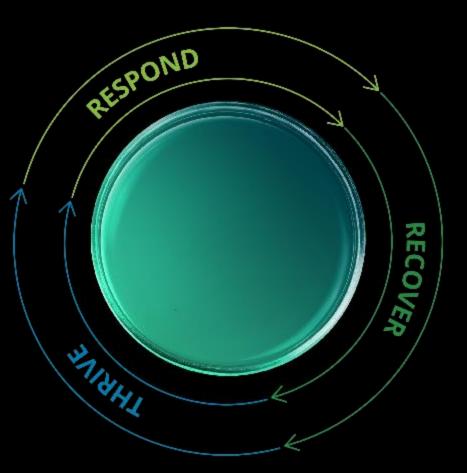
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Economic scenarios for the COVID-19 recovery Guiding strategic, financial and operational decisions





May 2020

Preparedness over prediction

Scenarios are stories about what the future may be like, created through a structured process to stretch thinking, challenge conventional wisdom, and drive better decisions today.

Scenarios are not predictions about what *will* happen. They are hypotheses about what *could* happen, designed to open our eyes to new opportunities or hidden risks.

Source: Deloitte, The world remade by COVID-19: Scenarios for resilient leaders | 3-5 years



In the midst of the greatest economic crisis since the Great Depression, prediction as we know it, is rendered problematic. In the face of uncertainty, the best approach is to consider a series of scenarios – of plausible and relevant futures – to understand the signposts and transmission mechanisms which can guide decision making.

As governments begin to lift restrictions, it would be folly to think linearly about a switch from health to economy. The two are so intertwined that this interconnection is going to remain with us over the coming years. This is a mindset shift we need to make. Our recovery will thus be in 'waves' not an alphabet. Indeed, we may need to shift out thinking from a post-COVID world to a world where we learn to live with COVID. Such thinking means that we need to be prepared for and manage expectations that the recovery may not be smooth or comfortable.

Each of the scenarios in this document posits a potential future state — including trends in epidemiology, society, technology and policy — leading to corresponding economic implications.

These economic scenarios are not predictions about what will happen; they are hypotheses about what could happen, designed to frame strategic decisions and planning discussions.

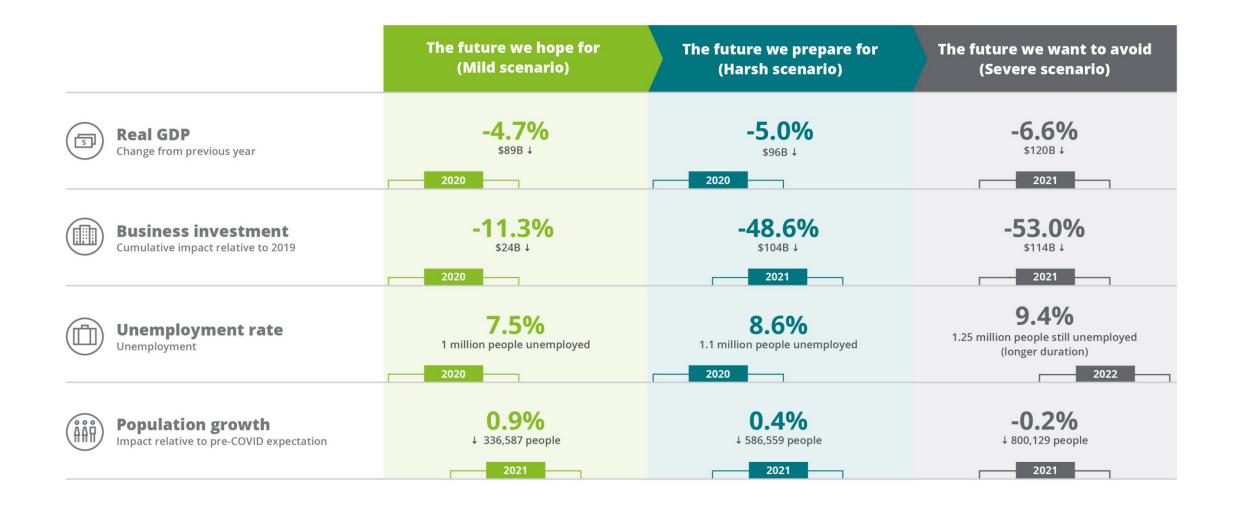
This document is an extension to the global <u>Recovery Scenarios</u> previously published by Deloitte and serves to provide an Australian perspective on the COVID-19 crisis.



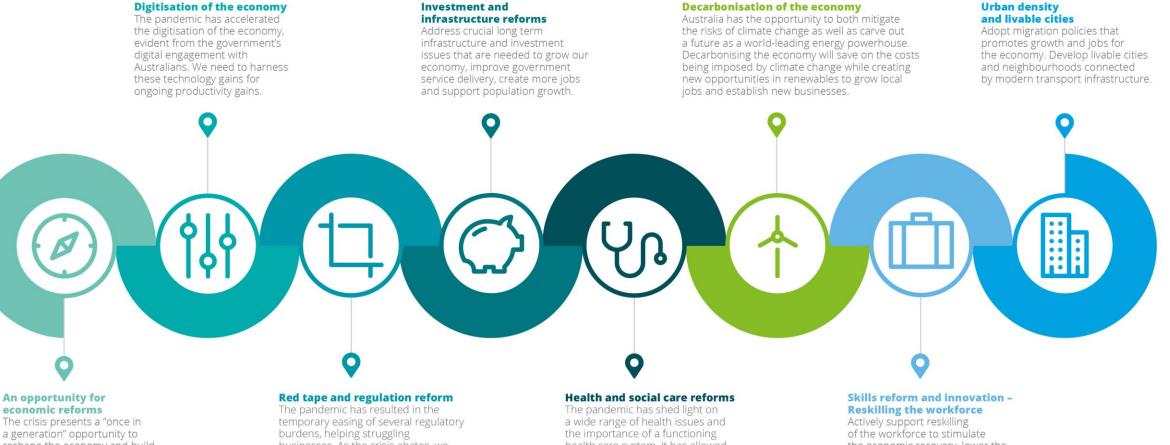
These scenarios are based on a combination of three critical uncertainties

	The future we hope for (Mild scenario)	The future we prepare for (Harsh scenario)	The future we want to avoid (Severe scenario)
Health Response and Impact	Rapid and effective containment measures result in a short sharp peak in new infected cases in April 2020. Physical distancing restrictions are replaced by effective testing, tracking and containment measures.	Australia successfully flattens the curve but without enhanced detection and tracing technology, ongoing physical distancing restrictions are required to manage new outbreaks. A vaccine (or effective treatment) is made available in July 2021.	Without effective detection and tracing, and a lack of compliance with remaining physical distancing rules, a major second wave of infections occur. A vaccine (or effective treatment) isn't available until July 2022.
Domestic Economic Recovery	Economic recovery begins from mid 2020. Economic activity reaches pre-COVID levels as productivity enhancing ways of working and a series of economic reforms are effectively implemented.	Economic activity starts to recover in late 2020. Activity remains below pre-COVID expectations in the long run as business investment falters.	Economic activity continues to weaken in 2020 as a result of the second outbreak. The recovery starts in late 2021, with the economy remaining lacklustre, hampered by financial distress and weak business and consumer confidence.
Global Economic Recovery	The world economy recovers quicker than expected. Global supply chains begin to mend as the outbreak recedes in China and North Asia.	The world economy faces a lengthy recession with persistently weak supply and demand. Global containment remains a problem, limiting the movement of goods, people and capital.	Many other countries across the world, including Australia, sees a resurgence of the pandemic, while others continue to struggle to contain the virus. The global economy faces an even more severe and prolonged downturn, hampered by de-globalisation and geopolitical posturing.

Australia's future prosperity will depend on how we manage the current crisis



Preparing for the next normal and a better future Productivity is no accident



a generation" opportunity to reshape the economy and build back stronger through a series of economic, social and sustainability reforms. The pandemic has resulted in the temporary easing of several regulatory burdens, helping struggling businesses. As the crisis abates, we need to continue to push through with initiatives that help further reduce regulatory inefficiency and red tape.

a wide range of health issues and the importance of a functioning health care system. It has allowed us to consider new models of delivering care (e.g. telehealth). We need to continue work on health and social care reforms to ensure this support for Australians is continued after the crisis abates.

Actively support reskilling of the workforce to stimulate the economic recovery, lower the future unemployment rate, improve productivity and prepare workers for jobs of the future. As we recover from this crisis we will require new efforts to boost innovation and encourage entrepreneurship.

The future we hope for – a *Mild* scenario

What if the pandemic is resolved sooner than we anticipate? Globally, the world economy recovers quicker than expected, with varying degrees of virus containment. Both demand and supply recover: global supply chains begin to mend as the outbreak recedes in China and North Asia and as confidence increasingly returns for families and businesses.

Rapid and effective containment under this scenario plays out in a short and sharp peak. Growth rates then steadily fall until the virus is successfully managed using **widespread and effective testing and tracing.** A **vaccine (or effective treatment) is made available in April 2021** and prevents or notably eases the damage from further outbreaks.

The short-term economic impact of the outbreak is material. Activity plummets during the period of shutdown and the unemployment rate rises. But the government introduces a series of well-designed fiscal packages to mitigate the effect of this shutdown and avoid persistent unemployment and deflationary pressure in the longer term.

Key assumptions

- A technological leap in virus testing enables many countries across the world, including Australia, to keep the **effective reproduction rate of the virus below one,** despite lifting most social distancing restrictions.
- A vaccine (or effective treatment in the form of anti-virals) is made readily available to everyone by April 2021.
- Government **survival support** enables organisations to keep people employed and maintain ownership of key assets so they're able to rapidly restart operations.
- Government **fiscal stimulus** supports the re-ignition of the economy in the second half of 2020.
- Society learns from the crisis and enjoys productivity enhancing technological solutions; and a wave of economic reforms, including tax and regulatory reforms, are put in place to improve economic growth and wellbeing.

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The future we prepare for – a *Harsh* scenario

What if ongoing physical distancing measures are the only way for us to control the pandemic? Globally, the world faces a lengthy recession with persistently **weak supply and demand.**

Australia successfully flattens the curve, but without enhanced detection and tracing technology we need **ongoing physical distancing** restrictions in place to curb future virus outbreaks. These restrictions remain in place until a vaccine or effective treatment is made available in July 2021.

Government support cushions the impact of physical distancing restrictions however the recovery is delayed as deflation sets in (with falling prices meaning even low interest rates are costly to borrowers) and investment decisions are deferred amid ongoing economic weakness and widespread uncertainty. Eventually the economy finds a 'new normal' level of activity and growth resumes, but a persistent gap remains between our economic expectations before the crisis and what we've now settled for – wealth, incomes and confidence are all badly damaged.

Key assumptions

- Some countries across the world, including Australia, manage to keep the effective reproduction rate of the virus below one. However, without effective and widespread surveillance, ongoing physical distancing measures are required to be in place – meaning flattening the curve comes at a considerable and ongoing cost to the economy.
- A vaccine (or effective treatment in the form of anti-virals) is made readily available to everyone by July 2021.
- Government **survival support** enables organisations to keep some people employed and maintain ownership of most key assets.
- Yet there's insufficient government **fiscal stimulus to avoid ongoing high unemployment and falling prices (deflation).** The subsequent rise in real interest rates hurts investment related sectors and delays the economic recovery.
- We revert to pre-COVID ways of working once medical treatment (a vaccine or antivirals) has been rolled out and are unable to push through major reforms.

The future we do everything to avoid – a Severe scenario

What if we get hit by a second outbreak? Countries that today seem to have controlled the outbreak face a return of the virus, while those still struggling find the pandemic outruns every effort of containment. Health outcomes are devastating and the global economy faces an even more severe and prolonged downturn.

In Australia, without effective detection and tracing, we experience a second outbreak of the pandemic as a result of lifting restrictions too early and a lack of compliance with remaining physical distancing rules. What's more, a vaccine or other effective treatment isn't available until July 2022 as efforts to fast-track it proves futile.

In this scenario we enjoy a rapid recovery in the later part of 2020, but it comes at a devastating cost. Our eagerness to restart the economy instigates a second wave of infections and the resulting physical distancing measures has a devastating impact on the economy from 2021 onwards. A greater number of businesses close as uncertainty rises, higher levels of unemployment becomes persistent and financial stress escalates as the duration of the crisis extends and we battle a liquidity trap.

Global economic recovery is slow, hampered by de-globalisation and geopolitical posturing.

Key assumptions

- Similar to many other countries across the world, Australia sees a resurgence of the pandemic. Without effective case detection and tracing and a high level of physical distancing fatigue among the population, the number of infected cases rise. The effective reproduction rate of the virus is > 1 during the second outbreak.
- Number of critical cases on any one day exceeds ICU capacity for a short period during the second outbreak.
- A vaccine (or effective treatment in the form of anti-virals) is made readily available to everyone by July 2022.
- A large number of businesses are lost as the second outbreak prolongs the period of disruption.
- Rising bad debts sees our lending institutions under increased pressure. Credit ratings drop, the cost of funding rises and availability of credit becomes curtailed.
- Consumers rapidly reduce spending and increase their savings, generating a downward spiral by putting further pressure on the viability of remaining businesses.
- An extended period of deflation sees us caught in a liquidity trap, leaving real interest rates to rise despite very high unemployment, further slowing the economic recovery.
- We eventually revert to pre-COVID ways of working once the vaccine has been rolled out and are unable to push through major economic reforms.

Economic scenarios for the COVID-19 recovery Guiding strategic, financial and operational decisions

COVID-19 is first and foremost a public health crisis

The effectiveness of our health response is critical to our future welfare

	Public health	response			Impact	
Scenario	Physical distancing measures	Testing and tracing capability	Compliance with measures	Vaccine / anti-virals availability	Effective reproduction number (R _e)	Critical cases > ICU capacity
Mild	Initial period only	At-scale testing and advanced tracing	High	Early 2021	Remains <1	No
Harsh	Some measures retained until vaccine	Limited improvement on current levels	Medium	Mid 2021	Remains ≤1	No
Severe	Required for two severe shutdowns	Limited improvement on current levels	Weak	2022	Reverts >1 to create second peak	Yes, during second peak

The effectiveness of the COVID-19 health response will be integral to Australia's future. The way we enforce and comply with social distancing measures is essential to the successful containment of the current outbreak, and our ability to test, trace and isolate future cases will determine our ability to control the virus over time. But to fully recover we've made the assumption that an effective vaccine (or treatment via anti-virals) will be discovered.

In the *future we hope for* (mild) scenario we assume compliance with physical distancing measures enables us to control the initial outbreak and rapidly lift restrictions as large scale testing and tracing capabilities are introduced.

The *future we prepare for* (harsh) scenario envisages a world where ongoing physical distancing measures are needed until a vaccine is made available in mid-2021.

Finally, in the *future we want to avoid* (severe) scenario, we experience a devastating second outbreak of the virus challenging ICU capacity for a critical period of time.

Australia has fared relatively well to date

But what could the future hold?

Cumulative number of confirmed cases

45,000 40,000 35,000 Second wave 30.000 25,000 Small rate of 20,000 sustained transmission 15,000 10,000 5,000 0 2020 2020 2020 2020 2021 2021 2021 2021 Qtr1 Qtr2 Qtr3 Qtr4 Otr1 Qtr2 Qtr3 Qtr4 ---- Mild ----- Harsh ----- Severe

Future we hope for (mild) scenario

As a result of effective and targeted containment measures, Australia sees a short and sharp peak in new infected cases and deaths by end of April 2020. After a period of decline, no new cases are observed from July 2020 onwards.

Future we prepare for (harsh) scenario

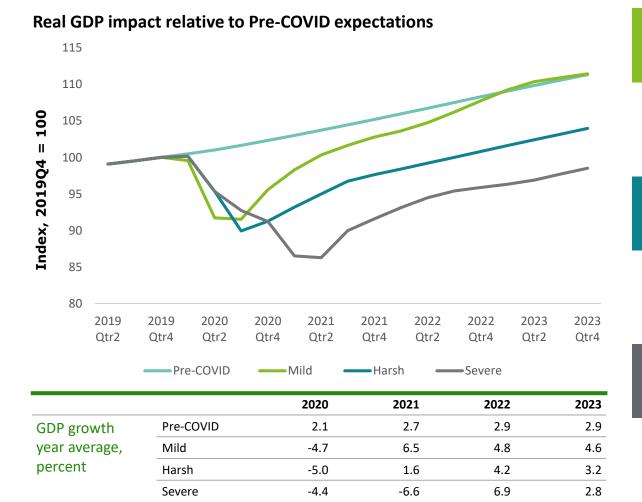
While we manage to contain the initial outbreak by May 2020, new cases/outbreaks continue to appear as we try to balance the need for physical distancing with the desire to re-open the economy. Following the release of a vaccine in July 2021, infected cases will decline rapidly until the virus is managed by August 2021.

Future we want to avoid (severe) scenario

As we lift social distancing measures, COVID cases escalate rapidly from September 2020. We eventually overcome this second outbreak through a renewed period of severe physical distancing regulations but the healthcare system struggles under the surge in demand for ICU places.

The sheer speed of economic disruption is unprecedented

We know COVID-19 has had a massive impact on economic activity, but what could the recovery look like?



Future we hope for (mild) scenario

Economic activity rebounds from mid 2020 as the virus dissipates. The initial recovery is fast as businesses are able to reopen quickly because they've retained their workforce and assets. The recovery reaches pre-COVID activity levels as we implement productivity enhancing ways of working and implement a range of reforms.



Future we prepare for (harsh) scenario

Economic activity starts to recover in late 2020 as the virus comes under control. However the recovery is slow as ongoing physical distancing restrictions remain in place until a vaccine arrives in mid-2021. Economic activity remains below pre-COVID levels as we fail to integrate new ways of working or implement productivity enhancing reforms.

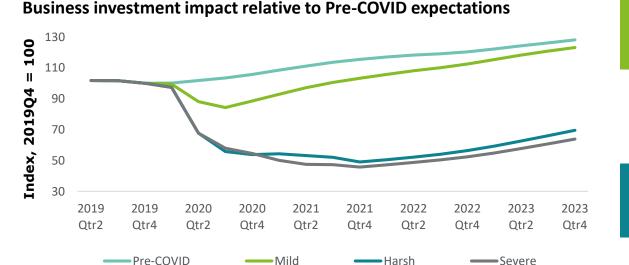


Future we want to avoid (severe) scenario

Activity continues to weaken as the second outbreak occurs in late 2020. Many businesses are lost and the recovery is hampered by weak consumer and business confidence, financial sector stress, a rising pool of long term unemployed, and a prolonged period of deflation.

Businesses have halted any plans for investment ...

Leaving a lasting impact on future productivity



		2020	2021	2022	2023
Growth year	Pre-COVID	1.3	9.1	5.8	5.5
average, percent		(\$3B)	<i>(\$20B)</i>	<i>(\$14B)</i>	(\$14B)
Change in	Mild	-11.3	9.3	10.8	9.4
\$ amount		(-\$24B)	<i>(\$18B)</i>	<i>(\$22B)</i>	<i>(\$22B)</i>
of business	Harsh	-32.3	-24.1	2.2	20.8
investment from		(-\$69B)	(-\$35B)	(\$2B)	(\$23B)
the previous year	Severe	-31.6	-31.3	4.3	19.3
in italics		(-\$68B)	(-\$46B)	(\$4B)	(\$20B)

Harsh

Severe



Future we hope for (mild) scenario

With most physical distancing restrictions lifted after the initial containment, the economy rebounds and businesses start regaining confidence. As credit recovers and the government implements a series of well-designed fiscal packages, business investment eventually recovers close to pre-COVID investment levels.



Future we prepare for (harsh) scenario

Business investment is the most affected part of the economy as it's hurt both by expected future sales and by the unwillingness of businesses to take a risk. As such the worse the health and economic outcomes of the pandemic, the worse the outlook is for business investment. Capital spending remains on pause, particularly affecting the non-mining sectors. With the implementation of a vaccine (or effective treatment) in mid 2021, businesses investment starts to recover slowly but settle at a level significantly lower than pre-COVID investment levels.

Future we want to avoid (severe) scenario

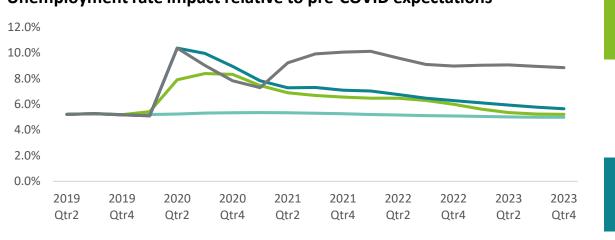
The two consecutive outbreaks of the virus results in business and consumer confidence hitting an all time low. Many businesses are lost by the time a vaccine (or effective treatment) is implemented in mid 2022. As financial stress escalates, credit becomes scarce and investment stagnates at a level much lower than pre-COVID investment levels.

This is personal...

Pre-COVID

Thousands of jobs have already been lost. How many of these can we recover?

Severe



		2020	2021	2022	2023
Unemployment rate, percent	Pre-COVID	5.3 <i>(28)</i>	5.3 (20)	5.1 <i>(-10)</i>	5.0 <i>(-7)</i>
Change in unemployment ('000)	Mild	7.5 <i>(320)</i>	6.9 (-61)	6.3 <i>(-63)</i>	5.3 <i>(-119)</i>
from the previous year in italics	Harsh	8.6 <i>(463)</i>	7.4 (-192)	6.6 <i>(-70)</i>	5.9 <i>(-96)</i>
	Severe	8.1 <i>(394)</i>	9.1 <i>(69)</i>	9.4 <i>(89)</i>	9.0 <i>(-49)</i>

Mild

Unemployment rate impact relative to pre-COVID expectations

Harsh

Future we hope for (mild) scenario

The unemployment rate reaches 8.4% in the third guarter of 2020 before beginning a steady decline towards levels of unemployment seen pre-COVID. The initial unemployment surge is muted by the successful health response enabling businesses to re-open before losing their staff. In the medium term, a fiscal stimulus package and effective re-training programs enable workers to return to work or find new work as businesses and shops re-open.



Future we prepare for (harsh) scenario

Despite the introduction of numerous government economic survival measures the unemployment rate reaches 10% in mid-2020. While the unemployment rate starts to drop relatively quickly, this is as much a reflection of the economy restarting as it is a reflection of a relatively smaller labour force due to a drop in inbound migration.



Future we want to avoid (severe) scenario

Despite the promise of a quick recovery seeing the unemployment rate dip below the Harsh and Mild scenarios in late 2020, a second outbreak and subsequent restrictions sees the unemployment reach 10% for a second time in early 2022. And even as the economy starts to recover after a vaccine (or equivalent treatment) is introduced in mid-2022 we struggle to lower unemployment as skills deteriorate and become obsolete for the long term unemployed.

COVID-19 will change our demographic outlook

Australia's population growth will shift gears as migration patterns are disrupted



Net overseas migration relative to pre-COVID expectations

Future we hope for (mild) scenario

Strong border controls over the next 12 months cause total population growth to drop to a low of 0.8% for 2020. An easing of restrictions through 2021 sees migration return to pre-COVID levels by 2023. The total fertility rate temporarily falls as some families shift family planning beyond the height of pandemic.



Future we prepare for (harsh) scenario

Border controls remain in place for longer, and people remain reluctant to relocate internationally, leaving the downshift in migration deeper and wider. Total population growth falls to a low of just 0.3% in 2020, recovering to 1.4% by 2023. The extended period of economic disruption causes the birth rate to dip to 1.6 babies per woman before recovering to 1.65 by 2024.

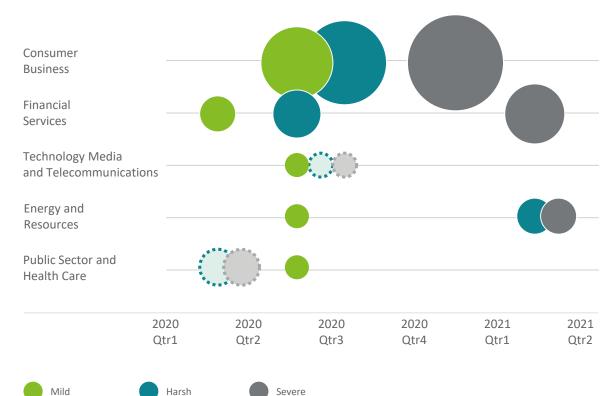
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Future we want to avoid (severe) scenario

A second outbreak sees extended disruptions to international movements, with the number of people departing Australia exceeding new arrivals through 2020 to 2022 as many migrants on temporary visas return home. The total population growth is -0.2% over 2020; remaining below 1% for several years. The economic turmoil sees families delay or forego family planning decisions and the total fertility rate falls to 1.5 babies per woman by 2023.

COVID-19 is affecting sectors differently

Some sectors face shorter or less severe impacts than others



COVID-19 industry impact and timing of recovery

Notes

• The position of the circle represents the starting time of the sector's recovery. The size of the circle indicates the magnitude of the COVID-19 disruption on the sector.

• Dotted lines surrounding the scenario circles represent increased sector demand.

Severe

Every sector is experiencing COVID-19 differently. While the direction of impact is clear for most sectors, the extent of the disruption and the timing of the recovery remains uncertain.

The **Consumer Business sector** is most affected. The hospitality and retail sectors suffer from shutdowns enforced as part of the physical distancing restrictions while much of the manufacturing industry faces lower demand as well as input shortages due to ongoing global supply chain disruptions. Finally, construction is severely affected as heightened uncertainty causes households and businesses to postpone or cancel planned investments – scared businesses batten down rather than spend on expanding their capacity.

Financial Services is similarly disrupted as businesses and households curb demand for new loans and as defaults rise on existing loans. Ongoing low interest rates crimp net interest margins. The effect on this sector grows rapidly as the severity of the economic disruption worsens from the future we hope for to the future we're doing everything to avoid.

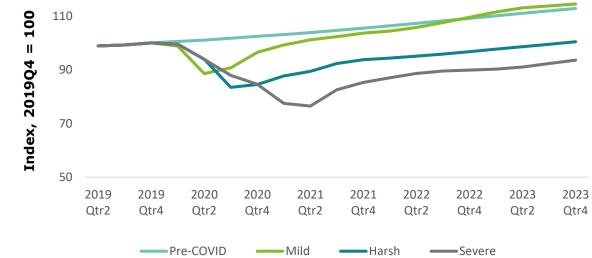
The disruption in **Energy and Resources** is more muted. While low oil prices mean profit pressures for the gas sector, underlying demand is unlikely to change materially. Similarly, there's a risk that iron ore and coal demand will drop due to a protracted global recession, but this is largely avoided in the Mild scenario.

Finally, there may be opportunities in **Technology Media and Telecommunications and the Public Sector.** Specifically, in the Harsh and Severe scenarios, demand for online services rises as people shift to working, learning and seeking entertainment from home. Similarly, in these latter scenarios the growing demand for public sector and health services to manage the crisis dominates the detrimental impact experienced in international education and elective surgery.

Consumer business and the financial sectors will be worst hit Will a rapid recovery avoid persistent impacts on these industries?

100 110 100 П П Index, 2019Q4 Index, 2019Q4 90 70 50 2019 2019 2020 2020 2021 2021 2022 2022 2023 2023 Qtr2 Qtr4 Qtr2 Qtr4 Qtr2 Qtr4 Qtr2 Qtr4 Qtr2 Qtr4 Pre-COVID

Consumer Business sector output relative to Pre-COVID expectations



Financial Services sector output relative to Pre-COVID expectations

The industries in this sector are highly dependent on consumer and business sentiment and the willingness to spend. In the Mild scenario, this sector starts recovering in late 2020, and returns to pre-COVID expectations by late 2023. The impact of COVID is persistent in the Harsh and Severe scenarios as consumer and business behaviour changes to permanently reduced levels of spending relative to pre-COVID expectations.

There will be pockets of opportunity. Farmers are enjoying a long sought after period of rain and demand for the local manufacture of a number of items is likely to rise as we reduce our reliance on global supply chains. Similarly, parts of the wholesale and transport sectors are experiencing sustained gains from the rise in online retail.

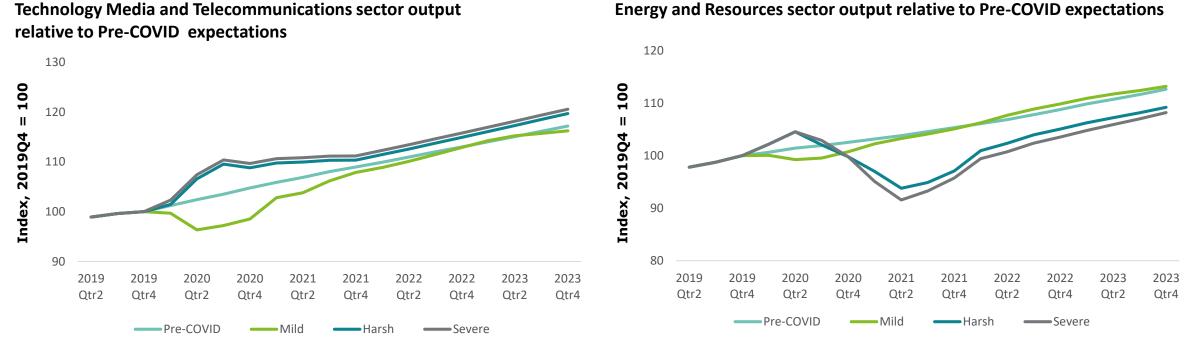
The financial services sector is playing an important role to smooth the income shock for businesses and households during the crisis. But that role comes at a cost as bad debts rise and demand for new loans drop in the face of high levels of uncertainty facing investors. In addition to these changes, lenders face a prolonged period of net interest margin pressure as the cash rate remains at the effective lower bound.

Having said that, there could be a rise in mergers and acquisition activity as industries consolidate and we might see a shift back towards active wealth management services as households place greater value on active financial risk management to protect their wealth.

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There are pockets of opportunity for the technology sector

Energy and resources sectors must stay wary of longer term impacts



Energy and Resources sector output relative to Pre-COVID expectations

In the Mild scenario, where the physical restrictions are temporary, the constraints in household consumer spending and business investment results in reduced activity in this sector. On the other hand, in the Harsh and Severe scenarios a prolonged period of physical distancing measures encourages greater investment in technology as we change the way we work, learn and play.

Energy and resource demand experiences a small fall in the Mild scenario as a period of relative mild economic disruption reduces demand and investment in this sector. However, if the disruption was to escalate we could see a short period of increased activity as the global economy lurches towards greater levels of infrastructure spending to overcome weakness in other parts of the economy. Unfortunately, the demand surge will be short lived as a slowdown would follow once the global economy switches back to normal and excess infrastructure capital is sweated to help repair fiscal balance sheets.

We rely on the health care sector to keep us safe... And the public sector to guide us through the crisis

100 110 Ш Index, 2019Q4 100 90 2019 2020 2019 2020 2021 2021 2022 2022 2023 2023 Qtr2 Qtr4 Qtr2 Qtr4 Qtr2 Otr4 Qtr2 Otr4 Qtr2 Qtr4 Pre-COVID Milc Severe

In the Mild scenario, this sector experiences a small fall in demand as the drop in international education and disruption to elective surgeries dominate the increased activity from government agencies supporting the COVID response. On the other hand, if the crisis intensifies then we'll see a sharp rise in activity as the required health response grows and greater levels of government oversight is required to manage the economic recovery. That surge period is only temporary, however, and once the crisis subsides the government shifts its focus to budget repair.



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Public sector and Health Care sector output relative to Pre-COVID expectations

Contacts

These economic scenarios represent a range of possible economic circumstances as the COVID-19 crisis evolves. It is too soon to tell which of these or other scenarios will emerge, but resilient leaders are preparing now for what the future may hold. For more information, or to explore the implications of these economic cases on the future of your organization, please contact us:

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