21 Jul-21 Aay-21

### Chart 1: Global COVID cases ebb in Sep-21

### US

The US economy roared back through the spring, with Q1-2021 annualised GDP growth coming in at 6.3% and this further increased to 6.7% in Q2-2021. This lofty growth erased the economic downturn of 2020, with annualised GDP at an absolute level of USD 22.74 th in the second quarter of the calendar year, well surpassing not only the level in Q2-2020 of USD 19.5 th but also the pre-pandemic level of USD 21.29 th in Q3-2019. As per IMF, the economy is set to achieve a growth rate of 7.0% in 2021. Having said so, outlook for second half of the year looks on a somewhat weaker footing, as the favourable base wanes. This along with factors such as vaccination drive running out of steam, spread of delta variant creating short term disturbances and business surveys looking a tad less optimistic are expected to weigh. Nevertheless, anticipated growth will remain strong enough, sufficient to create jobs and to move unemployment rate towards pre-pandemic levels.



On data front, most incremental inflows surprised on the downside. Economy added a net gain in non-farm payrolls of 194K in Sep-21, much below market consensus of 500k. This marked the slowest pace of increase since Jan-21 and followed two months of >900k additions. The only silver lining was that the unemployment rate eased to 4.8% - the lowest in post-pandemic phase. Total industrial production rose 0.4%MoM in Aug-21 compared to 0.8% in Jul-21, pulled down by shutdowns caused by hurricane Ida. Unexpectedly, retail sales rose in Aug-21 by 0.7%MoM defying expectations of a drop, to underscore the resilience in consumer demand recovery.

Given the continued pressure on supply chains and commodity prices remaining elevated, inflation currently at above 5.0%, is unlikely to register a strong pullback in the near future, notwithstanding the moderation seen in Aug-21 print. The latest CPI inflation came in at 5.3% compared to 5.4% in Jul-21, along with core CPI easing to 4.0% from 4.3%. CPI inflation could remain elevated until later this year or early 2022. 55% of the US population has been fully vaccinated (as of 5<sup>th</sup> Oct-21), with supplies known to be adequate. The vaccination campaign, however, has slowed of late with US having been overtaken by several countries especially those in the Eurozone. As per Bloomberg, at the current vaccination rate of 7.8 mn doses per day on average; US will likely take another 4 months to cover 75% of the population.

In the much-awaited Jackson Hole symposium, chairman Powell signalled that the Fed is likely to start tapering before the end of the year. As per Powell, US economy is at a point where it does not need as much policy support as had been the case in the wake of the pandemic, though the pace at which asset purchases will be reduced remains to be decided. The Fed delineated a plan decoupling tapering and rate increases, which has comforted market participants (for more details, see rates section).

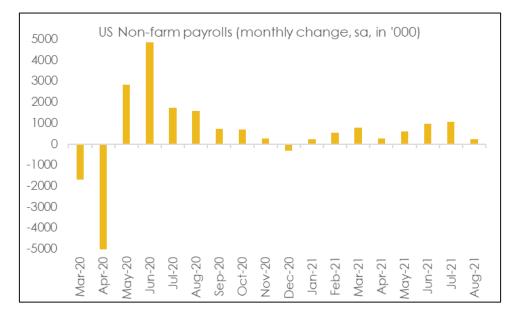


Chart 2: US Non-farm payroll additions exceptionally weak in Sep-21

### EUROZONE

The Eurozone economy grew by more than predicted in Q2-21, registering a growth of 2.2%QoQ and 14.3% annualised growth; led by a sharp rebound in consumer



spending after two quarters of decline during pandemic lockdown. Despite the rebound, GDP in absolute terms still remains 2.5% below its pre-COVID peaks. Looking ahead, growth is expected to maintain the pace in Q3-21 as per high frequency indicators. For the year as a whole, it would remain well-above trend (IMF growth forecast for 2021 at 4.6%), supported by sizeable monetary and fiscal stimulus, the release of accumulated forced savings and investments.

In its latest meeting, the European Central Bank (ECB) kept its monetary policy unchanged but opted to slow down the pace of net asset purchases under its Pandemic Emergency Purchase Program (PEPP). "Based on a joint assessment of financing conditions and the inflation outlook, the Governing Council judges that favourable financing conditions can be maintained with a moderately lower pace of net asset purchases under the PEPP than in the previous two quarters," the ECB said in the accompanying statement. On the back of a stronger second quarter growth recovery, ECB also revised upwards GDP growth for this year to 5.0%, from 4.6% in Jun-21. For 2022 and 2023, the ECB expects eurozone GDP growth to come in at 4.6% and 2.1%. Regarding inflation, the ECB expects headline inflation to come in at 2.2% in 2021, 1.7% in 2022 and 1.5% in 2023, from 1.9%, 1.5% and 1.4%, respectively.

Amidst firming growth, the health situation remains a key downside risk for the region. ECB Chief did admit to future recovery prospects remaining dependent on the continued success of Europe's vaccination programme and the trajectory of infections across the world. So far, the region has fully vaccinated 62.7% of its population – higher than US (54.6%) and only marginally below UK's (66.5%).

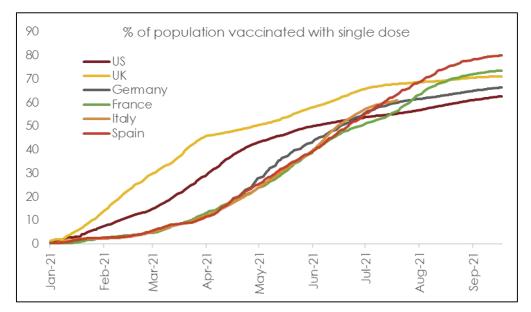


Chart 3: Key EZ nations have surpassed US in the vaccination race

### UK

After rebounding by a strong 4.8% in Q2-21, UK's economy stalled in the month of Jul-21, as GDP growth clocked a meagre growth of 0.1% compared to 1.0% in the previous month. This reflects the impact of COVID-19 delta cases spreading rapidly, leading to large number of workers being ordered to stay at home under self-isolation rules. While restrictions have been eased since mid Aug-21, the impact is expected to



linger on for a bit longer, as validated by retail sales, that slipped for the fourth consecutive month in Aug-21. Among the sectors, growth in services was flat. Industrial output grew by 1.2%, boosted by the return to production of an oil field, but manufacturing was flat. Construction output fell by 1.6% sequentially, amidst labour shortages. However, it appears that the third wave of infections that hit the UK economy has had a smaller economic impact.

On inflation front, prices surged more than expected by 3.2% in Aug-21 on an annualised basis compared to 2.0% in Jul-21, as global supply shortages and rising salaries drove price pressures. This marks the strongest MoM pace of rise on record, prompting investors to anticipate a sharper increase in interest rates by the Bank of England (BoE). This is because the surge in prices will undermine the central bank's view that "price rises are manageable and temporary".

From central bank's perspective, current inflation is definitely a surprise given its own expectations set out for a level of 4.0% by end of the year. But the debate on how quickly prices would cool down, especially in 2022 is a topic that is likely to find BoE's MPC to be divided in opinion. But nevertheless, the strength in labour market with payrolls back at pre-pandemic levels, and the recent inflation reading are likely to alter the central bank's thought process. Markets will keenly watch incoming data in the run up to the next MPC in early Nov-21.

### CHINA

China's post COVID rebound in economic activity appears to have peaked at the start of 2021, with most indicators registering a slowdown and a return to normal growth levels. The slowdown has been faster than anticipated, and fairly widespread across indicators and sectors. To put this in perspective, China's industrial output rose 5.3%YoY in Aug-21 (vs. 6.4% in Jul-21) to mark the weakest pace of increase since Jul-20, coming in lower than consensus growth of 5.8%. Vehicle sales slid in Jul-21 for the third consecutive month, in part owing to the global shortage in semi-conductor chips. Growth in retail sales also took a sharp hit, rising at the slowest pace in last 1 year by 2.5%YoY in Aug-21 compared to a forecast of 7.0% rise.

The broad slowdown has been driven by a confluence of several factors, including: the prudent tightening in fiscal policy and domestic credit conditions, the toughening of regulations in sectors such as real estate and tech, supply-chain constraints in the industry, slower export growth as well as new restrictions imposed to deal with the resurgence of the pandemic. Social restrictions in several provinces have hit services sector yet again, including demand for transport and tourism. The non-manufacturing Purchasing Managers' Index (PMI), a key gauge of activity in China's services and construction sectors contracted to 47.5 in Aug-21 for the first time since the start of the pandemic, compared to 53.3 in Jul-21. Reflecting these evolving dynamics, Fitch Ratings recently downgraded their China's 2021 growth forecast to 8.1% from 8.4% as the property slowdown weighs on domestic demand.

In the near term, the vaccine roll-out should continue to accelerate and the authorities are likely to give greater support to domestic demand through monetary and fiscal measures, while continuing regulatory tightening moves. This should help to cap the downside to growth moderation.



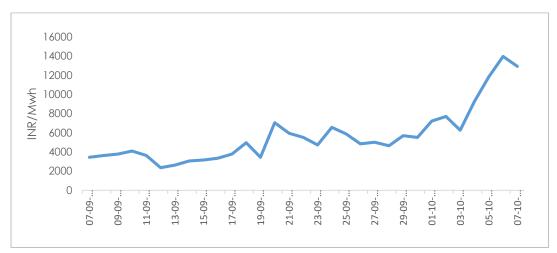
# Coal Shortages and its Implications

### Likely to hit industrial output, supply from captive mines may provide relief

As India faces an acute shortage of coal, the initial attention has been on production halt at various thermal power units and deepens the risk of power outage throughout. However, the crisis may not stop at power cuts and may lead to higher prices across various products such as steel, plastic and synthetic fibers. While coal shortages are not uncommon around the monsoon season, the impact is further exacerbated by the higher prices of coal globally and the logistical challenges. In our opinion, the supply challenges in coal is difficult to resolve immediately as production ramp-up at coal fields is a slow process and therefore the repercussions of this current shortage may extend to various industries over the near term. The recent amendment to the Captive Coal Mine rules however, may help to enhance coal supplies in the domestic market and offset a part of the shortage.

### Immediate impact on power prices

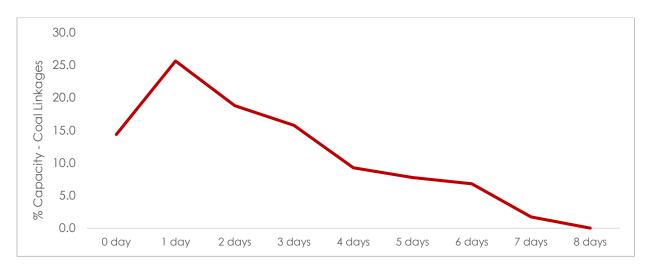
The daily prices per unit on IEX have seen a sharp increase over the last month (refer to the chart below). The peak hour pricing on IEX is as high as Rs.13,949 per Mwh, while the average remains at around Rs.9328 per Mwh. Clearly, a pickup in power demand from the industrial, household and the agriculture sector due to rebound of economic post the second wave of Covid-19 has been a key factor in the spurt in merchant power prices.



### Chart 1: IEX Prices: Sep-Oct'21



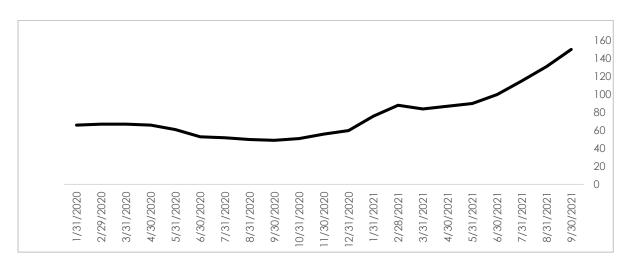
While the wholesale power rates on exchanges continues to remain high, the acute shortage in coal has resulted in the halt of generation or very low PLF at various power plants. The daily coal report published by National Power Portal on October 5, 2021 estimates that as high as 83.7% of the linkage-based power capacity (in Mwh) in the country has inventory of less than 4 days and about 14% power capacity actually has no coal inventory. Since this estimate assumes that the power plant is operating at a PLF of 55% and the consumption is measured as an average of 7 days actual consumption, the actual shortage of coal inventory is likely to vary for individual power units.



### Chart 2: Days of inventory at linkage based power plants

In our opinion, it will take some time to improve the inventory position since the intransit time for Rail Coal is upwards of 15 days. Therefore, the state utilities may have to procure power from other sources in the near term to maintain stability in the power supply levels.

### Chart 3: Indonesia Coal Prices: US \$ per Ton



The other sources that the distribution companies can tap may include gas-based power generation units and power plants using imported coal but the international prices of LNG and coal are on a rise rendering the import of LNG and coal for power



production unviable. The current JKM LNG prices as on October 6, 2021 stands at \$56 per MMBTU propelled by supply chain constraints and production concerns at Russia Nord 2 stream as well as higher spot demands from China. Imported Coal prices at \$150 per MT are already unviable leaving limited scope for imported coal-based power units to bridge the gap of current power shortage.

### Will large scale power cuts become a reality?

We expect a moderate shortage of power supply in the near term with increasing household demand in the upcoming festive season as the dependence on thermal coal based power plants remain high in India and the coal inventory position is unlikely to improve within a few days. However, a recent amendment in captive coal mining rules by the Government of India may help to improve coal supply over the next few weeks. The permission given to captive coal mines to sell up to 50% of their coal output in the open market after catering to internal demand, should help to release additional supplies of coal in the market.

Nevertheless, we foresee an impact of the shortage of coal beyond the power sector. Any shortfall in coal supply to industries such as cement and aluminium may have an implication on their output levels apart from increasing the raw material costs. Any lack of power availability or higher merchant power tariffs will particularly hit the medium and small scale industries who had plans to ramp up their production in sync with the recovery in domestic and export demand.

### About Acuité Ratings & Research Limited:

Acuité Ratings & Research Limited is a full-service Credit Rating Agency registered with the Securities and Exchange Board of India (SEBI). The company received RBI Accreditation as an External Credit Assessment Institution (ECAI), for Bank Loan Ratings under BASEL-II norms in the year 2012. Since then, it has assigned more than 8,850 credit ratings to various securities, debt instruments and bank facilities of entities spread across the country and across a wide cross section of industries. It has its Registered and Head Office in Kanjurmarg, Mumbai.

### Media Contacts:

Roshni Rohira	Neelam Naik
Ph: + 91-9769383310	Ph: + 91-9619699906
<u>roshnirohira@eminenceonline.in</u>	neelam@eminenceonline.in

### Investor Outreach:

### **Analytical Contact:**

Rituparna Roy	Suman Chowdhury
Deputy Vice President	Chief Analytical Officer
Ph: + 91-7506948108	Ph: + 91-9930831560
<u>rituparna.roy@acuite.in</u>	<u>suman.chowdhury@acuite.in</u>

**Disclaimer**: This report is based on the data and information (data) obtained by Acuité from sources it considers reliable. Although reasonable care has been taken to verify the data, Acuité makes no representation or warranty, expressed or implied with respect to the accuracy, adequacy or completeness of any Data relied upon. Acuité is not responsible for any errors or omissions or for the results obtained from the use of the report and especially states that it has no financial liability, whatsoever, for any direct, indirect or consequential loss of any kind arising from the use of its reports. Any statement contained in this report should not be treated as a recommendation or endorsement or opinion or a substitute for reader's independent assessment.