ECONOMIC IMPACT OF THE CORONAVIRUS PANDEMIC

ONLINE PRESENTATION VIA www.bettercallsaul.com.au

7th SEPTEMBER 2020

SAUL ESLAKE

CORINNA ECONOMIC ADVISORY PTY LTD

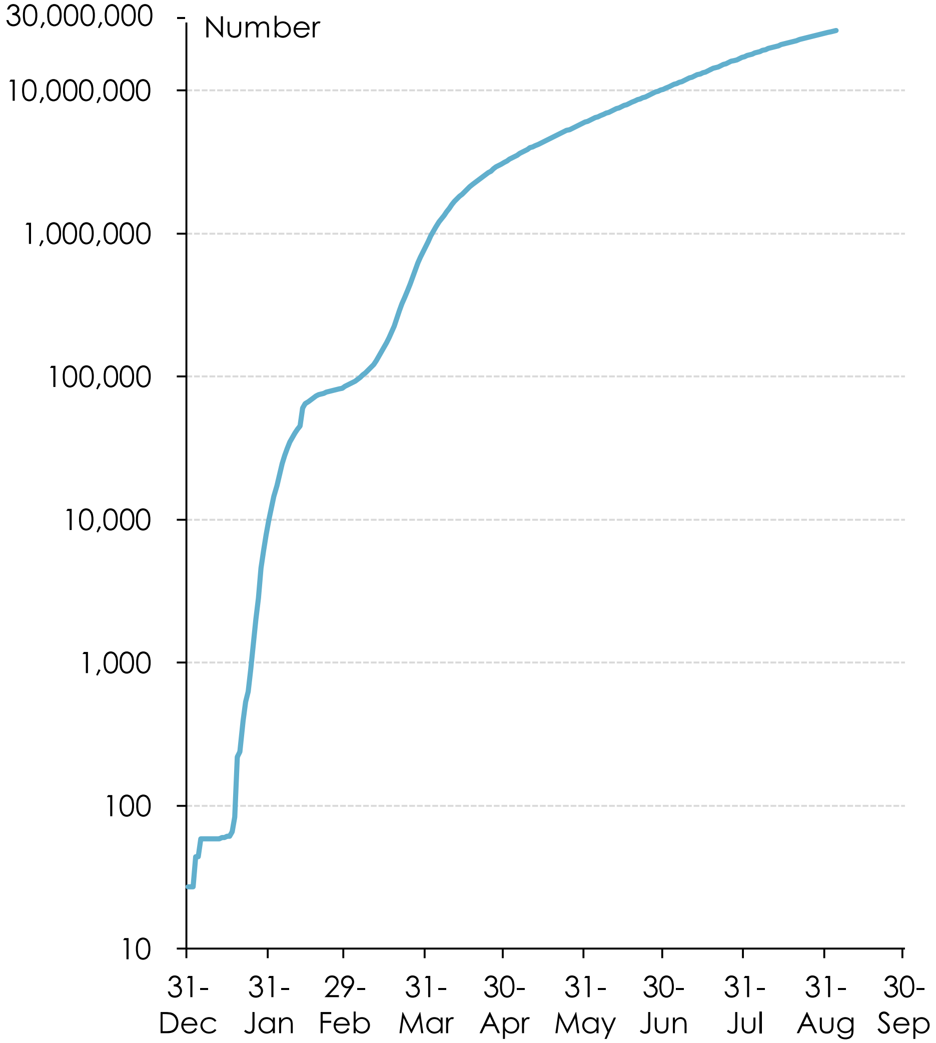
Agenda

- ❑ The virus
- ❑ The world economy (very briefly)
- ❑ The Australian economy
- ❑ The Australian policy response
- ❑ The 'path out'
- ❑ Some longer-term considerations
- ❑ Your questions

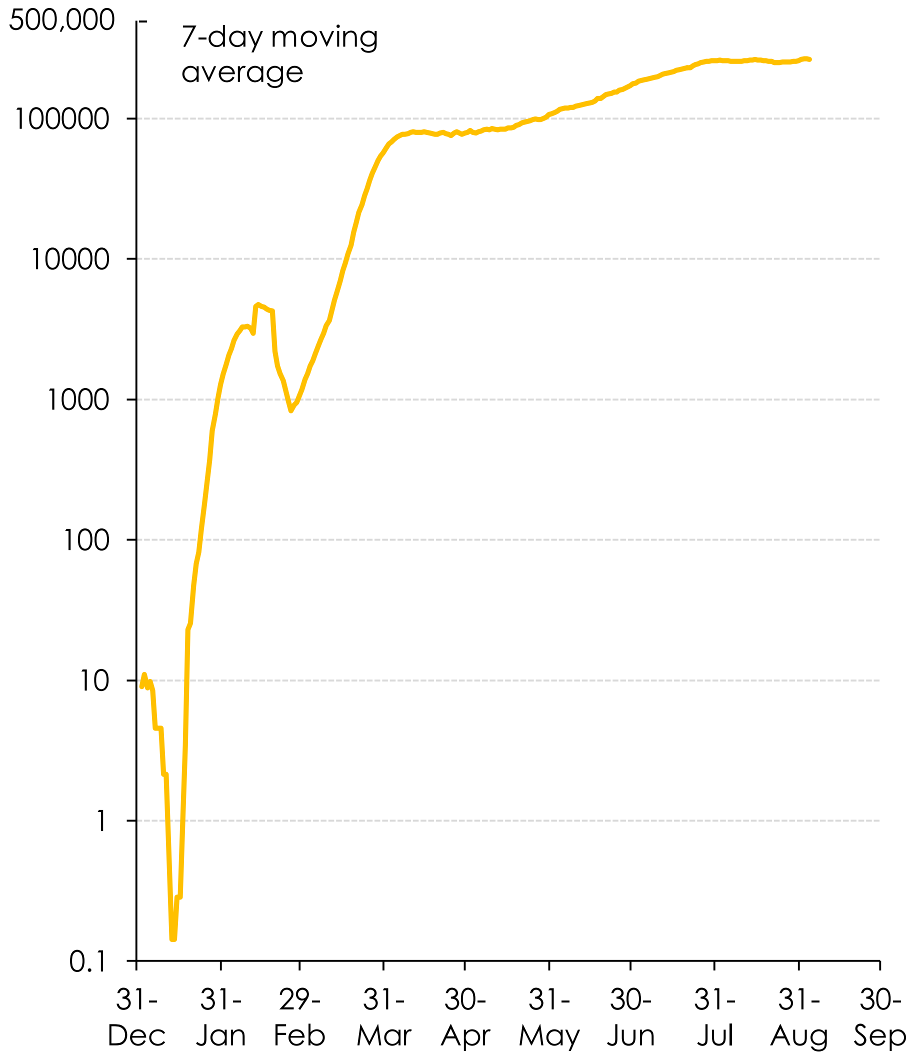
Note: nothing in what follows constitutes investment advice, nor should it be construed as such!

1.85mn new cases were recorded last week, in line with the average since the end of July, and bringing the cumulative total to 26.4mn

Cumulative confirmed cases – global total



New confirmed cases – global total



New deaths – alobal total

Note: All charts are on logarithmic scales. Data up to 4th September. *Source:* University of Oxford, *Our World in Data*.

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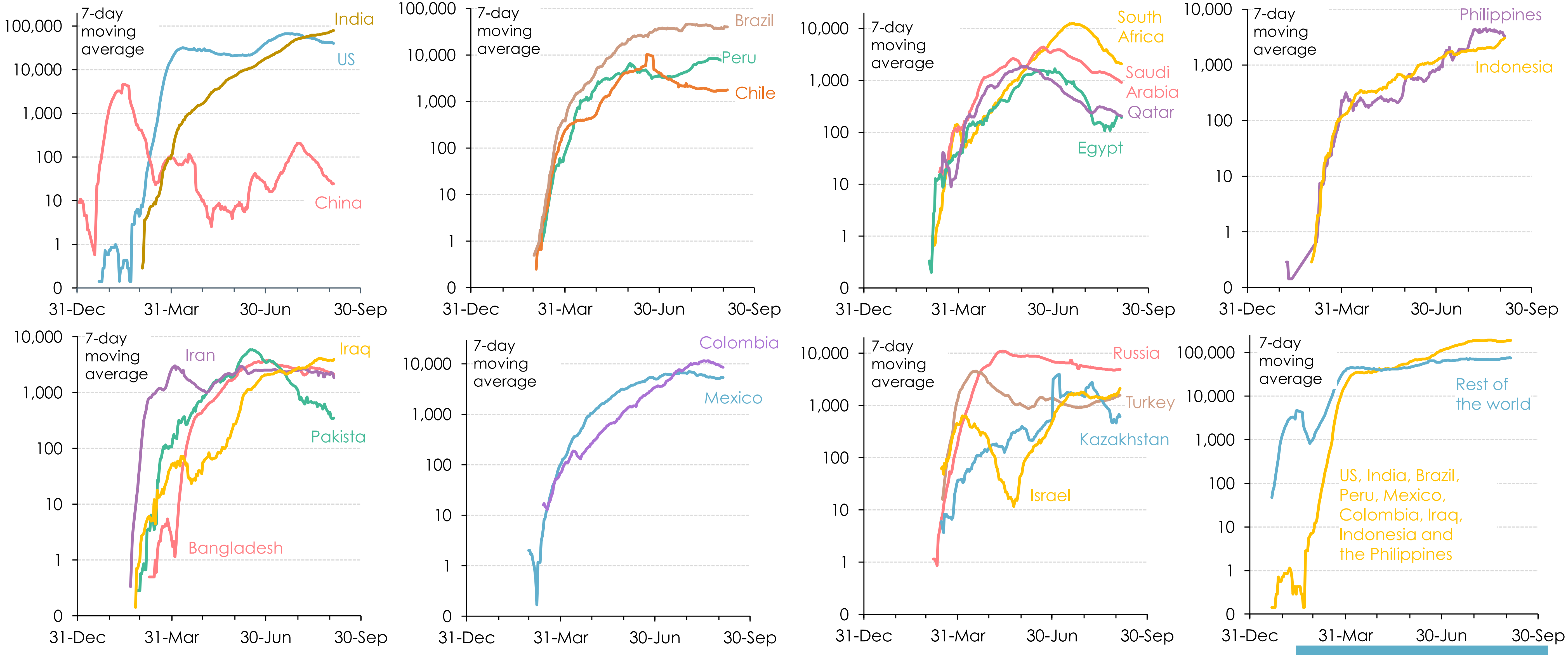
Nine countries with 33% of the world's population accounted for 72% of last week's new cases (down from 74% three weeks ago)

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 4th September. *Source:* University of Oxford, *Our World in Data*; Corinna.

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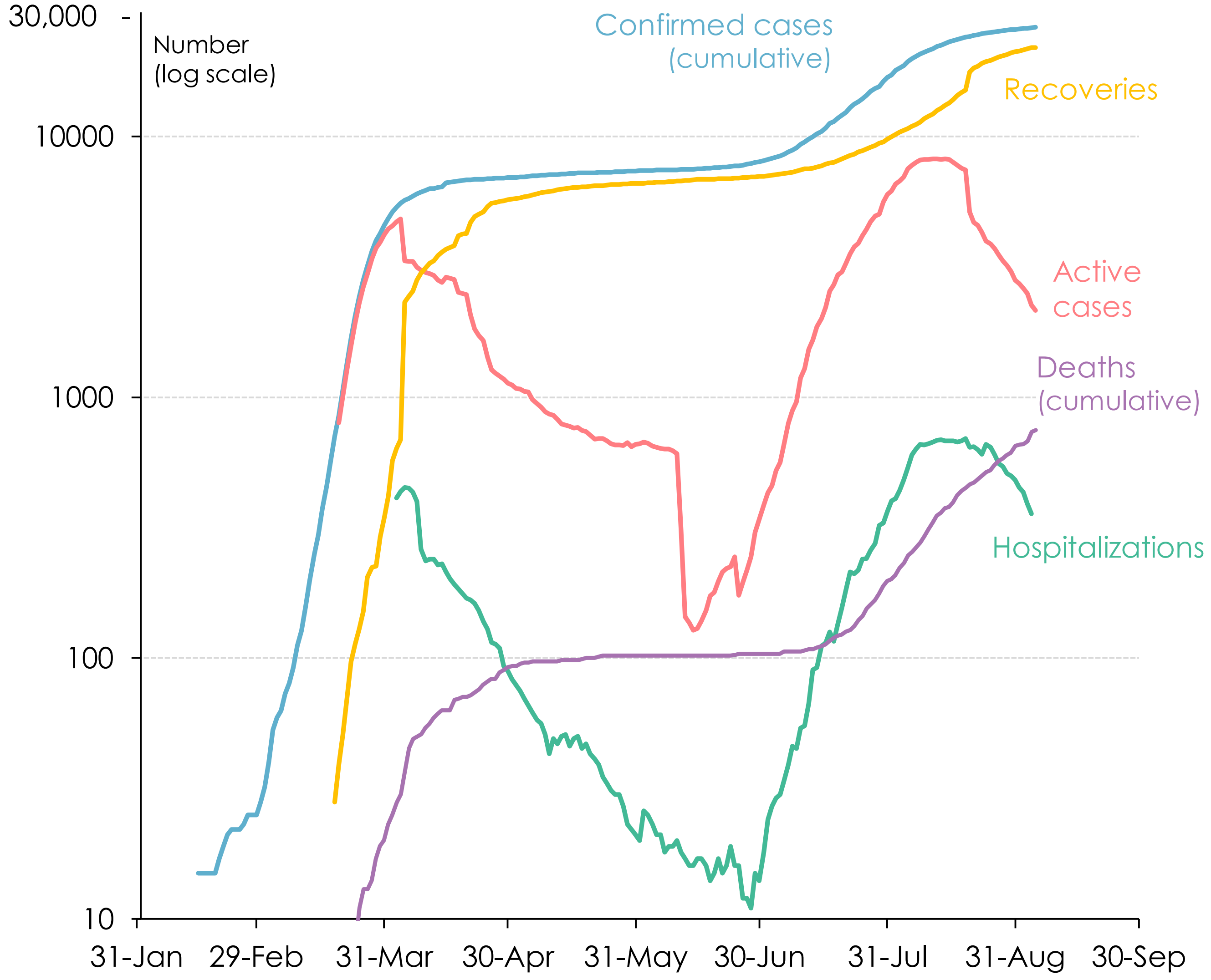
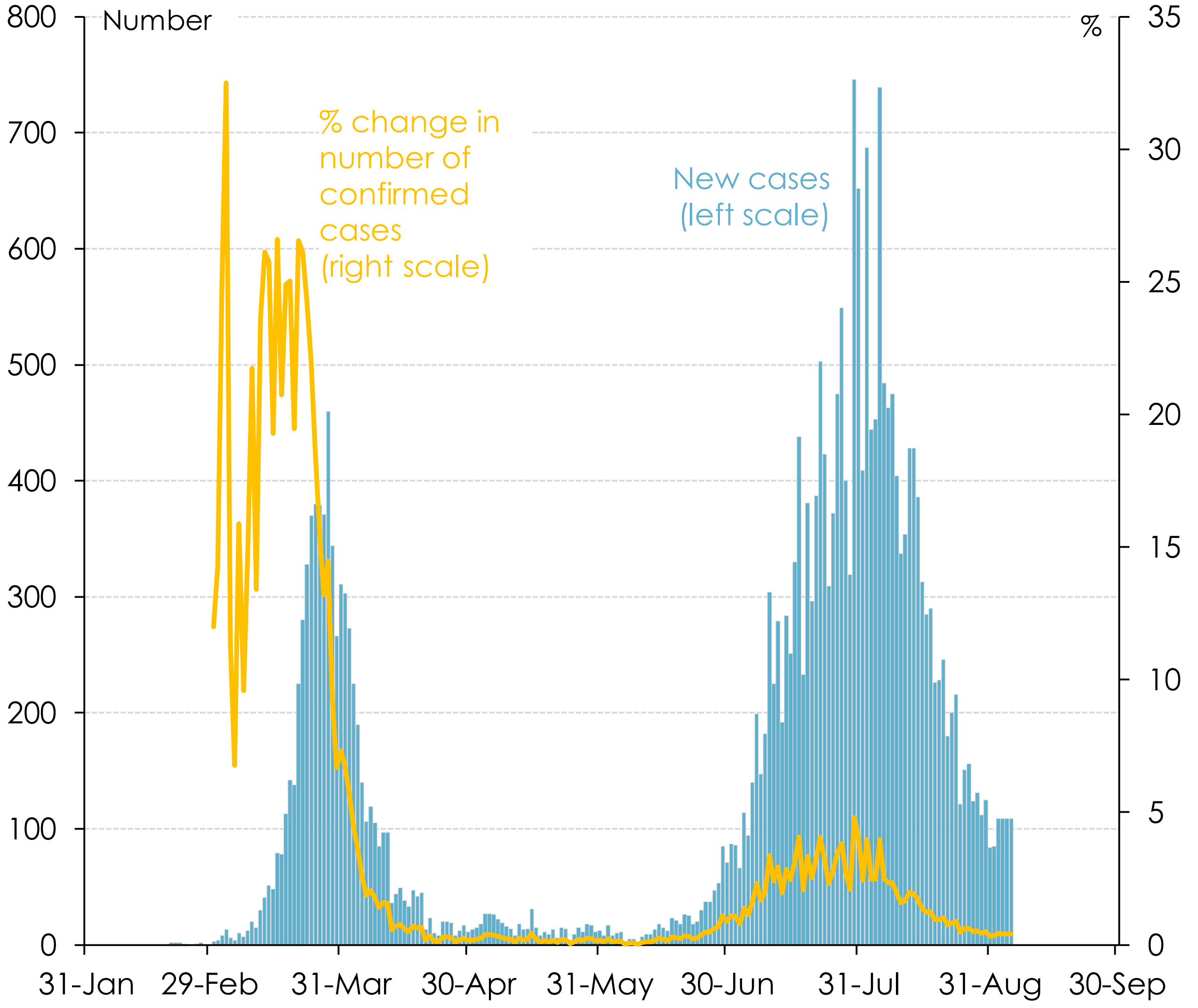
The number of new cases in Australia over the past week was the lowest since the first week of July, although the number of deaths is still rising

Cases, recoveries, hospitalizations and deaths



New cases



Note: Data up to 5th September. *Source:* covid19data.com.au

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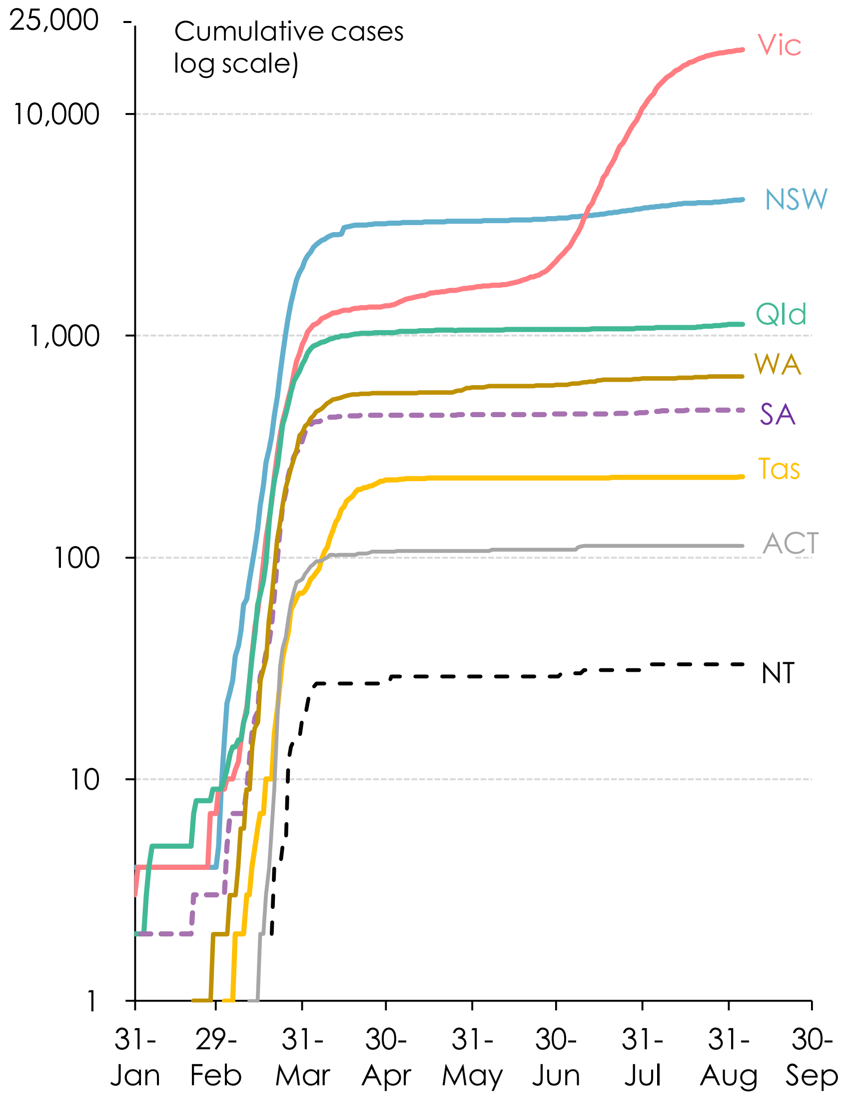
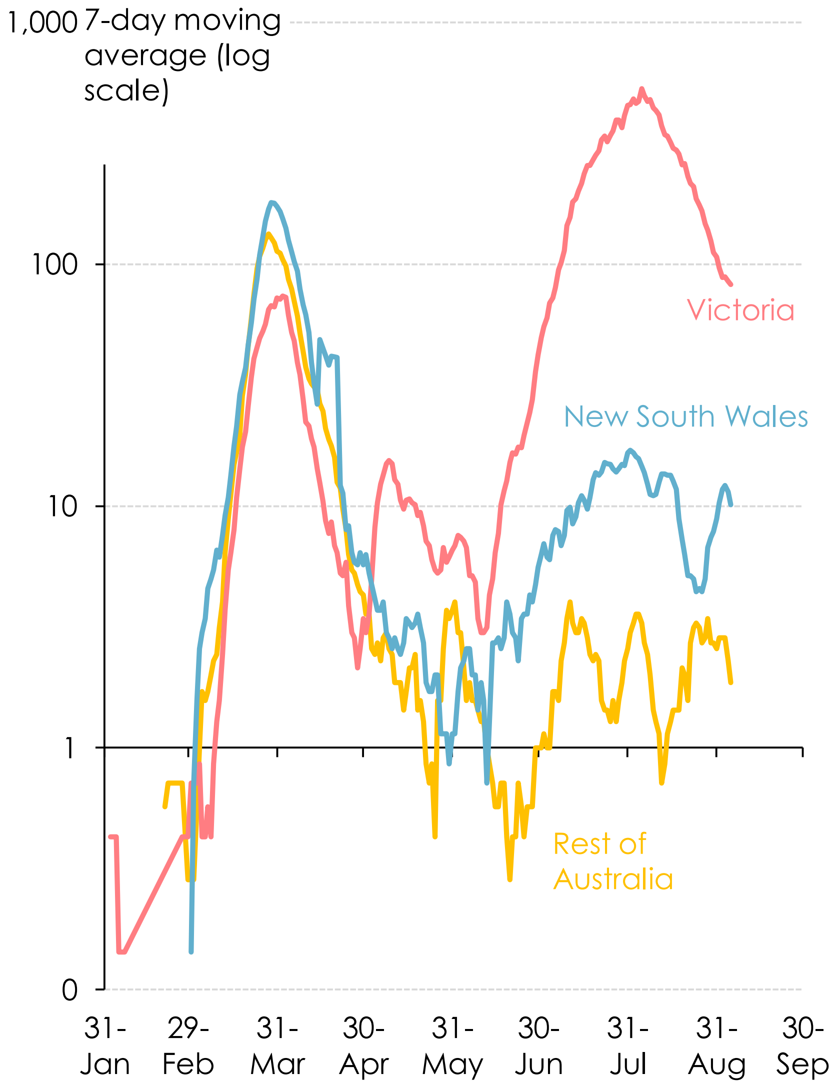
Victoria's "second wave" of infections peaked in the first week of August but still hasn't receded enough to allow the state to start 're-opening'

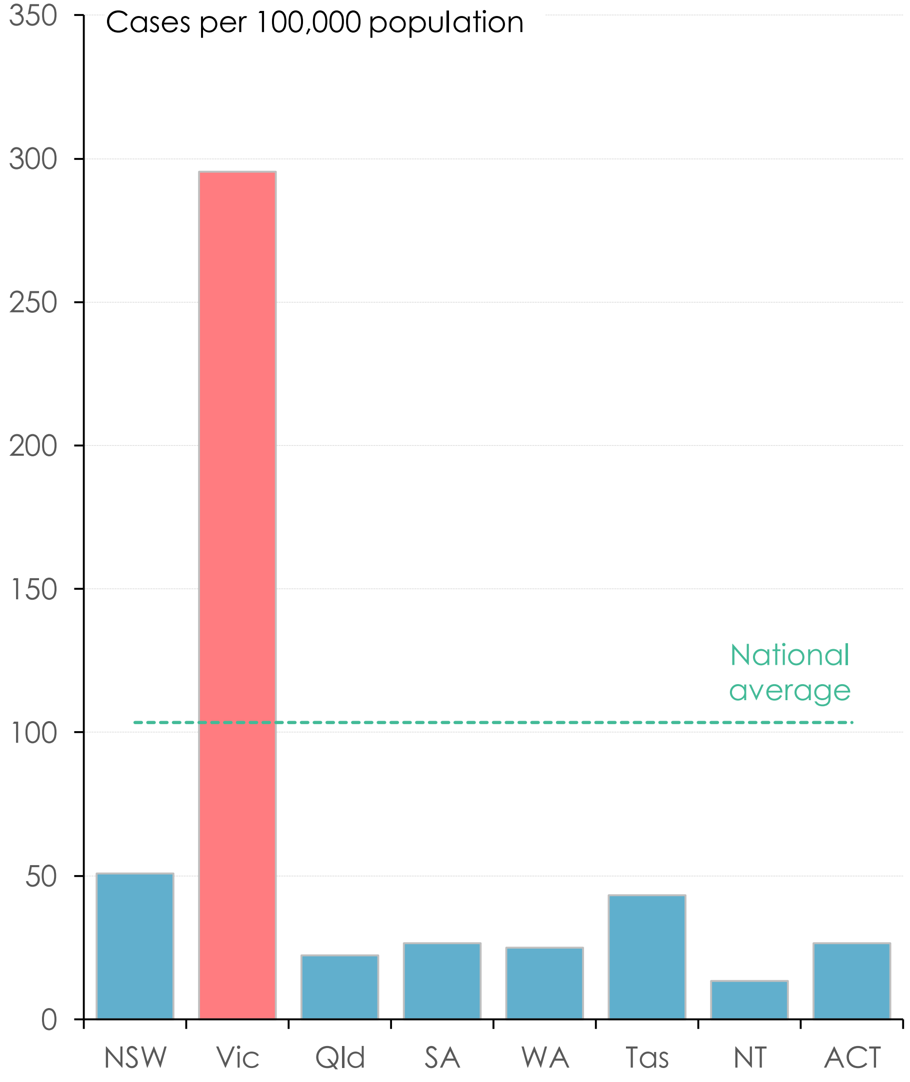
Cumulative cases, by State



New cases



Cases per 100,000 population



Note: Data up to 5th September. *Source:* covid19data.com.au

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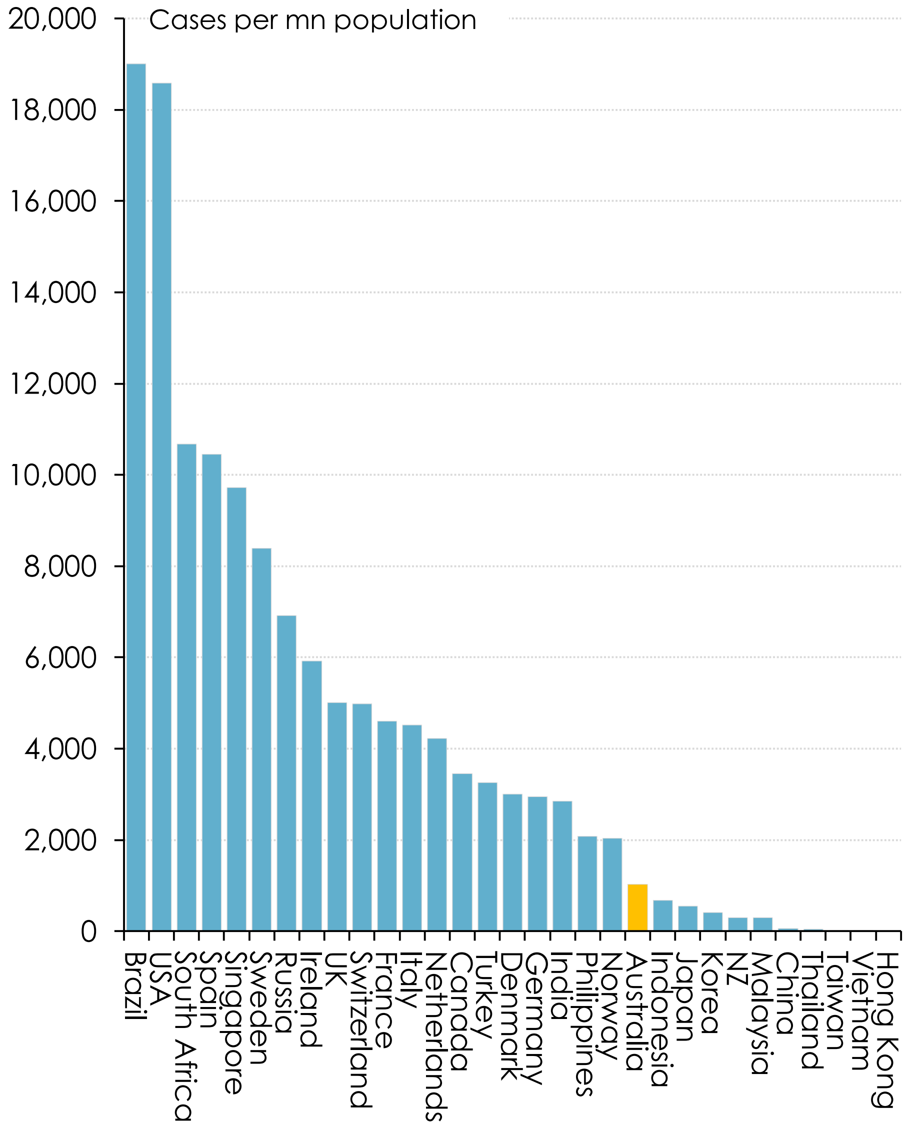
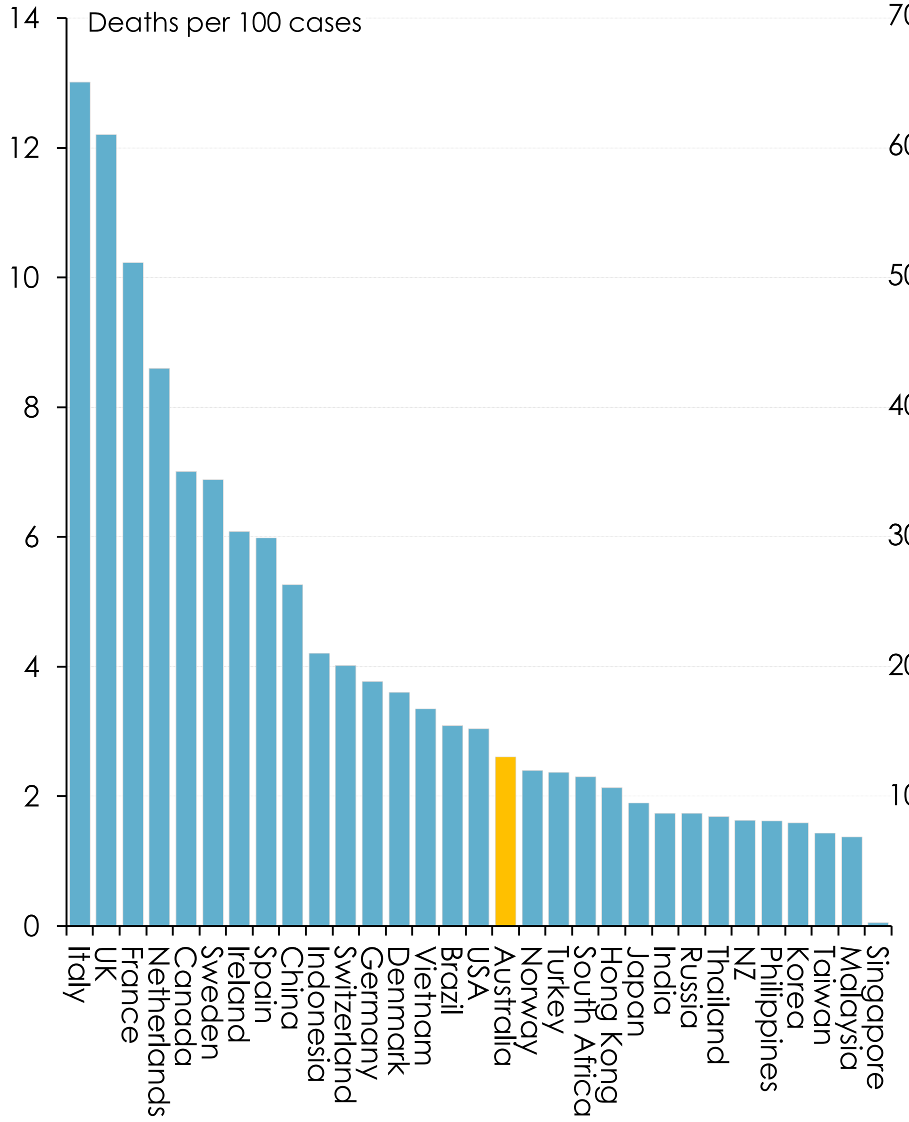
Australia's infection and fatality rates remain, along with NZ's and most East Asian countries', low by international standards

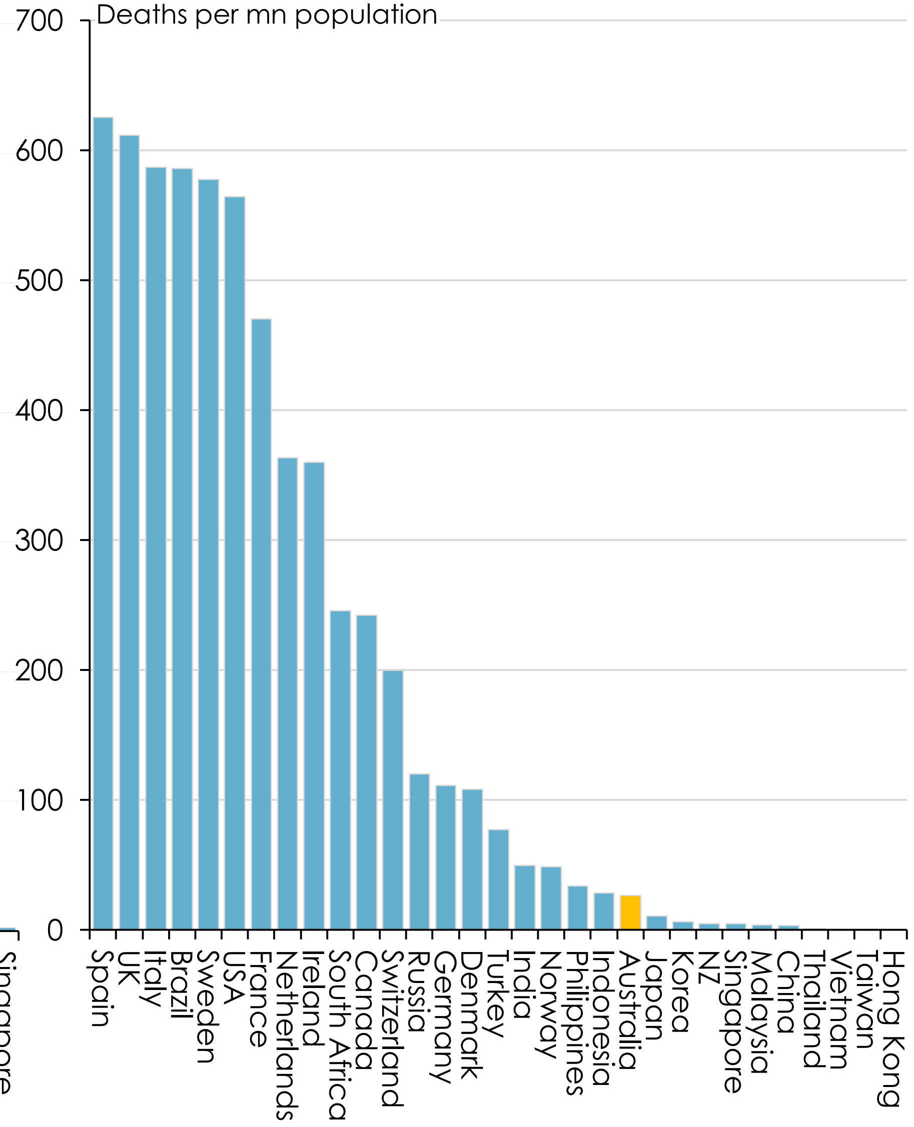
Apparent infection rate



Apparent fatality rate



Deaths rate



Note: Data up 4th September. *Source:* University of Oxford, *Our World in Data*; Corinna.

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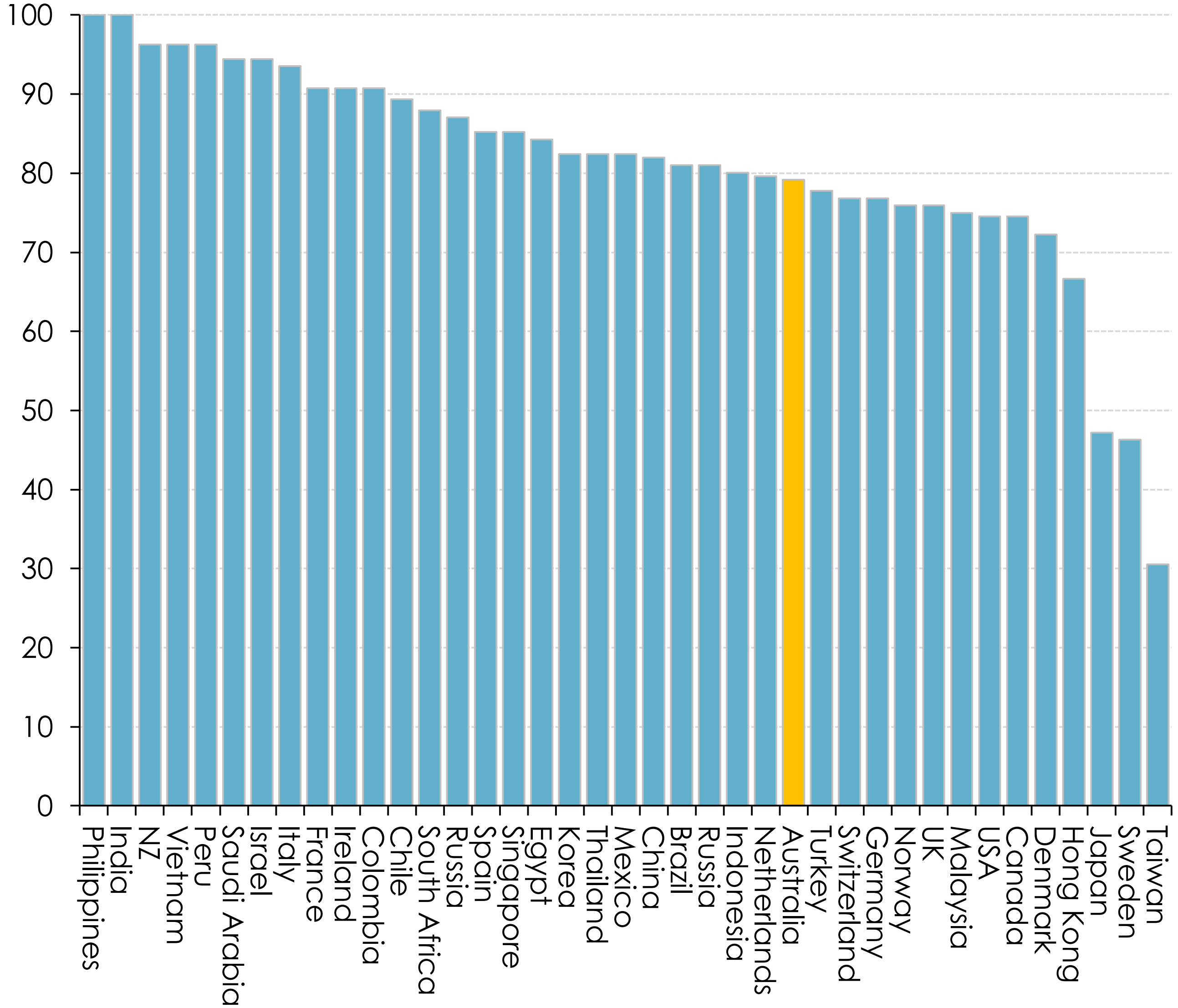
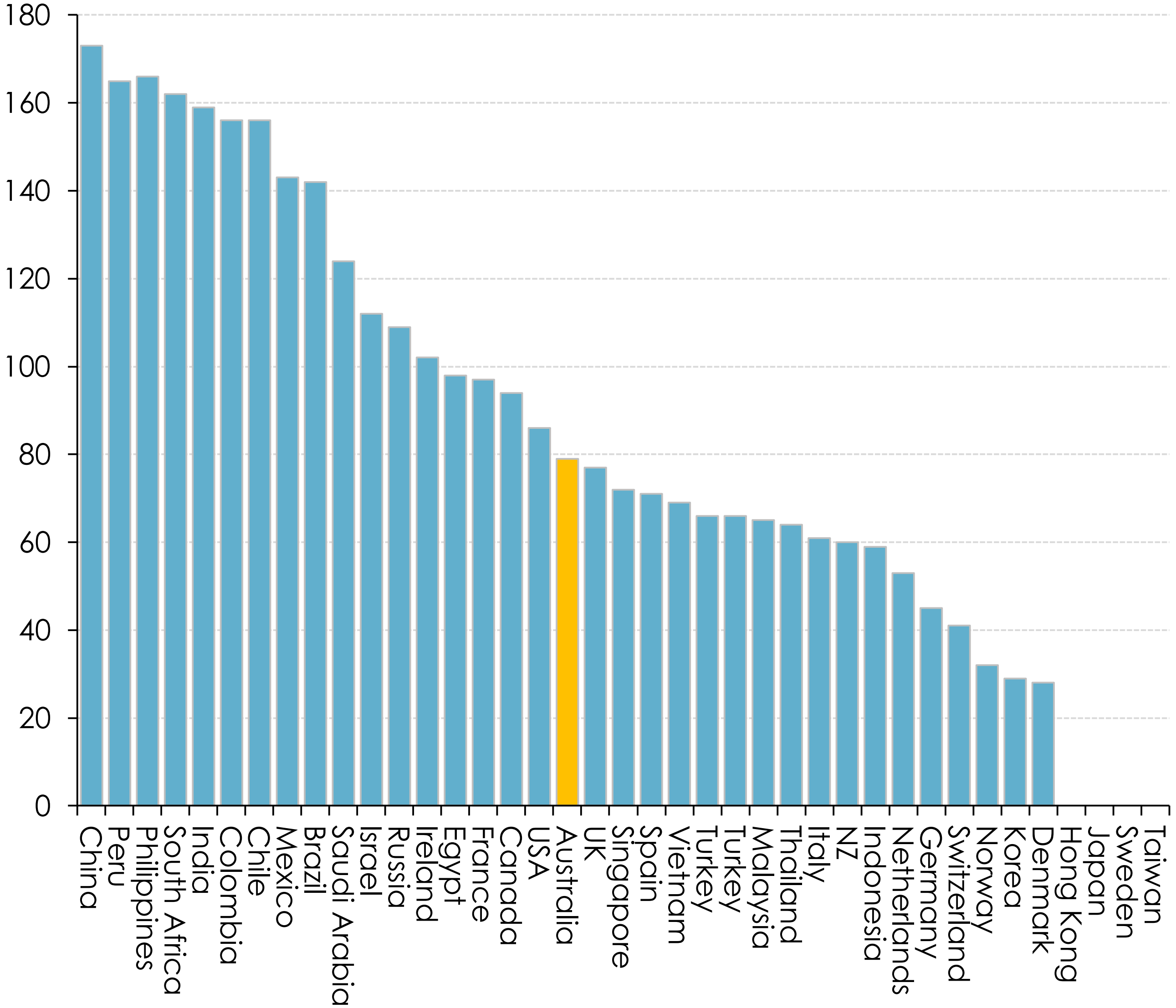
Australia's restrictions have been, on average, less stringent than in most other countries – though we have crept up the list a bit in the past 6 weeks

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 27th August – 3rd September.

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All of the major international economic forecasting institutions expect 2020 to be the worst year for global growth since the 1930s

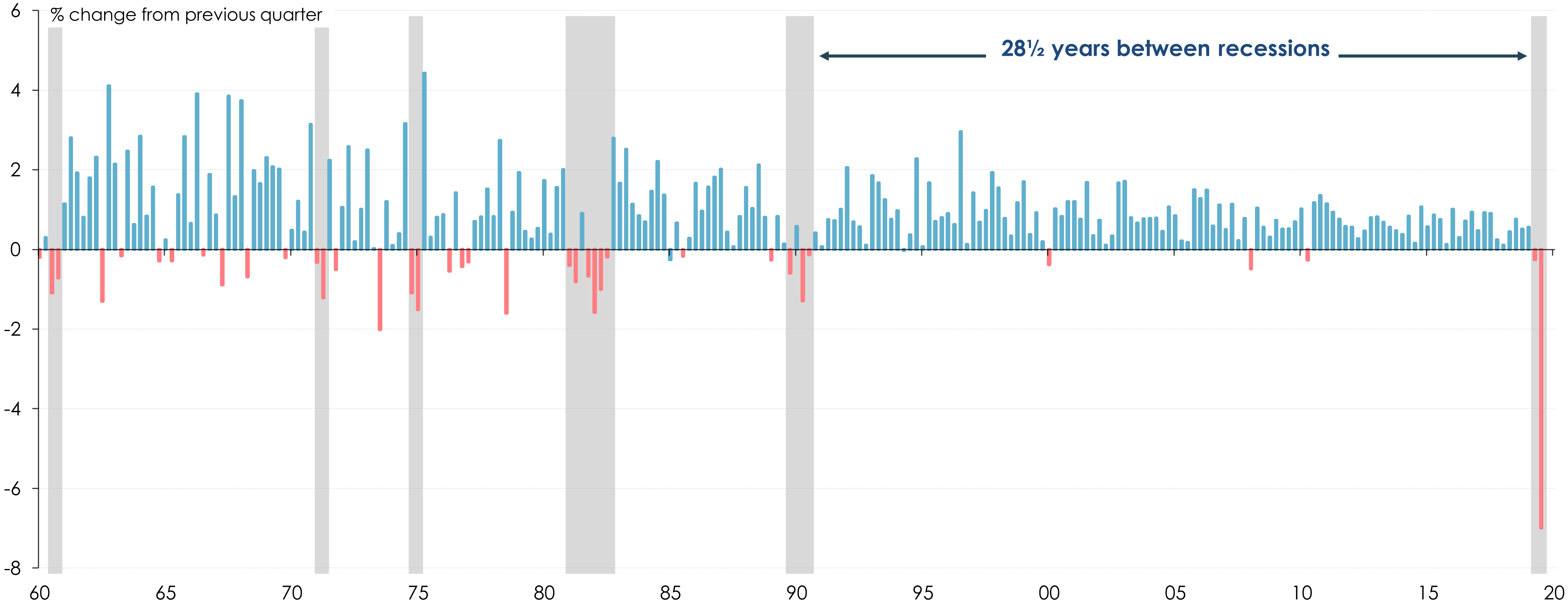
Major global institutions' growth forecasts for 2020 and 2021 compared

	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	-7.3	4.1	-8.0	4.8
China	6.1	1.2	9.2	1.0	6.9	-2.6	6.8	1.8	8.3
Euro area	1.2	-7.5	4.7	-9.1	4.5	-9.1	6.5	-8.8	5.0
India	4.2	1.9	7.4	-3.2	3.1	-3.7	7.9	-4.0	4.3
Japan	0.7	-5.2	3.0	-6.1	2.5	-6.0	2.1	-6.3	2.8
UK	1.4	-6.5	4.0	na	na	-11.5	9.0	na	na
Australia	1.8	-6.7	7.1	na	na	-5.0	4.1	-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	-6.0	5.2	-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*, Volume 2020 Issue 1, 10th June 2020; Australian Treasury, *Economic and Fiscal Update*, 23rd July 2020.

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.

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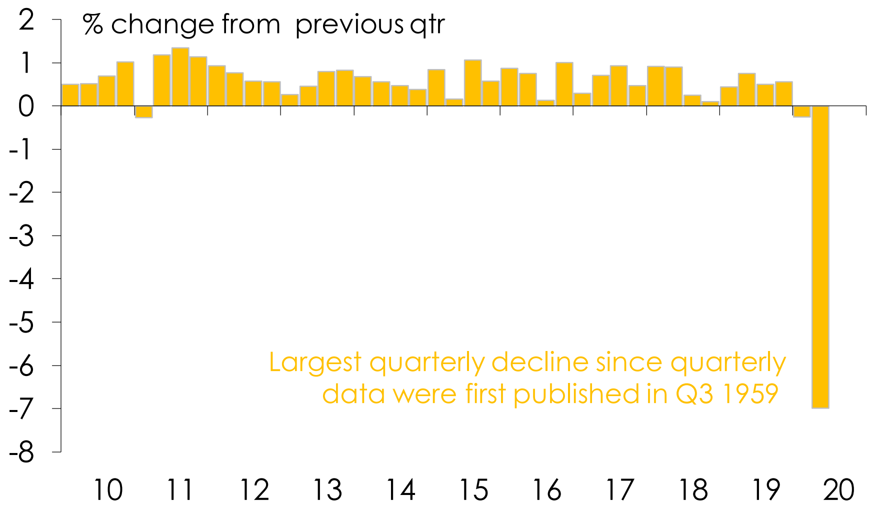
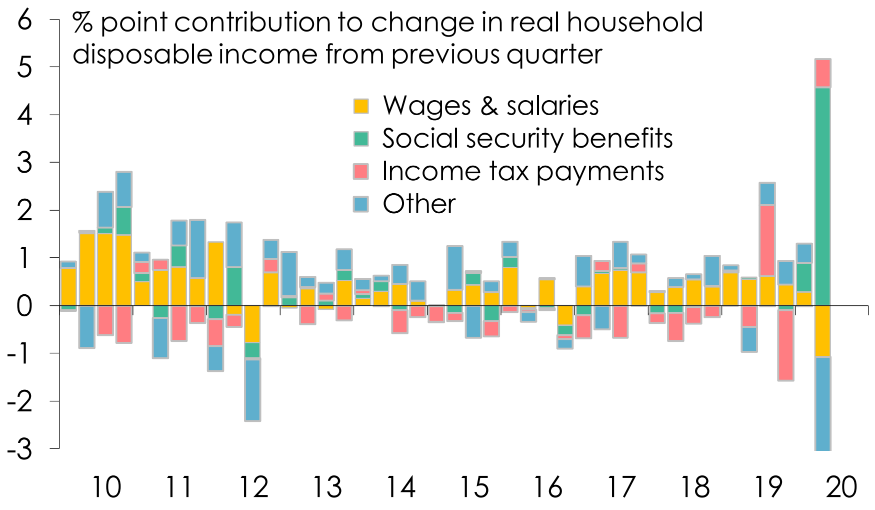
Real GDP fell a record 7.0% in Q2 after a 0.3% decline in Q1, the first time there have been two consecutive declines since Q1 and 12 1991

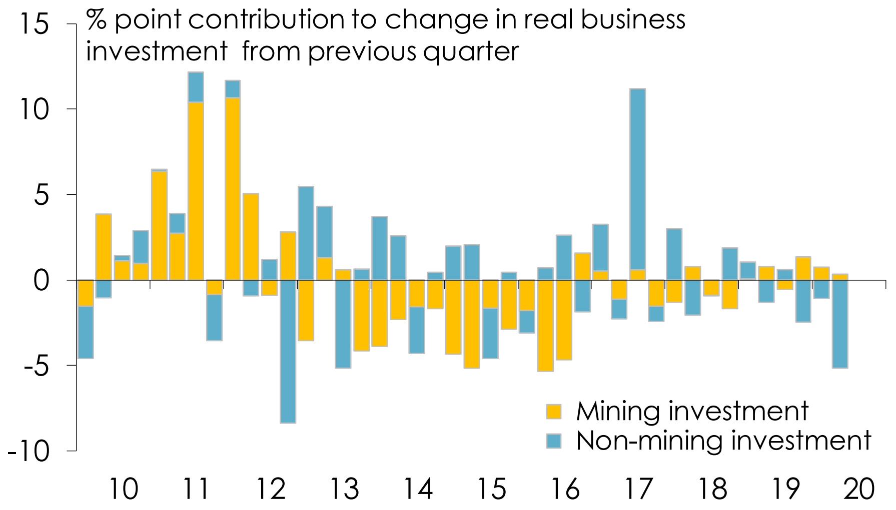
Quarterly change in real GDP



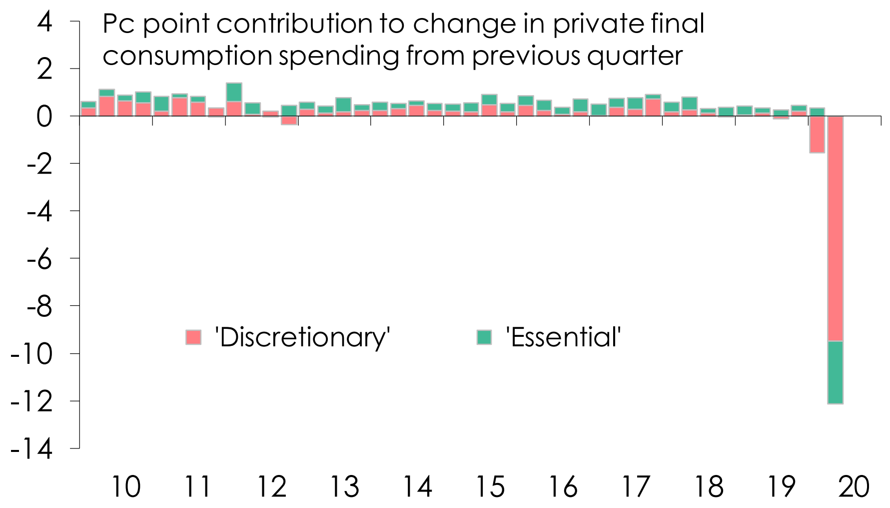
Household disposable income



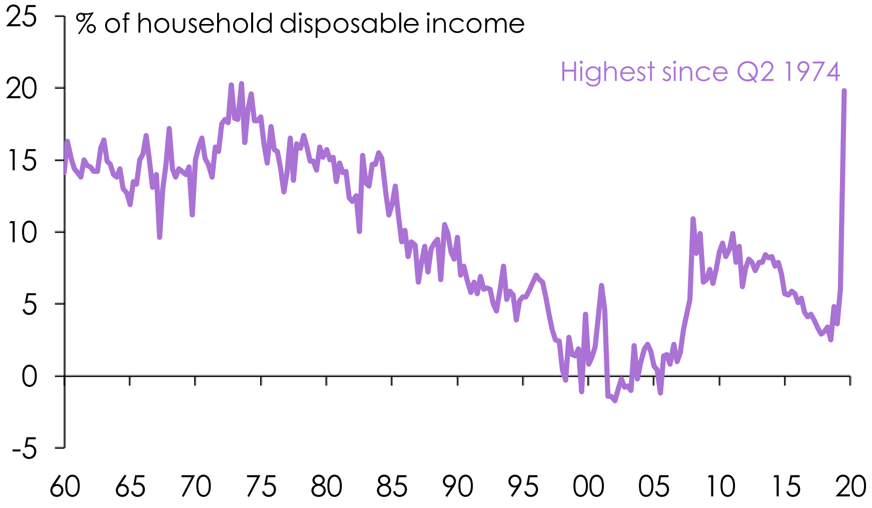
Business investment expenditure



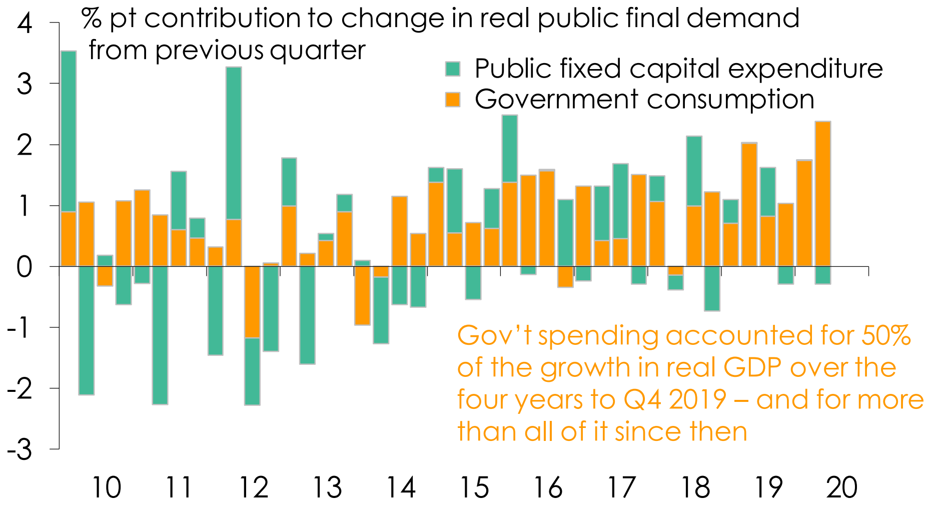
Household consumption expenditure



Household saving rate



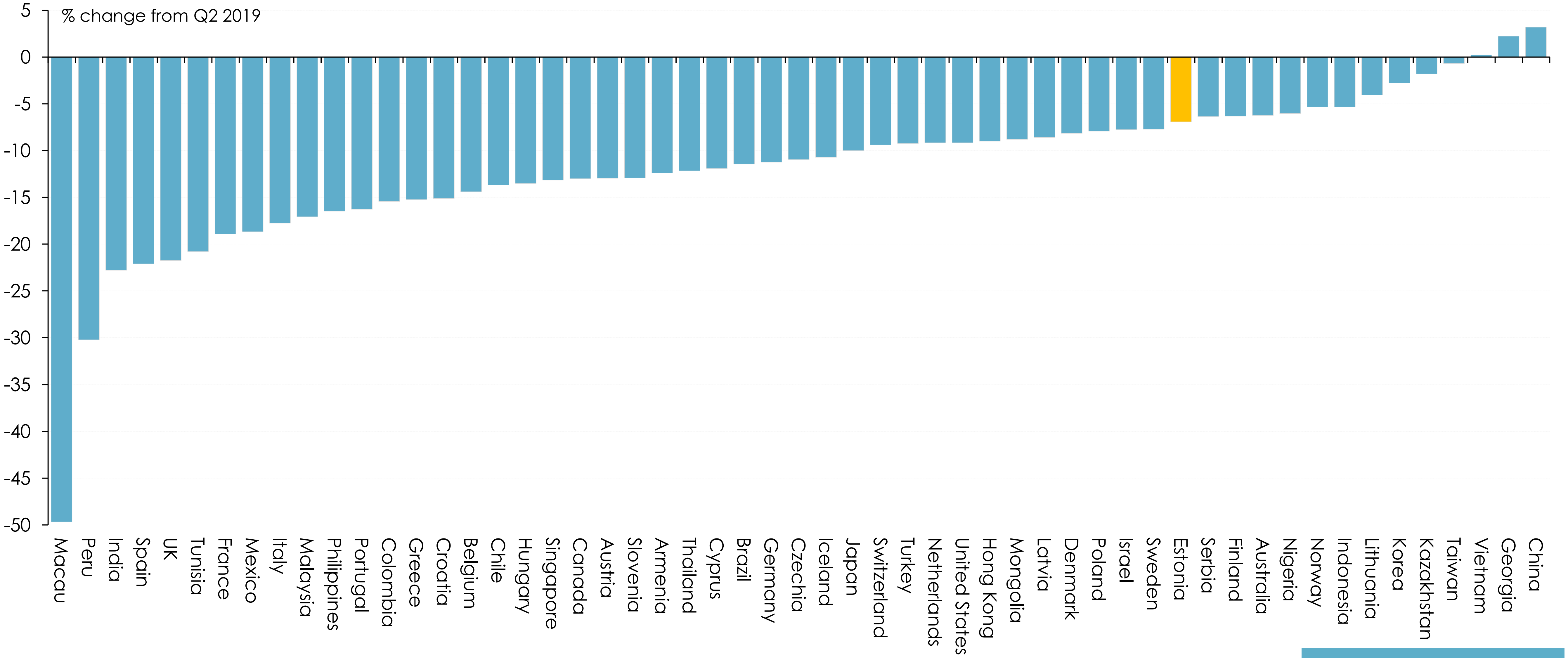
Public expenditure



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.

Of the 55 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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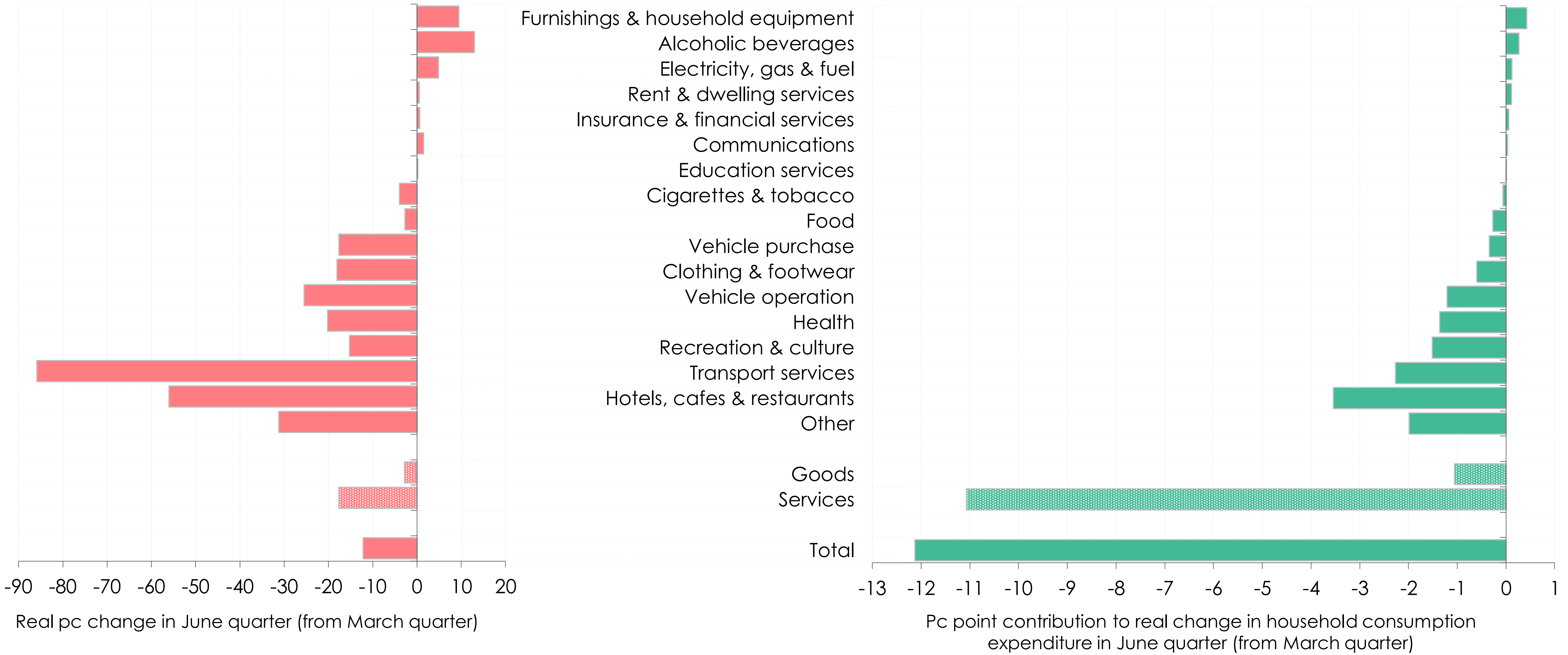
The record 12.1% fall in consumer spending in Q2 was largely driven by sharp declines in spending on discretionary services

Change in household consumption spending, by category, June quarter

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

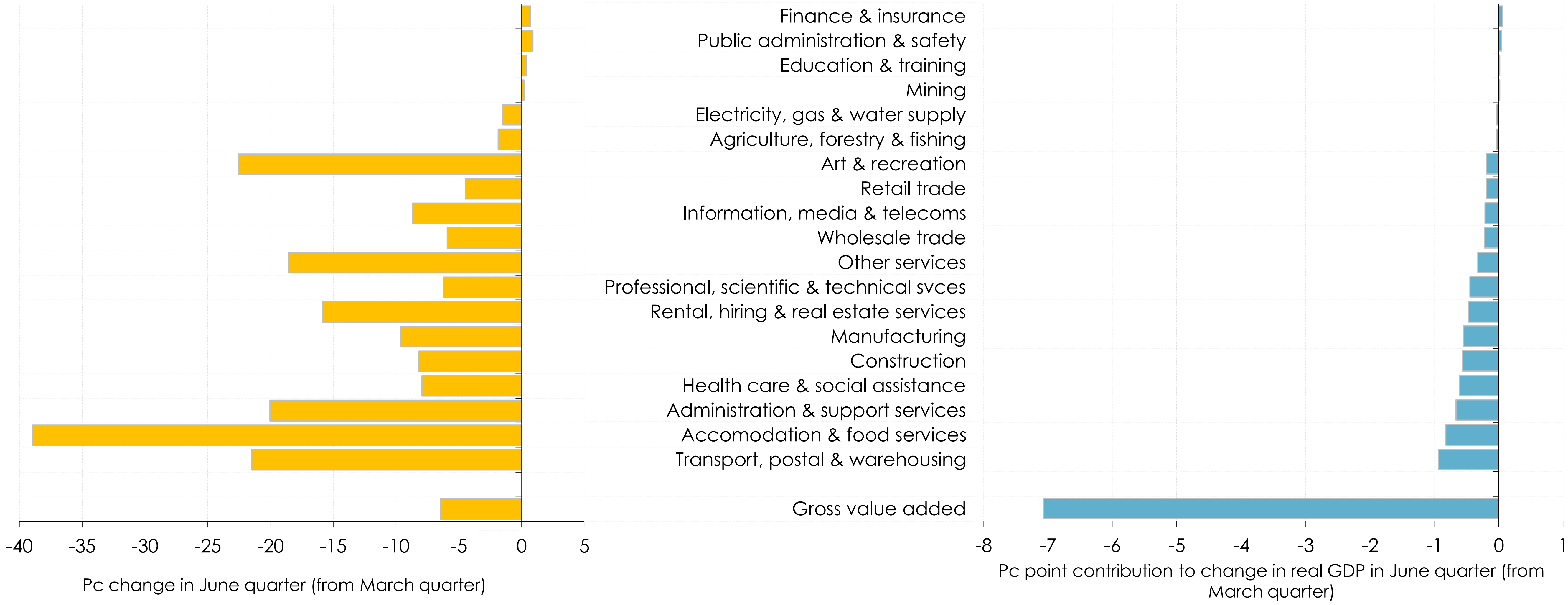


Note: 'Rent and dwelling services' includes the imputed rent which home-owners pay to (and receive from) themselves in the national accounts (so that changes in the home-ownership rate over time don't distort measured household consumption or GDP). *Source:* ABS.

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.

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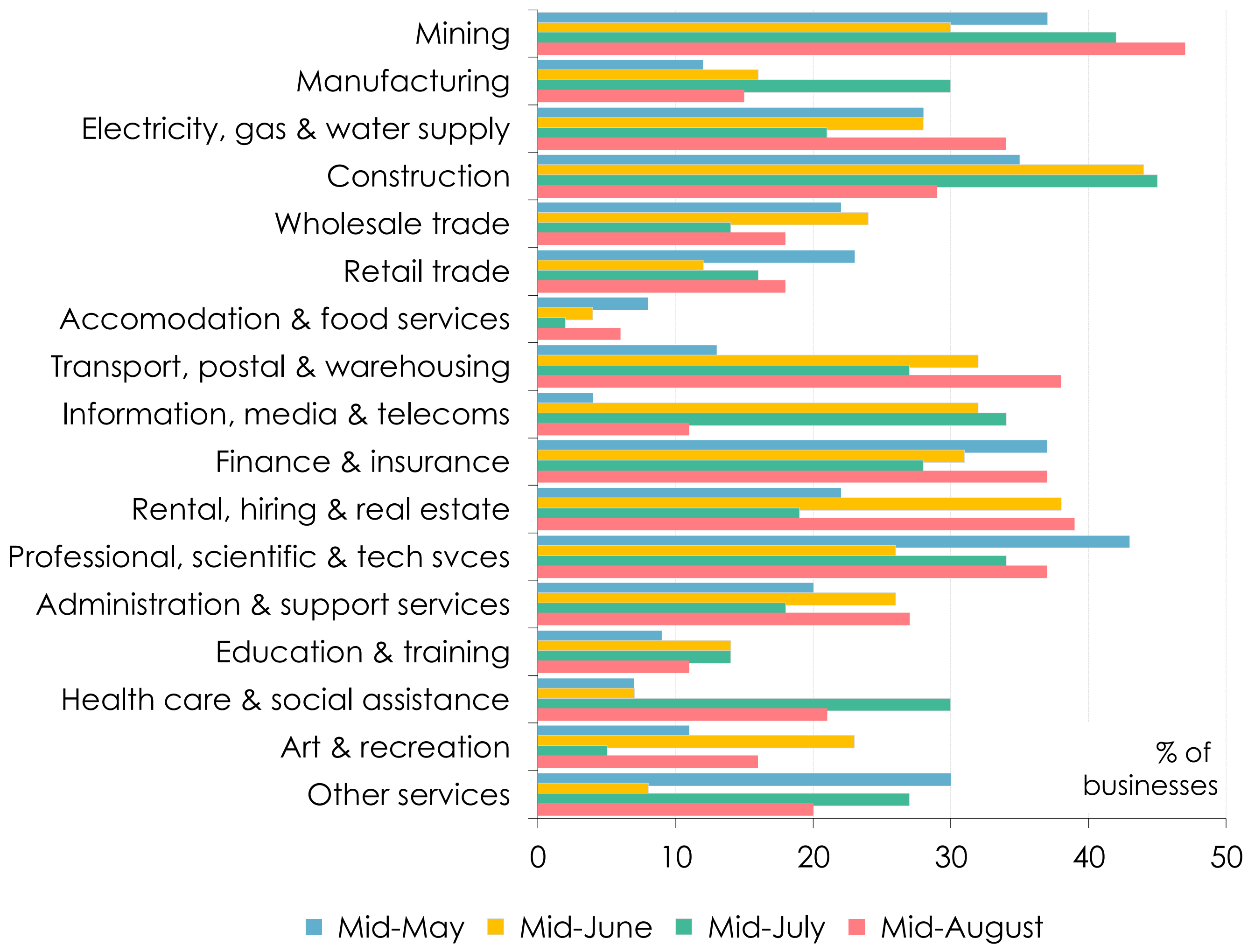
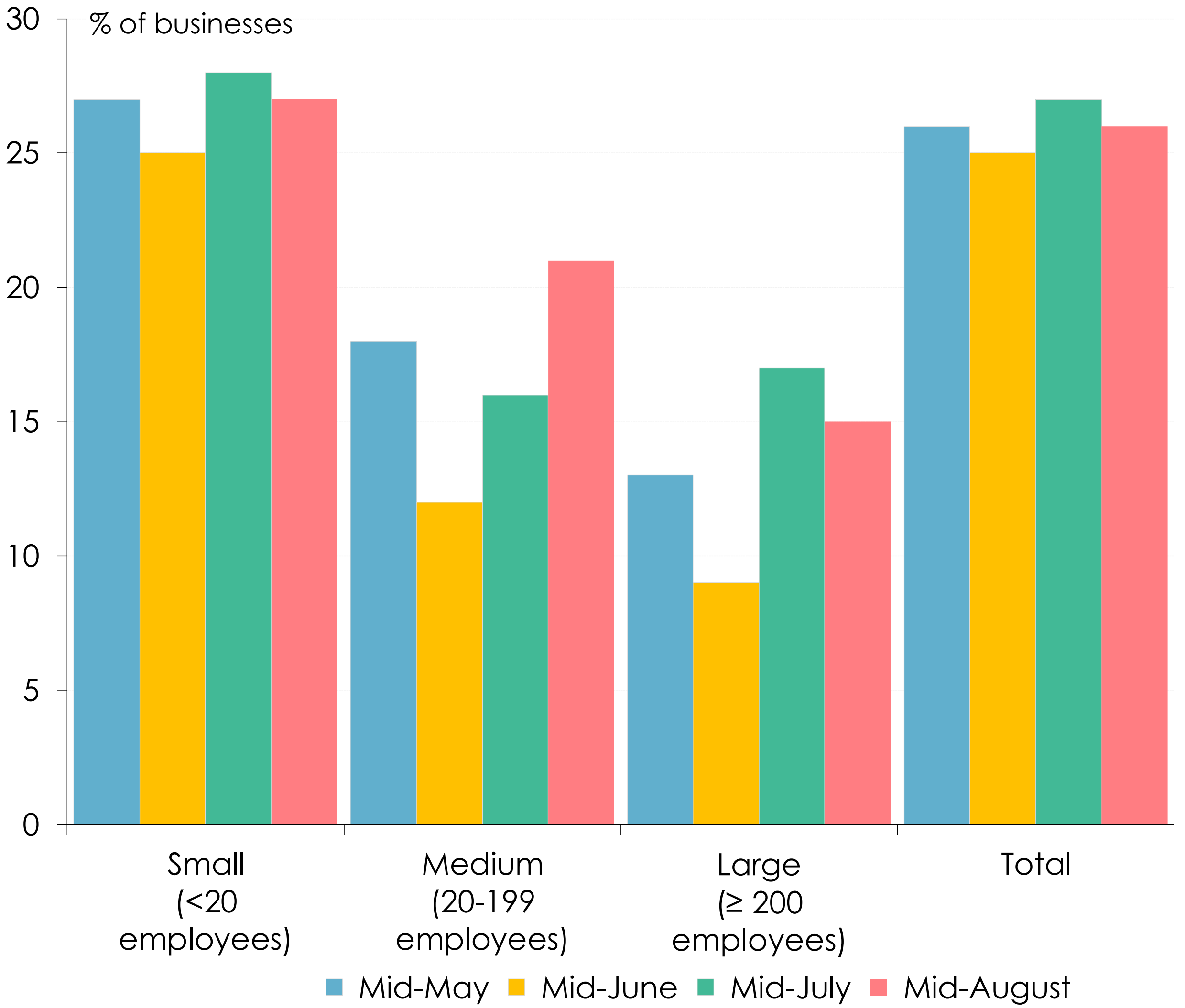
Still only about one-quarter of businesses are operating 'as normal' – with fewer large business operating as 'normal' than small ones

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



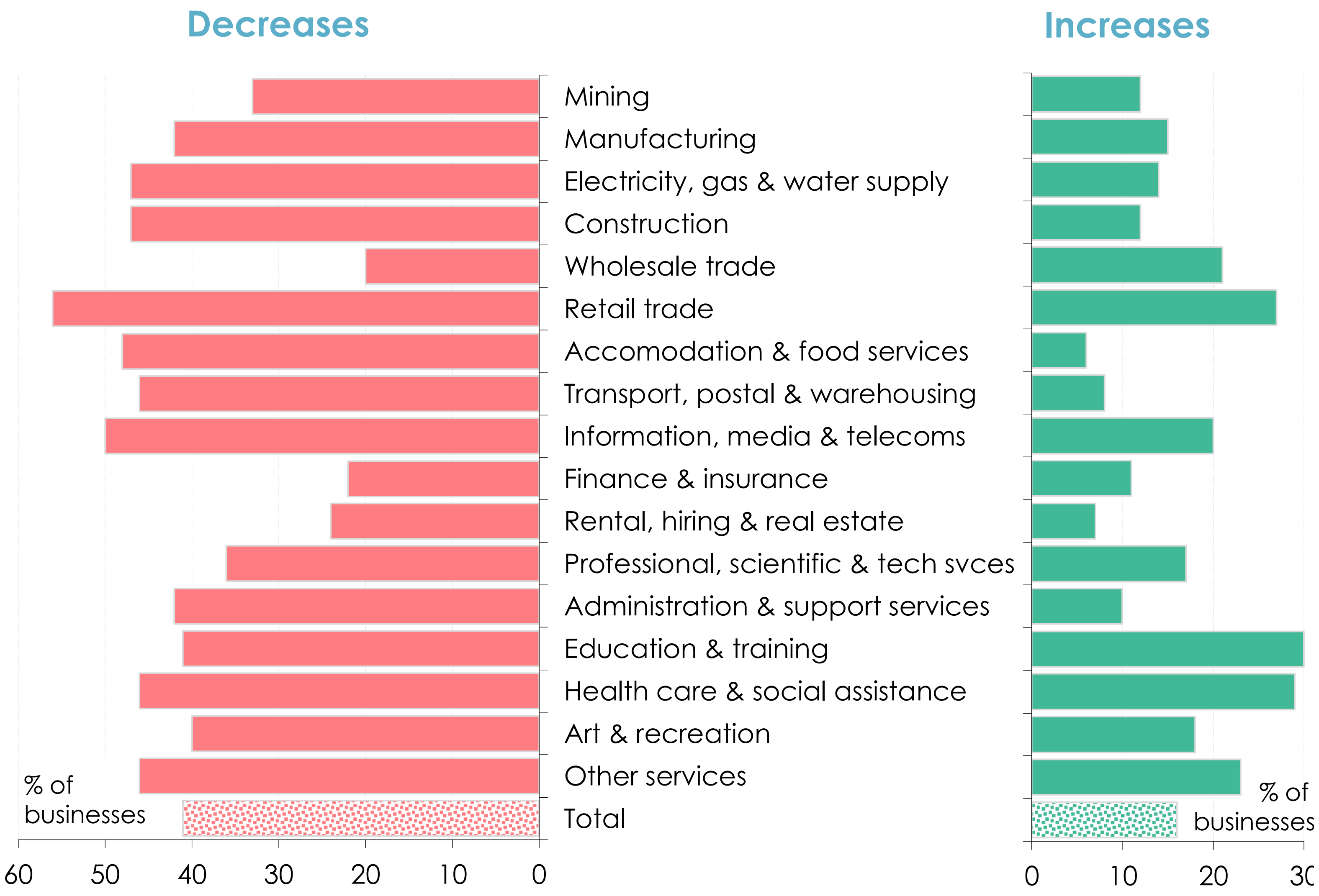
Proportion of 'trading businesses' which are operating 'as normal' – by size



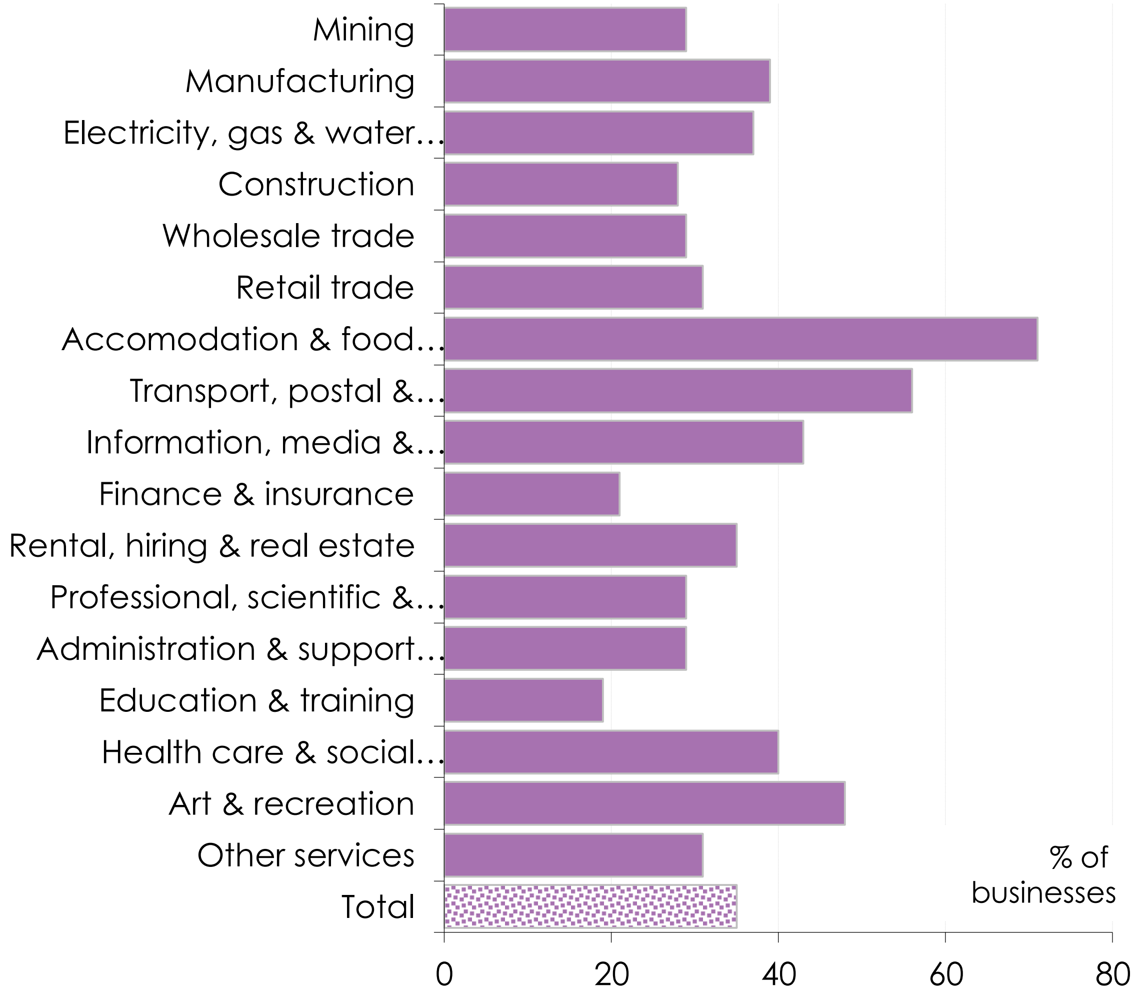
Source: ABS, *Business Impacts of Covid-19*, May 2020 (based on survey conducted between 13th and 22nd May), June 2020 (based on survey conducted between 10th and 17th June), July (survey conducted between 15th and 23rd July) and August (survey conducted between 12th and 19th August)

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 12h and 19th August).

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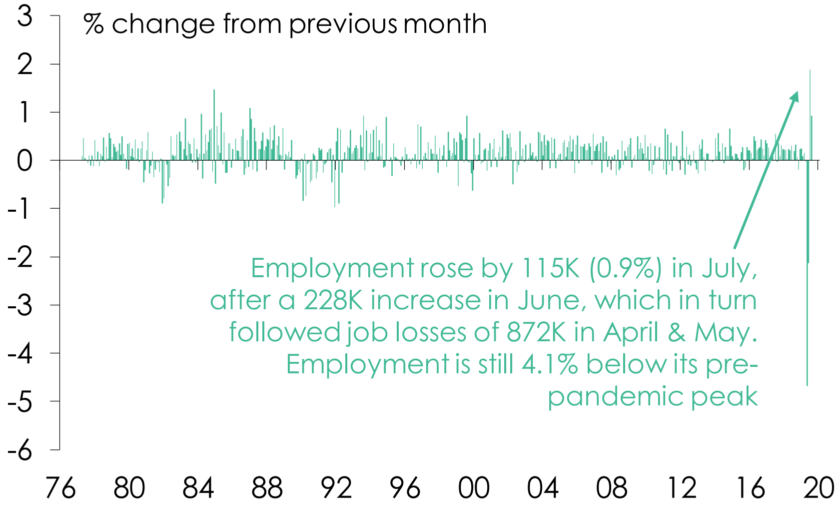
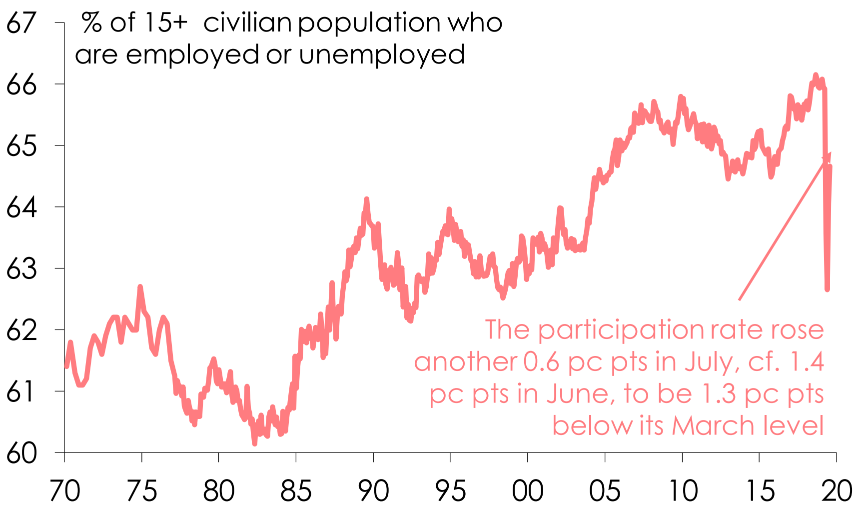
343,100 (39%) of those who lost their jobs in March-April are now back at work, while another 86,000 started looking for work

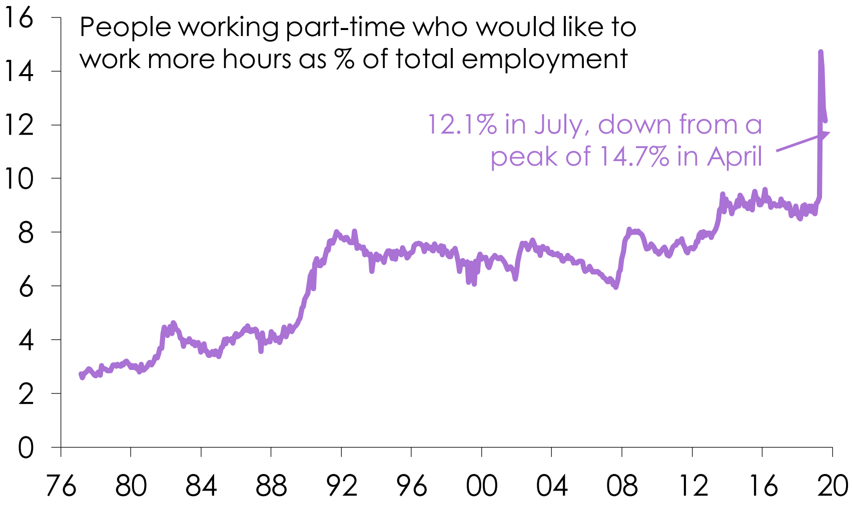
Employment



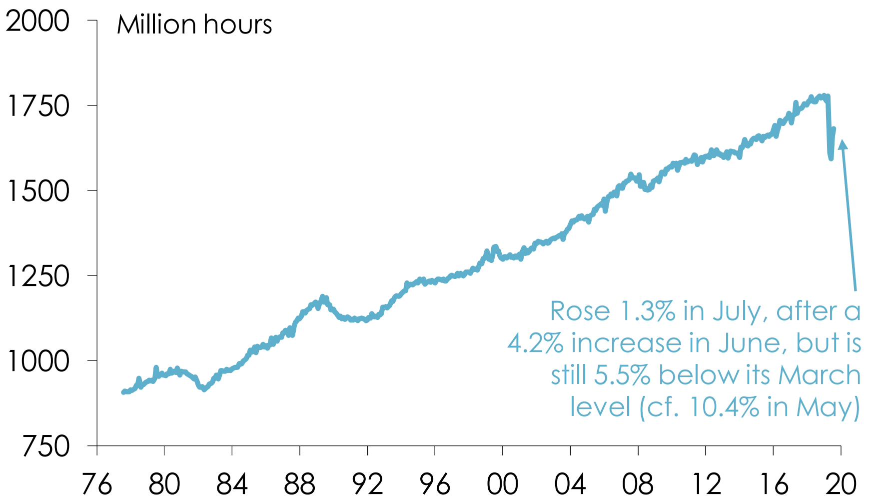
Labour force participation rate



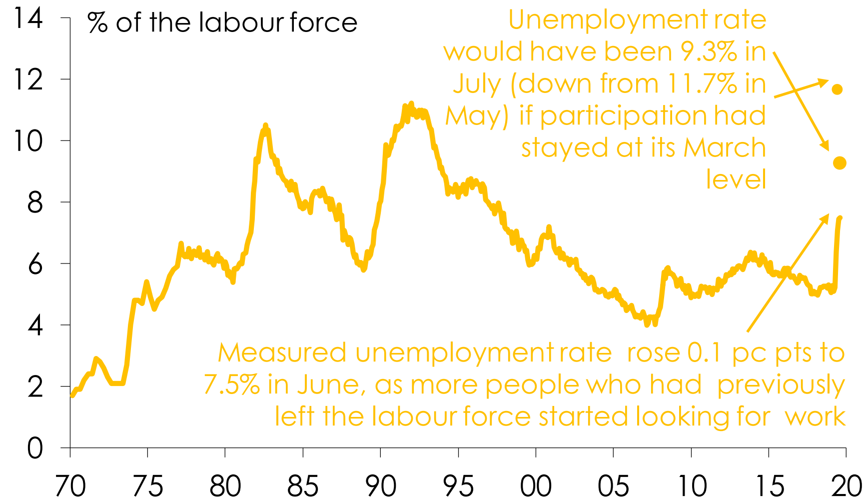
Under-employment ratio



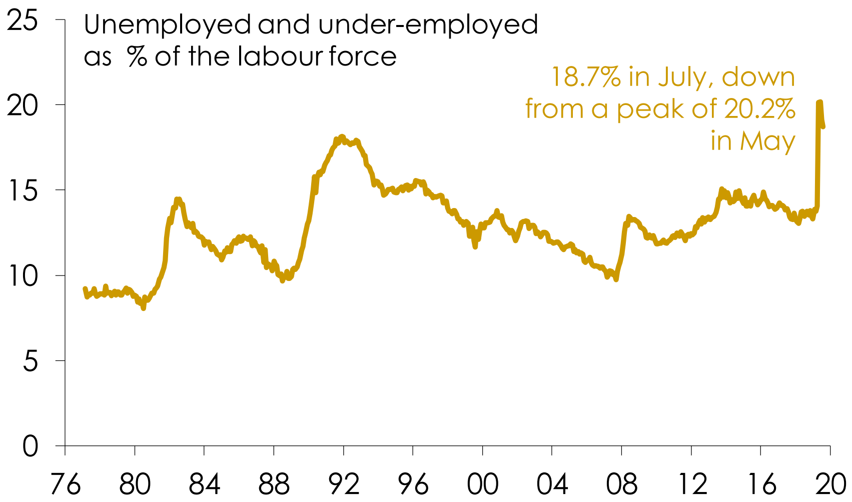
Total hours worked



Unemployment rate



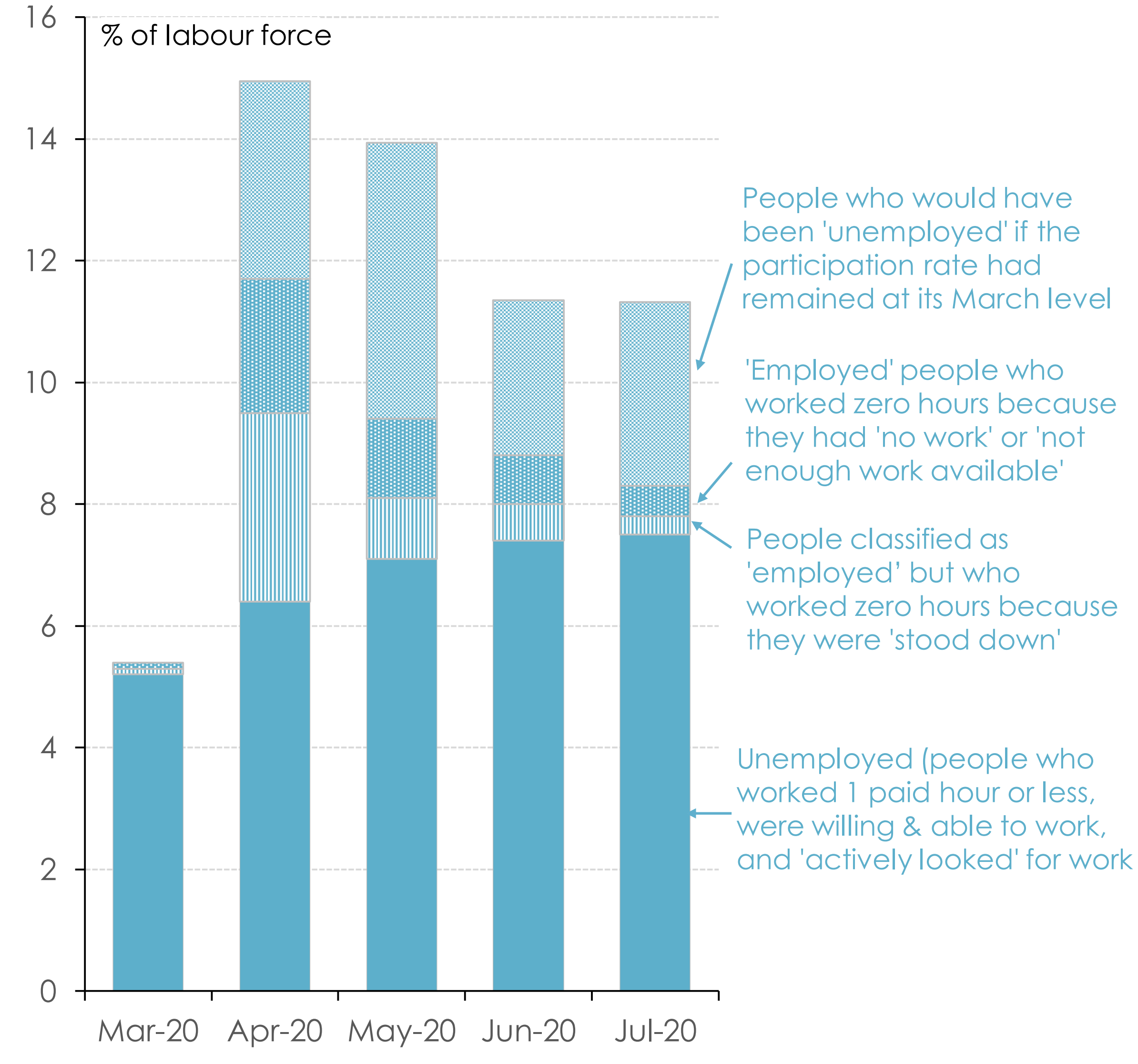
'Under-utilization' rate



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 May would have been 9.5% (*down* from 11.7% 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*.

The July unemployment rate would have been 11.3% if people working zero hours and those who dropped out of the labour force were counted

Alternative measures of unemployment



Source: ABS, Labour Force, Australia; Corinna.

- The Government's JobKeeper program pays eligible employers a subsidy of $1500 per fortnight for each eligible employee kept on the payroll between 30 March and 27 September (the level of payments will step down in October and January)
- Eligible employers are those with
  - annual turnover of <$1bn whose turnover has fallen by >30%
  - annual turnover of >$1bn (other than major banks) whose turnover has fallen by >$1bn
  - Registered charities whose turnover has fallen by >15%
- Eligible employees are Australian citizens who are (or were at 1 March) permanent full- or part-time employees, or casuals who had at least 12 months 'regular employment'
- For labour force survey purposes the ABS classifies people being paid through JobKeeper as 'employed' – even if they have been stood down, or worked no hours during the survey week
  - in the US and Canada, such people are classified as unemployed
- If these people, and those who've dropped out of the labour force since March, were counted as unemployed, then the unemployment rate in July would have been 11.3% - down from 13.9% in May and 14.9% in April

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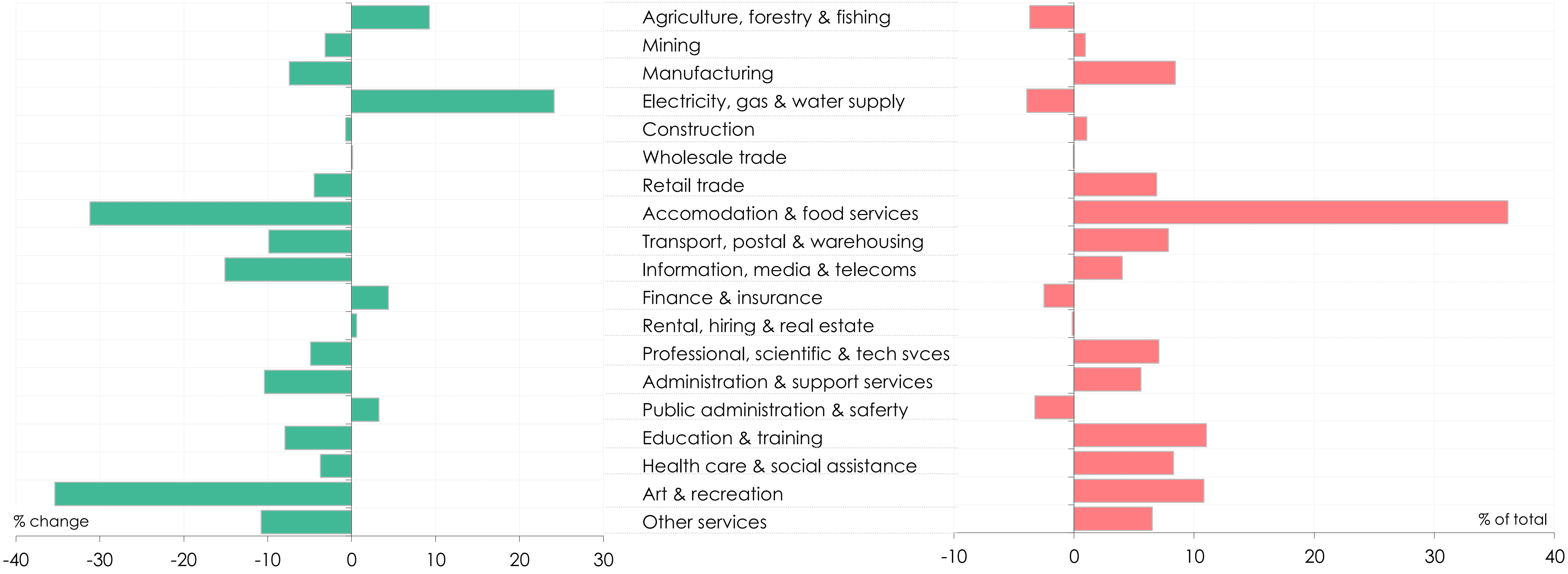
58% of total job losses between February & May were in accommodation & food services, education & training, and arts & recreation

Change in employment between February and March 2020, by industry

Proportion of change in total employment between February and March 2020, by industry



Note: The accommodation & food services, education & training, and arts & recreation services sectors accounted for 15% of total employment in February.
Source: ABS, Labour Force, Australia, Detailed, Quarterly, May 2020.

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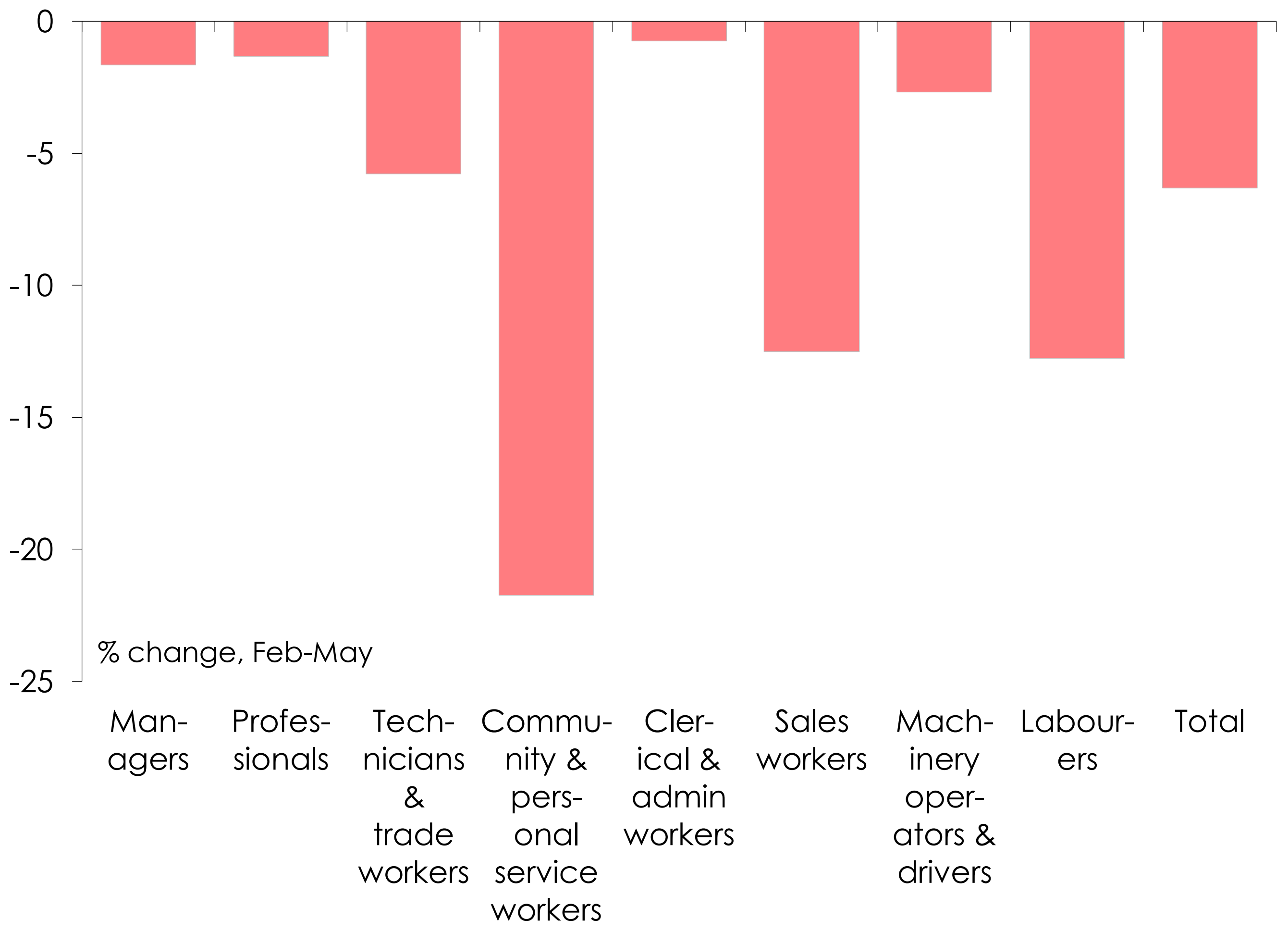
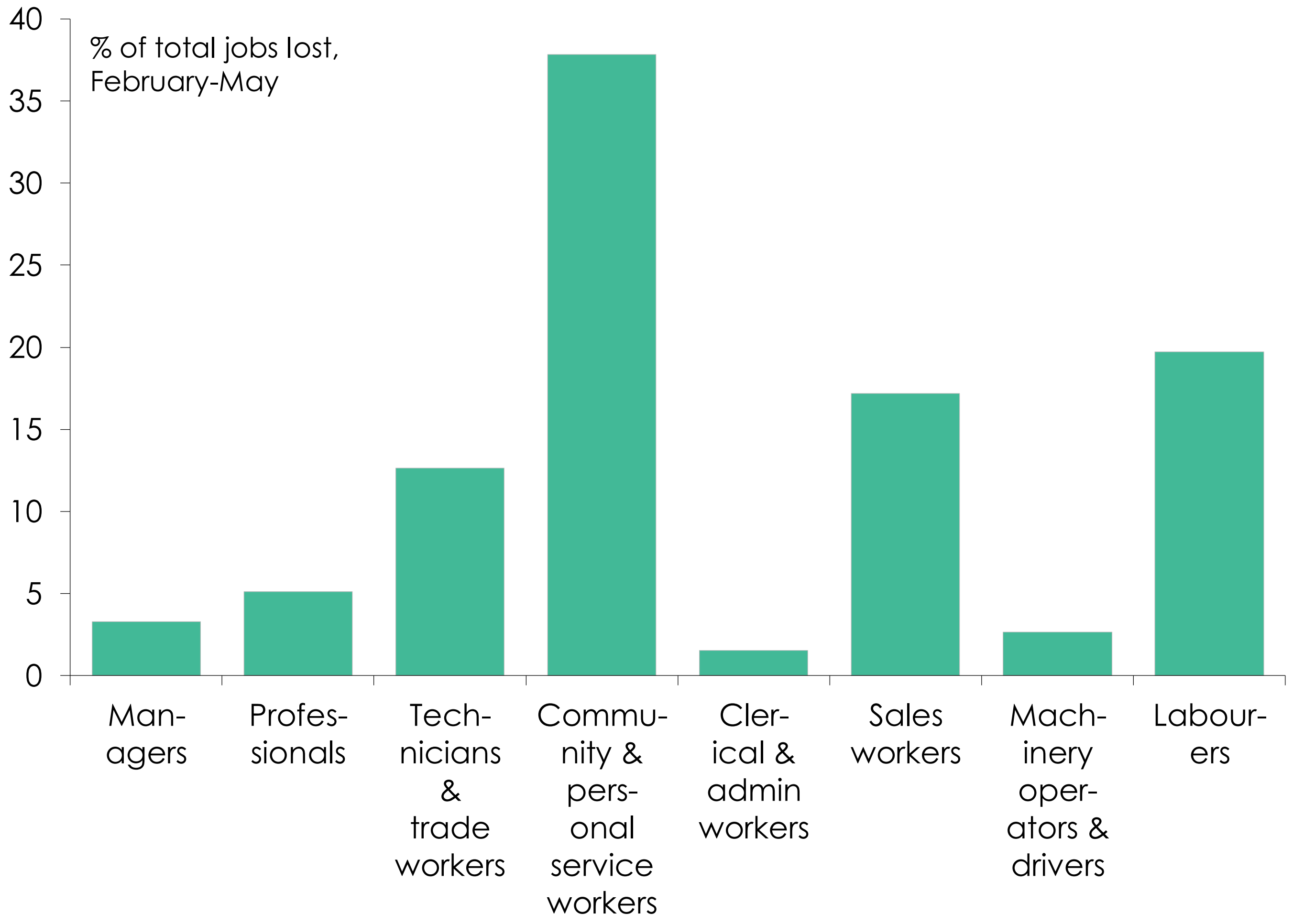
Community & personal service workers, sales workers and labourers have accounted for 75% of job losses since February

Change in employment between February and March 2020, by occupation



Proportion of change in total employment between February and March 2020, by occupation



Source: ABS, *Labour Force, Australia, Detailed, Quarterly*, May 2020.

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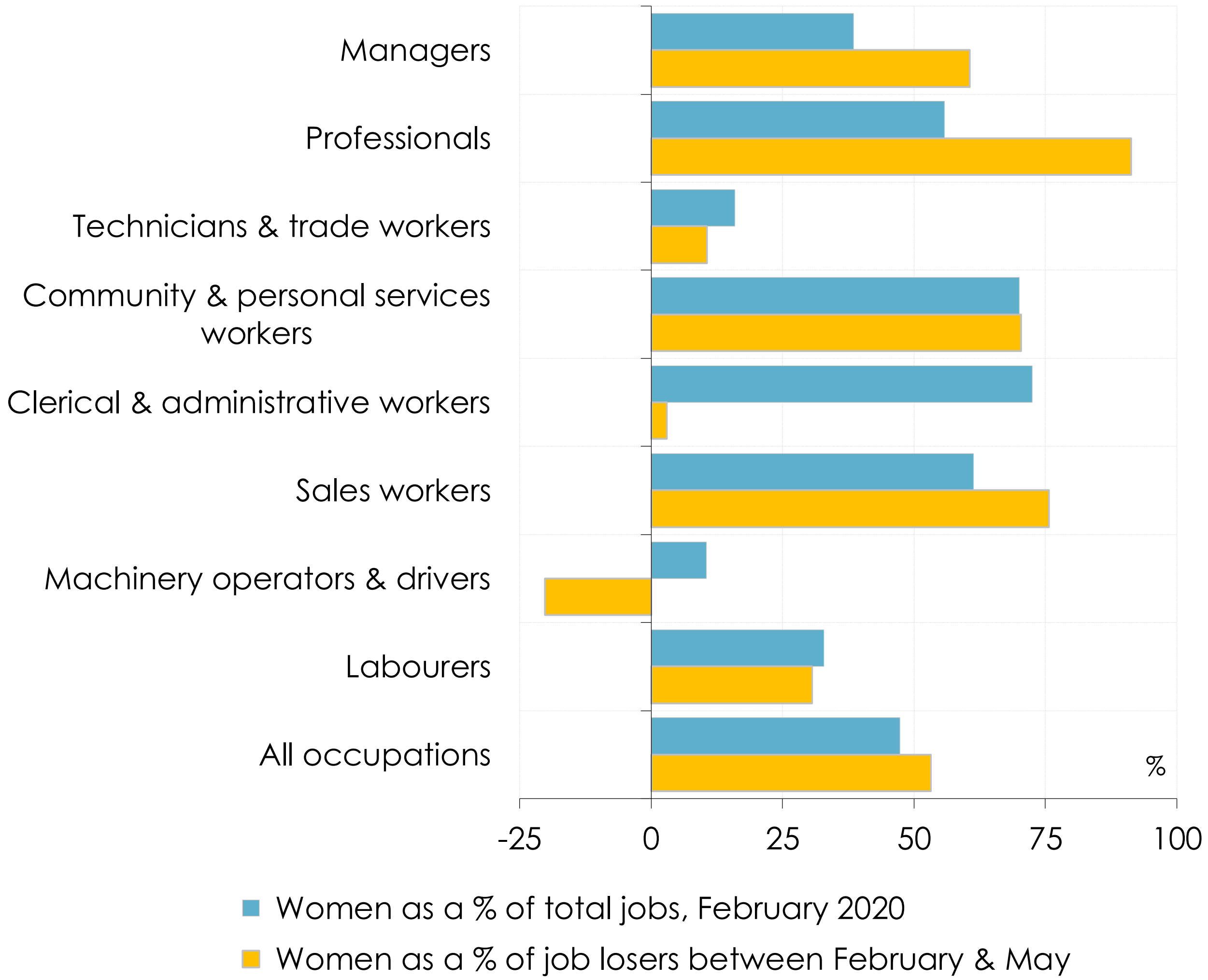
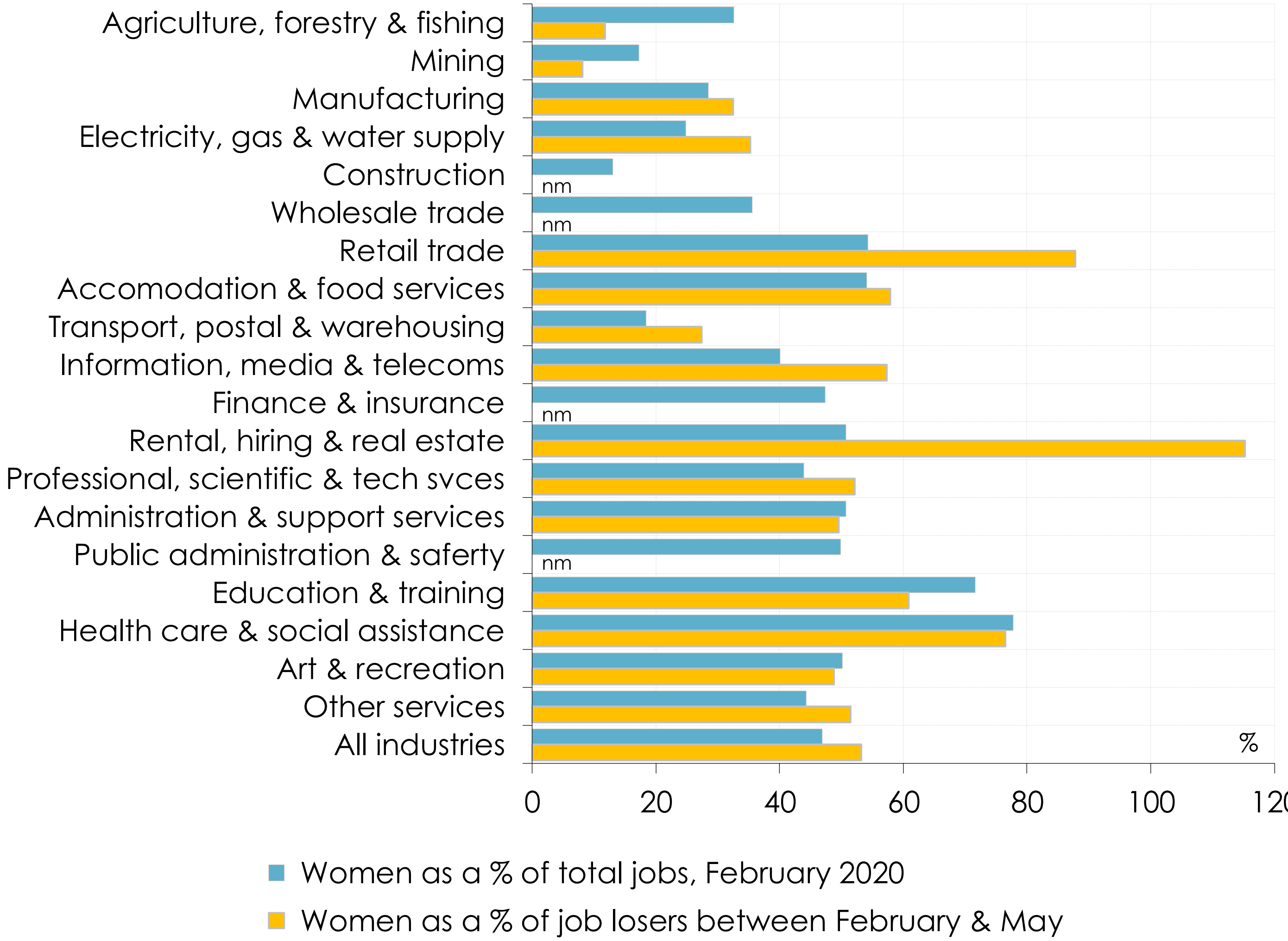
Women bore 53% of the job losses between February & May, in part because they typically work in occupations or industries which have been hardest hit

Women's share of jobs in February, and of job losses since February, by occupation



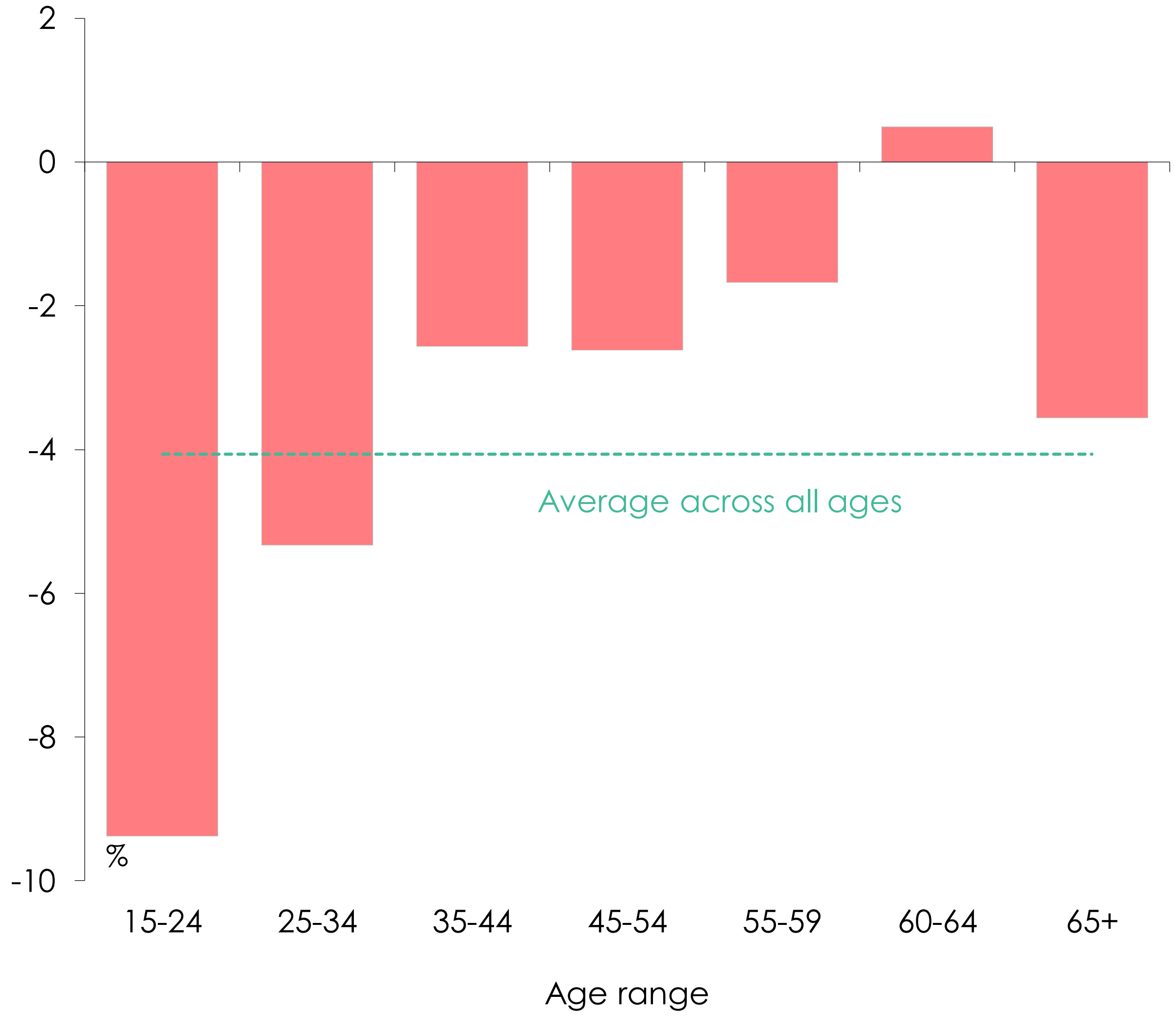
Women's share of jobs in February, and of job losses since February, by industry



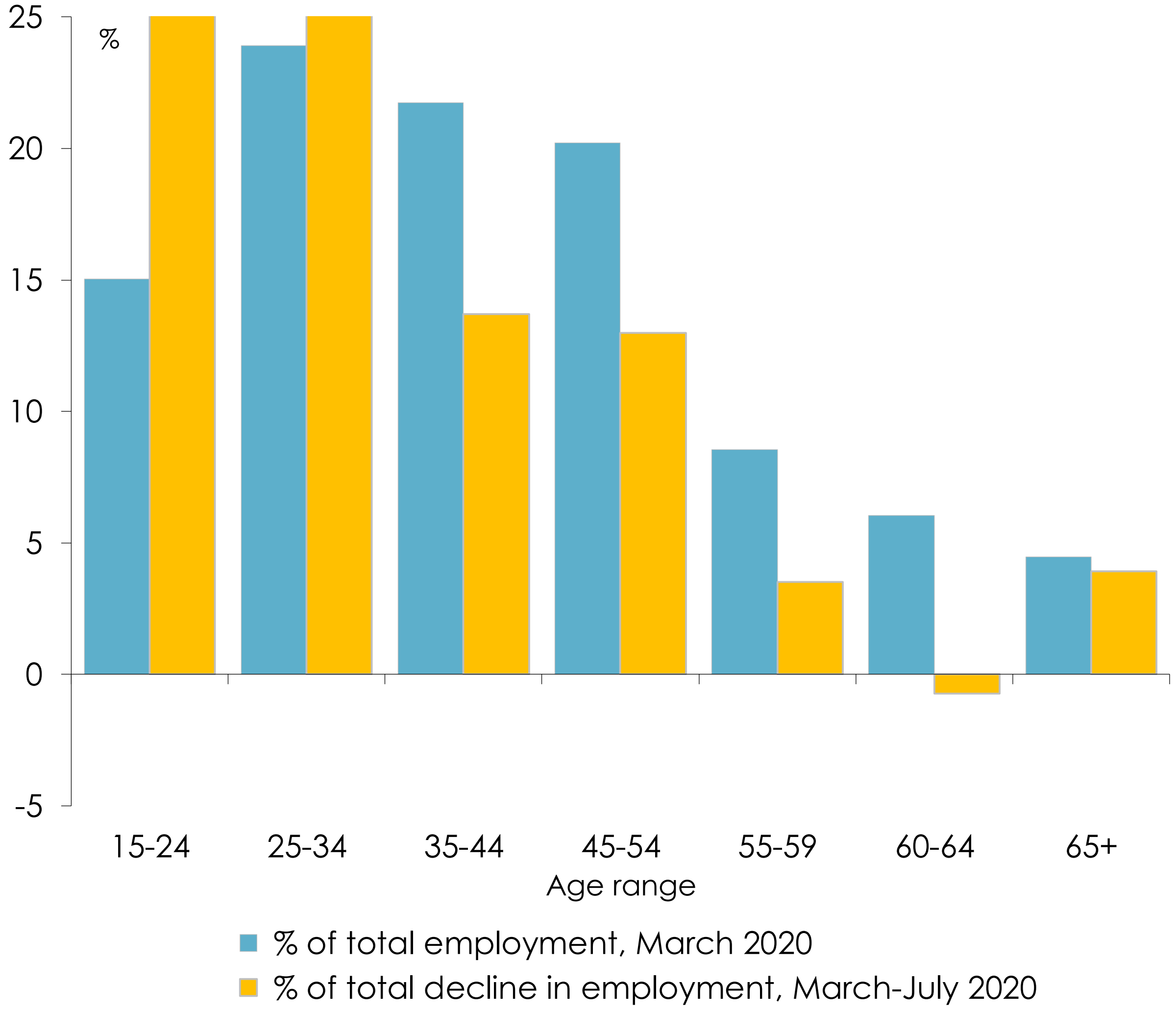
Note: Data depicted in these charts are not seasonally adjust. "nm" = "not meaningful", because employment of women in the industry thus marked either increased between February and May 2020; or fell despite total employment in that industry rising between February and May.
Source: ABS, *Labour Force, Australia, Detailed, Quarterly*, May 2020.

People aged 15-34 accounted for 39% of total pre-pandemic employment but have experienced 66% of the jobs lost since March

Change in employment, March-July 2020, by age range



Share of total job losses between March and July 2020 and share of total employment in March, by age group



Source: ABS, *Labour Force, Australia - Detailed*, July 2020; Corinna.

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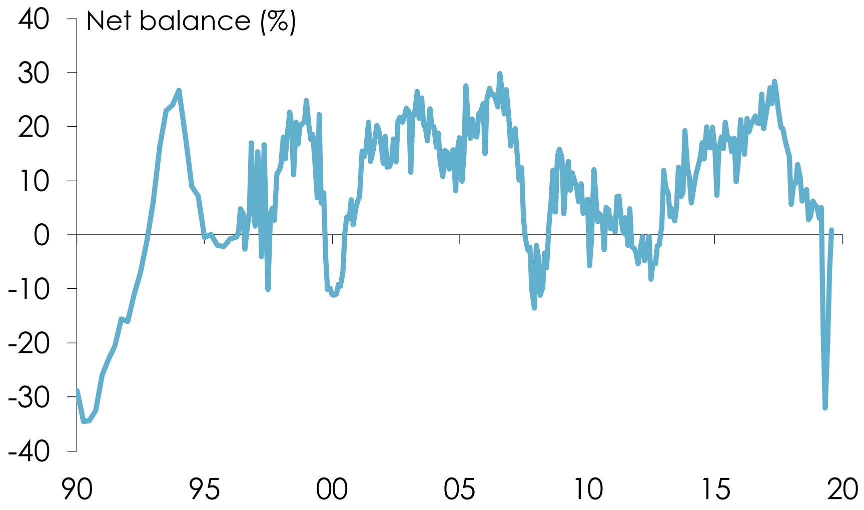
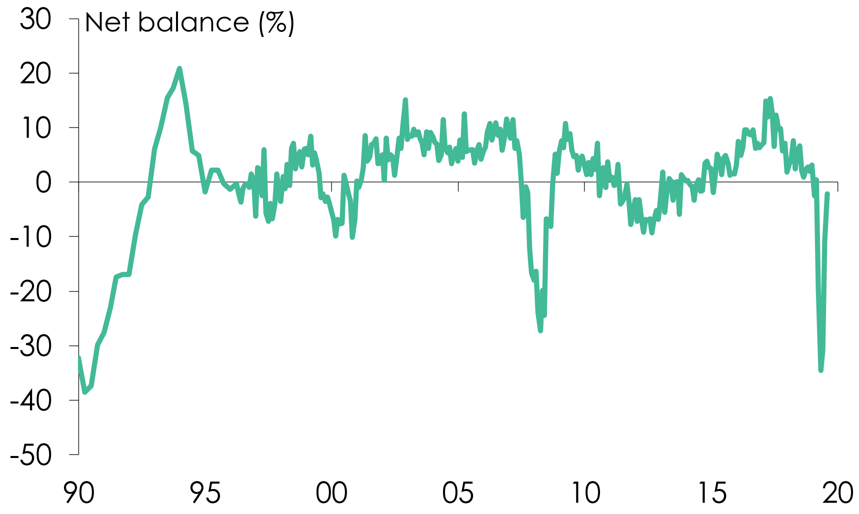
All of the components of the NAB monthly survey improved a bit further in July, after strong gains from a very low base in June

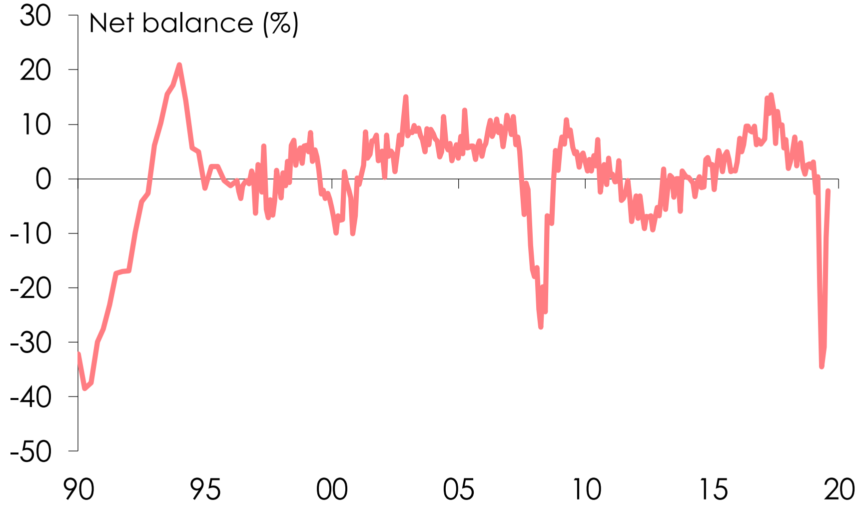
Trading conditions



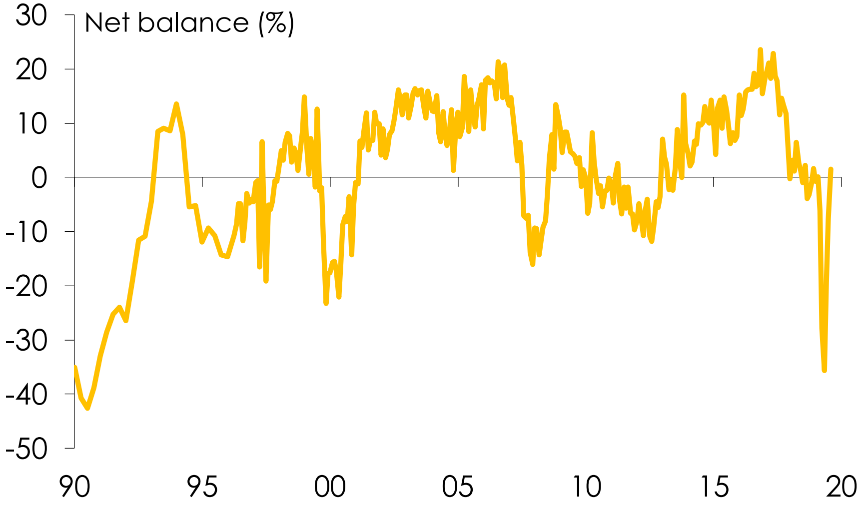
Forward orders



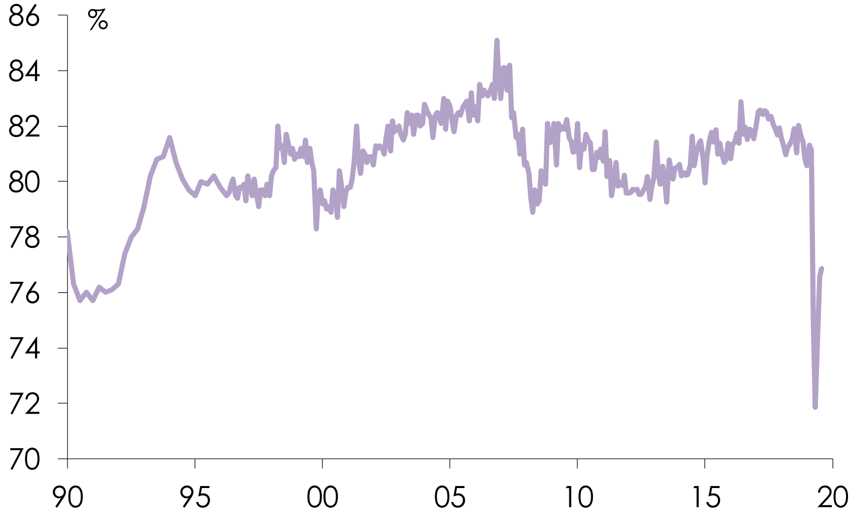
Employee hiring intentions



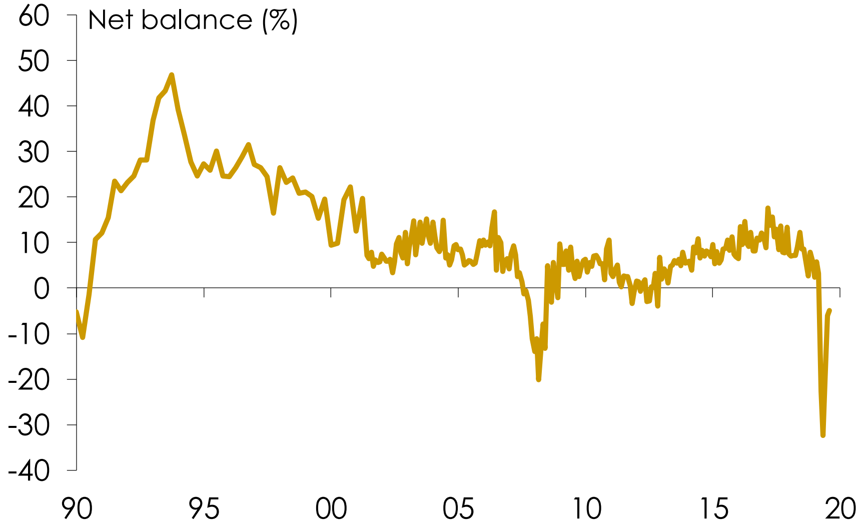
Profitability



Capacity utilization



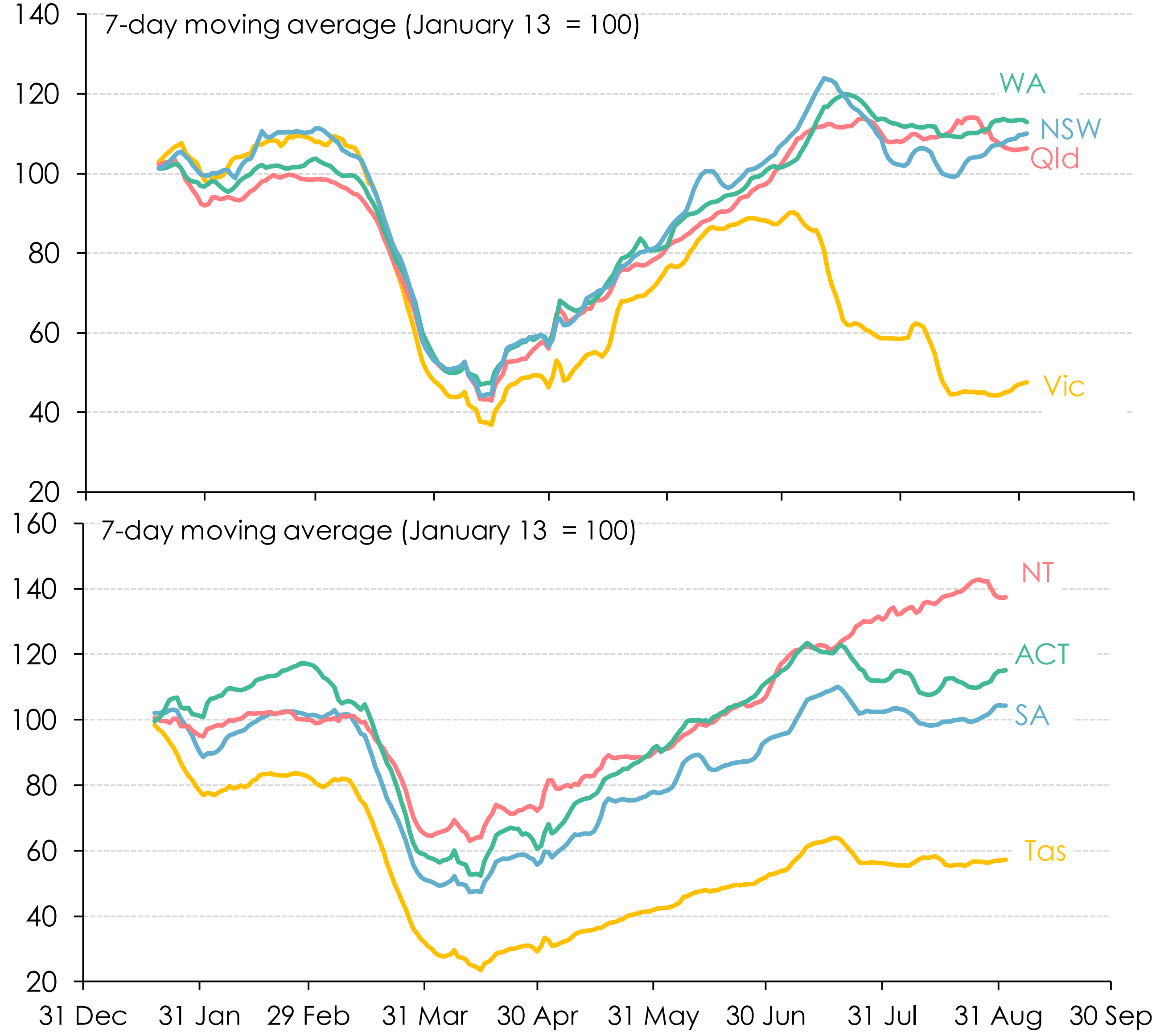
Capital expenditure intentions



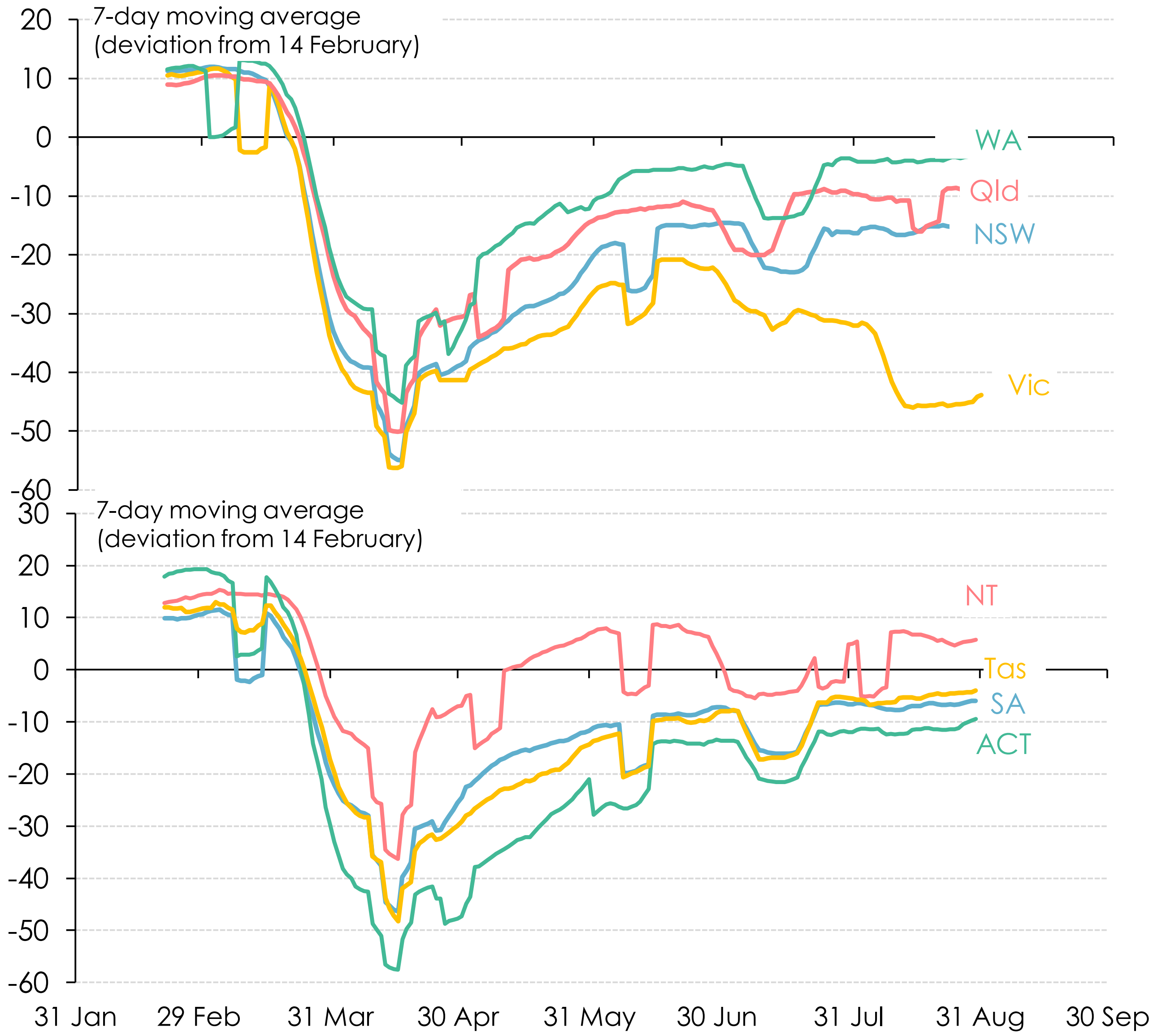
Note: Quarterly data up to March 1987 (May 2002 for capex intentions), monthly thereafter (latest data July 2020 – note that the July survey was conducted before the announcement of 'stage 4' restrictions in Victoria. *Source:* National Australia Bank *Monthly Business Survey* July 2020.

The impact of Victoria's 'stage 4' lockdown is clear from mobility measures

Time spent driving, by State and Territory



Time spent working, by State and Territory



Note: these data will reflect normal seasonal variations in activities as well as the effects of government restrictions and individual responses to the risks posed by the virus. *Sources:* Apple Mobility Trends Reports (data up to 2nd September); Google Community Mobility Reports (data up to 30th August).

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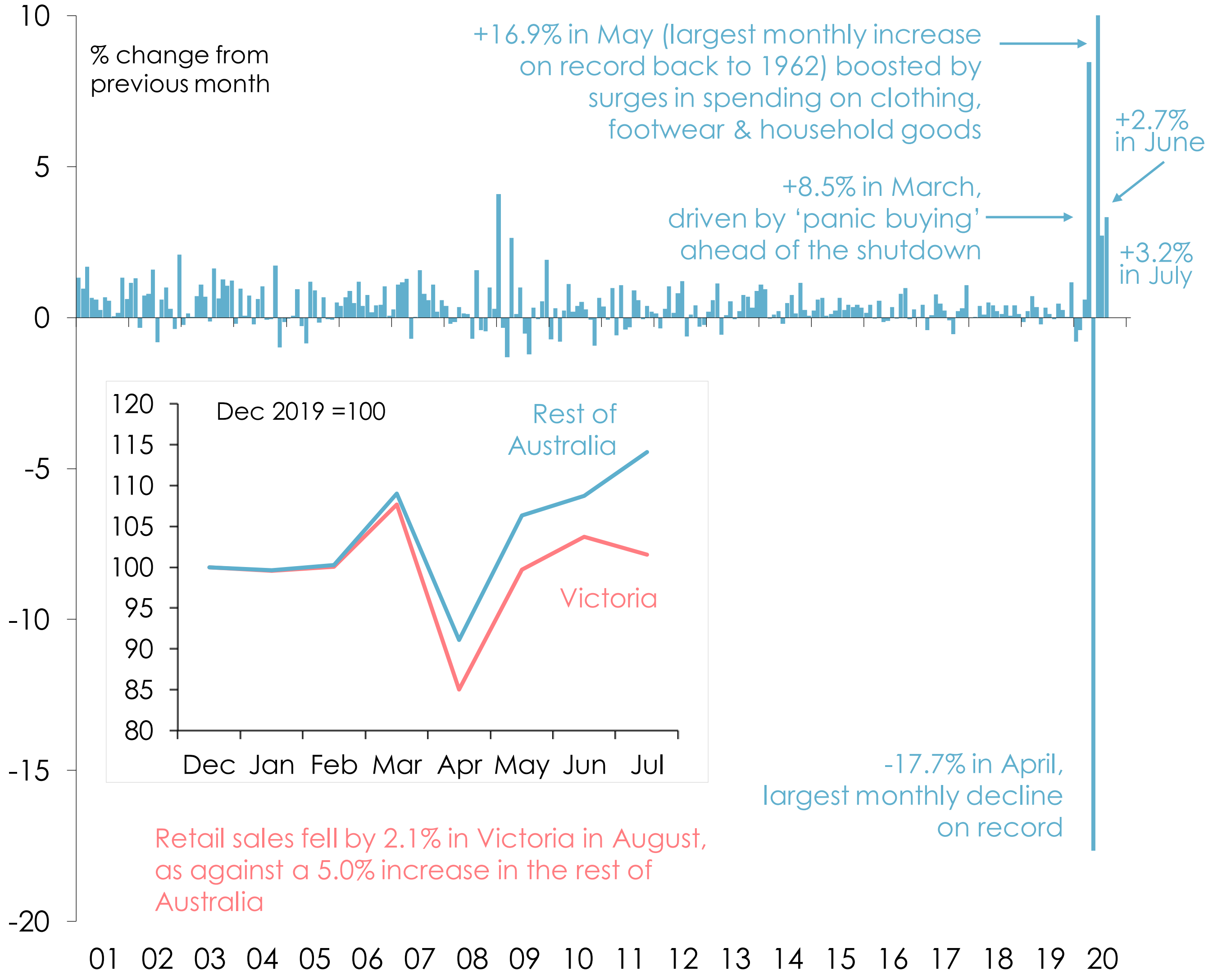
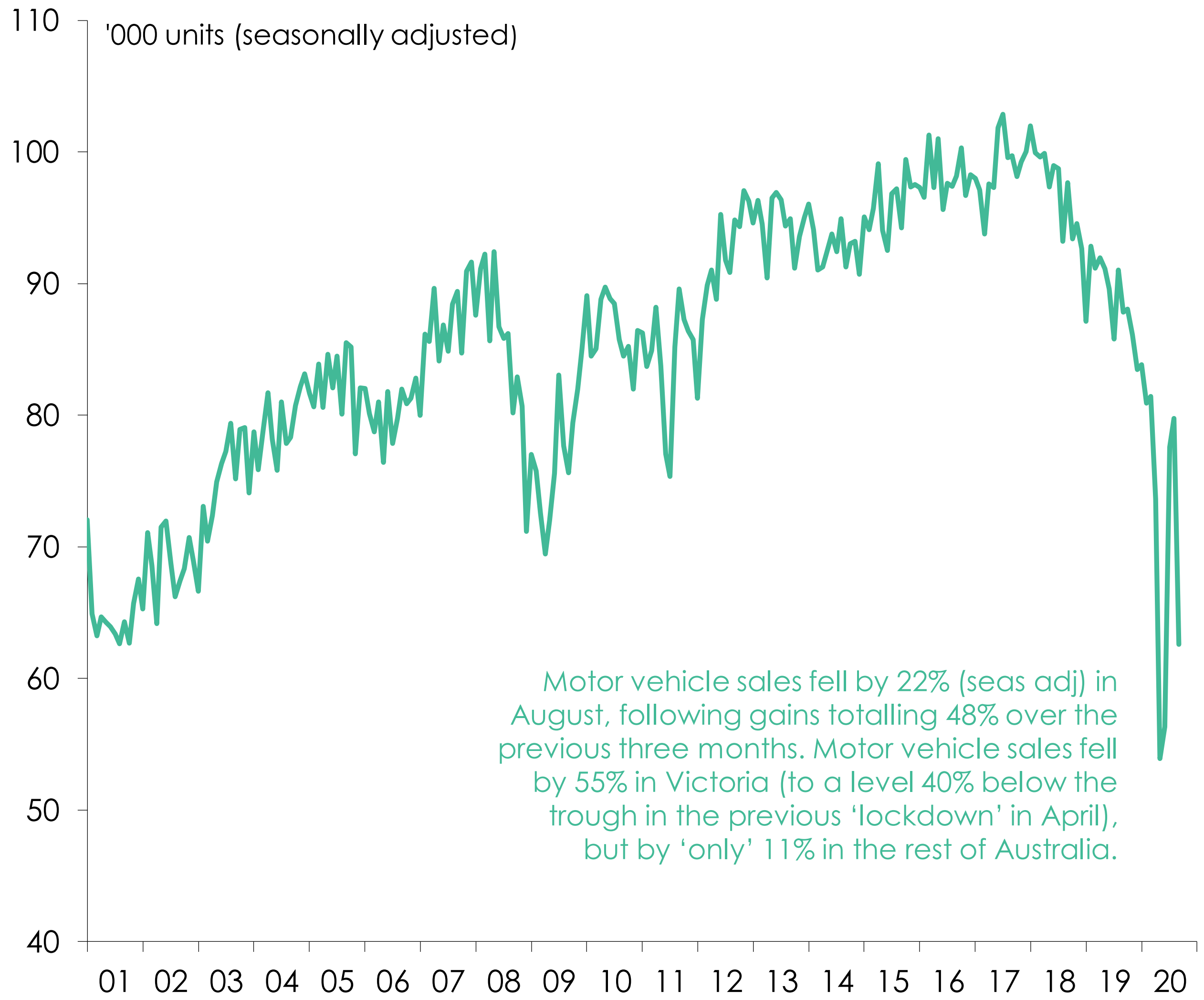
Retail sales rose 3.2% in July (despite a 2% fall in Victoria), while motor vehicle sales fell 22% in August (dragged down by a 55% slump in Victoria)

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.

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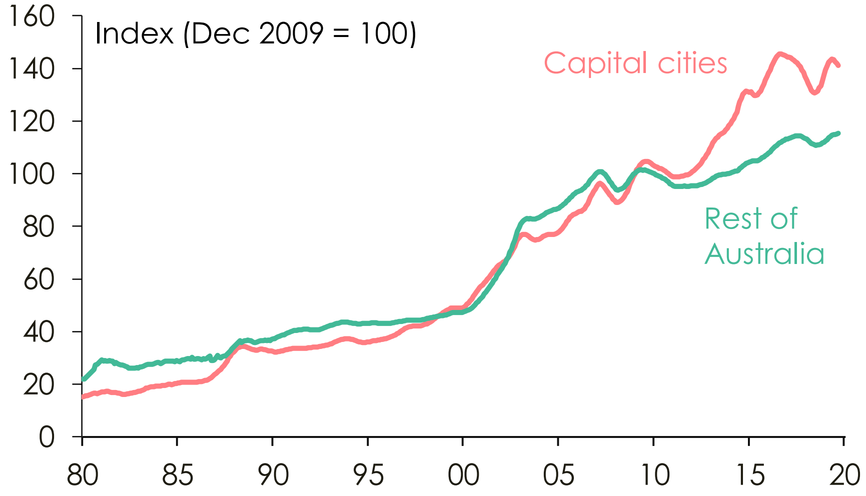
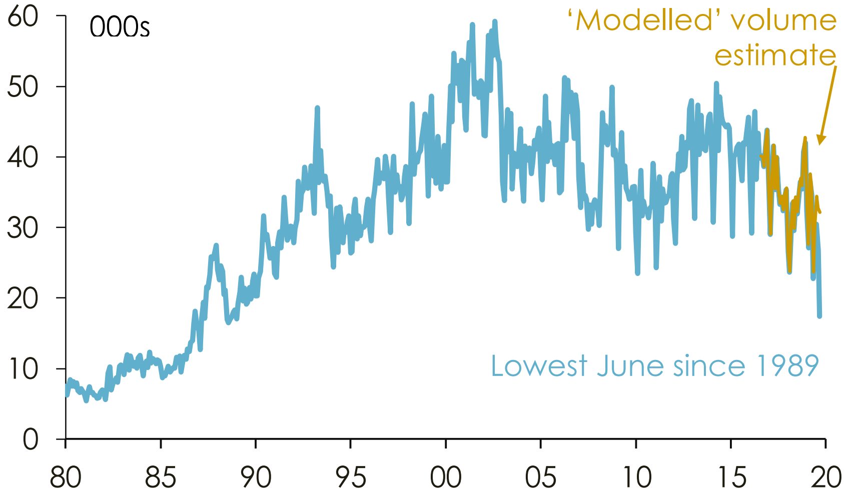
Property prices fell by an average of 1.3% from April to August, on thin volumes, with bigger falls in cities than regions, and in ‘top tier’ properties

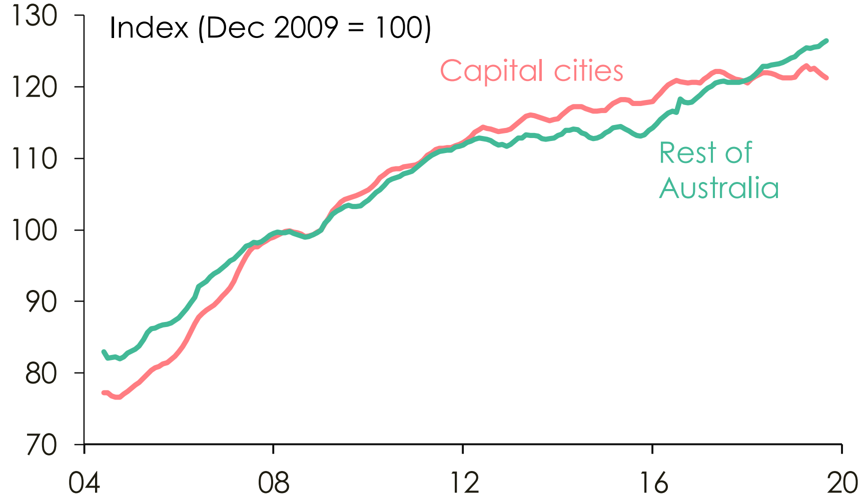
Residential property prices



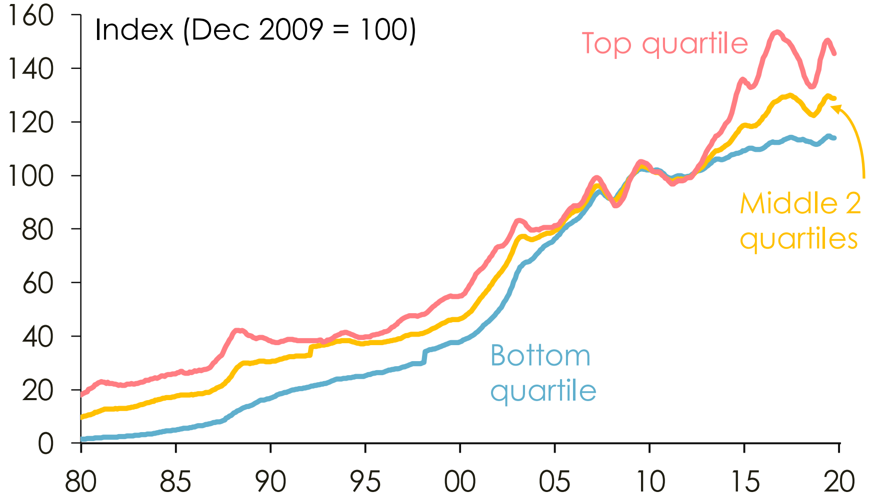
Residential property sales volumes



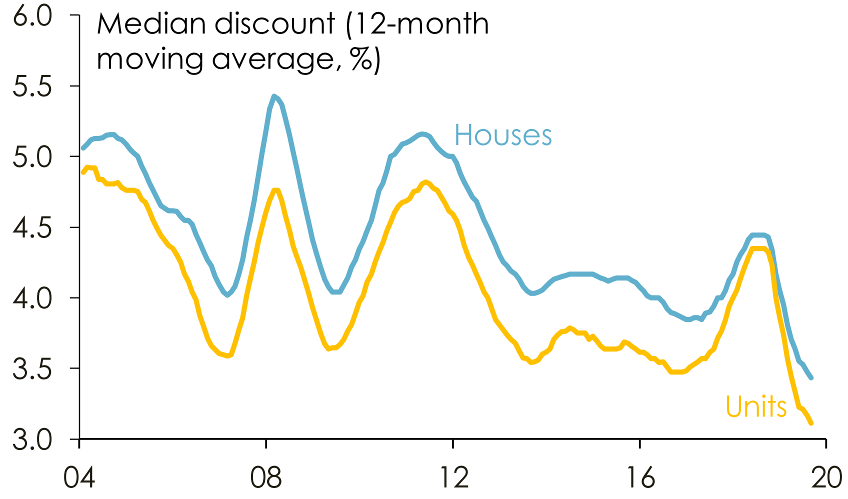
Residential rents



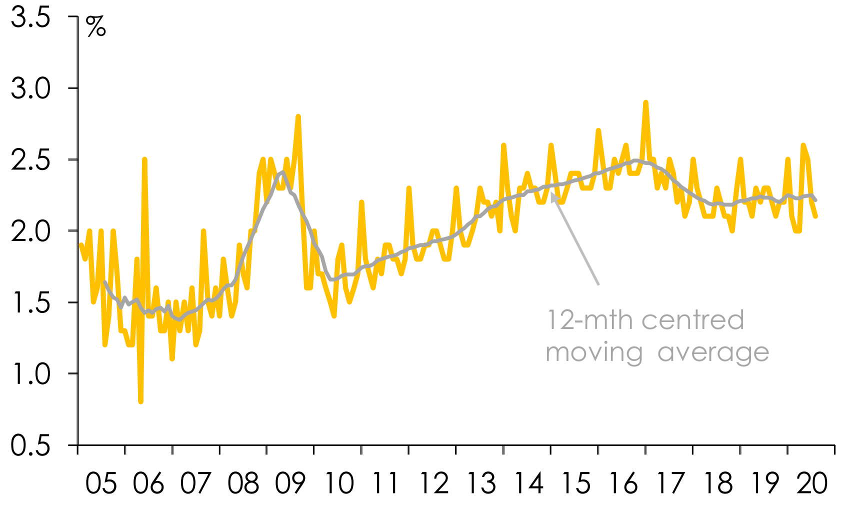
Property prices by tier



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). Latest data are for August 2020. *Sources:* CoreLogic; SQM Research.

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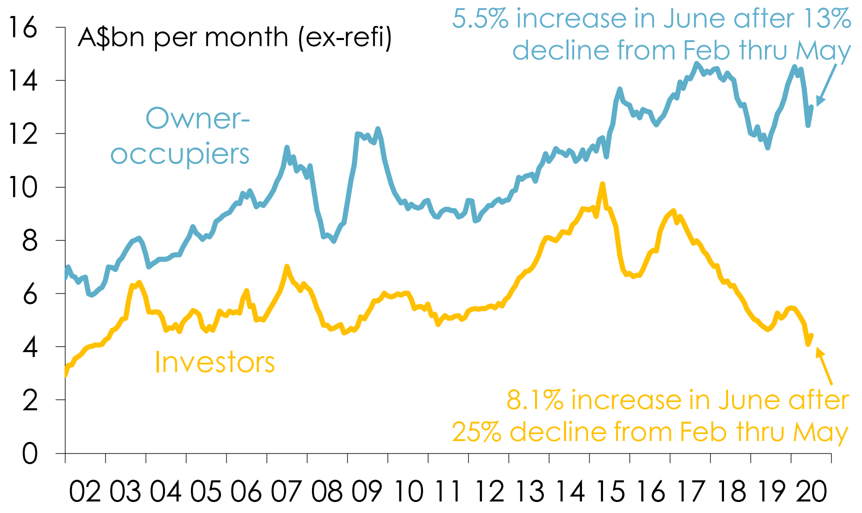
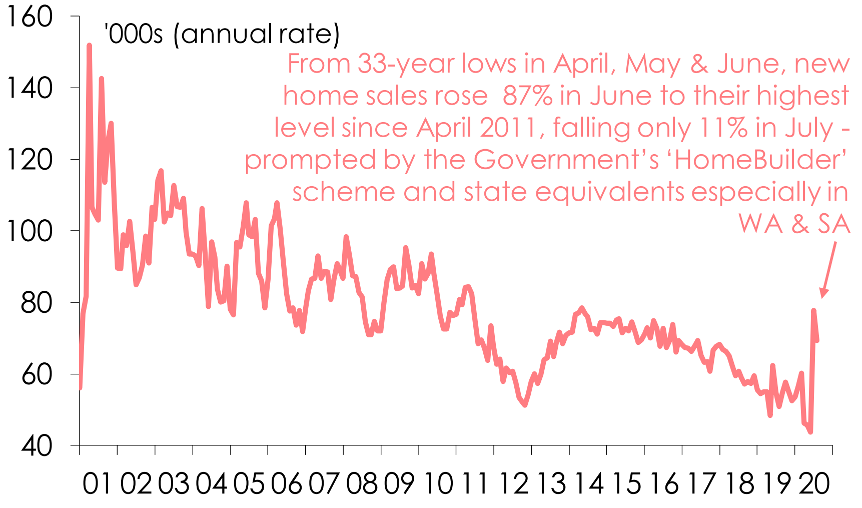
Residential building activity will turn down over the next few months and longer-term will be adversely affected by sharply lower immigration

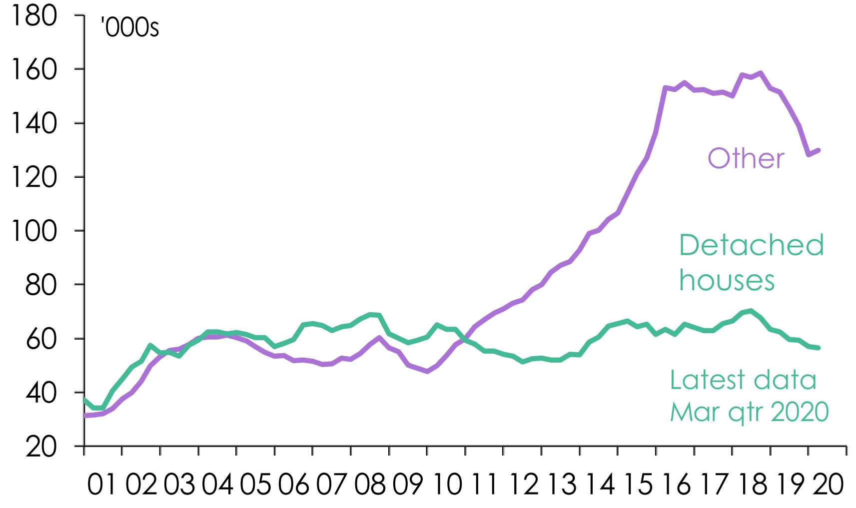
Housing finance commitments



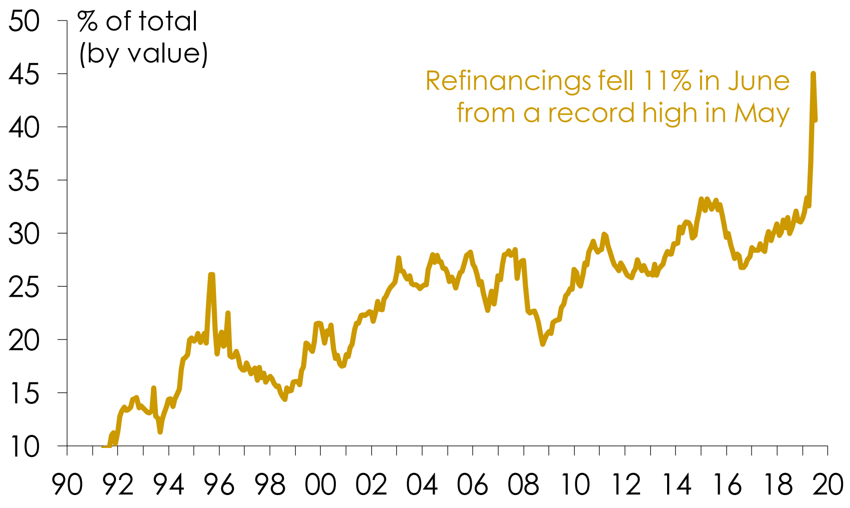
Large builders' new home sales



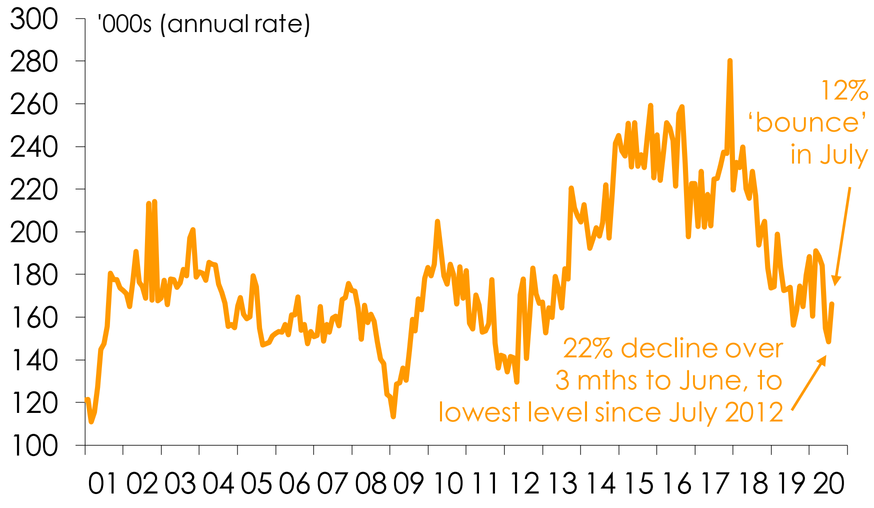
Dwellings under construction



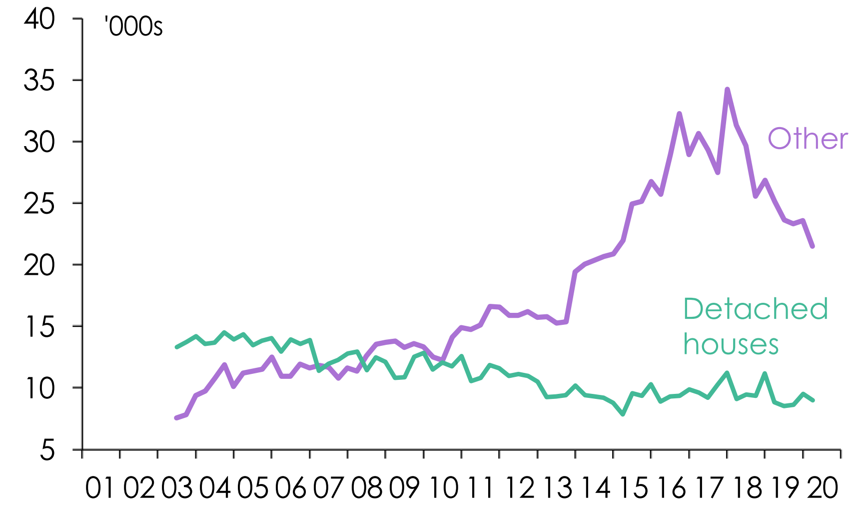
Refinancings as pc of total



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.

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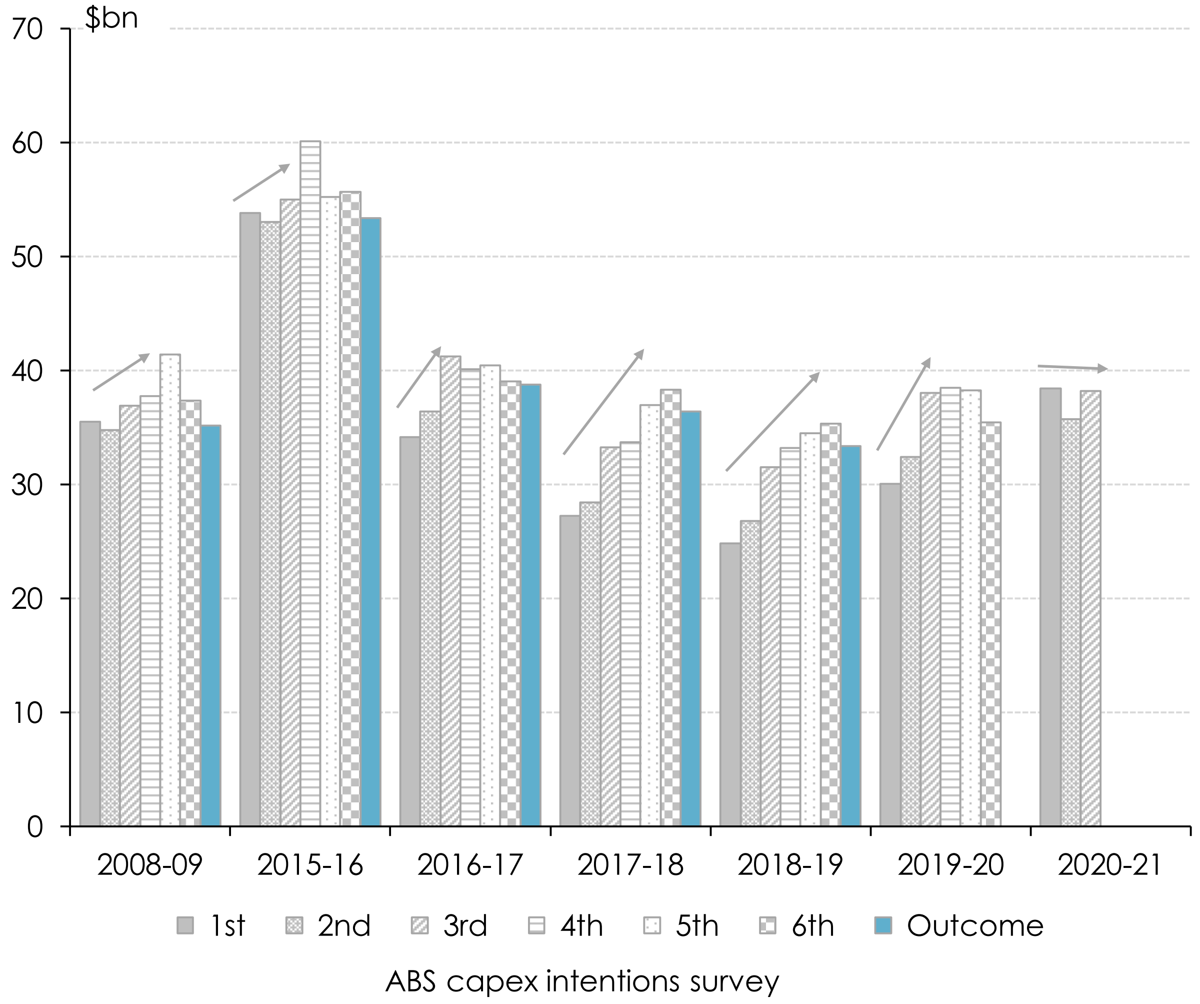
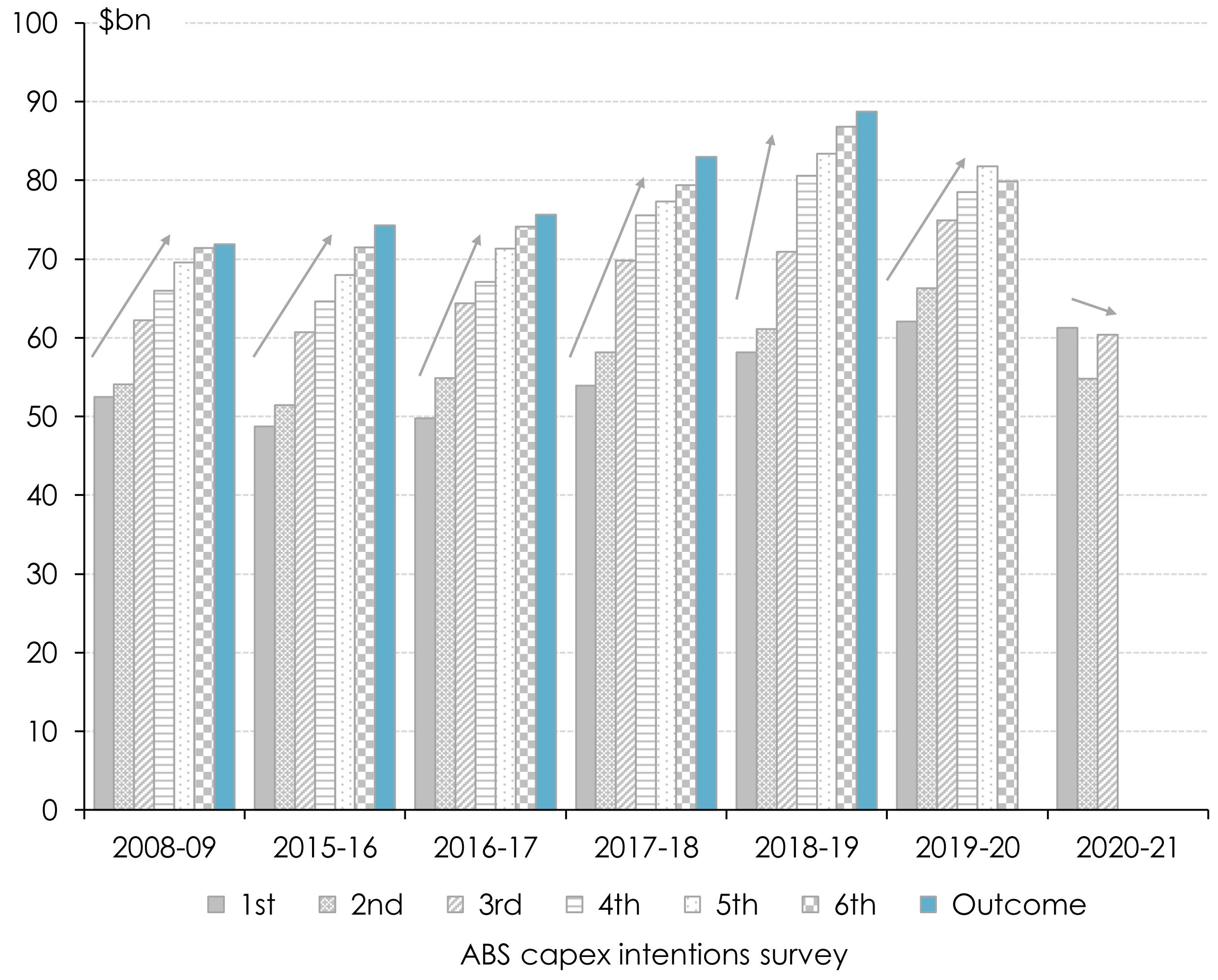
Business capex intentions for the current financial year are lower than they were six months ago – for the first time in at least 33 years

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.

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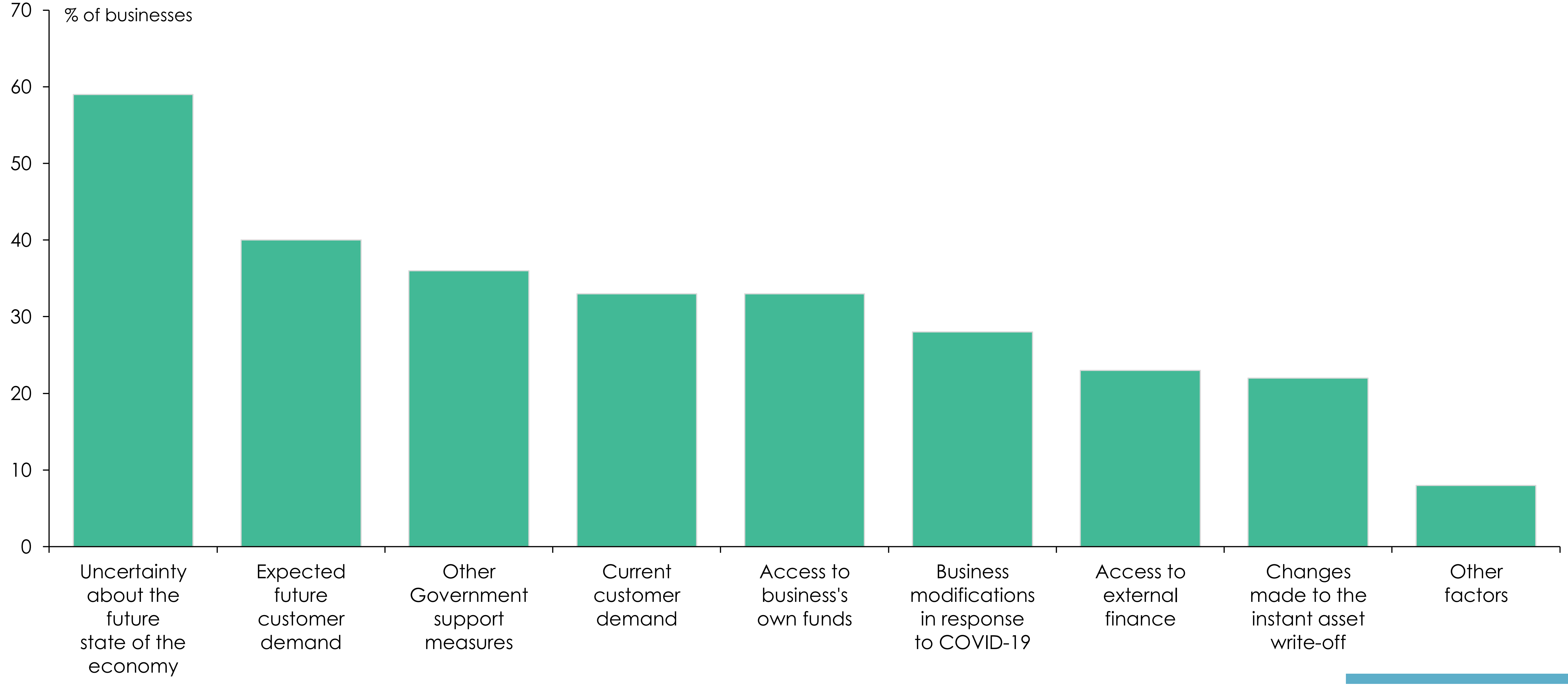
Uncertainty about the economic outlook is the most important factor weighing on business capex decisions

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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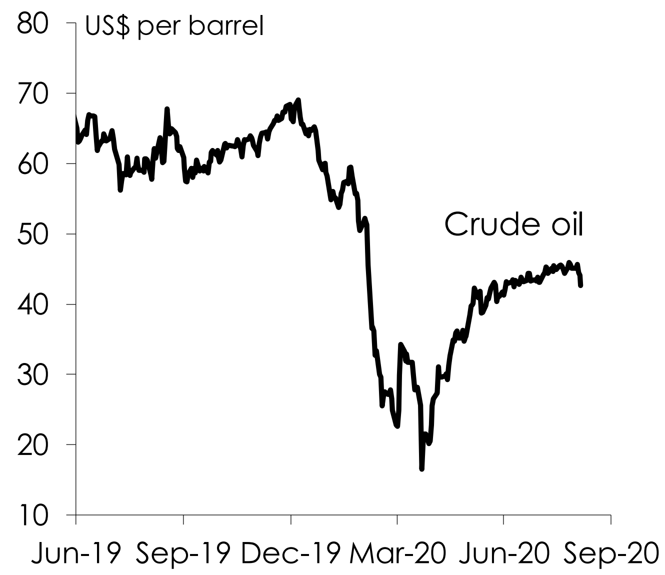
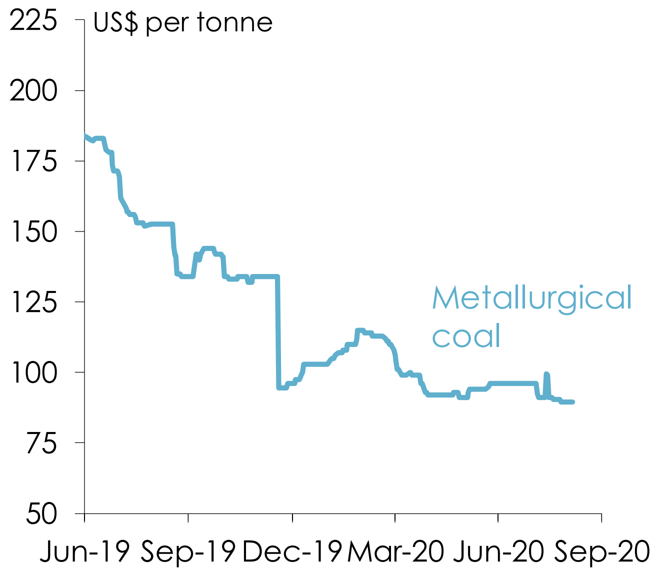
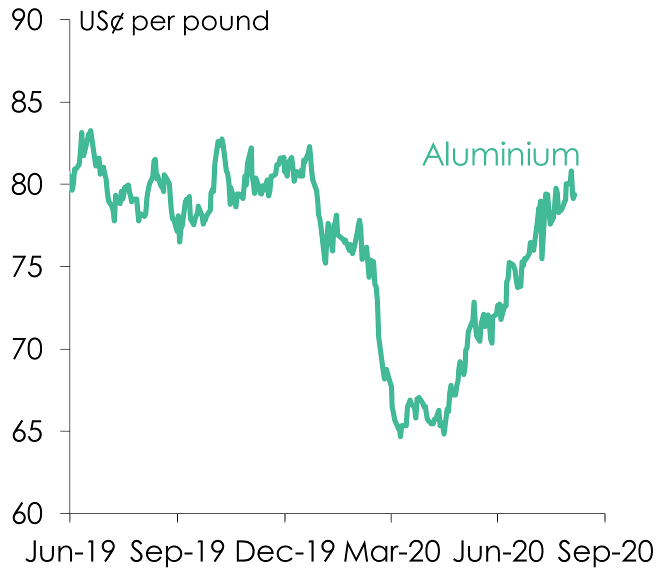
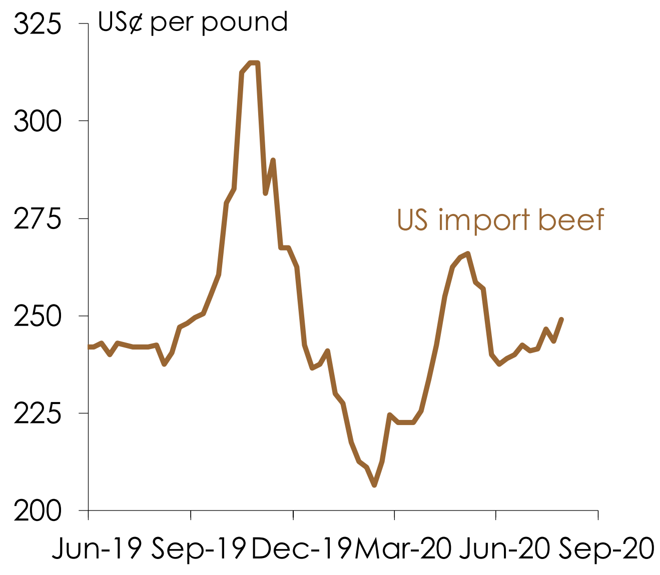
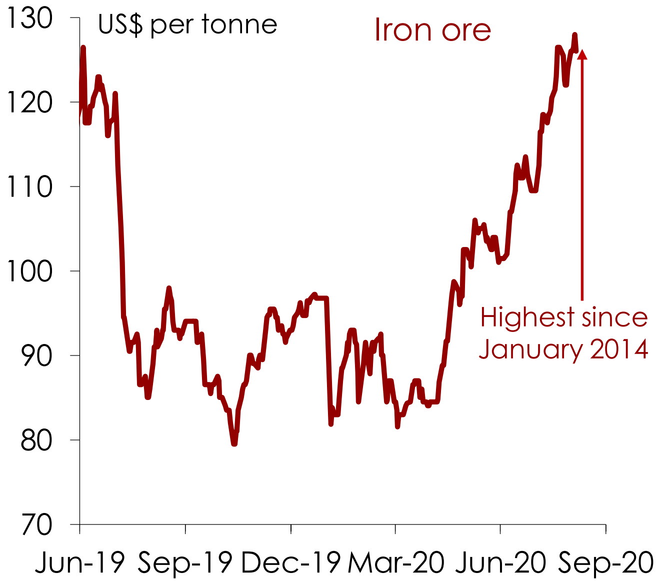
Iron ore prices hit new 7½-year highs this week, most base metals were a little firmer, but wool prices fell another 9% to an 11-year low

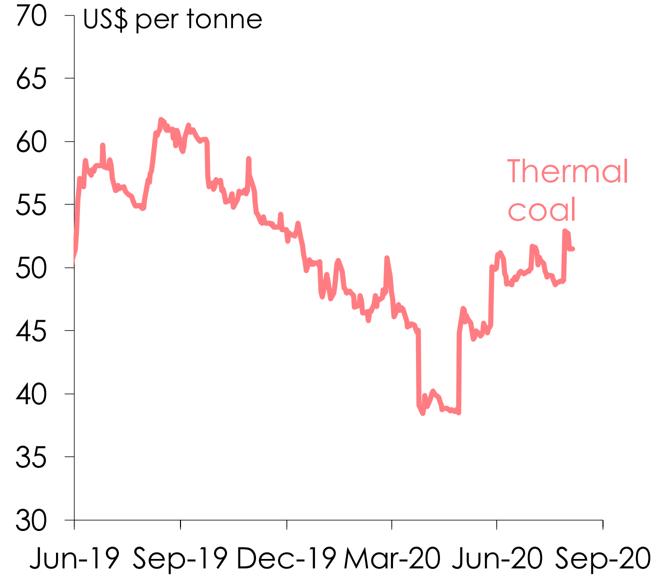


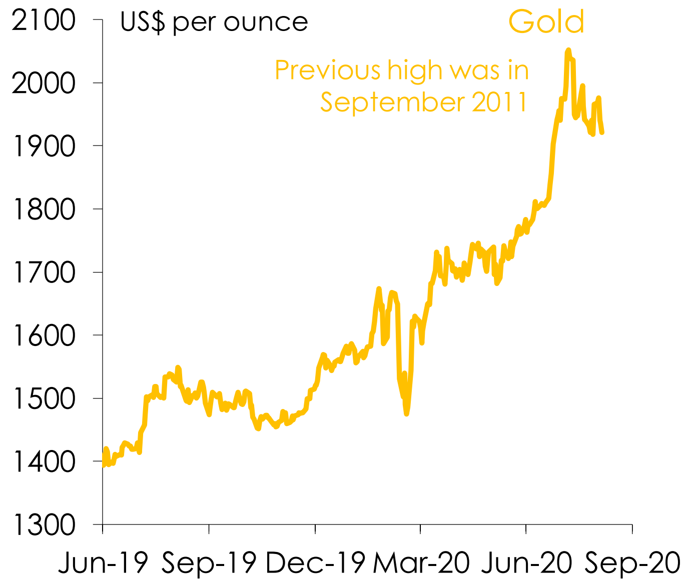


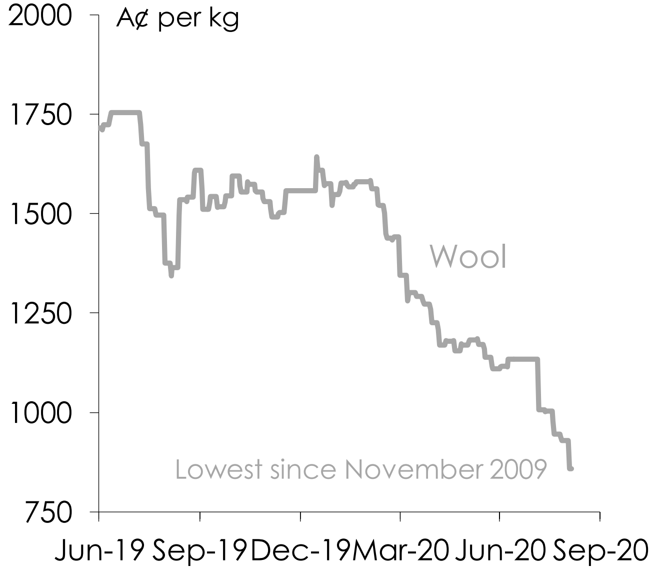








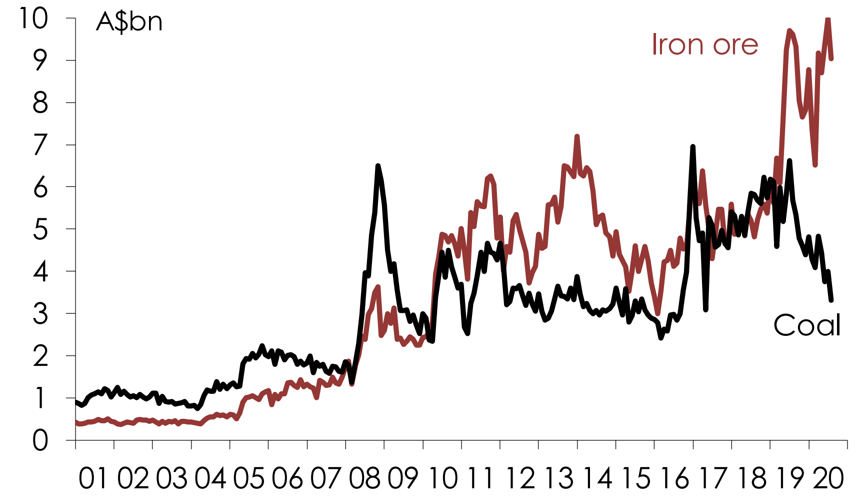




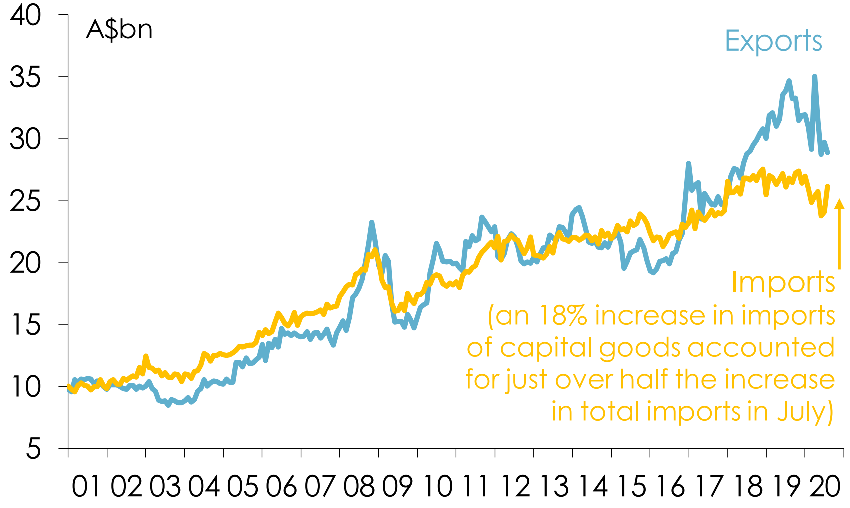
Sources: Refintiv Datastream; Meat & Livestock Australia; Australian Wool Innovation. Data up to 4th September.

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%

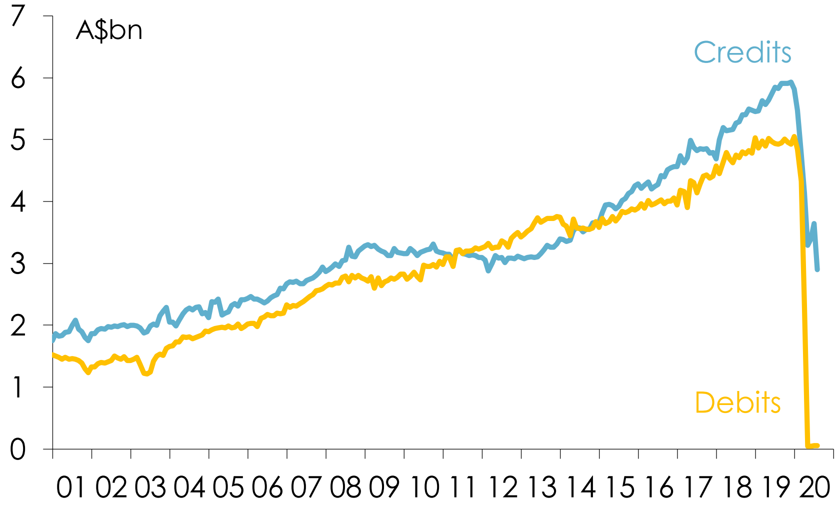
Iron ore and coal exports



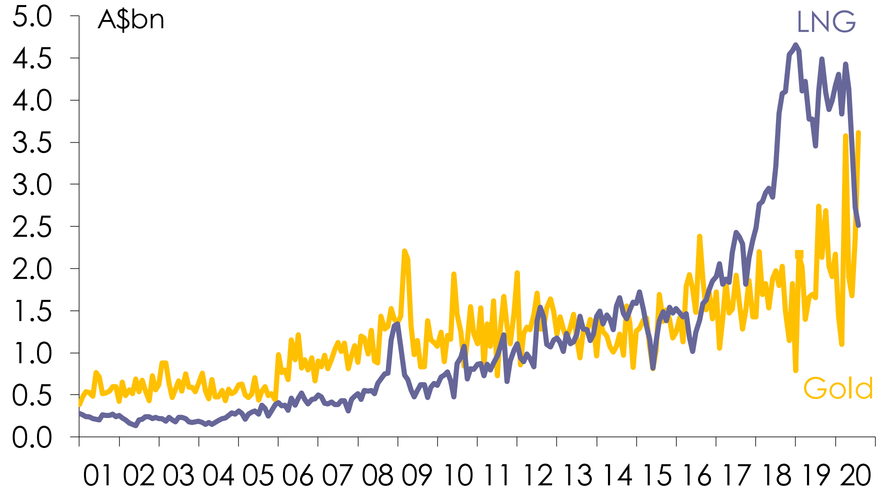
Merchandise exports and imports



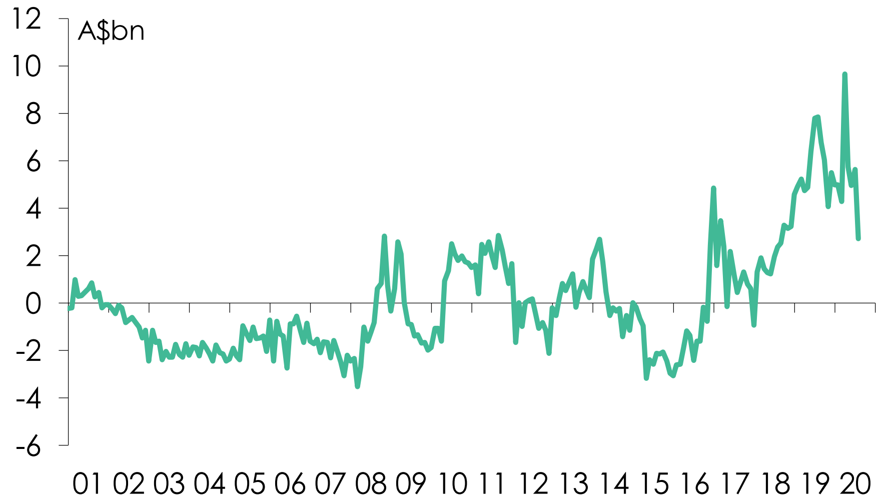
Tourism-related services trade



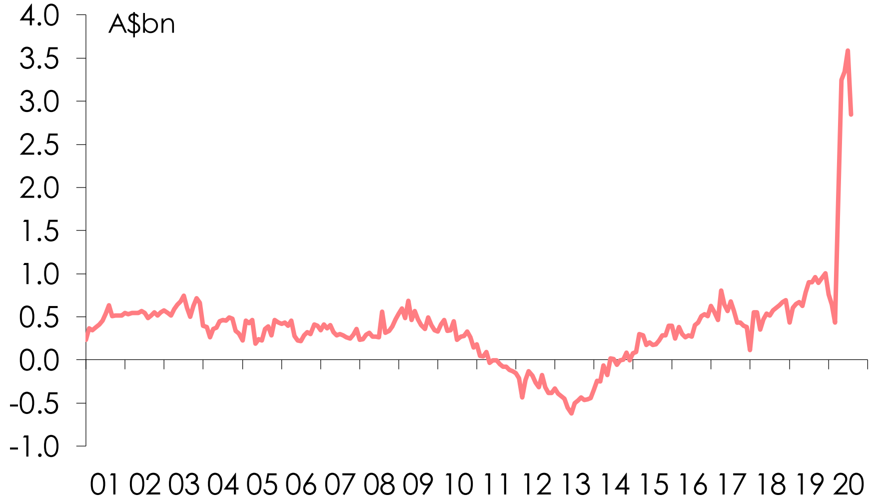
LNG and gold exports



Merchandise trade balance



Tourism services trade balance



Source: ABS, International Trade in Goods and Services, Australia. Latest data are for July.

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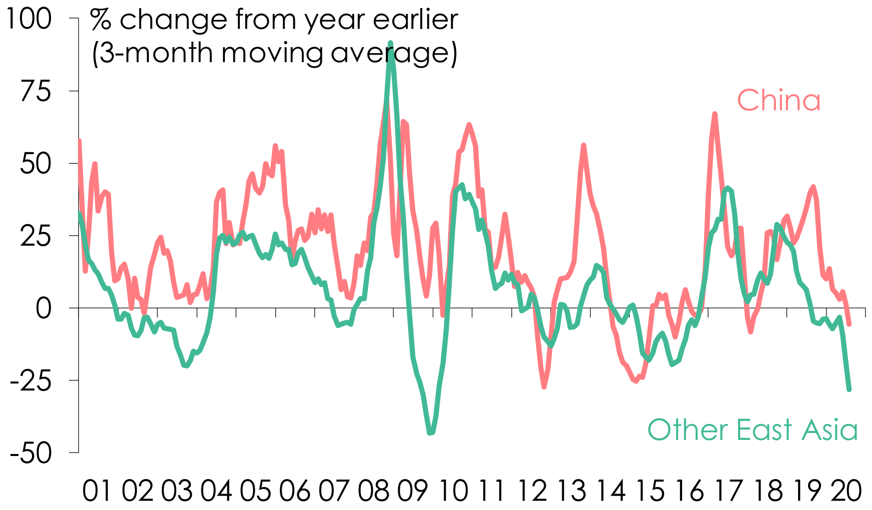
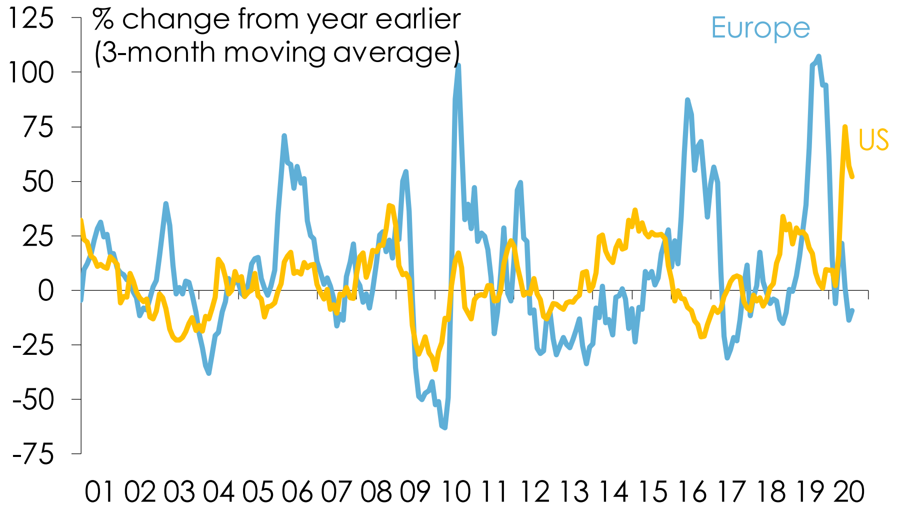
Despite strong iron ore exports, Australia's exports to China are now below year-earlier levels, as are exports to other markets (apart from the US)

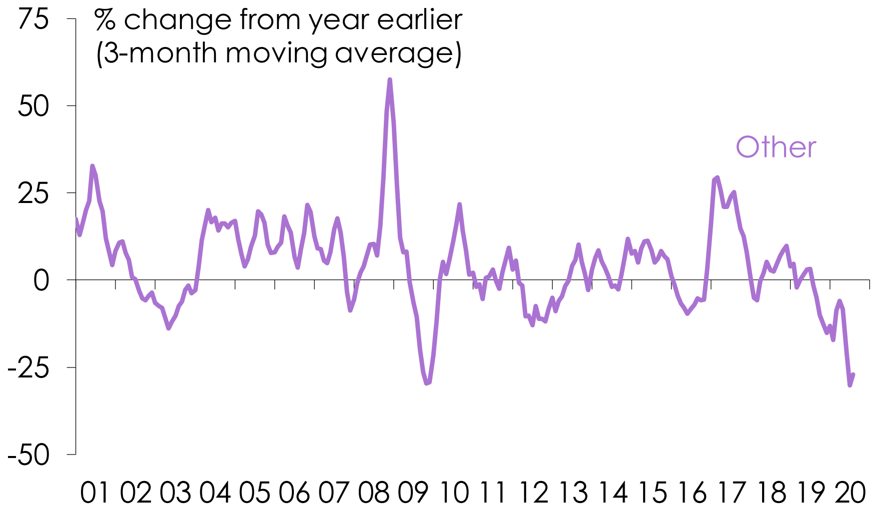
Merchandise exports – East Asia



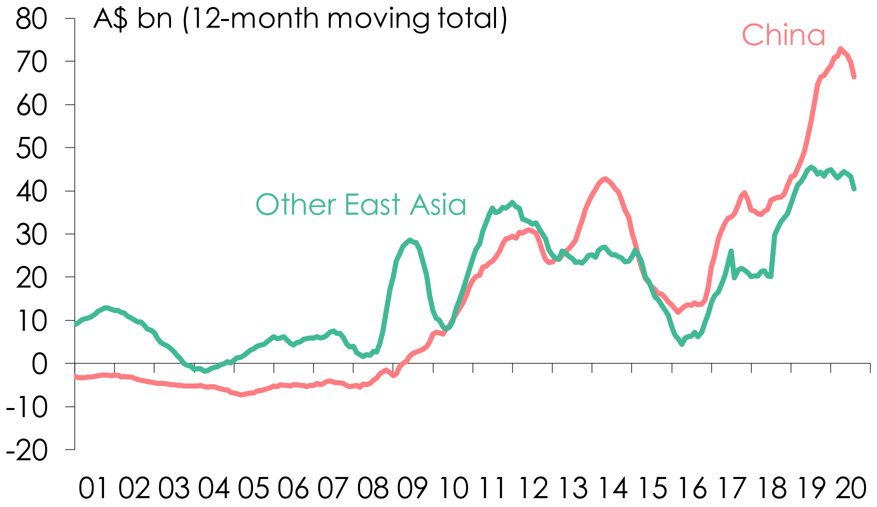
Merchandise exports – US & Europe



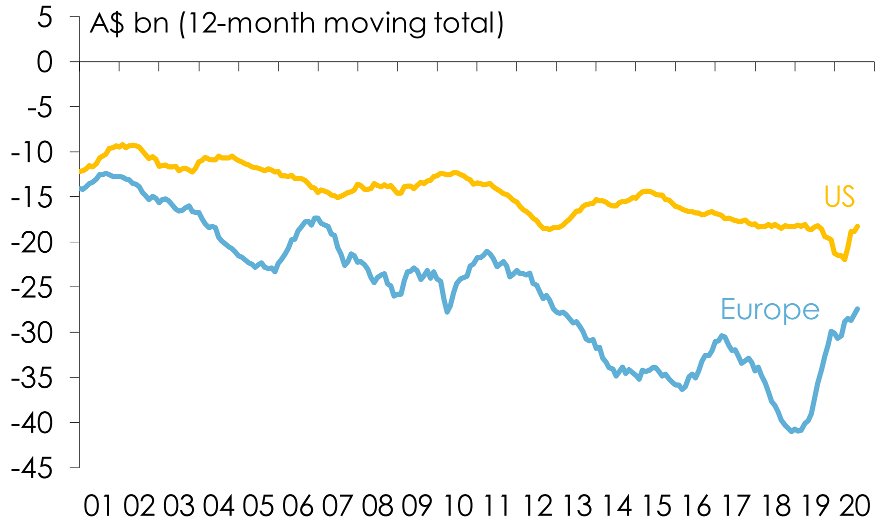
Merchandise exports – other



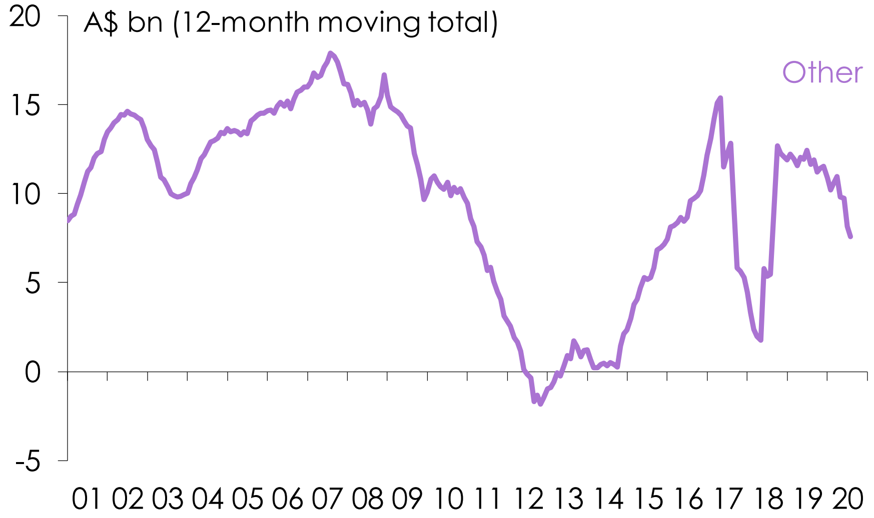
Goods trade balance – East Asia



Goods trade balance – US & Europe



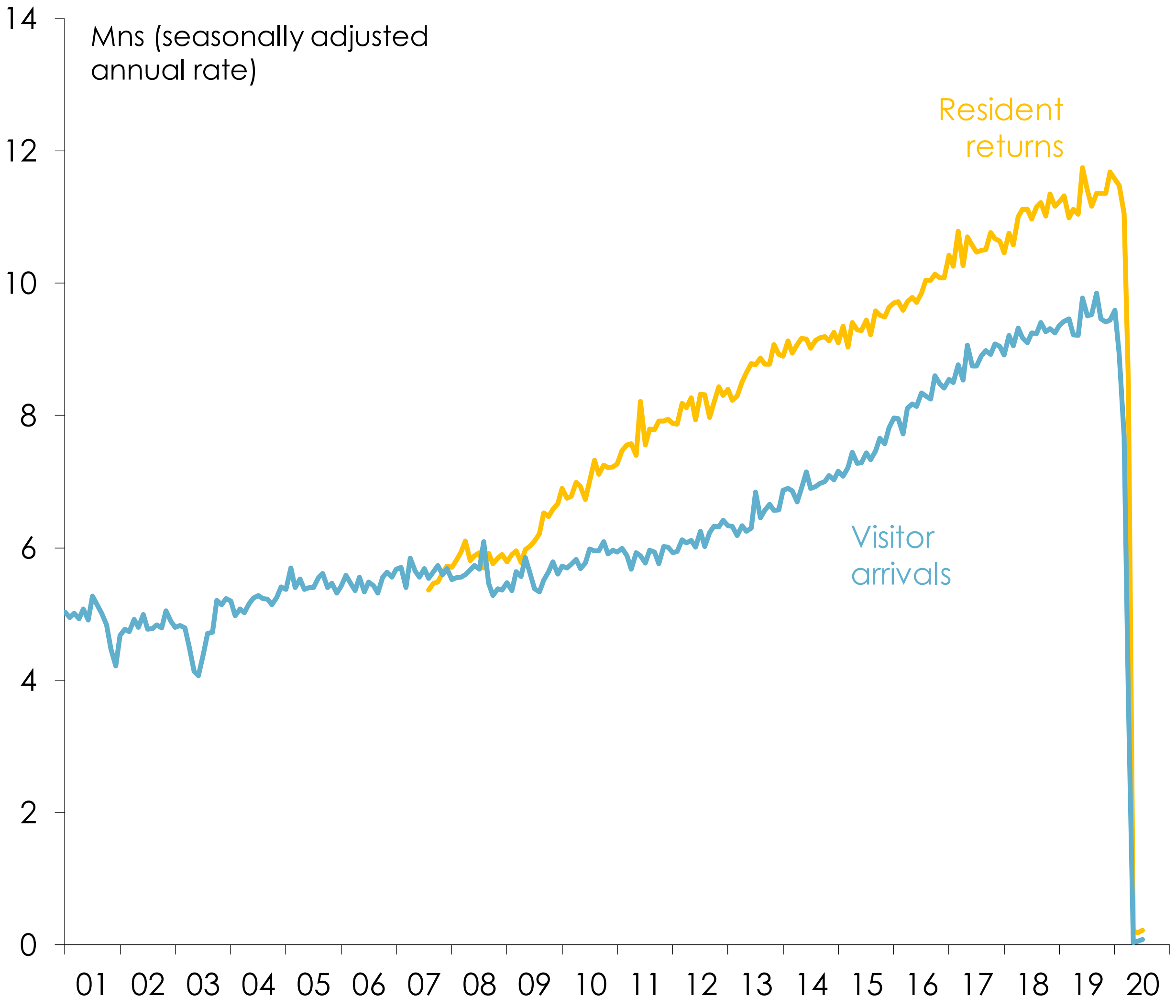
Goods trade balance – other



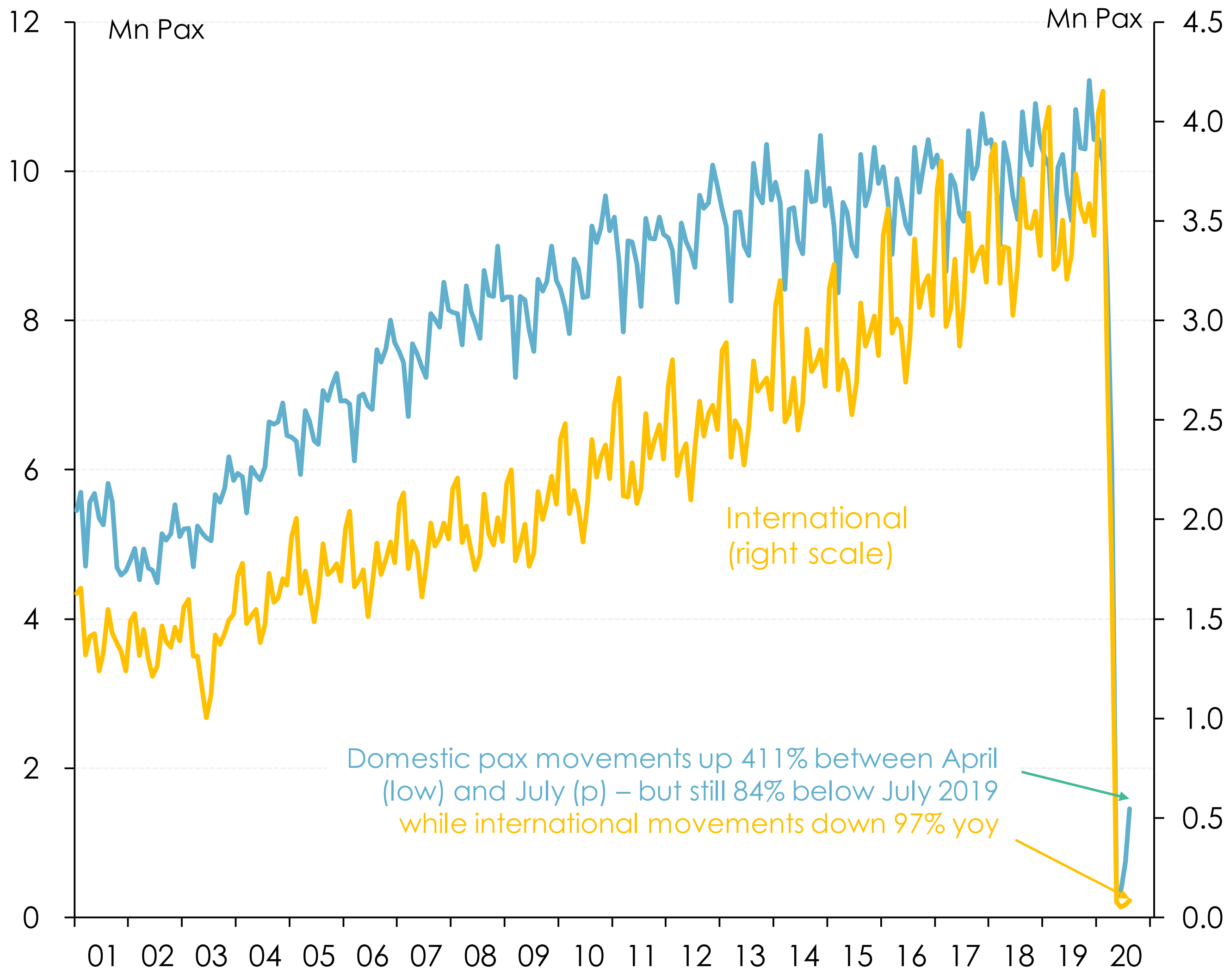
Note: 'Other East Asia' includes Japan, Korea, Taiwan, Hong Kong and ASEAN. 'Europe' includes the EU, UK and Switzerland. 'Other' includes India, New Zealand and the Pacific, Canada, Latin America, Africa, the Middle East and others not included in the foregoing. *Source:* ABS, International Trade in Goods and Services, Australia. Latest data is for July.

Tourism and aviation have been severely impacted by the closure of international and most state borders

Short-term visitor arrivals and resident returns



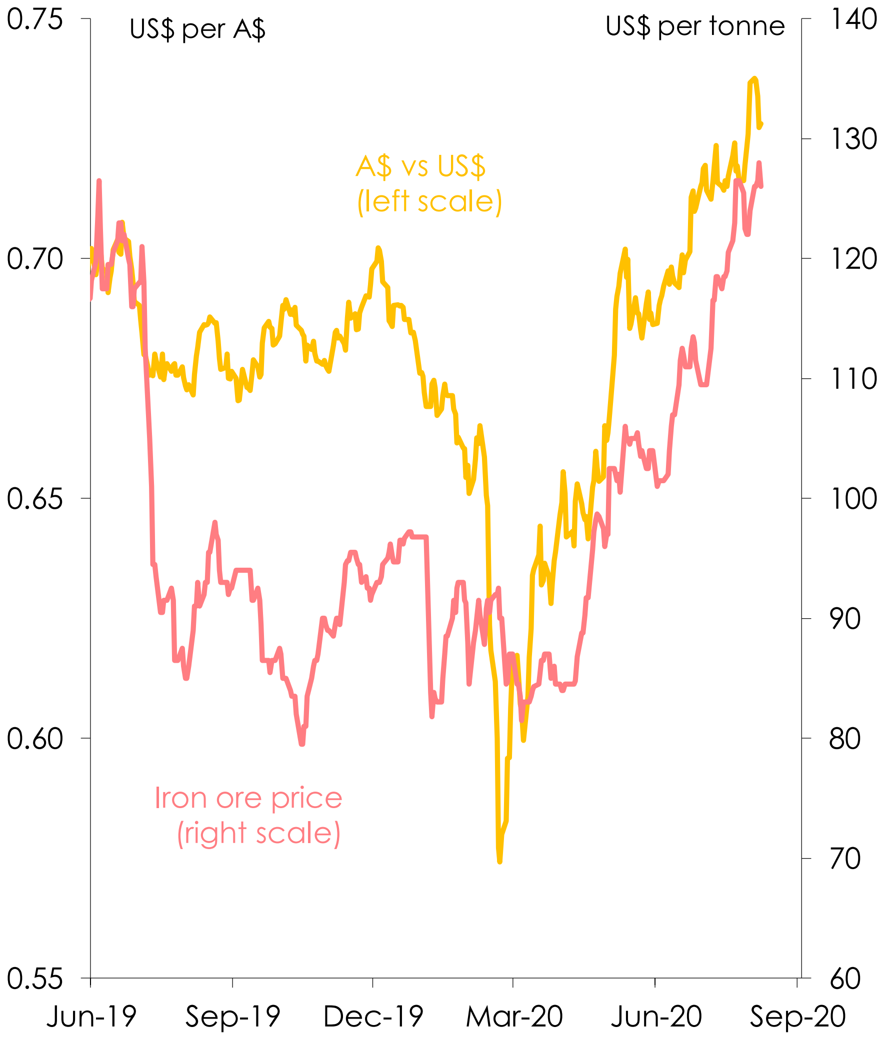
Airport passenger movements



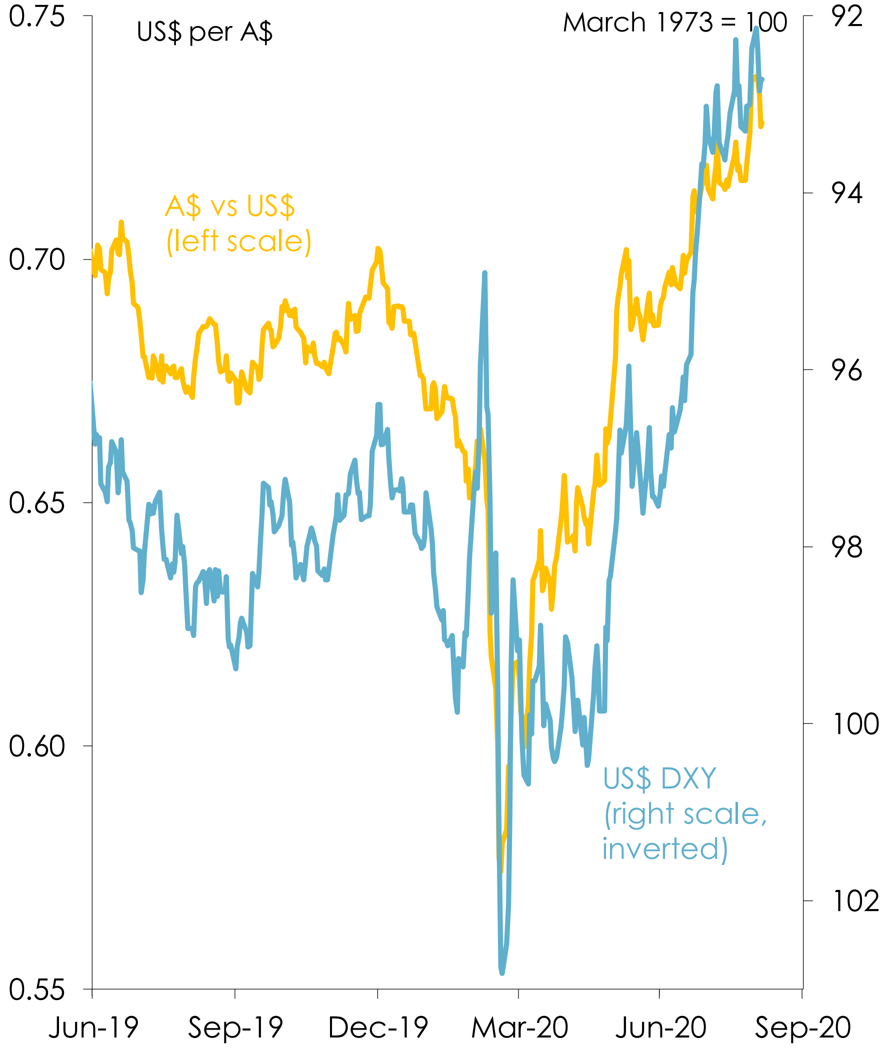
Note: The ABS has suspended publication of seasonally adjusted estimates of short-term visitor arrivals and resident returns, so published original estimates for April 2020 (and beyond) have been seasonally adjusted by Corinna using the same seasonal factors as for the corresponding month of 2019. Latest BITRE data on airport passenger movements are for June; July data have been extrapolated from data for Sydney Airport published by Sydney Airport Ltd.
Sources: ABS; Bureau of Industry, Transport and Resources Economics (BITRE); Sydney Airport Ltd; Corinna.

The A$ crashed to below US58¢ in late March but has since climbed back to reach US74¢ this time last week

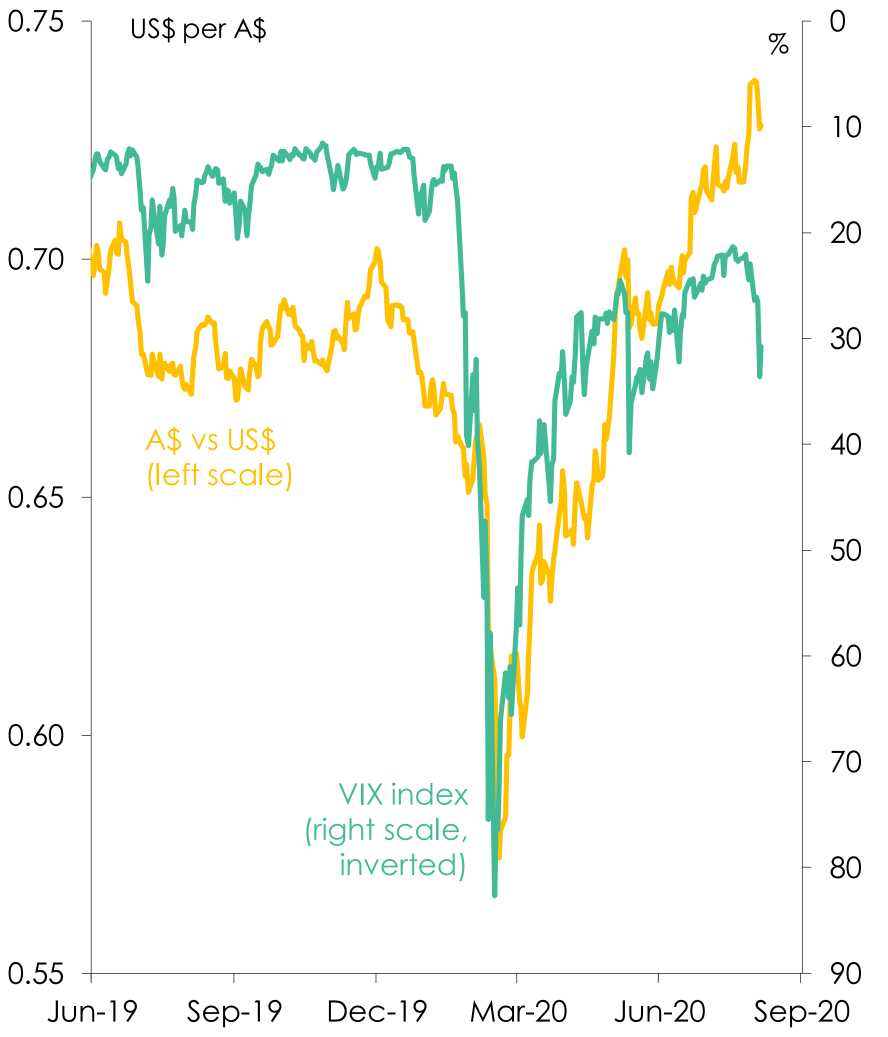
A$-US$ and spot iron ore prices



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



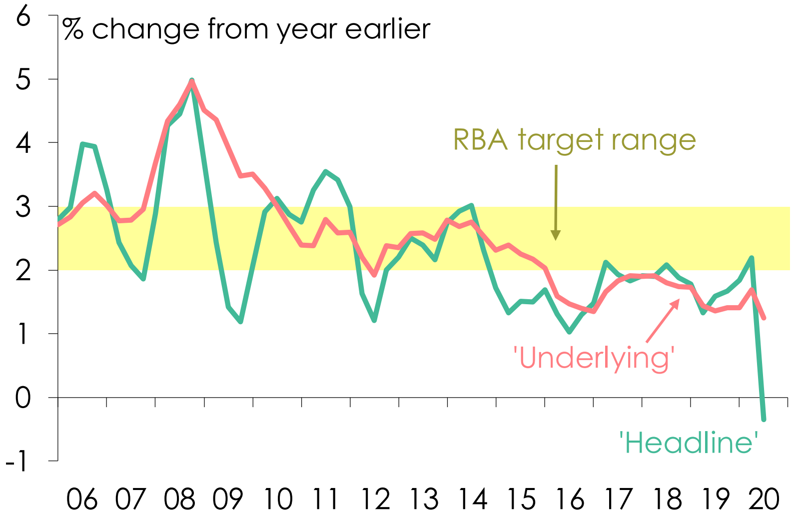
A$-US$ and US equity market volatility



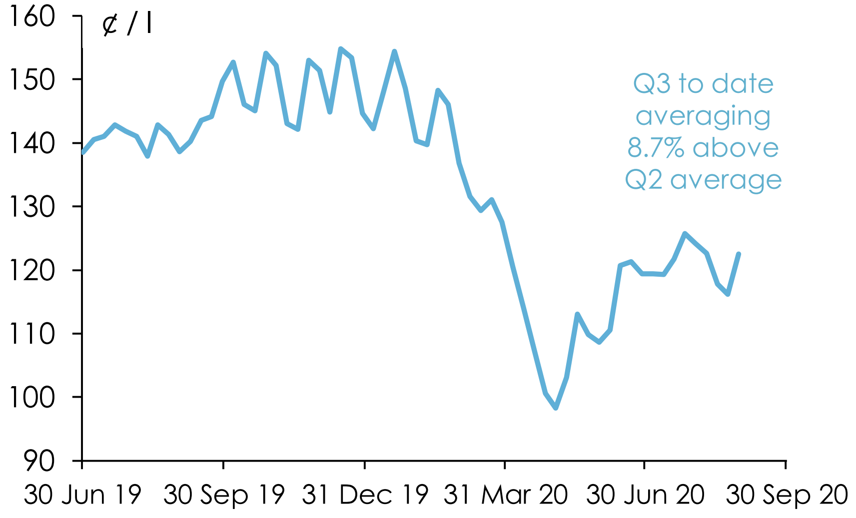
Note: The VIX index is a measure of the implied volatility of S&P500 options and is widely interpreted as an indicator of investor risk appetite or aversion.
Source: Refinitiv Datastream. Data up to 4th September.

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

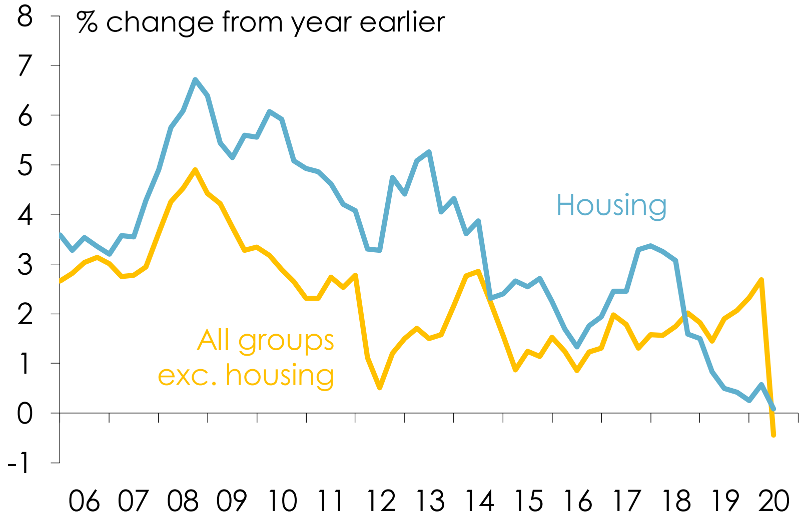
Consumer prices



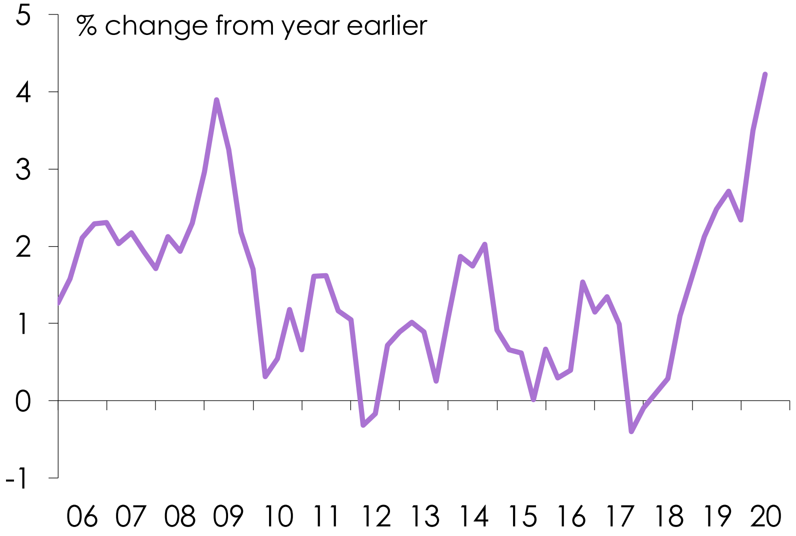
Retail petrol prices



Housing costs in the CPI



Retail sales implicit price deflator

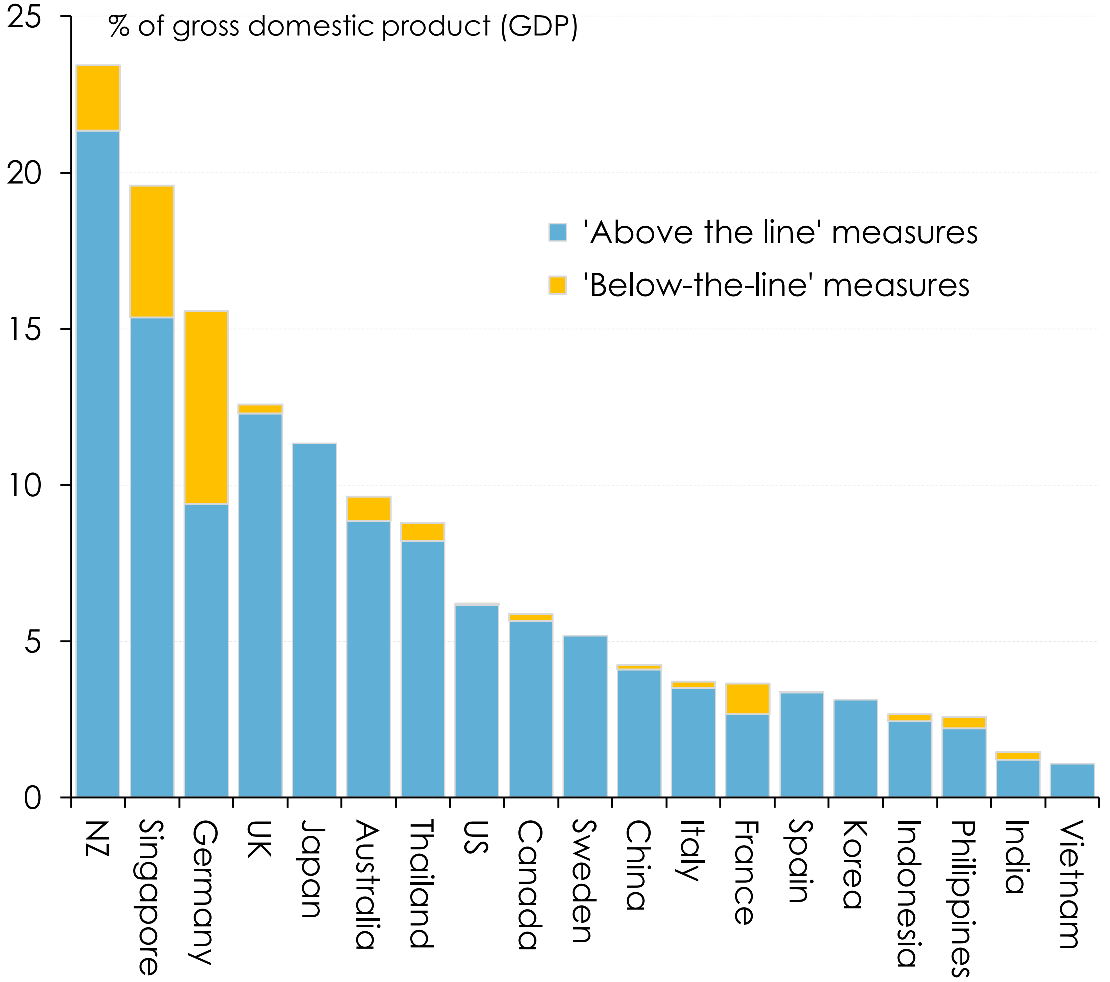


- **The CPI fell (by 1.9%) in the June quarter, the largest quarterly decline since 1931 and only the 11th decline in 60 years**
- **The annual 'headline' inflation rate fell to -0.3%, the lowest since Q3 1997 (which was artificially induced by falling mortgage rates, which are no longer included in 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 Australian Government's policy measures have been large by historical and international standards

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

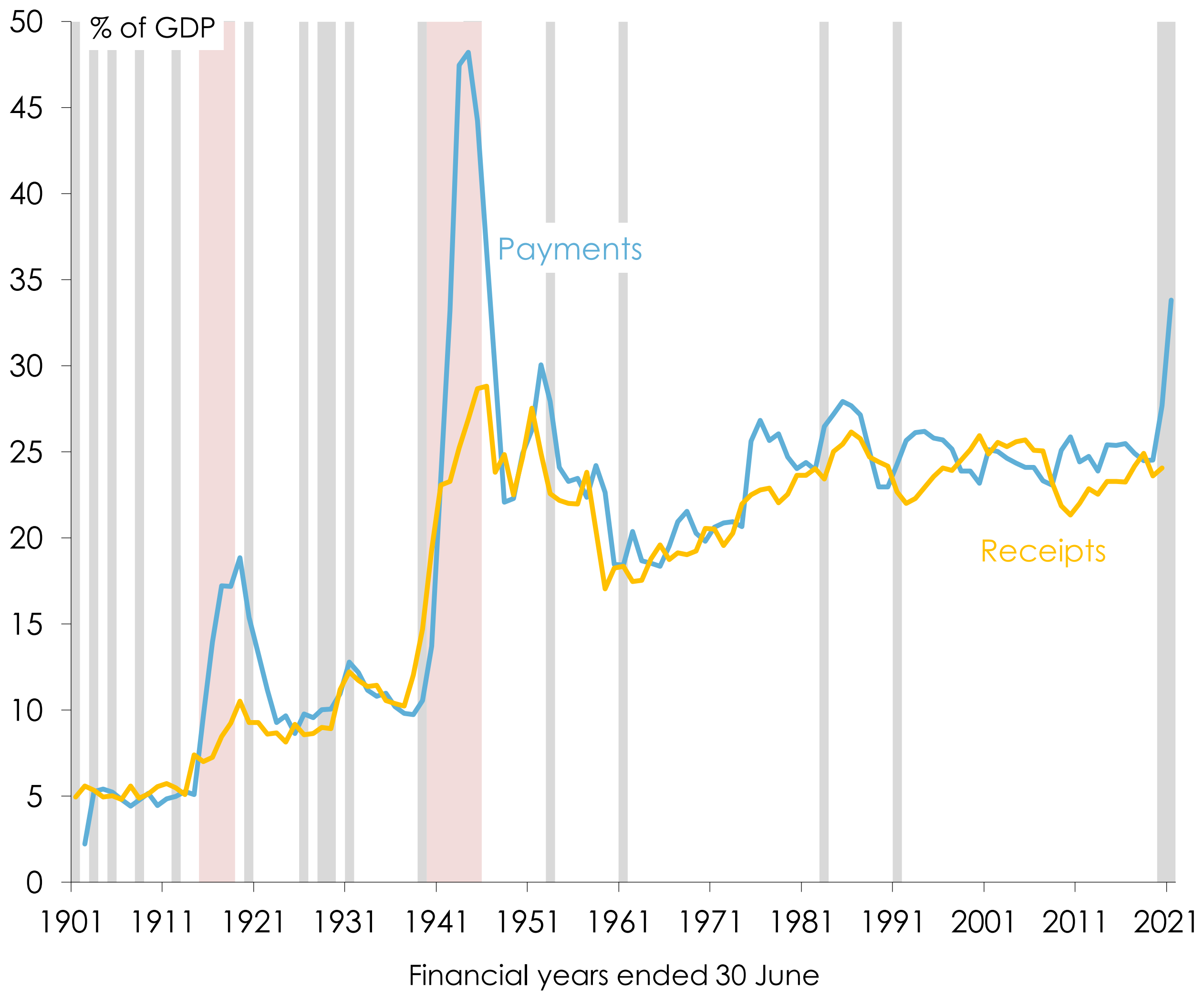


Note: 'Above the line' measures comprise additional or accelerated spending and deferred or foregone revenue. 'Below the line' measures comprise equity injections, loans, asset purchases and debt assumptions, but do not include loan guarantees or other contingent liabilities. *Source:* IMF, Fiscal Monitor: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

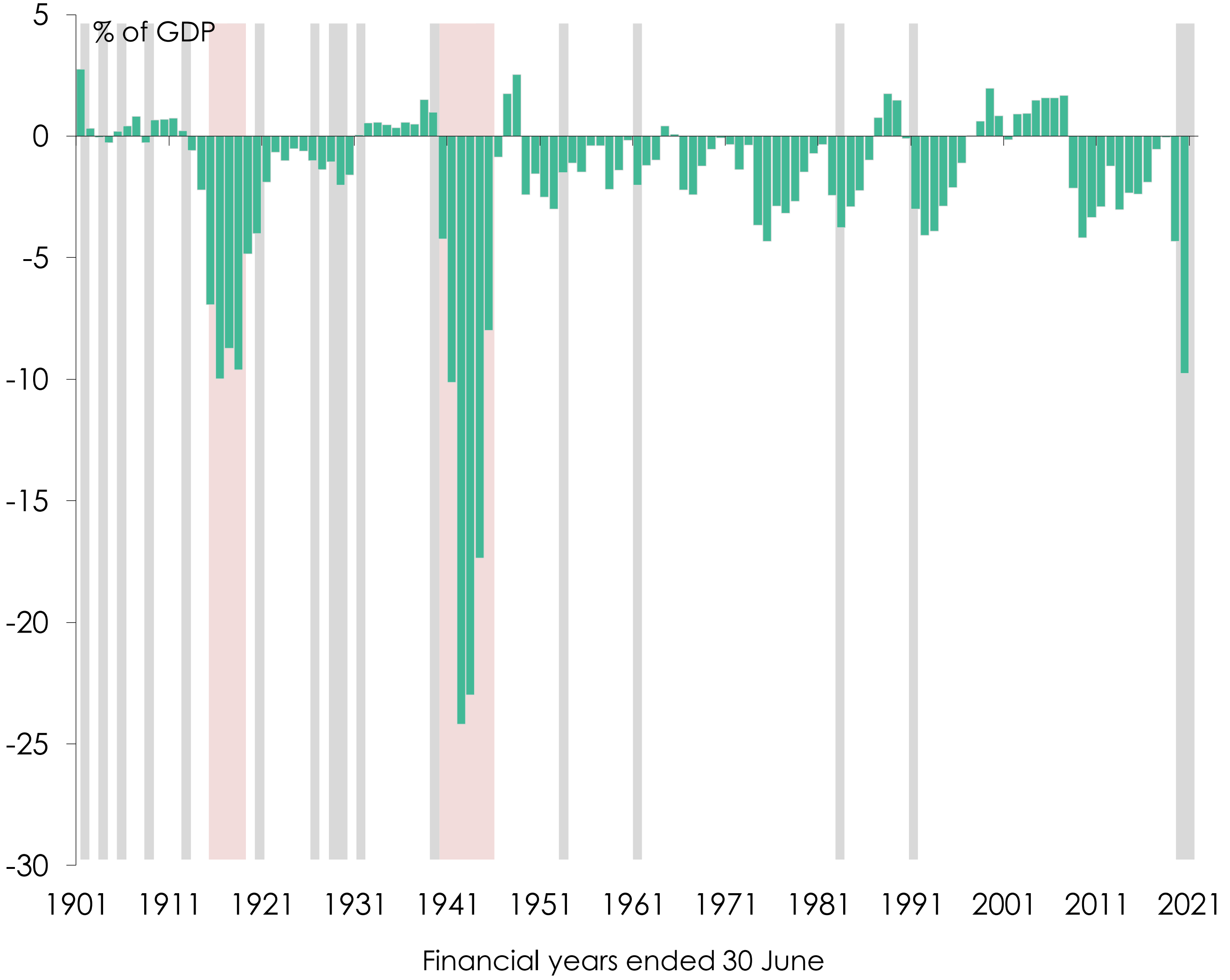
- **Policy measures announced thus far by the Australian Government total $192bn over FYs 2019-20 and 2020-21 or about 9% of one year's GDP – which is large by international standards (and double what was done during the GFC)**
  - including an additional $15bn for Jobkeeper announced this week in response 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



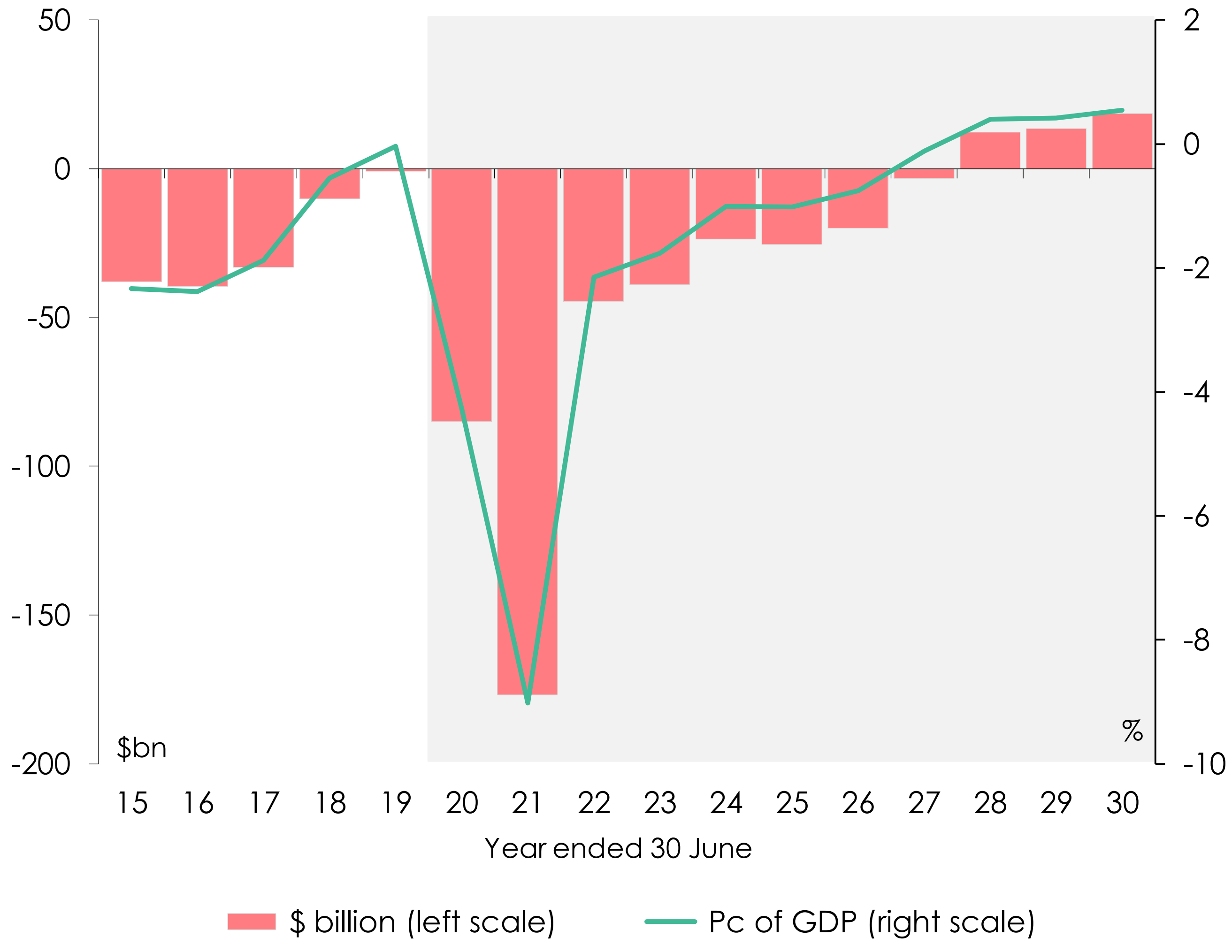
Australian Government budget deficit or surplus



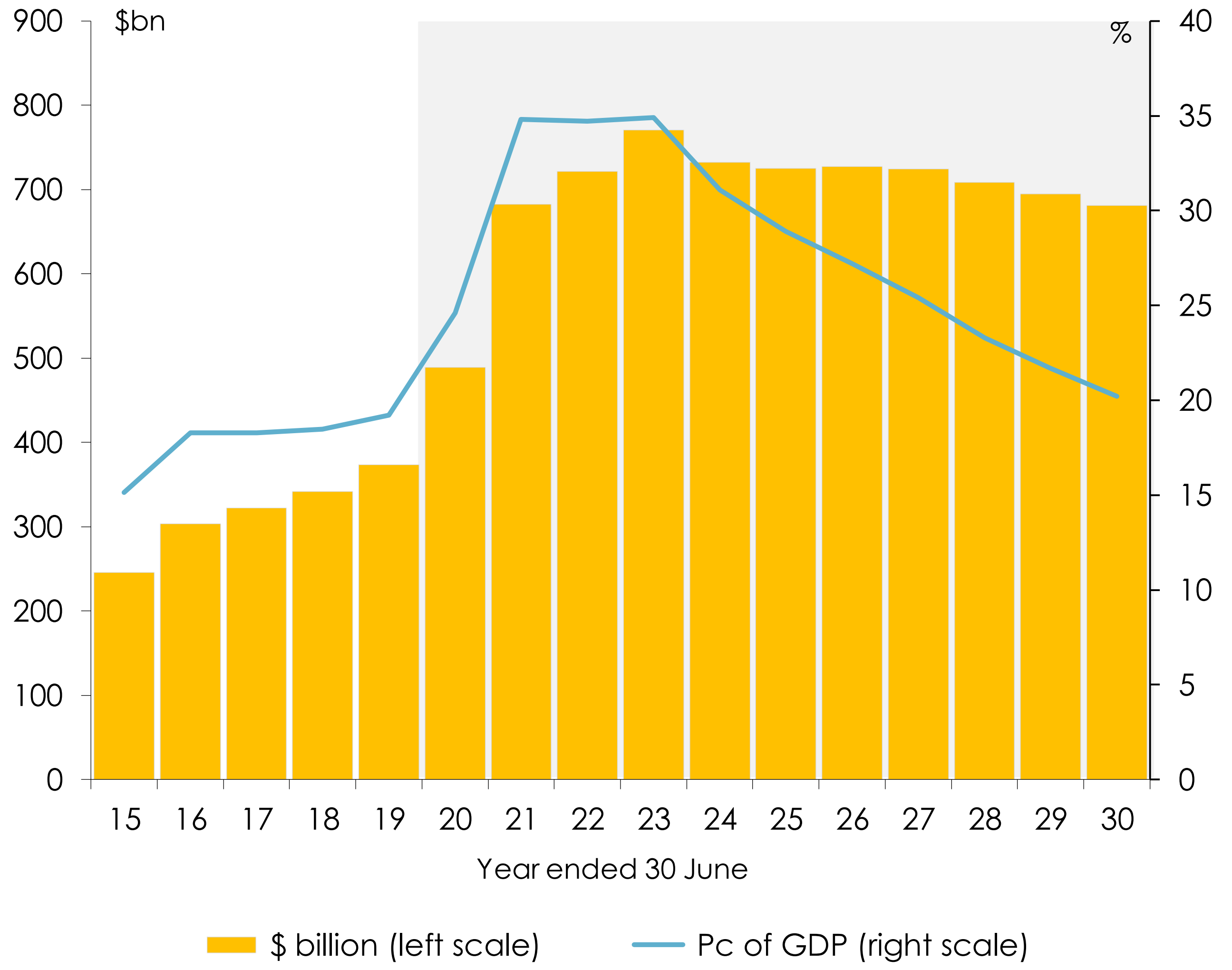
Note: Payments and the budget surplus or deficit are 'underlying' (that is, exclude 'net investments in financial assets for policy purposes') after 1989-90, when state governments became responsible for issuing their own debt, and 'headline' before that. Areas shaded in grey are fiscal years in which 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

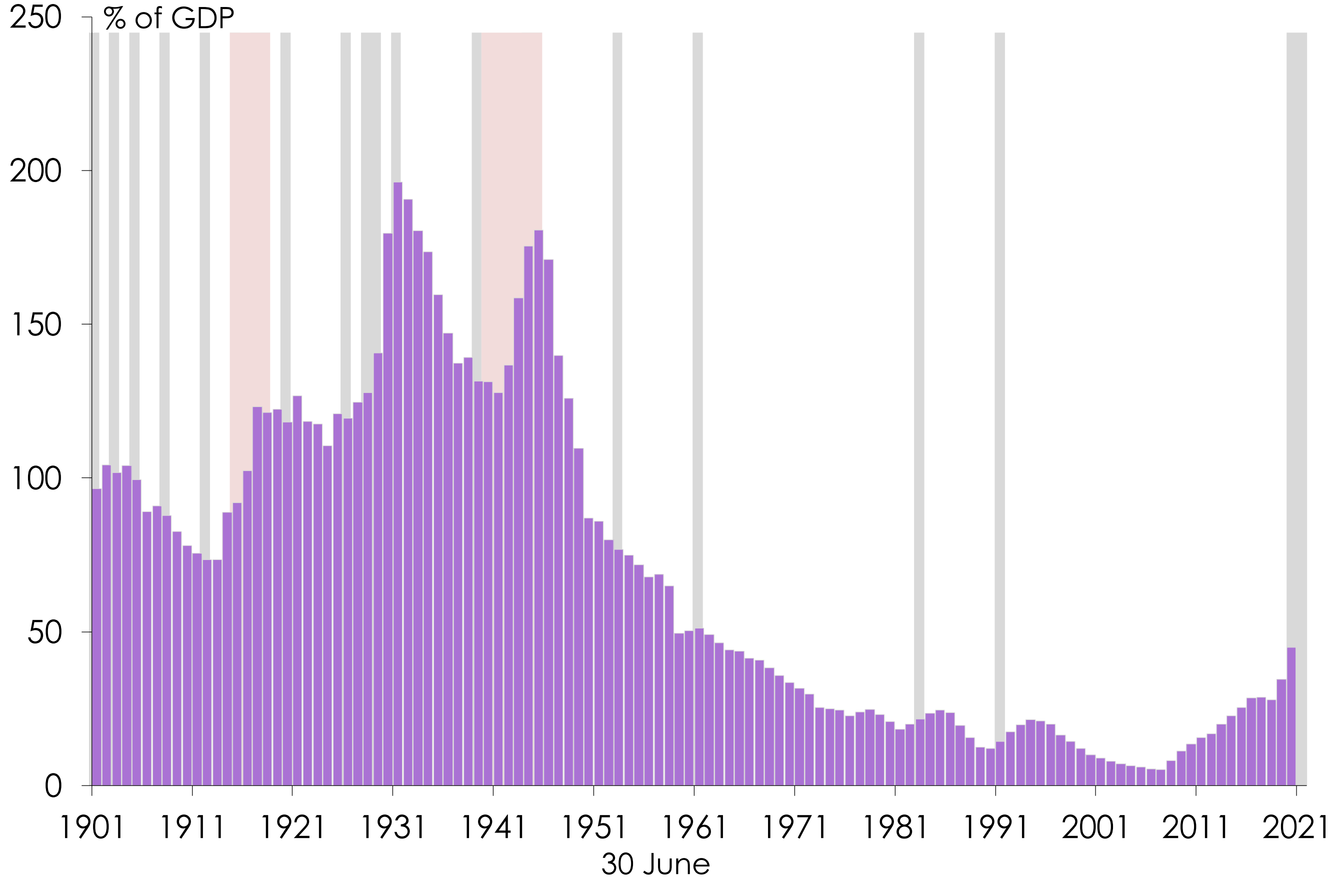


Note: Shaded area denote estimates (for 2019-20) or projections. Estimates and projections expressed in dollars have been inferred by Corinna from the PBO's baseline projections expressed as a pc of GDP, PBO projections of real GDP (starting with RBA SoMP forecasts) and Corinna estimates of the GDP deflator. 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.

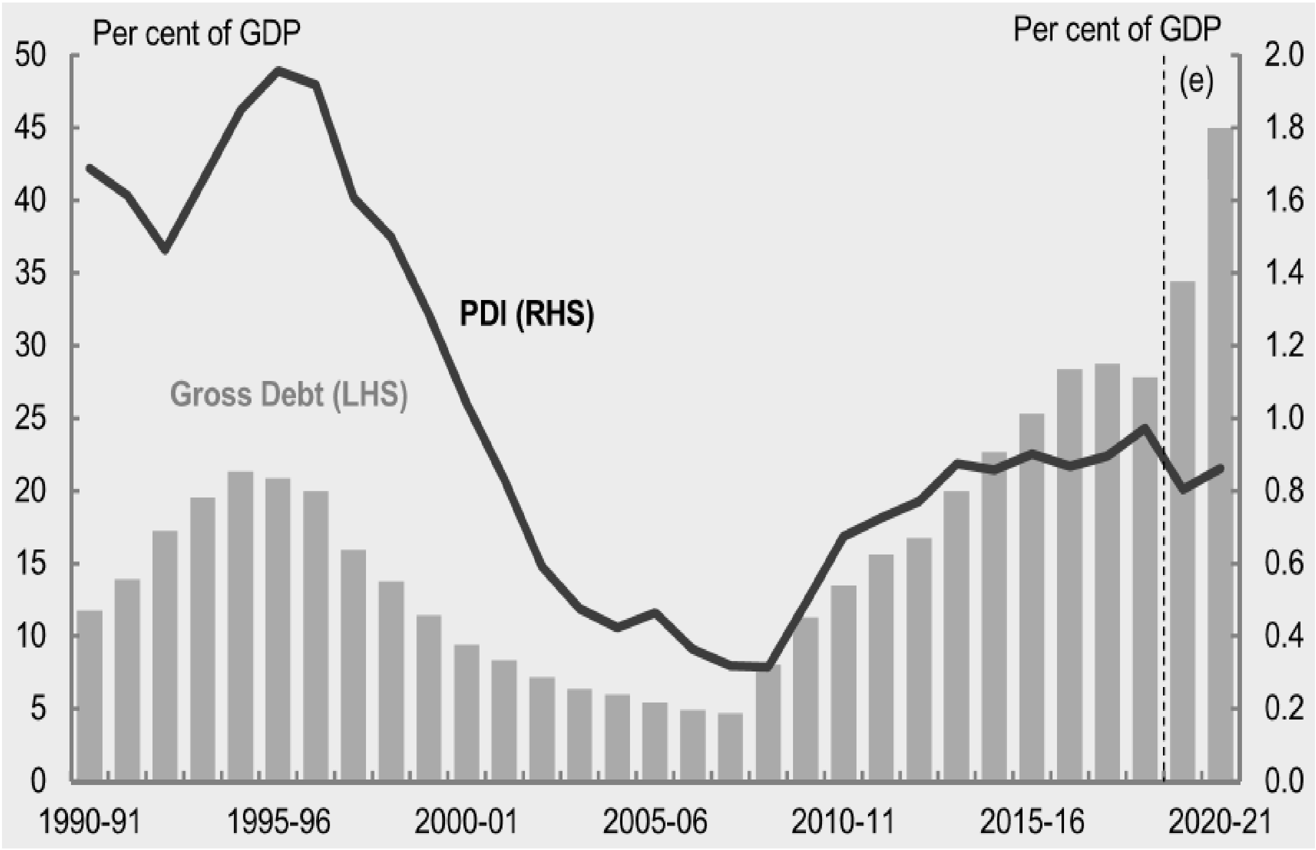
However there's no need for undue alarm at the level of debt which will be incurred by the Australian Government

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).

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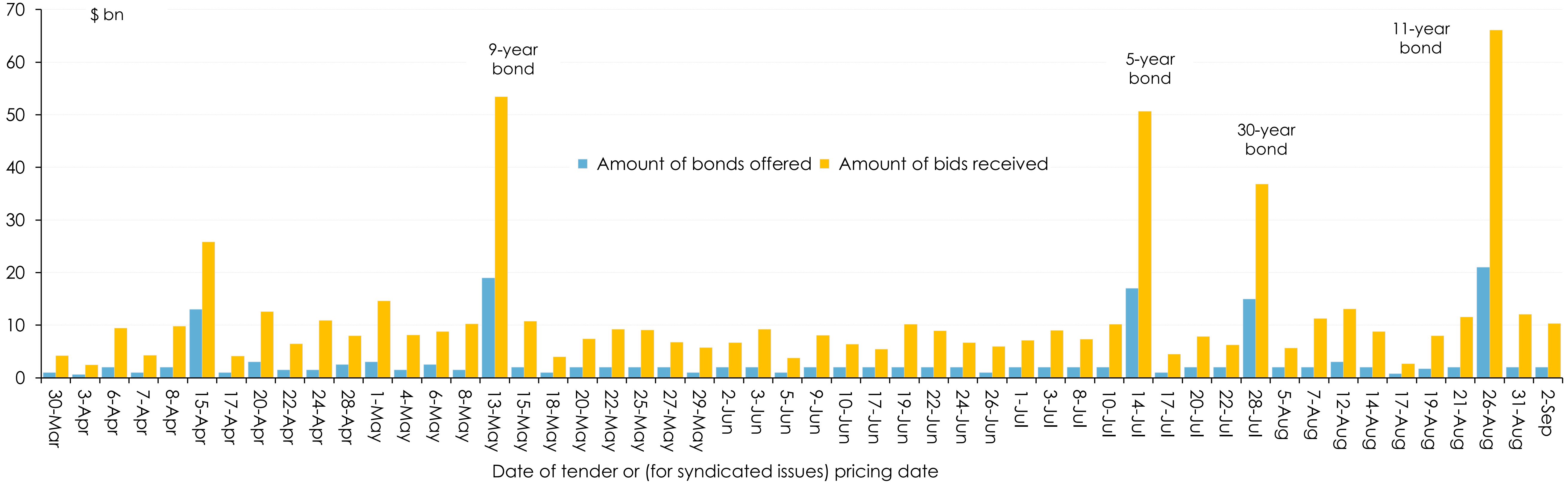
The Australian Government continues to have absolutely no difficulty financing its significantly higher deficits

Australian government bond issuance since March 2020



- **Since 30th March, the Australian Office of Financial Management (which conducts the Government's borrowing programs) has issued $170.1bn of Treasury bonds - based on the volume of bids received it could have borrowed $606bn with yields at most 3 basis points above the highest yields actually accepted**
- **In the last week of August the AOFM attracted $66bn of offers for $21bn of 11-year bonds with a 1.0% coupon rate, with accepted bids carrying a weighted average yield of 1.055%**

Source: Australian Office of Financial Management data hub.

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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

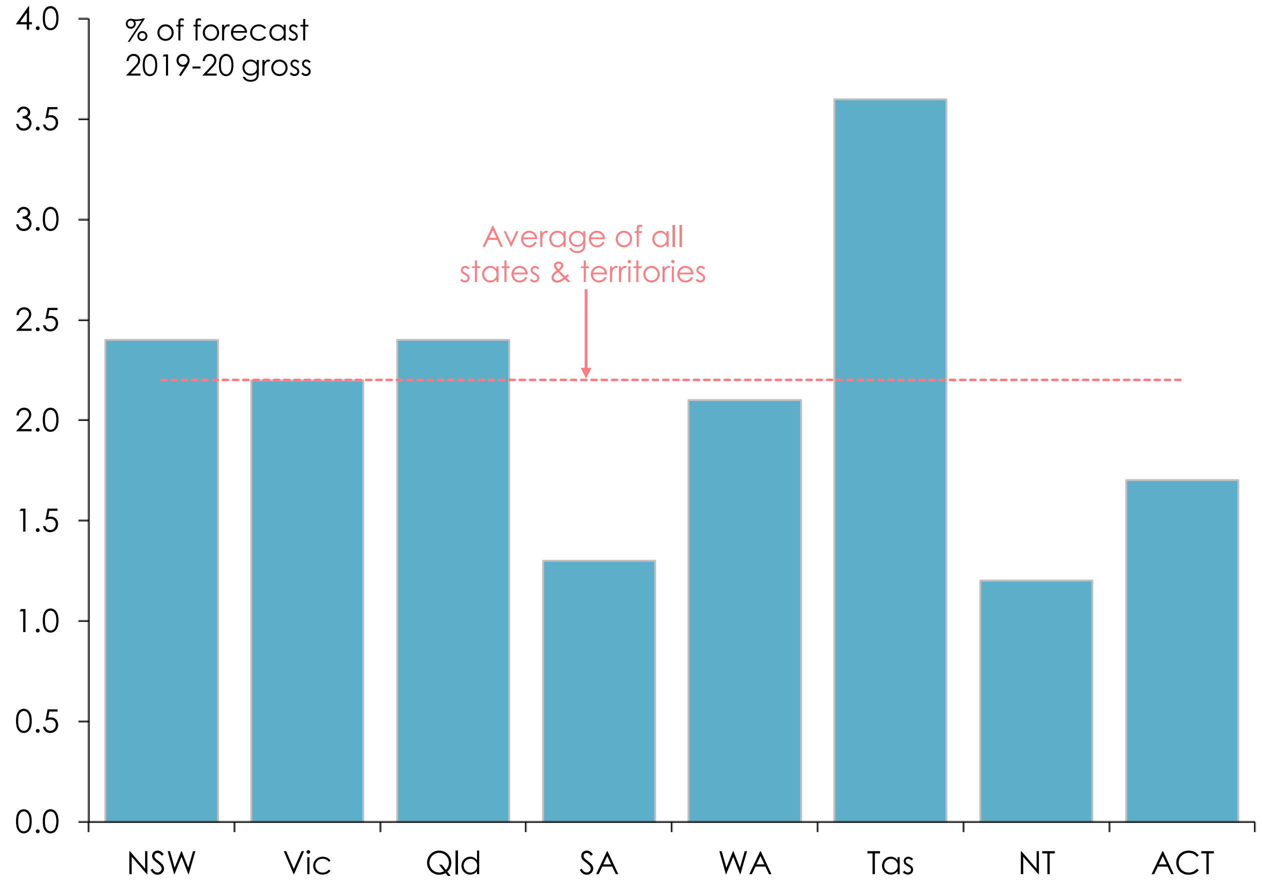
Rates from 2024-25	New thresholds from 2024-25
Nil	Up to $18,200 pa
19 %	$18,201 – $45,000 pa
30 %	$45,001 – $200,000 pa
45 %	Above $200,000 pa
Low income tax offset	Up to $700

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

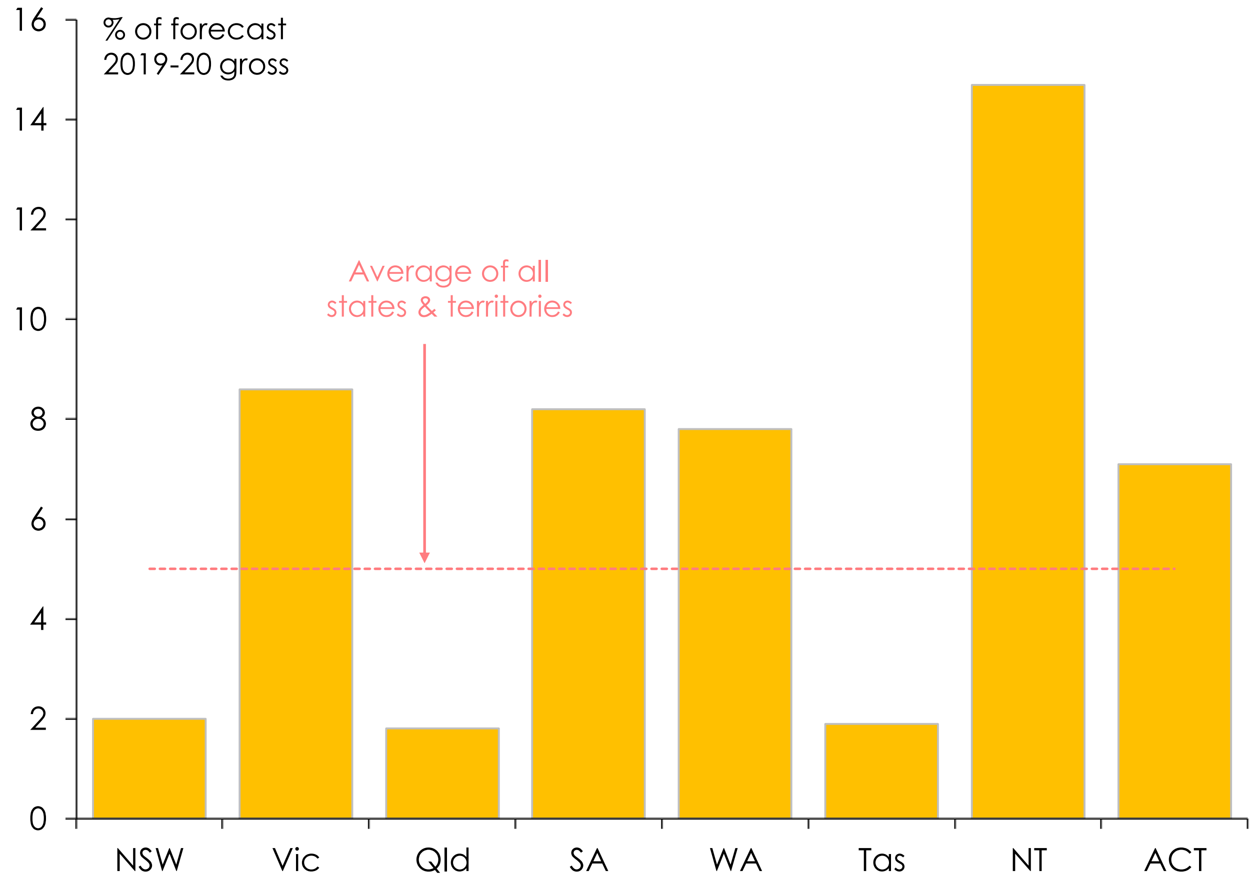
- **Treasurer Josh Frydenberg once again this week foreshadowed bringing forward the personal income tax cuts currently legislated to come into effect on 1st July 2022, as a way to 'boost aggregate demand, boost consumption [and] put more money in people's pockets'**
  - this could be a central feature 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

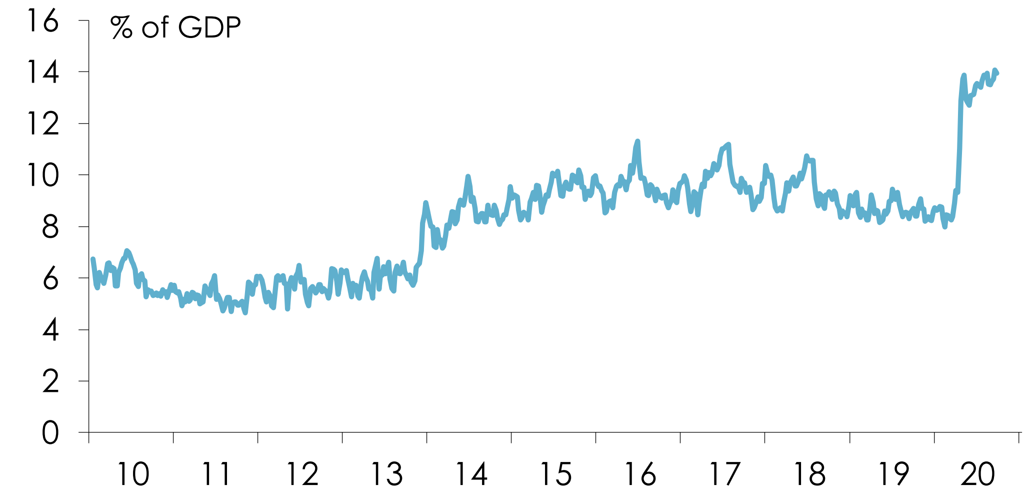


- **This month RBA Governor Phillip Lowe advised state and territory governments to spend an additional $40bn (2% of GDP) on infrastructure investment – an amount which S&P Global Ratings said state and territory balance sheets had "plenty of room to accommodate"**

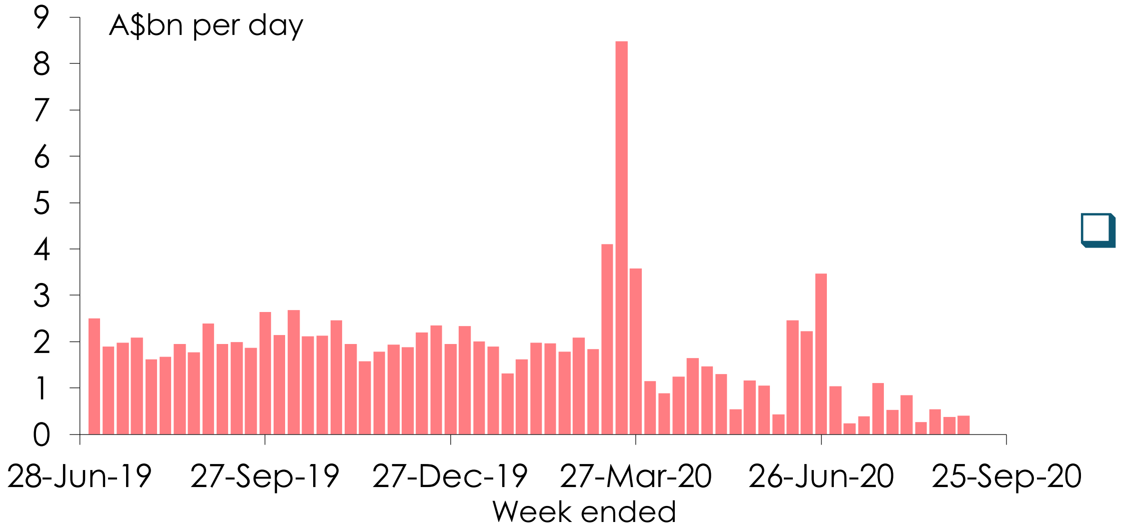
Sources: Commonwealth Treasury, 6th August 2020; *Australian Financial Review*, 14th August 2020; *The Australian*, 22nd August 2020.

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

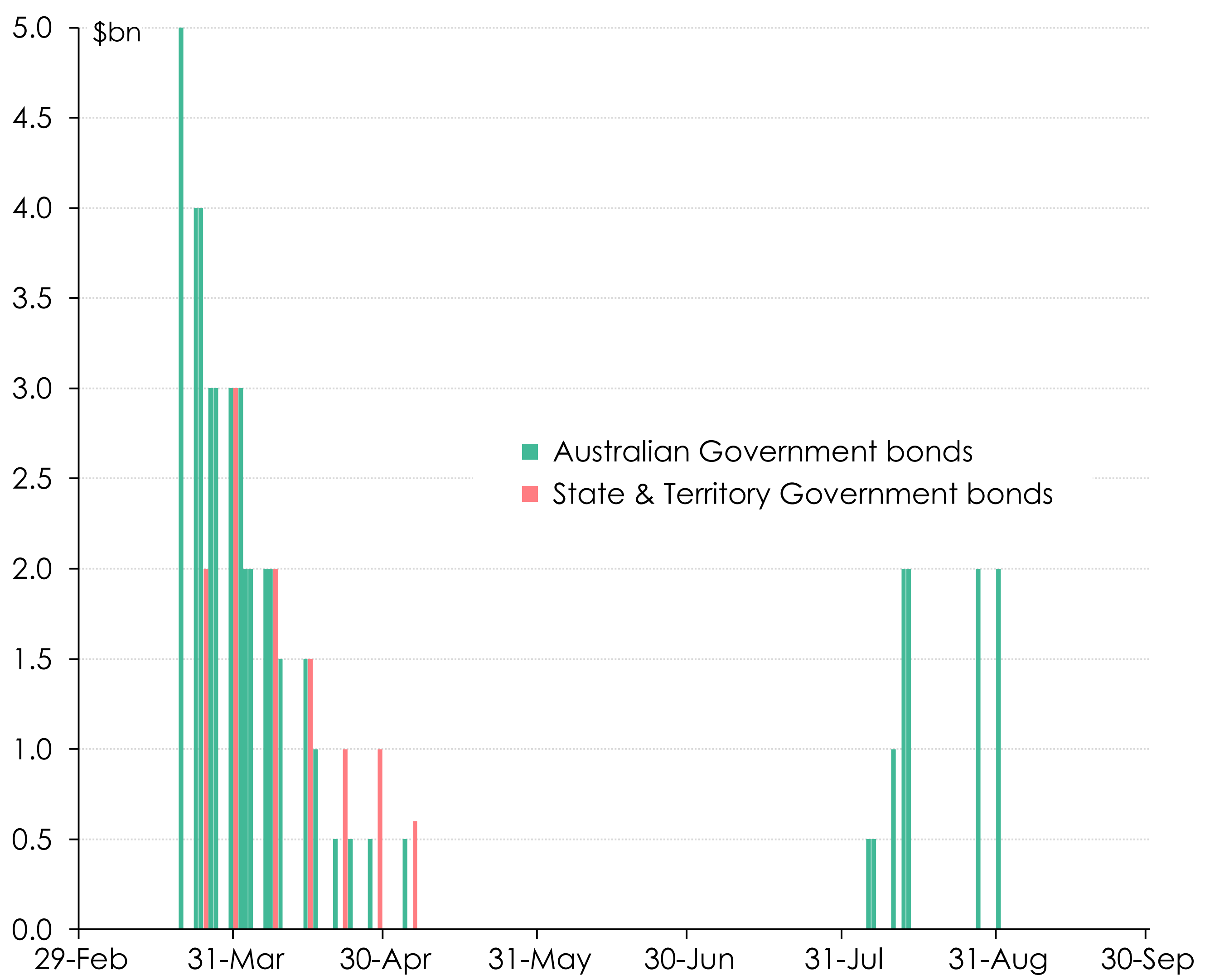


Source: Reserve Bank of Australia, *Statistical Tables* A1 and A3.

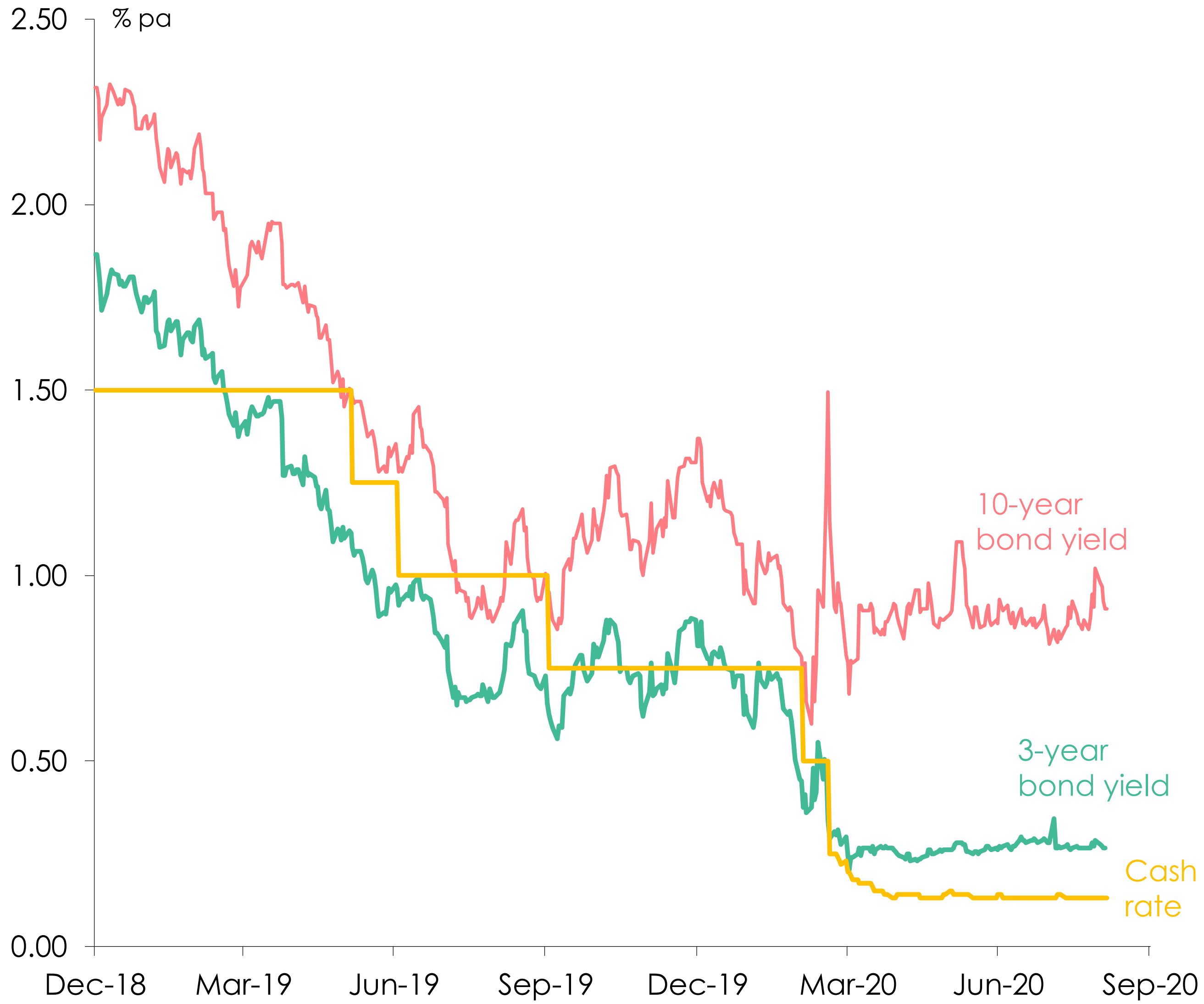
- **The RBA last week again kept its cash rate target at 0.25% since March, but has allowed the actual rate to drift down to 0.13%**
  - the RBA has committed to keeping it at this level 'until progress is made towards full employment' and 'it is confident inflation will be sustainably within the 2-3% 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 was absent from the bond market this week, after buying $5bn of bonds last week and $1bn the week before (the first purchases since May)
  - RBA assets are now equivalent to 14.6 % of GDP (cf. BoC 23¾%, US Fed 36%, BoE 44½%, ECB 55%, BoJ 135% and RBNZ 18½%)
- **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
- **At last week's Board meeting the RBA increased its 'Term Funding Facility' originally established in March to provide funding to banks and other lenders for up to 3 years at 0.25% for on-lending to business (with particular incentives for lending to SMEs) to $200bn, and extended the time for which it will be available from end-September to end-June 2021**
  - to date $52.3 bn has been provided through this facility (including almost $10¾bn in the week ended 2nd September)

The RBA has bought $60bn worth of government bonds in the secondary market in order to keep three-year yields at its target of 0.25% pa

RBA open market bond purchases



Interest rates



Source: Reserve Bank of Australia, *Statistical Tables* A3 and F2. Data up to 4TH September.

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

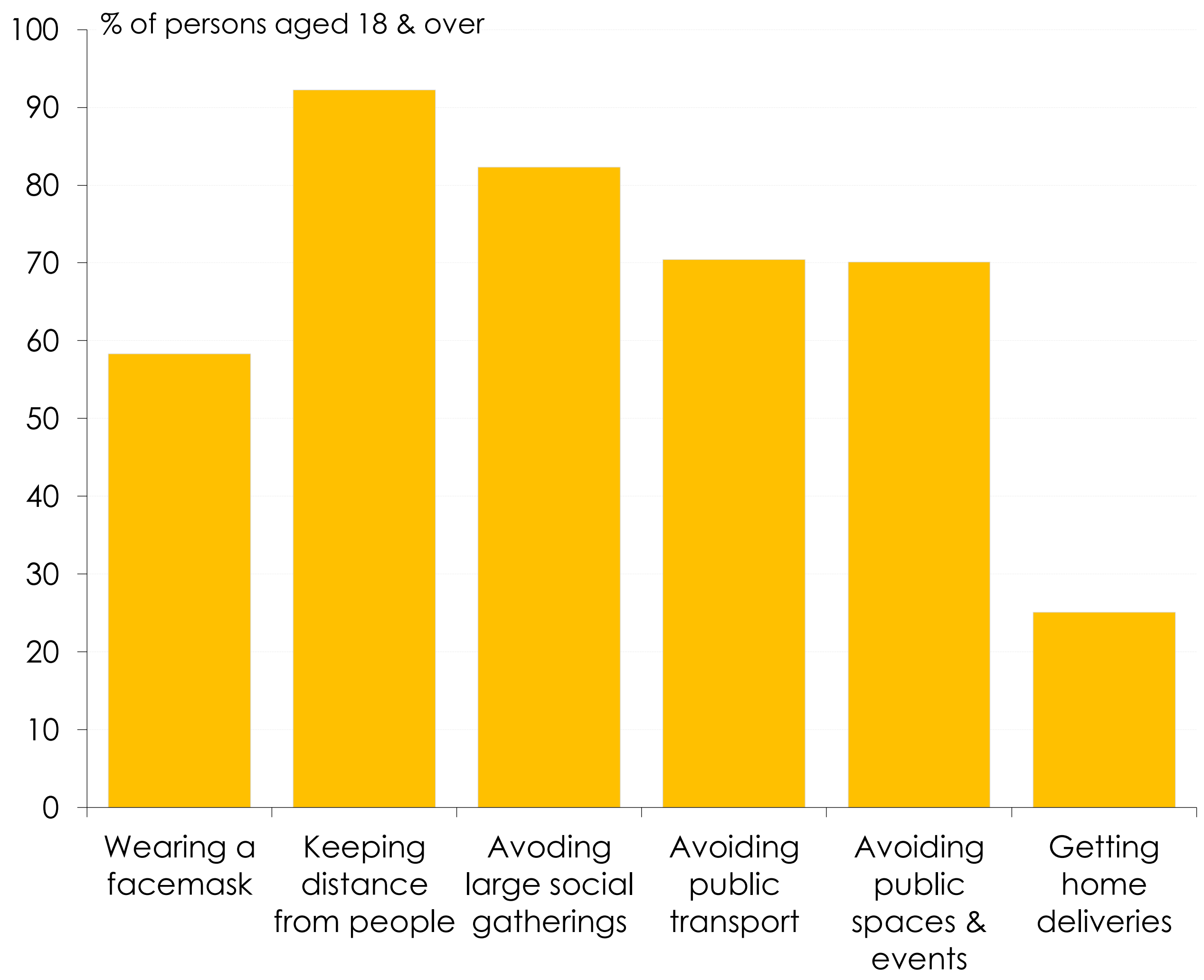
- Speaking to the Parliamentary Economics Committee on 14th August RBA Governor Lowe again characterized negative interest rates as "extraordinary unlikely", monetary financing of budget deficits (aka 'modern monetary theory') as "not on the agenda in Australia", and FX market intervention to drive the 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 Reserve Bank of New Zealand, 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 this 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 of the current downturn will be more gradual than the path into it was

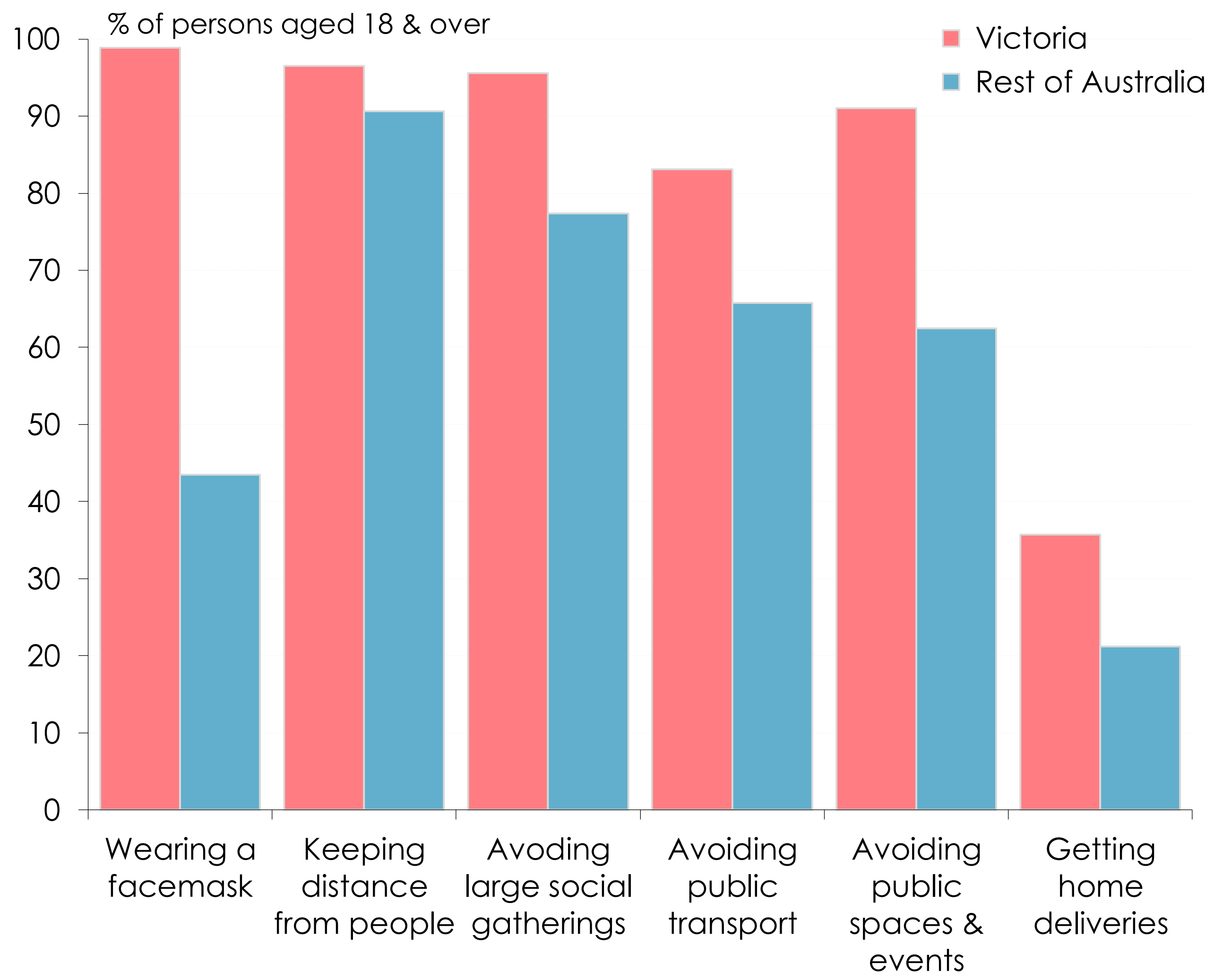
- ‘Social distancing’ requirements will be relaxed gradually rather than ‘all at once’ – and (as seen in Victoria) restrictions can be re-imposed in response to new outbreaks)
  - new health and safety regulations will likely limit the number of employees and customers who can be ‘on premises’ (which 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).

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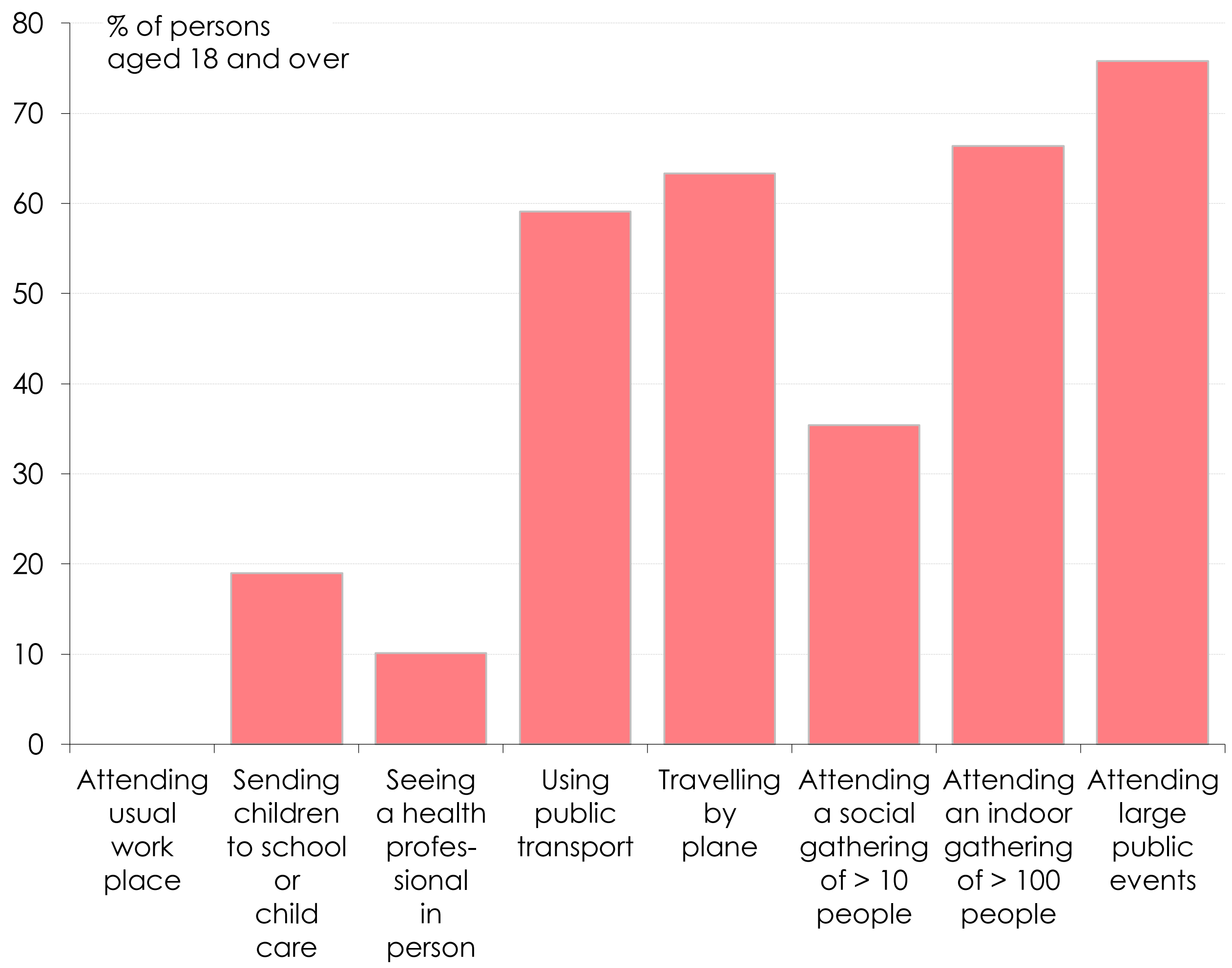
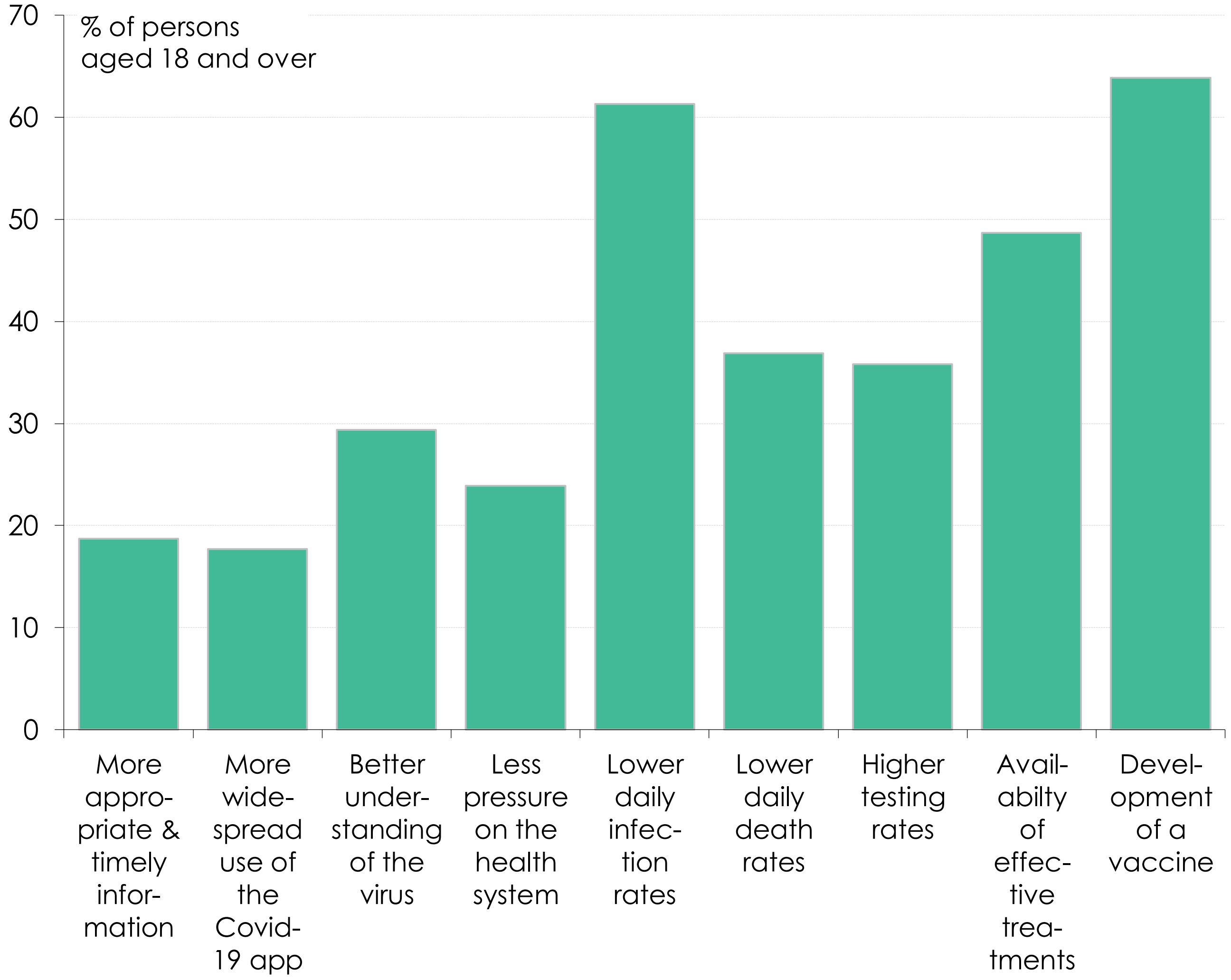
Australians seem likely to continue to be wary of travel and large gatherings, at least until a vaccine for Covid-19 is developed

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).

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

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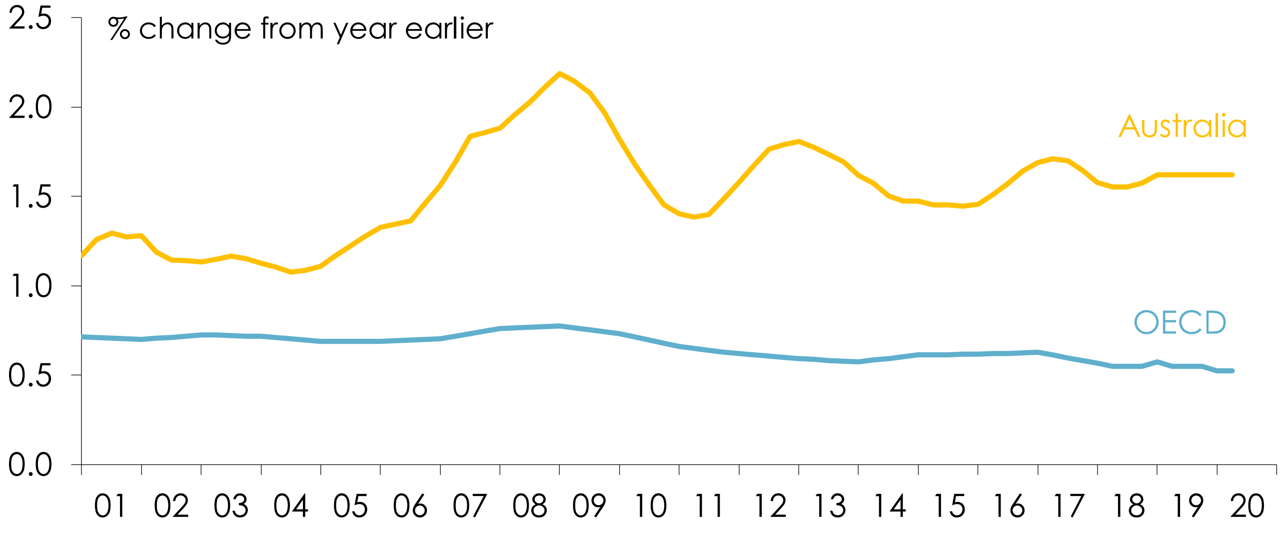
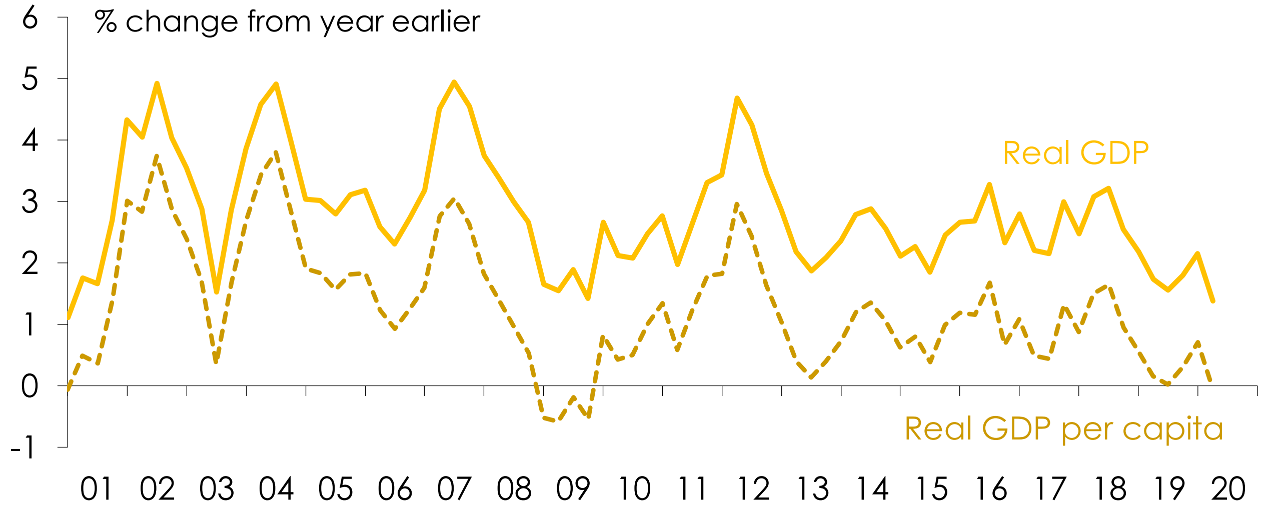
  - new health and safety regulations will likely limit the number of employees and customers who can be ‘on premises’ (which may make it uneconomic for some businesses to re-open until restrictions are relaxed
  - and many people may remain wary of exercising all of their newly-regained ‘freedoms’
- At 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

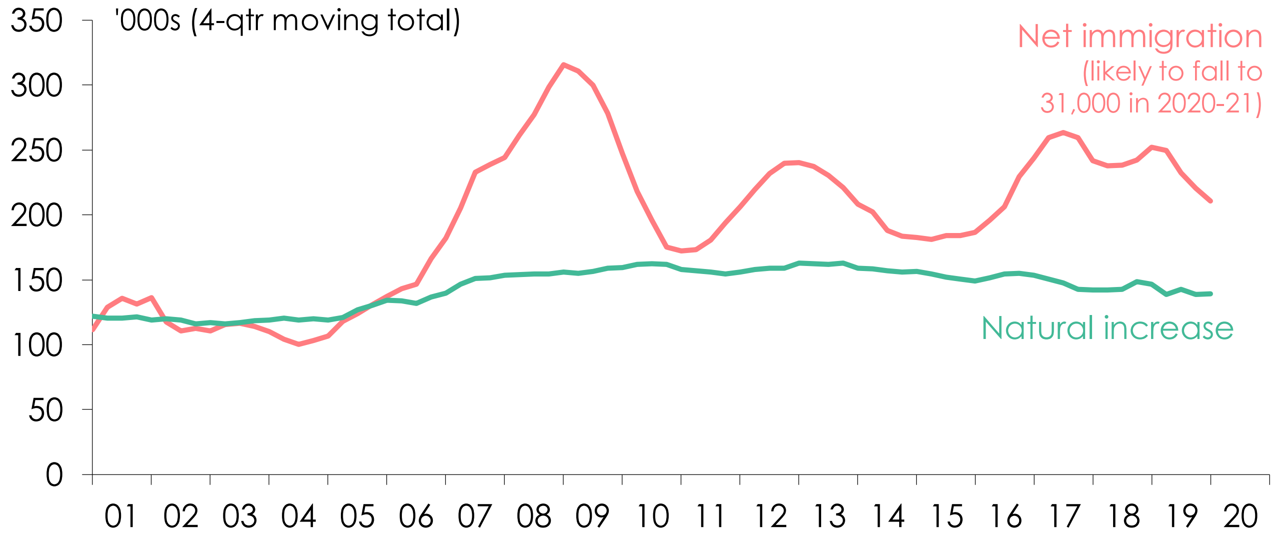
Australia and OECD population growth



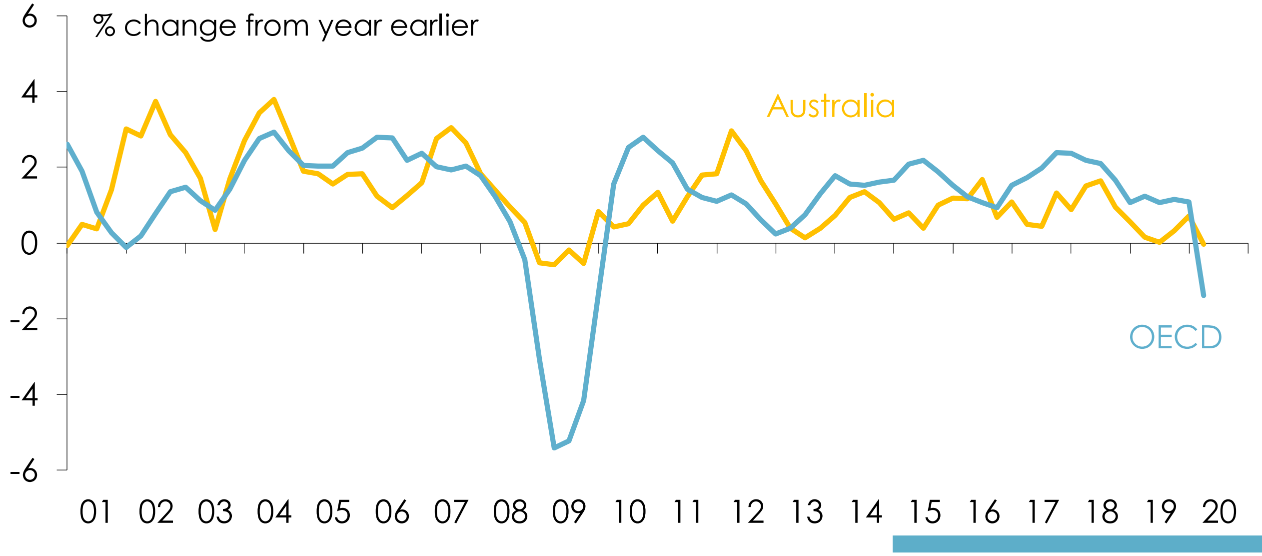
Australian GDP and per capita GDP growth



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.

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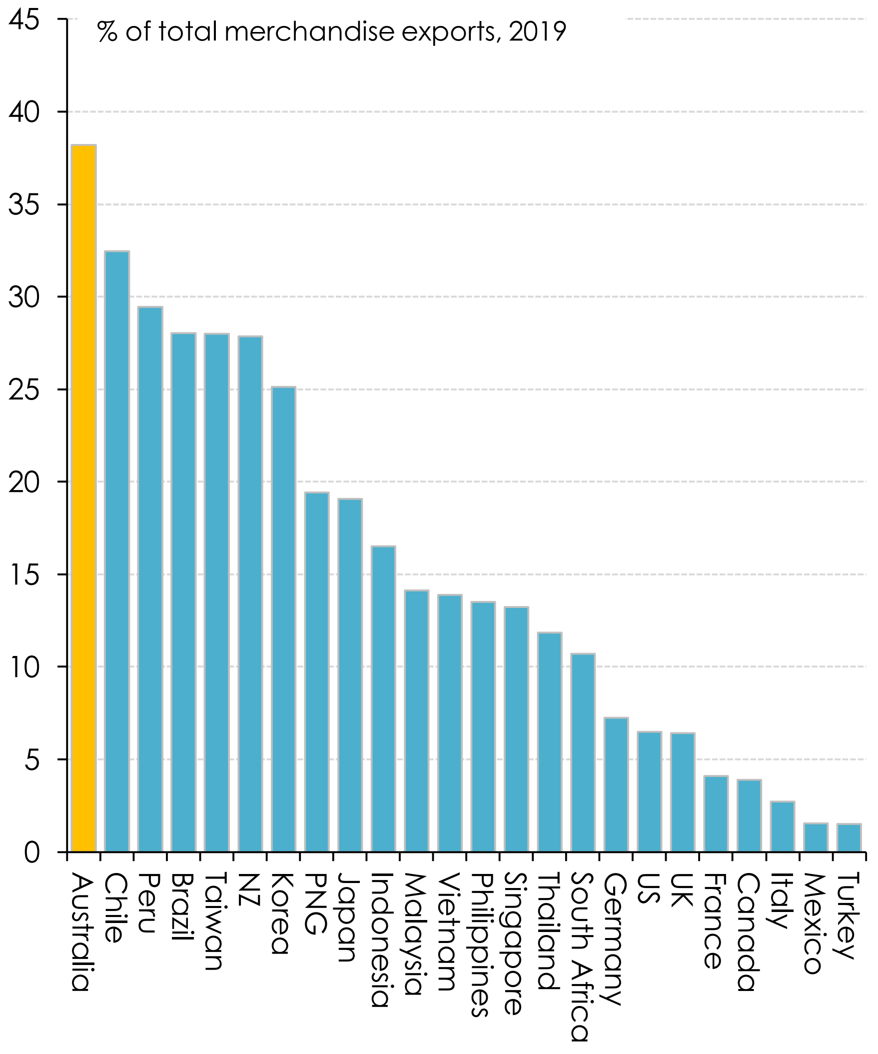
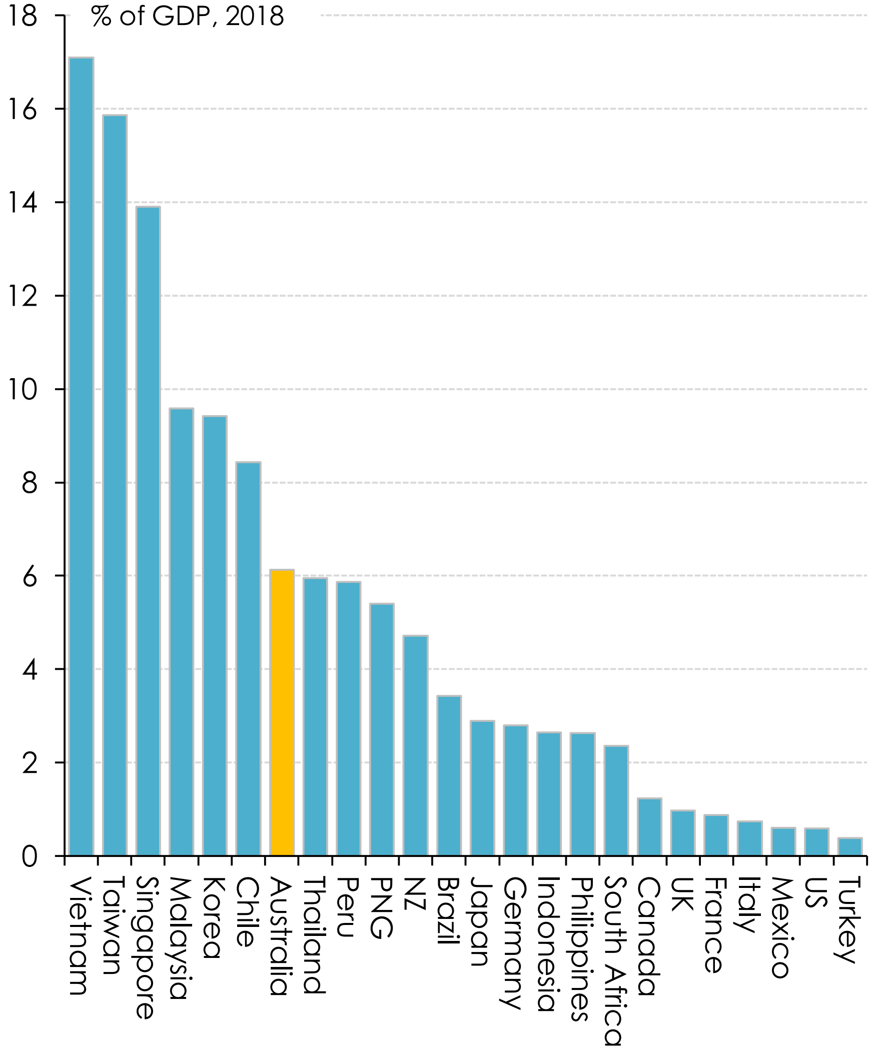
Australia has benefited enormously from its economic relationship with China over the past 25 years, but will that continue to be the case?

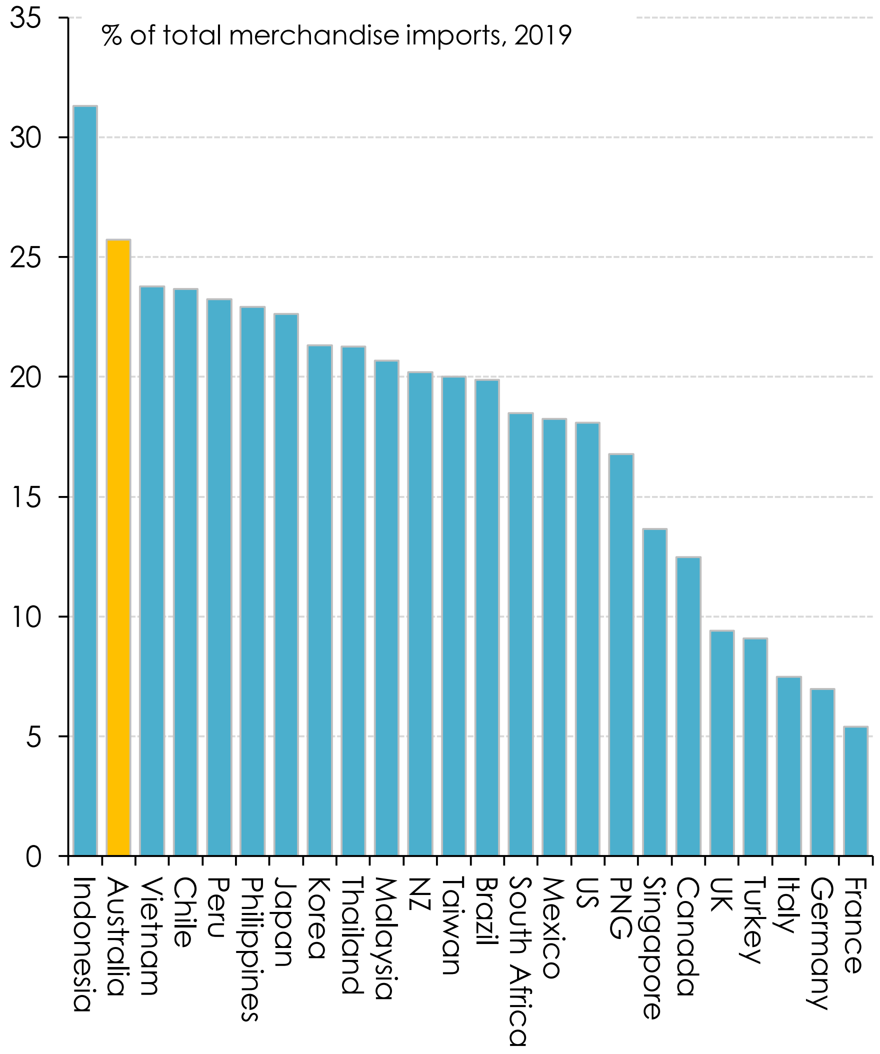
Merchandise exports to China as a pc of total



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.

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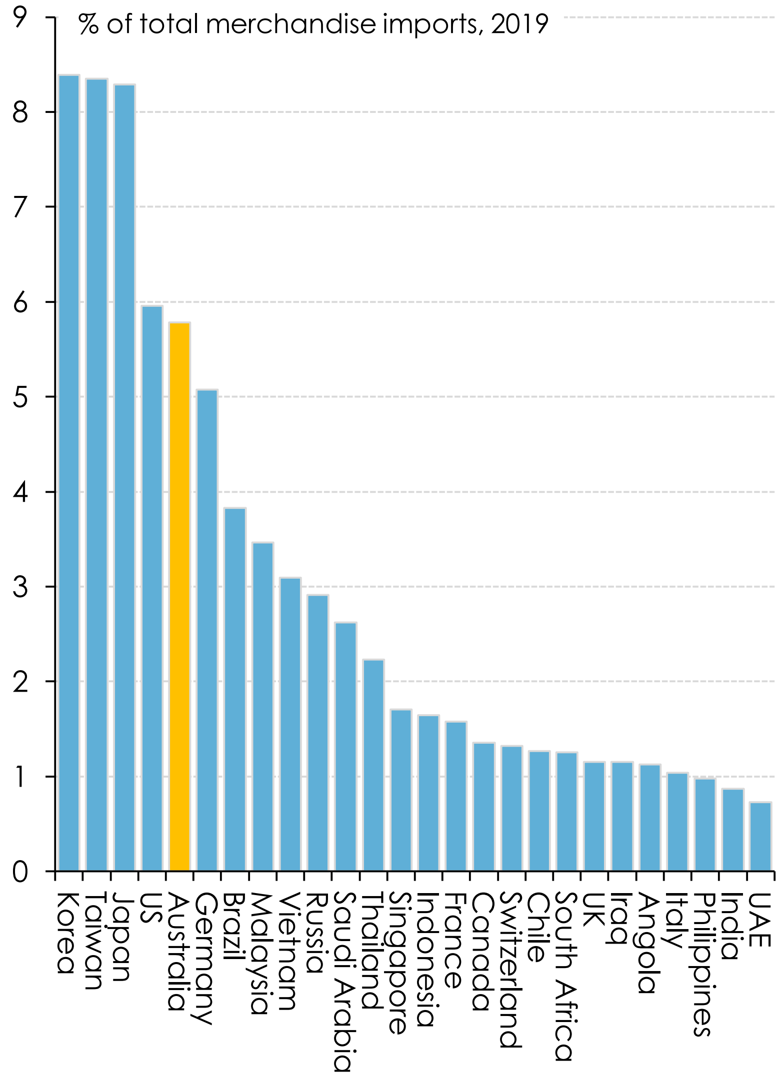
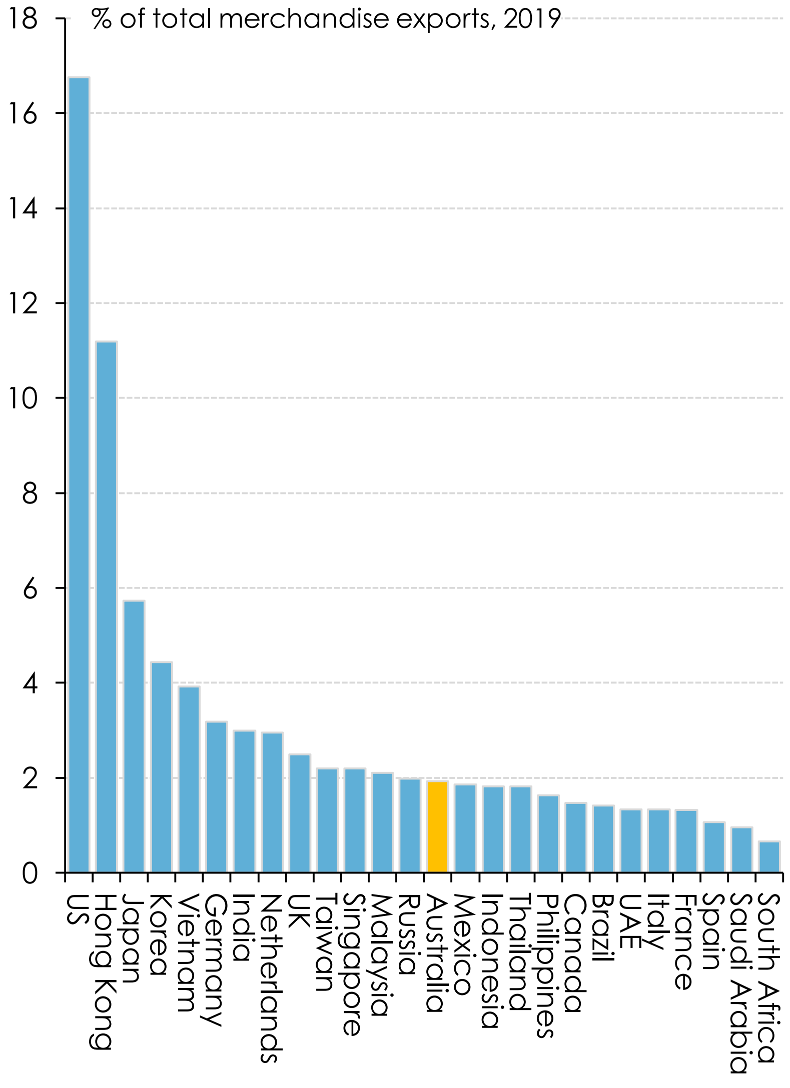
Australia is China's 5th biggest source of imports (of goods), 14th biggest export market, and has the 2nd-largest bilateral trade surplus with China

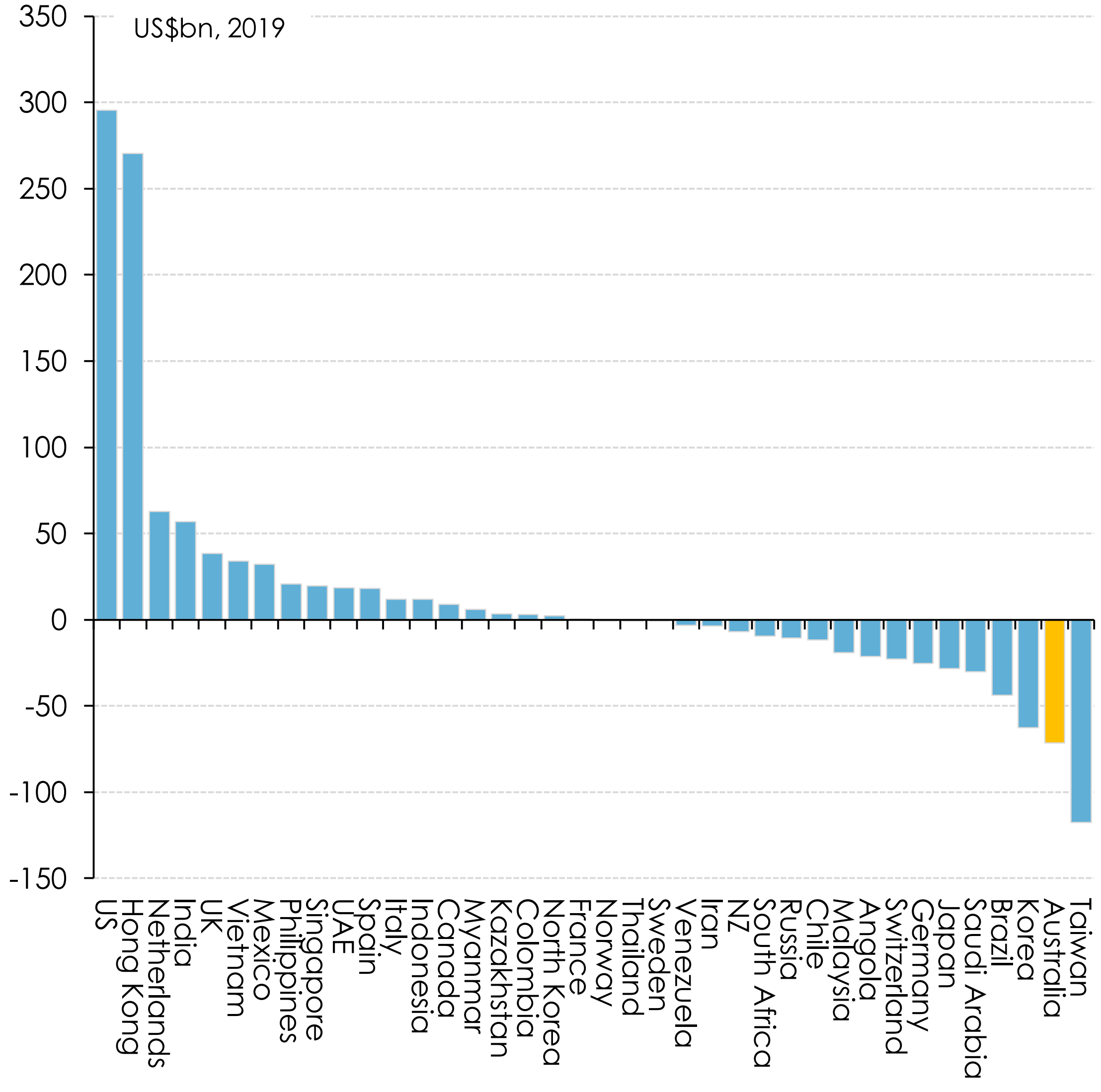
China's sources of imports



China's export destinations



China's bilateral merchandise trade balances



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

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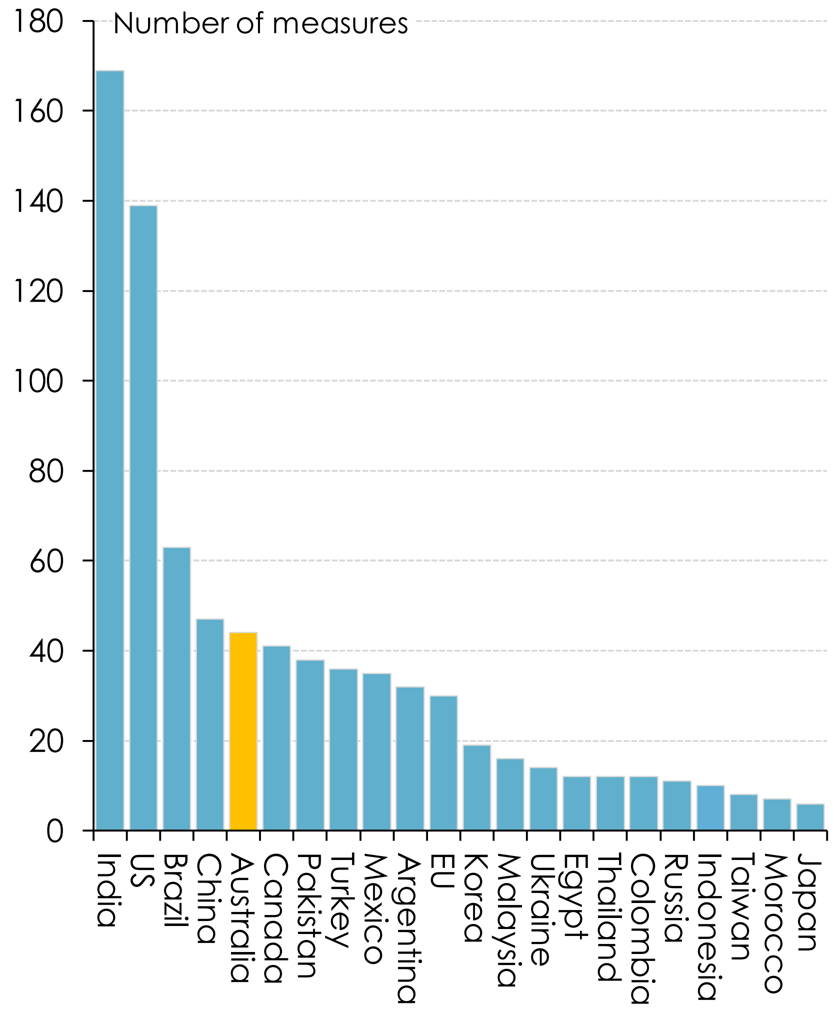
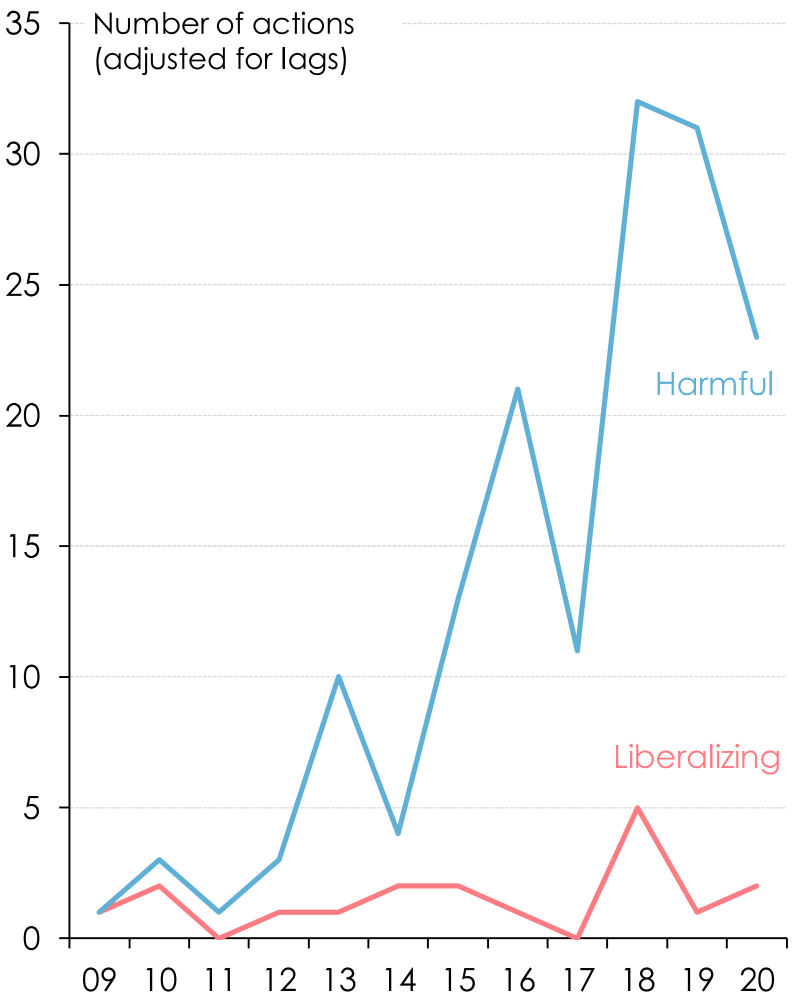
China's threats against Australian exports of barley, beef, wine, coal, tourism and education aren't justified, but we aren't 'Snow White' either

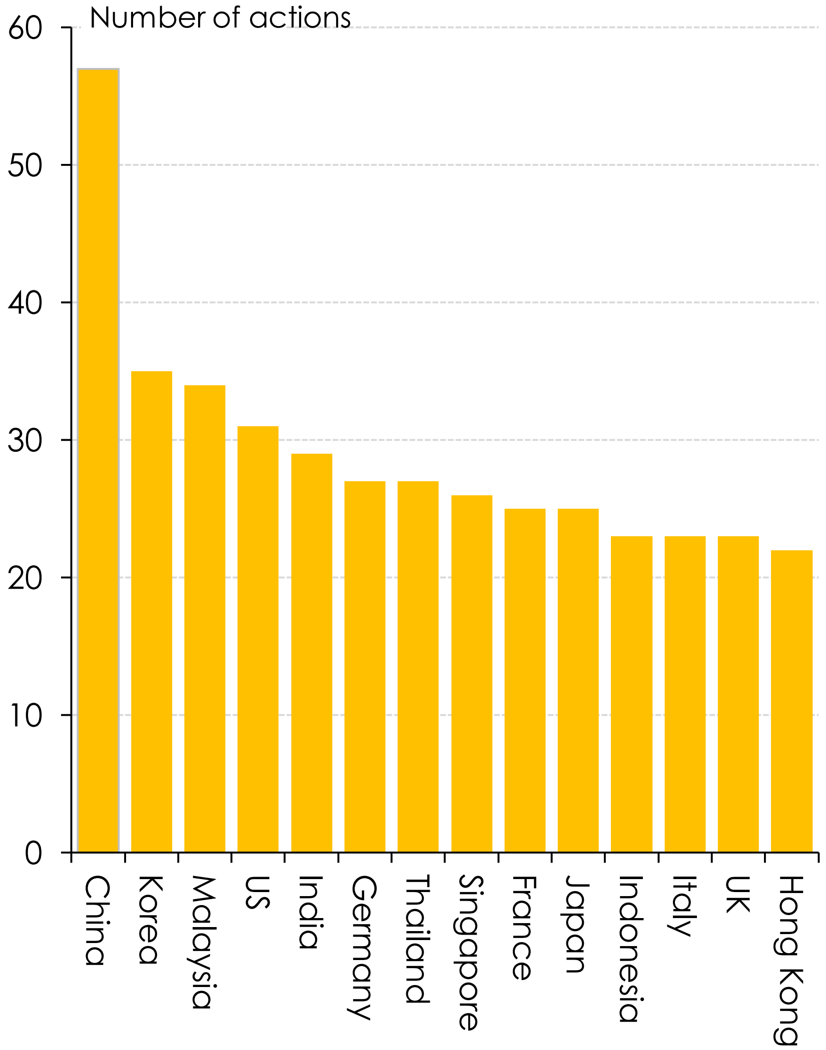
Number of anti-dumping measures imposed, 2015-19



Australian trade policy measures since 2009



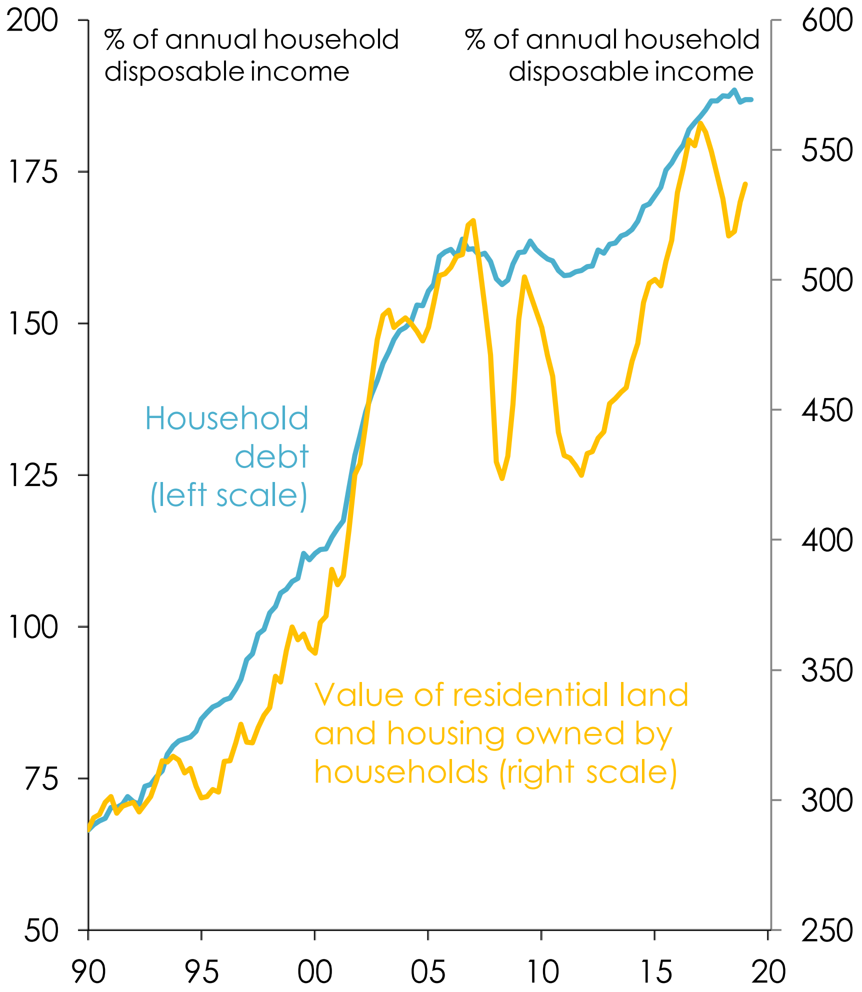
Countries adversely affected by 'harmful' Australian trade actions



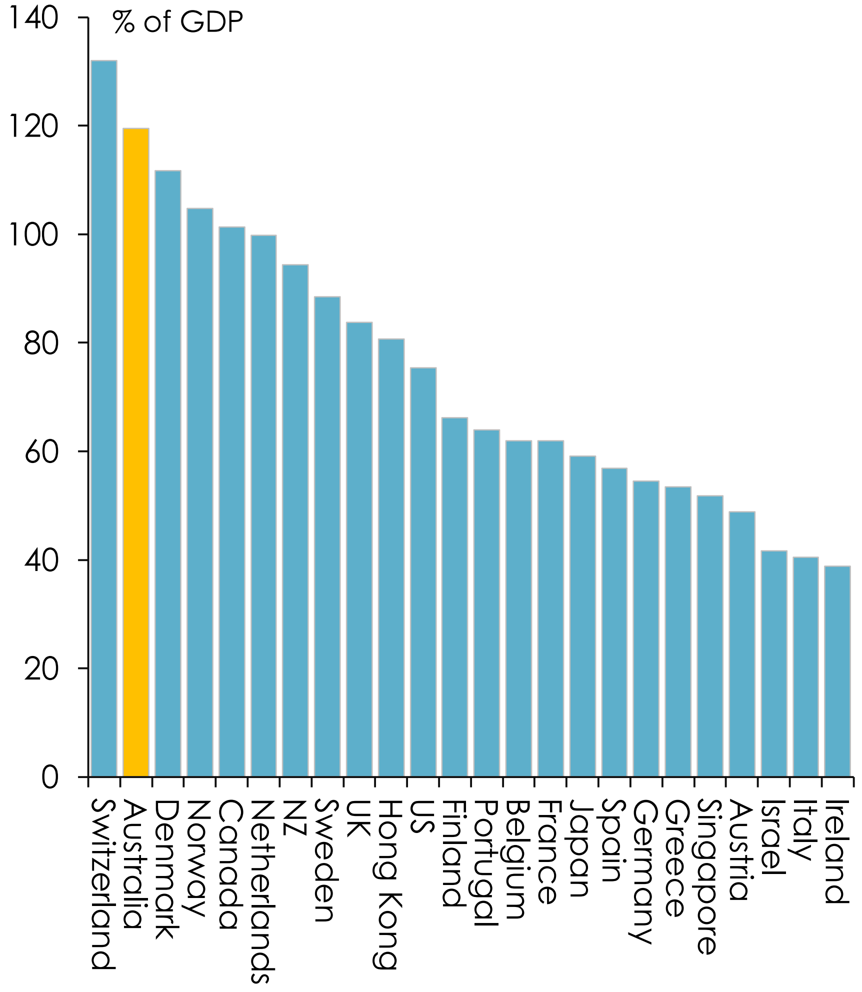
Sources: World Trade Organization; Centre for Economic Policy Research, Global Trade Alert (data up to 28th August).

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

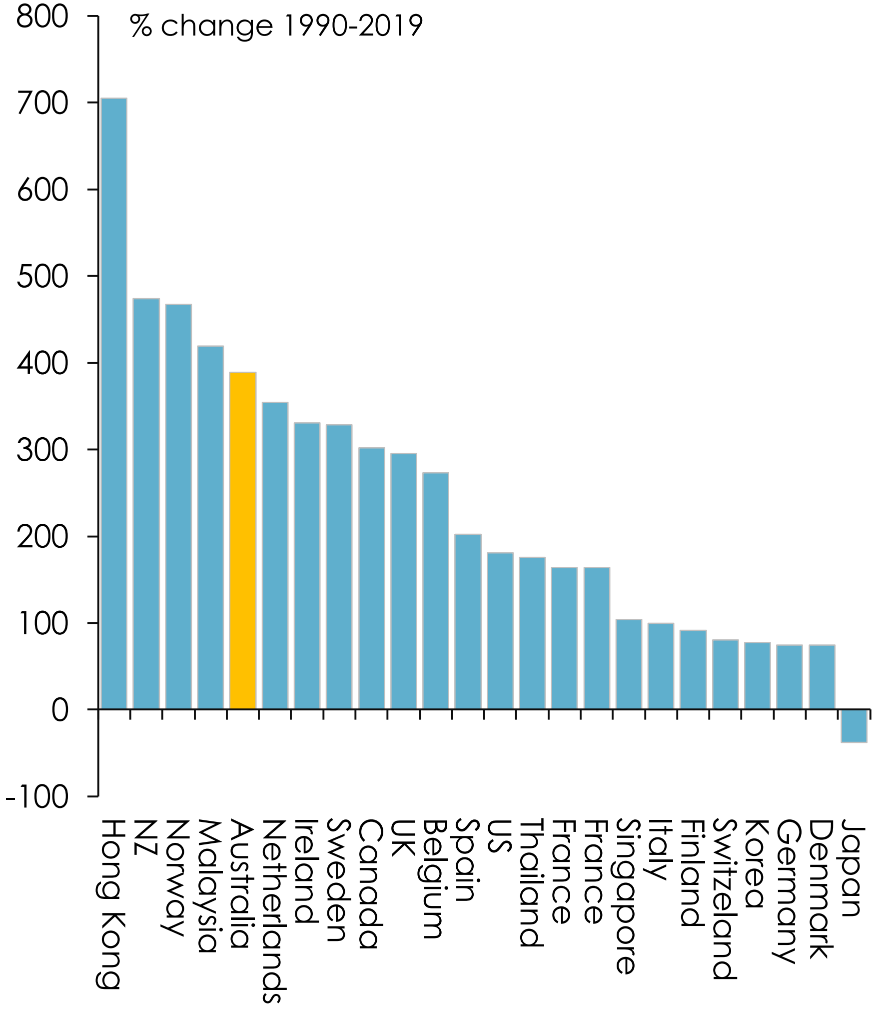
Australian housing wealth and household debt



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.

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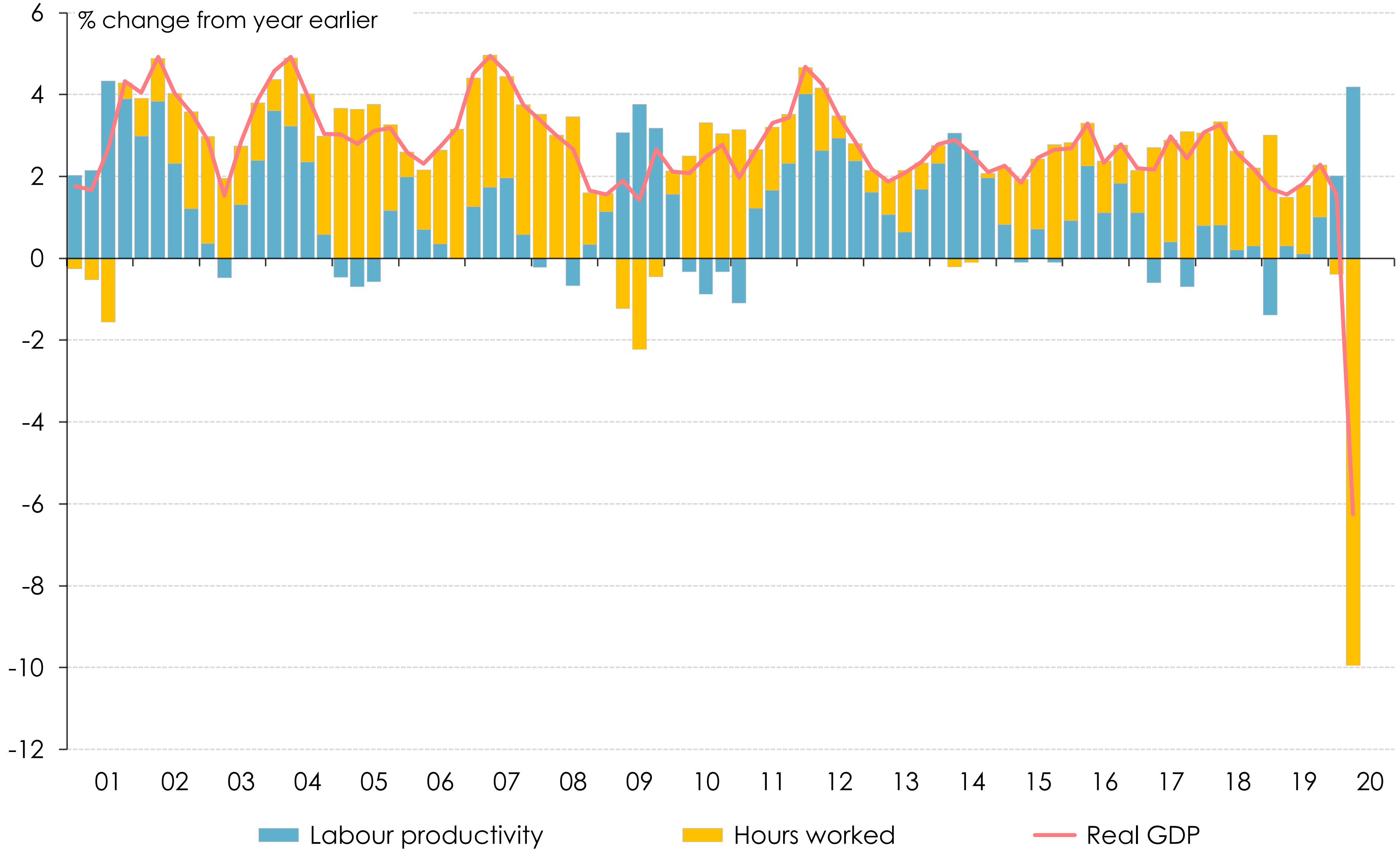
Australia has come to rely much more heavily on increased labour input to drive economic growth in recent years – we can't keep doing that

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.

Some other possible longer-term consequences of the pandemic

- **An accelerated retreat from 'globalization'**
  - prompted by mistrust of international supply chains and desire for greater self-sufficiency in 'essential' products
  - greater government control over movement of people and capital across international borders likely to persist
- **Greater expectations of government**
  - having done things previously considered 'unthinkable' during this downturn, governments may be expected to do more during future downturns
  - there may as a result be heightened demand for hitherto unprecedented government intervention to address other issues (for example climate change)
- **A reduced role for (conventional) monetary policy in managing economic cycles**
  - implying a greater role for fiscal policy (or, alternatively, bigger and perhaps more frequent cycles)
- **Changes in ways of working**
  - at least some employers and employees are likely to maintain the option of (or preference for) 'working from home'
  - possible implications for demand for commercial office space
- **Diminished use of mass transit**
- **Accelerated decline in the use of cash for transactions**
- **Re-think of relationships with China**
  - especially challenging for Australia given our unusual (for an 'advanced' economy) economic relationship with China
- **Erosion of respect for US leadership and competence**
  - unless Trump loses the 3rd November election and Biden can reverse the damage done to perceptions of US credibility, competence and commitment

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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