

ECONOMIC IMPACT OF THE CORONAVIRUS PANDEMIC

8TH AUGUST 2020

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What's new?

The world

- ❑ 1,775,137 new Covid-19 cases were confirmed this week, 2.4% less than last week but otherwise the highest so far, taking the cumulative total to just over 19mn; while 41,340 people died taking the total number of deaths to 714,618 (slide 3)
- ❑ Seven countries (the US, India, Brazil, Mexico, Colombia, Indonesia and the Philippines), with 32% of the world's population, accounted for 70% of last week's new cases (slide 4)
- ❑ A growing number of countries are experiencing a renewed rise in infections (slide 7) and are re-imposing restrictions (slide 14)
- ❑ In the US the number of payroll jobs increased by 1.7mn (1.3%) in July, fewer than in May or June; 42% of the 22mn jobs lost in March and April have now been regained. The unemployment rate fell 0.9 pc pts to 10.2% (slide 44)
- ❑ More Asian economies reported sharp contractions in Q2 GDP compared with a year earlier – Indonesia down 5.3% (the first decline since 1999) and the Philippines down 16.5% (the worst in at least 38 years), while Vietnam's real GDP rose only 0.3%, the slowest in at least 30 years (slide 38)
- ❑ Purchasing managers indices (PMIs) for major economies showed further gains in July (slide 31) although some Asian economies recorded slight declines (slide 39)
- ❑ New Zealand's unemployment actually fell, from 4.2% to 4.0% in Q2, although it would have risen to 5.1% if not for a fall in labour force participation; employment fell by only 0.4% (thanks to NZ's wage subsidy scheme) but hours worked fell 10.3% (slide 123)

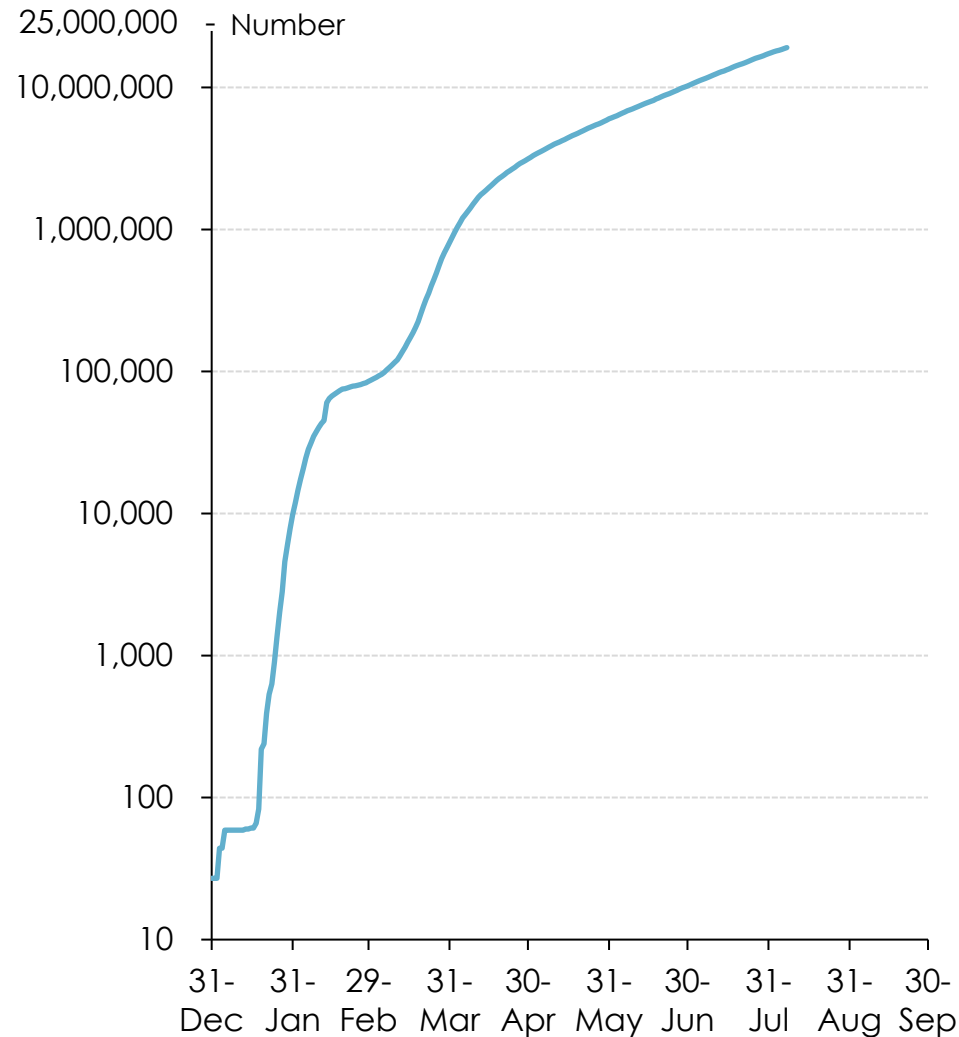
Australia

- ❑ Australia recorded 3,397 new Covid-19 cases this week, a new record high; there were 7,941 active cases on Friday (including 632 in hospital, the highest number since the pandemic started (slide 8)
- ❑ Victoria accounted for 3,290 (97%) of the new cases reported this week, bringing its total to 14,283 – only 236 less than Korea which has almost 8 times as big a population (slide 9)
- ❑ While failings in Victoria's administration of quarantine for overseas arrivals appears to have been a major reason for its 'second wave', a contributing factor to the 'complacency' of which Victoria's Premier accuses its citizens may have been Victoria's (typically) heavy-handed approach to policing the lockdown (slide 11)
- ❑ Victoria's 'stage 4' lockdown is likely to result in Australia recording a third quarter of negative real GDP growth in Q3, with both Treasury and the RBA revising down their forecasts this week (slides 55-56), with the RBA's inflation forecasts (below 2% until at least the end of 2022) suggesting the cash rate target won't be raised for a very long time
- ❑ The RBA purchased bonds in the secondary market this week for the first time since May (slide 96), but again ruled out negative interest rates and 'monetary financing' of deficits (slides 95 & 98)
- ❑ The RBA also ruled out intervention in the FX market, saying that the A\$ was "now in a range that is broadly consistent with its fundamental determinants" (slide 99)
- ❑ Australia recorded another large trade surplus (of \$8.2bn) in June, reflecting strong growth in exports to China (despite recent political tensions), and the collapse in services imports (slide 83)
- ❑ A special look at the Northern Territory ahead of elections to be held there on 22nd August (slides 108-120)

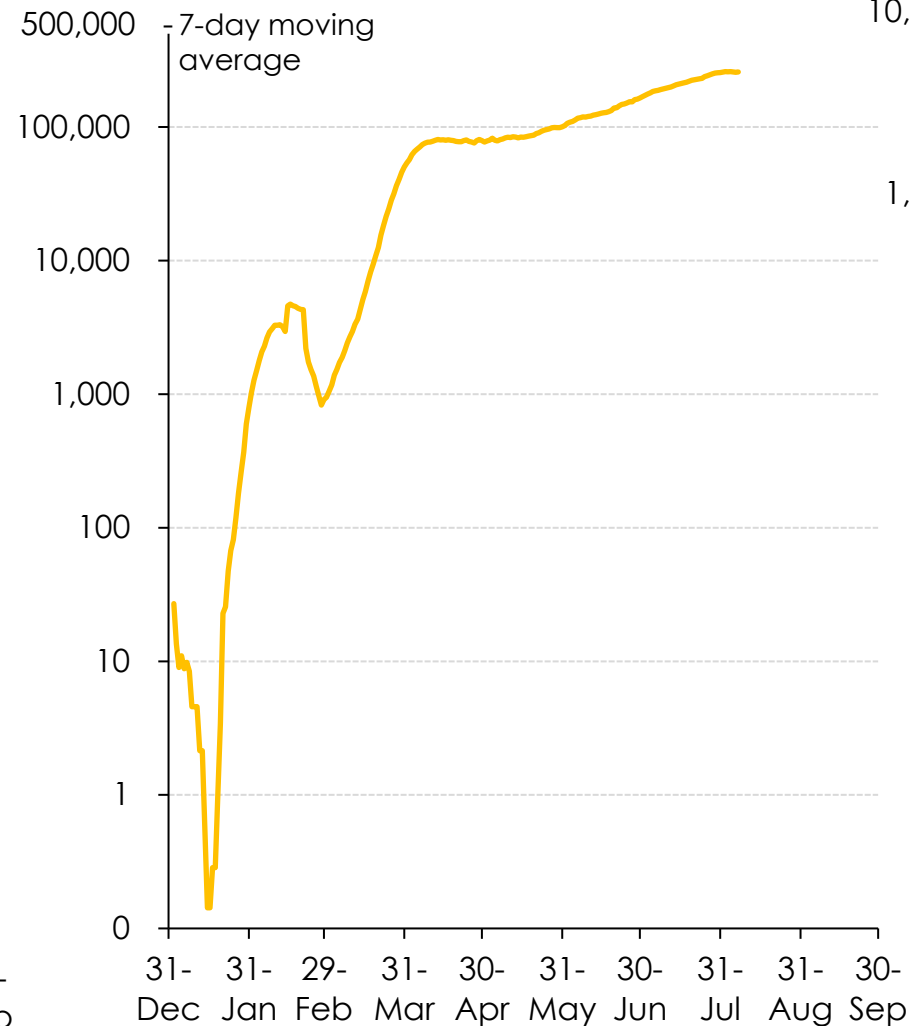
The virus

Globally there were 1.8mn new cases recorded this week, bringing the cumulative total to over 19mn – although deaths are rising more slowly

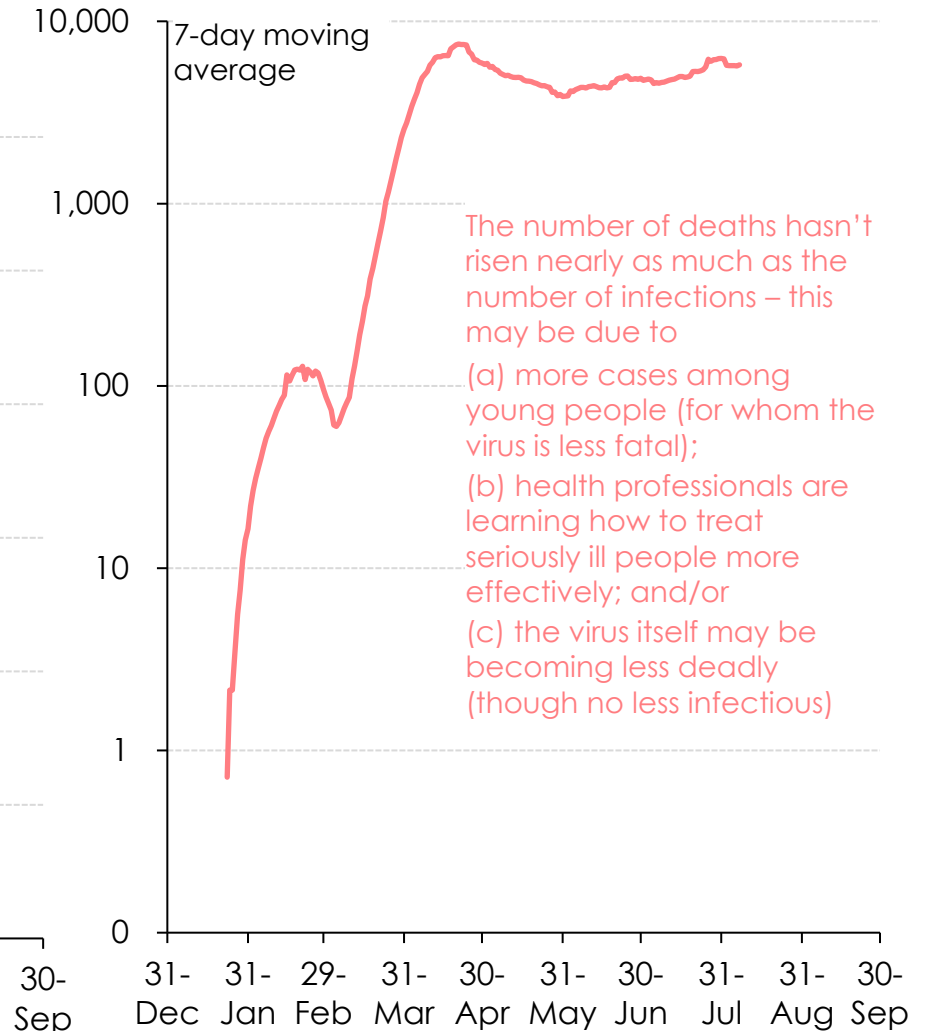
Cumulative confirmed cases – global total



New confirmed cases – global total



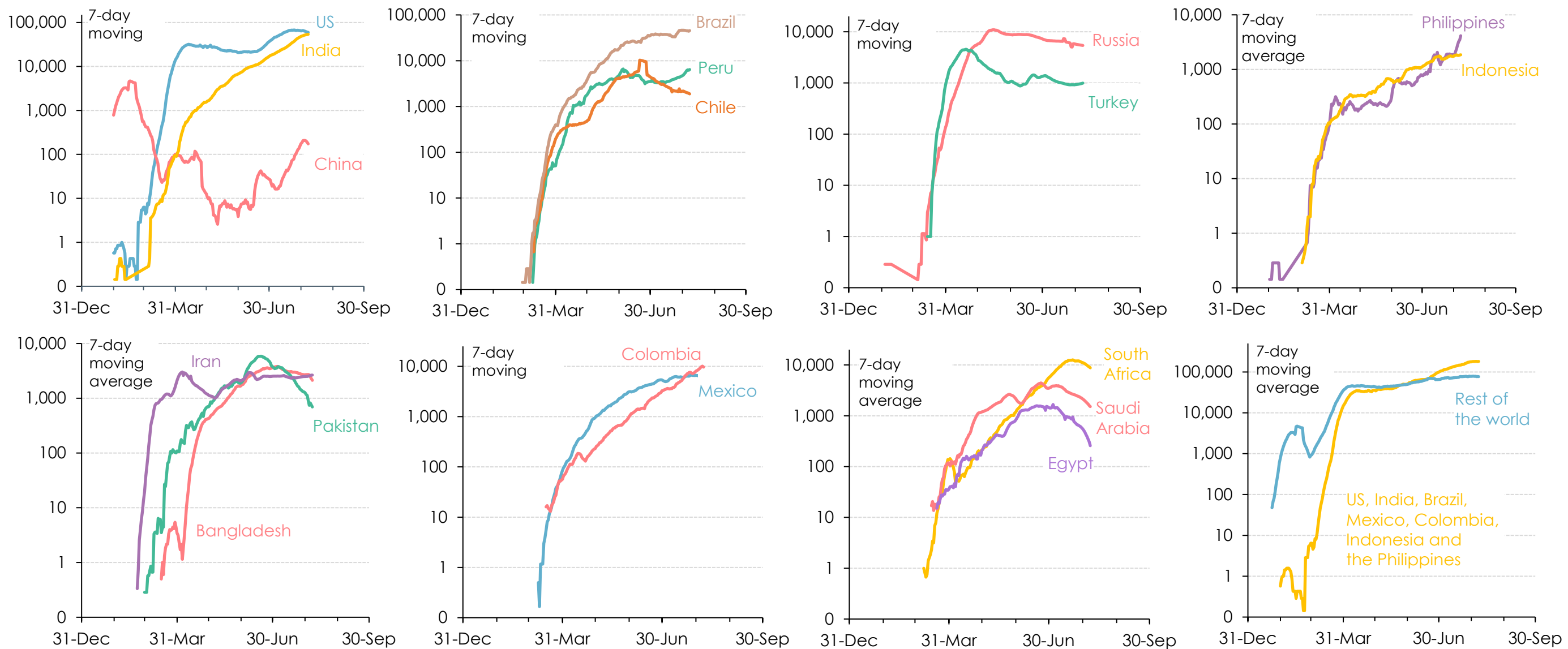
New deaths – global total



Note: All charts are on logarithmic scales. Data up to 7th August. Source: University of Oxford, Our World in Data.

Seven countries with 32% of the world's population accounted for 70% of last week's new cases

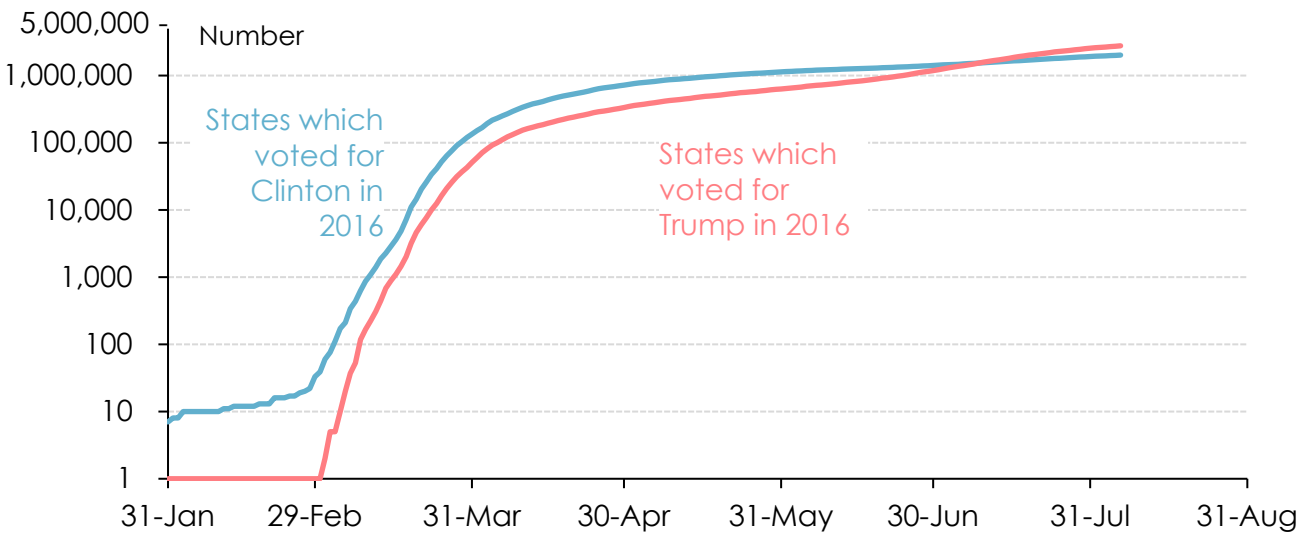
Daily new cases – 20 countries with large populations



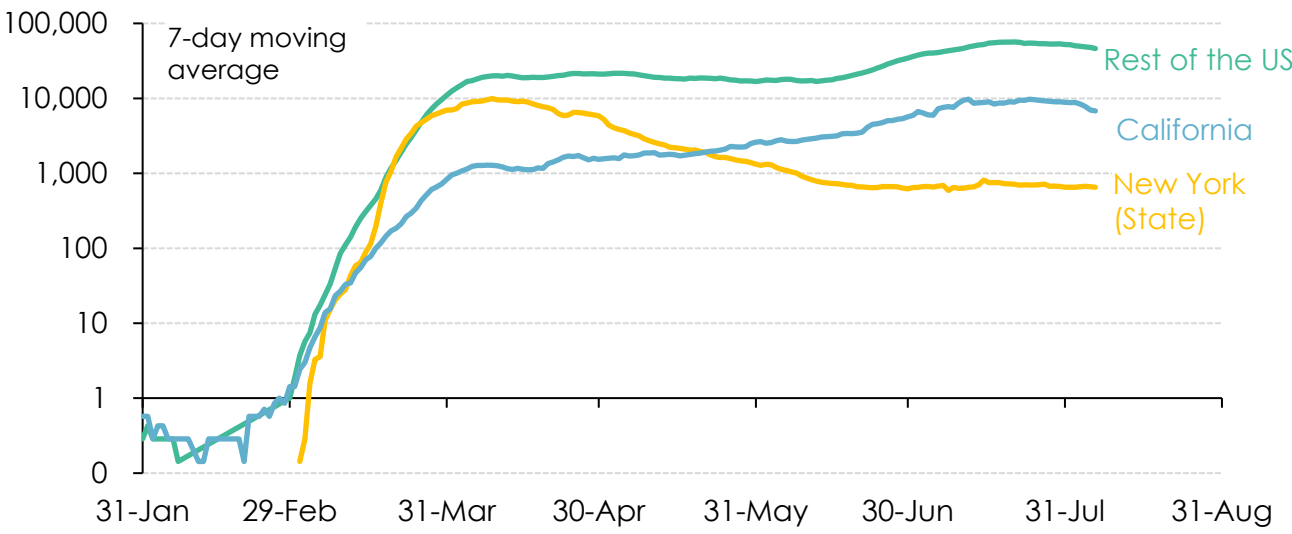
Note: All charts are on logarithmic scales. Data up to 7th August. Source: University of Oxford, Our World in Data; Corinna.

In the US, new Covid-19 cases in 'red states' continue to outnumber those in 'blue' states (despite the continuing rise in infections in California)

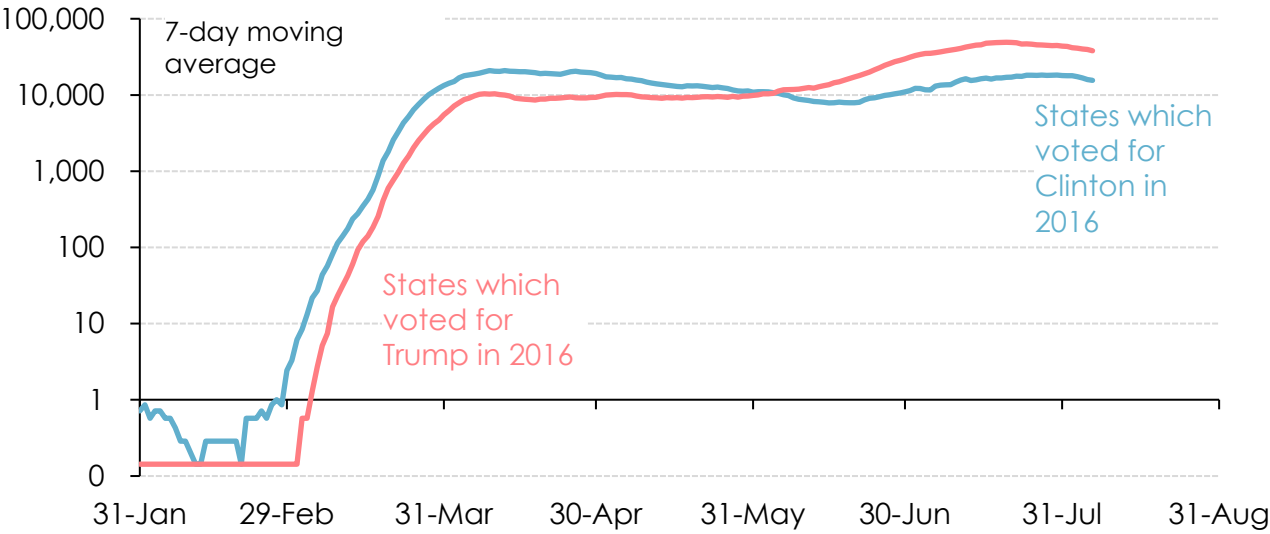
Cumulative cases, by 2016 Electoral College vote



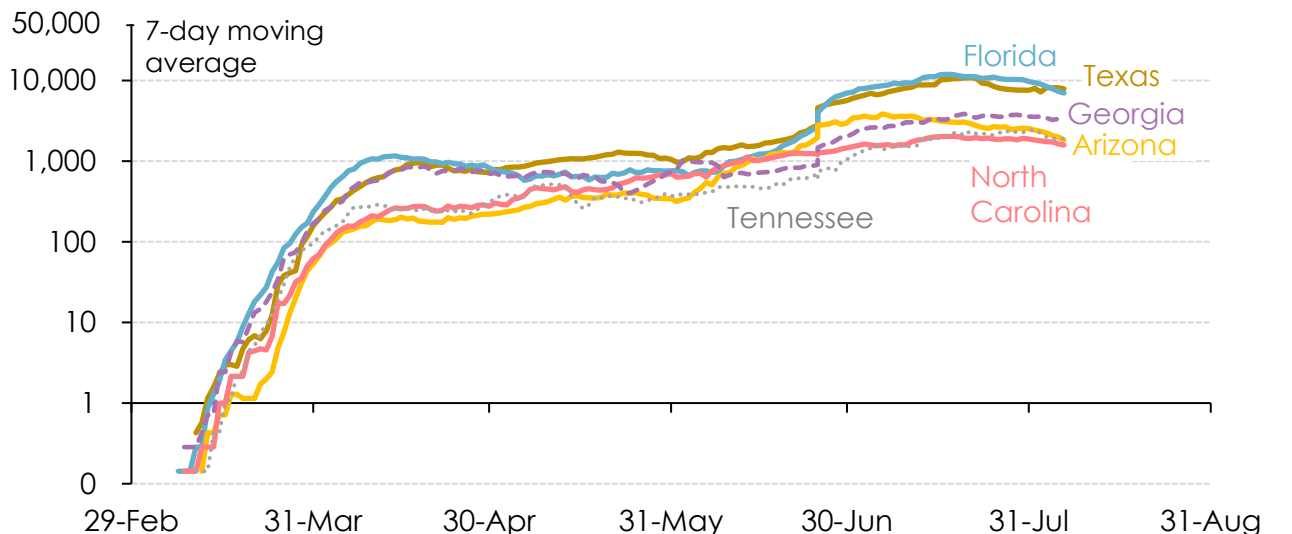
New cases – New York, California & the rest of the US



New cases, by 2016 Electoral College vote



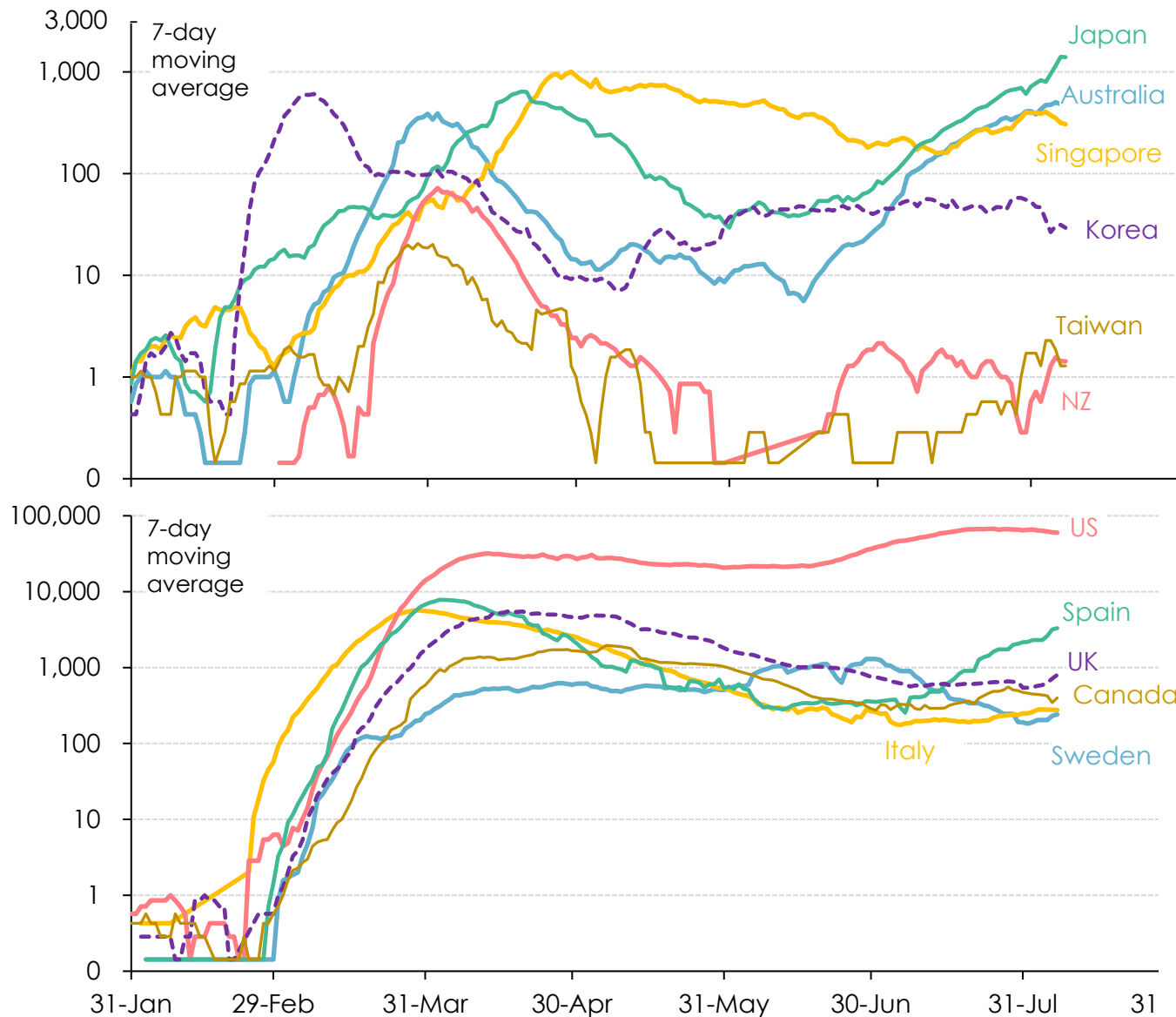
States with fastest recent increases in new cases



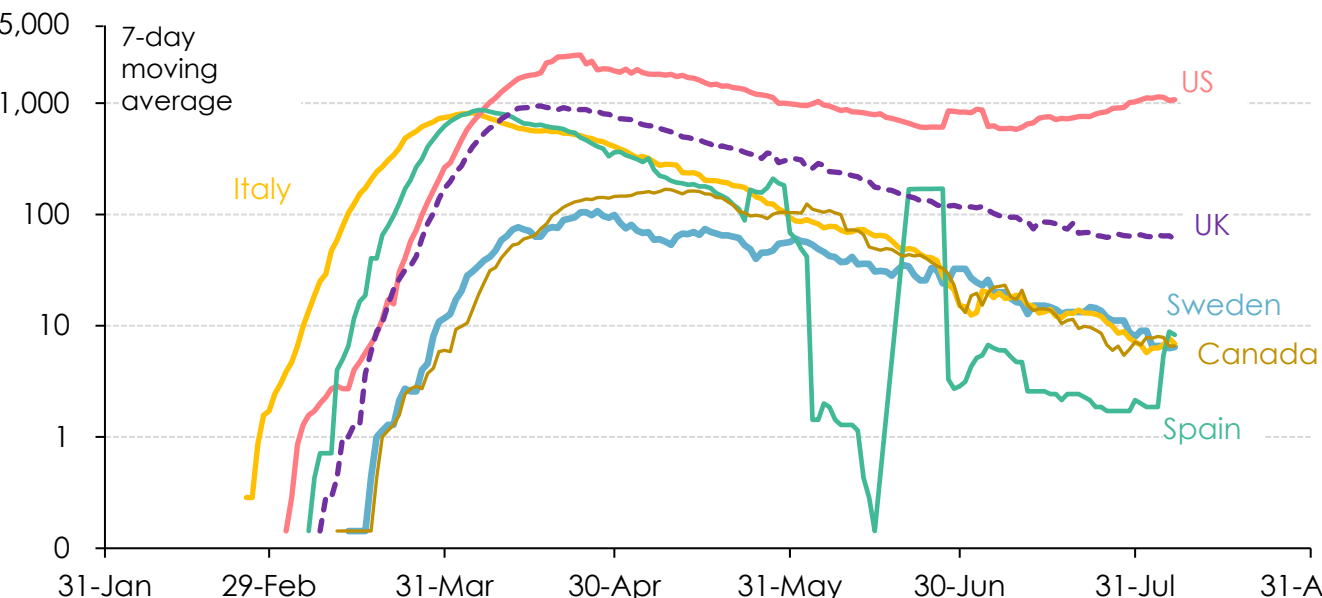
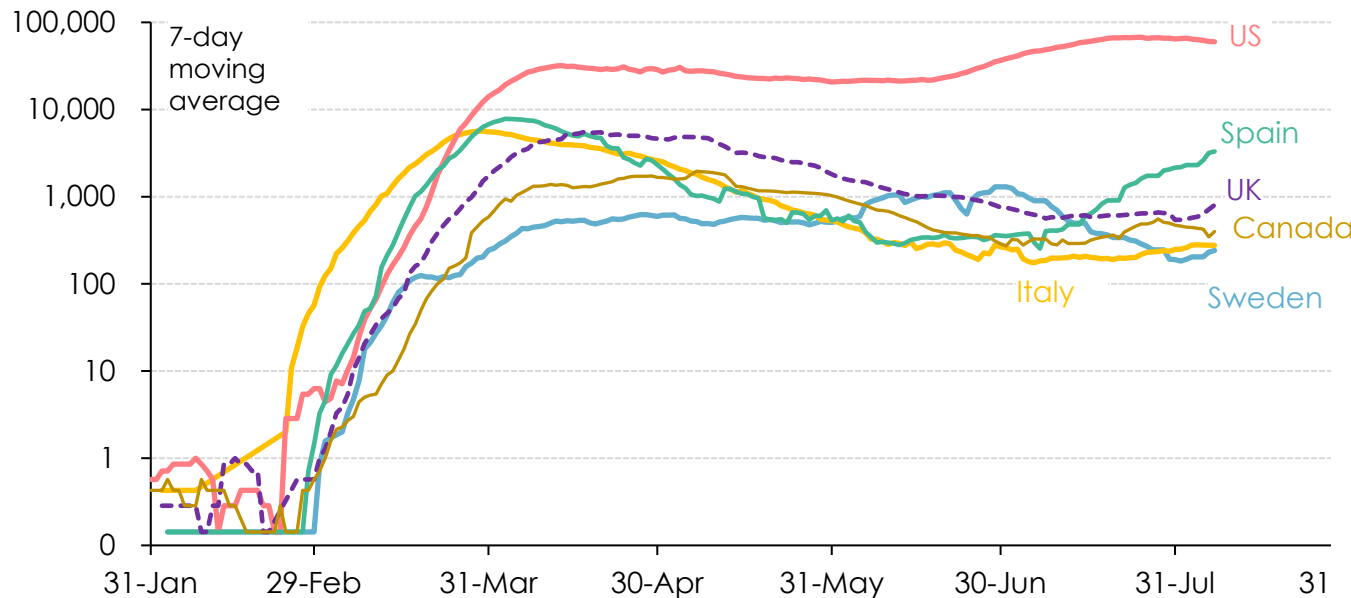
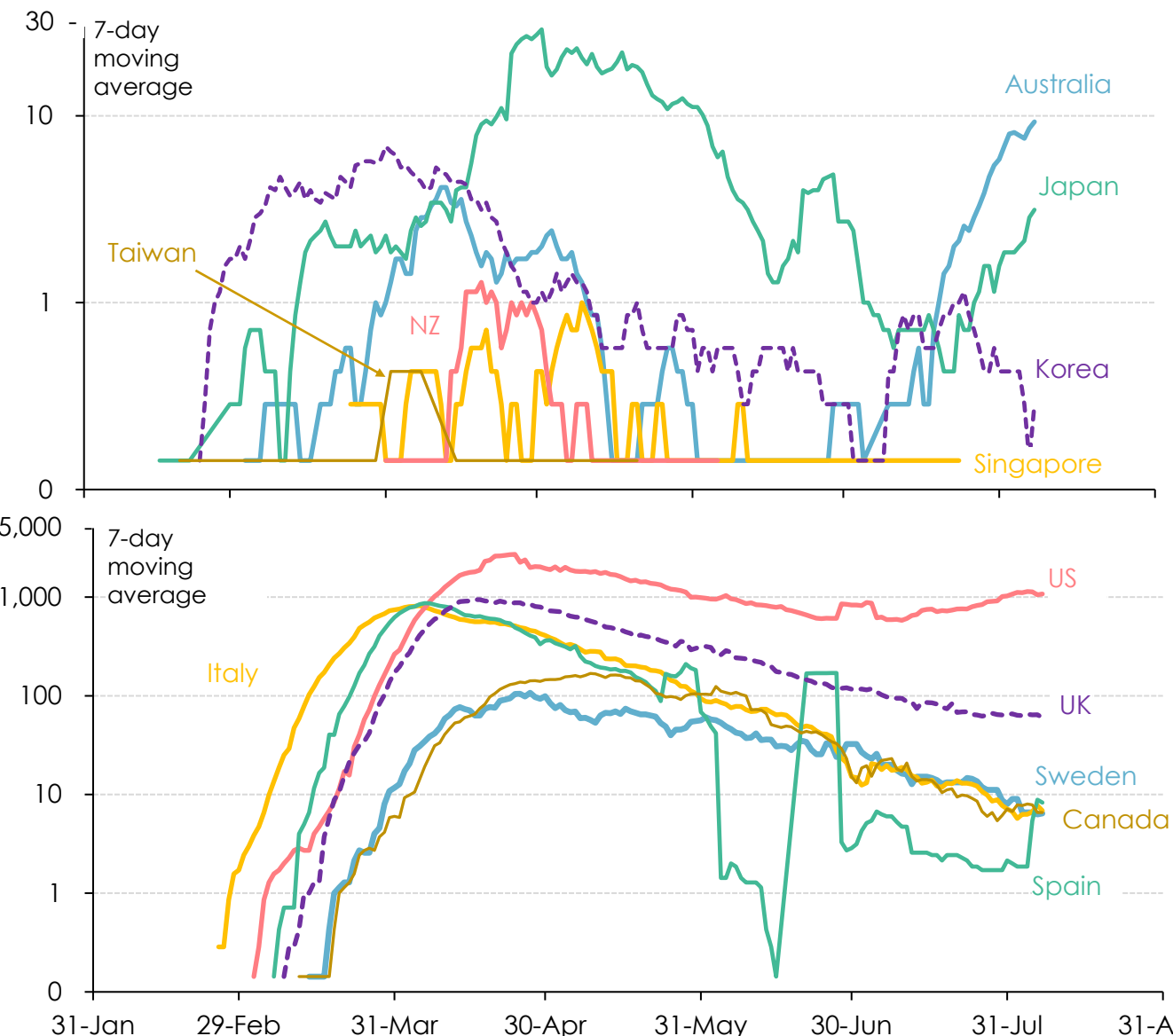
Note: All charts are on logarithmic scale. Cases for Maine (whose Electoral College votes are awarded separately by each of its two Congressional districts) are split by how each of its 16 counties voted in 2016. Sources: USAFacts.org; Centers for Disease Control and Prevention; Corinna. Latest data are for 6th August.

A growing number of 'advanced' nations are experiencing 'second waves' of new cases – but Australia is one of the few also with a surge in deaths

Daily new cases



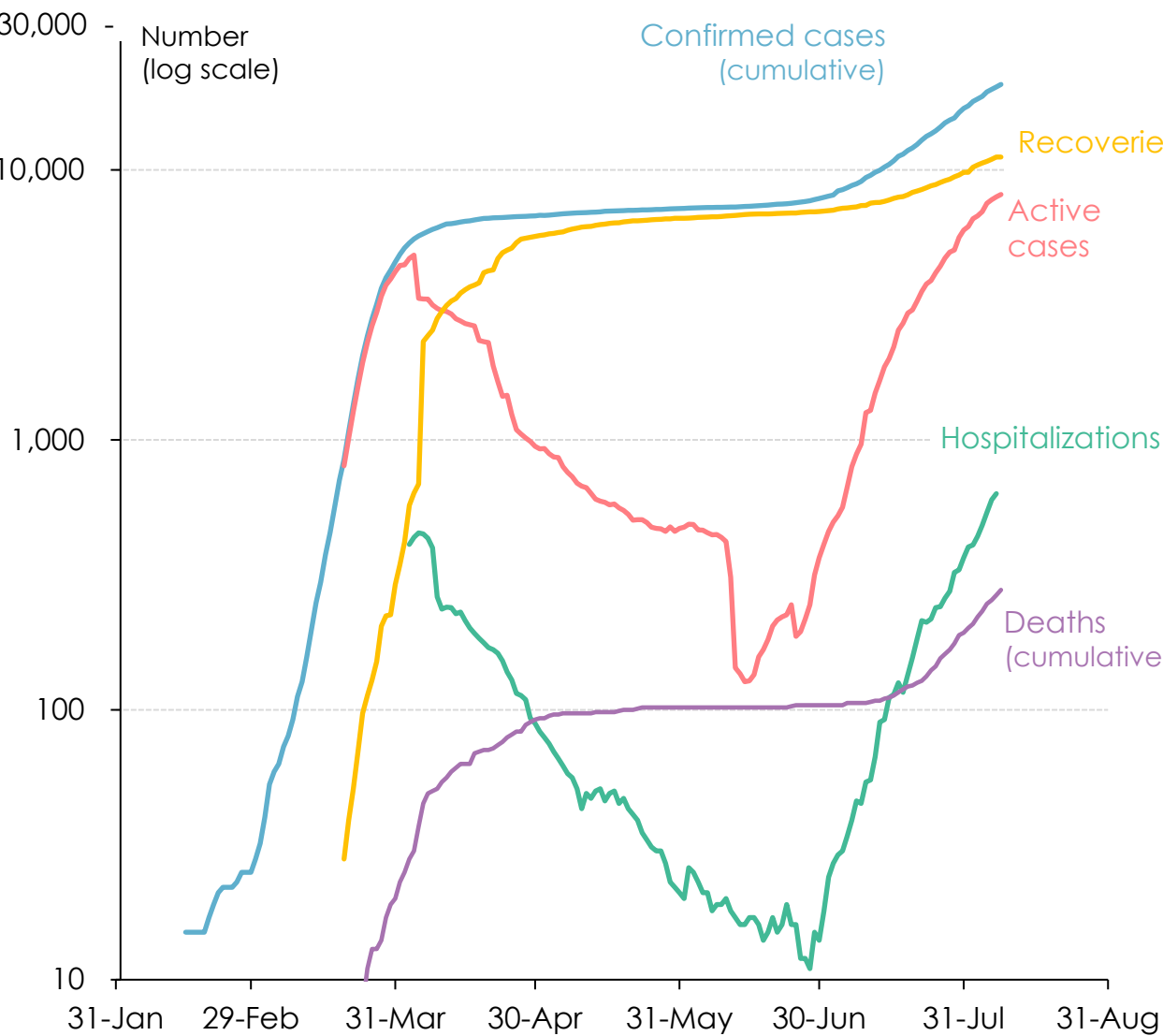
Daily new deaths



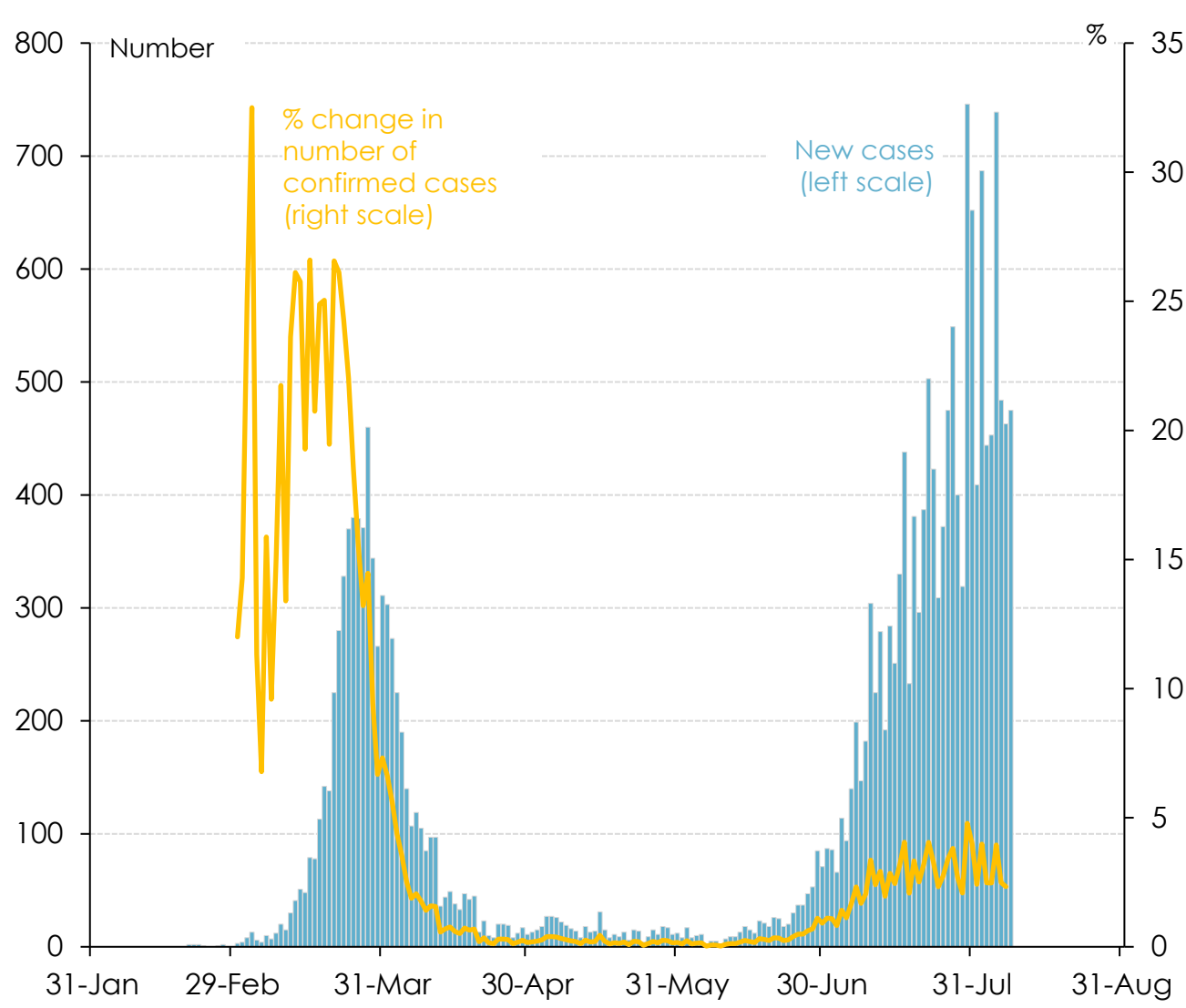
Note: All charts are on logarithmic scales. Data up to 7th August. Source: University of Oxford, Our World in Data; Corinna.

The number of new cases and hospitalizations in Australia has risen rapidly since end-June, and the number of deaths has also risen since mid-July

Cases, recoveries, hospitalizations and deaths



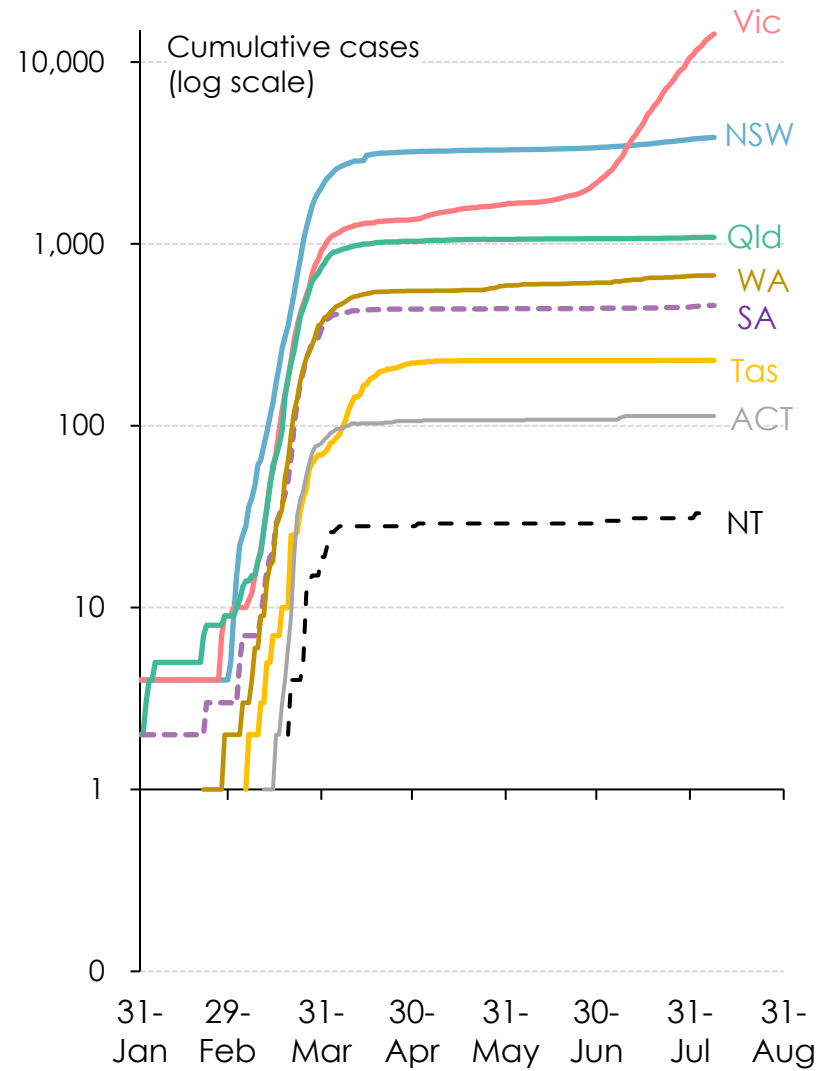
New cases



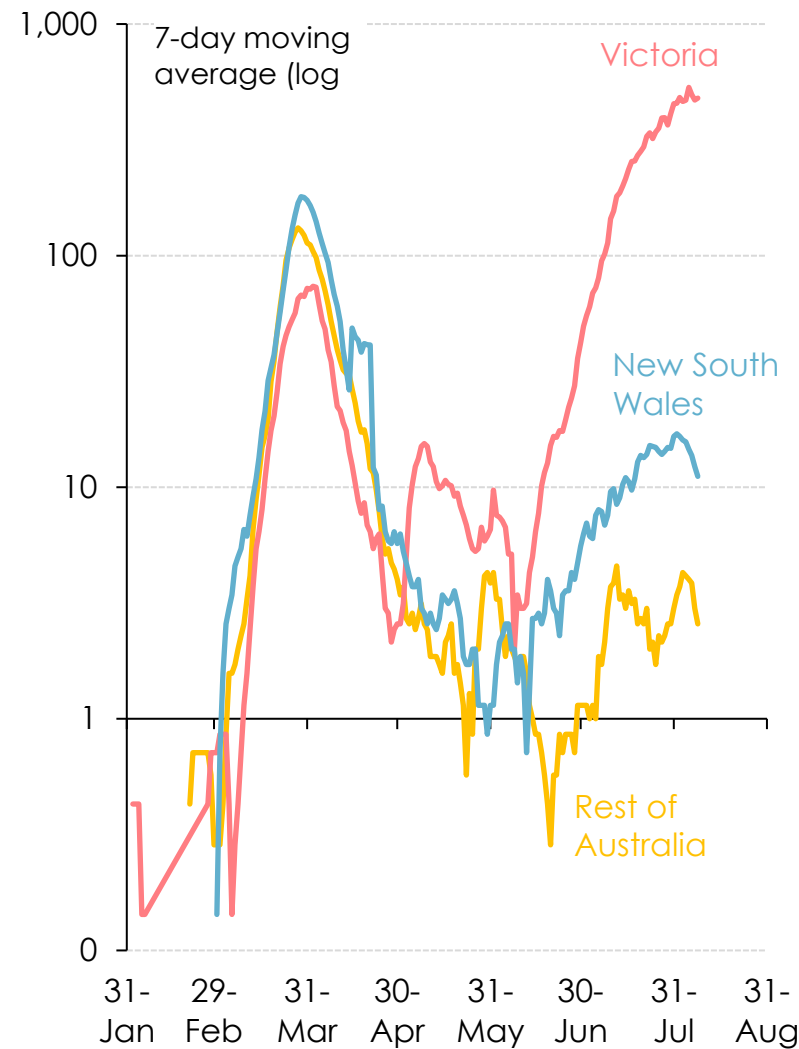
Note: Data up to 8th August. Source: covid19data.com.au

96% of the new cases in Australia over the past four weeks have been in Victoria (and almost all of the rest in New South Wales)

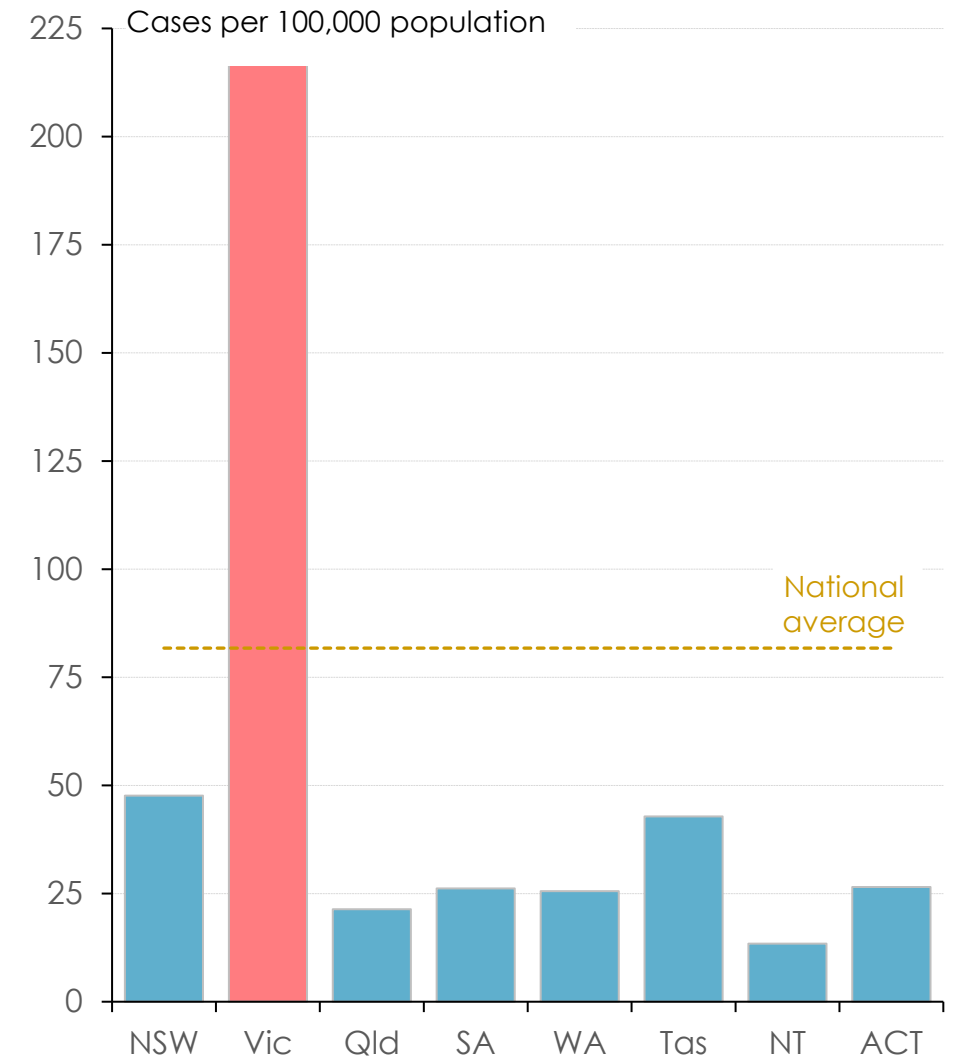
Cumulative cases, by State



New cases



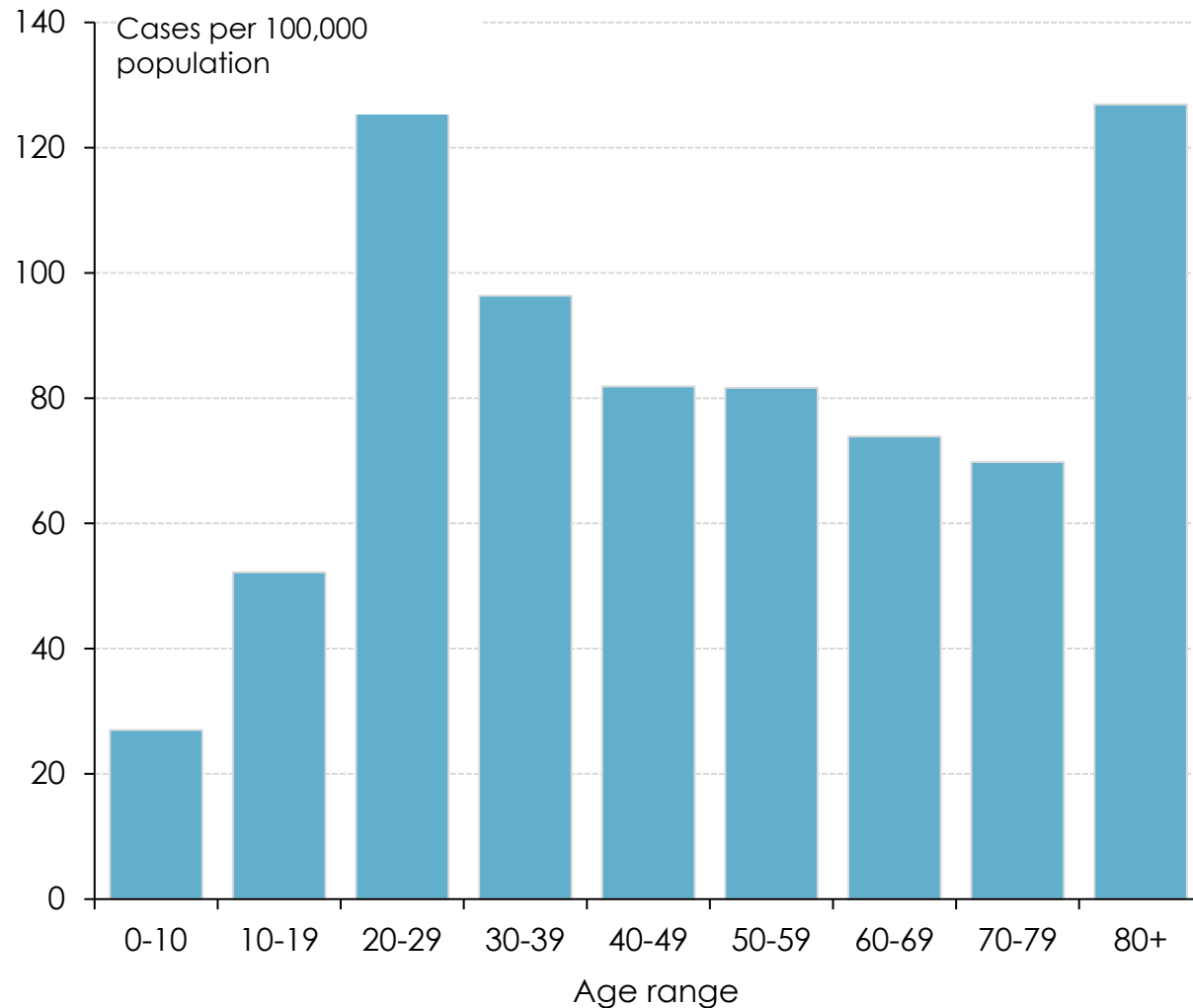
Cases per 100,000 population



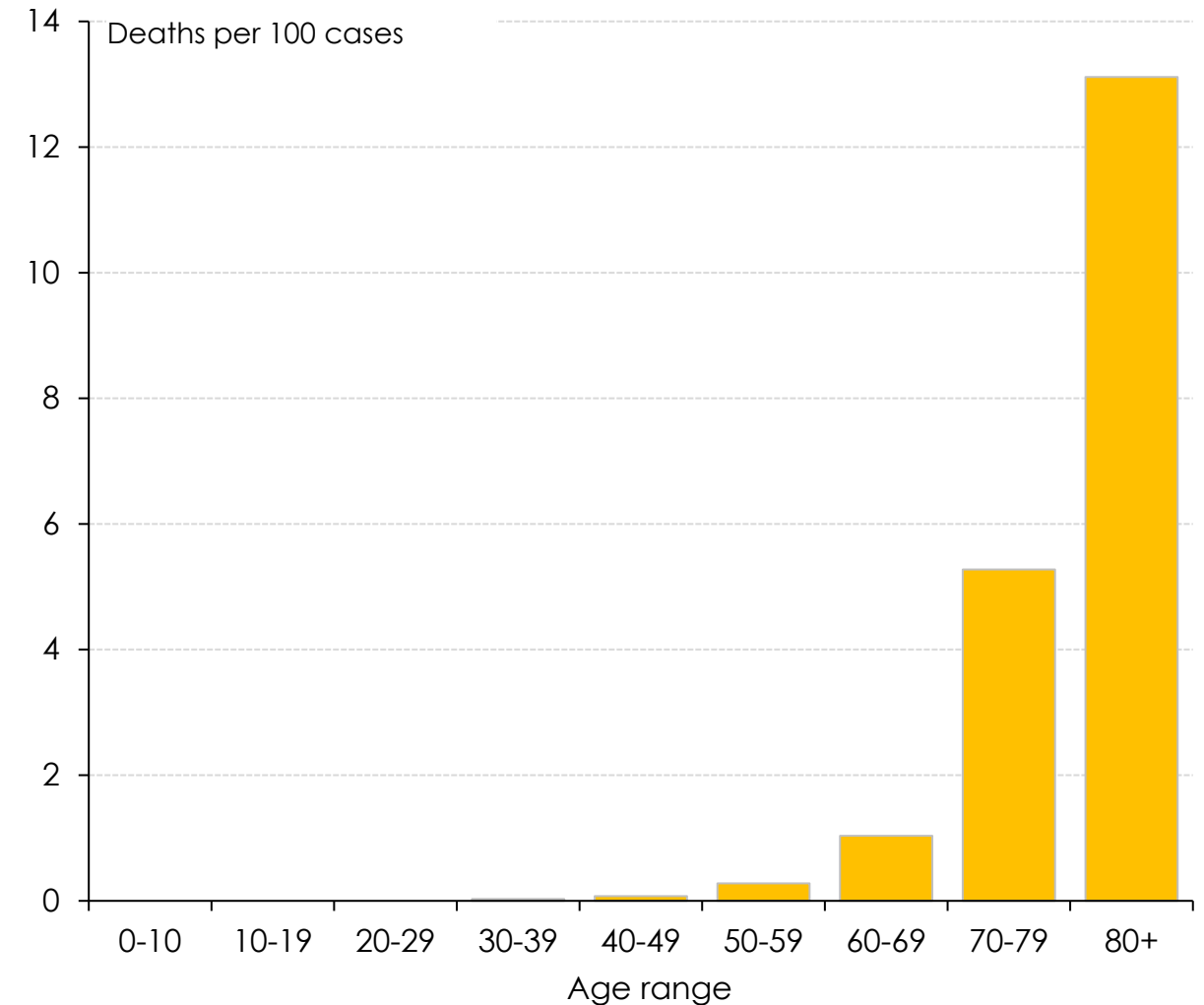
Note: Data up to 8th August. Source: covid19data.com.au

Infection rates are now higher among people in their 20s & 30s than among people in their 40s, 50s & 60s, although fatality rates are higher for over-60s

Cumulative confirmed cases per 100,000 population, by age group



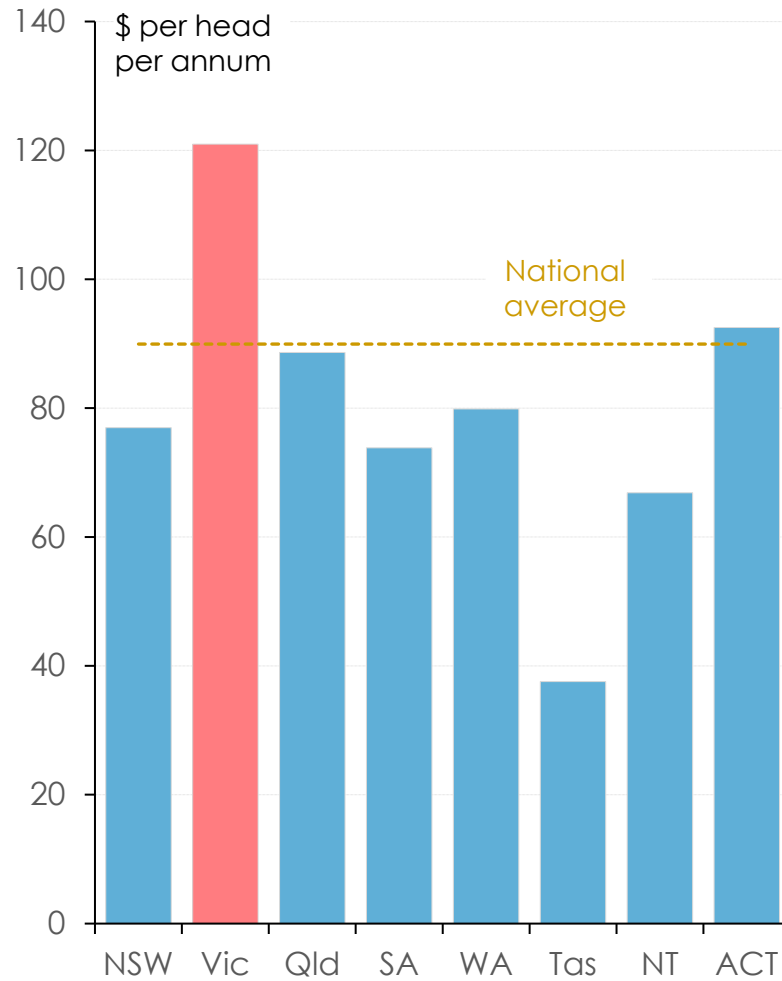
Deaths from Covid-19 per 100 cases, by age group



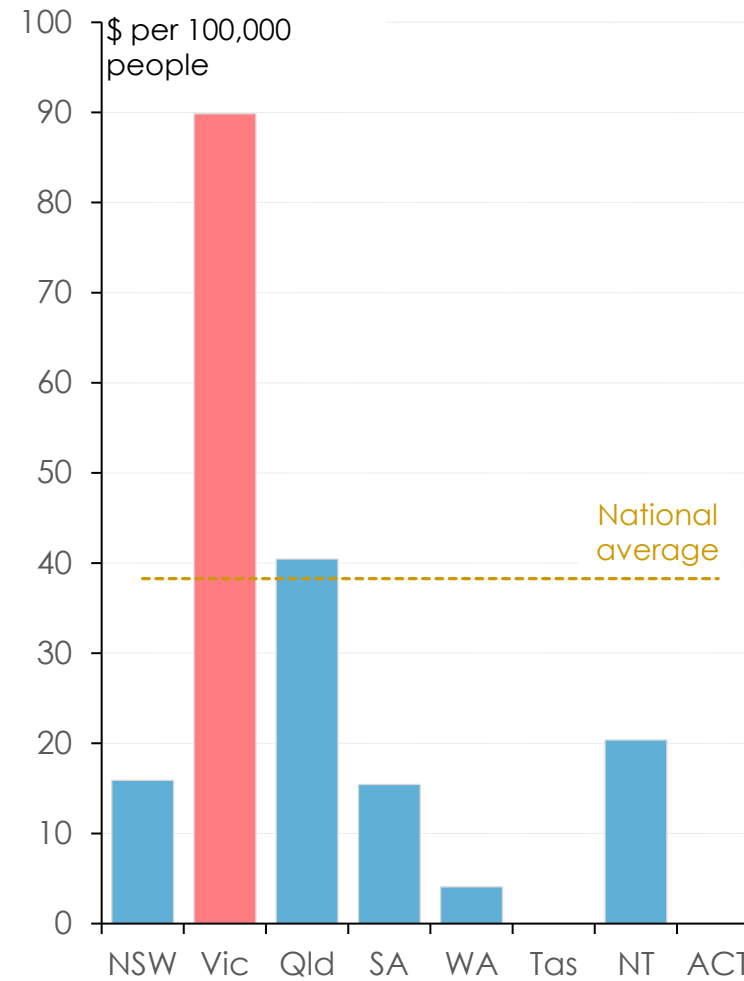
Note: Data up to 7th August. Source: Australian Government Department of Health, National Notifiable Diseases Surveillance System; ABS; Corinna.

Victoria just “doesn’t get” that its heavy-handed policing of restrictions hasn’t worked – rather, it has ‘doubled down’ on fining people

Revenue from fines per head of population, 2014-15 to 2018-19



Fines for breaches of lockdown regulations, per head

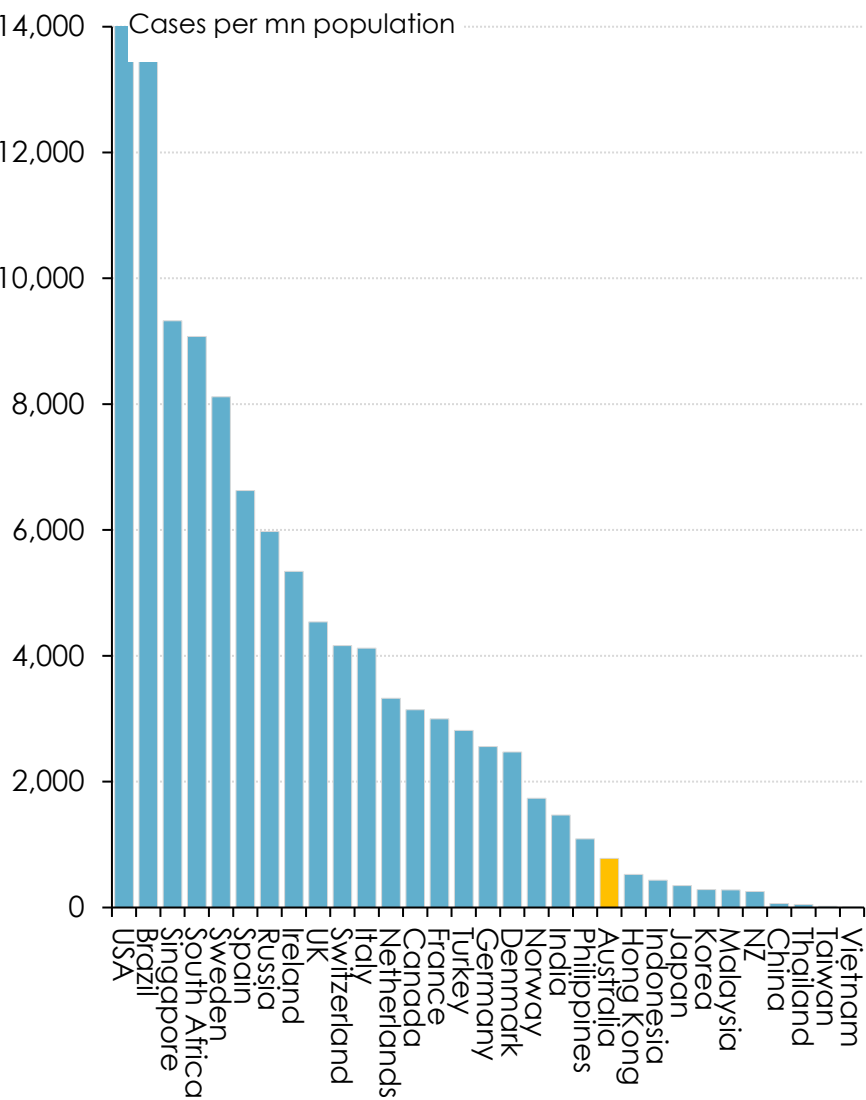


Note: fines for breaches of Covid-19 regulations are for the period between when ‘stage 3’ lockdowns started in late March and the last week of May when restrictions began to be eased. Sources: State and Territory annual financial reports and 2019-20 Mid-Year Budget Reviews; ABS; Tammy Mills, [‘Ahead on penalties: Victoria leads nation on COVID-19 lockdown fines’](#), *The Age*, 28th May 2020; Corinna.

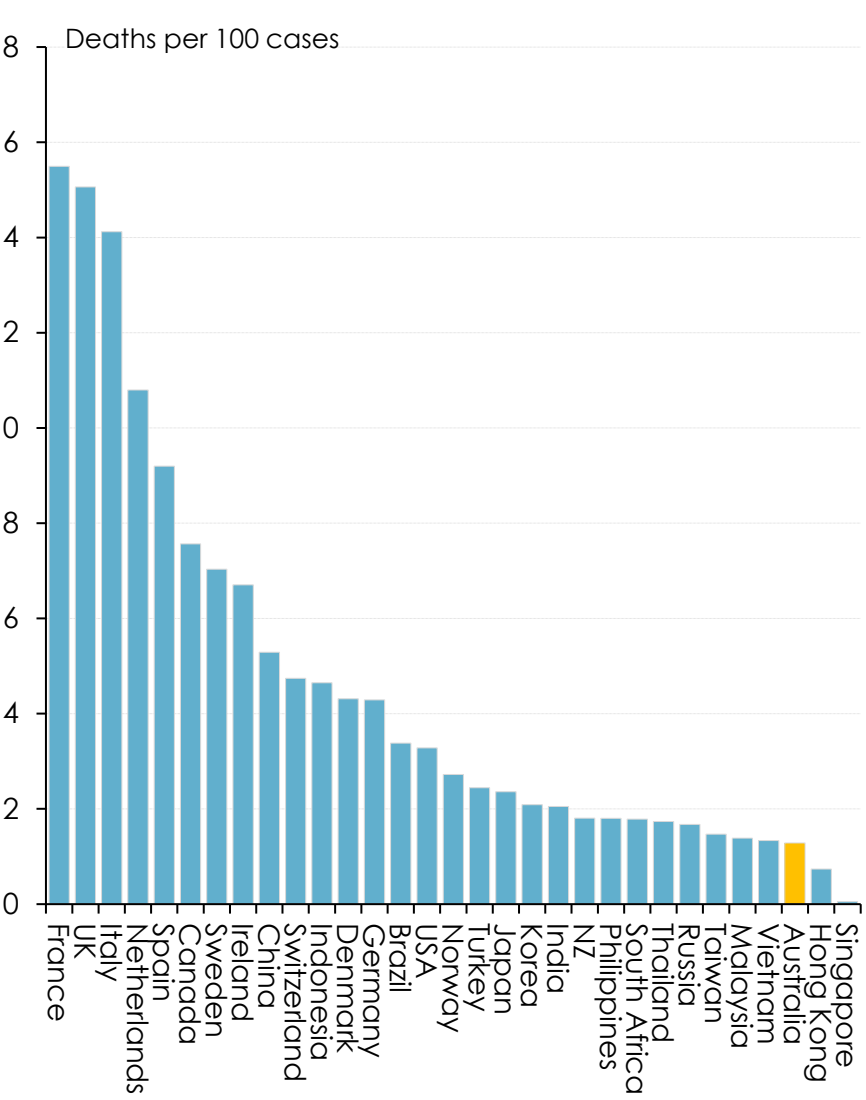
- ❑ Despite its image as Australia’s ‘most progressive’ state, Victoria has long extracted more money from its citizens through fines than any other jurisdiction (irrespective of which party is in power)
- ❑ This ‘authoritarian’ approach carried over into Victoria’s enforcement of the first ‘lockdown’
 - despite there being *no* evidence that Victorians are more likely to breach restrictions, or to be ‘sovereign citizens’ asserting their ‘constitutional rights’ not to wear masks (etc), than people living in other states
 - and yet it didn’t work (see slide 9)
- ❑ While the major reason for Victoria’s ‘second wave’ appears to be failures in the system of hotel quarantine for arrivals from overseas
 - Victoria outsourced this task to ‘security firms’ rather than taking up the Federal Government’s offer of defence force personnel (as NSW did)
- ❑ ... another reason for the ‘complacency’ of which the Victorian Premier accuses his citizens (“it’s your fault, not mine”) may have been a sense of ‘relief’ at getting ‘out from under’ a more oppressive policing regime than anywhere else in Australia
- ❑ Yet even in the past week the Victorian Premier has been boasting about the ‘opportunity’ (his words) that the new lockdown has created to impose ‘even bigger fines’

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

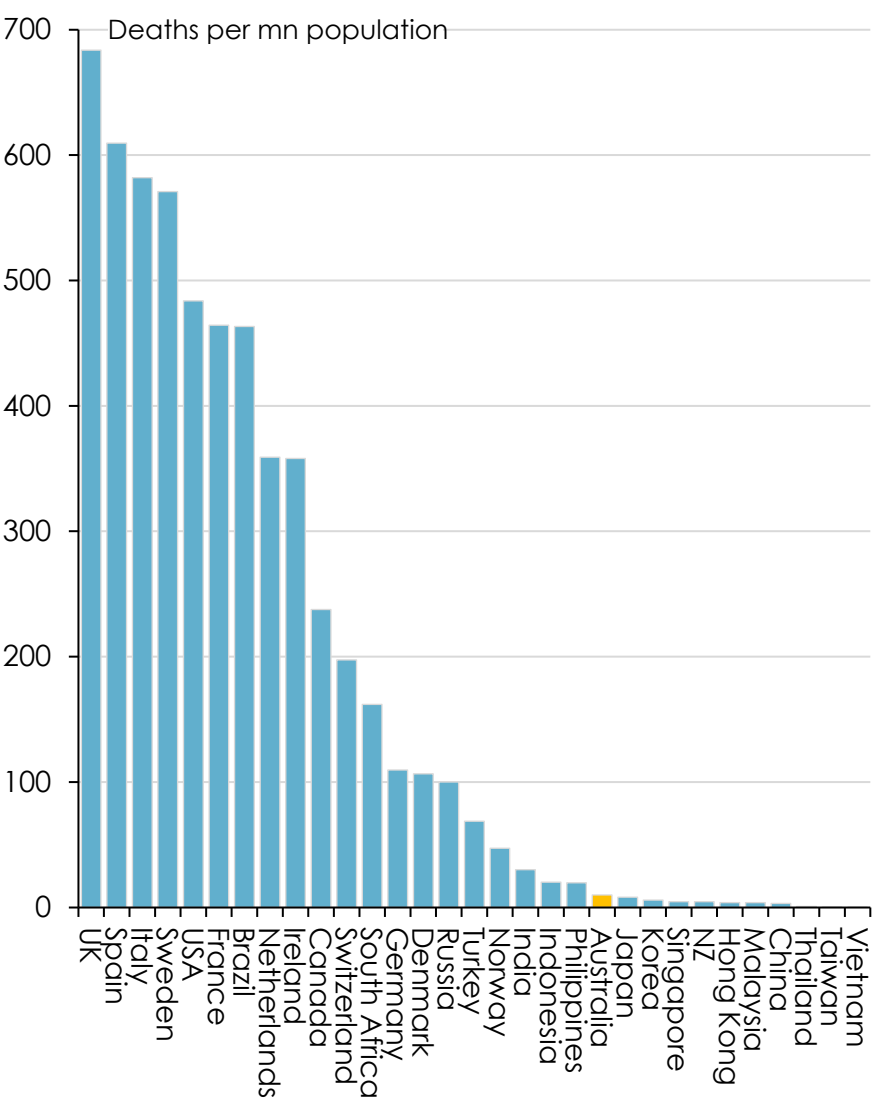
Apparent infection rate



Apparent death rate



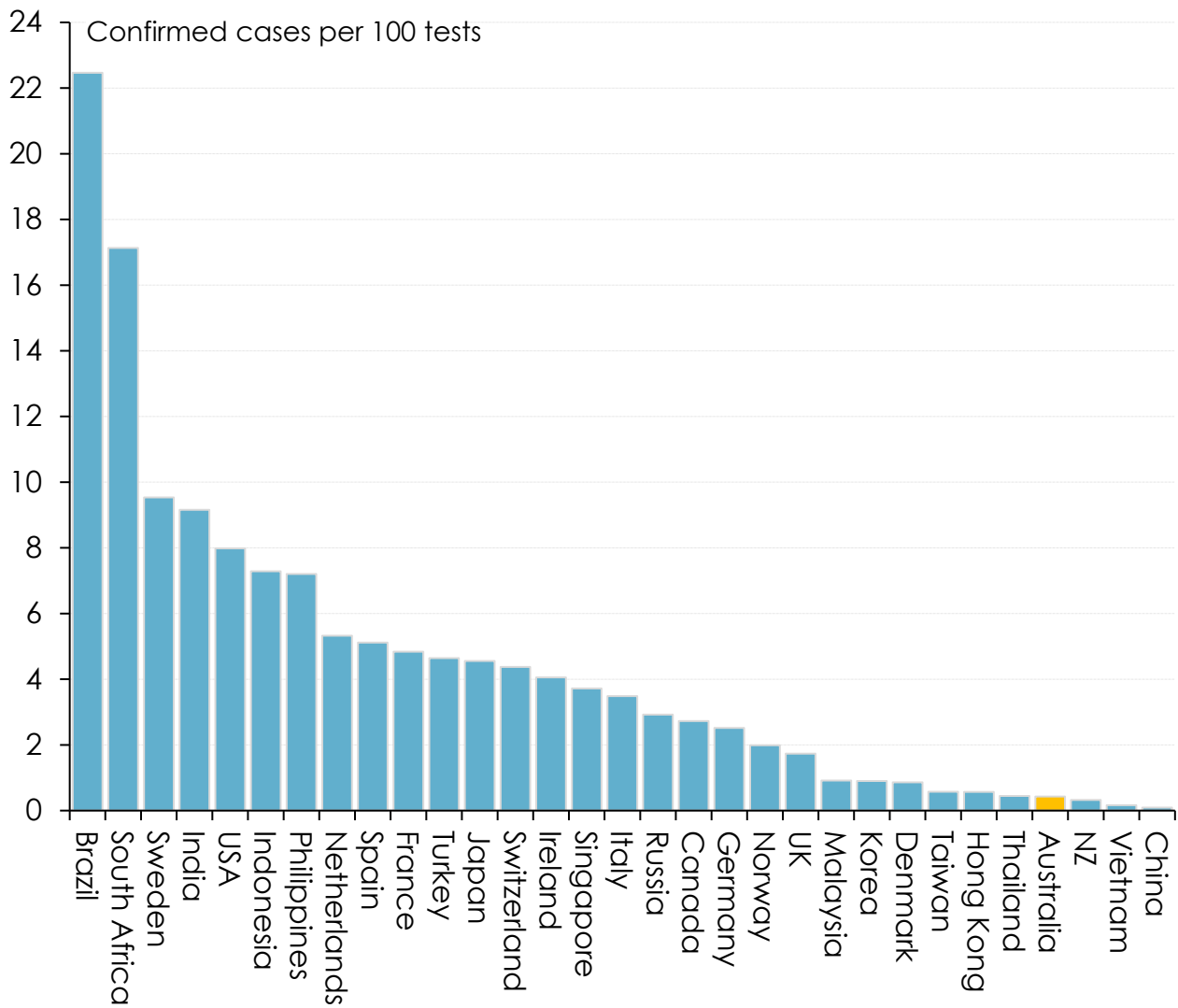
Deaths per mn population



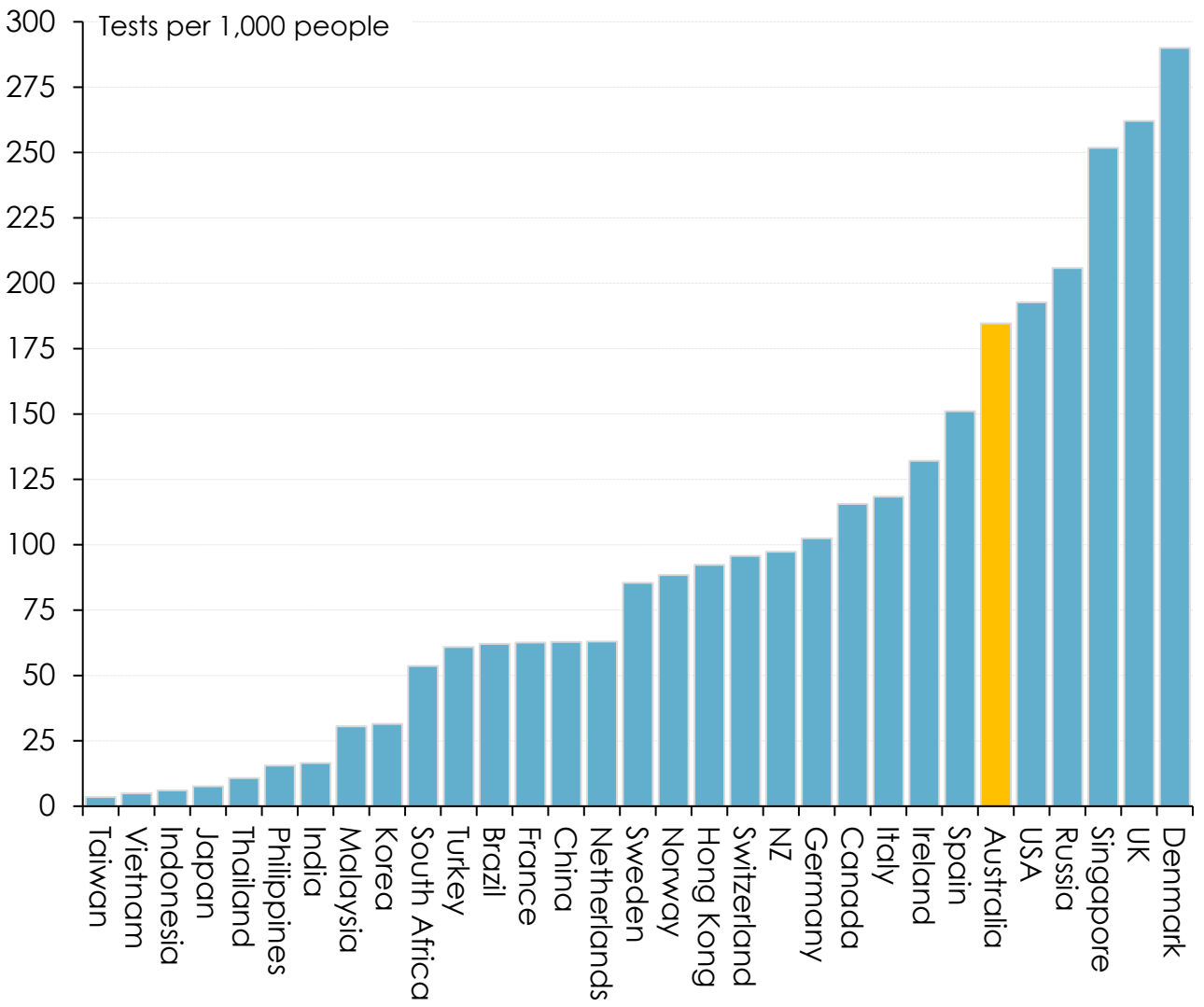
Note: Data up 7th August. Source: University of Oxford, Our World in Data; Corinna.

Australia's testing regime appears sufficiently broad for the low infection and death rates to be seen as 'credible' (ie not due to low testing)

Confirmed cases per 100 tests



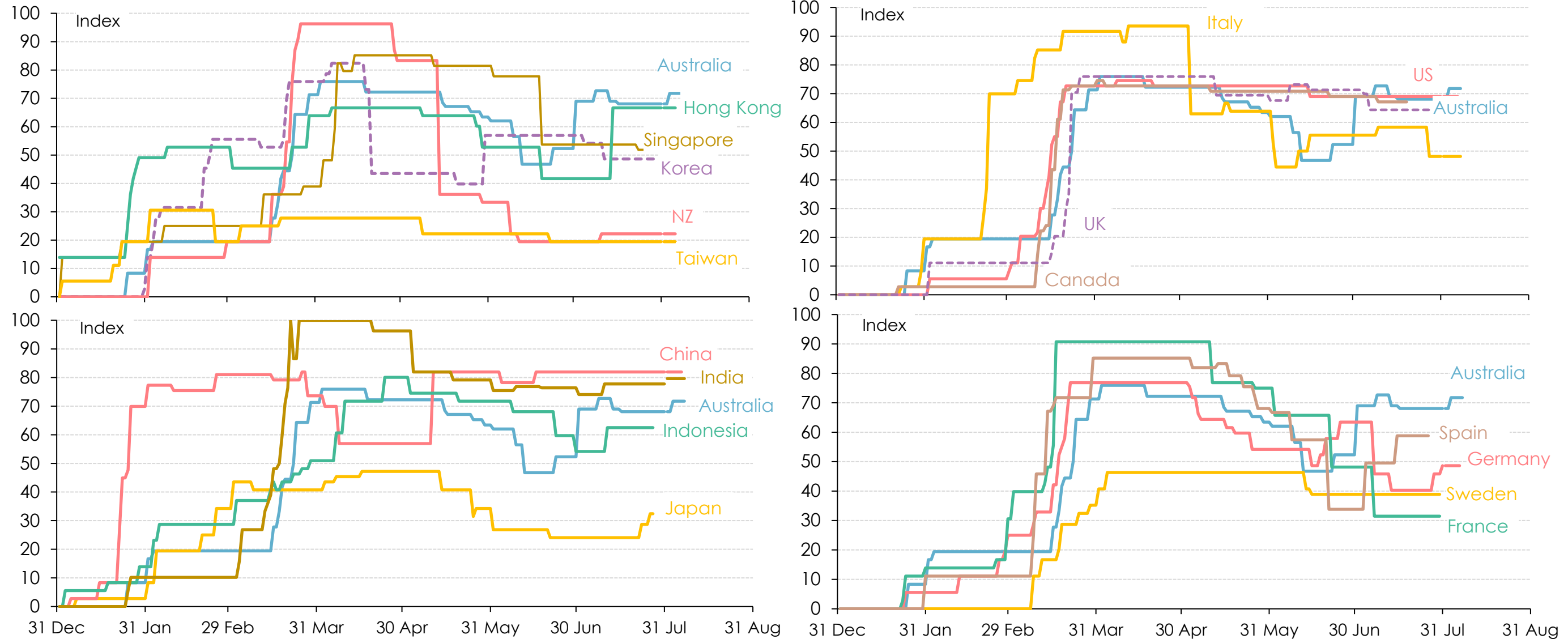
Tests per thousand of population



Note: Data up to 7th August. A high number of confirmed cases per 100 tests combined with a low number of tests per 000 population is *prima facie* evidence of an inadequate testing regime. Source: Worldometers; Corinna.

A growing number of countries have re-imposed restrictions, usually on a regional or local basis, in response to renewed outbreaks of the virus

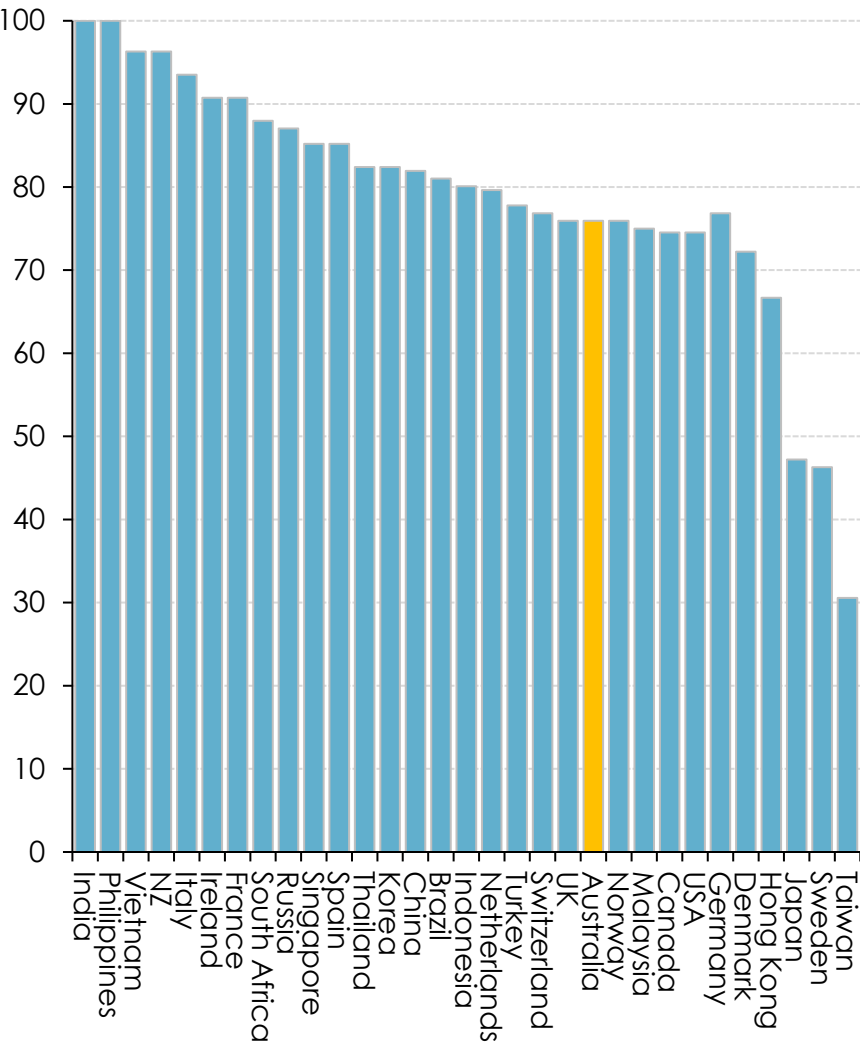
Timing and severity of government restrictions on movement and gathering of people



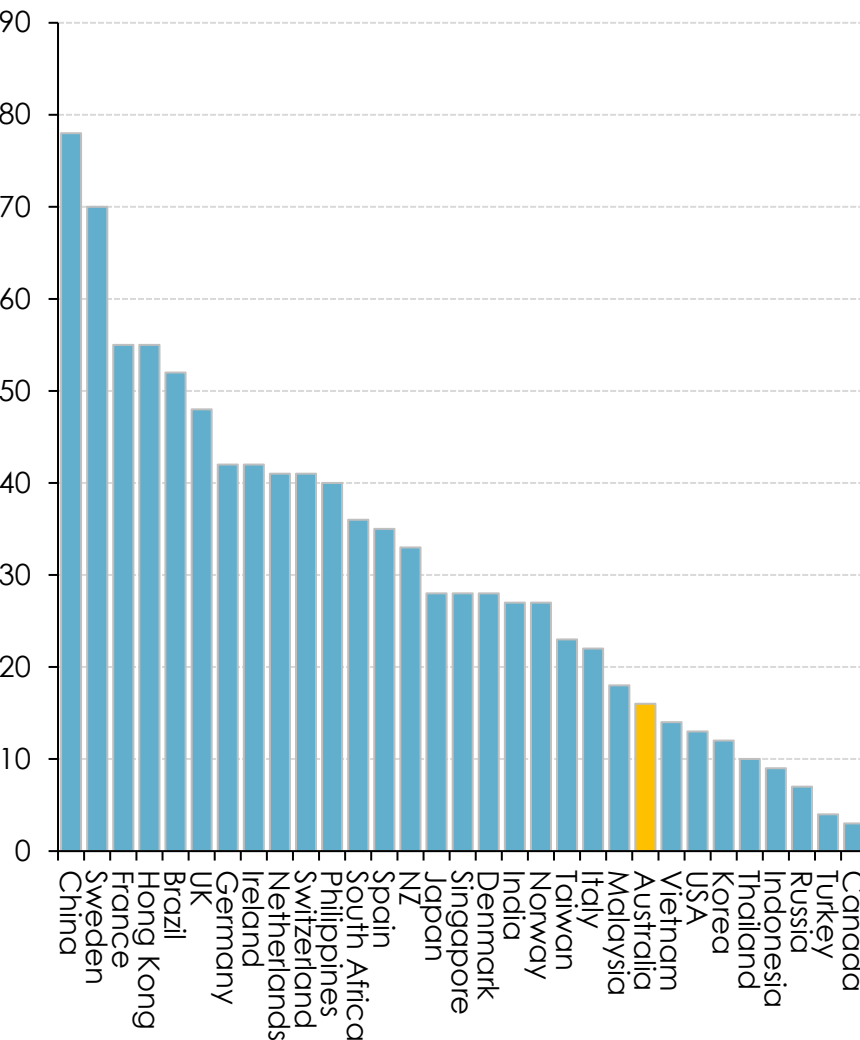
The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. The increase in the index for Australia since 1 July reflects the lockdown imposed on 36 Melbourne suburbs in response to outbreaks there. Source: Blavatnik School of Government, Oxford University. Data up to 19th July – 7th August.

Australia's restrictions have been, on average, less stringent than in most other 'advanced' economies, or other economies in our region

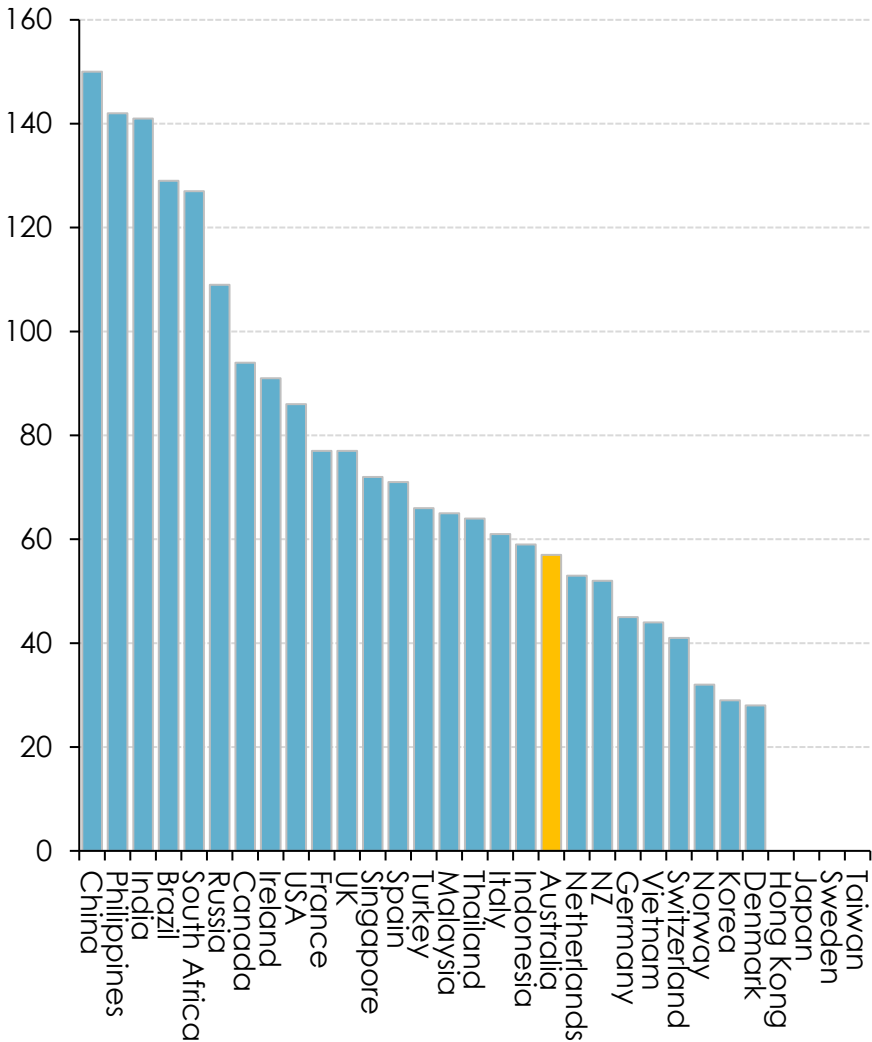
Highest level of restrictions imposed



Number of days restrictions at highest level



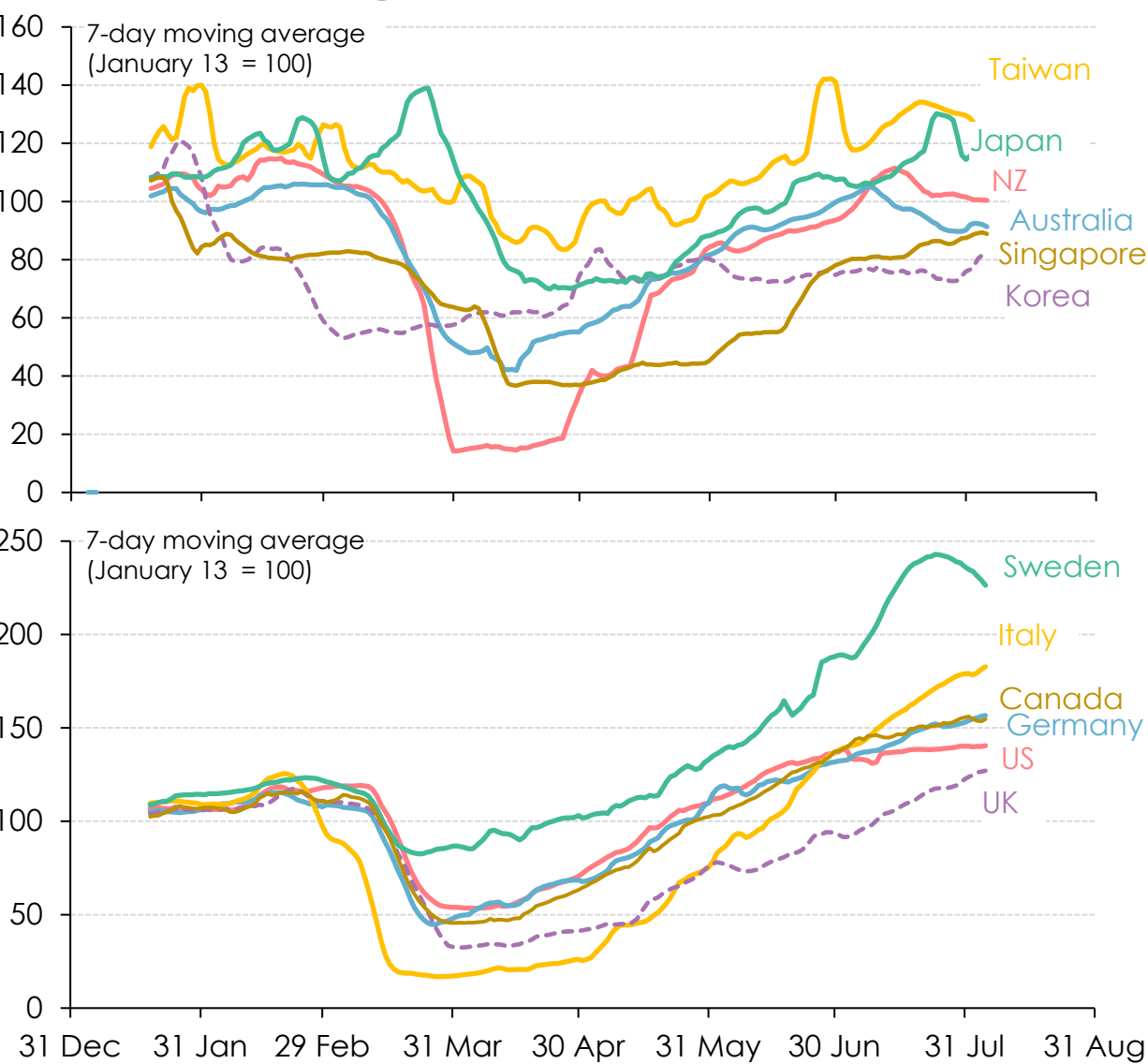
Number of days restrictions above 70 on Oxford index



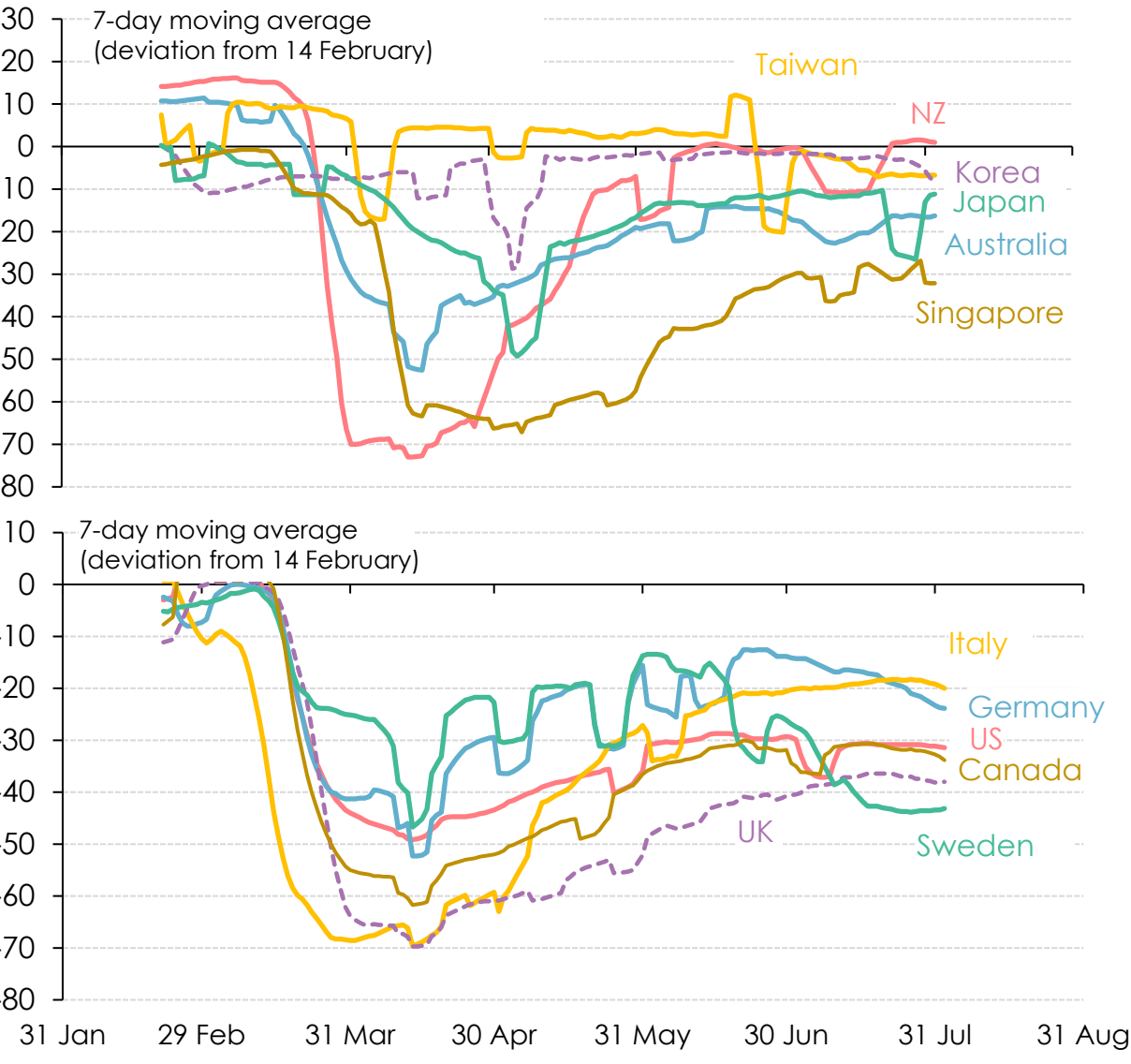
The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. Source: Blavatnik School of Government, Oxford University. Data up to 19th July – 7th August.

The uptrend in mobility since April has begun to peter out in countries where restrictions have been re-imposed

Time spent driving



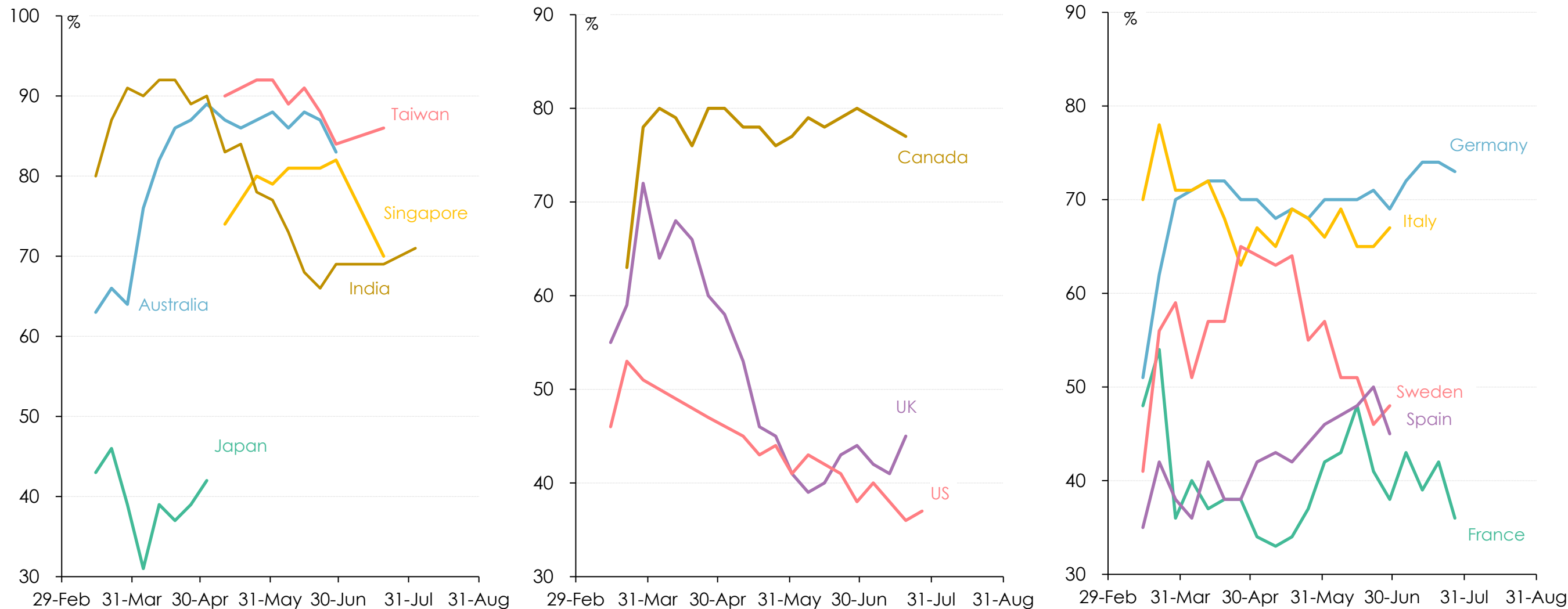
Time spent in work places



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 5th August); Google Covid-19 Community Mobility Reports (data up to 2nd August).

Voters are becoming less satisfied with governments' handling of the pandemic in a growing number of countries

Percentage of opinion poll respondents who think their government has handled the coronavirus outbreak 'well' or 'very well'

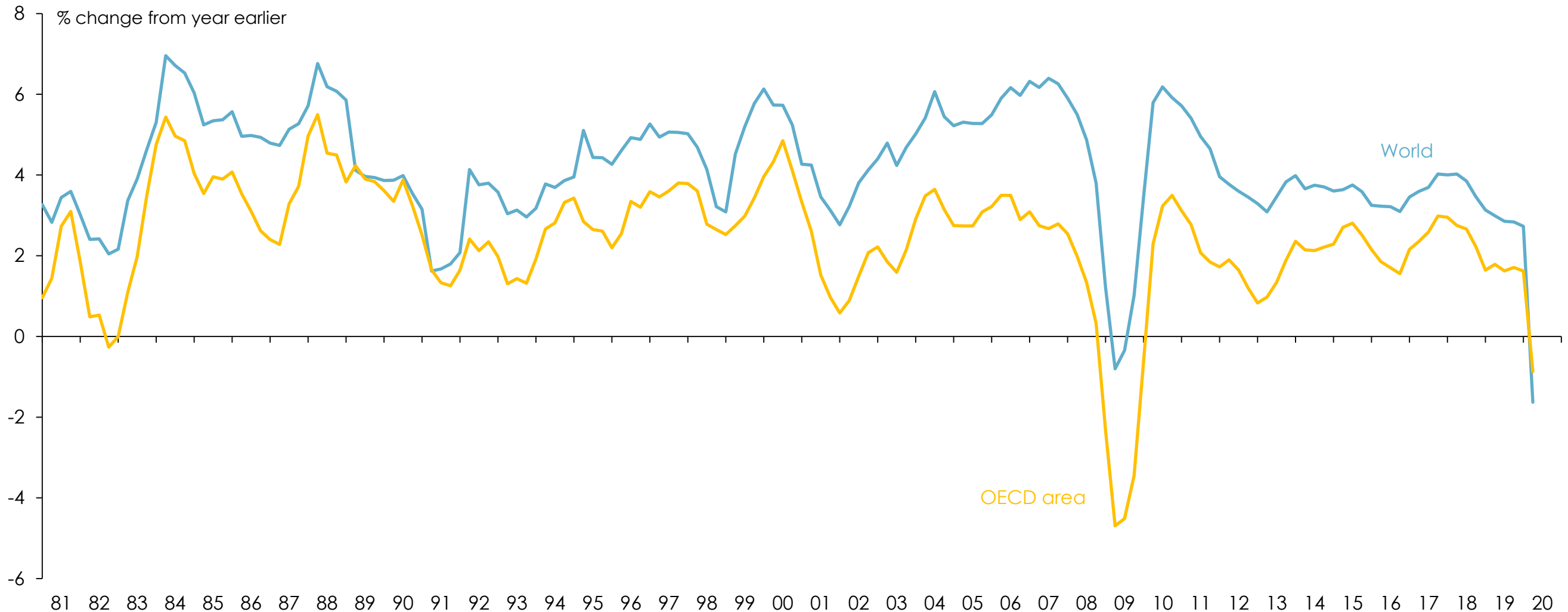


Source: YouGov.

The world

The world economy experienced its sharpest year-on-year contraction for at least 40 years in Q1 this year – with worse to come in Q2

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.
Sources: national statistical agencies and central banks; Eurostat; OECD; IMF.

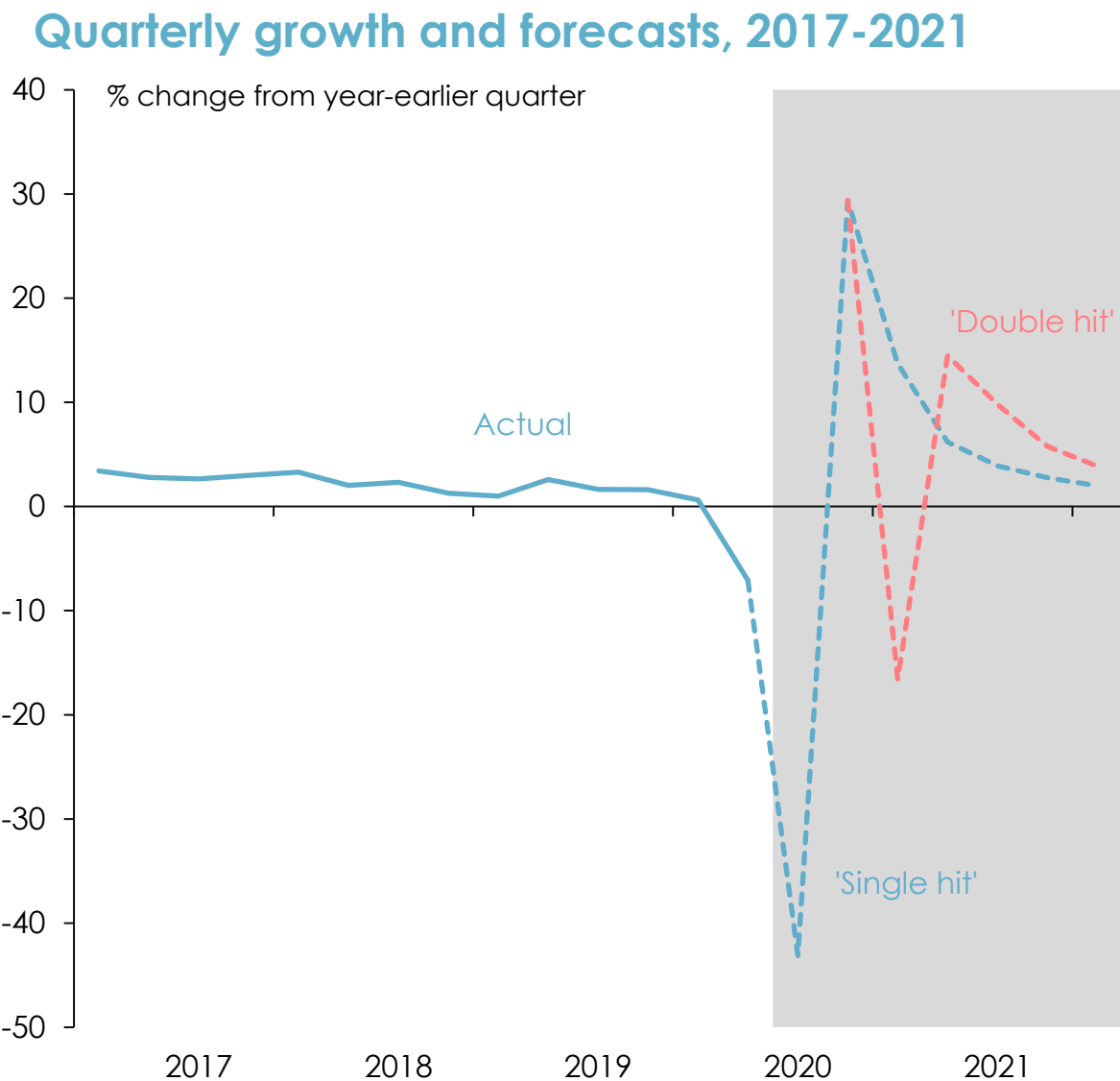
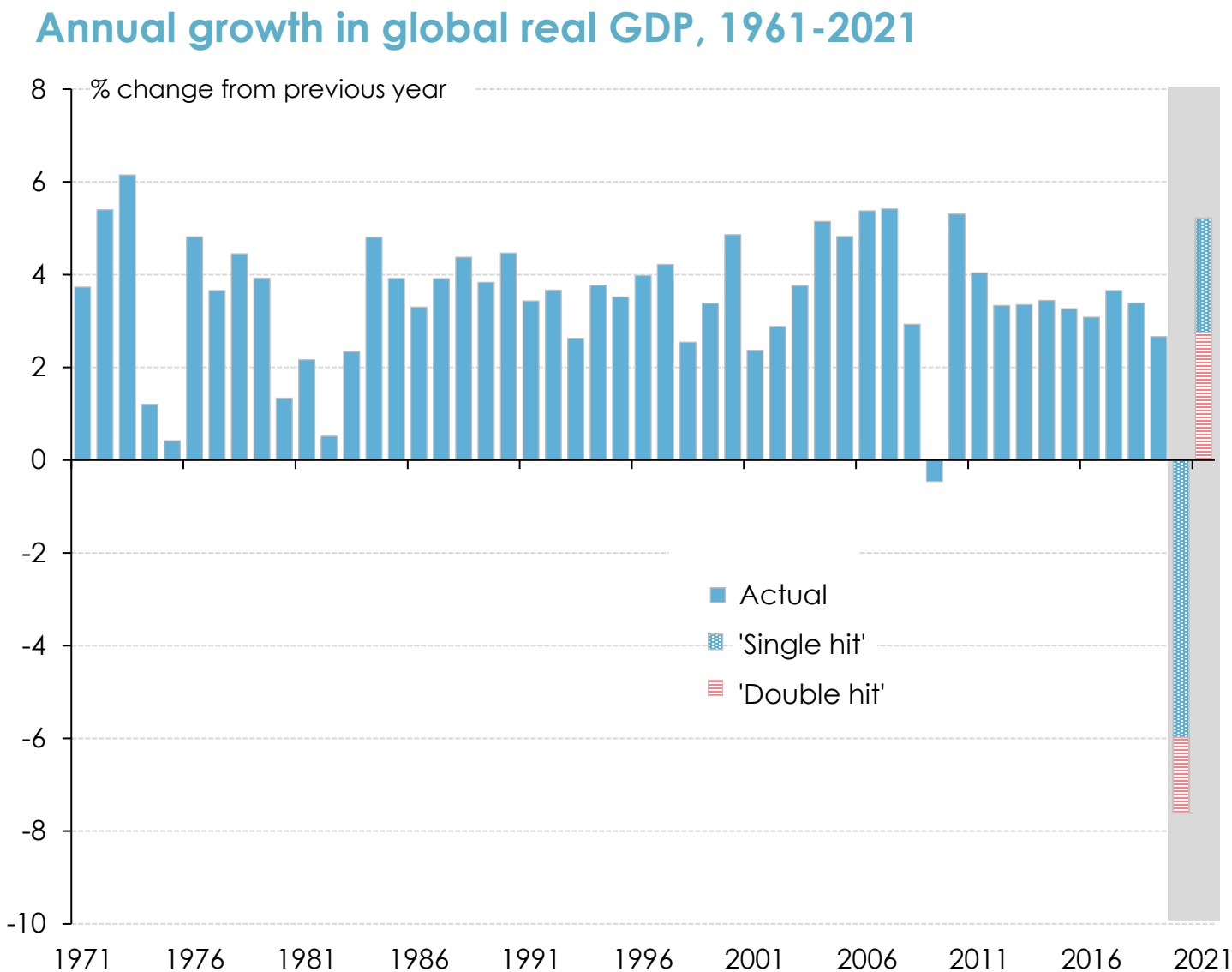
All of the major international economic forecasting institutions expect 2020 to be the worst year for global growth since the 1930s

Major global institutions' growth forecasts for 2020 and 2021 compared

| | <i>Actual</i> | <i>IMF</i> | | <i>World Bank</i> | | <i>OECD*</i> | | <i>Australian Treasury</i> | |
|-------------|---------------|-------------------|------------------|-------------------|------|--------------|------|----------------------------|------|
| | 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.

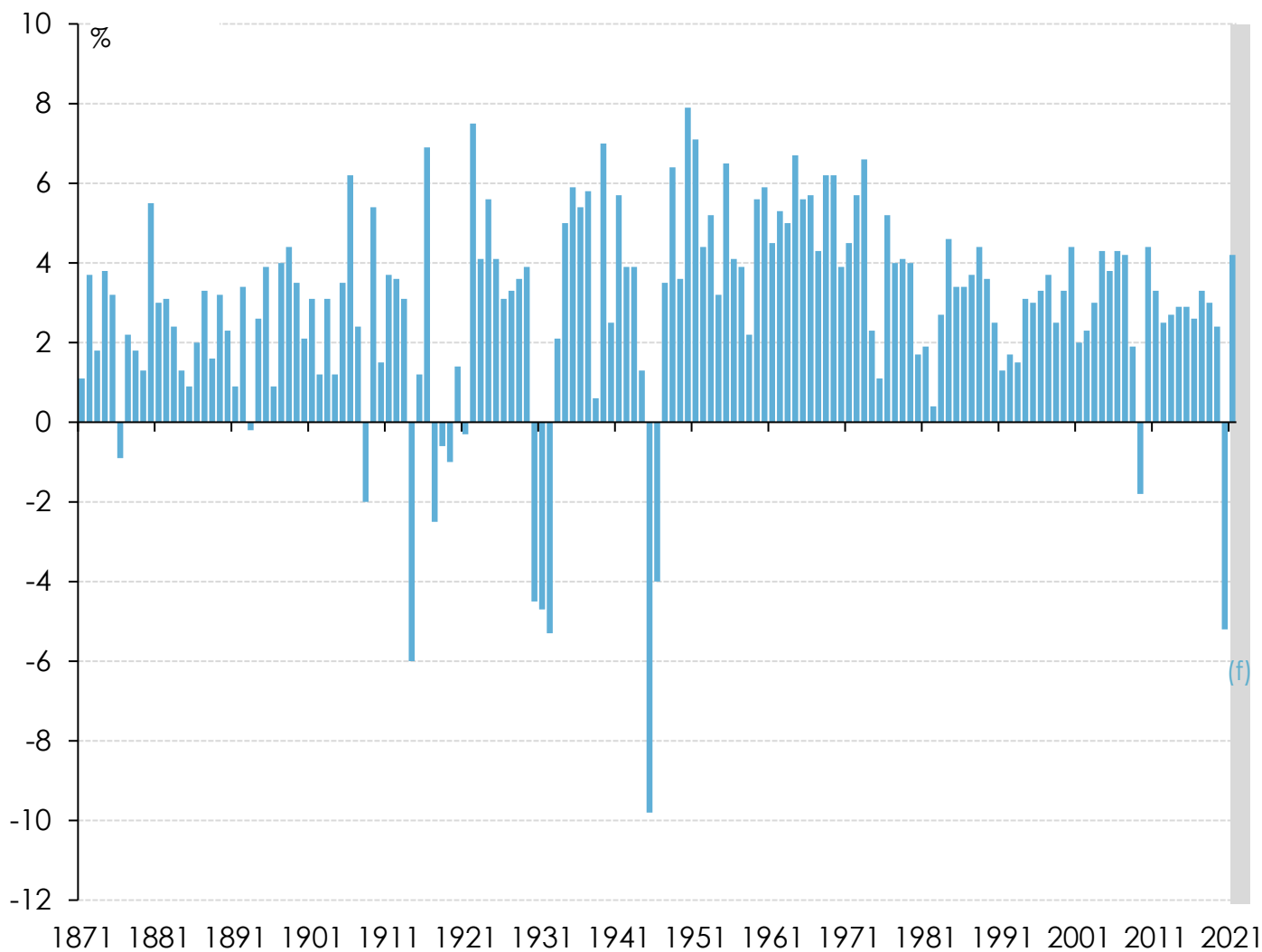
The OECD forecasts a 6% decline in world GDP this year, followed by a 5.2% rebound in 2021 – or -7.2% followed by +2.8% if there's a 'second wave'



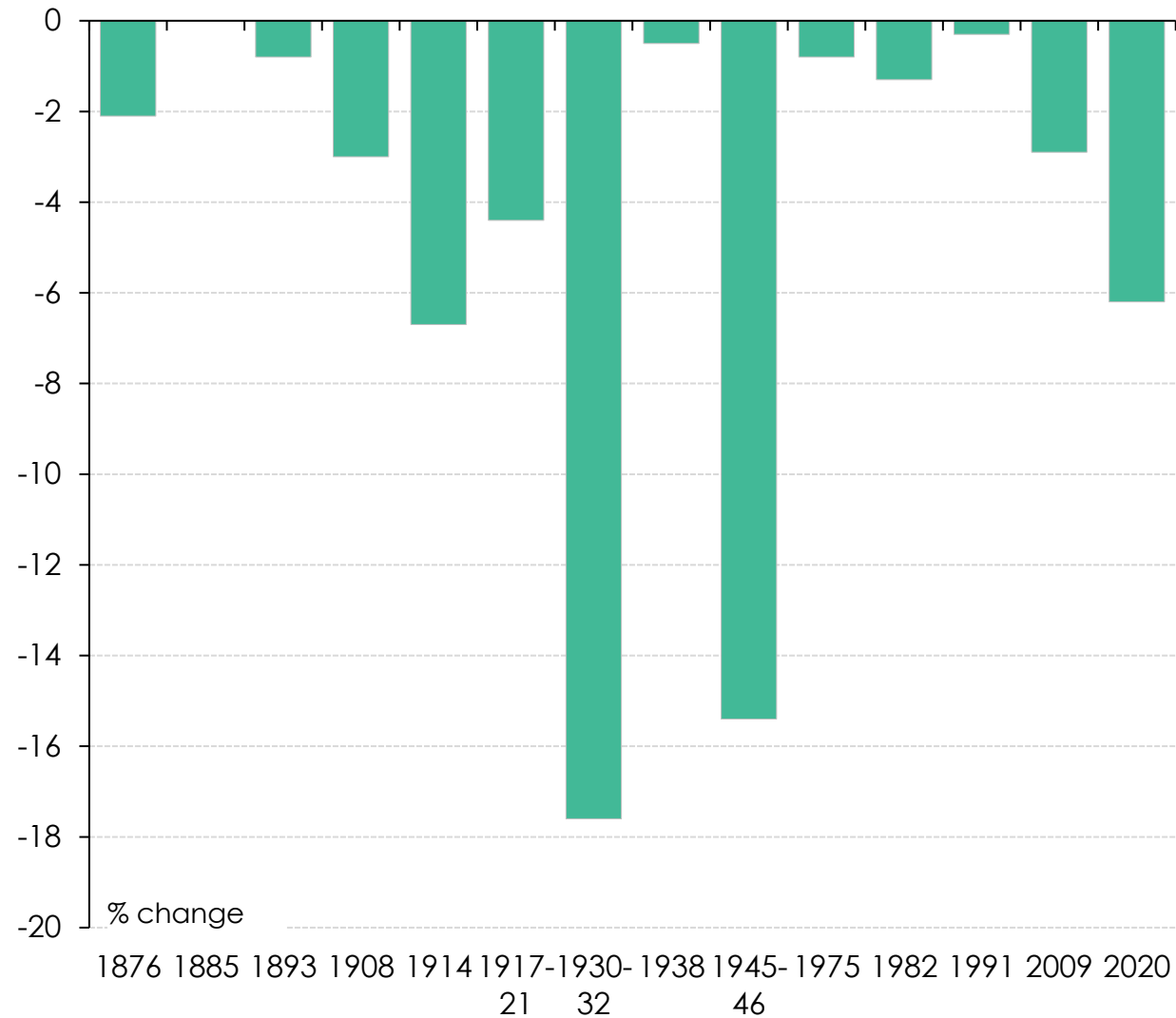
Note: The 'double hit' scenario assumes a 'second wave' of Covid-19 infections and deaths "in all economies towards the end of this year", while the 'single hit' scenario assumes this 'second wave is avoided'. The OECD regards each scenario as "equally likely". Source: OECD, *Economic Outlook*, No. 107, Volume 2020 Issue 1, 10th June 2020.

The World Bank forecasts a 5.2% decline in world GDP this year, with a 4.2% increase in 2021 - the 4th worst global downturn in 150 years

Growth in global real GDP, 1871-2001



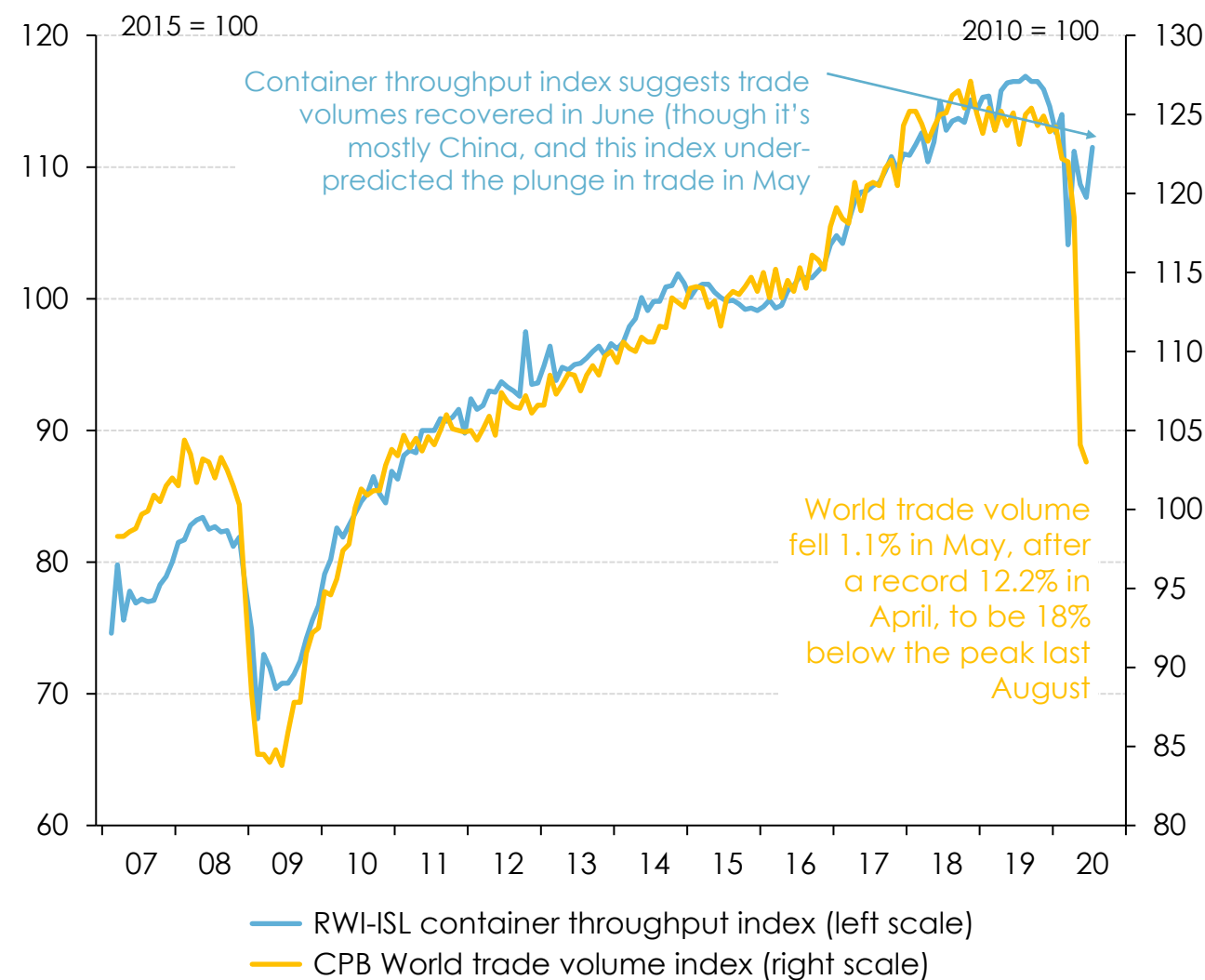
Cumulative decline in real per capita GDP during global recessions



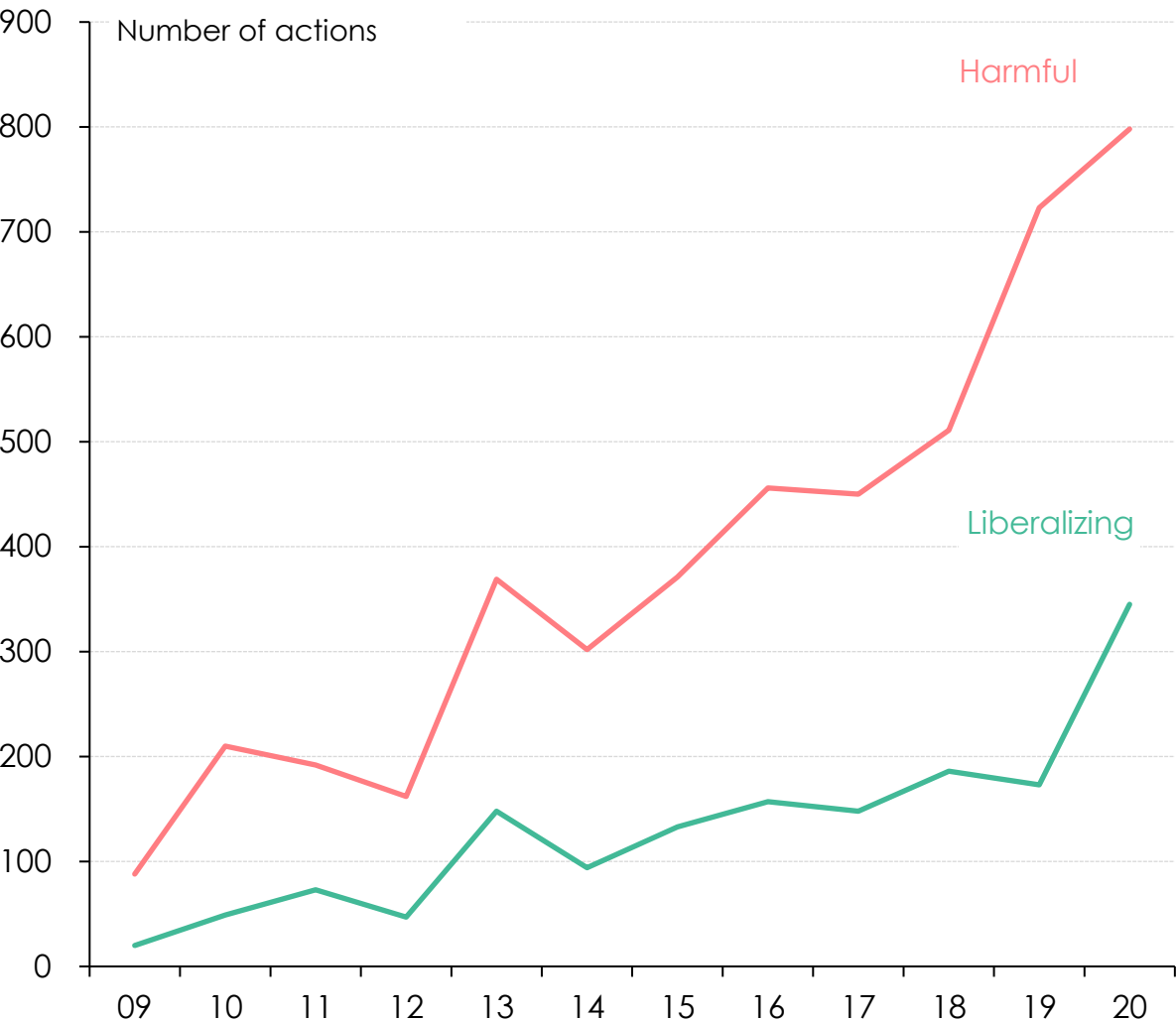
Source: The World Bank, *Global Economic Prospects*, 8th June 2020.

World merchandise trade volumes fell sharply in April

World trade volumes and container throughput



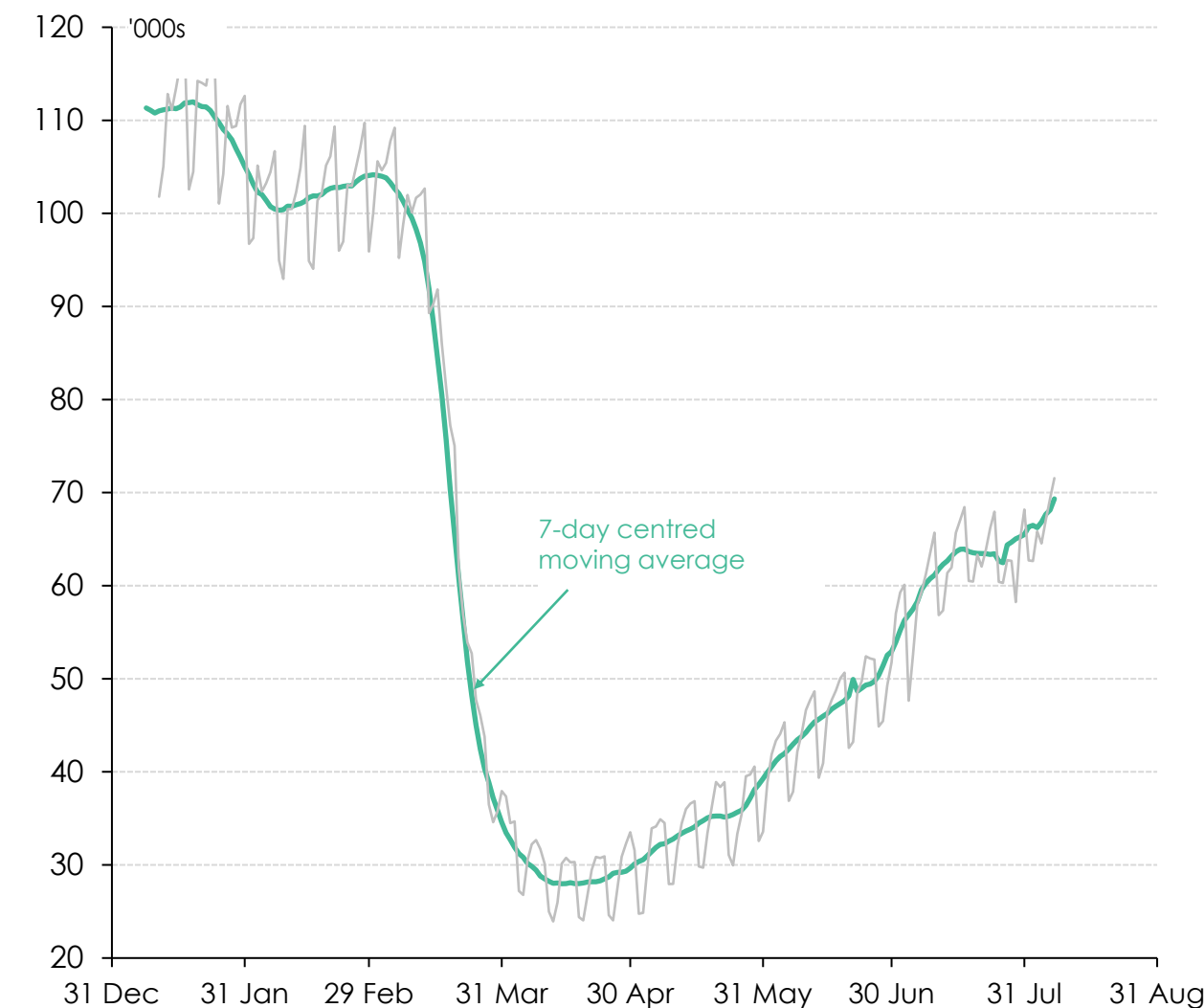
Pro- and anti-trade policy interventions



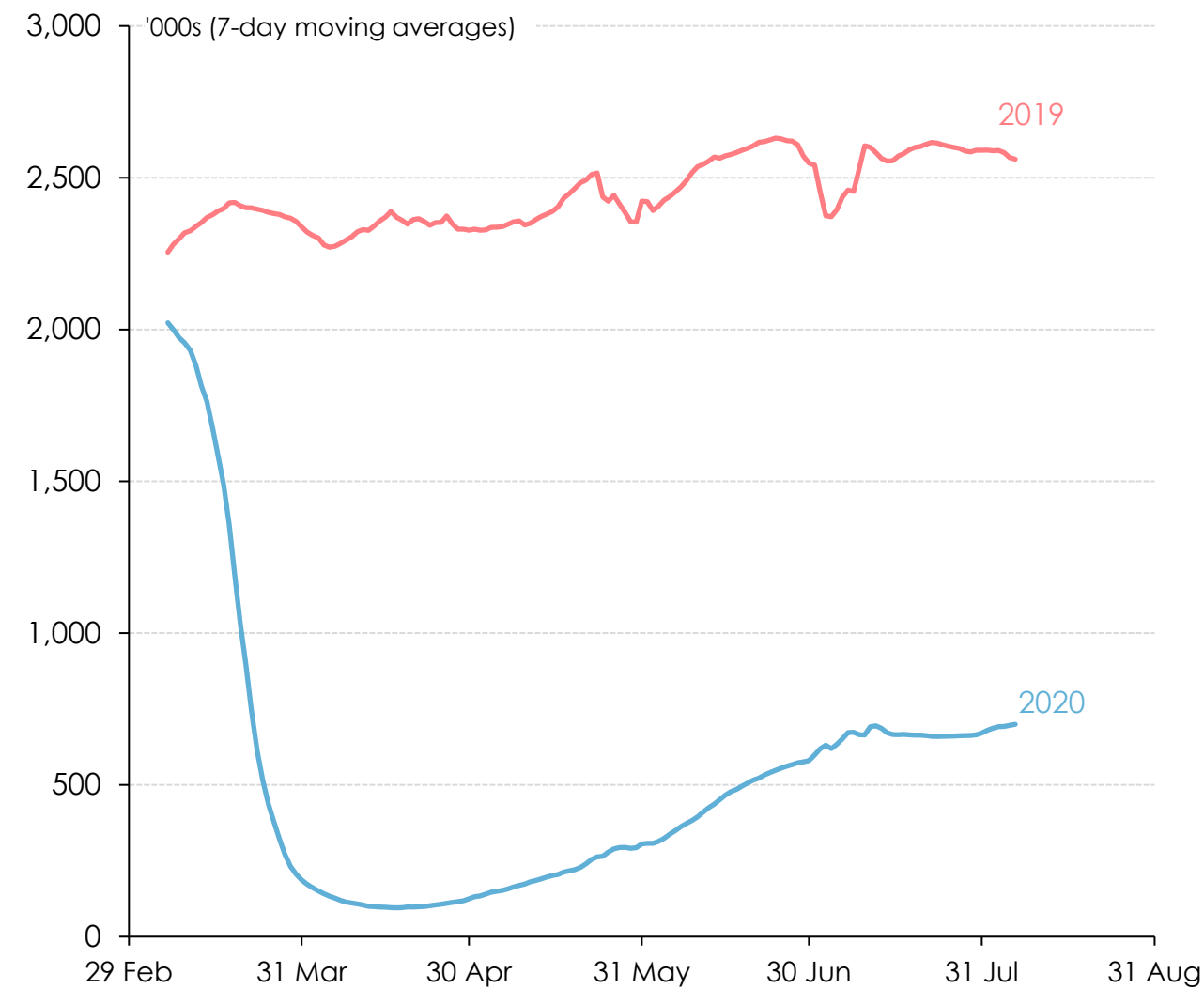
Note: The shipping container throughput index is based on reports from 91 ports around the world handling over 60% of global container shipping.
Sources: CPB Netherlands Economic Planning Bureau, *World Trade Monitor*; Institute of Shipping Economics & Logistics (ISL) and RWI Leibniz-Institut für Wirtschaftsforschung (RWI) *Container Throughput Index*; Centre for Economic Policy Research, *Global Trade Alert Global Dynamics* (latest report 7th August).

Global aviation traffic picked up a bit last week though remains some 33% below pre-pandemic levels; US traffic is still flat-lining

Daily commercial flights worldwide



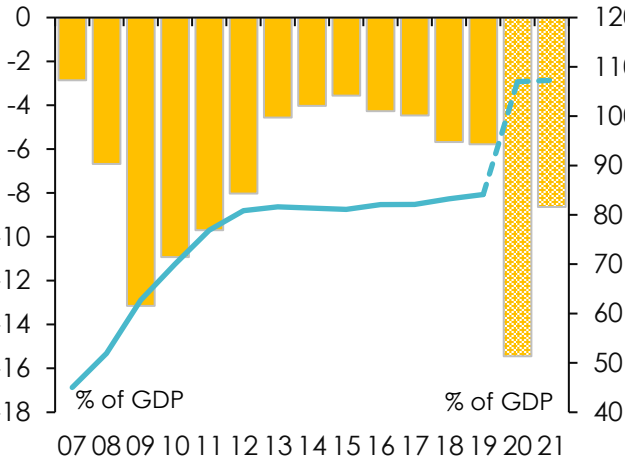
Daily US TSA security checks



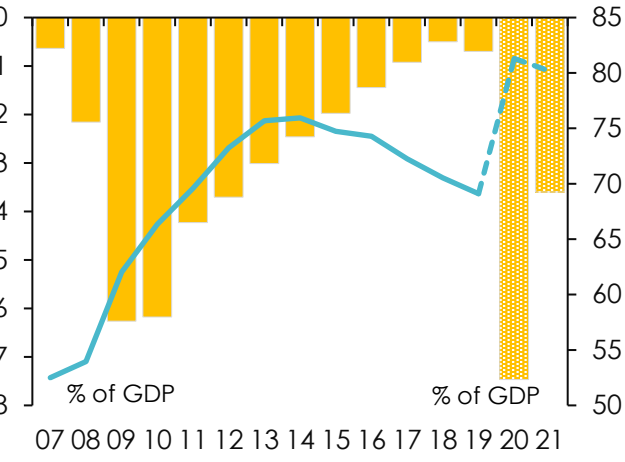
Note: Commercial flights include commercial passenger flights, cargo flights, charter flights, and some business jet flights. Data up to 7th August.
Sources: Flightradar24.com; US Transport Safety Administration (at last, something useful produced by aviation 'security'!!!)

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

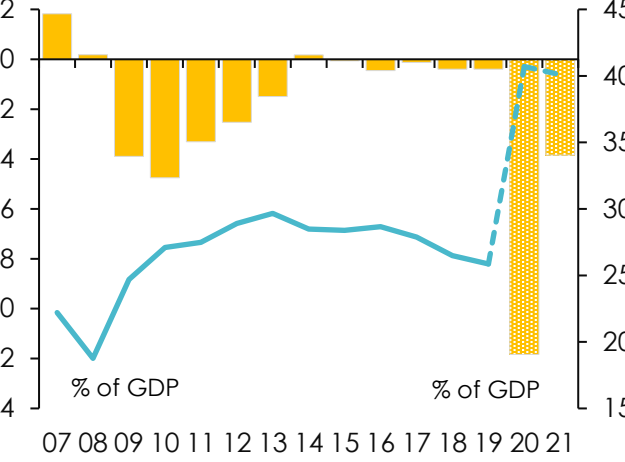
United States



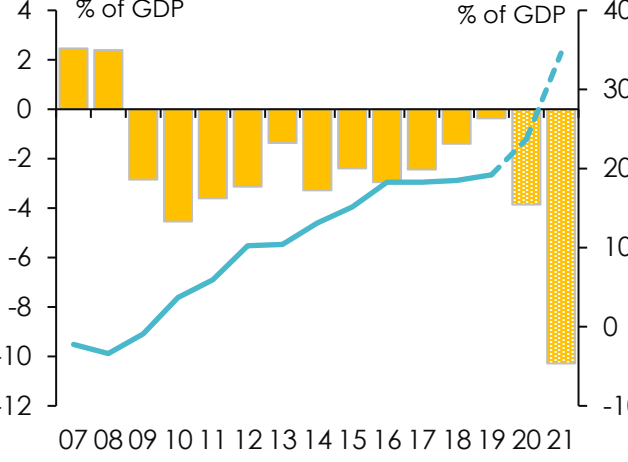
Euro area



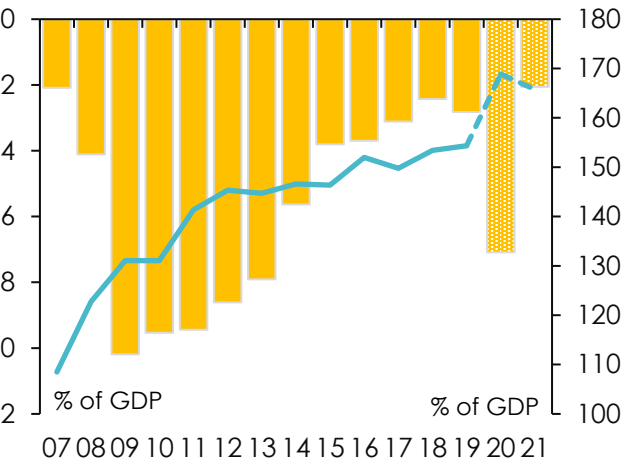
Canada



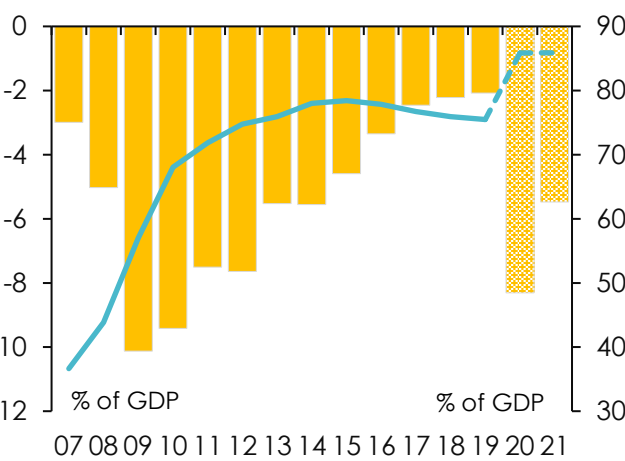
Australia



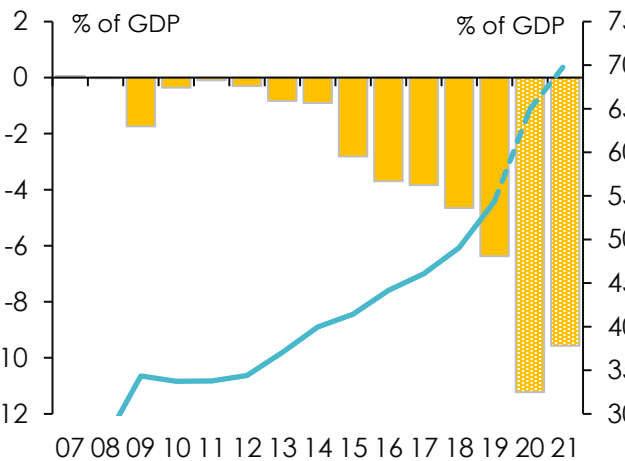
Japan



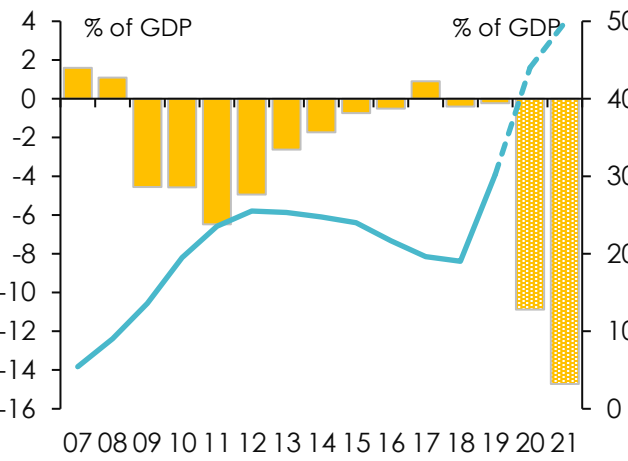
United Kingdom



China



New Zealand

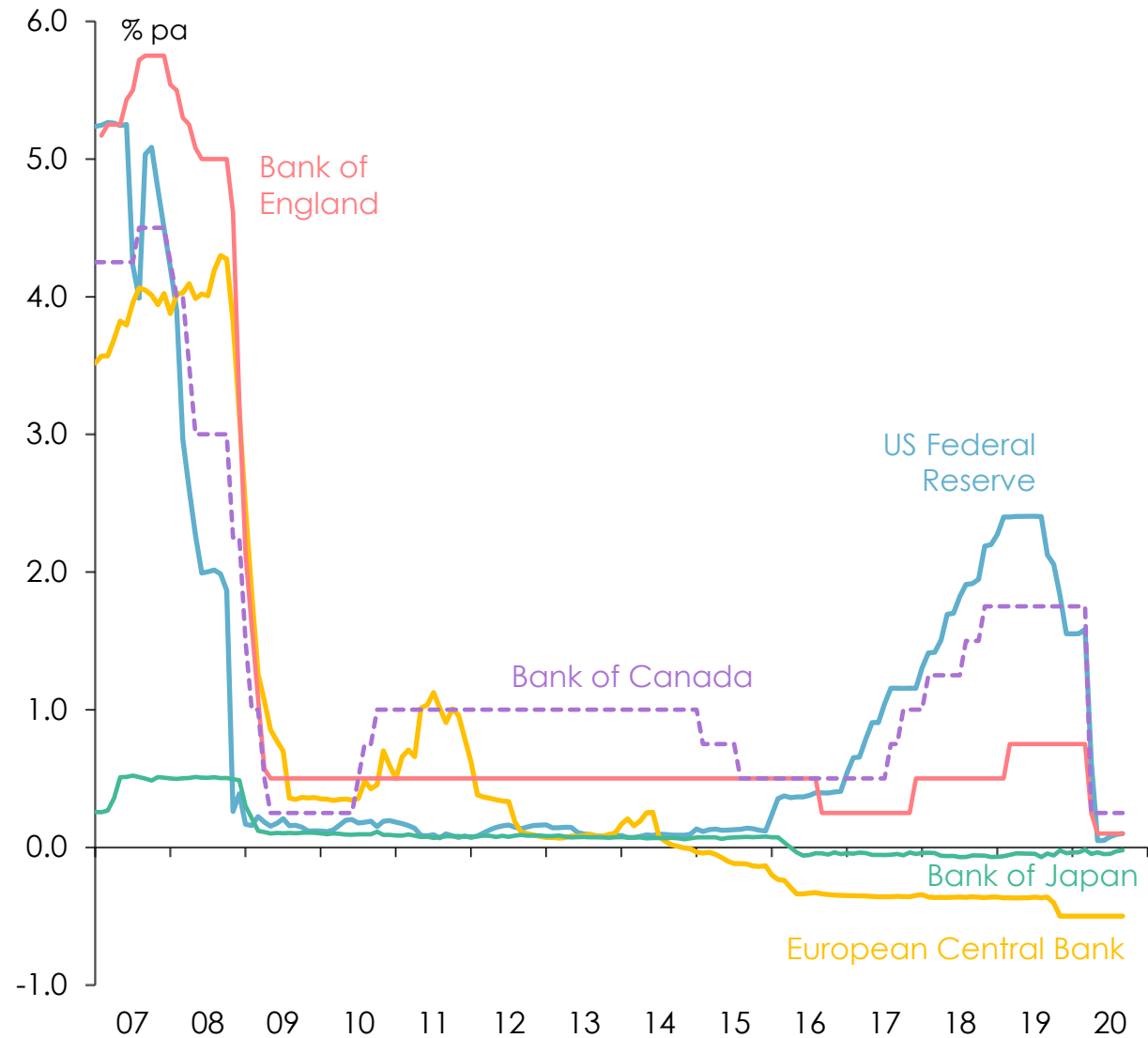


General government overall fiscal balance (left scale) General government net debt (right scale)

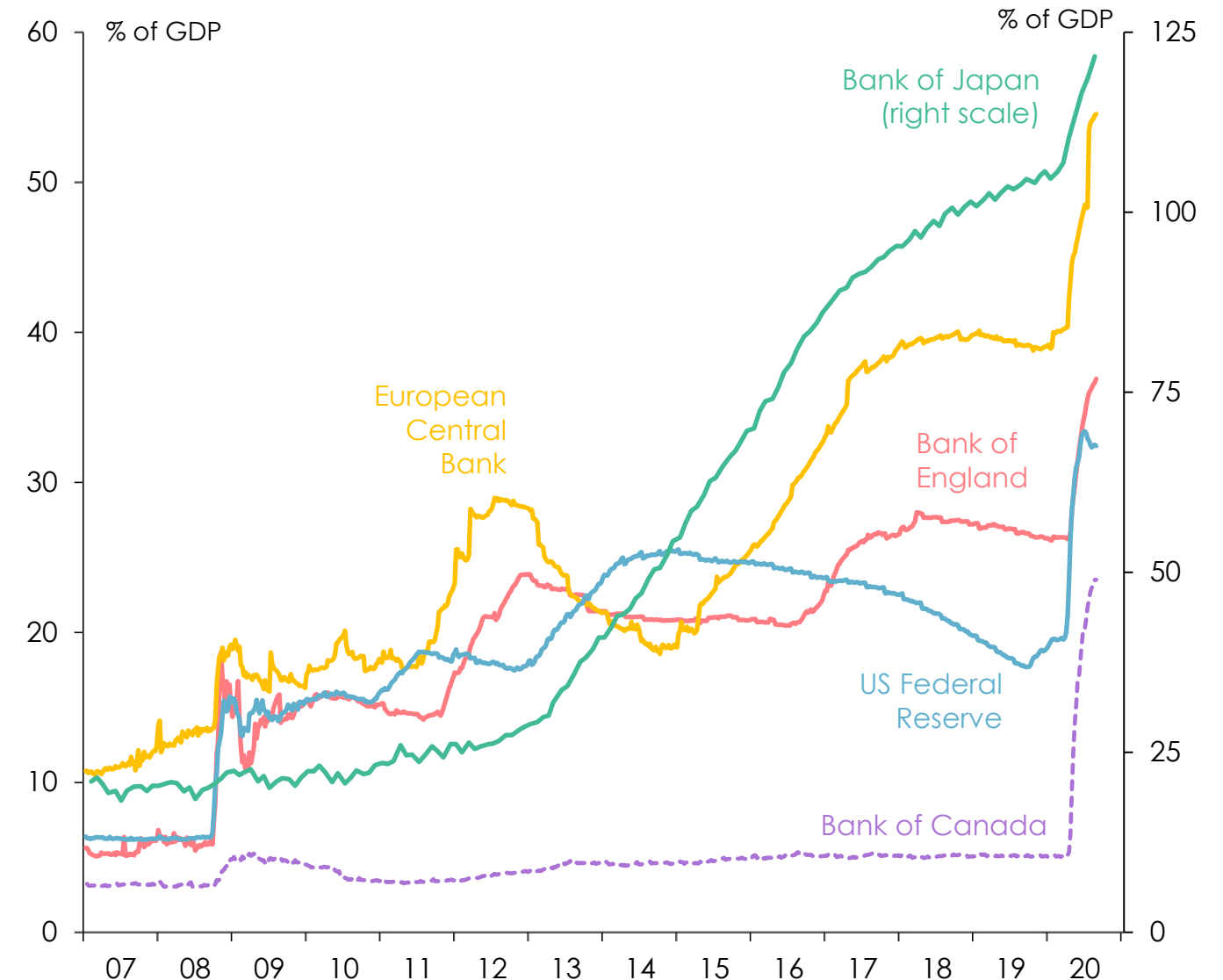
Note: UK data does not include the measures announced by the Chancellor on 8th July; China debt is gross debt, not net; Australian data are for the federal government only and are for fiscal years ended 30th June; NZ data are for fiscal years ended 31st March. Sources: International Monetary Fund, *Fiscal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

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



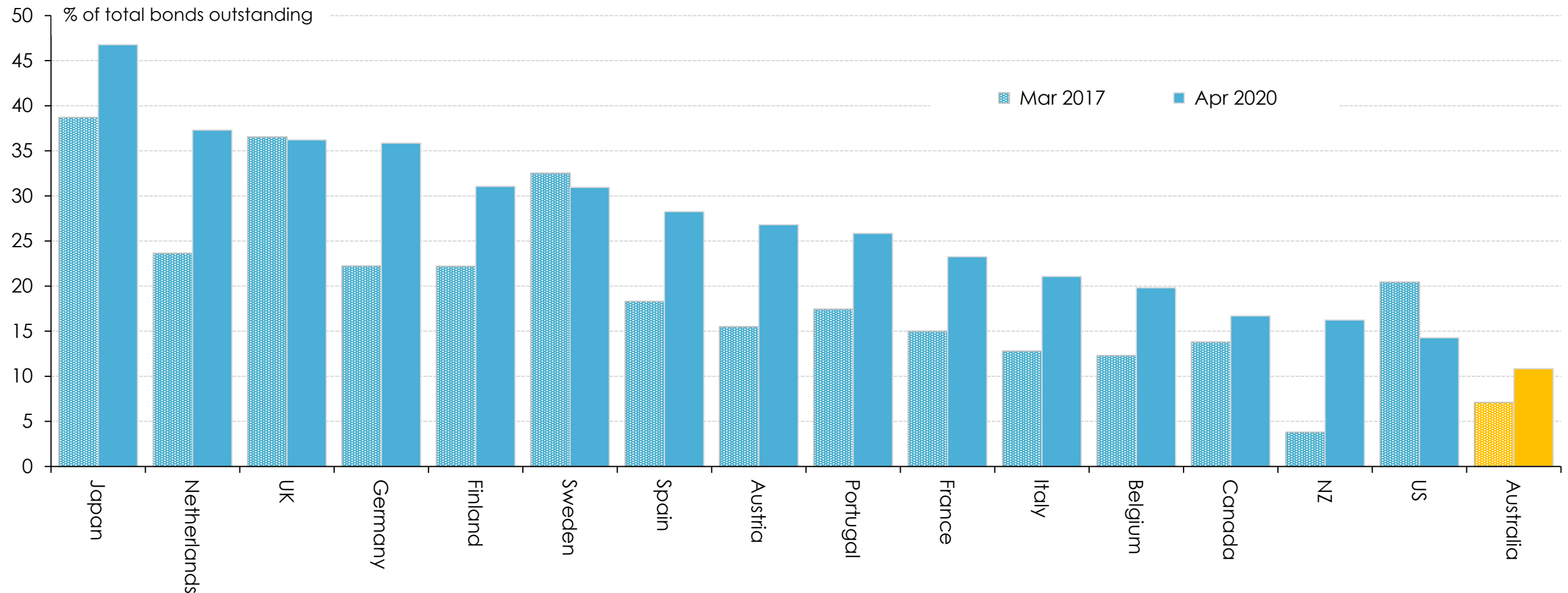
Major central bank balance sheets



Sources: US Federal Reserve; European Central Bank; Bank of Japan; Bank of England; Bank of Canada.

Central banks now hold significant proportions of total government debt in a growing number of countries

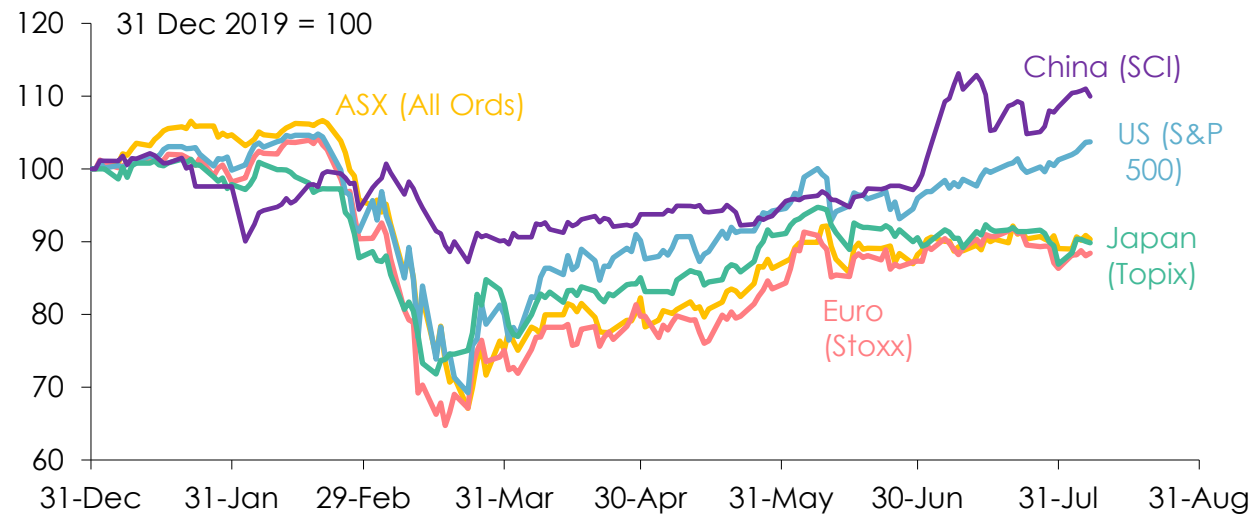
Central bank holdings of central government bonds



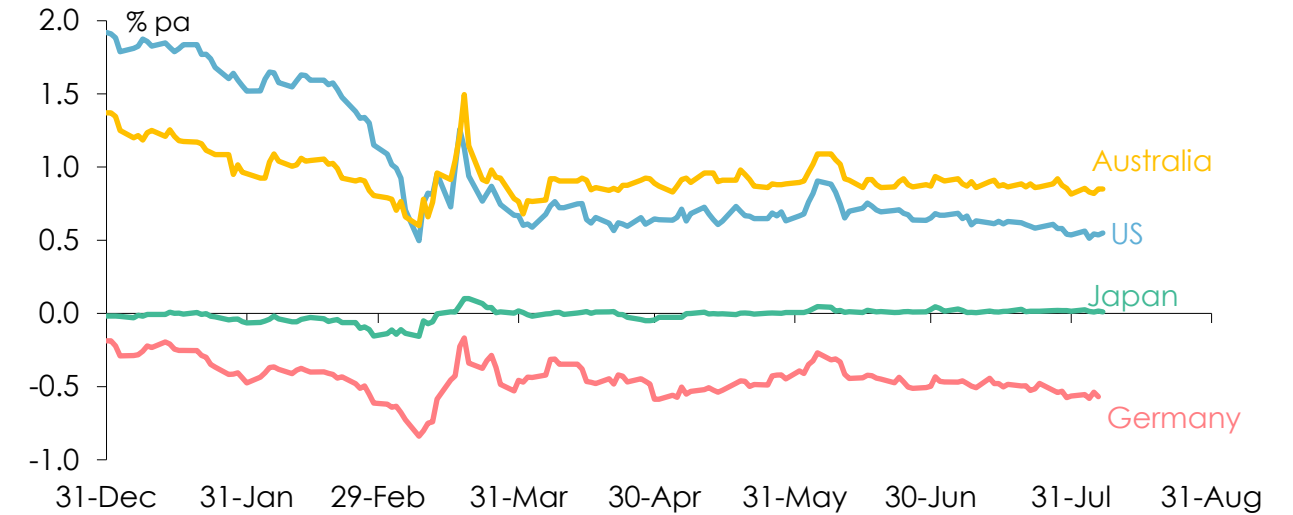
Sources: Surprisingly, the RBA does not disclose its holdings of Australian Government bonds in its weekly balance sheet statement (see RBA Statistical Table A1. Hence the figure shown here for Australia at March 2017 was derived from ABS *Finance and Wealth*, and that for April 2020 by adding to RBA holdings as per the December 2019 issue of *Finance and Wealth*, disclosed RBA purchases of Australian Government bonds up to end-April, divided by the amount of Australian Government securities outstanding disclosed in the Government's *Monthly Financial Statement*. The figures for RBNZ holdings of NZ government securities are published in Table r1 on the RBNZ's website while figures for total NZ government securities outstanding are in Table D30. All others are from OECD, *Economic Outlook* No. 107 (June 2020) and No. 104 (June 2017).

Most stockmarkets rose more than 2% this week (Australia's by only 1½%), while the US\$ recovered a little on Friday's jobs report

Stock markets



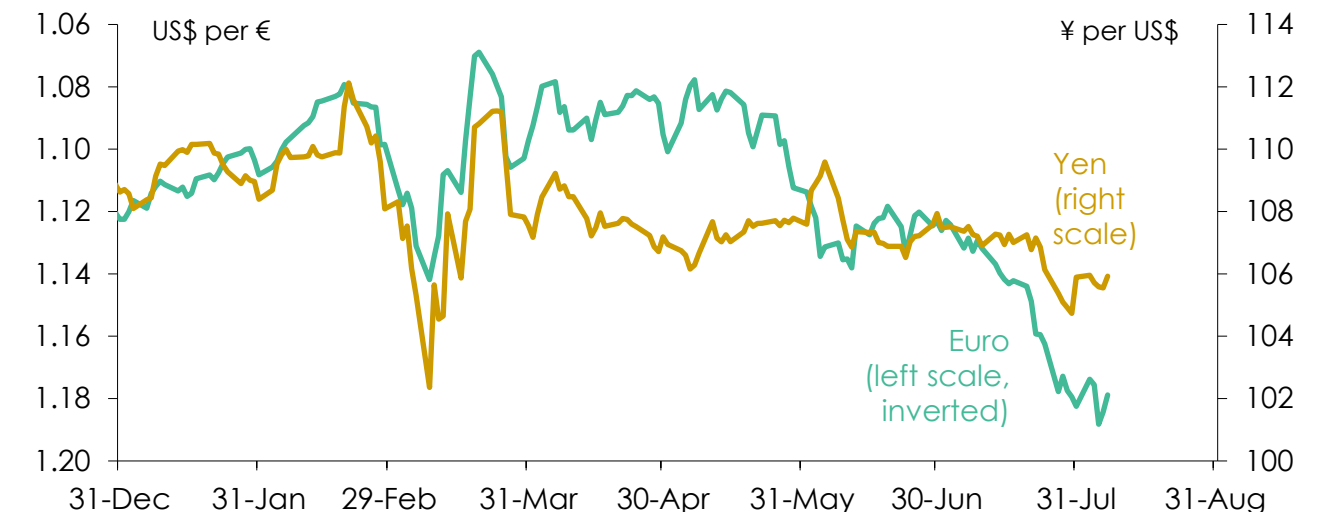
10-year bond yields



Measures of market volatility

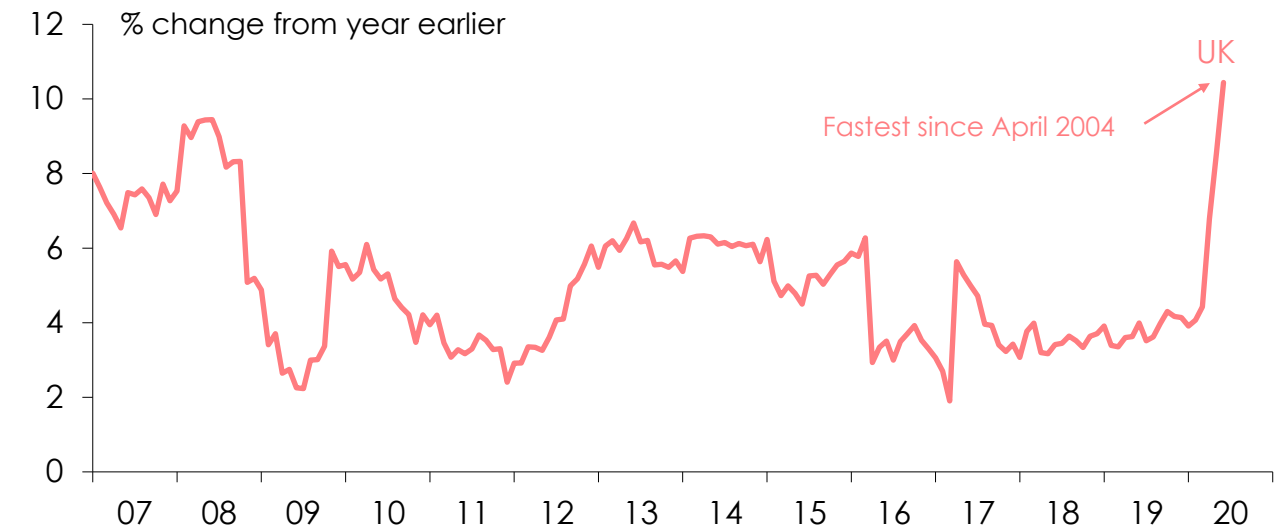
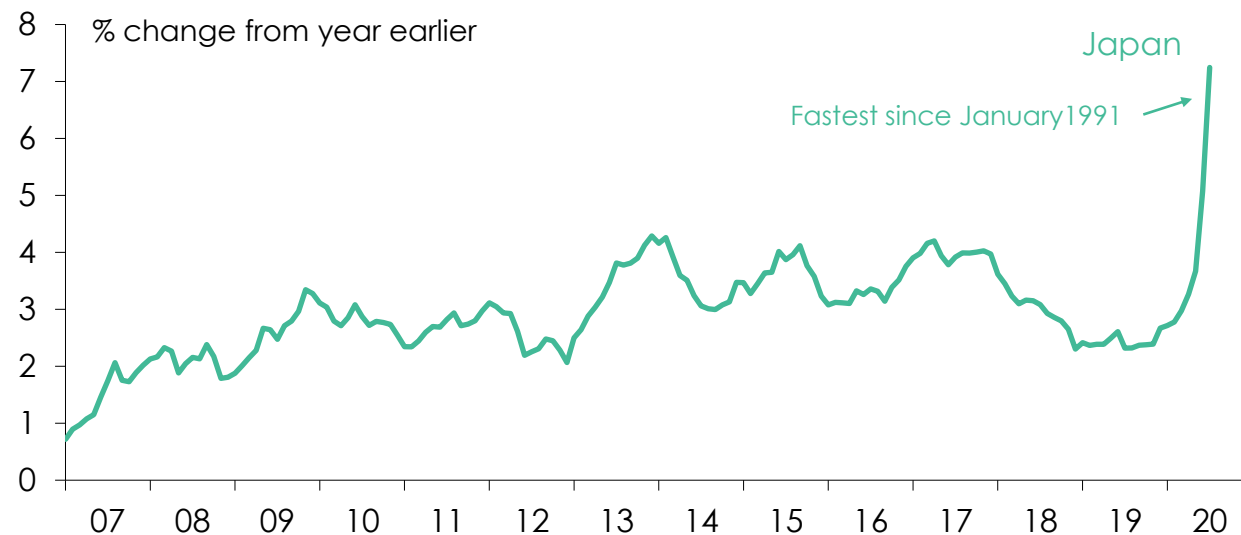
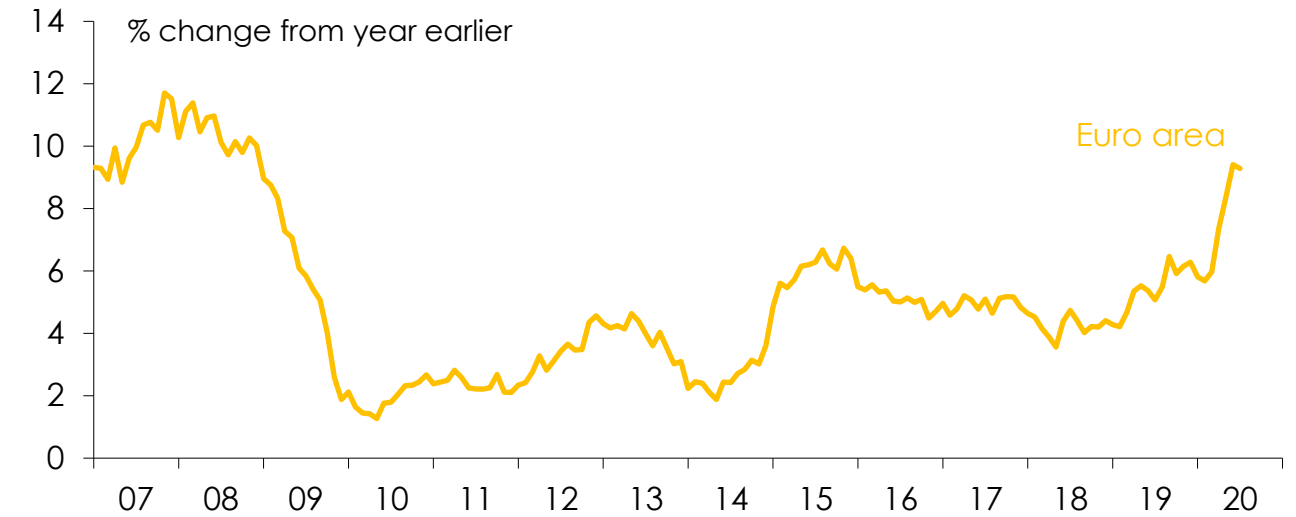
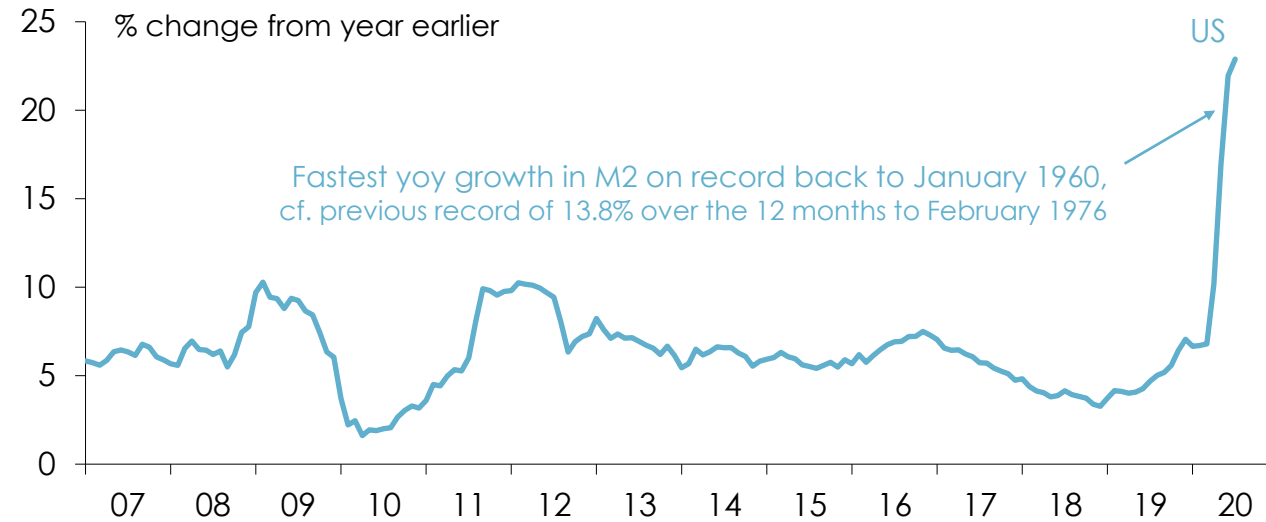


US dollar vs euro and yen



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

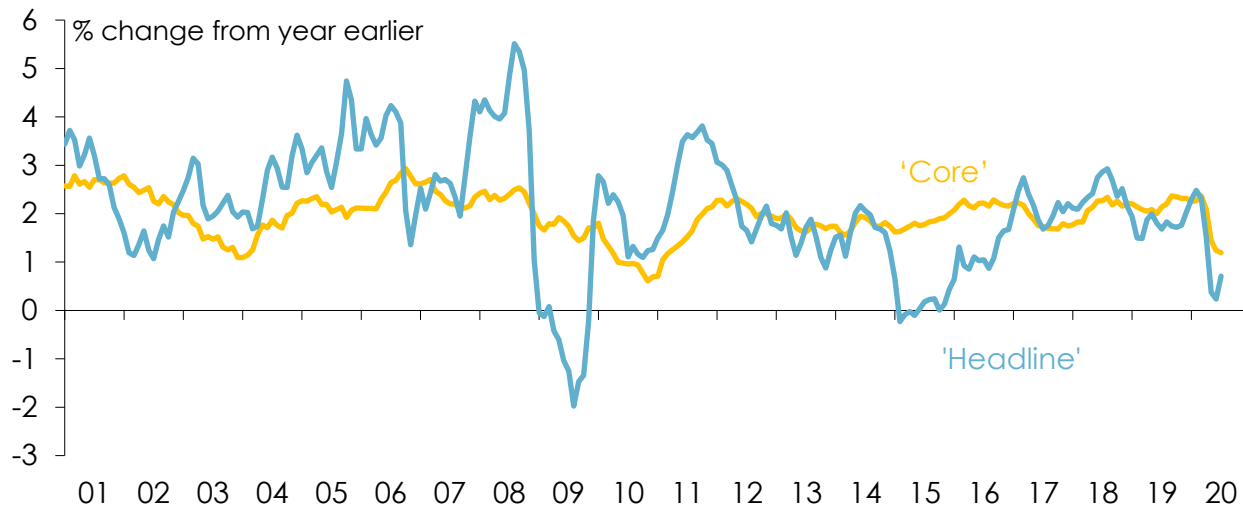
M2 money supply growth



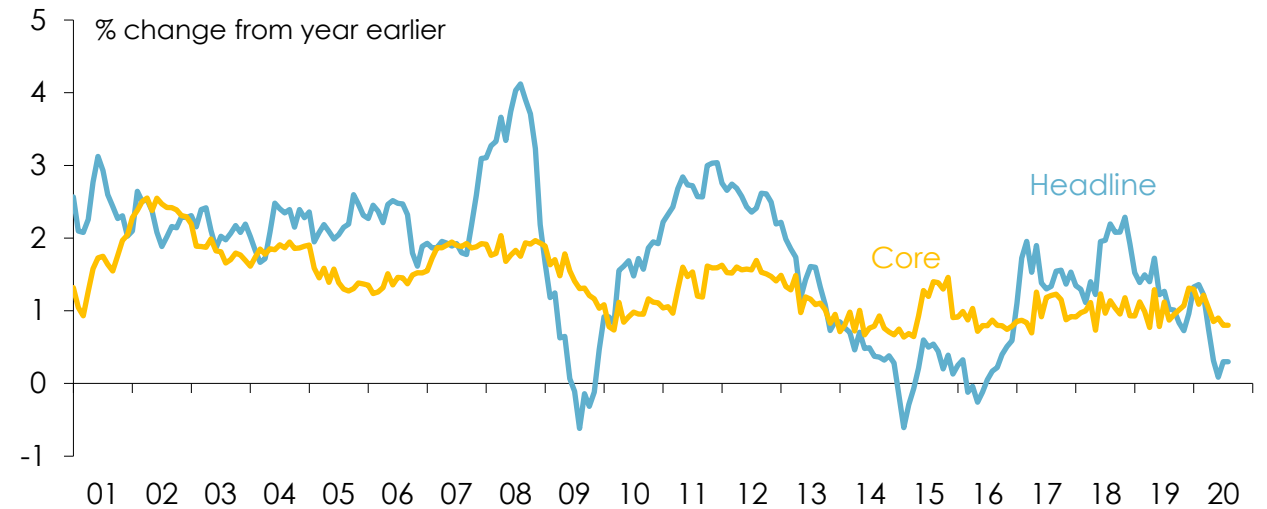
Note: Japan is M2+CDs; UK is M4. Sources: US Federal Reserve; European Central Bank; Bank of Japan; Bank of England.

...but so far at least, inflation has been falling rather than rising, even discounting the impact of lower oil prices

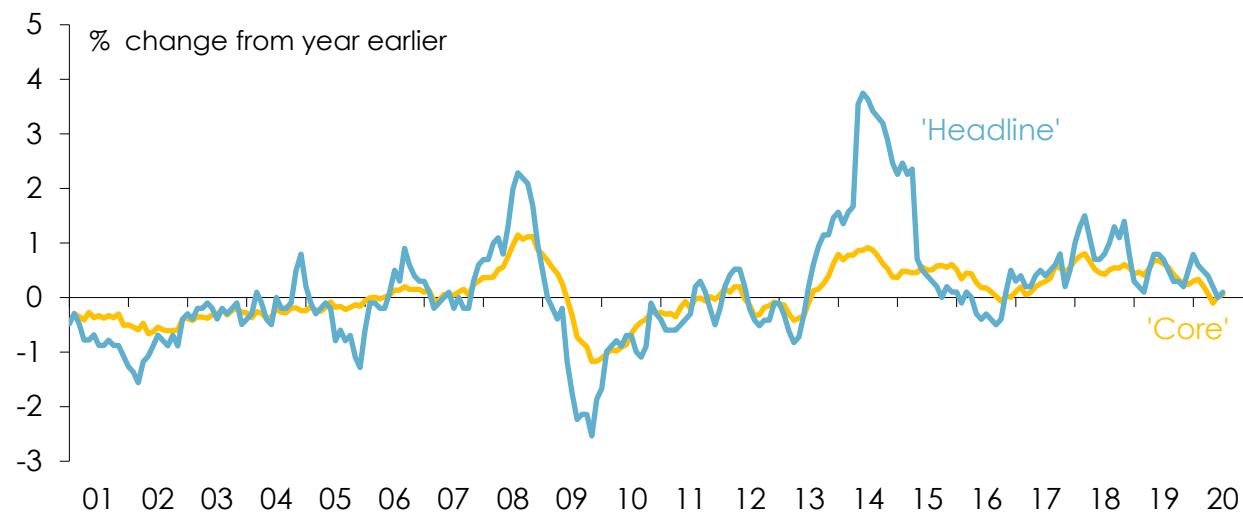
'Headline' and 'core' inflation - US



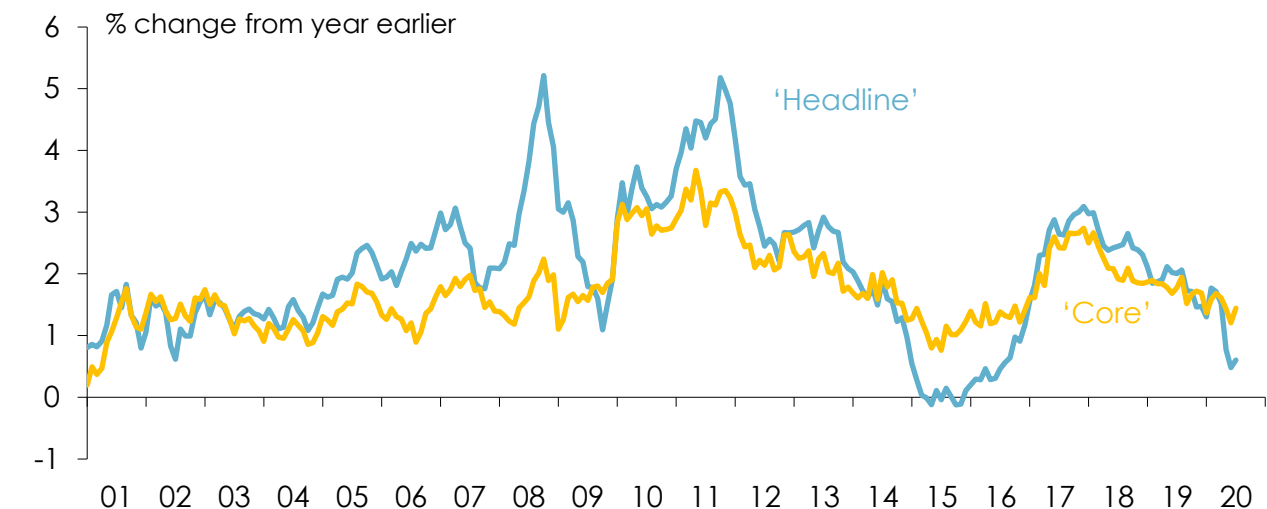
'Headline' and 'core' inflation – Euro area



'Headline' and 'core' inflation - Japan

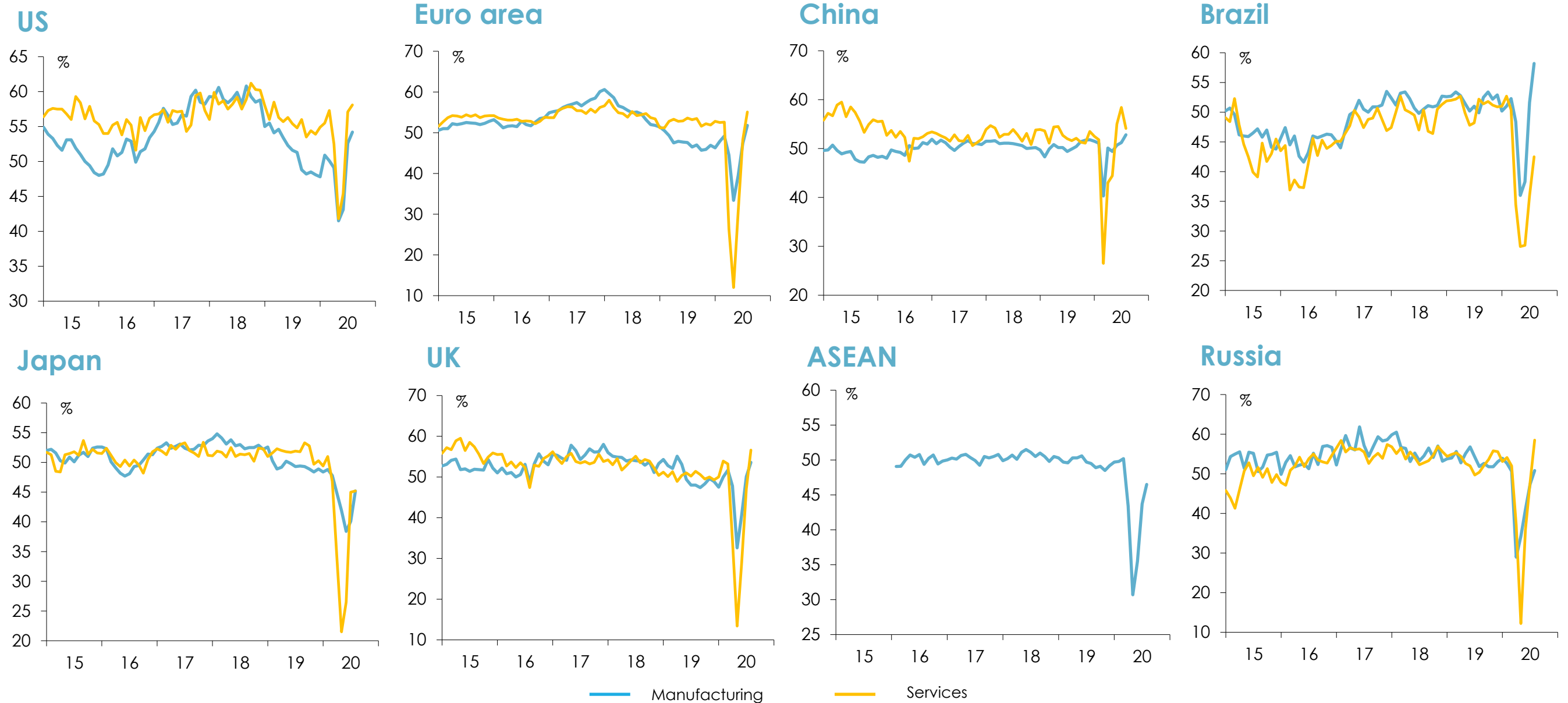


'Headline' and 'core' inflation – UK



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.

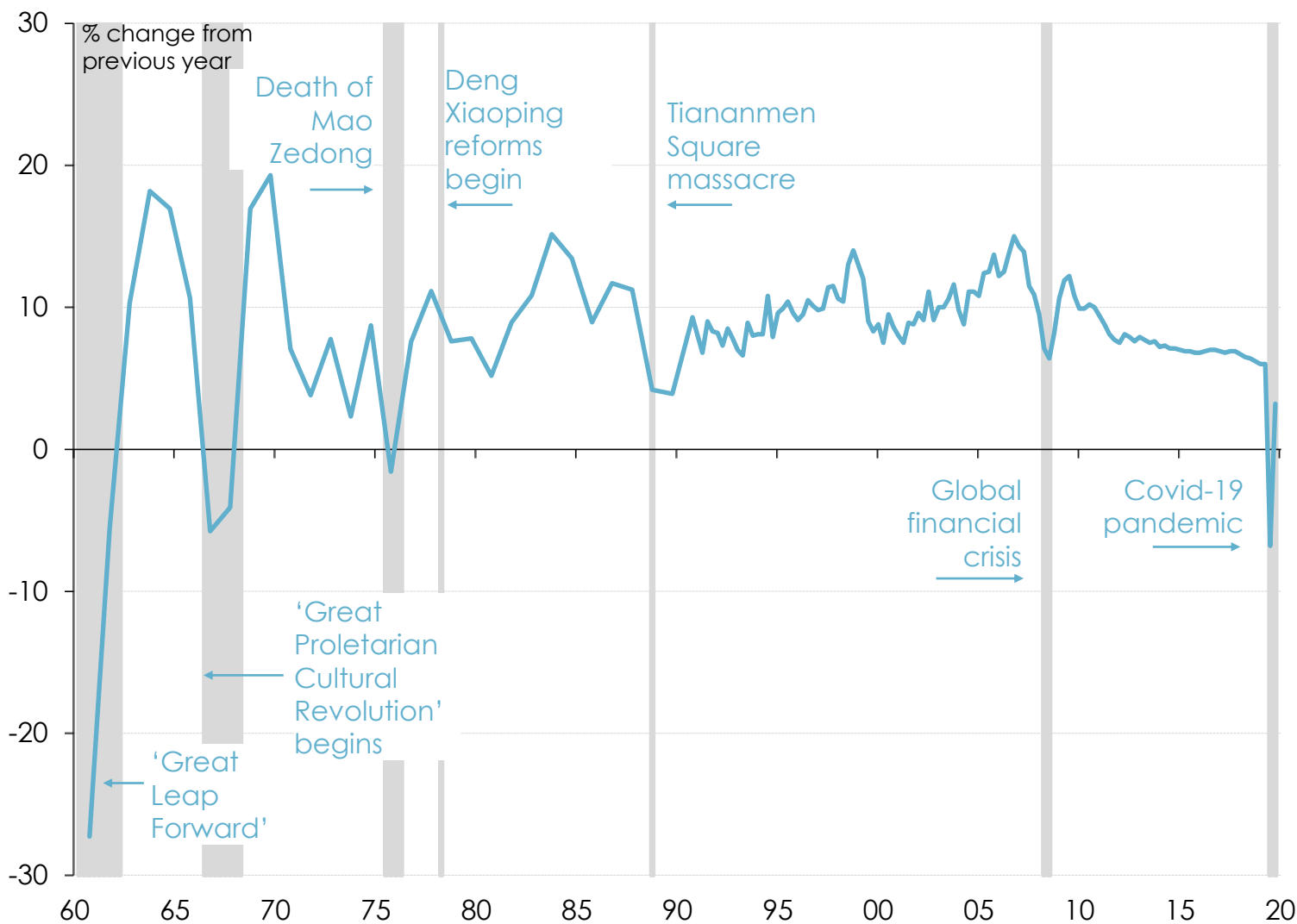
Purchasing managers' indices (PMIs) point to an ongoing rebound in both manufacturing and services in major economies since May



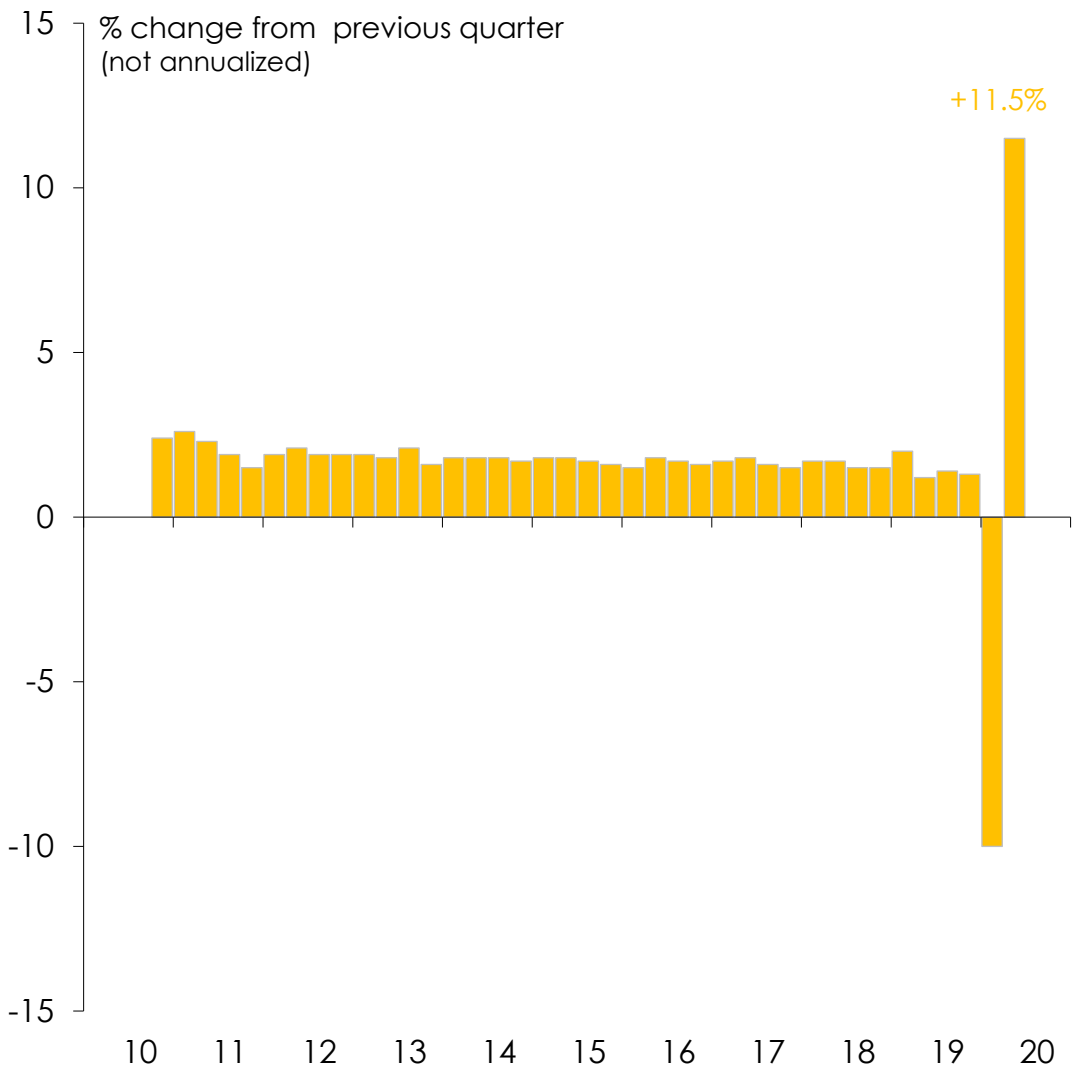
Note: Purchasing Managers' Indexes (PMIs) are derived from surveys of senior executives, who are asked to report whether various dimensions of business activity recorded an increase, decrease or no change compared with the previous month. A reading of 50 indicates an overall increase cf. the previous month, and a reading of less than 50 indicates a decrease. Latest data are for July. See also PMIs for other Asia-Pacific economies on slide 39. Sources: US Institute of Supply Management; INH Markit; Caixin; Refinitiv Datastream.

China's economy rebounded strongly in Q2 from what had been the worst downturn in almost 60 years in Q1

Real GDP growth, from year earlier, 1961-2020



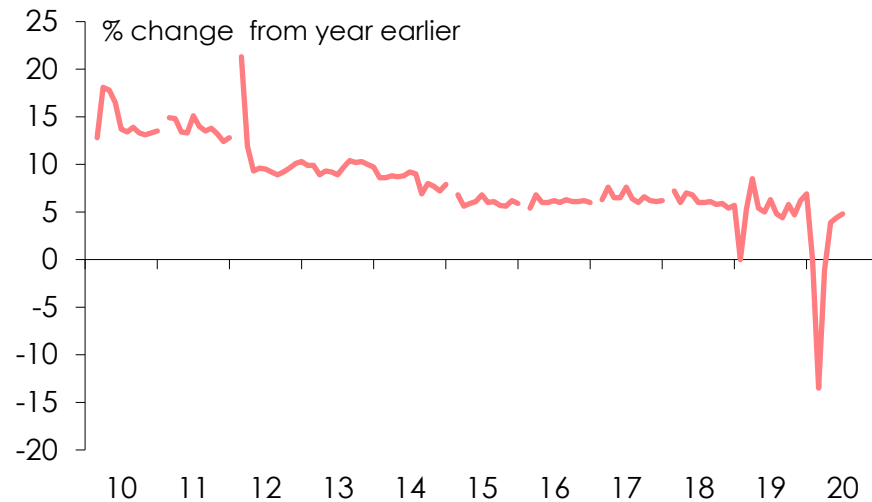
Quarterly real GDP growth, 2010-2020



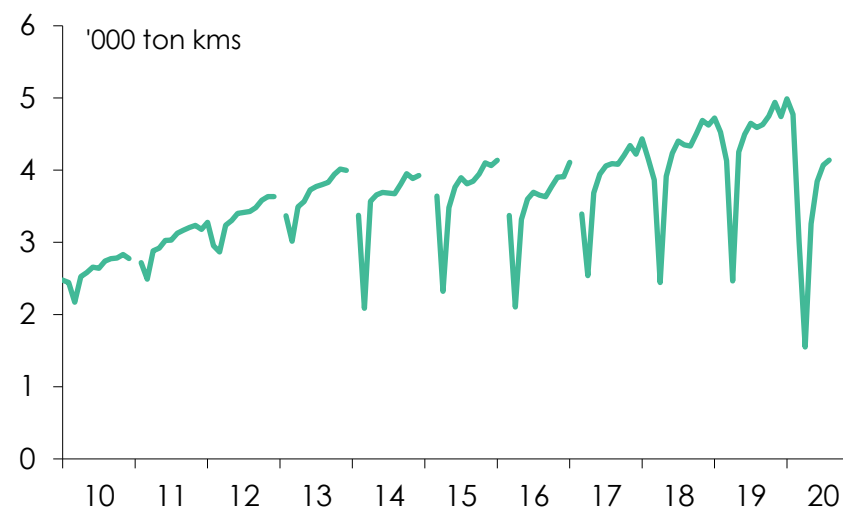
Note: In the left-hand chart, GDP growth rates are annual averages up to the December quarter of 1991, and then quarter-on-corresponding-quarter-of-previous-year thereafter. Sources: China National Bureau of Statistics.

The production side of the Chinese economy rebounded strongly in the June quarter

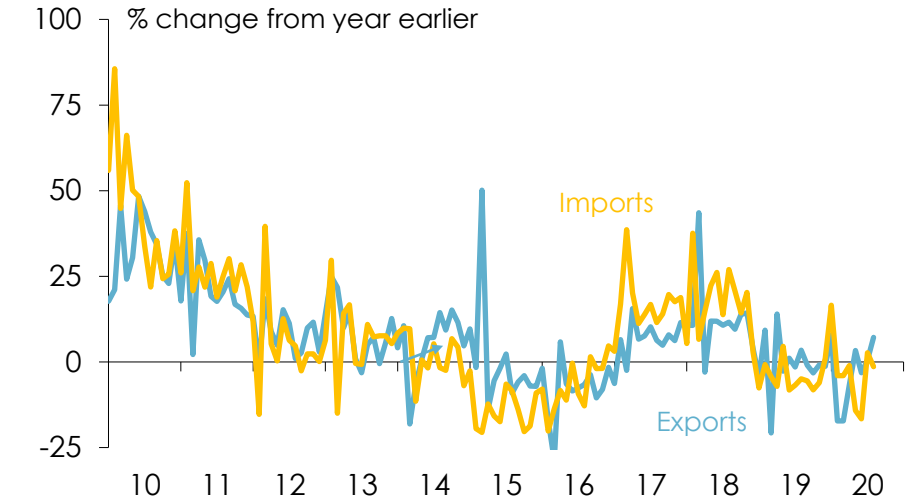
Industrial production



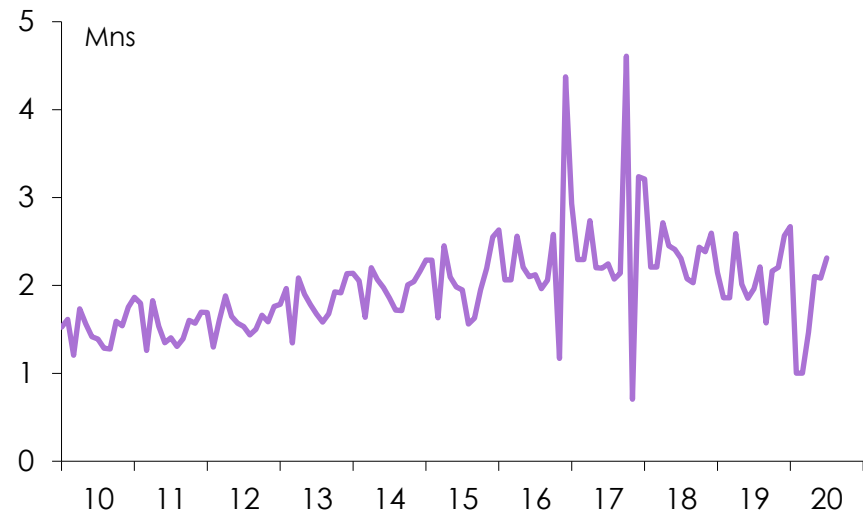
Freight traffic volumes



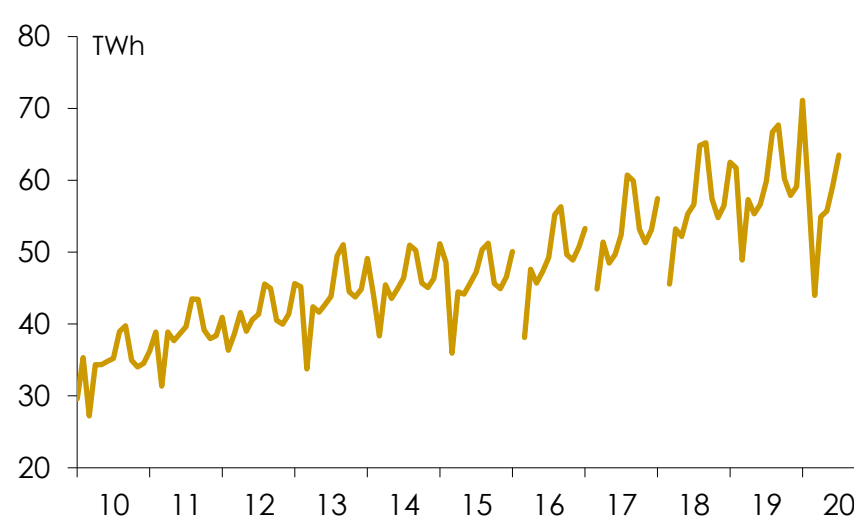
Merchandise trade



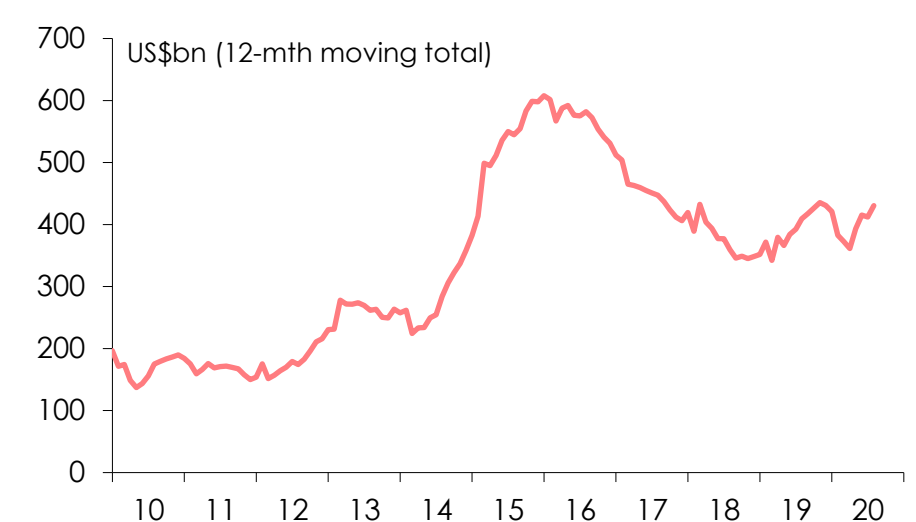
Motor vehicle production



Primary electricity production



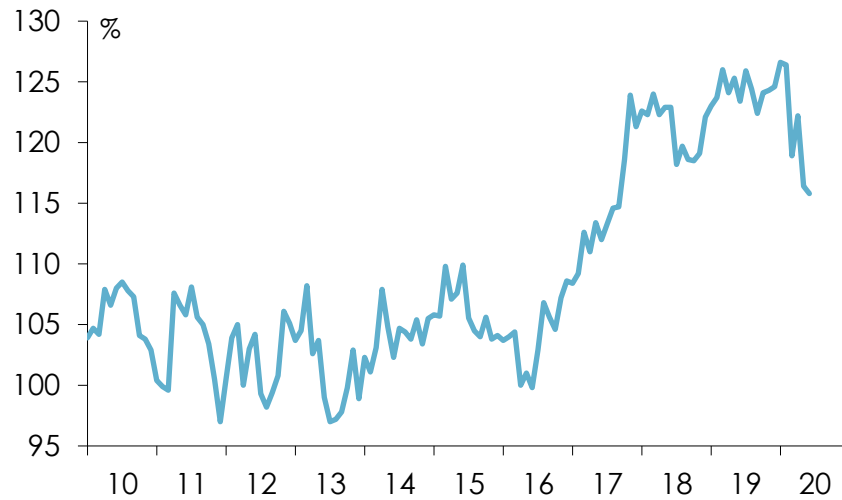
Merchandise trade balance



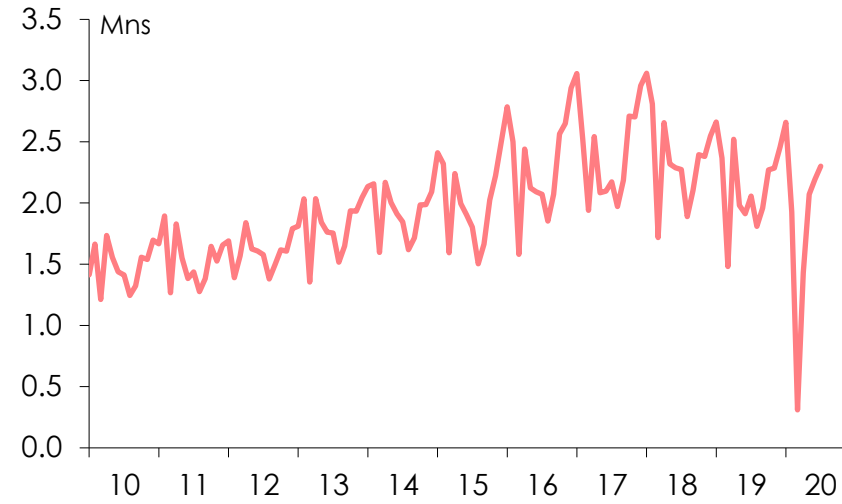
Sources: China National Bureau of Statistics; China Association of Automobile Manufacturers; China General Administration of Customs.

However the 'demand' side of the Chinese economy – both household and business – is recovering rather more gradually

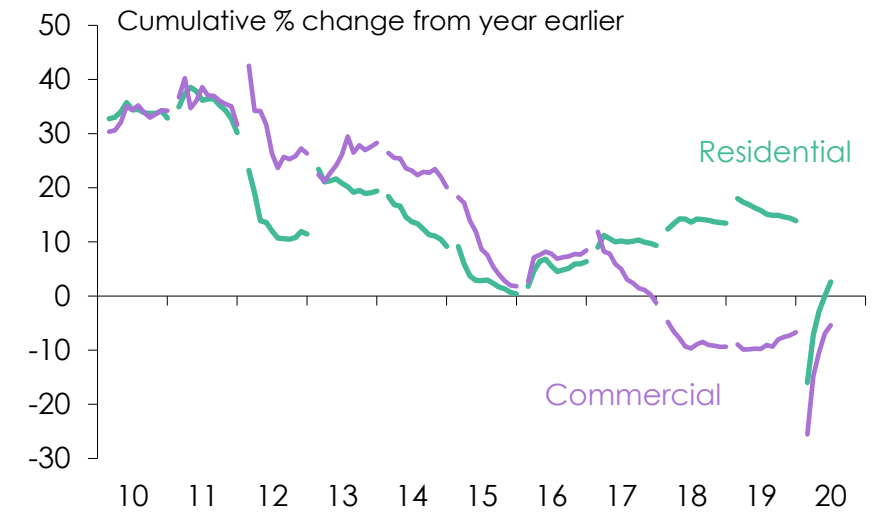
Consumer sentiment



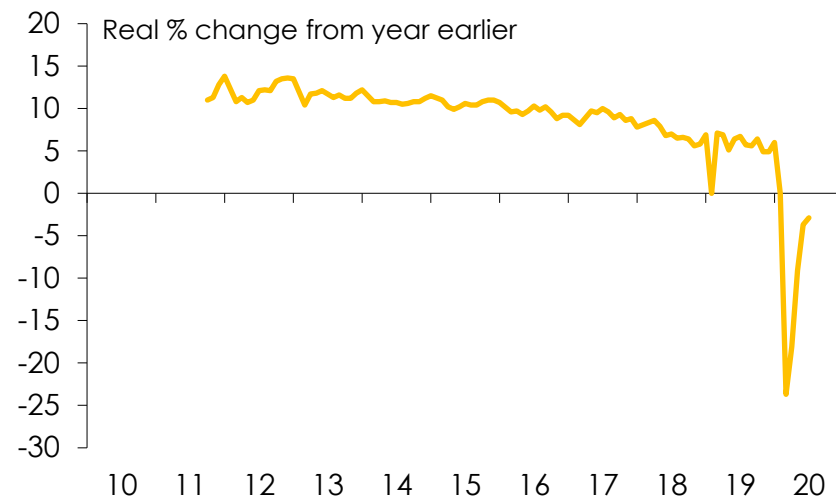
Motor vehicle sales



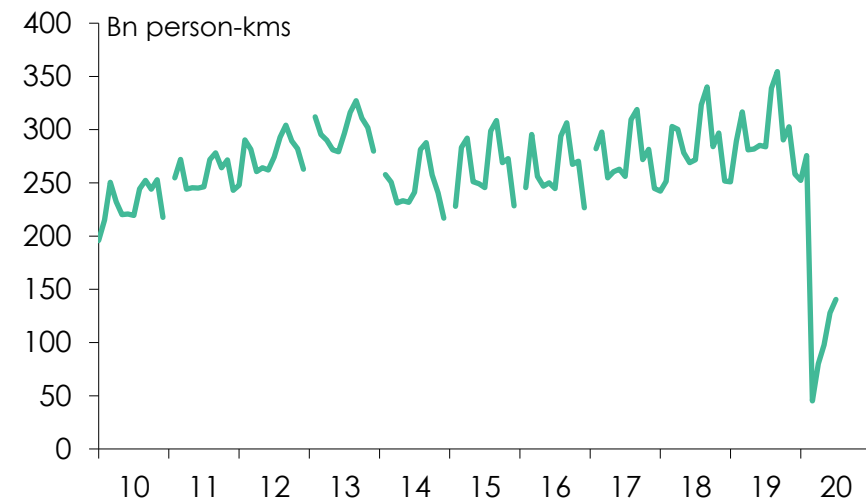
Real estate investment



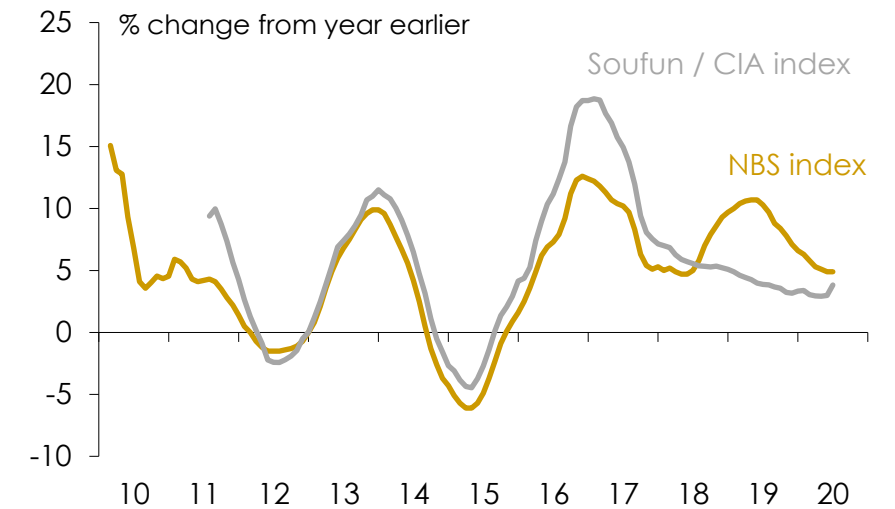
Retail sales volume



Passenger traffic volumes



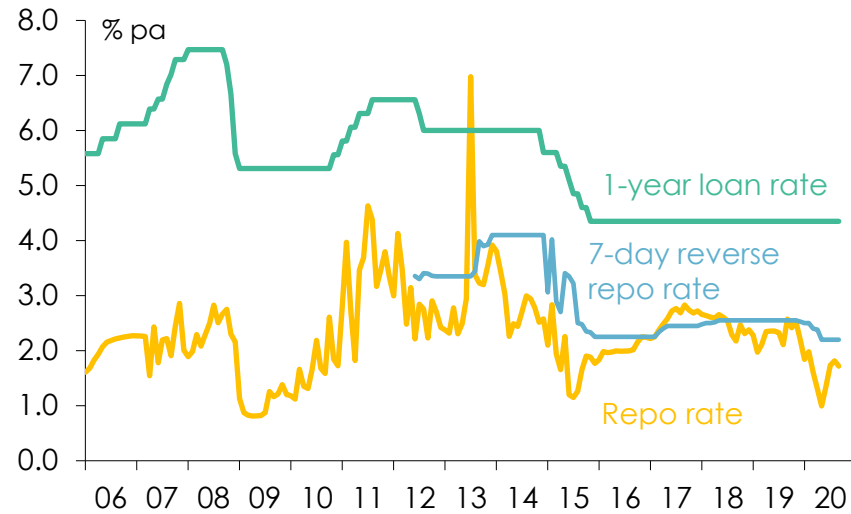
Residential real estate prices



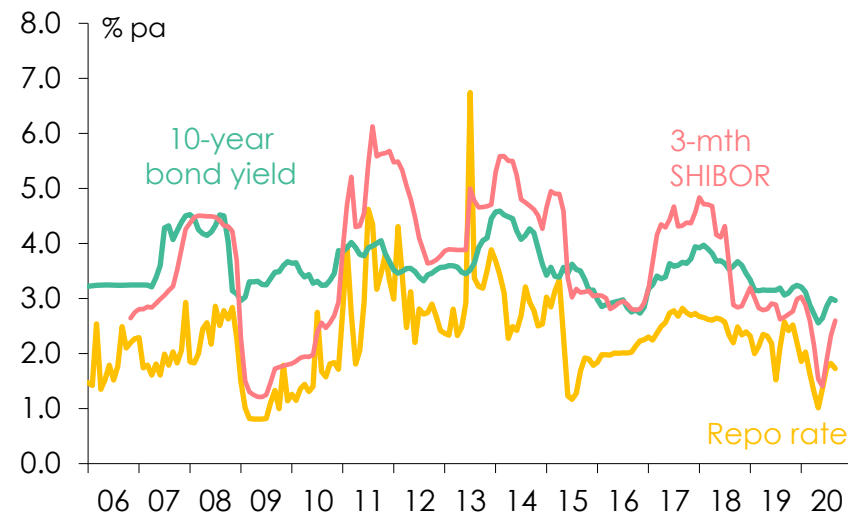
Sources: China National Bureau of Statistics; China Association of Automobile Manufacturers; China Index Academy.

The PBoC has been more cautious about stimulus than it was in 2008-09 or 2015-16, perhaps because it's still concerned about financial stability

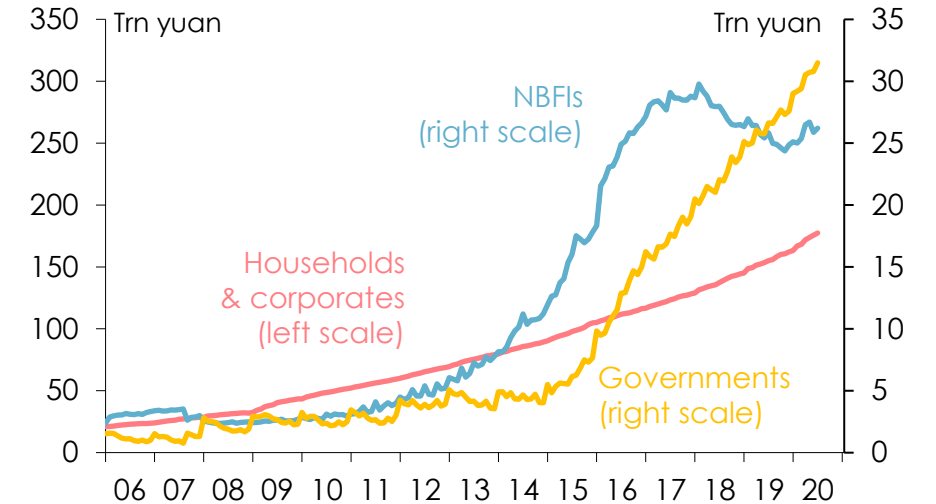
PBoC policy interest rates



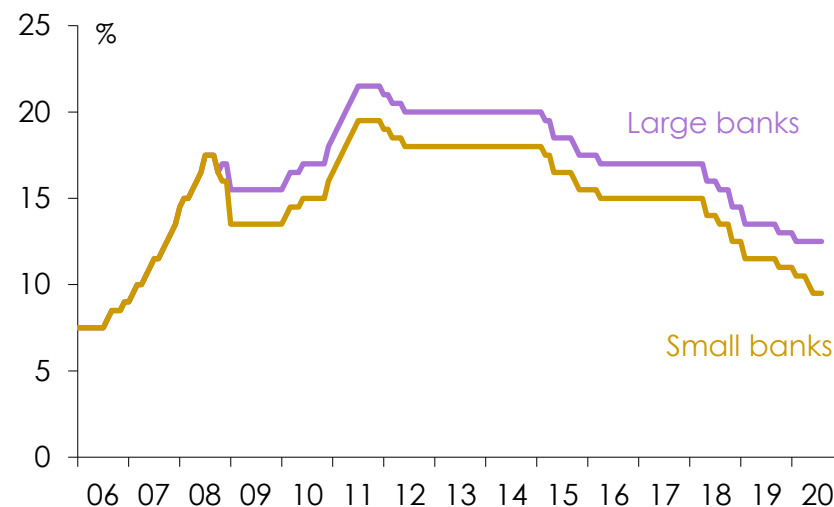
Market interest rates



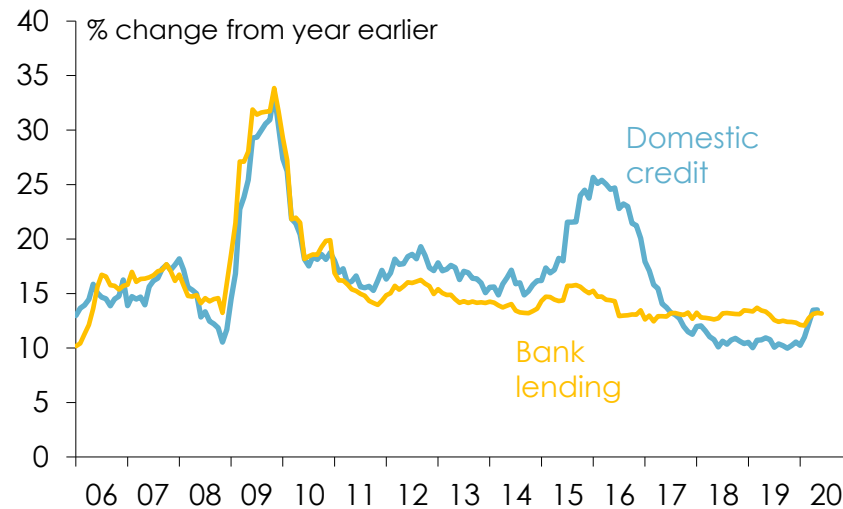
Depository corporation assets



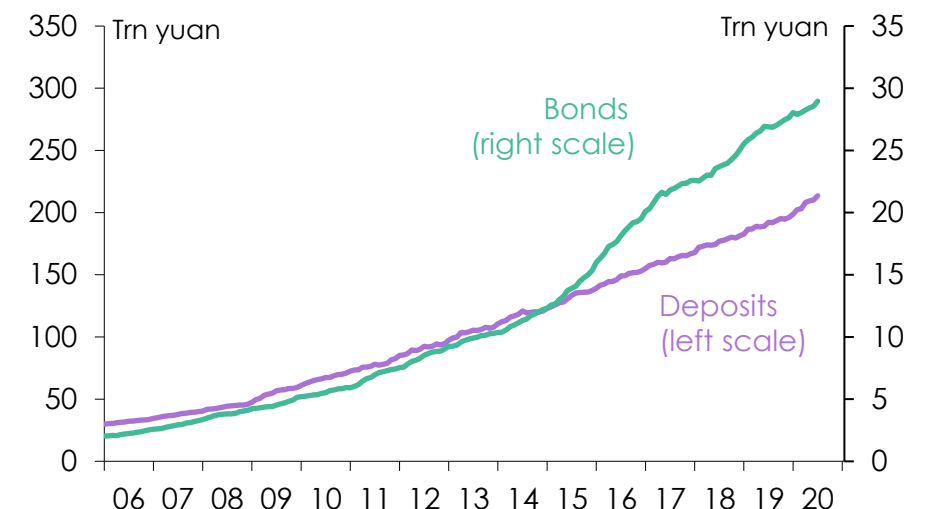
Bank reserve requirement ratios



Credit growth



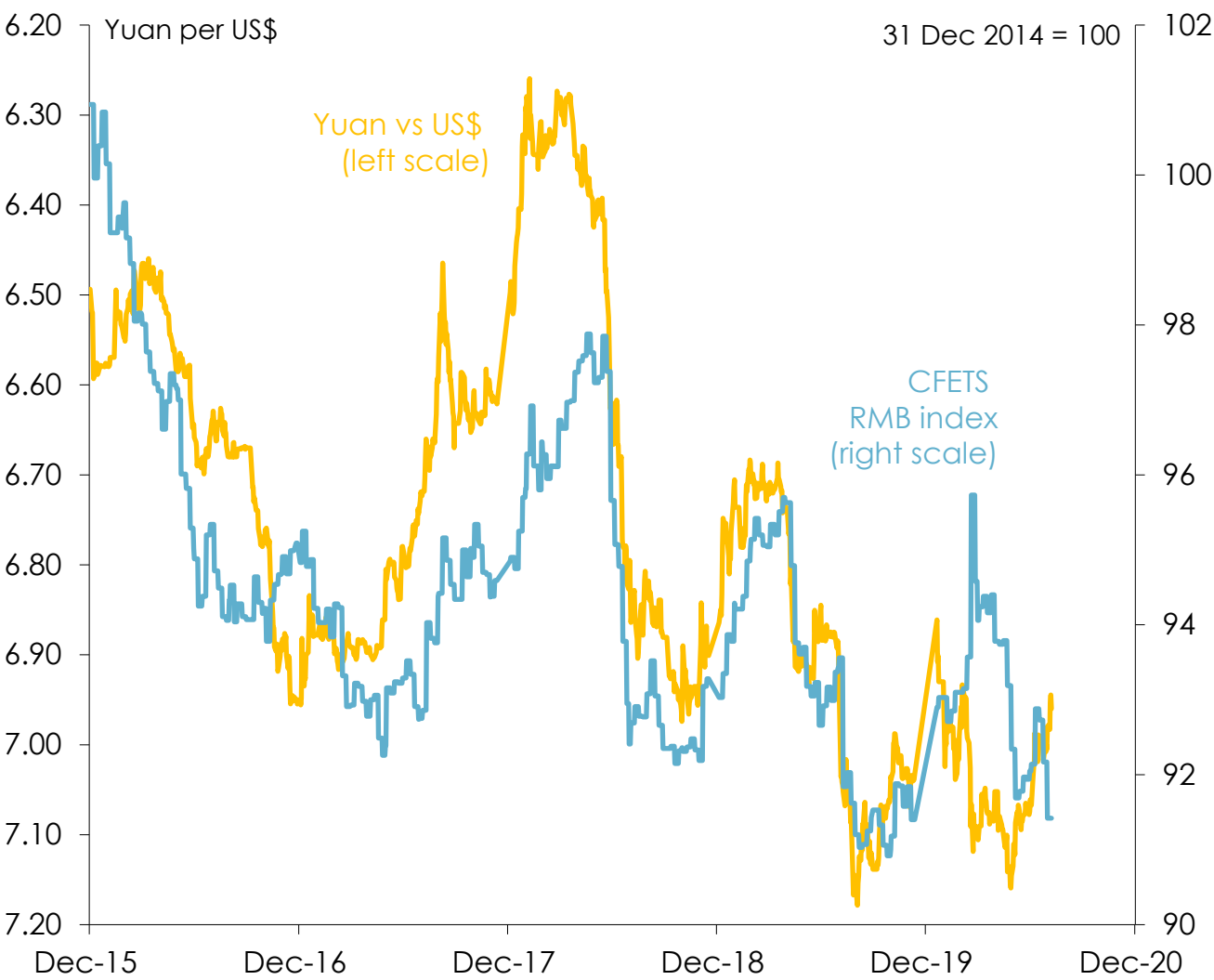
Depository corporation liabilities



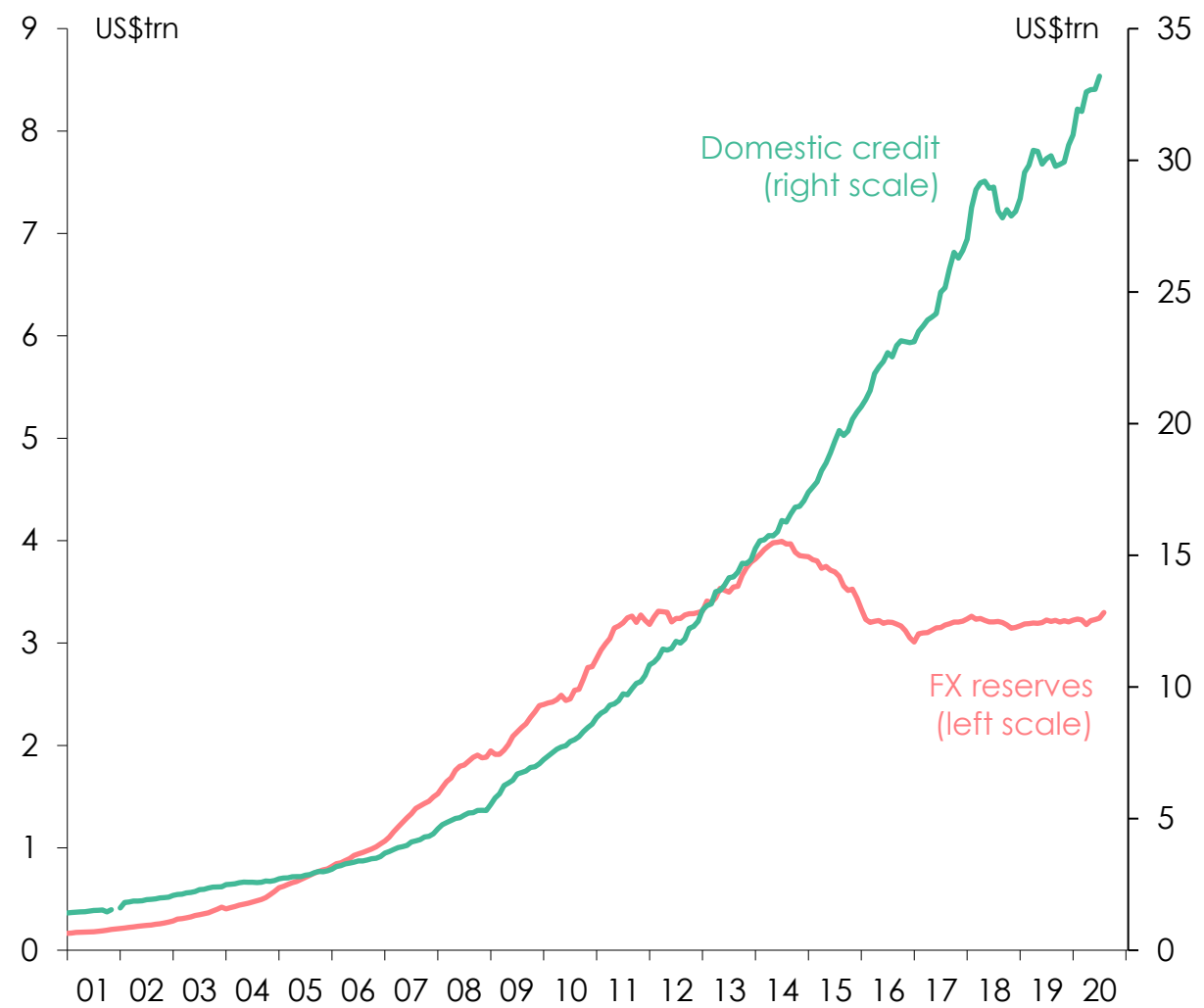
Note: 'SHIBOR' is the Shanghai Inter-Bank Offered Rate. Sources: Refinitiv Datastream; People's Bank of China.

The yuan rose 0.3% against the US\$ but was steady against the CFETS index this week – longer term the Rmb’s stability rests on capital controls

Chinese yuan vs US\$ and trade-weighted index



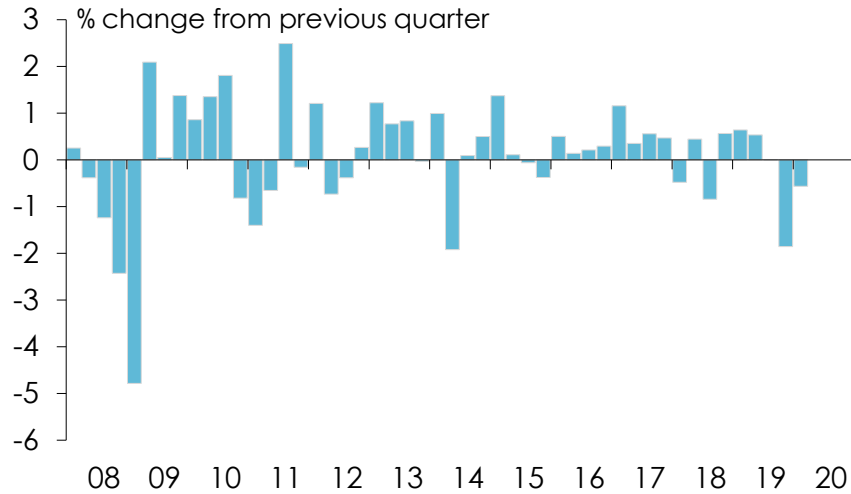
FX reserves and domestic credit



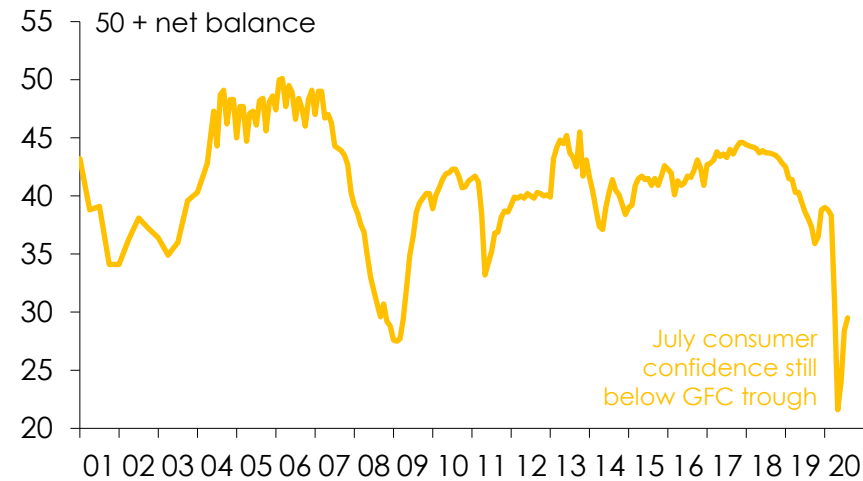
Sources: Refinitiv Datastream; China Foreign Exchange Trading System; People's Bank of China. Exchange rates up to 7th August.

Japan entered its fourth recession since 2000 after hiking its GST rate last October, and the pandemic has worsened it

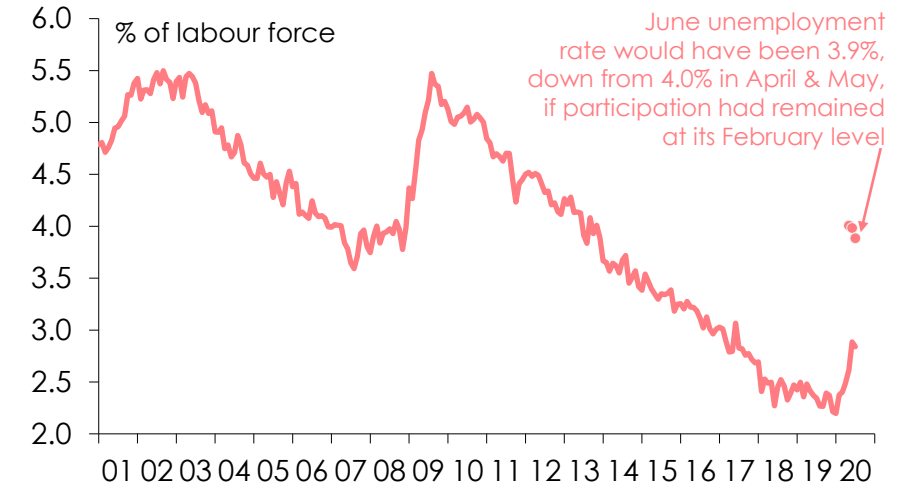
Real GDP



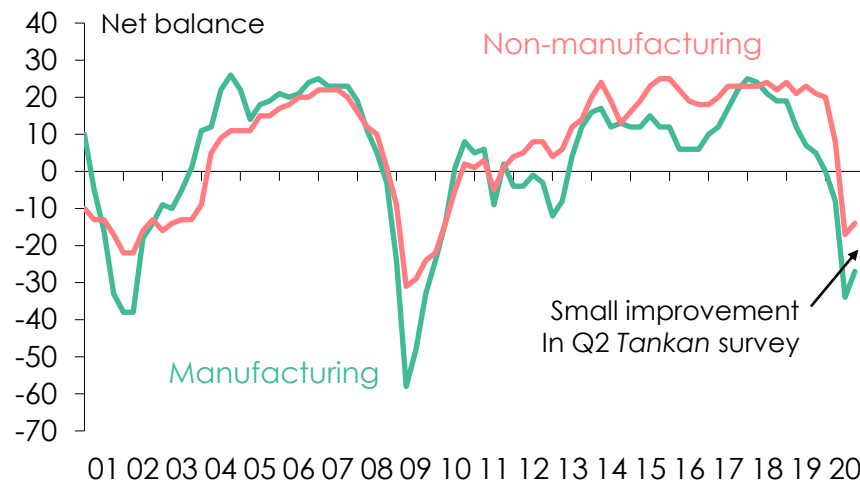
Consumer confidence



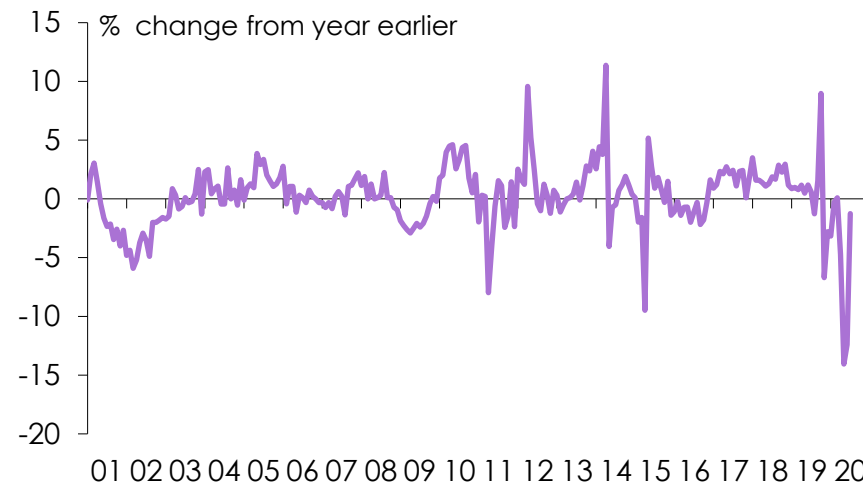
Unemployment



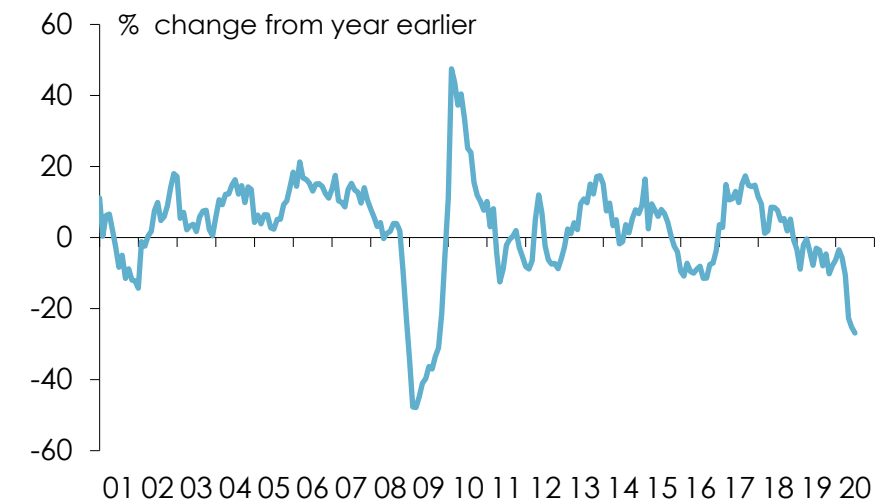
Business conditions – large firms



Retail sales



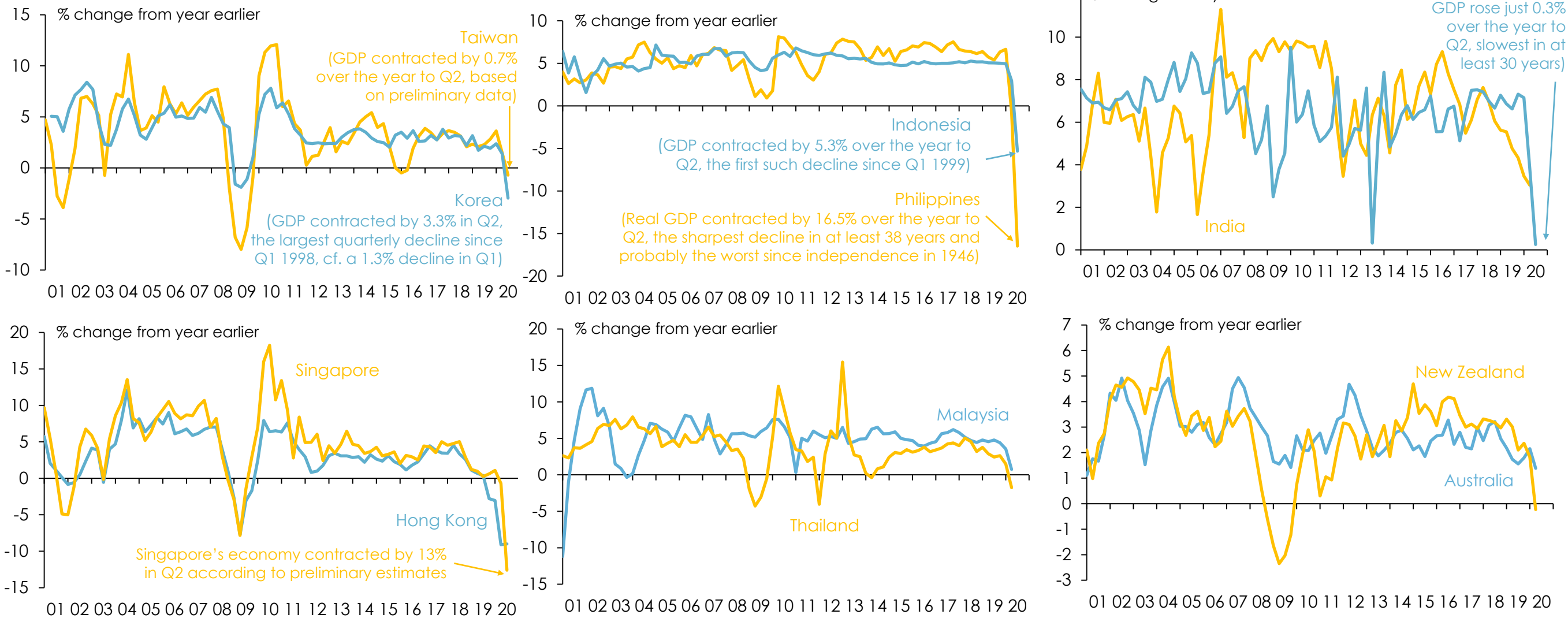
Merchandise exports



Sources: Japan Cabinet Office; Bank of Japan; Japan Automobile Dealers' Association; Ministry of Health, Labour & Welfare. The first estimate of Q2 GDP will be released this Monday, 3rd August.

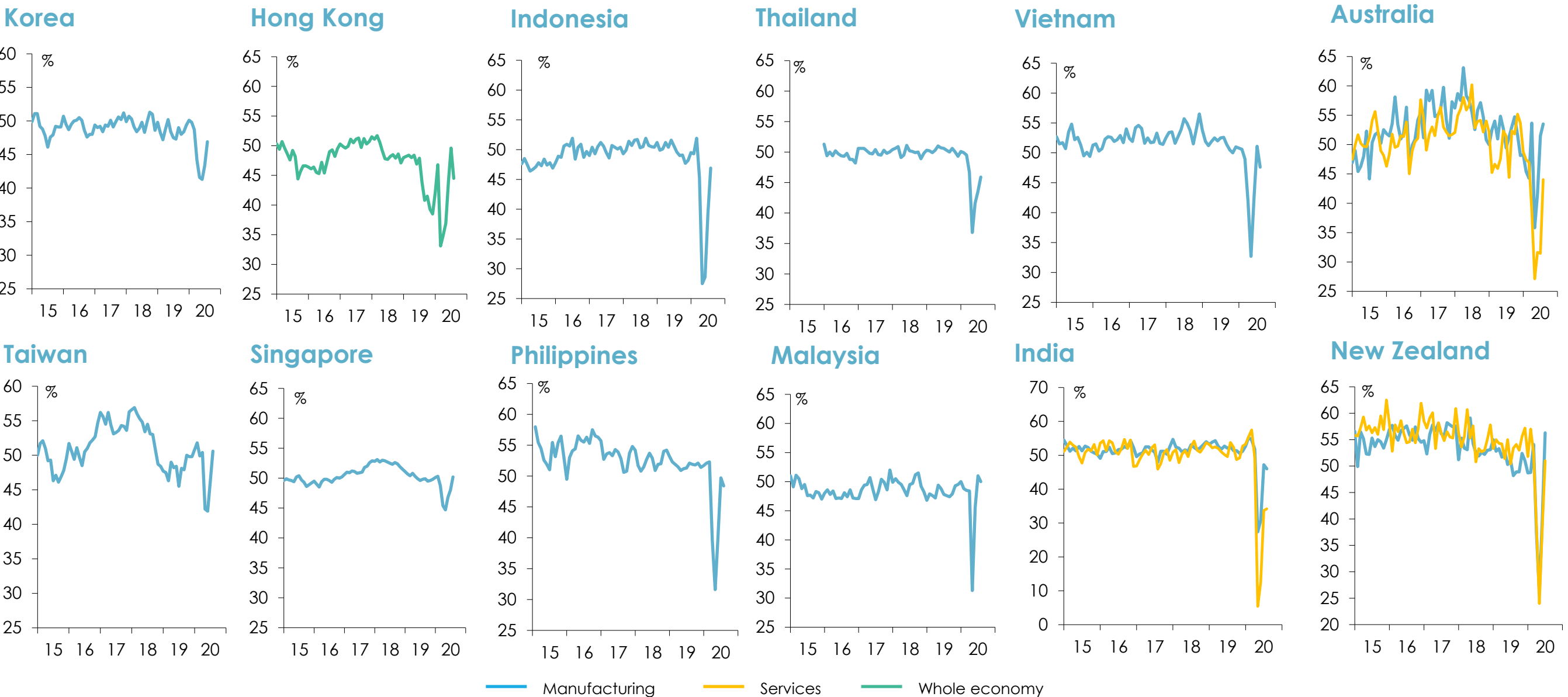
All other Asian economies which have so far reported Q2 GDP numbers, except Vietnam, have experienced outright contractions from Q2 2019

Real GDP growth – Asia-Pacific economies



Sources: Bank of Korea; Taiwan Directorate-General of Budget, Accounting & Statistics; Hong Kong Census & Statistics Department; Singapore Ministry of Trade and Industry; Department of Statistics Malaysia; Office of the National Economic & Social Development Council of Thailand; Statistics Indonesia; Philippine Statistics Authority; General Statistics Office of Viet Nam; India Ministry of Statistics & Programme Implementation; Australian Bureau of Statistics; Statistics New Zealand. Malaysia's Q2 GDP is released on 14th August; Thailand's on 17th August; India's on 31st August; Australia's on 2nd September; and New Zealand's on 17th September.

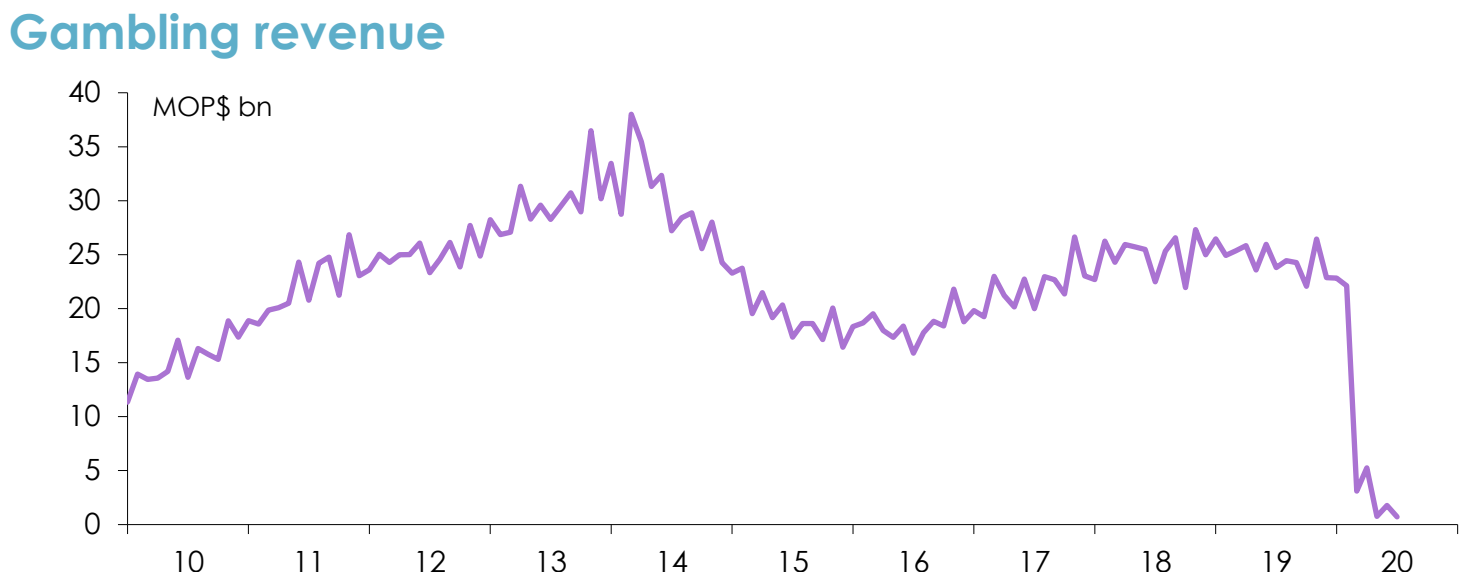
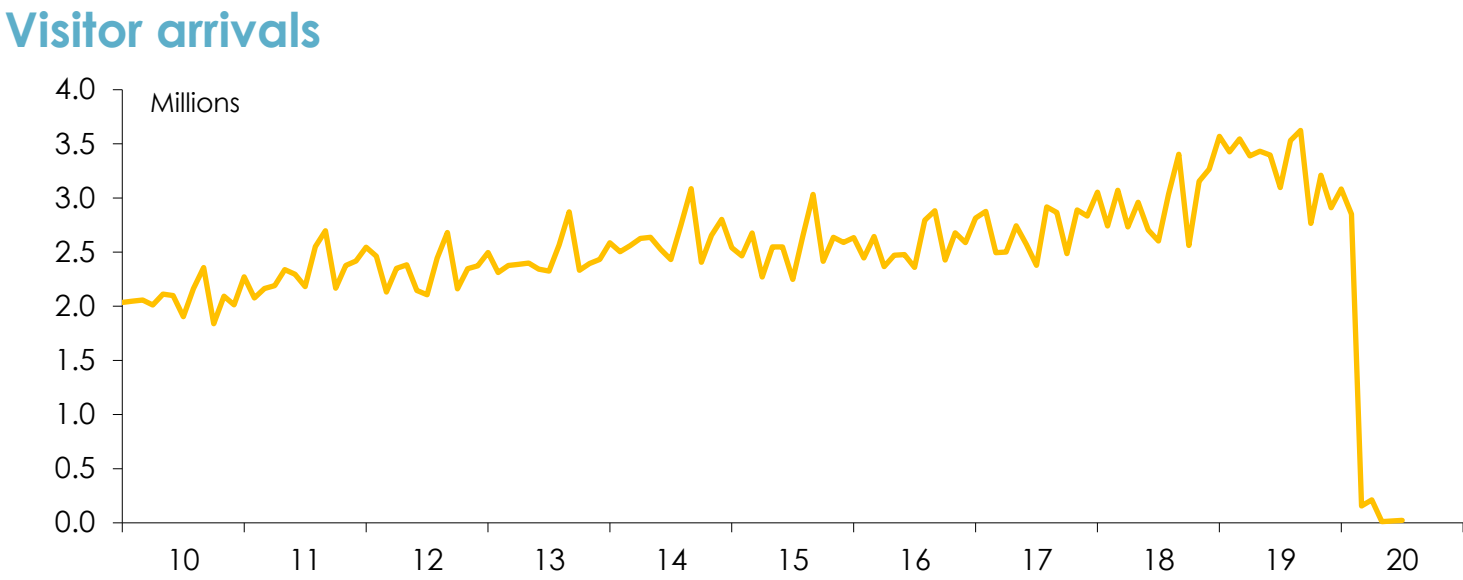
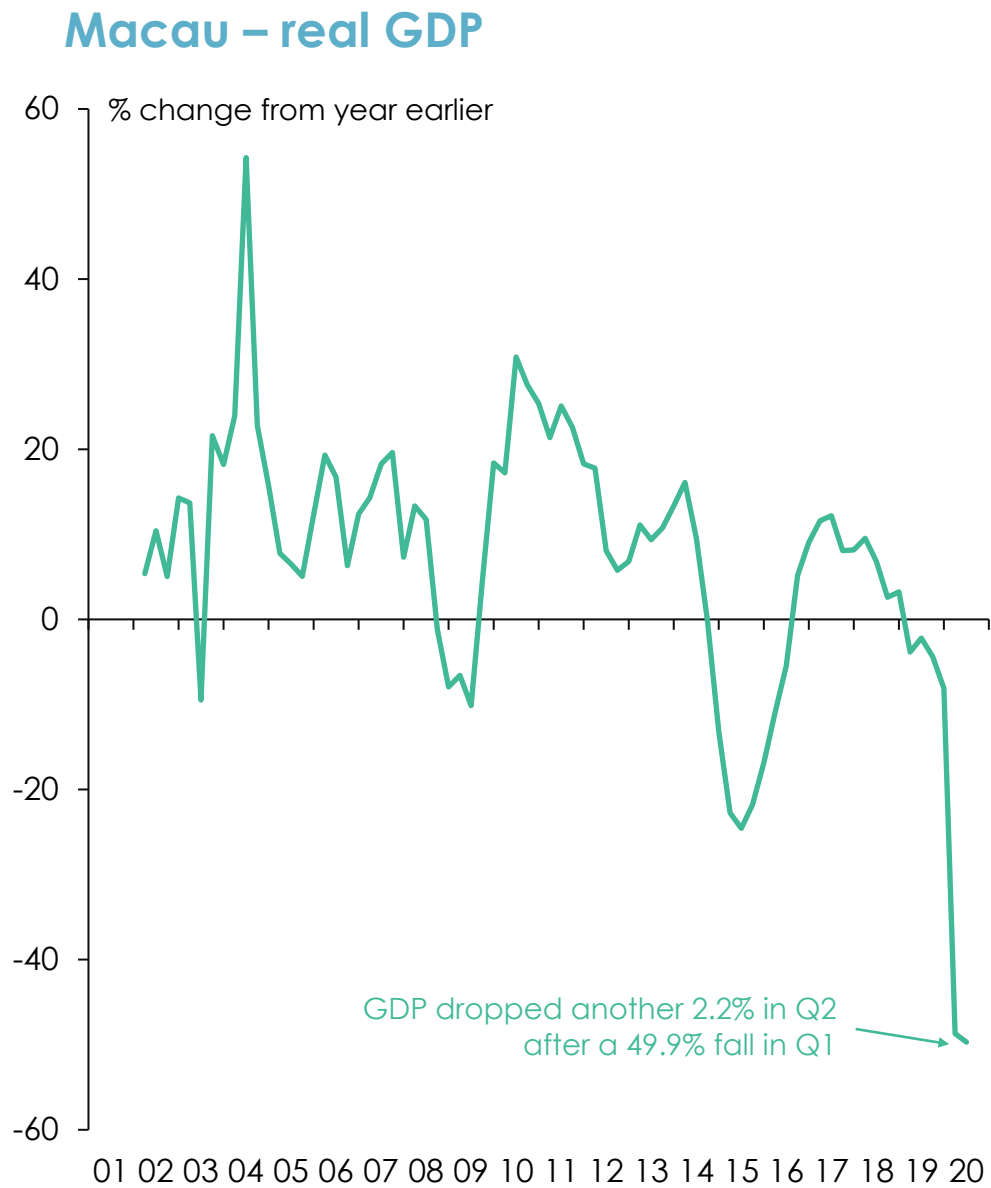
Manufacturing PMIs rose further in July in Korea, Taiwan, Indonesia and Thailand but fell back slightly in the Philippines, Malaysia, Thailand & India



Note: Purchasing Managers' Indexes (PMIs) are derived from surveys of senior executives, who are asked to report whether various dimensions of business activity recorded an increase, decrease or no change compared with the previous month. A reading of 50 indicates an overall increase cf. the previous month, and a reading of less than 50 indicates a decrease. Latest data are for July (except for NZ which is for June).

Sources: IHS Markit; Singapore Institute of Purchasing & Materials Management; Australian Industry Group; Business NZ; Refinitiv Datastream.

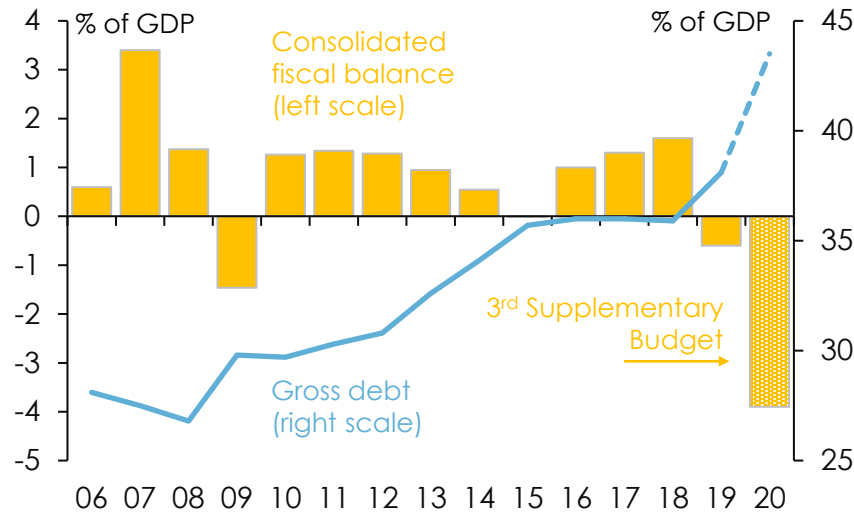
The world's worst recession is probably in Macau



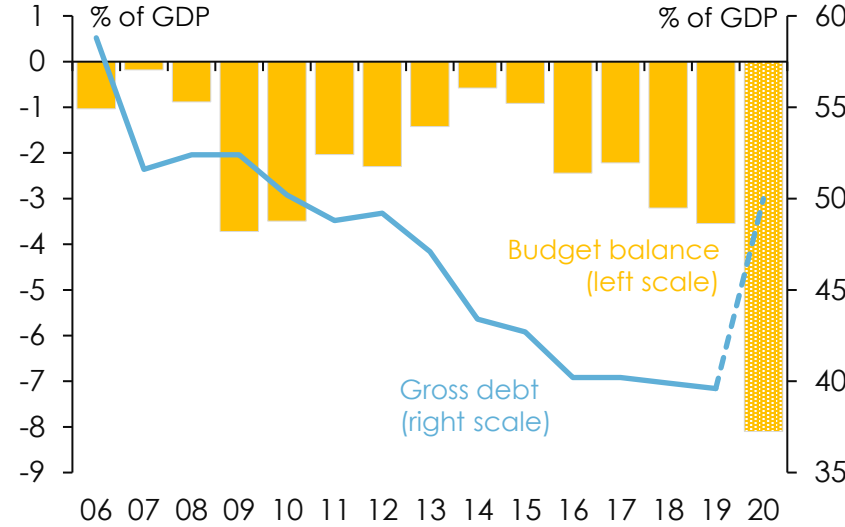
Note: MOP\$ is the standard abbreviation for Macanese pacatas (1 MOP = US13¢). Source: Macau Statistics and Census Service.

Some Asian central banks have engaged in various forms of 'quantitative easing'

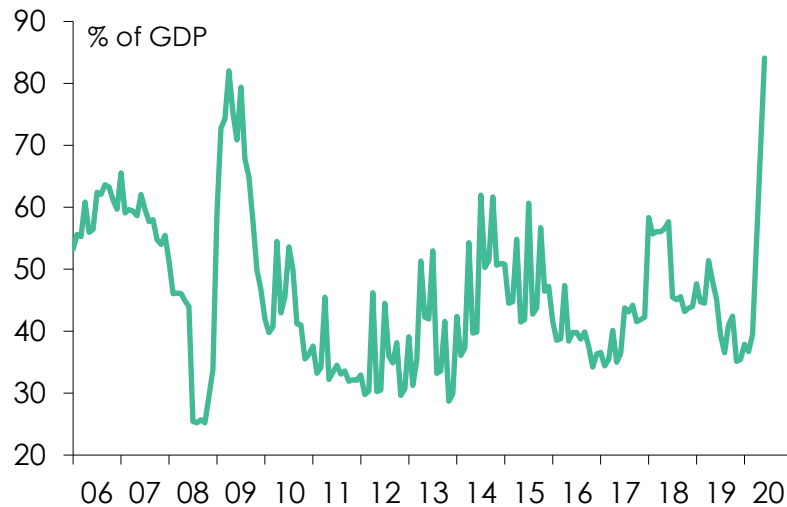
Korea central government budget



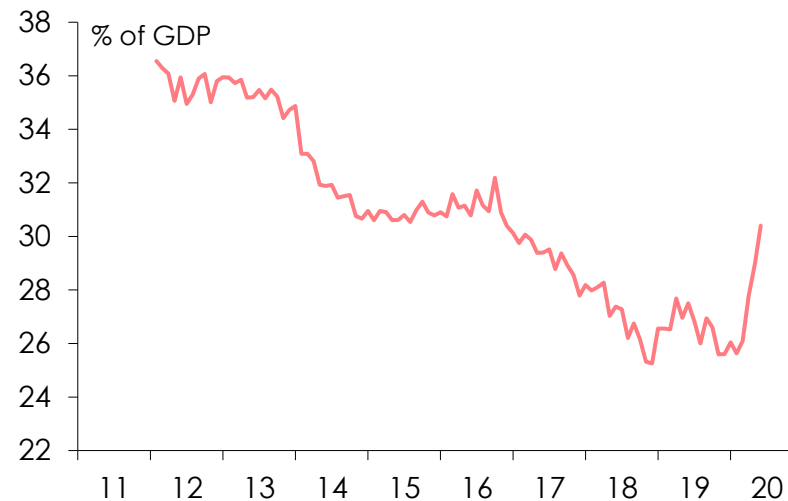
Philippines NG budget



BoK domestic assets



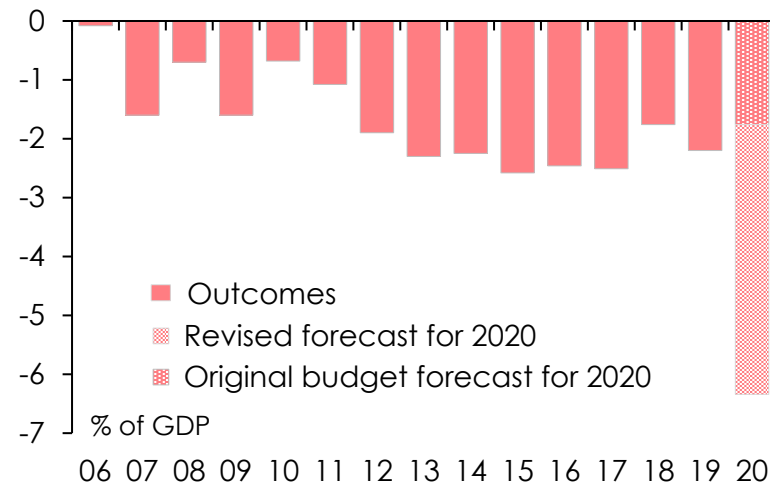
BSP assets



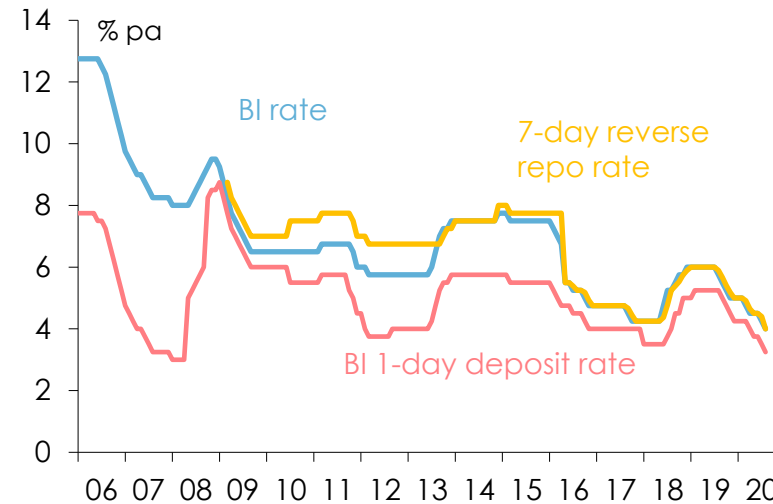
- ❑ The Bank of Korea has cut its policy rate by 100bp so far this year to a record low of 0.50%
- ❑ After its last rate cut in May, Governor Lee Ju-Yeol indicated the BoK was considering using 'unconventional monetary tools' to support growth
 - since March, the BoK has been willing to supply 'unlimited liquidity' to financial institutions, accepting a wider range of collateral in repos
 - this month the BoK lent ₩8 trn to a ₩10 trn SPV established to buy corporate bonds and CP
- ❑ The BoK's total domestic assets more than doubled between end-February and end-May, from 40% of GDP to 84% - reflecting increased holdings of bonds, reverse repos and lending to both government and the private sector
- ❑ The Philippines National Government (NG) expects its budget deficit to reach 8.1% of GDP this year, and public debt to rise to 50% of GDP
- ❑ In March, the BSP purchased ₱300bn (US\$6bn) of bonds directly from the Treasury Bureau under a 6-mth repo arrangement, and has indicated a willingness to purchase a further ₱200bn (but to date hasn't made any further purchases)

Bank Indonesia has entered into a formal agreement with the Indonesian Government to purchase debt directly, and subsidize other debt issuance

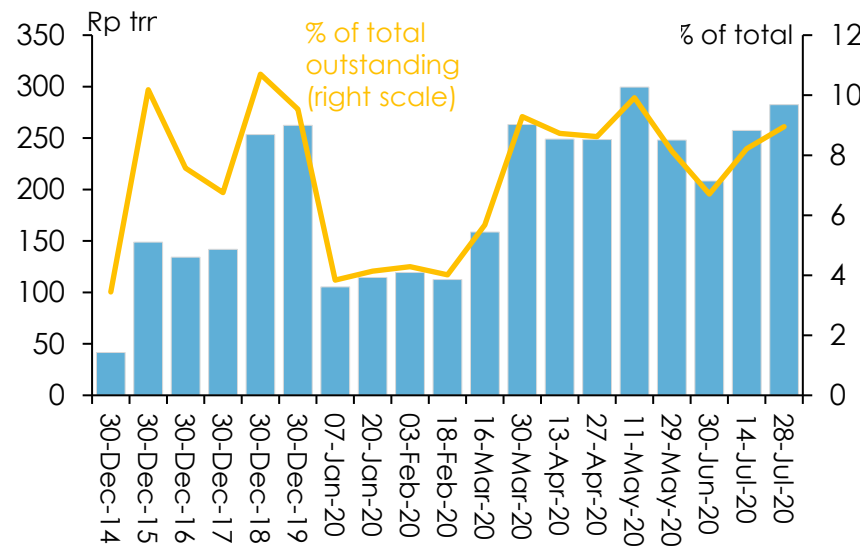
Indonesia budget deficit



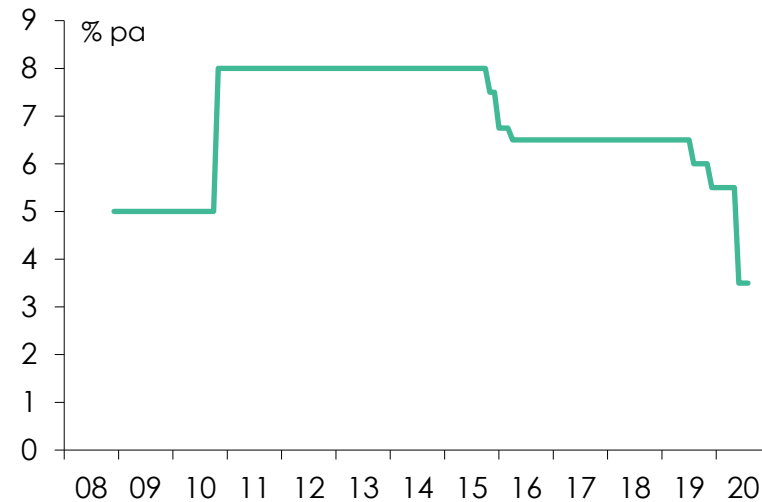
BI monetary policy rates



BI holdings of tradeable SBNs



Bank reserve requirement ratio

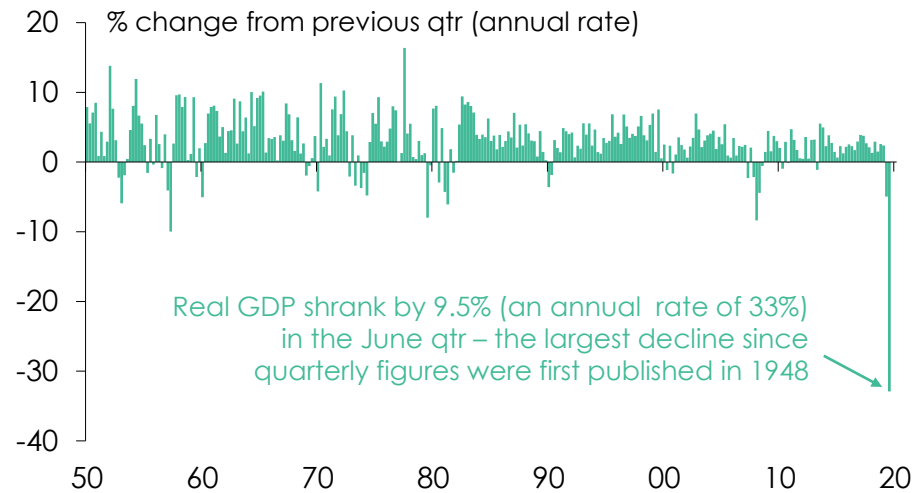


- This month the Indonesian Government and Bank Indonesia agreed on a 'burden sharing' scheme under which BI will directly purchase from the Government almost Rp400 trn of bonds (SBNs) – equivalent to about 1/4 of this year's financing requirement – at its benchmark reverse repo rate, and return the interest received to the Government
 - BI has so far purchased Rp36.7 trn of SBNs
 - prior to this BI had also purchased at least Rp166trn of SBNs in the secondary market
- BI will also subsidise the interest on another Rp177trn of bonds issued to fund loans to micro, small and medium-sized businesses
- This follows BI's decision in mid-April to cut banks' reserve requirement ratio by 200bp, coupled with a requirement that banks use the funds thus 'freed up' to purchase SBNs
 - banks' holdings of SBNs have since increased by Rp 213 trn (27%)
- BI calls all this 'synergic monetary expansion'
- BI is also doing conventional monetary policy: it cut its policy indicator rates by 25bp at this month's policy meeting

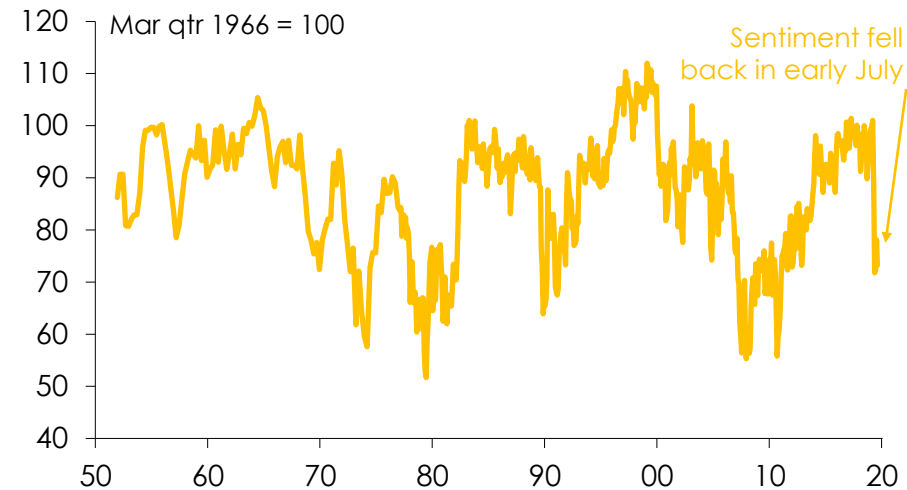
Sources: Indonesia Ministry of Finance (Kementerian Keuangan); Directorate of Government Debt Securities; Bank Indonesia.

The US economy has experienced its sharpest contraction since the 1930s, but there are increasing signs that a rebound began in May

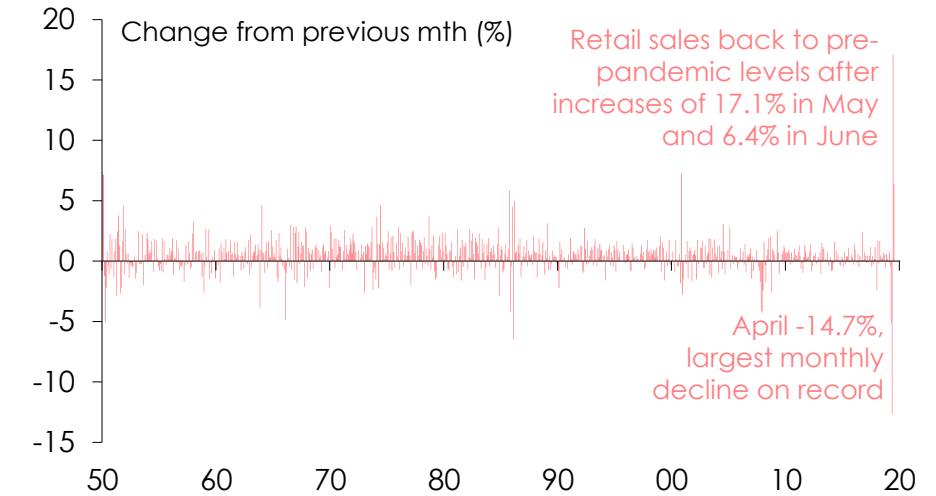
Real GDP



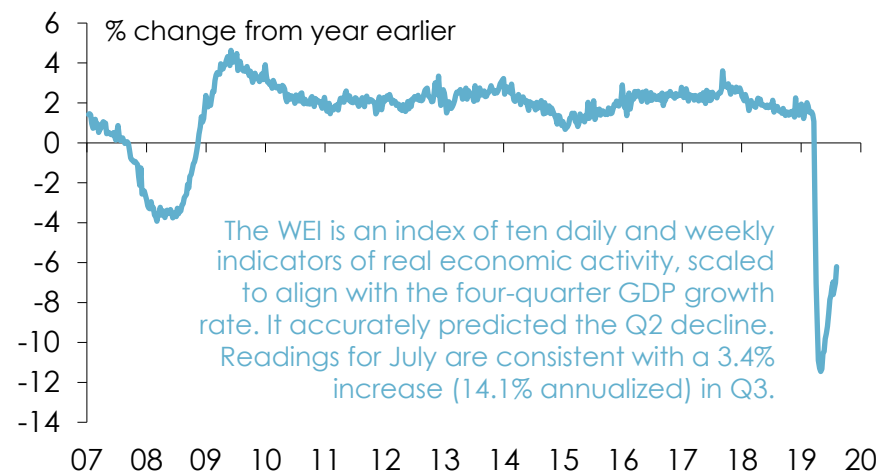
Consumer sentiment



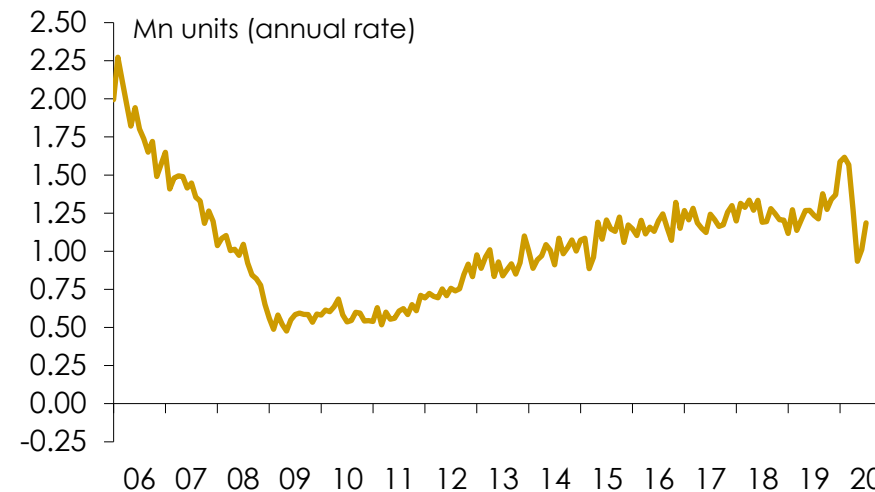
Retail sales



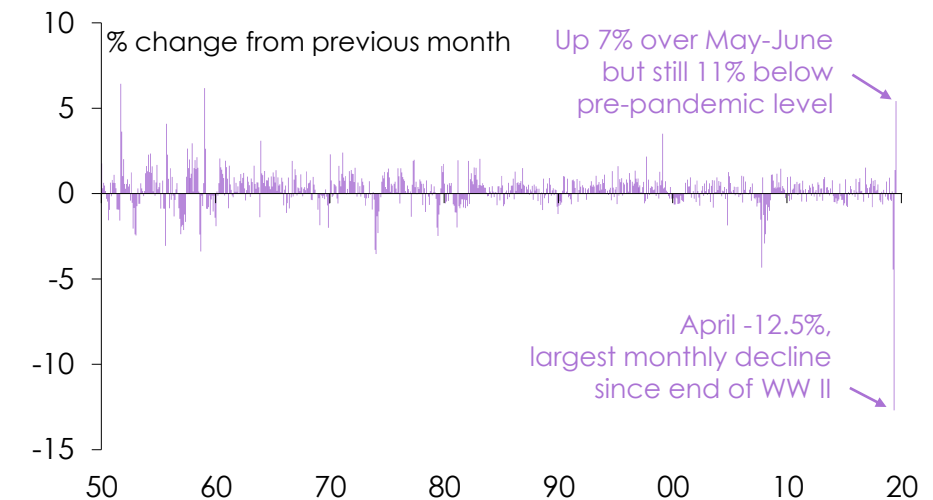
NY Fed weekly economic index



Housing starts



Industrial production

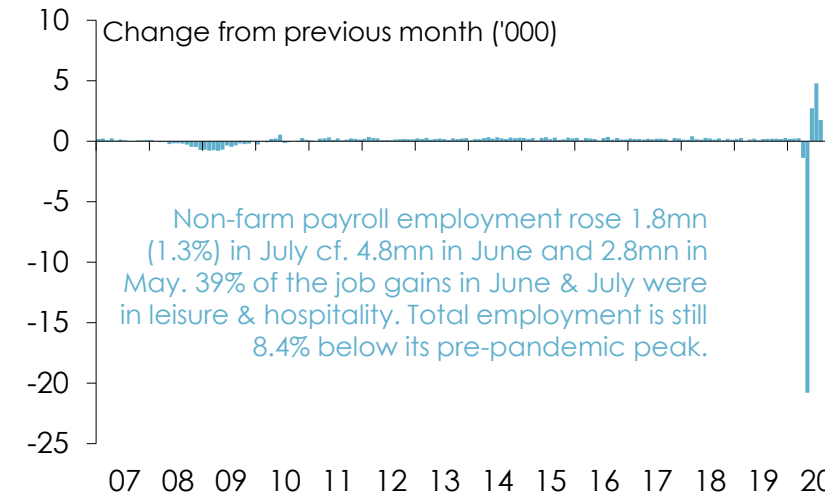


42% of the 22mn jobs lost in the US in March and April have been regained over May, June and July

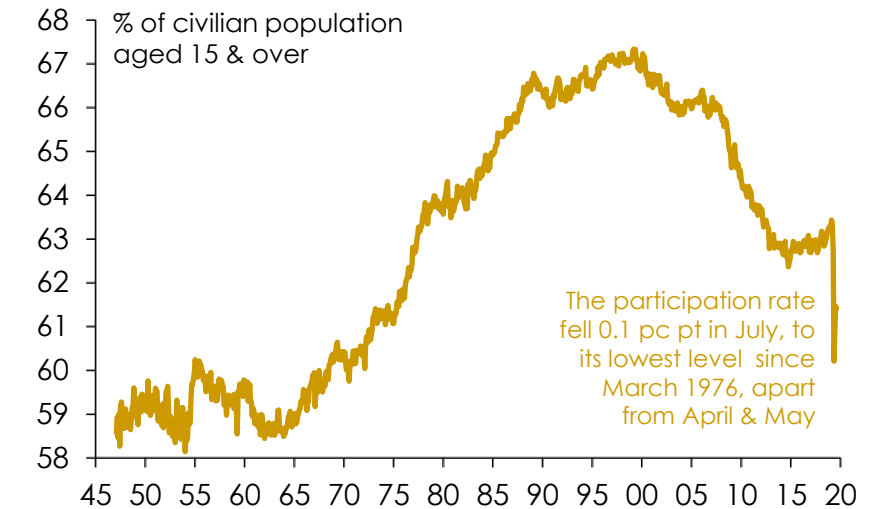
Unemployment benefit claims



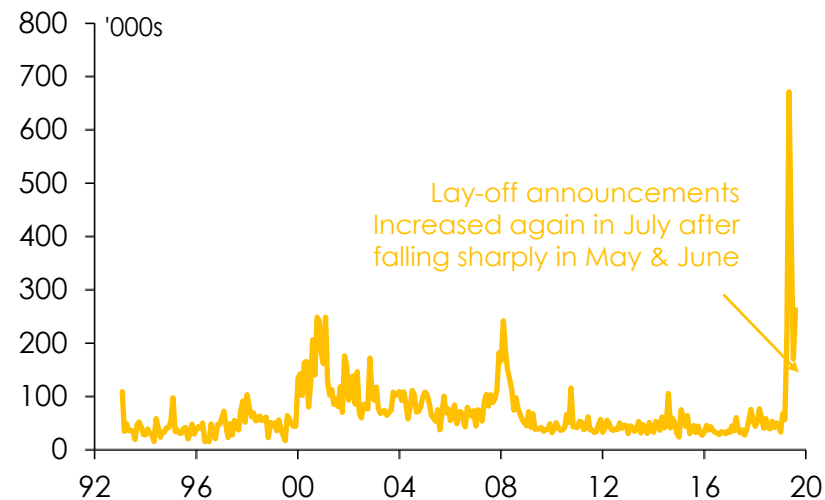
Non-farm payroll employment



Labour force participation rate



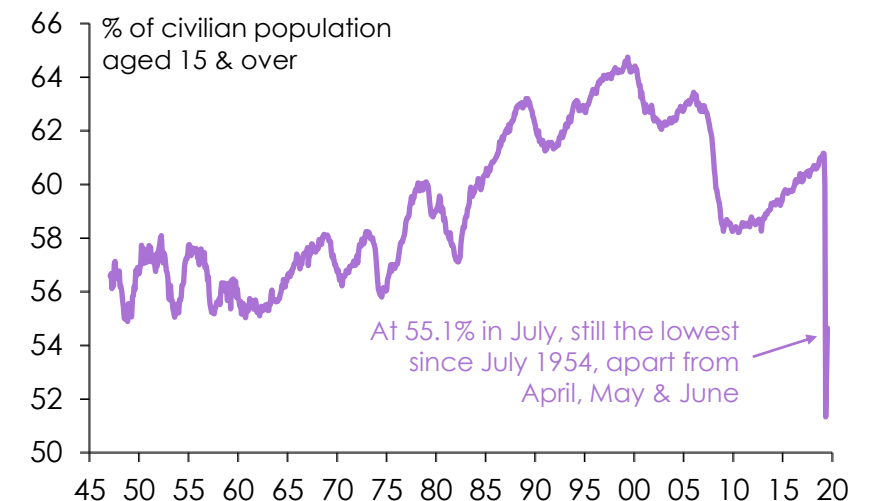
Layoff announcements



Unemployment rate



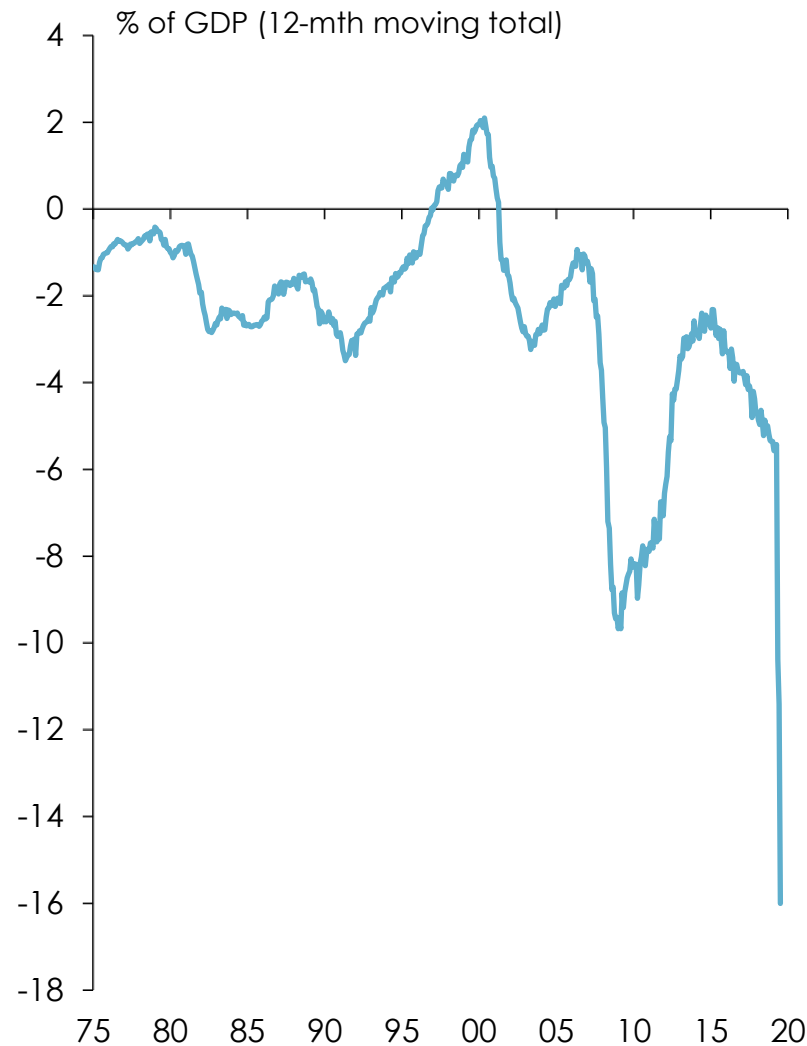
Employment to population ratio



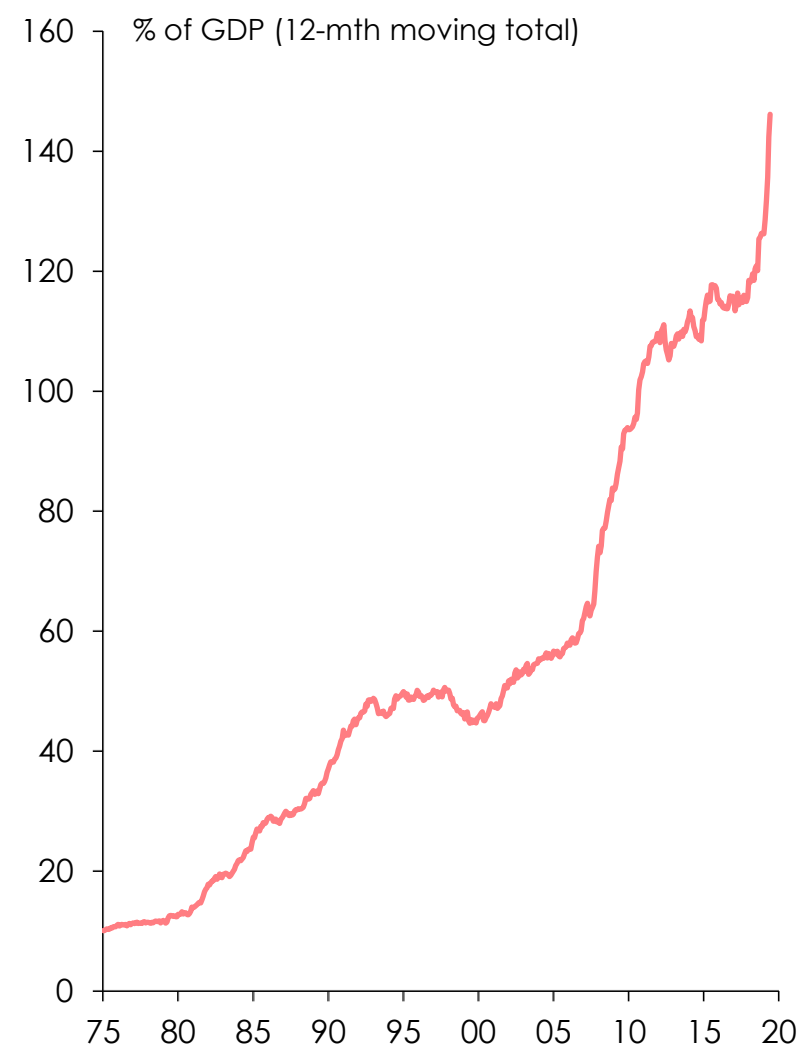
Sources: US Department of Labor; Challenger, Gray & Christmas; US Bureau of Labor Statistics; National Bureau of Economic Research Macro History database. August employment and other labour force data will be released on 4th September.

The US budget deficit has blown out dramatically since the end of March, reaching 16% of GDP in the 12 months ended June

US Federal budget deficit



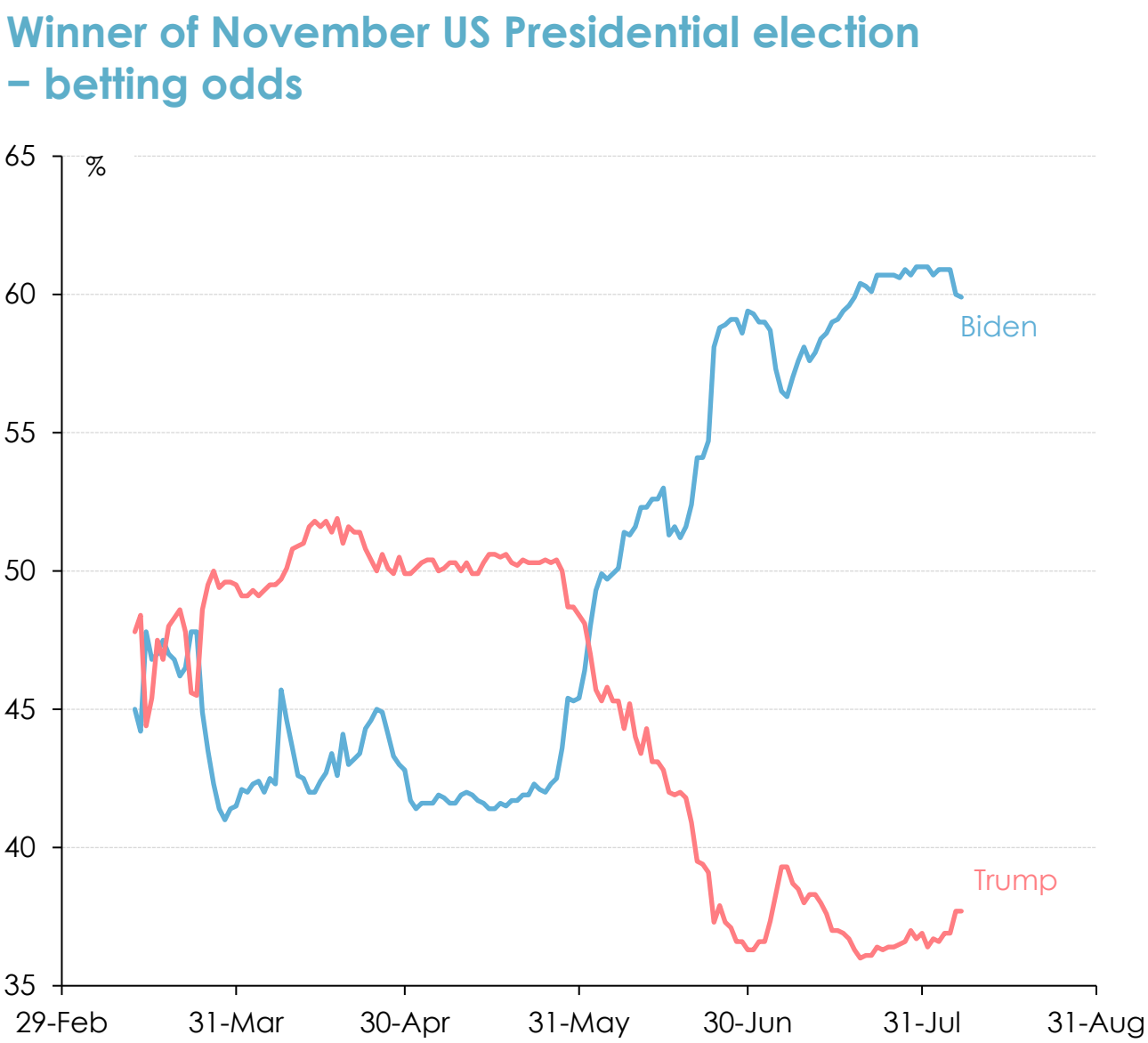
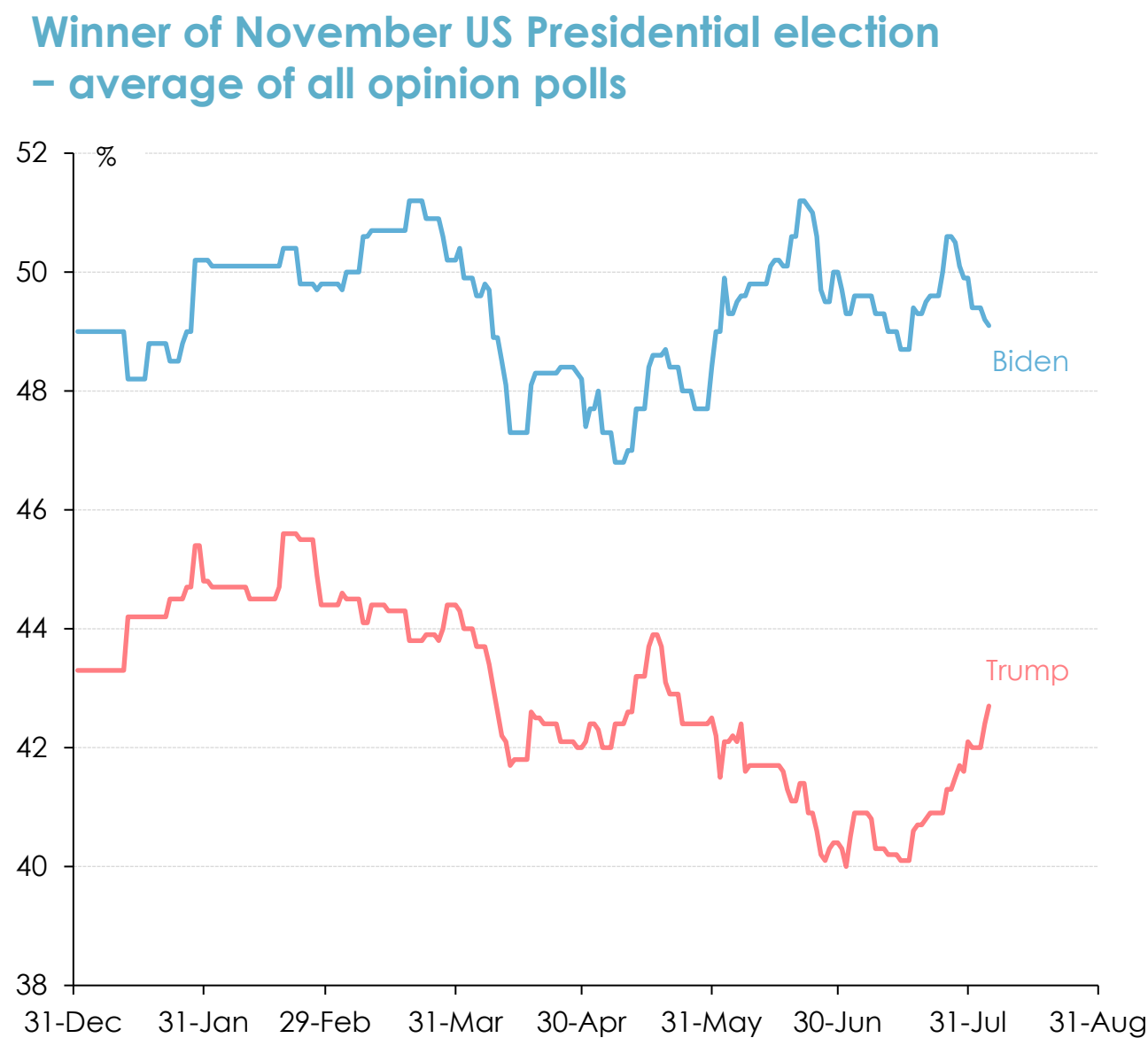
US gross Federal debt



- ❑ The US federal budget deficit widened from US\$582bn (3.3% of GDP) in 2016 (Obama's last year in office) to US\$1 trn (5.4% of GDP) in 2019, while gross federal debt rose from US\$20.4 trn (115% of GDP) to \$24.1trn (126% of GDP)
- ❑ In March, the Congressional Budget Office forecast the deficit would remain above US\$1trn every year over the next decade, reaching US\$1.7 trn (5.6% of GDP) by 2030
- ❑ The budget deficit for April, May and June amounted to US\$2.0trn (reflecting the impact of Covid-19 related measures), bringing the 12-month moving total to US\$3.0 trn (16.0% of GDP), cf. a peak of 9.7% of GDP during the GFC (and the largest since 20.8% of GDP in FY 1945)
- ❑ Gross federal debt increased by US\$727 bn to US\$28.7 trn (154% of GDP)

Note: The measure of US gross federal debt is at market value. Sources: US Treasury Department; Federal Reserve Bank of Dallas; US Bureau of Economic Analysis; US Congressional Budget Office; Corinna. July budget data are released on 12th August.

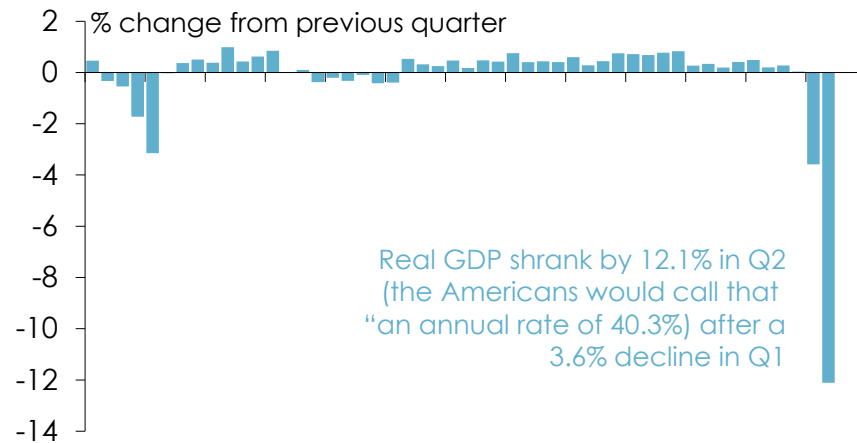
Joe Biden's lead over Donald Trump in both opinion polls and betting markets narrowed over the past week



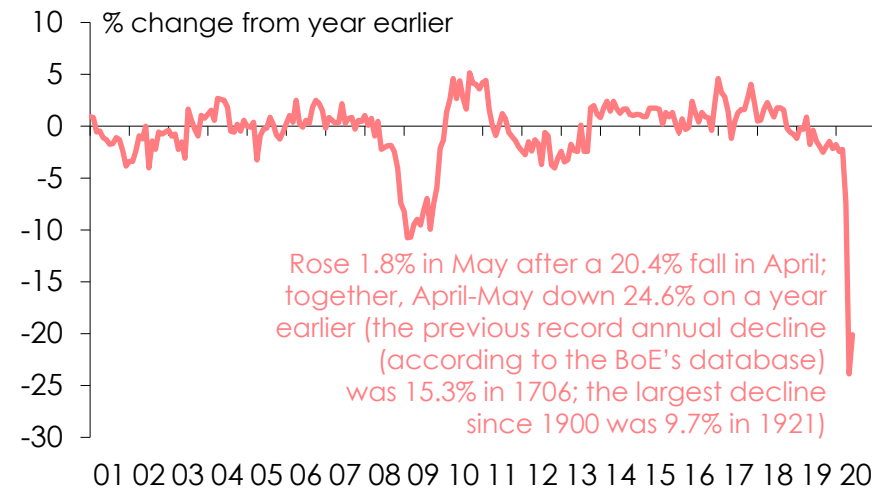
Note: The opinion poll average is based on 9 different polls; the betting odds average is based on 6 different markets. Latest opinion poll data are for 5th August; latest bedding odds are for 7th August. Source: RealClearPolitics.

Europe has experienced a larger contraction in real GDP than the US – although unemployment hasn't risen nearly as much

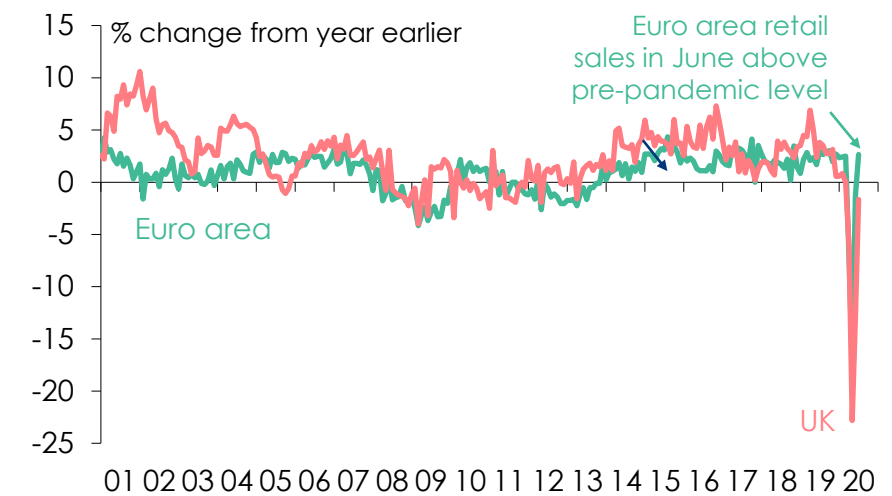
Euro area real GDP



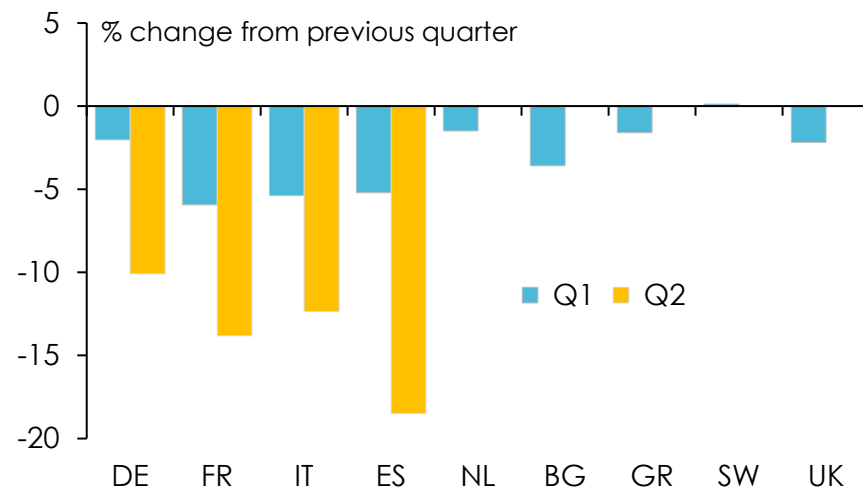
UK monthly GDP



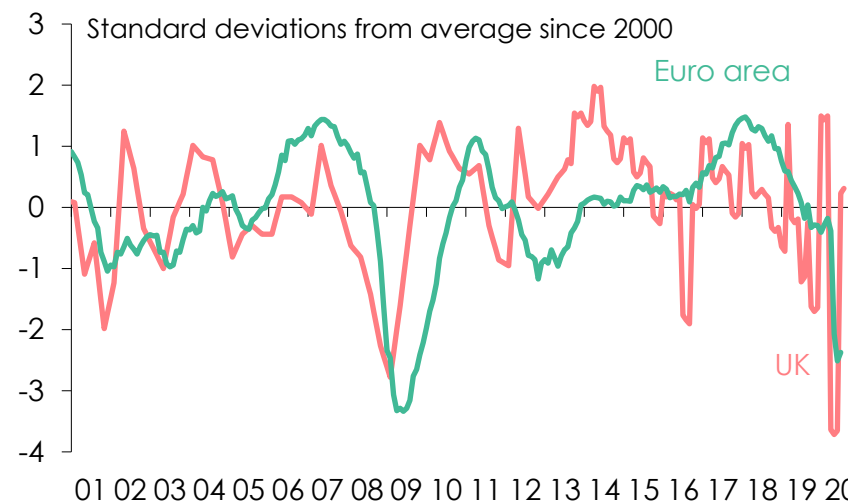
Retail sales volume



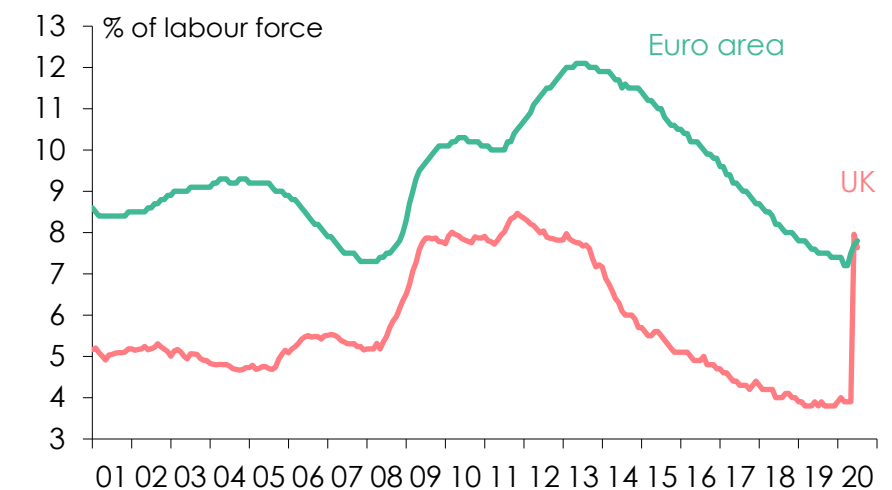
Quarterly GDP by country



Business confidence



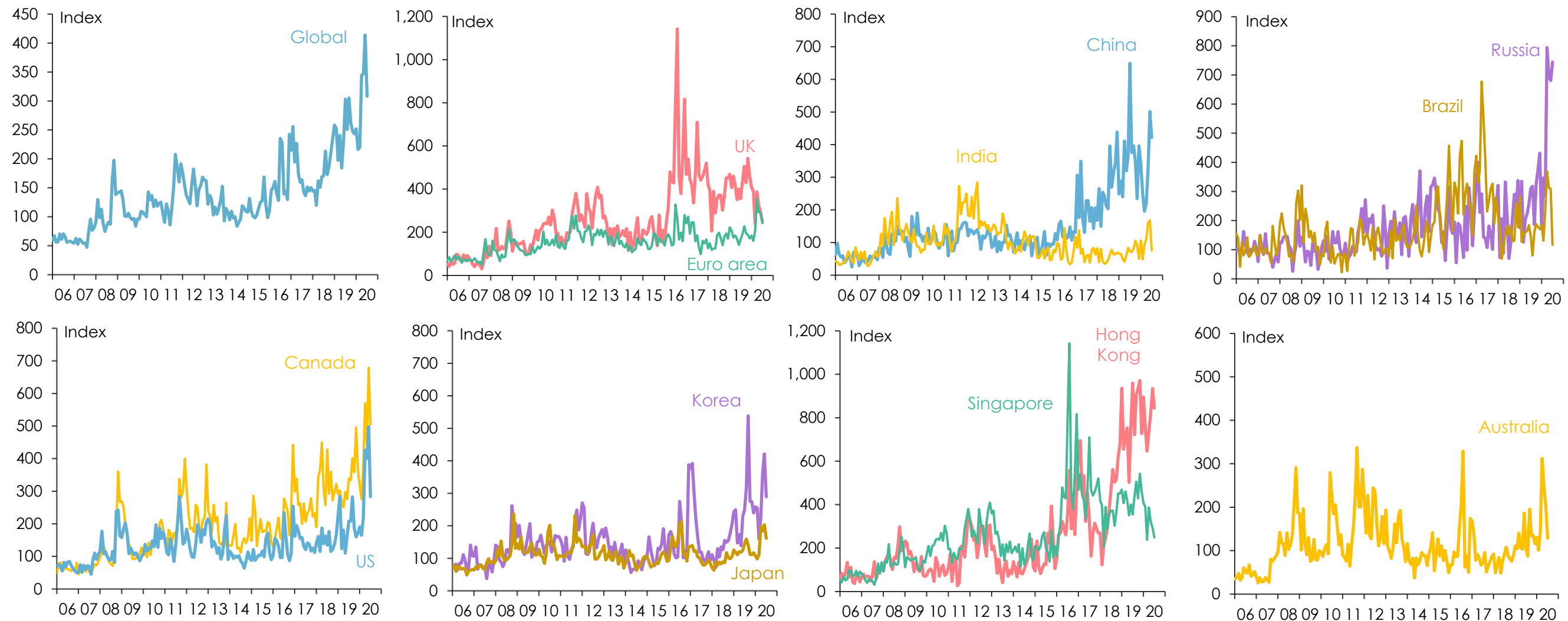
Unemployment



Sources: Eurostat; UK Office for National Statistics; Confederation of British Industry. The UK unemployment rate is published as a 3-month moving average; the most recent observation (for May) is derived by adding to the 'claimant count' unemployment rate the average margin between that rate and the conventionally defined unemployment rate over the preceding 12 months. Preliminary estimates of Q2 GDP for the UK will be released on 12th August.

Perhaps surprisingly, economic policy uncertainty eased almost everywhere in June – although it remains elevated by historical standards

Economic policy uncertainty indices

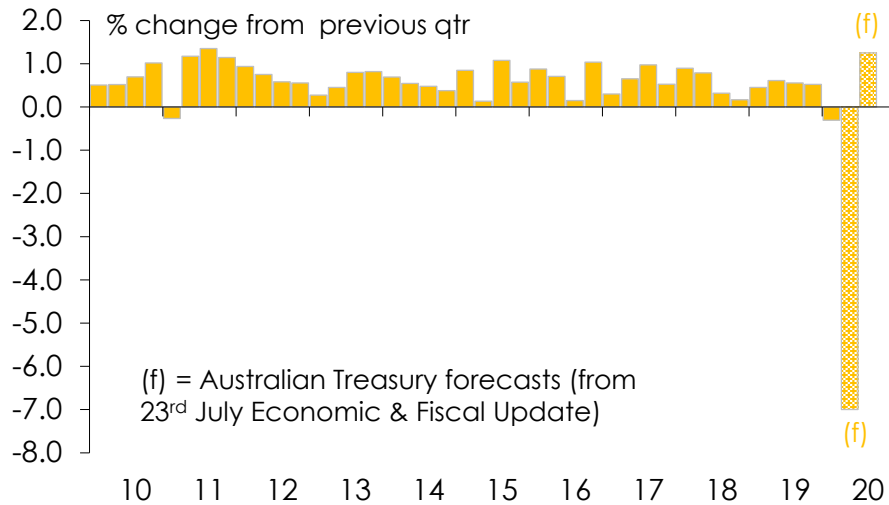


Note: The Economic Policy Uncertainty Index is derived from a count of newspaper articles containing the words “uncertain” or “uncertainty”, “economy” or “economic”, and policy-relevant terms pertaining to regulation, monetary or fiscal policy, central bank, taxation, tariffs, deficit, budget, etc. The index for the euro area is a GDP-weighted average of indices for Germany, France, Italy, Spain, the Netherlands and Ireland constructed by Corinna. Latest data are for June 2020.
Source: PolicyUncertainty.com; Scott Banker, Nick Bloom & Steven Davis, ‘Measuring Economic Policy Uncertainty’, *Quarterly Journal of Economics*, 131, no. 4 (November 2016), pp. 1593-1636.

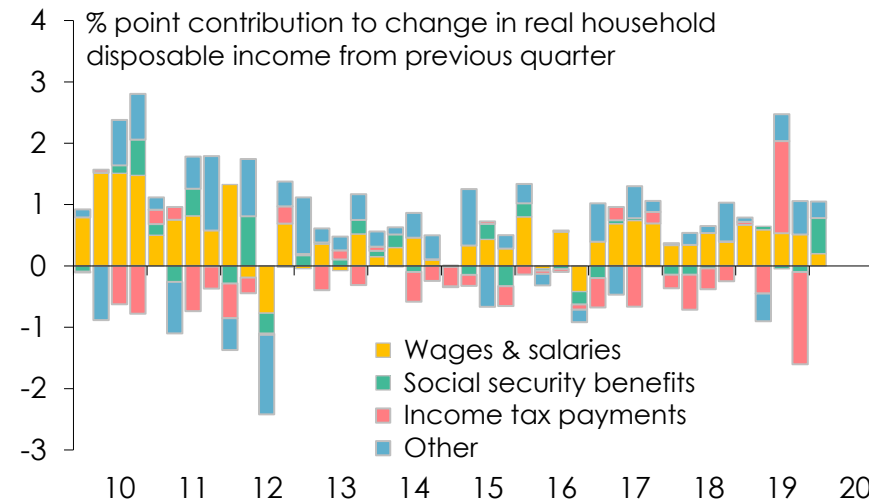
Australia

In Australia GDP declined in Q1 for the first time in 9 years, reflecting the impact of bushfires and 'social distancing' restrictions on private demand

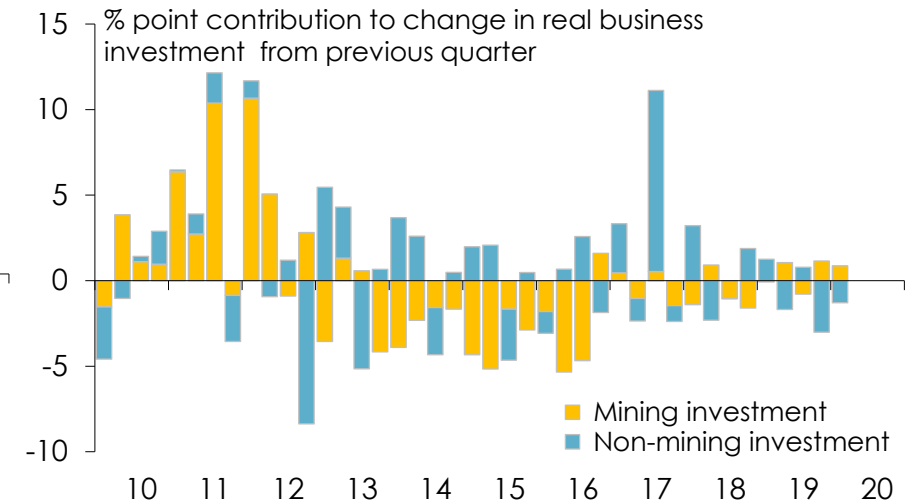
Quarterly change in real GDP



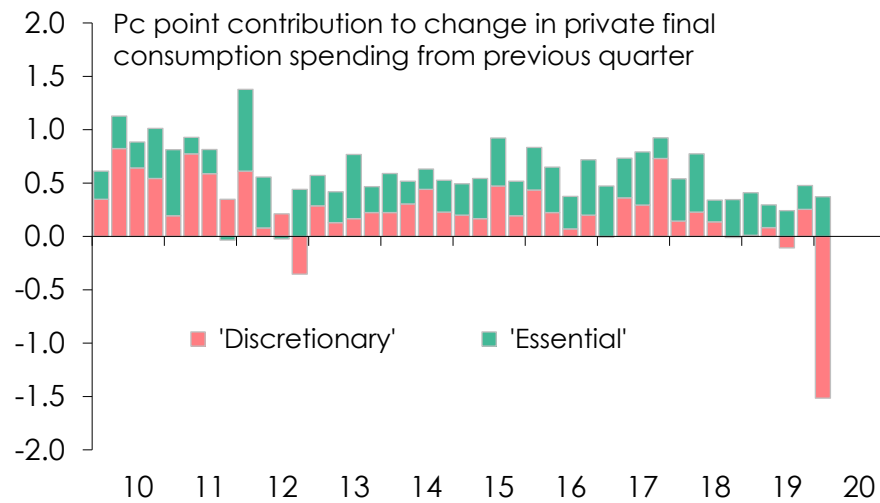
Household disposable income



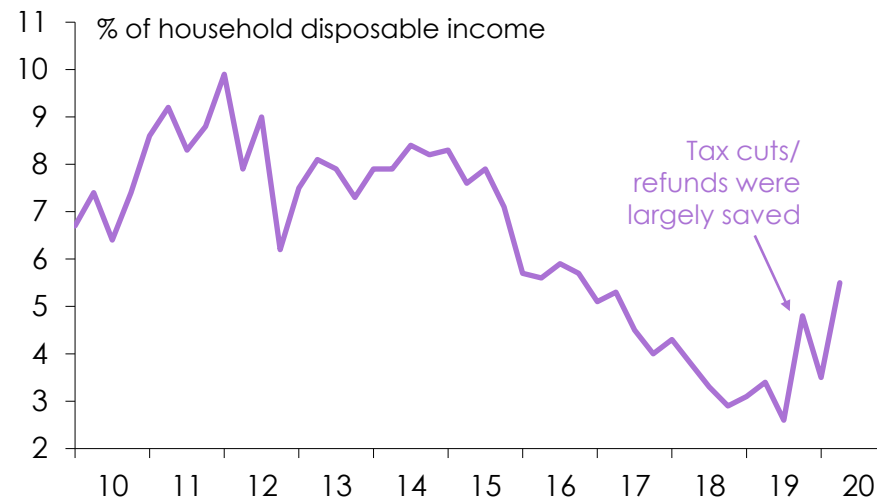
Business investment expenditure



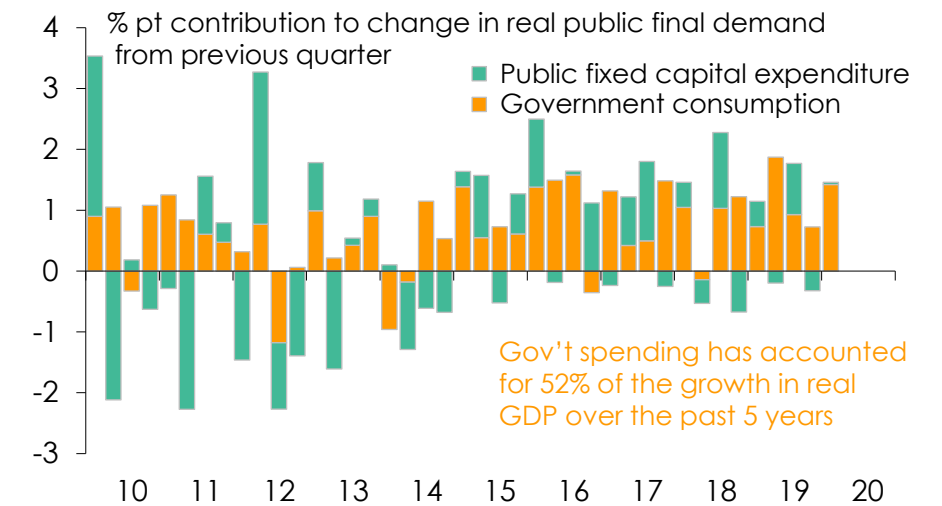
Household consumption expenditure



Household saving rate



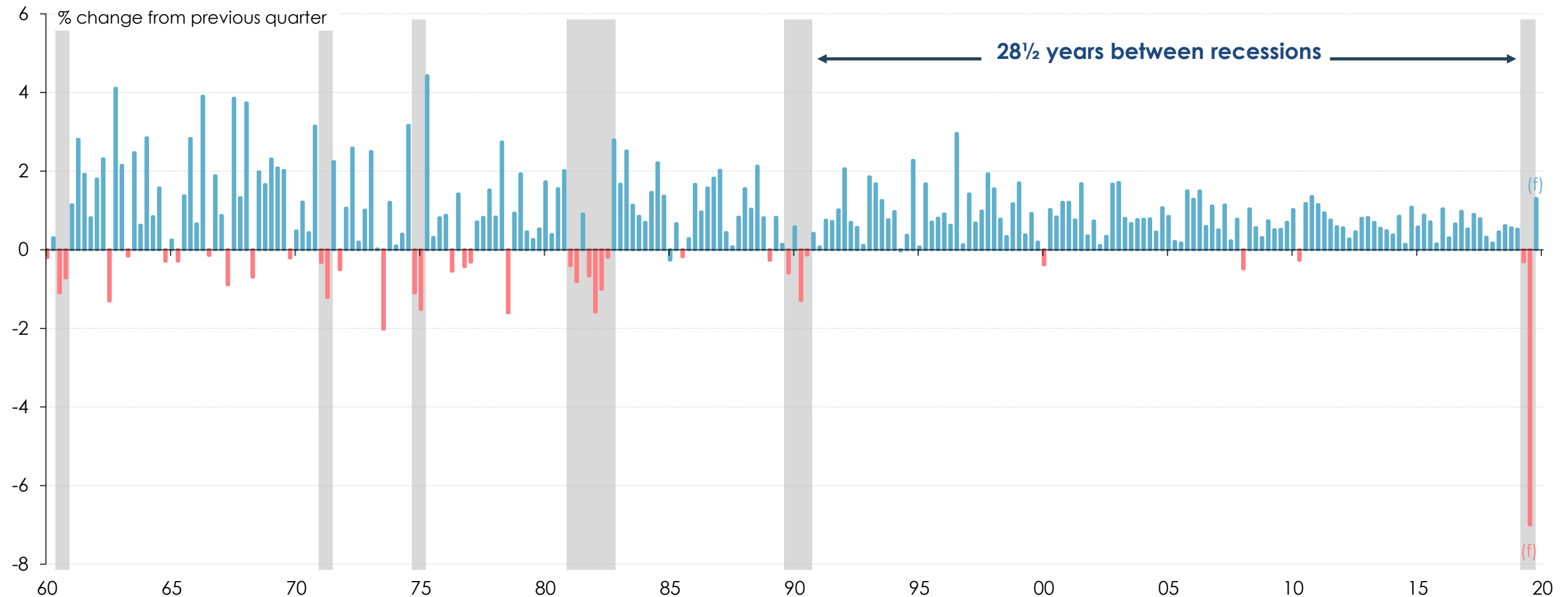
Public expenditure



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; Australian Treasury. June quarter national accounts released on 2nd September.

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



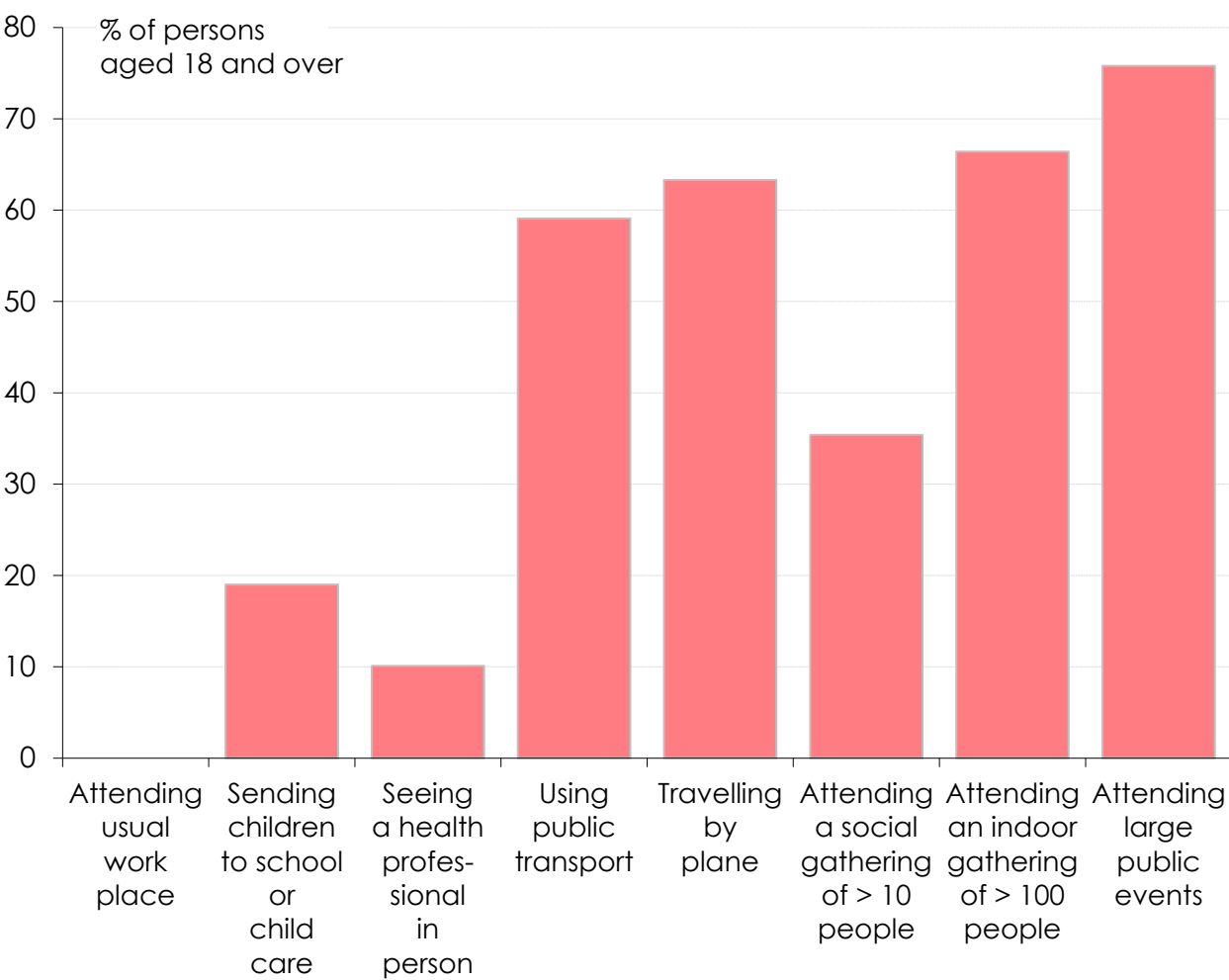
Note: Shaded areas denote recessions. (f) denotes Australian Treasury forecasts (for more detail see slide 54).
Sources: ABS; Australian Treasury, *Economic and Fiscal Update*, 23rd July 2020.

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

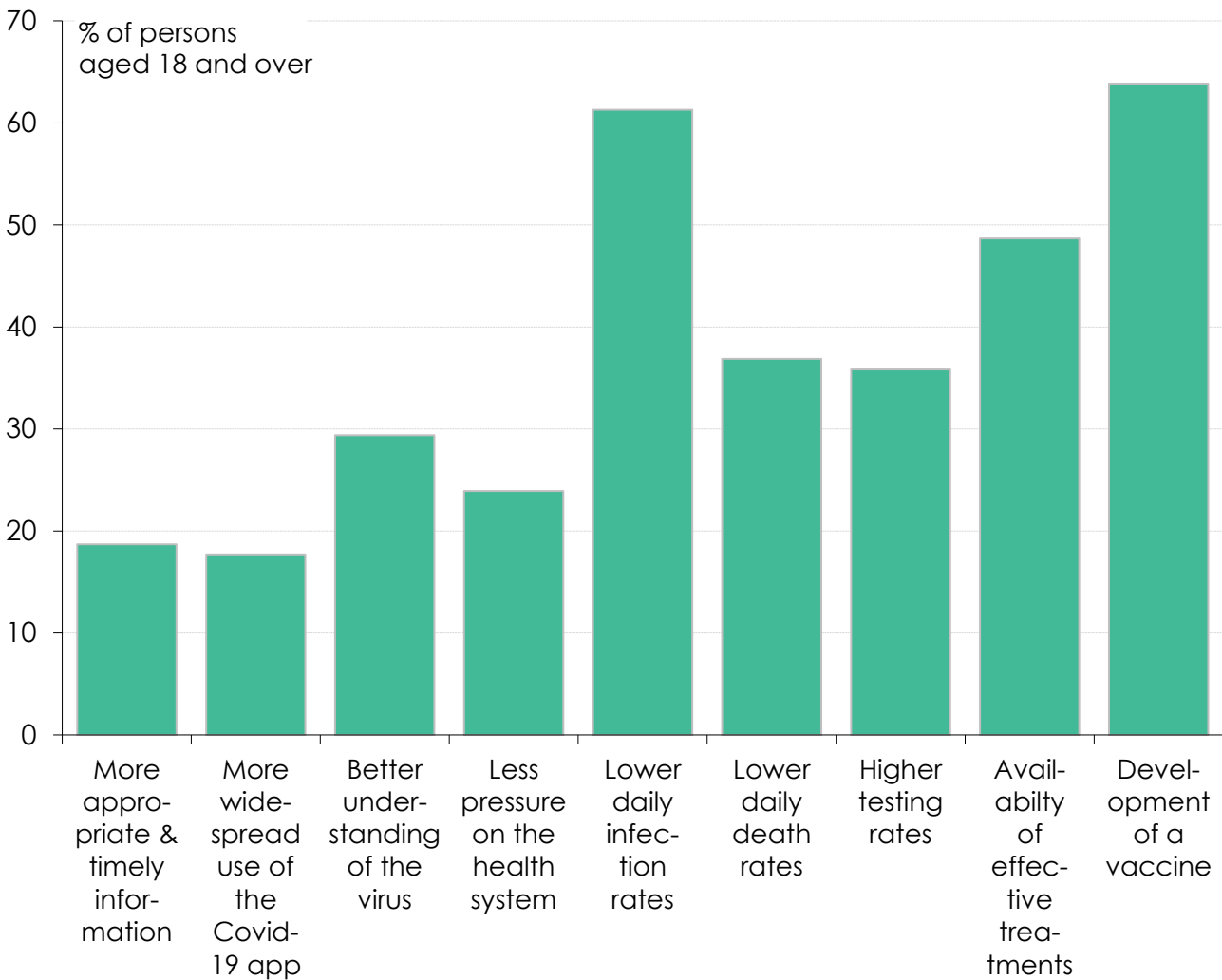
- ❑ **‘Social distancing’ requirements will be relaxed gradually rather than ‘all at once’ – and (as seen in Victoria) restrictions can be re-imposed in response to new outbreaks)**
 - new health and safety regulations will likely limit the number of employees and customers who can be ‘on premises’ (which 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’ (see next slide)
- ❑ **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
 - most households will have run down discretionary savings to at least some extent, as well as having their superannuation balances depleted by market movements and/or withdrawals – and so will likely want to rebuild savings
 - 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 likely to be at least 12 months away**
 - 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 (with some exceptions)**

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



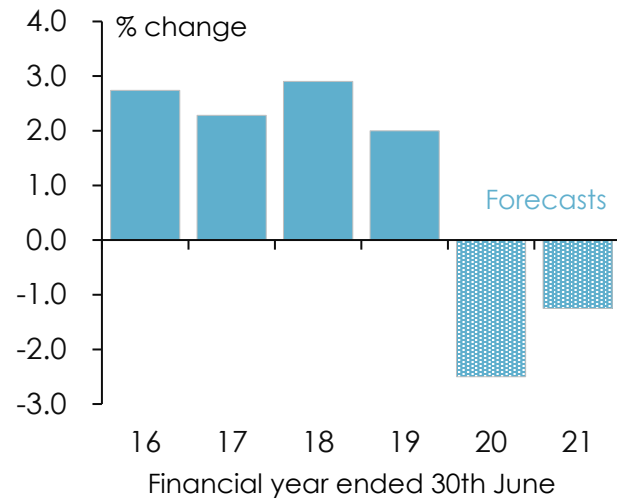
Actions that would improve people’s comfort with activities as restrictions are eased



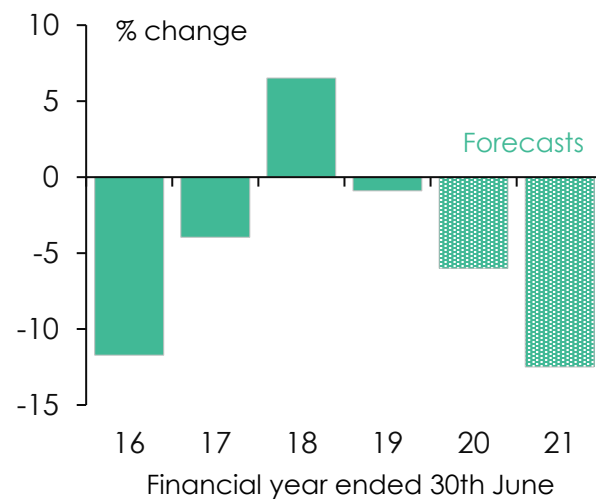
Source: ABS, Household Impacts of Covid-19 Survey, 26th-29th May (published 15th June).

Treasury's most recent forecasts, published last month, assumed a 6-week 'stage 3' shutdown in Victoria and no other 'second waves' ...

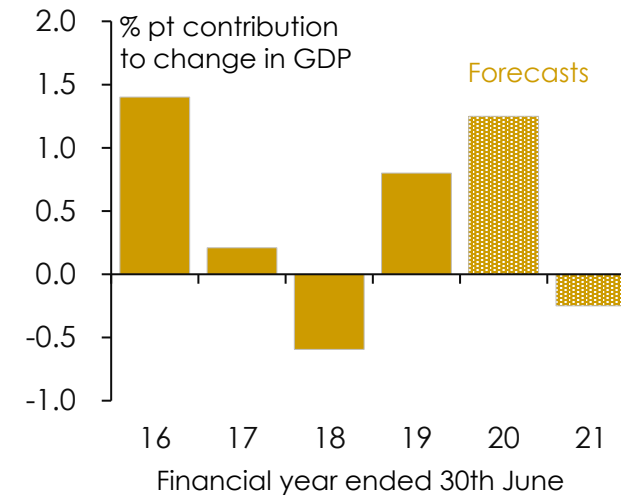
Household consumption



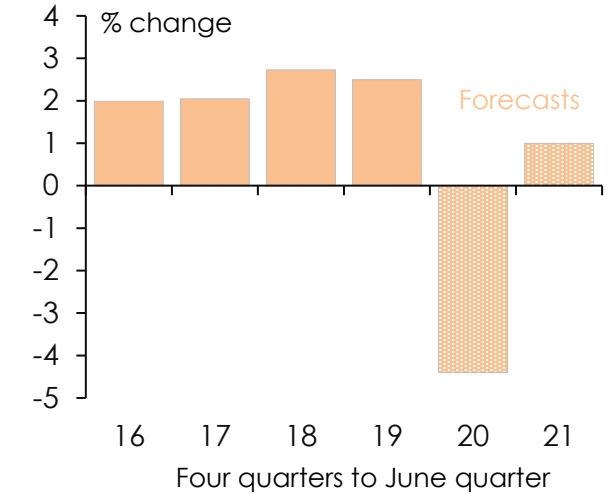
Business investment



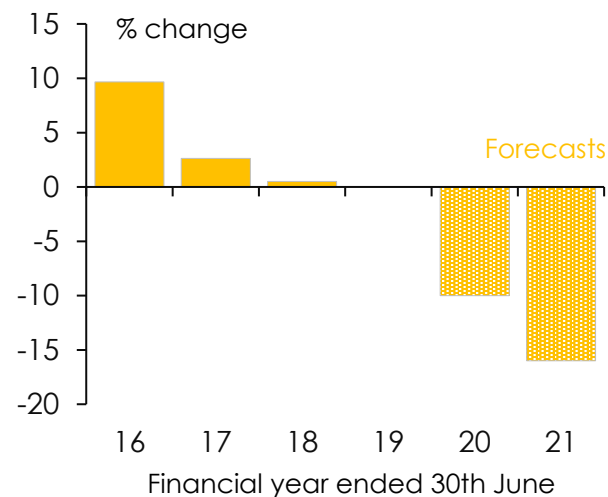
Net exports



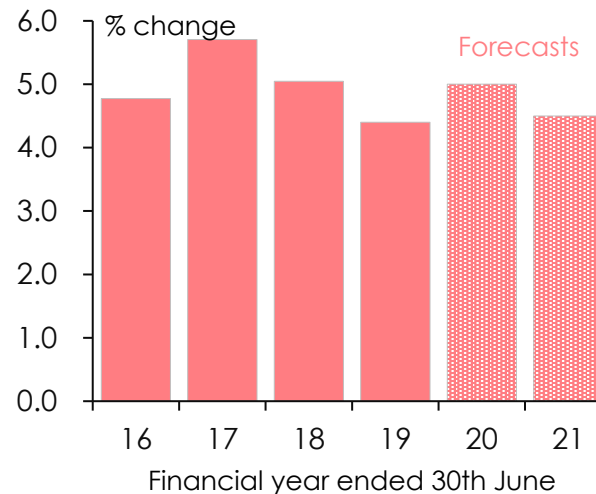
Employment



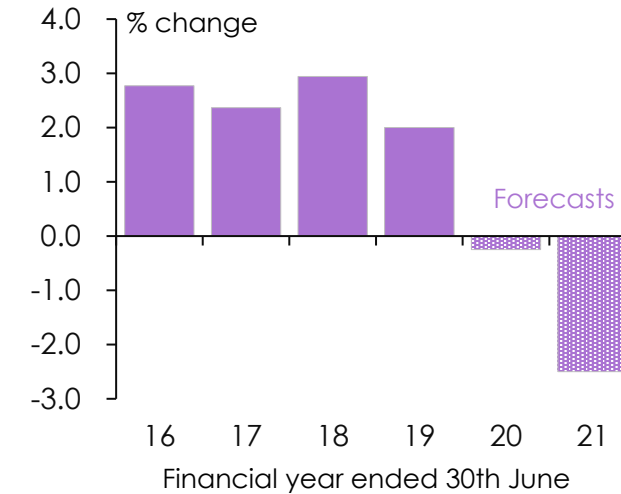
Dwelling investment



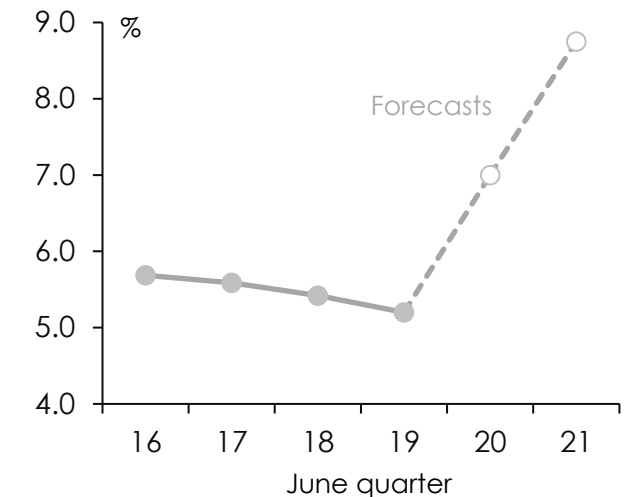
Public spending



GDP



Unemployment rate



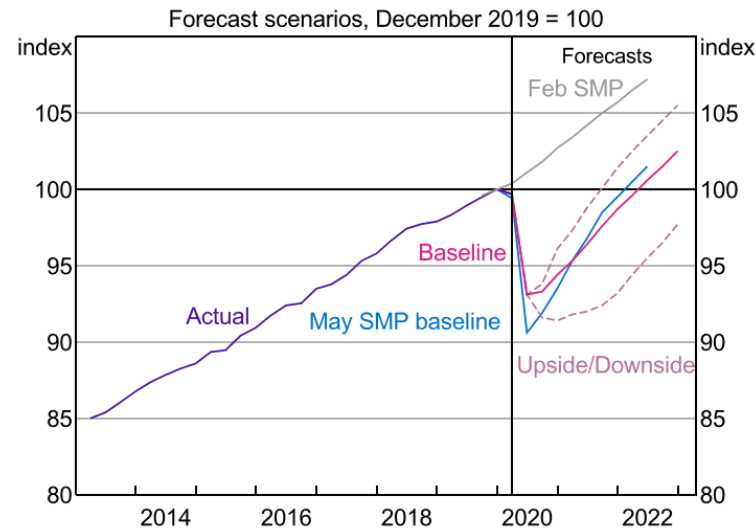
Note: Business investment and public spending exclude transactions in second-hand assets. Employment growth is June quarter on June quarter; unemployment rate is June quarter. Assumptions include current restrictions in Melbourne ending after 6 weeks, no further restrictions imposed, and other restrictions being eased in line with the '3-step process' outlined by the Government on 8th May. Net overseas migration assumed to fall from 232K in 2018-19 to 154K in 2019-20 and 31K in 2020-21; international travel bans lifted from 1st January 2021; the iron ore price falling to US\$55/t FoB by end-2020; metallurgical and thermal coal prices remaining at US\$110/t and \$54/t FoB respectively; and the A\$ remaining at around US69¢. Sources: ABS; Australian Treasury, *Economic and Fiscal Update*, 23rd July 2020.

.. but those forecasts will need to be revised downwards as a result of the harsher, longer, 'lockdown' in Victoria

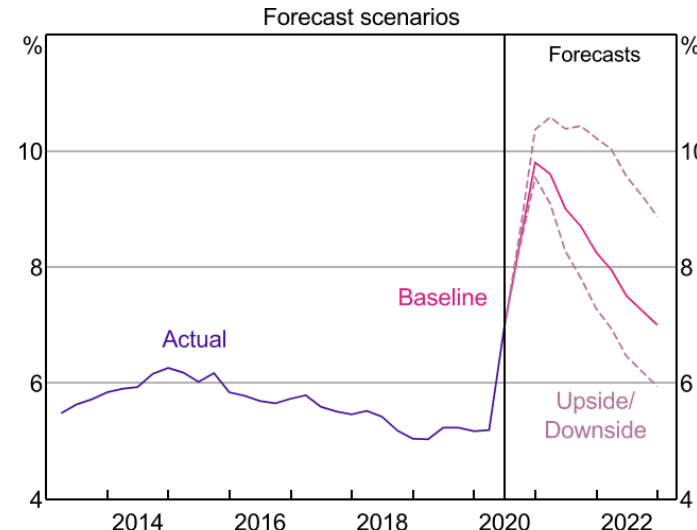
- ❑ In the Federal Government's *July Economic & Fiscal Update*, Treasury had estimated that real GDP had contracted by 7% in the June quarter, and forecast that it would increase by 1½% in the September quarter
 - the forecast explicitly assumed that Victoria's 'stage 3' lockdown restrictions were "not extended further", but rather would be eased from mid-September onwards, with the borders with NSW and SA opening on 19th August
 - Treasury also suggested that "if similar large scale restrictions were reimposed across Australia, this would ... cost the economy at least \$2bn per week"
 - for context, Treasury's forecasts implied that September quarter real GDP would be equivalent to about \$35¾bn per week
- ❑ This week, the Prime Minister suggested that, based on "preliminary estimates from Treasury", the new 'stage 4' restrictions in Melbourne and Mitchell Shire, combined with the extension of 'stage 3' restrictions to the rest of Victoria, would shrink real GDP by "between \$7bn and \$9bn" in the September quarter
 - these estimates appear to include (not unreasonably) additional allowance for 'spill-over effects' on other states due to supply-chain disruptions and an adverse impact on consumer and business confidence
- ❑ If correct, these Treasury estimates imply that (all else being equal), rather than increasing by 1½% in the September quarter, real GDP is now expected to decline by between 0.1% and 0.5% (following the 0.3% decline in the March quarter and an expected 7% decline in the June quarter)
 - this would mean Australia's recession extended into a third quarter, with a peak-to-trough decline of 7¼-7¾%
- ❑ It could also mean that growth in the December quarter (for which Treasury did not provide an estimate in the *July Update*) could be stronger than previously expected, based on a mechanical 'bounce-back' in Victoria
 - provided that isn't overwhelmed by the tightening of fiscal policy which will (on current policy settings) occur at the beginning of the December quarter (see slide 91)
- ❑ Treasury has also reportedly raised its forecast for the December quarter peak in the unemployment rate to 10% (from 9¼% in July), with the 'effective' rate now expected to peak in the 'high 13s'
 - despite an easing of eligibility criteria in response to the Victorian 'lockdown'

In this week's quarterly Monetary Policy Statement, the RBA slightly lowered its sights on the economic recovery from the pandemic

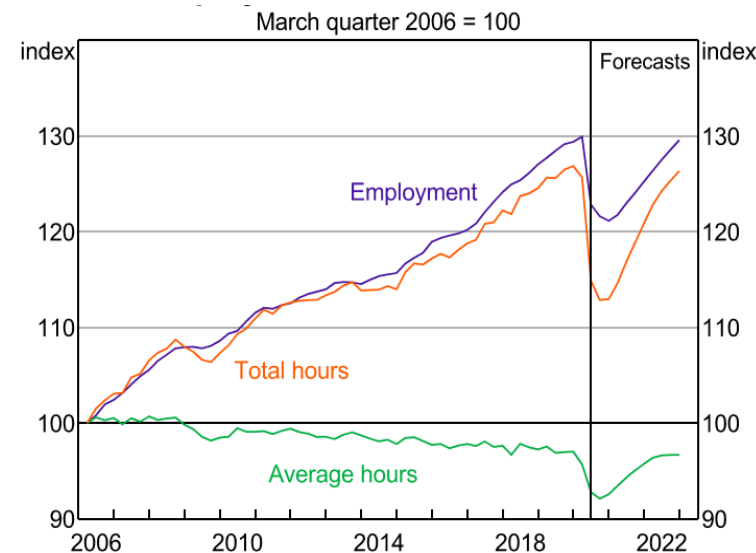
GDP



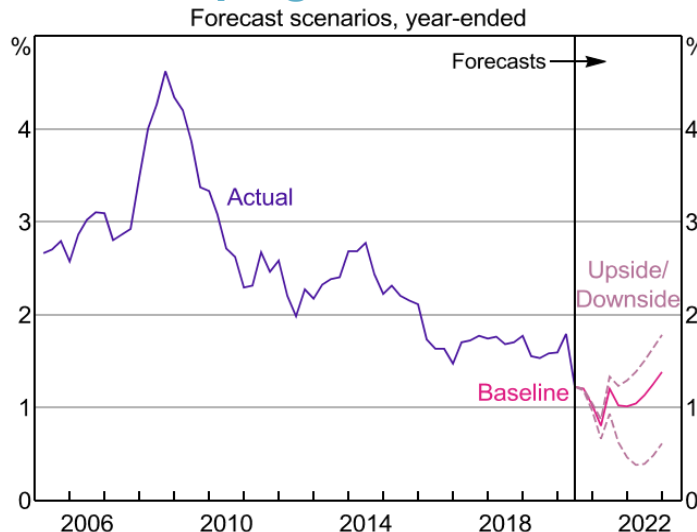
Unemployment



Employment & hours worked



'Underlying' inflation



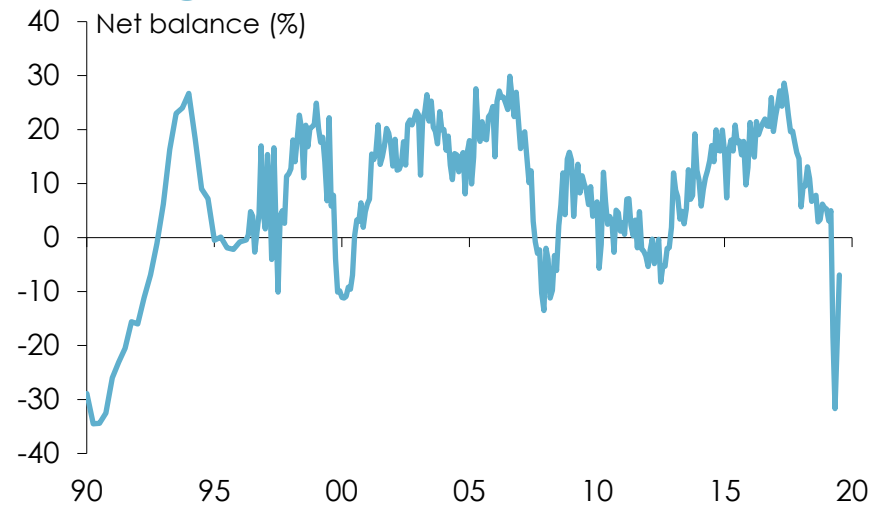
- ❑ The short-run economic effects of the initial 'lockdown' turned out to be less than the RBA had assumed in May – but it thinks the “on-going effects of weak demand are likely to be larger”, with additional headwinds stemming from the new Victorian 'lockdown'
- ❑ The RBA's latest 'baseline' scenario envisages real GDP declining by 6% over the year to Q4 (4% for 2020 as a whole) and rising by 5% (previously 6%) over the year to Q4 2021 (2% for the year as a whole), with 'official' unemployment peaking at 10% in Q4 (rather than Q2 as previously) and declining slowly to 8½% by Q4 2021 (previously 7½%) and to 7% by Q4 2022
- ❑ In an 'upside scenario' where the virus is contained more quickly and domestic restrictions lifted sooner, the unemployment rate would decline more quickly during 2021 and 2022, reaching 6% by Q4 2022
- ❑ But in a 'downside' scenario entailing periodic regional outbreaks of the virus and 'rolling lockdowns', with a widespread resurgence of infections globally, economic recovery would be delayed, unemployment would peak at ~ 11% and still be around 9% by Q4 2022
- ❑ In the RBA's 'baseline' scenario underlying inflation picks up gradually from 1% over the year to Q4 2020, to 1½% by Q4 2022 – but still remains below the target band, even in the 'upside' scenario

Note: 'underlying' inflation is as measured by the 'trimmed mean'.

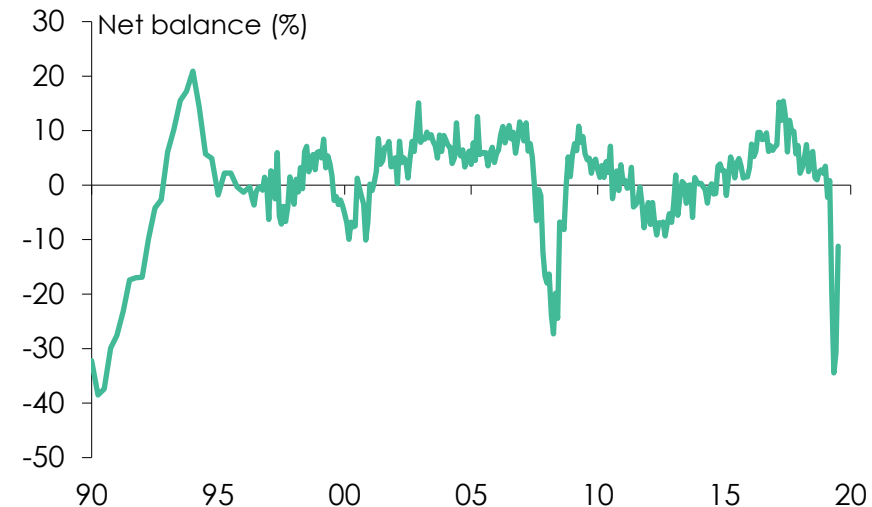
Source: Reserve Bank of Australia, Statement on Monetary Policy, 7th August 2020.

All of the components of the NAB monthly survey improved substantially in June, following an initial bounce in May, but they remain negative

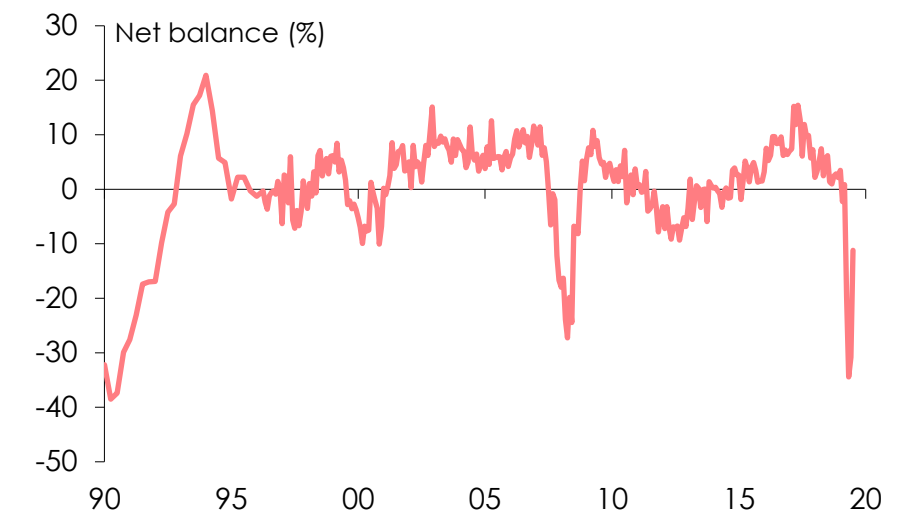
Trading conditions



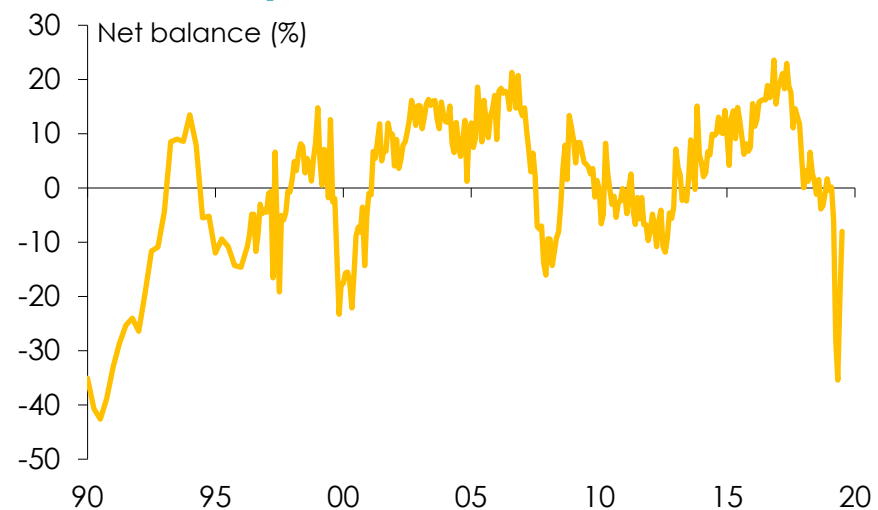
Forward orders



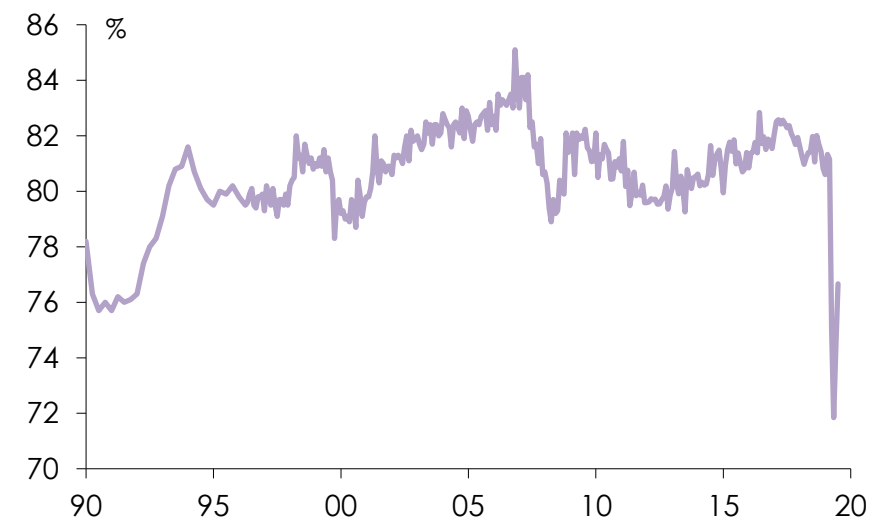
Employee hiring intentions



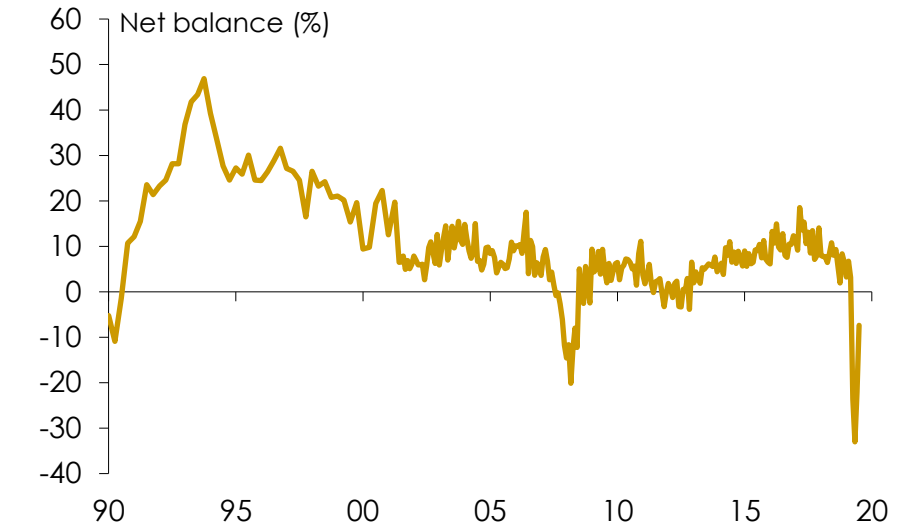
Profitability



Capacity utilization



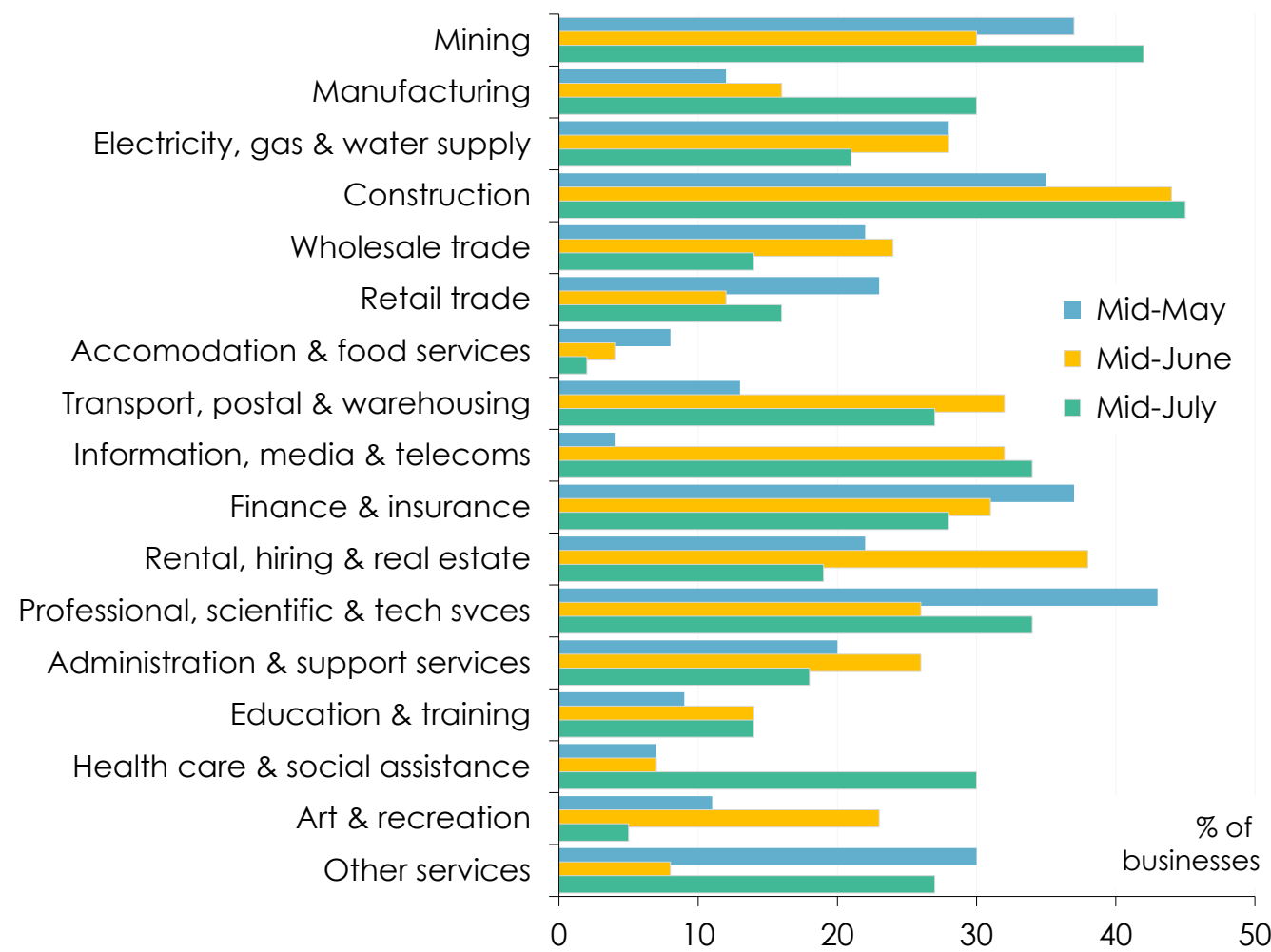
Capital expenditure intentions



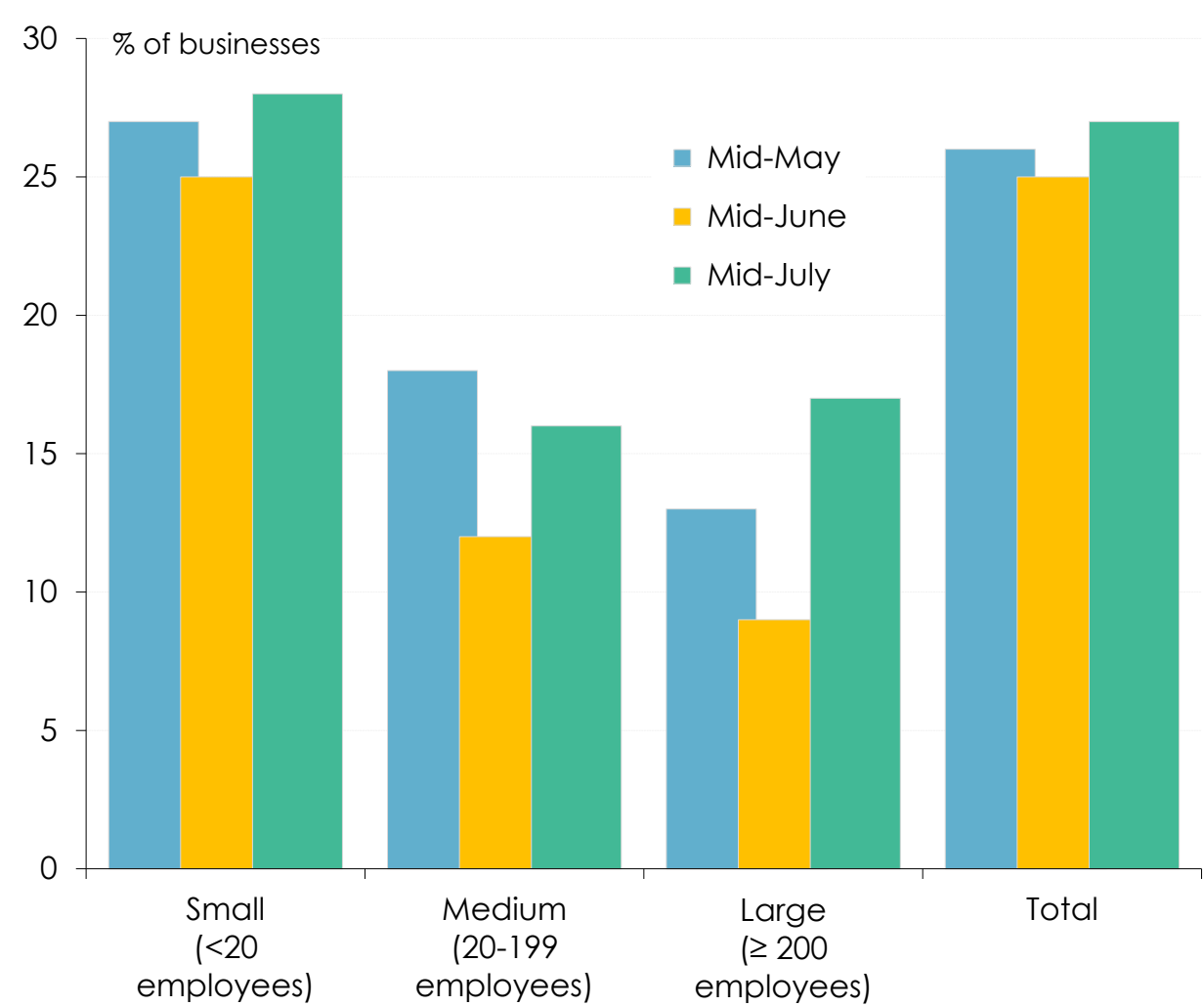
Note: Quarterly data up to March 1987 (May 2002 for capex intentions), monthly thereafter (latest data June 2020). Source: National Australia Bank (July survey results will be released on 12th August).

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



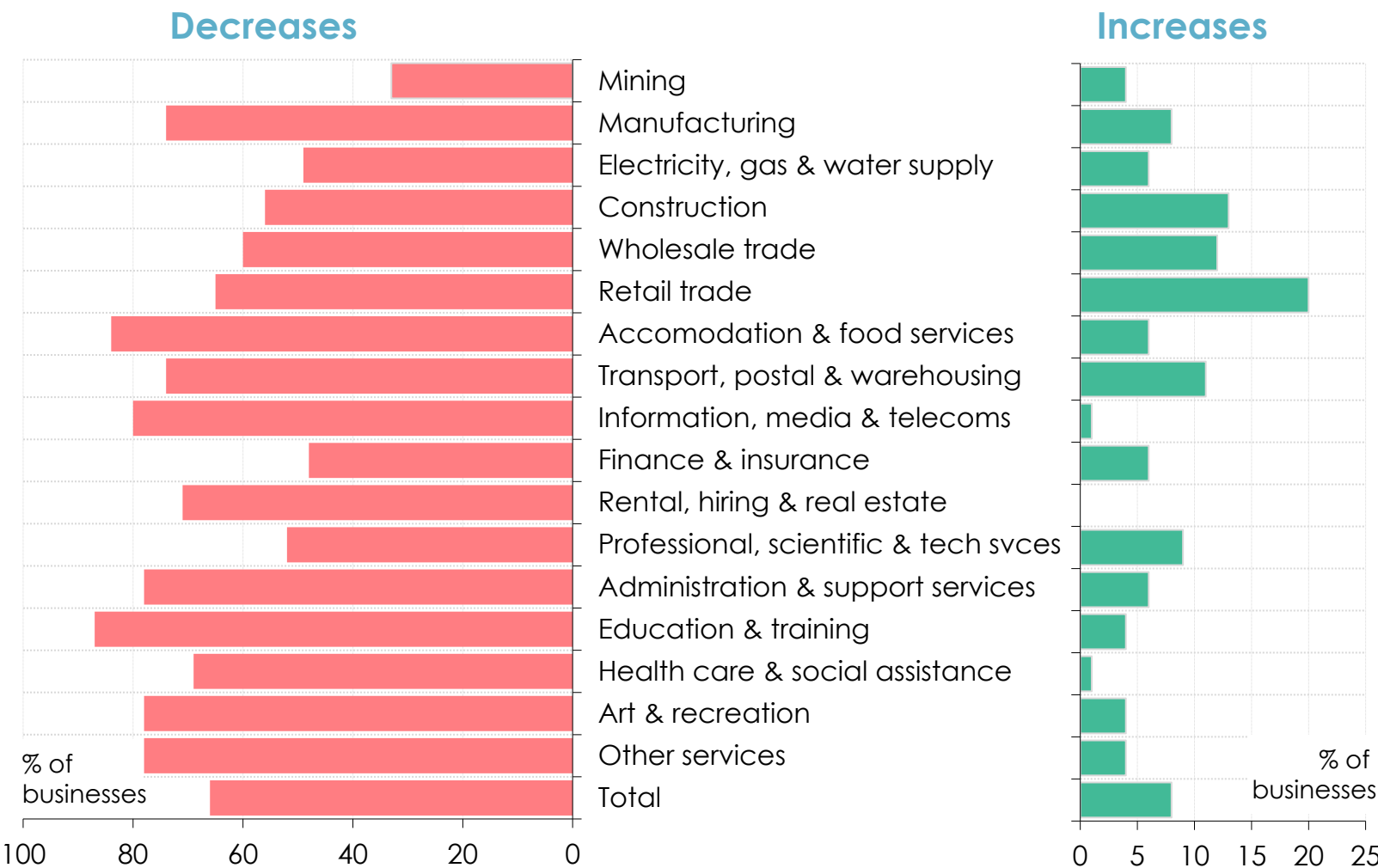
Proportion of ‘trading businesses’ which are operating ‘as normal’ – by size



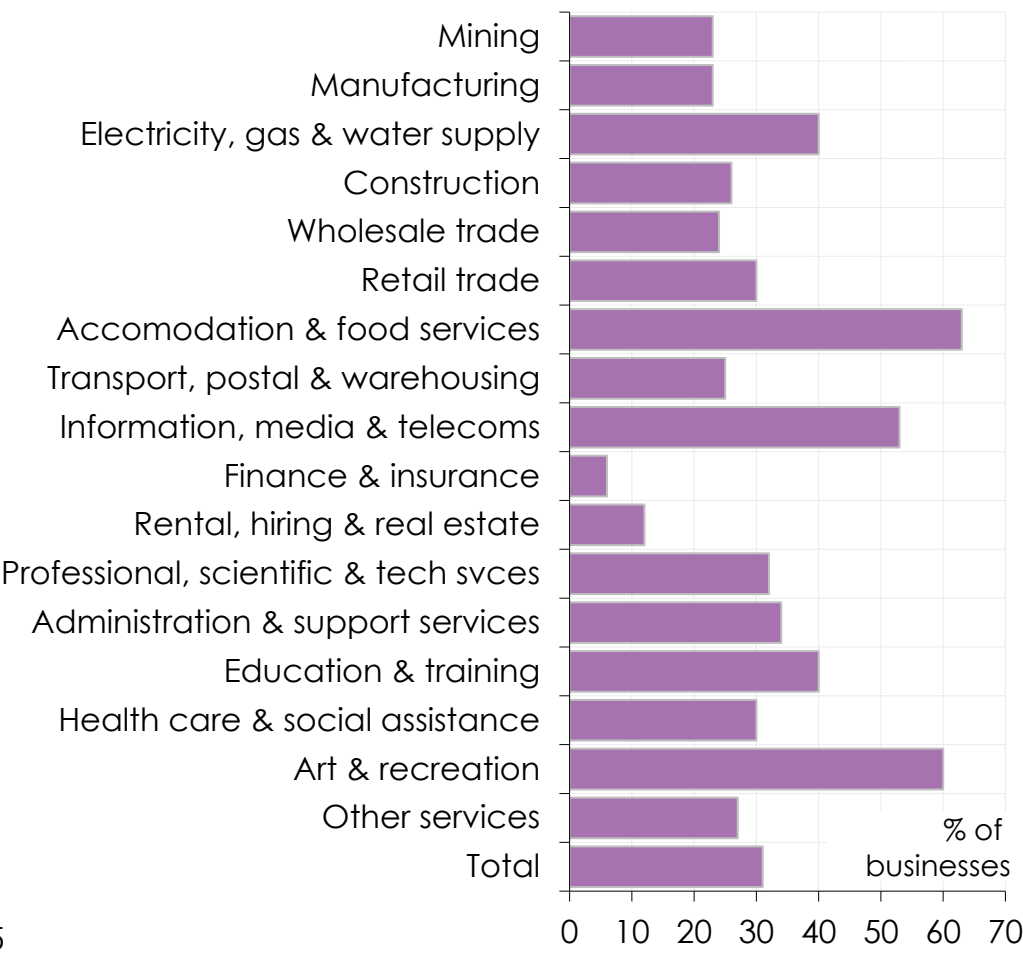
Source: ABS Business Indicators, Business Impacts of COVID-19, May 2020 (based on survey conducted between 13th and 22nd May), June 2020 (based on survey conducted between 10th and 17th June), and July (survey conducted between 15th and 23rd July).

Two-thirds of all businesses reported lower revenue in June compared with June last year – and 30% of them reported declines of more than 50%

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



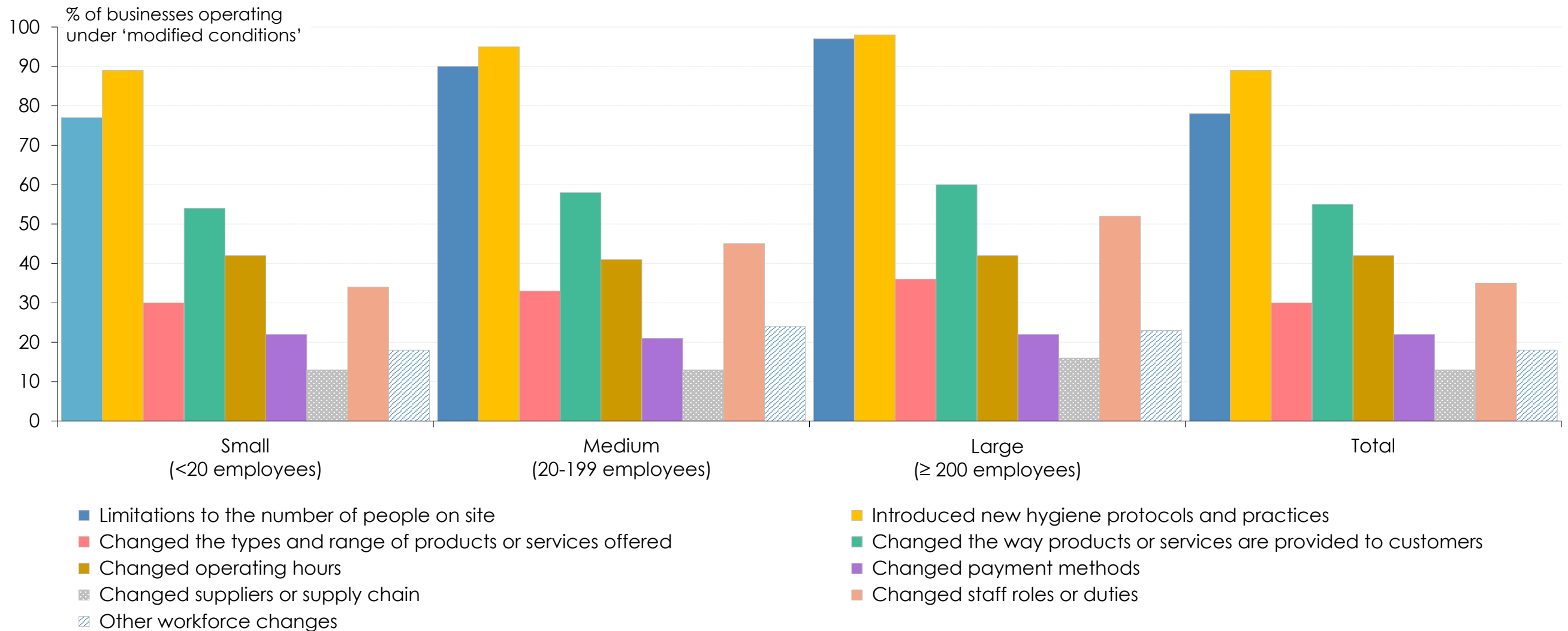
Businesses with revenue decreases of 50% or more in June cf. June last year, as a pc of businesses with lower revenue



Source: ABS Business Indicators, Business Impacts of COVID-19, June 2020 (based on survey conducted between 10th and 17th June).

The biggest changes made by businesses have been limits on the no. of people on site, hygiene protocols, product delivery methods and staff roles

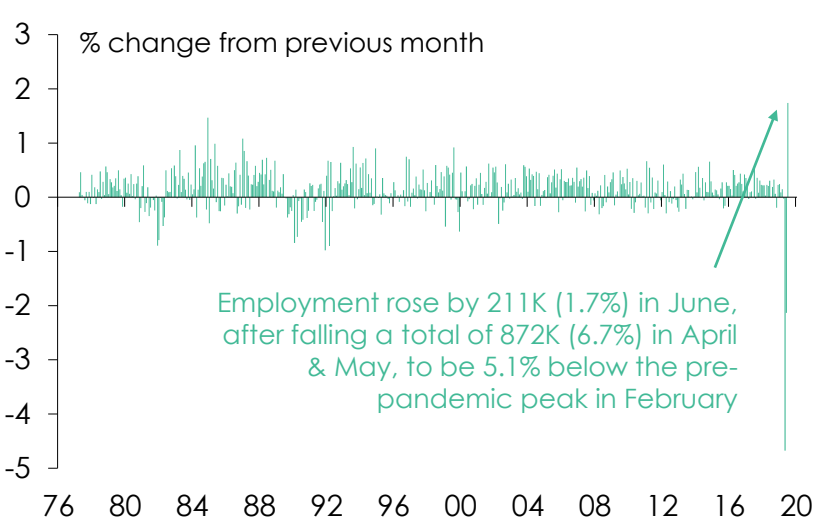
Changes made to business operations, by size of business



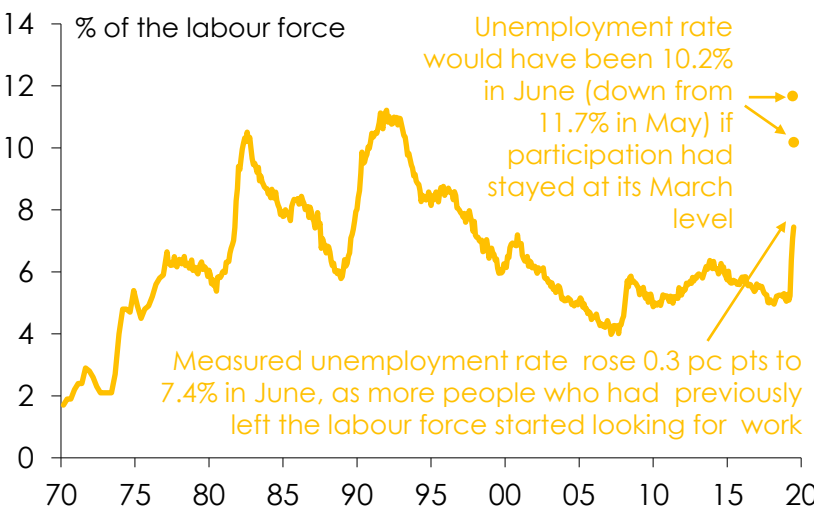
Source: ABS Business Indicators, Business Impacts of COVID-19, June 2020 (based on survey conducted between 10th and 17th June).

211,000 (24%) of those who lost their jobs in March-April are now back at work, while another 70,000 started looking for work

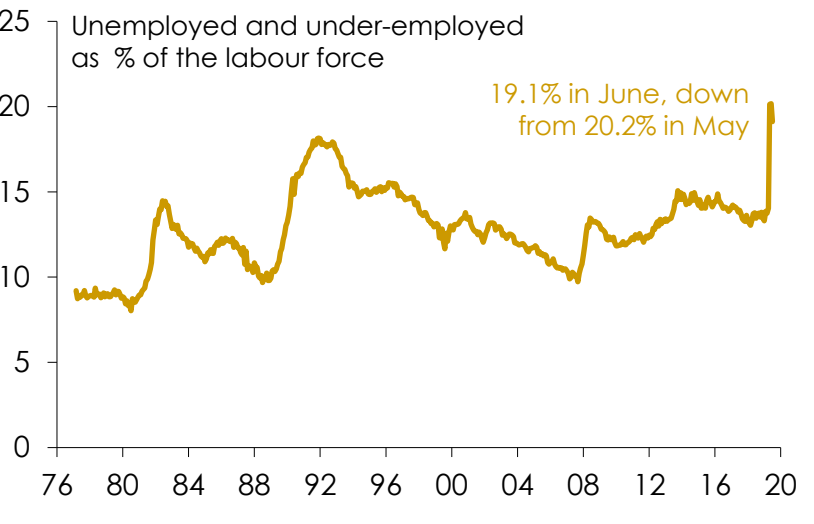
Employment



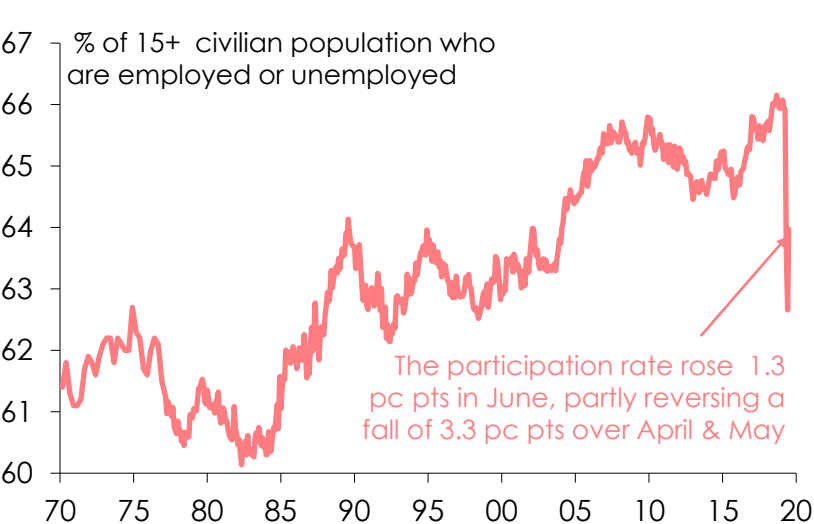
Unemployment rate



'Under-utilization' rate



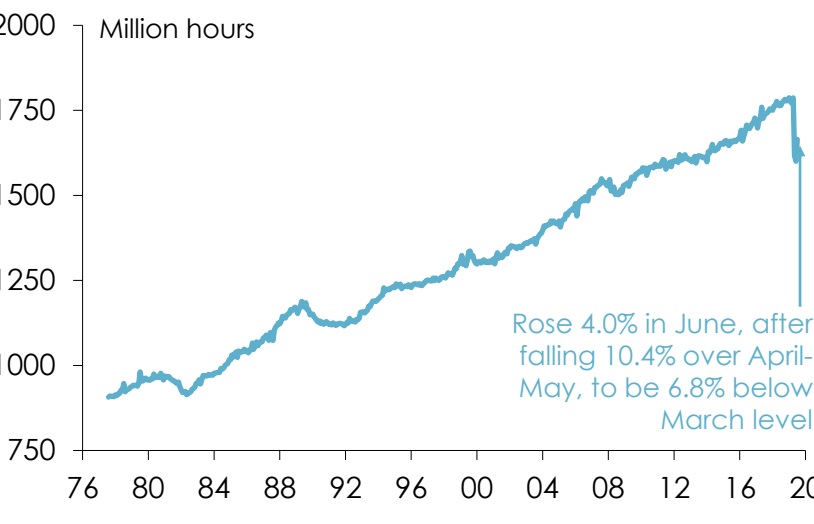
Labour force participation rate



Under-employment ratio



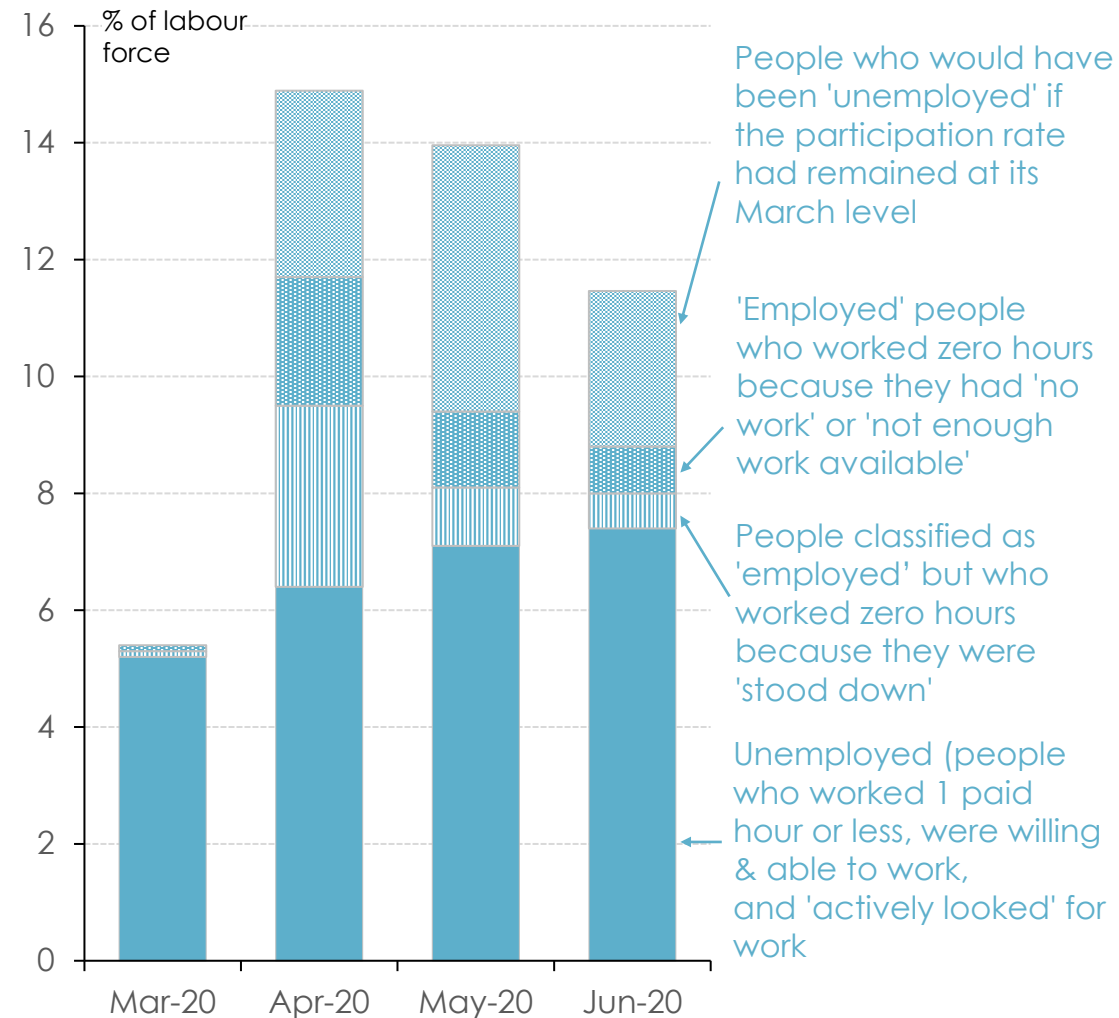
Total hours worked



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. July data will be released on 13th August.

The June unemployment rate would have been 11½% if people working zero hours and those who dropped out of the labour force were counted

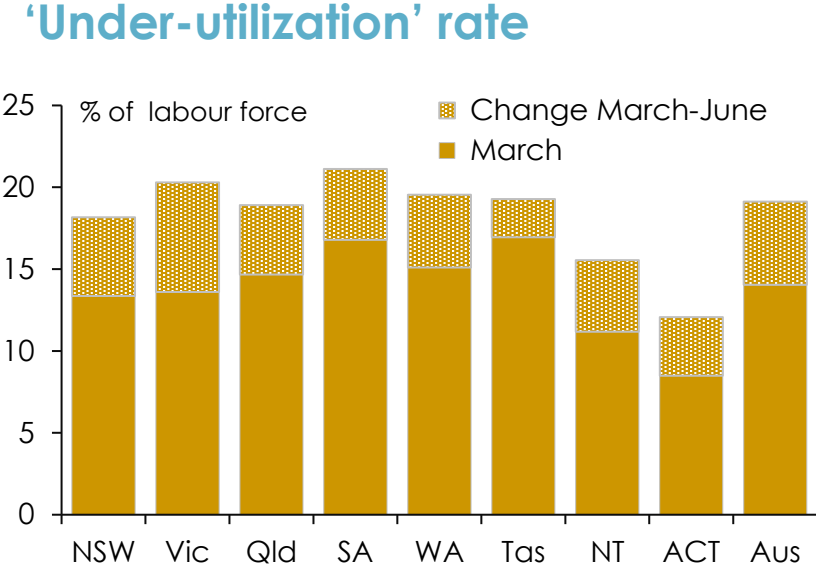
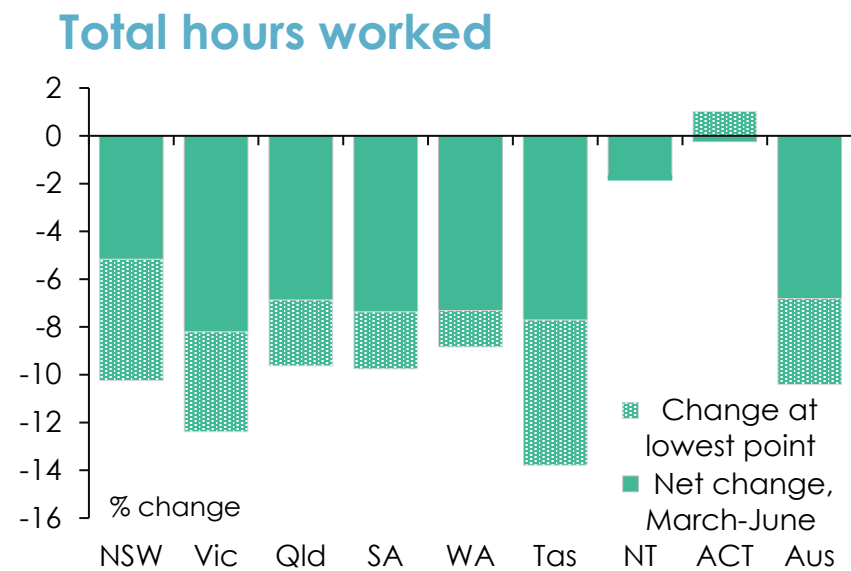
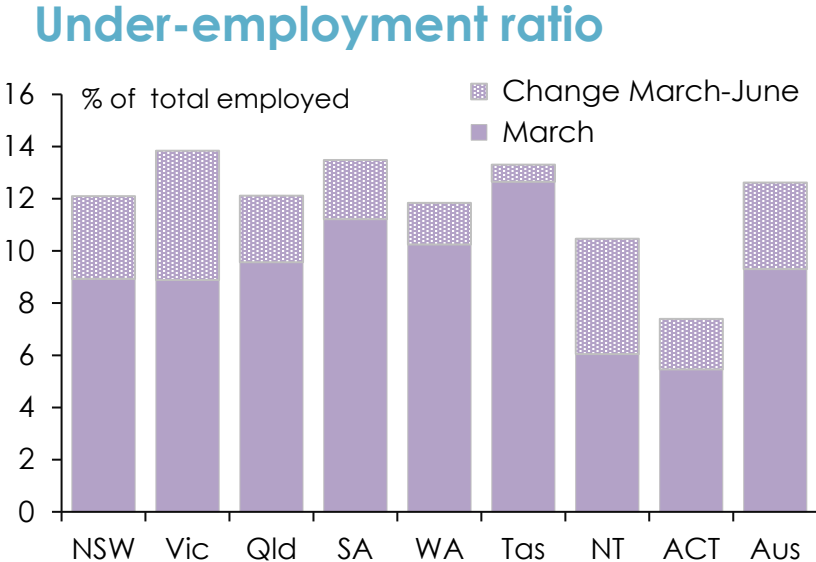
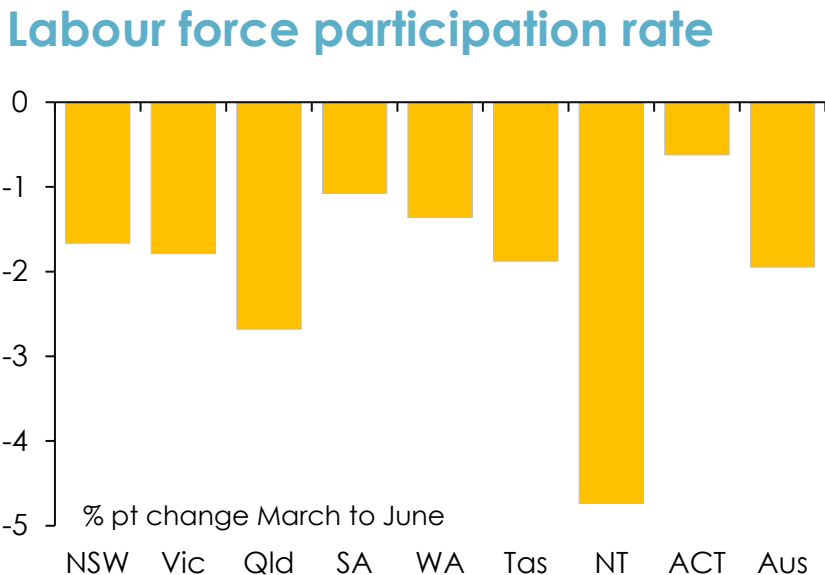
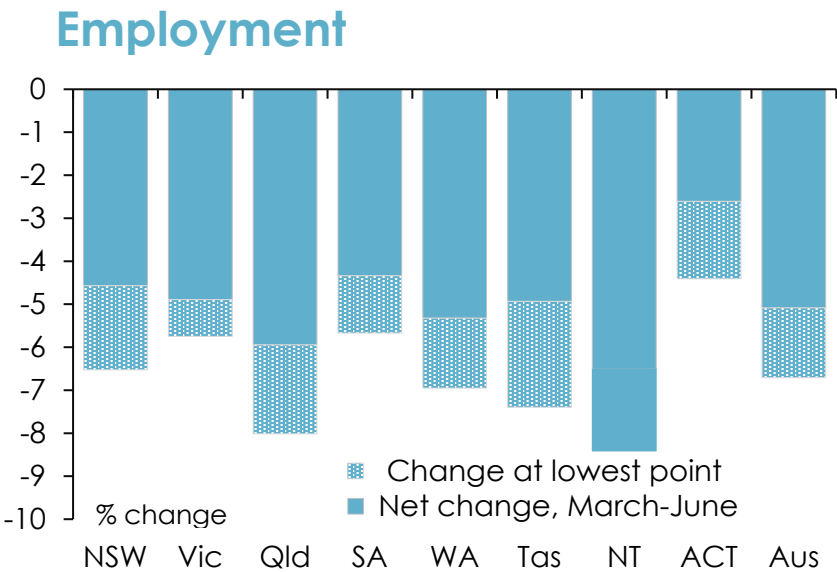
Alternative measures of unemployment



Source: ABS; 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 June would have been 11.5% - down from 14.0% in May and 14.9% in April

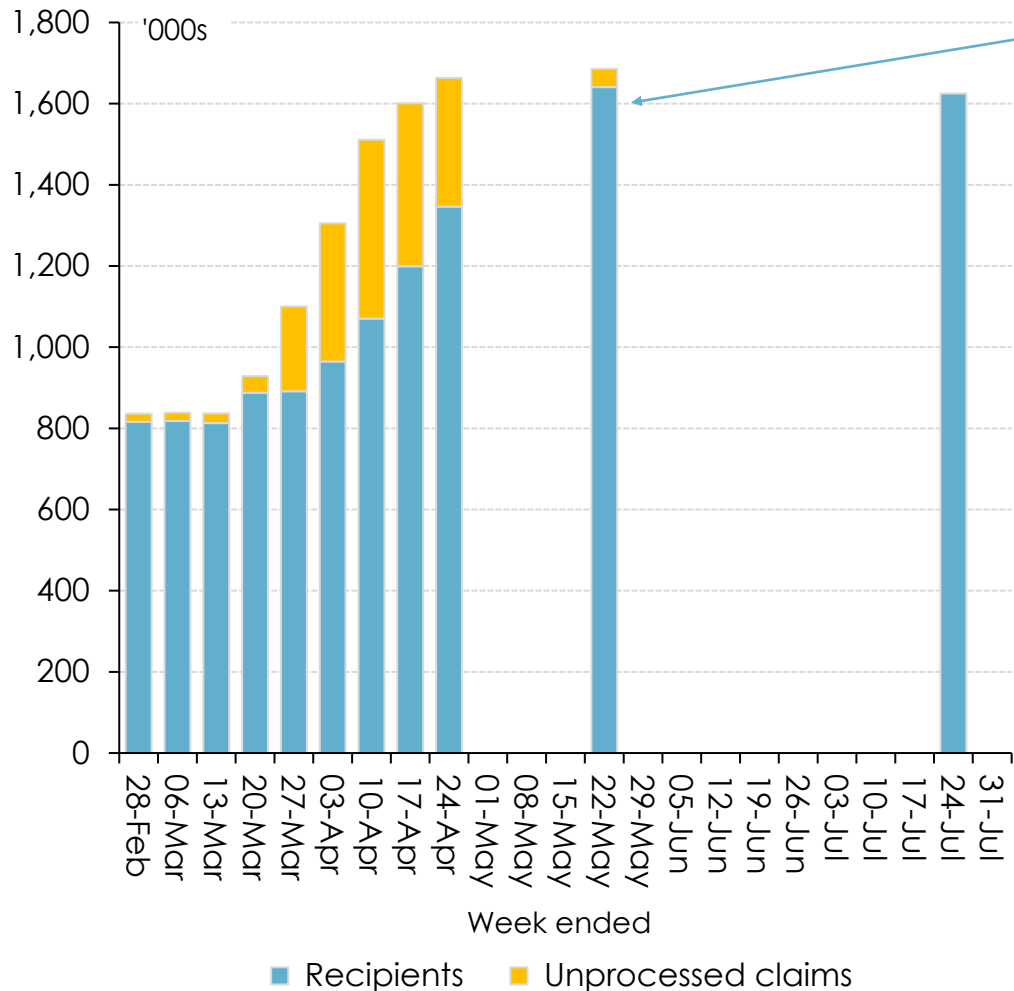
Tasmania, Queensland & NSW had the strongest recoveries in employment in June, while the NT has continued to shed jobs



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 (July data will be released this Thursday, 13th August).

The measured unemployment rate is understating the 'true' extent of job losses

Number of people receiving or seeking Newstart/JobSeeker or Youth Allowance payments

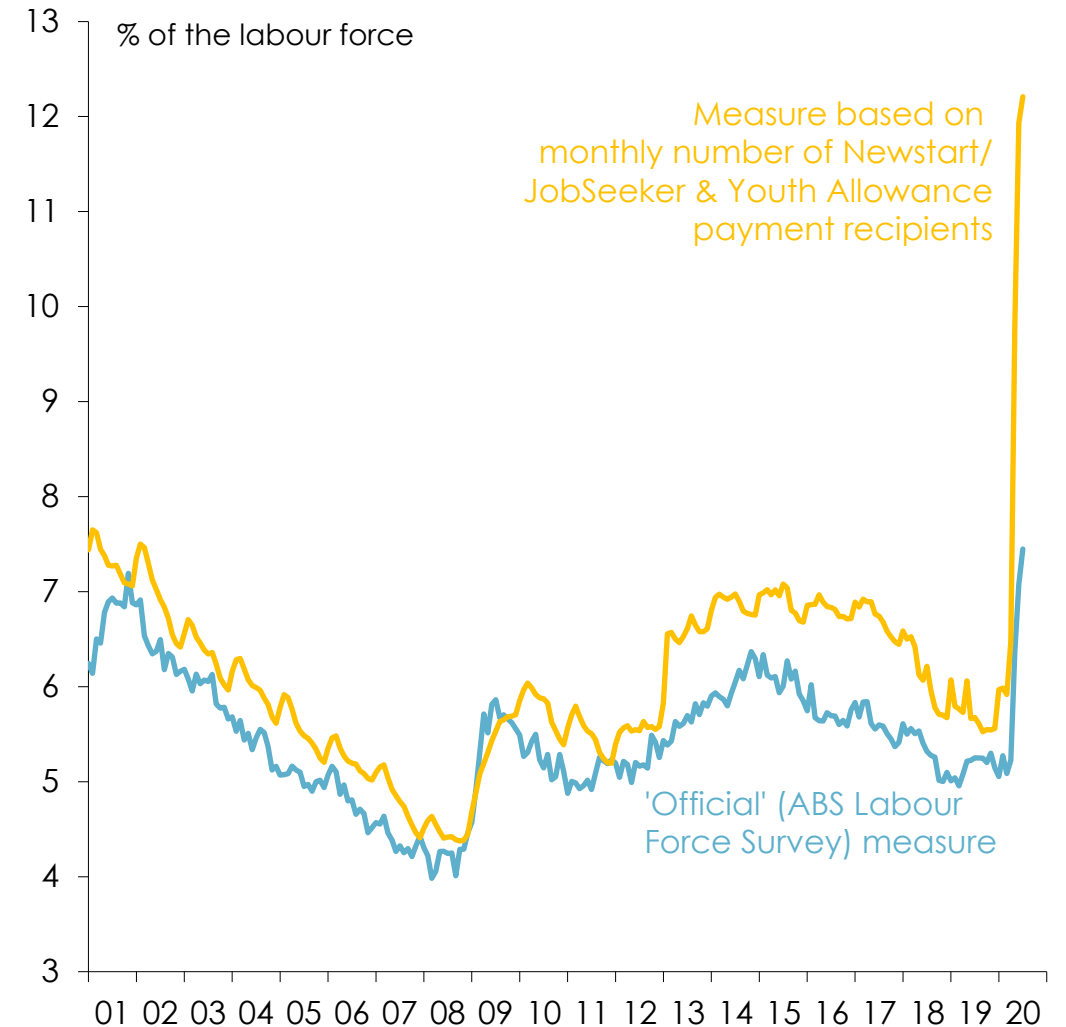


These numbers (up to 22nd May) were provided by the Dep't of Social Security to a Senate Economics Committee hearing.

The DSS this week agreed to provide fortnightly data to this Committee for the duration of its inquiry.

But the weekly numbers will still be a 'state secret' (unlike in the US where they have been published for 52 years); the fortnightly numbers won't be on data.gov.au; and what happens when the inquiry is finished?

Alternative measures of the 'unemployment rate'

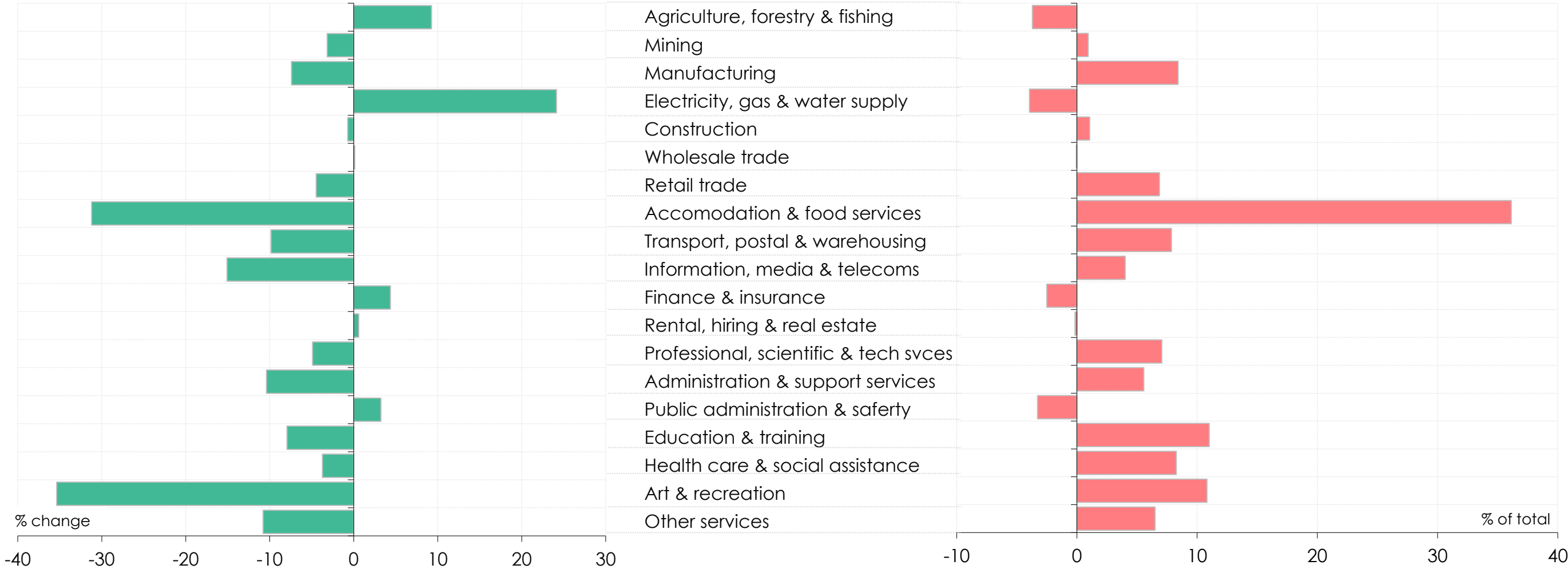


Sources: Department of Social Security; ABS. Note: Youth Allowance recipients excludes full-time students. Number of Newstart/JobSeeker and Youth Allowance recipients is not seasonally adjusted. Latest (monthly) data is for June 2020.

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

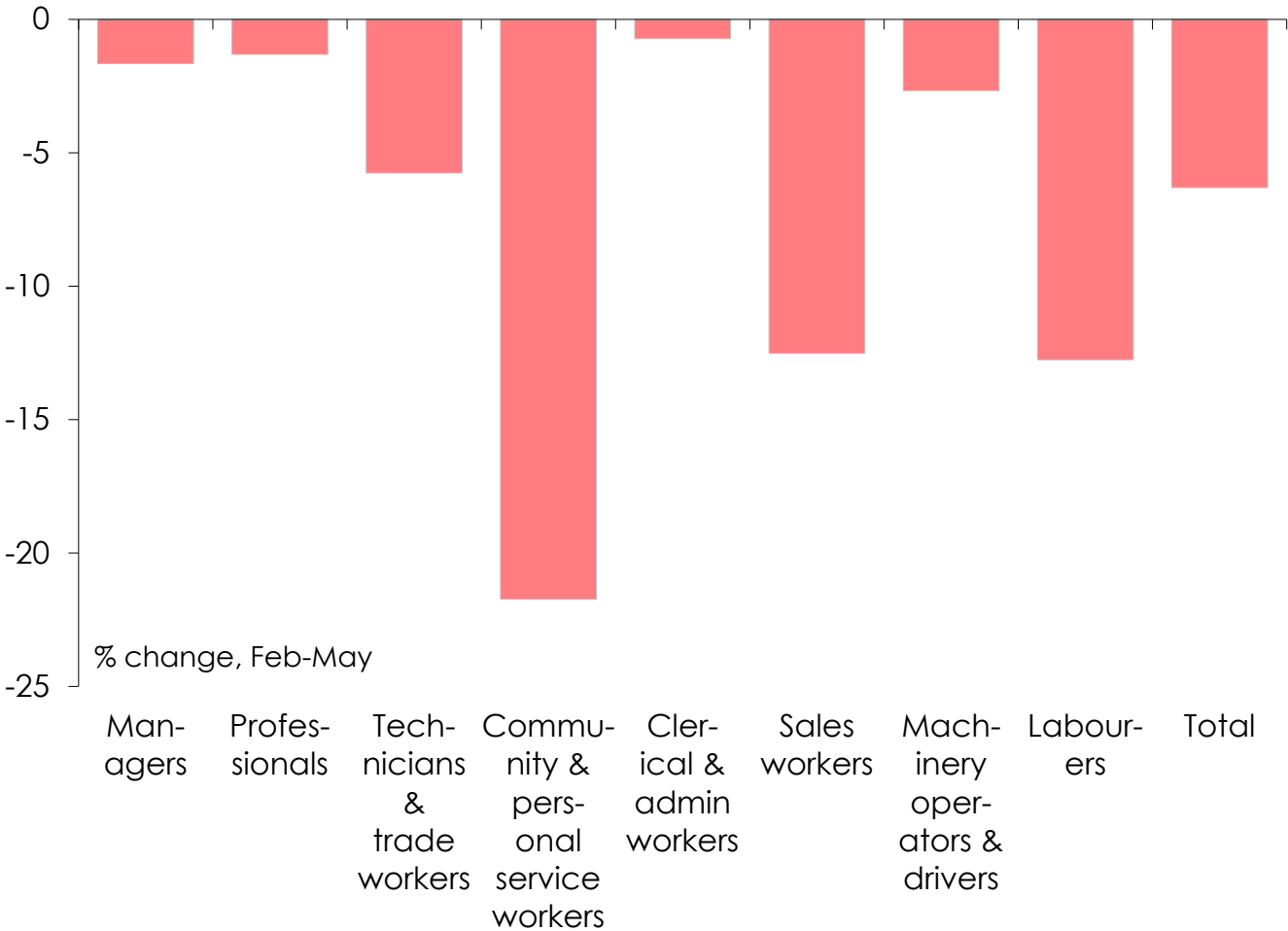
Proportion of change in total employment between February and March 2020, by industry



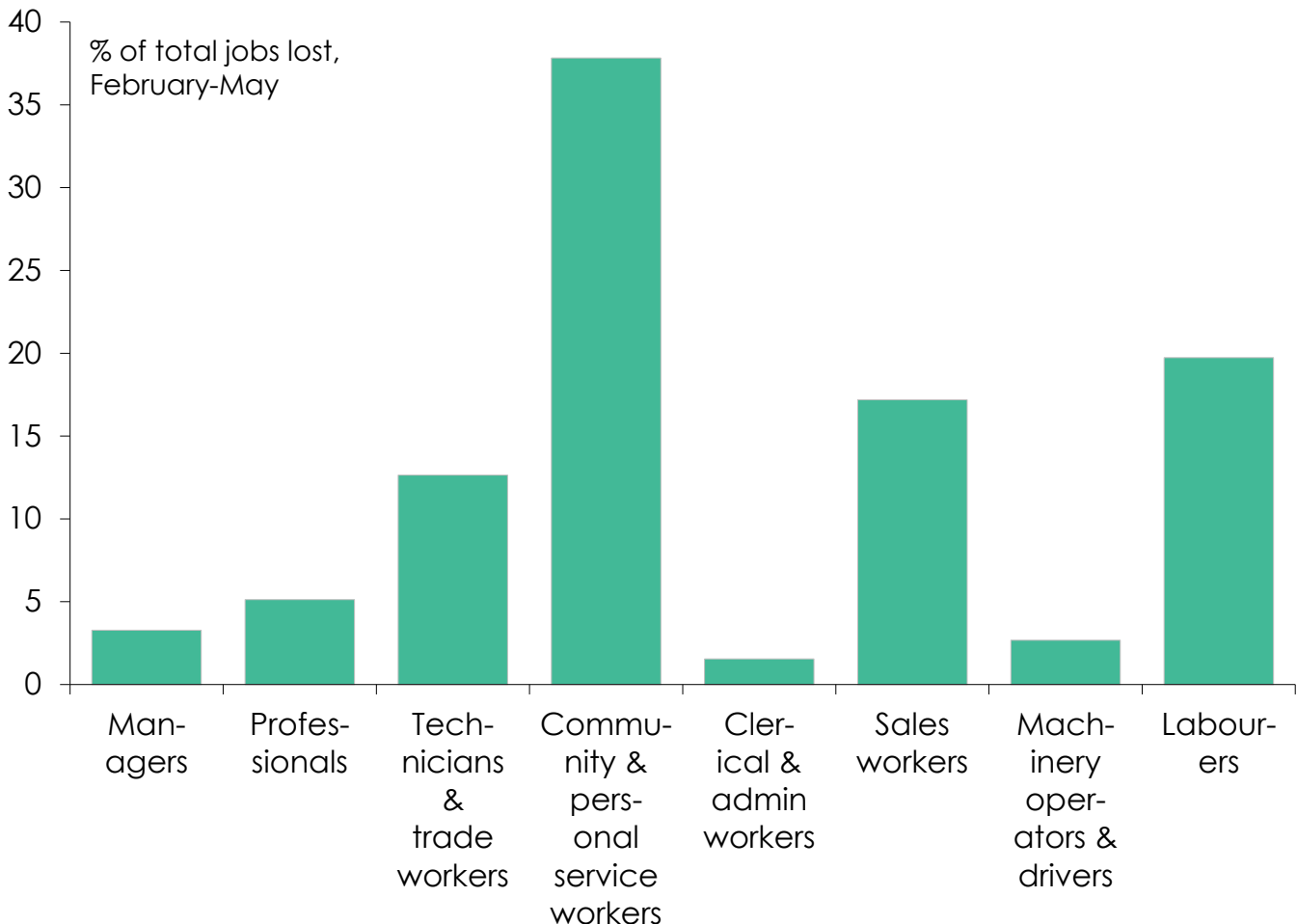
Note: The accommodation & food services, education & training, and arts & recreation services sectors accounted for 15% of total employment in February.
Source: ABS, Detailed quarterly labour force data, May 2020. August data will be released on 24th September.

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



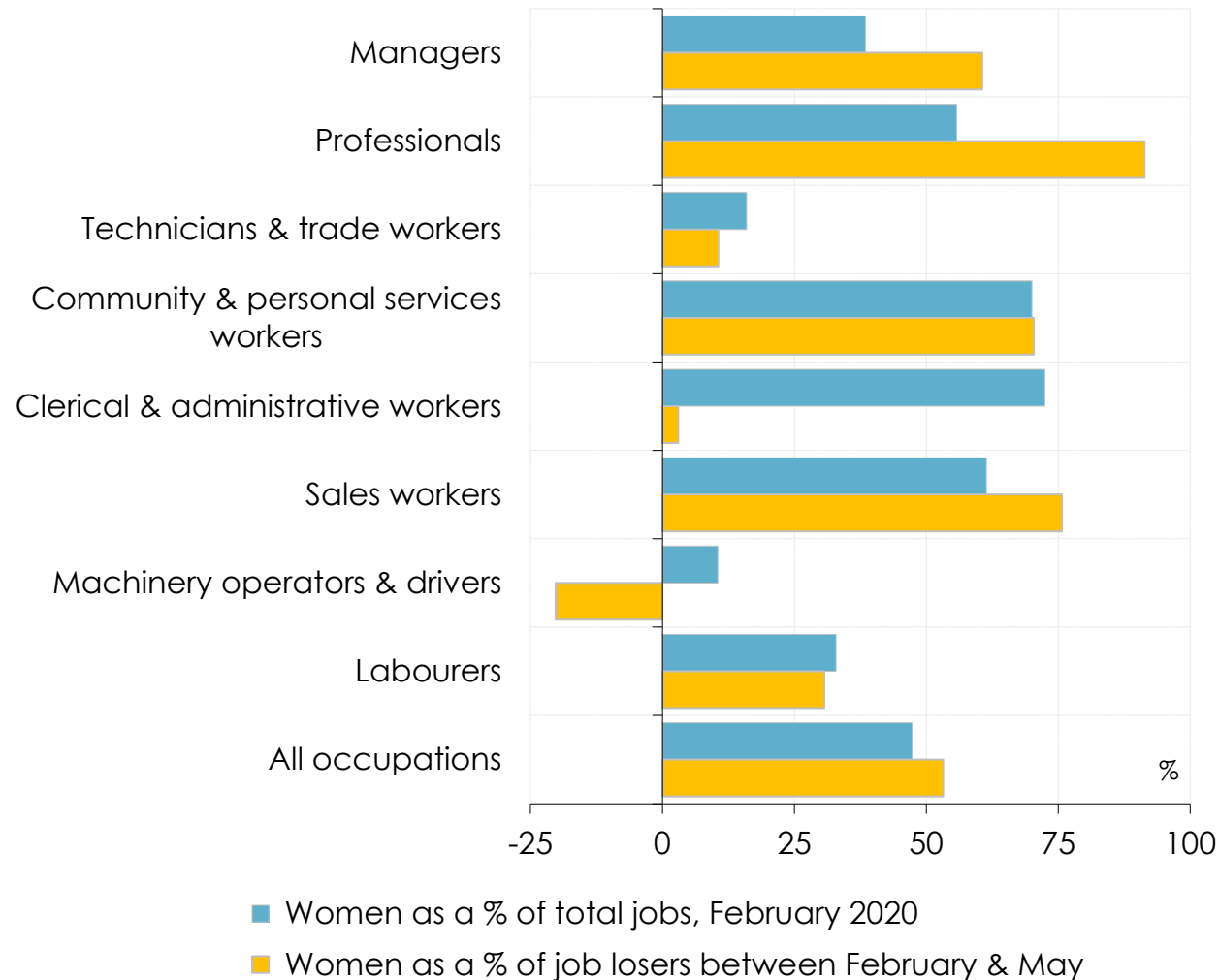
Proportion of change in total employment between February and March 2020, by occupation



Source: ABS, Detailed quarterly labour force data, May 2020. August data will be released on 24th September.

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



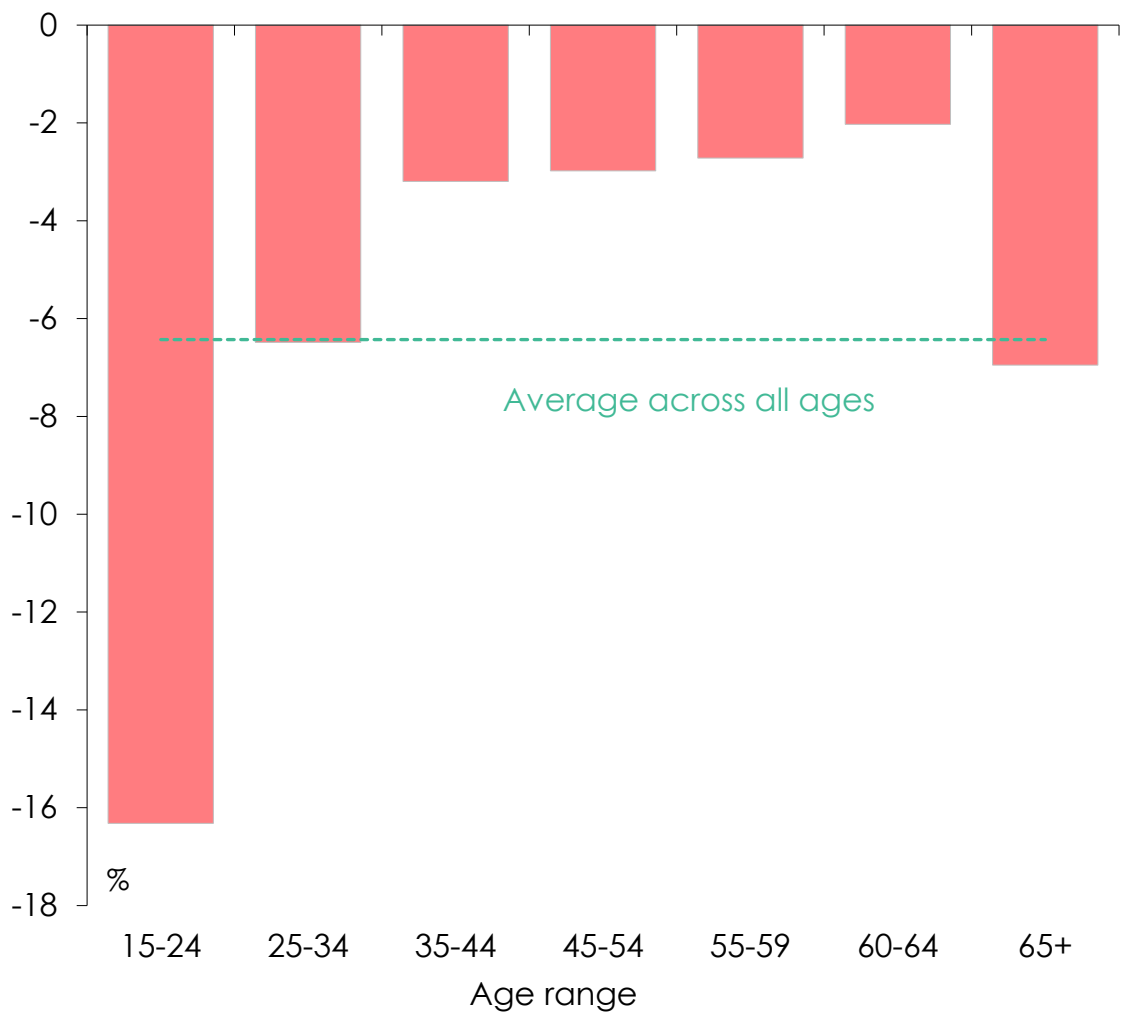
Women's share of jobs in February, and of job losses since February, by industry



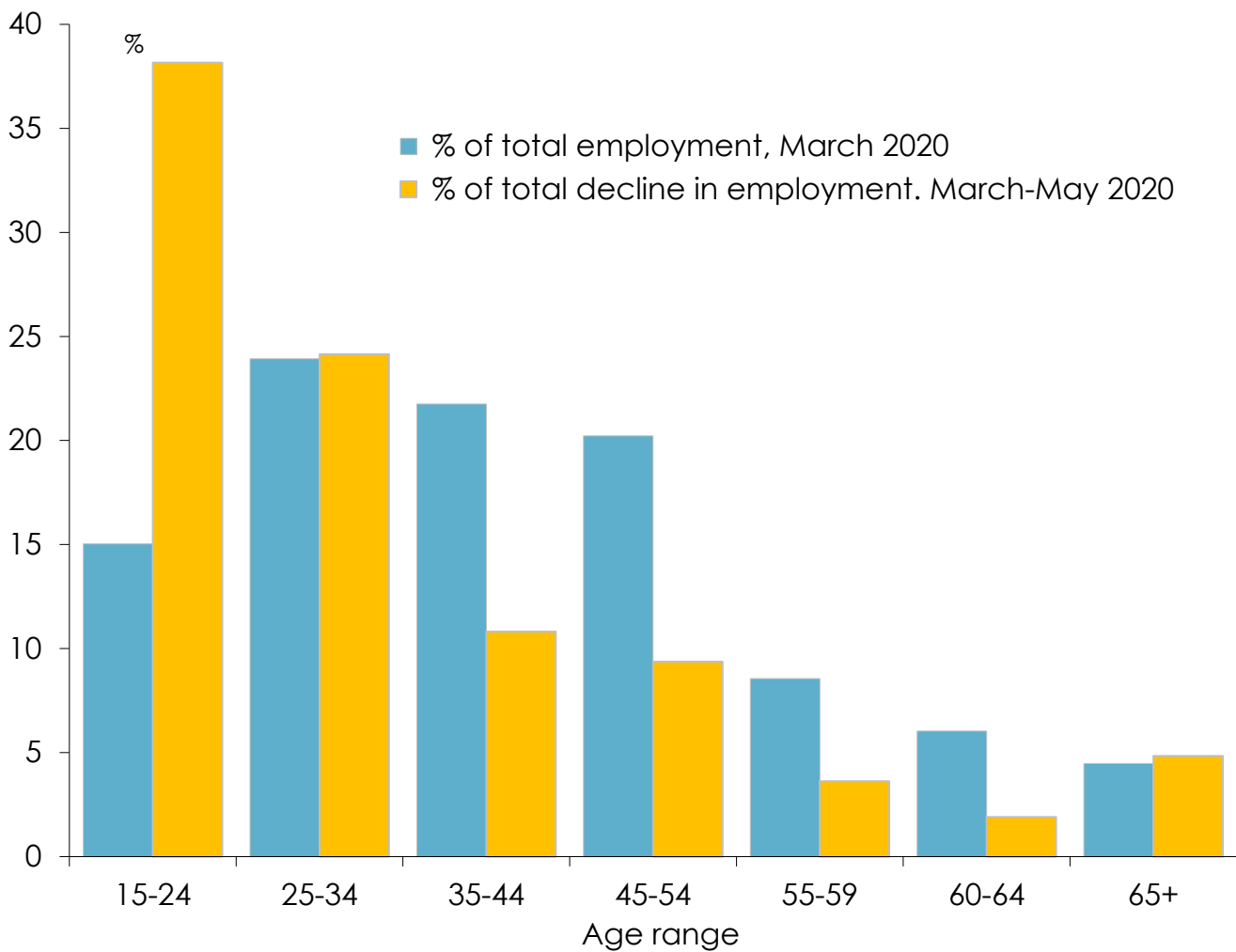
Note: Data depicted in these charts are not seasonally adjust. "nm" = "not meaningful", because employment of women in the industry thus marked either increased between February and May 2020; or fell despite total employment in that industry rising between February and May.
Source: ABS, Detailed quarterly labour force data, May 2020. August data will be released on 24th September.

People aged 15-24 accounted for 15% of total pre-pandemic employment but have experienced 38% of the jobs lost since March

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



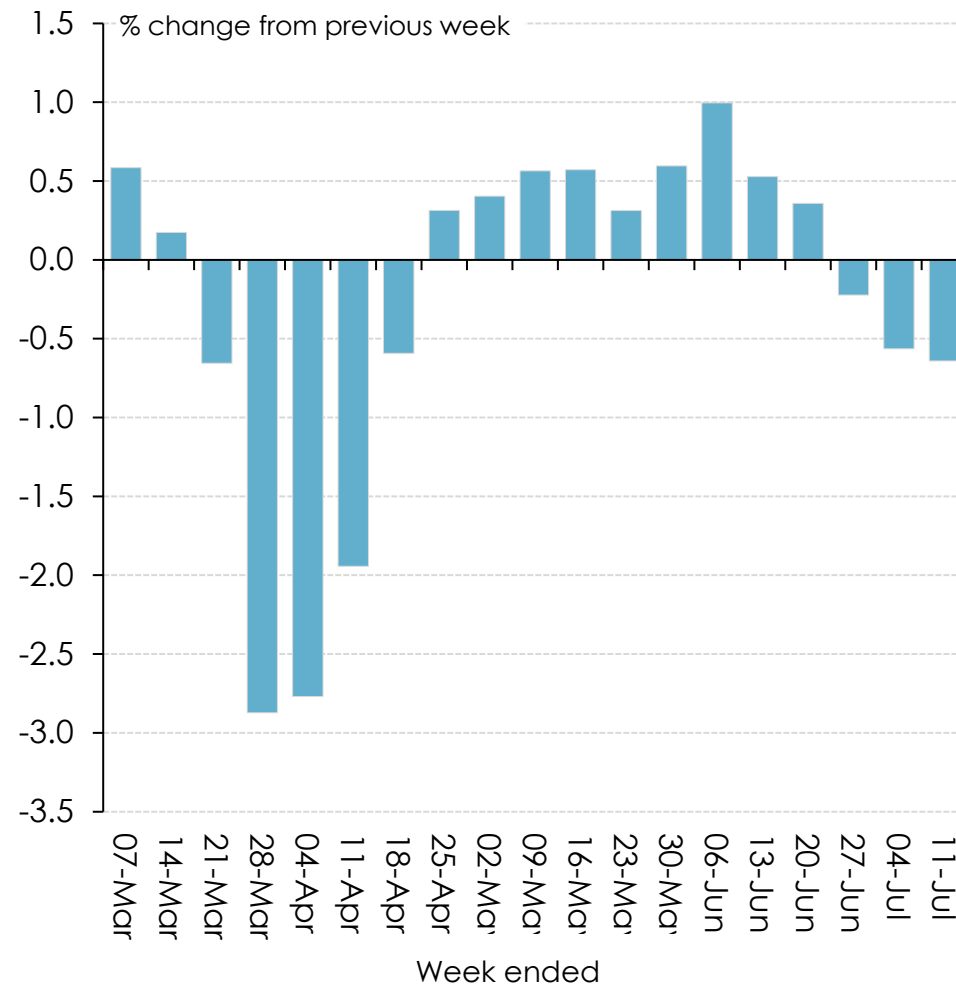
Share of total job losses between March and May 2020 and share of total employment in March, by age group



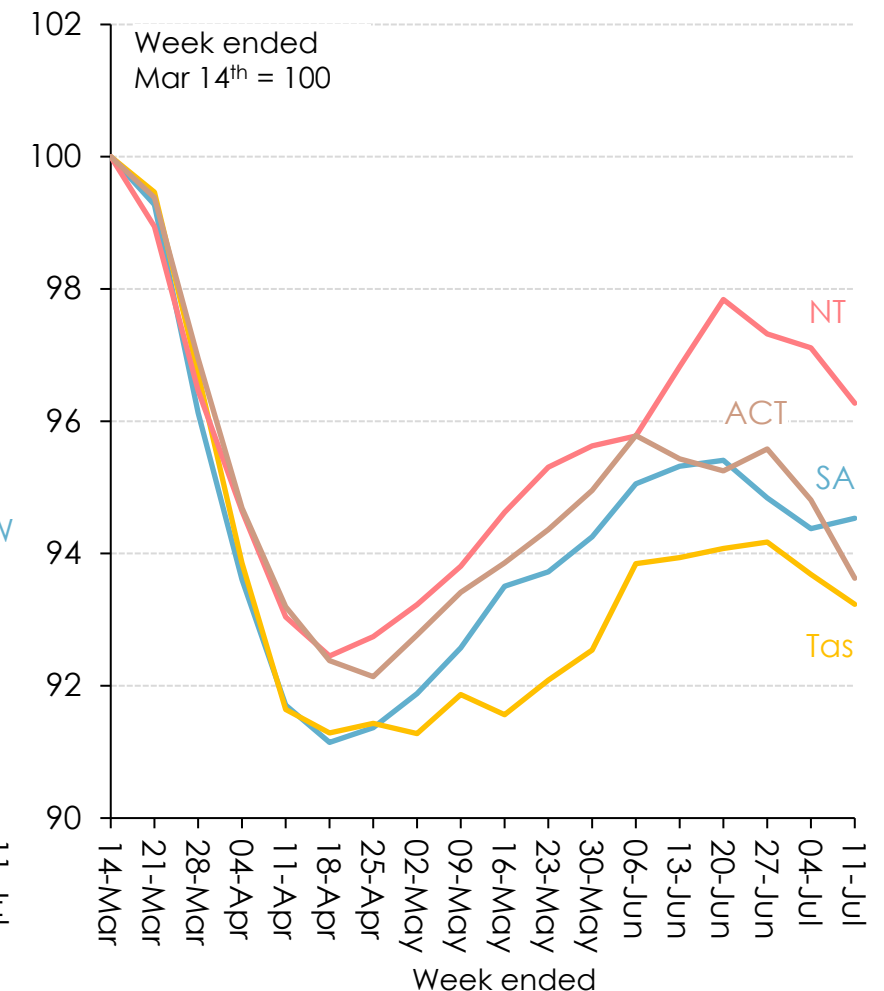
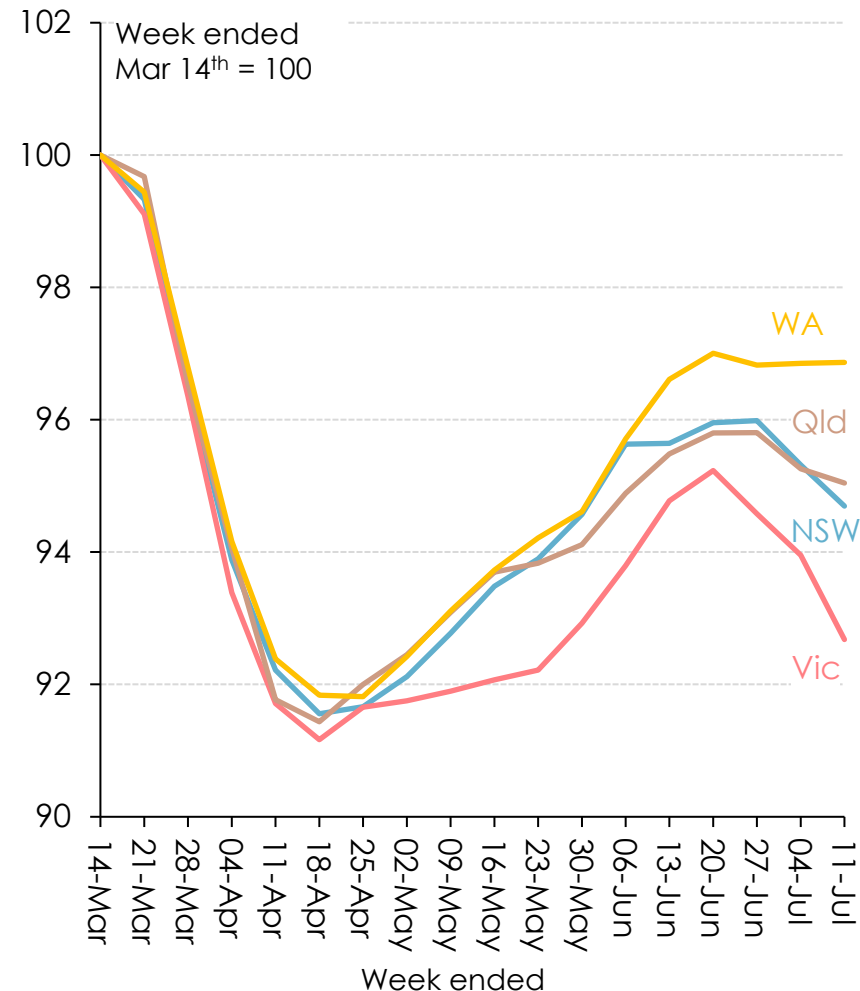
Source: ABS detailed monthly labour force data, May 2020; Corinna. August data will be released on 24th September.

The recovery in payroll employment stalled and went into reverse from late June through mid-July – partly, but not only, because of Victoria

Weekly change in number of payroll jobs



Payroll jobs by State & Territory



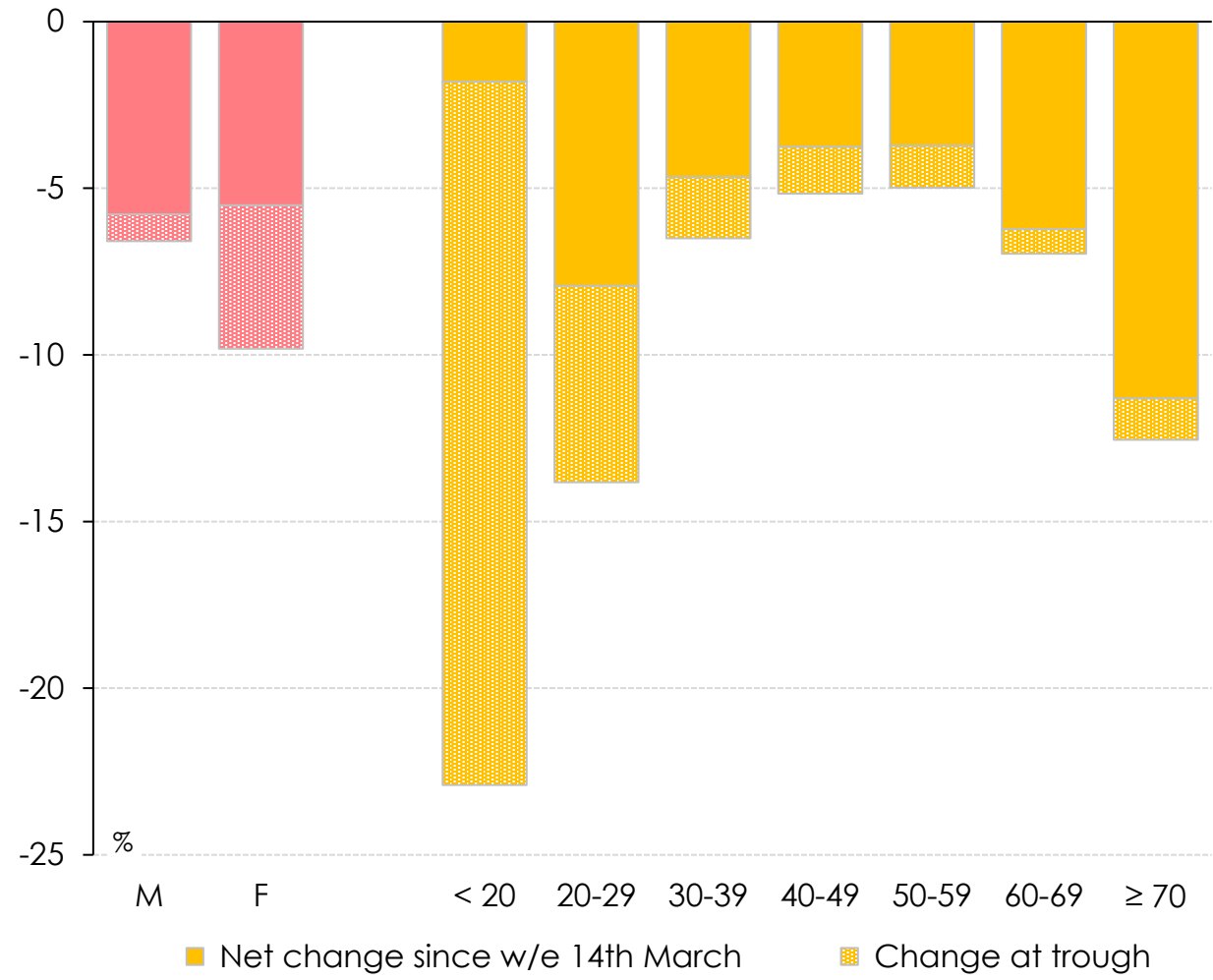
Source: ABS. Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's Single Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. People with two or more jobs (about 6% of the total) are double-counted; employers and the self-employed are not included. Data are not seasonally adjusted (so at least some of the week-to-week variations could be due to 'normal' seasonal factors). Data for weeks up to week ended 25th July will be released on 11th August.

Victoria and Tasmania continue to have experience the largest net job losses – but it's no longer true that women and teenagers have

Net change in the number of payroll jobs since the week ended 14th March, by state and territory



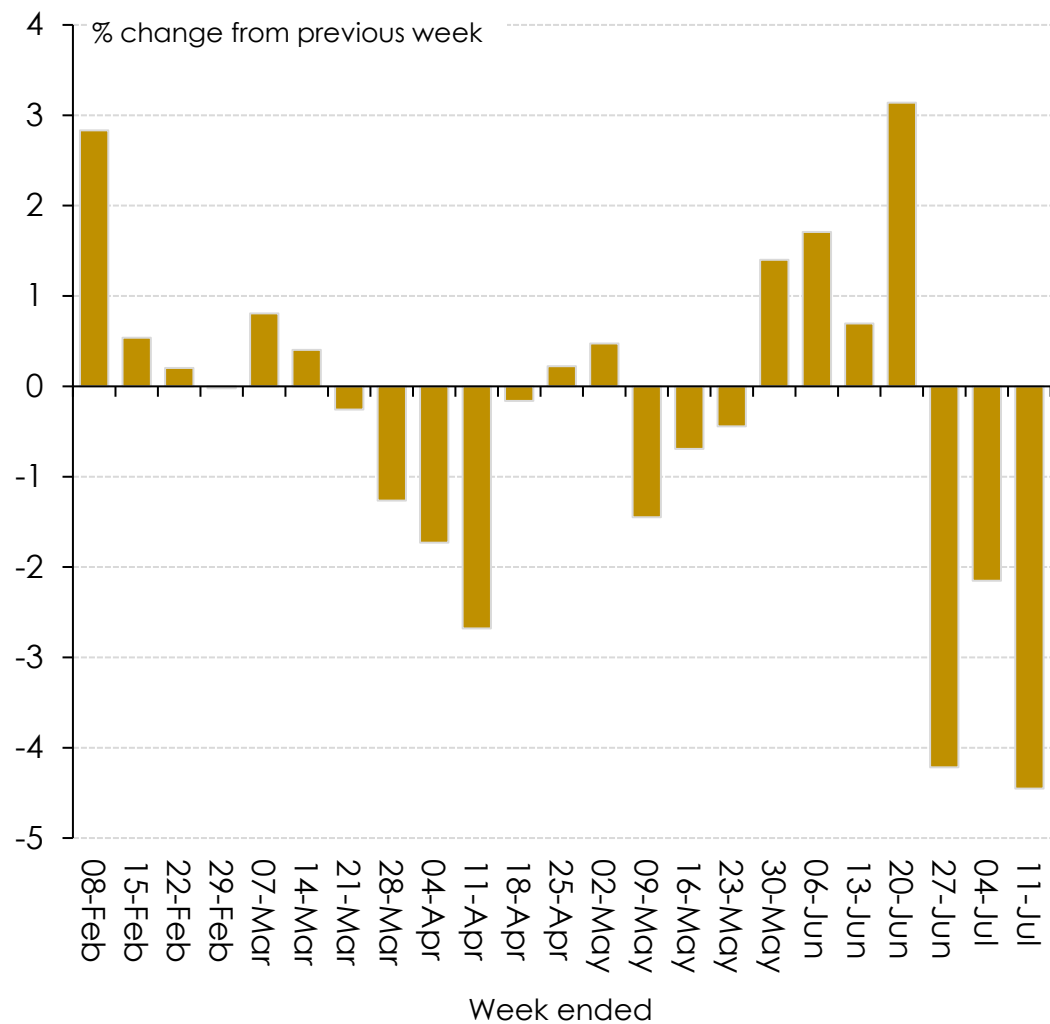
Net change in the number of payroll jobs since the week ended 14th March, by gender and age group



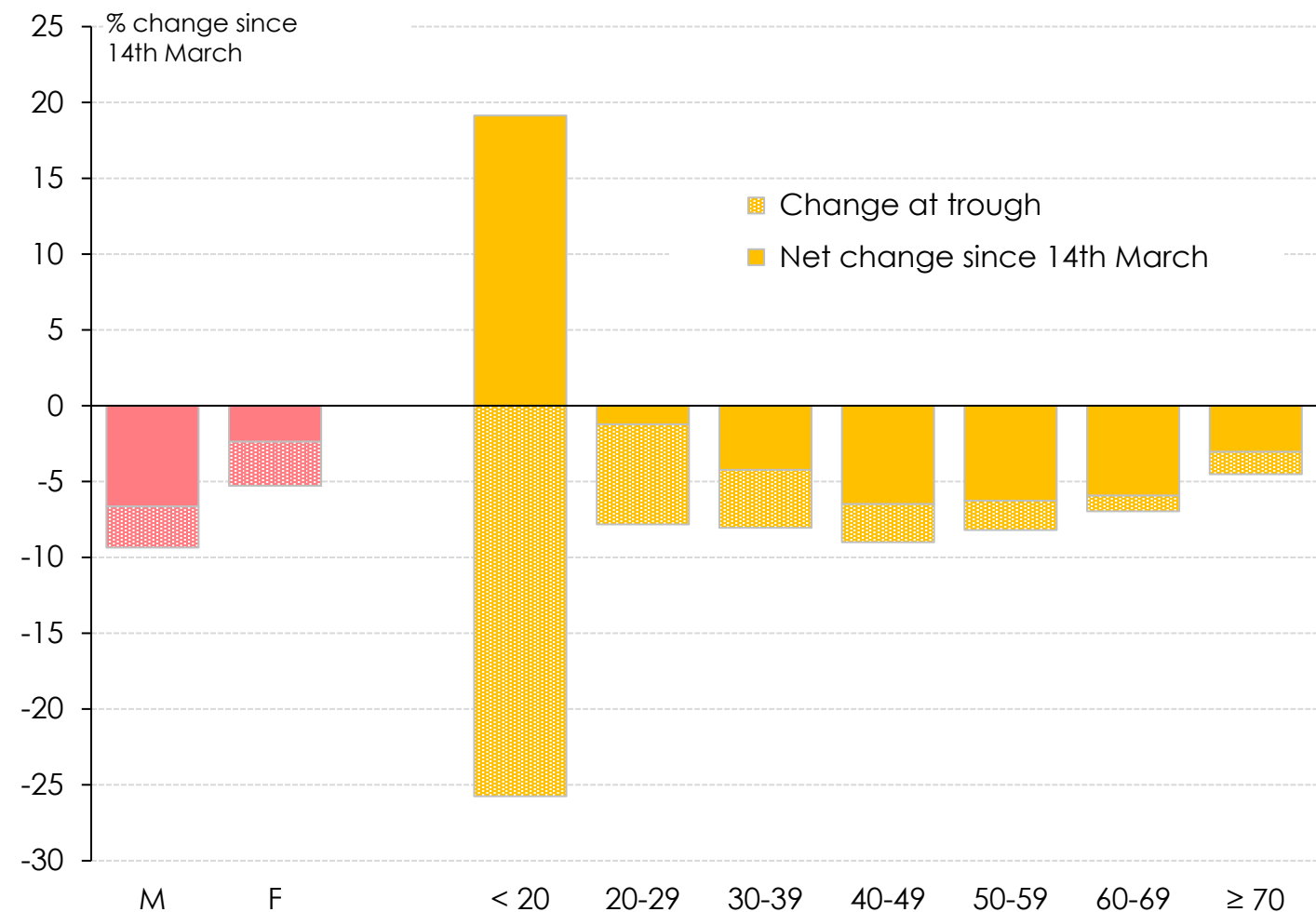
Source: ABS. Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's Single Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. People with two or more jobs (about 6% of the total) are double-counted; employers and the self-employed are not included. 'Trough' refers to the week in which payroll employment for the state/territory, gender or age group was at its lowest level since mid-March. Data for weeks up to week ended 25th July will be released on 11th August.

Wage payments fell in the last week of June and the first half of July; women and younger workers have benefited more from JobKeeper payments

Weekly change in total wages paid



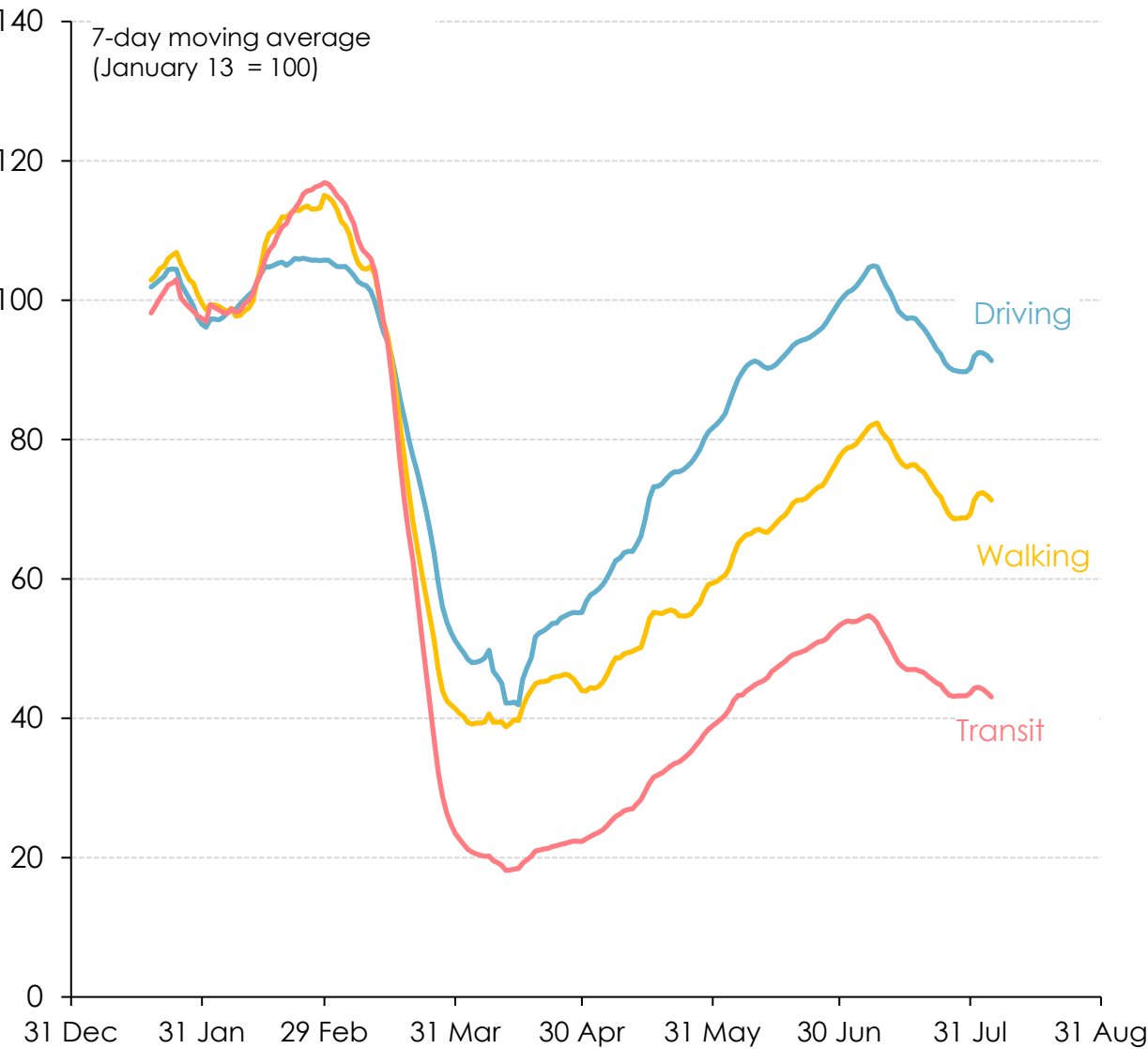
Change in total wages paid by gender and age group



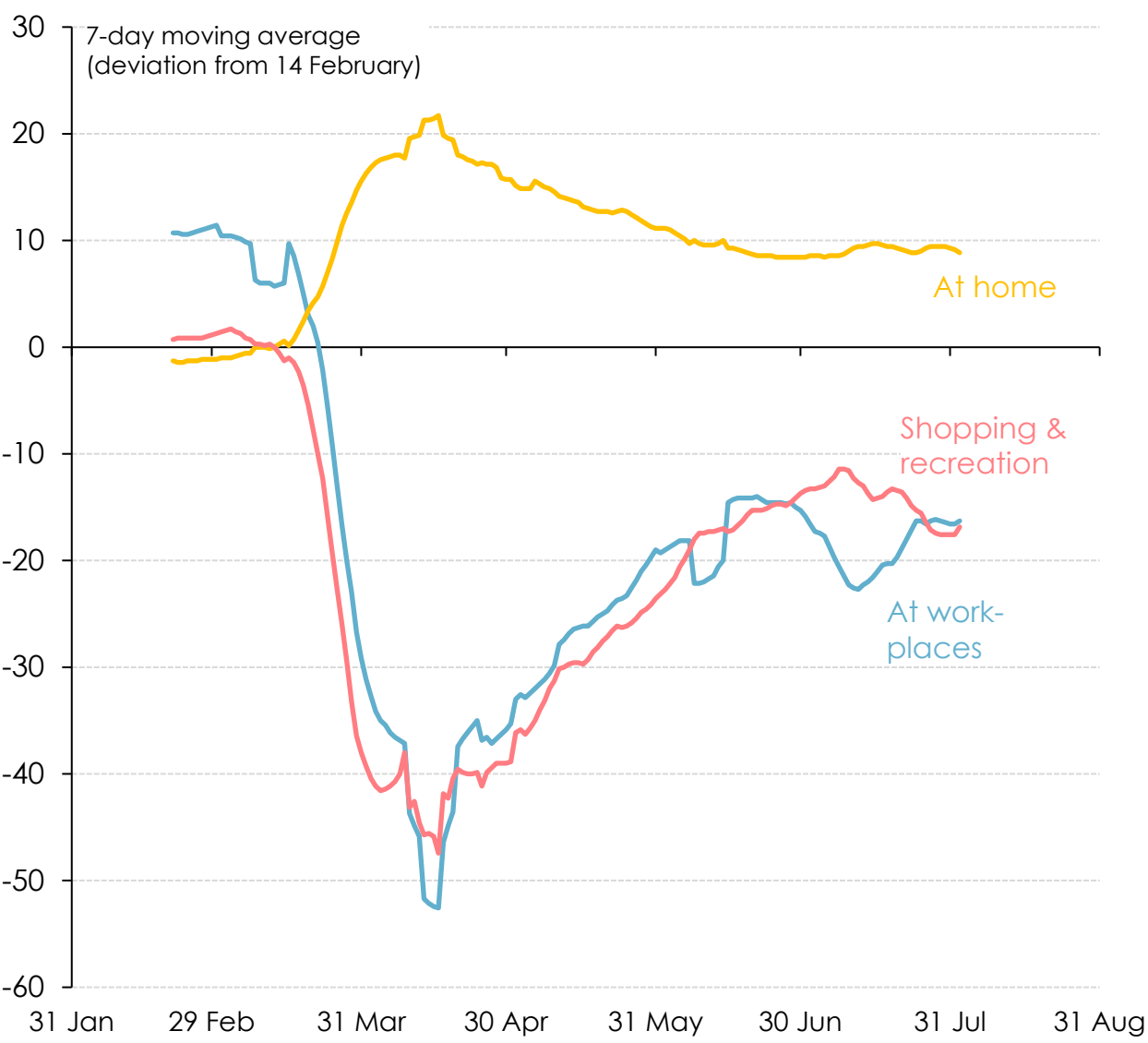
Note: The smaller fall in women's wages than men's likely reflects the fact that JobKeeper payments (at a flat rate of \$1500 per employee per fortnight) represent a higher proportion of women's (lower) average earnings than men's. Ditto for teenagers (most of whom work part-time). Source: ABS. 'Trough' refers to the week in which payroll employment for the state/territory, gender or age group was at its lowest level since mid-March. Data are not seasonally adjusted, so some of the week-to-week movements in wages could be due to 'normal' seasonal factors (for example end-of-financial year bonuses).

Australians have begun to move about less over the past four weeks in response to the new wave of infections, and new government restrictions

Time spent driving, walking and in transit



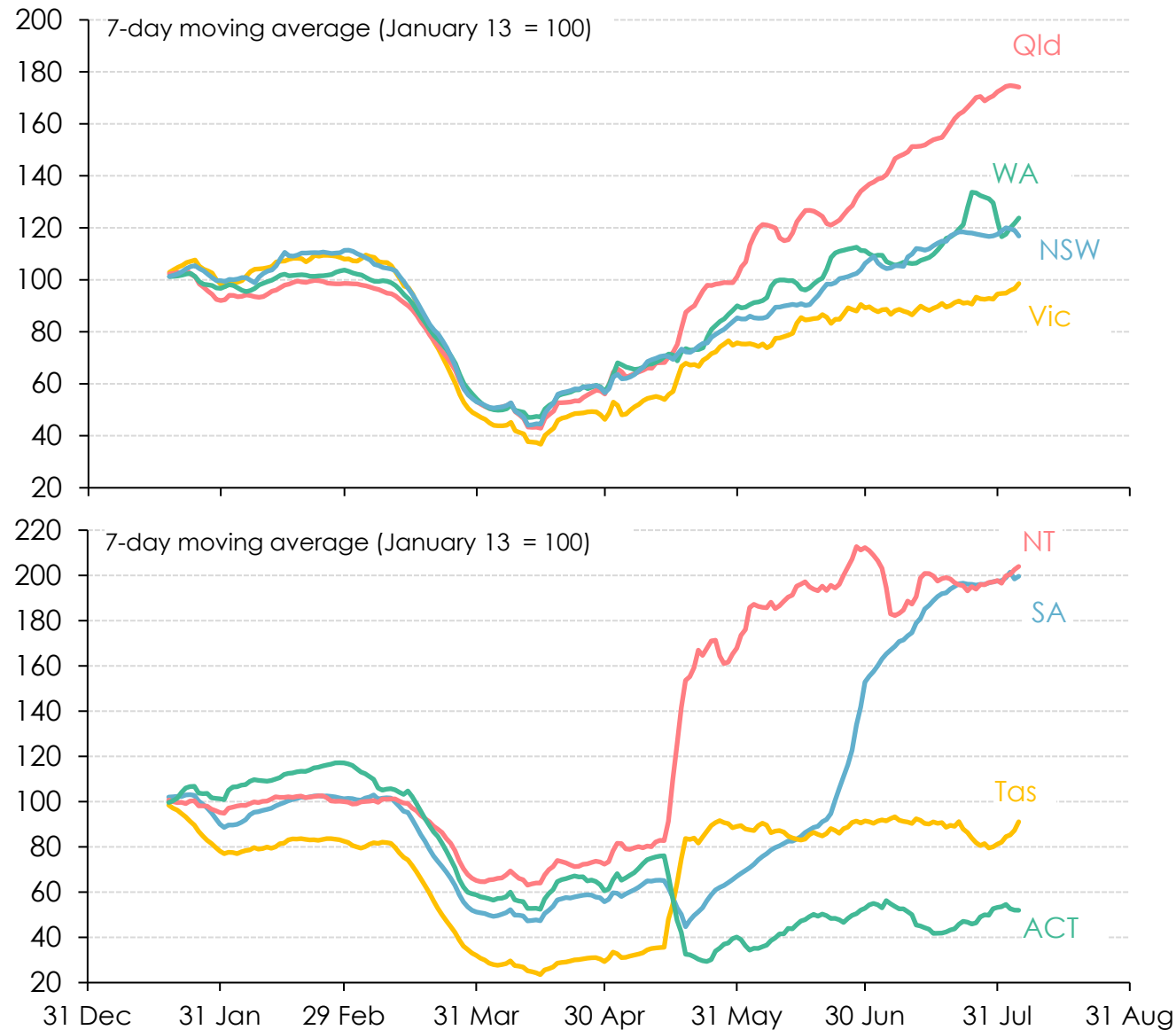
Time spent working, at home, shopping & playing



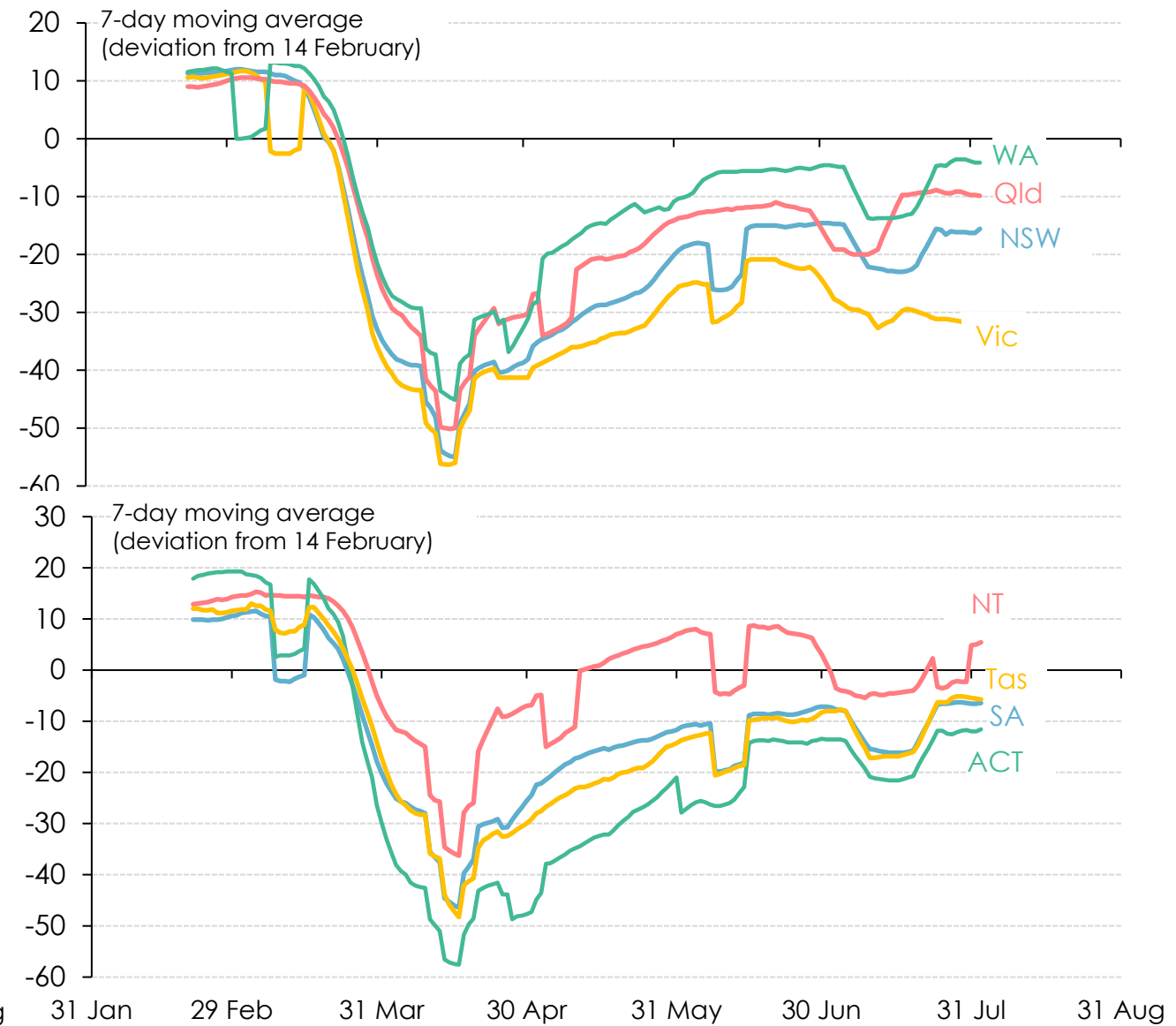
Note: 'transit' means using public transport. Note also that these data will reflect normal seasonal variations in activities as well as the effects of government restrictions and individual responses to the risks posed by the virus. Sources: Apple Mobility Trends Reports (data up to 5th August); Google Covid-19 Community Mobility Reports (data up to 2nd August). For state-level data see next slide.

The slowdown in mobility is largely but not completely due to Victoria: Queensland, WA, SA & the NT are still gradually moving towards 'normal'

Time spent driving, by State and Territory



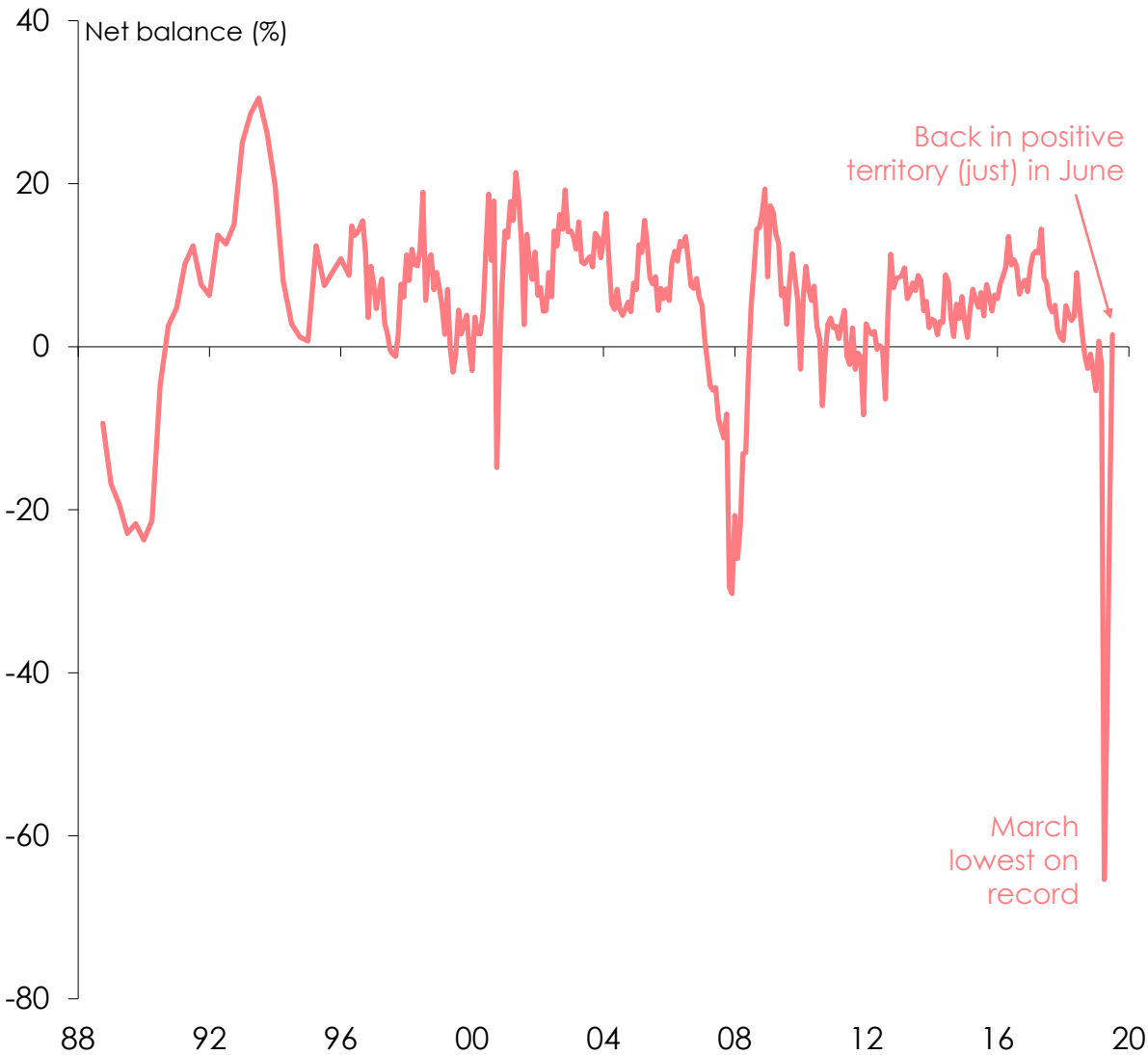
Time spent working, by State and Territory



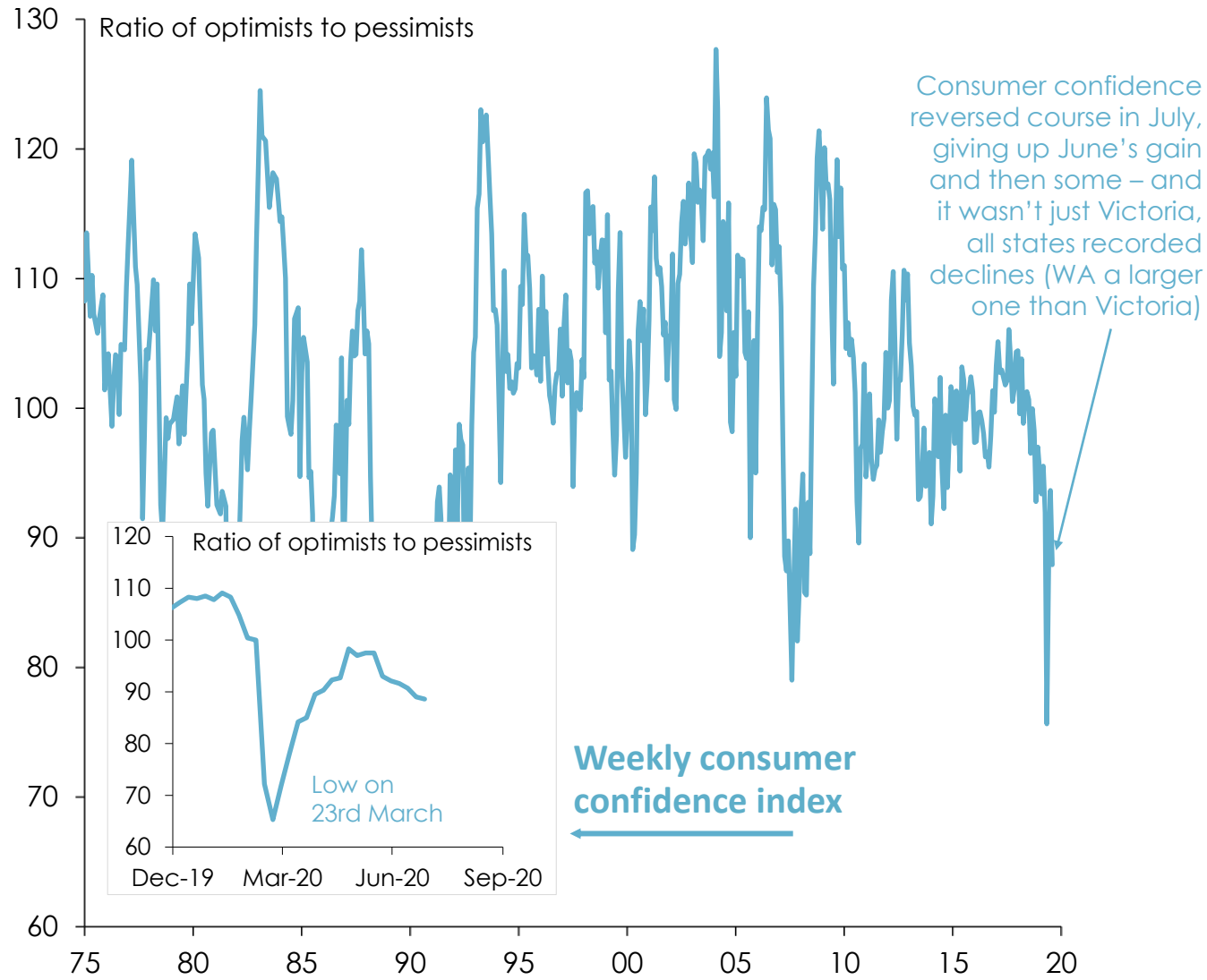
Note: these data will reflect normal seasonal variations in activities as well as the effects of government restrictions and individual responses to the risks posed by the virus. Sources: Apple Mobility Trends Reports (data up to 5th August); Google Covid-19 Community Mobility Reports (data up to 2nd August).

Business confidence improved significantly in June, but the June gains in consumer confidence were more than reversed in July

Business confidence



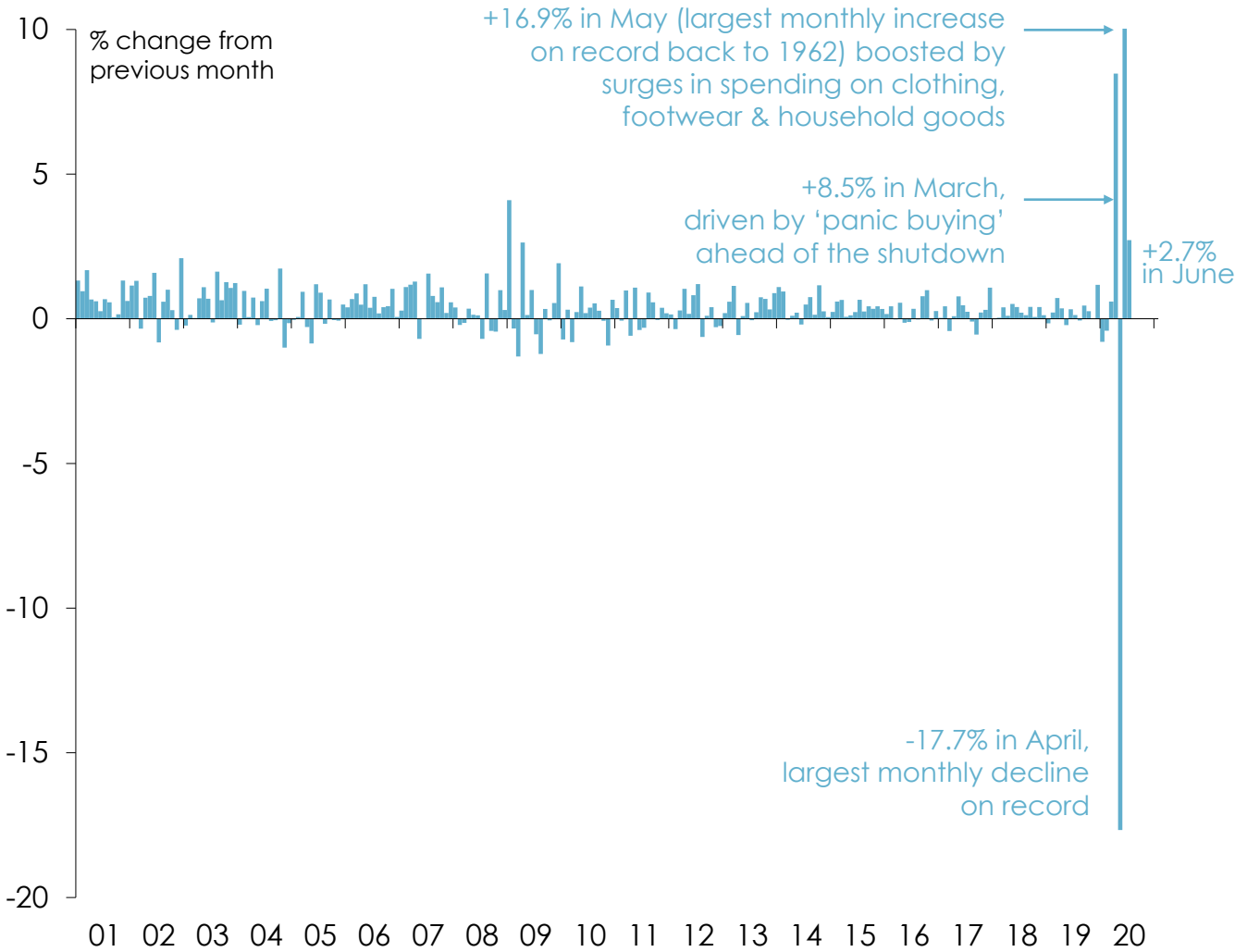
Consumer confidence



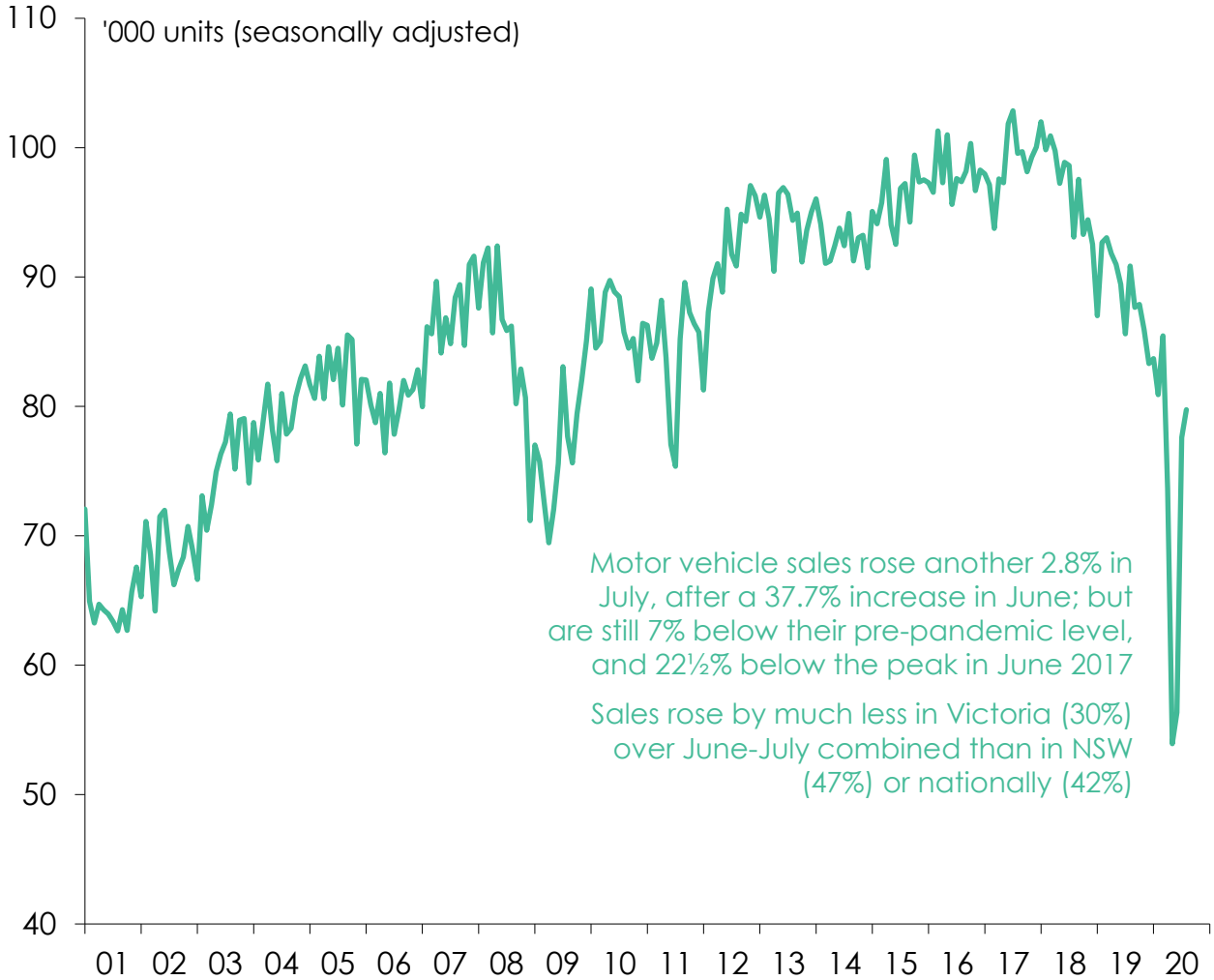
Sources: National Australia Bank; Westpac-Melbourne Institute; ANZ-Roy Morgan (weekly index). July business confidence and August consumer confidence data will be released on 11th and 12th August, respectively.

Retail sales rose another 2.7% in June after a 17% rebound in May; while vehicle sales surged rose a little further in July after surging 38% in N

Retail sales



Motor vehicle sales



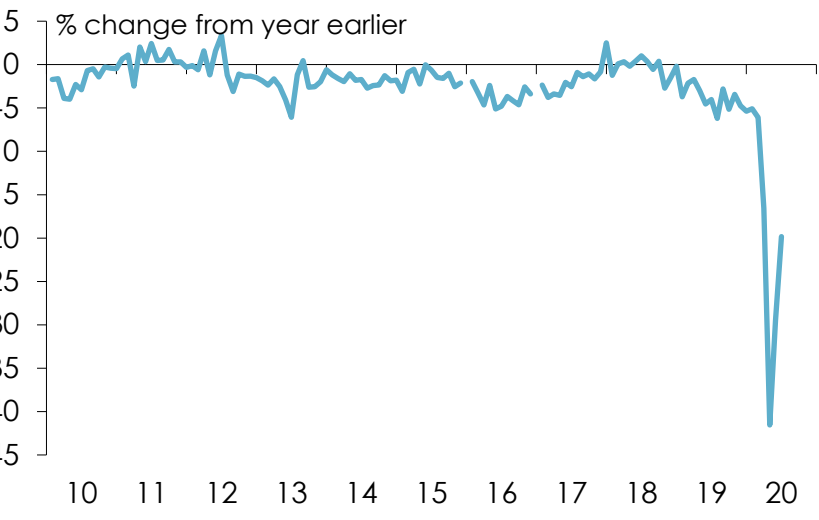
Sources: ABS; Federal Chamber of Automotive Industries VFACTS (seasonal adjustment of FCAI data by Corinna). Retail sales data for July will be released on 4th September.

The pandemic and lockdown has accelerated changes in the way Australians shop, and make payments

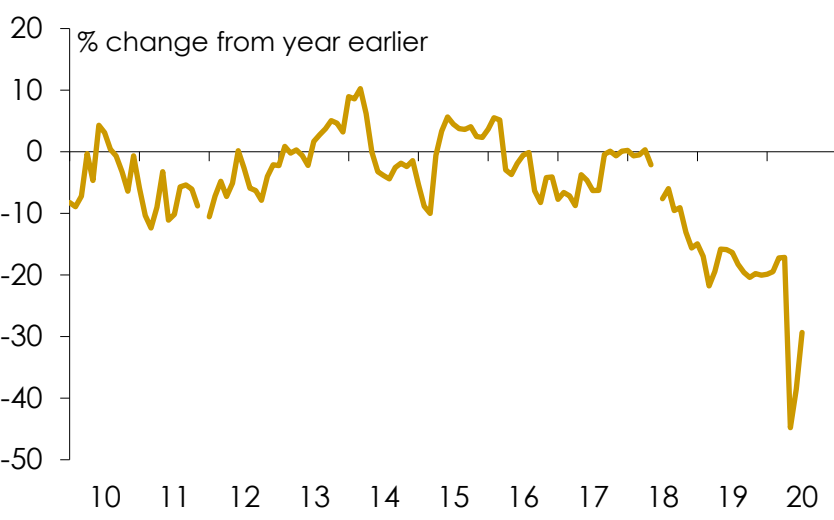
Growth in online retail sales



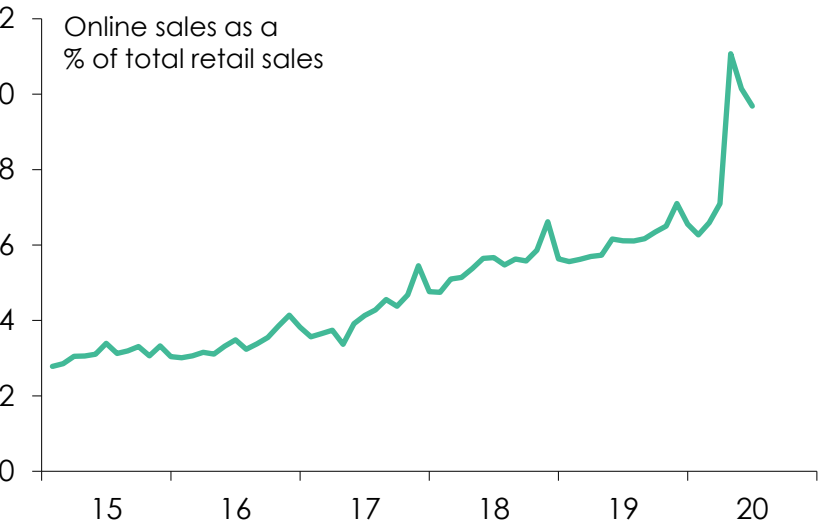
ATM cash withdrawals



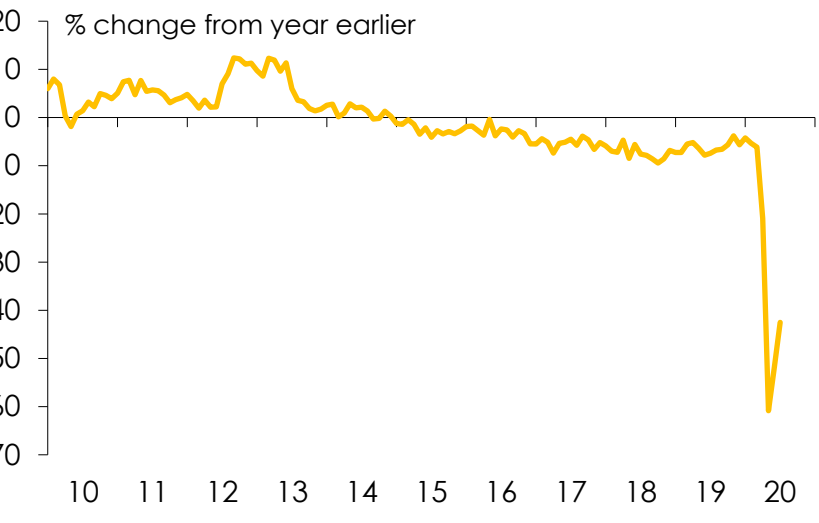
Credit card cash advances



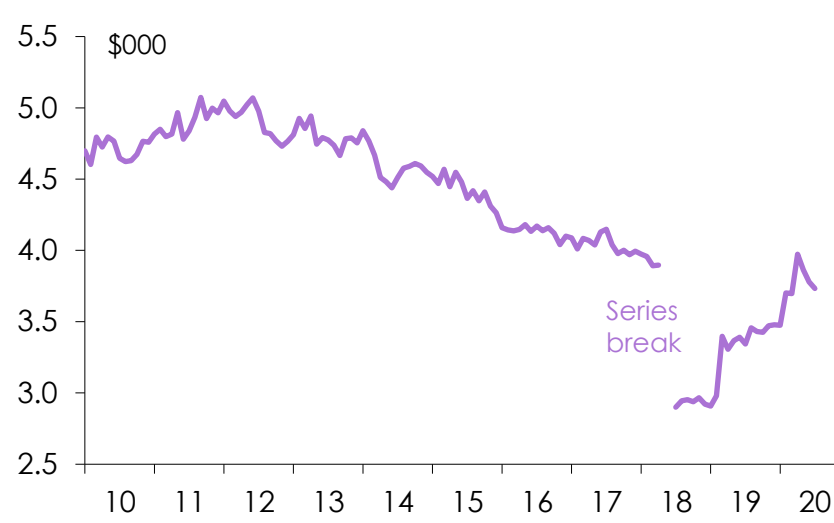
Online retail 'market share'



Debit card cash-outs



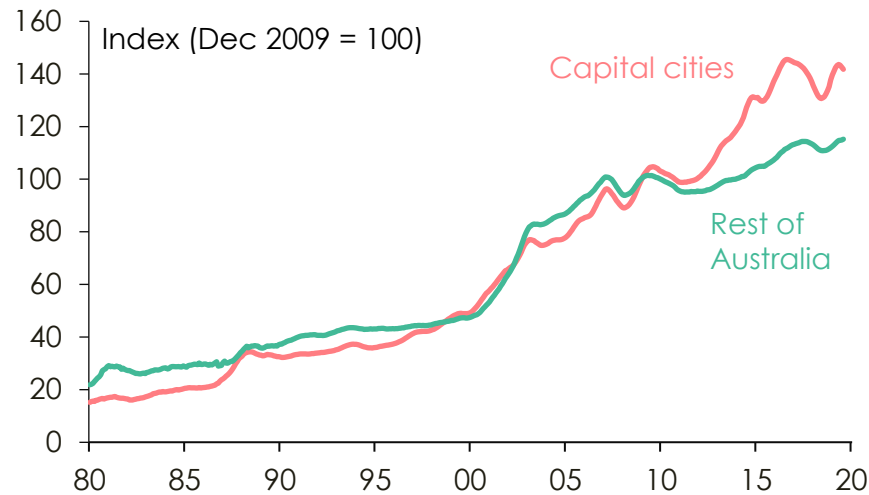
Direct entry payments



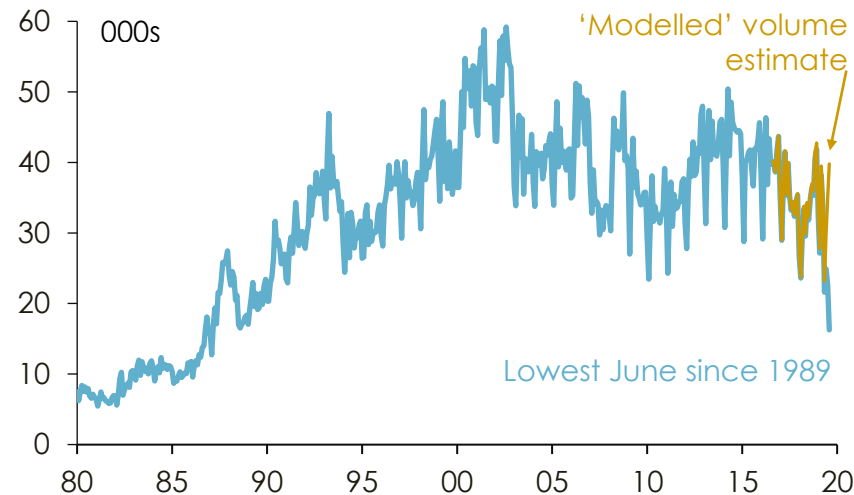
Sources: ABS; RBA. Latest data are for June; online retail sales data for July will be released on 4th September, and payments system data for July on 7th September.

Property prices fell by an average of 0.9% between April and July, on thin volumes, with bigger falls in cities than regions, and in 'top tier' properties

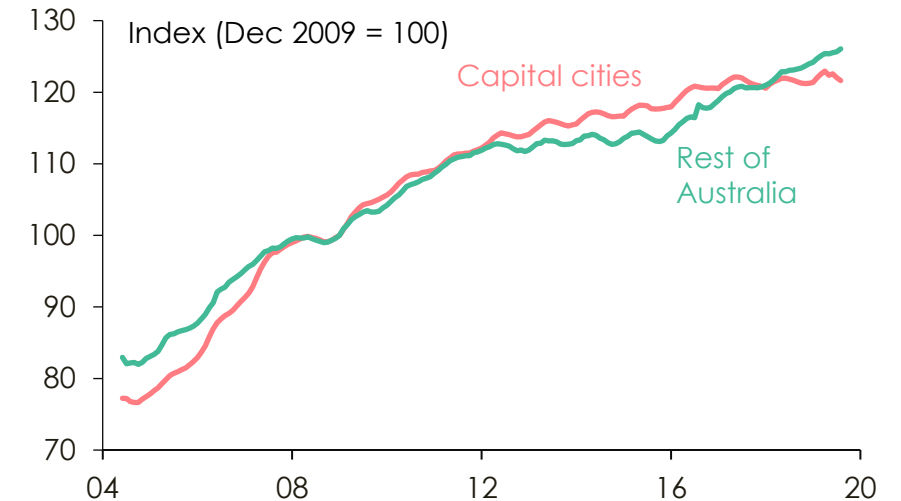
Residential property prices



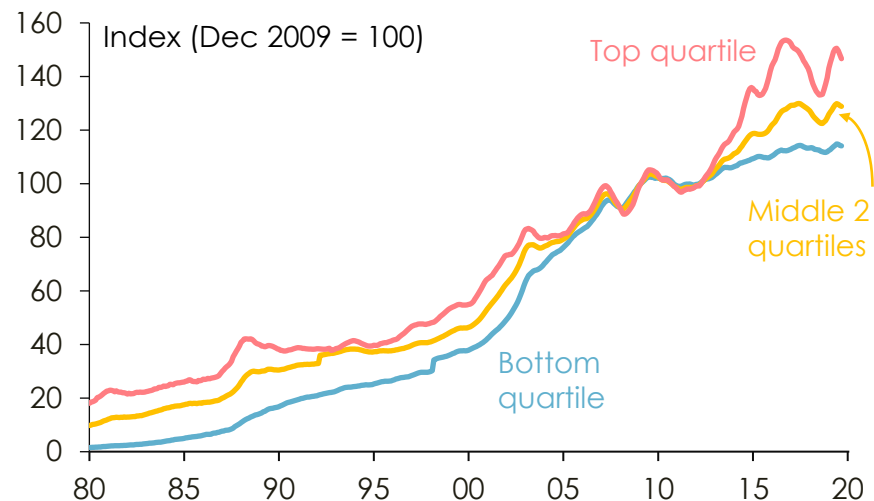
Residential property sales volumes



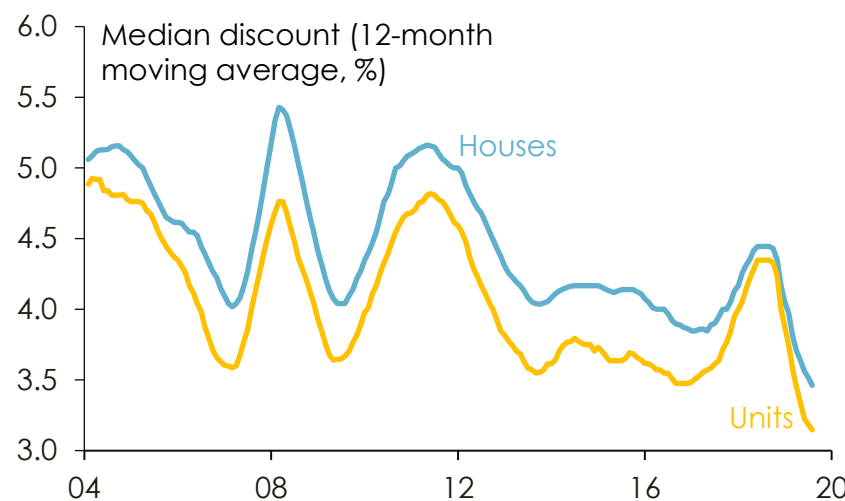
Residential rents



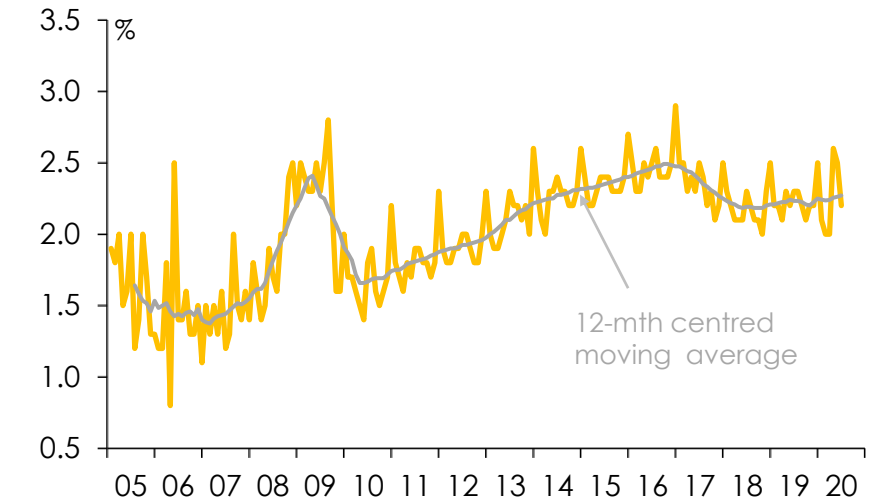
Property prices by tier



Vendor discounting



Capital city rental vacancy rates

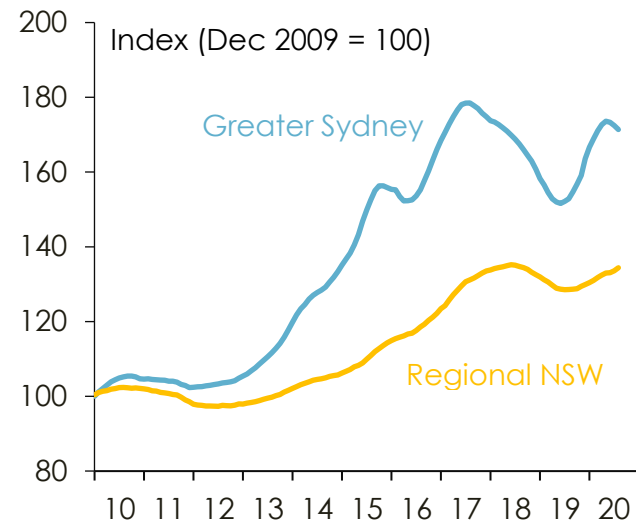


Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Property price data are now seasonally adjusted. The index of residential 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 July 2020; August data released on 1st September.

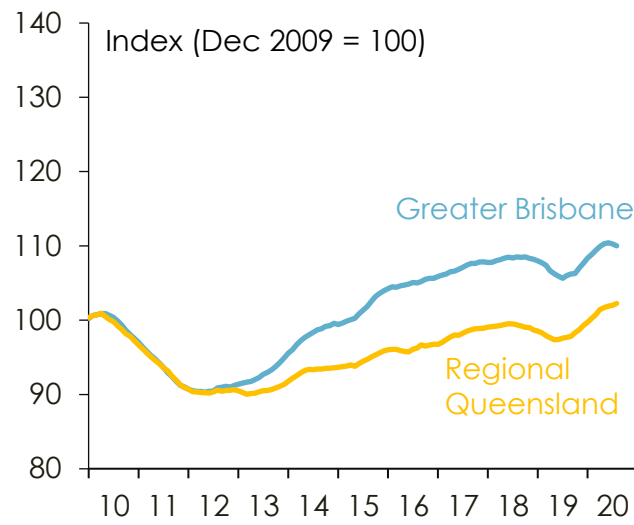
Sources: CoreLogic; SQM Research.

Property prices have fallen more in regional WA, Melbourne, Perth, Darwin and Sydney since March than in other cities or regions

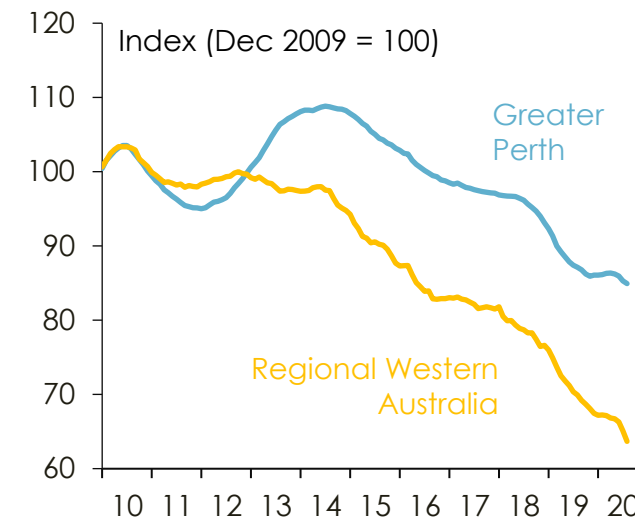
New South Wales



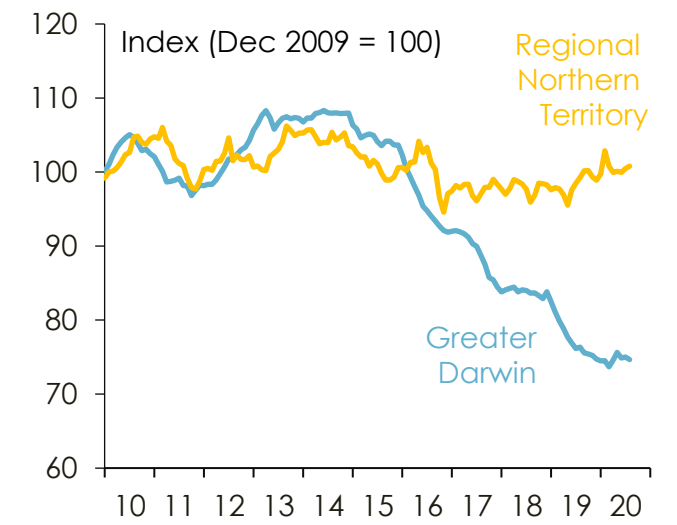
Queensland



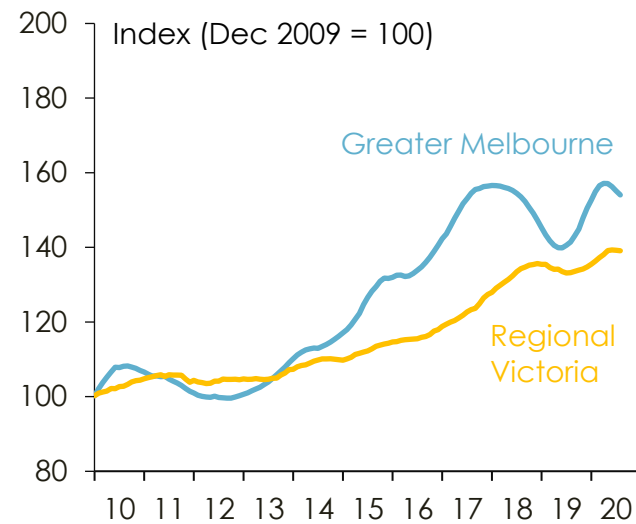
Western Australia



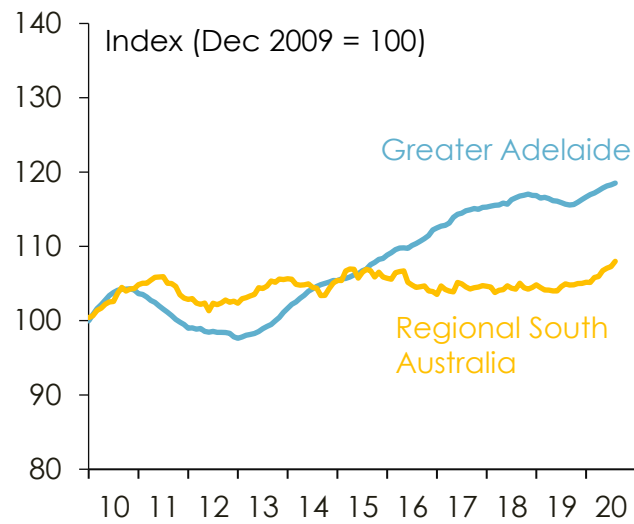
Northern Territory



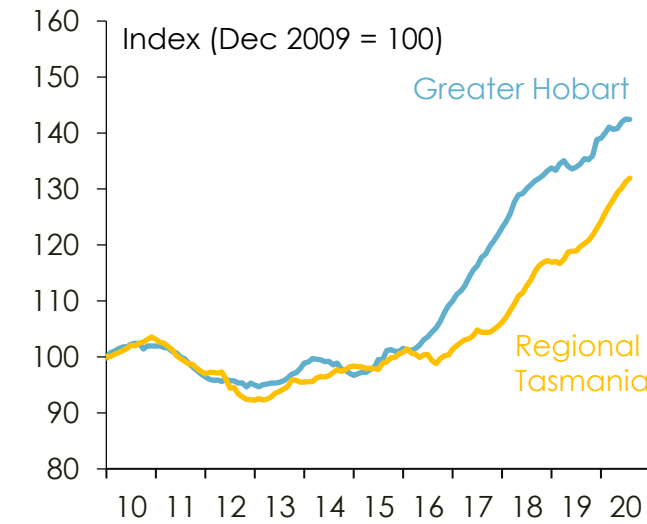
Victoria



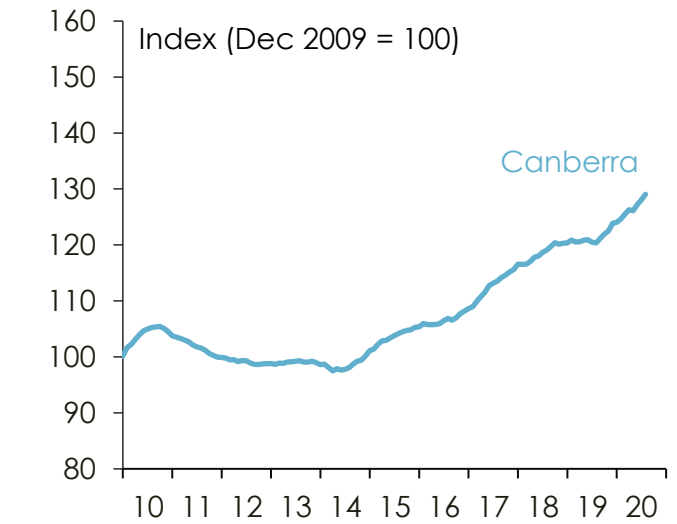
South Australia



Tasmania



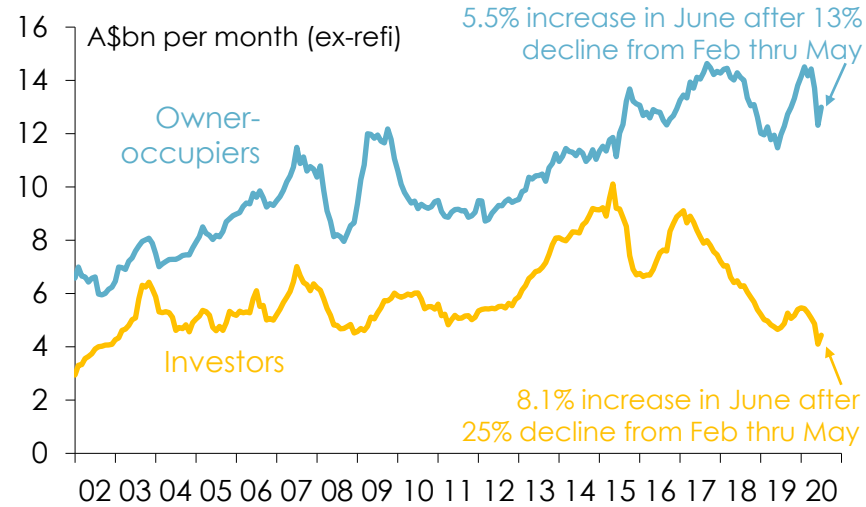
Australian Capital Territory



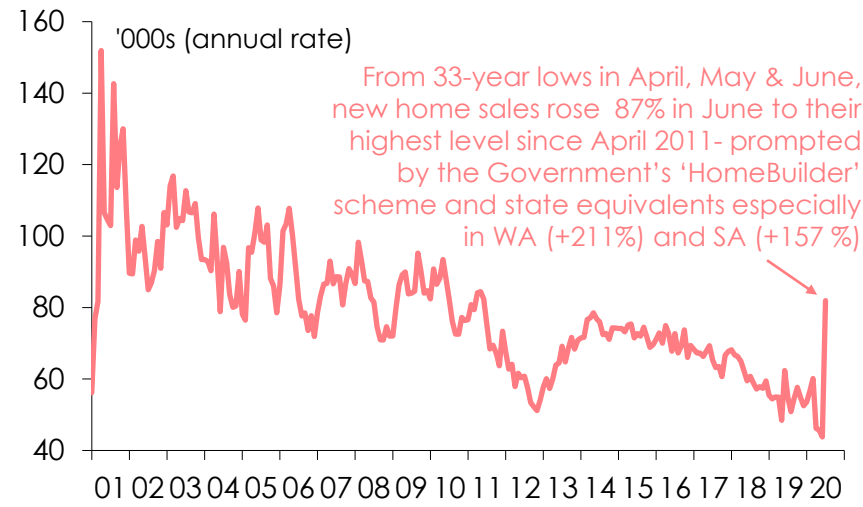
Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Property price data are now seasonally adjusted. Latest data are for July 2020; August data released on 1st September. Source: CoreLogic.

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

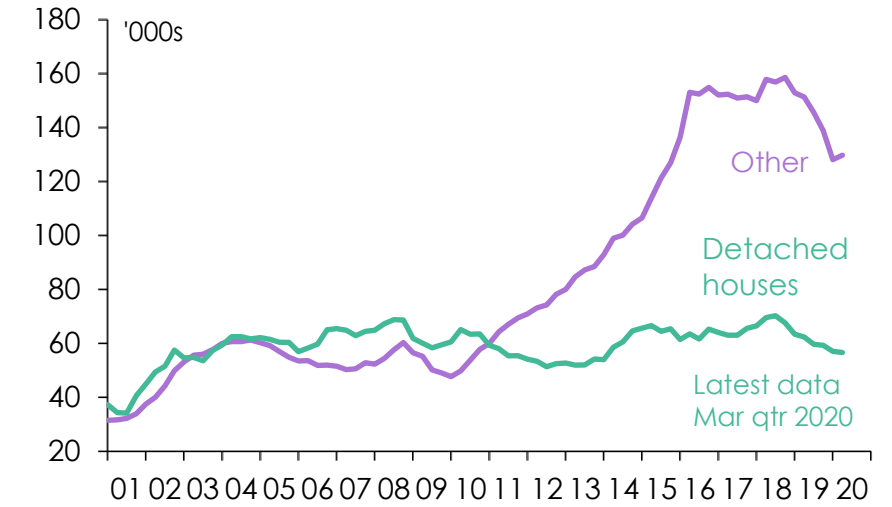
Housing finance commitments



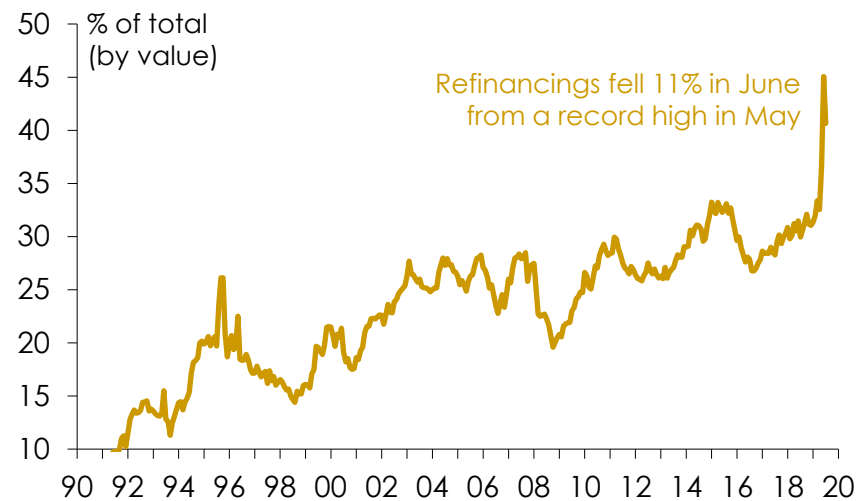
Large builders' new home sales



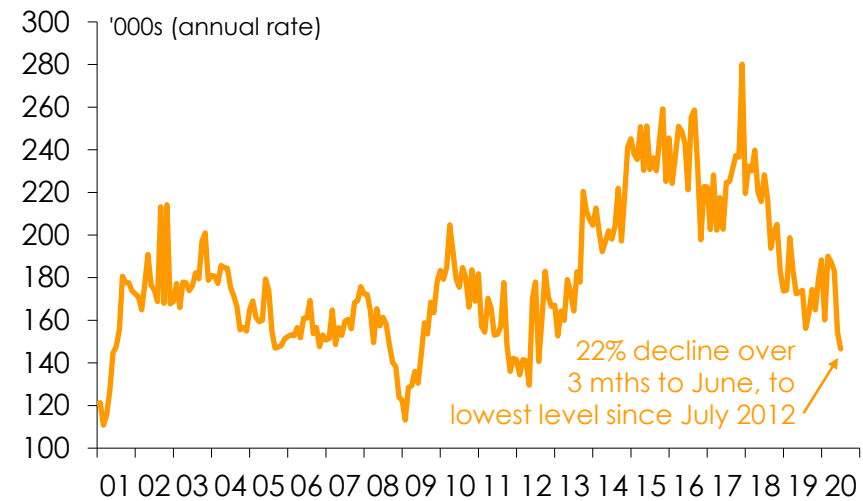
Dwellings under construction



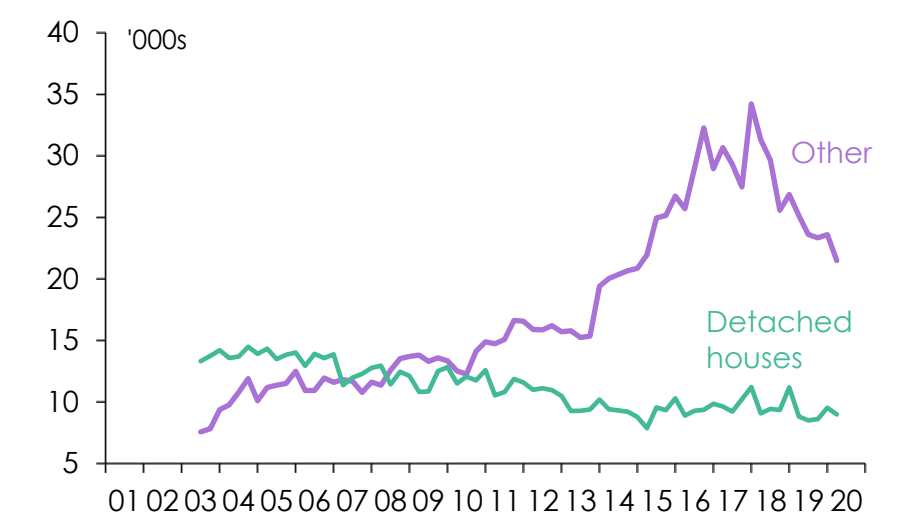
Refinancings as pc of total



Residential building approvals



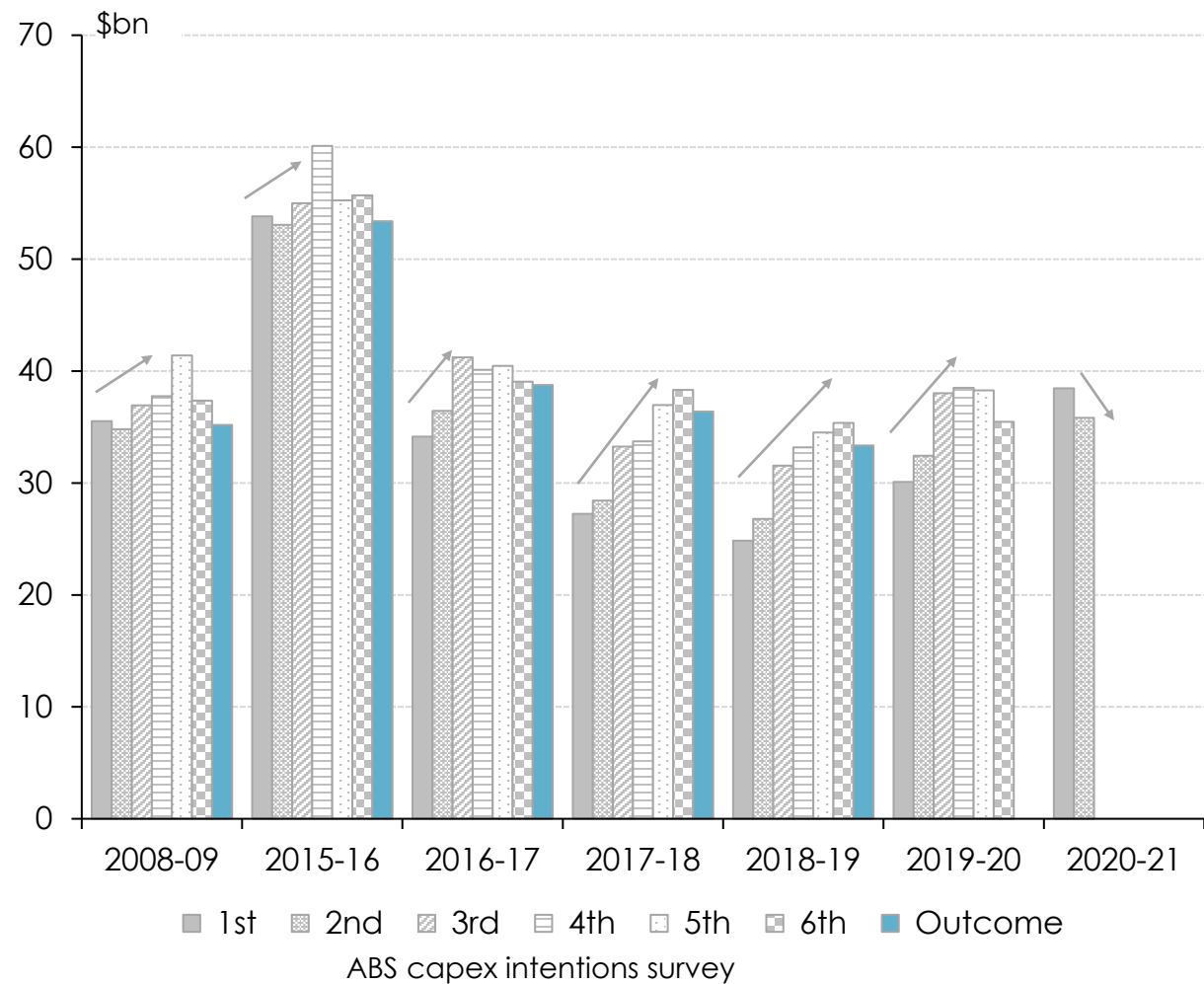
'Pipeline' of work yet to be done



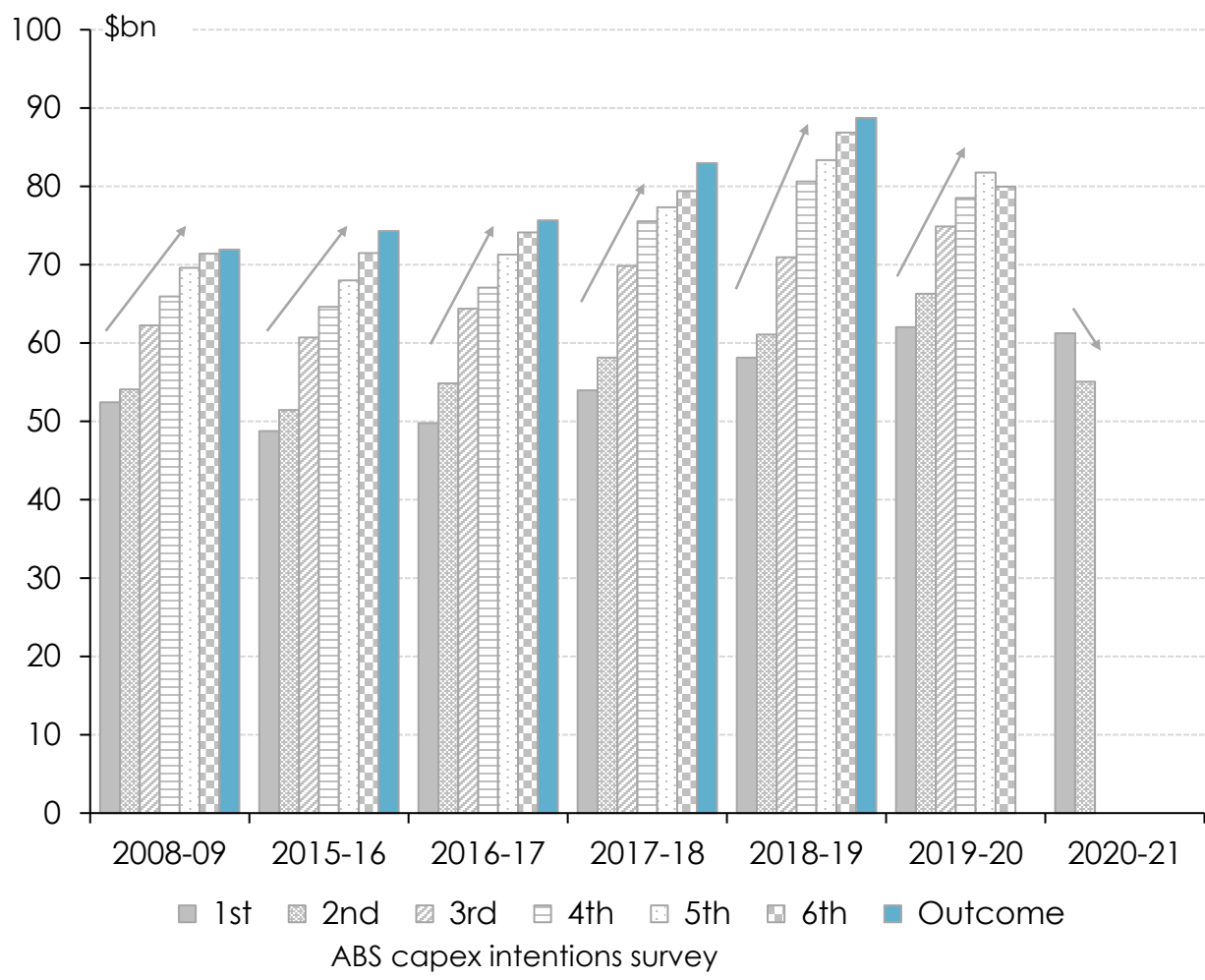
Note: 'New home sales' are of detached dwellings only and exclude small-scale builders. Sources: ABS; Housing Industry Association. July residential building approvals will be released on 1st September; July housing finance data on 9th September; and June quarter dwellings under construction and 'pipeline' data on 14th October.

Businesses have cut back their capital expenditure intentions for 2020-21, which is unusual for this time of year

Capital expenditure intentions - mining

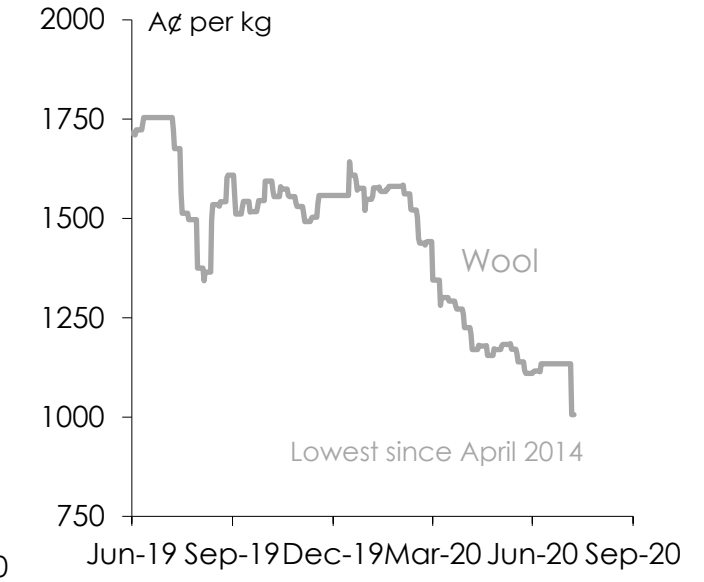
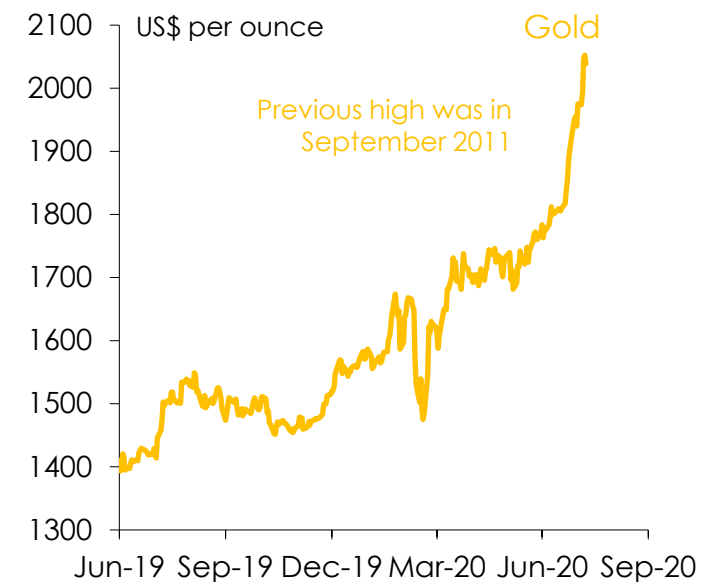
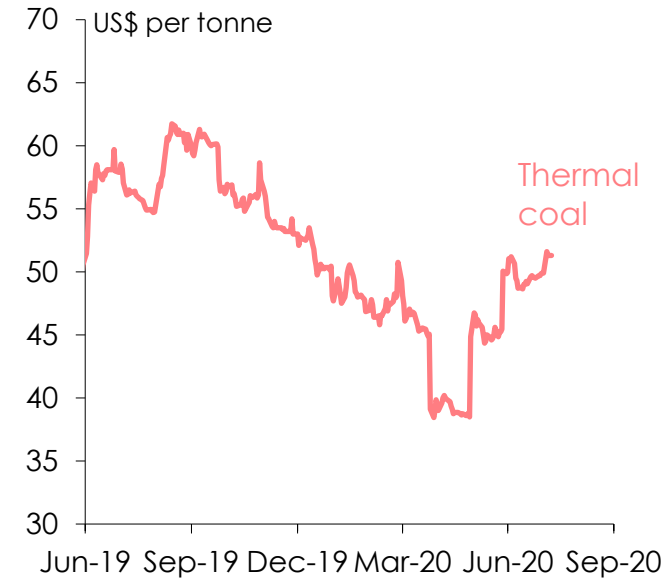
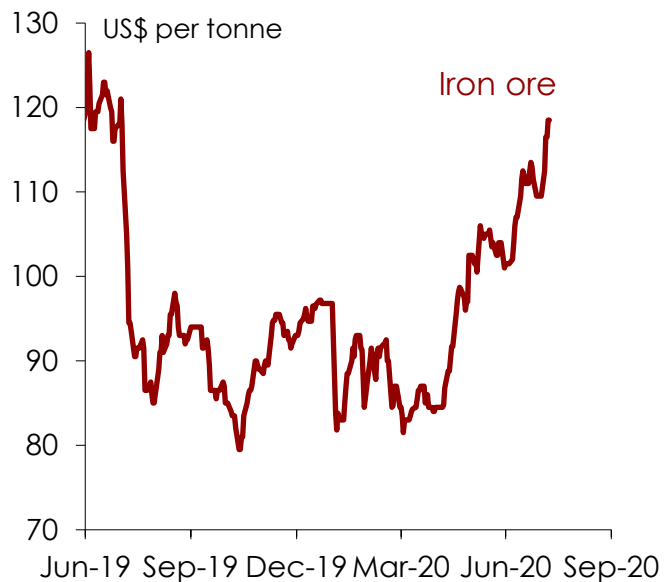
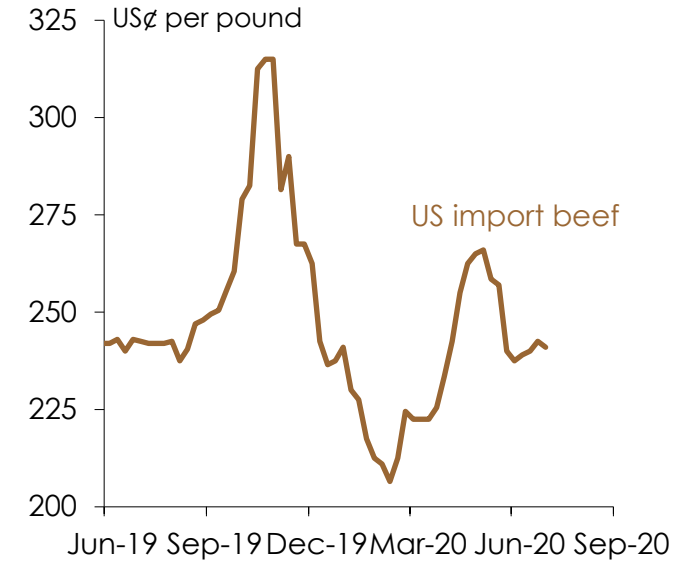
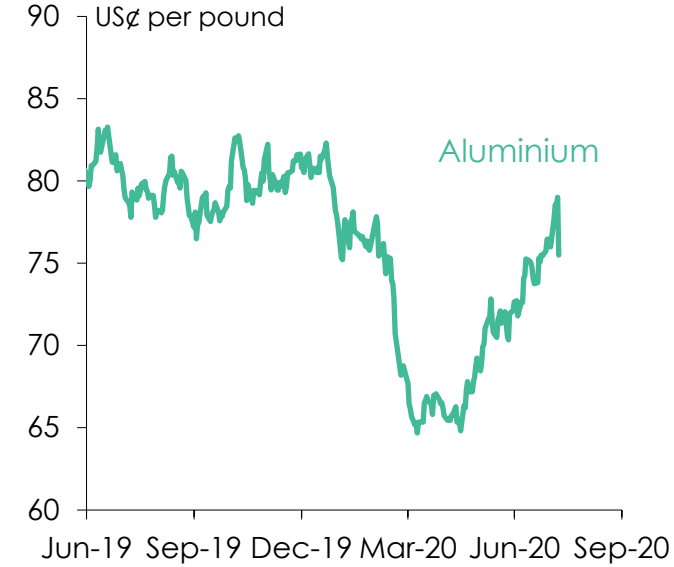
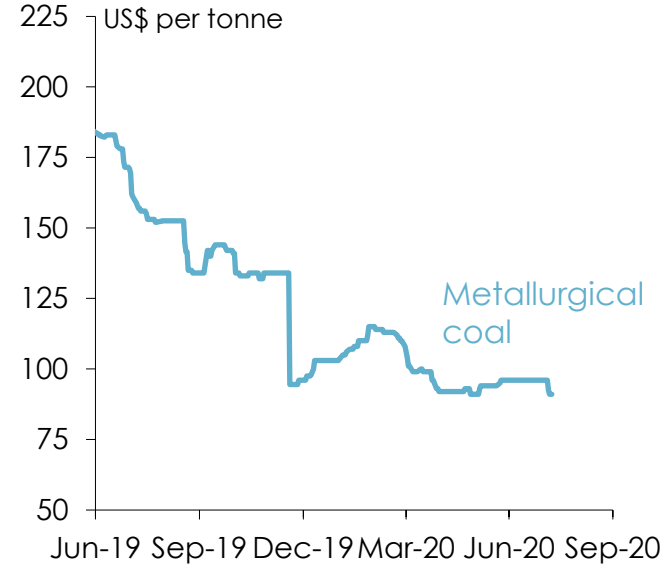
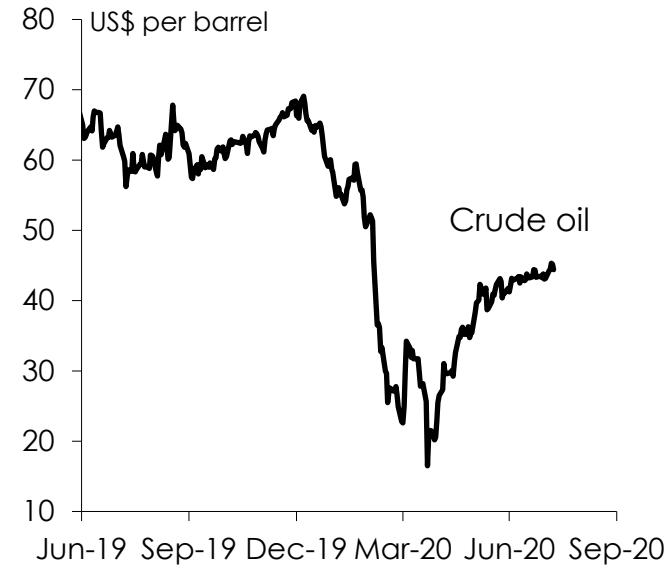


Capital expenditure intentions – non-mining



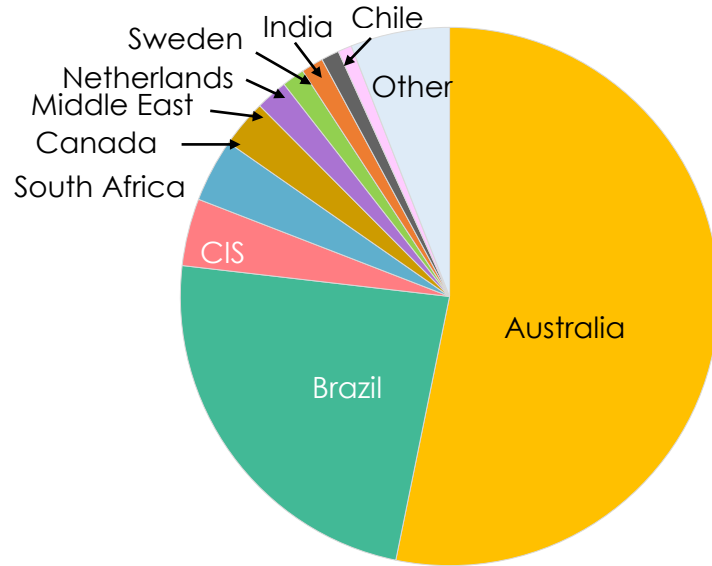
Note: The ABS conducts six surveys of business' capital expenditure intentions in respect of each financial year. The first is conducted in January & February prior to the commencement of the financial year, the second in May & June, the third in July & August of the financial year, the fourth in October & 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 (next update 27th August).

Iron ore and gold prices surged this week, on strong Chinese demand and US-related concerns (respectively), while wool prices crashed

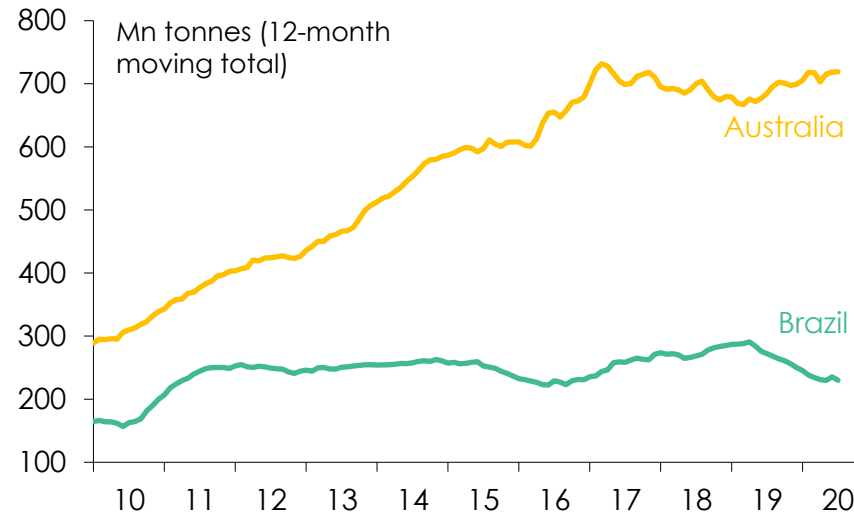


The resilience of iron ore prices stems from strong Chinese demand, declining Chinese production and constraints on Brazilian exports

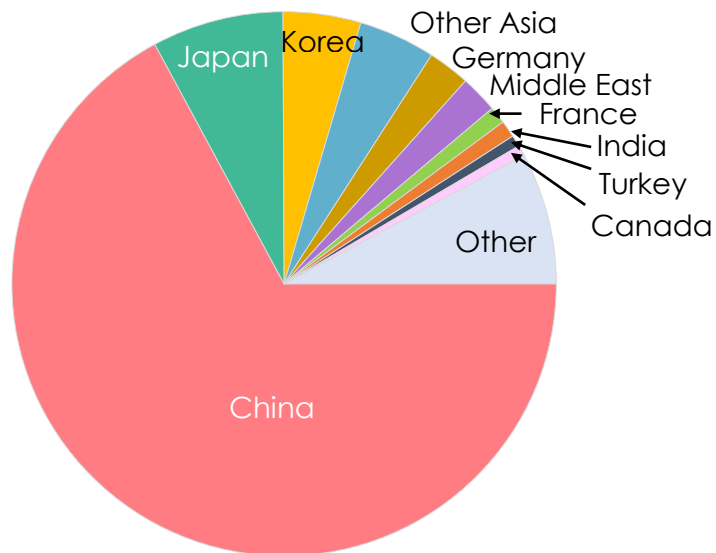
Iron ore exports, 2018



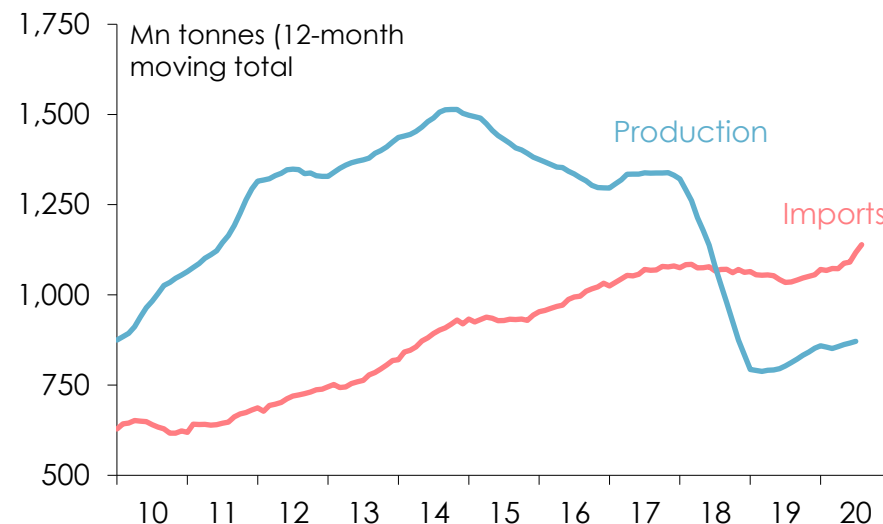
Australia & Brazil iron ore exports



Iron ore imports, 2018



China iron ore production & imports

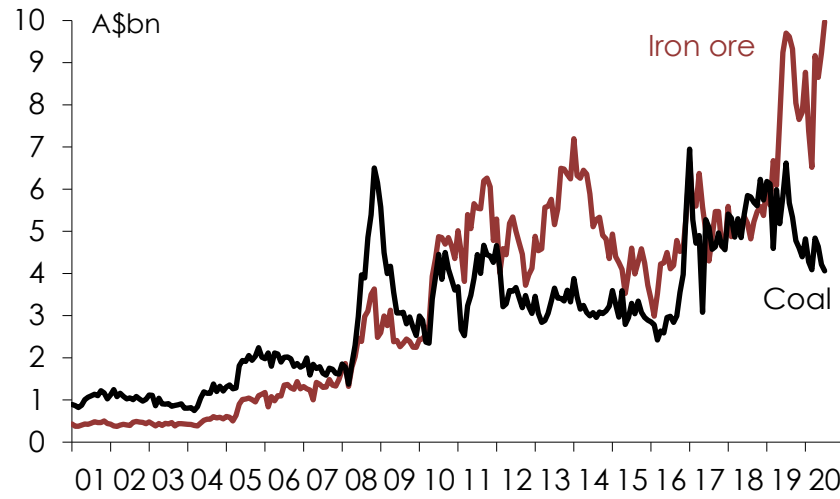


- ❑ The global seaborne iron ore trade is dominated by shipments from Australia & Brazil to China (which accounts for 53% of global steel production and 51% of steel use)
- ❑ Chinese iron ore production has fallen by more than 34% since 2017, largely because of rapidly declining quality – forcing Chinese steel mills to become more dependent on imports in response to increased demand driven by stimulus measures
- ❑ Meanwhile 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 especially in Guinea though there are big logistical hurdles

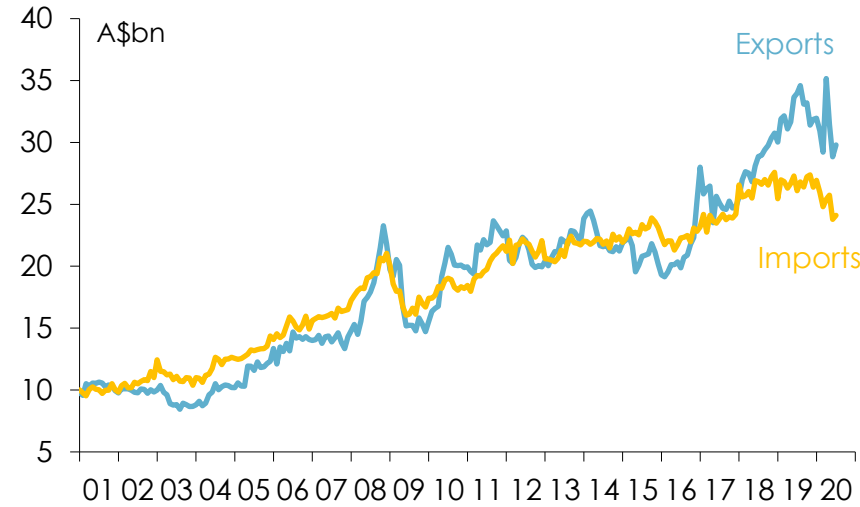
Note: Export volume data for Australia and Brazil derived by dividing export values (in US\$) from ABS and IGBE by the average US\$ price of Chinese iron ore imports.
Sources: World Steel Association; China National Bureau of Statistics; China General Administration of Customs; Refinitiv Datastream;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

Exports of most items except iron ore have fallen since March, but that's been offset by big falls in imports, especially services & consumer goods

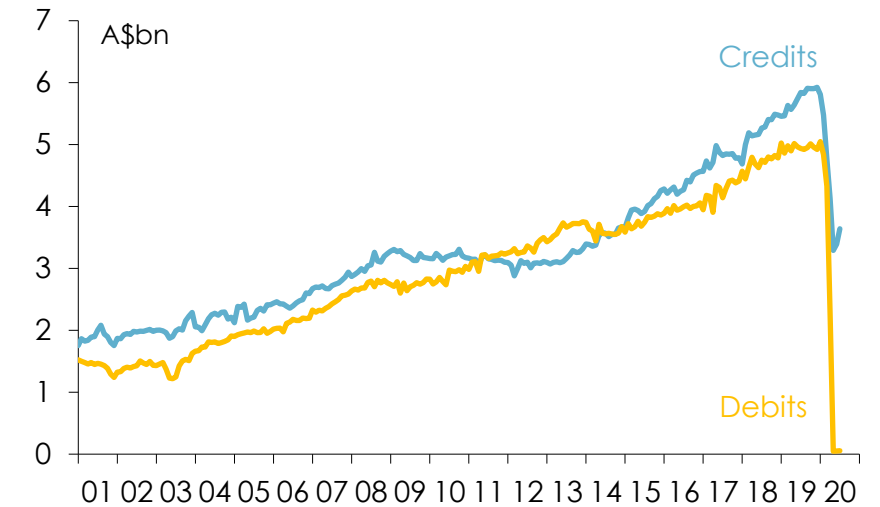
Iron ore and coal exports



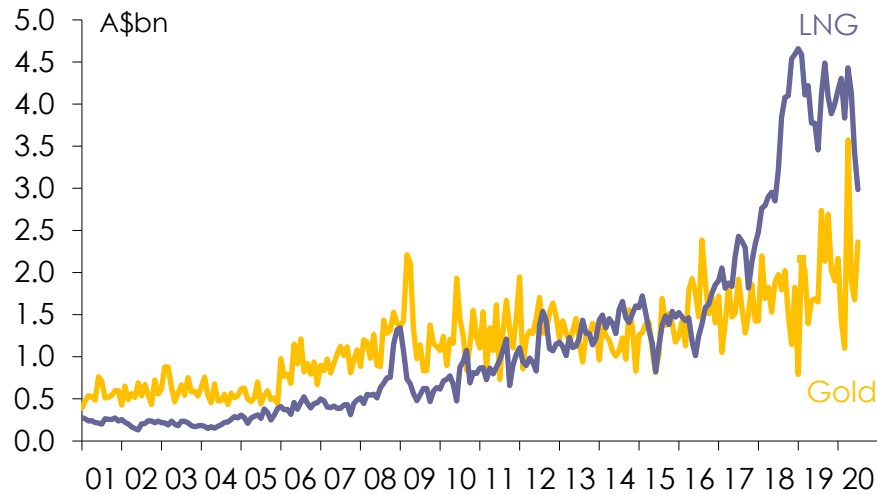
Merchandise exports and imports



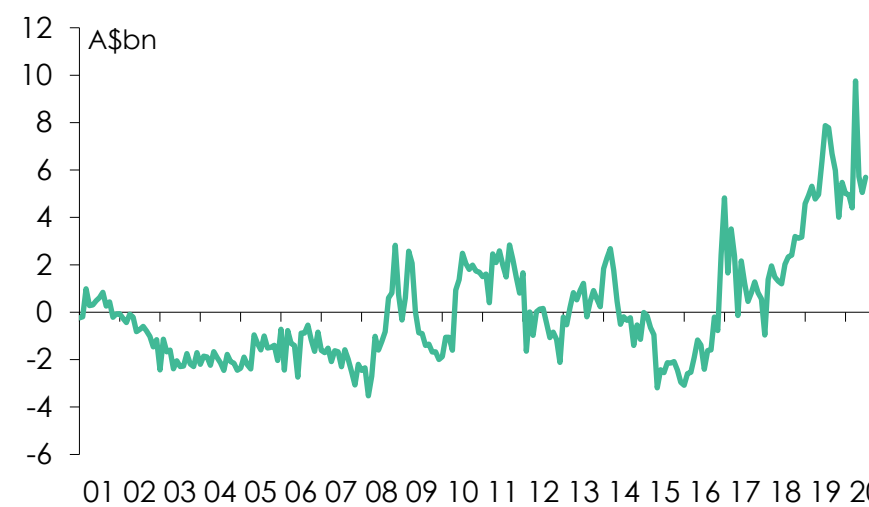
Tourism-related services trade



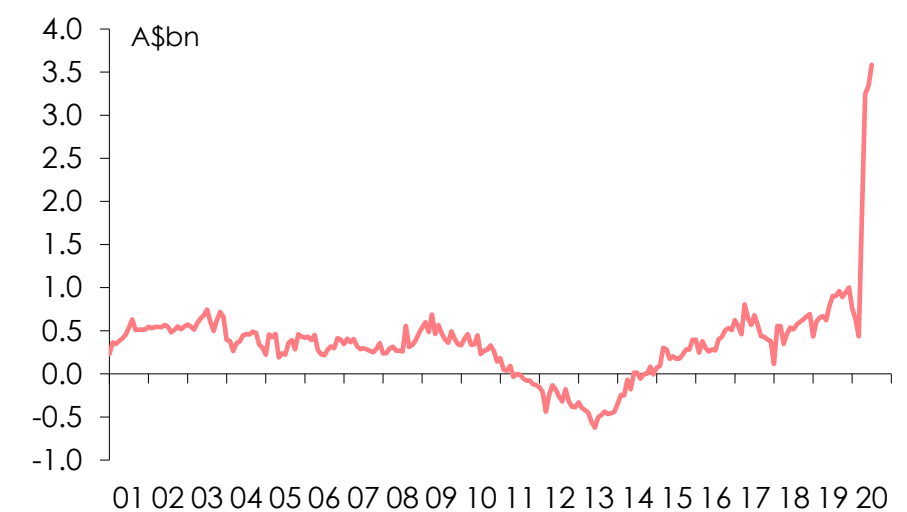
LNG and gold exports



Merchandise trade balance



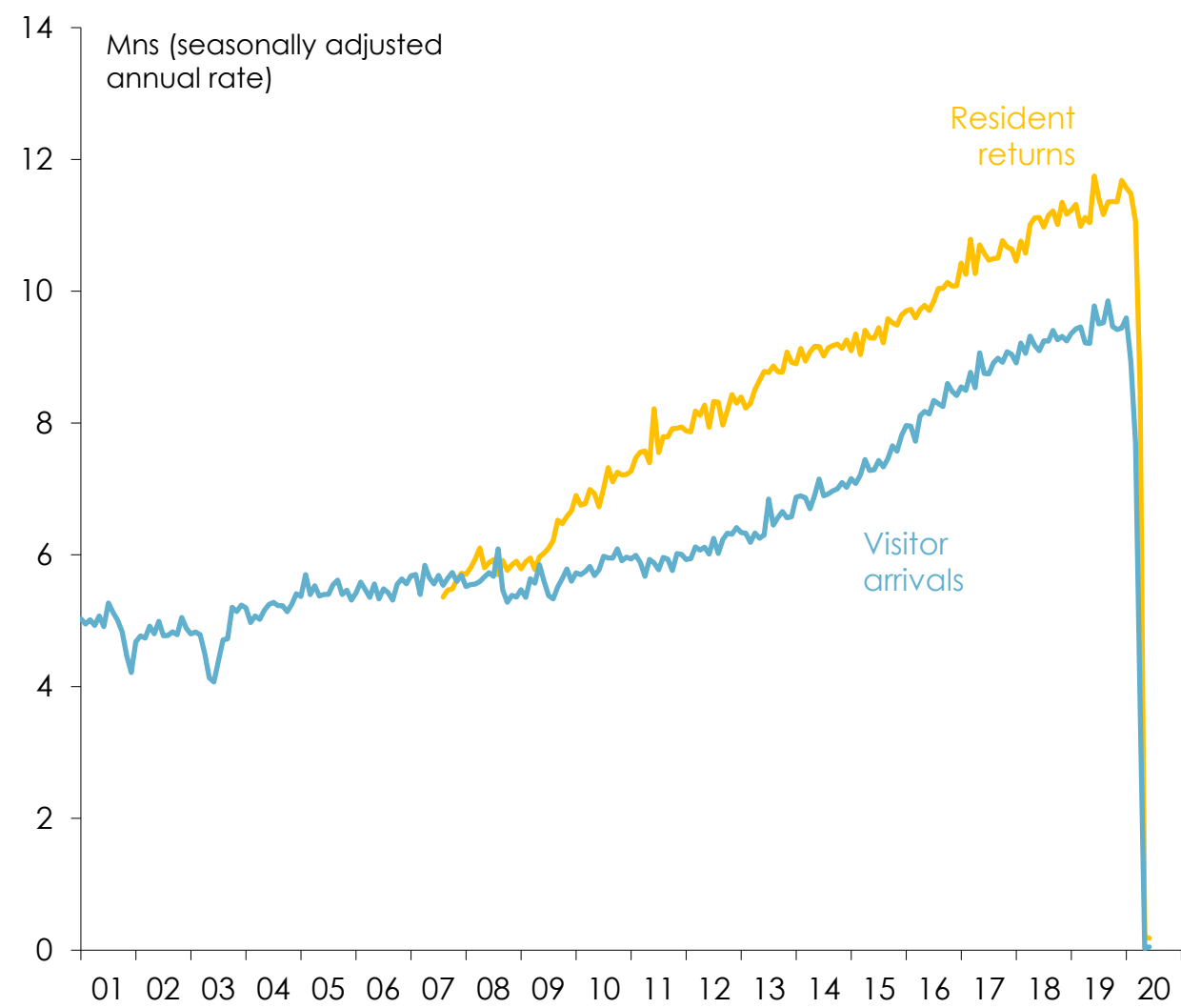
Tourism services trade balance



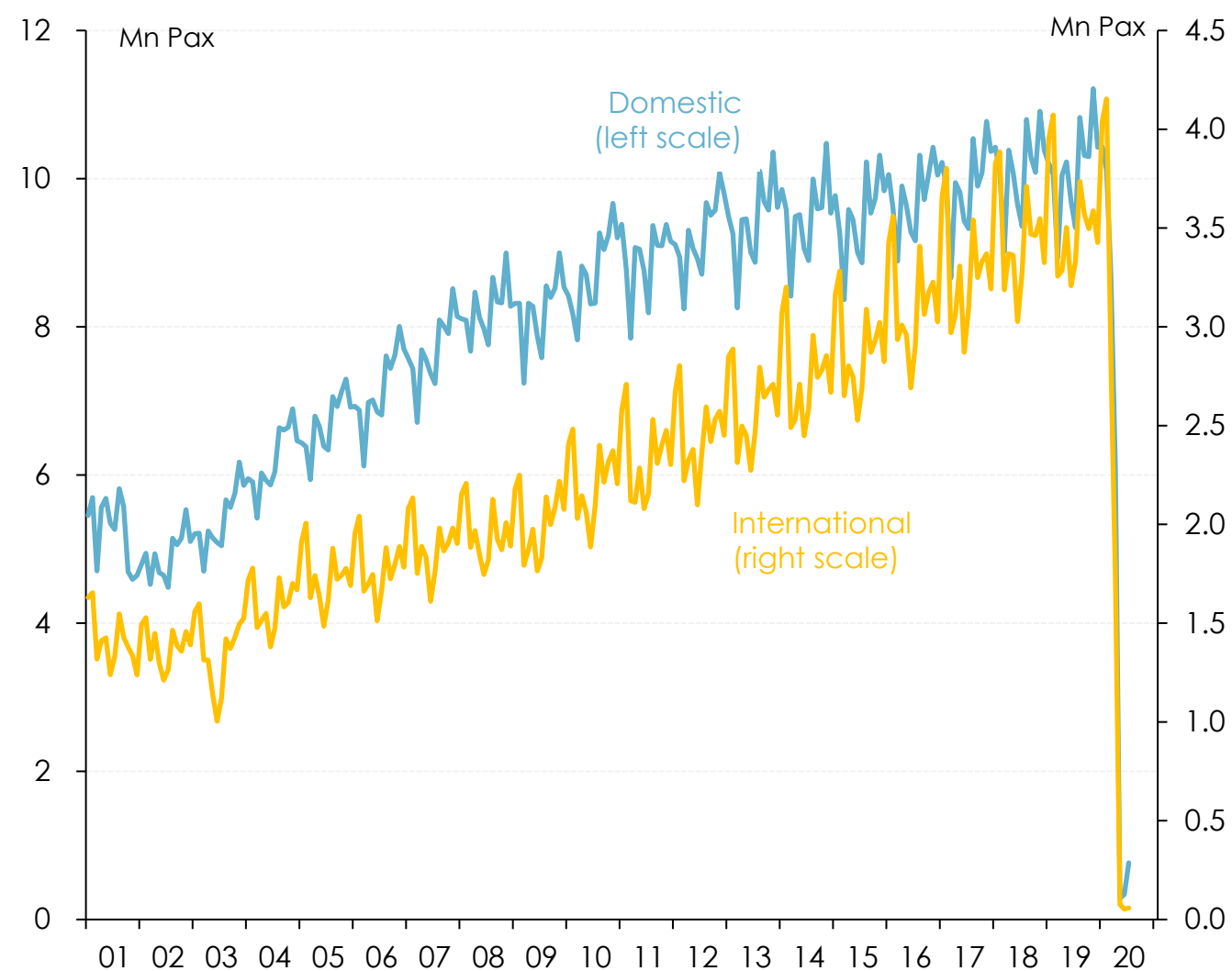
Source: ABS. Latest data are for June; data will be released on 3rd September.

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

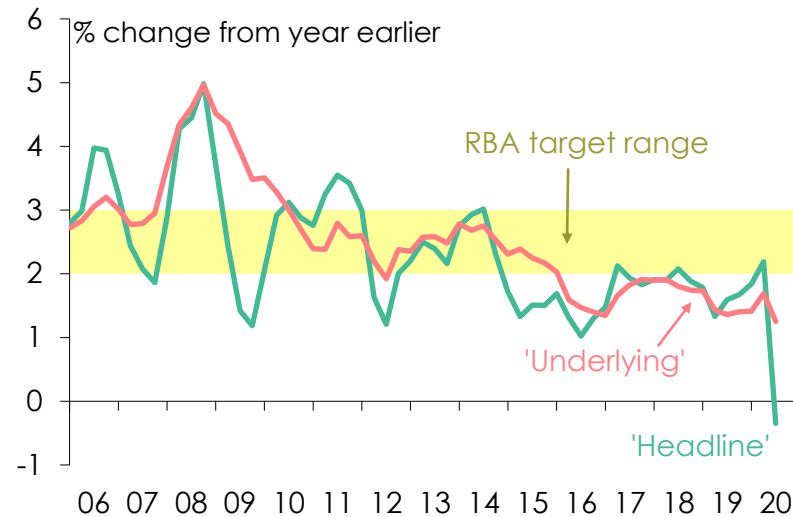


Note: The ABS has suspended publication of seasonally adjusted estimates of short-term visitor arrivals and resident returns, so published original estimates for April 2020 (and beyond) have been seasonally adjusted by Corinna using the same seasonal factors as for the corresponding month of 2019. Latest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

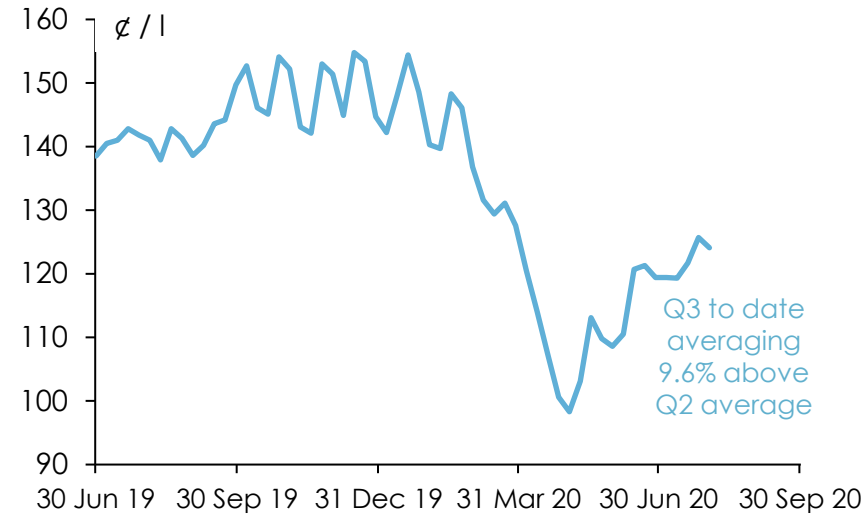
Sources: ABS; Bureau of Industry, Transport and Resources Economics (BITRE); Sydney Airport Ltd; Corinna.

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

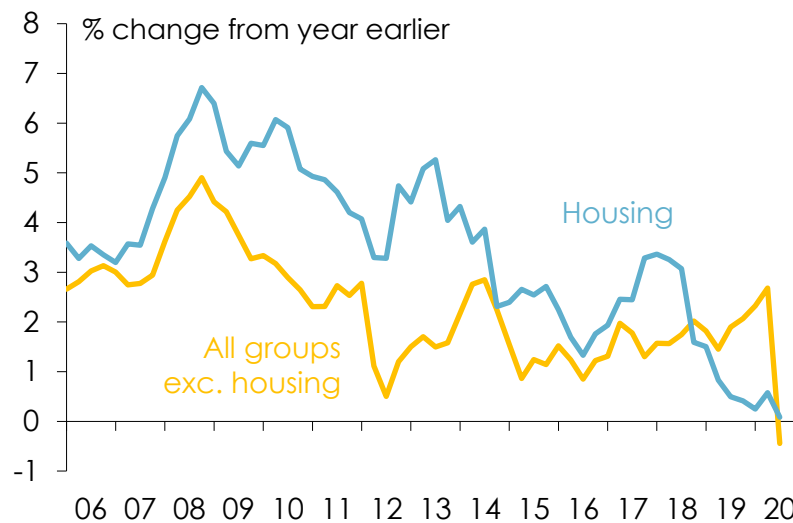
Consumer prices



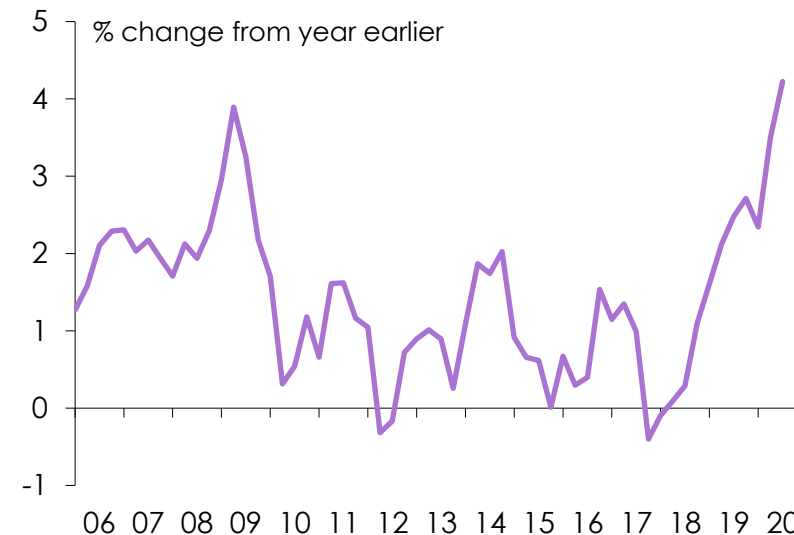
Retail petrol prices



Housing costs in the CPI



Retail sales implicit price deflator

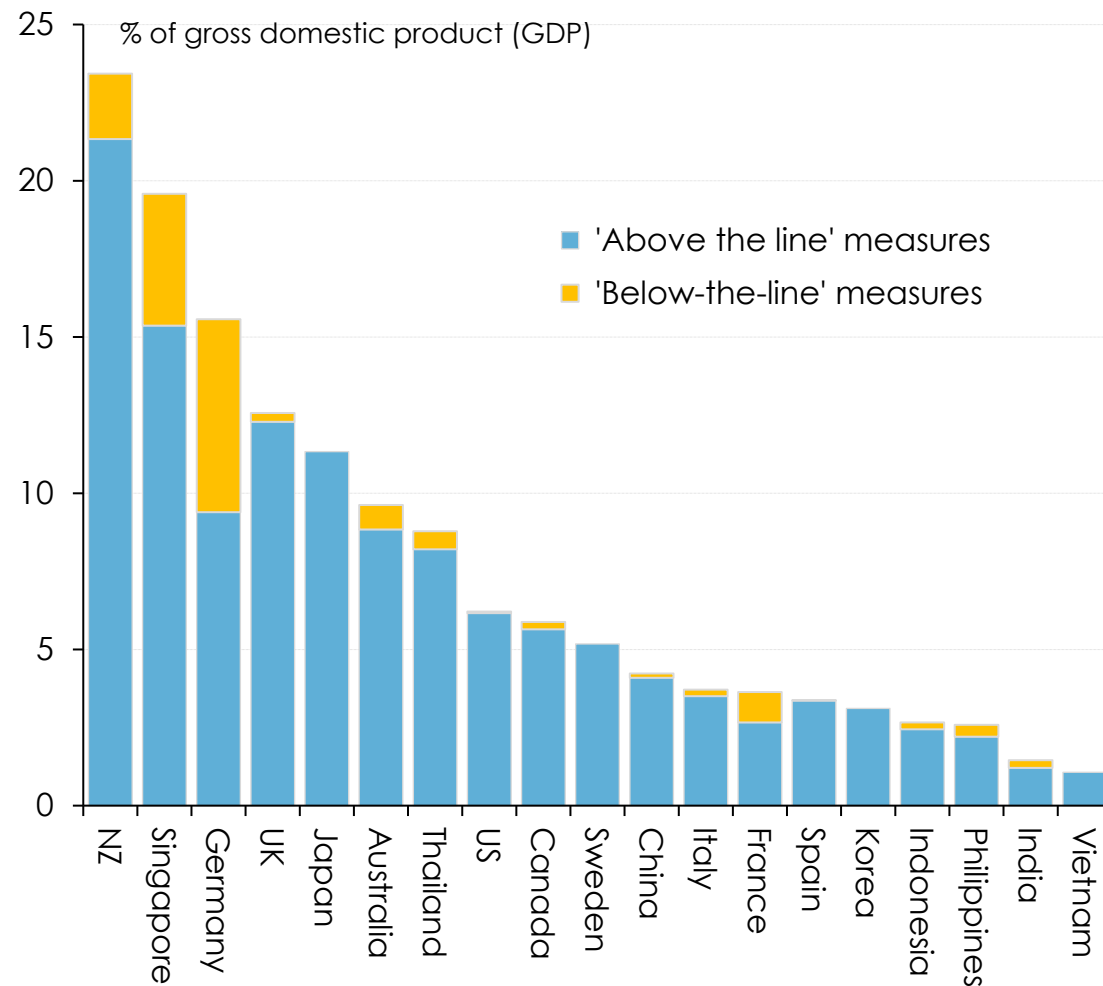


- ❑ The CPI fell (by 1.9%) in the June quarter, the largest quarterly decline since 1931 and only the 11th decline in 60 years
- ❑ The annual 'headline' inflation rate fell to -0.3%, the lowest since Q3 1997 (which was artificially induced by falling mortgage rates, which are no longer included in the 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; Australian Institute of Petroleum. The September quarter (Q3) CPI will be released on 28th October.

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

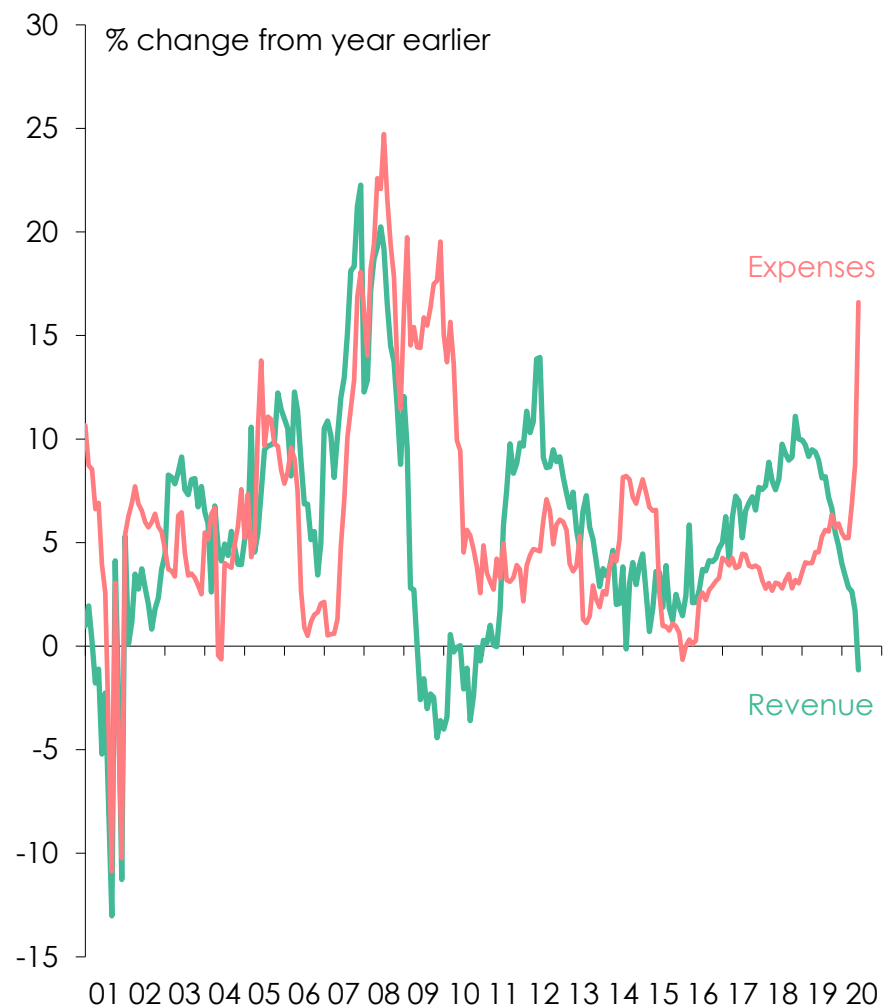


Note: 'Above the line' measures comprise additional or accelerated spending and deferred or foregone revenue. 'Below the line' measures comprise equity injections, loans, asset purchases and debt assumptions, but do not include loan guarantees or other contingent liabilities. Source: IMF, *Fiscal Monitor: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

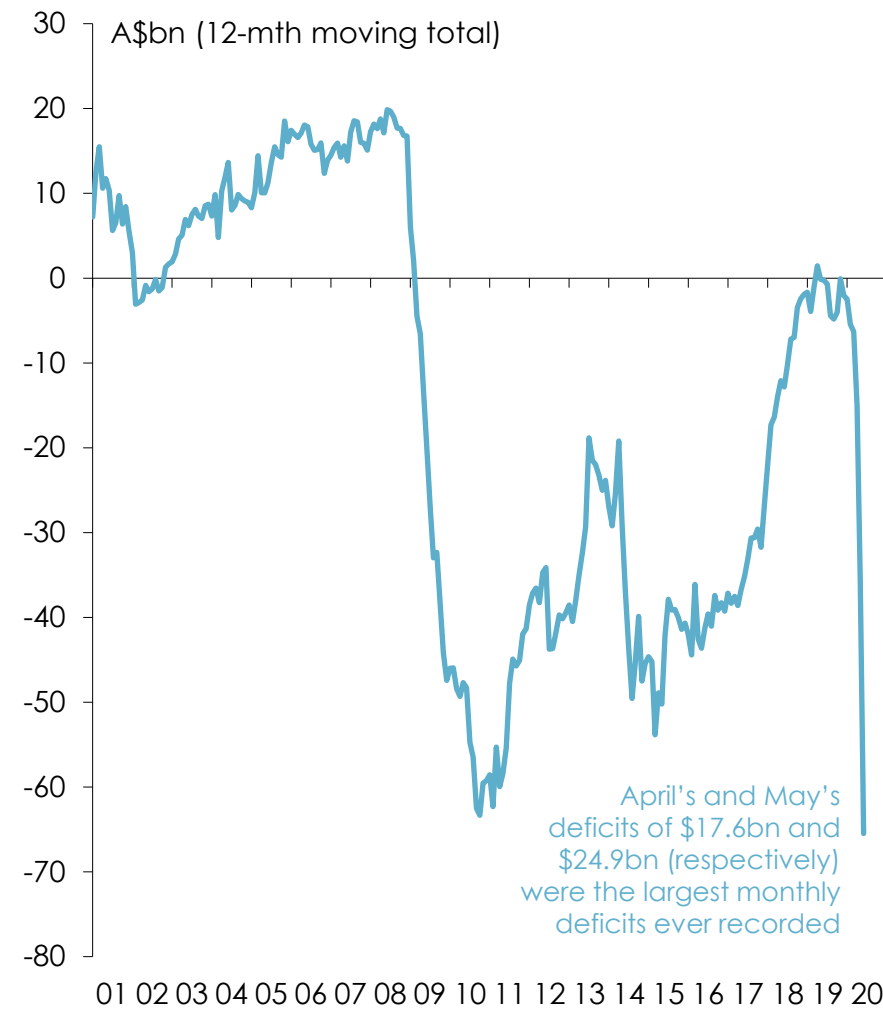
- ❑ Policy measures announced thus far by the Australian Government total \$192bn over FYs 2019-20 and 2020-21 or about 9% of one year's GDP – which is large by international standards (and double what was done during the GFC)
 - including an additional \$15bn for Jobkeeper announced this week in response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

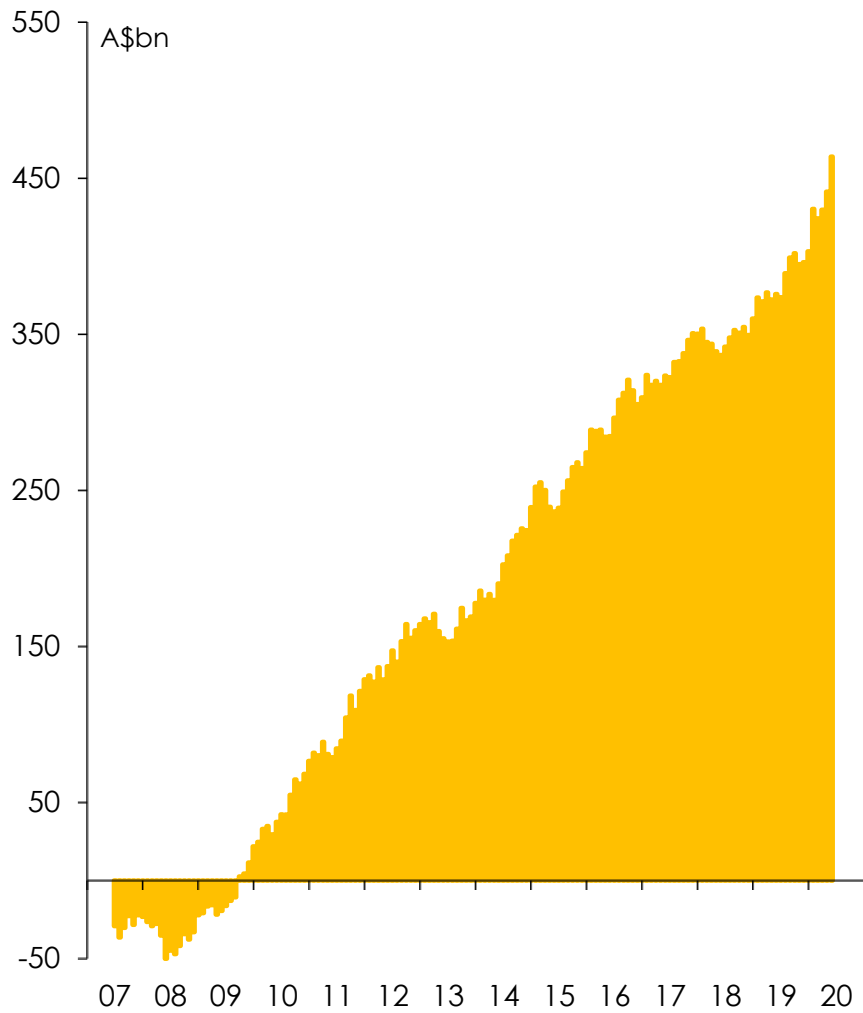
Australian Government revenue and expenses



Australian Government 'underlying' cash balance



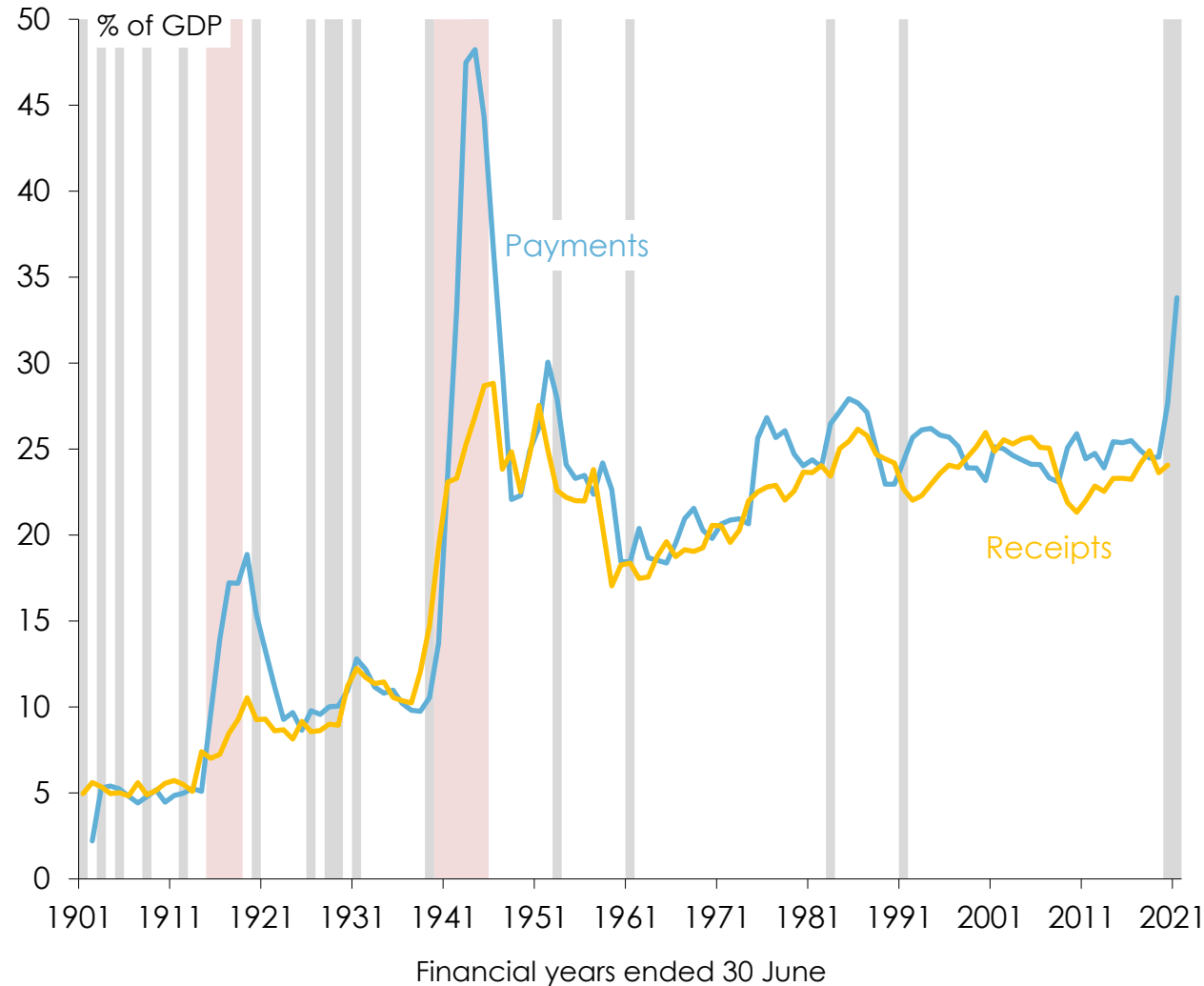
Australian Government net debt



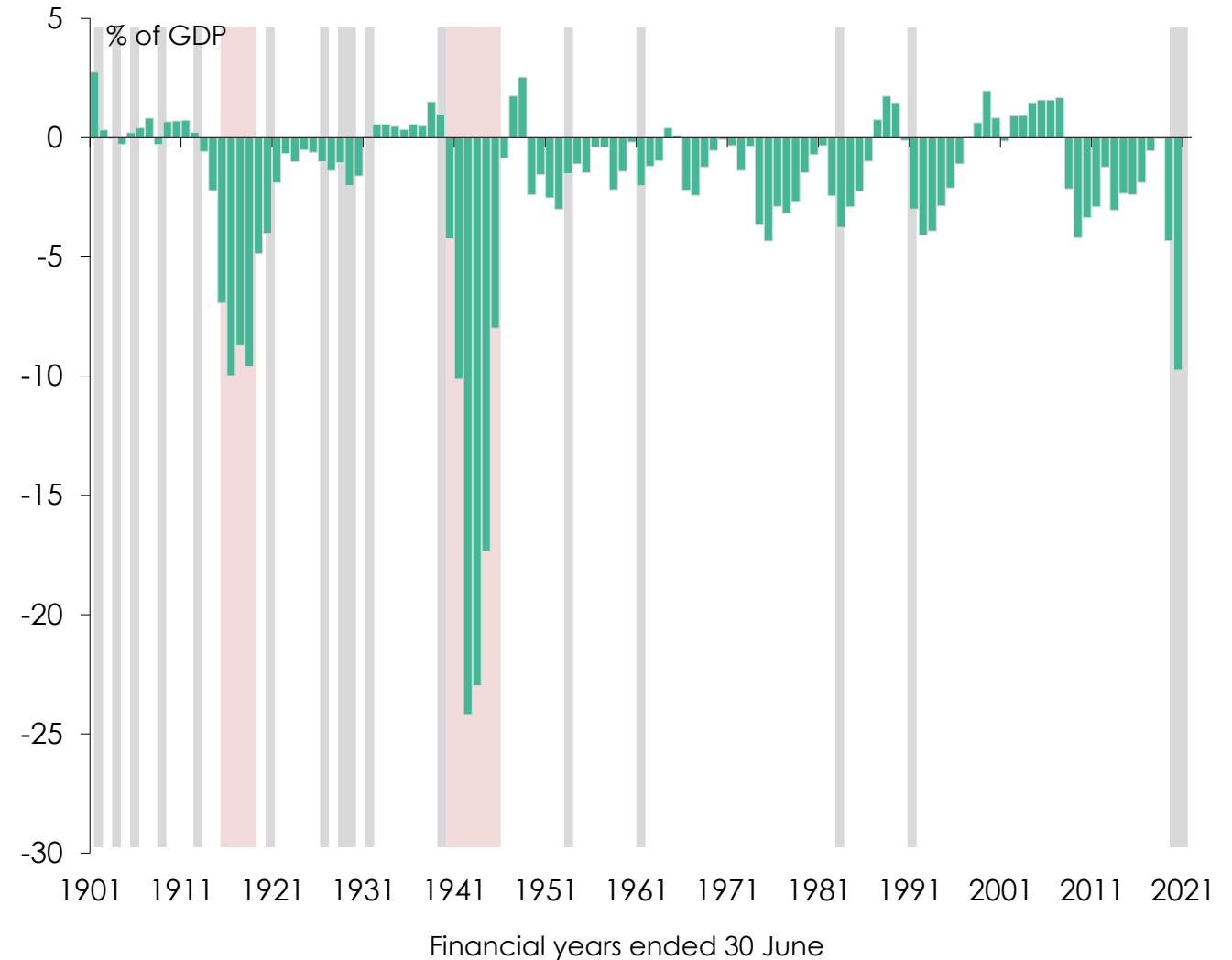
Note: Revenue and expenses are accrual accounting items. The 'underlying' cash balance is (cash) receipts minus payments, excluding transactions in financial assets for policy purposes and net earnings of the Future Fund. Net debt is total interest-bearing liabilities (government securities, deposits, loans and other borrowing) minus cash and deposits, advances paid, and (interest-bearing) loans, placements and investments. Source: Department of Finance.

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

Australian Government receipts and payments



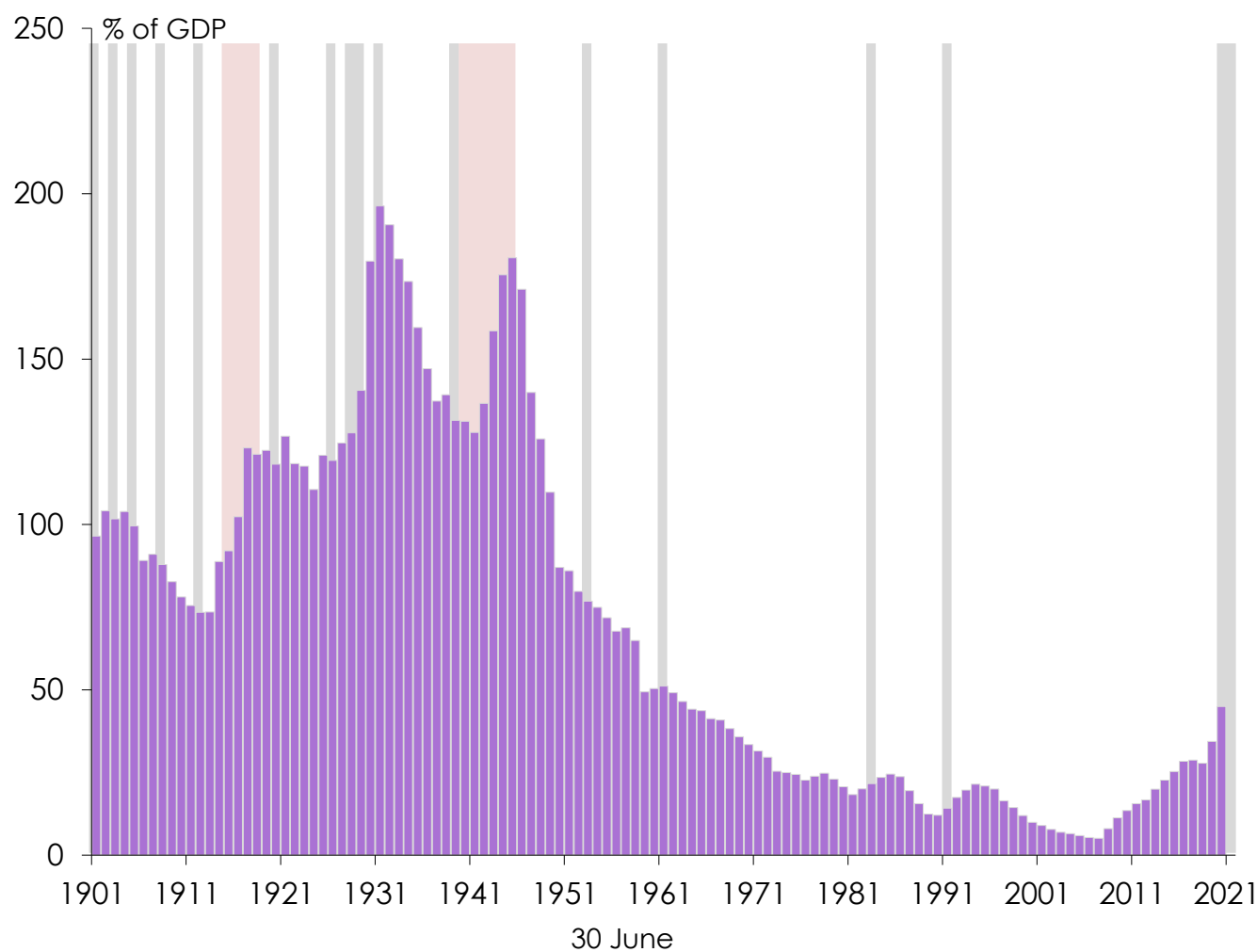
Australian Government budget deficit or surplus



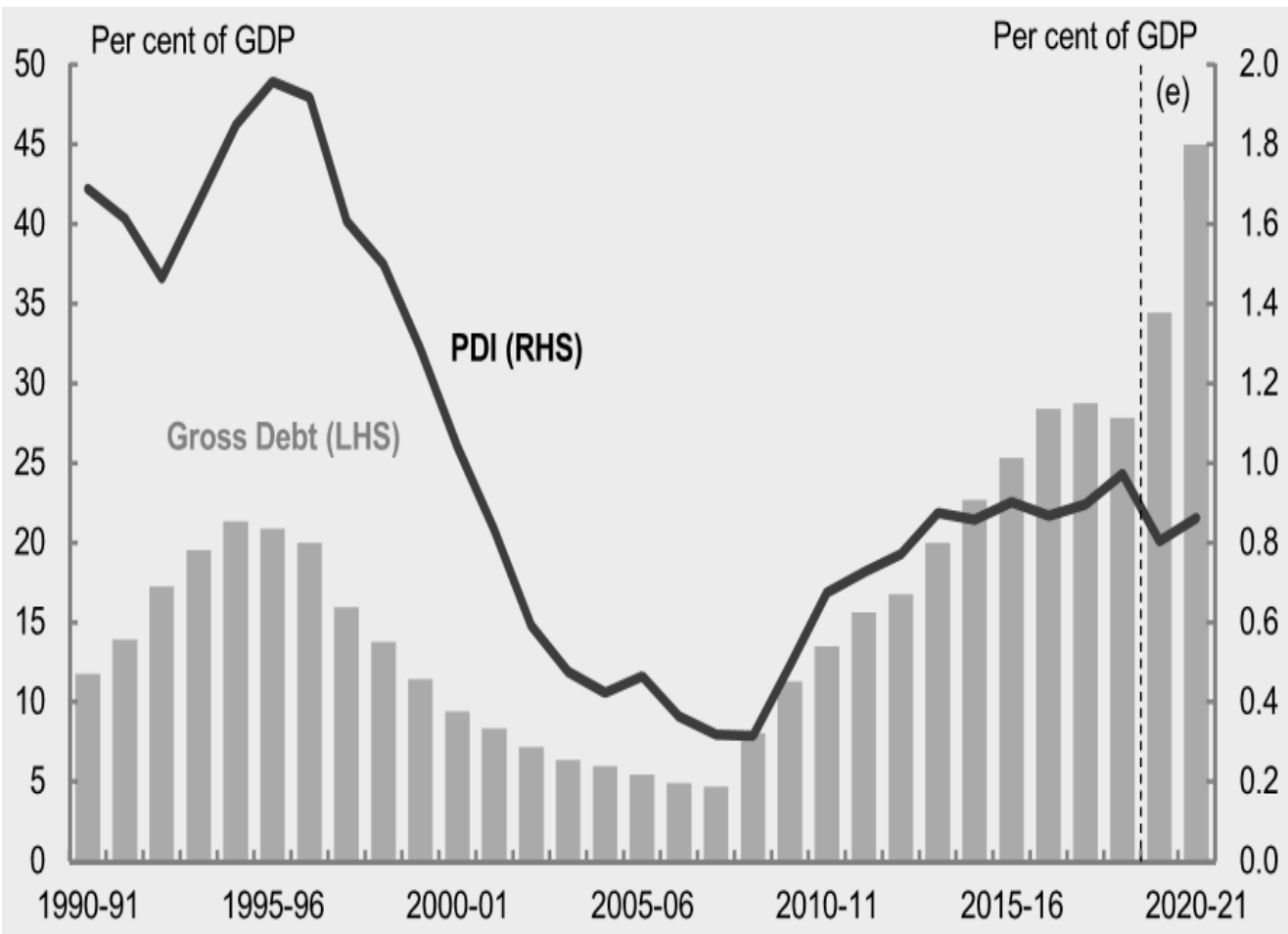
Note: Payments and the budget surplus or deficit are 'underlying' (that is, exclude 'net investments in financial assets for policy purposes') after 1989-90, when state governments became responsible for issuing their own debt, and 'headline' before that. Areas shaded in grey are fiscal years in which 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 (June 2020).

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



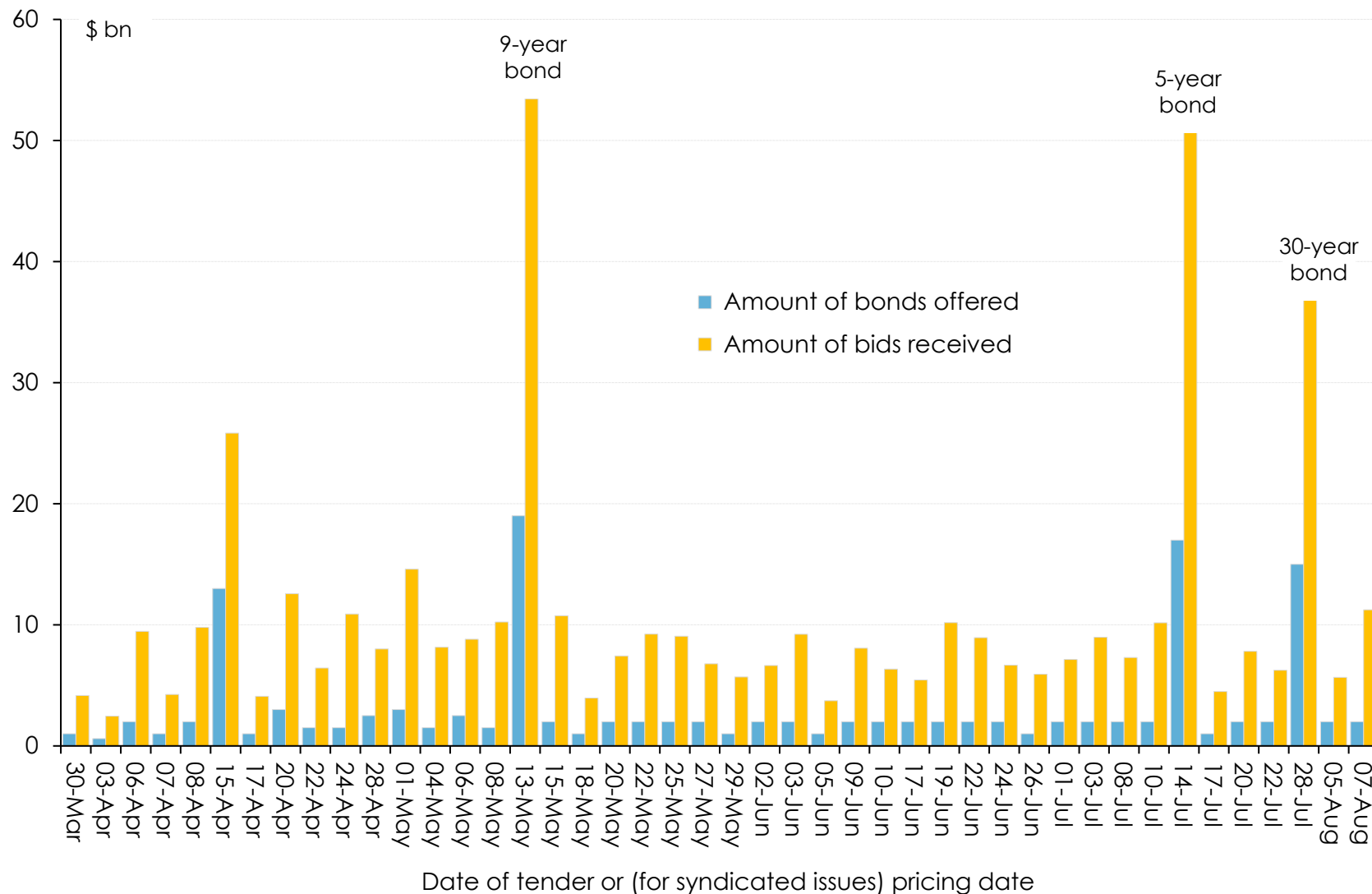
Gross public debt and public debt interest payments



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, *Mid-Year Economic and Fiscal Outlook (MYEFO)*, December 2019, and *Economic and Fiscal Update*, June 2020; International Monetary Fund, *Fiscal Monitor*, April 2020.

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

Australian government bond issuance since March 2020

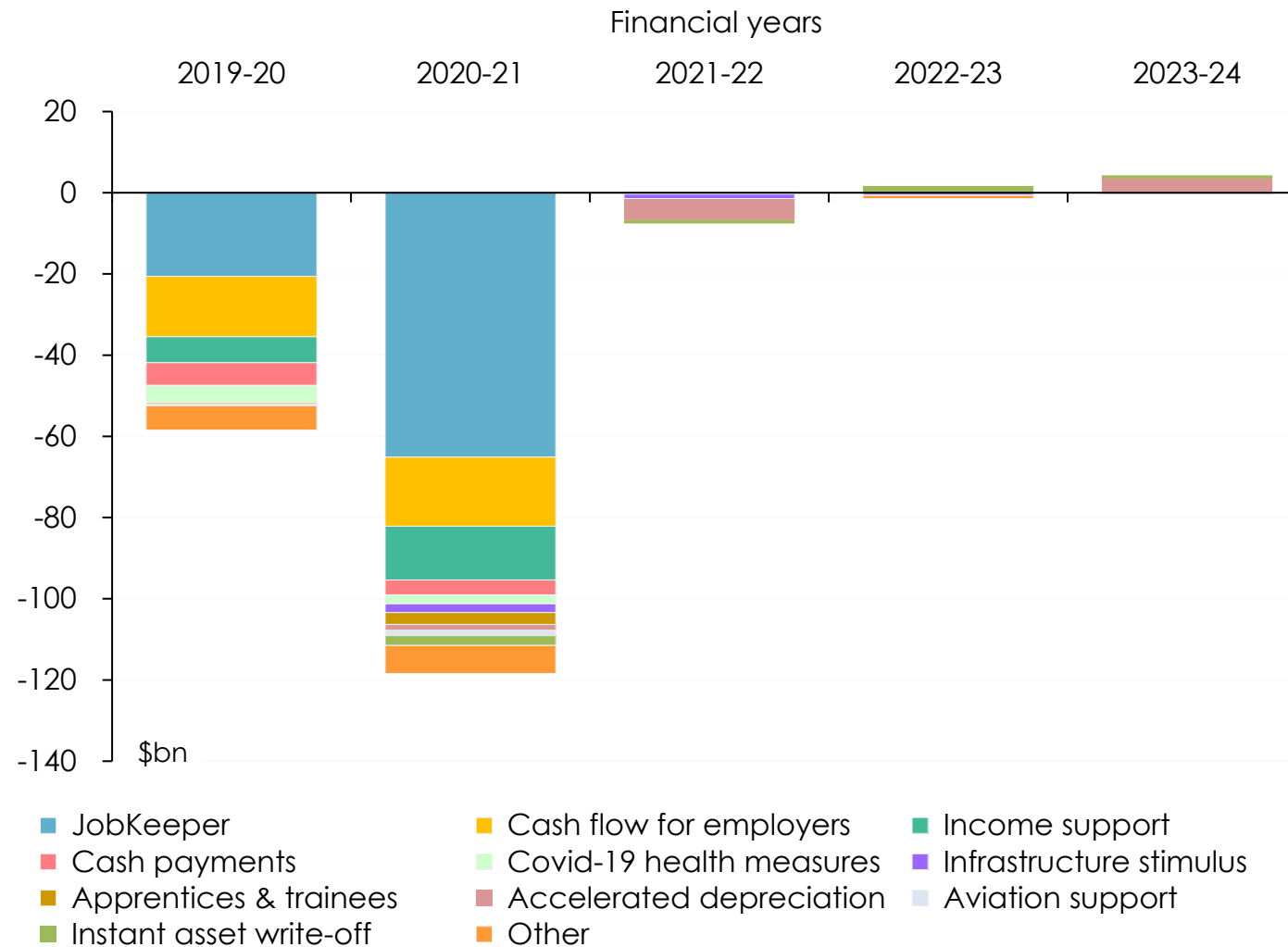


- Since 30th March, the Australian Office of Financial Management (which conducts the Government's borrowing programs) has issued \$135.6bn of Treasury bonds
- Based on the volume of bids received at bond tenders or for syndicated issues, the AOFM could have borrowed \$474bn (3½ times as much as it accepted) – with the highest yields on unsuccessful bids averaging 3bp above the highest accepted yields
- Last week, AOFM received offers worth \$36.8bn for \$15bn of 30½ year bonds carrying a coupon rate of 1.75% pa – the average yield on successful bids was 1.94% pa
- Yesterday the AOFM received \$11¼bn of bids for \$2bn of November 2024 bonds carrying a 0.25% pa coupon, with the average successful yield on successful bids being 0.34% pa

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

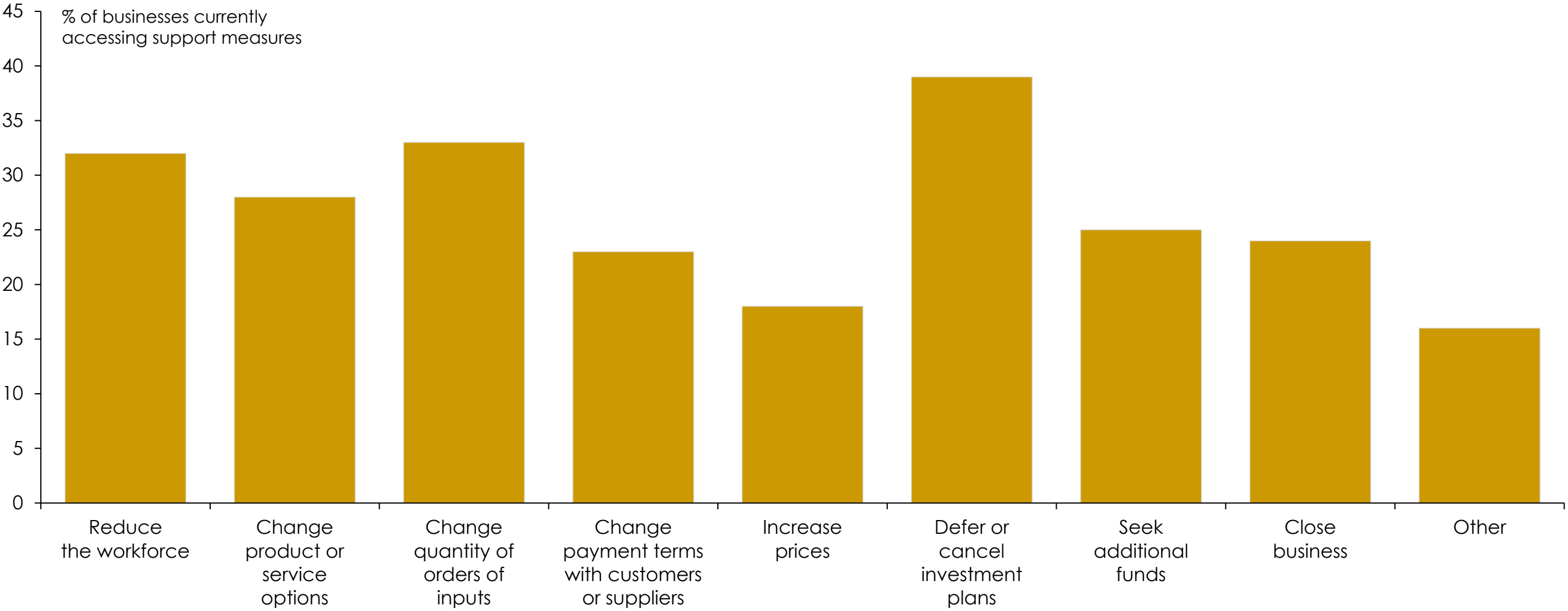
Impact of 'policy decisions' taken since last December on the Australian Government's 'underlying' cash balance



- ❑ '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 $\frac{3}{4}\%$ in 2019-20, and will boost it by around $4\frac{1}{4}\%$ 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
- ❑ Last month'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 (see slide 93)

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 Indicators, Business Impacts of COVID-19, July 2020 (based on survey conducted between 15th and 23rd July).

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 |

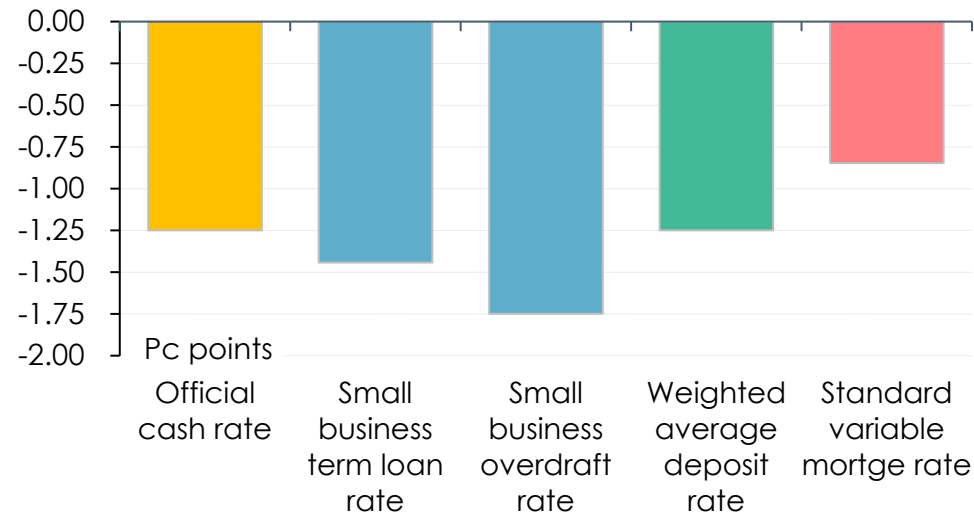
| Rates from 2024-25 | New thresholds from 2024-25 |
|-----------------------|-----------------------------|
| Nil | Up to \$18,200 pa |
| 19 % | \$18,201 – \$45,000 pa |
| 30 % | \$45,001 – \$200,000 pa |
| 45 % | Above \$200,000 pa |
| Low income tax offset | Up to \$700 |

- ❑ This week the Government announced extensions to its (wage subsidy and income support schemes
 - ‘JobKeeper’ will be extended from 28th September to 28th March 2021, but fortnightly payments will step down from \$1500 to \$1200 (or \$750 for people working < 20 hrs per week before 1st March 2020) from 28th September, and then to \$1,000 (\$650 for part-time workers) from 4th January
 - the ‘Coronavirus Supplement’ paid to JobSeeker recipients (and some others) will be extended beyond 27th September until 31st December, but at a lower fortnightly rate of \$300 (cf. \$550 currently) – although recipients will be allowed to earn \$300/fortnight (cf. \$200 currently)
- ❑ Treasurer Josh Frydenberg has 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’
- ❑ These 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 a 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 – slide 50)
 - whereas the same dollar amount spent (eg) on infrastructure, or on cash handouts to low-income earners who don’t pay tax, would boost demand by a larger amount

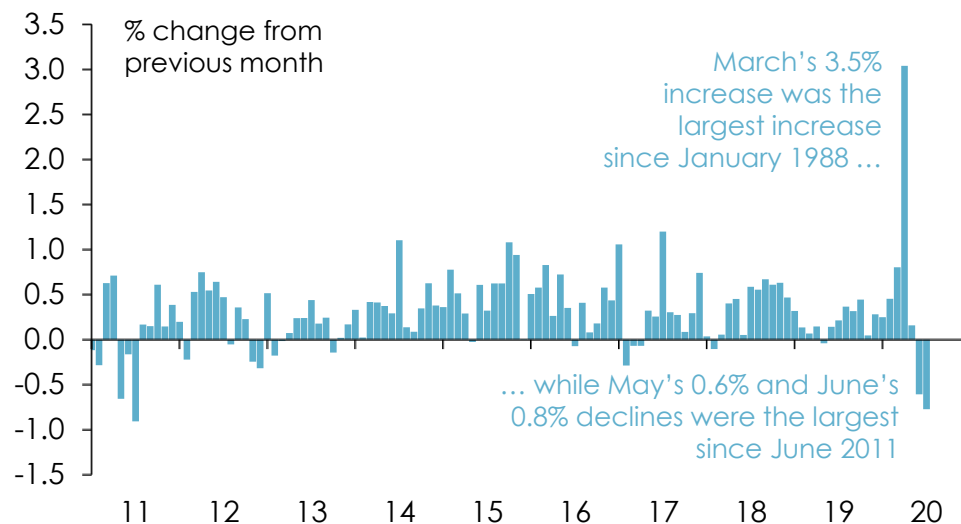
Source: Australian Government, 2019-20 Budget Paper No. 1, *Budget Strategy and Outlook*, April 2019.

For now at least, banks are 'part of the solution', not 'part of the problem'

Changes in interest rates since June 2019



Business credit outstanding

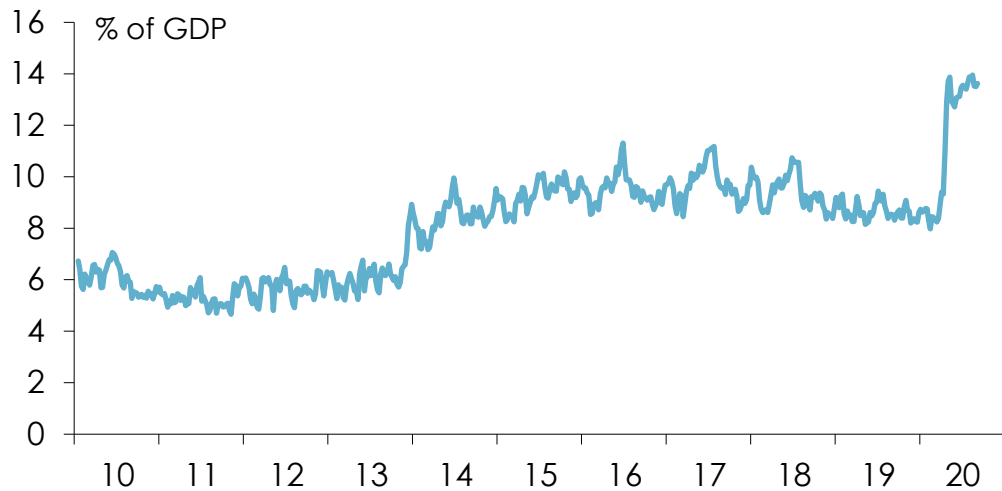


- ❑ Banks have cut interest rates on small business loans by more than the official cash rate since June last year (when the RBA started cutting rates again)
- ❑ Banks have extended 'repayment holidays' to business and home mortgage borrowers who request it (about 12% of mortgages and 20% of SME loans)
 - although it is important to note that under these arrangements interest payments are deferred and capitalized, not foregone
- ❑ These 'repayment holidays' are due to expire at end-September, but banks have announced that they would be extended for up to four months for those customers who were still experiencing difficulties but have good prospects of eventually repaying
- ❑ Major banks have cut or deferred dividends
- ❑ At end-2019, the Australian banking system had a Common Equity Tier 1 capital ratio of 11.3% of risk-weighted assets - well above the 10.5% required for major banks since 2017
 - APRA will allow banks CET1 ratios to drop below the 2017 requirements during the Covid-19 period provided they remain above other minimum prudential capital requirements
- ❑ Banks may be hit by increased loan impairment charges after 30th September

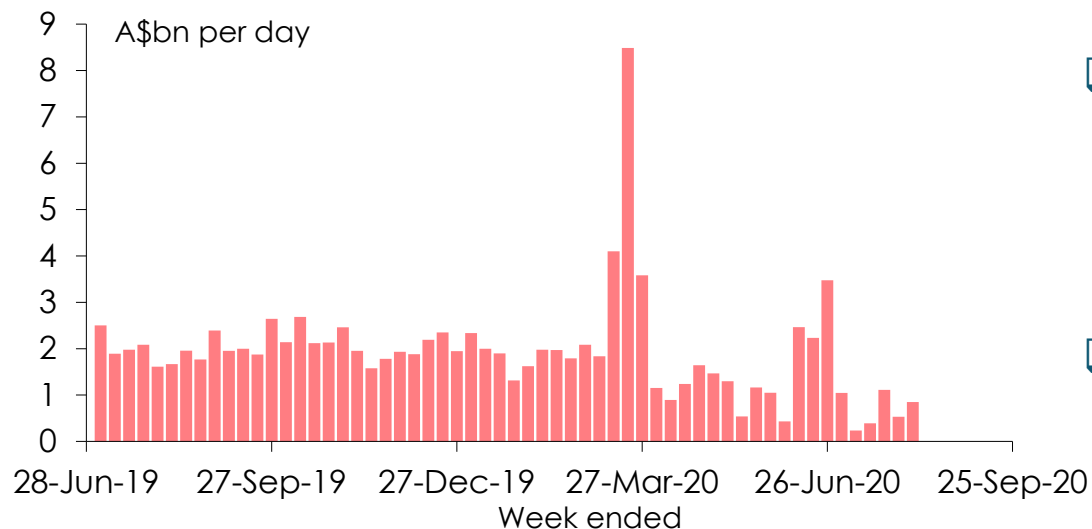
Source: Reserve Bank of Australia.

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 again kept its cash rate target at 0.25% at this week's Board meeting, 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 its latest forecasts published on Friday suggest is at least 2½ years away (see slide 56)
 - RBA again re-iterated that it has 'no appetite' for negative rates, or for 'monetary financing of deficits' (see slide 98)
- ❑ The RBA restated its commitment to keeping 3-year yields at 0.25%
 - the RBA purchased \$1bn of bonds this week, for the first time in three months, with an immediate (downward) impact on 3-year yields (see next slide)
 - RBA assets are now equivalent to 13½% of GDP (cf. BoC 23½%, US Fed 32½%, BoE 37%, ECB 54½%, BoJ 122% - see slide 26) and RBNZ 17¾%
- ❑ RBA provided additional liquidity through 'open market operations' to prevent disruption of credit markets in March
 - RBA repo transactions averaged just under \$1 bn 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
- ❑ 'Term Funding Facility' to provide up to \$155 bn at 0.25% pa to lending institutions for increased lending, especially to businesses with annual turnover of less than \$50 mn
 - to date \$28.6 bn has been provided through this facility
 - the RBA expects larger drawings as existing bank funding 'rolls off'

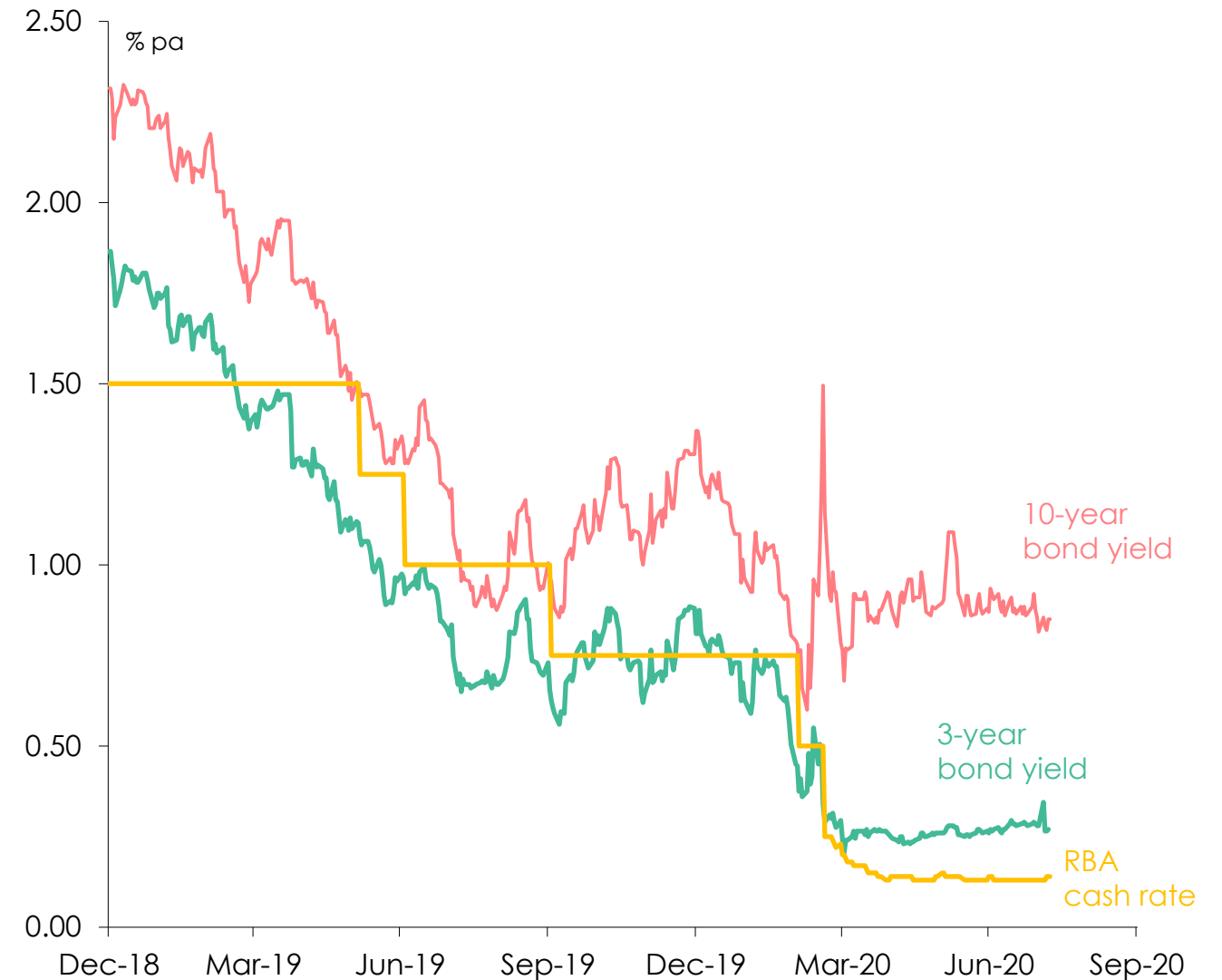
The RBA bought \$1bn of bonds in the secondary market this week – for the first time in 3 months – with an immediate effect on 3-year yields

RBA open market bond purchases



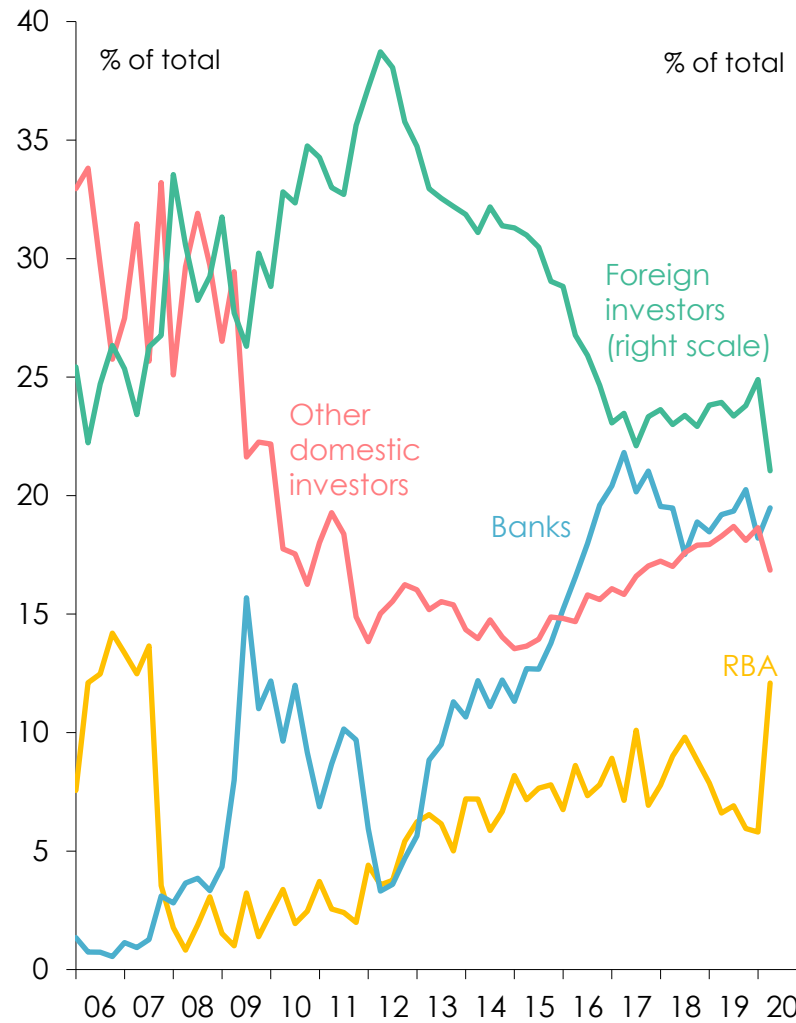
Source: Reserve Bank of Australia. Data up to 7th August.

Interest rates

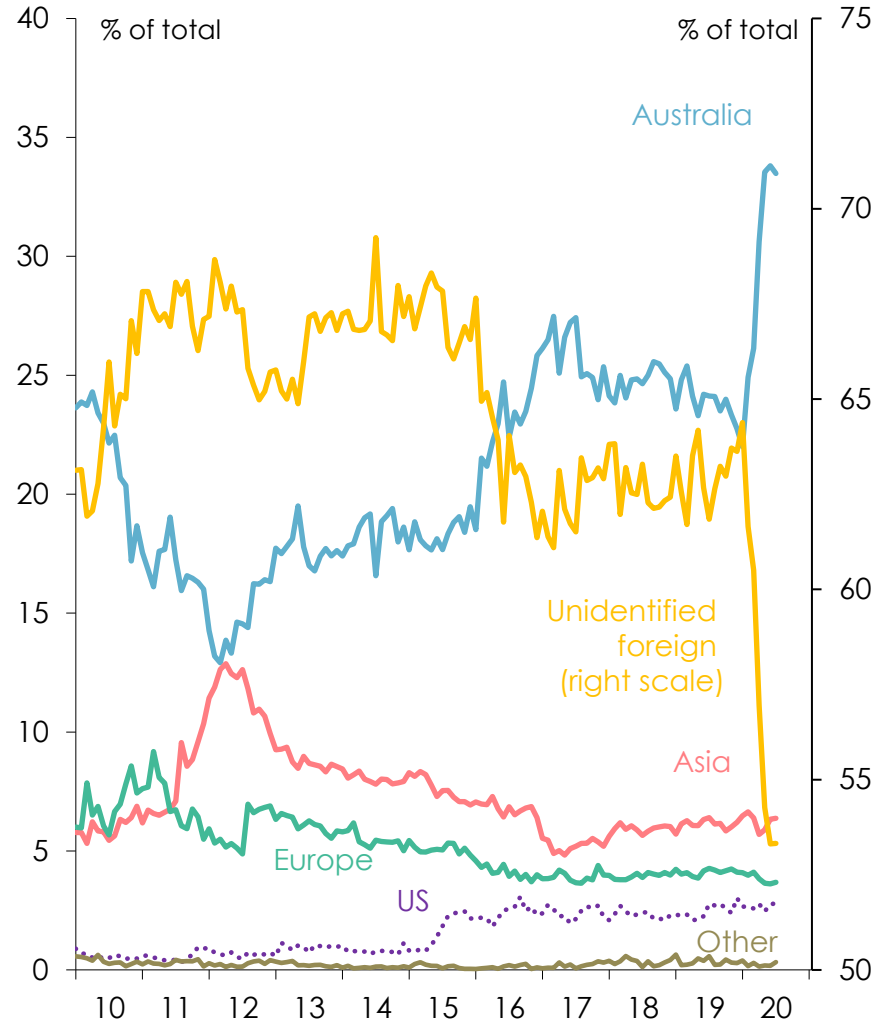


The RBA in effect more than absorbed the increase in Commonwealth and State debt, and sales by foreign investors, during the March quarter

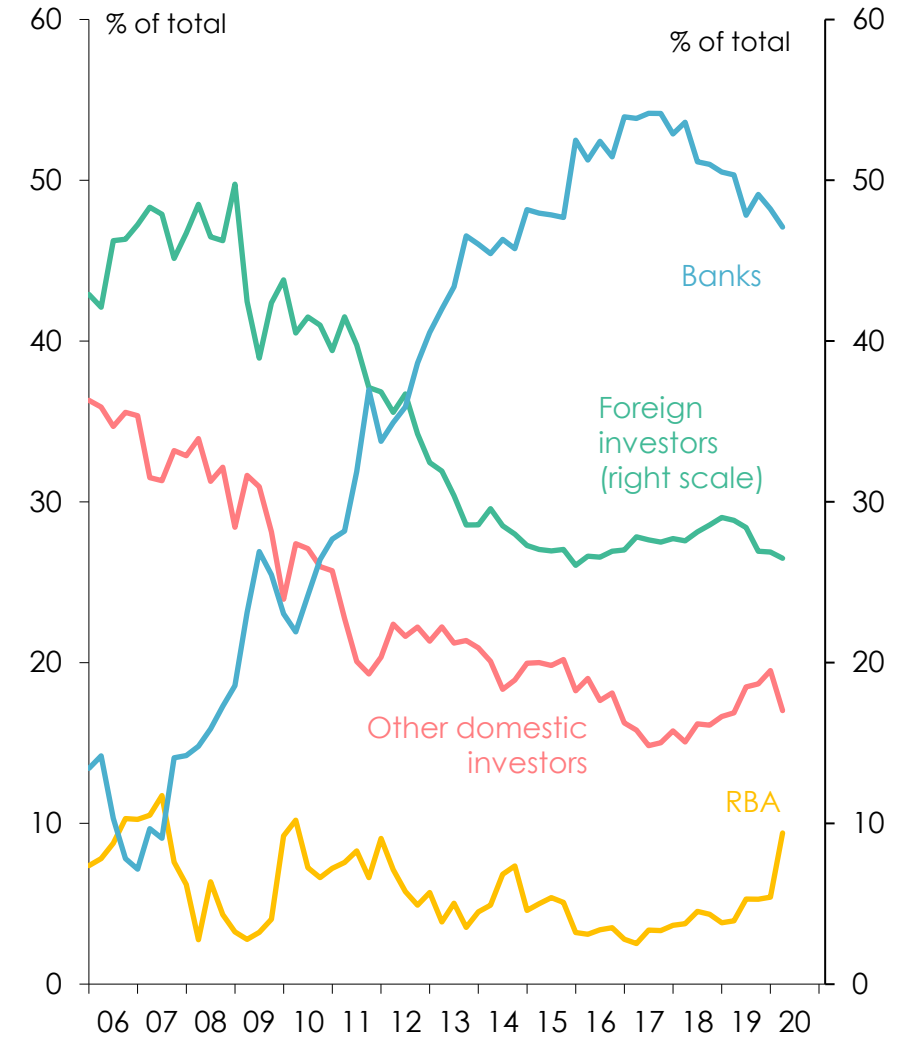
Holder of Australian Government bonds



Nationality of Australian Government bond holders



Holder of State and Territory Government bonds



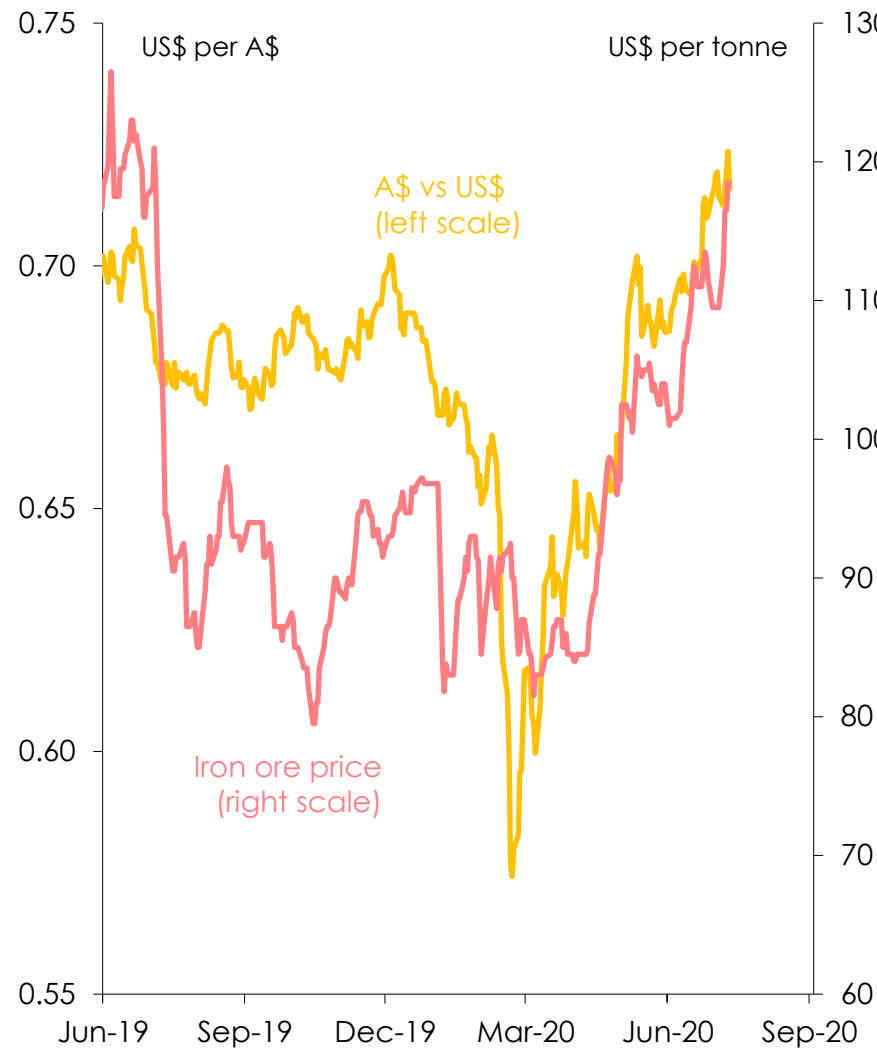
Sources: ABS (Finance & Wealth Accounts); Australian Office of Financial Management. June quarter data will be released on 24th September.

The RBA Governor has again ruled out negative interest rates - and the application of 'modern monetary theory'

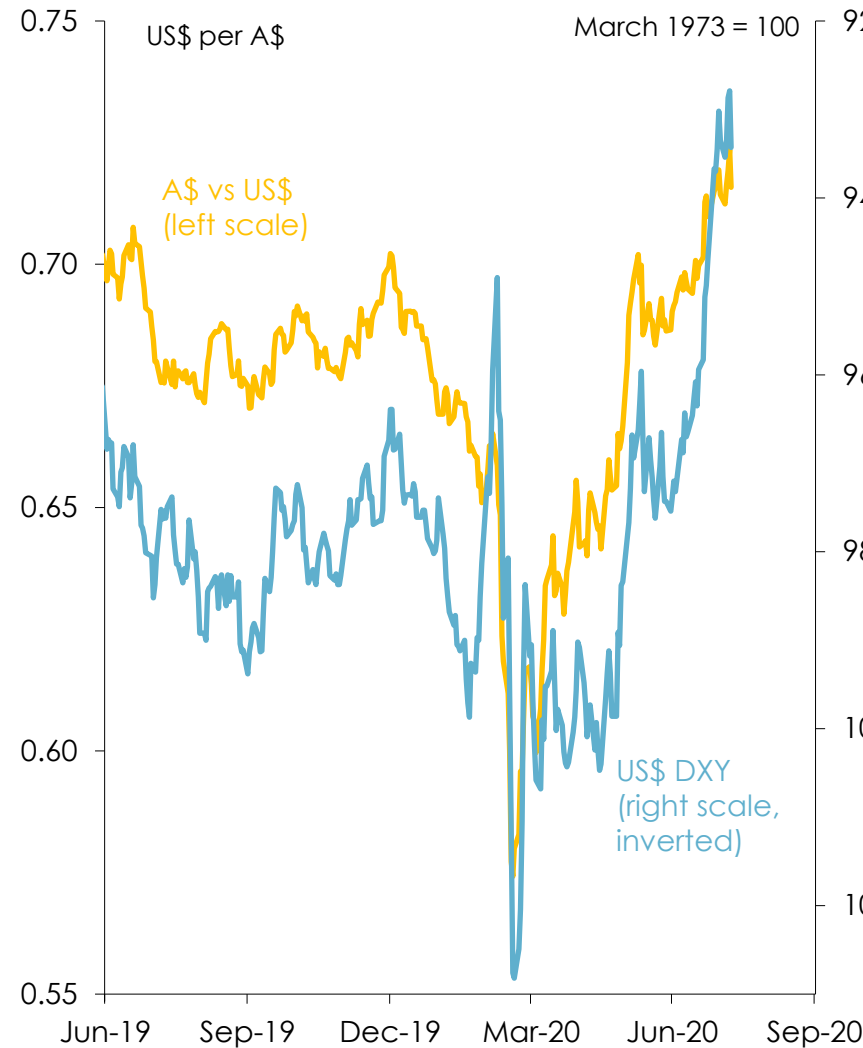
- ❑ **Speaking last month, Governor Lowe said “negative interest rates in Australia are extraordinarily unlikely”**
 - “They can cause stresses in the financial system that are unhelpful for the supply of credit. They can also encourage people to save more, rather than spend more, so they can be counter-productive from that perspective too”
- ❑ **Governor Lowe also dissed ‘modern monetary theory’ (MMT) – though without referring to it by name**
 - “For some, this idea is seen as a way of avoiding financing constraints – it is seen as holding out the offer of a free lunch of sorts”
 - “The reality, though, is there is no free lunch. The tab always has to be paid and it is paid out of taxes and government revenues in one form or another”
- ❑ **How ‘the tab is paid for’ depends, according to Governor Lowe, on ‘the arrangements in place’**
 - if money-financed government spending was “successful in stimulating the economy” and started to push inflation up, and interest rates weren’t raised to counter that, the tab would be paid “through the inflation tax that the community pays”
 - if the government were to pay the IOU issued to the central bank along with any accumulated interest at some point, “this repayment would need to be funded by future taxes”
 - if the IOU was not interest-bearing and wasn’t repaid, “the central bank would start accumulating losses as the interest rate it paid on its deposit liabilities increased and there was no offsetting income” which “would lead to a decline in dividends to the government and possibly a future recapitalization of the central bank” both of which “have to be funded through tax revenue”
 - or, if the general level of interest rates were raised to counter inflation, but the low rate on deposits at the central bank maintained, that “would effectively amount to a tax on the banking system”
- ❑ **Governor Lowe also addressed the proposal by Stanley Fischer et al that monetary financing of budget deficits could be ‘welfare enhancing’ when governments are unable to borrow ‘on reasonable terms’ and conventional monetary policy options have been exhausted, provided that the central bank (rather than the government) determined the amount of monetary financing and the conditions under which it is provided**
 - “there are likely to be very significant challenges in maintaining this type of safeguard over time”
 - and in any case this “is not relevant to the situation we face in Australia”

The A\$ topped US72¢ during the week, on the back of surging iron ore prices and a weaker US\$, but fell back after Friday's US jobs report

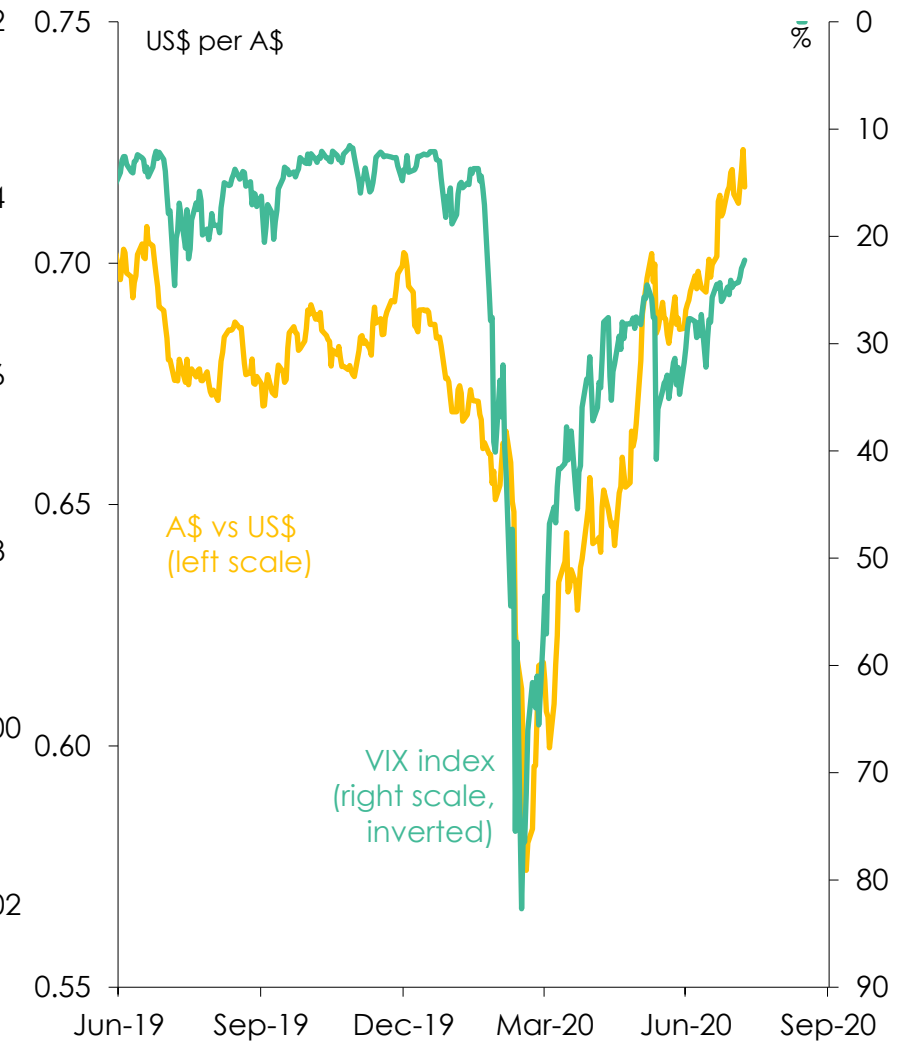
A\$-US\$ and spot iron ore prices



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



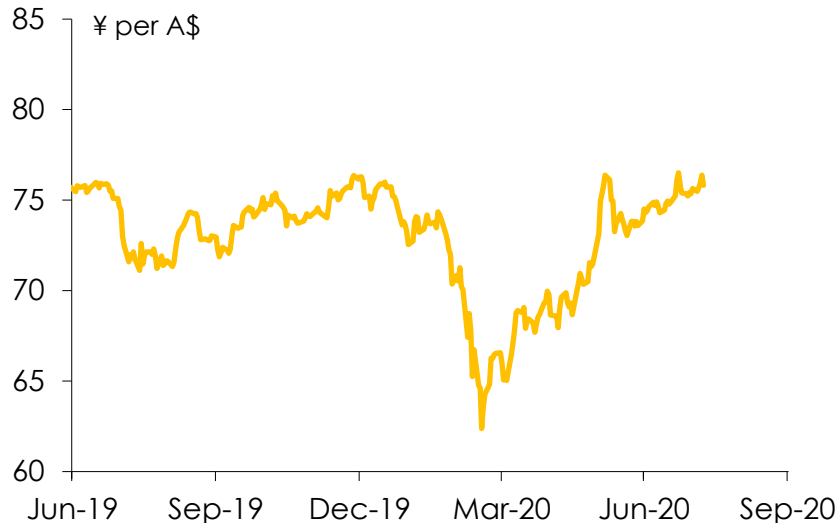
A\$-US\$ and US equity market volatility



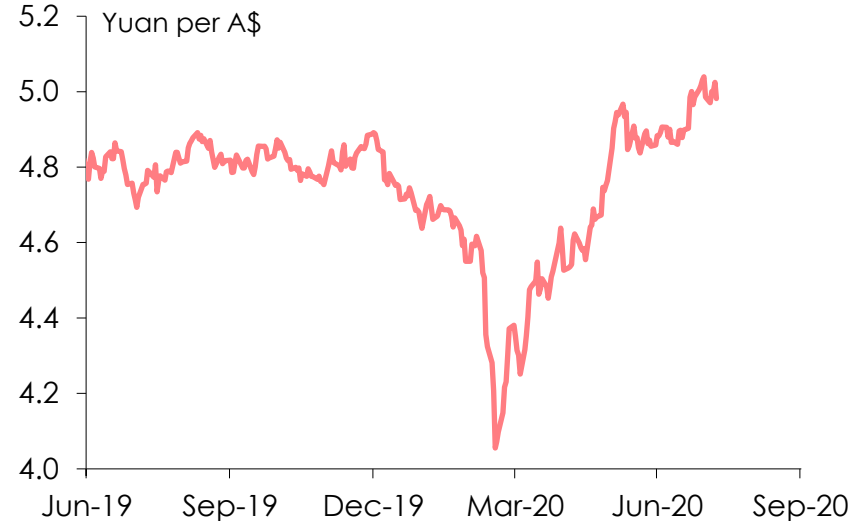
Note: The VIX index is a measure of the implied volatility of S&P500 options and is widely interpreted as an indicator of investor risk appetite or aversion. For an explanation of the factors underpinning the strength in the iron ore price see slide 82. Source: Refinitiv Datastream. Data up to 7th August.

The A\$ continued its rise against Asian currencies and the NZ\$, but moved sideways against the euro and sterling

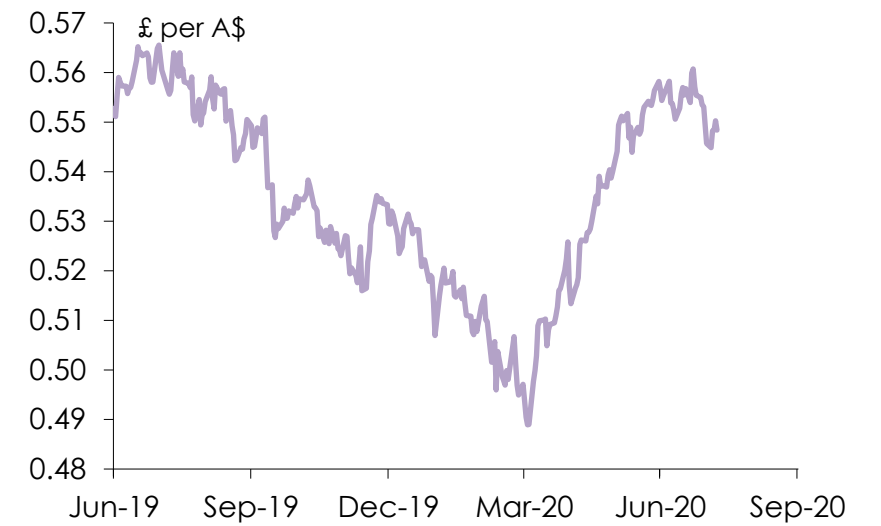
A\$ vs Japanese yen



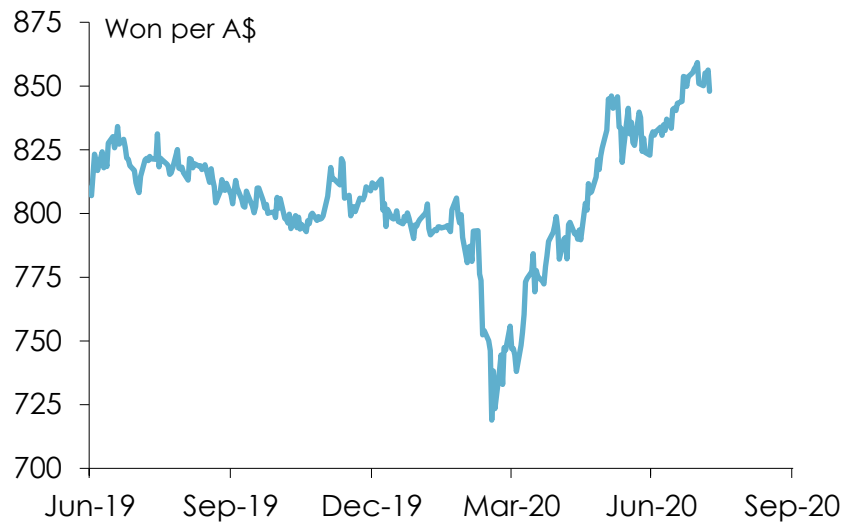
A\$ vs Chinese yuan



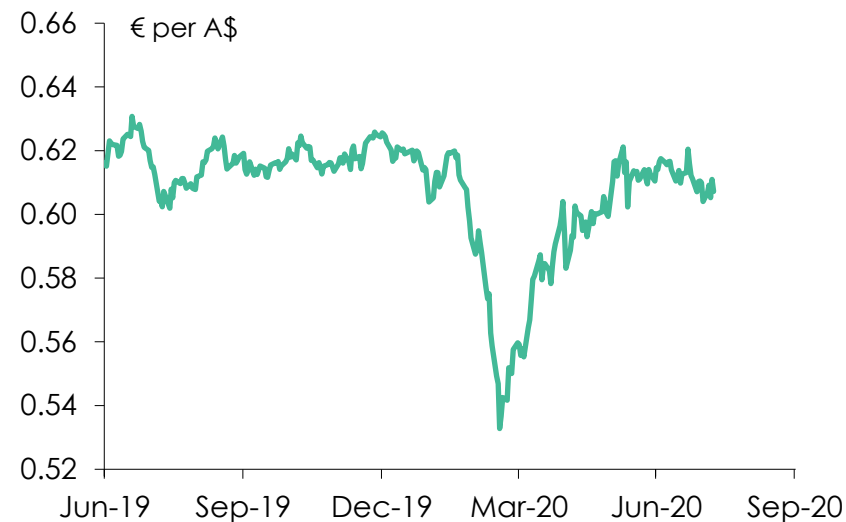
A\$ vs British pound



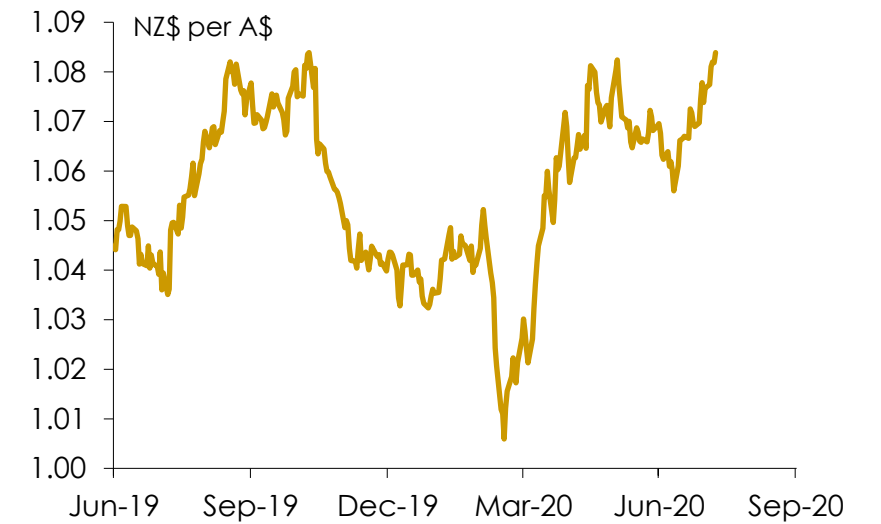
A\$ vs Korean won



A\$ vs Euro



A\$ vs NZ\$



Source: Refinitiv Datastream. Data up to 7th August.

The factors which helped us achieve almost 30 years of continuous economic growth may not be so helpful in the post-Covid environment

Australia's record-breaking run of almost 30 years without two or more consecutive quarters of negative real GDP growth owed a lot to four factors -

❑ Population growth

- Australia's population grew at an average annual rate of 1.5% pa over the 19 years to 2019, compared with 0.6% pa for all 'advanced' economies
- net immigration accounted for 58% of this growth – ie, in the absence of immigration Australia's population would have grown by only 0.7% per annum, on average, and would have aged more rapidly

❑ Our unusual (for an 'advanced' economy) economic relationship with China

- China's rapid economic growth, industrialization and urbanization significantly boosted both the volumes and prices of many of our commodity exports, under-wrote the post-GFC mining investment boom, pushed down the prices of many of the things which we import, and contributed significantly to the growth of our tourism and education sectors
- By contrast, China's rapid economic growth undermined the competitiveness of manufacturing industries which account for a much larger share of most other 'advanced' economies, put downward pressure on the prices of their exports and put upward pressure on the prices of commodities which they import

❑ The 'housing boom'

- Australia's 'housing boom' started earlier (mid-1990s) and ended later (2017, rather than 2007-08) than in most other 'advanced' economies (some – such as Japan, Italy and France – didn't have a housing boom at all)
- the two-way interaction between rising house prices and rising household debt underwrote stronger growth in household consumption spending, for longer, than would have occurred otherwise

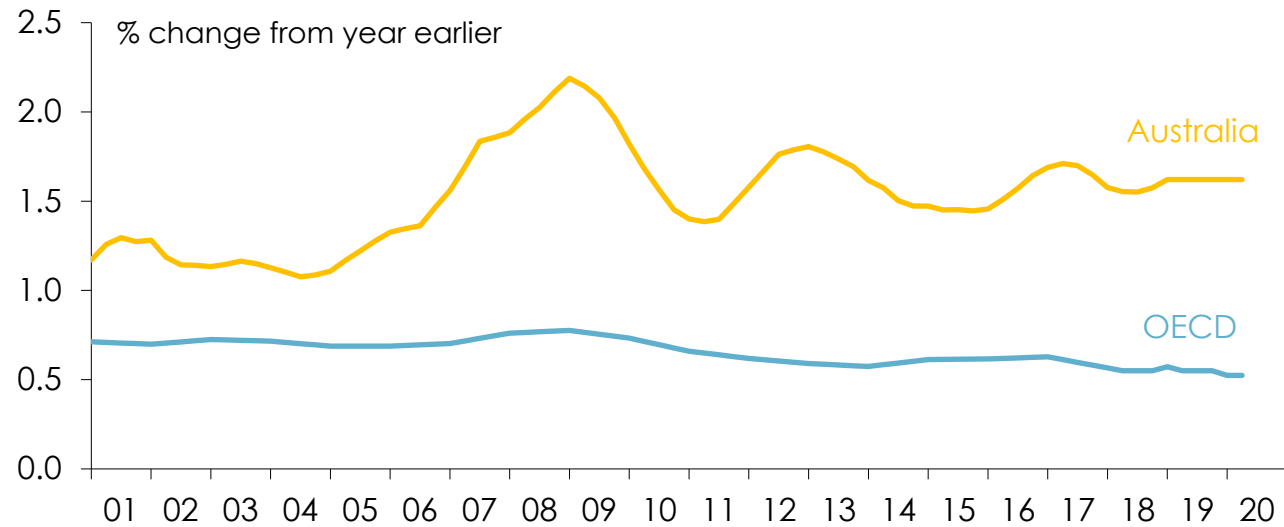
❑ (Mostly) good macro-economic policy – especially by comparison with other 'advanced' economies

- although we haven't done nearly as well as we once did on the micro-economic front (especially with regard to productivity)

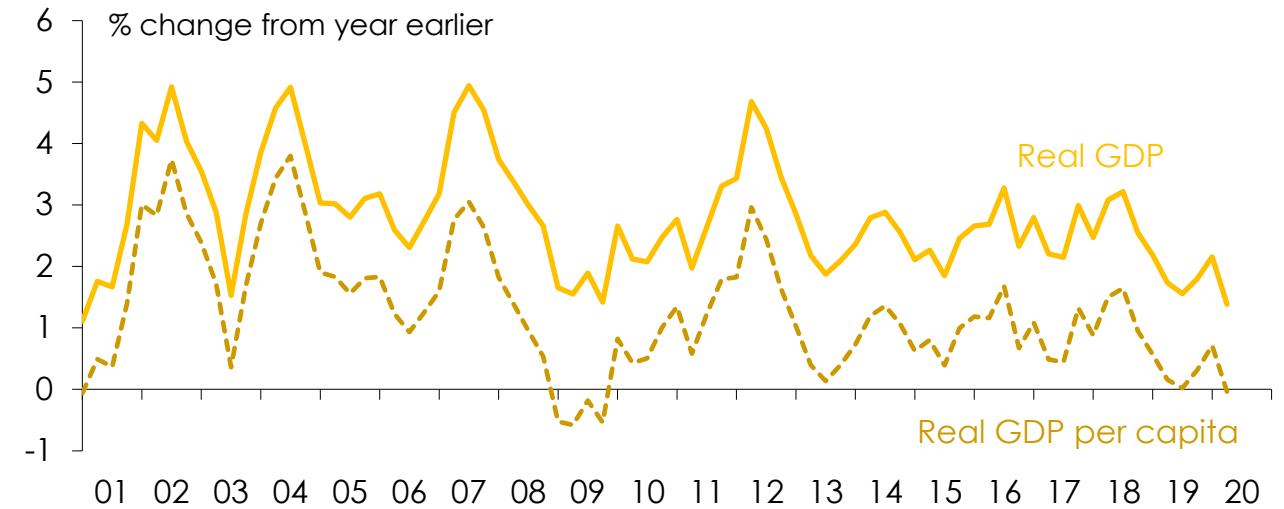
The first three of these are likely to be of less assistance from now on

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

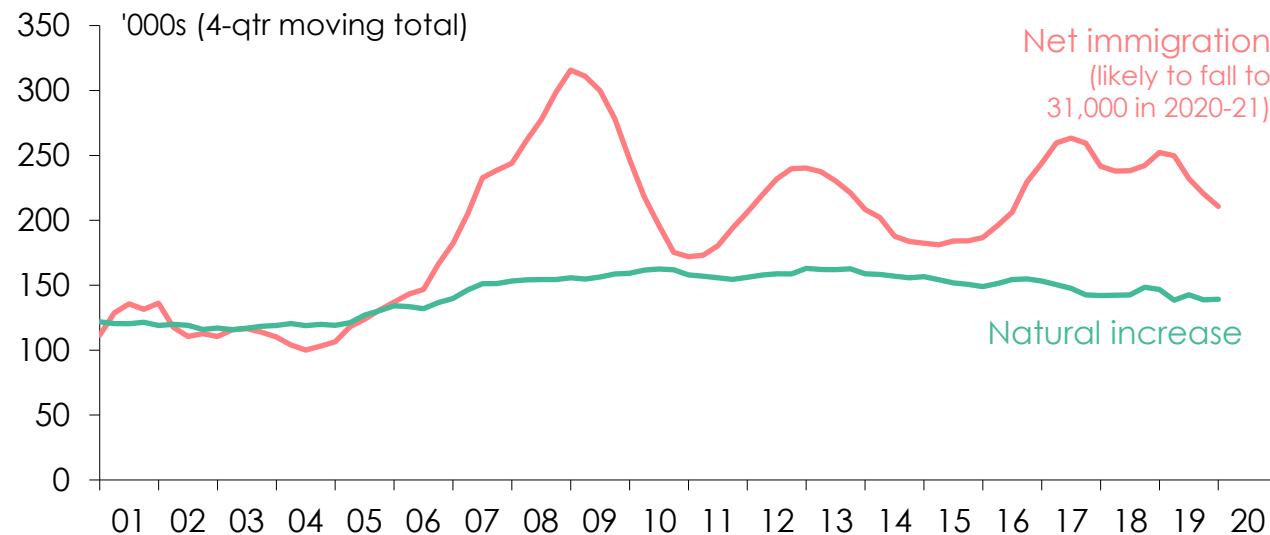
Australia and OECD population growth



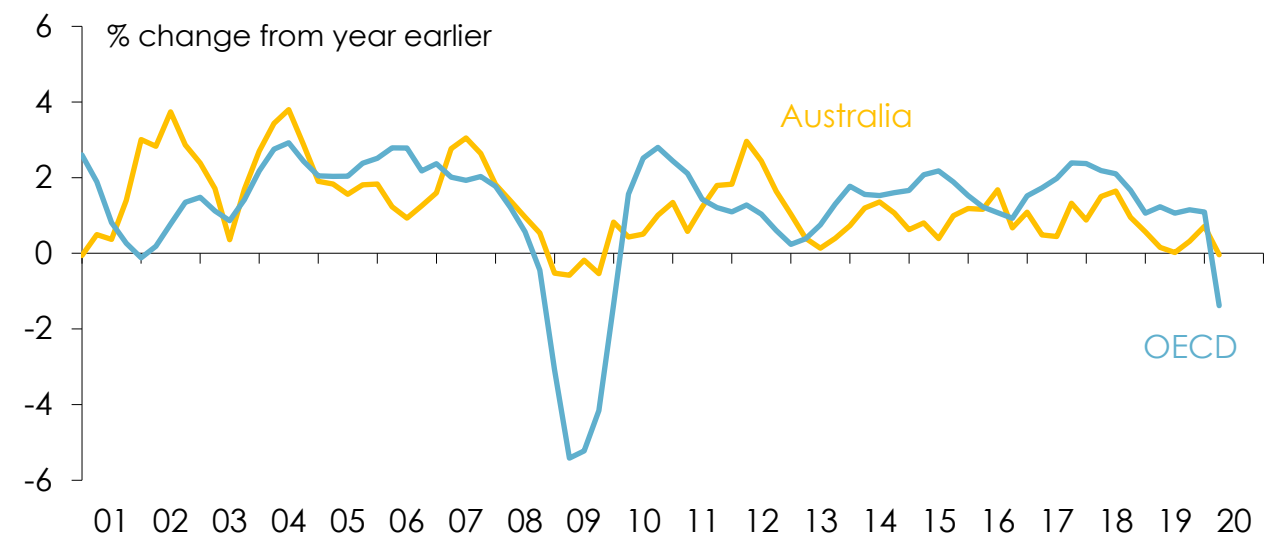
Australian GDP and per capita GDP growth



Sources of Australia's population growth



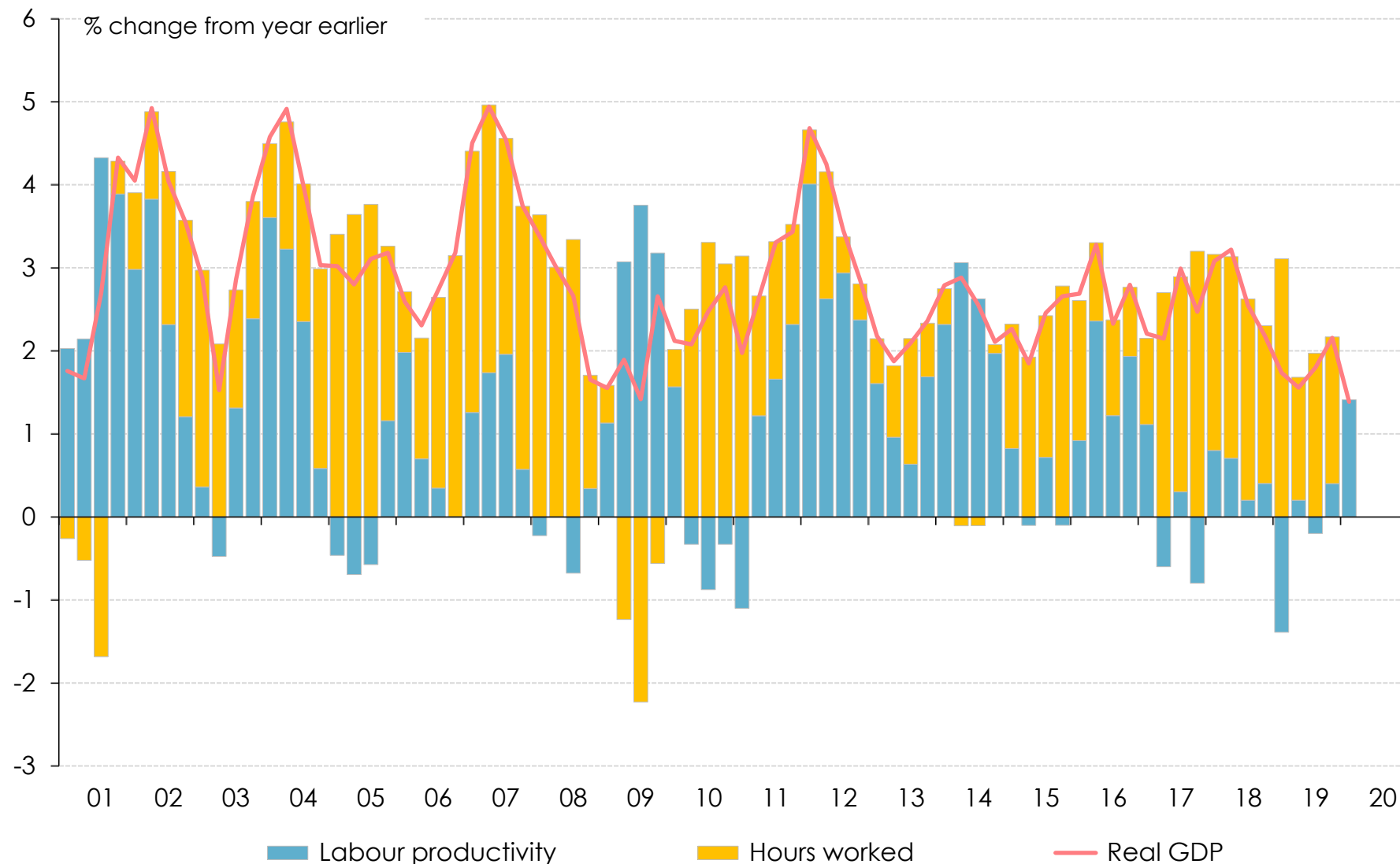
Australia and OECD per capita real GDP growth



Sources: ABS; OECD.

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

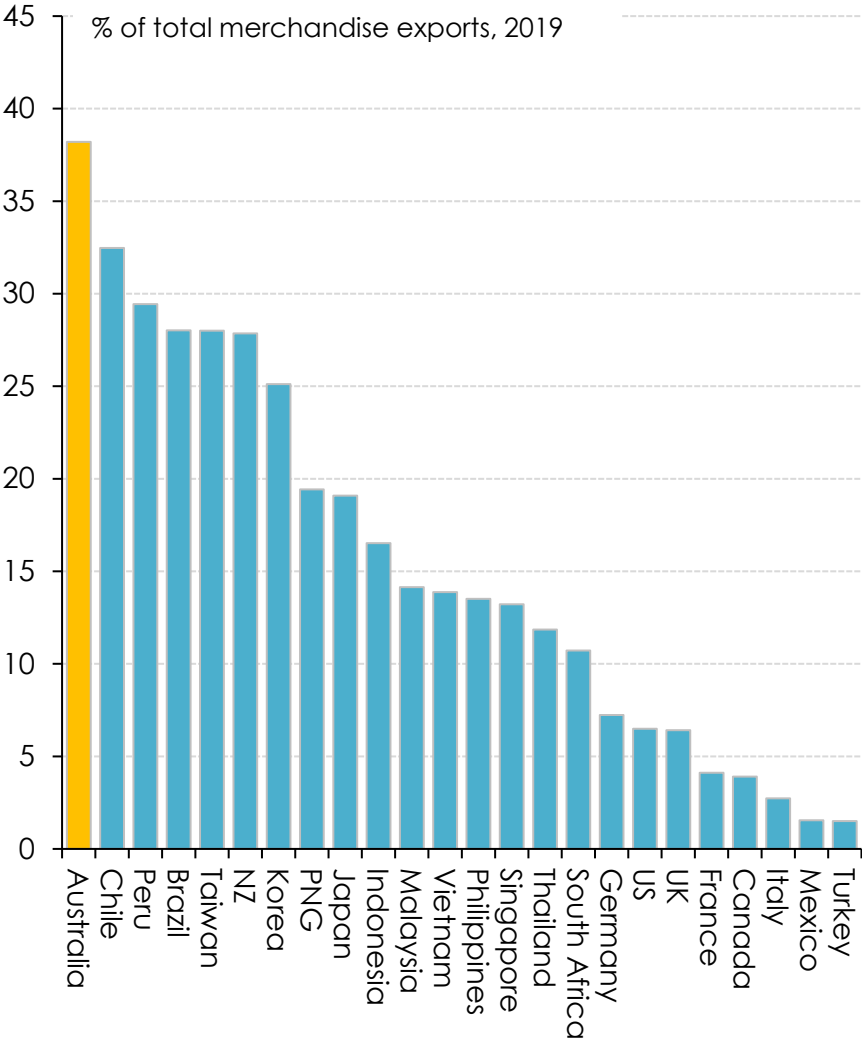
Labour input and labour productivity contributions to Australian real GDP growth



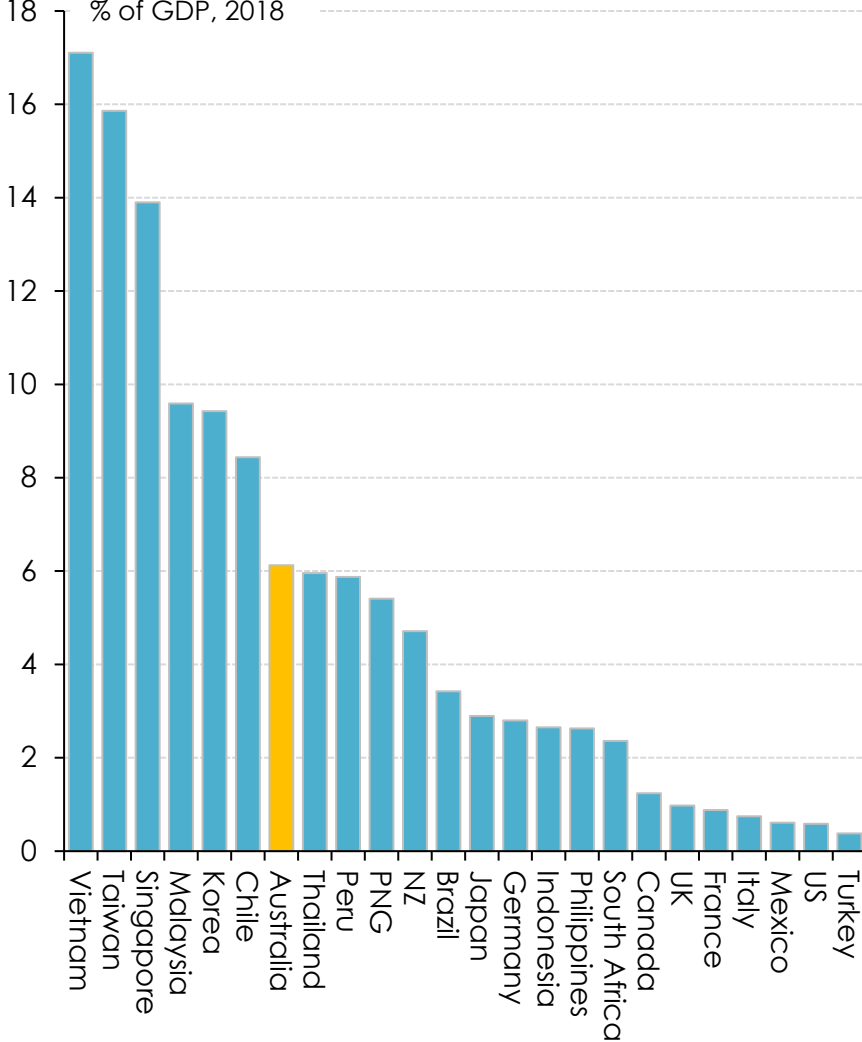
- Over the past five years, 72% of Australia's real GDP growth has come from increased labour input, and only 28% from labour productivity growth
- By contrast, between the end of the early 1990s recession and the onset of the global financial crisis, 46% of Australia's real GDP growth came from increased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

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

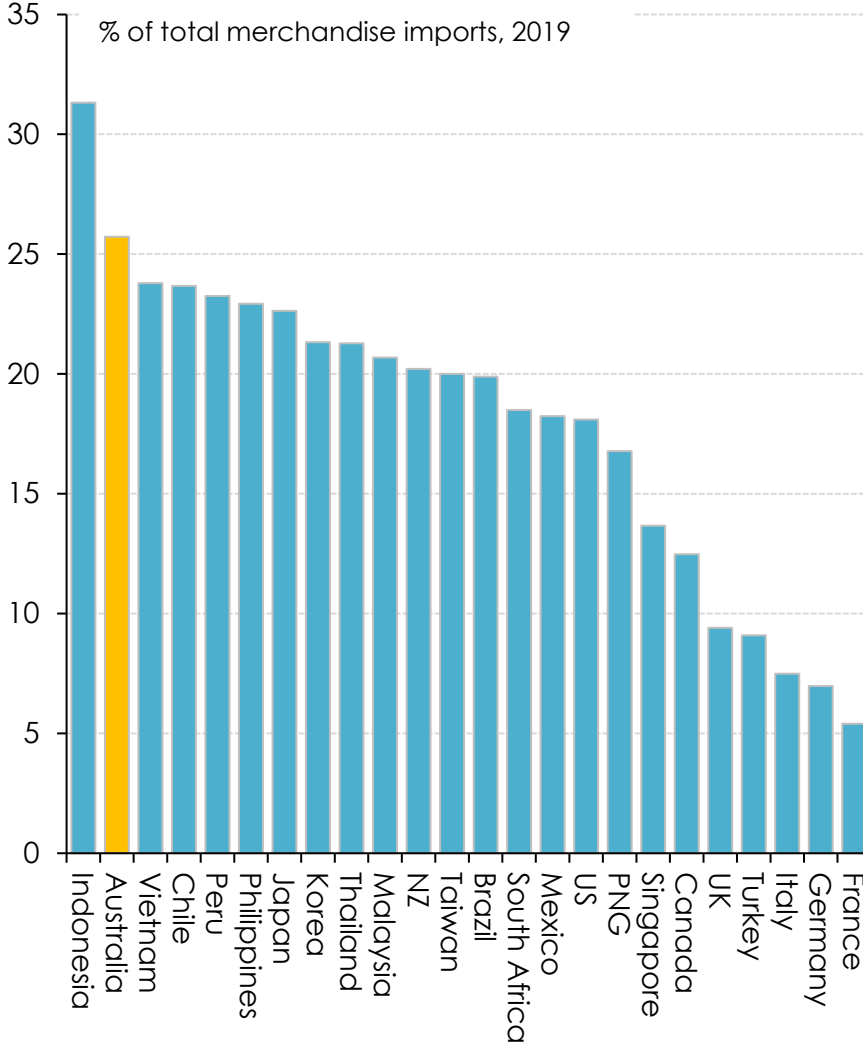
Merchandise exports to China as a pc of total



Merchandise exports to China as a pc of GDP



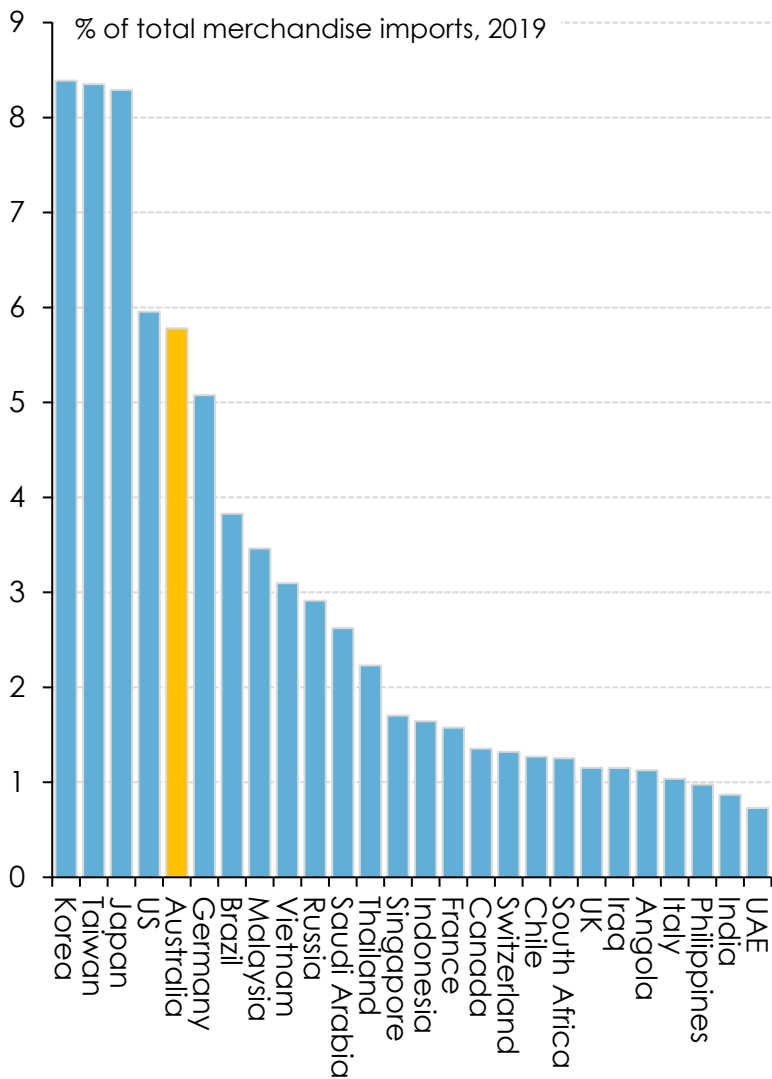
Merchandise imports from China as a pc of total



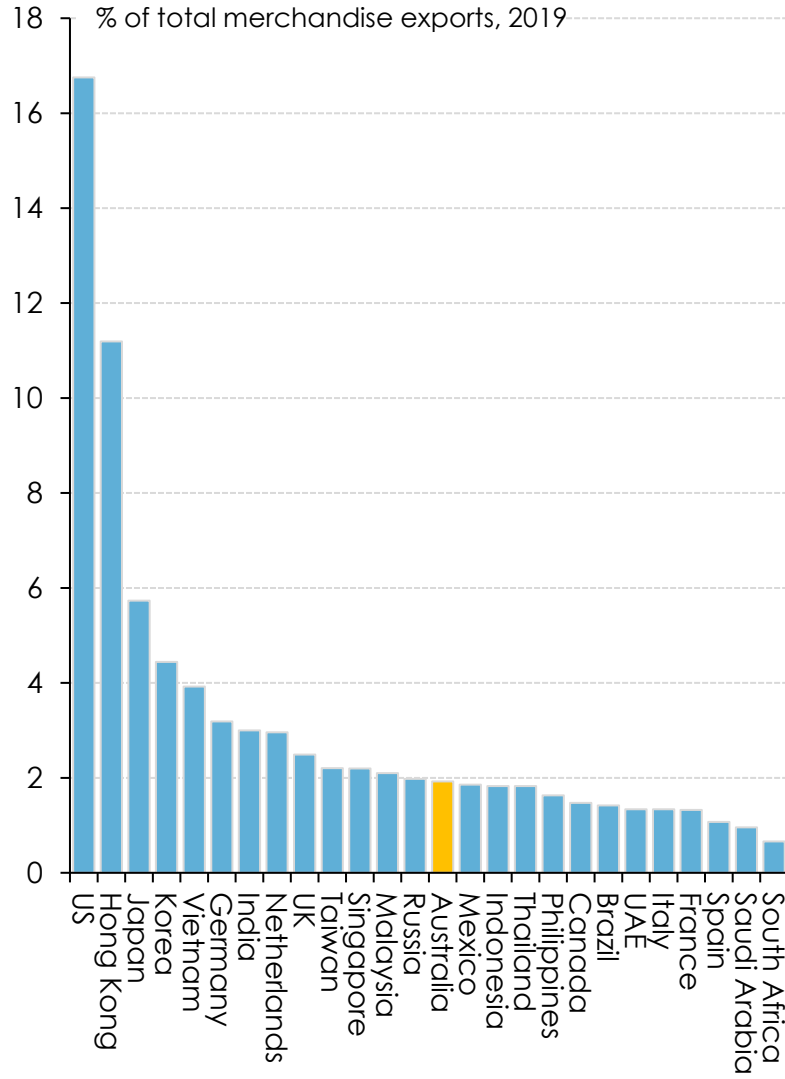
Sources: IMF, Direction of Trade Statistics; Taiwan Ministry of Economic Affairs, Bureau of Foreign Trade.

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

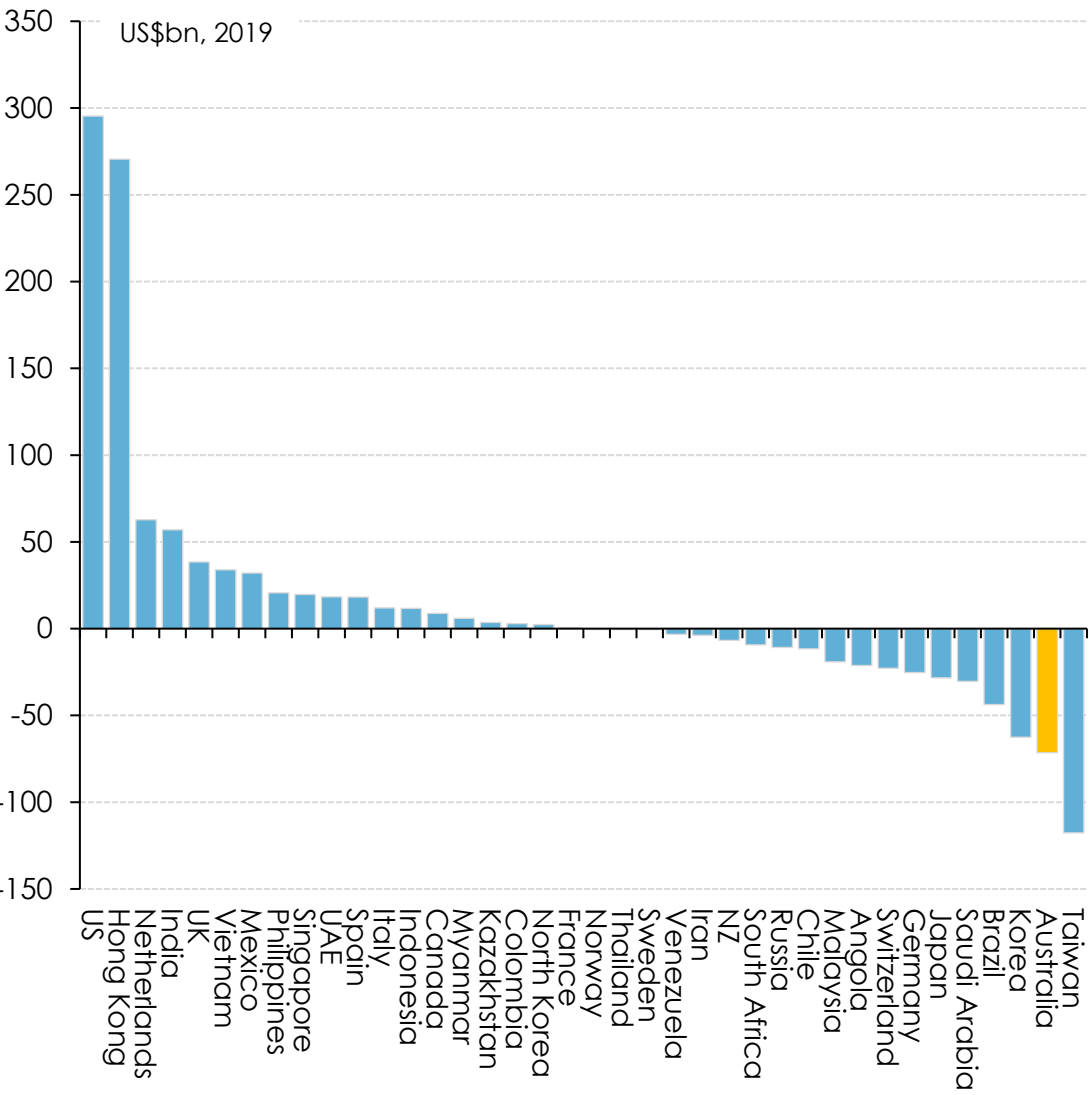
China's sources of imports



China's export destinations



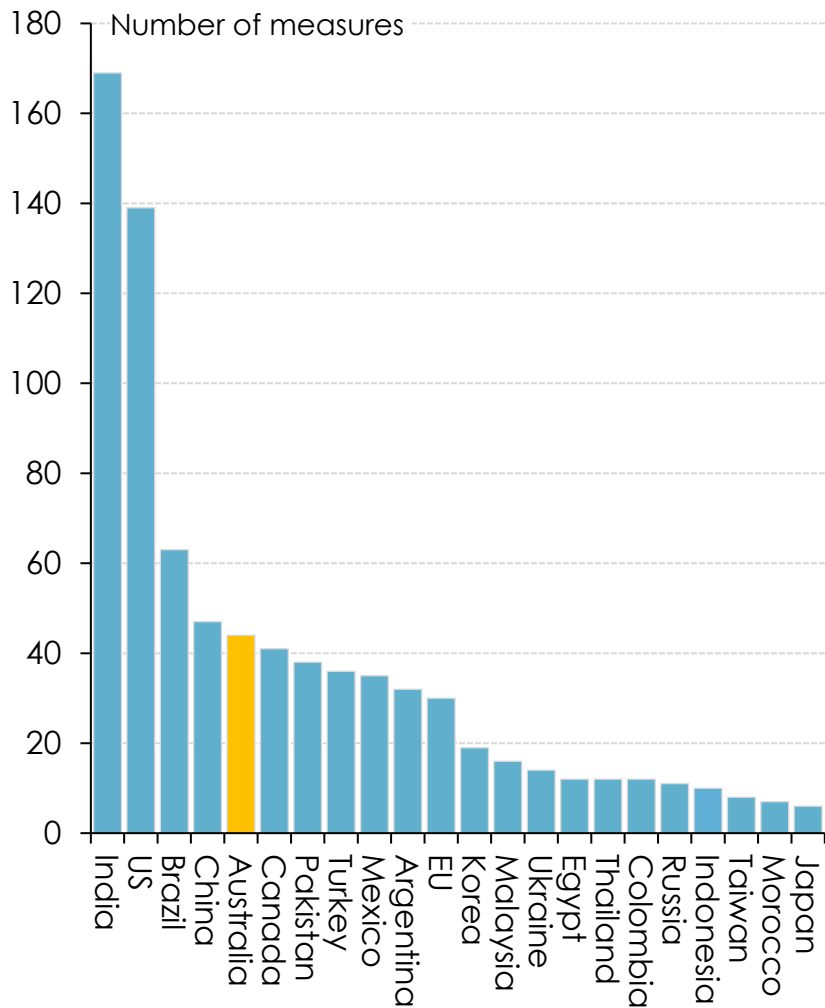
China's bilateral merchandise trade balances



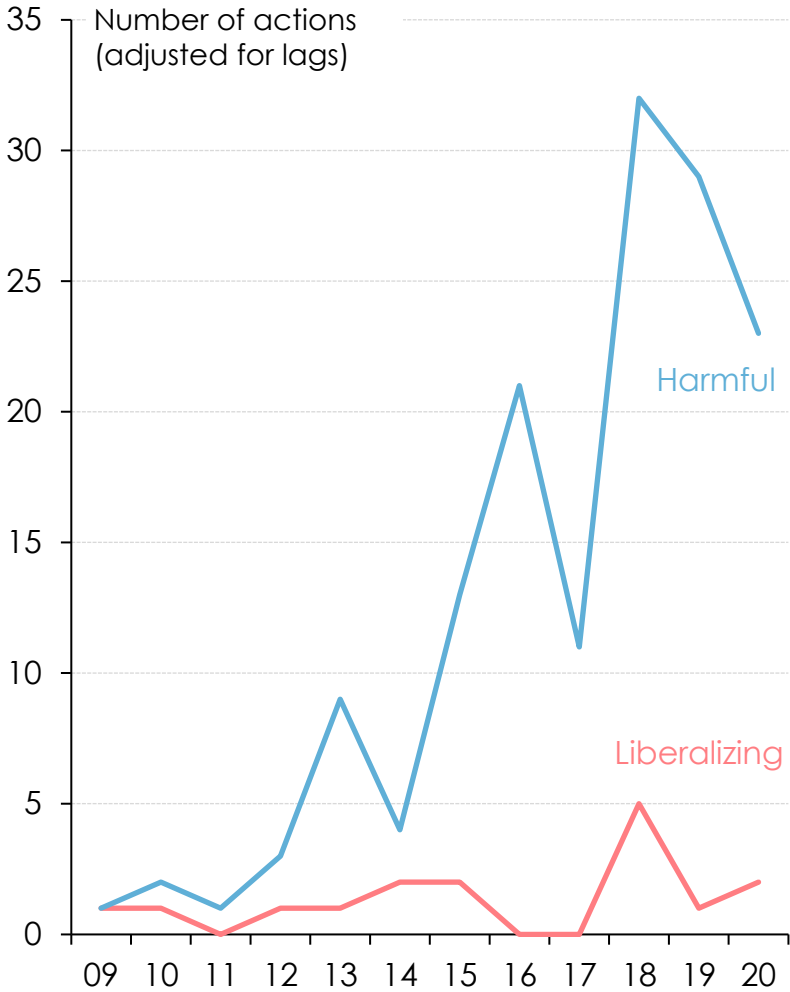
Source: International Monetary Fund, Direction of Trade Statistics.

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

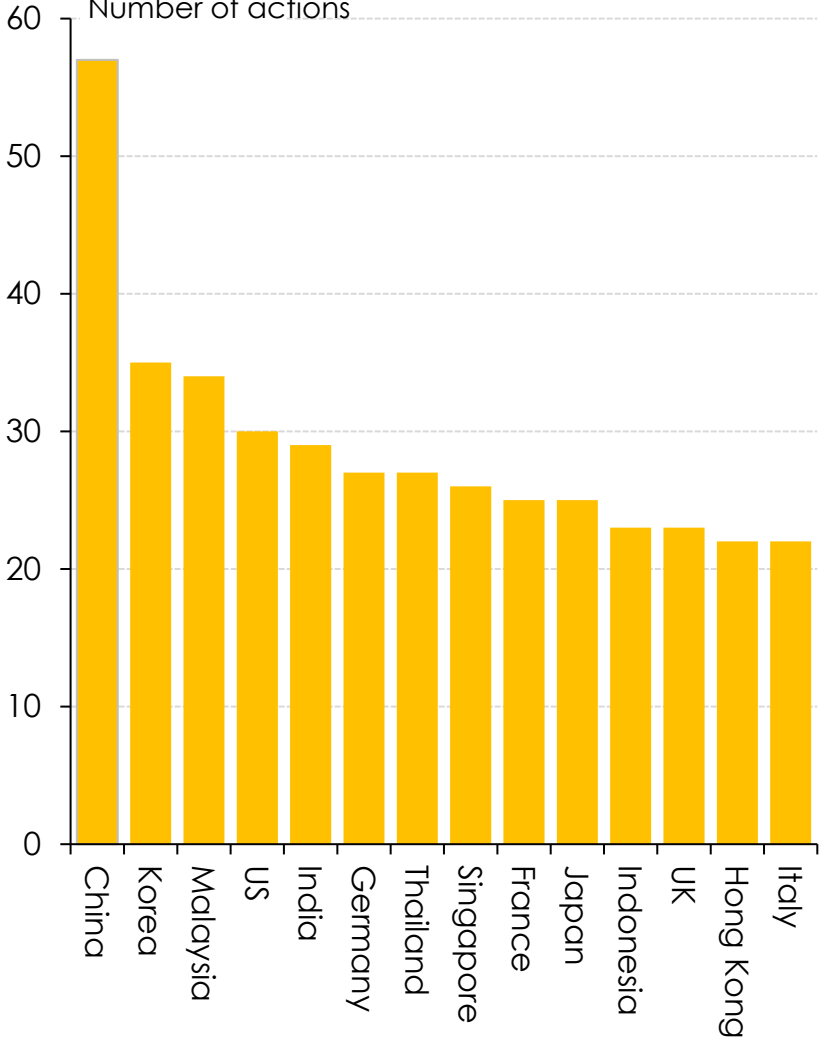
Number of anti-dumping measures imposed, 2015-19



Australian trade policy measures since 2009

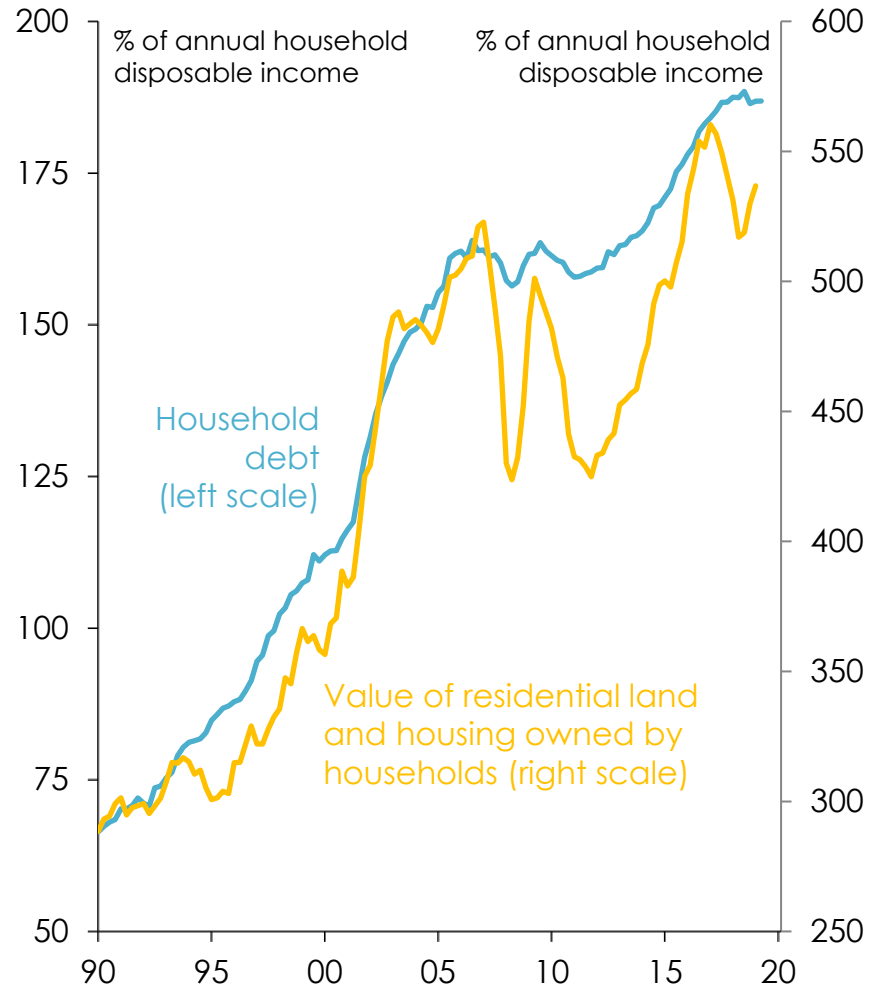


Countries adversely affected by 'harmful' Australian trade actions

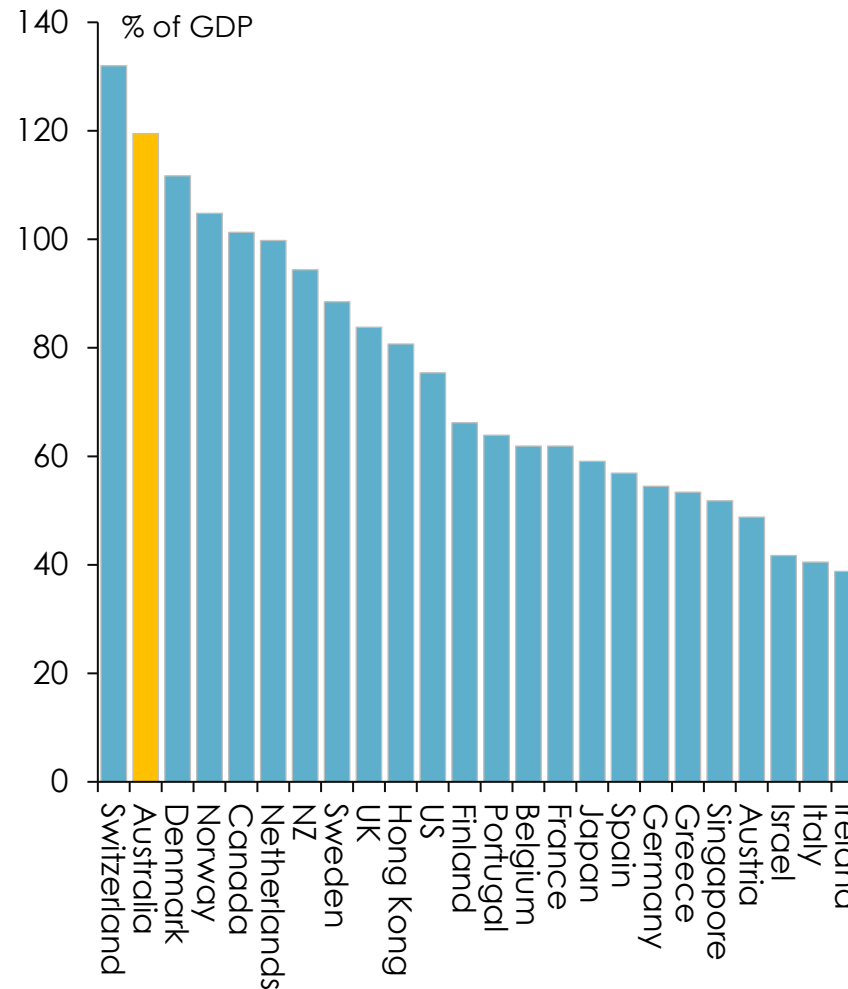


Rising property prices and household debt are unlikely to underpin Australian economic growth as they have done for most of the past 30 years

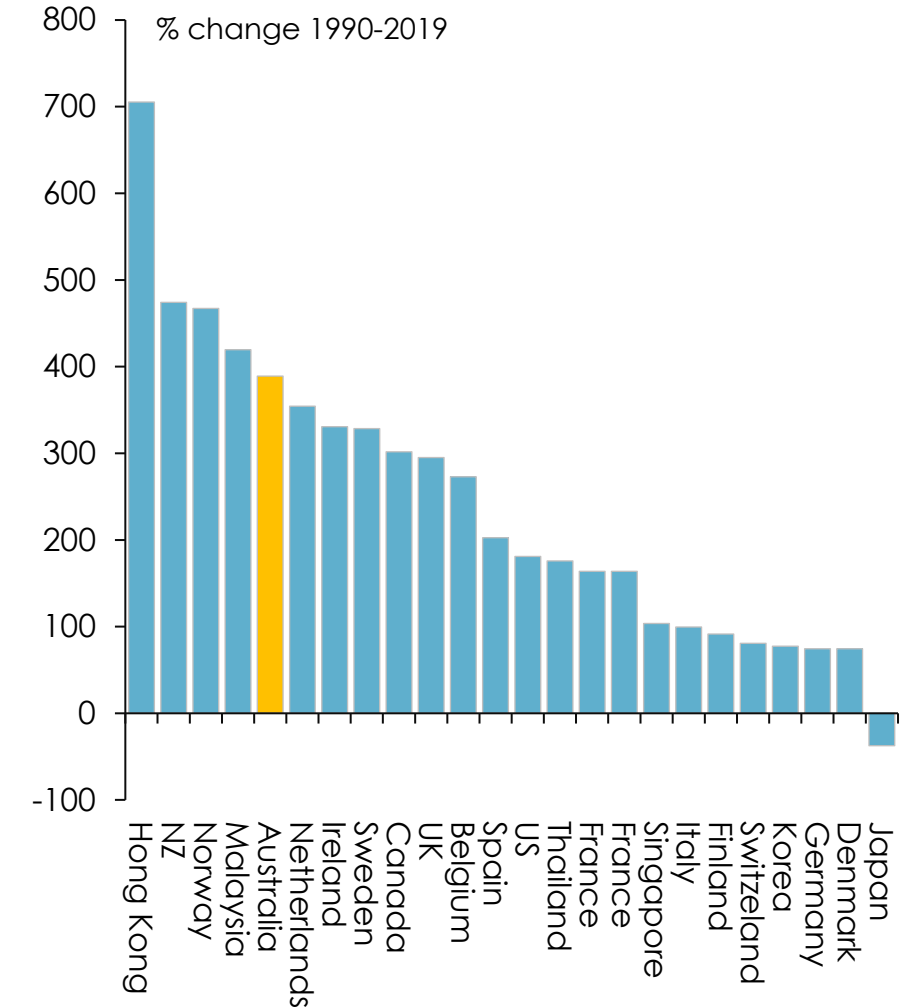
Australian housing wealth and household debt



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.

A special look at Australia's Northern Territory

(which holds an election on 22nd August)

Australia's Northern Territory

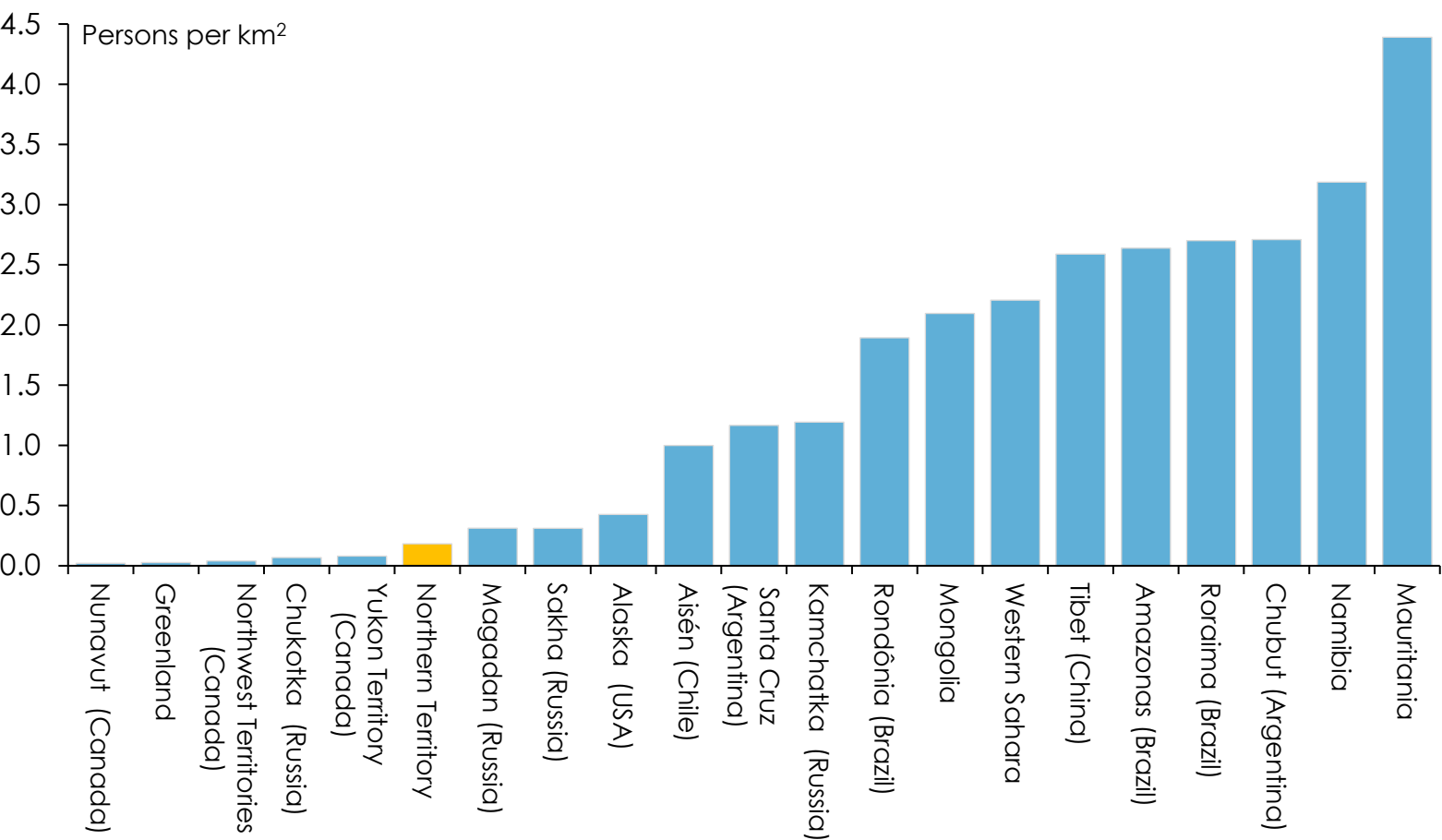
- ❑ Northern Territory electors will vote for a new Legislative Assembly on Saturday 22nd August (slide 110)
- ❑ The Northern Territory's population is just under 250,000, living in an area of just under 1.35 million square kilometres, making it the 6th most sparsely populated inhabited region anywhere in the world (slide 111)
- ❑ The Territory's demographic profile is very different from that of the rest of Australia, with Indigenous people (most of whom live in remote or very remote locations, and experience much higher levels of socio-economic disadvantage than Indigenous people in other parts of Australia, or non-Indigenous people anywhere) accounting for over 31% of the population, cf. 3.3% for Australia as a whole (slide 112) ...
- ❑ ... while the Territory's non-Indigenous population is relatively well-off (even after allowing for the higher costs of living than in the rest of Australia), and relatively young (the proportion of the Territory's population aged 65 or over is less than half the national average) (slide 113)
- ❑ Mining, tourism (directly and indirectly), and public administration & defence account for 44% of 'value added' in the Territory's economy, and 30% of total employment, compared with 21% and 19%, respectively, for Australia as a whole (slide 114)
- ❑ The Northern Territory's economic experience over most of the past decade has been dominated by the huge (A\$53bn, US\$40bn) [Ichthys LNG Project](#), construction of which commenced in 2012 and was completed in 2018
- ❑ The production and export phase of the Ichthys Project is much less labour-intensive than the construction phase was – with the result that since mid-2017, when construction peaked, 'territory final demand' (onshore spending) has declined by 25% (in real terms), employment has fallen by 5¾%, property prices by more than 30% (from their peak in mid-2014), and the population by more than 1% (which has kept a lid on unemployment) (slides 115-6)
- ❑ The NT has been more successful at containing the spread of Covid-19 than any other state or territory, which has allowed it to 'open up' more quickly, and avoid having to re-impose restrictions (slides 117-8)
- ❑ The NT Government's revenue and spending rose significantly during the 'boom' period – but revenues (including the NT's share of GST revenues, on which it is highly dependent) have since fallen sharply, resulting in a serious deterioration in its financial position – which may necessitate a federal 'bail-out' after the election (slides 119-20)

The Northern Territory votes on 22nd August

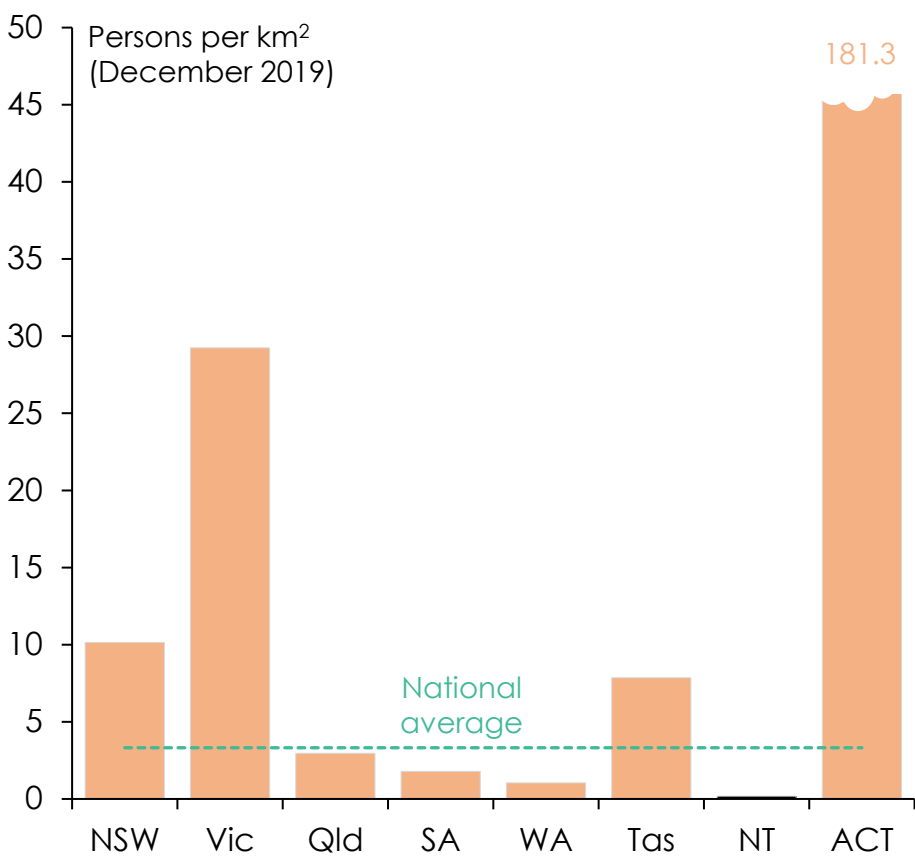
- ❑ The Northern Territory's voters (all 138,000 of them) go to the polls on Saturday 22nd August
 - the Territory's Legislative Assembly has 25 members, representing an average of just 5,500 electors each (which means that personal votes can be quite important), in electorates ranging in area from 4 km² to almost 450,000 km²
 - although voting is officially compulsory (as elsewhere in Australia), voter turnout is typically quite low – 74% at the 2016 election (less than 60% in five seats, and only 49% in one seat)
- ❑ Historically, the Northern Territory has been a stronghold for the Country-Liberal Party (CLP), as the centre-right party in the Territory is called – it has governed for 27 of the 42 years since self-government was granted in 1978, while Territory Labor (as the ALP calls itself) has been in power for only 15 (2001-2012 and since 2016)
- ❑ However the CLP was swept from office at the last election in August 2016, losing all but 2 of the 16 seats it previously held, on a two-party-preferred swing of 5.1% – Territory Labor took office with 57½% of the two-party-preferred vote, winning 18 seats, forming government under Chief Minister Michael Gunner; while Independents won 5 seats
- ❑ In December 2018 three Labor MLAs were expelled from the party, and joined the cross-bench: one of those resigned, with Labor (narrowly) regaining his seat at a by election in February this year
- ❑ Former CLP Leader and Chief Minister Terry Mills, who was elected as an Independent at the 2016 election, has formed the 'Territory Alliance', joined by another of the former Labor MLAs expelled in 2018 and a former Independent, and also has the backing of former Labor Leader Delia Lawrie (as deputy campaign manager)
 - the Territory Alliance's platform includes a ban on 'fracking' for natural gas (both Territory Labor and the CLP support 'fracking')
- ❑ The only credible opinion poll conducted in recent months (at the end of June, and only in Greater Darwin) suggested an 8.6% swing away from Labor on primary votes, but coming back to 3.2% after preferences – which if repeated at the election would see Territory Labor returned to government with a still-comfortable majority
 - the conservative vote may be fractured between the CLP and the Territory Alliance, with preference flows from candidates with the lower number of votes potentially being crucial in many seats
 - TA preferenced Labor at the by-election in February (which was crucial to Labor retaining the seat) but is not expected to do so (at least not uniformly) at the forthcoming election

Australia's Northern Territory is one of the most sparsely populated regions in the world

Population density – selected regions and countries



Population density – Australian states and territories

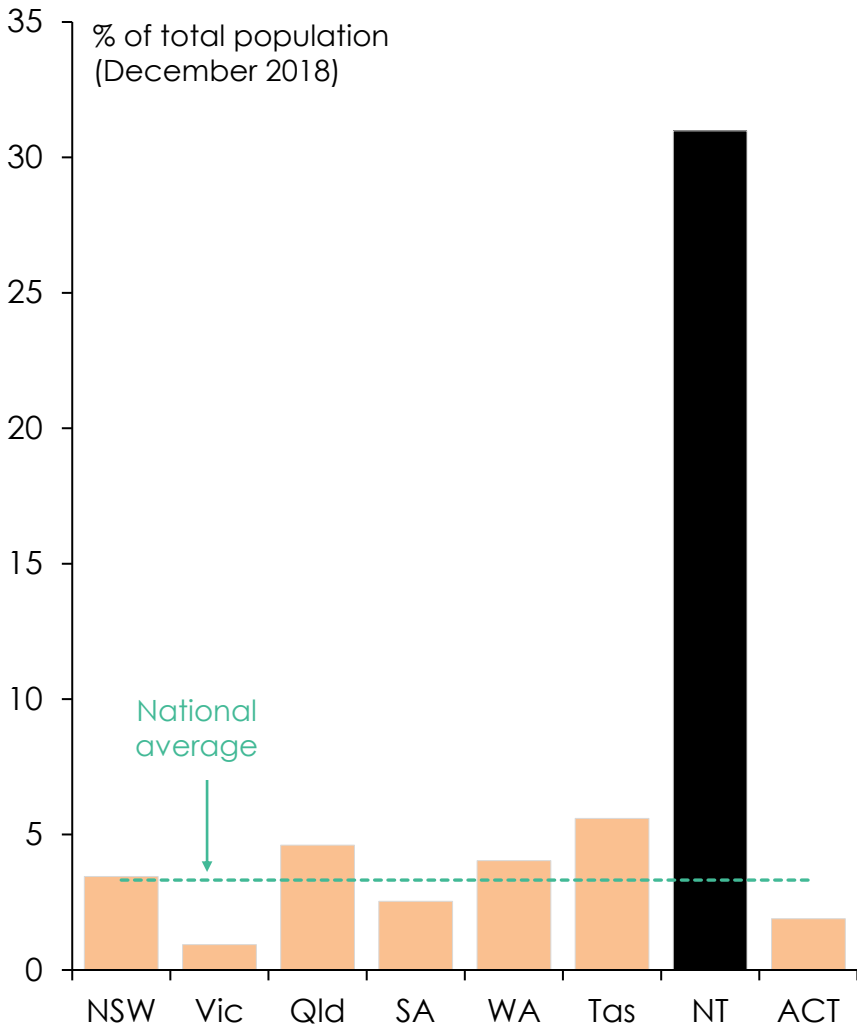


❑ The Northern Territory has a population of just under 250,000 (almost 60% of whom live in Darwin, and another 11% in Alice Springs), in an area a little more than three-quarters the size of Alaska, or about the same as Peru

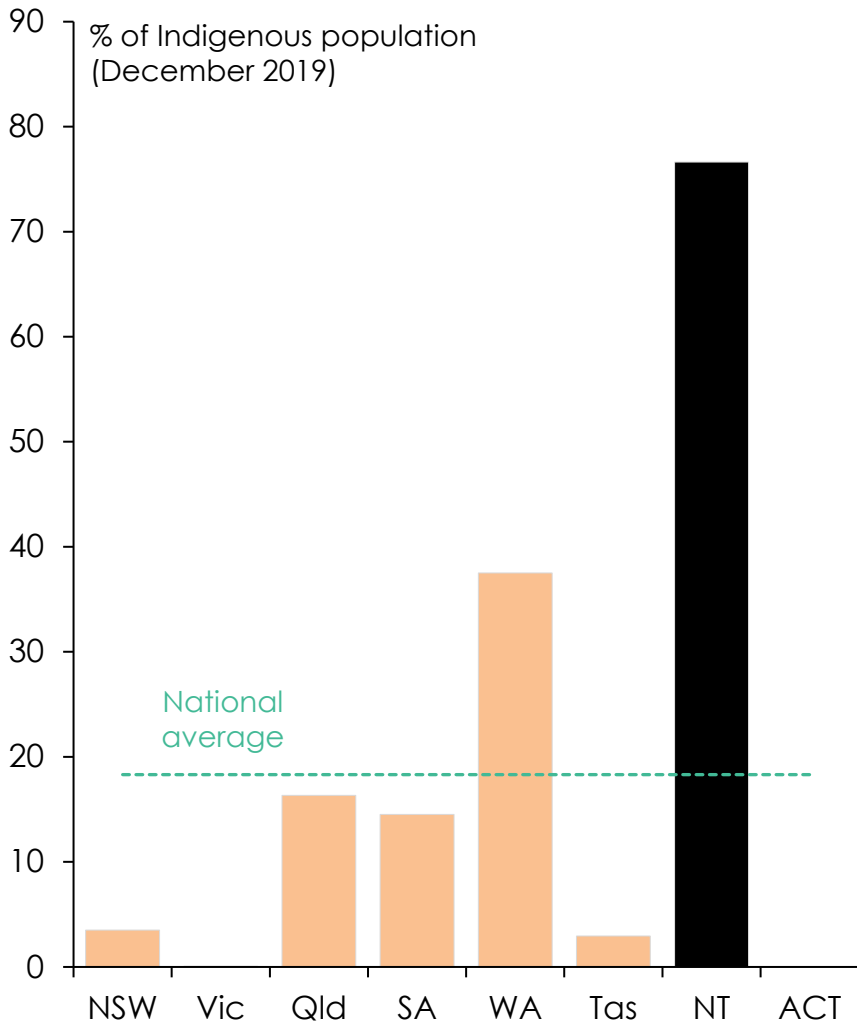
Note: population estimates are the latest available for each country or region, between 2014 and 2019.
Sources: national statistical agencies; Wikipedia (for areas in some cases); The World Bank; ABS; Corinna.

A large proportion of the NT's population is Indigenous – and a large proportion live in remote locations, in very disadvantaged conditions

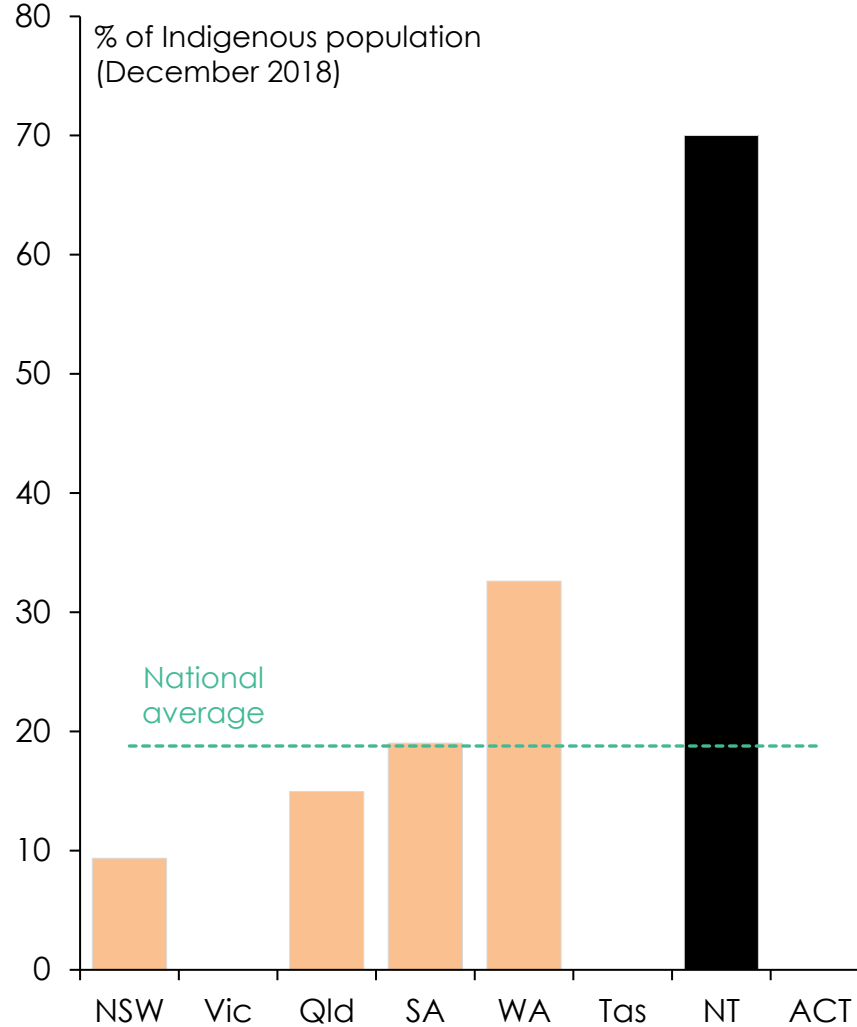
Indigenous population as a proportion of total



Indigenous population living in remote or very remote locations

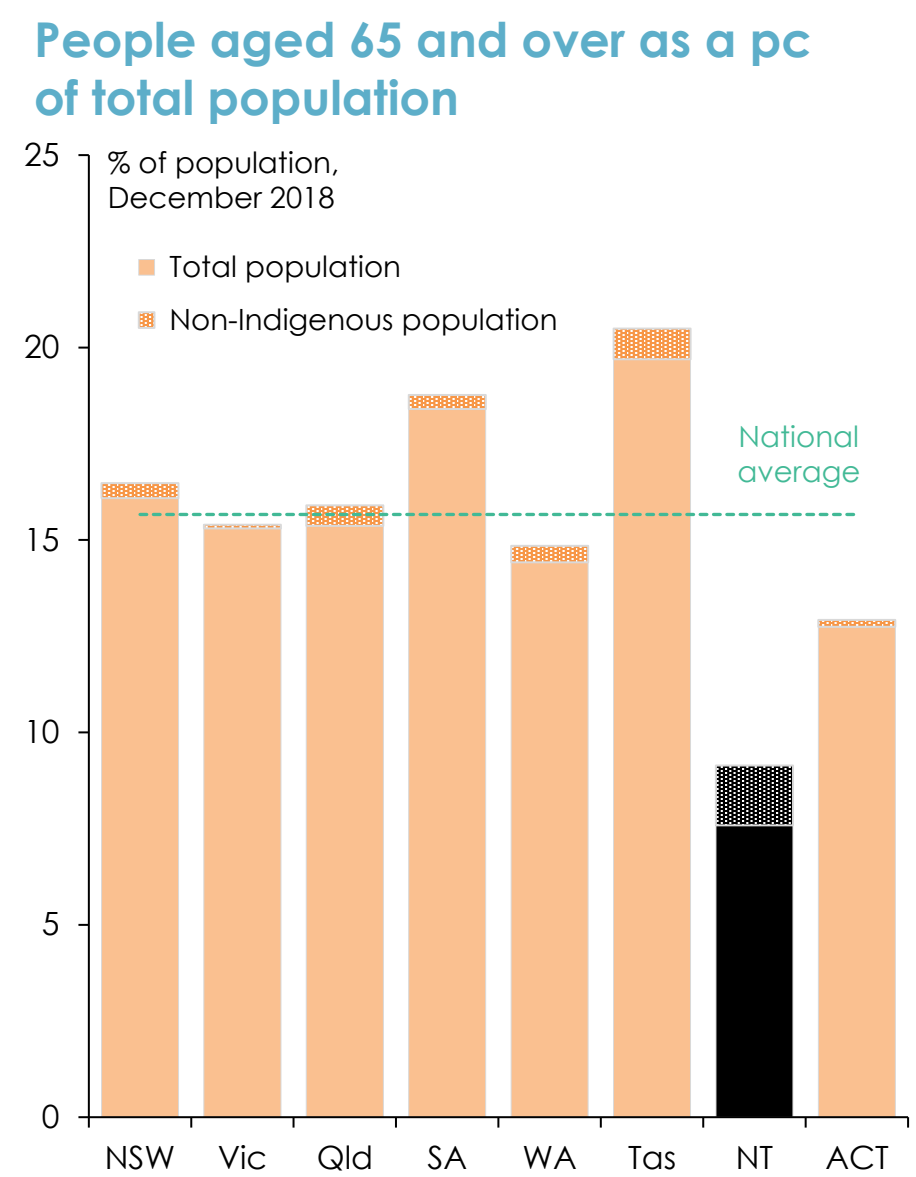
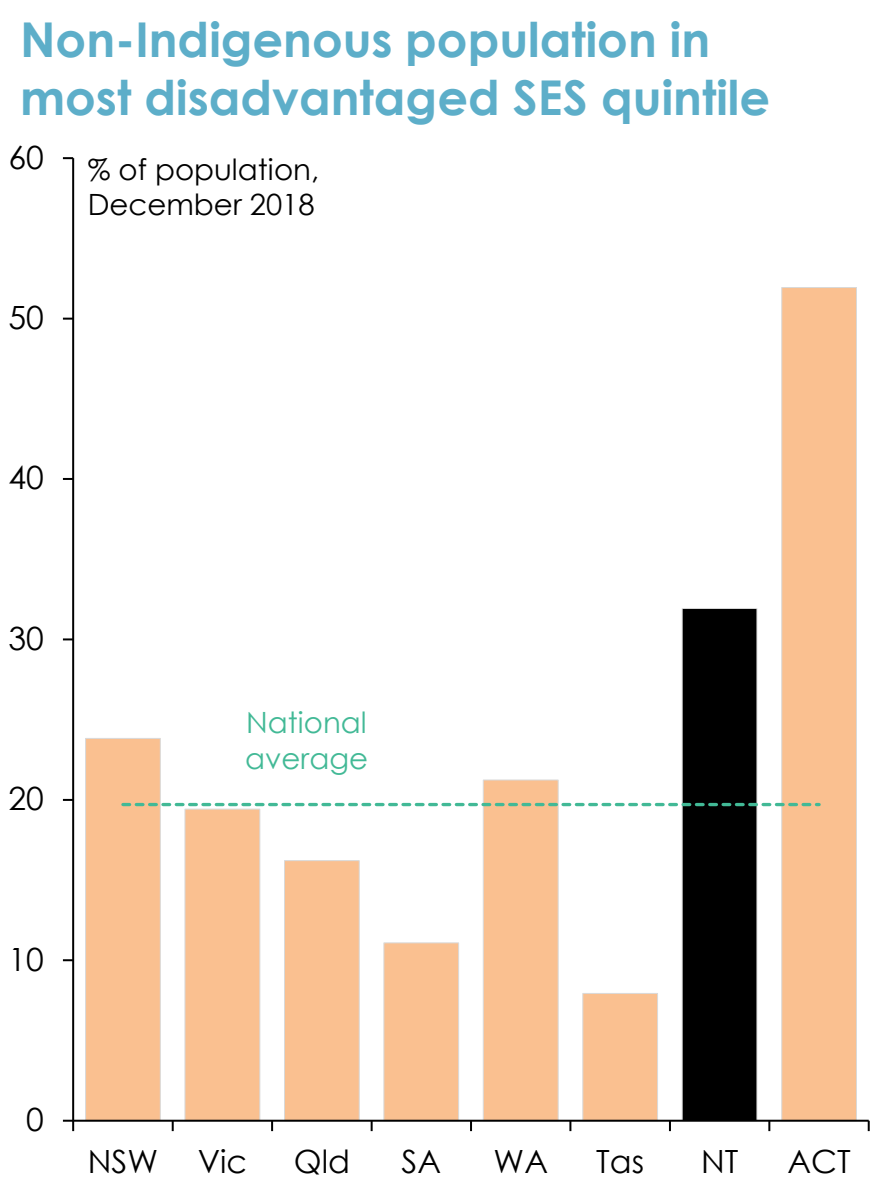
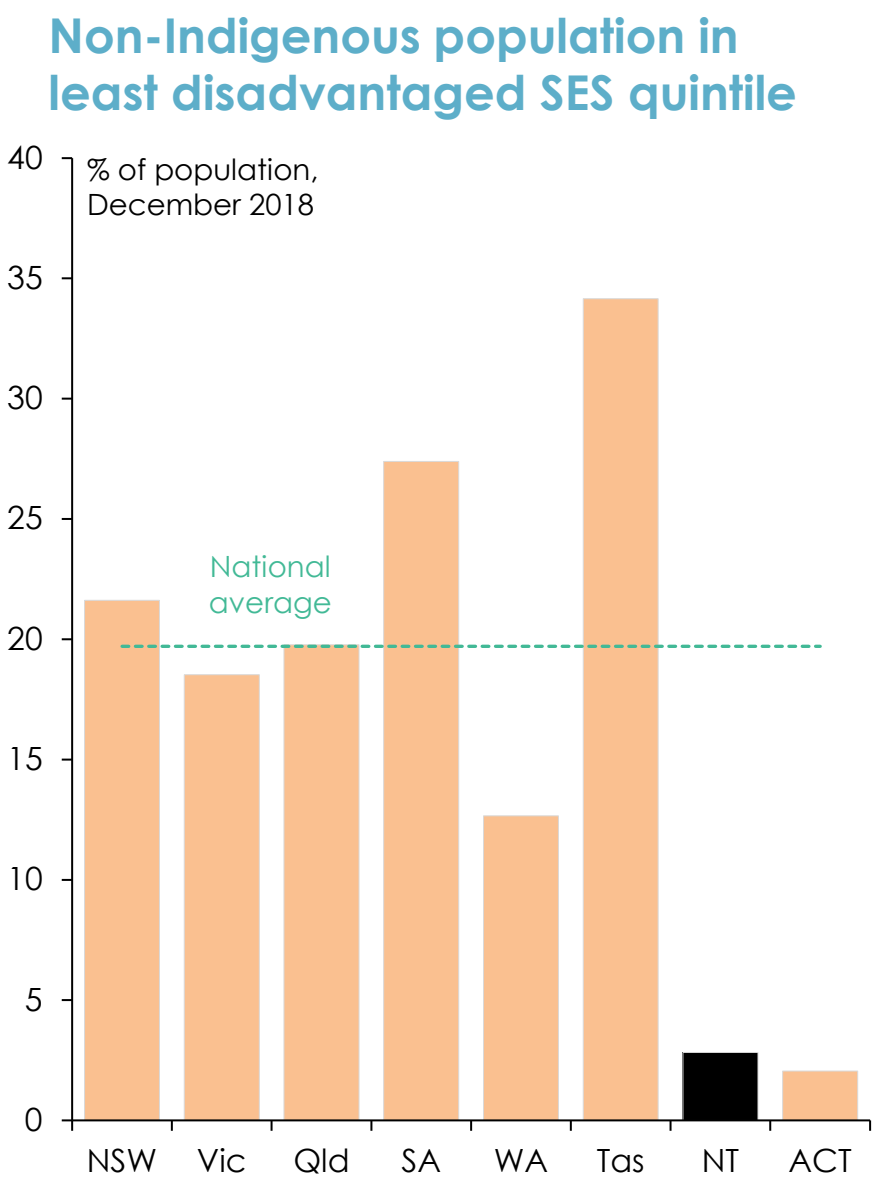


Indigenous population in most disadvantaged SES quintile



Note: An 'Indigenous' person is a person of Aboriginal or Torres Strait Islander descent who identifies as such and is accepted as such by the community in which he or she lives. 'SES' means 'socio-economic status' (for more information see [here](#)). For definitions of 'remoteness' (and a map showing each category) see [here](#).
Source: Commonwealth Grants Commission, 2020 Review, [Supporting data: Population data](#); Corinna.

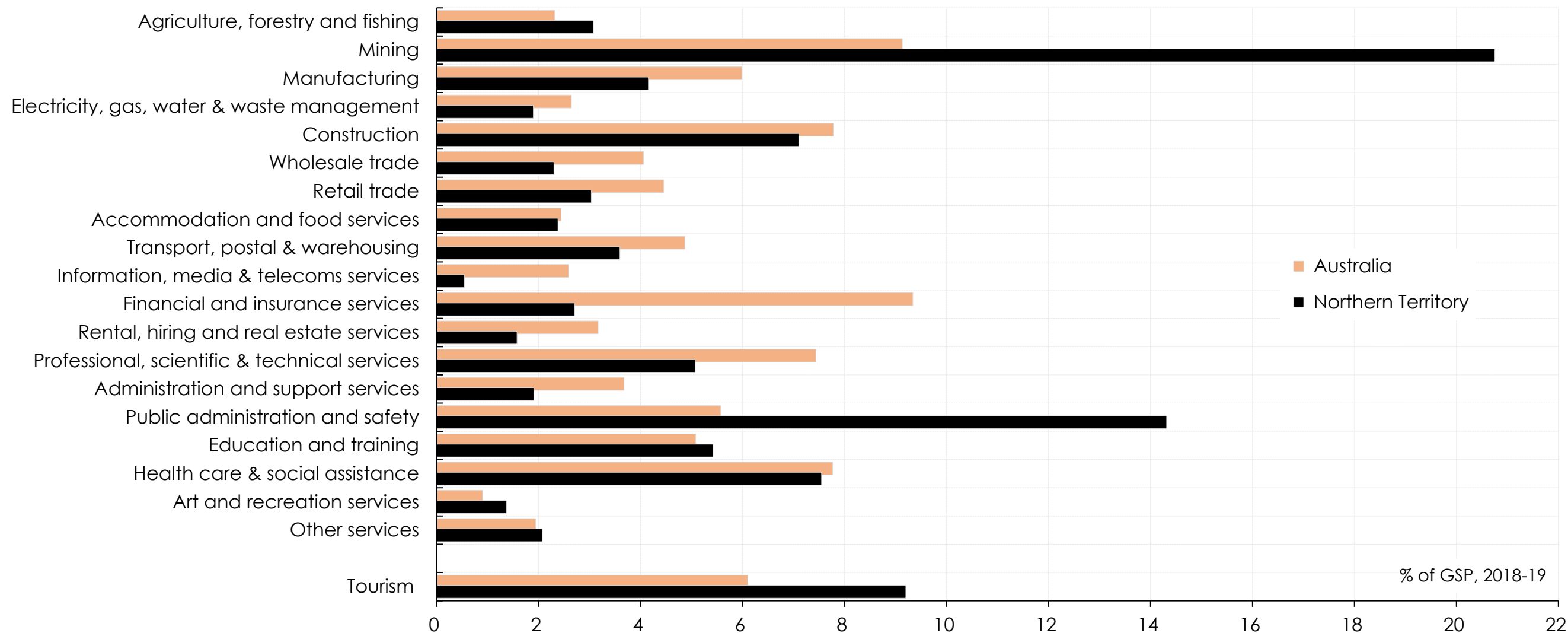
By contrast the non-Indigenous population of the NT is, in general, better off than other Australians – and also a lot younger



Note: An 'Indigenous' person is a person of Aboriginal or Torres Strait Islander descent who identifies as such and is accepted as such by the community in which he or she lives. 'SES' means 'socio-economic status' (for definitions and more information see [here](#)).
Sources: Commonwealth Grants Commission, 2020 Review, [Supporting data: Population data](#); Corinna.

The NT economy is much more reliant on mining, tourism and government, and less on manufacturing and finance, than the rest of Australia

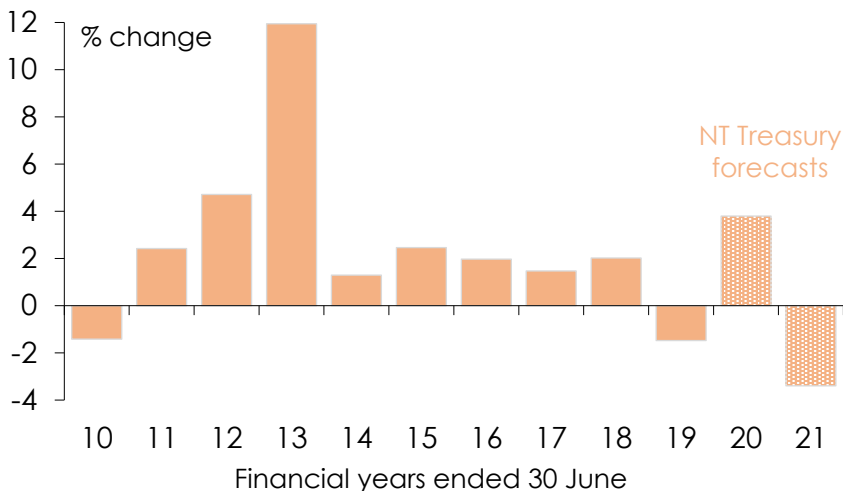
Industry composition of gross value added, Northern Territory and Australia as a whole, 2018-19



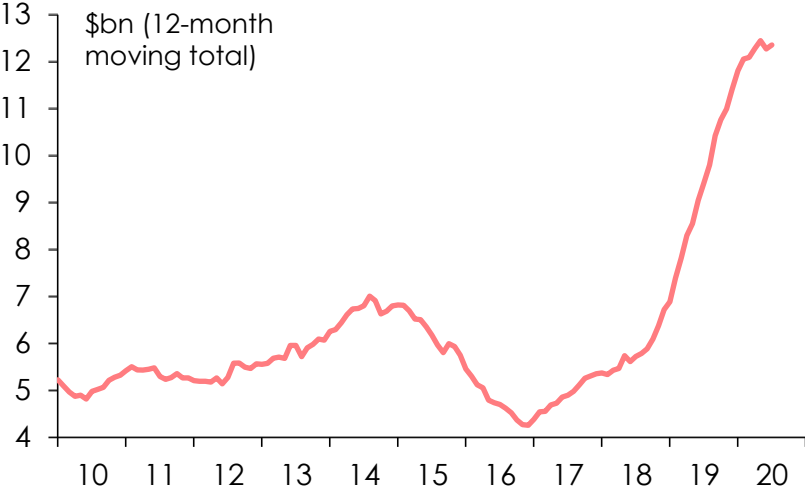
Note: Tourism is not one of the 19 industry sectors represented in the ABS national and state accounts. Rather, it is a composite of accommodation and food services; transport; rental and hiring; art and recreation services; retail trade; and education and training, shown separately in the ABS [Tourism Satellite Account](#) and the [State Tourism Satellite Accounts](#) produced by Tourism Research Australia. Sources: ABS; Tourism Research Australia; Corinna.

The end of the five-year construction phase of the giant Ichthys LNG project has seen the NT economy fall into a recession

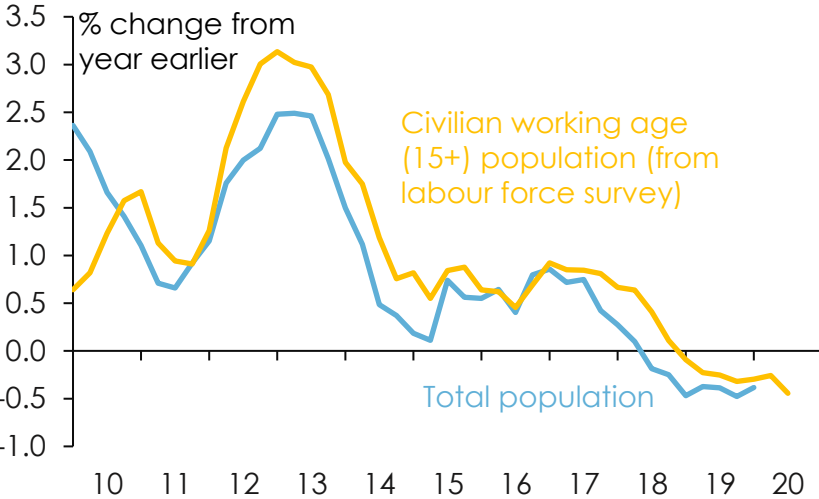
NT real gross state product



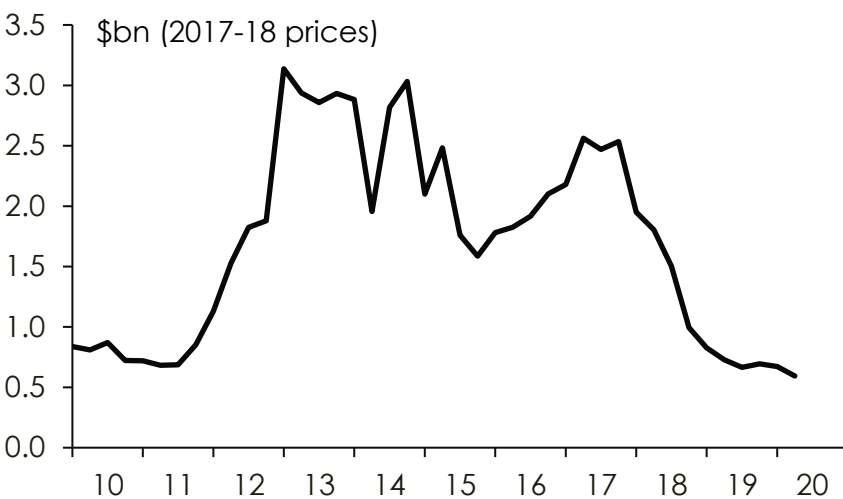
NT merchandise exports



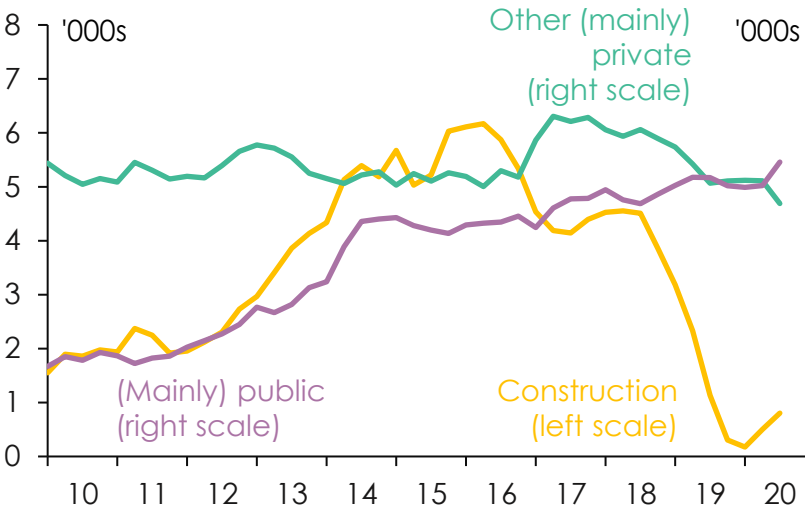
NT population



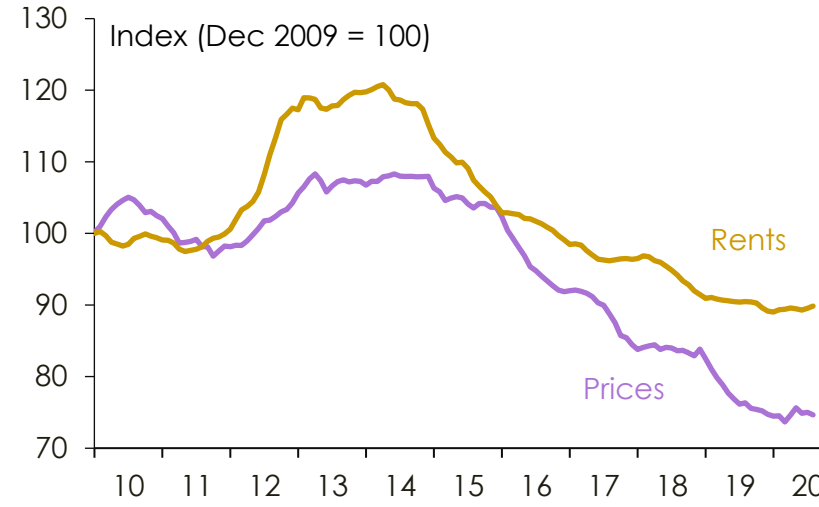
NT business investment



NT employment



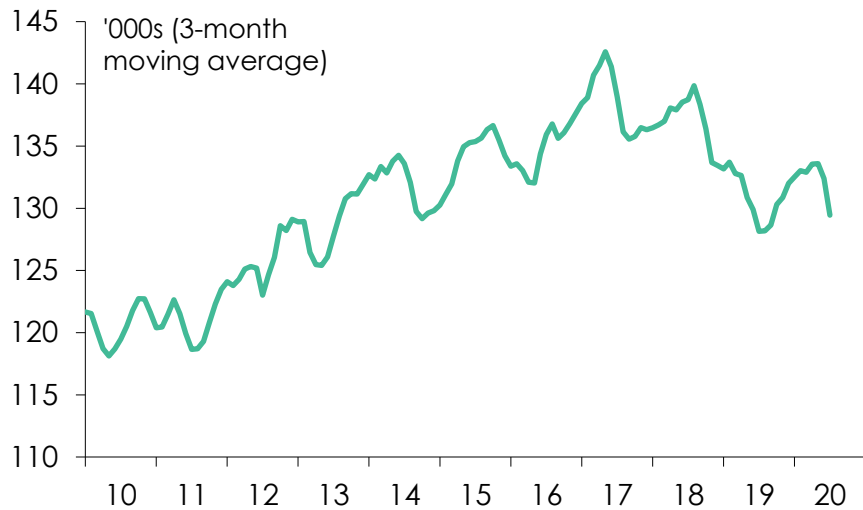
Darwin property prices and rents



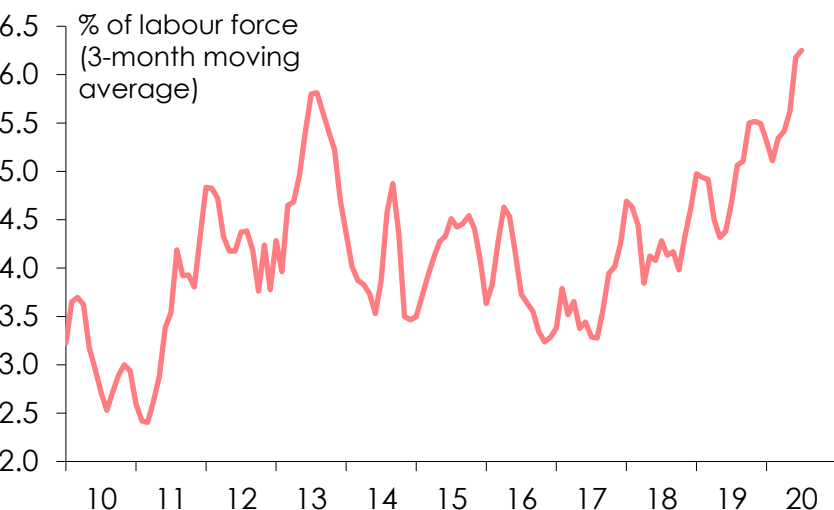
Note: 'Mainly public' industry sectors are public administration & defence; electricity, gas & water; education & training; and health care & social assistance. 'Mainly private' includes all other sectors except construction (shown separately).
Sources: Northern Territory Treasury, Covid-19 Financial Report, July 2020; ABS; CoreLogic; Corinna.

Emigration to the southern states, and much lower immigration from overseas, has cushioned the rise in unemployment since 2017

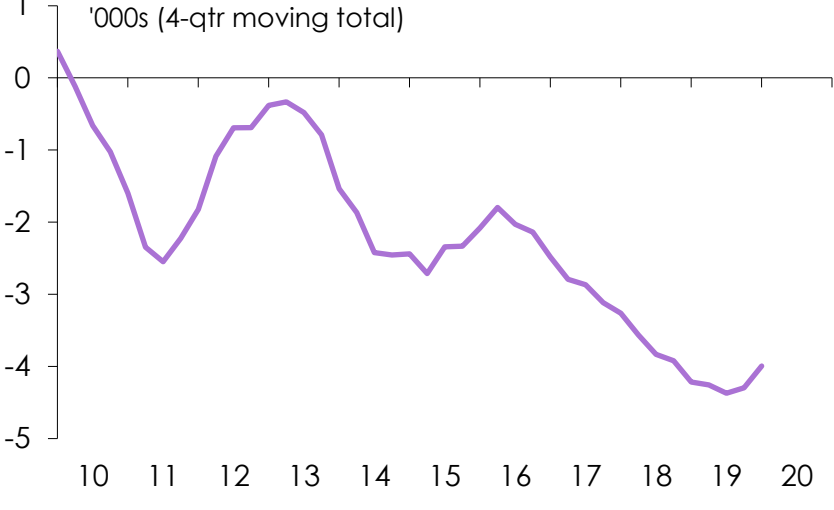
Employment



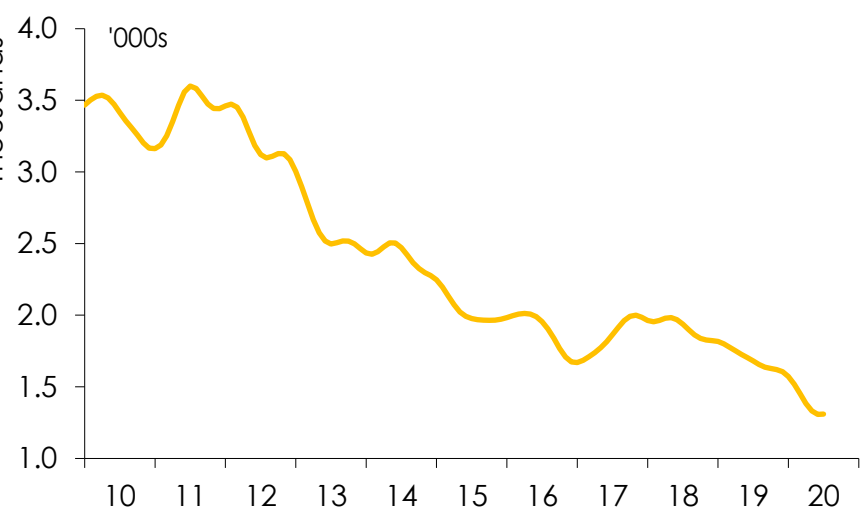
Unemployment rate



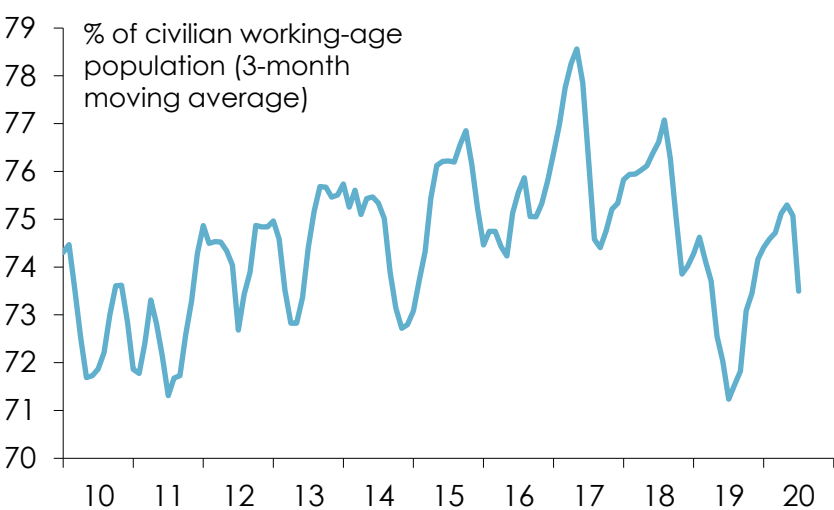
Net interstate migration



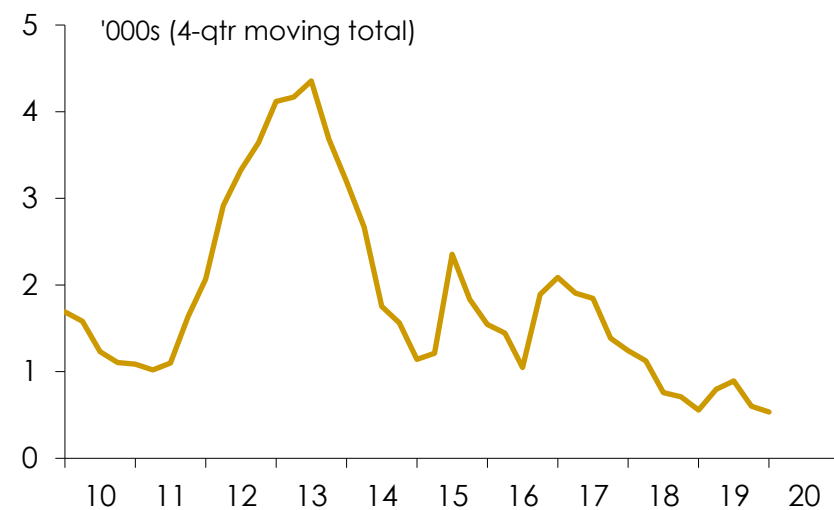
Skilled vacancies



Labour force participation rate



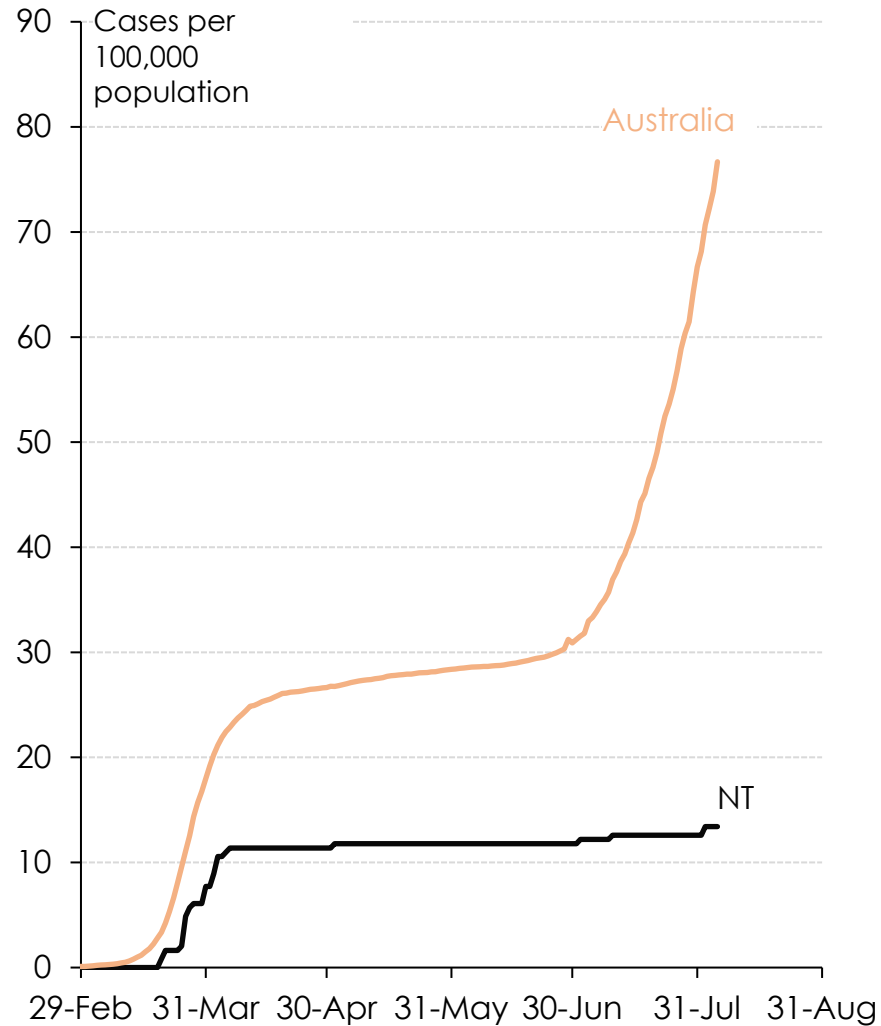
Net overseas migration



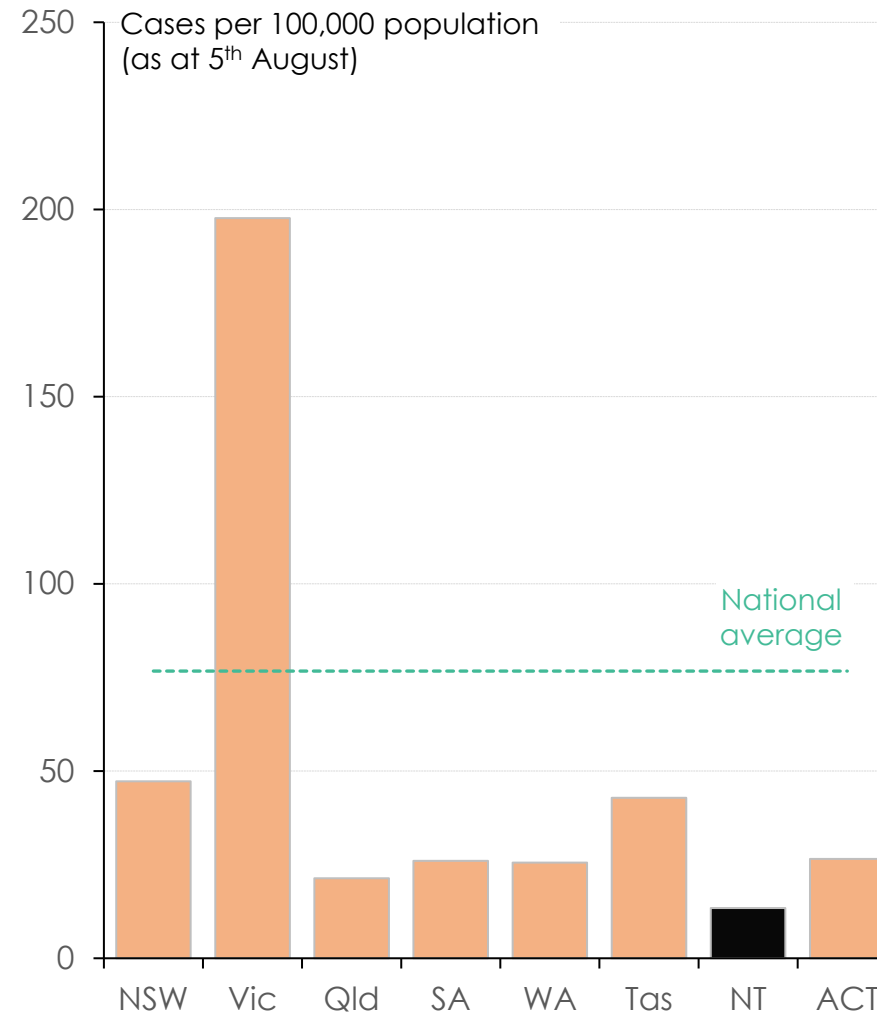
Sources: ABS; Australian Government National Skills Commission.

The Northern Territory has been more successful than any other state or territory in preventing the spread of Covid-19, and in avoiding fatalities ...

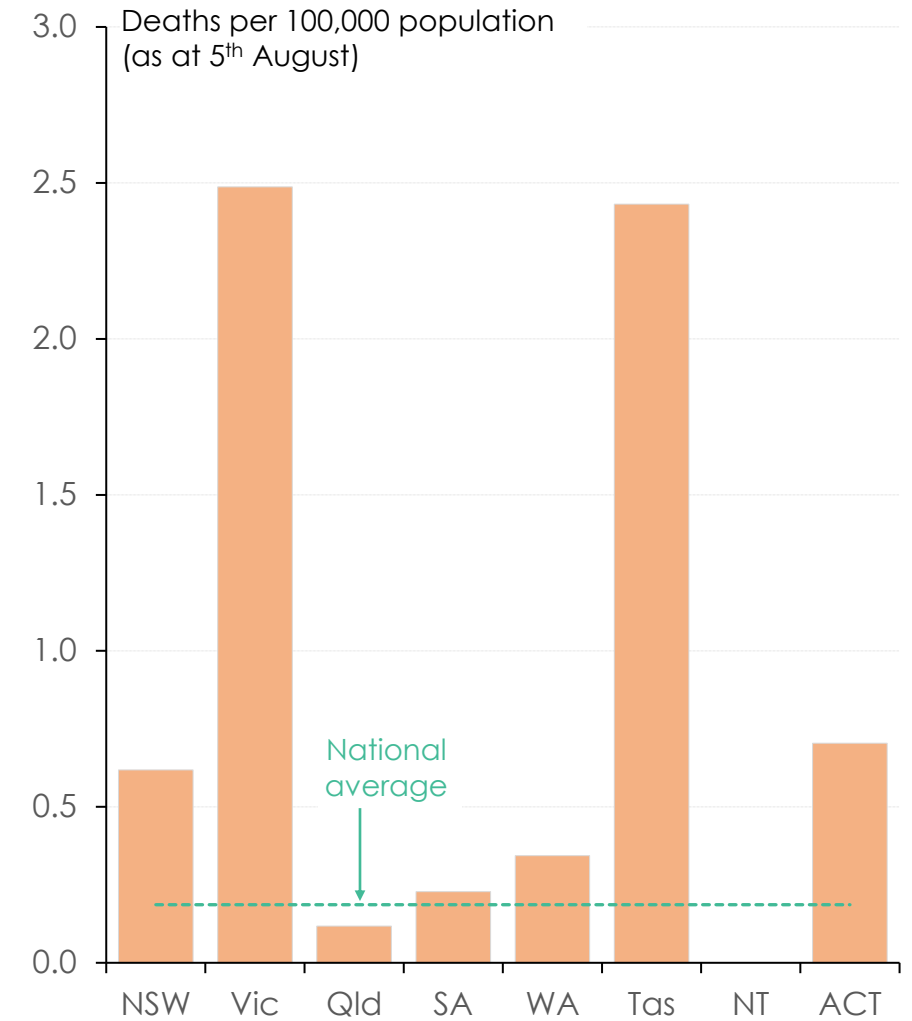
Covid-19 cases per 100,000 population, NT and Australia



Covid-19 cases per 100,000 population, states and territories

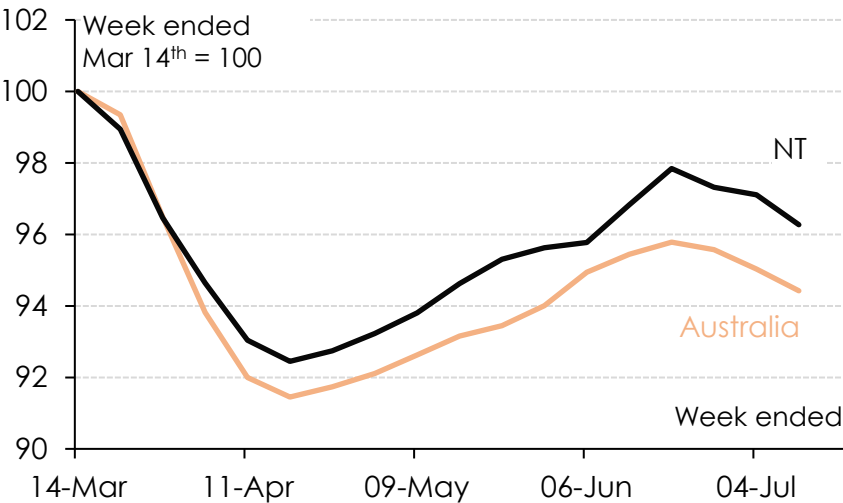


Covid-19 related deaths per 100,000 population, states and territories

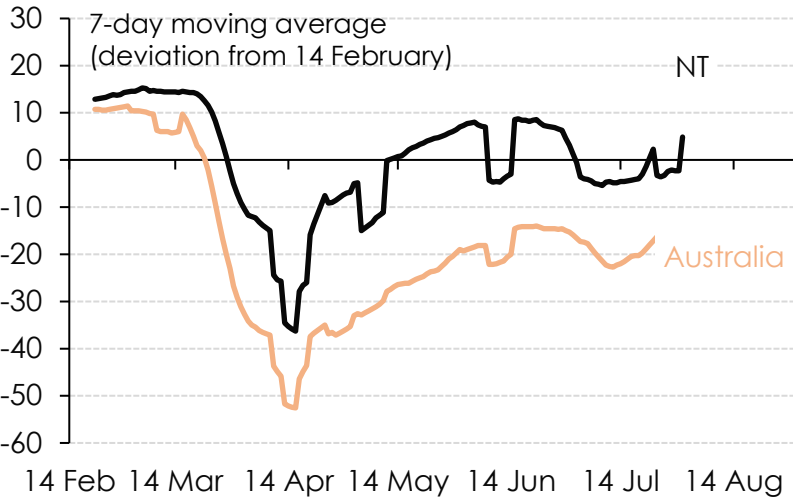


... which has allowed the Territory to ‘open up’ more quickly than the rest of Australia, and to avoid re-imposing restrictions

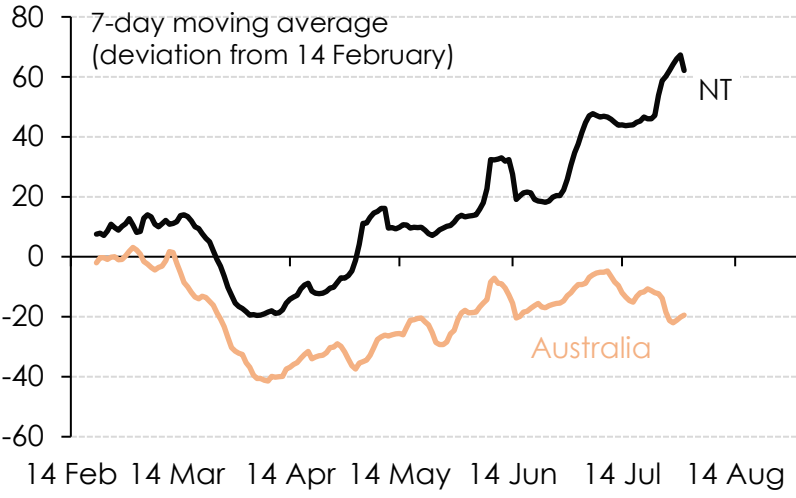
Number of payroll jobs



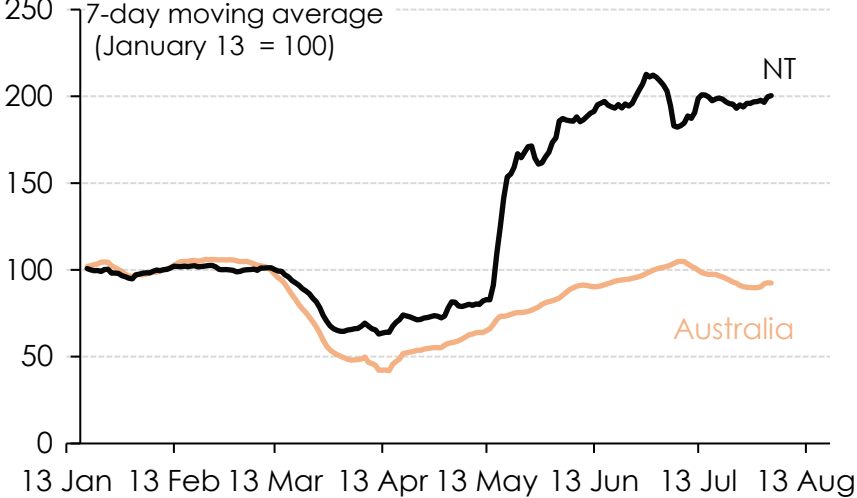
Time spent in work places



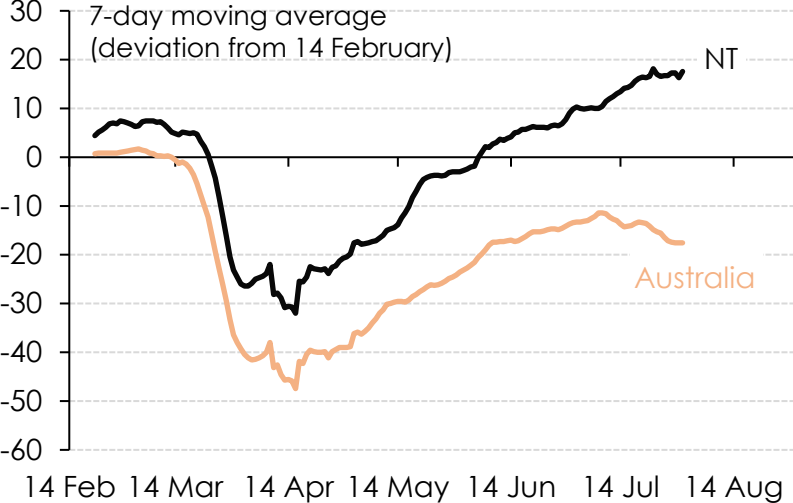
Time spent in parks



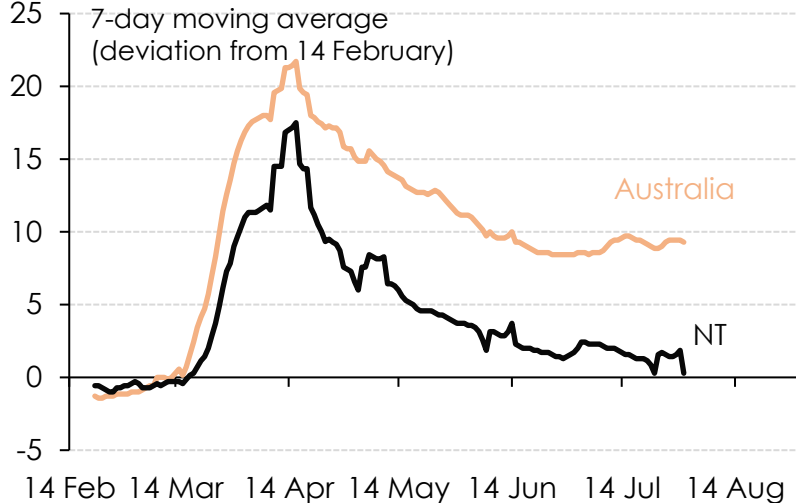
Time spent driving



Time spent shopping

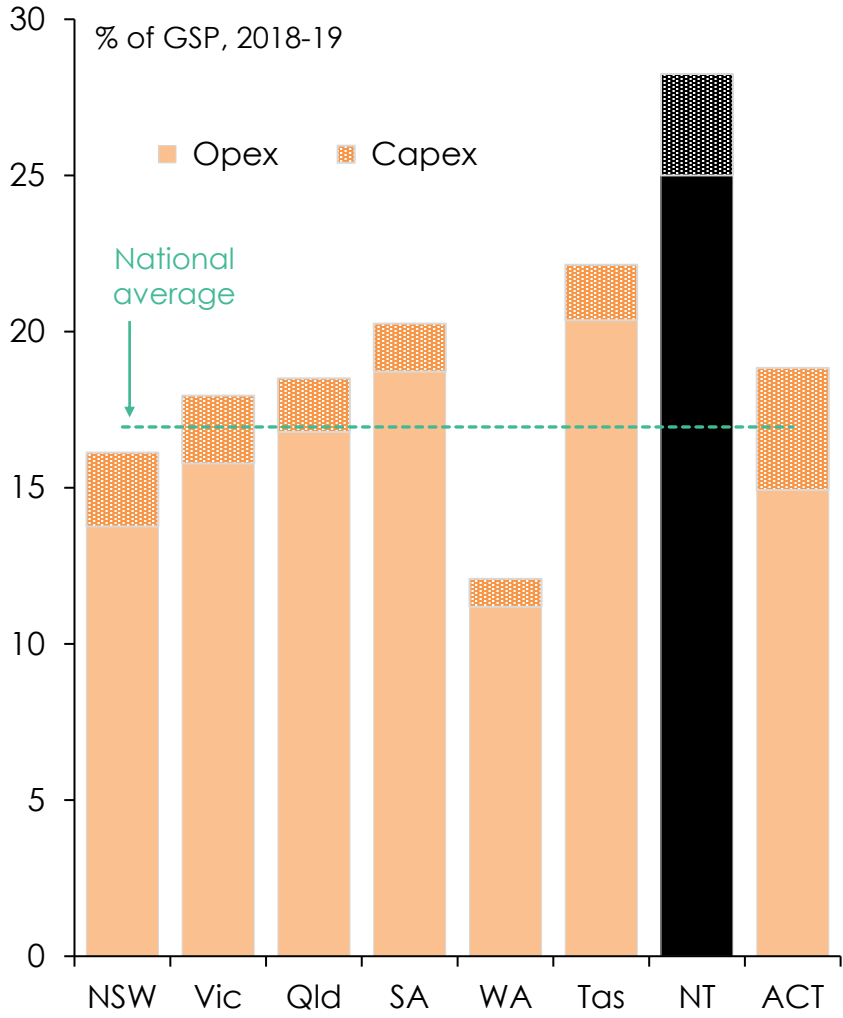


Time spent at home

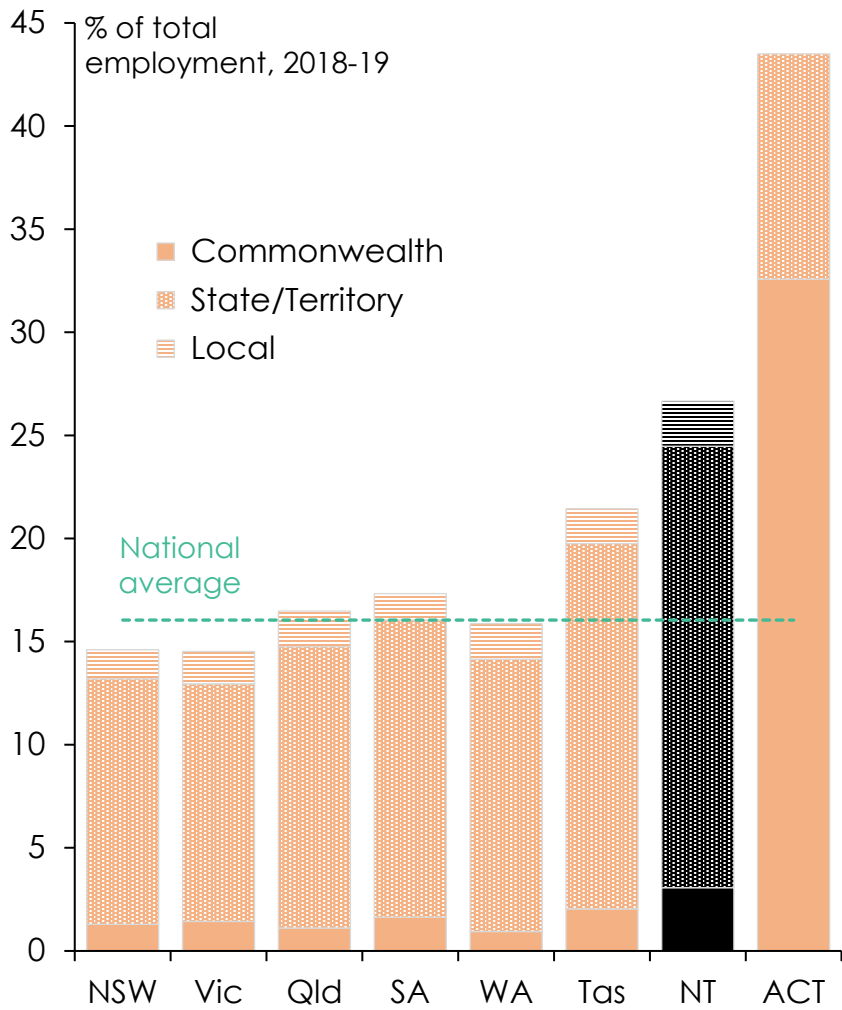


The NT is unusually dependent on government, and the NT government is very dependent on revenue from the GST and Commonwealth grants

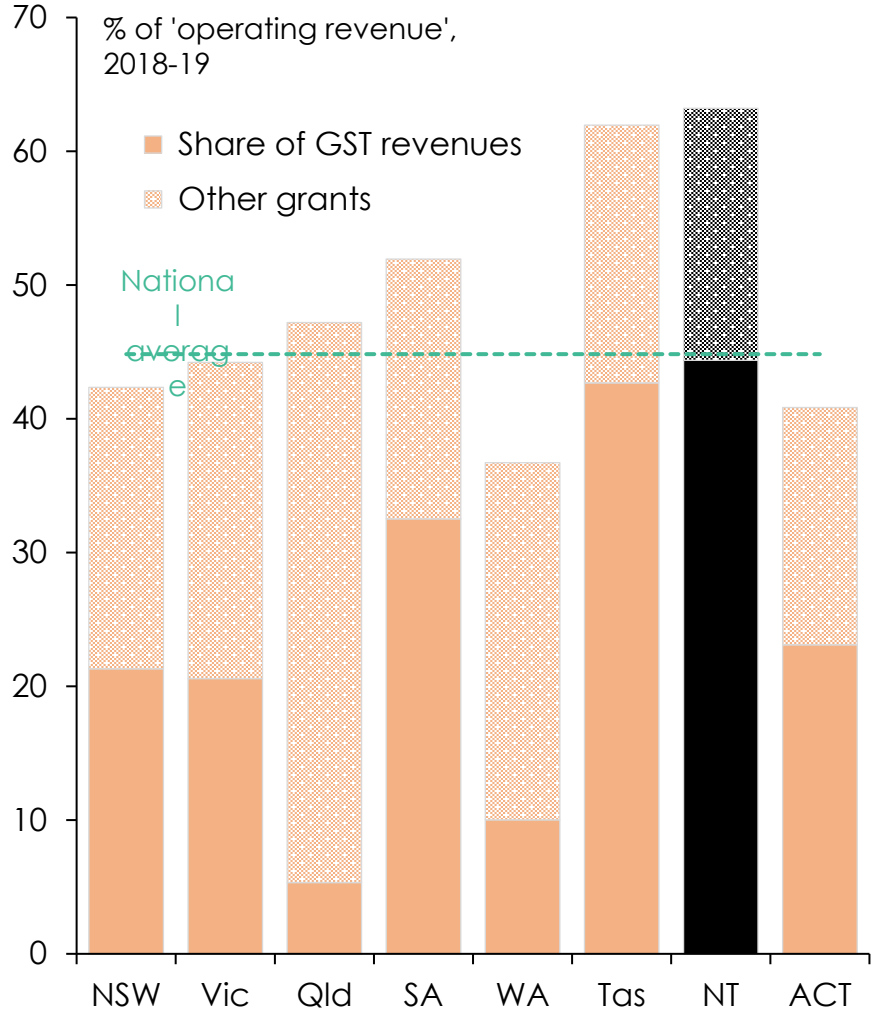
State/territory public sector spending, 2018-19



Public sector employment, states and territories, 2018-19



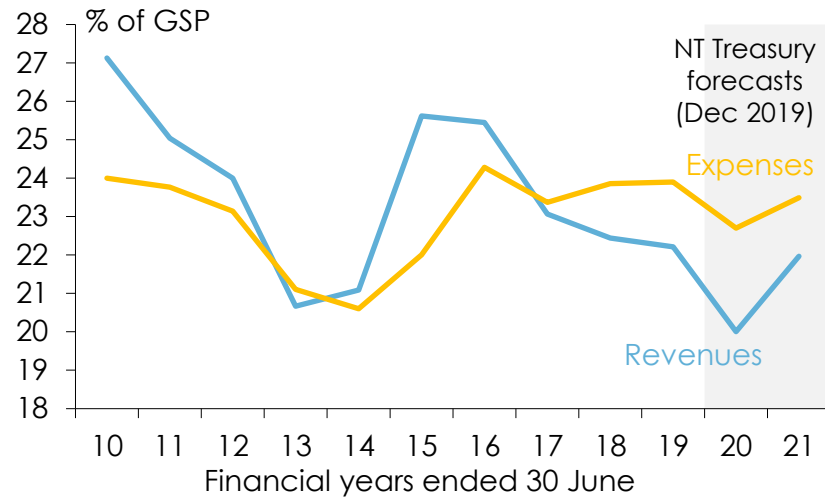
State/territory government reliance on Commonwealth revenue, 2018-19



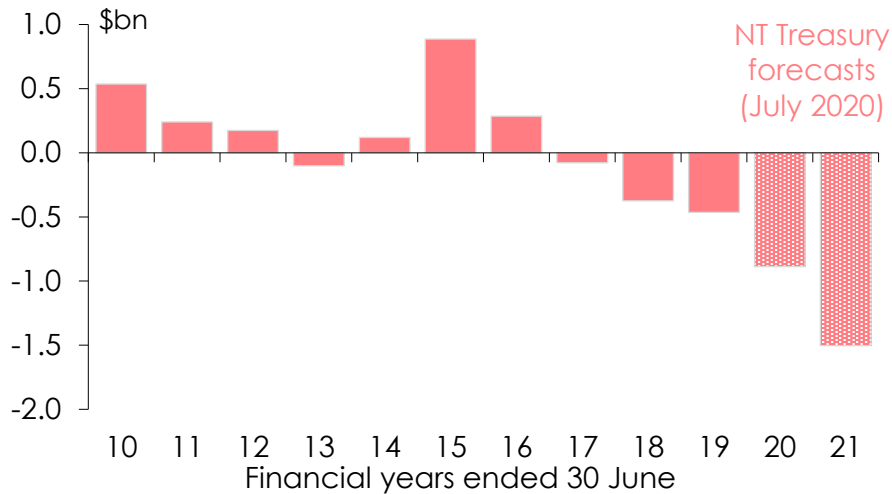
Note: Spending (first chart) and revenue (third chart) are for the 'general government' sectors (ie, departments and agencies wholly or largely funded by taxation or grants); employment (second chart) is for the public sector as a whole (including public enterprises). Sources: ABS; Corinna.

The Northern Territory's public finances are in poor shape, and the Territory will probably need further financial assistance from the Commonwealth

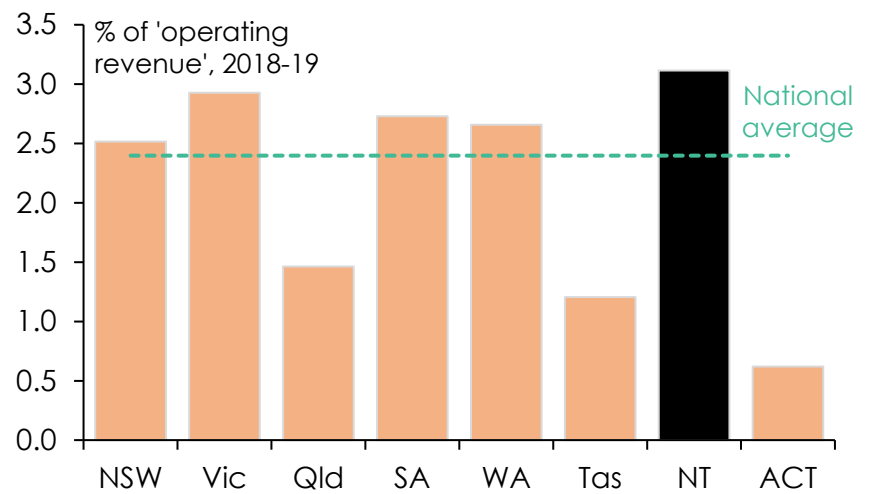
General gov't revenue & expenses



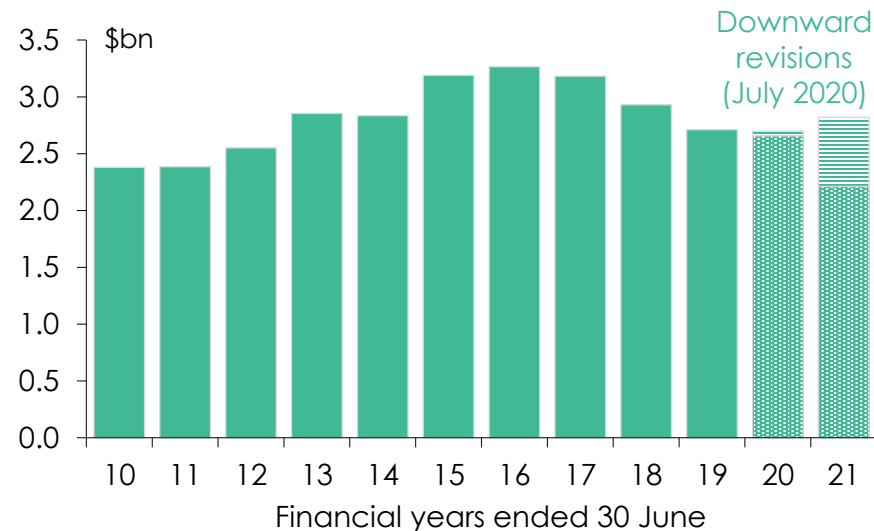
General gov't net operating balance



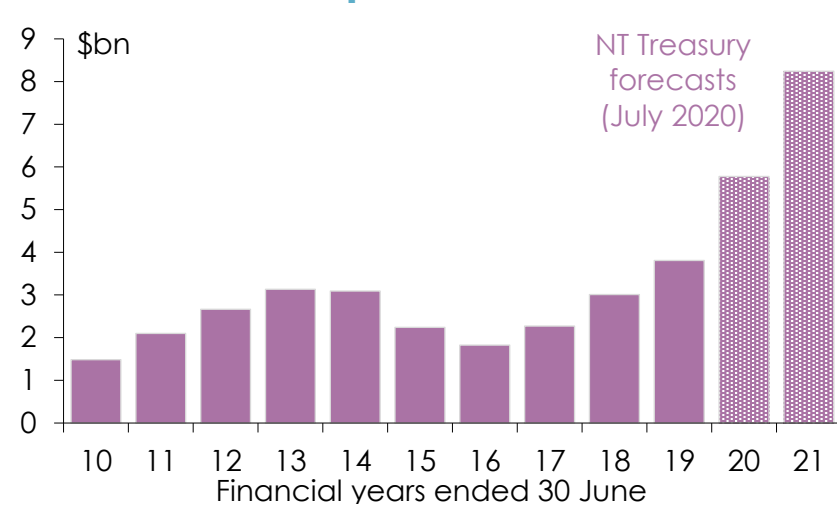
NFPS net interest as pc of revenue



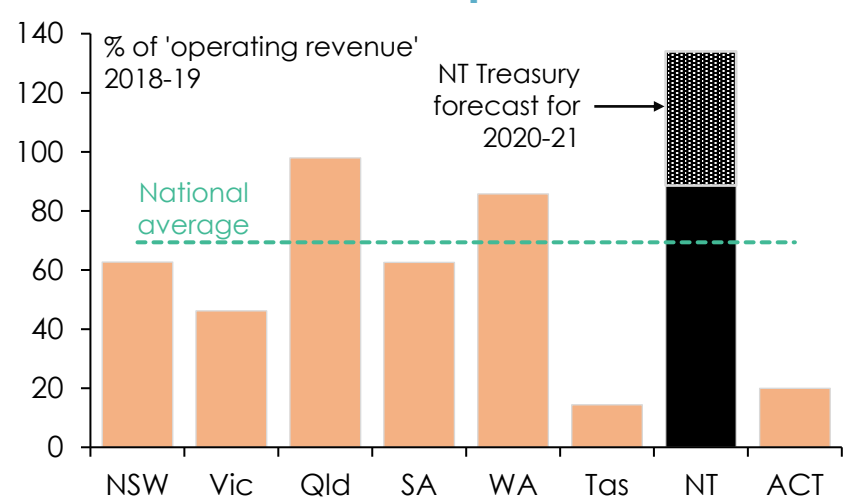
NT's share of GST revenues



Non-financial public sector net debt



NFPS net debt as a pc of revenue

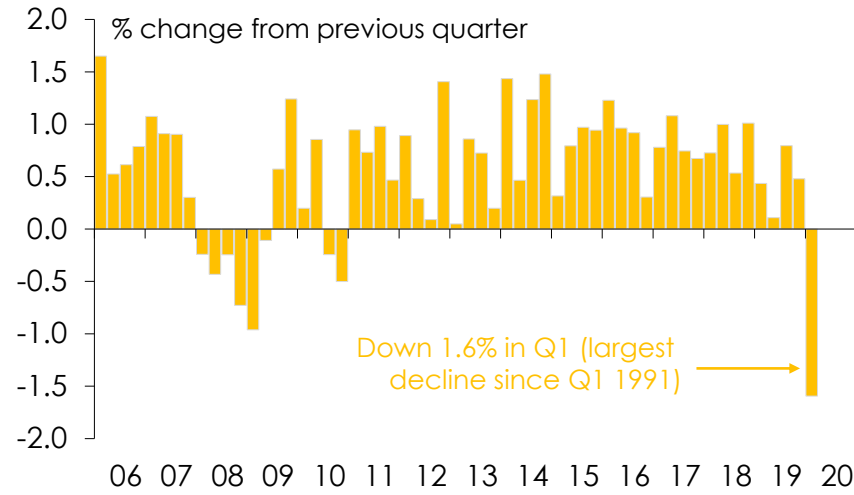


Note: 'General government' consists of departments and agencies wholly or largely funded by taxation or grants. 'NFPS' is the non-financial public sector (ie includes 'general government' and public non-financial enterprises). Sources: Northern Territory Treasury, [2019-20 Mid-Year Report](#), 28th November 2019 and [Covid-19 Financial Report](#), 29th July 2020; ABS, [Government Finance Statistics 2018-19](#), 28th April 2020; Corinna.

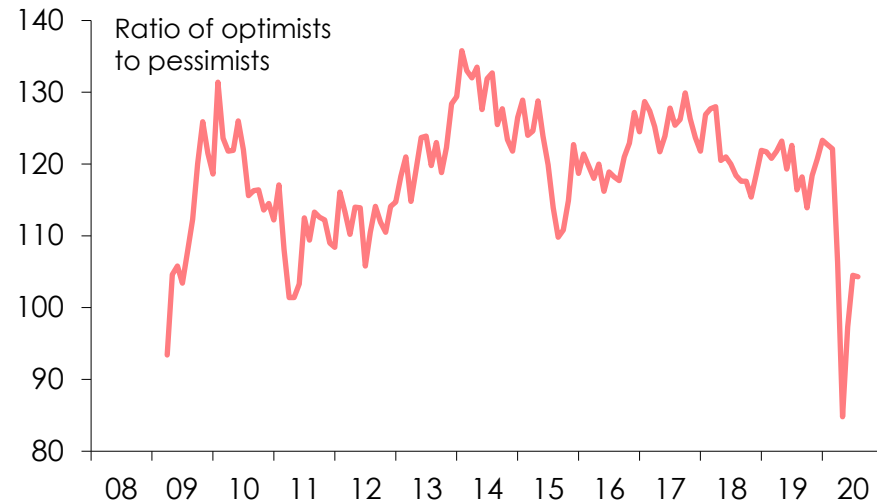
New Zealand

New Zealand has thus far had a sharper economic contraction than Australia – although it has done (and will do) more by way of fiscal policy

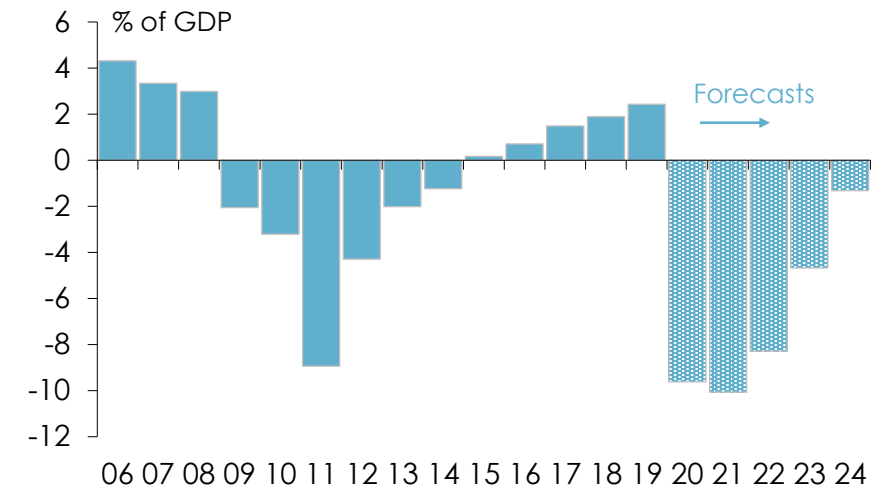
Real GDP



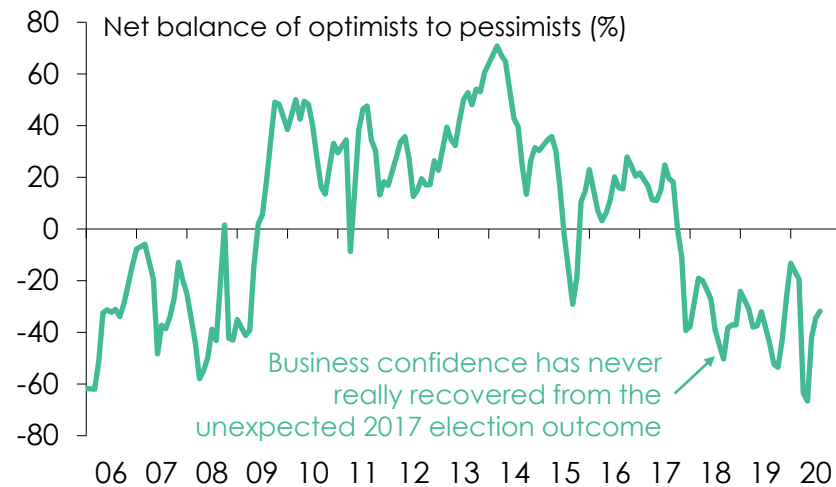
Consumer confidence



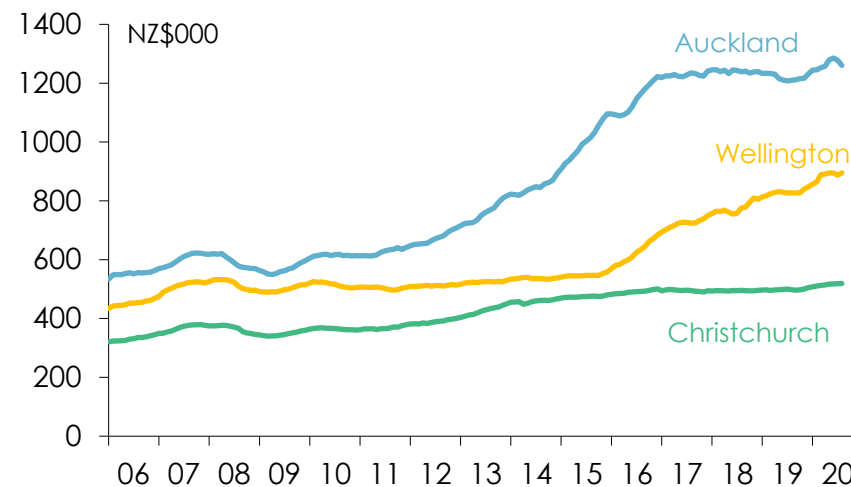
NZ government budget balance



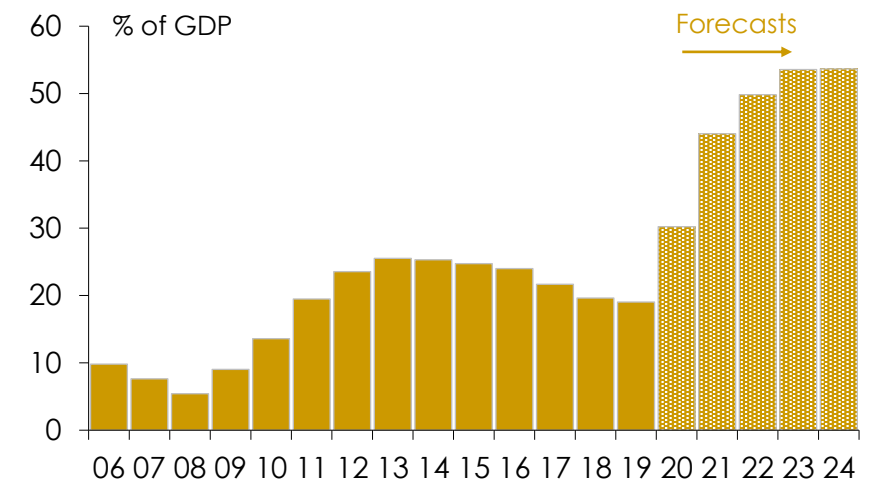
Business confidence



Residential property prices



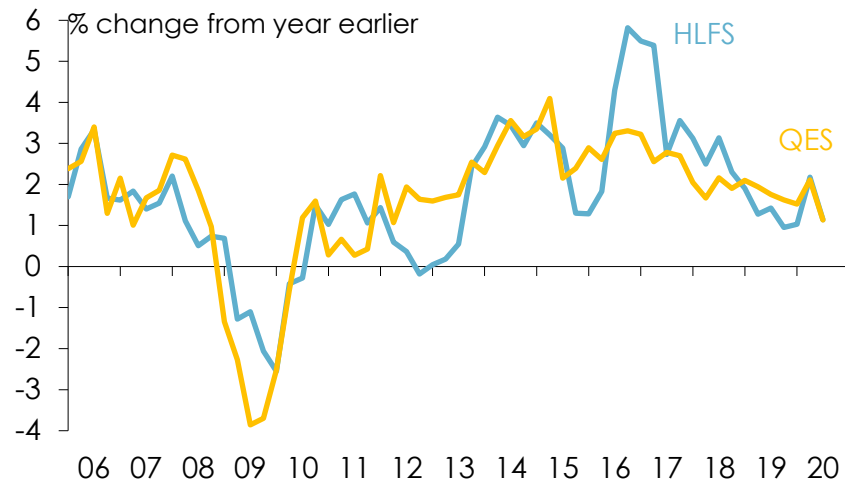
NZ 'core Crown debt'



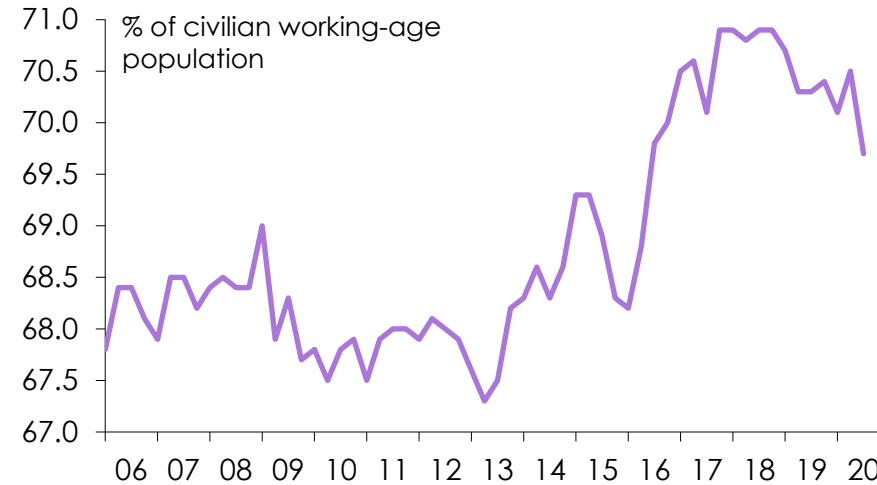
Note: New Zealand uses GDP(P) as its preferred measure of GDP. Unemployment rates are quarterly. The measure of the NZ Government budget balance is 'OBEGAL', operating balance excluding gains and losses (an accrual accounting measure). Net 'core Crown debt' excludes assets of the NZ Super Fund, student loans and other advances, and financial assets held for public policy purposes. Fiscal data (the two right-hand charts) are for fiscal years ended 30th June. Sources: Statistics NZ; ANZ-Roy Morgan; ANZ Bank; Quotable Value NZ; NZ Treasury *Budget Economic and Fiscal Update 2020*. Q2 GDP estimates will be released on 17th September.

New Zealand's wage subsidy scheme appears to have prevented a large rise in unemployment, although hours worked have fallen sharply

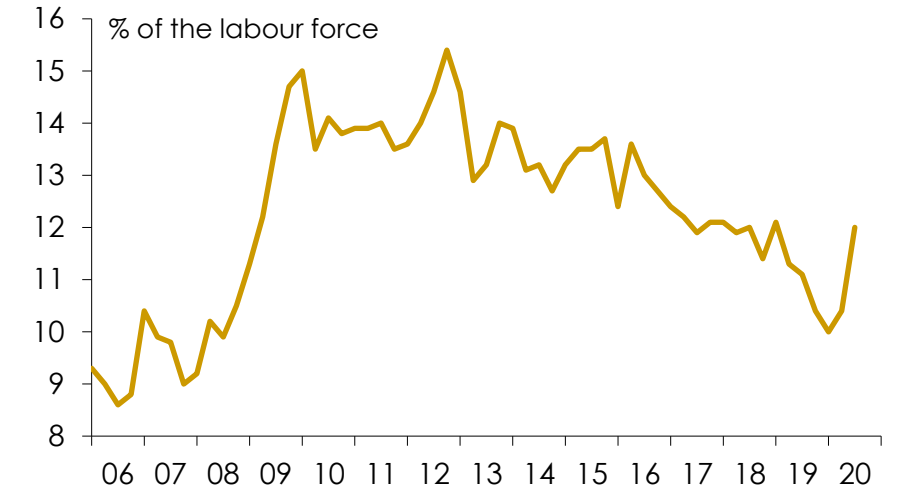
Employment



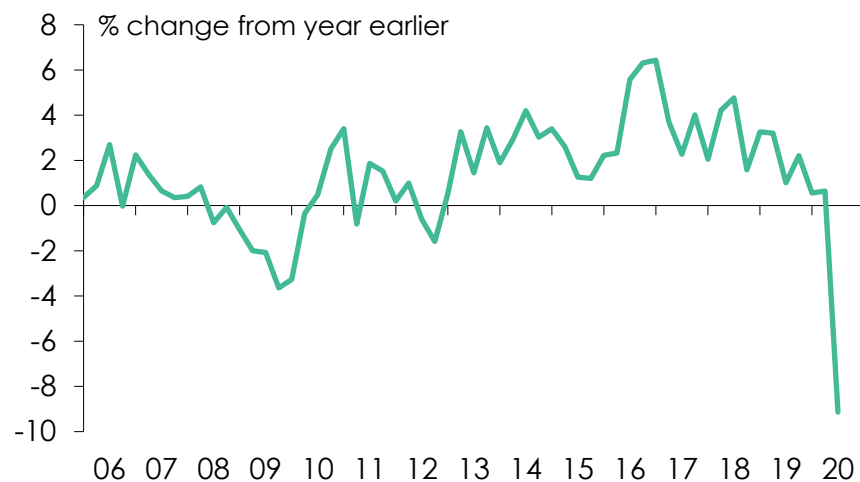
Labour force participation rate



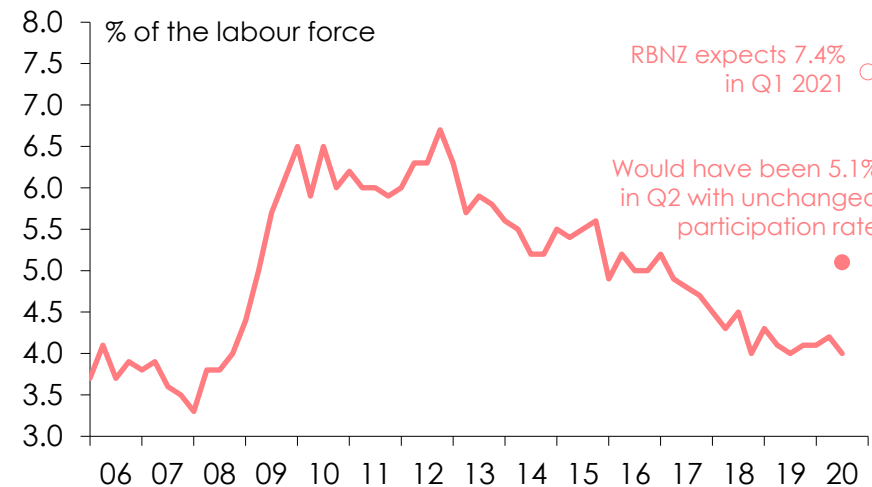
Labour force under-utilization rate



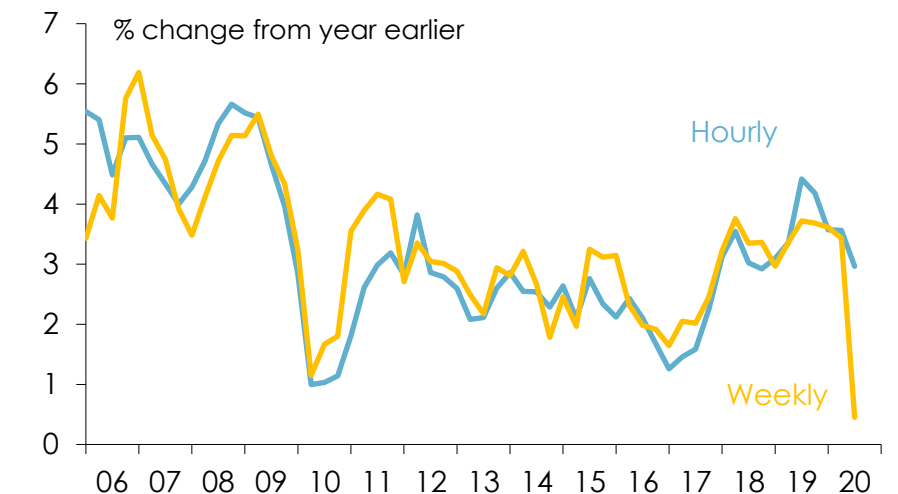
Hours worked



Unemployment rate



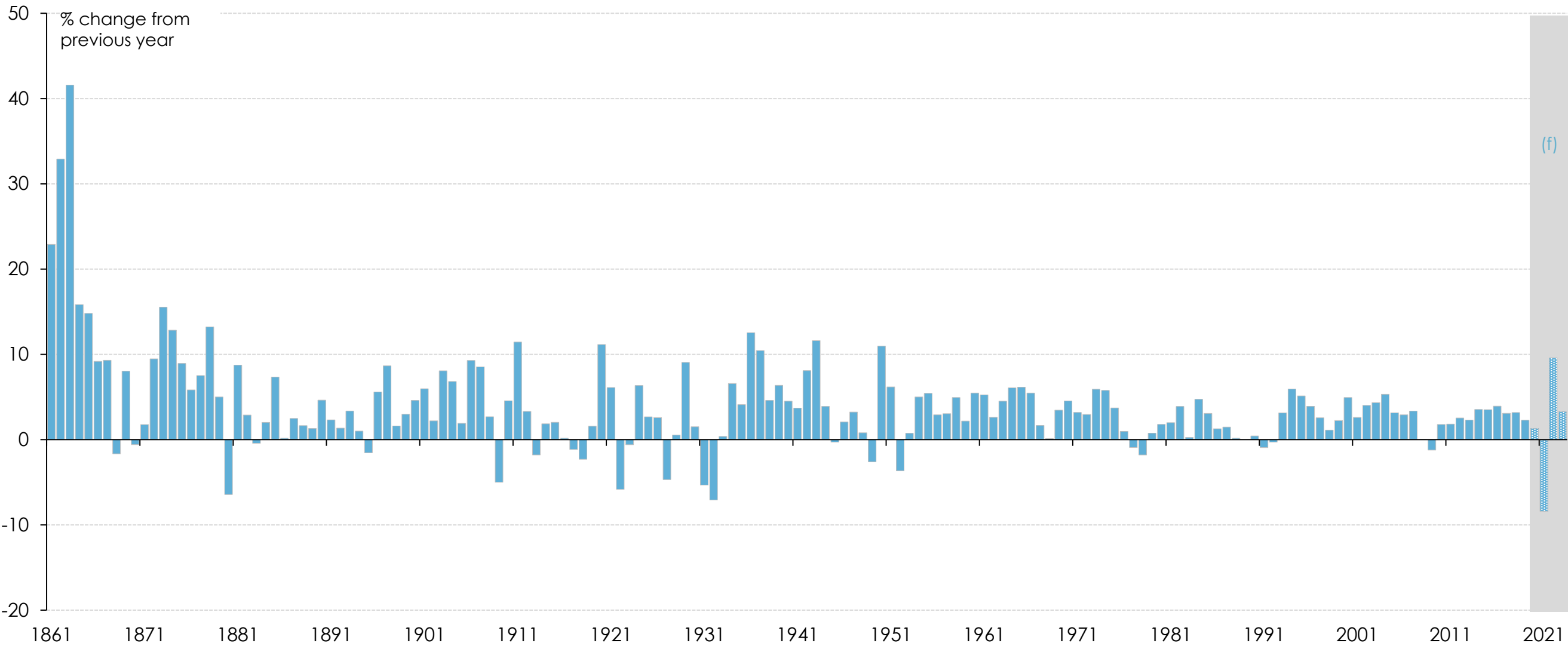
Average weekly earnings



Note: New Zealand labour force data are only published quarterly. There are two 'headline' series on employment – the household labour force survey (HLFS) which counts the number of people in employment during the quarter; and the quarterly employment survey (QES), which counts the number of 'filled jobs' at 'economically significant enterprises' in the 'reference week' in the middle of the quarter, excluding the self-employed and those working in agriculture and fishing. The labour force under-utilization rate measures those who are unemployed plus those who are employed part-time but working fewer hours than they are able and willing to work. Source: Statistics NZ. September quarter data will be released on 4th November.

The Reserve Bank of New Zealand is expecting the fall in real GDP in the year ended March 2021 to be the biggest in recorded NZ history

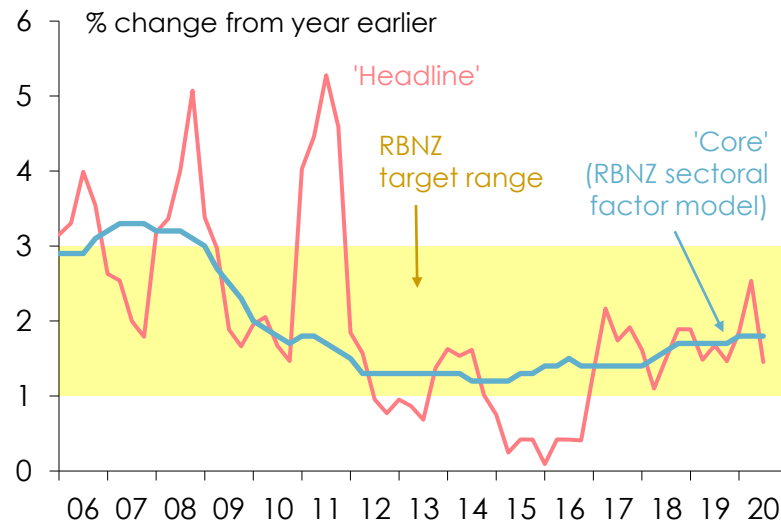
Annual growth in New Zealand real GDP, 1861-2023



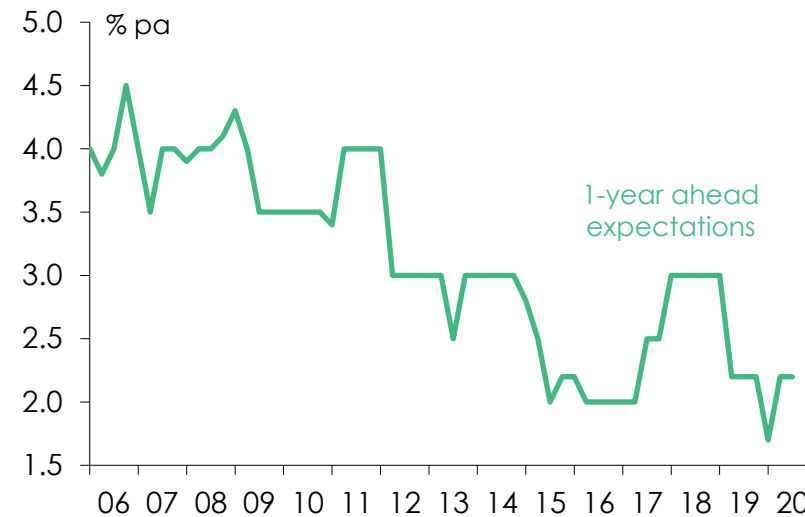
Note: Forecasts are for years ended 31 March. Source: RBNZ, Monetary Policy Statement, May 2020.

Inflation remained comfortably in the RBNZ's target band in the June quarter

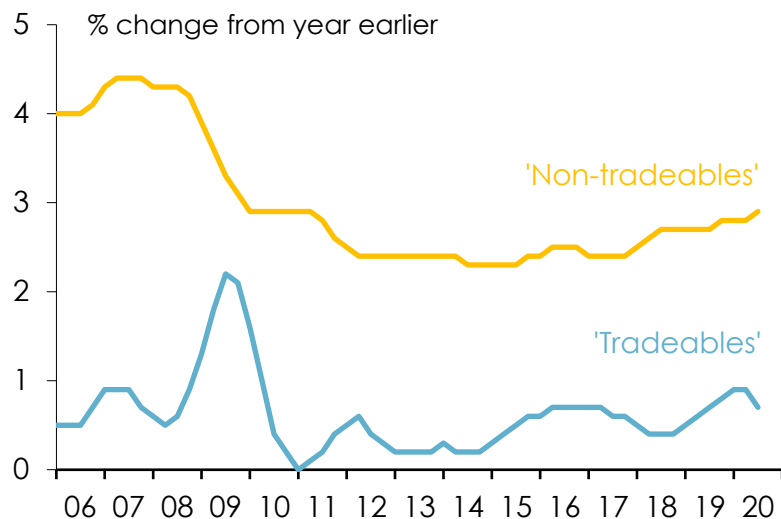
Consumer prices



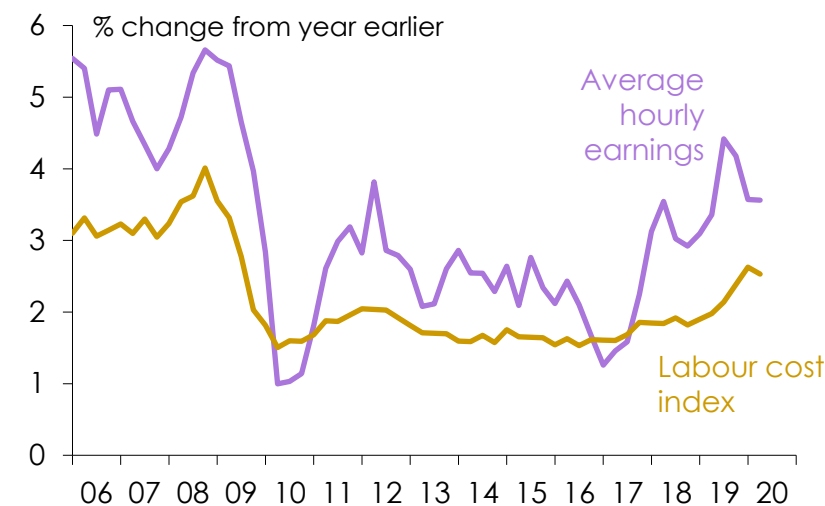
Household inflation expectations



Components of 'core' inflation



Labour costs

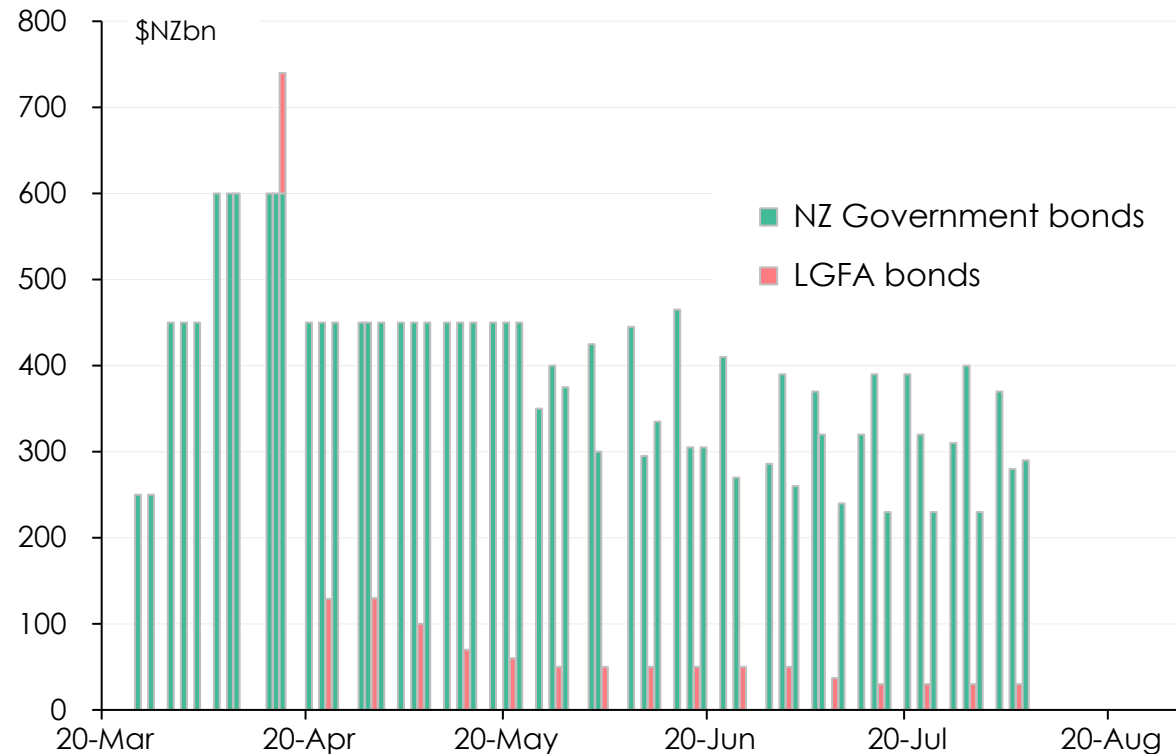


- ❑ The CPI fell 0.5% in the June quarter, reflecting a 12% fall in petrol prices, partly offset by a 16% increase in food prices and SNZ's inability to capture fully the effect of freeze on residential rents between 26th March and 25th September
- ❑ The June quarter result cut the annual 'headline' inflation rate to 1.5%, from the 8-year high of 2.5% recorded in the March quarter (which resulted from large increases in rents, food and cigarette & tobacco prices)
- ❑ The annual 'core' inflation rate remained unchanged at 1.8%, with a further slight acceleration in 'core' non-tradeables inflation (to its highest level in 9 years) offset by an easing in 'core' tradeables inflation
- ❑ Inflation expectations remain low, and pressures from labour costs are likely to abate given the weakening in the labour market since March

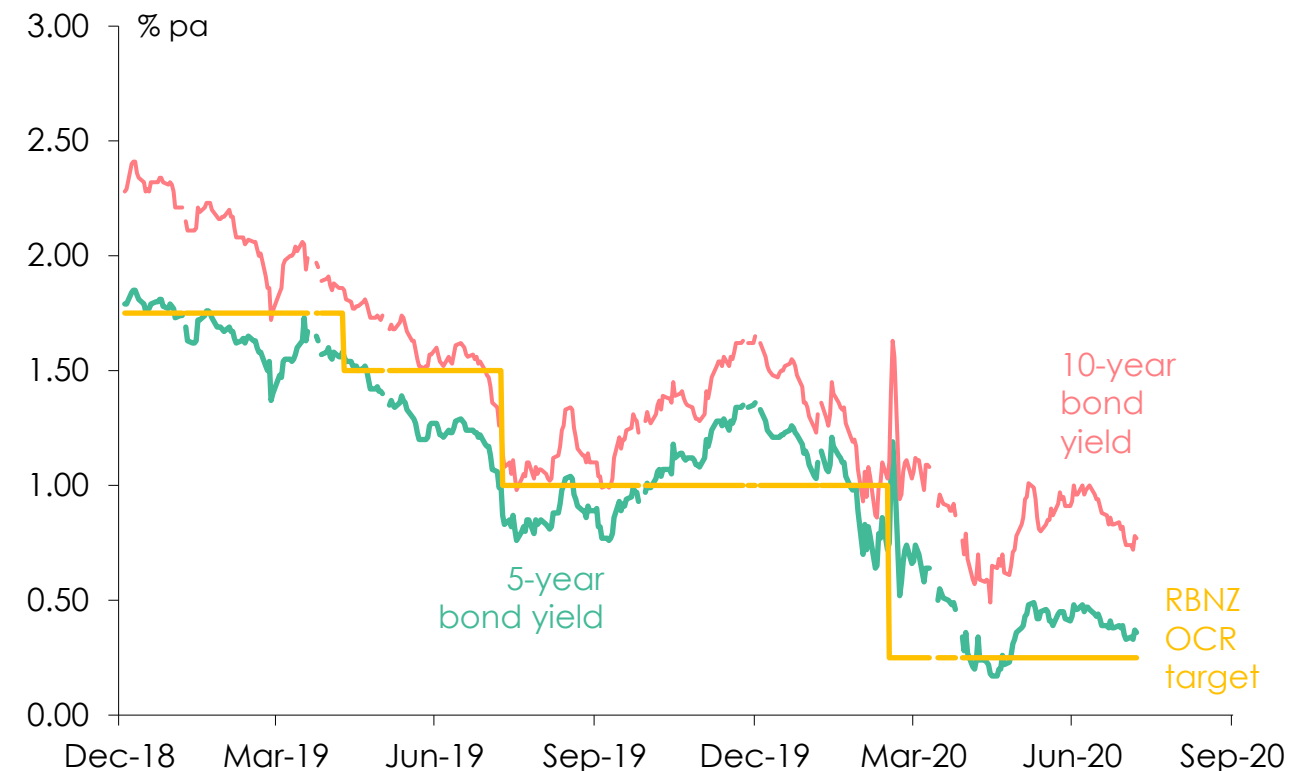
Sources: Statistics NZ; Reserve Bank of New Zealand. September quarter CPU will be released on 23rd October.

The RBNZ's 'QE' program has been larger than the RBA's, but less successful in stabilizing bond yields

RBNZ open market bond purchases



New Zealand interest rates

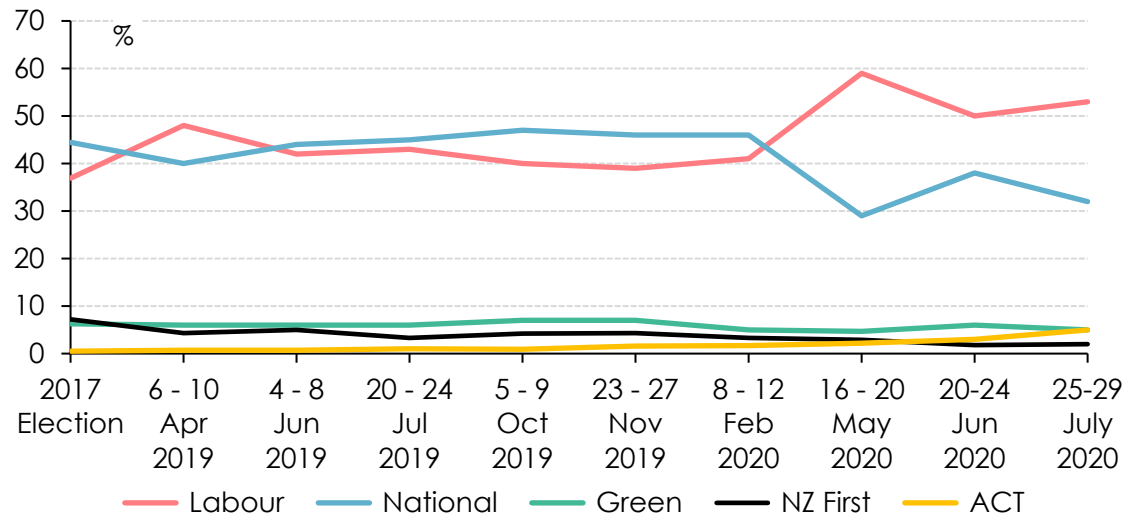


- ❑ RBNZ has adopted an ECB-style QE program, establishing a Large Scale Asset Program initially set at \$NZ33bn (10½% of GDP), since increased to \$60bn (19% of GDP)
- ❑ Since 25th March RBNZ bond purchases have amounted to \$NZ23.9 bn (7.7% of GDP) – but have been less successful than the RBA's in stabilizing medium-term bond yields
- ❑ The RBNZ has asked banks to prepare operationally for the possibility of negative interest rates

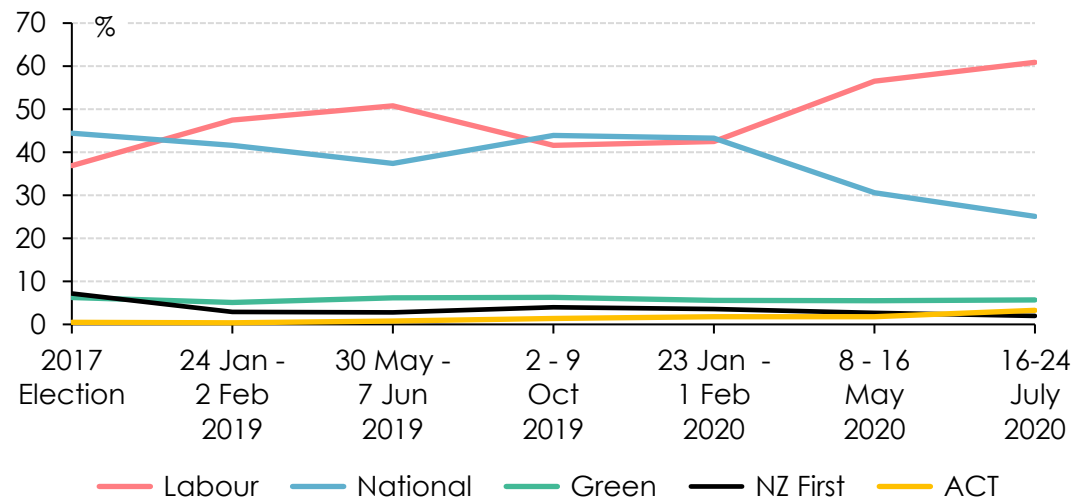
Note: LGFA = Local Government Financing Authority. Source: Reserve Bank of New Zealand. Data up 7th August.

PM Jacinda Ardern's Labour Party seems likely to win a majority in its own right at the elections to be held on 19th September

Colmar-Brunton 1-News poll



Reid Research – TV3 poll



- New Zealand uses a 'mixed member proportional' (MMP) system to determine the composition of its 120-seat Parliament
 - 71 members are elected from constituencies (of which 7 are reserved for Māori) on a 'first past the post' basis (as used in Britain)
 - the other 49 are chosen from party lists such that each party has the same share of seats in the Parliament as its share of the national vote, provided it has won at least 5% of the national vote or one constituency seat (similar to the system used for the German Bundestag)
 - each elector has two votes, one for his or her constituency and one for a party list
- At the 2017 election, the then incumbent centre-right National Party won 56 seats with 44.6% of the vote, but Labour which won 46 seats with 36.9% of the vote was able to form government in coalition with the conservative-populist NZ First (9 seats with 7.2% of the vote) and the Greens (8 seats with 6.3% of the vote)
- For the second time eight weeks, National changed leaders, installing Judith Collins (known to her colleagues as 'Crusher' Collins) after the resignation of Todd Muller for 'health reasons'
- The most recent poll, by Colmar Brunton, if repeated at the election would give Labour 67 seats (up 20), more than enough to govern in their own right, and National 41 (down 15)
 - The Greens would get 6 seats (down 2), the ACT 6 (up 5), and NZ First would lose all its seats (including that of Deputy PM Winston Peters)

Note: 'ACT' is the Association of Consumers and Taxpayers, a libertarian party which currently holds one constituency seat in the NZ Parliament. Sources: NZ Electoral Commission; Colmar Brunton; Reid Research.

Some possible longer-term consequences

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)
 - and as Treasury Secretary Stephen Kennedy pointed out this week, "it is highly likely that fiscal multipliers are larger when interest rates are near zero and expected to remain there for the foreseeable future"
- ❑ **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 (see slide 72)**
- ❑ **Accelerated decline in the use of cash for transactions (see slide 76)**
- ❑ **Re-think of relationships with China (see slides 104-106)**
 - 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 November election (see slide 46) 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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