ECONOMIC IMPACT OF THE CORONAVIRUS PANDEMIC

PRESENTATION TO A WEBINAR HOSTED BY THE FINANCIAL SERVICES ACCOUNTANTS ASSOCIATION

18TH SEPTEMBER 2020

SAUL ESLAKE
CORINNA ECONOMIC ADVISORY PTY LTD

Agenda

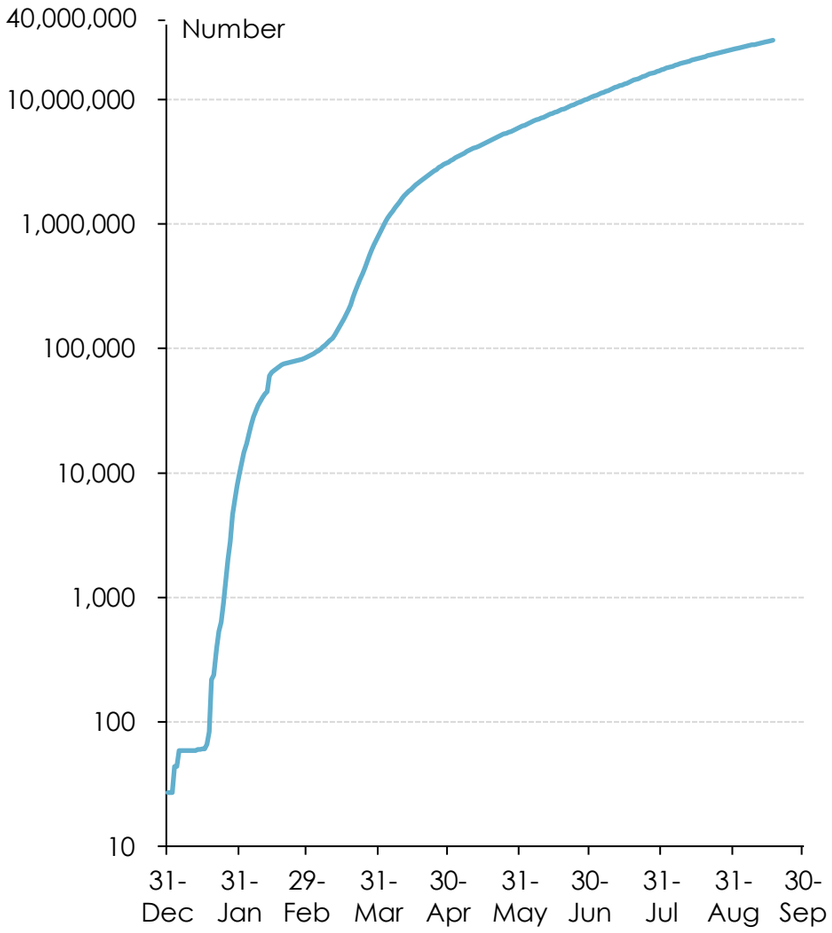
- ❑ The virus
- ❑ The world economy
- ❑ The Australian economy
- ❑ The Australian policy response
- ❑ The ‘path out’
- ❑ Your questions

Note: nothing in what follows constitutes investment advice, nor should it be construed as such!

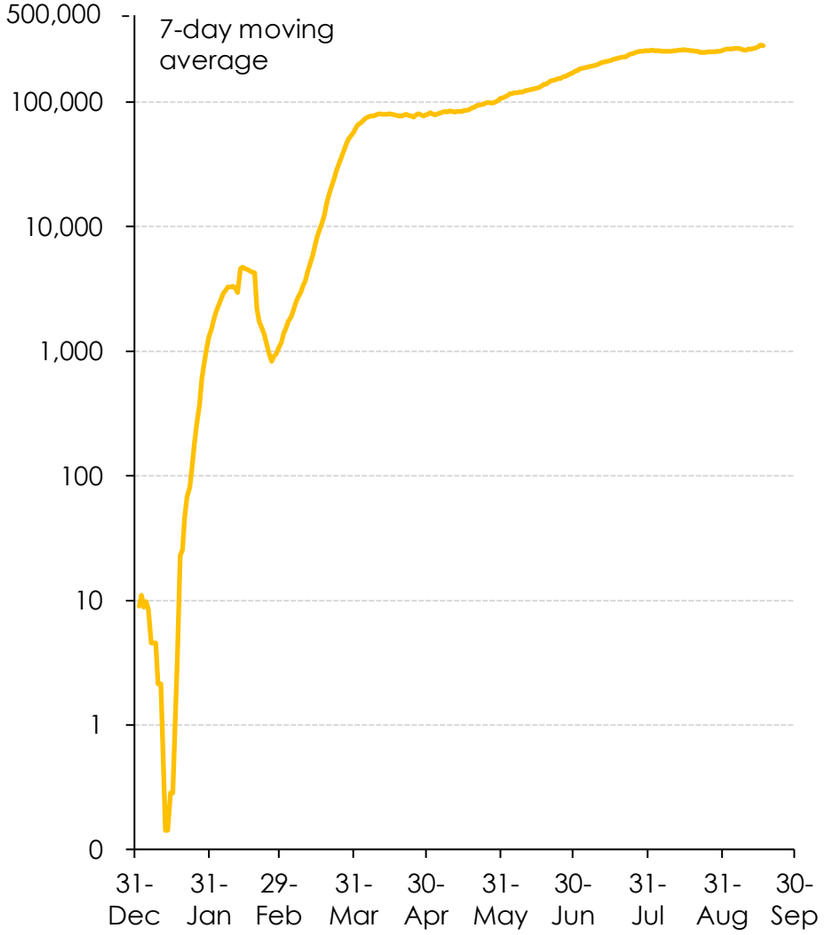
The virus

The global 'second wave' still hasn't peaked, with the number of cases now approaching 30 million, and the number of deaths only 50K short of 1 million

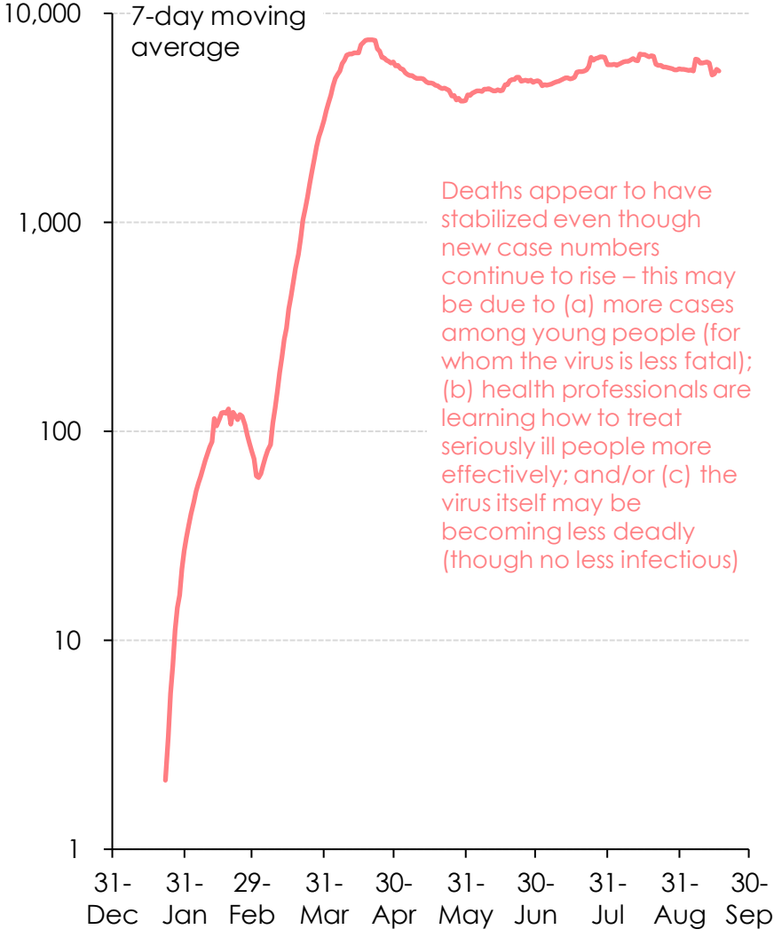
Cumulative confirmed cases – global total



New confirmed cases – global total



New deaths – global total

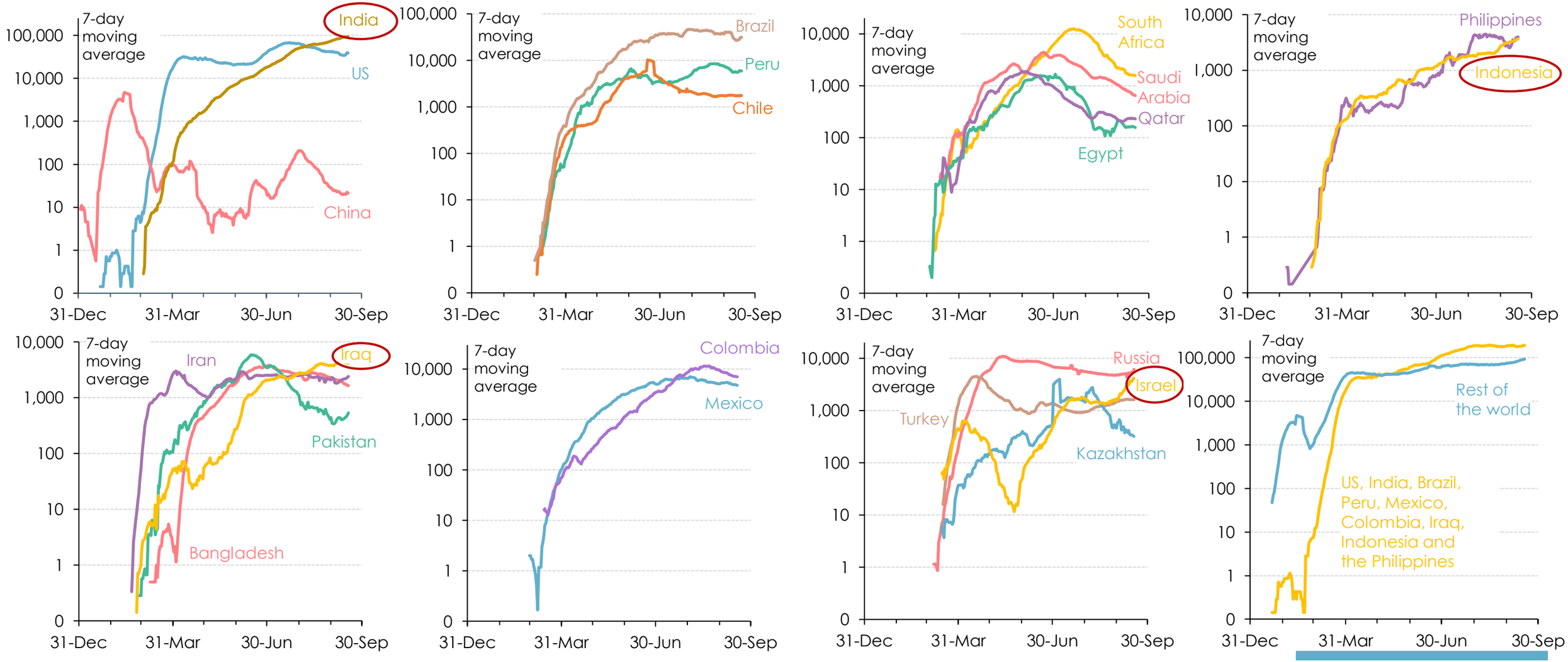


Deaths appear to have stabilized even though new case numbers continue to rise – this may be due to (a) more cases among young people (for whom the virus is less fatal); (b) health professionals are learning how to treat seriously ill people more effectively; and/or (c) the virus itself may be becoming less deadly (though no less infectious)

Note: All charts are on logarithmic scales. Data up to 17th September. *Source:* University of Oxford, *Our World in Data*.

Share of cases in 9 countries with 33% of world's population down to 67% from peak of 73% in mid-August, but cases still rising in "the four I's"

Daily new cases – 22 countries with (mostly) large populations and large numbers of new cases



Note: All charts are on logarithmic scales. Data up to 17th September. *Source:* University of Oxford, *Our World in Data*; Corinna.

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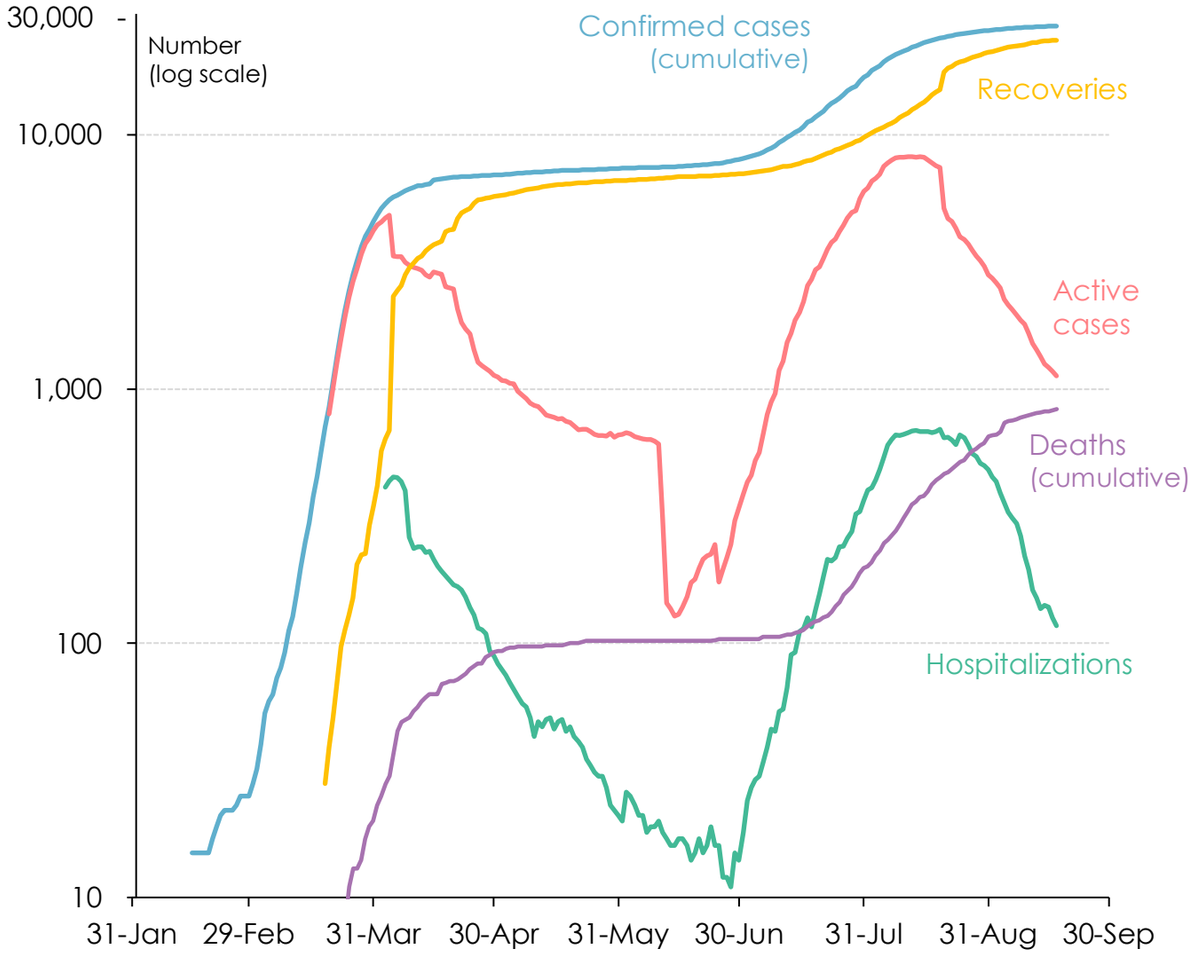
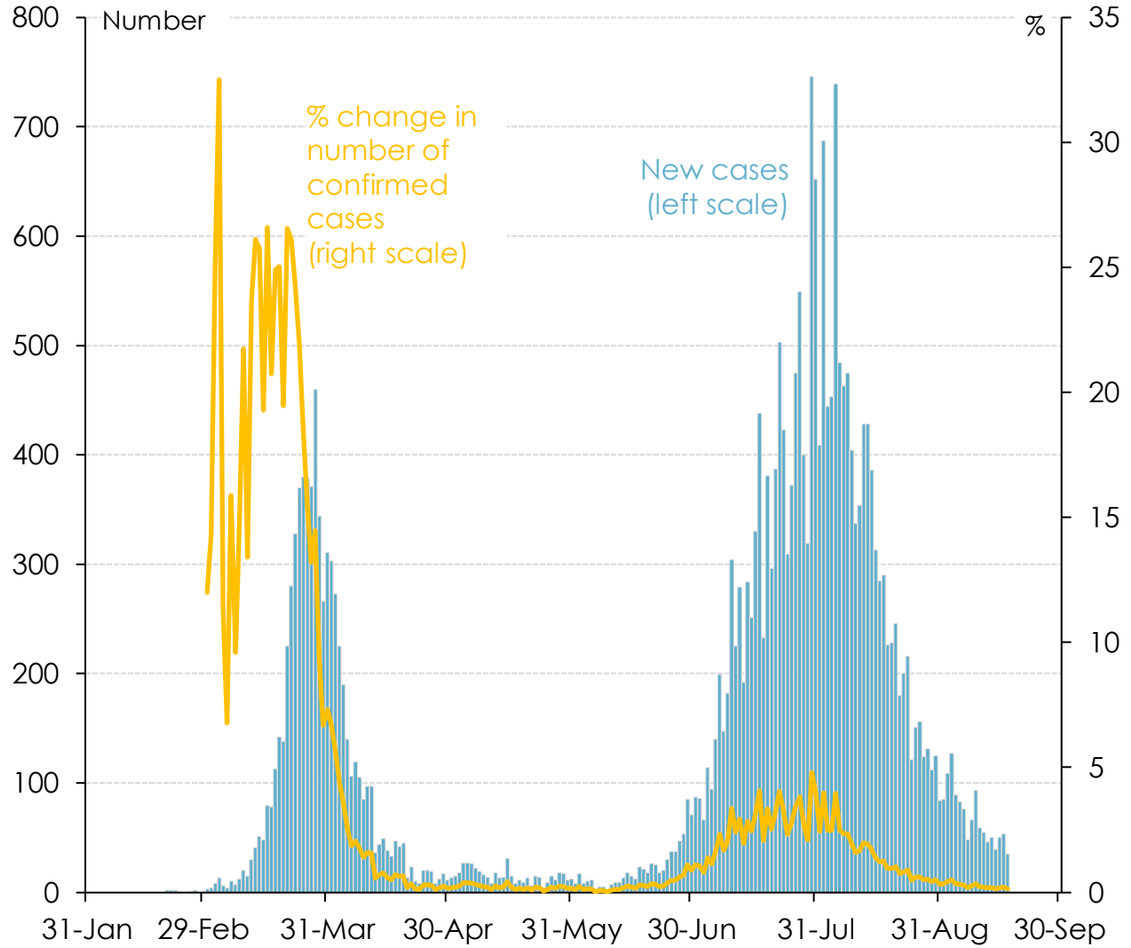
The number of new cases in Australia over the past week was the lowest since the last week of June, although the number of deaths is still rising

Cases, recoveries, hospitalizations and deaths



New cases



Note: Data up to 17th September. *Source:* covid19data.com.au.

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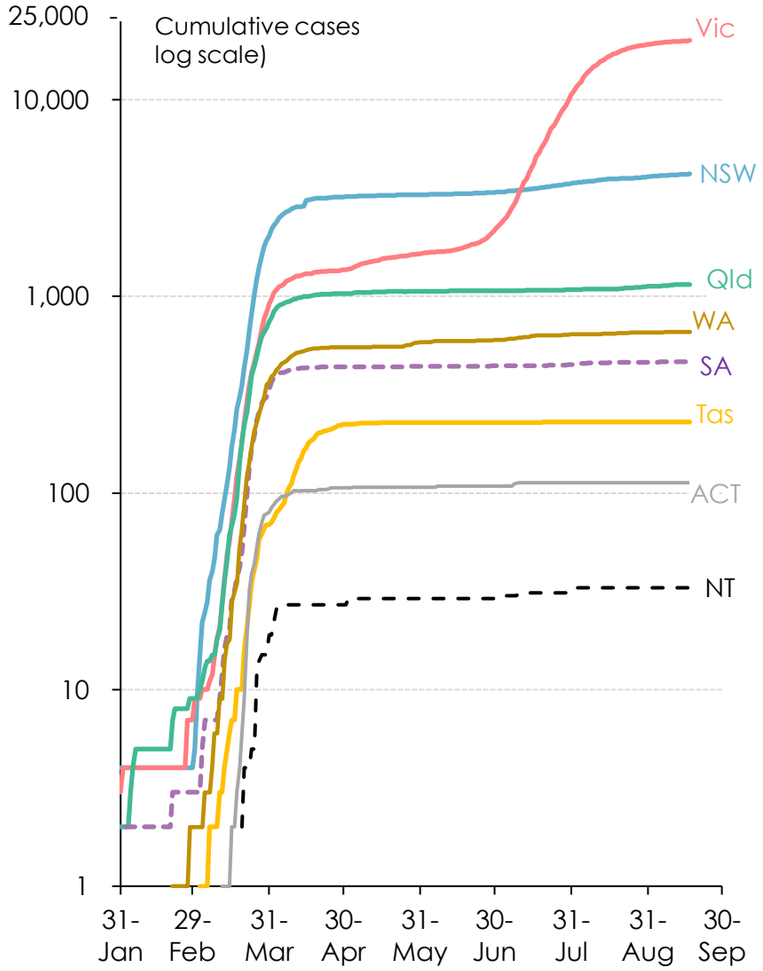
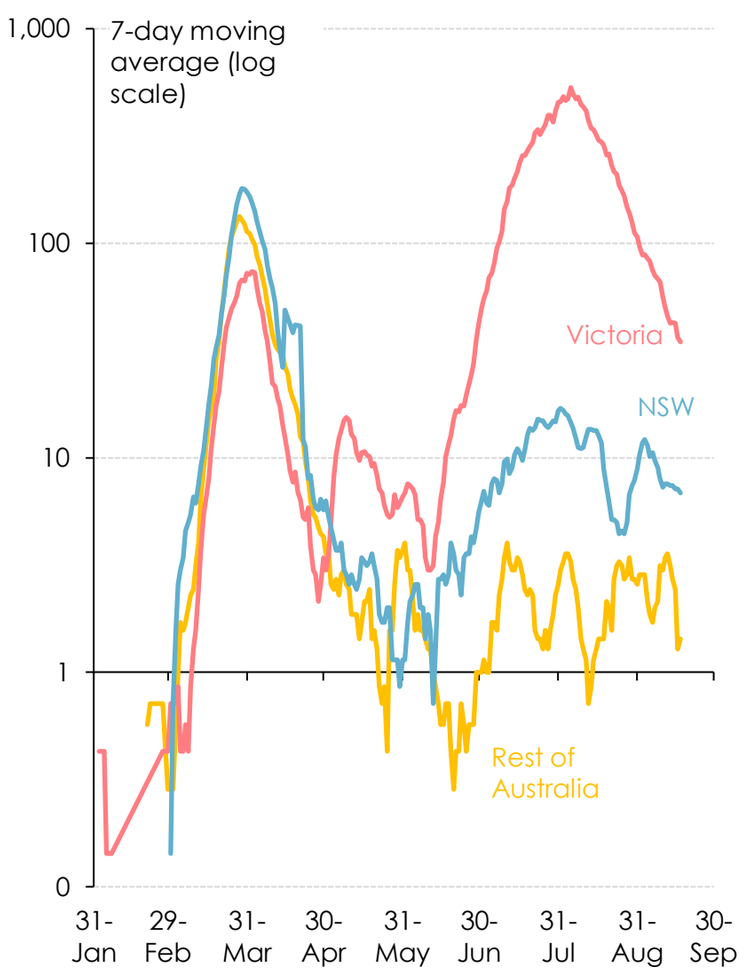
Victoria's "second wave" of infections peaked in the first week of August but still hasn't receded enough to allow the state to start 're-opening'

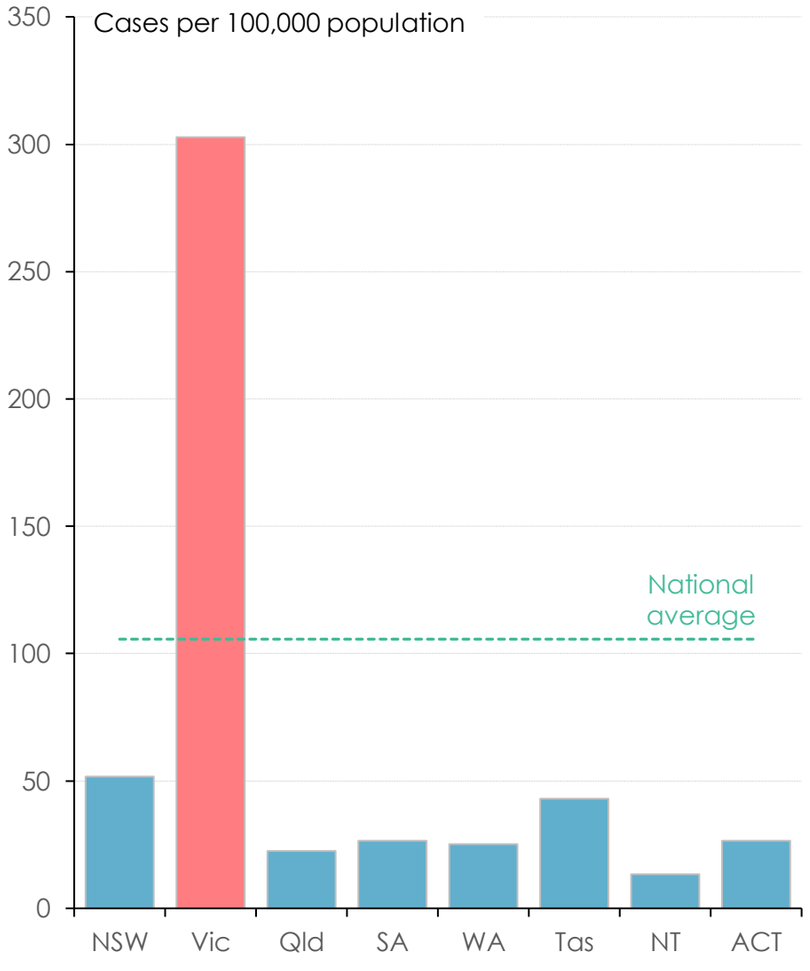
Cumulative cases, by State



New cases



Cases per 100,000 population



Note: Data up to 17th September. *Source :* covid19data.com.au.

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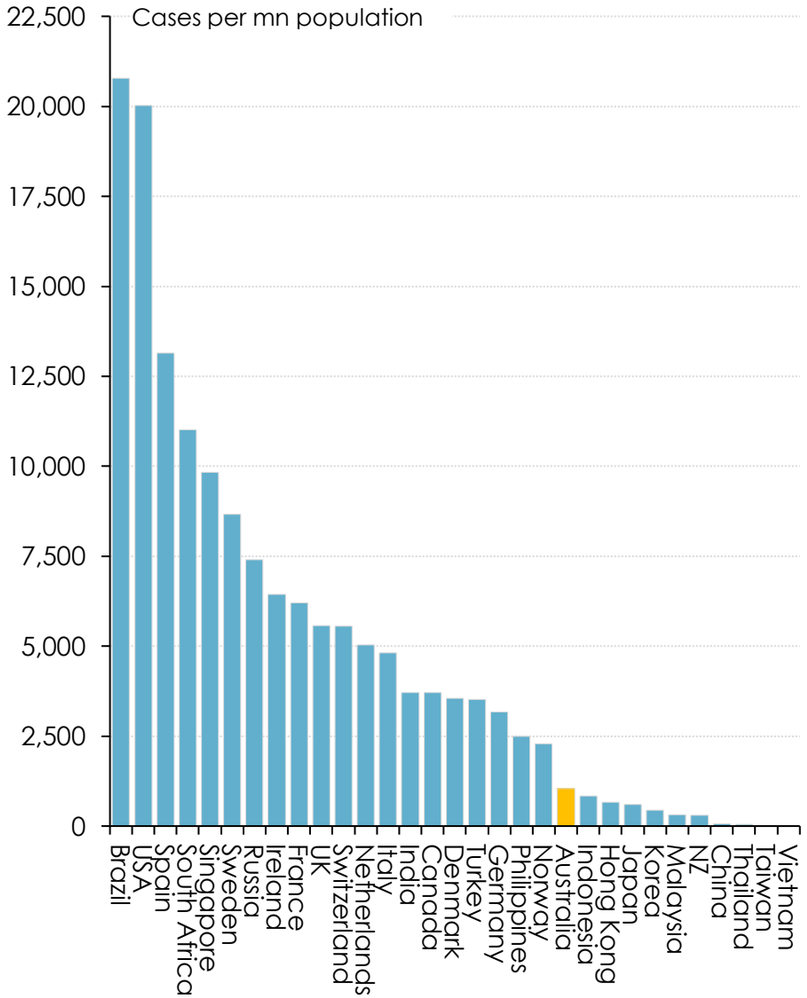
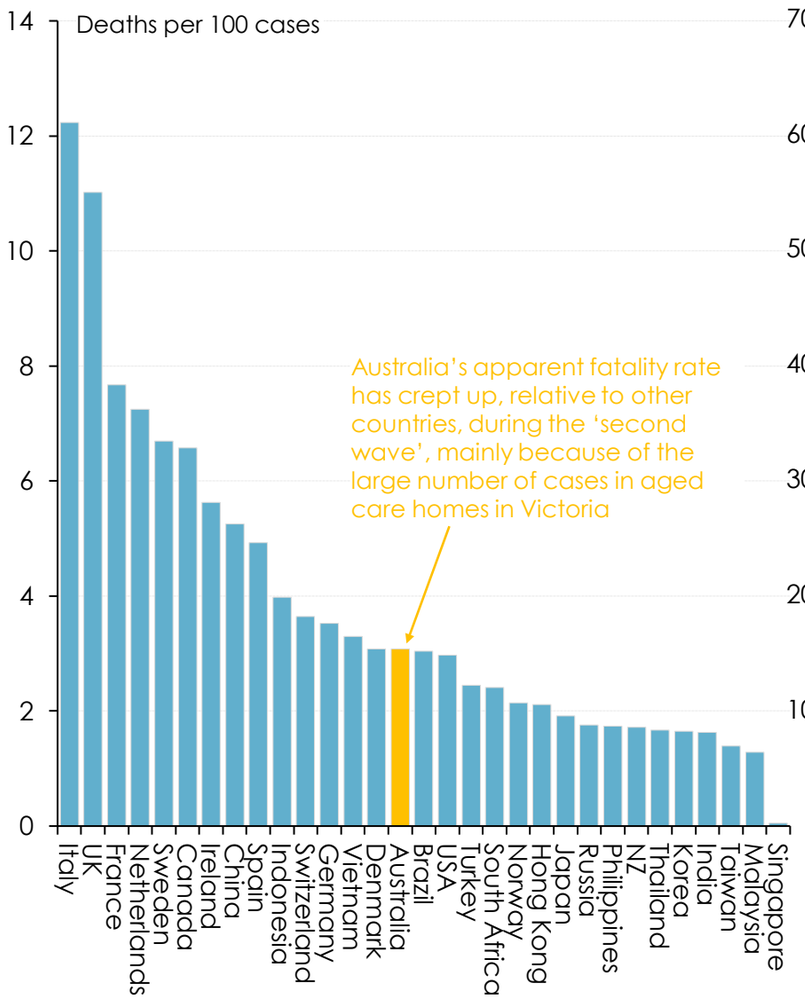
Australia's infection and fatality rates remain, along with NZ's and most East Asian countries', low by international standards

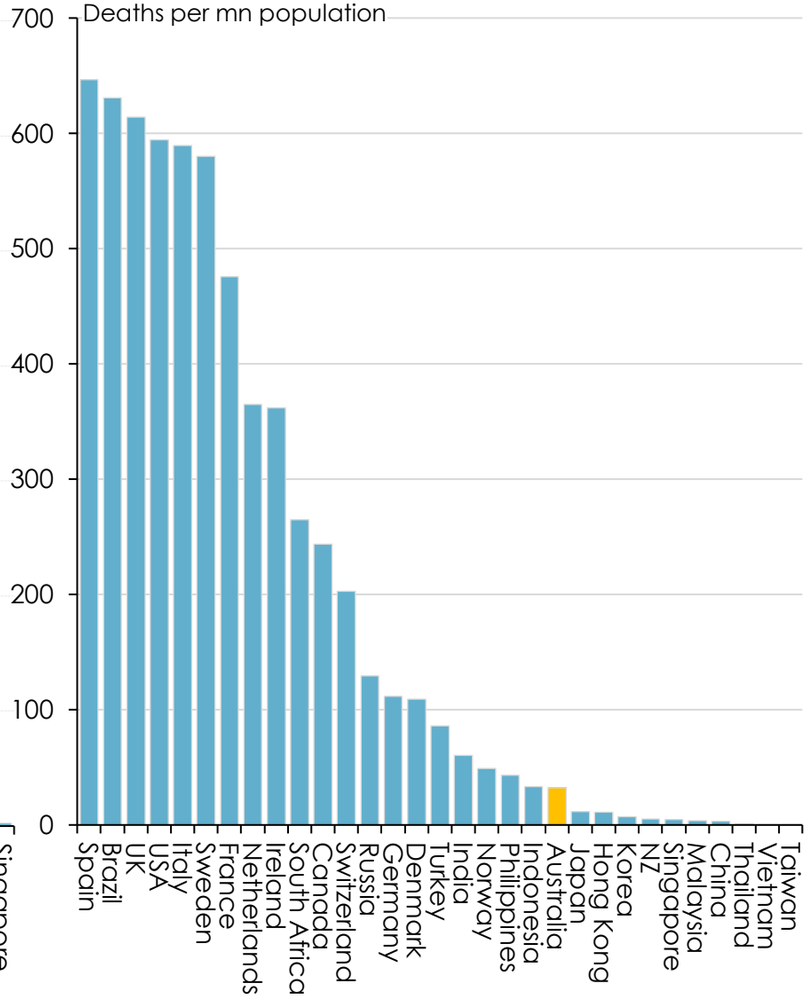
Apparent infection rate



Apparent fatality rate



Death rate



Note: Data up 17th September. *Source:* University of Oxford, Our World in Data; Corinna.

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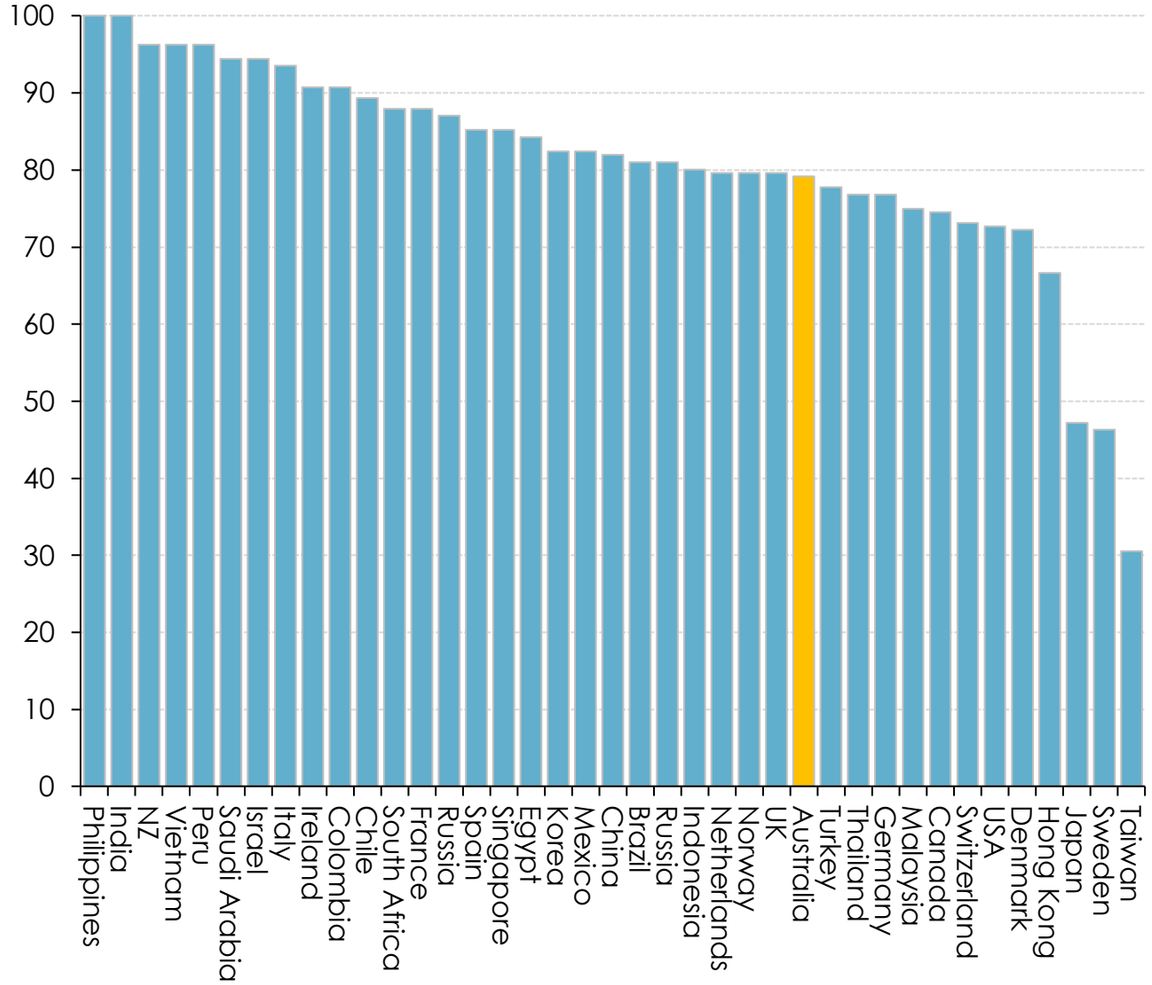
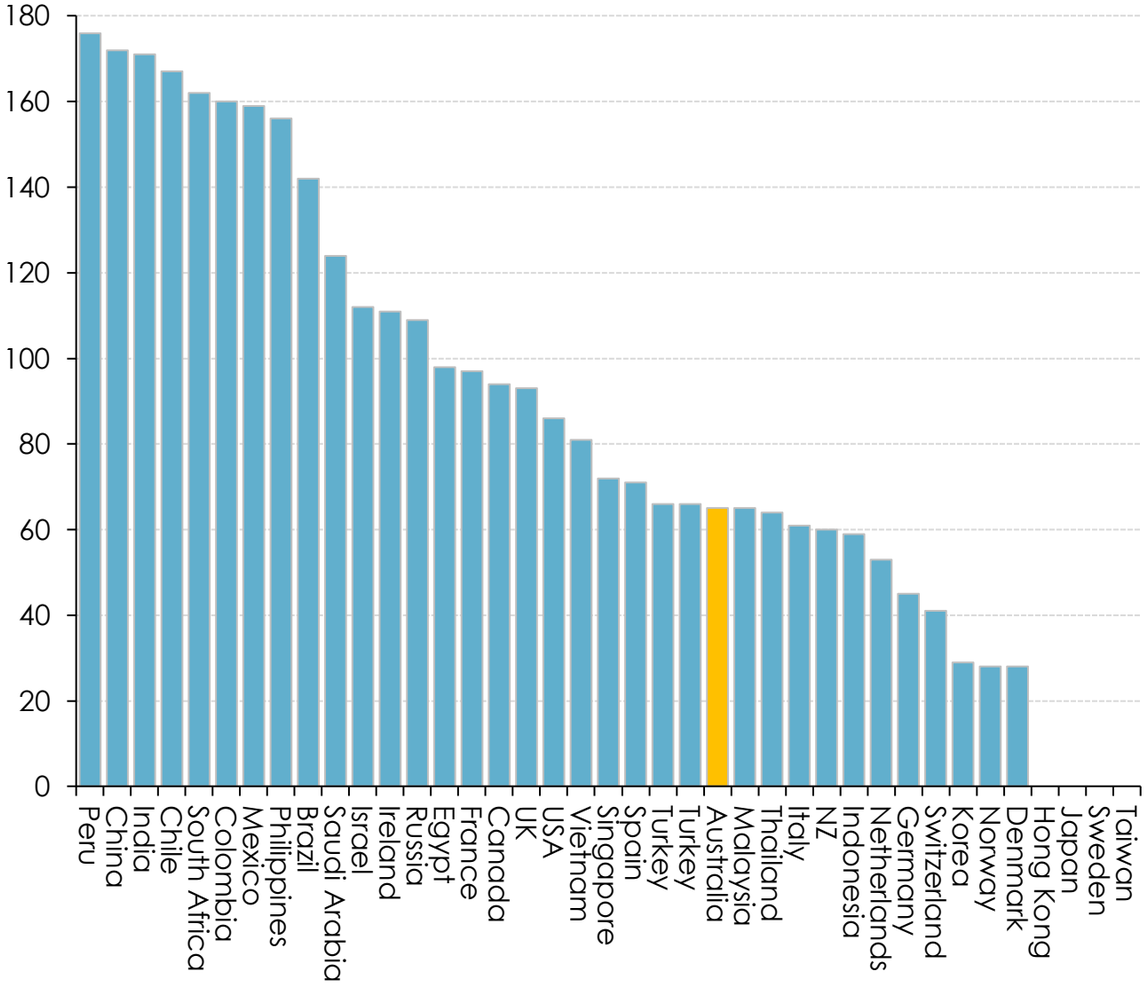
Australia's restrictions have been, on average, less stringent than in most other countries – though we have crept up the list a bit in the past 6 weeks

Highest level of restrictions imposed



Number of days restrictions above 70 on Oxford index

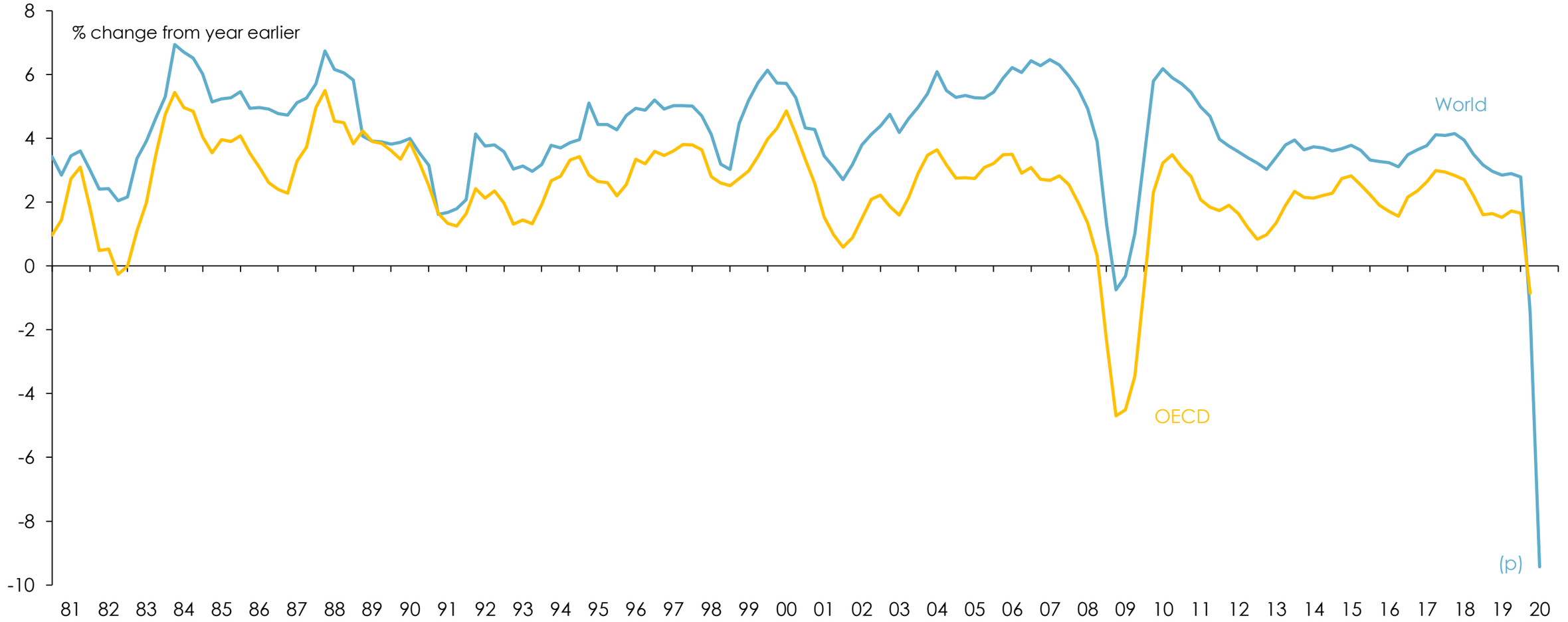


The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. *Source:* : Blavatnik School of Government, Oxford University. Data up to 24th August – 10th September.

The world

The world economy experienced has experienced its sharpest year-on-year contraction in at least 40, and probably almost 90, years

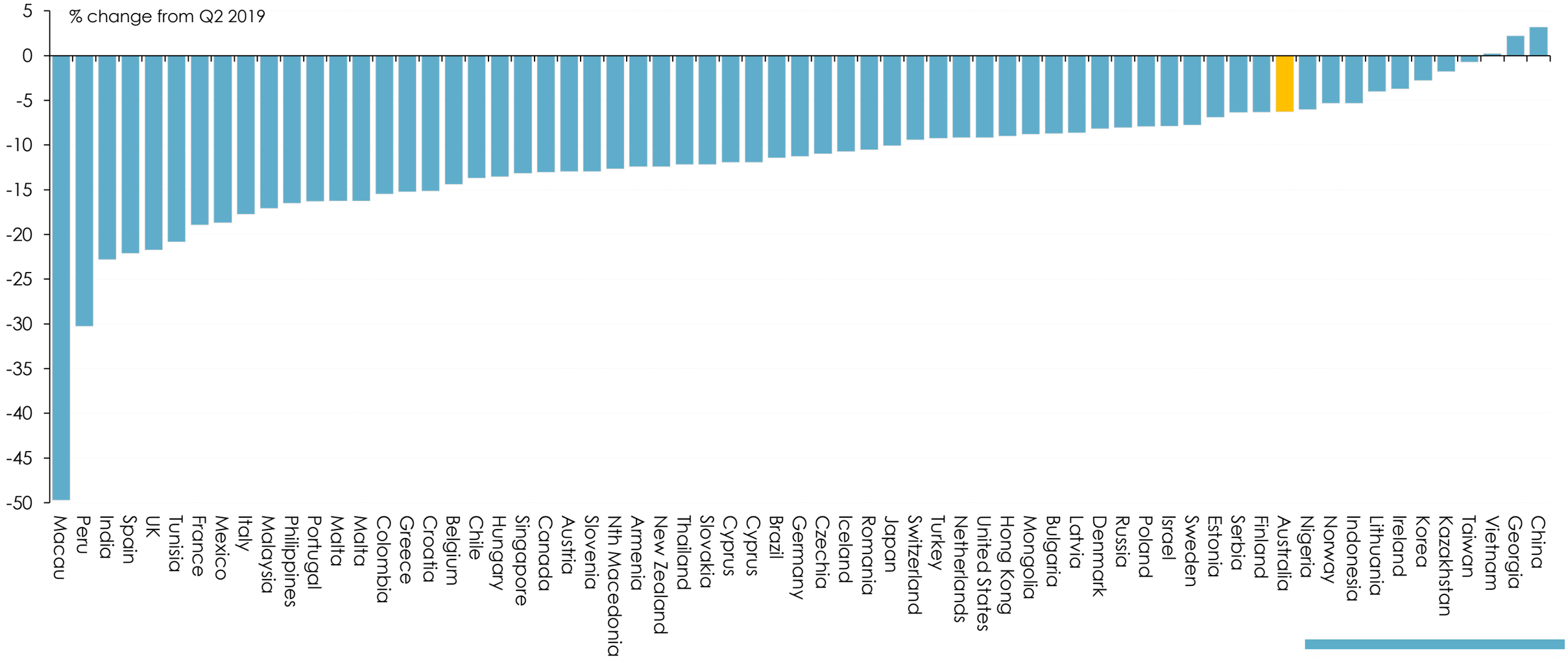
World and OECD area real GDP growth



Note: Estimates of global GDP growth compiled by Corinna using data for 95 countries accounting for 90% of 2018 world GDP as measured by the IMF; excludes constituents of the former USSR before 1993, the former Czechoslovakia before 1995, and the former Yugoslavia before 1998. (p) Estimate for Q2 is a preliminary estimate based on published results for 66; the only significant economies still missing from the 95 in the full data set are Argentina, Ukraine and Saudi Arabia. *Sources:* national statistical agencies and central banks; Eurostat; OECD; IMF; Corinna.

Of the 65 economies which have reported Q2 GDP data so far, the worst contractions over the past year have been in Macau, Peru, India & Spain

Real GDP growth over the year to Q2 2020



Sources: national statistical agencies and central banks; Refinitiv Datastream; Corinna.

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All major forecasters expect 2020 to be the worst year since the 1930s: the OECD this week revised 2020 forecasts up (a bit) but 2021 down

Major global institutions' growth forecasts for 2020 and 2021 compared

	Actual	*IMF*		*World Bank*		*OECD**		*Australian Treasury*	
	2019	2020	2021	2020	2021	2020	2021	2020	2021
US	2.3	-6.1	4.5	-6.1	4.0	-3.8	4.1	-8.0	4.8
China	6.1	1.2	9.2	1.0	6.9	1.8	8.0	1.8	8.3
Euro area	1.2	-7.5	4.7	-9.1	4.5	-7.9	6.5	-8.8	5.0
India	4.2	1.9	7.4	-3.2	3.1	-3.7	5.1	-4.0	4.3
Japan	0.7	-5.2	3.0	-6.1	2.5	-5.8	1.5	-6.3	2.8
UK	1.4	-6.5	4.0	na	na	-10.1	10.7	na	na
Australia	1.8	-6.7	7.1	na	na	-4.1	2.5	-3.8	2.5
New Zealand	2.2	-7.2†	5.9†	na	na	-8.9	6.6	na	na
World	2.9	-3.0	5.8	-5.2	4.2	-4.5	5.0	-4.8	5.0
World trade	0.9	-11.0	8.4	-13.4	5.3	-9.5	6.0	na	na

* OECD forecasts are their 'single hit' scenario to be consistent with the assumptions of the other institutions. † The IMF did not publish revised forecasts for New Zealand in its latest WEO publication. *Sources :* International Monetary Fund (IMF), *World Economic Outlook*, 24th June 2020; The World Bank, *Global Economic Prospects*, 8th June 2020; Organization for Economic Co-operation & Development (OECD), *Economic Outlook - Interim Report* 16th September 2020; Australian Treasury, *Economic and Fiscal Update*, 23rd July 2020.

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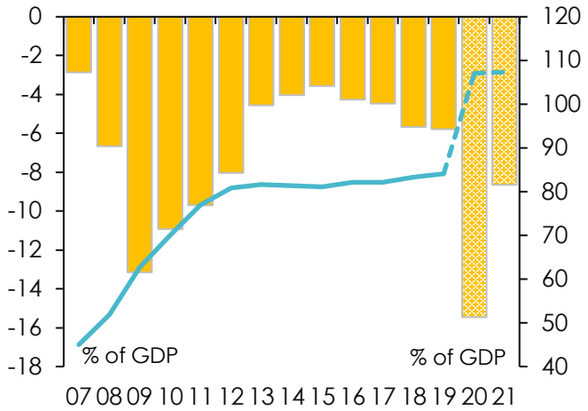
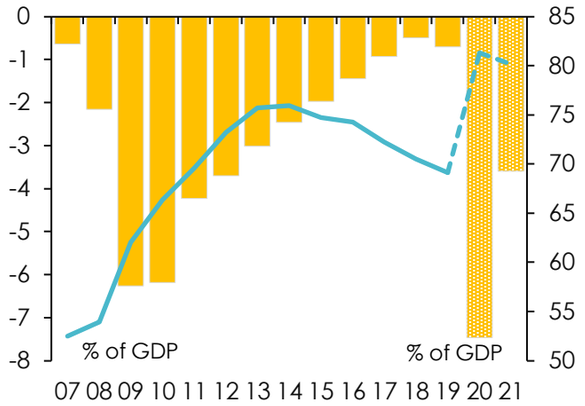
Governments around the world are doing more by way of fiscal stimulus than they did during the global financial crisis

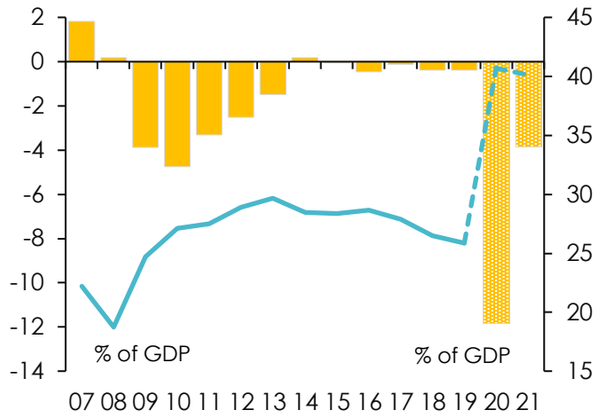
United States



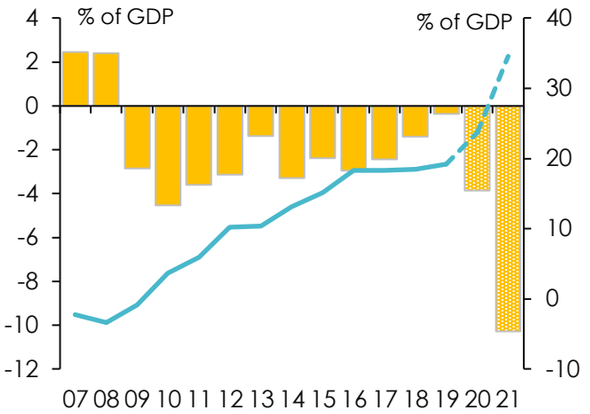
Euro area



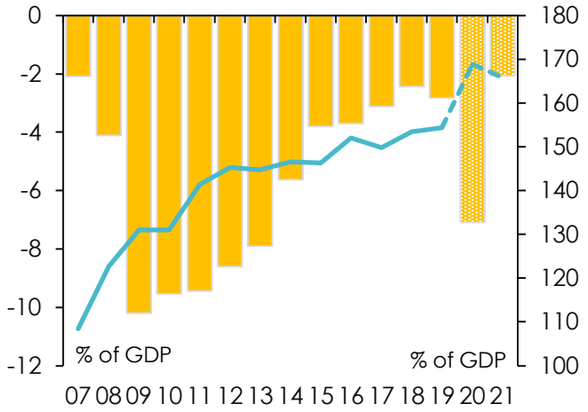
Canada



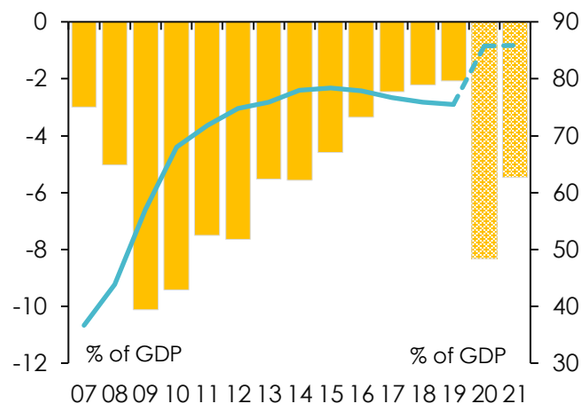
Australia



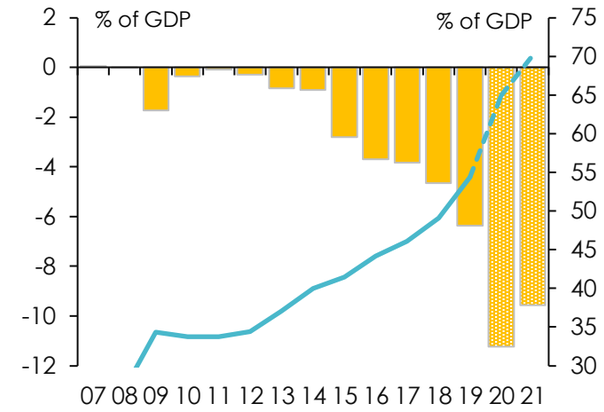
Japan



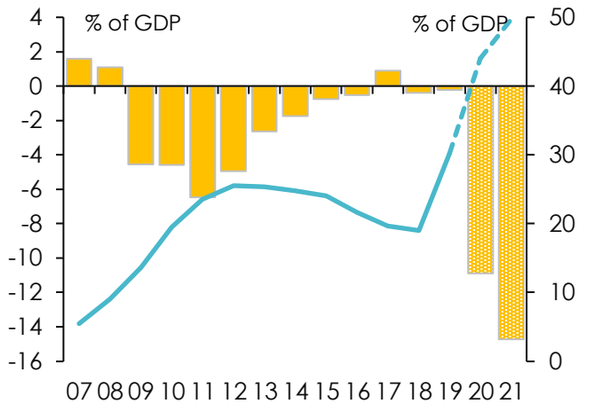
United Kingdom



China



New Zealand



General government overall fiscal balance (left scale)

General government net debt (right scale)

Note: UK data does not include the measures announced by the Chancellor on 8th July; China debt is gross debt, not net; Australian data are for the federal government only and are for fiscal years ended 30th June; NZ data are for fiscal years ended 31st March. *Sources:* International Monetary Fund, *Fiscal Monitor*, April 2020, and *World Economic Outlook*, June 2020; Australian Government, *Economic and Fiscal Update*, July 2020; New Zealand Treasury, *Budget Economic and Fiscal Update*, May 2020.

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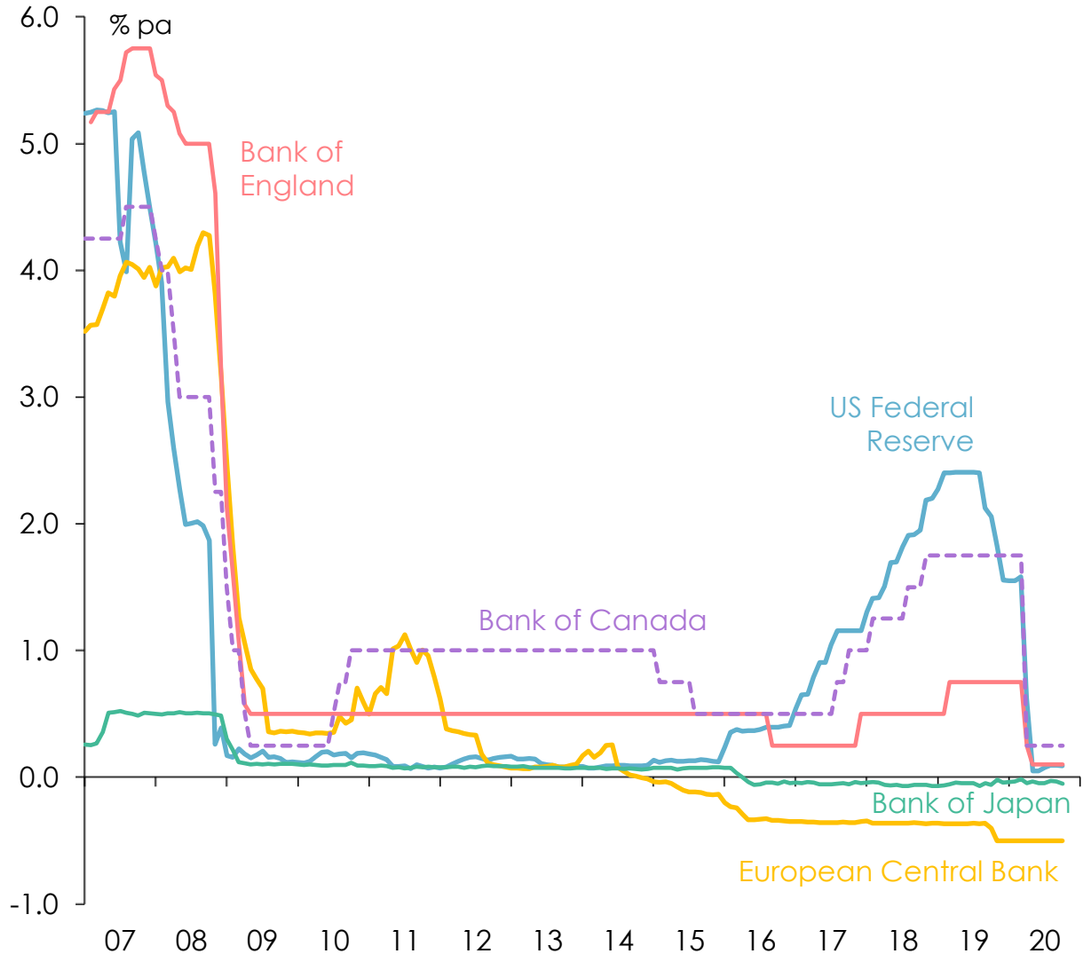
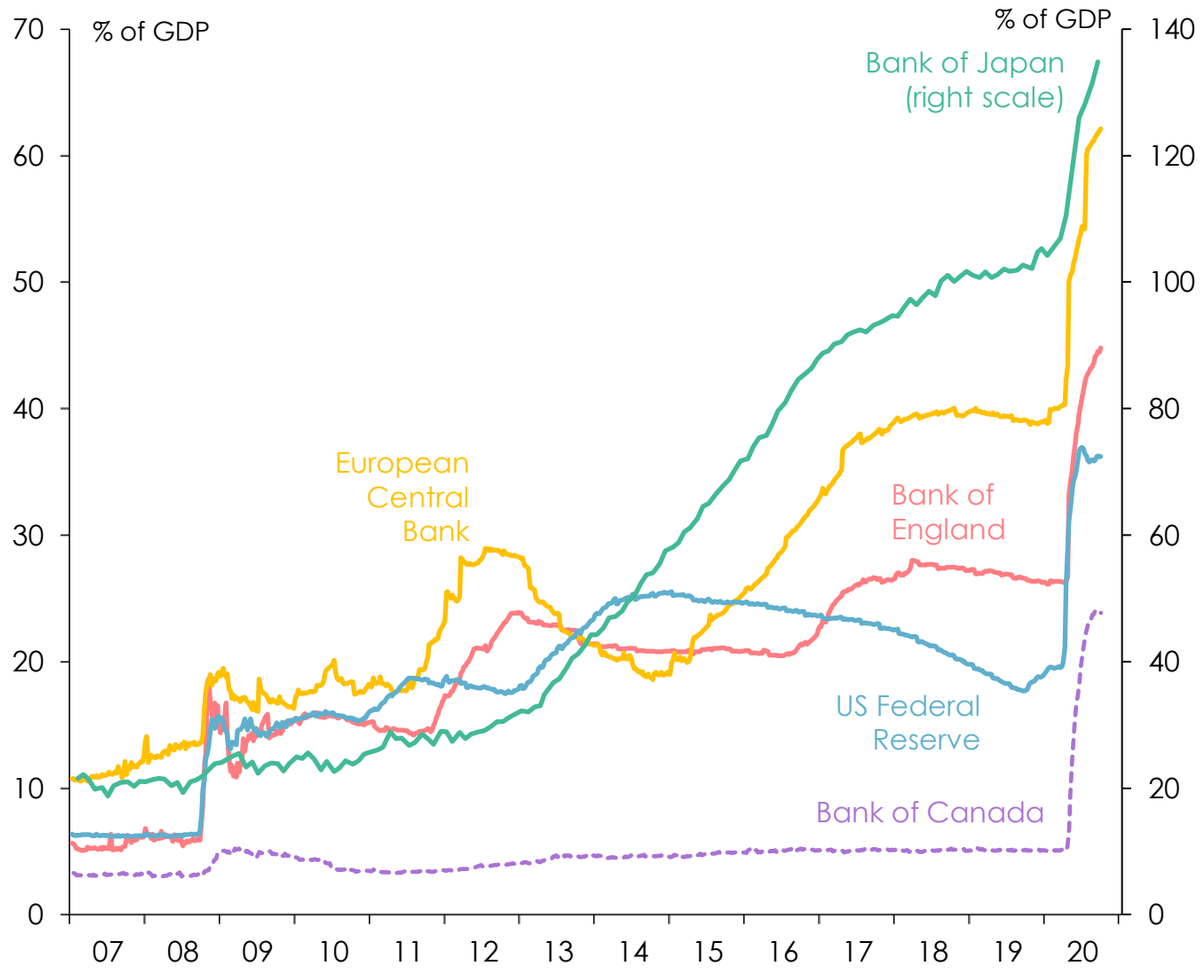
Major central banks have cut interest rates to record lows, and done more 'quantitative easing' than during the global financial crisis

Major central bank policy interest rates



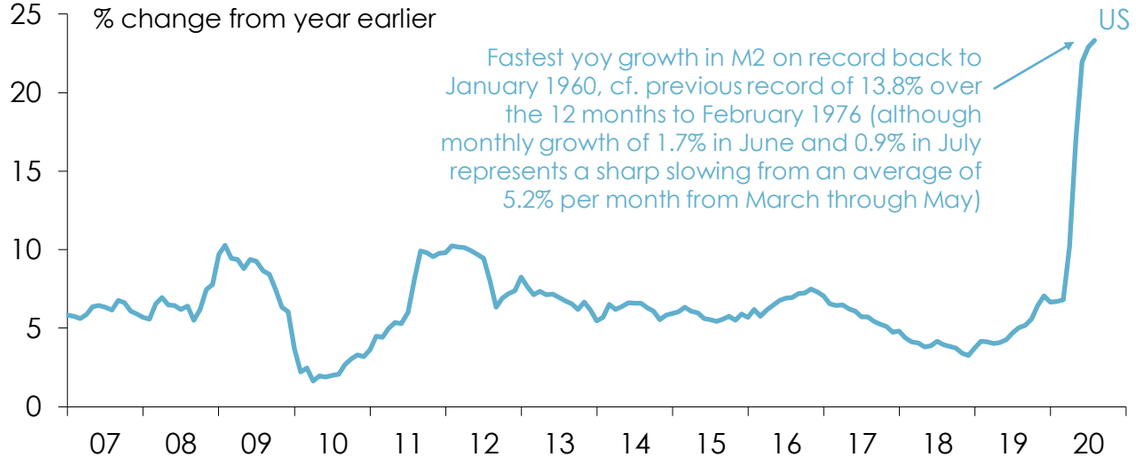
Major central bank balance sheets

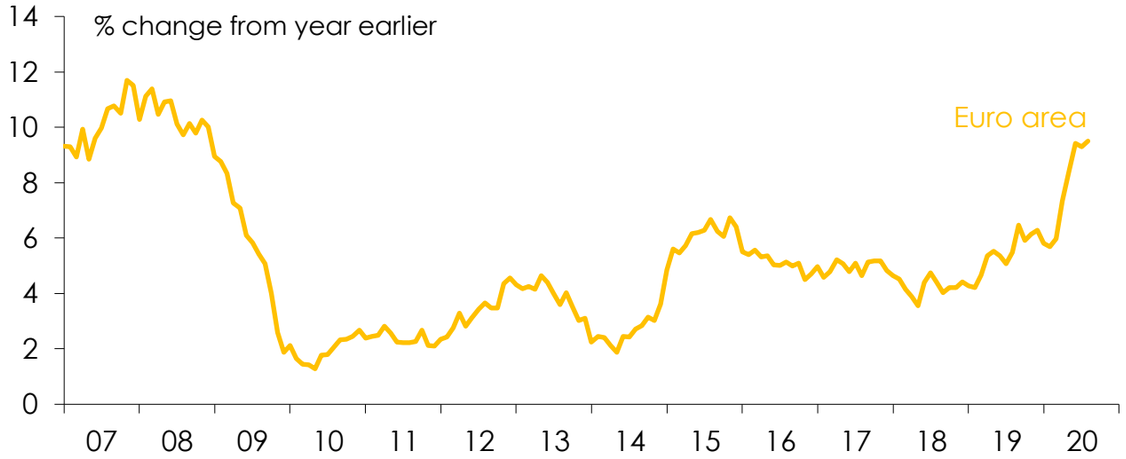


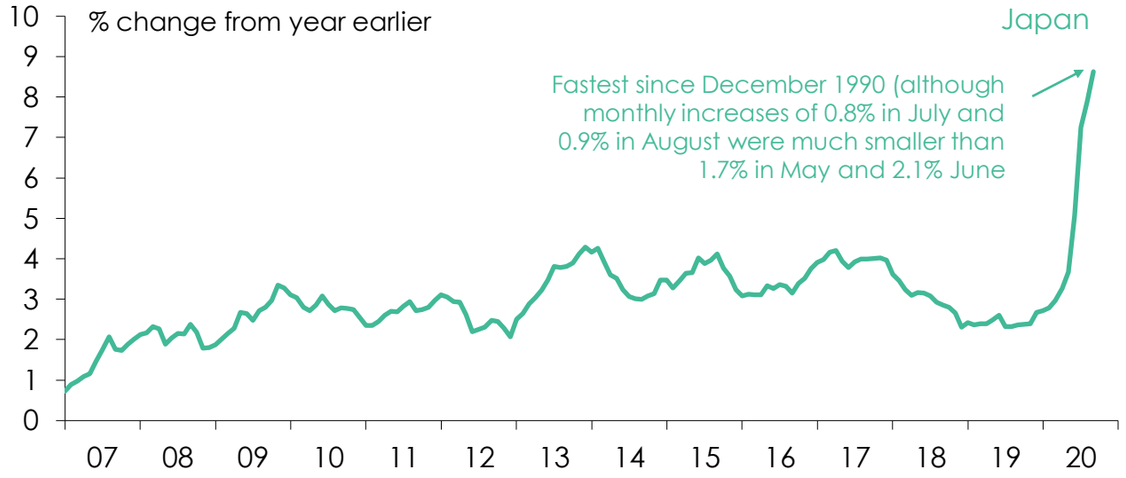
Note: estimates of European Central Bank assets as a pc of GDP for weeks since the beginning of April have been revised upwards by around 5 pc points of GDP following the publication by Eurostat this week of estimates of Q2 nominal GDP (as happened with estimates of Bank of England assets as a pc of GDP three weeks ago. Estimates of US Fed, and BoJ assets as a pc of GDP were also revised up with the use of Q2 nominal GDP as the denominator, but less sharply.
Sources: US Federal Reserve; European Central Bank; Bank of Japan; Bank of England; Bank of Canada; national statistical agencies; Corinna.

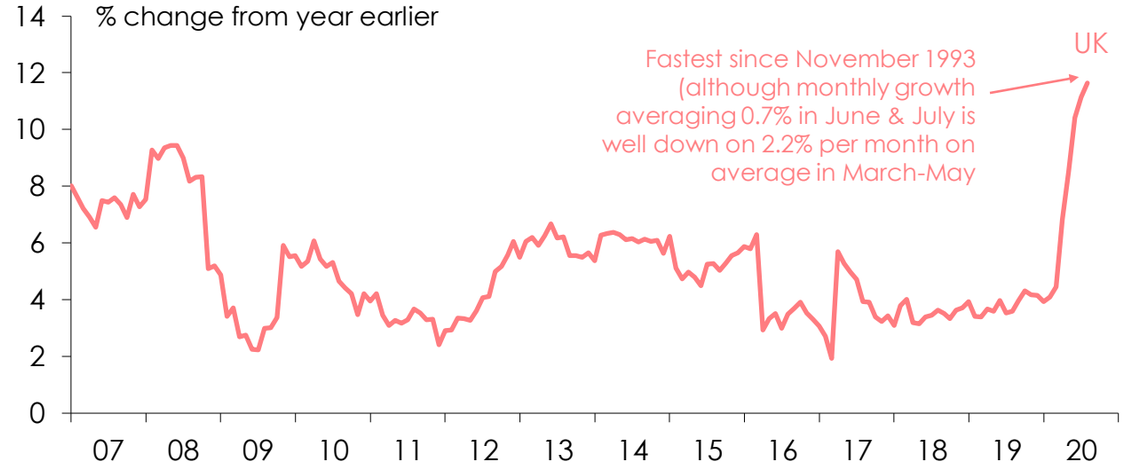
‘Quantitative easing’ has prompted a more rapid acceleration in money supply growth than it did during the global financial crisis …

M2 money supply growth





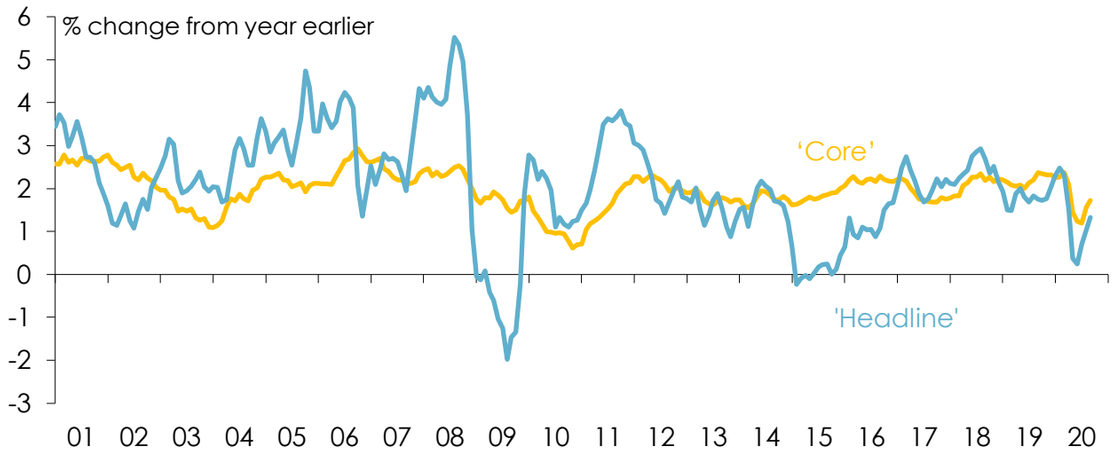




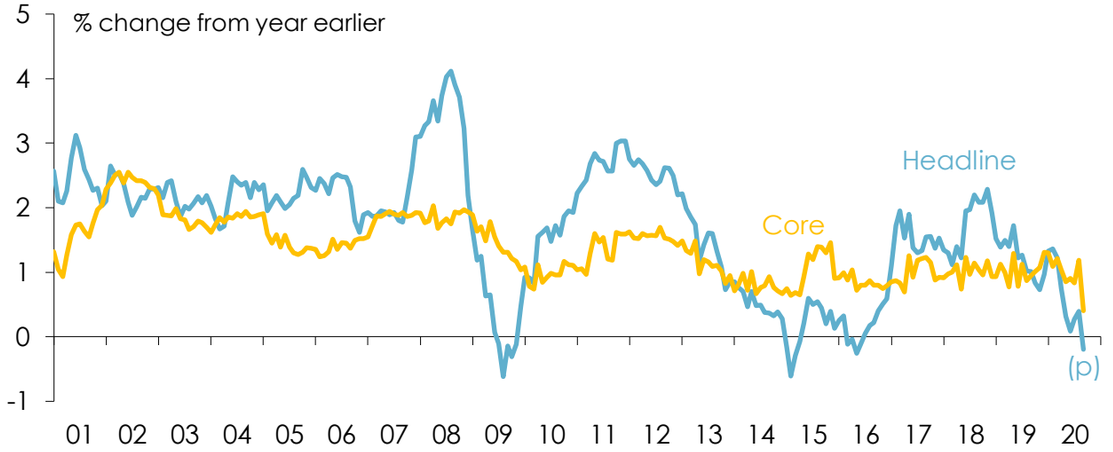
Note: Japan is M2+CDs. *Sources:* US Federal Reserve; European Central Bank; Bank of Japan; Bank of England.

…but so far at least, inflation has remained below central bank targets – although both 'headline' and 'core' US inflation ticked up in July & August

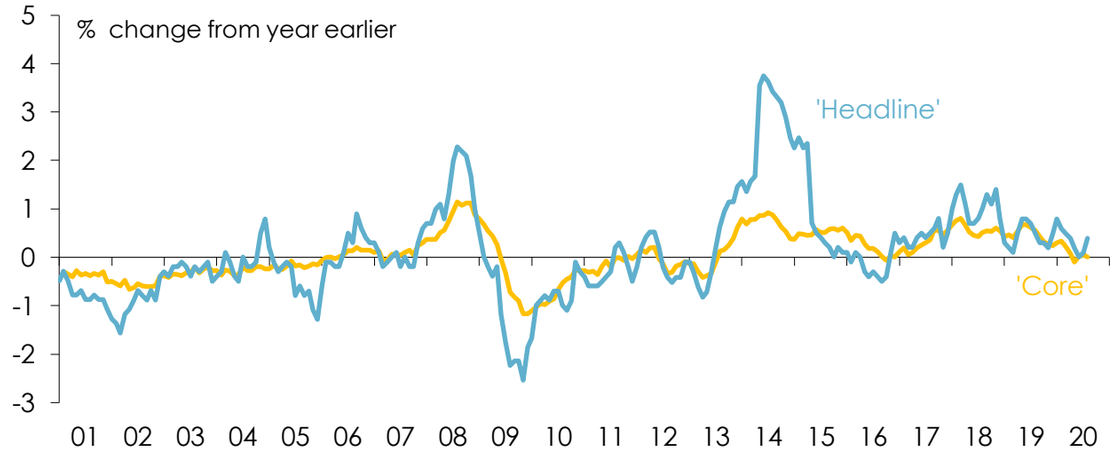
'Headline' and 'core' inflation - US



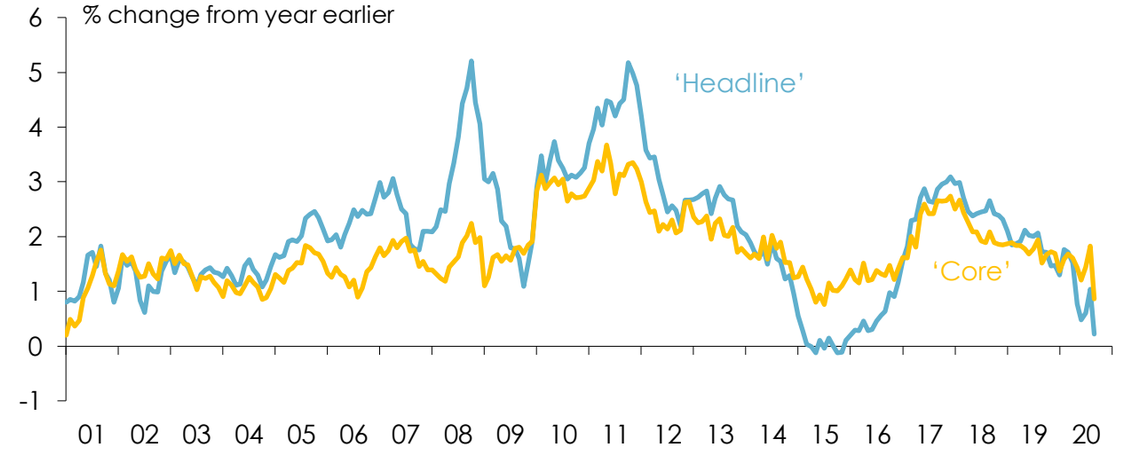
'Headline' and 'core' inflation – Euro area



'Headline' and 'core' inflation - Japan



'Headline' and 'core' inflation – UK

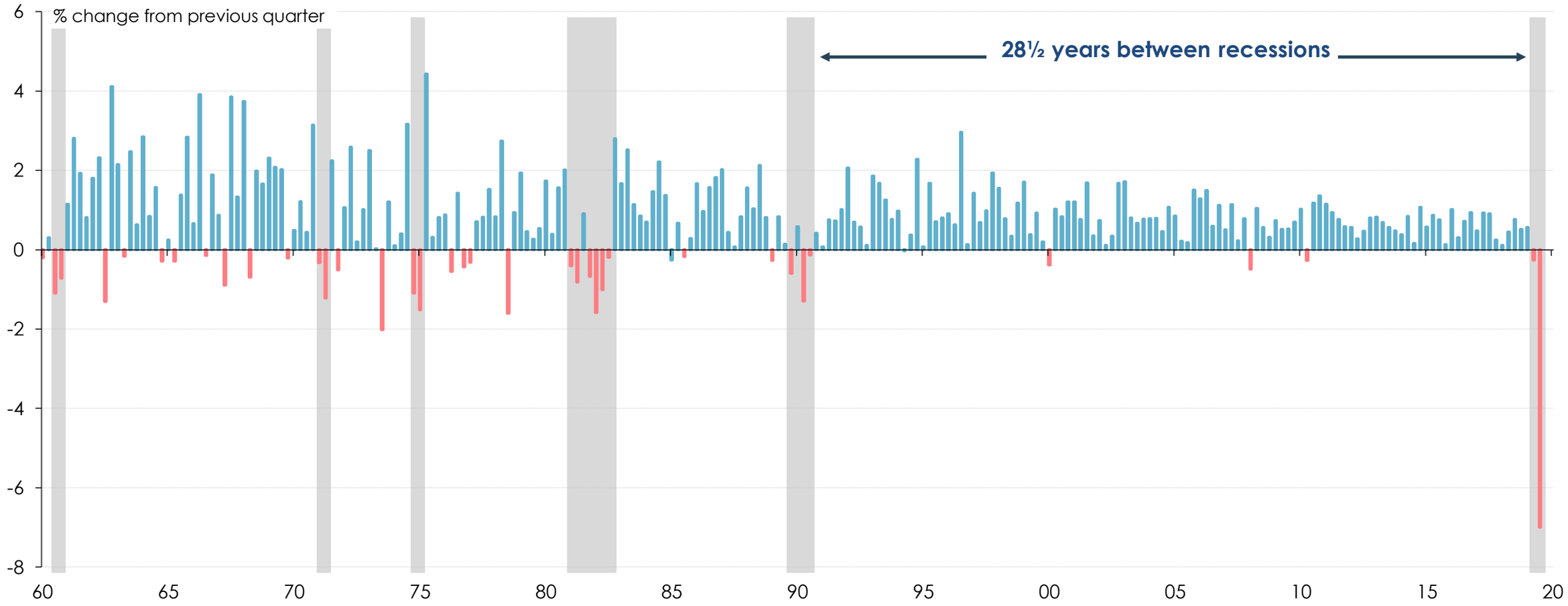


Note: 'Core' inflation is the CPI excluding food & energy in the US; excluding food, energy, alcohol & tobacco in the euro area; and excluding energy & seasonal foods in the UK. The 'core' inflation measure for Japan is the weighted median CPI calculated by the Bank of Japan. *Sources:* US Bureau of Labor Statistics; Eurostat; Statistics Bureau of Japan; Bank of Japan; UK Office for National Statistics.

Australia

Australia's record-breaking run of almost 30 years without a recession has come to an end

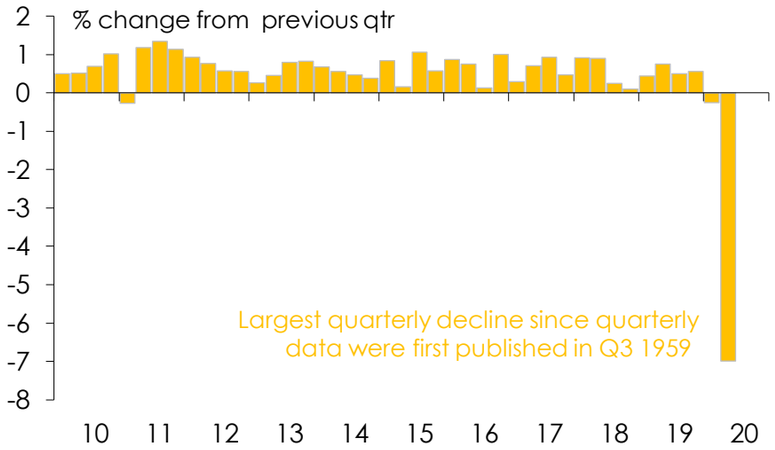
Quarterly growth in Australian real GDP, 1960-2020



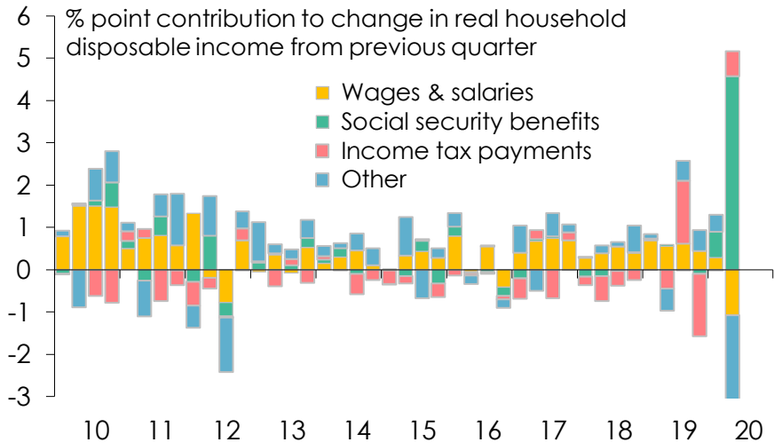
Note: Shaded areas denote recessions. *Source:* ABS, *Australian National Accounts: National Income, Expenditure and Product*, June quarter 2020.

Real GDP fell a record 7.0% in Q2 after a 0.3% decline in Q1, the first time there have been two consecutive declines since Q1 and 12 1991

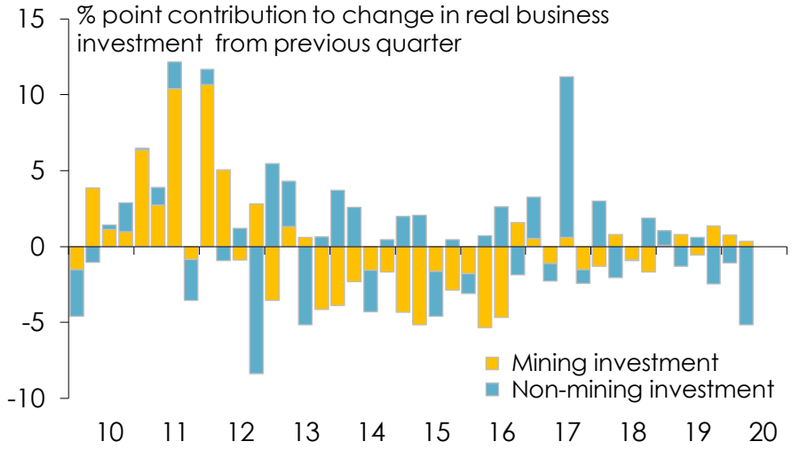
Quarterly change in real GDP



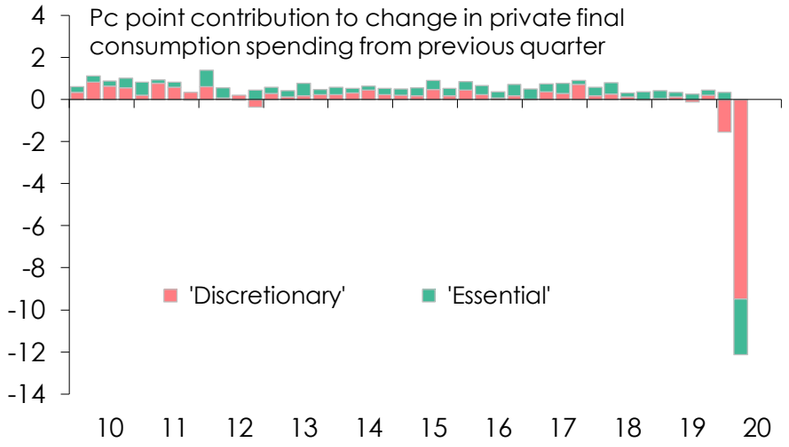
Household disposable income



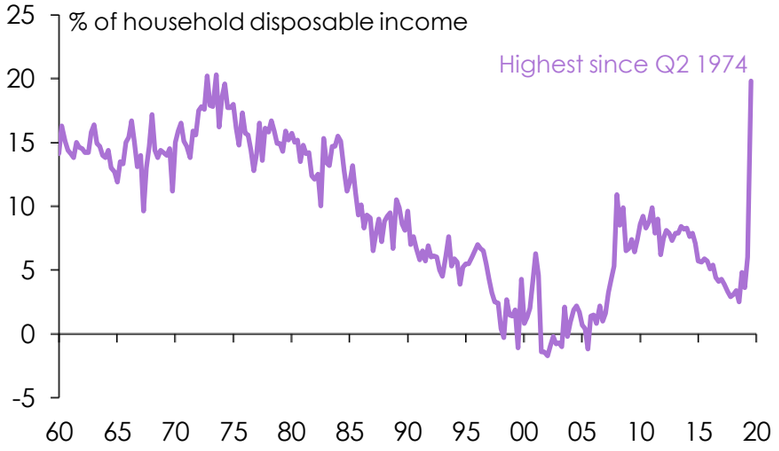
Business investment expenditure



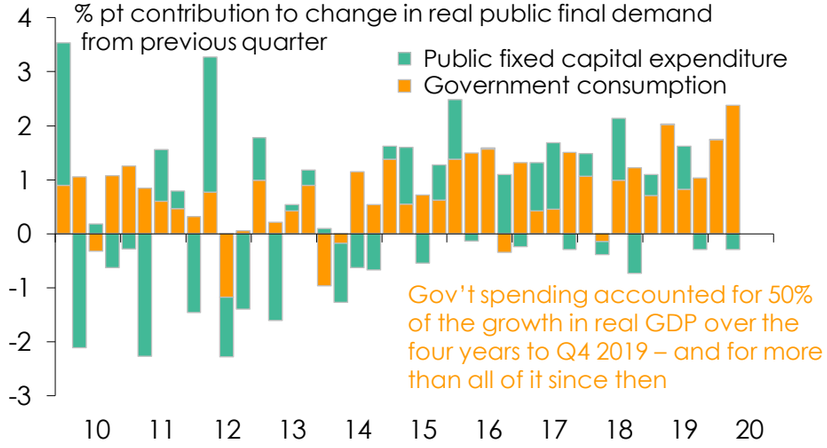
Household consumption expenditure



Household saving rate



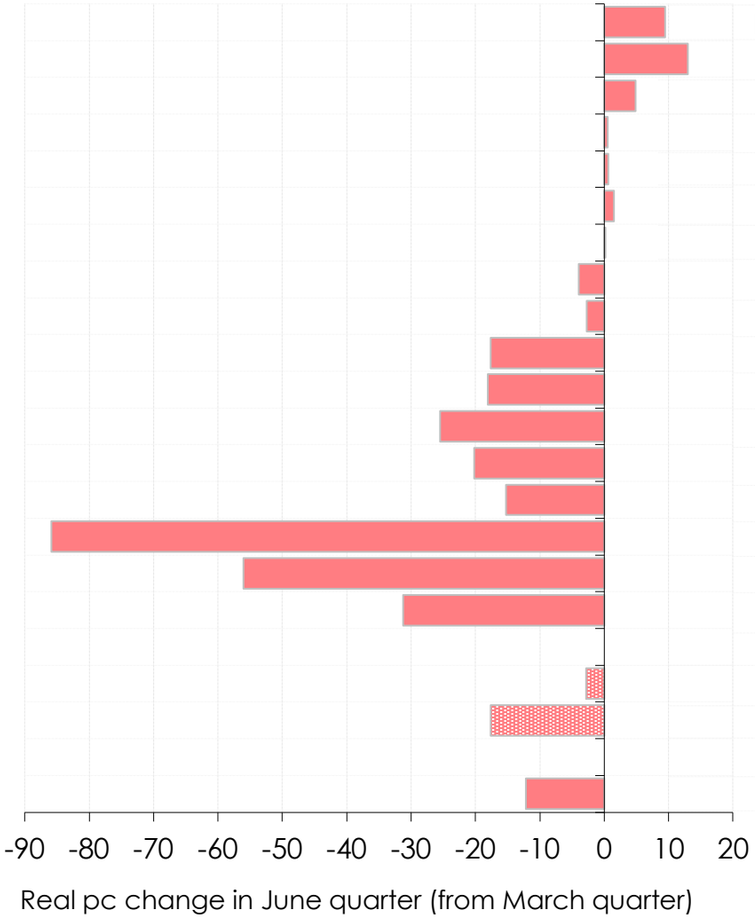
Public expenditure



Note: 'Essential' household consumption expenditure comprises food; rent & other dwelling services; electricity, gas & other fuel; operation of vehicles; rail, bus & taxi services; communications; health; education; and insurance & other financial services. Components of household disposable income are deflated by the implicit price deflator of household final consumption expenditure. *Source:* ABS.

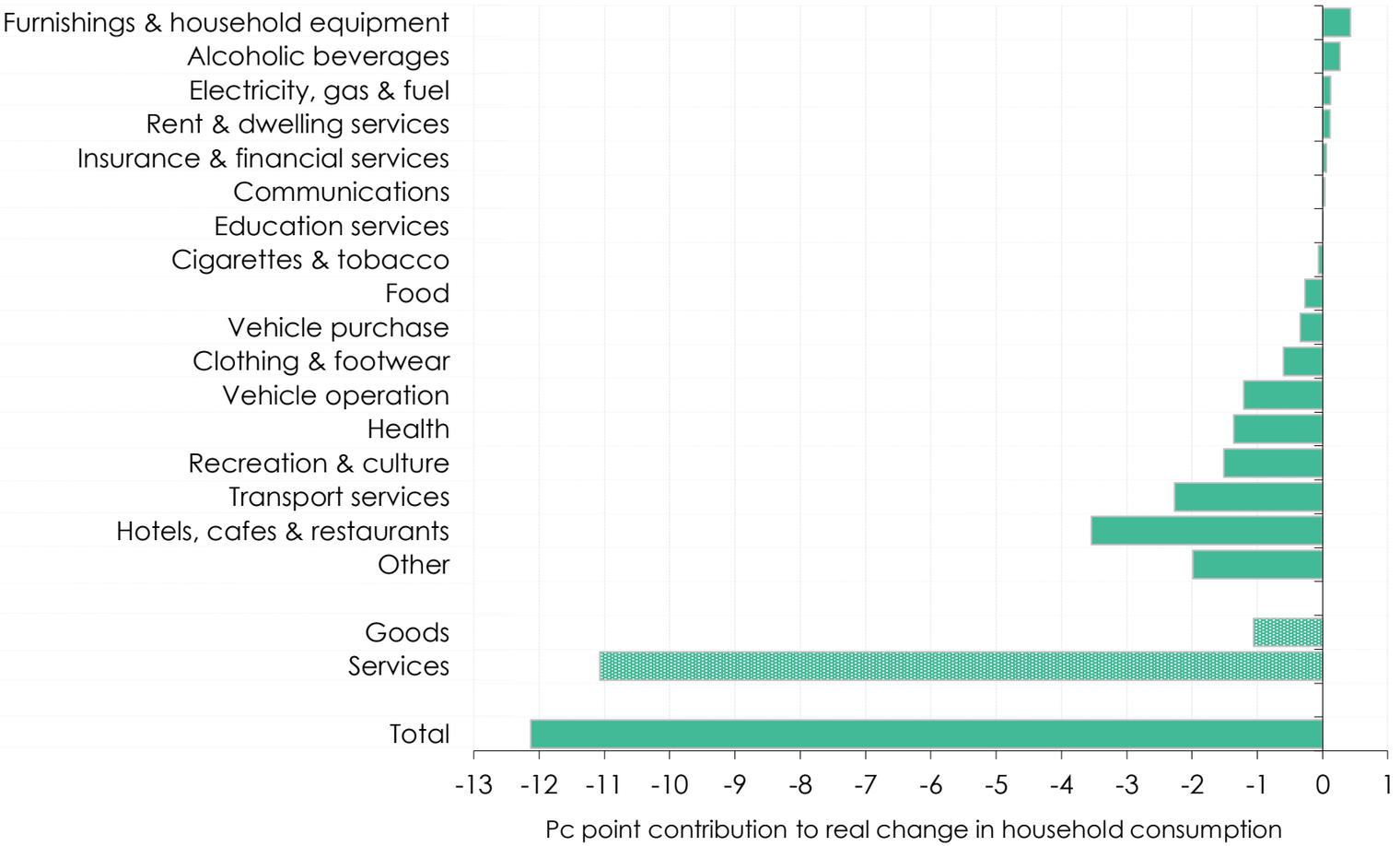
The record 12.1% fall in consumer spending in Q2 was largely driven by sharp declines in spending on discretionary services

Change in household consumption spending, by category, June quarter



Real pc change in June quarter (from March quarter)

Contribution to change in household consumption spending, by category, June quarter

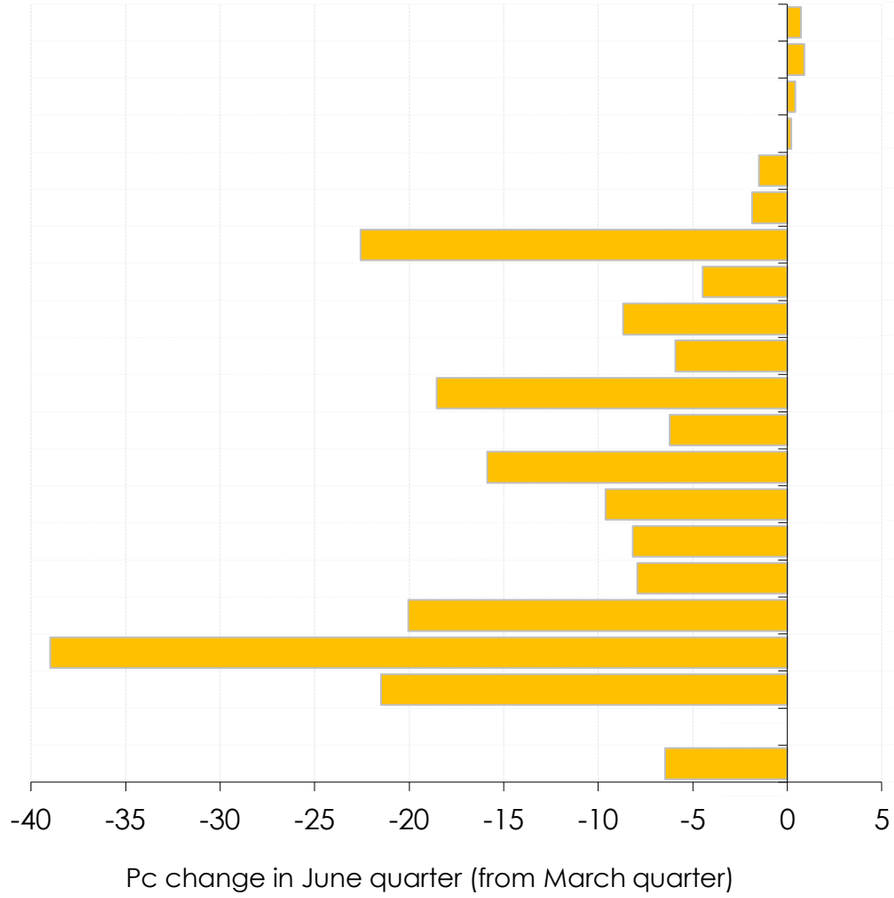


Pc point contribution to real change in household consumption expenditure in June quarter (from March quarter)

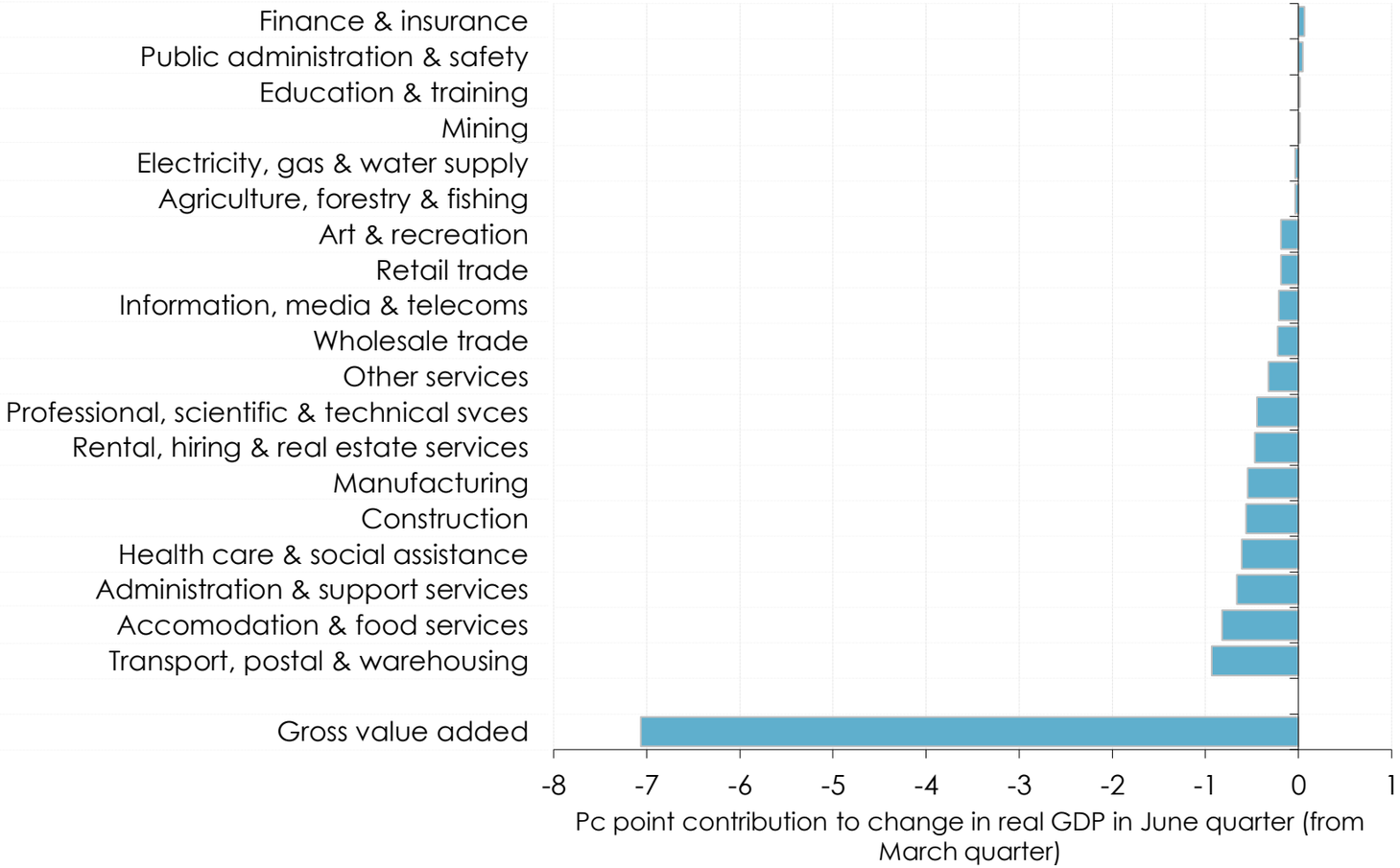
Note: 'Rent and dwelling services' includes the imputed rent which home-owners pay to (and receive from) themselves in the national accounts (so that changes in the home-ownership rate over time don't distort measured household consumption or GDP). *Source:* ABS.

From an industry standpoint the record decline in real GDP in Q2 was driven by falls in manufacturing, construction and private sector services

Change in real gross value added, by industry, June quarter



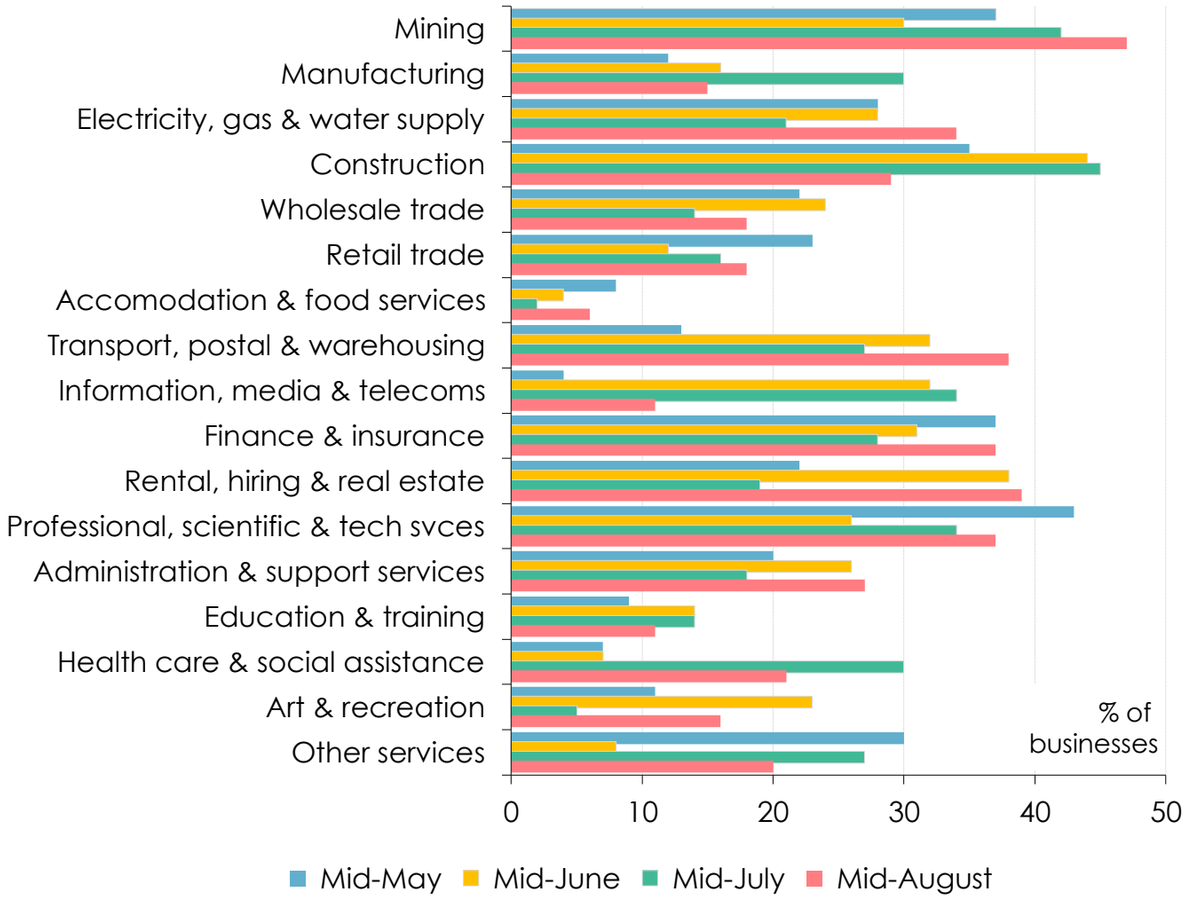
Contribution to change in real GDP, by industry, June quarter



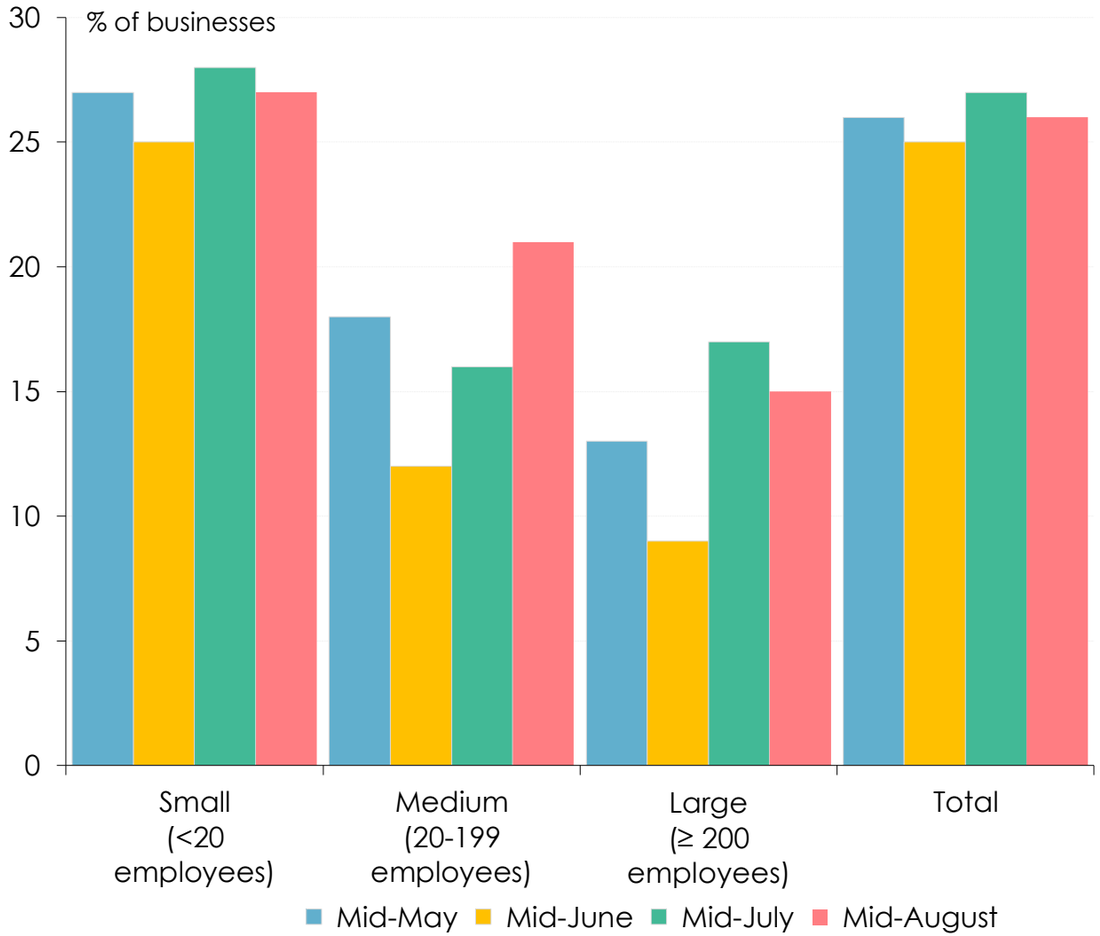
Note: Changes in, and contributions to the change in real GDP from, ownership of dwellings and net indirect taxes are not shown in the above charts. *Source:* ABS.

Still only about one-quarter of businesses are operating 'as normal' – with fewer large business operating as 'normal' than small ones

Proportion of 'trading businesses' which are operating 'as normal' – by industry



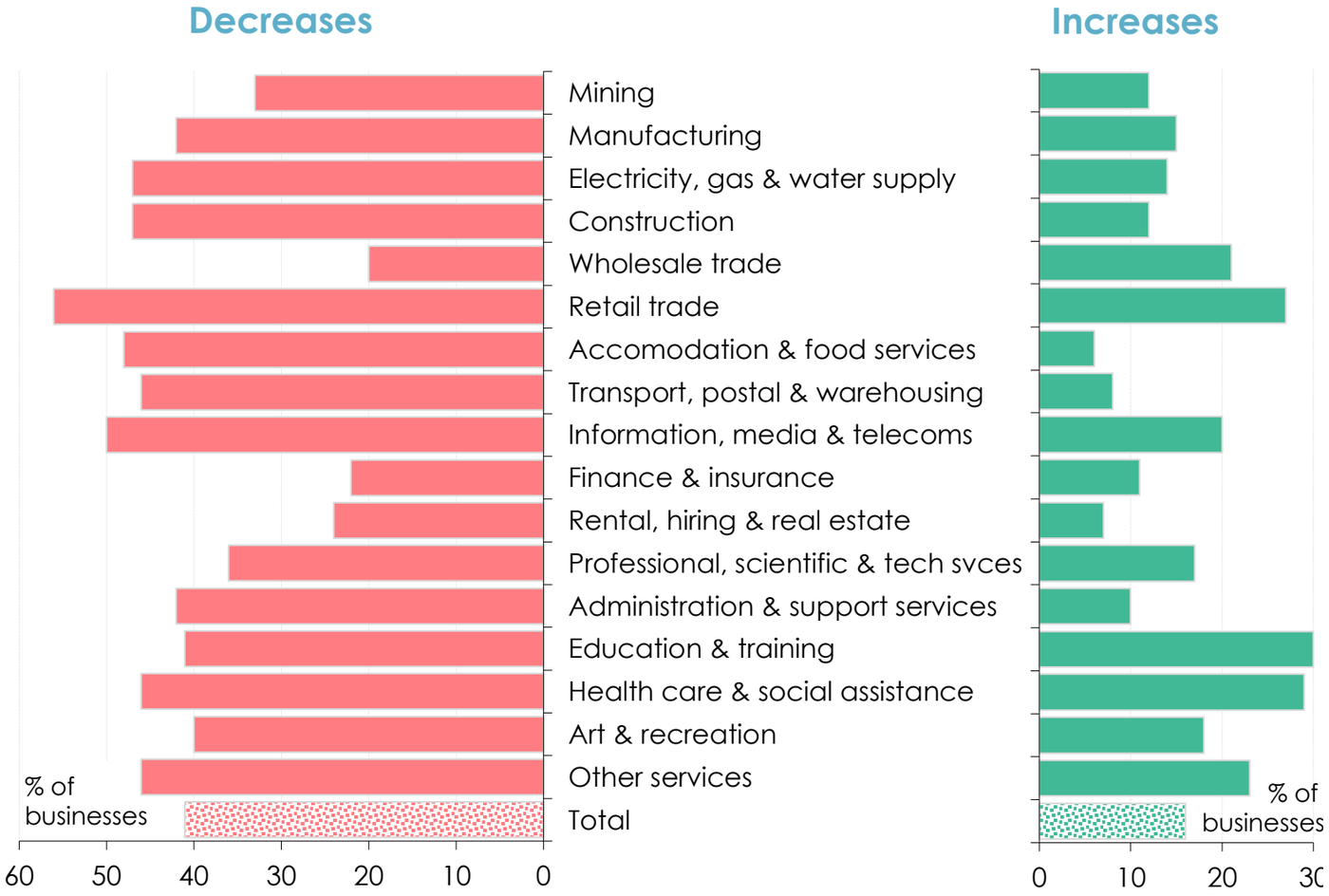
Proportion of 'trading businesses' which are operating 'as normal' – by size



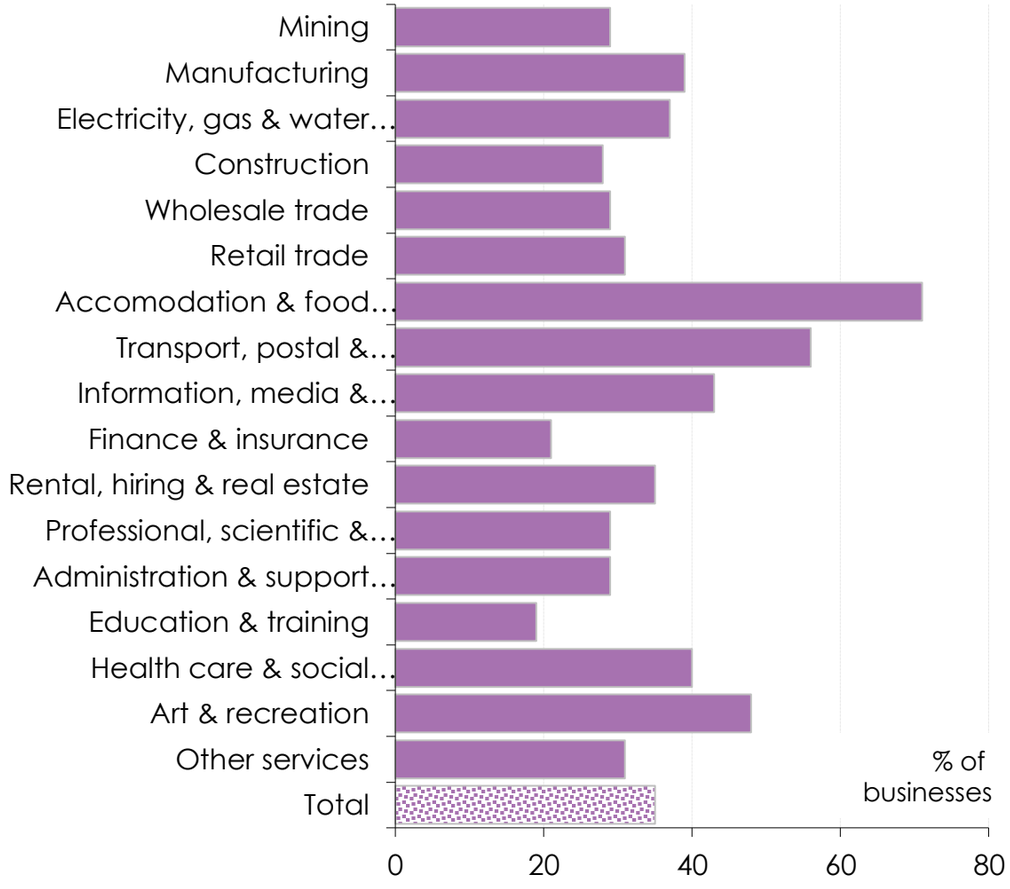
Source: ABS, *Business Impacts of Covid-19*, May 2020 (based on survey conducted between 13th and 22nd May), June 2020 (based on survey conducted between 10th and 17th June), July (survey conducted between 15th and 23rd July) and August (survey conducted between 12th and 19th August)

40% of all businesses reported lower revenue in August compared with last year – and 35% say they will have trouble meeting financial commitments

Proportion of businesses reporting decreases or increases in revenue in August 2020 cf. August last year, by industry



Businesses who would find it difficult, or very difficult, to meet financial commitments over the next three months, August 2020



Source: ABS, *Business Impacts of Covid-19*, August 2020 (based on survey conducted between 12th and 19th August).

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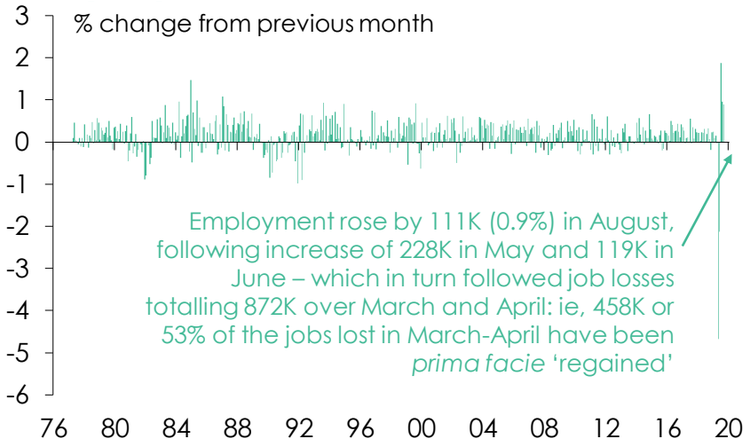
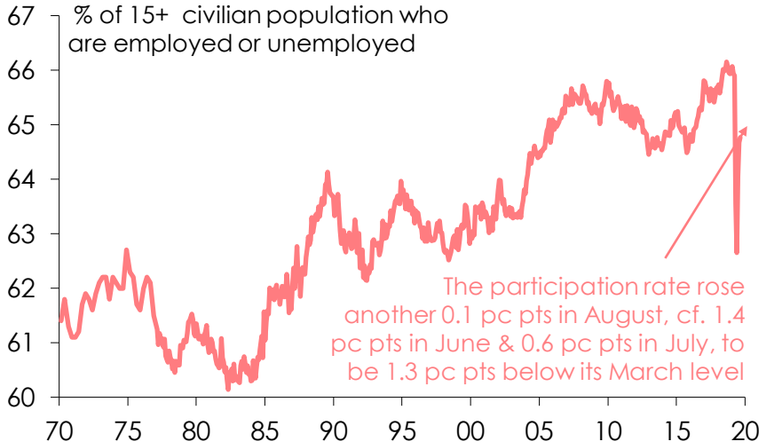
458,000 (53%) of those who lost their jobs in March-April are now back at work, although only 11% of those job gains have been full-time

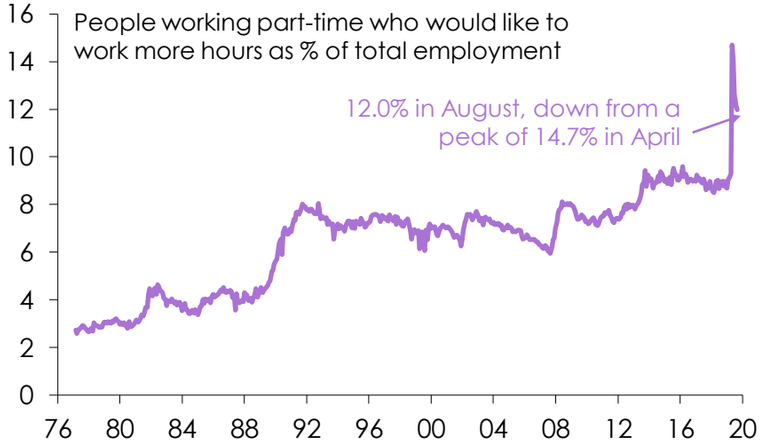
Employment



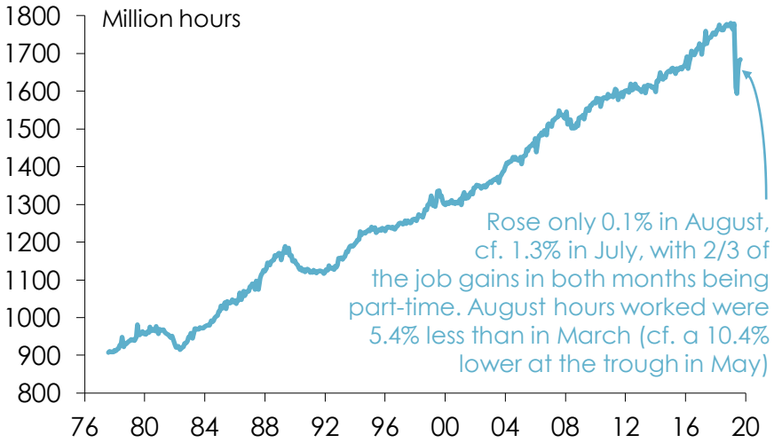
Labour force participation rate



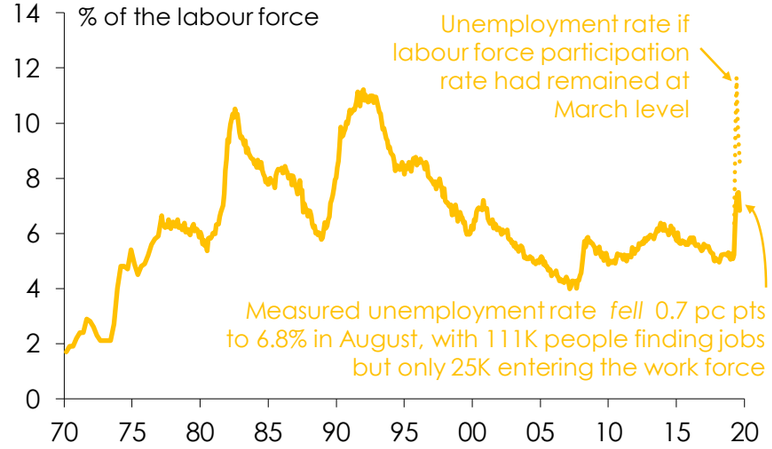
Under-employment ratio



Total hours worked



Unemployment rate



'Under-utilization' rate

Note: The ABS classifies people on JobKeeper who worked zero hours in the survey week as 'employed'. Had it not done so, the unemployment rate in August would have been 7.9% (*down* from 11.8% in April). The 'under-employment ratio' is the percentage of employed persons who are working fewer hours than they are willing and able to work. The 'under-utilization rate' is the proportion of the labour force who are unemployed or underemployed.

Source: ABS, *Labour Force, Australia*.

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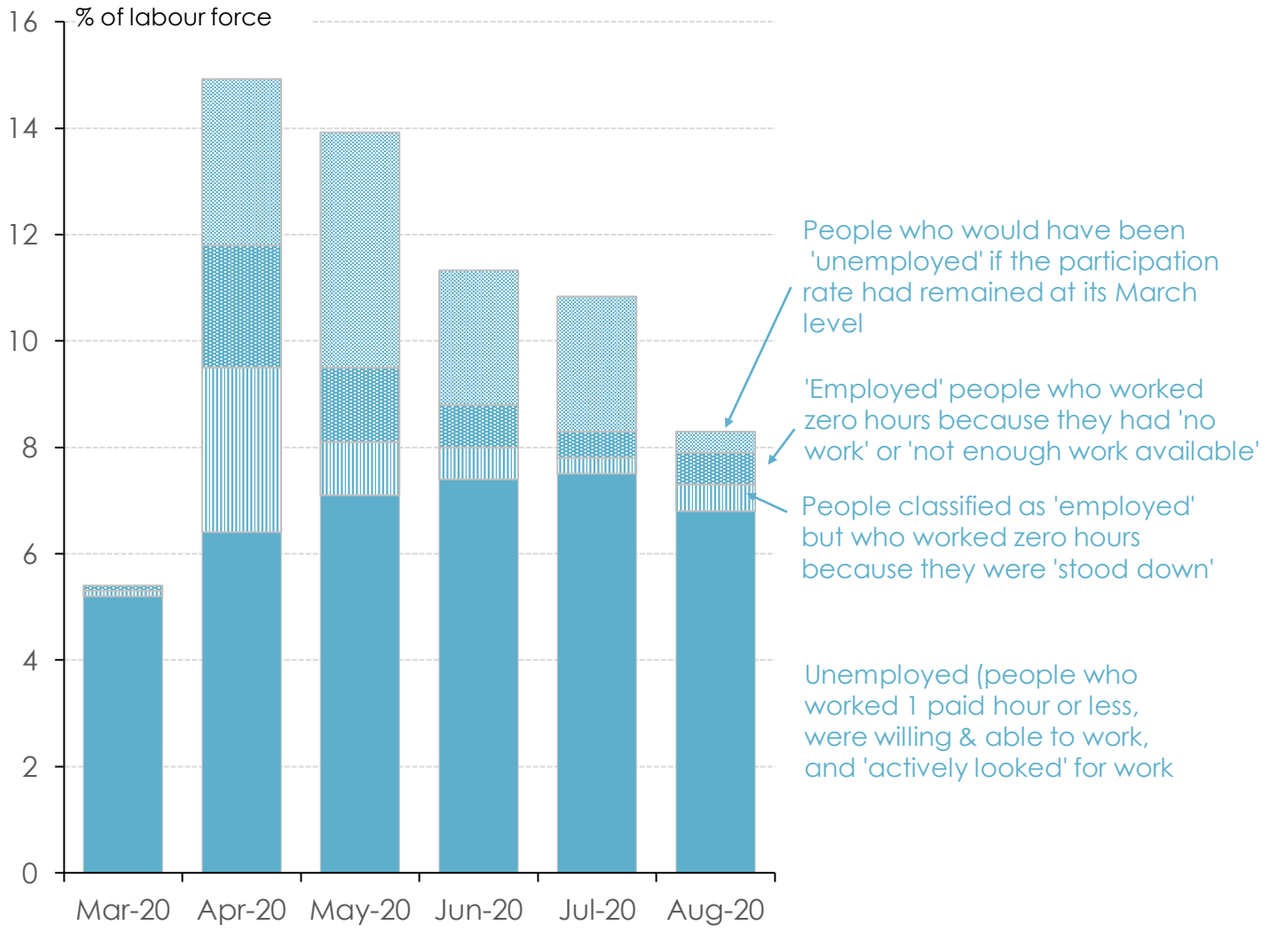
The unemployment rate would have been 8.3% in August if people working zero hours and those who dropped out of the labour force were counted

Alternative measures of unemployment

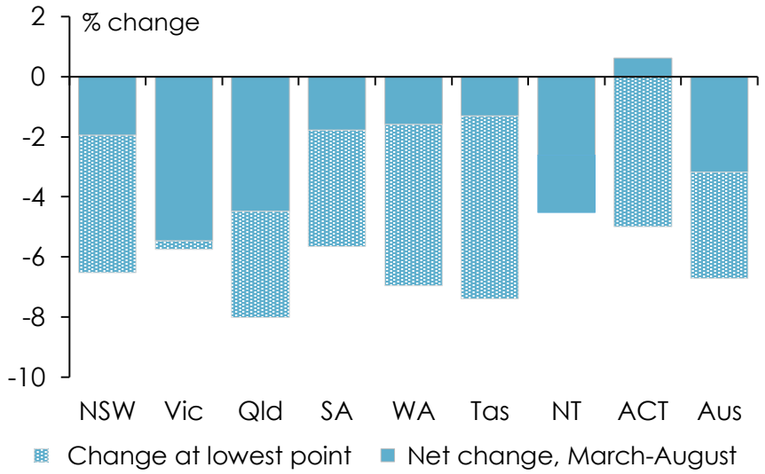


- The Government's JobKeeper program has paid eligible employers a subsidy of $1500 per fortnight for each eligible employee kept on the payroll since 30th March
- From 28th September the JobKeeper payment will reduce to $1200 per fortnight, with a lower rate of $750 per fortnight for employees who were working fewer than 20 hours per week in the four weeks prior to 1st March …
- … and will reduce further to $1000 per fortnight (and $650 per fortnight for those who had been working fewer than 20 hours per week) from 4th January until 28th March, when JobKeeper is currently scheduled to end
- Employers will also need to demonstrate that they continued to meet the 'drop in turnover' criteria (30% for businesses with turnover of $1 bn or less, 50% for large employers, 15% for not-for-profits) in both Q3 and Q4 to remain eligible for JobKeeper payments

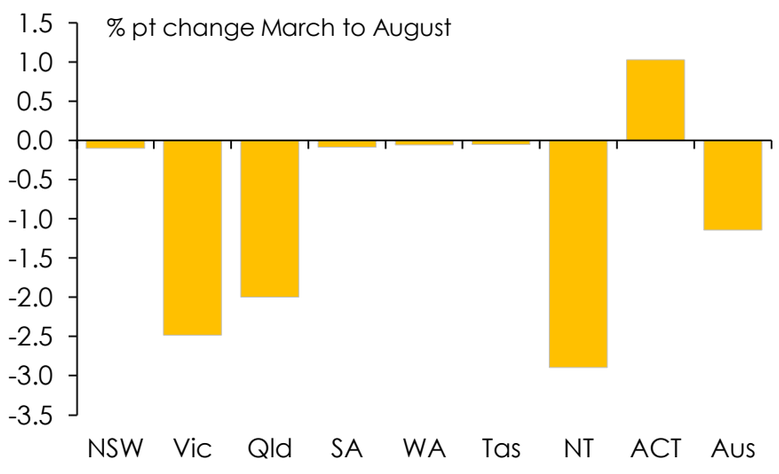
Source: ABS, *Labour Force, Australia*; Corinna.

Tasmania, WA, the ACT and NSW have seen the strongest jobs recoveries since June, while Victoria has (for obvious reasons) had the weakest

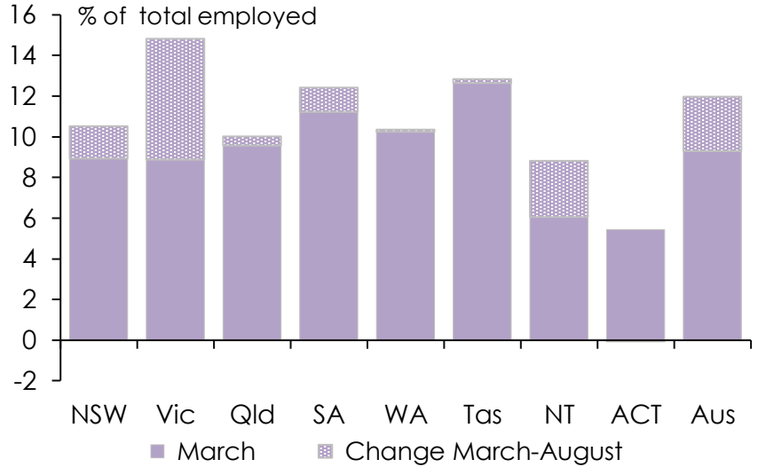
Employment



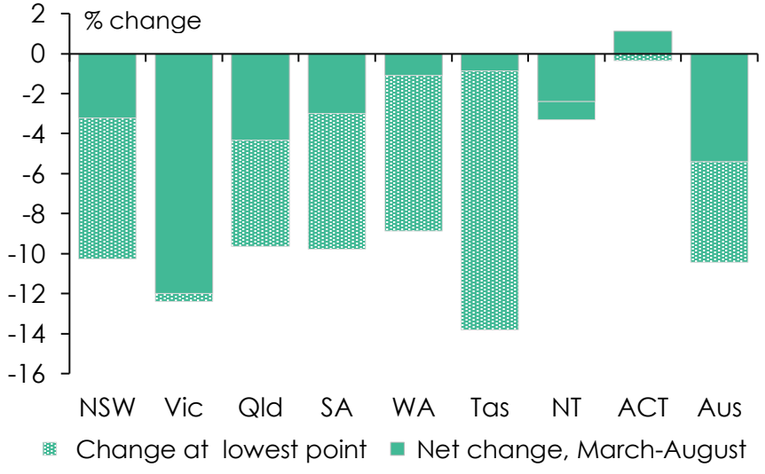
Labour force participation rate



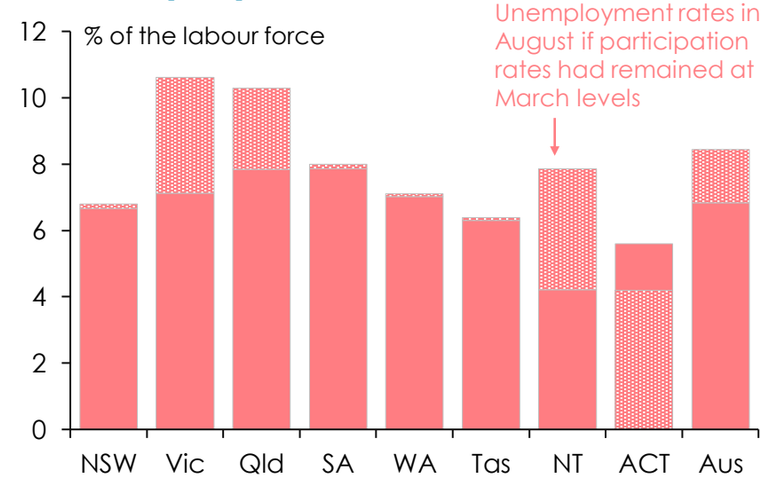
Under-employment ratio



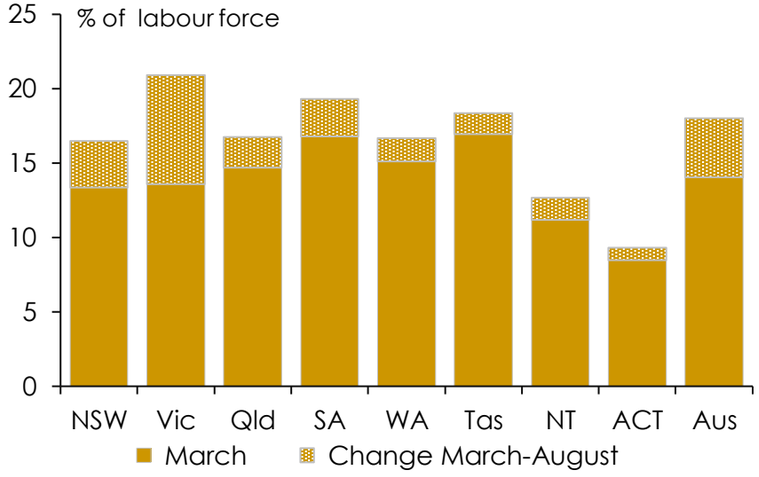
Total hours worked



Unemployment rate



'Under-utilization' rate



Note: The 'under-employment ratio' is the percentage of employed persons who are working fewer hours than they are willing and able to work. The 'under-utilization rate' is the proportion of the labour force who are unemployed or underemployed. *Source:* ABS, *Labour Force, Australia*.

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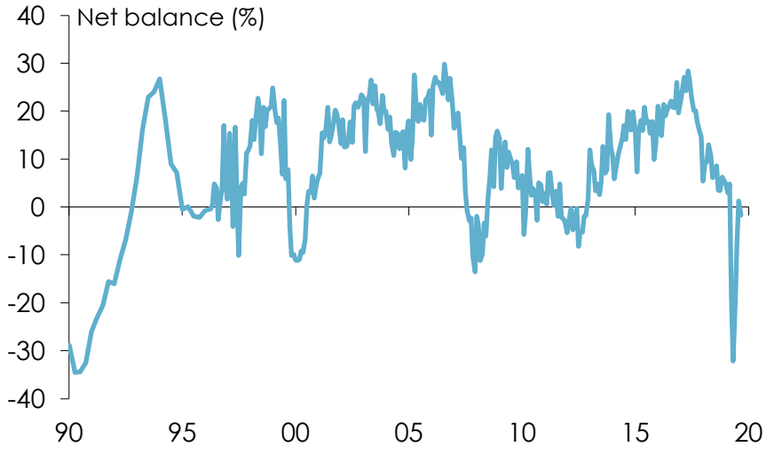
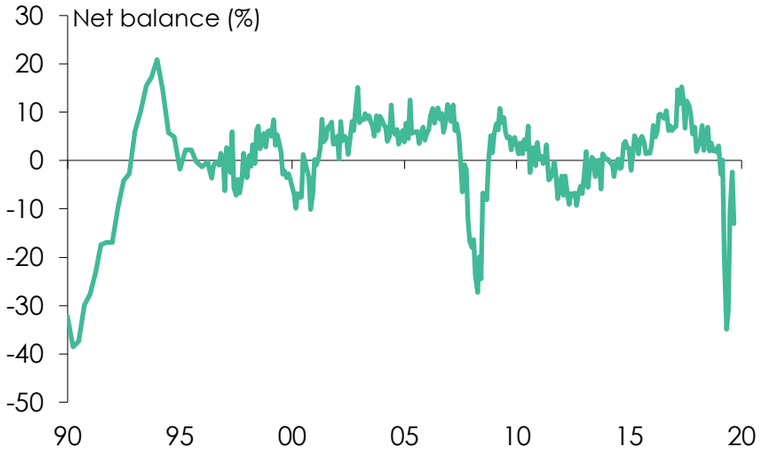
All of the components of the NAB business conditions index fell back in August after having made strong gains in July

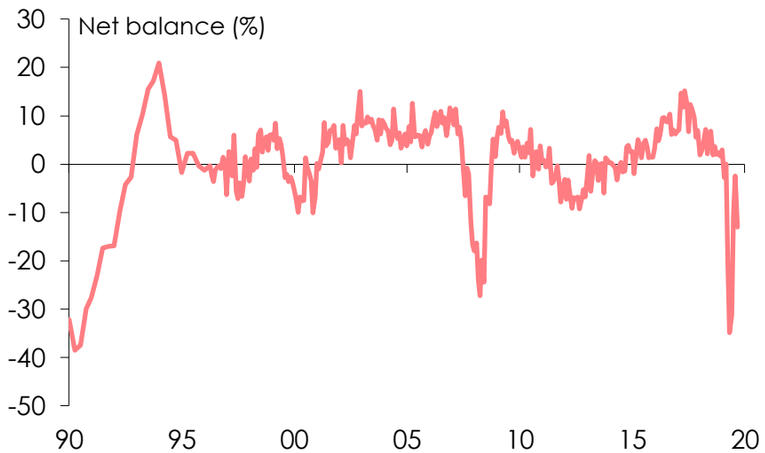
Trading conditions



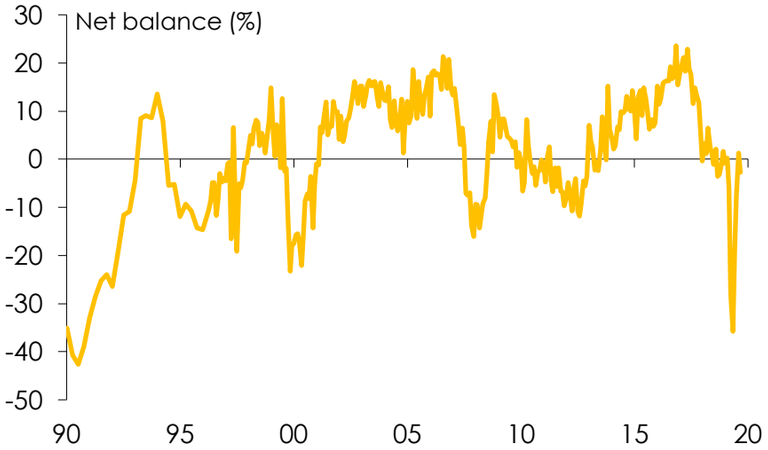
Forward orders



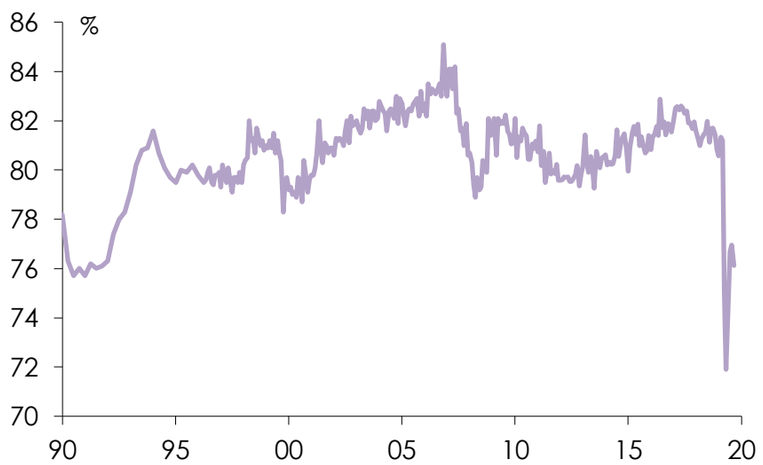
Employee hiring intentions



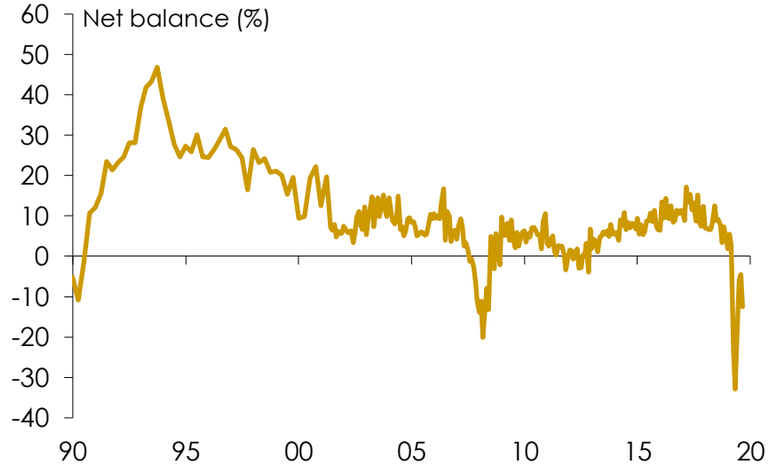
Profitability



Capacity utilization



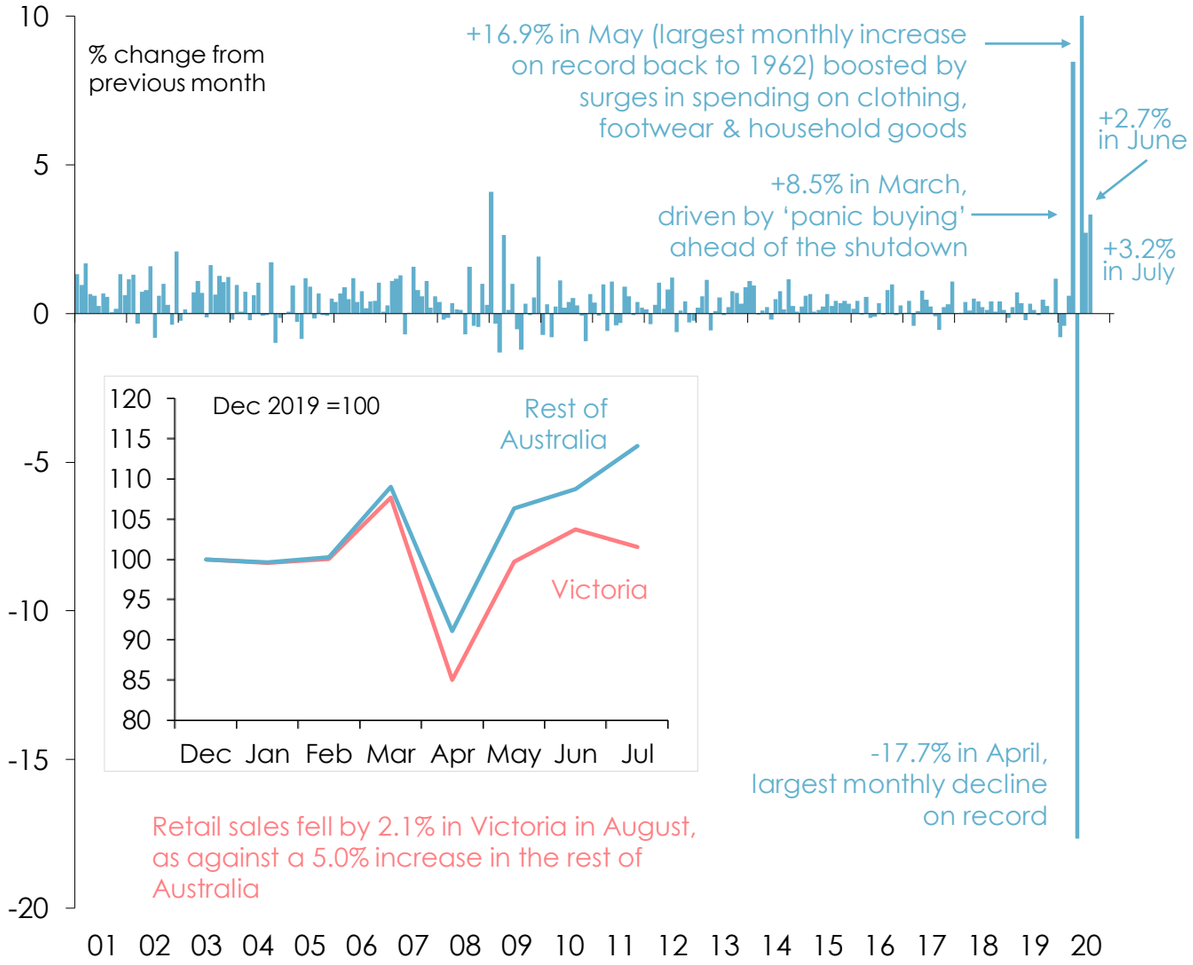
Capital expenditure intentions



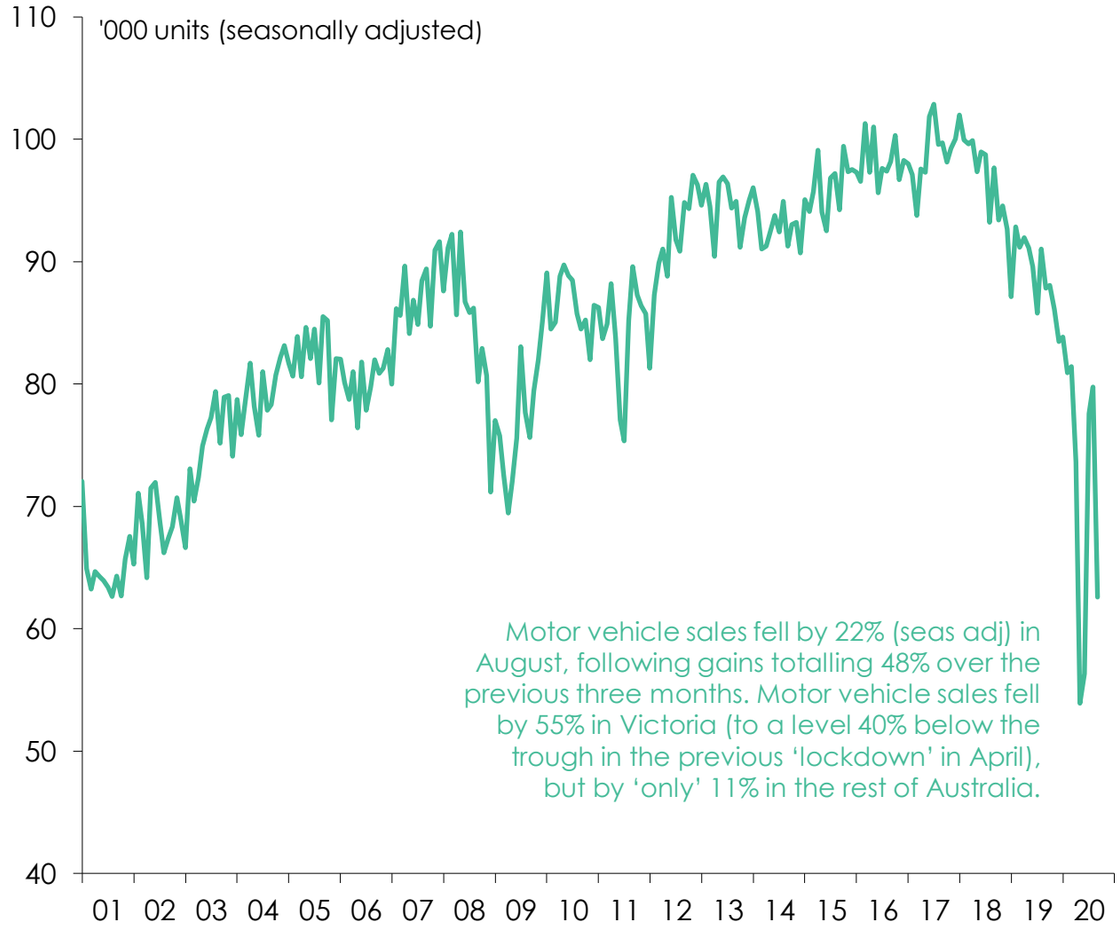
Note: Quarterly data up to March 1987 (May 2002 for capex intentions), monthly thereafter (latest data August 2020).
ource: National Australia Bank *Monthly Business Survey August 2020.*

Retail sales rose 3.2% in July (despite a 2% fall in Victoria), while motor vehicle sales fell 22% in August (dragged down by a 55% slump in Victoria)

Retail sales



Motor vehicle sales



Sources: ABS, *Retail Trade, Australia*; Federal Chamber of Automotive Industries *VFACTS* (seasonal adjustment of FCAI data by Corinna). Retail sales data are up to July and motor vehicle sales to August. Preliminary retail sales data for August will be released on 23rd September, and final data on 2nd October; September motor vehicle sales data will be released on or around 5th October.

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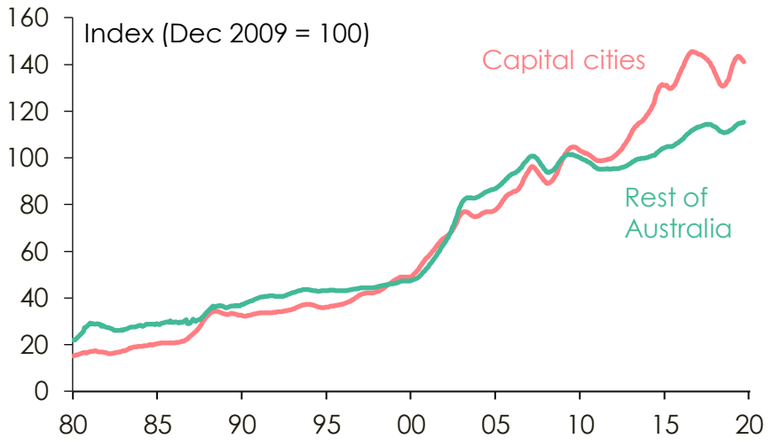
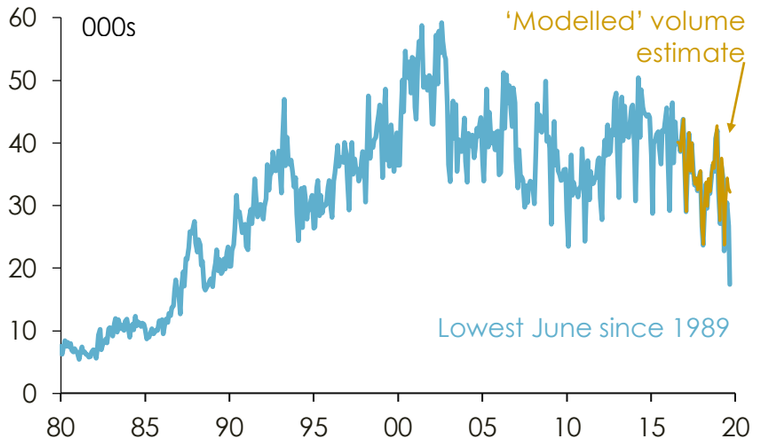
Property prices fell by an average of 1.3% from April to August, on thin volumes, with bigger falls in cities than regions, and in 'top tier' properties

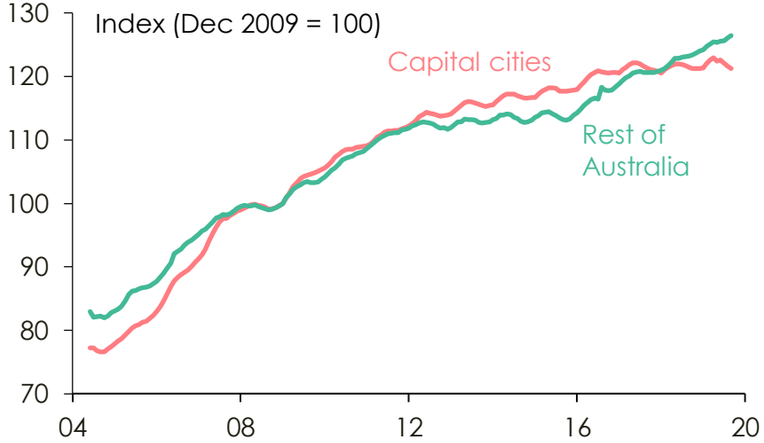
Residential property prices



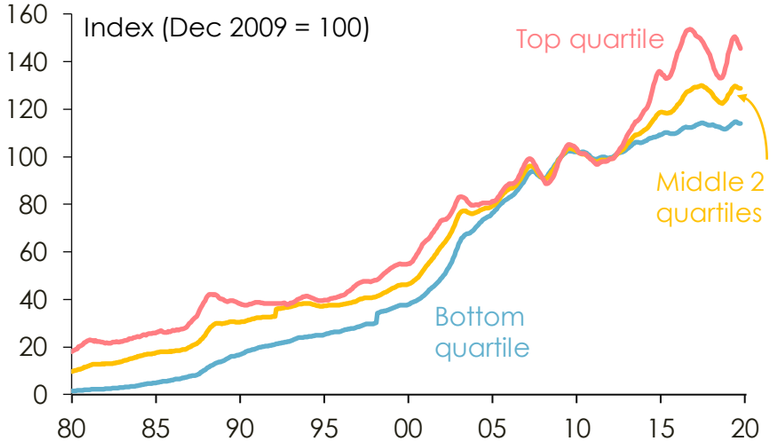
Residential property sales volumes



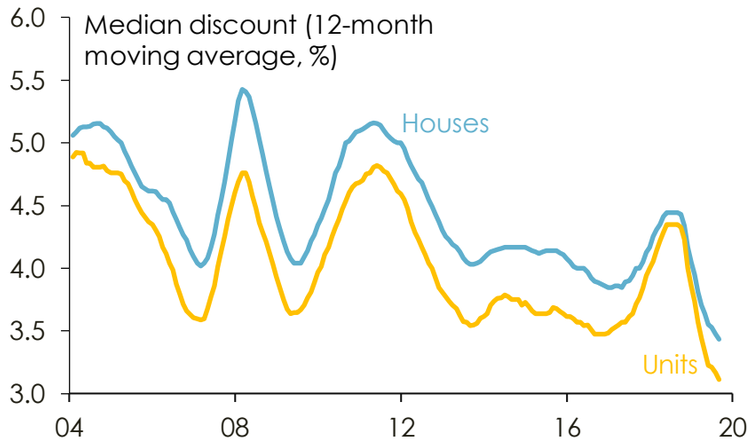
Residential rents



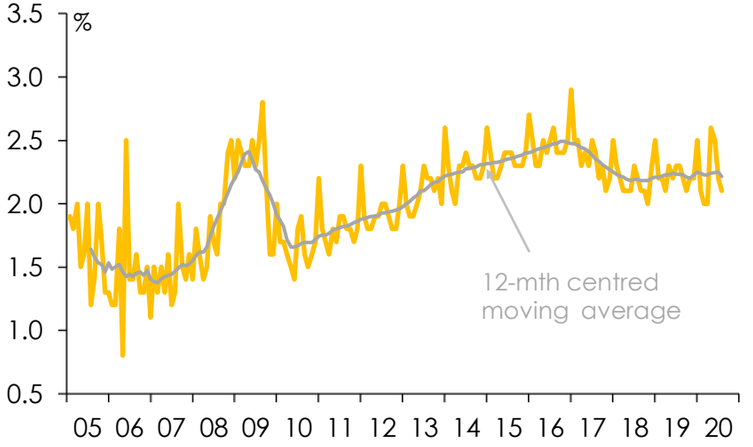
Property prices by tier



Vendor discounting



Capital city rental vacancy rates



Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Property price data are now seasonally adjusted. The index of residential rents uses a similar methodology to measure the 'organic' change in underlying rents. The 'modelled' sales volume estimates seek to account for delays in receiving information on transactions that have yet to settle (which can be more than six weeks after the contract date). *Sources:* CoreLogic; SQM Research.

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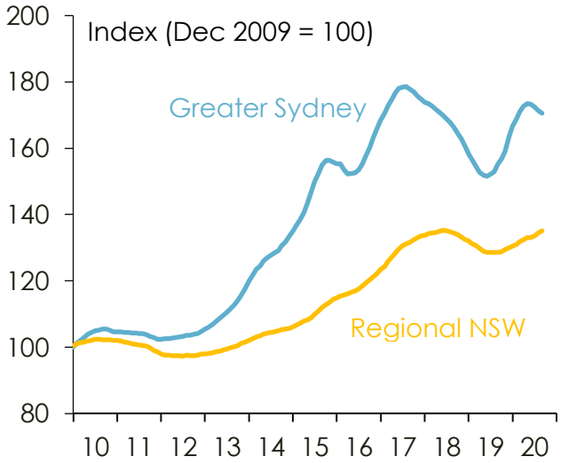
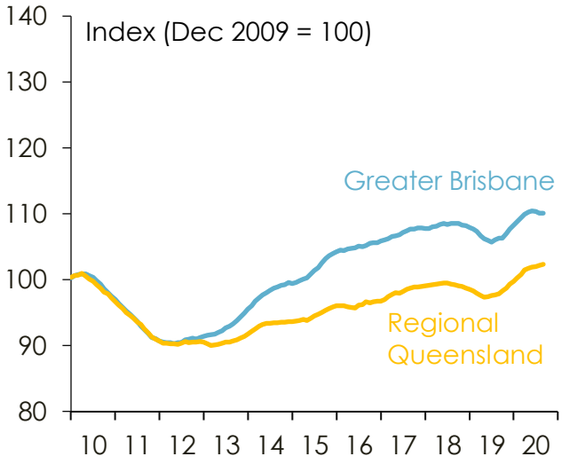
Property prices have fallen more in regional WA, Melbourne, Sydney and Perth since March than elsewhere, and have risen in Adelaide and Hobart

New South Wales



Queensland



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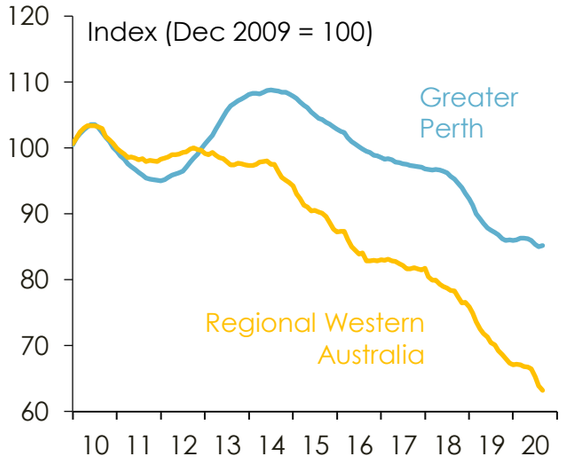

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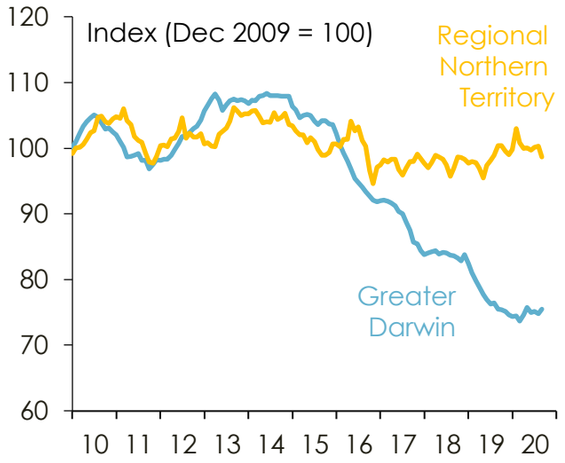

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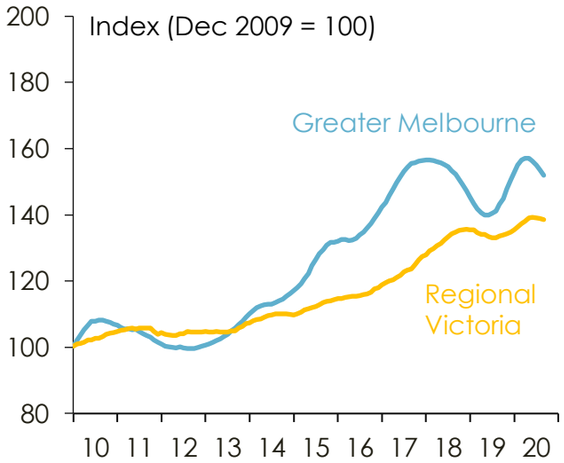
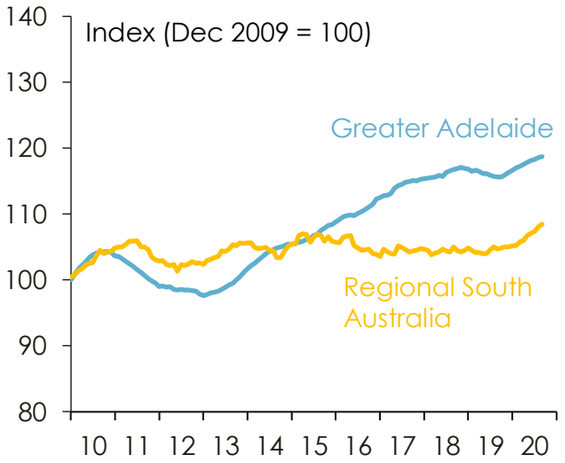
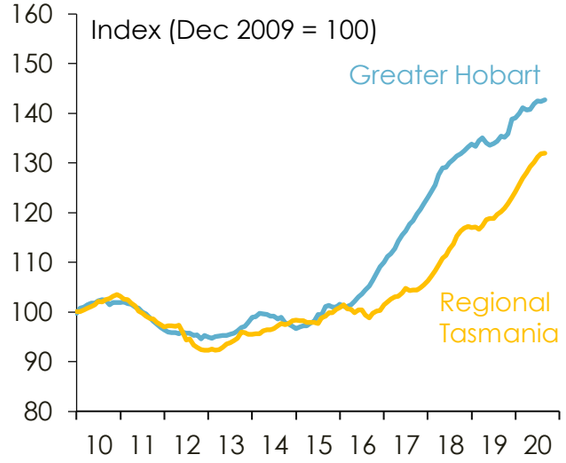


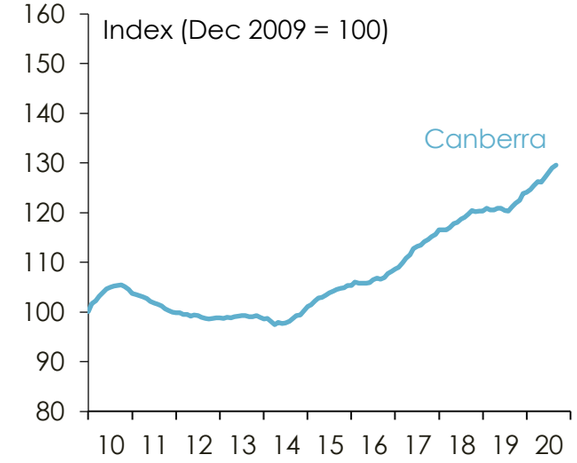
South Australia



Tasmania



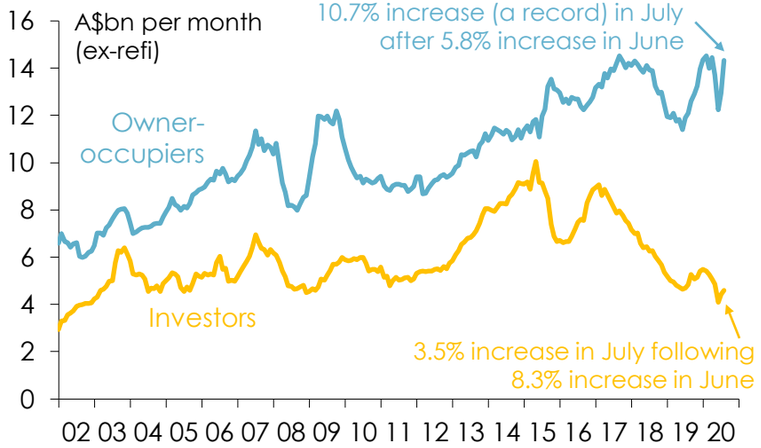
Australian Capital Territory



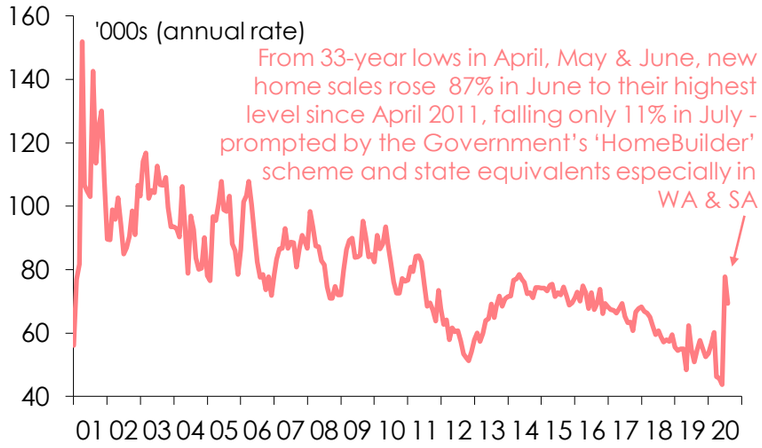
Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Property price data are now seasonally adjusted. *Source:* CoreLogic.

Residential building activity will likely turn down over the next few months and longer-term will be adversely affected by sharply lower immigration

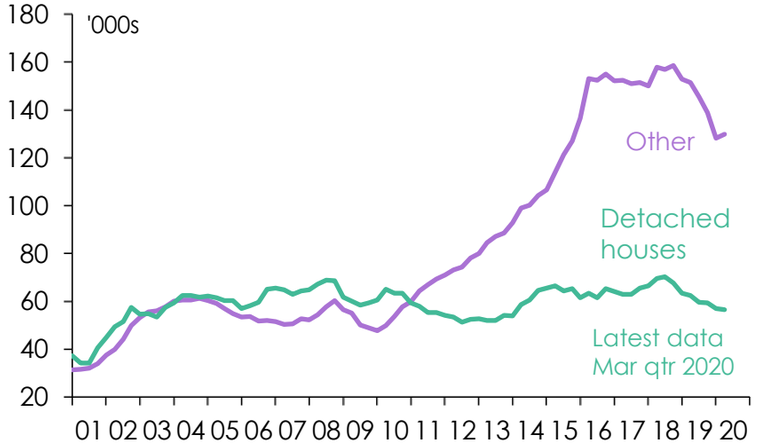
Housing finance commitments



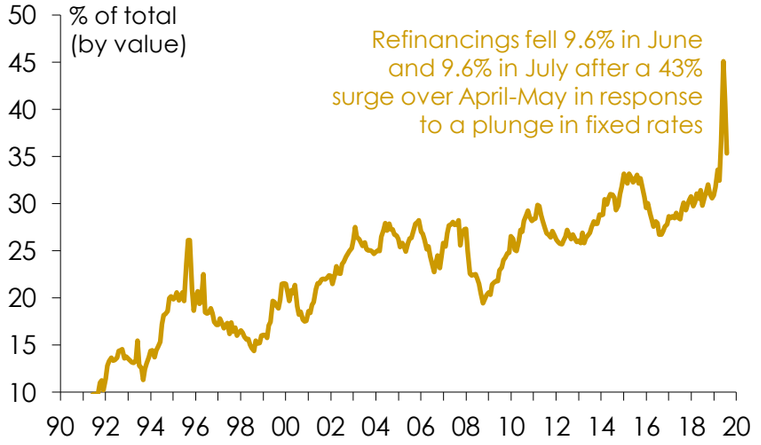
Large builders' new home sales



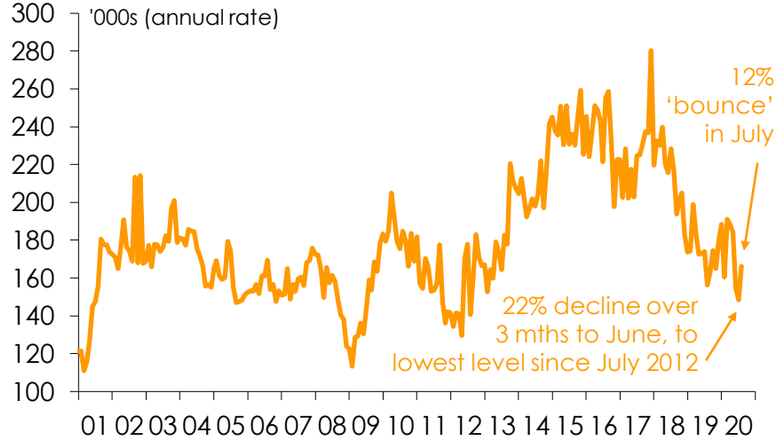
Dwellings under construction



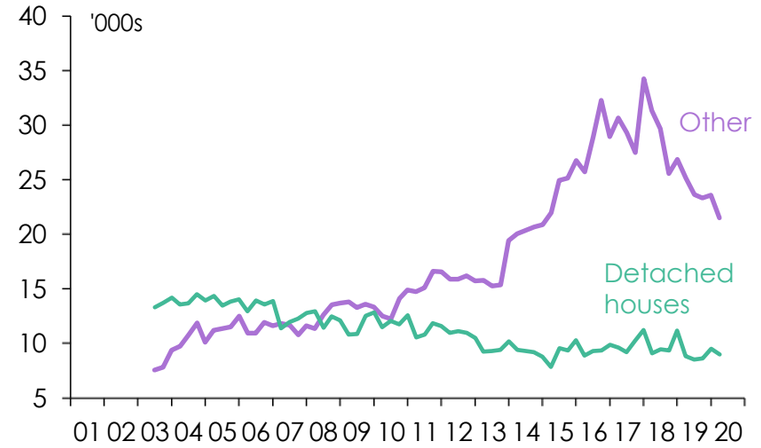
Refinancings as pc of total



Residential building approvals



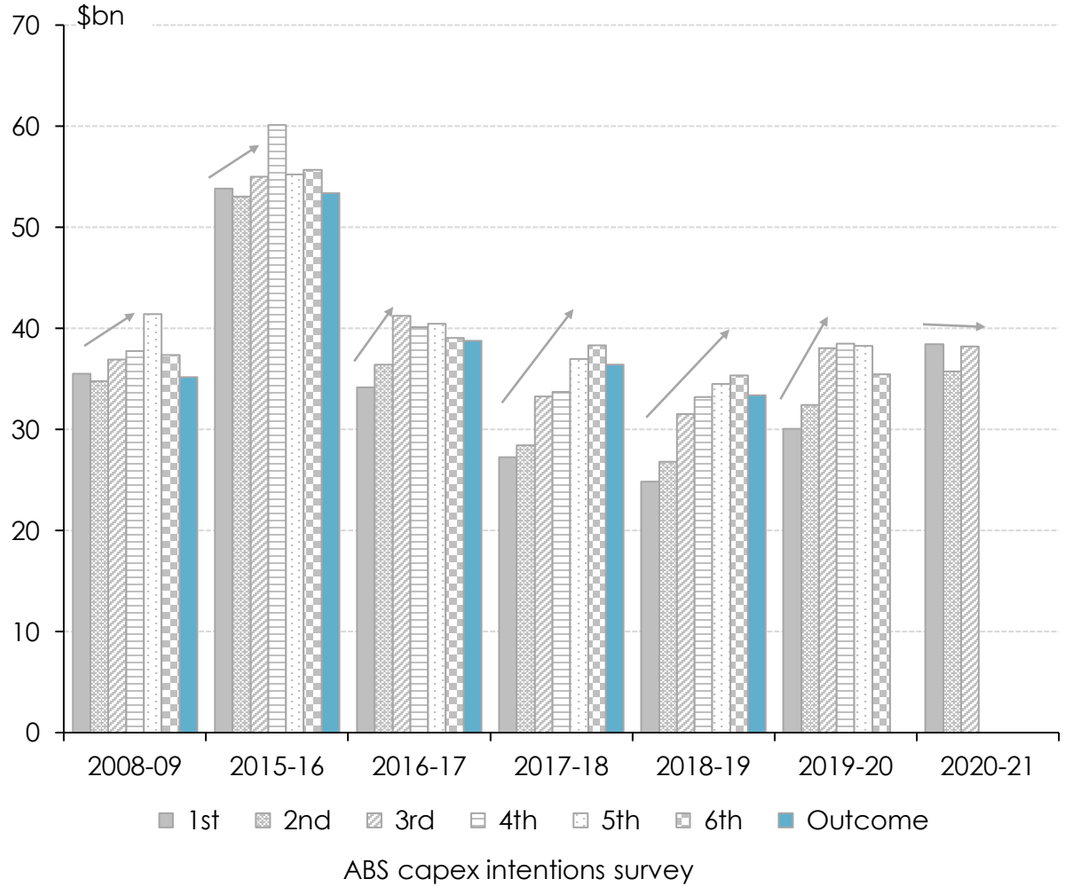
'Pipeline' of work yet to be done



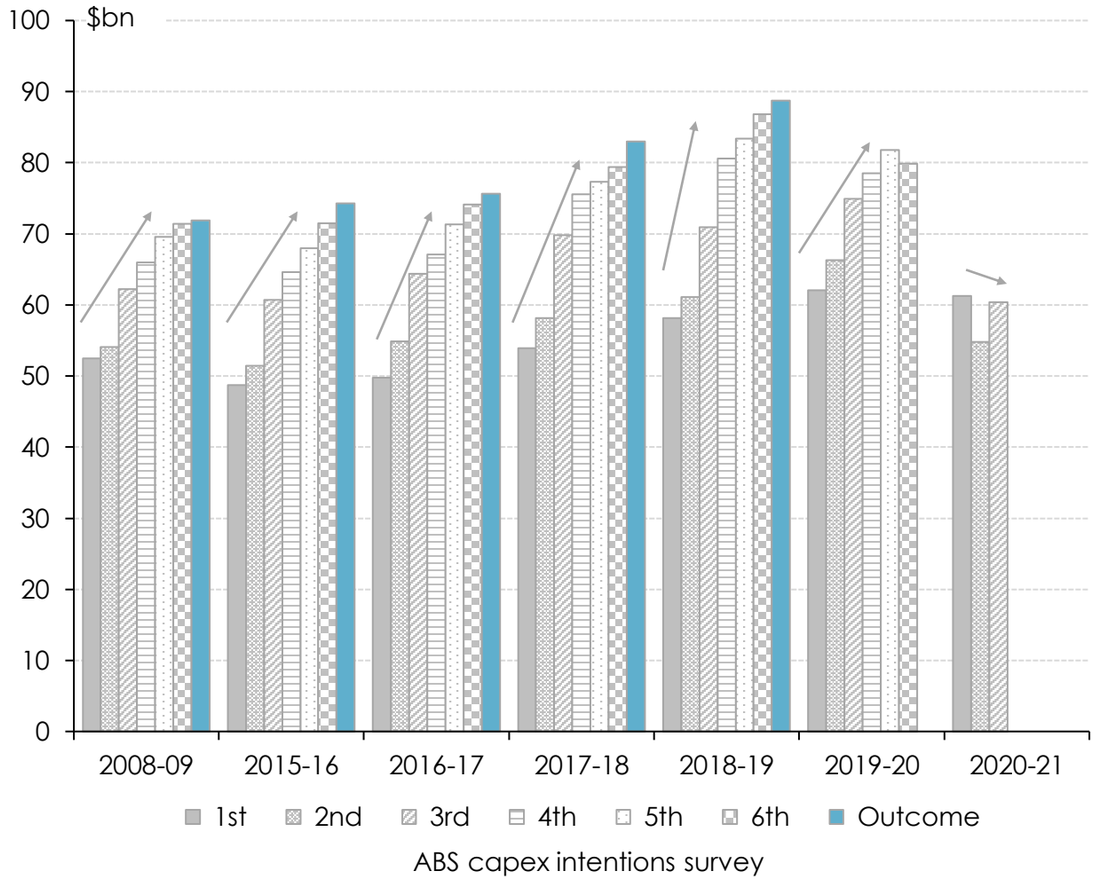
Note: 'New home sales' are of detached dwellings only and exclude small-scale builders. *Sources:* ABS; Housing Industry Association.

Business capex intentions for the current financial year are lower than they were six months ago – for the first time in at least 33 years

Capital expenditure intentions - mining



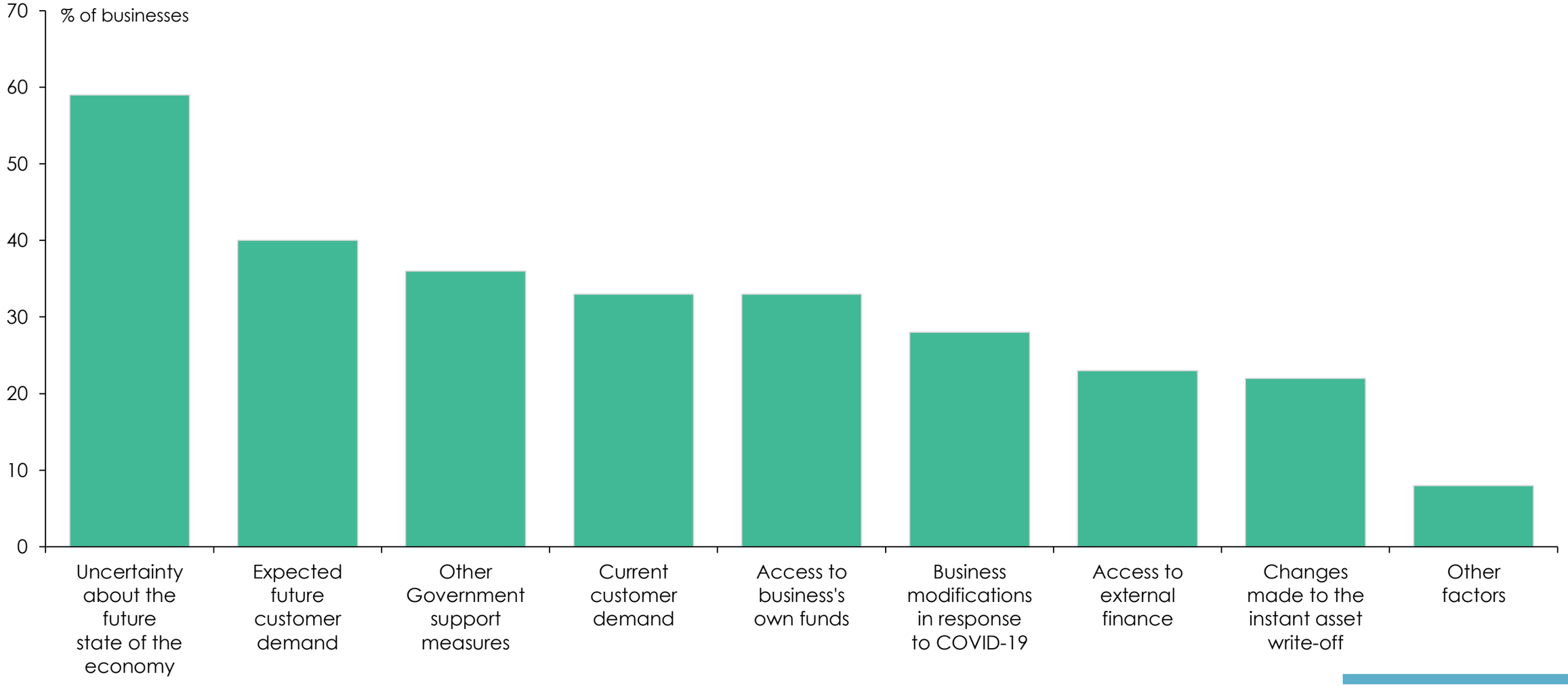
Capital expenditure intentions – non-mining



Note: The ABS conducts six surveys of business' capital expenditure intentions in respect of each financial year. The first is conducted in January & February prior to the commencement of the financial year, the second in May & June, the third in July & August of the financial year, the fourth in October & November, the fifth in January & February of the financial year, and the sixth in May & June. The outcome (actual capital expenditure in the financial year) is determined from the survey taken in July & August after the end of the financial year. The survey excludes businesses in the agriculture, forestry & fishing; and public administration and safety sectors, and also superannuation funds. The education & training, and health care & social assistance sectors have been included in the surveys since December 2019 but are not included in the above charts (to assist in comparisons). *Source:* ABS, *Private New Capital Expenditure and Expected Expenditure, Australia*.

Uncertainty about the economic outlook is the most important factor weighing on business capex decisions

Significant factors affecting business capital expenditure decisions, by industry, August 2020



Source: ABS, *Business Impacts of Covid-19*, August 2020 (based on survey conducted between 12th and 19th August).

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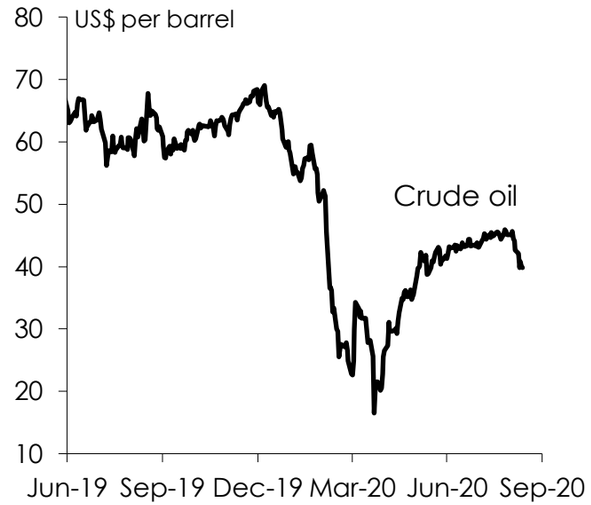
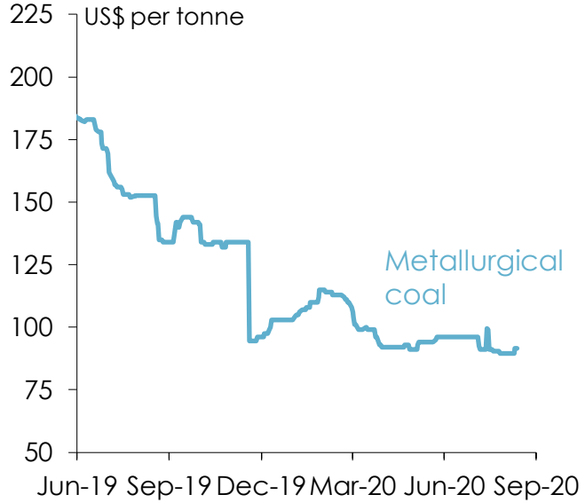
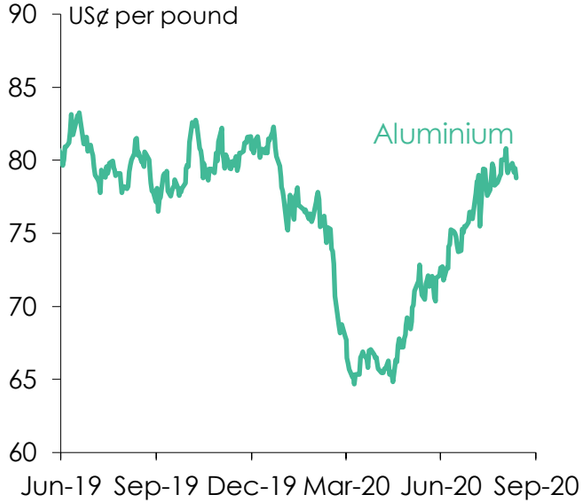
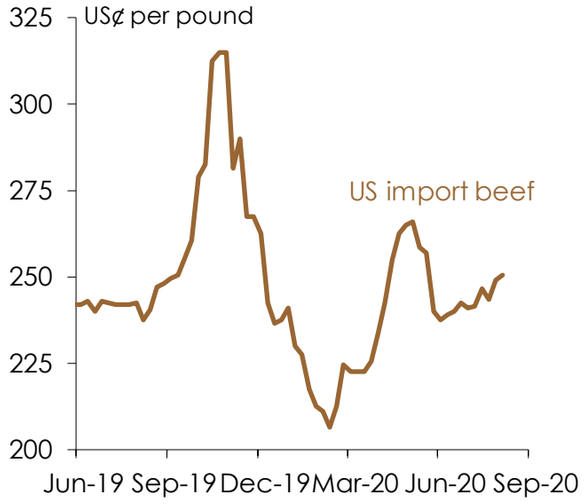
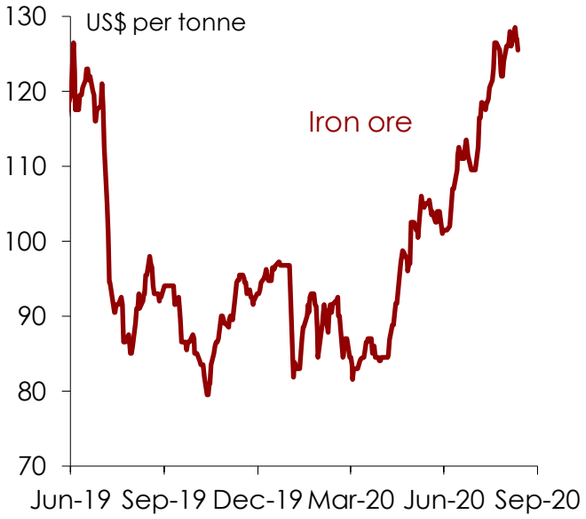
Prices of most of Australia's resources exports (especially iron ore) have held up well – agricultural commodities not so much

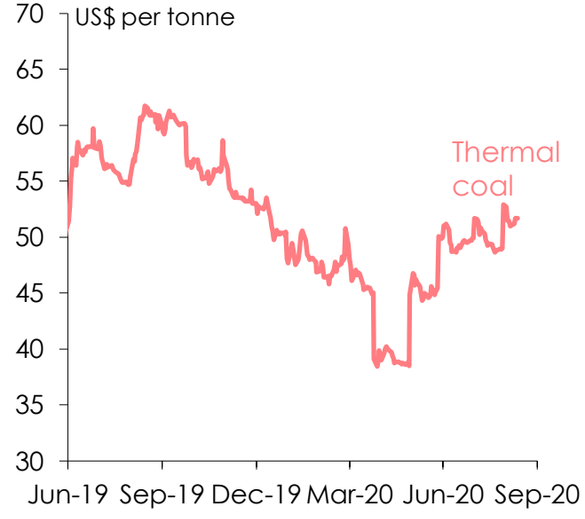


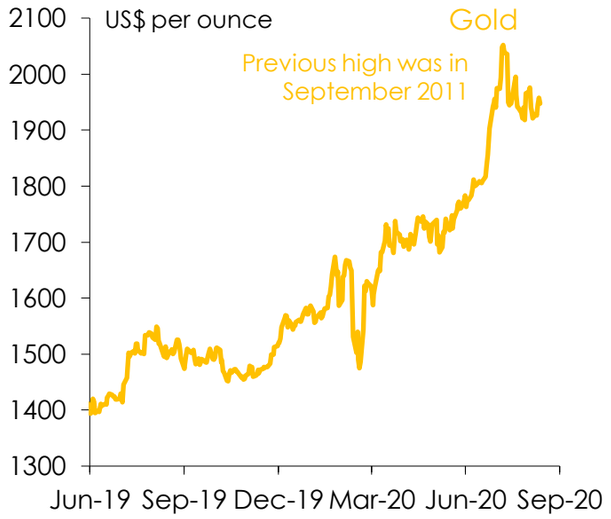


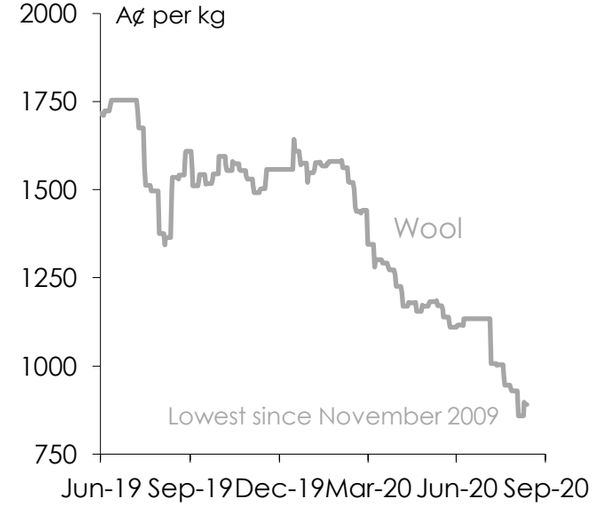








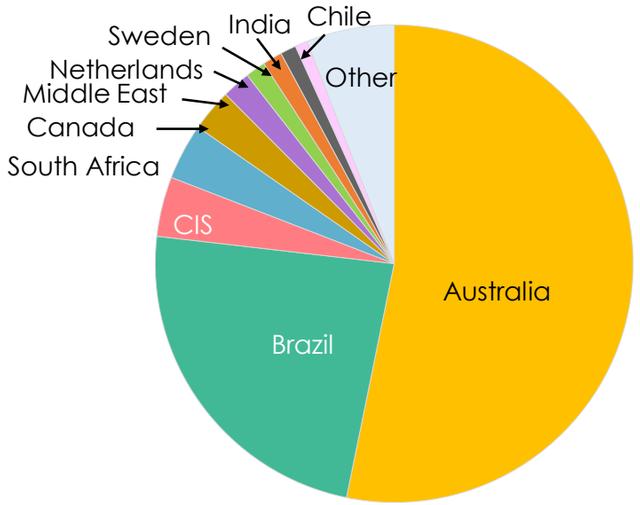




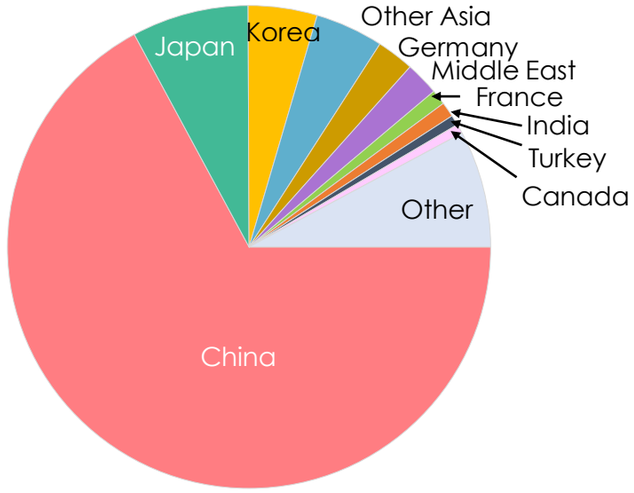
Sources: Refintiv Datastream; Meat & Livestock Australia; Australian Wool Innovation.

The resilience of iron ore prices stems from strong Chinese demand, declining Chinese production and constraints on Brazilian exports

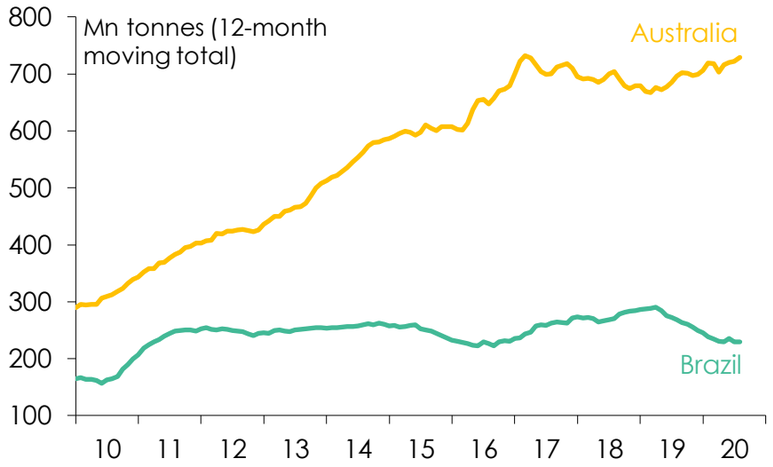
Iron ore exports, 2018



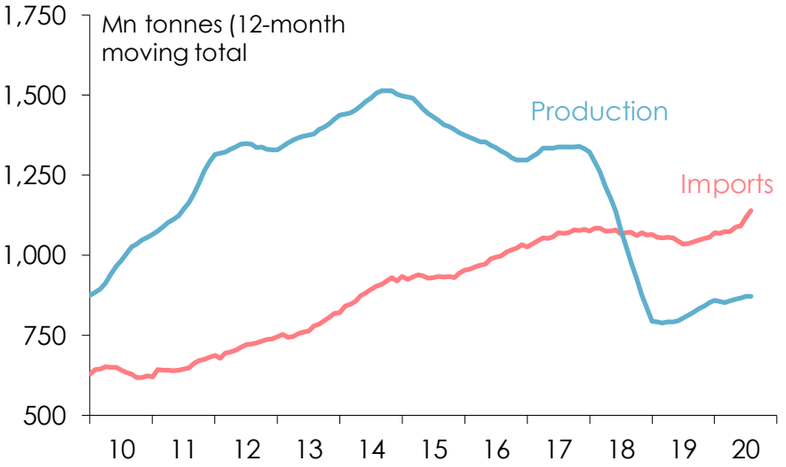
Iron ore imports, 2018



Australia & Brazil iron ore exports



China iron ore production & imports

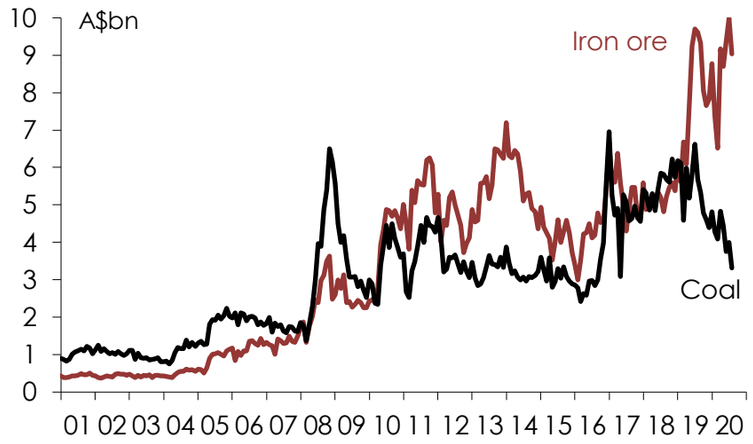


- The global seaborne iron ore trade is dominated by shipments from Australia & Brazil to China (which accounts for 53% of global steel production and 51% of steel use)
- Chinese iron ore production has fallen by more than 34% since 2017, largely because of rapidly declining quality – forcing Chinese steel mills to become more dependent on imports
- Brazilian production and exports have been curtailed by a series of tailing dam collapses over the past five years, and more recently by Covid-19 outbreaks at four large mine sites
- China is seeking to develop other sources in West Africa although there are big logistical hurdles to be overcome there
- BHP said this week that iron ore prices "can be expected to ease as Brazilian supply recovers" and that "in the second half of the 2020s, China's demand for iron ore is expected to be lower than today as crude steel production plateaus and the scrap-to-steel ratio rises"

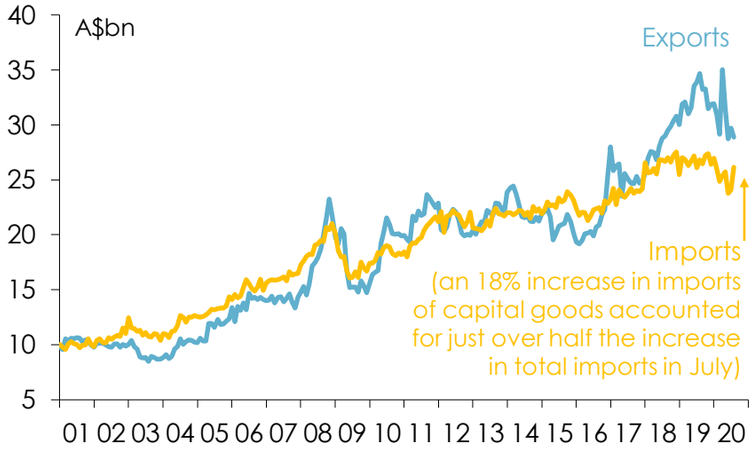
Note: Export volume data for Australia and Brazil derived by dividing export values (in US$) from ABS and IGBE by the average US$ price of Chinese iron ore imports.
Sources: World Steel Association; China National Bureau of Statistics; China General Administration of Customs; Refinitiv Datastream; ABS; IGBE; BHP; Corinna.

Australia's merchandise trade surplus fell by 52% in August to its smallest since last August 2018, with exports down 2¾% and imports up 8½%

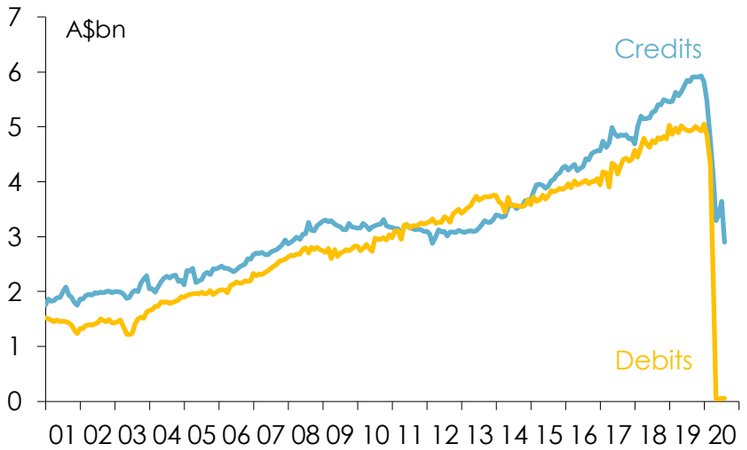
Iron ore and coal exports



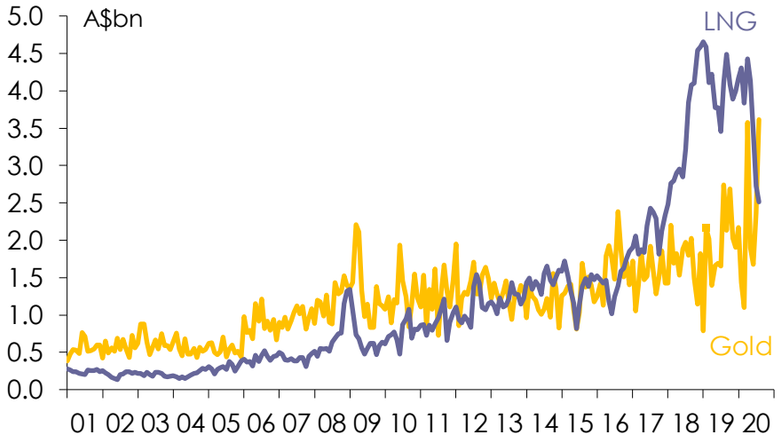
Merchandise exports and imports



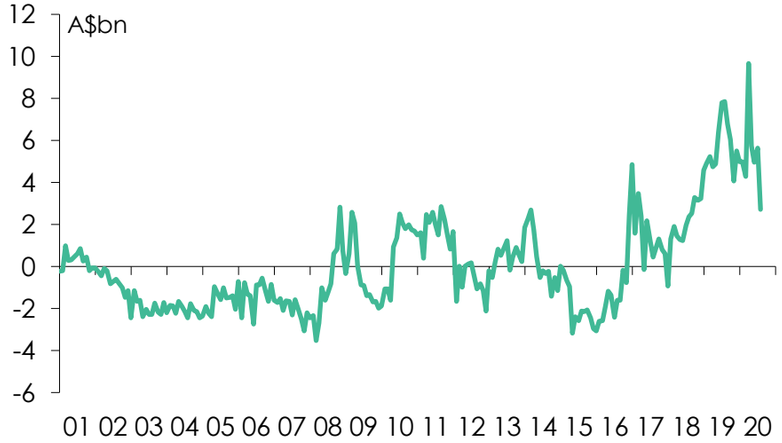
Tourism-related services trade



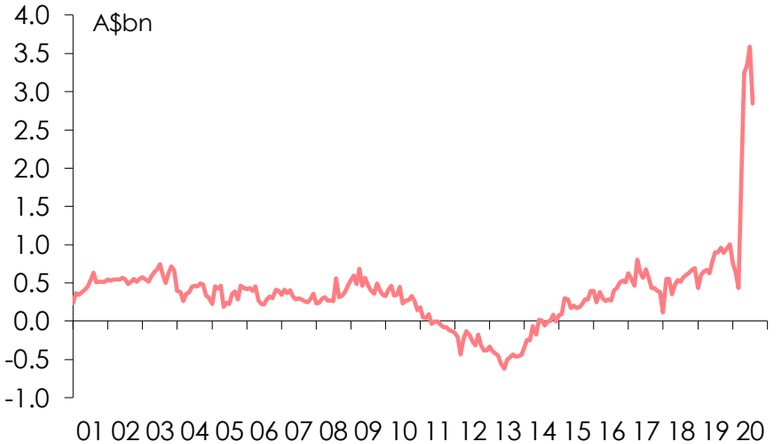
LNG and gold exports



Merchandise trade balance



Tourism services trade balance

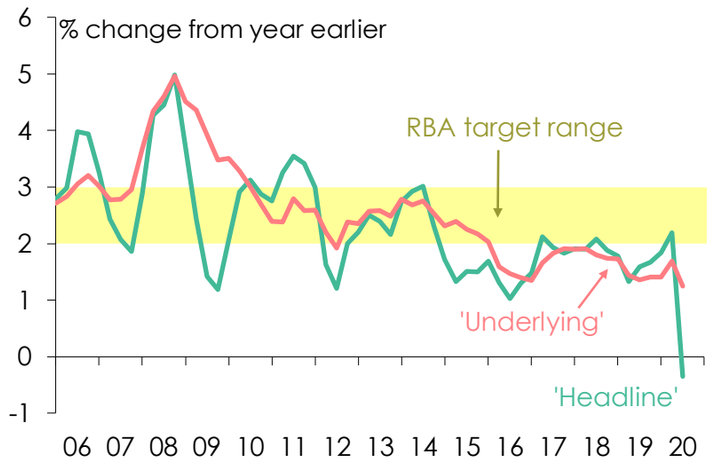


Source: ABS, *International Trade in Goods and Services, Australia*.

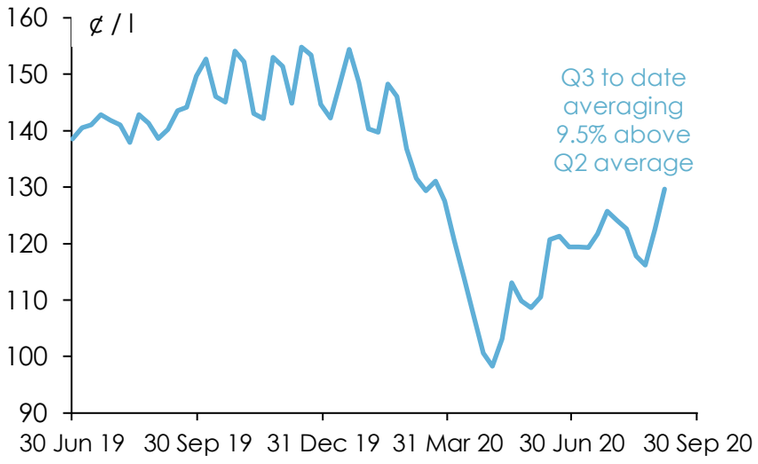
SAUL ESLAKE
CORINNA ECONOMIC ADVISORY

Inflation turned negative, temporarily, in Q2 and will remain below the RBA's target until at least the second half of 2021

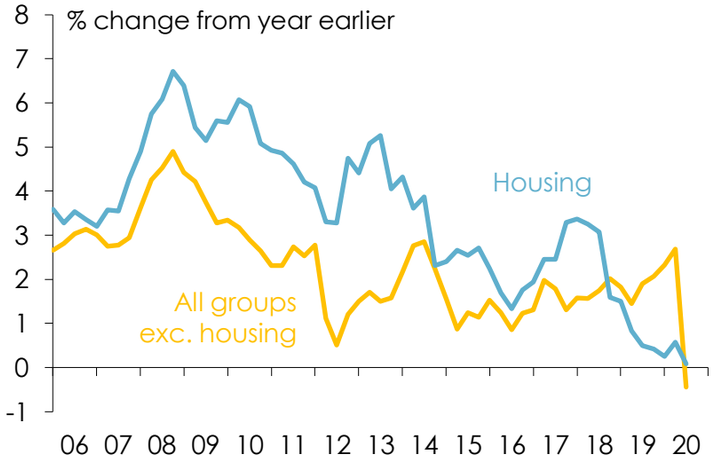
Consumer prices



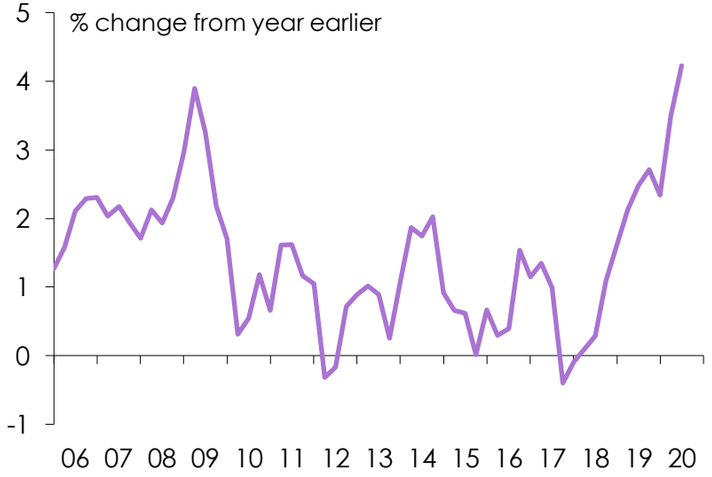
Retail petrol prices



Housing costs in the CPI



Retail sales implicit price deflator

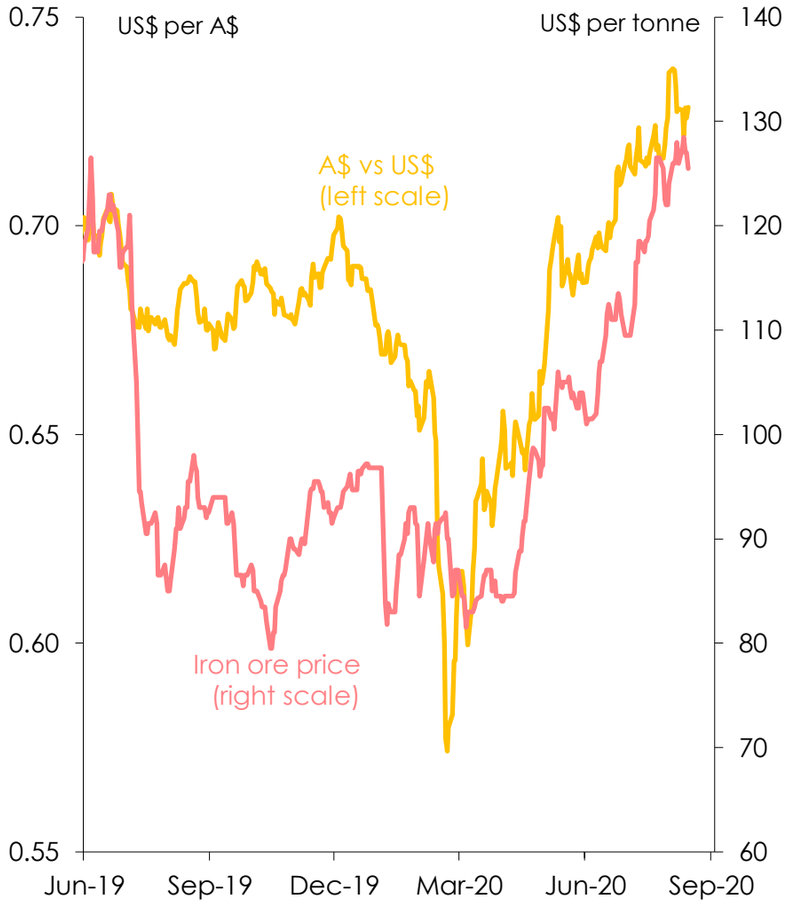


- The CPI fell (by 1.9%) in the June quarter, the largest quarterly decline since 1931 and only the 11th decline in 60 years
- The annual 'headline' inflation rate fell to -0.3%, the lowest since Q3 1997 (which was artificially induced by falling mortgage rates, which are no longer included in the CPI), or otherwise since Q3 1944
- The fall in the CPI in Q2 was largely due to the provision of free child care between 6th April and 28th June, which subtracted 1.1pc pts from the CPI; and a 19% fall in petrol prices, which subtracted 0.7 pc pts
  - both of these items will reverse in Q3
- 'Underlying' inflation was flat in Q2 and 1.3% from Q2 last year – it's now been below the RBA's target for more than four years
- In contrast to the CPI, the retail sales price deflator rose 1.2% in Q2 to be 4.2% higher than in Q2 2019 – the biggest annual increase since Q2 2001 – largely driven by a 6.7% increase in food prices

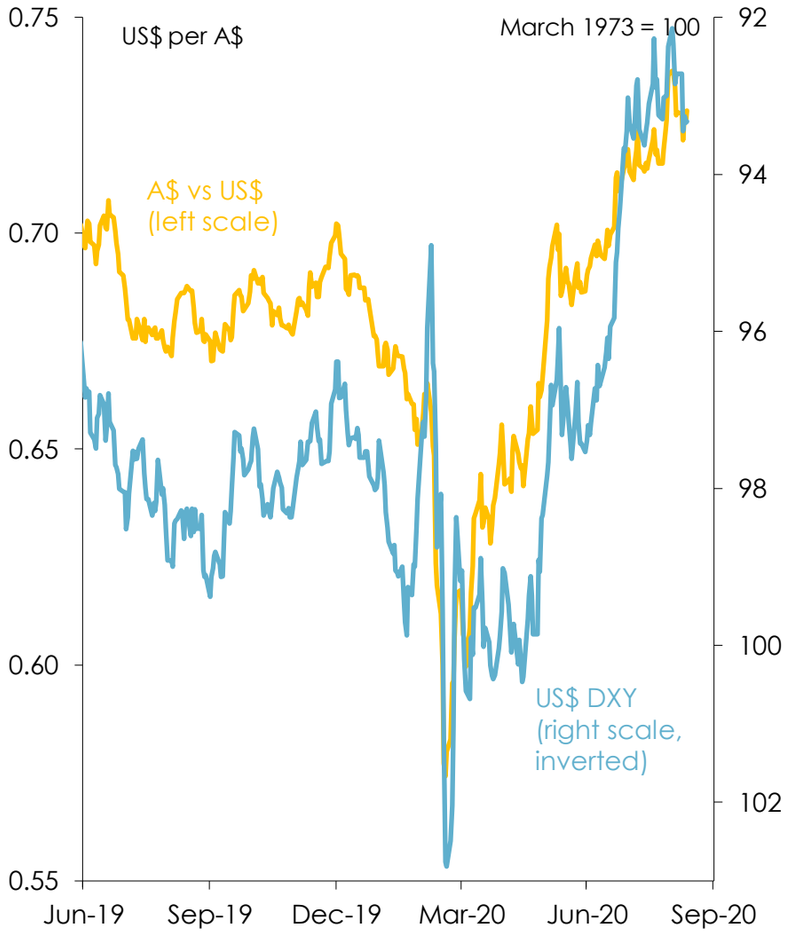
Note: 'Underlying' inflation is the average of the weighted median and trimmed mean CPIs. Wage price indices exclude bonuses.
Sources: ABS, *Consumer Price Index, Australia*; Australian Institute of Petroleum.

The A$ crashed in the first few weeks of the pandemic (more than in the GFC) but has since recovered strongly

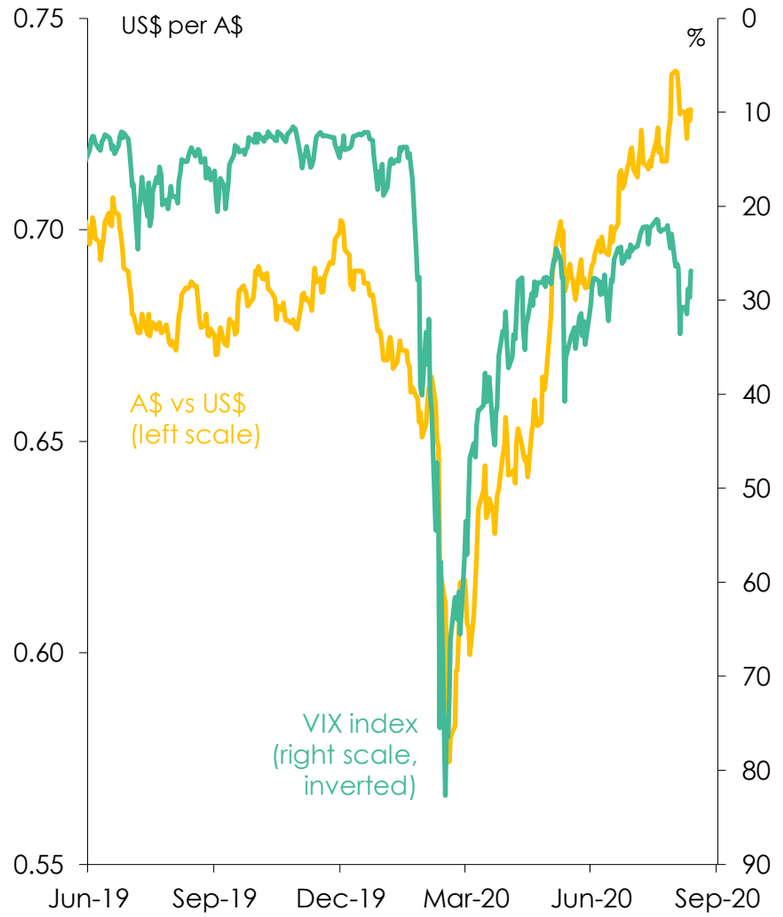
A$-US$ and spot iron ore prices



A$-US$ and US$ trade-weighted index



A$-US$ and US equity market volatility

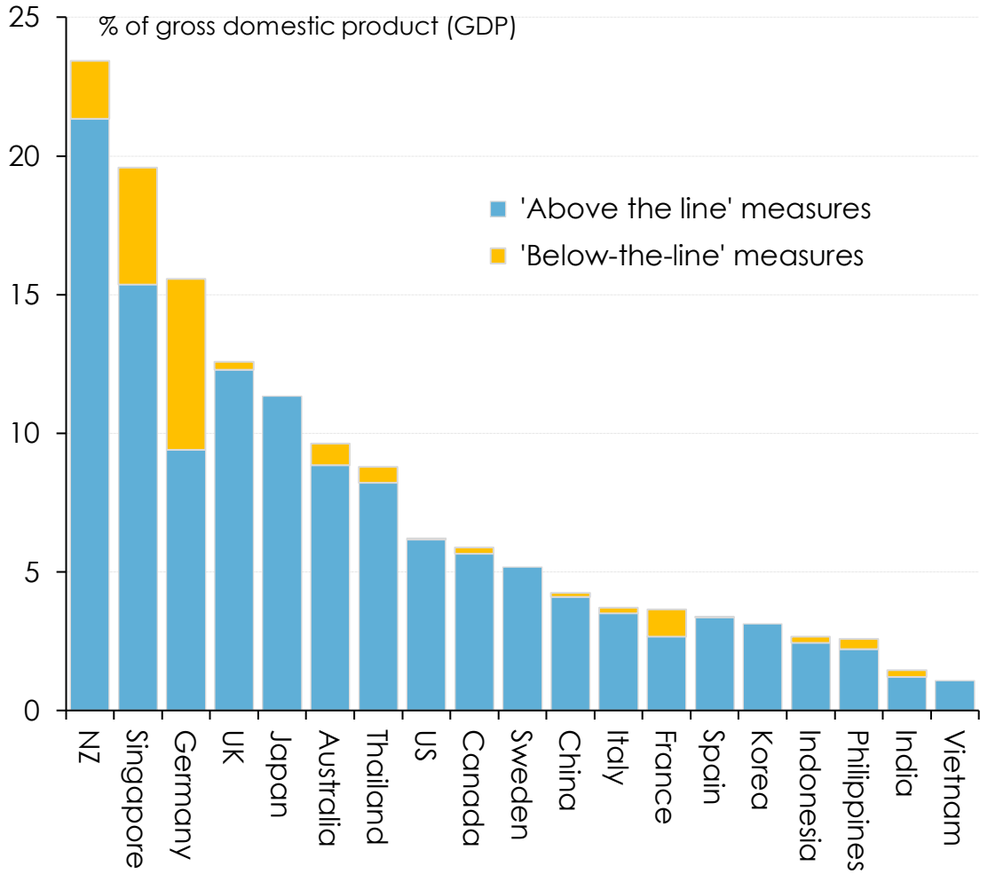


Note: The VIX index is a measure of the implied volatility of S&P500 options and is widely interpreted as an indicator of investor risk appetite or aversion.
Source: Refinitiv Datastream.

The Australian policy response

The Australian Government's policy measures have been large by historical and international standards

Fiscal policy responses to Covid-19 – selected 'advanced' & Asia-Pacific economies

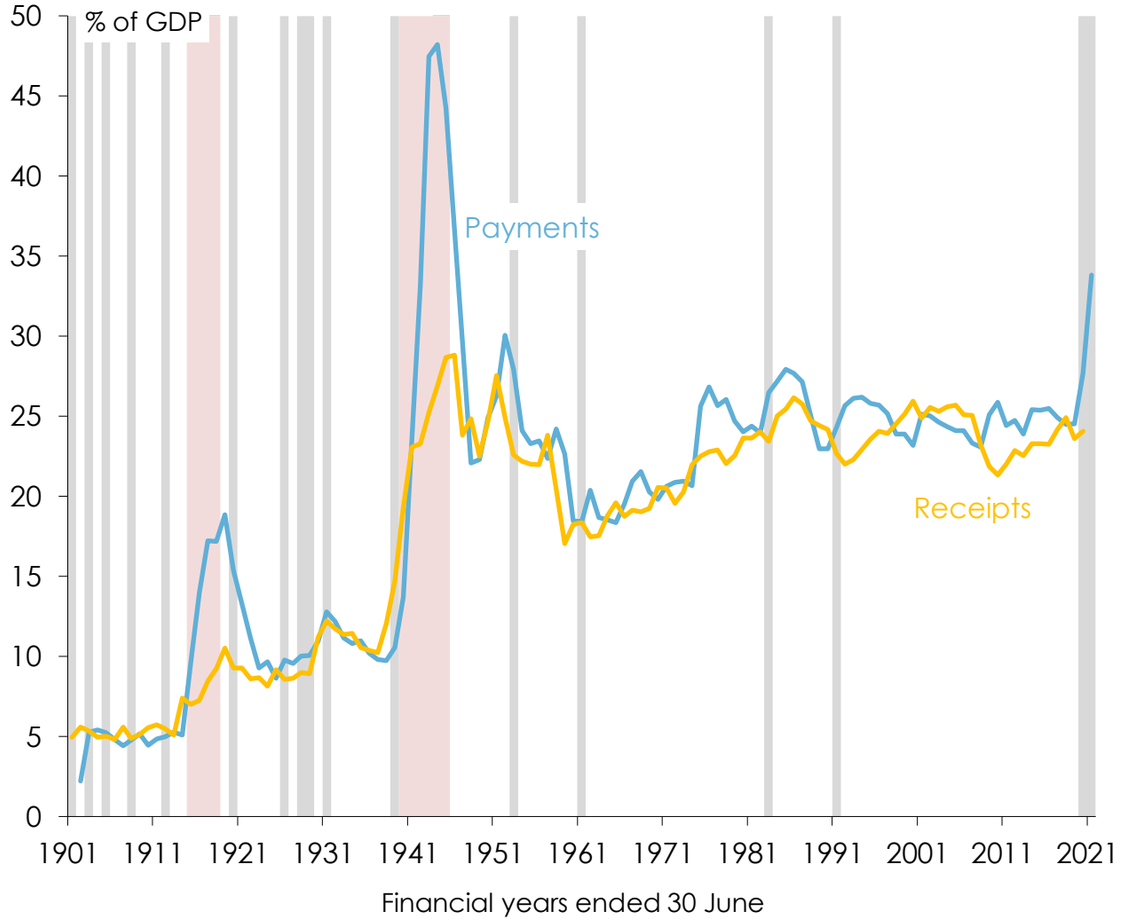


Note: 'Above the line' measures comprise additional or accelerated spending and deferred or foregone revenue. 'Below the line' measures comprise equity injections, loans, asset purchases and debt assumptions, but do not include loan guarantees or other contingent liabilities. *Source:* IMF, *Fiscal Monitor: Database of Country Fiscal Measures in Response to the COVID-19 Pandemic*, 24th June 2020.

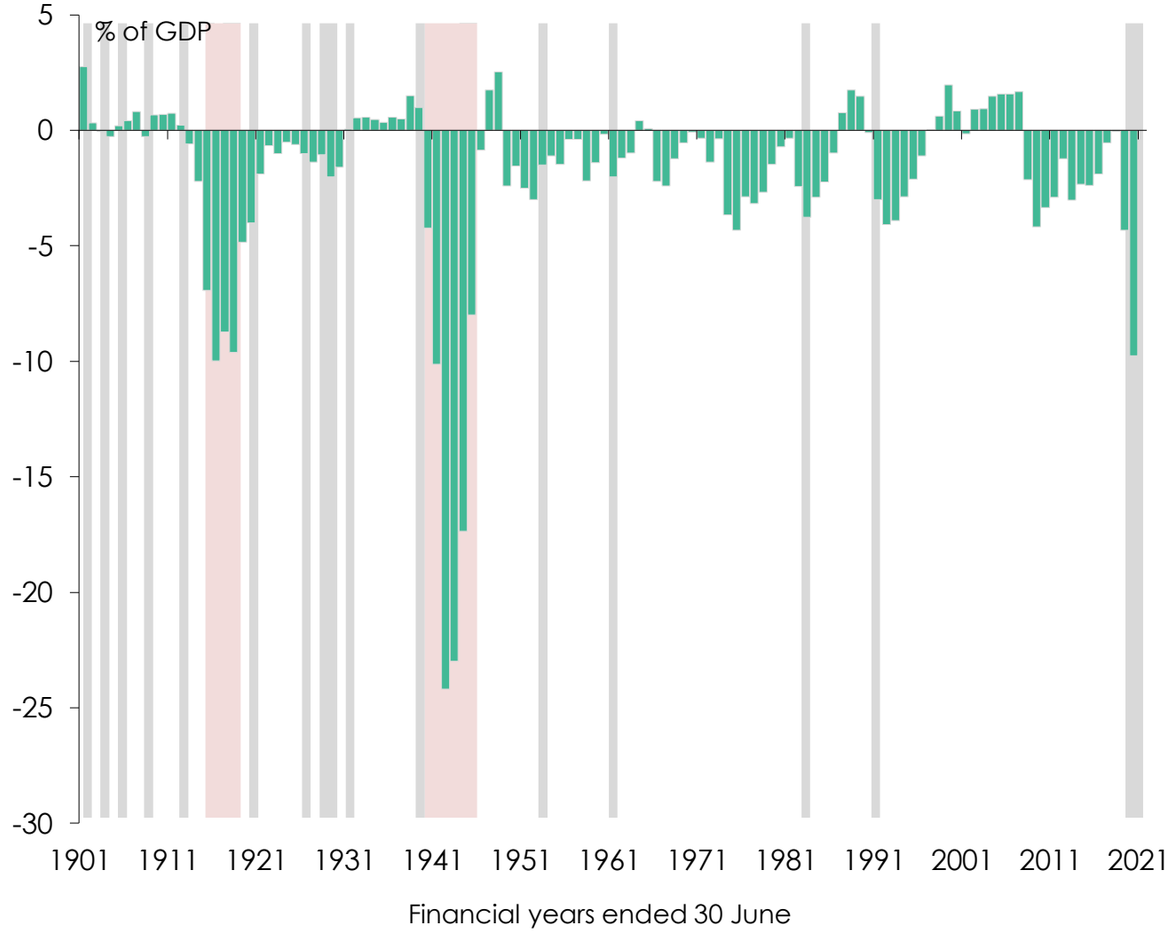
- **Policy measures announced thus far by the Australian Government total $192bn over FYs 2019-20 and 2020-21 or about 9% of one year's GDP – which is large by international standards (and double what was done during the GFC)**
  - including an additional $15bn for Jobkeeper announced this week in response to the 'lockdown' in Victoria
- **Principal objectives of policy measures have been to –**
  - maximize the 'survival prospects' of businesses affected by shutdowns or ongoing restrictions
  - minimize the impact of the shutdown on employment
  - provide additional income support to those who lose their jobs
  - strengthen the capacity of the health care system to cope with increased demand
- **Policy measures have been designed to be 'simple' to administer, and to make greatest use of existing systems rather than having to create new mechanisms**
  - which resulted in some anomalies initially (eg with the level of Jobkeeper payments to part-time workers) though most of these have now been corrected
- **Policy measures also designed to be readily 'switched off' once the need for them has passed**

The budget deficit blew out to $86bn in 2019-20, and is forecast to widen to $185bn (9.7% of GDP) in 2020-21, the largest as a pc of GDP since WW II

Australian Government receipts and payments



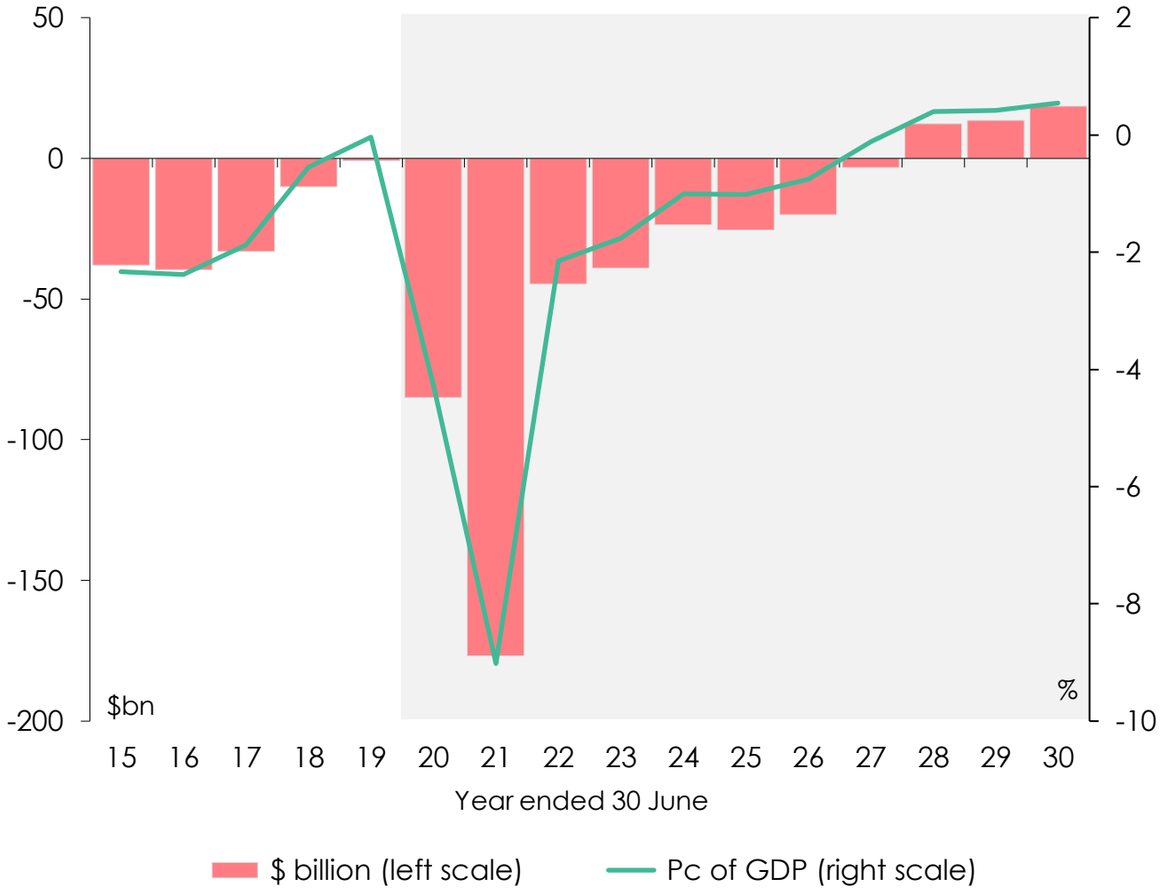
Australian Government budget deficit or surplus



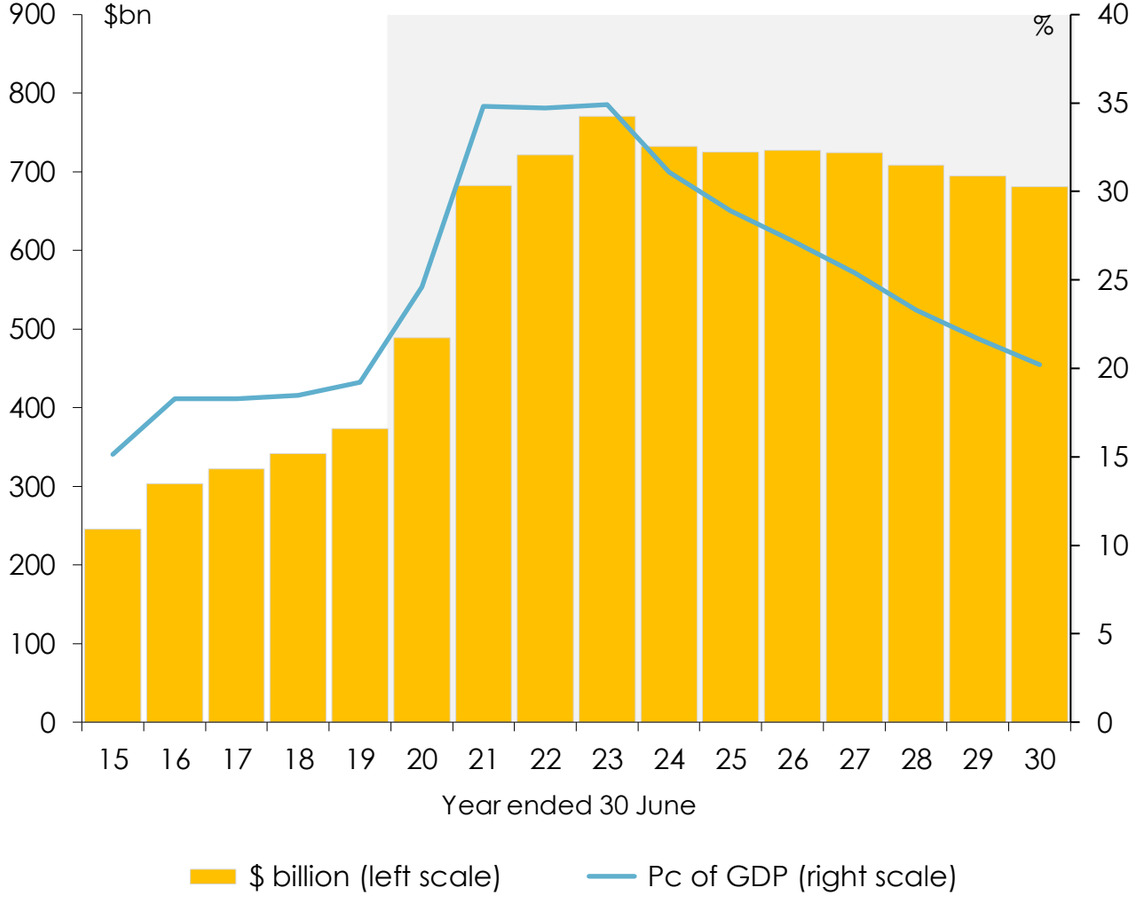
Note: Payments and the budget surplus or deficit are 'underlying' (that is, exclude 'net investments in financial assets for policy purposes') after 1989-90, when state governments became responsible for issuing their own debt, and 'headline' before that. Areas shaded in grey are fiscal years in which real GDP contracted; areas shaded in pink are World Wars I and II. *Sources:* Global Financial Data; Australian Government, 2019-20 *Mid-Year Economic and Fiscal Outlook* (December 2019) and *Economic and Fiscal Update* (July 2020).

Based on PBO projections, the budget looks set to remain in deficit until 2027-28, with net debt peaking at $771bn (35% of GDP) in 2023

‘Underlying’ cash balance projections to 2029-30



Net debt projections to 2029-30

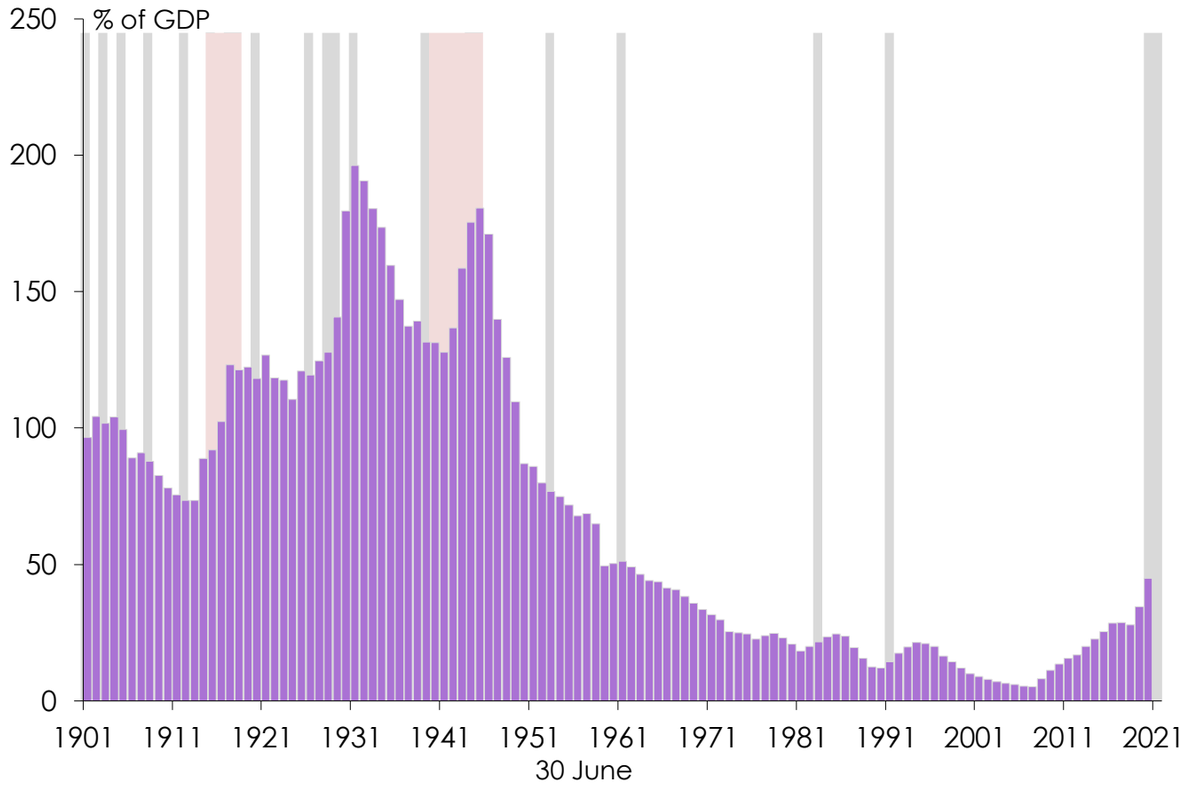


Note: Shaded area denote estimates (for 2019-20) or projections. Estimates and projections expressed in dollars have been inferred by Corinna from the PBO's baseline projections expressed as a pc of GDP, PBO projections of real GDP (starting with RBA SoMP forecasts) and Corinna estimates of the GDP deflator. PBO projections only allow for the impact of Covid-19 and measures taken in response to it (including, in particular, the impact of border closures on forecasts for immigration and hence population growth), and not for any other developments which may affect long-term economic or fiscal projections (in either direction).

Sources: Parliamentary Budget Office (PBO), *Updated medium-term fiscal scenarios: impact of COVID-19 pandemic and response*, Canberra, 21st August; Corinna.

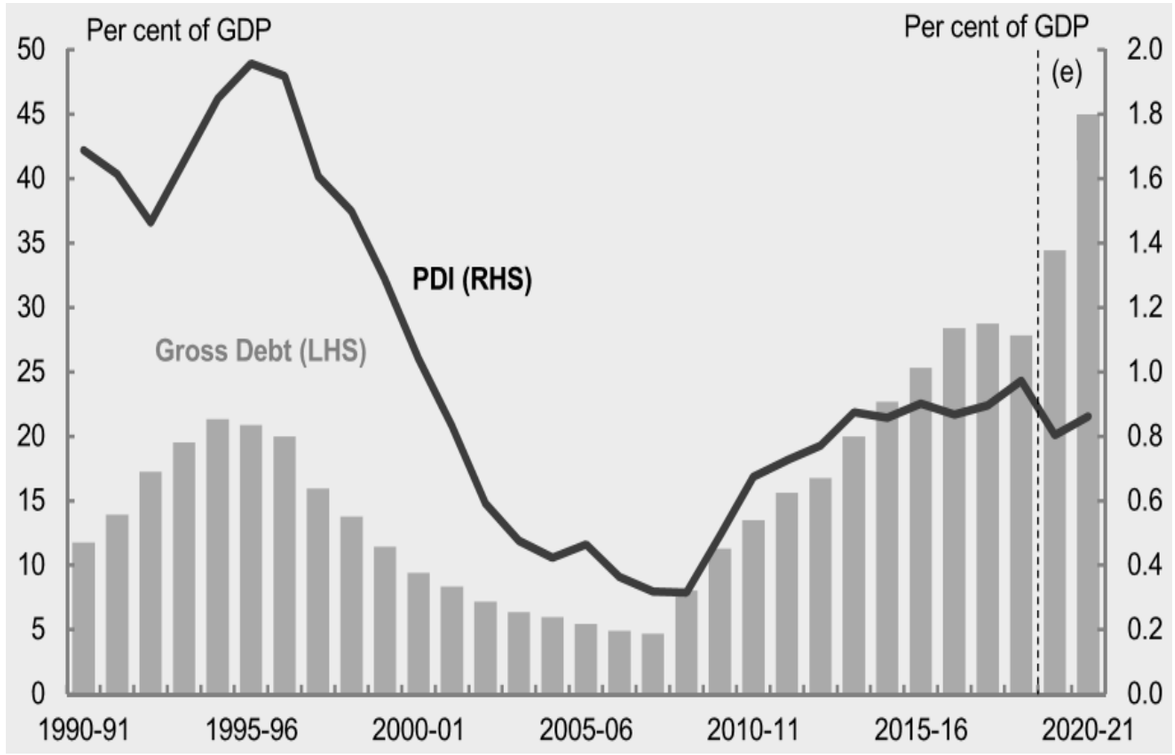
However there's no need for undue alarm at the level of debt which will be incurred by the Australian Government

Australian Government gross public debt



- Australian governments have coped with much higher levels of gross debt (as a pc of GDP) in the past than are in prospect over the next decade

Gross public debt and public debt interest payments

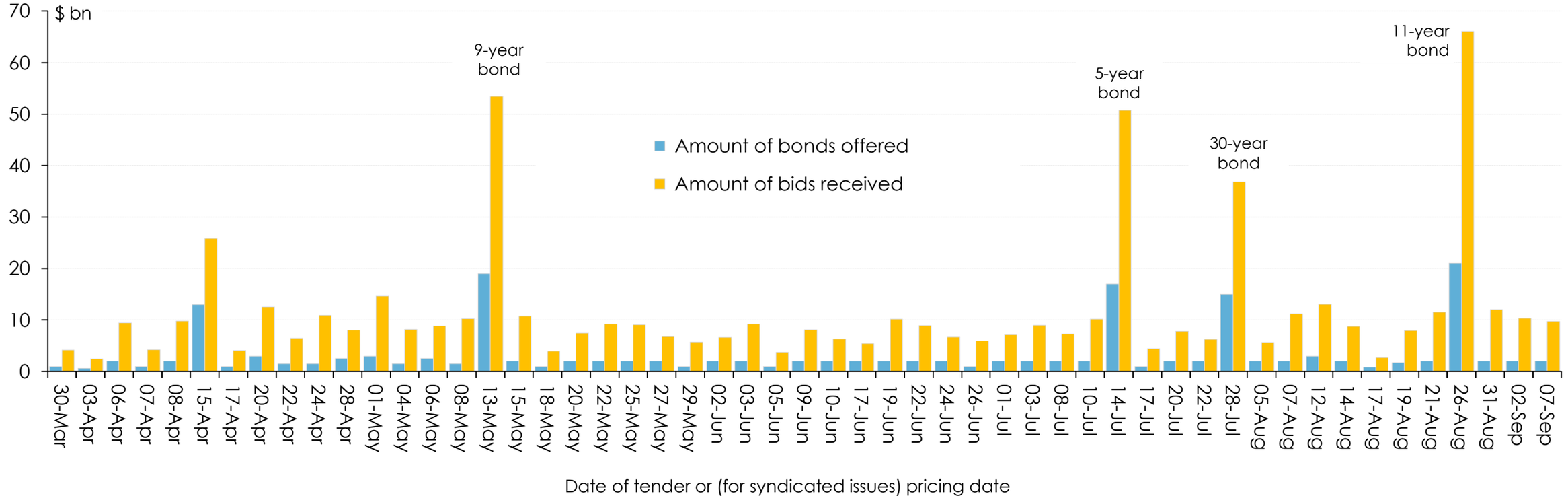


- Thanks to much lower interest rates, the Government will actually be spending less on interest payments, as a pc of GDP, in 2020-21 than in any of 2013-14 through 2018-19

Note: Areas shaded in grey are fiscal years in which real GDP contracted; areas shaded in pink are World Wars I and II. *Sources:* Global Financial Data; Australian Government, 2019-20 *Mid-Year Economic and Fiscal Outlook* (December 2019) and *Economic and Fiscal Update* (July 2020).

The Australian Government continues to have absolutely no difficulty financing its significantly higher deficits

Australian government bond issuance since March 2020



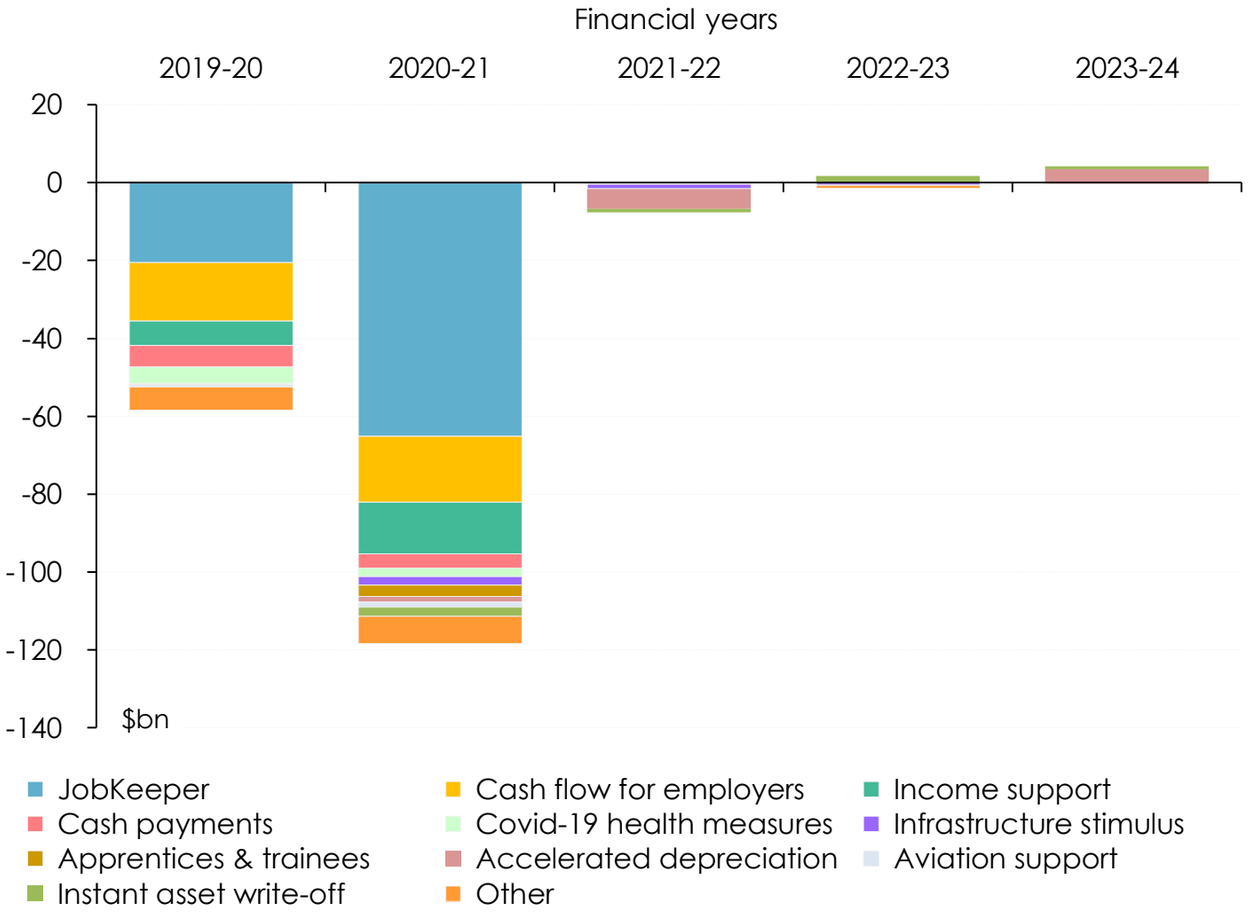
Date of tender or (for syndicated issues) pricing date

- Since 30th March, the Australian Office of Financial Management (which conducts the Government's borrowing programs) has issued $172.1bn of Treasury bonds - based on the volume of bids received it could have borrowed $616bn with yields at most 3 basis points above the highest yields actually accepted
- This past week, AOFM had only one auction, of $2bn of 9-year bonds – for which it received $9.7bn of offers (almost five times as much as sought)

Source: Australian Office of Financial Management data hub.

The Government has provided a massive fiscal stimulus during the June and September quarters, but this is set to wind back in Q4 and beyond

Impact of 'policy decisions' taken since last December on the Australian Government's 'underlying' cash balance

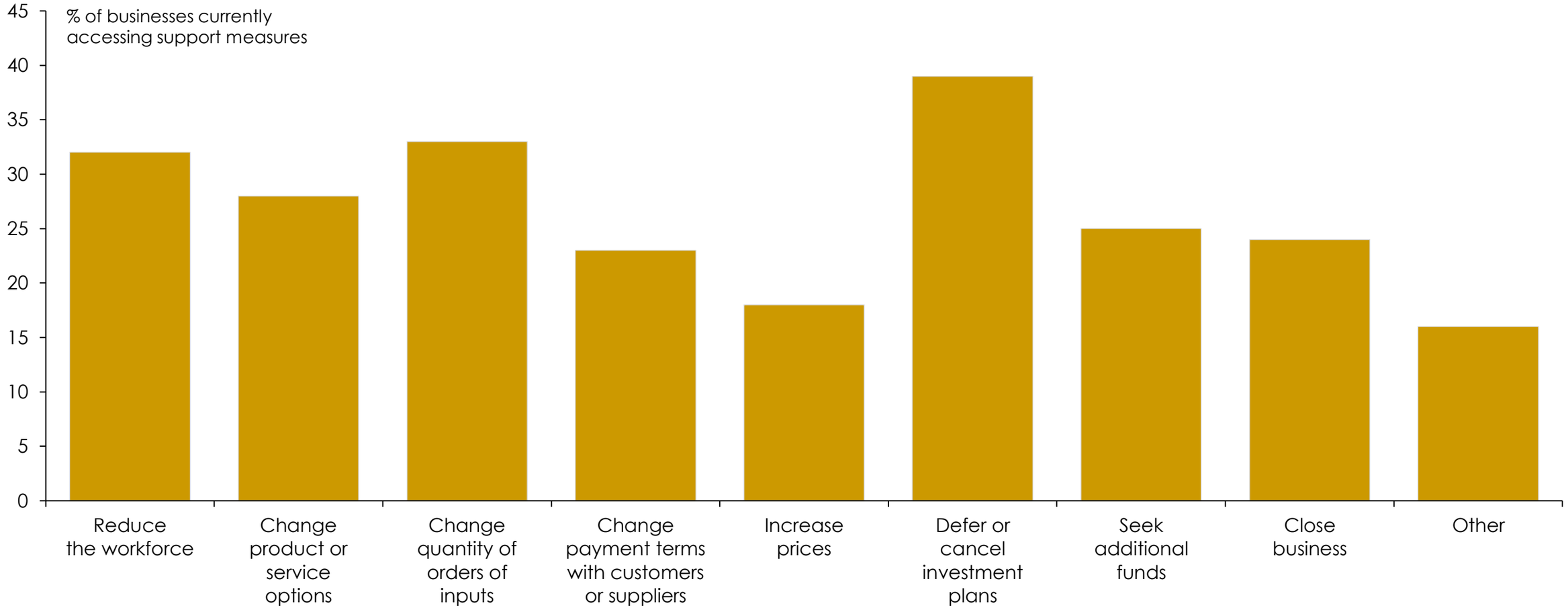


- 'Policy decisions' taken since last December's Mid-Year Economic & Fiscal Outlook (MYEFO) represent a discretionary fiscal stimulus equivalent to 2.9% of GDP in 2019-20 and 6.3% of GDP in 2020-21
- Treasury estimates that this fiscal support boosted by real GDP (relative to what it would have been otherwise) by ¾% in 2019-20, and will boost it by around 4¼% in 2020-21
  - and that this support prevented the loss of around 700,000 jobs, lowering the peak unemployment rate by around 5 pc points
- July's decisions to extend 'JobKeeper', and the elevated level of 'JobSeeker' payments (albeit at lower levels) beyond end-September until the end of March have lowered the 'fiscal cliff' that was looming at the end of September
  - nonetheless, as things currently stand there will still be a significant tightening of fiscal policy at the end of this and the next two quarters
- The Government will need to (and probably will) provide more fiscal stimulus in the (delayed) Budget to be presented on 6th October

Source: Australian Government, *Economic and Fiscal Update* , 23rd July 2020, Appendix A.

Withdrawal of government supports for business may have significant consequences for employment – unless the economy is much improved

Actions that businesses currently accessing support measures expect to take when support measures are no longer available, July 2020



Source: ABS *Business Impacts of Covid-19*, July 2020 (based on survey conducted between 15th and 23rd July).

SAUL ESLAKE
CORINNA ECONOMIC ADVISORY

The Treasurer has foreshadowed 'bringing forward' personal income tax cuts scheduled for 2022 and 2024 as a form of fiscal stimulus

Legislated personal income tax cuts

Rates from 2017-18 to 2023-24	New thresholds from 2018-19 to 2021-22	New thresholds from 2022-23 to 2023-24
Nil	Up to $18,200 pa	Up to $18,200 pa
19 %	$18,201 - $37,000	$18,201 - $45,000
32.5 %	$37,001 - $90,000	$45,001 - $120,000
37 %	$90,001 - $180,000	$120,001 - $180,000
45 %	Above $180,000	Above $180,000
Low & middle income tax offset	Up to $1,080	-
Low income tax offset	Up to $445	Up to $700

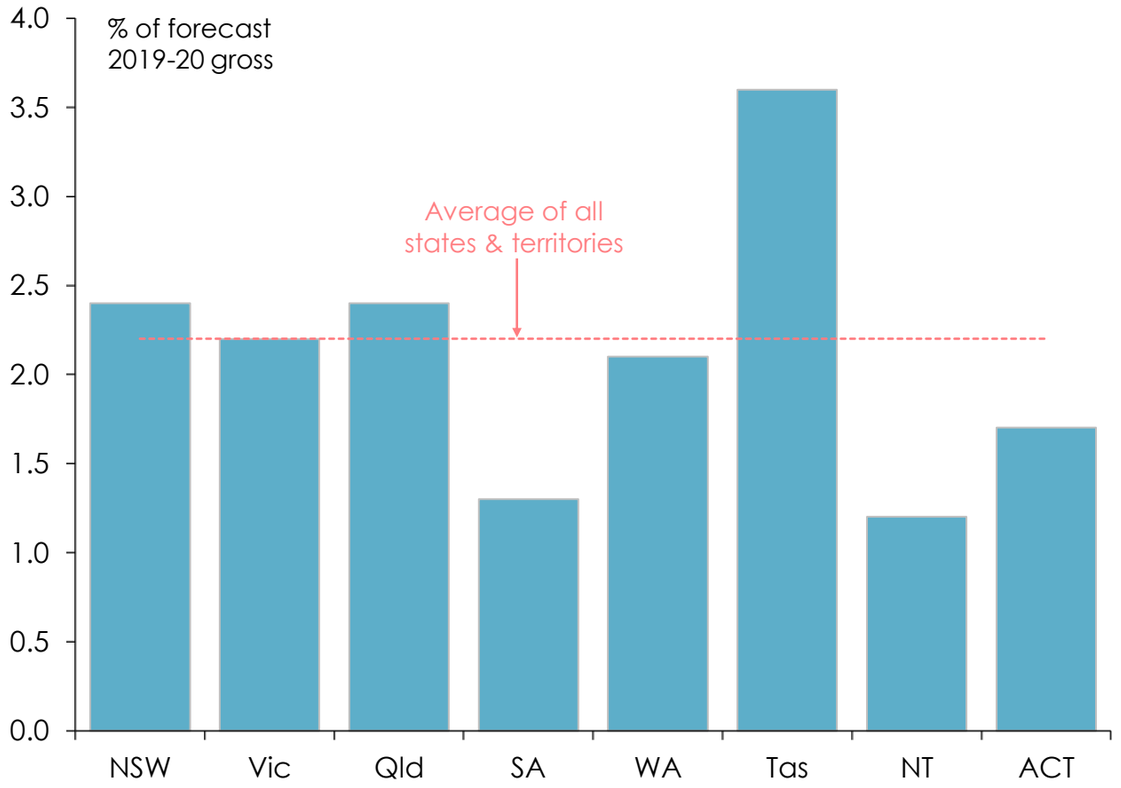
Rates from 2024-25	New thresholds from 2024-25
Nil	Up to $18,200 pa
19 %	$18,201 – $45,000 pa
30 %	$45,001 – $200,000 pa
45 %	Above $200,000 pa
Low income tax offset	Up to $700

Source: Australian Government, 2019-20, Budget Paper No. 1, *Budget Strategy and Outlook*, April 2019.

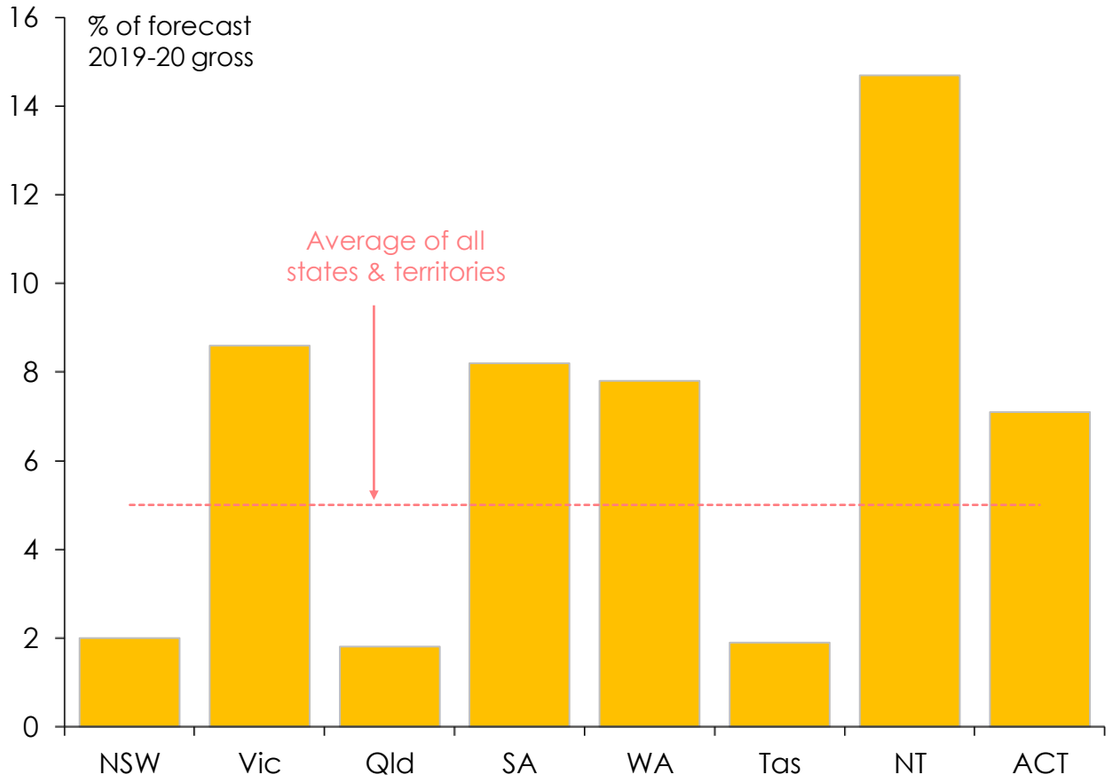
- **Treasurer Josh Frydenberg has again foreshadowed bringing forward the personal income tax cuts currently legislated to come into effect on 1st July 2022, as a way to 'boost aggregate demand, boost consumption [and] put more money in people's pockets'**
  - this could be a central feature of the (delayed) Budget which he will present on 6th October
- **The tax cuts were estimated to 'cost' $4½bn (in revenue foregone) in FY2022-23 and (together with the further cuts legislated to take effect from the beginning of FY2023-2024) $143bn over the ten years to 2029-30**
- **Bringing forward these tax cuts would likely provide some lift to demand and activity – but, inevitably, at least some of the boost in after-tax incomes would be saved and/or used to pay down debt**
  - as happened with the enhanced tax refunds paid out in the Sep quarter of last year, and (even more starkly) with the government payments made to social security beneficiaries and (via JobKeeper) employees
- **Alternatively, spending the same amount on (for example) cash payments to households whose income is too low to benefit from tax cuts, infrastructure spending, or social housing would provide more 'stimulus bang' for each 'buck'**
  - an even better option could be to provide time-limited, tradeable vouchers valid for spending in designated areas (eg tourism, child care etc)

There's been considerable difference in the size of state and territory governments' fiscal responses to Covid-19

State & territory Covid-19 support and response measures as a pc of gross state product



State & territory general government net debt as at 30 June 2020

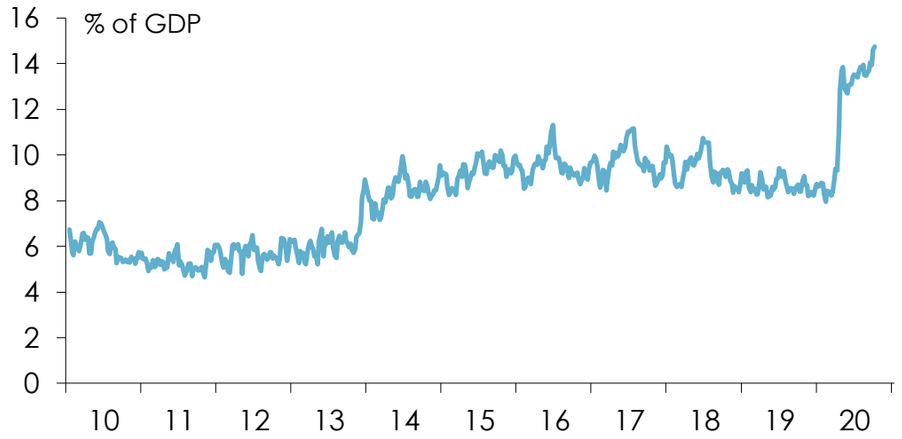


- **This month RBA Governor Phillip Lowe advised state and territory governments to spend an additional $40bn (2% of GDP) on infrastructure investment – an amount which S&P Global Ratings said state and territory balance sheets had "plenty of room to accommodate"**

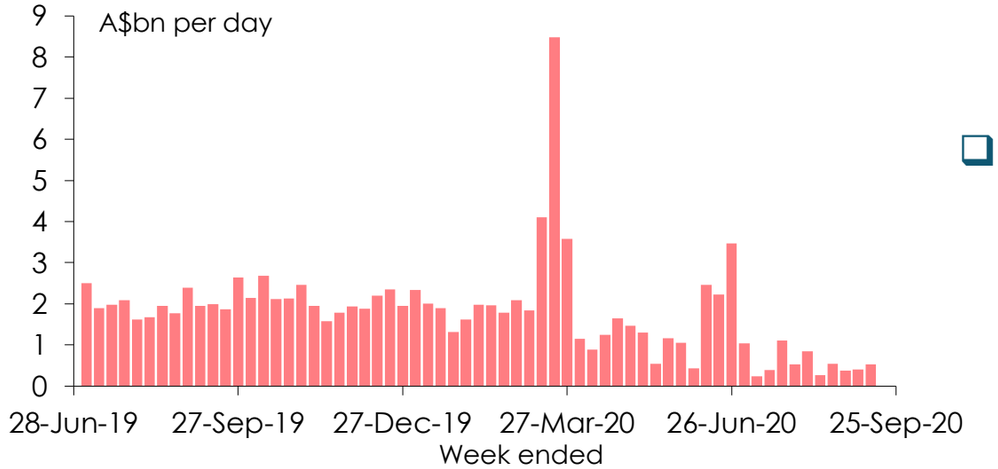
Sources: Commonwealth Treasury, 6th August 2020; *Australian Financial Review*, 14th August 2020; *The Australian*, 22nd August 2020.

With official interest rates as low as they can go, the RBA has implemented a range of 'quantitative' monetary policy measures

Reserve Bank assets as a pc of GDP



Reserve Bank daily repo transactions

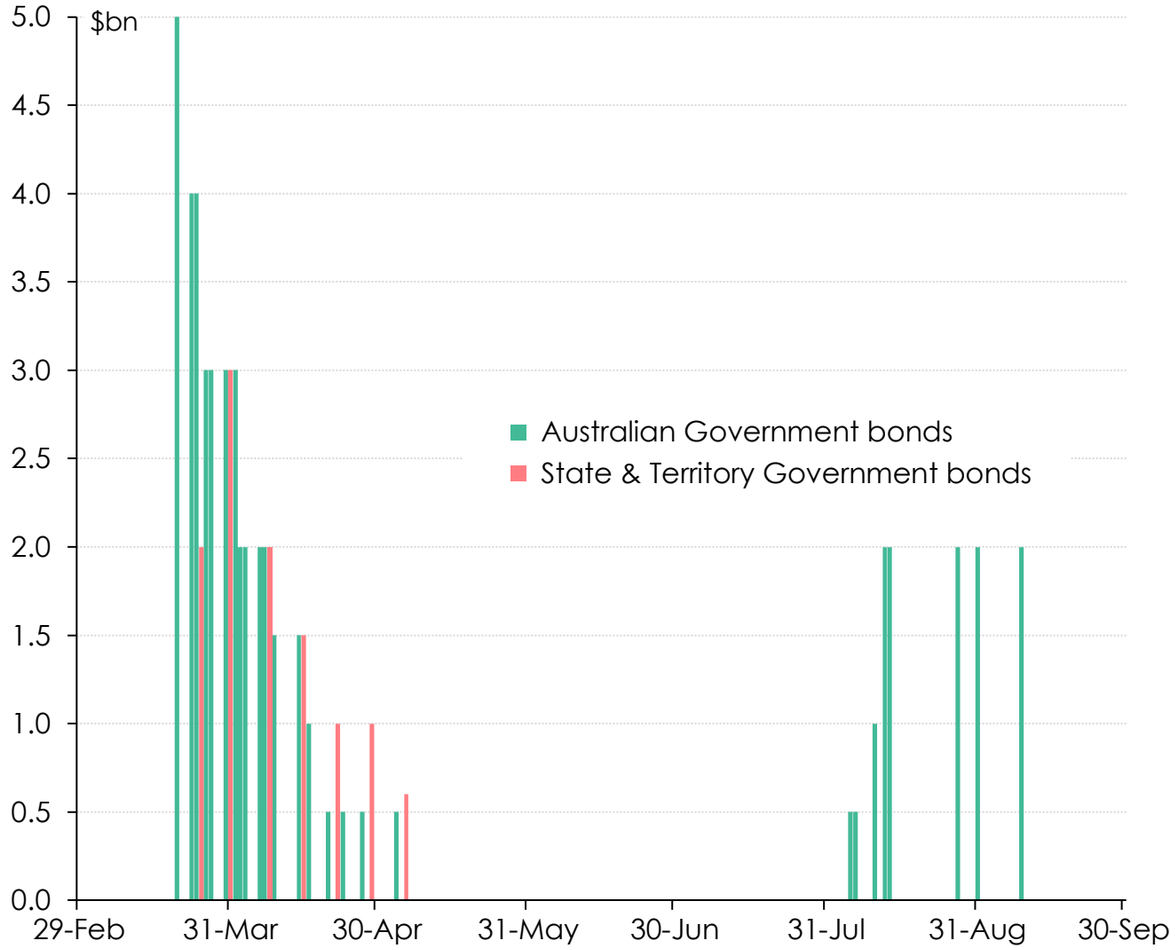


- **The RBA has kept its cash rate target at 0.25% since March, but has allowed the actual rate to drift down to 0.13%**
  - the RBA has committed to keeping the target at this level 'until progress is made towards full employment' and 'it is confident inflation will be sustainably within the 2-3% target band' – which the RBA Governor last month said was likely to be at least three years away
- **The RBA restated its commitment to keeping 3-year yields at 0.25%**
  - The RBA bought another $2bn of bonds this week, taking total purchases under its BoJ-style QE to $62.1bn, of which $12bn has been since it resumed purchases in the first week of August after a 3-month hiatus)
- **RBA provided additional liquidity through 'open market operations' to prevent disruption of credit markets in March**
  - RBA repo transactions averaged $830mn a day since the beginning of April (except for the last two three weeks of the 2019-20 financial year), down from peak of almost $8½ bn a day in 3rd week of March
- **The RBA has provided $58bn of three-year funding at 0.25% pa to banks and other lenders for on-lending to business, especially SMEs, through its Term Funding Facility**
  - of which $5.8bn was provided in the week ended Wednesday
  - as of this week up to $151.7bn was notionally available through the TFF
  - at last month's Board meeting the RBA extended the period for which the TFF will be available from 30th September to 30th June next year

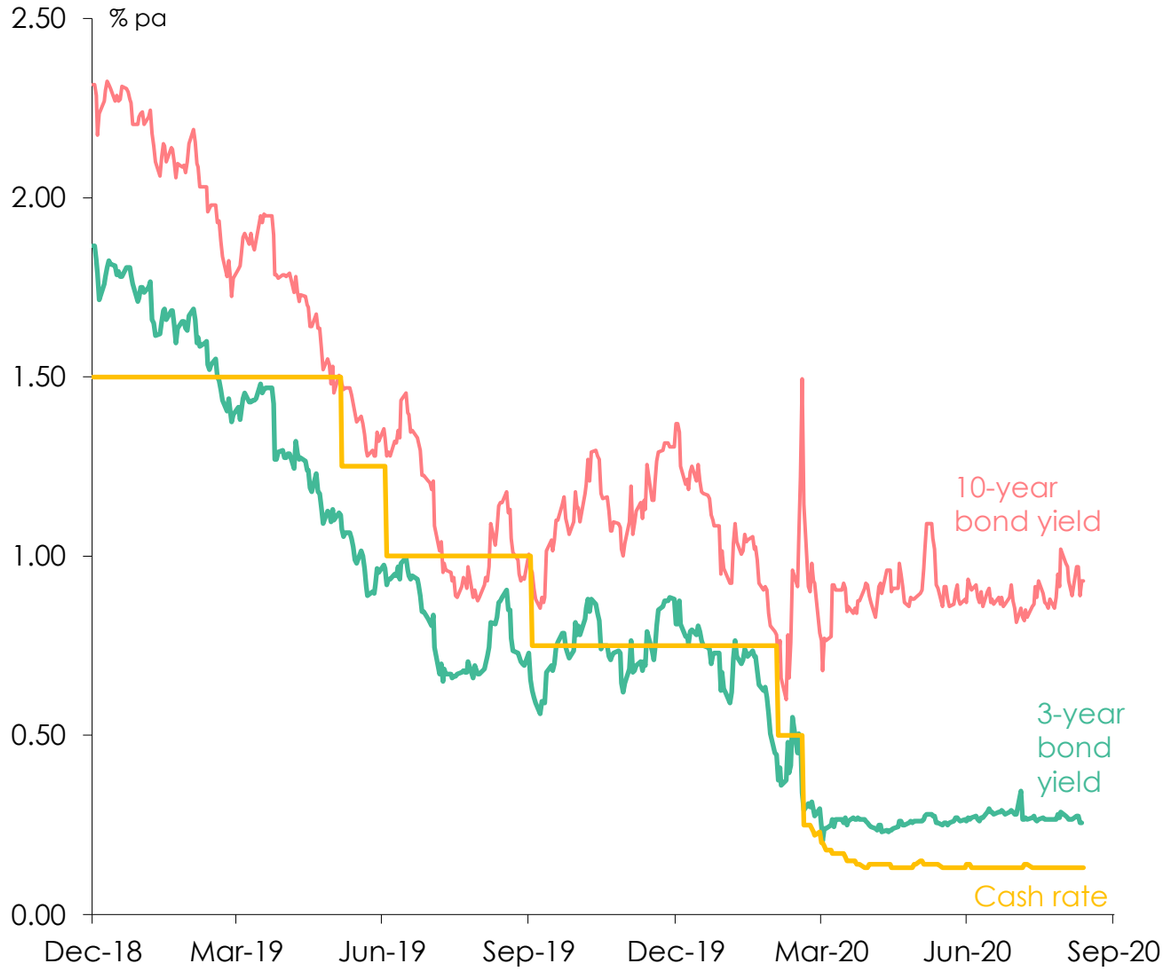
Source: Reserve Bank of Australia, *Statistical Tables* A1 and A3.

The RBA bought another $2bn of bonds in the secondary market this week as part of its 'yield curve control' targeting the 3-year yield at 0.25%

RBA open market bond purchases



Interest rates



Source: Reserve Bank of Australia, *Statistical Tables* A3 and F2. Data up to 11th September.

The RBA has no appetite for negative interest rates, 'modern monetary theory' or FX market intervention

- Speaking to the Parliamentary Economics Committee on 14th August RBA Governor Lowe again characterized negative interest rates as "extraordinary unlikely", monetary financing of budget deficits (aka 'modern monetary theory') as "not on the agenda in Australia", and FX market intervention to drive the A$ down as something the RBA is "not prepared to [do] … unless the currency is misaligned, and I don't think it is"
- The Governor indicated that, on the basis of its current outlook it is likely to be at least three years before the RBA's stipulated conditions for raising the cash rate will be met
- The Governor defended the RBA's adoption of a BoJ-style approach to QE – targeting the 3-year yield at 0.25% pa as opposed to a fixed program of bond purchases – saying this was "a more direct way of achieving … low funding costs" and that it "reinforces the [RBA's] forward guidance regarding the cash rate"
  - however the Governor didn't rule out "a separate bond buying program", or "tweaks" to the RBA's Term Funding Facility, if doing so were likely to "get traction" in a future environment where "people … want to invest and expand"
- The Governor re-iterated that the "expected increase in public debt" resulting from the blow-out in budget deficits is "entirely manageable and … affordable"
  - and moreover that borrowing "today to help people, keep them in jobs and boost public investment at a time when private investment is very weak" was "the right thing to do"
- The RBA's approach to the use of monetary policy in current circumstance is increasingly different from that of the RBNZ, whose Governor last month again flagged the possibility of negative interest rates, coupled with a 'Funding for Lending Program' to enable banks to lend to their customers at negative rates, and direct FX market intervention to push the NZ$ lower
  - The RBNZ last month also announced an expansion (in size) and extension (in time) of its ECB-style bond-buying program (which is already three times as large, as a pc of GDP, as the RBA's)

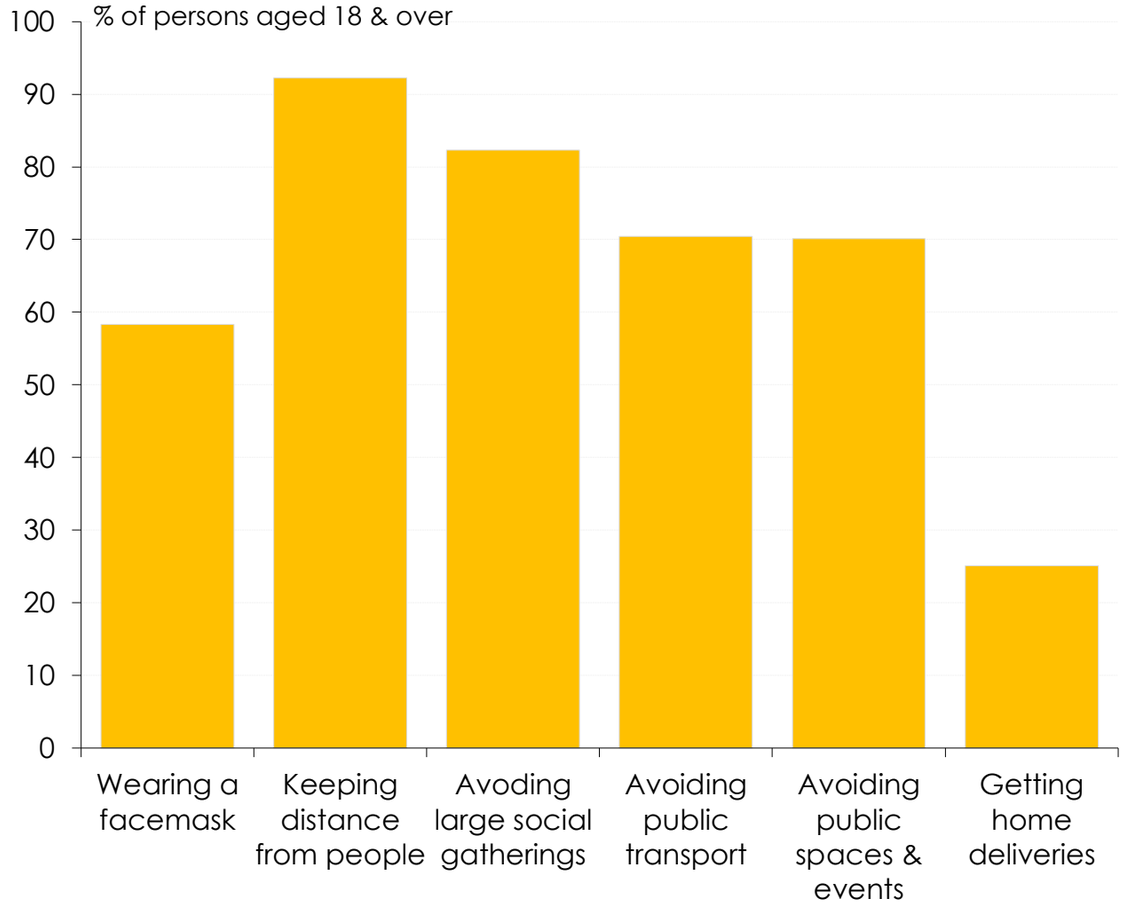
The path out

The path out of the current downturn will be more gradual than the path into it was

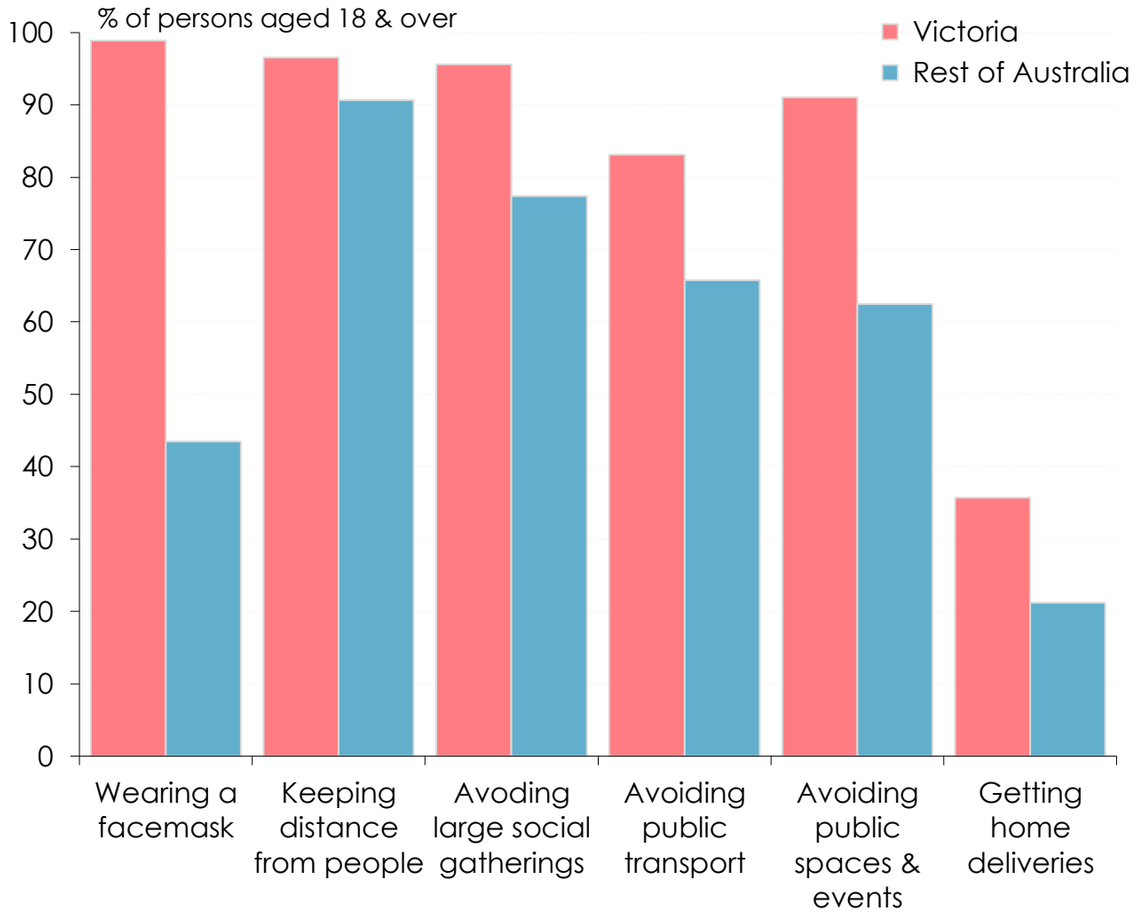
- **'Social distancing' requirements will be relaxed gradually rather than 'all at once' – and (as seen in Victoria) restrictions can be re-imposed in response to new outbreaks)**
  - new health and safety regulations will likely limit the number of employees and customers who can be 'on premises' (which may make it uneconomic for some businesses to re-open until restrictions are relaxed
  - and many people may remain wary of exercising all of their newly-regained 'freedoms'

Australians are continuing to adhere to a wide range of precautions, even where it's not mandatory (as in Victoria)

Precautions taken by Australians aged 18 and over, mid-August 2020



Precautions taken by people living in Victoria and elsewhere in Australia, mid-August 2020

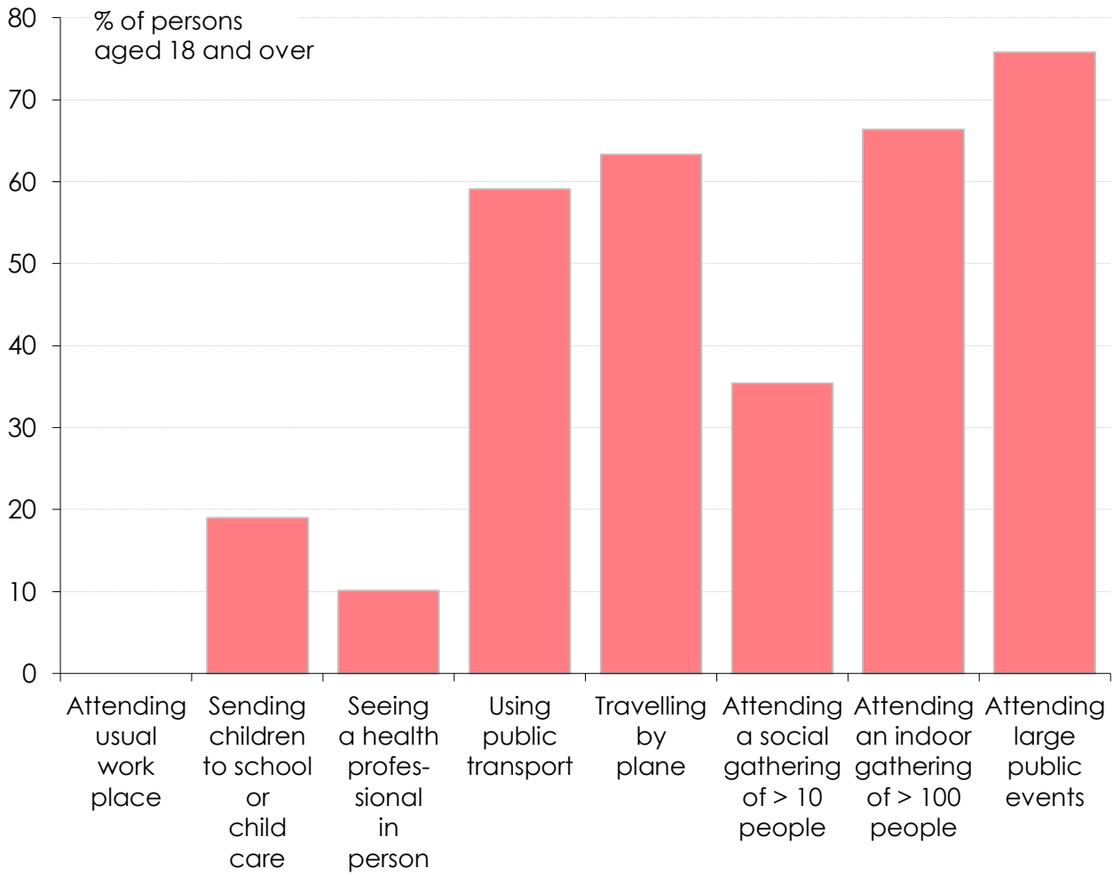


Source: ABS, *Household impacts of Covid-19*, August 2020 (published 31st August).

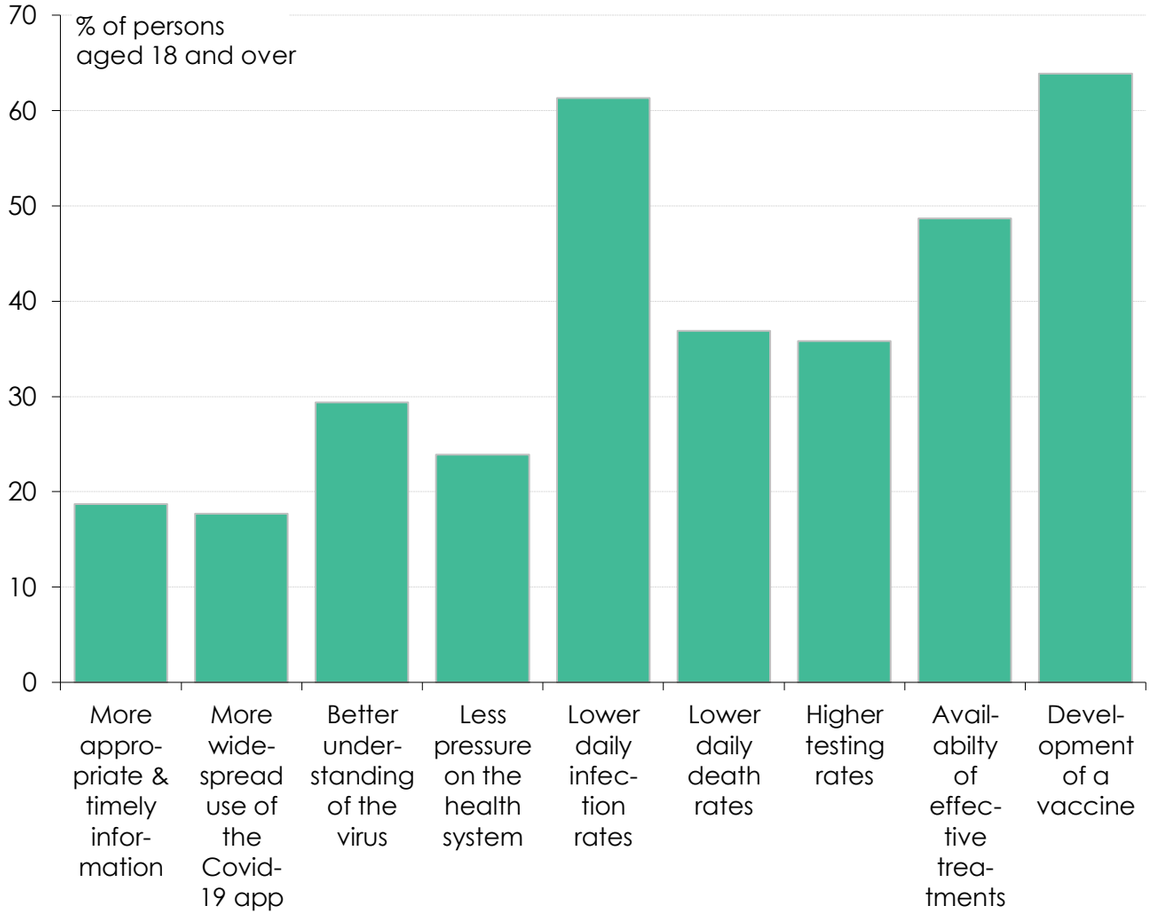
SAUL ESLAKE
CORINNA ECONOMIC ADVISORY

Australians seem likely to continue to be wary of travel and large gatherings, at least until a vaccine for Covid-19 is developed

Proportion of adults feeling 'uncomfortable' with selected activities as restrictions are eased



Actions that would improve people's comfort with activities as restrictions are eased



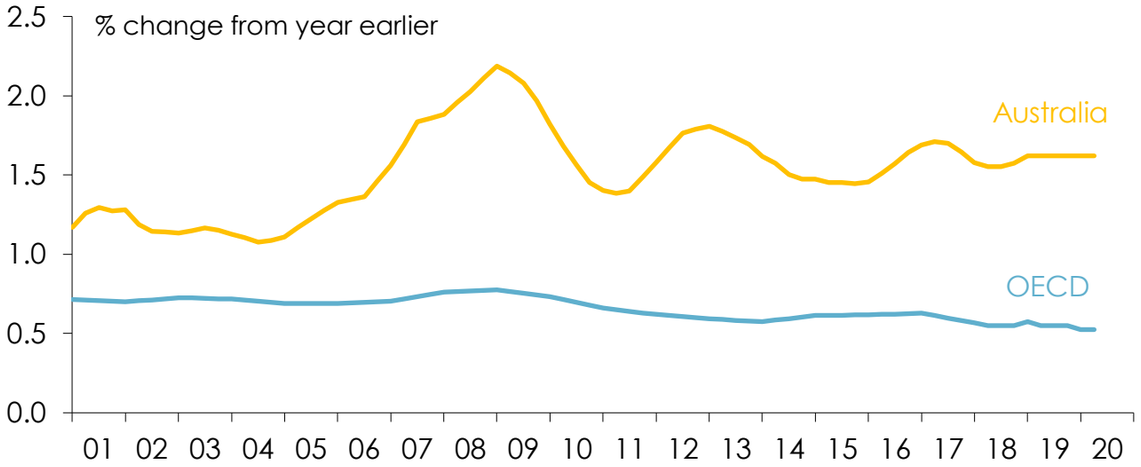
Source: ABS, *Household impacts of Covid-19*, 26th-29th May (published 15th June).

The path out of the current downturn will be more gradual than the path into it was

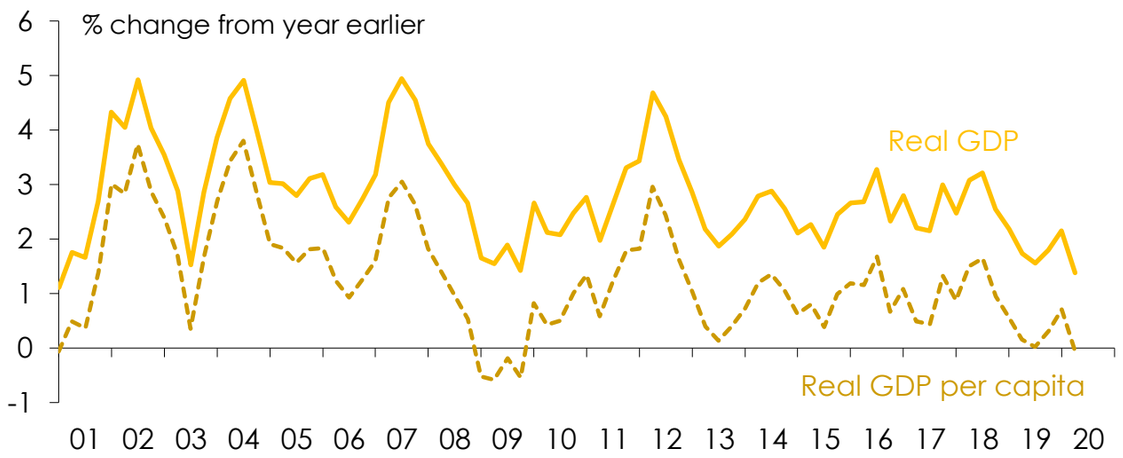
- ‘Social distancing’ requirements will be relaxed gradually rather than ‘all at once’ – and (as seen in Victoria) restrictions can be re-imposed in response to new outbreaks)
  - new health and safety regulations will likely limit the number of employees and customers who can be ‘on premises’ (which may make it uneconomic for some businesses to re-open until restrictions are relaxed
  - and many people may remain wary of exercising all of their newly-regained ‘freedoms’
- At least some businesses won’t have survived the shutdown period, and many of those which do will not immediately return to pre-outbreak levels of employment
  - so employment will remain below pre-outbreak levels for some time rather than ‘snapping back’ quickly
  - and those returning to work may work reduced hours (compared with pre-outbreak) for some time
- The recovery in household spending is likely to be gradual, rather than rapid
  - if the recovery in employment is only gradual, so too will be the recovery in household disposable income
  - some households will be able to draw down on savings accumulated during the shutdown, but others will want to rebuild savings (or superannuation balances) drawn down over the past six months
  - households with mortgages who have deferred repayments will face higher or longer mortgage repayments, constraining their spending capacity to some extent
  - household spending may also be affected by ‘negative wealth effects’ from lower property prices
- Despite the recent extensions to JobKeeper and Jobseeker, on current policy settings there will still be an effective tightening of fiscal policy at the beginning of each of the December and March quarters
- International borders (except with NZ) will likely remain closed until a vaccine is widely available – which is in turn unlikely to be before the middle of next year
  - implying that there will be no near-term recovery in international tourism or international education
- Businesses are likely to be very hesitant about investment spending for an extended period

Australia's above-average economic growth over the past 20 years owes a lot to above-average population growth: that's about to change

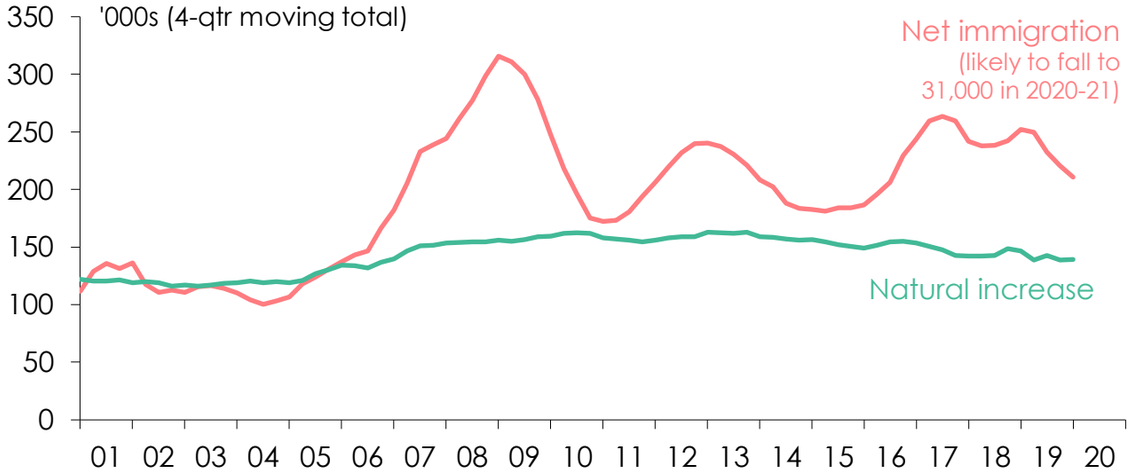
Australia and OECD population growth



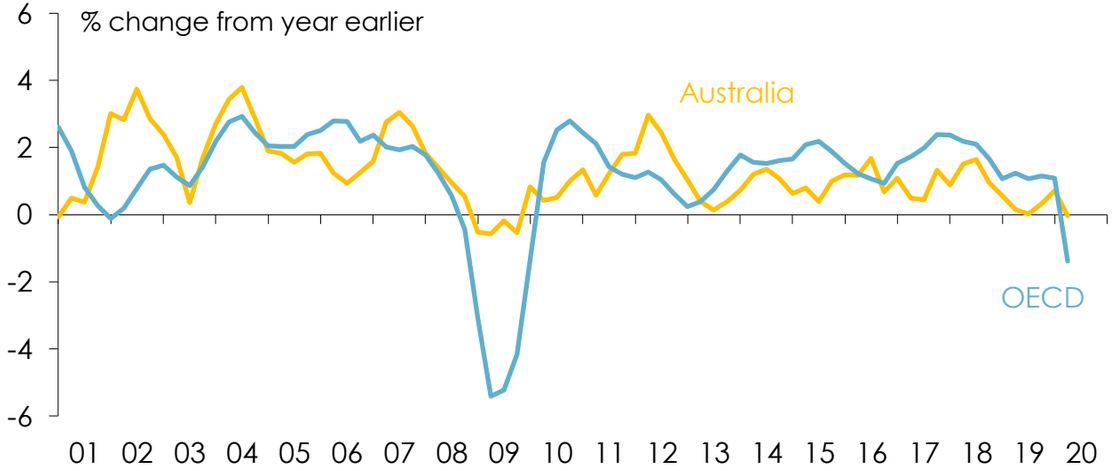
Australian GDP and per capita GDP growth



Sources of Australia's population growth



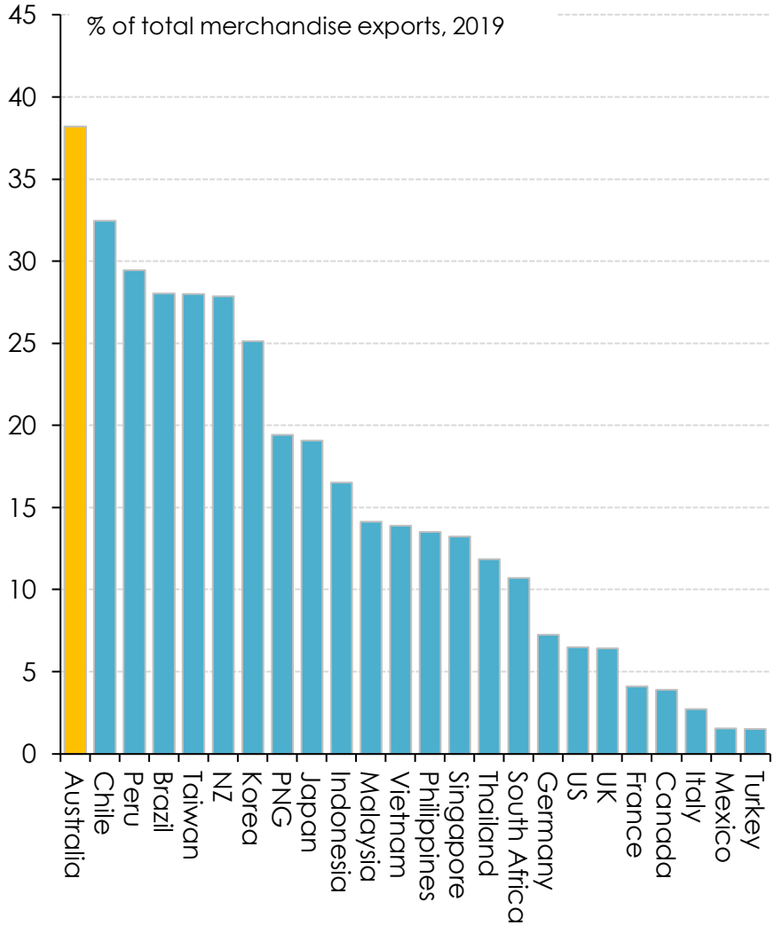
Australia and OECD per capita real GDP growth



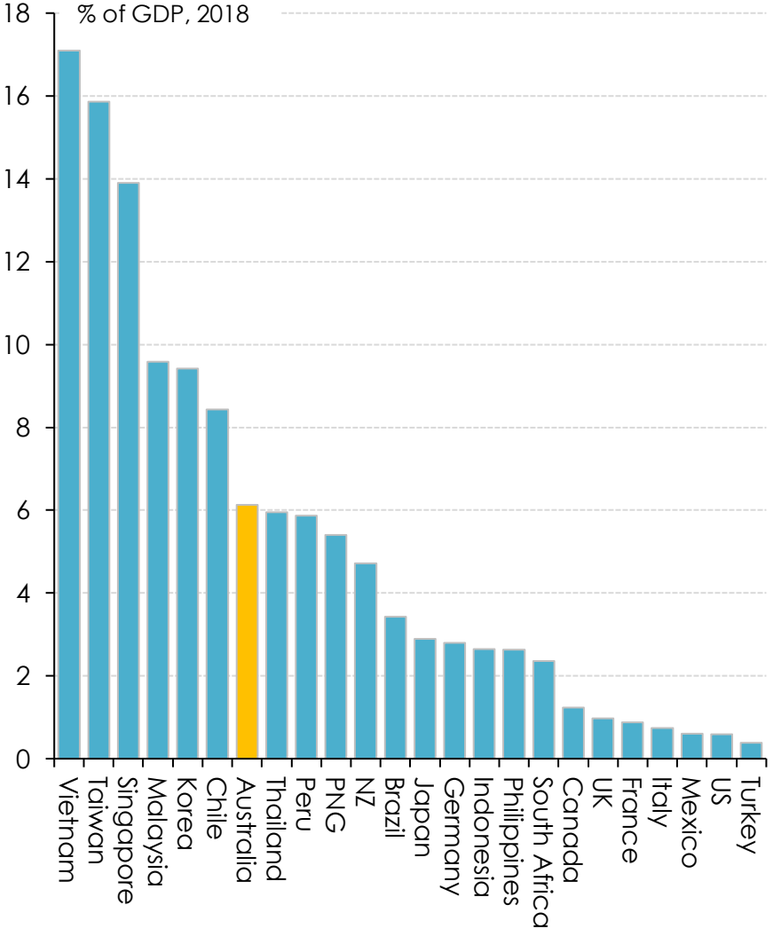
Note: Q2 2020 data not shown in the charts of GDP and per capita GDP growth. *Sources:* ABS; OECD.

Australia has benefited enormously from its economic relationship with China over the past 25 years, but will that continue to be the case?

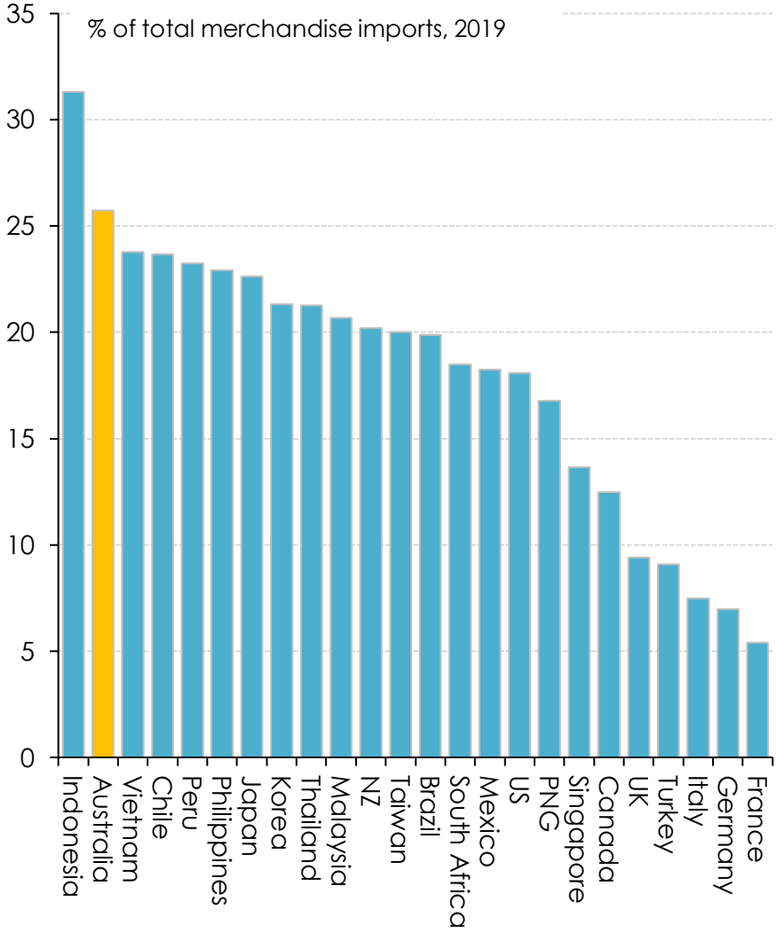
Merchandise exports to China as a pc of total



Merchandise exports to China as a pc of GDP



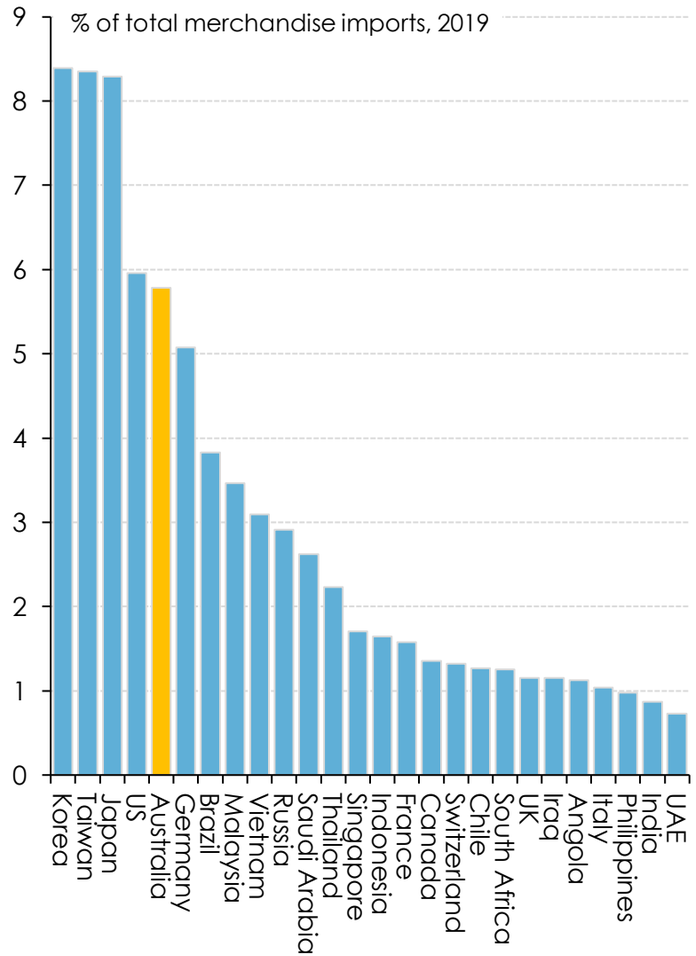
Merchandise imports from China as a pc of total



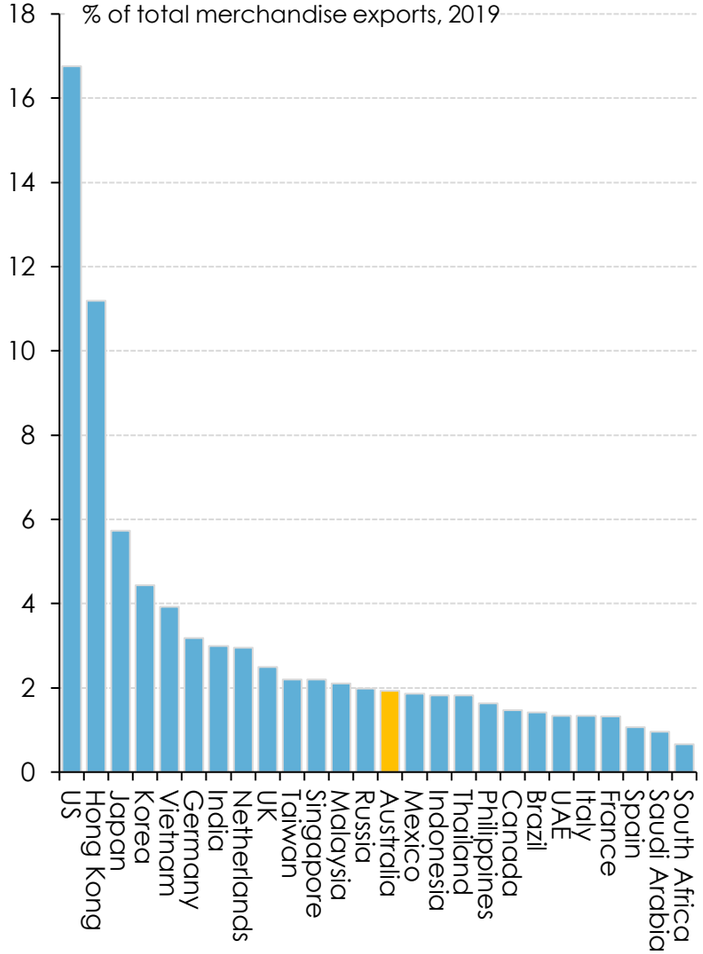
Sources: IMF, *Direction of Trade Statistics*; Taiwan Ministry of Economic Affairs, Bureau of Foreign Trade.

Australia is China's 5th biggest source of imports (of goods), 14th biggest export market, and has the 2nd-largest bilateral trade surplus with China

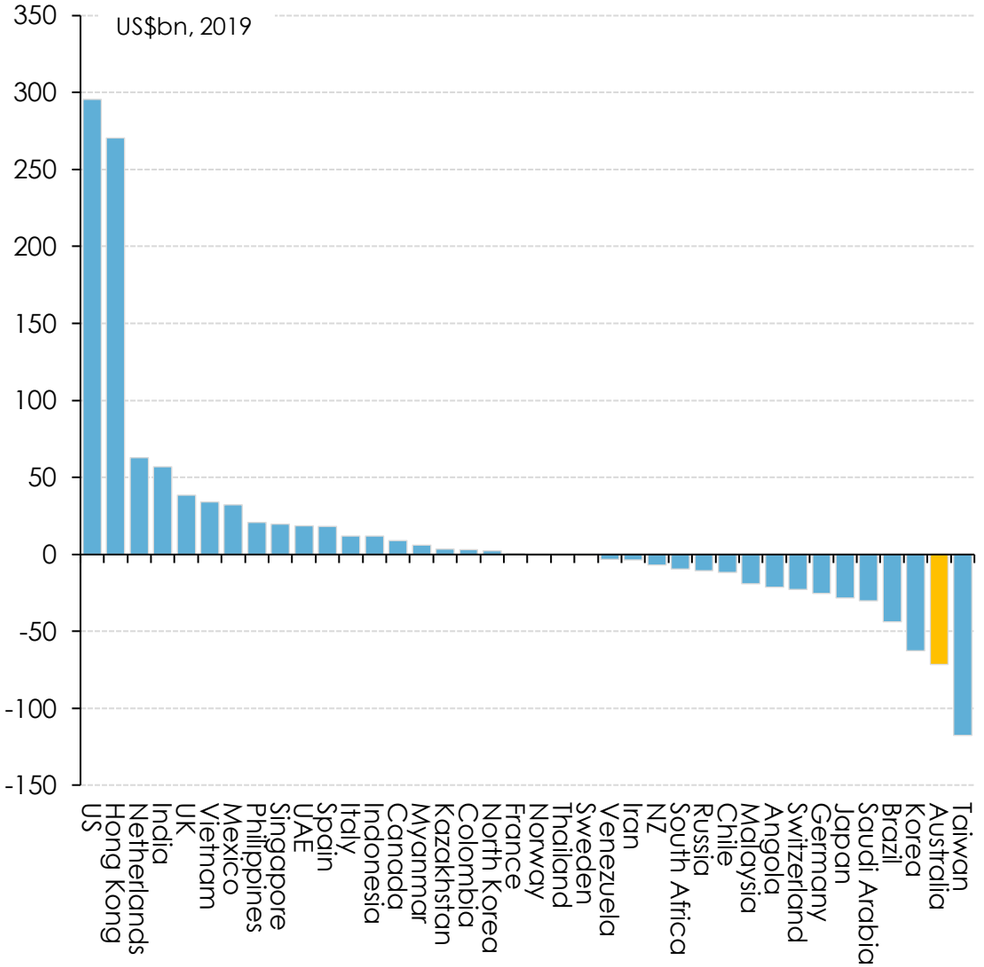
China's sources of imports



China's export destinations



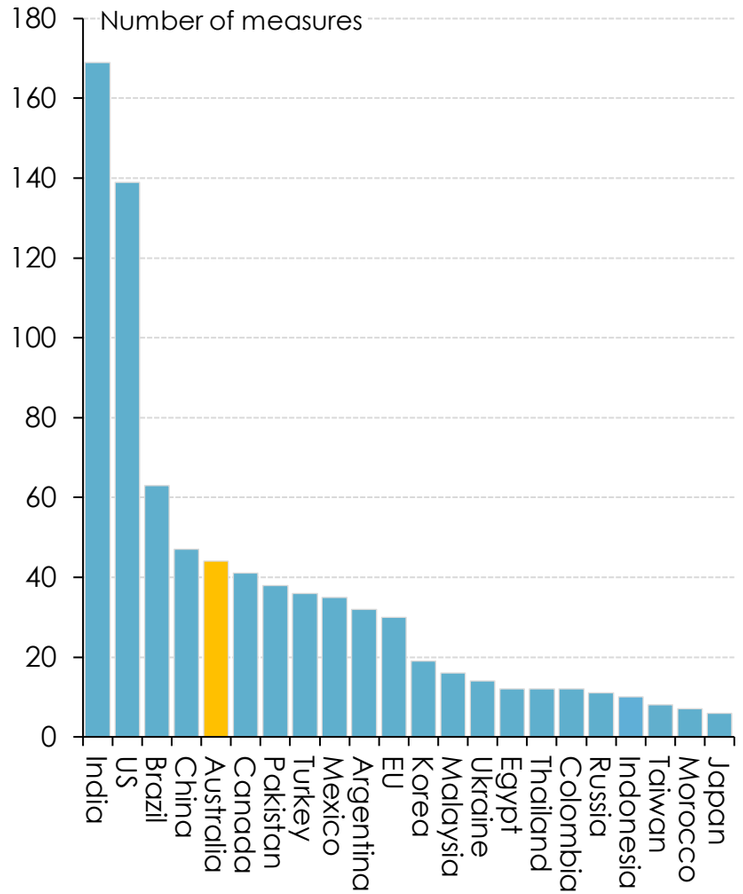
China's bilateral merchandise trade balances



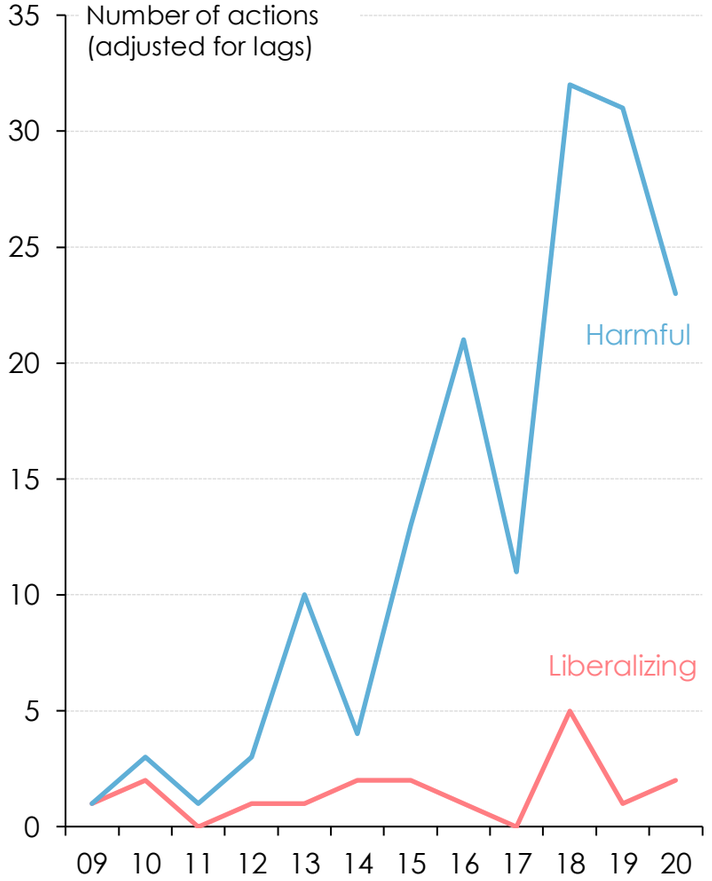
Source: International Monetary Fund, *Direction of Trade Statistics*.

China's threats against Australian exports of barley, beef, wine, coal, tourism and education aren't justified, but we aren't 'Snow White' either

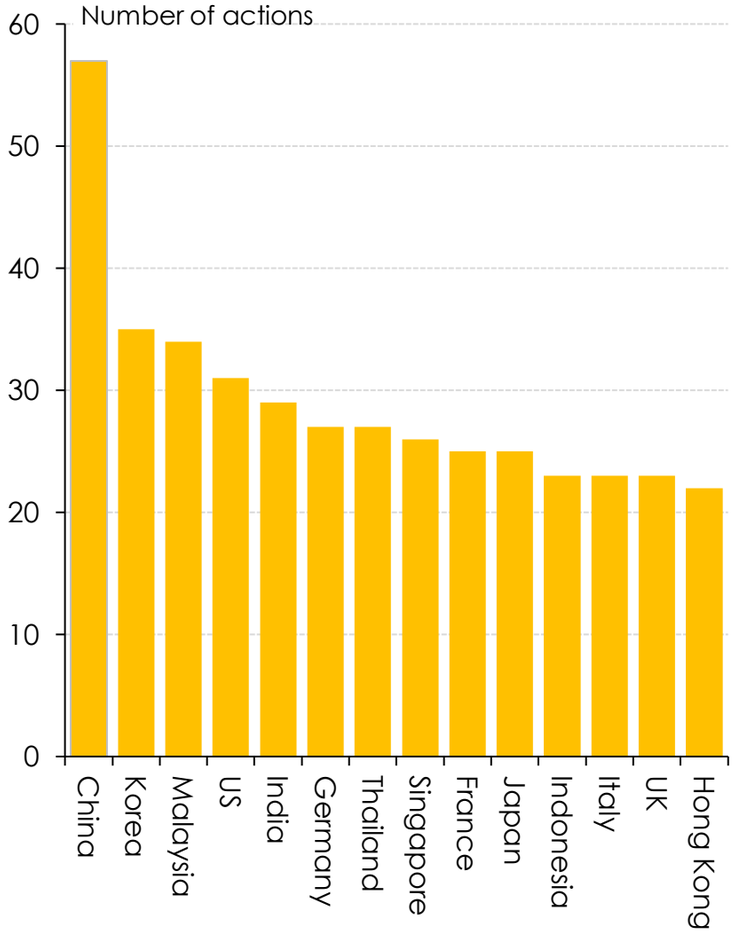
Number of anti-dumping measures imposed, 2015-19



Australian trade policy measures since 2009



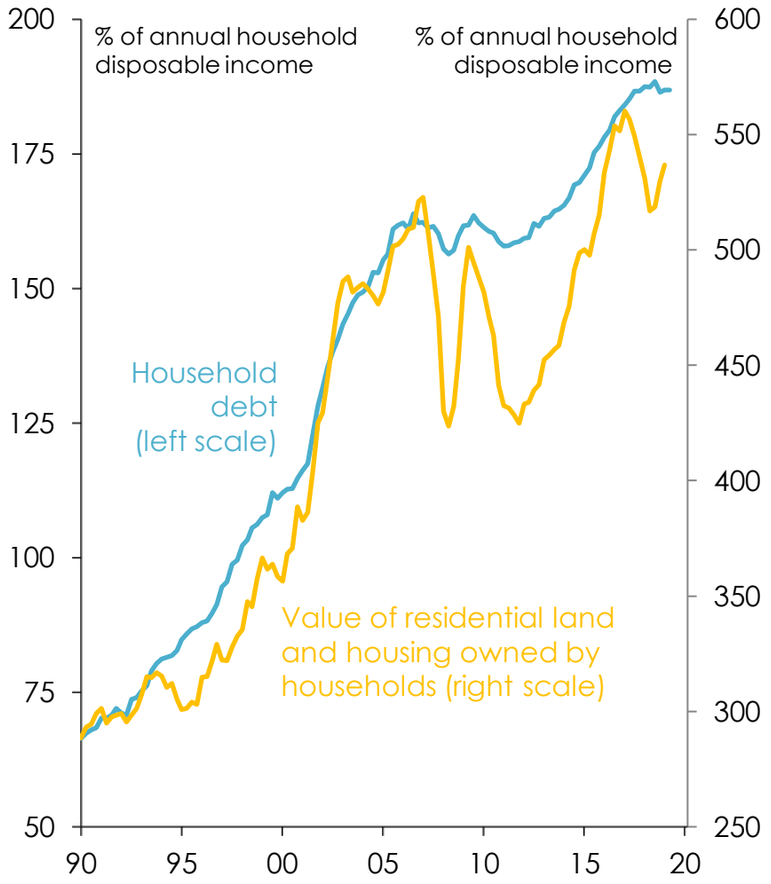
Countries adversely affected by 'harmful' Australian trade actions



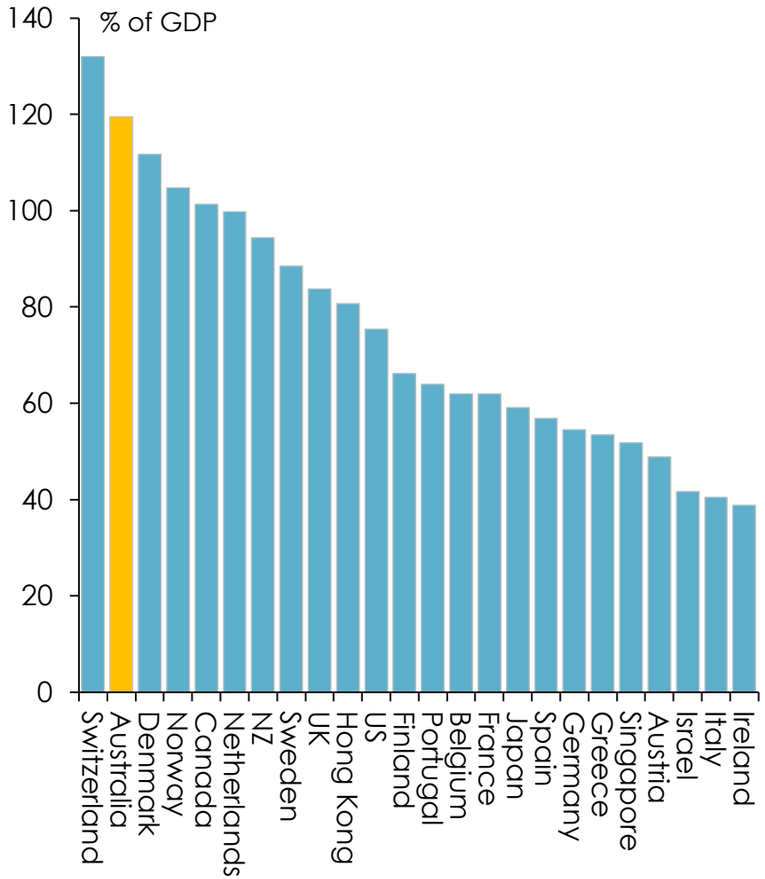
Sources: World Trade Organization; Centre for Economic Policy Research, *Global Trade Alert* (data up to 28th August).

Rising property prices and household debt are unlikely to underpin Australian economic growth as they have done for most of the past 30 years

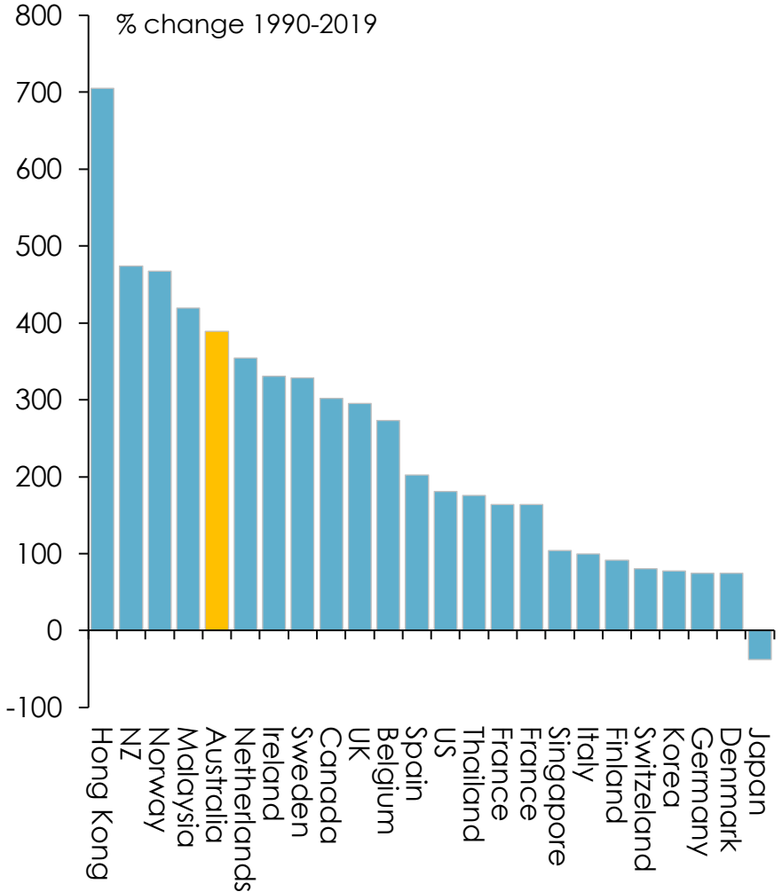
Australian housing wealth and household debt



Household debt as a pc of GDP, December 2019



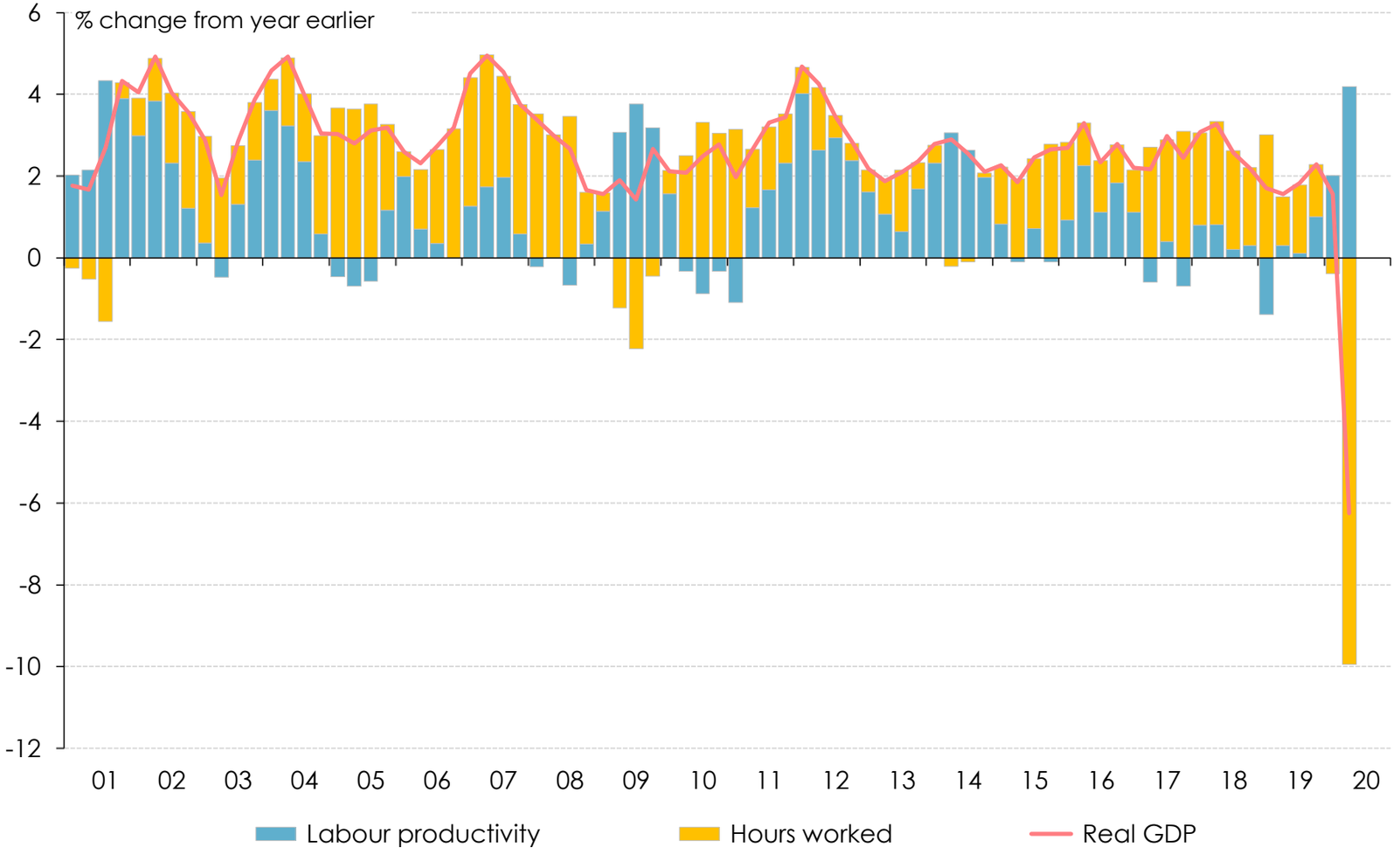
Increase in residential property prices, 1990-2019



Note: Singapore property price increase is from March quarter 1999. *Sources:* ABS; Bank for International Settlements, *Property price statistics*.

Australia has come to rely much more heavily on increased labour input to drive economic growth in recent years – we can't keep doing that

Labour input and labour productivity contributions to Australian real GDP growth



- Over the five years between the end of the 'mining boom' and the onset of the Covid-19 pandemic, 72% of Australia's real GDP growth came from increased labour input, and only 28% from labour productivity growth
- By contrast, between the end of the early 1990s recession and the onset of the global financial crisis, 46% of Australia's real GDP growth came from increased labour input and 54% from productivity growth

Source: ABS, *Australian National Accounts: National Income, Expenditure and Product*, June quarter 2020; Corinna.

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This document has been prepared by Saul Eslake on behalf of Corinna Economic Advisory Pty Ltd, ABN 165 668 058 69, whose registered office is located at Level 11, 114 William Street, Melbourne, Victoria 3000 Australia.

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