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23 June 2021

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Infrastructure & Project Finance – India Second wave of COVID-19 will have a varied impact on infrastructure companies

Infrastructure sectors in India will be impacted to different degrees by the second wave of COVID-19 infections in the country. Regional lockdowns to control rising infections have led to lower electricity demand and lower traffic volumes for transportation companies. However, rated power companies are insulated from significant demand risk and can tolerate a moderate extension of the cash conversion cycle. Airports and toll roads will continue to be the most impacted from the lockdowns and wider movement restrictions. Rated ports are well positioned to handle any medium-term slowdown in cargo volumes given their dominant market share and the material buffer in their financial profiles.

- Further regional lockdowns would increase uncertainty about the economic recovery. During the second wave of COVID-19 in India, many states have resorted to lockdowns that are less stringent than last year to decelerate the recent high infection rates. While infection rates have been declining and restrictions relaxed in many regions, vaccination rates remain low. As a result, the risk of subsequent waves that could require further lockdowns cannot be ruled out. Thus, we expect a more gradual recovery in economic growth for fiscal year ending March 2022 (fiscal 2022).
- Power companies can manage current demand contraction and elongated cash conversion cycle. The business models of rated Indian power companies allow for manageable demand risk, although we expect the cash conversion cycle to remain stretched given their high dependence on state-owned distribution companies, which would be under increased financial stress in a lower demand scenario. However, our rated power companies' portfolio has good access to liquidity and/or have strong sponsors to provide support in case of sustained demand destruction and any subsequent cash squeeze.

Airports and toll roads will face increased difficulties following the second wave; liquidity buffers will be key for their credit quality. The recovery of domestic traffic at Indian airports will get further pushed back by the surge in new infections and regional lockdowns. International traffic will take even longer to recover given the closure of borders. Lower cash revenue as a result of COVID-19 could put pressure on both our rated airports' debt-funded expansion projects, with the possibility of additional debt being required to complete the projects. However, recent capital raising by both airports has provided some liquidity buffers. Toll road operators would be adversely impacted by protracted movement restrictions and prolonged lockdowns will increase pressure on their credit quality.

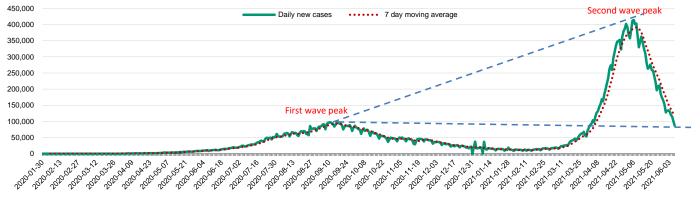
Further regional lockdowns would increase uncertainty about India's economic recovery

Many states in India have reimposed regional lockdowns and curfews during the second wave of COVID-19 infections as daily new cases increased sharply in May 2021, overwhelming the health infrastructure. The lockdowns, along with behavioral changes of the public are curbing economic activity and mobility, which will delay India's economic recovery.

Lockdowns and tightened restrictions have focused on the most severely impacted states and districts, with 10 states and union territories ¹ continue to account for over 75% of active cases. Maharashtra, Karnataka, Kerala, Uttar Pradesh, Tamil Nadu, Delhi, Rajasthan and West Bengal have accounted for most new cases and together contributed almost 60% of India's GDP over the four fiscal years through March 2020.

The second wave of COVID-19, which peaked in May 2021, was significantly stronger than the first wave (Exhibit 1), with daily new cases peaking at around 4x the peak of the first wave. While the second wave has receded to some extent, there are currently around 100,000 daily new cases, which is similar to the first peak.

Exhibit 1 Daily infections have receded since the first week of June Daily COVID-19 cases reported by India



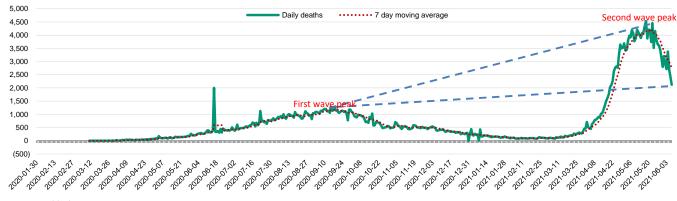
Source: ourworldindata.org

While infection rates have been declining and restrictions relaxed in many regions, vaccination rates remain low. As a result, the risk of subsequent waves that could require further, wider and deeper lockdowns cannot be ruled out. At the same time, the daily mortality rate remains very high and is around 2.0x-2.3x the peak of the first wave (Exhibit 2).

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Exhibit 2

Daily mortality rate from COVID-19 in the first week of June was 2x the peak of the first wave Daily deaths reported by India because of COVID-19



Source: ourworldindata.org

Exhibit 3

The government's ability to limit the spread of the virus and materially increase the rate of vaccinations will have a direct impact on the trajectory of economic recovery. However, as of the first week of June, only around 15% of the country's population had received at least one dose of the vaccine (Exhibit 3).

Vaccination rates have picked up over the last few weeks Status of COVID-19 vaccinations in India 250,000,000 total vaccinations people vaccinated people_fully_vaccinated 200.000.000 150.000.000 100.000.000 50,000,000 0 2021.01-23 2021.03.07 2021.01.16 2022.02.06 2021.02.13 2021.02:21 2021.02.28 2021.04.28 2021.01.30 2021.03-14 2021.0328 2021.04.18 2021.05.05 2027.0512 2021.0519 2021-06-03 2021-0610 2021.0321 2021.04.04 2021.04.11 2021.0521

Source: ourworldindata.org

The impact of regional lockdowns has been less severe than the full national lockdown imposed in April 2020. Labor availability for infrastructure companies has not been materially impacted so far. We expect a more gradual recovery in economic growth for fiscal year ending March 2022 (fiscal 2022).

However, if infections fail to decline to more manageable levels, lockdowns may be reimposed. Further lockdowns, particularly at a national level, could severely disrupt the country, compared with the more contained state-level restrictions put in place during May and June of 2021. A national lockdown scenario would restrict personal mobility on a large scale, reduce demand for goods and services, as well as lead to supply-chain disruptions and aggravate labor shortages. Infrastructure issuers in transportation sectors would be more impacted than those in the power sector in such a scenario (Exhibit 4).

Exhibit 4

Exhibit 5

Impact on infrastructure sectors from COVID-19 resurgence

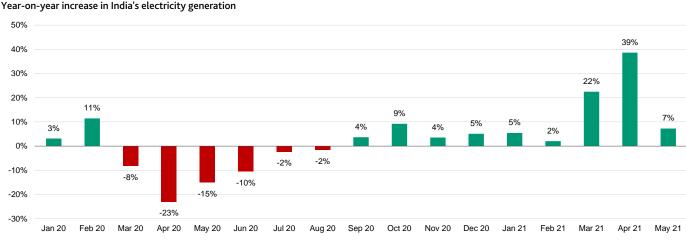
	Regulated utilities/ networks	Renewable companies/ projects	Ports	Airports	Toll roads
Movement restrictions	•	•	•	•	•
Labor shortage			•	•	•
Slowdown in commercial and industrial activity			•	•	•
Change in consumer behavior			•	•	•
Neutral					
Colors indicates risk level.					

Source: Moody's Investors Service

Power companies can manage current demand contraction and elongated cash conversion cycle

The slowdown in economic activity and uncertain path of economic recovery have negative implications for electricity demand and the liquidity of power companies. However, the business models of rated Indian power companies allow for manageable demand risk and most of them have good access to liquidity.

During the period of national lockdown in April-May 2020, electricity generation declined by 15%-23% on a year-on-year basis. In May 2021, when most states imposed some sort of regional lockdown, electricity generation grew by 7% year-on-year (Exhibit 5), indicating the severity of the regional lockdowns was lower than last year's national lockdown. However, compared to May 2019, electricity generation in May 2021 fell 8%, which is a reflection of the slowdown in economic activity.



Electricity generation grew by 7% in May 2021

Sources: Central Electricity Authority, Moody's Investors Service

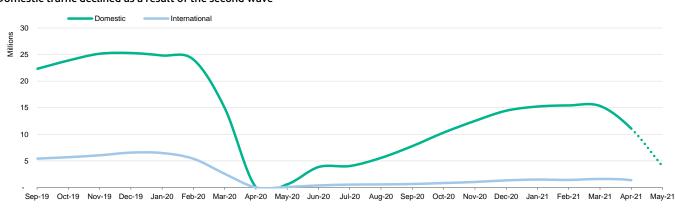
Regulated utilities and networks like <u>NTPC Limited</u> (Baa3 negative), <u>Power Grid Corporation of India Limited</u> (Baa3 negative) and <u>Adani</u> <u>Transmission Limited</u> (Baa3 negative) have availability linked revenue models, which protects them from lower demand risk. Similarly, renewable power companies like <u>Greenko Energy Holdings</u> (Ba1 stable), <u>JSW Hydro Energy Limited</u> ((P)Ba1 stable) and <u>Renew Power</u> <u>Private Limited</u> (Ba2 stable) have preferred dispatch status in terms of electricity supply, relative to conventional sources of power, which protects them in lower demand scenario.

We expect the cash conversion cycle for power companies to remain stretched given their high dependence on state-owned distribution companies, which would be under financial stress if the lower demand scenario were to continue. Most of these distribution companies are dependent on subsidies from state governments, which are likely to delay such payments as we expect social and healthcare spending to increase amid coronavirus disruptions. However, our rated power companies' portfolio has good access to liquidity and/or have strong sponsors to lean on in case of any cash squeeze. The financial performance of the power companies remained more or less unaffected by the 40 days national lockdown in fiscal 2021.

Airports and toll roads will face increased difficulties following second wave; liquidity buffers will be the key to credit quality

The recovery of Indian airports will get further pushed back following the recent surge in new infections and regional lockdowns. International traffic will take even longer to recover given the closure of borders. By mid-May, daily domestic passenger traffic fell to just around 25% of the level recorded in February before the second wave (Exhibit 6). Prior to the second wave, domestic passenger traffic had gradually recovered to around 60% of the December 2019 level.

Exhibit 6 Domestic traffic declined as a result of the second wave



May domestic traffic estimated based on daily traffic data published by the Ministry of Civil Aviation. Sources: Airports Authority of India, Ministry of Civil Aviation, Moody's Investors Service

Even though domestic and international traffic should rise in the second half of fiscal 2022, on the back of easing infection rate and movement restrictions, the disruption caused by the second wave will likely lead to lower traffic and revenue in fiscal 2022, and potentially fiscal 2023, relative to our earlier forecasts.

Both rated airports – <u>Delhi International Airport Limited</u> (DIAL, B1 negative) and <u>GMR Hyderabad International Airport Limited</u> (HIAL, B2 negative) – are also undergoing sizable debt funded expansion plans,

We downgraded DIAL's rating on 11 June 2021, reflecting our view that the airport will likely need additional debt to complete its expansion because of lower operating cash flow, and DIAL's limited capacity to introduce countermeasures such as a significant deferral of its capital spending program. This, in turn, will likely prolong the time needed before its credit metrics can see a sustained recovery.

By comparison, the impact of the second wave will be more manageable to HIAL, because of the likely higher tariffs expected in our base case scenario, upon completion of its regulatory tariff decision.

However, both airports completed debt issuances in 2021 before the onset of the second wave, which should give them sufficient liquidity to manage their operating requirements and planned capital spending for at least the remainder of fiscal 2022.

A key driver for a recovery for airports would be an increase in vaccinations as outlined by the government, which would help reduce concerns over potential infections, and the risk of further waves and reimposition of restrictions.

Toll road operators, including <u>IRB Infrastructure Developers Limited</u> (Ba1 stable), will continue to be adversely impacted by a prolonged or reimposition of movement restrictions or lockdown would increase pressure on their credit quality.

The performance of rated ports — <u>Adani Ports and Special Economic Zone Limited</u> (Baa3 negative) and <u>Adani International Container</u> <u>Terminal Private Limited</u> (Baa3 negative) — was very strong in fiscal 2021 despite the economic contraction from COVID-19 as they significantly improved their respective market shares. The operations of both ports have remained mostly unaffected by the regional lockdowns because the movement of goods across the country has remained normal and both ports also have sufficient buffer in their financial profiles to absorb any temporary disruptions.

Moody's related publications

Renewable energy – India: Rated renewable energy companies' credit quality can tolerate generation shortfalls

Infrastructure & Project Finance – Asia: Growth of Asian infrastructure companies will strengthen in 2021 but pace will vary

Moody's downgrades Delhi International Airport ratings to B1; outlook negative

Adani Ports and Special Economic Zone Limited: Update to credit analysis

Endnotes

1 union territories are federal territories governed by the Union Government of India

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