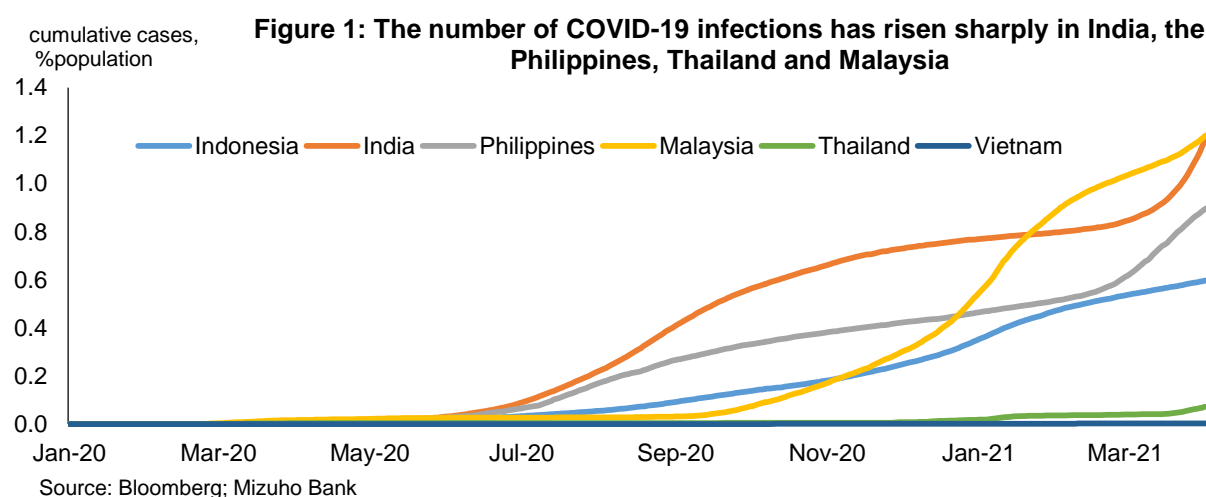


Renewed Virus Outbreaks Threaten Growth Recovery Amidst Slow Inoculations

In a nutshell: The resurgence in COVID-19 infections in India and the ASEAN-6 countries has been more pronounced in recent weeks. First and foremost, the loss of lives and livelihood during this resurgence has been tragic. In order to restrict the spread of infection, governments' in these countries have had to tighten social restrictions. Although these restrictions are not severe as they were in March-May 2020, they will hurt the economic recovery. A lot of hope is riding on the vaccination drive in these countries to stem the spread of COVID-19 but so far, the pace of vaccinations has been slow and in the case of India, unable to keep up with the rapid outbreak. A big reason for the slow progress has been the availability of vaccine doses as manufacturers struggle to keep pace with demand amongst other factors. Given the current state of play, we have significantly revised down our 2021 GDP growth forecasts for India, the Philippines and Thailand. Although we have maintained our growth forecasts for Vietnam, Malaysia, Indonesia and Singapore, the situation is constantly evolving and will be reassessed as appropriate.

Resurgent COVID-19 infections leading to a tightening of social restrictions

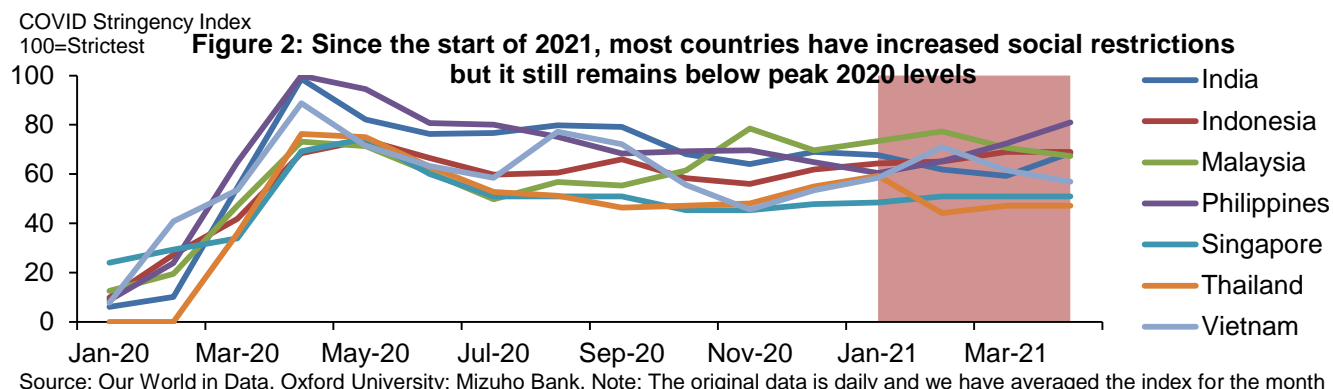
That 2021 would usher in a distinct turnaround in the pandemic situation for the ASEAN-6 (Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam) countries and India is now confirmed to be a lofty hope. With the exception of Singapore, the other countries under discussion have had to deal with a resurgence of COVID-19 infections since the start of the year. The rise in infections in India, Malaysia, Thailand and the Philippines has been particularly acute (Figure 1).



Most countries, again with the exception of Singapore, have had to re-impose some kind of social restrictions. Most countries have tried to avoid prolonged and widespread lockdowns, resorting instead to targeted restrictions such as reduced restaurant capacity, limited public transportation capacity, online schooling, reduced workplace capacity and curfews on night time activities. Despite the authorities' aversion to broad-based lockdowns, which left behind deep scars in 2020, it had to be resorted to in the cases of Malaysia (in January), the Philippines (in early April) and in the bigger cities of India (in late April), to rein in the spread of COVID-19 infections and its new highly contagious strains.

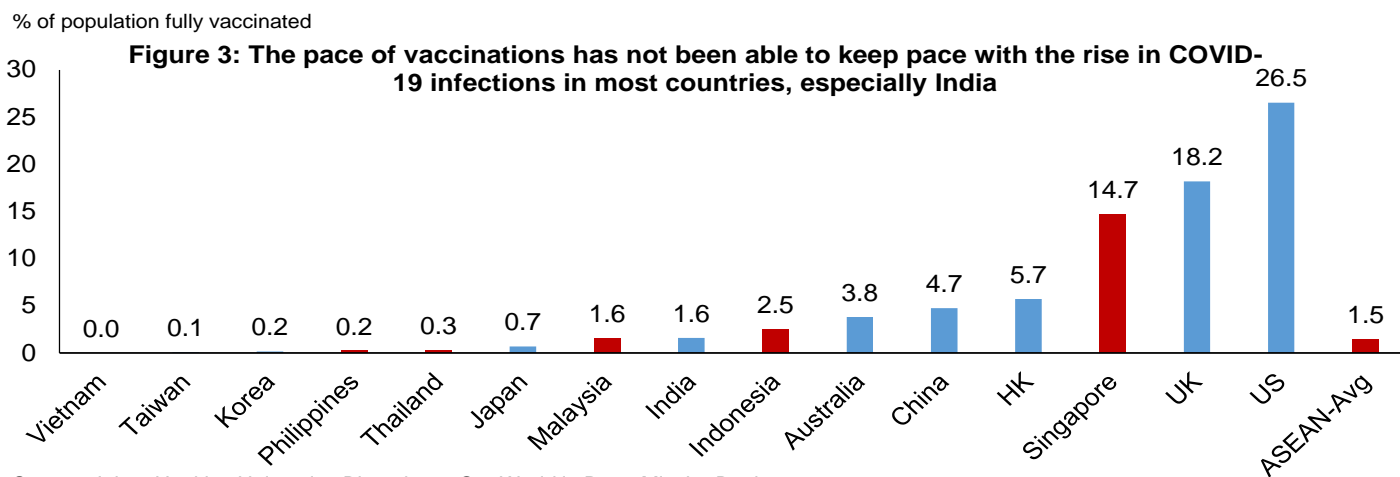
The University of Oxford's COVID-19: Stringent Index, which it defines as "a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 =strictest)", shows that social restrictions over the past four months in most of the seven countries under discussion

have increased. The sharpest increase has been in the Philippines, which put the National Capital Region and neighbouring provinces in a strict lockdown during the week leading up to and following Easter (Figure 2). The index also shows tighter social restrictions in Indonesia and India.



The vaccination drive is off to a slow start

With COVID-19 infections resurging and the virus mutating into more virulent strains, governments’ reliance on the inoculation drive has become more apparent. While all of the seven countries under discussion started their inoculation drive in earnest in Q1, the pace has differed depending on vaccine procurement and distribution. Singapore, by virtue of its size, resource pool, had already fully vaccinated (i.e. received both doses) 14.7% of the population (as of 18 April) but this percentage rapidly declines as we head down the list of countries. In a distant second place is Indonesia, with 2.5% of its total population vaccinated followed by India and Malaysia. The Philippines, Thailand and Vietnam have only a very small proportion of their populations fully vaccinated (Figure 3).



Below is a closer look at the situation in each country; the pecking order represents the highest proportion of the population vaccinated to the lowest.

- Singapore:** The city state is making steady progress on its vaccination drive. As of 18 April, 14.7% of the population had been fully vaccinated. The government is currently in the process of vaccinating those aged 45 years and above and it expects to extend vaccinations to those below 45 years from June. According to Senior Minister of State for Health Janil Puthuchery, Singapore is on track to complete the inoculation program by the end of this year. However, this timeline maybe be subject to delays as vaccine producers struggle to keep pace with global demand.

- Indonesia:** Indonesia's vaccination progress has been slow. As of 25 April, 2.5% of the total population had been fully vaccinated. The slow progress is mainly related to procurements; by our estimates, Indonesia has received only 17% of the total vaccination doses expected (as of 18 April). Even this is inflated considering some of the shipments from China contain only raw material, which have not yet been processed into the full vaccine. Following delays in the shipments of vaccines from AstraZeneca and the COVAX facility, Indonesian authorities compensated by increasing their orders from Chinese pharmaceutical companies. The Indonesian government reached an agreement with China's pharmaceutical company Sinovac Biotech Ltd to buy 140mn doses of vaccines in bulk shipments. Sinovac will not ship completed vaccines but instead raw material for the vaccine, which will be processed by the Indonesian pharmaceutical PT Bio Farma Persero into a finished product for inoculation. The government received, as of 18 April, raw materials enough for 59.5mn doses¹; of which, 22mn had been completed and distributed by Bio Farma².

The slower procurement of vaccines, the authorities say, has reduced the number of doses administered in April to 200-300k from 500k a day in March. This will make it harder for the government to meet its ambitious target of vaccinating 181.5mn people (~66% of the population) by March 2022.

Figure 4: Indonesia: Vaccination doses received versus total expected

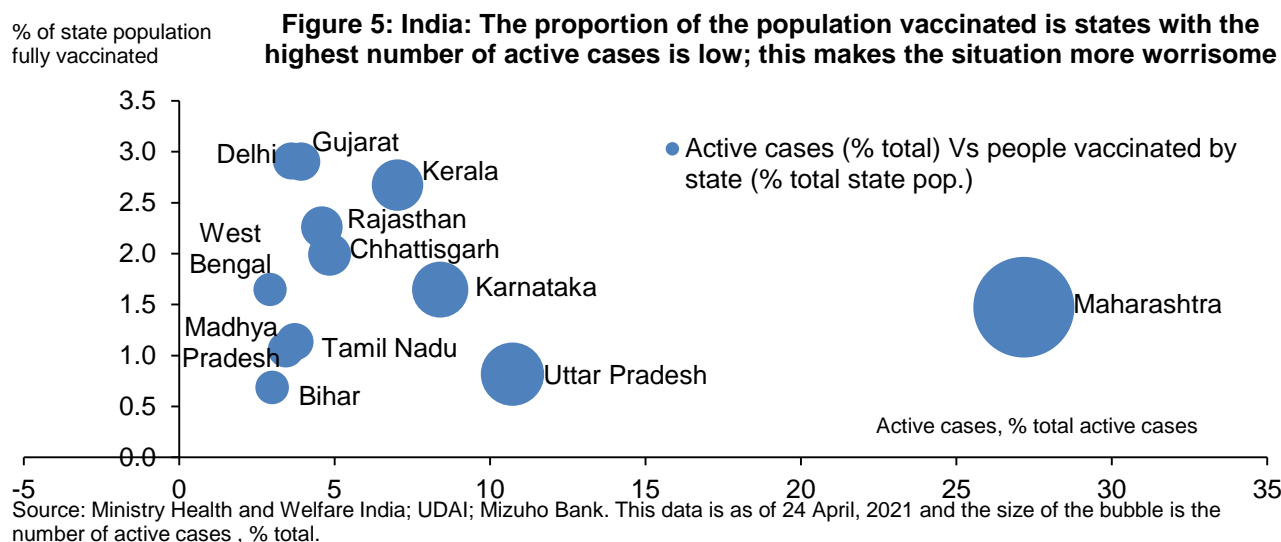
| Country | Vaccination brand | Doses received so far | Total doses expected | % of target |
|----------------------------|--------------------------|--|----------------------|-------------|
| Indonesia (As of 18 April) | Sinovac | 59.5mn | 140mn | 42.5 |
| | AstraZeneca | Only 20mn expected to arrive in 2021; 30mn in 2022 | 50mn | N/A |
| | Novavax Inc | N/A | 50mn | N/A |
| | Indigenous Merah Putih | N/A | 57.6mn | N/A |
| | AstraZeneca (with COVAX) | 16mn | 54mn | 29.6 |
| | Pfizer-BioNTech | N/A | 50mn | N/A |
| | Total | 75.5mn | 441mn | 17.1 |

Source: Cabinet Secretariat of the Republic of Indonesia, The Diplomat, Jakarta Globe, Jakarta Post, Mizuho Bank. Note: The shipments from Sinovac include raw material equivalent of completed doses.

- India:** As of 24 April, 1.6% of the population had been fully vaccinated. While this number is low, the situation within the states is more glaring. Maharashtra, which has the largest case load (27% of total active cases) has fully vaccinated only 1.5% of the state; while Uttar Pradesh accounting for just over 10% of the total case has vaccinated only 0.8% of its total population. Only Ladakh, Lakshadweep and the Northeast States of Sikkim, Tripura and Mizoram have vaccinated over 3% of their populations.

¹ This product will need to be deemed fit for distribution by the Drug and Food Supervisory Agency. <https://www.scmp.com/news/china/diplomacy/article/3130452/china-help-coronavirus-hit-indonesia-close-vaccine-divide>

² The bigger problem is that the efficacy of Sinovac's vaccine, however, remains in question and most of the data publicly available (so far) shows a rate of just above 50%.



After letting down its guard in February, March and early April in terms of (significantly) easing social restrictions, the Indian government is paying the price with the latest wave of infections becoming out-of-control. This has made the authorities more reliant than before on the expediting the vaccination drive. In order to do this, the government has resorted to the following steps:

- First, vaccine production is ramping up and the domestic population is being prioritised. There are only two vaccines being used for immunisation: Covishield (AstraZeneca's vaccine) produced by the Serum Institute of India – which has accounted for over 90% of the vaccines administered - and Covaxin produced by Bharat Biotech.

A few other vaccines are in the pipeline to be deployed including Russia's Sputnik in collaboration with Dr. Reddy Laboratories. SII plans to ramp up production to 100mn doses a month by June from the 60-70mn currently while Bharat Biotech claims it will ramp up production to 100mn by September from 10-15mn currently. For SII, in particular, the 100mn production mark was meant to have already happened but has been delayed due to raw material constraints; which cannot be ruled out as a source of additional delay.

- The push to expedite production comes as the government opens up vaccinations for all those aged 18-45 years of age from 1 May. The scaling of vaccine coverage is accompanied by a "liberalised vaccine pricing" policy. Under this policy, "vaccine manufacturers would supply 50% of their monthly Central Drugs Laboratory (CDL) released doses to Govt. of India and would be free to supply remaining 50% doses to State Govts. and in the other than Govt. of India channel", according to the government³.

For vaccine procurement under the 50% directly by states and private enterprises, manufacturers will need to make their price known in advance. The prices of these vaccines at private hospitals will be monitored. The low cost vaccinations will only apply to the existing groups (i.e. Health Care Workers, Front Line Workers and population above 45 years of age) and not for the newest category eligible for vaccinations from 1 May; hence, this group will necessarily have to buy their vaccination doses at a higher cost than it is

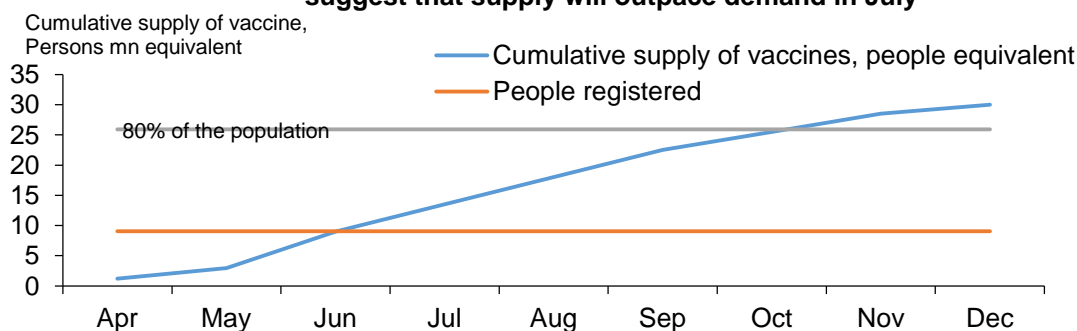
³ Liberalised Pricing and Accelerated National Covid-19 Vaccination Strategy
<https://www.mohfw.gov.in/pdf/LiberalisedPricingandAcceleratedNationalCovid19VaccinationStrategy2042021.pdf>

currently being sold, casting doubt on the take-up rate especially if prices are unfairly marked up.

- **Malaysia's** vaccination drive, which began on 24 February, achieved only 64.3% of its target in Phase 1 focussed on frontline and healthcare workers. Phase 2, which began on 19 April in 8 states, is open to senior citizens above the age of 60 and people with chronic diseases and comorbidities.

The country, however, faces a unique problem in that the demand for being inoculated has been weak and by July 2020 could fall behind the supply of vaccines⁴. With Phase 1 falling short of its target, Phase 2 does not look promising seeing as only 37.3% of the population has registered for vaccines. Worryingly, registration has been the poorest in places where the outbreak has been the worst such as Sabah. Given the low registration rates, the government has decided to bring forward Phase 3 of the vaccination process (i.e., for adults above 18 years of age) and is also considering various options to improve the take-up including making inoculation compulsory and providing travel incentives.

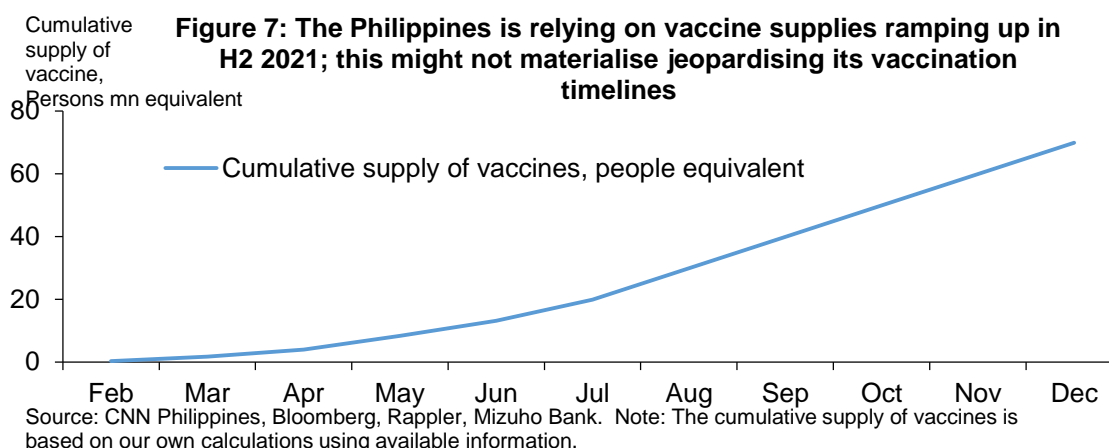
Figure 6: Malaysia: The current level of vaccine registrations suggest that supply will outpace demand in July



Source: Vaskincovid.gov.my; Code Blue; Mizuho Bank. The orange line shows the current level of people registered. While this will increase as the government opens up more categories to vaccinations, it is illustrative of the low take-up so far.

- **The Philippines** vaccination drive began in early March but has already hit supply constraints. As of 22 April, we estimate only around 3mn doses of vaccines (or 2.2% of the total expected) had been delivered. All these doses were distributed across 3,263 vaccination sites, with 1.6mn doses (>50% of the available doses) administered. Only 0.2% of the population has been fully vaccinated. The government expects that vaccine supply will ramp up in the coming months such that it procures 148mn doses this year. Note the data we have suggests a total commitment of 137mn doses, with the bulk of these doses expected to arrive in Q2 and Q3. The government aims to vaccinate 2-3mn people a week in Q2 and Q3. The need to boost the vaccination drive is now more pressing than before as the country is experiencing a sharp resurgence in COVID-19 cases.

⁴ Malaysia brings forward Covid-19 vaccine roll-out schedule due to low registration, *Strait Times*, 7 April 2021.



- Thailand:** The latest data suggests that only 0.3% of the total population has been fully vaccinated. For Q1 and April, Thailand received 2.1mn doses of Sinovac from China and has administered 0.6mn doses (under 30%) as progress is slow. For the year, it looks like the country may fall woefully short of vaccines. The government has procured just over 64mn doses (as of 20 April), 95% of which will come from AstraZeneca. The company has been struggling to keep up with its production commitments and has also been subjected to vaccine nationalism by many EU countries, which have prevented exportation until domestic demand is met. Without acknowledging potential delays to its AstraZeneca supplies, the Thai government is now considering expanding its procurement list to include more companies. It wants to buy an additional 35mn doses this year.
- Vietnam's** vaccination drive is yet to get off the ground in a convincing manner. It has so far procured 30mn doses from AstraZeneca, which has fallen behind on its commitment. As a result, Vietnam has (as of 20 April) only received two shipments of AstraZeneca vaccine doses totalling 0.9mn. The government has stated that it is looking to secure 150mn doses this year to cover 70% of its population; and has asked for external assistance to do this⁵. There is limited information of the number of people who have received both doses of the vaccine; Johns Hopkins data suggests that 0.1% have got the first jab.

Downgrading our GDP growth forecasts for 2021

Taking into account the severity of the recent wave of COVID-19 infections for some countries and the progress on the vaccination drive, we have adjusted some of our GDP growth forecasts. The biggest downgrade is to India's 2021 CY GDP growth by 2.4pp to 7.5% - this reflects the devastating impact of the most recent wave of COVID-19 infections which have dealt a severe blow to lives, livelihood and inevitably the economic recovery through weaker private consumption, investment and export channels (see [Mizuho Flash: 23 April 2021: India's COVID Tragedy: Misdiagnosis & Maladies](#)).

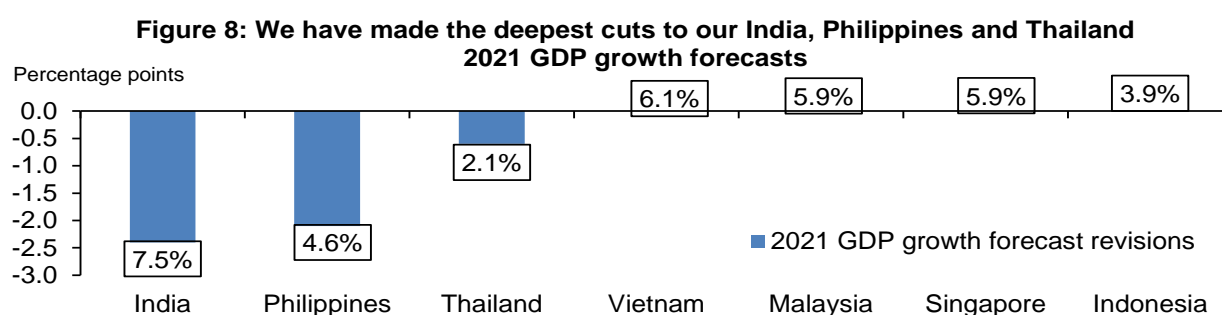
The same channels of impact will affect GDP growth in the Philippines this year as the lockdown through early April in Manila and the surrounding areas will hurt all key sectors including manufacturing, construction and services (especially retail services). As such, we have shaved off 2.1pp to our 2021 GDP growth forecast taking it to 4.6%.

⁵ The Australian government and the United Nations Children's Fund (UNICEF) have announced a A\$14 million (US\$10 million) package to support a mass immunization program against COVID-19 in Vietnam.

In Thailand's case, 0.6pp growth downgrade this year is driven by the country's poor progress on inoculations as well as its conservative vaccine procurement pipeline, which is heavily reliant on AstraZeneca and is subject to long delays. We also cut our 2022 GDP growth forecast by a more significant 2.1pp cut, taking it to 7.1% YoY, reflecting a slower-than-expected return of tourism and tourism-related activities.

In Vietnam's case, despite the government's slow progress on the vaccination drive, its proven track record in preventing mass transmissions through targeted lockdowns and strong contact tracing still gives it an upper hand hence we are maintaining our 2021 GDP growth forecast at 6.1%.

For Indonesia, Malaysia and Singapore we have maintained our 2021 GDP growth forecasts but we highlight that a lot hinges on the progress of each country's vaccination drive and its ability to rein in subsequent waves of infections.



Source: Mizuho Bank; Note: the values in the box are our full year 2021 GDP growth forecasts

Room for counter-cyclical policy is becoming increasingly constrained

Despite the slower growth outlook, we see the scope for counter-cyclical policies to tackle subsequent waves of COVID-19 infections as becoming more constrained. Additional fiscal stimulus measures raises concerns around sharply rising government debt levels while the room to manoeuvre has narrowed on the monetary policy front with the official policy rate across the region at historical lows. Importantly, as the US economic recovery gains traction, EM Asia's still poor growth prospects will become more exposed, subjecting these economies to capital flight risks. From a FX standpoint, there may be some breathing room yet as the US Fed will not likely to unwind its extraordinary policy accommodation this year, keeping sharp depreciation risks at bay.

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