



Economic outlook: 1 May 2020

The macroeconomic environment, COVID-19 and innovation

What is the current macroeconomic environment?

Global economic environment and assistance measures

COVID-19 is in 213 countries/territories with 3,090,000 **confirmed cases** and 218,000 confirmed deaths ([WHO, 1 May](#)).

- **Continued uncertainty** over the economic fallout resulting in high market volatility and withdrawn investment across all asset classes, large declines in equity prices and government bond yields, and pervasive restrictions across funding markets. **Heavily constrained private sector spending** means worsening financial conditions for the public sector.
- National governments and state governments are starting to **ease restrictions** or plan to do so soon. Economic recovery will be stifled by continued measures like social distancing. Should a second wave of infections occur, economies would suffer as temporary financial support measures are phased out. ([Deloitte, 28 April](#), [Oxford Economics, 27 April](#)).
- Developed markets experienced significant **contraction in economic activity** in April ([Deloitte, 28 April](#)). The Eurozone's economy contracted by 3.8%p in the first quarter ([ECB, 30 April](#)). The US economy contracted by 4.8%p ([BEA, 29 April](#)).
- Emerging markets are expected to shrink by 4% this year ([Capital Economics, 28 April](#)) and will continue to be impacted by supply chain disruptions, job losses and declines in remittances ([Deloitte, 28 April](#)).
- Asia is entering a new "**deleveraging phase**" as firms struggle with cashflow, tighter credit, repaying loans and paying workers. As banks prioritize large businesses, small and mid-sized businesses are vulnerable ([IMF, 23 April](#)).
- **Oil prices** fell below zero early last week with demand so low that storage capacity is expected to hit close to 100% in the next few weeks. Oil producing nations and producers are highly impacted and face worsening economic and political prospects, and consuming nations are not benefitting from low prices due to the current lack of travel ([Deloitte, 28 April](#)).

- **Environmental pollution** has fallen sharply and the OECD is calling for an inclusive and green COVID recovery ([22 April](#)).
- Global assistance measures amount to approximately \$8 trillion ([IMF, 20 April](#))
- The IMF has established a new facility (the Short-term Liquidity Line) to address liquidity shortages ([IMF, 22 April](#)), doubled its emergency disbursing capacity, tripled its concessional funding for the most vulnerable members, and supports suspending official bilateral debt repayments for the poorest countries ([IMF, 20 April](#)).
- The US is issuing a further \$380b in additional funding for small businesses and workers and \$100 billion for healthcare providers to support hospitals and testing ([US President's Statement, 24 April](#)).
- The ECB has left interest rates on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility unchanged at 0.00%, 0.25% and -0.50% respectively ([ECB, 30 April](#)). Assistance packages were announced for €120B on [12 March](#) and €750B on [18 March](#) (together 7.3% of GDP). European member states have also enacted their own measures through March and April.
- The PBoC cut the interest rate on its targeted medium-term lending facility by 20 basis points, injecting 56.1 billion Yuan (\$7.93 USD) into the economy. There have been delays in approving a large stimulus package but Chinese officials have signalled possible additional stimulus later in the year as the health situation stabilises ([Reuters, 24 April](#); [CSIS, 30 April](#)).

Australian economic environment and assistance measures

6,746 confirmed cases and 90 confirmed deaths ([WHO, 1 May](#)).

- To date, the Federal Government's assistance measures total \$320 billion representing 16.4% of GDP ([Treasury, 30 April](#)).
- For the first half of 2020, GDP is expected to decline by around 10%p with most of the decline occurring in June, and total hours worked is expected to fall by 20%. Unemployment is likely to be around 10% by the end of June and inflation is also expected to decline significantly ([RBA, 21 April](#)).

- Of the \$90b Term Funding Facility package, \$3b has so far been drawn with 35 institutions participating ([RBA, 21 April](#)).

Macroeconomics and health sector innovation in Australia

One of the immediate and obvious areas of innovation activity in response to COVID-19 has been in health.

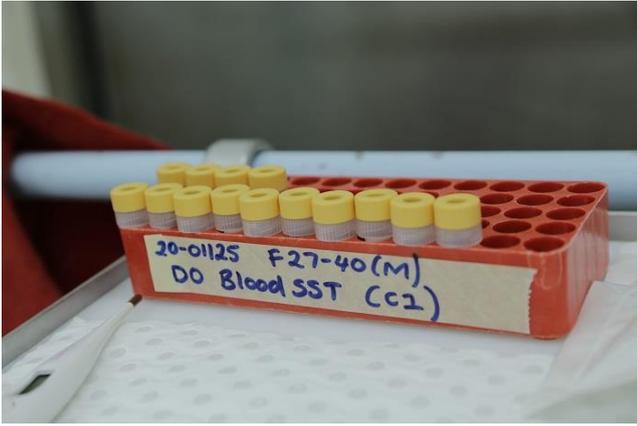
Health sector innovation in Australia

Australian scientists, including scientists at the CSIRO Australian Centre for Disease Preparedness, have been working on disease preparedness for decades, placing us in an excellent position to respond rapidly to COVID-19. Much of the current response activity builds on these decades of planning and preparation.

- Globally and in Australia COVID-19 has spurred increases in R&D activity, particularly in medical and biological research sectors as firms work on a vaccine for COVID-19. Revenue for the Australian industry is expected to grow by 5.7% this year due to capital expenditure by government and private funding for COVID-19 related research. ([IbisWorld, 28 April](#))
- To date the Australian government has invested more than \$36 million for COVID-19 research as component of the \$2.4 billion COVID-19 National Health plan announced in March ([Greg Hunt Media Release, 13 April](#)). The plan provides funding across healthcare providers, research in vaccine, anti-viral and respiratory medicine, and supplies for the national medical stockpile ([Prime Minister's Statement, 11 March](#)).

Key COVID-related health innovation trends

- **Vaccine and therapeutics development:** There are 94 candidate vaccines in preclinical evaluation and 8 candidate vaccines in clinical evaluation ([WHO, 30 April](#)). There are also approximately 180 treatments, including antibodies, antivirals, cell-based therapies, RNA based treatments and devices ([Milken Institute, 1 May](#)). CSIRO is playing a vital role in vaccine development efforts by successfully establishing a biological model in February, being the first to confirm ferrets react to the COVID-19 causing virus, and now using this model to assess vaccine candidates.



CSIRO scientists are testing vaccines for COVID-19 at CSIRO's Australian Centre for Disease Preparedness.

- **Rapid diagnostic testing:** The TGA has approved 45 COVID-19 test kits for inclusion on the Australian Register for Therapeutic Goods since the 19 March (TGA, 1 May).
- **Track and trace systems:** Many countries are now using contact tracing smartphone apps to help curb the spread of the virus, including [Australia](#). With the speed of development and lack of global standards yet, there are concerns raised about managing accuracy and privacy (see for example the editorial in [Nature](#), 29 April).
- **Sanitiser and disinfectants:** There have been many examples of organisations pivoting their production systems to produce hand sanitiser, including large chemical companies such as [Syngenta](#) as well as [Australian gin distilleries](#).
- **Telehealth:** Health professionals and health systems around the world are adopting virtual treatment approaches to avoid physical meetings with patients

(see for example commentary in [The Lancet](#), 11 April). The Australian Government has [provisioned](#) \$100m over 2019-21 to allow health professionals to deliver bulk billed services via telehealth.

The Road Ahead

- The WHO activated its **R&D Blueprint** to accelerate diagnostics, vaccines and therapeutics for COVID-19 ([WHO](#), 13 April). Key **research areas** identified are virus history, transmission and diagnostics, epidemiological studies, clinical characterization/management, infection prevention/control, vaccine/therapeutics R&D, ethics considerations and social sciences. The blueprint advocates coordinated and focused funding, collaboration and timely sharing of research data.
- A vaccine development strategy for Europe proposes a staged support scheme to tackle the COVID-19 vaccine challenge and a 'moon shot programme' to meet the challenge of future pandemics ([Bruegel](#), 21 April).

Conclusion

1. In the **short term**, investment in health is focused on treating COVID-19 and slowing its spread as well as securing critical medical items and funding vaccine development and related science.
2. In the **long term**, focus in health innovation should shift to science and technologies that support COVID-19 recovery and strengthen Australia's resilience for future epidemics.

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