

COVID-19: Where to now?

Vaccines, fiscal stimulus and market impacts

March 2021



Summary

Ongoing lockdowns, financial market volatility and recessionary pressures in many countries show COVID-19 is still having a significant impact on global economies.

When the pandemic spread worldwide in early 2020, it triggered a financial upheaval not seen since the Great Depression. Some countries experienced their largest economic contraction in 100 years and many national health systems were pushed beyond their limits. This led to a remarkable policy response, with governments and central banks quickly delivering massive stimulus packages.

Another outstanding achievement has been the rapid development of highly effective vaccines which appear to prevent severe COVID-19 symptoms and hospitalisations. With these now being rolled out around the world, many investors are hoping that the past 12 months will prove to be an aberration and that life—and economic growth—will soon return to its pre-pandemic path.

Indeed, the vaccines are likely to insulate financial markets from another meltdown, even in the event of more adverse COVID-19 developments. It is worth noting, however, that COVID-19 will be circulating in some communities, such as emerging markets where vaccines may not be rolled out until 2023. Thus, precautions will need to be maintained.

We think that investors have faith that the combination of government support and vaccine development will ensure that any further slowdown is fleeting. But we also believe that ongoing changes in the economy will arise from the pandemic; ultimately, the true legacy of COVID-19 could be a shift in the behaviour of policymakers, and its implications for long-term trends in inflation and interest rates.



Chart 1: When will countries be fully covered?

Source: The Economist Intelligence Unit, 27 January 2021

1. The future of COVID-19

Global vaccine development and rollout

"It's going to disappear. One day—it's like a miracle—it will disappear"

Former US President Donald Trump, 27 February 2020 Many governments around the world are rolling out a range of COVID-19 vaccines which appear to be highly effective in providing protection from severe symptoms. Given the rapid deployment, albeit at varying speeds as shown in Chart 2, does this mean that COVID-19 will soon 'disappear' as US President Trump famously claimed? And, if so, when will societies—and economies—be able to return to normal?

While we can't know with certainty how COVID-19 will evolve, a recent article in *Signal Transduction and Targeted Therapy*, suggested that the virus is unlikely to disappear from society, even with highly effective vaccines available.

Israel
US
Germany
UK
Russia
Canada
China
Australia

0 10 20 30 40 50 60

Chart 2: Percentage of population fully vaccinated, select countries, March 2021

Source: Our World in Data, University of Oxford

Epidemiologists state that only one virus—smallpox—has been eradicated but others, such as SARS-COV-1, have 'disappeared' in the sense that they rarely disrupt activity. The ability of health authorities to extinguish a virus, however, depends on its characteristics.

Can we eradicate COVID-19?

Two characteristics of SARS-COV-1 made it relatively easy to contain with few asymptomatic carriers who could unknowingly spread it through a community. First, it caused very severe symptoms in the people who contracted it, usually confining them to bed and a form of self-isolation. Second, the transmissible phase of the virus occurred when people were experiencing symptoms. It proved to be relatively easy to find people with SARS-COV-1 and isolate them.

In contrast, many people with COVID-19 are asymptomatic but can still transmit the virus. Moreover, COVID-19 appears more contagious than SARS-COV-1.

Despite these challenges, some countries such as Australia and New Zealand have effectively eradicated COVID-19 with a combination of closed borders, long quarantine periods for people that do enter the country and extensive testing, tracing and isolation.

Vaccines help societies live with COVID-19

The success of containing COVID-19 in Australia and New Zealand is a tremendous starting point and tempts many people to think that a vaccine rollout might allow a full "return to normal" once enough people have been inoculated. Unfortunately, that appears unlikely for 2 reasons.

While the vaccines prevent people from developing severe symptoms of COVID-19, they do not stop people from becoming infected.

While the vaccines prevent people from developing severe symptoms of COVID-19, they do not always stop people from getting infected. Even people who have had COVID-19 may need to be vaccinated as it appears their antibodies are fairly short-lived.

The virus also appears to mutate quickly. If it survives in one population, there is a possibility that it will develop into a more contagious and/or more dangerous strain that re-infects the 'vaccinated' population.

COVID-19 is likely to become endemic (i.e. pervasive and widespread) rather than eradicated. Vaccines, however, will ensure that the impact of the virus is much smaller. It is essential therefore to not only vaccinate the populations of advanced countries, such as Australia, but also the less developed world.



2. Australia – a 'COVID-19 normal' model

While epidemiologists believe that COVID-19 will become endemic like influenza, with a new vaccine released each year, they suggest that societies should still try to limit community circulation of the virus to reduce opportunities for it to mutate. They also recommend that some behavioural changes introduced since early 2020 should be retained – aspects such as frequent hand washing, avoiding handshakes and using masks when people feel ill.

Governments are urged to maintain testing and tracing capabilities, and places where crowds congregate (such as restaurants and gyms) should still require the use of QR codes to enable authorities to quickly trace people if there is an outbreak. These changes are relatively cheap and shouldn't disrupt the lives of most people.

This 'COVID-19 normal' is, essentially what most Australians currently experience and is touted as a global best-practice model. But there is more to Australia's success.

What's the situation overseas?

Unlike Australia, which has limited the impact of COVID-19 by stopping its spread through the community, other countries such as the US and UK imposed restrictions only when growth in the number of patients threatened to overrun the capacity of their hospital systems. This resulted in more deaths, poorer health outcomes and the persistent threat by governments of further lockdowns restricting individual and business activity.

For these countries, vaccines should be a game-changer; by removing the risk of overburdened health systems, the vaccine roll out makes widespread lockdowns less likely. This will provide households and businesses with confidence to make longer term plans which, in turn, should be reflected in stronger spending and employment. In other words, the countries hit hardest by COVID-19 should benefit most from the vaccine rollout.

The Australian dilemma

We said earlier that, for many Australians 'COVID-19 normal' won't be too different from what life is like now. But, unlike residents of other countries who have had relative freedom to travel, Australia's success has also been achieved through closed borders and extensive quarantine arrangements in place for new arrivals.

This observation raises an important question for Australia's leaders: should the nation remove border controls once most Australians have been vaccinated, even if it means that many more people will contract COVID-19? Or should border restrictions be slowly and gradually loosened to ensure that new COVID-19 cases remain low, while the rest of the world gets vaccinated?

Let's consider each option in turn.

Quick removal of restrictions

The Commonwealth Government aims to provide vaccinations for all Australians by October 2021. Assuming that a sufficient number of people take up that offer, it may achieve 'herd immunity' in which the virus reproduction rate will remain below 1. This could allow the Government to re-open the borders before Christmas 2021.

Some countries have also spoken about creating 'vaccine passports' either electronic or paper to certify a person has been inoculated and with which vaccine. People with the vaccine passport would be allowed to travel.

As noted earlier, even though the majority of Australians would have been vaccinated, this doesn't necessarily mean that they won't contract the virus. The main benefit is that few people will develop severe symptoms which means that Australia's health system will not be over-run. There is a very real possibility that the number of Australians contracting COVID-19 might rise higher than Australian leaders and health authorities have hitherto been comfortable.

Alluding to this issue, NSW Minister for Health, Brad Hazzard recently said that it would be "a bit redundant" to publish daily COVID-19 case numbers once the vaccines have been rolled out. The question is whether those states which were quick to impose widespread lockdowns and border closures in response to just a single new case, will be willing to allow case numbers to increase, potentially substantially.

Gradual removal of restrictions

The alternative to 'ripping off the band-aid' is to pursue a gradual removal of restrictions. This could be pursued along several lines as illustrated in Table 1 below.

Table 1: Options for removing travel restrictions

Option	Detail
Travel bubbles	Australia could form 'travel bubbles' with those countries that have effectively eliminated COVID-19 from their communities. Australia already allows New Zealanders to enter Australia without having to undergo quarantine, although it does require them to be tested. Given Australia's ability to limit community transition, New Zealand seems likely to adopt a similar protocol in coming months.
Proof of vaccination coming from country with high vaccination rate	Only people from countries with high vaccination rates, and proof that they have been vaccinated (i.e. a vaccine passport), can visit Australia. Australians can only travel overseas once they have been vaccinated and can only visit countries with high vaccination take-ups. Cyprus has announced that from 1 April, Israelis who have had both doses of the vaccine will be allowed to enter, while UK residents will be able to enter from 1 May. Israel and the UK have been leading the way in vaccine roll outs.
Proof of vaccination coming from country with low vaccination rate, plus quarantine	People from countries with relatively low vaccination rates can visit Australia if they have been vaccinated and undergo quarantine (perhaps in their home) when they arrive in Australia. Poland allows entry for people that have been vaccinated from a limited range of (mainly European) countries.
Proof of vaccination over past 12 months	Anyone that can prove they have been vaccinated within the last 12 months can travel to and from Australia. Iceland and Romania already allow travellers who can show a vaccination certificate to enter without testing or quarantine.
Free movement	No travel restrictions whatsoever.

Source: TCorp

In terms of the timing for the gradual removal of restrictions, it might be possible to create travel bubbles in the second half of 2021, allow travel to the US and UK at the start of 2022, and allow free movement from 2023.

Australia's path

It is not clear which path the Australian government will take, but there is likely to be some gradation of the removal of restrictions. While overseas tourism operators, and universities relying on overseas students for revenue would obviously prefer a quicker re-opening of borders, other companies have benefitted from closed borders with Australians spending less money overseas and more money domestically.

As shown in Chart 3, while spending at cafés and restaurants fell sharply following Australia going into lockdown in March 2020, and are yet to fully recover, spending at household goods retailers rose strongly. People spent more time at home and bought desks, monitors and other household goods to facilitate working from home (WFH). At the same time, employment has returned to its pre-pandemic level

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even while borders have remained closed as illustrated in Chart 4. While re-opening the borders would boost hospitality spending, it is likely that spending in other areas will decline.

As such, this decision will be more important for the composition of economic activity rather than the total amount.

Chart 3: Australian retail sales by industry, 2019 - 2021

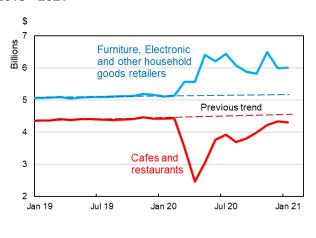
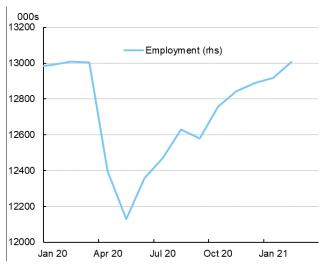


Chart 4: Australian employment



Source: Australian Bureau of Statistics, TCorp

Normal but different

Even once most restrictions have been removed, the pandemic is likely to have accelerated some existing structural trends in the economy. Government support policies introduced last year—such as the JobKeeper wage subsidy, small business assistance and rent and loan repayment deferrals—are likely to have delayed some of the adjustment to the new reality. And it is also

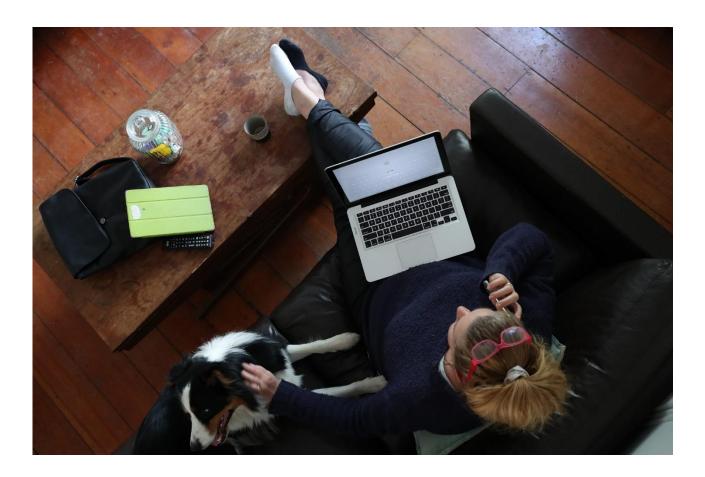
possible that some changes will prove less persistent than is widely believed. It seems clear, however, that the economy of 2022 won't be the same as the one that existed in 2019.

Working from home and leveraging technology

The obvious changes include the increased prevalence of WFH, and rapid adoption of digital technologies in the home and workplace. Many restaurants, for example, report that home delivery sales increased from around 15% of their revenue pre-pandemic, to 65% currently. If this shift persists, restaurants might opt for smaller premises and fewer waiting staff to reduce costs. Similarly, the surge in online sales could have an ongoing impact on the demand for retail property.

Particularly contentious is the idea that the adoption of WFH will lead to a permanent reduction in demand for CBD office and retail space, as well as the switch in housing demand away from crowded inner cities. The real debate, however, is the *extent* to which WFH will persist, not whether more people will do so. While many firms have encouraged, or required, their staff to return to the office as quickly as possible, other companies have made a permanent change to their working arrangements.

Other changes seem less debatable. The rapid acceptance of Zoom or Teams meetings over the last year means that many fewer people are likely to fly to Melbourne or Brisbane for a 1-hour meeting, or even for a day of meetings in London or New York. This has implications for the travel and accommodation sectors.



3. COVID-19 changed behaviours in central banks, government and business

A changed approach to monetary policy

It is entirely possible that the pandemic has changed attitudes. And while this is far more speculative, it may also be a more important consideration over the medium term. For example, the pandemic has certainly changed the way that some central banks approach monetary policy.

Previously, the Reserve Bank of Australia (RBA) or the US Federal Reserve (Fed) would calculate detailed economic forecasts and adjust the level of interest rates today on the basis of where they expected the economy would be in 2 years' time (as that was how long they thought it would take a policy change to fully affect the economy).

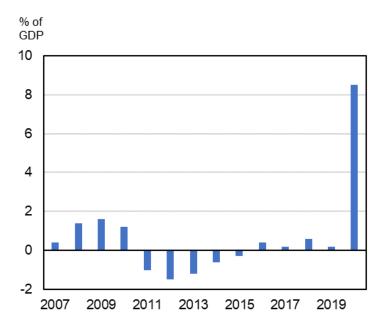
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Now, however, these central banks have vowed to keep interest rates low until actual inflation is sustainably at their target. This means that interest rates will be much lower, for much longer, than they would have been in the previous regime. And this certainly makes it more likely that inflation will be able to build up some momentum when it eventually starts to rise.

Government attitudes towards fiscal policy have changed too

The attitudes of some governments to fiscal policy and debt also appears to have shifted. In the US, for example, the Obama Administration quickly reverted to contractionary fiscal policy after its initial stimulus package in the wake of the GFC.

Chart 5: Change in advanced economies' structural budget balance



Source: Reserve Bank of Australia, IMF, TCorp

In contrast, the Biden administration recently passed a record fiscal stimulus, following a succession of large packages in 2020. Moreover, President Biden is also proposing further significant spending on infrastructure to "Build Back Better".

In Europe, there is also much less appetite for fiscal austerity than after the GFC. In the UK, the government provided additional fiscal support in 2021 and announced

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that higher corporate tax rates would play a part in the return to fiscal soundness. This is significant as it would be the first increase in the corporate tax rate since 1974.

It is also possible that the pandemic triggers a shift in the behaviour of households and business. Optimists conjecture that the next decade could be a period of celebration and ebullience like the 'Roaring Twenties' which followed the Spanish Flu. Equally, however, households may adopt a more cautious attitude around saving, as the pandemic revealed just how tenuous employment can be.

4. COVID-19, vaccines and financial markets

Rewriting the policymaker rulebook

The vaccine rollout has massively improved the outlook for the economy, and this has been reflected in financial markets. As we argued, vaccines will not mean that life will return to the way it was pre-pandemic, but the changes in behaviour that need to be maintained are not particularly onerous from an economic perspective.

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Of course, the virus has already evolved into various mutations, some of which have been more contagious than earlier variants. And it is possible that new variants could emerge that are both highly contagious and resistant to the current range of vaccines. So, might this potentially threaten the rebound in financial markets?

In our view, the way that governments around the world have been able to use fiscal policy to support businesses and households, and the ability of scientists to rapidly develop effective vaccines,

suggests that financial markets are now likely to remain resilient to an adverse development in the spread of COVID-19.

In effect, investors are likely to think that while this could postpone recovery by 3 or 6 months, more effective vaccines will be developed fairly quickly, and government support will limit the damage done to the economy until those new vaccines arrive.

In this sense, the rapid development of highly effective vaccines not only protects people from suffering severe COVID-19 symptoms but also reduces the risk that financial markets nose-dive as a result of such adverse developments.

A more relevant risk to financial markets, however, might arise from how policymakers have altered their behaviour as a result of COVID-19. While financial markets have performed well over the last decade, there has been widespread disappointment with the performance of the economy, as households are saddled with high debt levels and weak wages growth.

The post-pandemic world, however, could be very different. The way that governments responded to COVID-19 showed how effective fiscal policy could be, and some governments now seem much more comfortable with running larger budget deficits. At the same time, central banks are more willing to allow inflation to accelerate. If inflation does eventually increase—which we think it ultimately will, though not for a few years—it will end the period of low interest rates.

The way that governments responded to COVID-19 showed how effective fiscal policy could be, and some governments now seem much more comfortable with running larger budget deficits.

This environment of rising inflation, rising wages growth, potentially rising corporate tax rates (as in the UK) would be completely different to the one in which equity markets performed very well over the last decade.

As such, the long-term impact of COVID-19 on the economy and financial markets might not arise from its impact on people's health or the actions needed to limit its spread, but rather from the shift in policymaker behaviour. COVID-19 might have re-written the policymaker rulebook. Policies that

were once considered reckless and irresponsible are now becoming mainstream. And this might be the true legacy of the pandemic.

Inflation fears a false alarm?

Central banks are far more tolerant of higher inflation and far more reluctant to raise interest rates than they were over the previous 30 years. And some politicians are more willing to run larger budget deficits for longer.

Financial markets are currently very alert to signs that inflation is about to rise. We think that this will be yet another false alarm for now, as wages growth remains weak. And yet this pivot in policymaker strategy does open the door to a potential rise in inflation in a few years' time. If that does take hold, it will have major ramifications for interest rates, financing and how investors value assets. When thinking about the period ahead, this is likely to be the key thing that investors should monitor.

5. Background

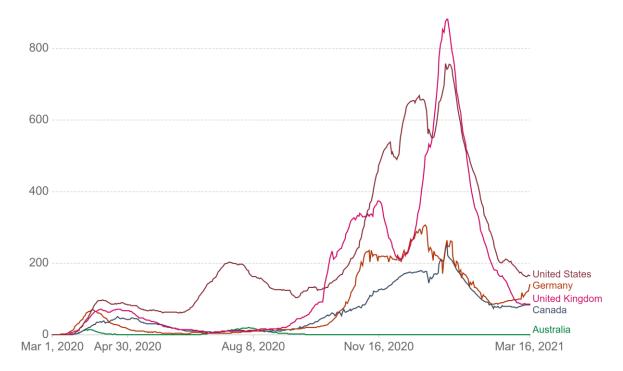
The appearance of COVID-19 and its global spread

A novel coronavirus that caused a respiratory illness was identified in Wuhan, Hubei, China, in December 2019, reported to the World Health Organization (WHO) on 31 December. WHO declared the outbreak a Public Health Emergency of International Concern a month later, and a pandemic on 11 March 2020.

Becoming known as COVID-19, it proved to be highly infectious with estimates suggesting that one person with the virus would pass it on to another 2 to 4 people – for influenza the same estimate is 1.3 other people.

Over the course of 2020, COVID-19 spread rapidly and globally, particularly in the US and the EU as illustrated in Chart 6. Today, some countries in the EU including Germany, France and Italy are experiencing a third wave.

Chart 6: Daily new confirmed COVID-19 cases per million people

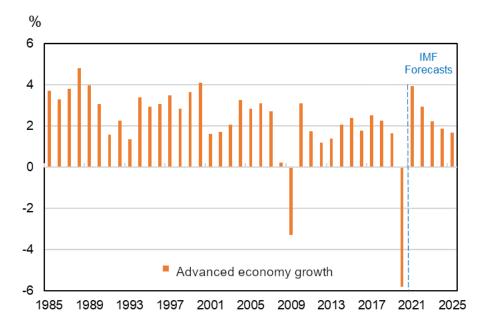


Source: Johns Hopkins University

The economic impact of COVID 19

COVID-19 has had a large negative impact on economies throughout the world. As illustrated in Chart 7, the average growth rate in 2020 declined sharply from just under +2%, to -6%.

Chart 7: Advanced economy growth, 1985 - 2025



Source: IMF, TCorp

6. References

- 1. <u>COVID-19 in early 2021: current status and looking forward</u>, Chengdi Wang, Zhoufeng Wang, Guangyu Wang, Johnson Yiu-Nam Lau, Kang Zhang & Weimin Li, Signal Transduction and Targeted Therapy, 8 March 2021.
- 2. <u>The Pandemic Will End—but Covid-19 May Be Here to Stay</u>, Maryn McKenna, Wired, 22 February 2021.
- 3. <u>How Will the Coronavirus Evolve?</u>, William A. Haseltine, Scientific American, 19 February 2021.
- 4. <u>Future scenarios for the COVID-19 pandemic</u>, David Skegg, Peter Gluckman, Geoffrey Boulton, Heide Hackmann, Salim S Abdool Karim, Peter Piot, et al., The Lancet. 16 February 2021.

Author

For more information contact:



Brian Redican
Chief Economist

T: +61 2 9325 9388

E: brian.redican@tcorp.nsw.gov.au



Level 7, Deutsche Bank Place 126 Phillip Street Sydney NSW 2000, Australia

T +61 2 9325 9325 **W** www.tcorp.nsw.gov.au

ABN 99 095 235 825

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