

ECONOMIC IMPACT OF THE CORONAVIRUS PANDEMIC

19TH SEPTEMBER 2020

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What's new?

The world

- ❑ 1,999,971 new Covid-19 cases were confirmed this week, the highest total since the pandemic began, pushing the cumulative total above 30 million; while 36,526 people died, the lowest weekly total since mid-July, bringing the cumulative death toll to 946,665 ([slide 4](#))
- ❑ The rising case numbers are now being driven by an upsurge in Europe (where new cases have doubled over the past four weeks) and “the four I’s” – India, Indonesia, Iraq and Israel ([slide 5](#))
- ❑ With 67 countries now having released their Q2 GDP estimates (of the 95 who eventually will) we estimate that global GDP declined by 9.4% from Q2 2019, while the OECD estimated that OECD area real GDP shrank by 10.6% over the year to Q2 ([slide 18](#))
- ❑ The OECD raised its forecast for global GDP growth in 2020 to -4½% (from -6% three months ago) but lowered its 2021 forecast to 5% (from 5¼%) ([slide 21](#))
- ❑ The Fed committed to achieving an inflation rate “moderately above 2% for some time” ([slide 28](#)) while the Bank of England joined the RBNZ in openly contemplating negative rates ([slide 29](#))
- ❑ Chinese monthly economic data for August show an ongoing rebound in the ‘supply side’ ([slide 34](#)) but continuing sluggishness on the domestic ‘demand side’ ([slide 36](#))
- ❑ The Brookings Institution published an incisive analysis of the Trump Administration’s trade policies ([slide 47](#))
- ❑ New Zealand’s economy shrank by 12.2% in Q2, although the Pre-Election Economic & Fiscal Update forecasts a strong rebound in Q3, and indicates the budget situation isn’t as dire as projected in the May Budget ([slide 120](#))

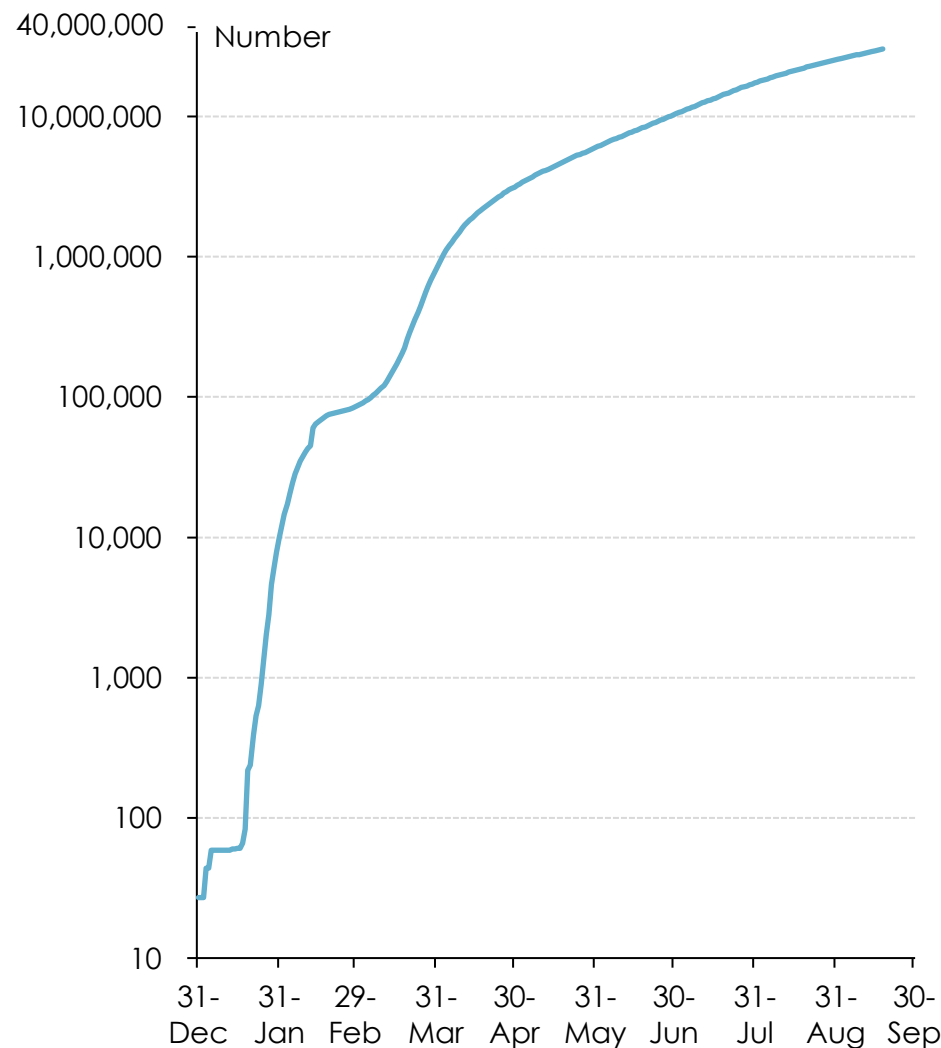
Australia

- ❑ Australia recorded ‘only’ 296 new Covid-19 cases this week, the lowest since the last week of June; there were 1,105 active cases on Friday (the lowest numbers since 9th July); and this week’s death toll of 40 was the lowest since the week ended 25th July ([slide 8](#))
- ❑ Victoria accounted for 245 (83%) of the new cases reported this week, the smallest percentage since the third week of June, and the 14-day moving average – for which the state government is targeting at zero by 23rd November – dropped to 43 this week (from over 400 in early August); the state government eased restrictions for regional Victoria but has imposed a ‘ring of steel’ around Melbourne with (consistent with Victoria’s long-standing practice of using the police as a branch of the State Revenue Office) fines of \$4957 for people trying to breach it
- ❑ Employment rose by 111K (0.9%) in August, although two-thirds of this was part-time, and seasonally unadjusted data suggest that it was largely accounted for by people describing themselves as ‘self-employed’; the ‘official’ unemployment rate unexpectedly fell 0.7 pc pts to 6.8% ([slide 66](#)) while a broader measure dropped 1.1 pc pts to 9.7% ([slide 67](#))
- ❑ The Federal Government continues to foreshadow bringing forward personal income tax cuts previously legislated to come into effect in July 2022 and July 2024 as the ‘flagship’ stimulus measure in its (delayed) 6th October Budget: but a more effective measure could be distribution of time-limited but tradeable vouchers for use in spending in prescribed areas ([slide 103](#))
- ❑ Minutes of this month’s RBA Board meeting indicate that the RBA is continuing to ponder ‘further monetary policy measures to support recovery’ ([slide 106](#)) but it has no appetite for negative rates ([slide 109](#))

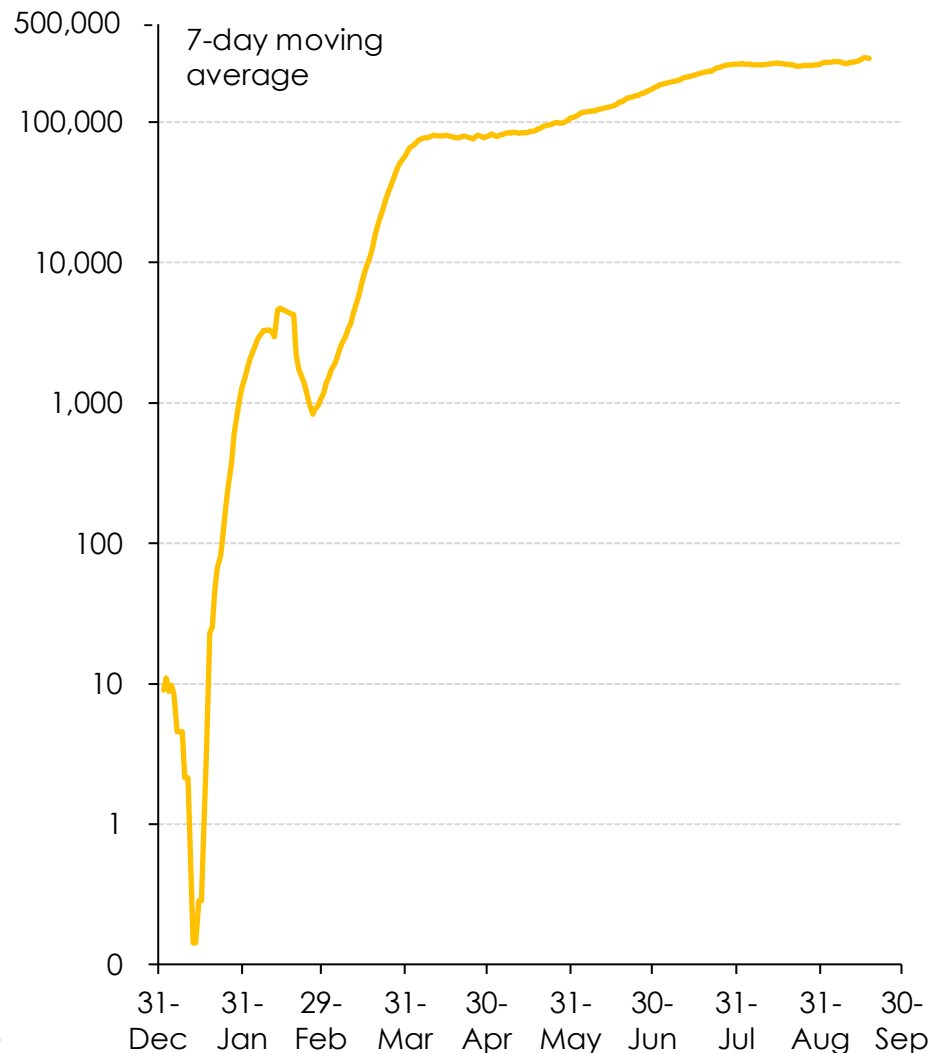
The virus

The global ‘second wave’ still hasn’t peaked, with the number of cases now over 30 million, and the number of deaths only 53K short of 1 million

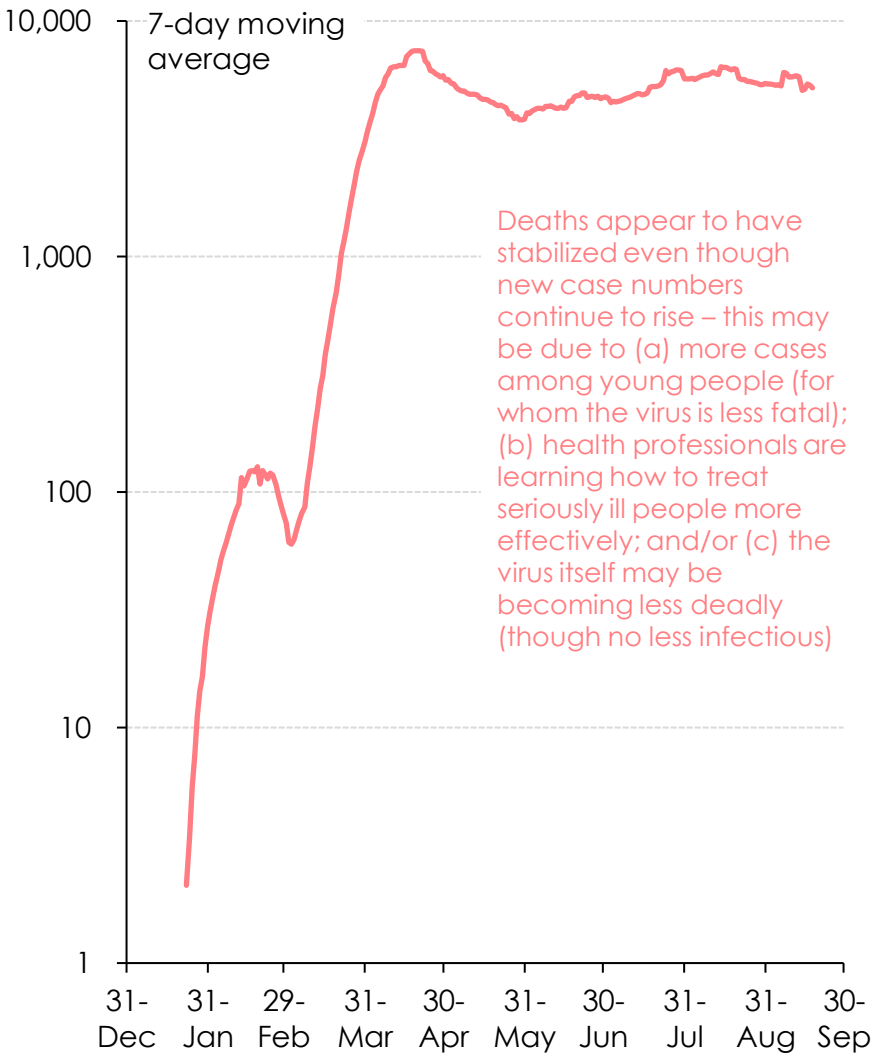
Cumulative confirmed cases – global total



New confirmed cases – global total



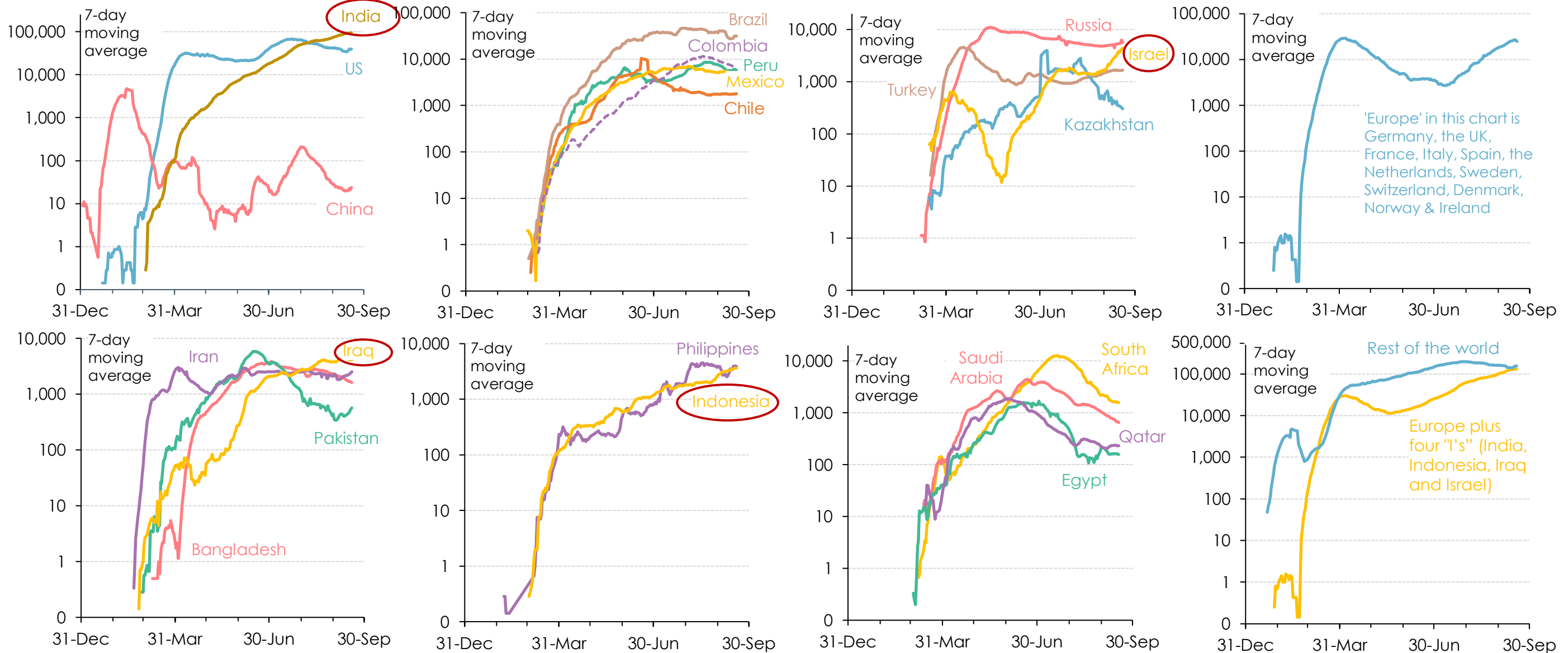
New deaths – global total



Note: All charts are on logarithmic scales. Data up to 18th September. Source: University of Oxford, [Our World in Data](#).

The ongoing rise in global case numbers is now being driven by Europe and the “four I’s” (India, Indonesia, Iraq and Israel)

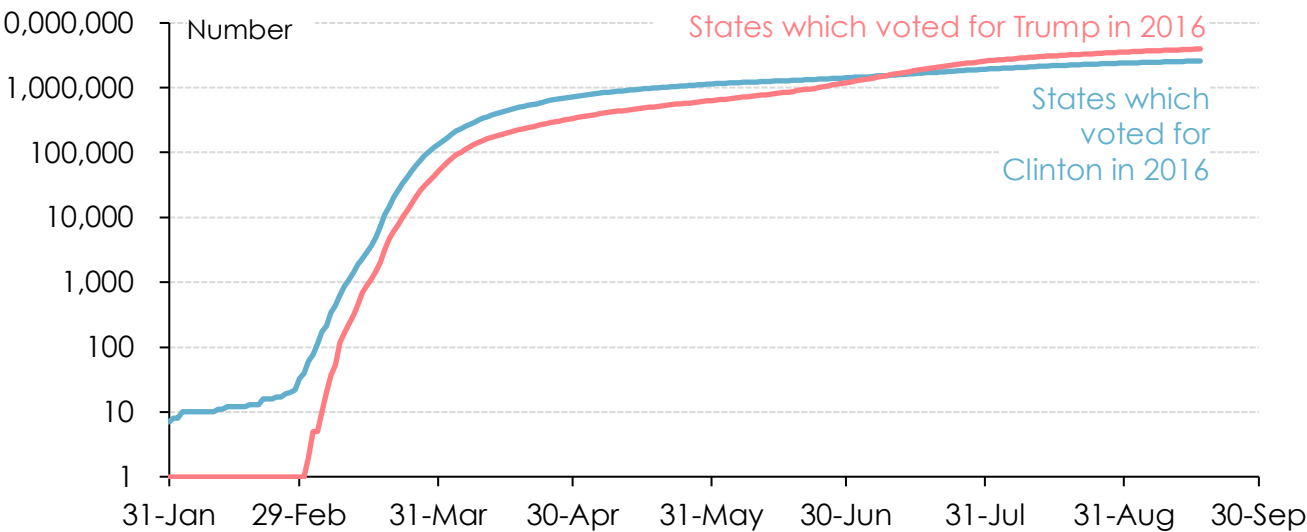
Daily new cases – 22 countries with (mostly) large populations and large numbers of new cases



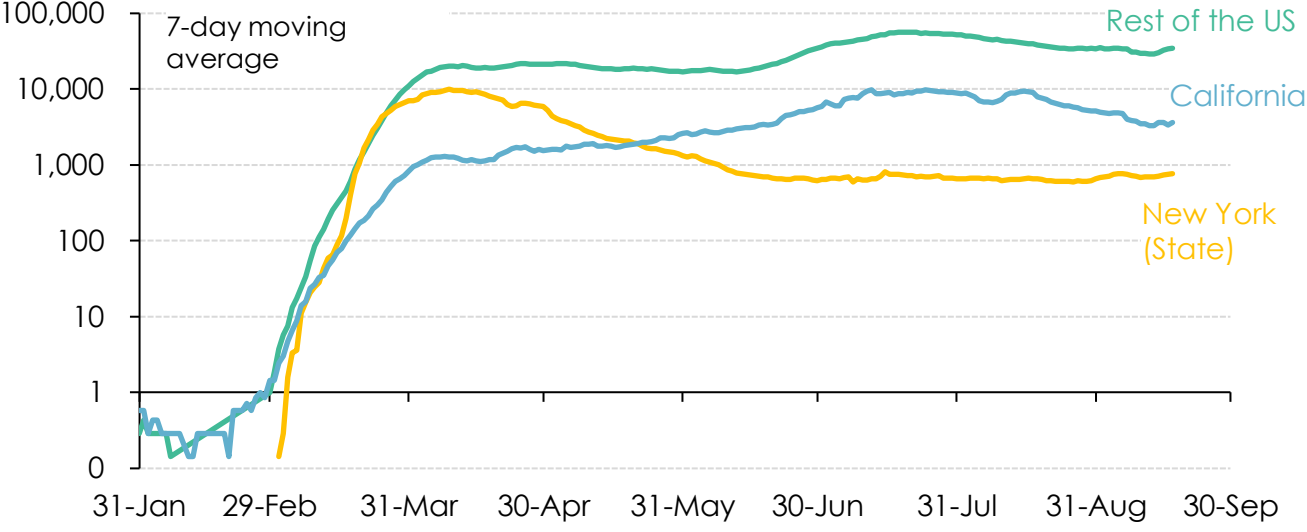
Note: All charts are on logarithmic scales. Data up to 18th September. Source: University of Oxford, [Our World in Data](#); Corinna.

In the US, new Covid-19 cases in 'red states' continue to outnumber those in 'blue' states – although in aggregate new cases numbers are flattening

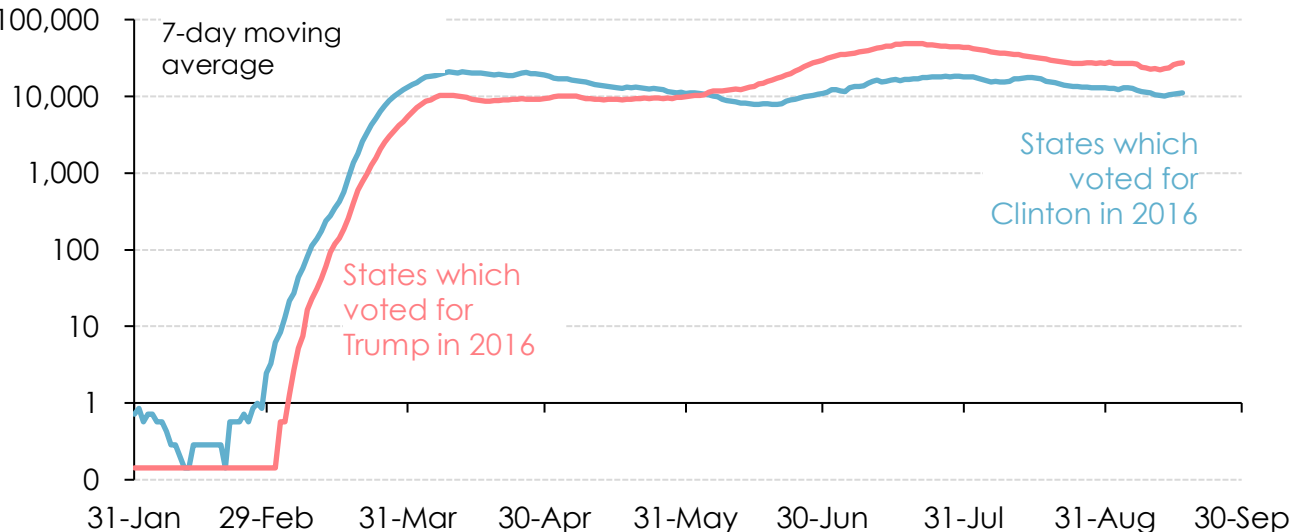
Cumulative cases, by 2016 Electoral College vote



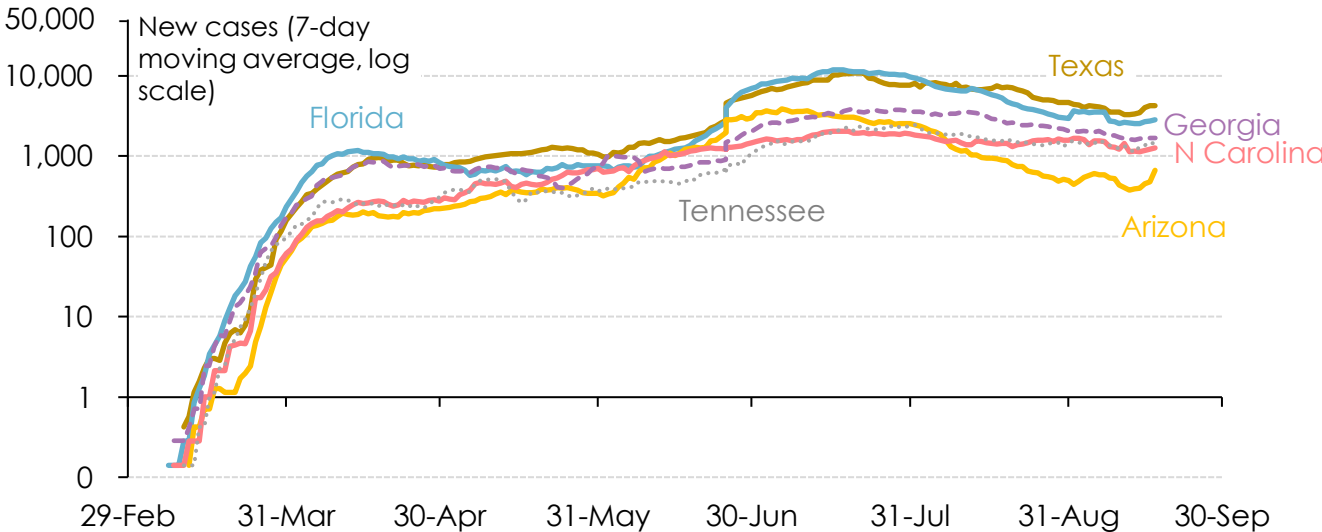
New cases – New York, California & the rest of the US



New cases, by 2016 Electoral College vote



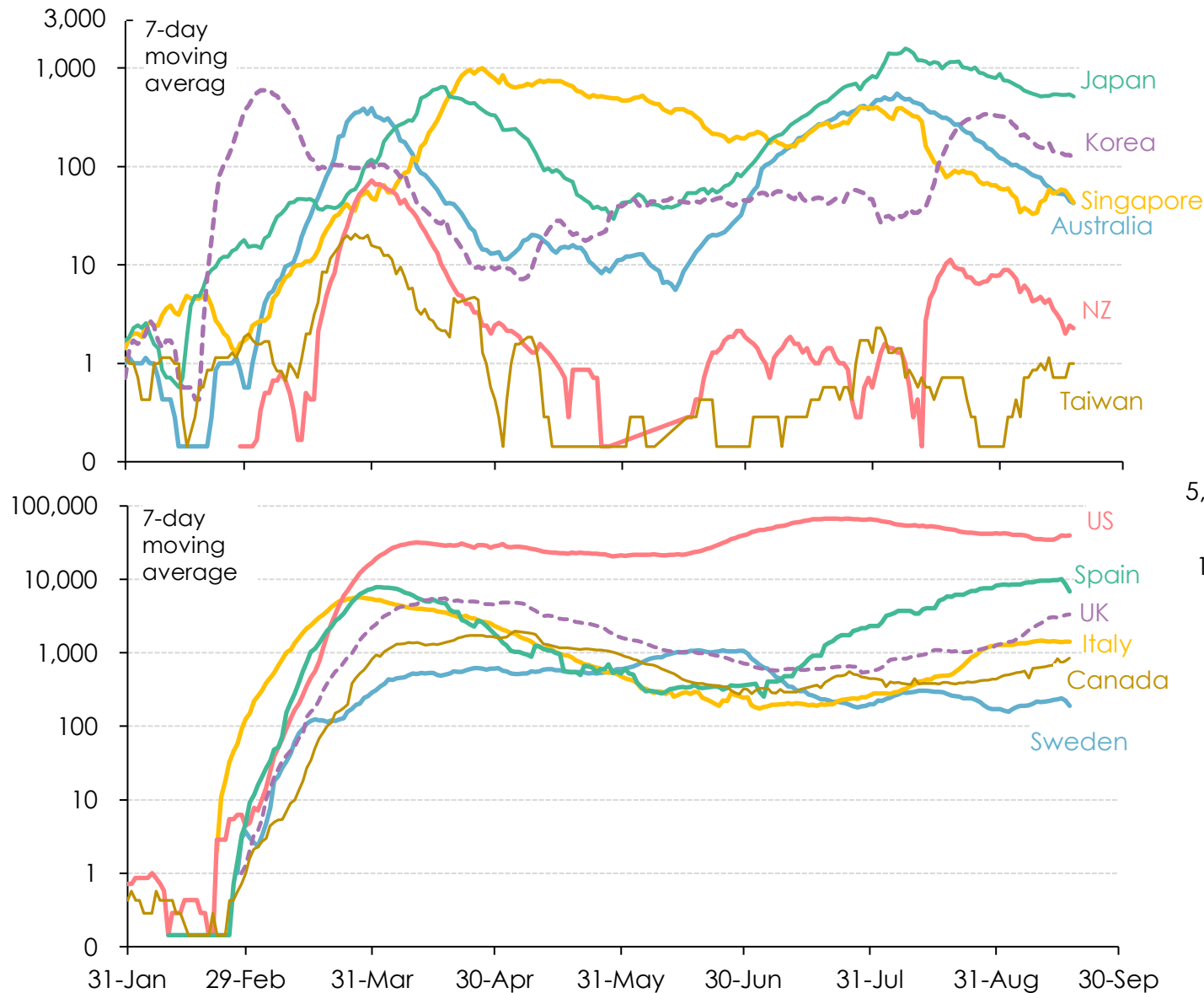
States with fastest recent increases in new cases



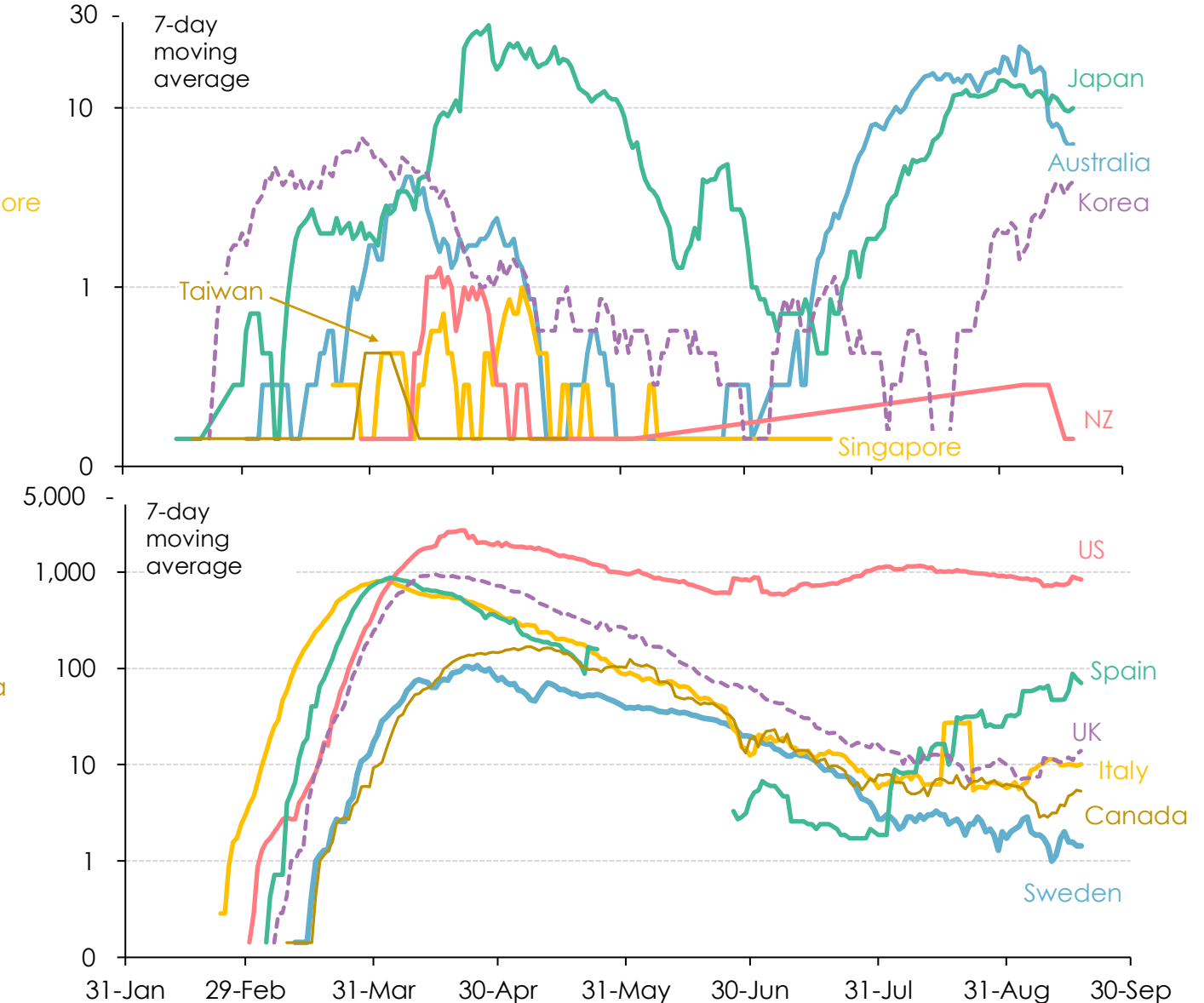
Note: All charts are on logarithmic scale. Cases for Maine (whose Electoral College votes are awarded separately by each of its two Congressional districts) are split by how each of its 16 counties voted in 2016. Sources: [USA Facts](#); [Centers for Disease Control and Prevention](#); Corinna. Latest data are for 17th September.

A growing number of 'advanced' nations are experiencing 'second waves' of new cases and deaths

Daily new cases



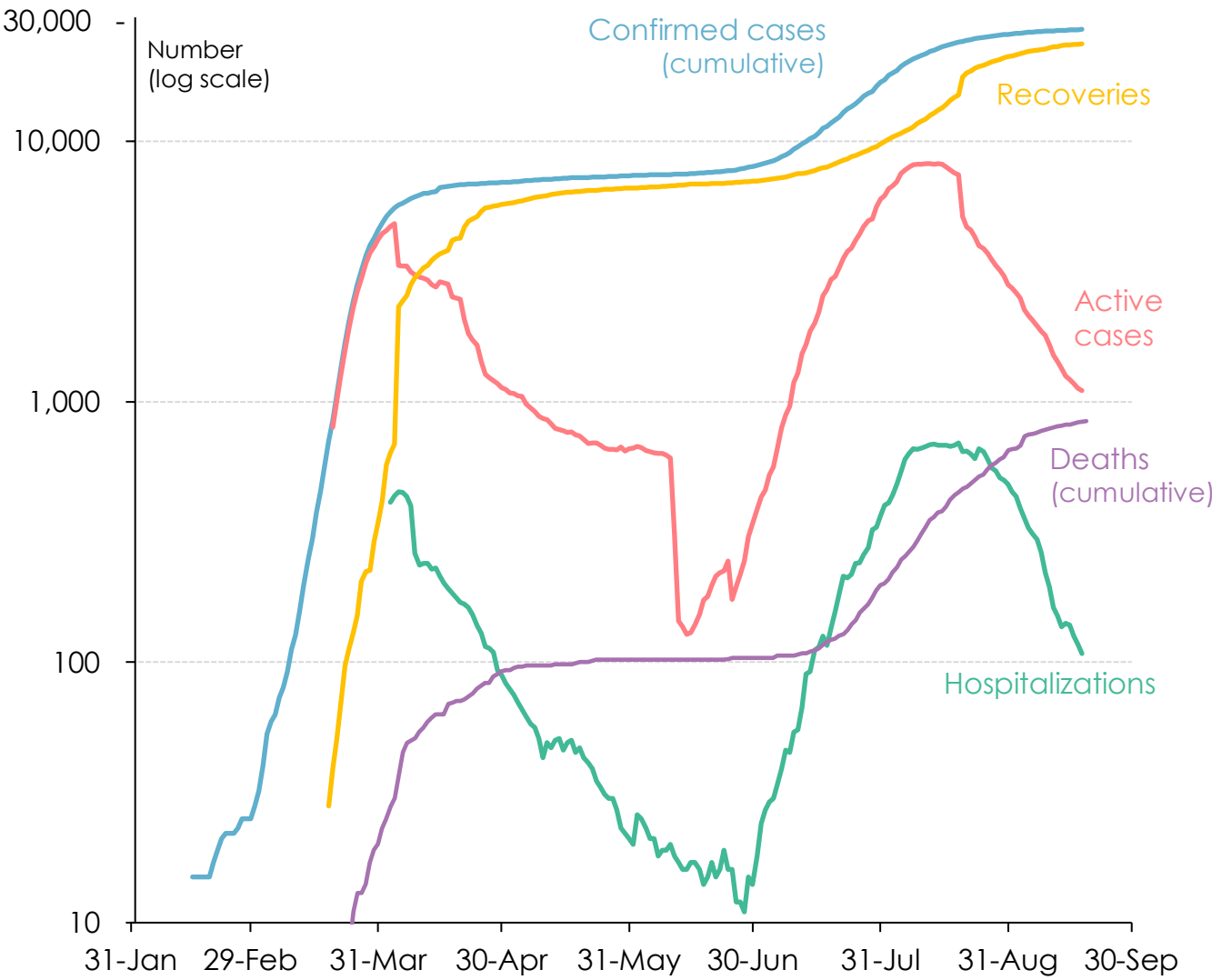
Daily new deaths



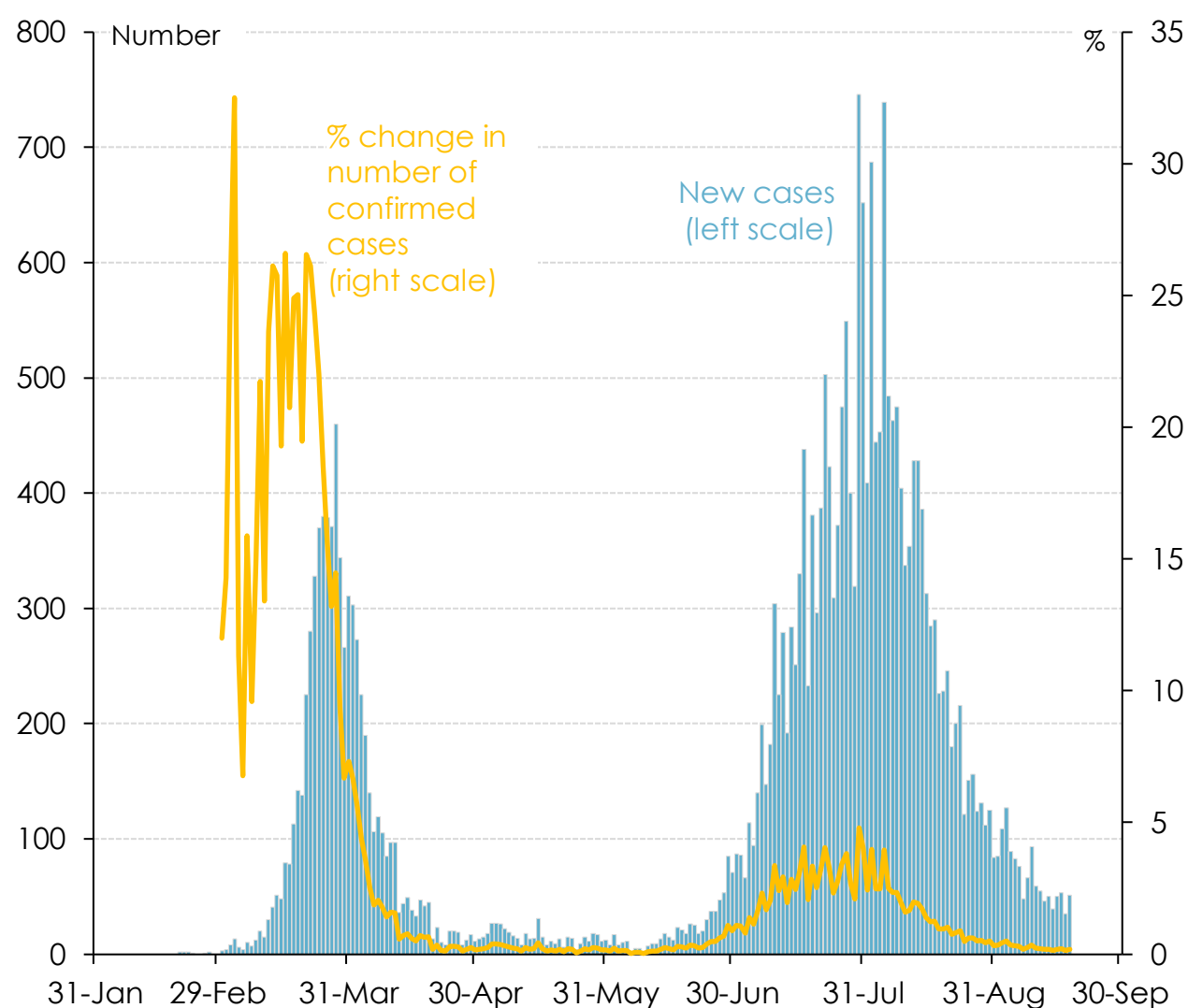
Note: All charts are on logarithmic scales. Data for new deaths in Spain between 25th May and 19th June not shown because of distortions caused by reclassifications on those dates. Data up to 18th September. Source: University of Oxford, [Our World in Data](#); Corinna.

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

Cases, recoveries, hospitalizations and deaths



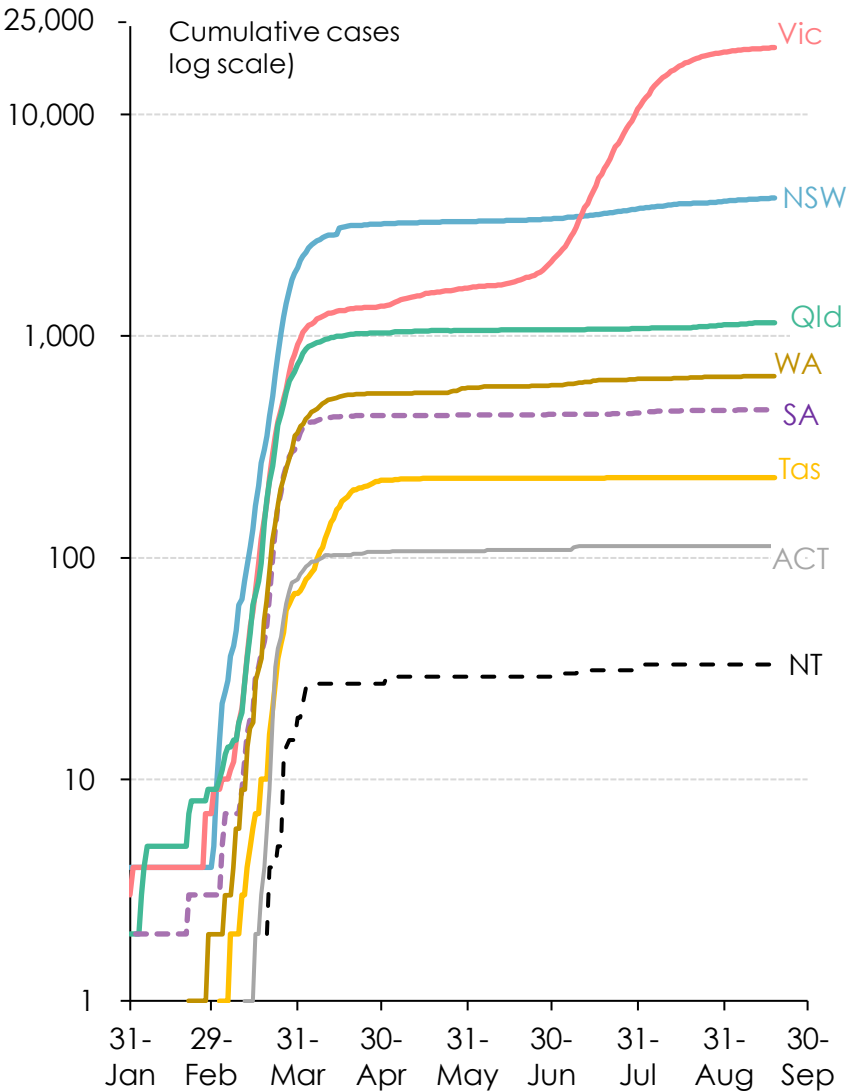
New cases



Note: Data up to 18th September. Source: covid19data.com.au.

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

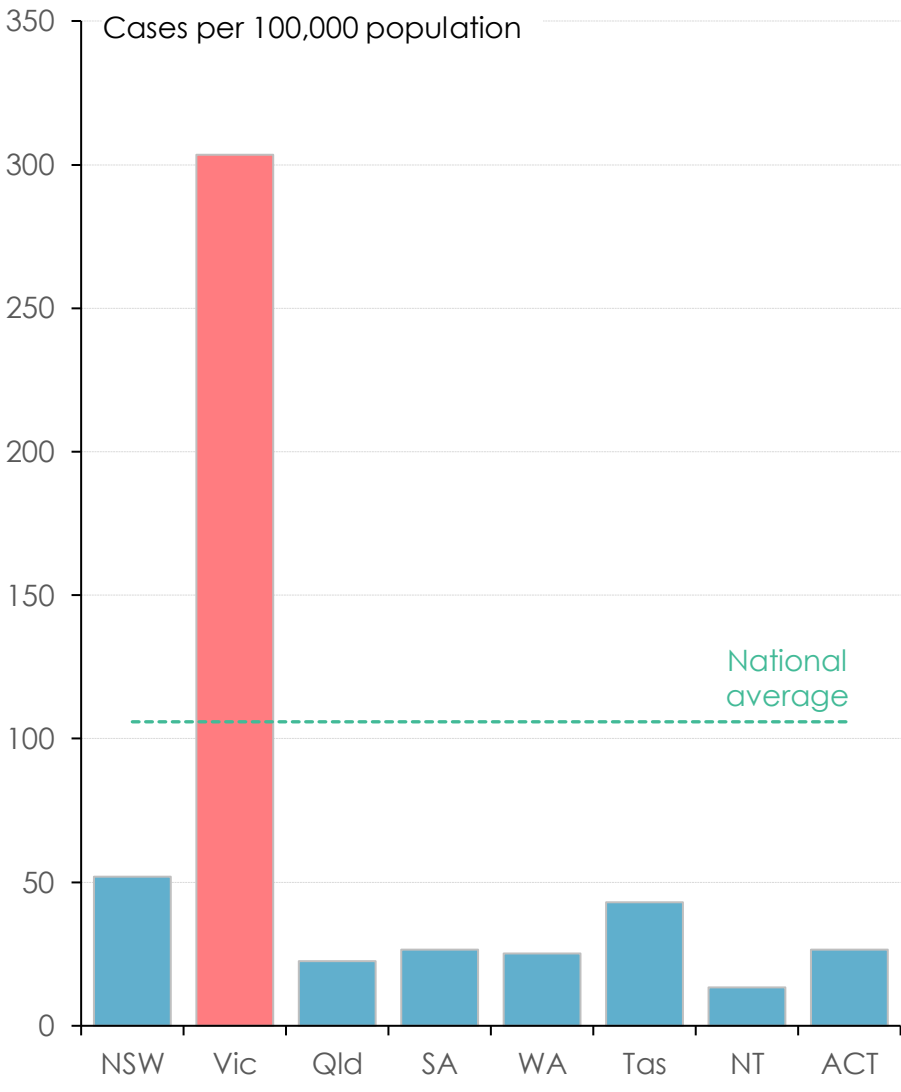
Cumulative cases, by State



New cases



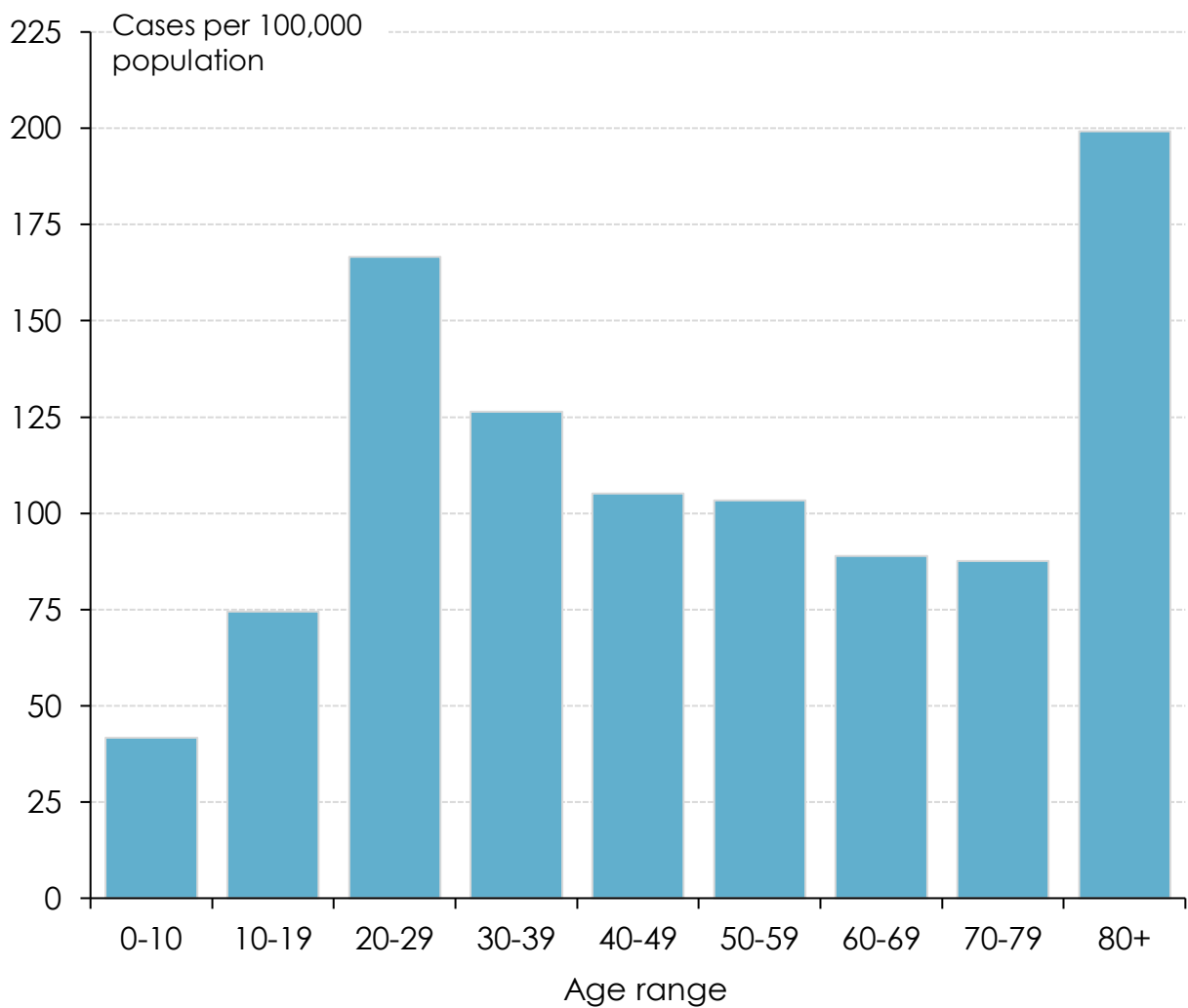
Cases per 100,000 population



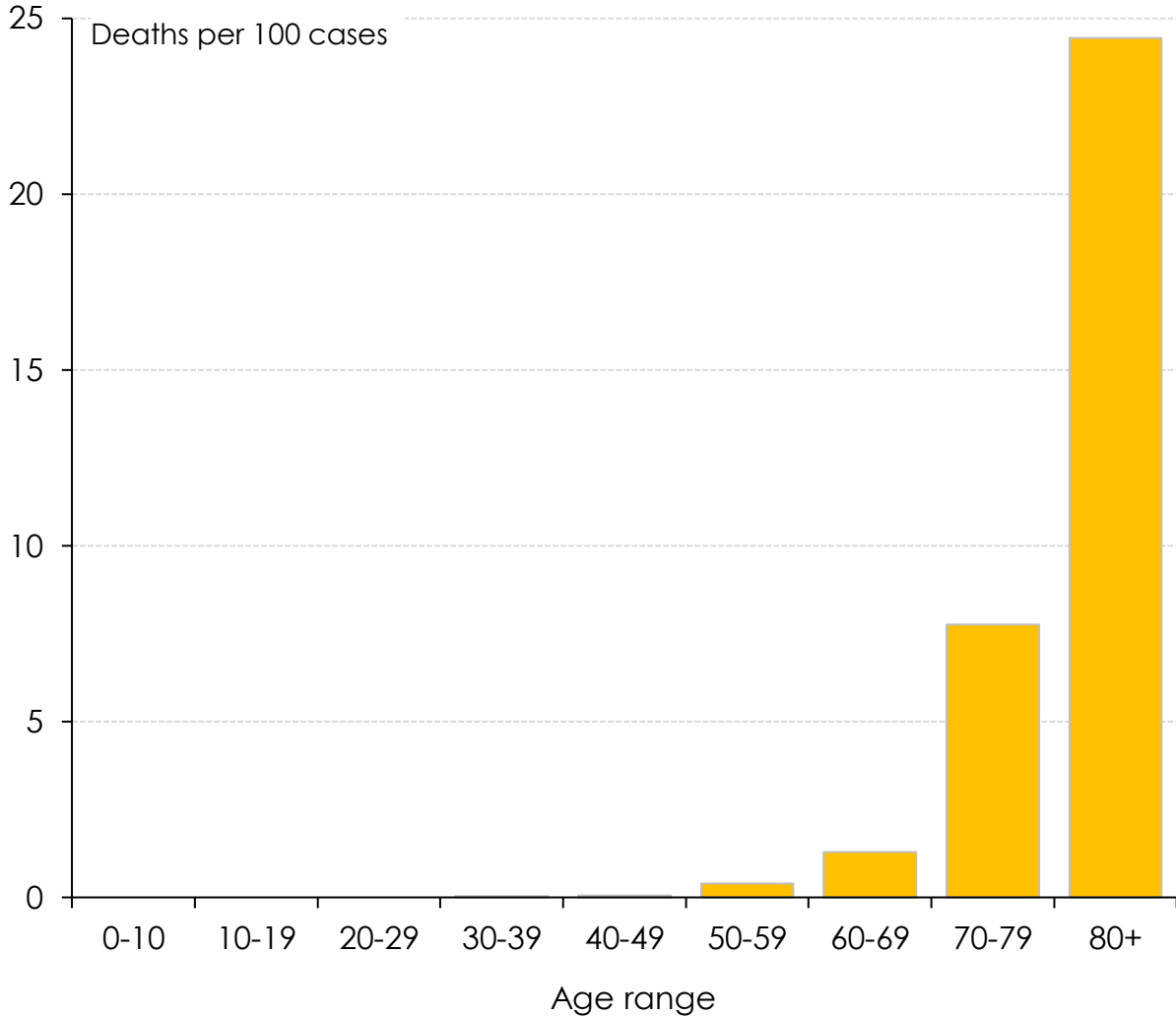
Note: Data up to 18th September. Source : covid19data.com.au.

Infection rates now higher among people in their 20s & 30s than among those in their 40s though 70s, though fatality rates are higher for over-60s

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



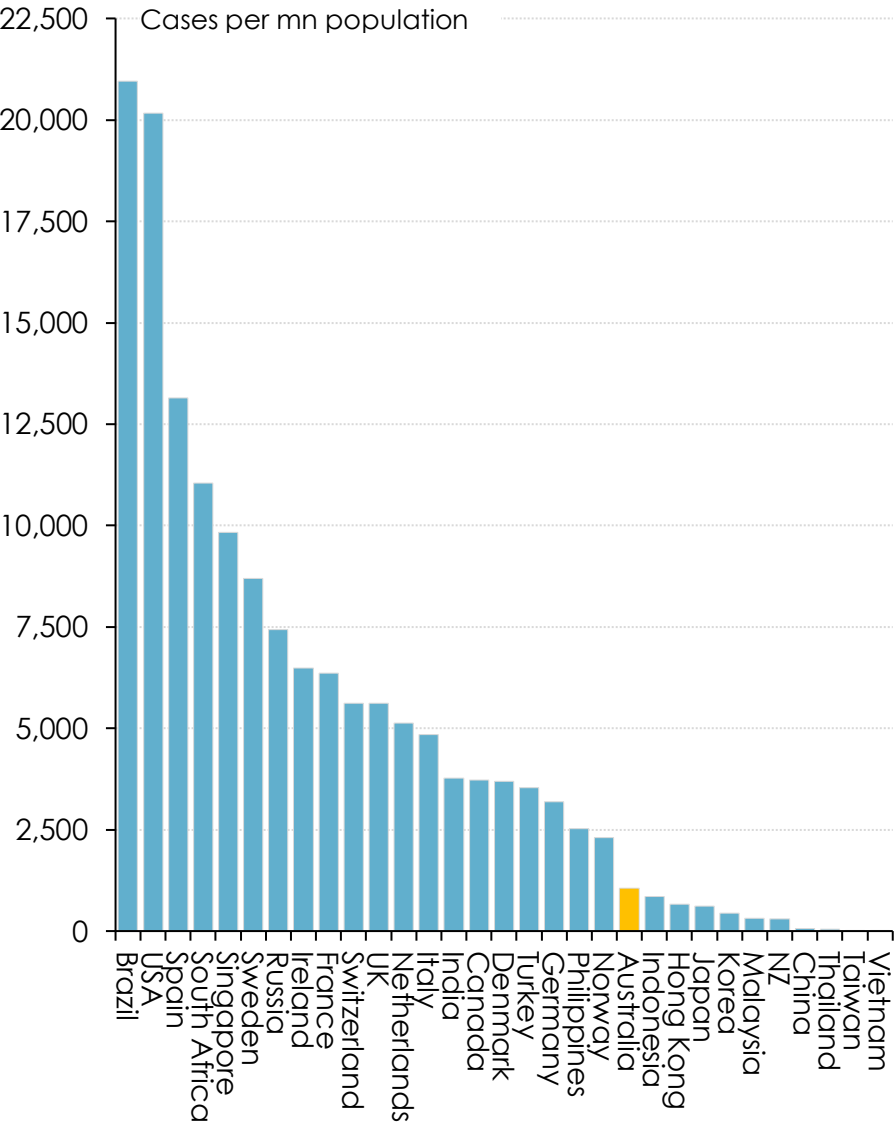
Deaths from Covid-19 per 100 cases, by age group



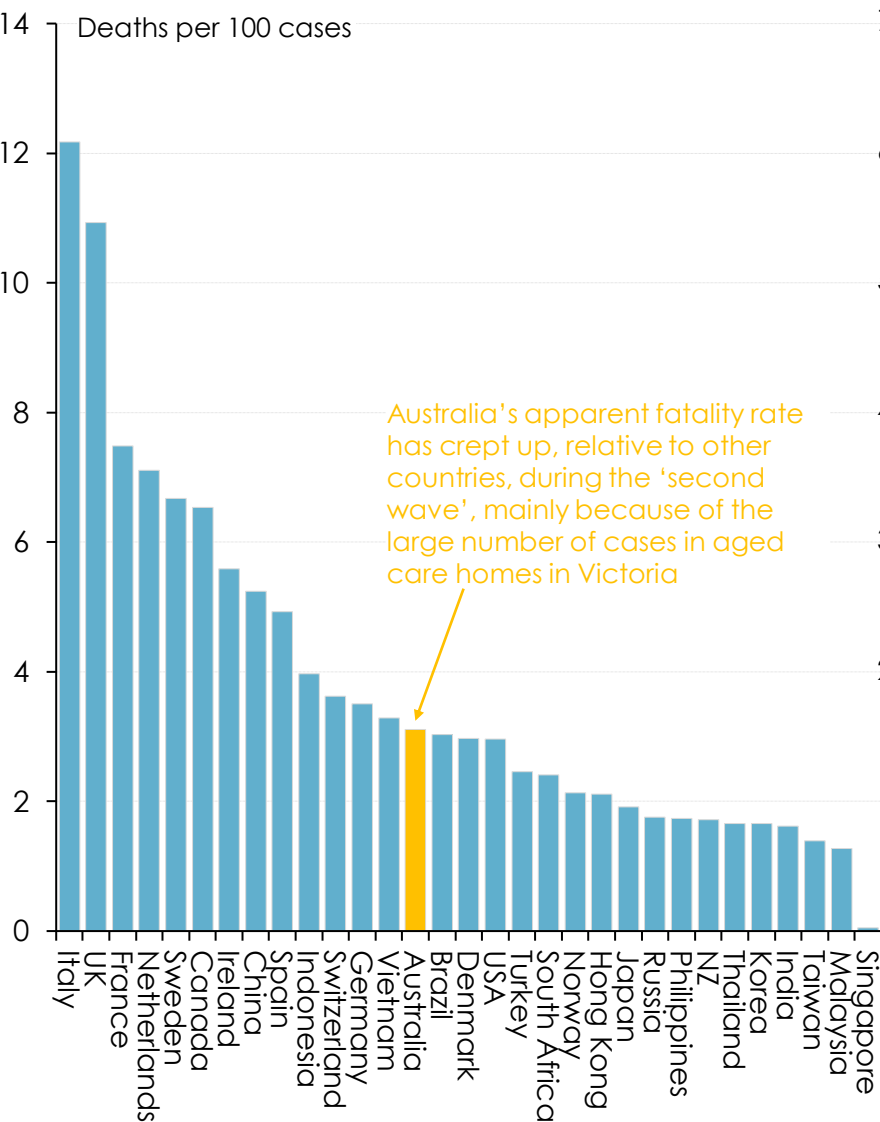
Note: Data up to 18th September. Source: Australian Government Department of Health, [National Notifiable Diseases Surveillance System](#); ABS; Corinna.

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

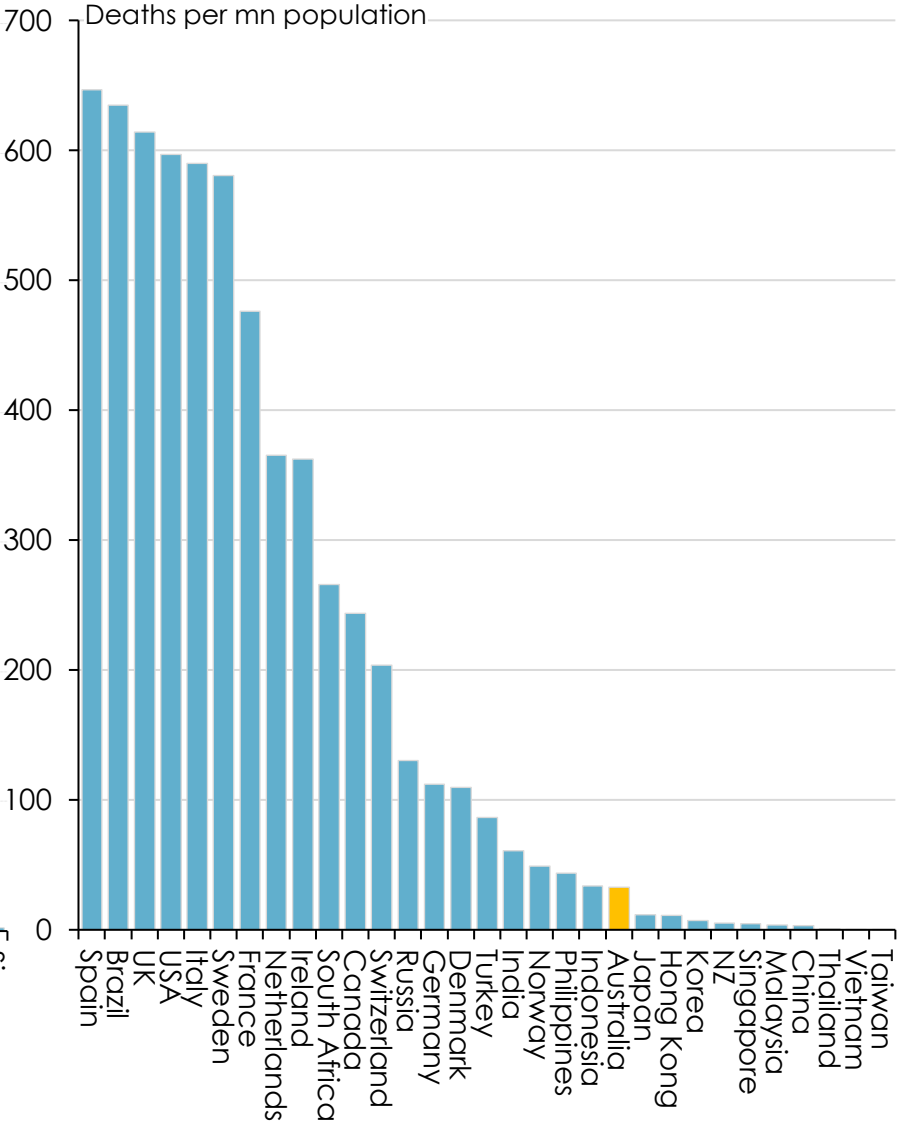
Apparent infection rate



Apparent fatality rate



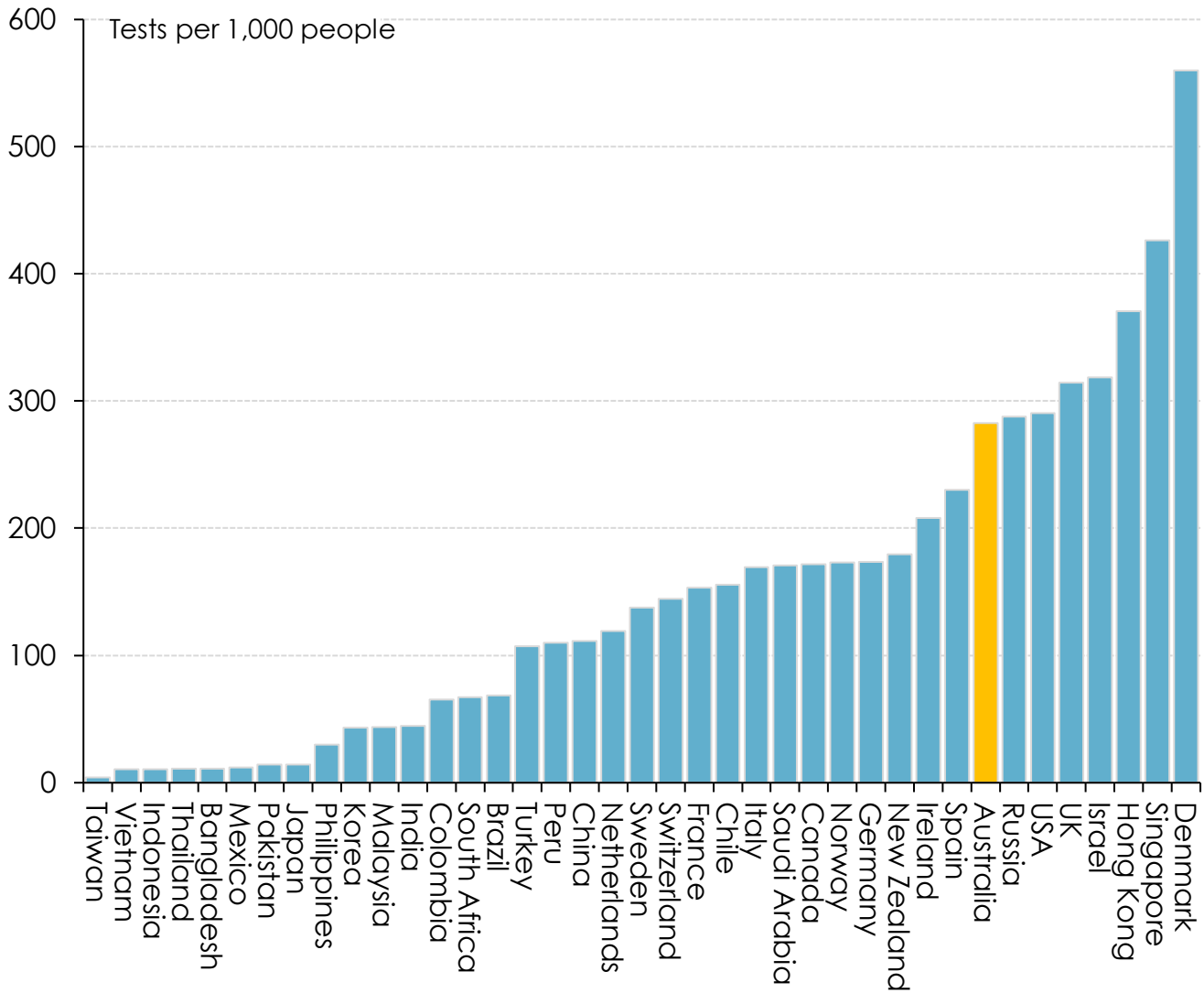
Death rate



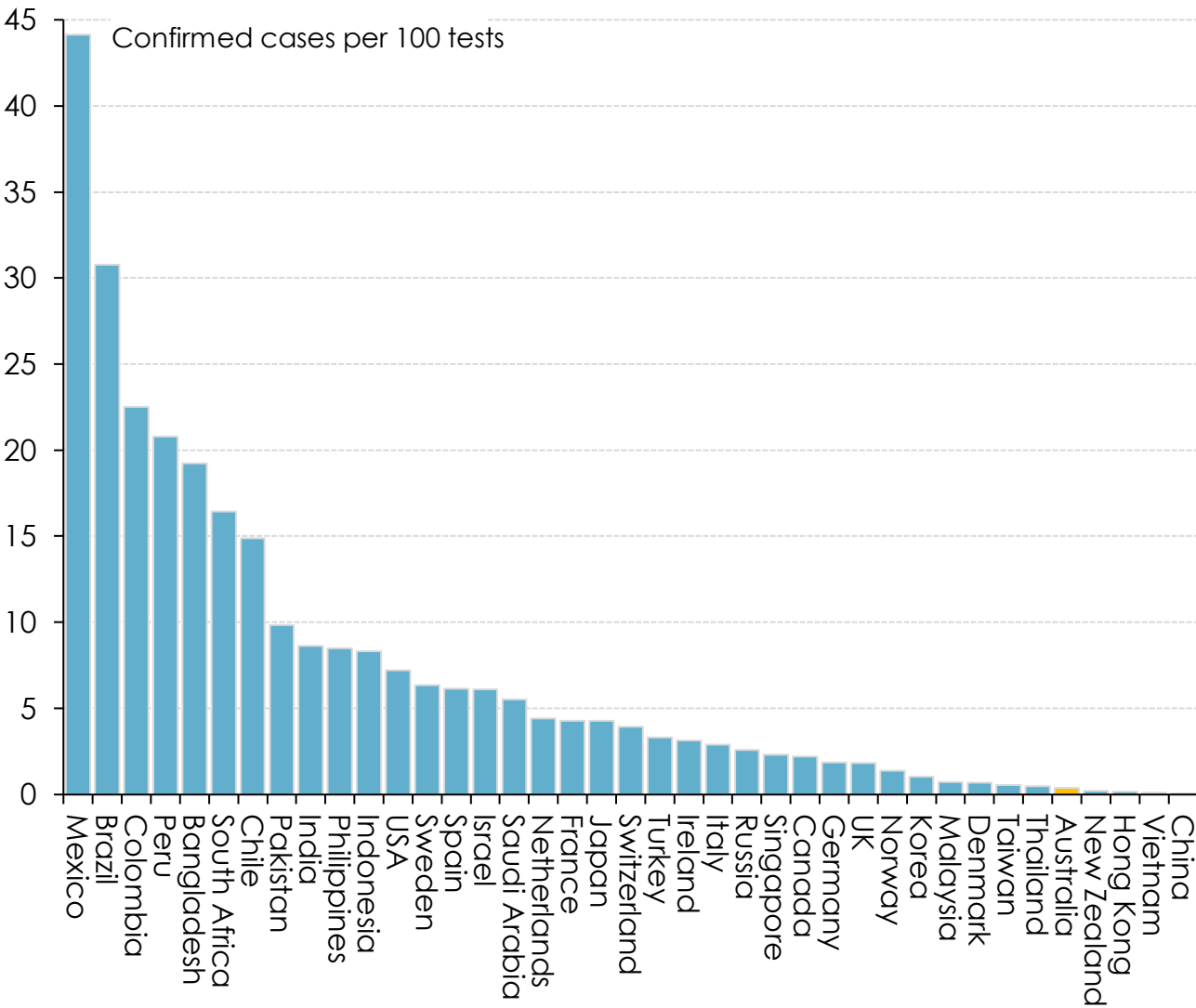
Note: Data up 18th September. Source: University of Oxford, [Our World in Data](#); Corinna.

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)

Tests per thousand of population



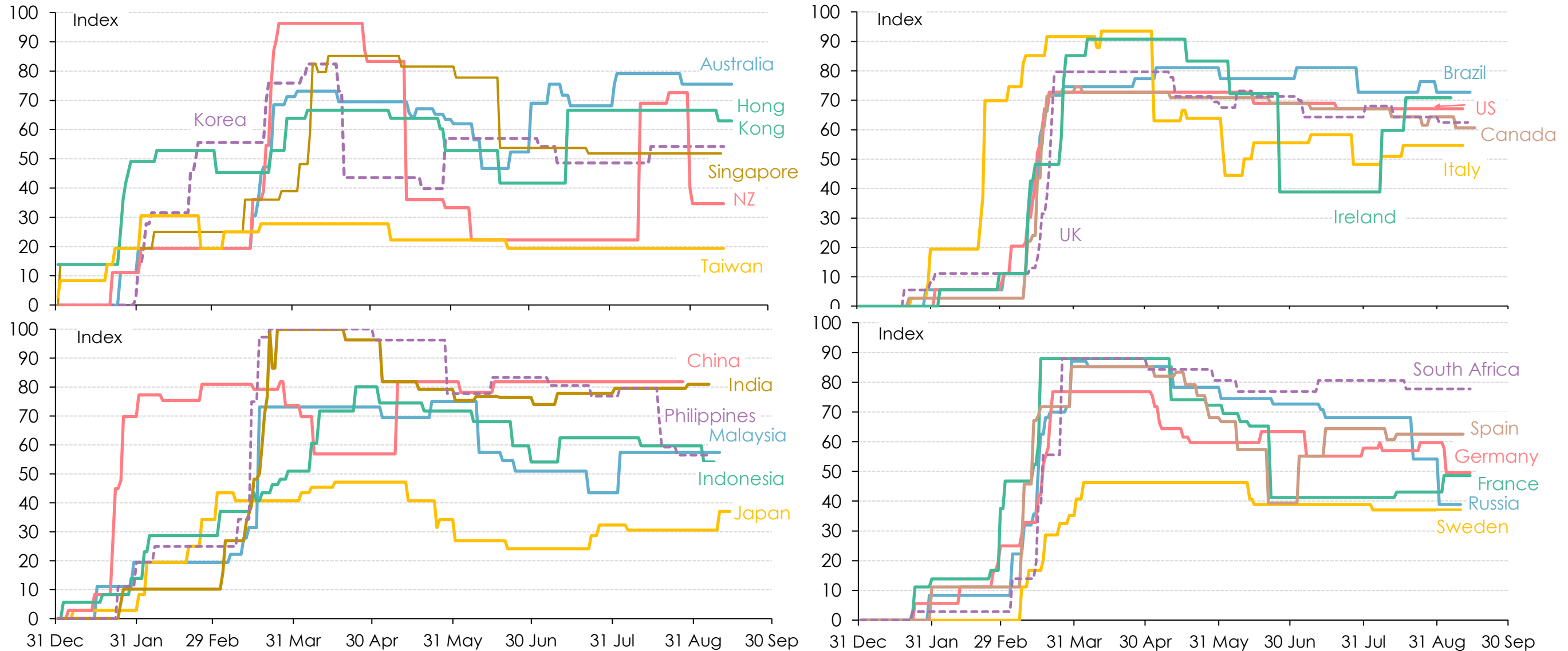
Confirmed cases per 100 tests



Note: Data up to 18th September. A high number of confirmed cases per 100 tests combined with a low number of tests per 000 population is (all else being equal) *prima facie* evidence of an inadequate testing regime. Source: [Worldometers](#); Corinna.

A few more countries have tightened restrictions in response to 'second waves' in recent weeks, while some (eg NZ) have eased

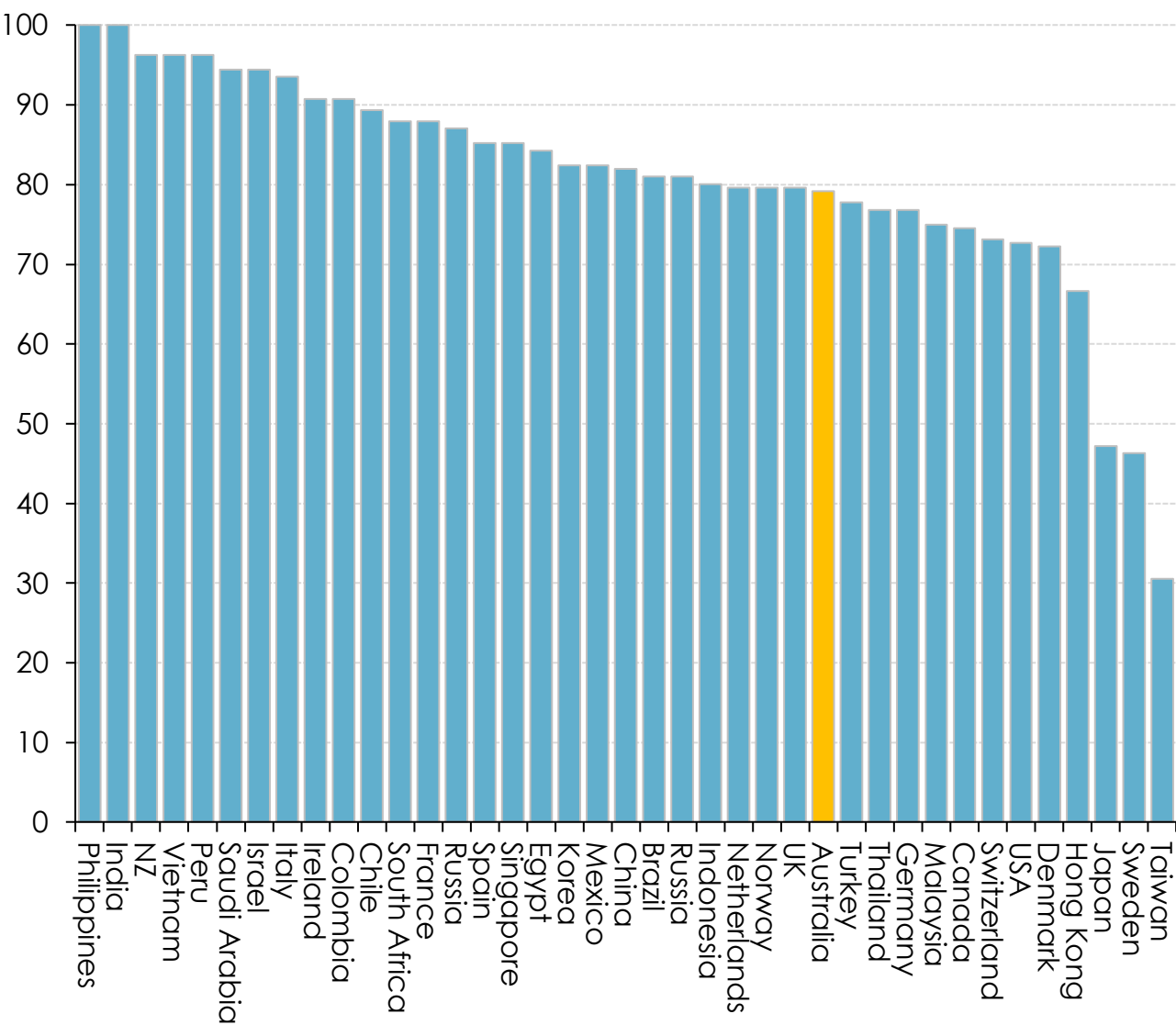
Timing and severity of government restrictions on movement and gathering of people



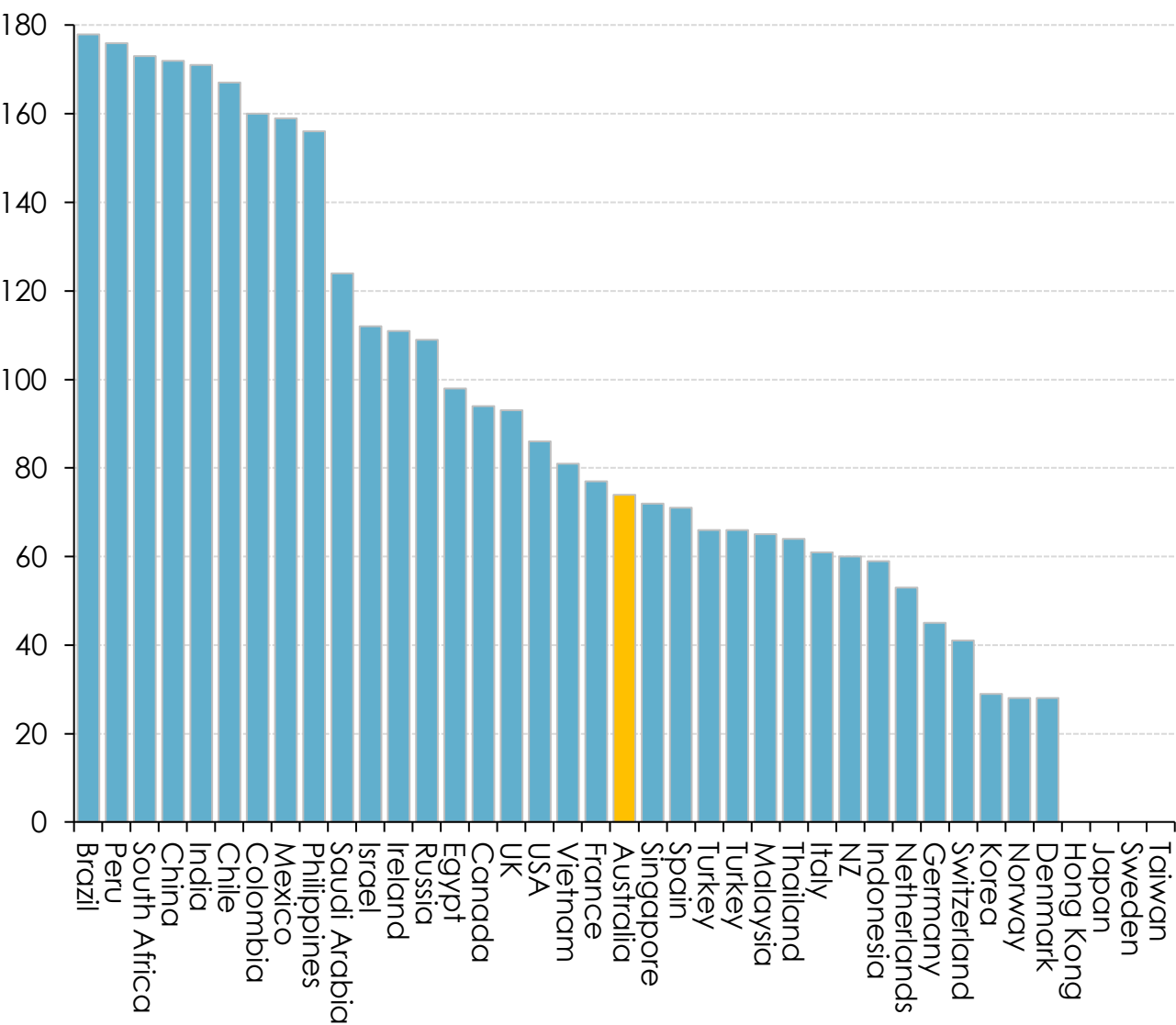
The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. Source: [Blavatnik School of Government, Oxford University](#). Data up to 24th August – 16th September.

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

Highest level of restrictions imposed



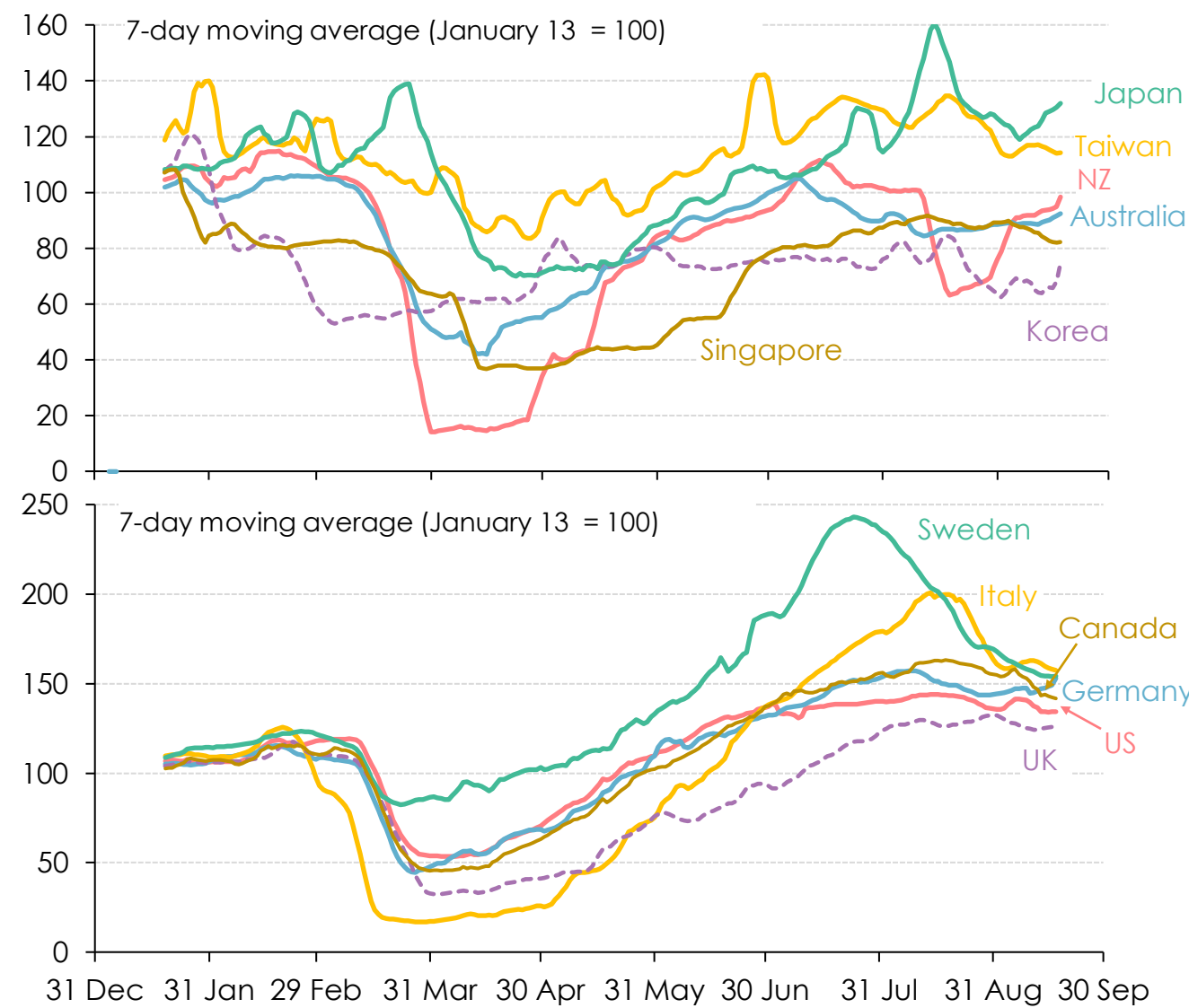
Number of days restrictions above 70 on Oxford index



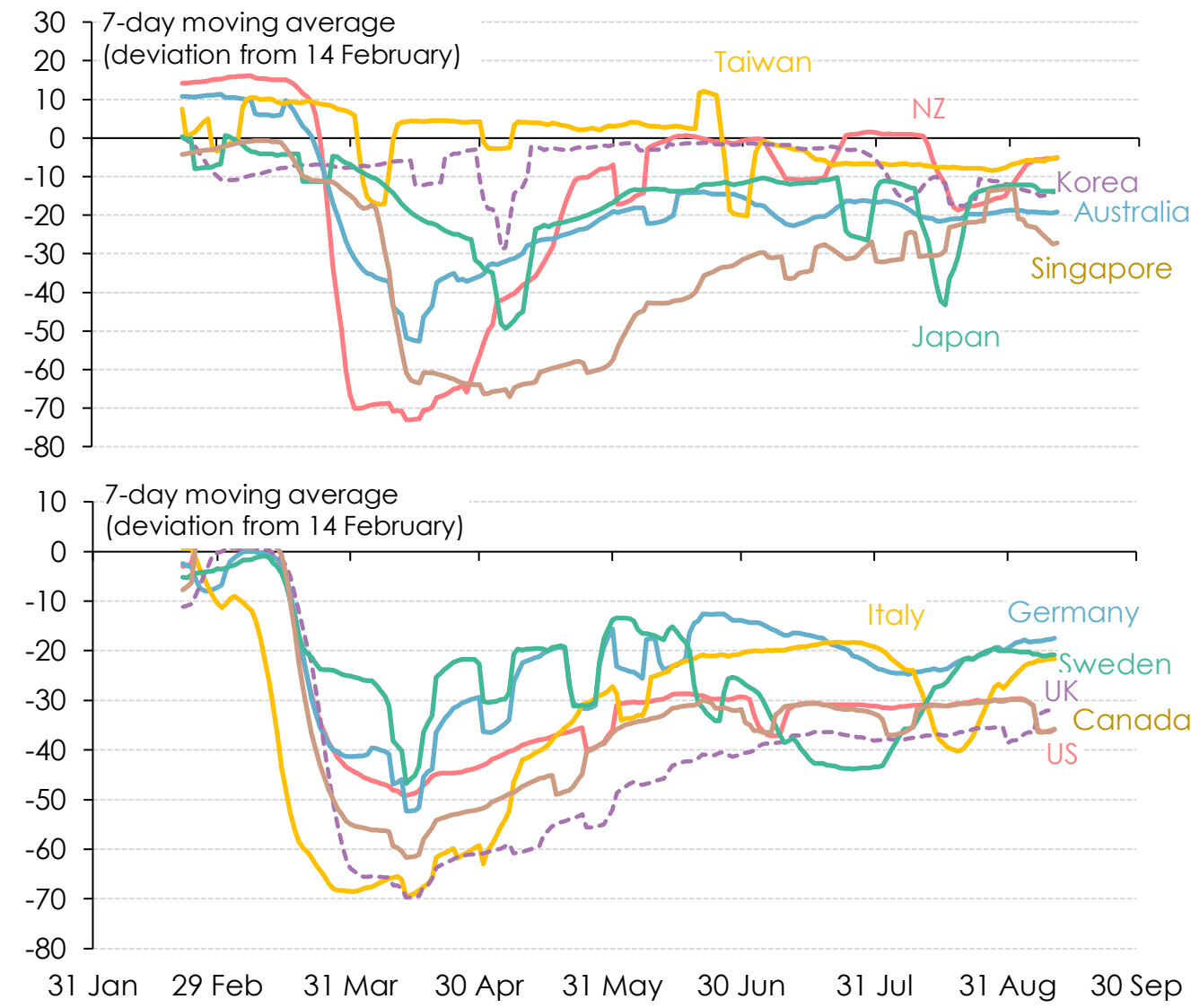
The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. Source: [Blavatnik School of Government, Oxford University](#). Data up to 24th August – 16th September.

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

Time spent driving

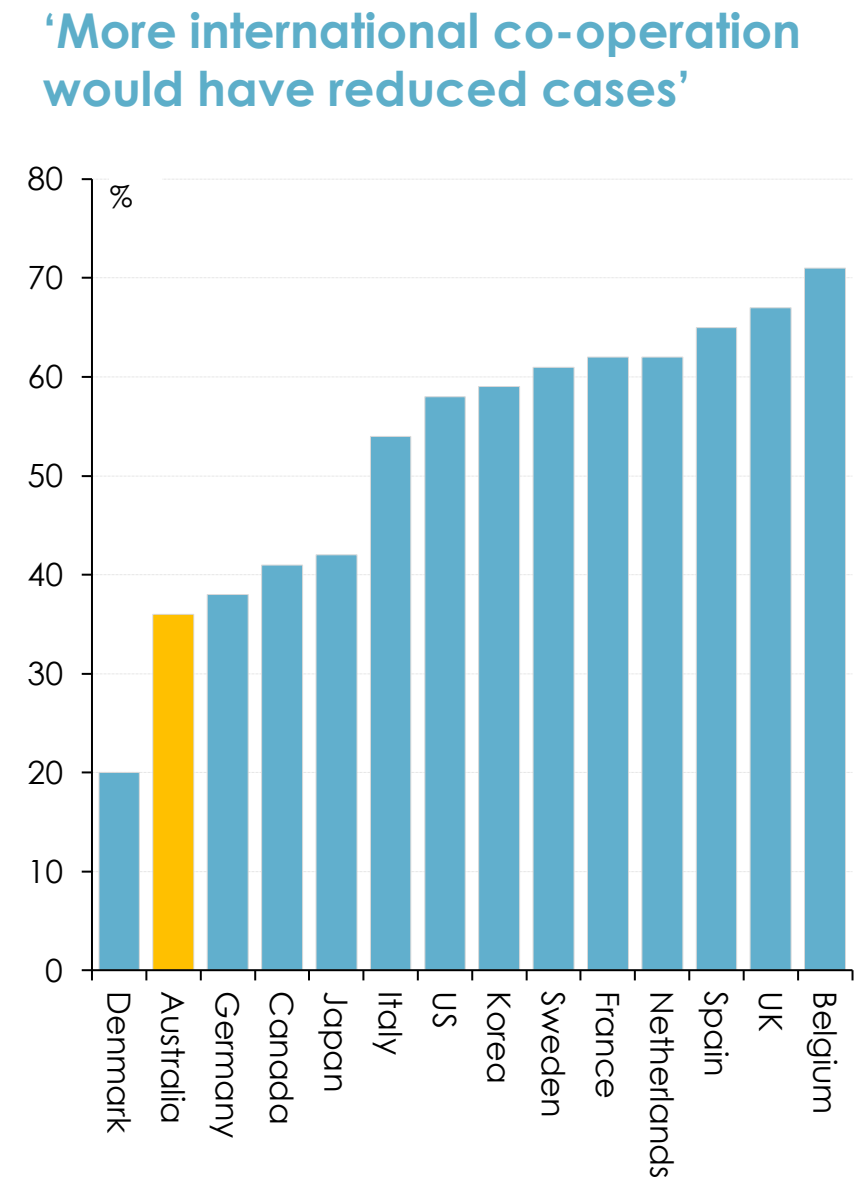
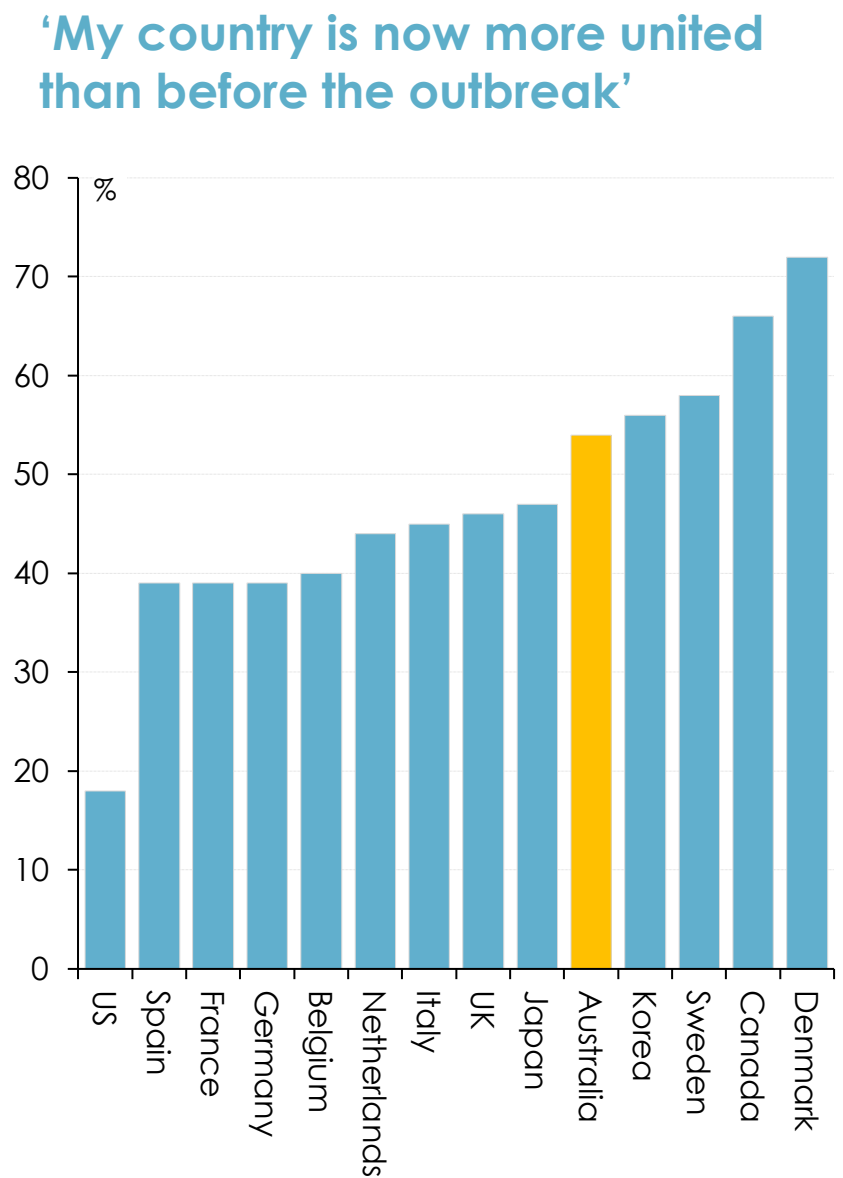
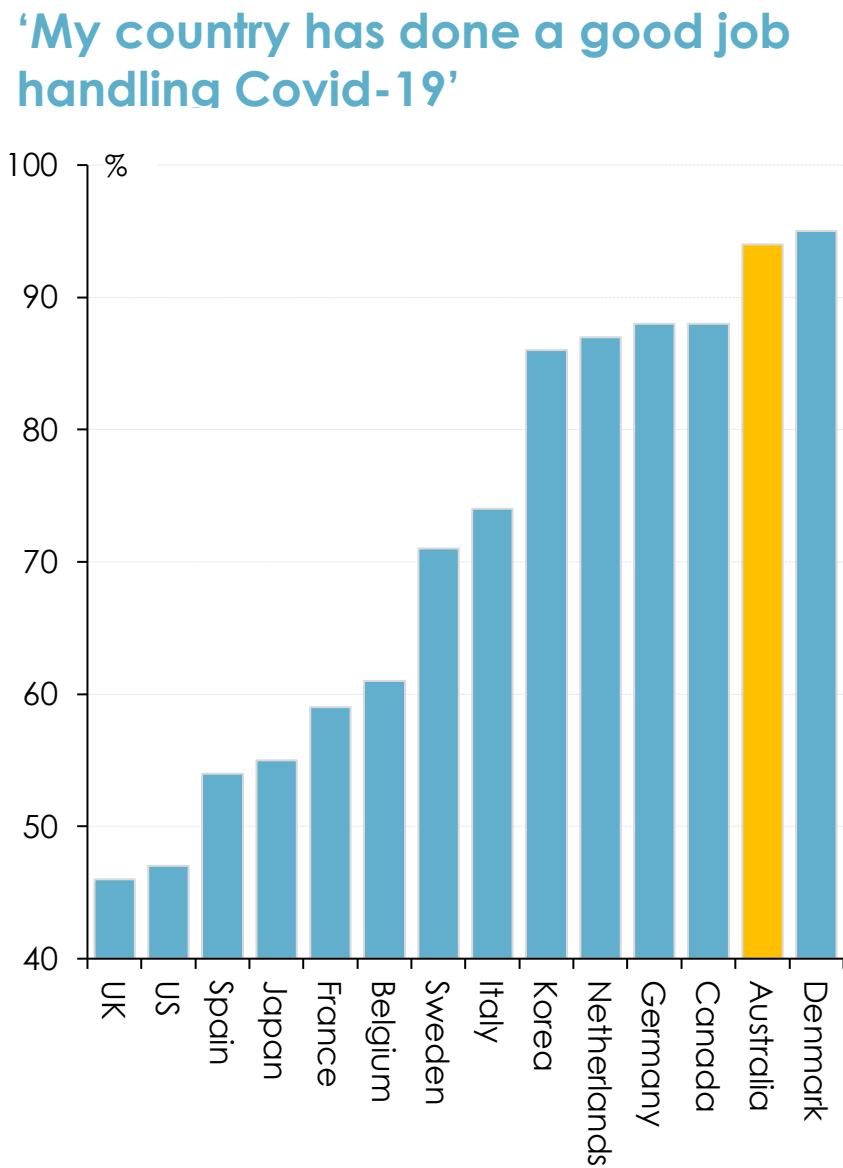


Time spent in work places



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 17th September); [Google Community Mobility Reports](#) (data up to 11th September).

Australians seem very satisfied with their government's handling of Covid-19 – like Danes and Canadians but unlike Americans and Britons

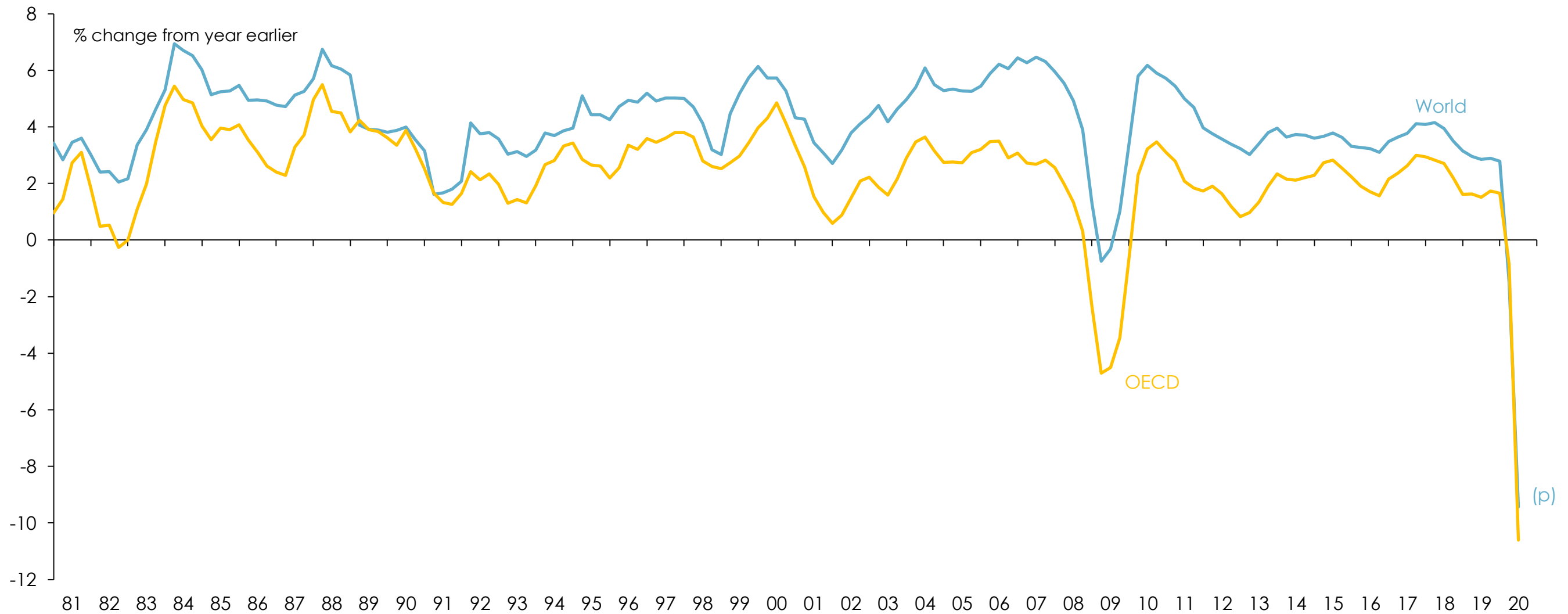


Source: Pew Research Center: survey of 14,276 adults in 14 countries conducted between 10th June and 3rd August.

The world

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

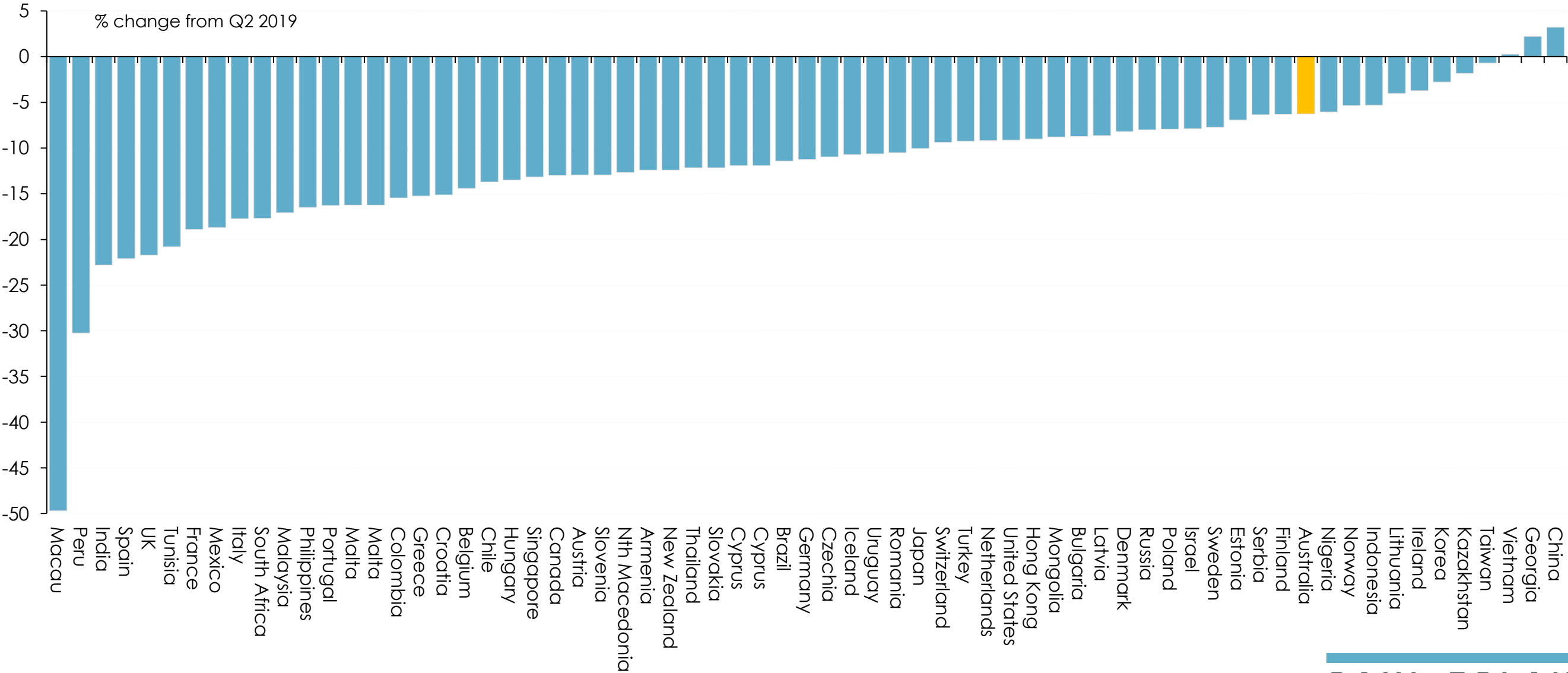
World and OECD area real GDP growth



Note: Estimates of global GDP growth compiled by Corinna using data for 95 countries accounting for 90% of 2018 world GDP as measured by the IMF; excludes constituents of the former USSR before 1993, the former Czechoslovakia before 1995, and the former Yugoslavia before 1998. (p) Estimate for Q2 is a preliminary estimate based on published results for the 62 countries shown in the [next slide](#); the only significant economies still missing from the 95 in the full data set are Argentina, Ukraine and Saudi Arabia. Sources: national statistical agencies and central banks; Eurostat; [OECD](#); IMF; Corinna.

Of the 67 economies which have reported Q2 GDP data so far, the worst contractions over the past year have been in Macau, Peru, India & Spain

Real GDP growth over the year to Q2 2020



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

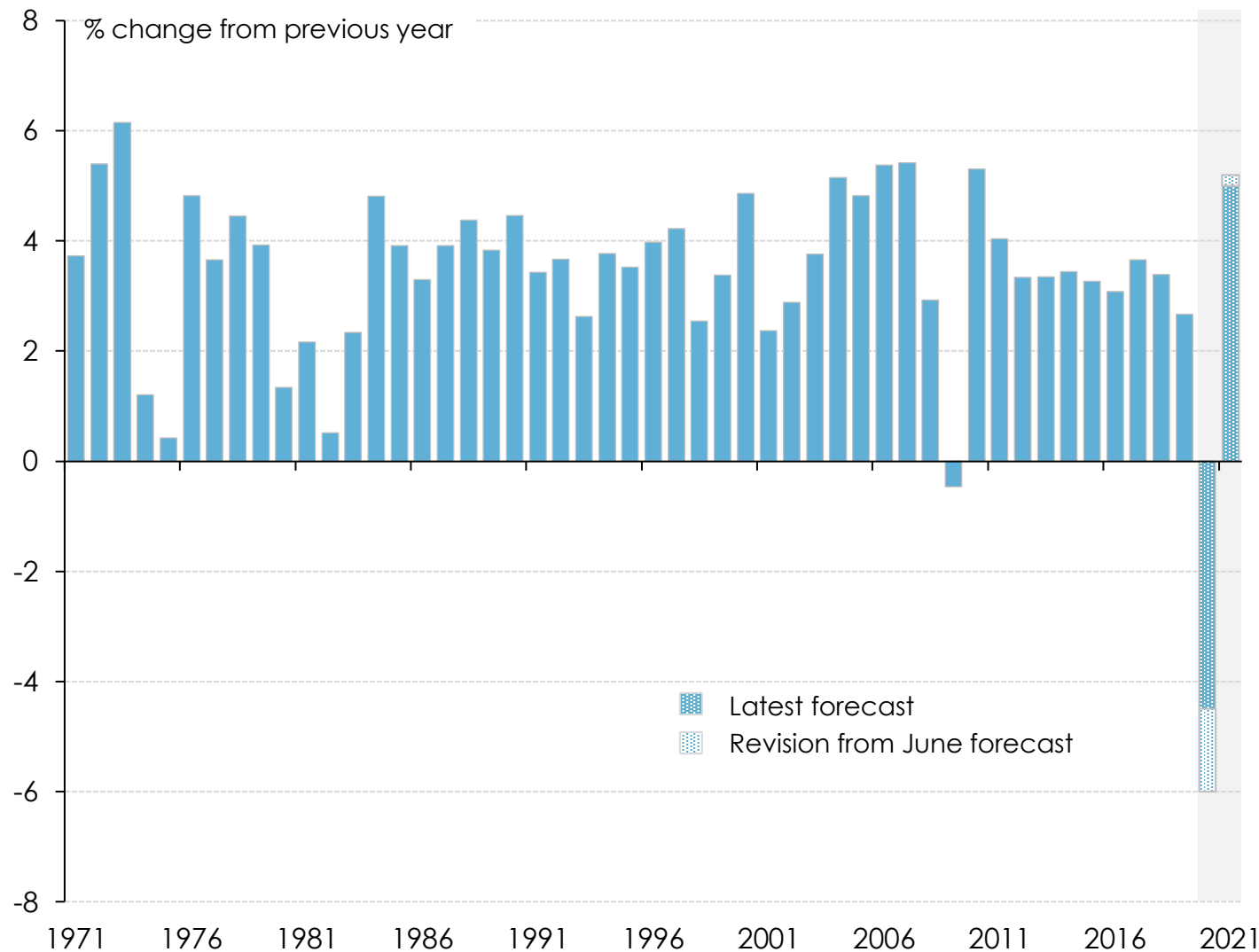
Major global institutions' growth forecasts for 2020 and 2021 compared

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

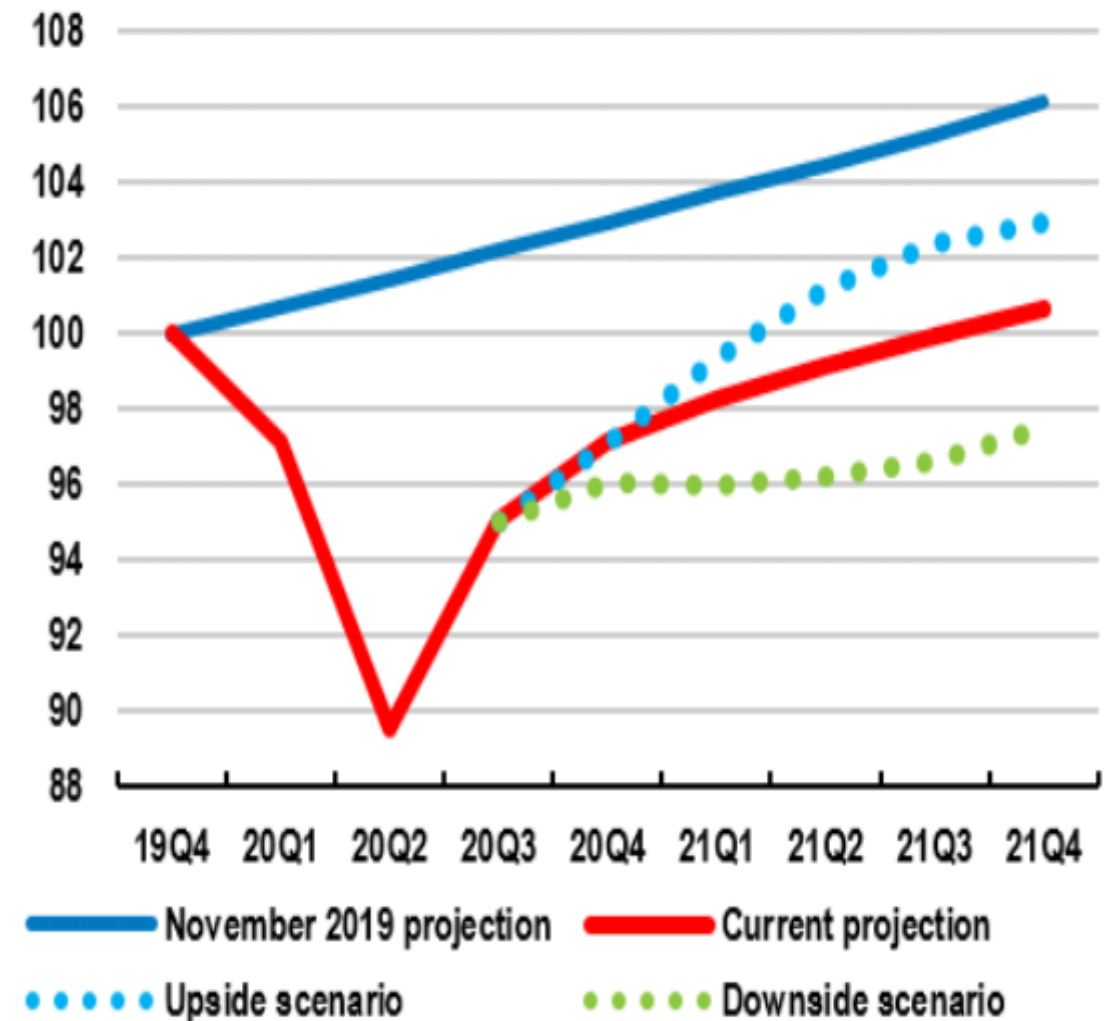
* OECD forecasts are their 'single hit' scenario to be consistent with the assumptions of the other institutions. [†] The IMF did not publish revised forecasts for New Zealand in its latest WEO publication. Sources: International Monetary Fund (IMF), [World Economic Outlook](#), 24th June 2020; The World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

The OECD's latest forecast for world GDP growth in 2020 is -4½% (revised from -5% in June) and for 2021 is + 5% (revised from 5.2%)

Annual growth in global real GDP, 1961-2021



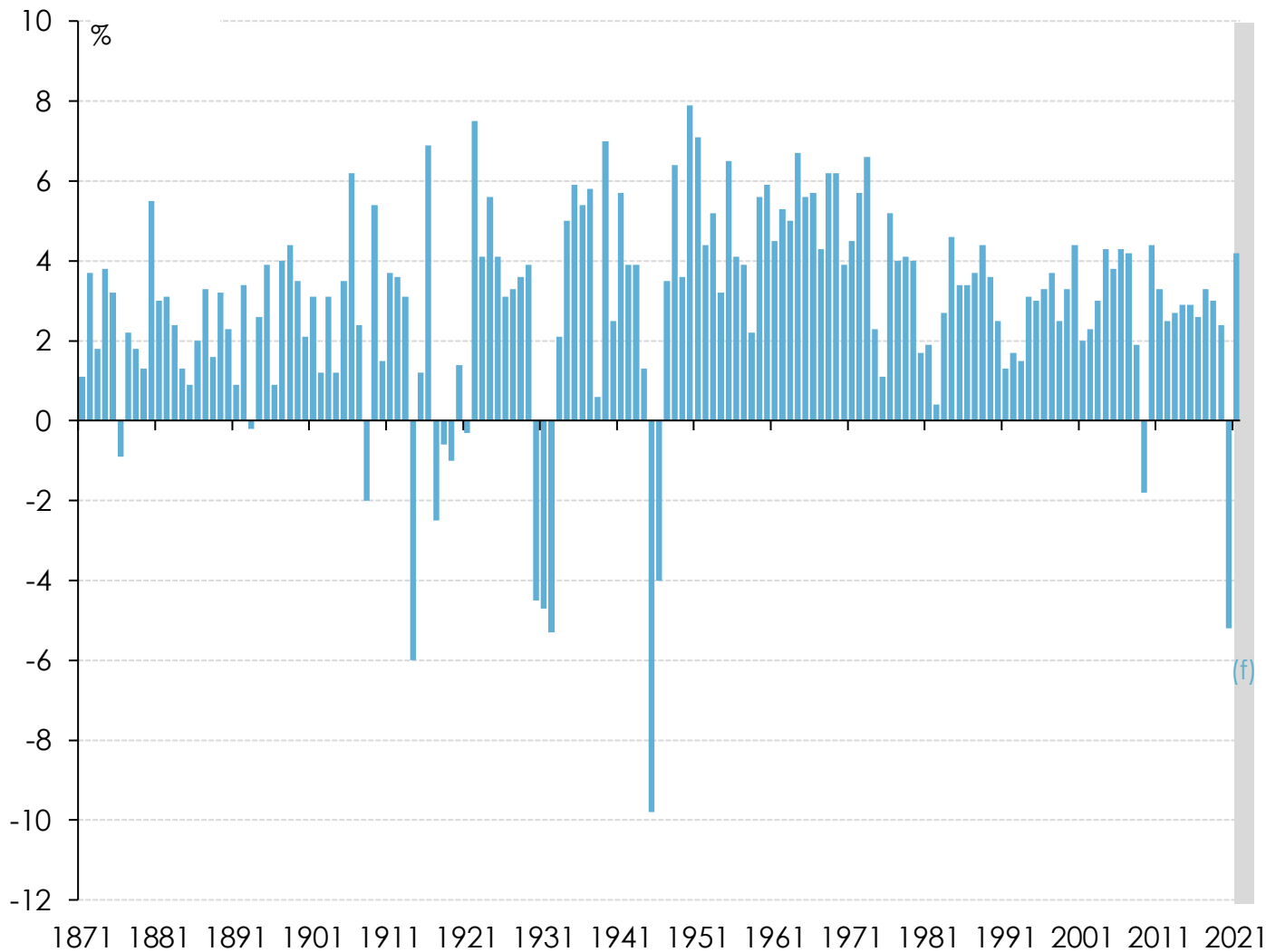
Quarterly growth and forecasts, 2017-2021



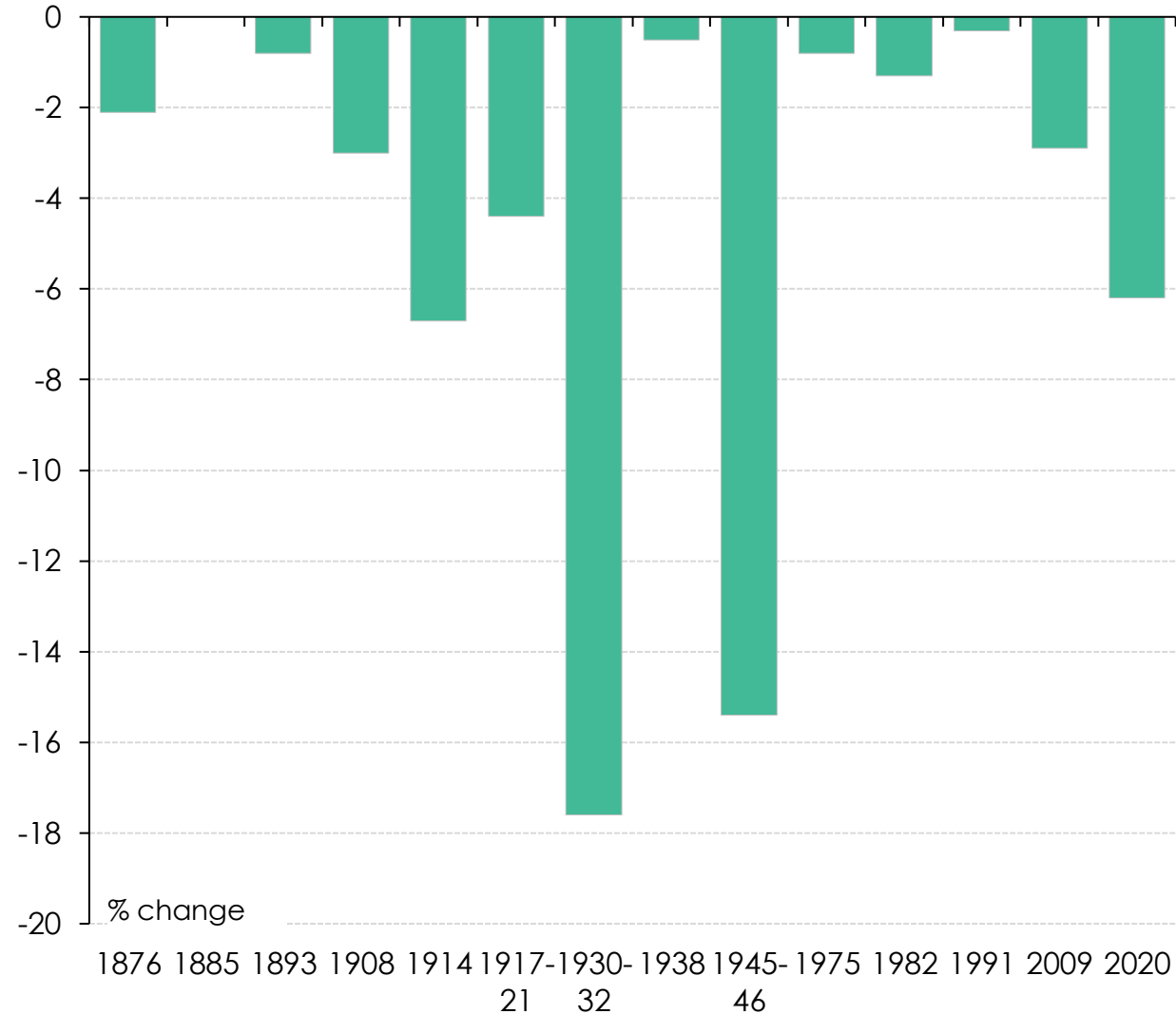
Note: The 'double hit' scenario assumes a 'second wave' of Covid-19 infections and deaths "in all economies towards the end of this year", while the 'single hit' scenario assumes this 'second wave is avoided'. The OECD regards each scenario as "equally likely". Source: OECD, [Economic Outlook Interim Report](#), 16th September 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



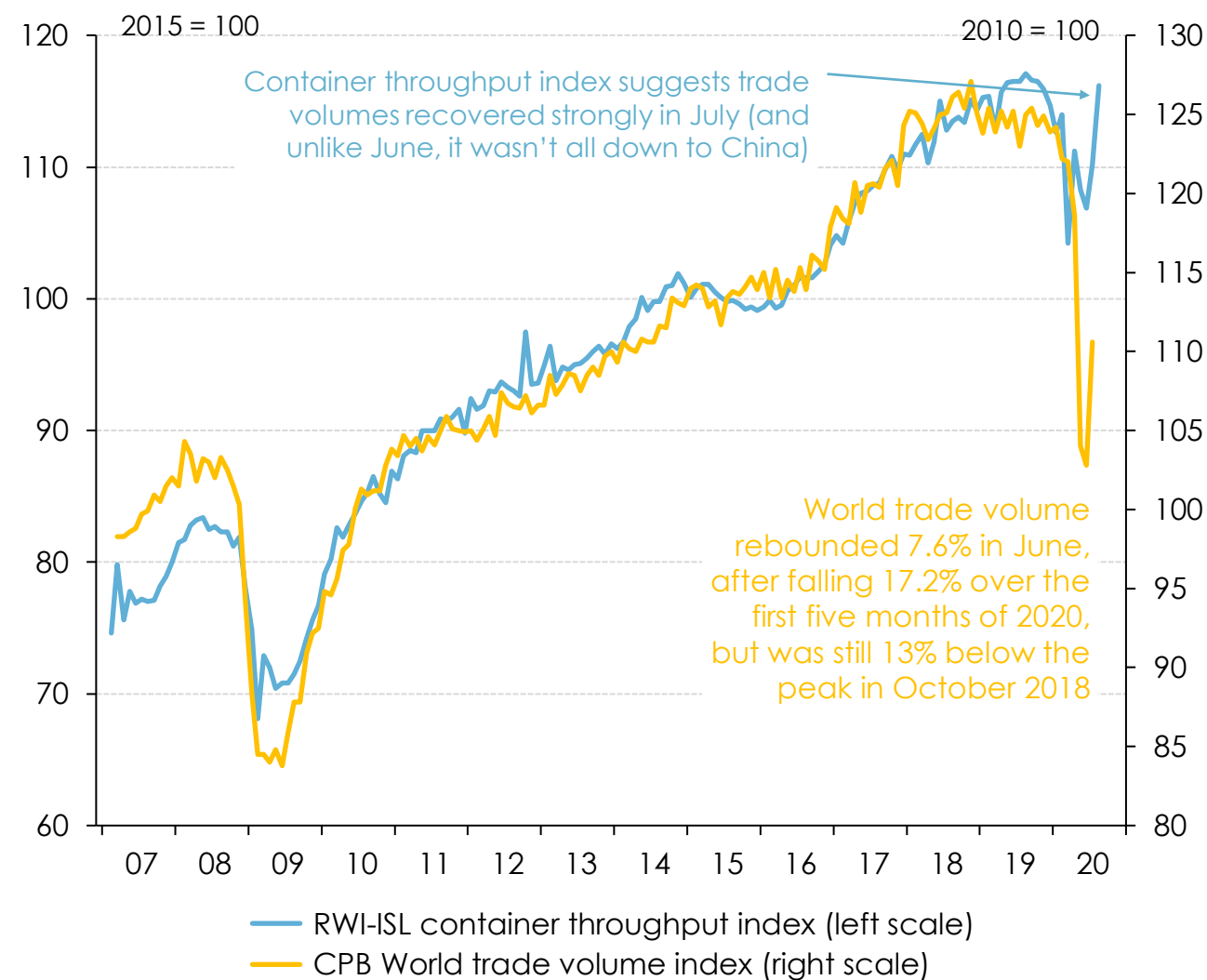
Cumulative decline in real per capita GDP during global recessions



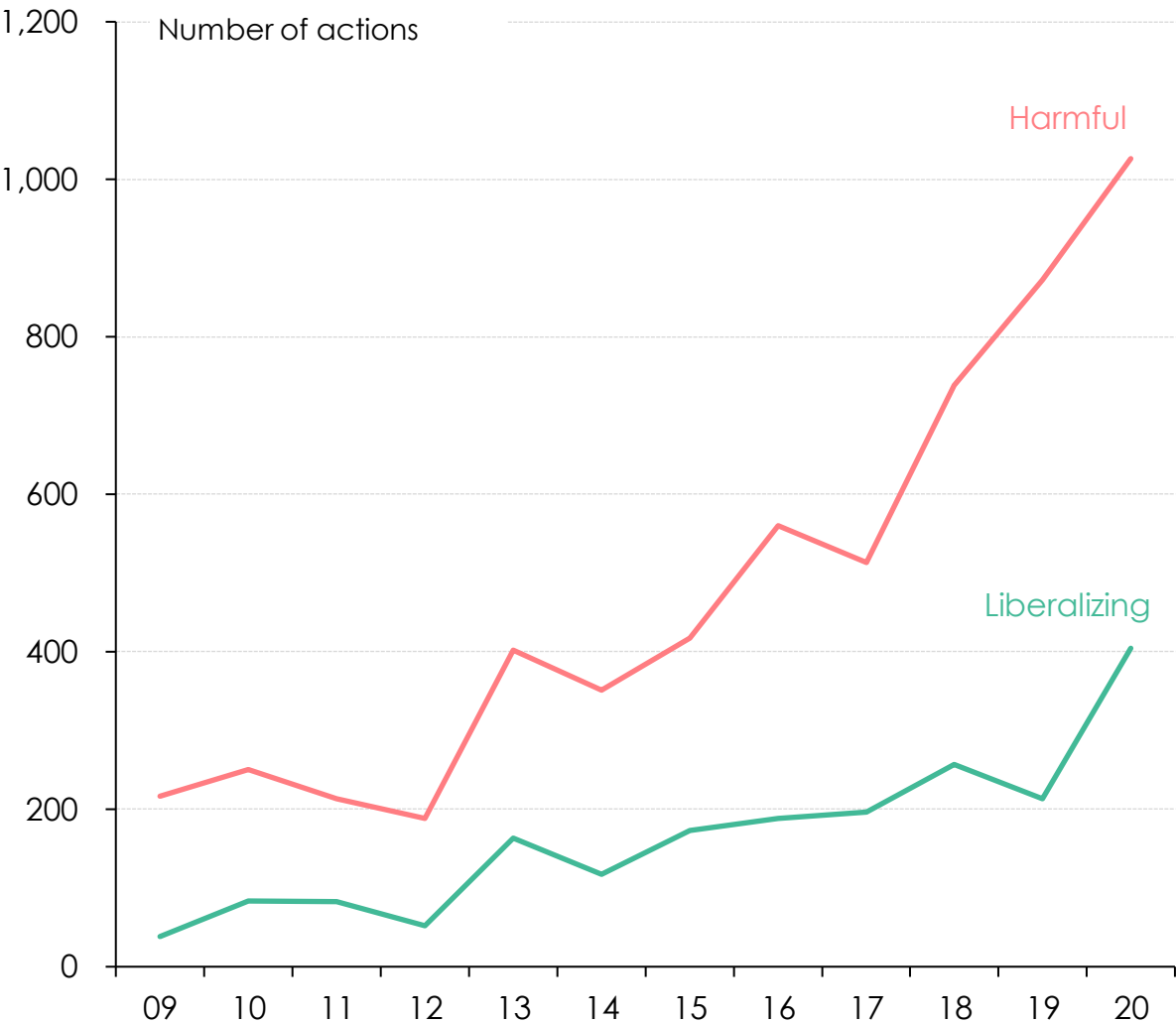
Source: The World Bank, [Global Economic Prospects](#), 8th June 2020.

World merchandise trade volumes rebounded in June but are still 13% below their October 2018 peak

World trade volumes and container throughput



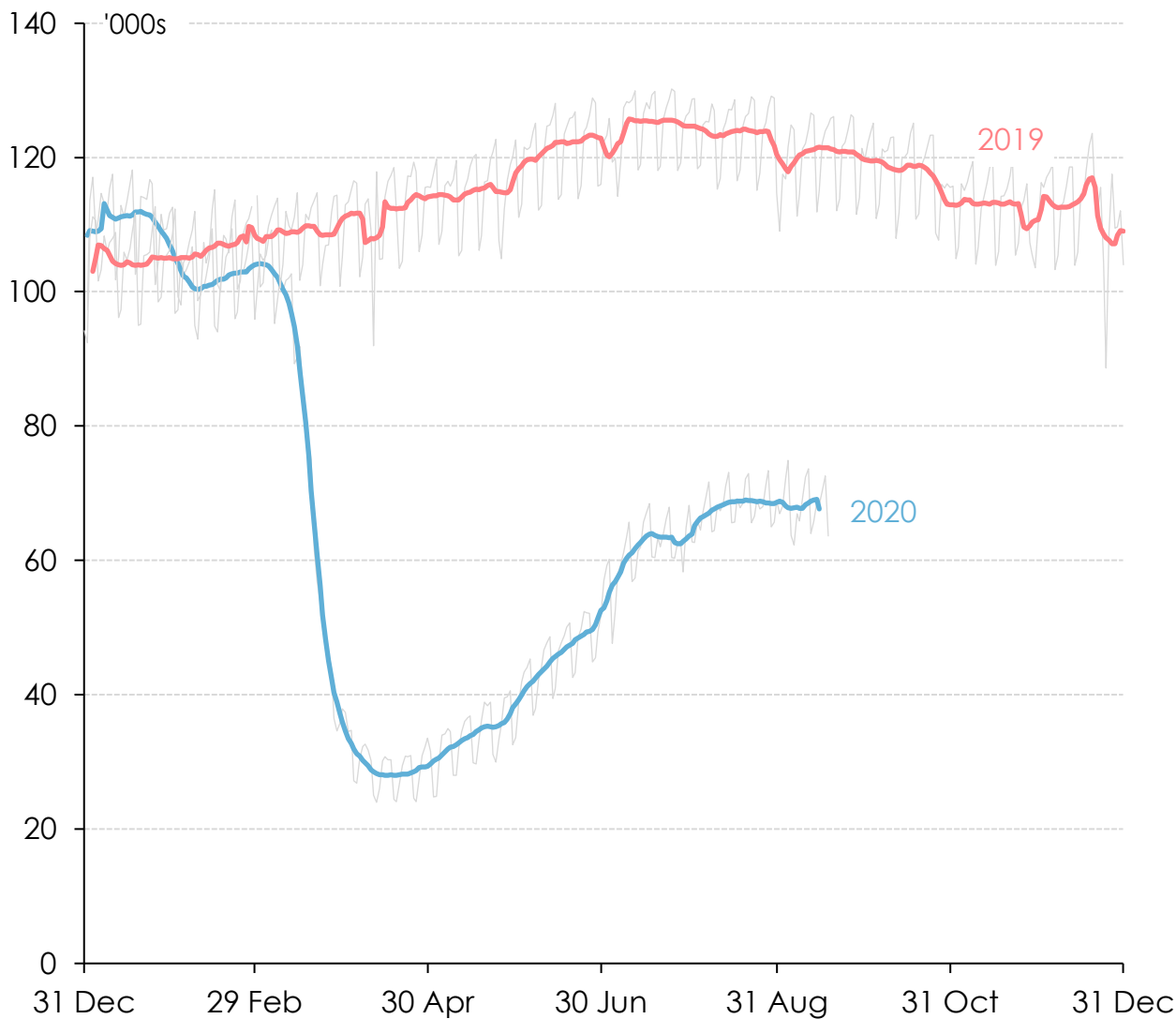
Pro- and anti-trade policy interventions



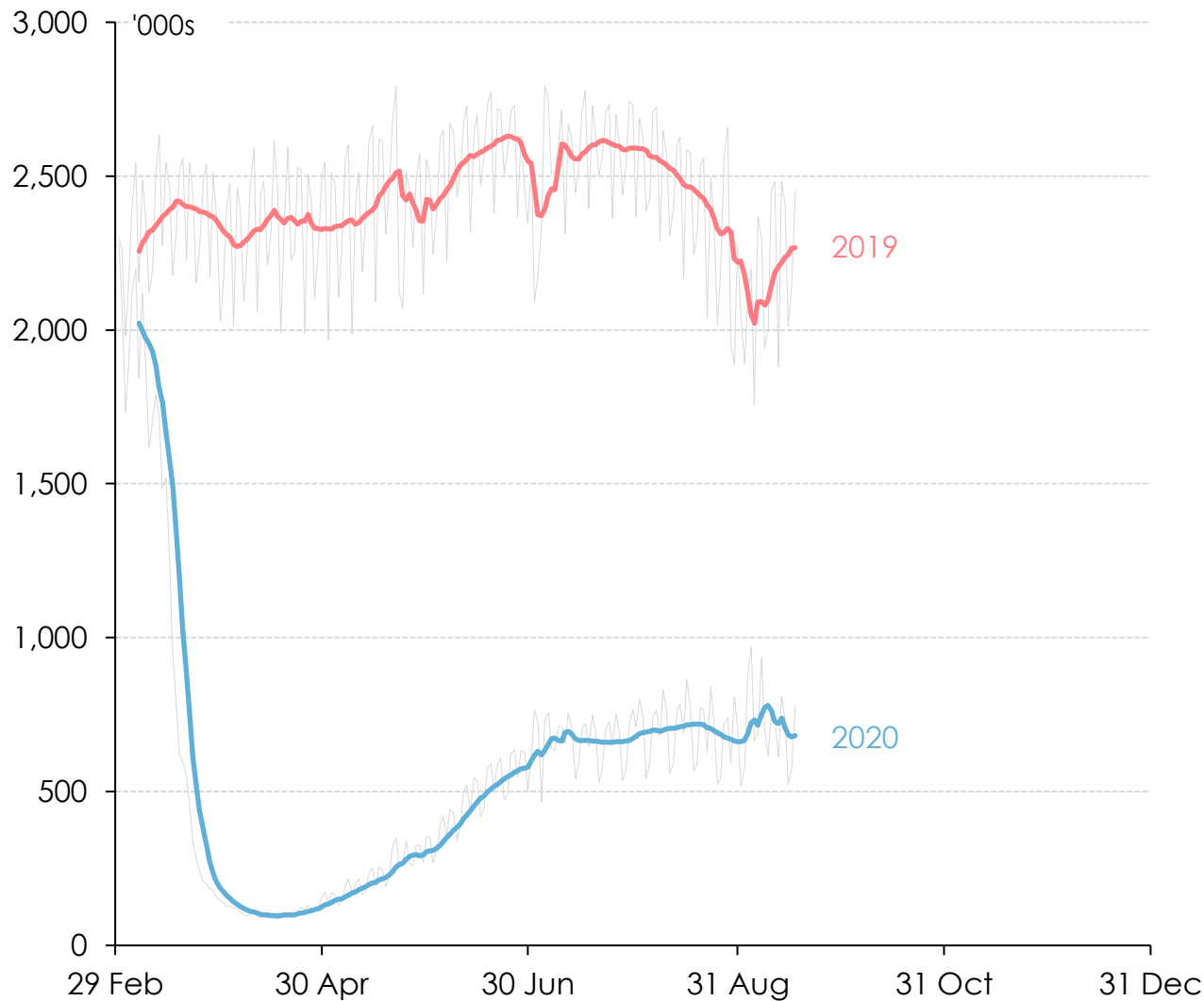
Note: The shipping container throughput index is based on reports from 91 ports around the world handling over 60% of global container shipping.
Sources: CPB Netherlands Economic Planning Bureau, [World Trade Monitor](#); Institute of Shipping Economics & Logistics (ISL) and RWI Leibniz-Institut für Wirtschaftsforschung (RWI) [Container Throughput Index](#); Centre for Economic Policy Research, [Global Trade Alert](#) Global Dynamics (data up to 14th September).

Global aviation traffic fell back marginally last week, and the previous week's uptick in US passenger air travel was completely reversed

Daily commercial flights worldwide

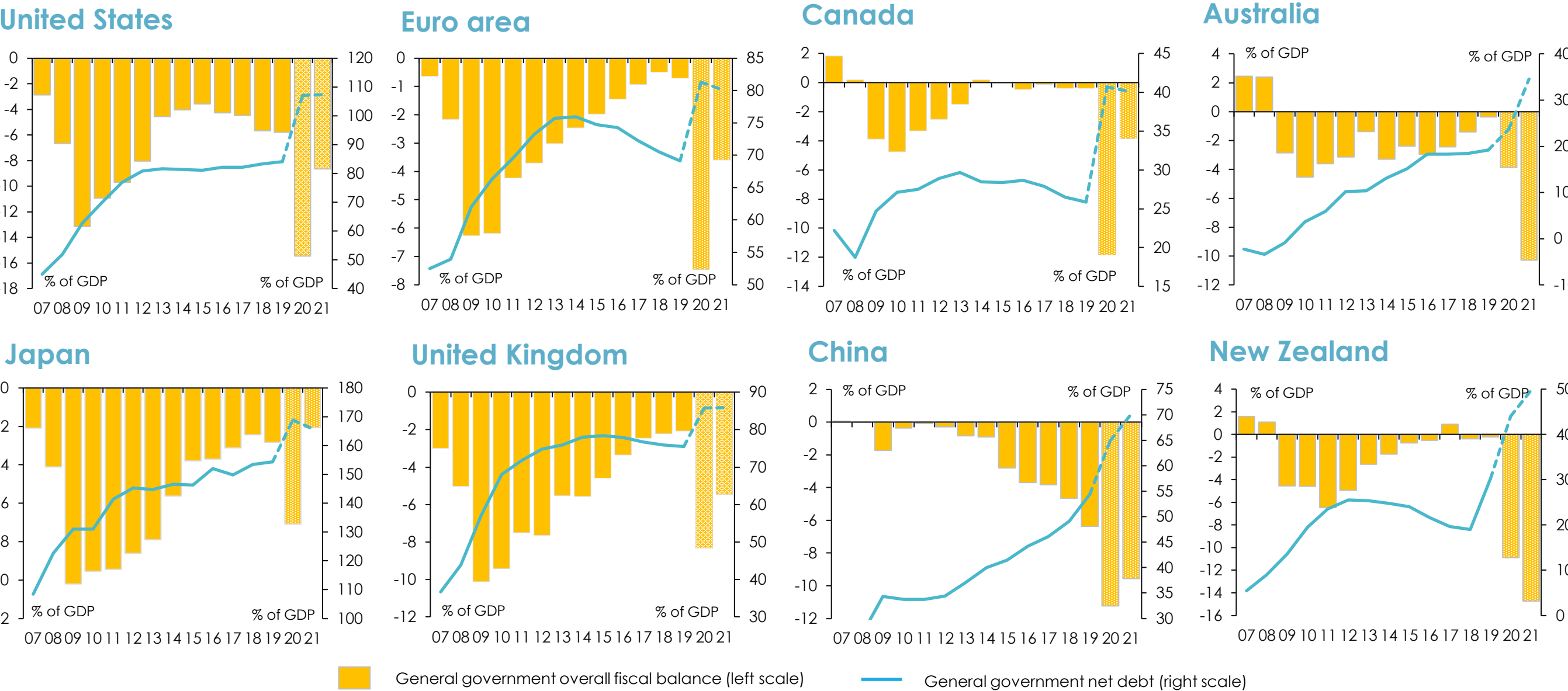


Daily US TSA security checks



Note: Commercial flights include commercial passenger flights, cargo flights, charter flights, and some business jet flights. Data up to 18th September for daily commercial flights, 17th September for TSA checks. Thicker coloured lines are 7-day centred moving averages of daily data plotted in thin grey lines.
Sources: [Flightradar24.com](https://flightradar24.com); [US Transport Safety Administration](https://www.transportation.gov) (at last, something useful produced by aviation 'security'!!!)

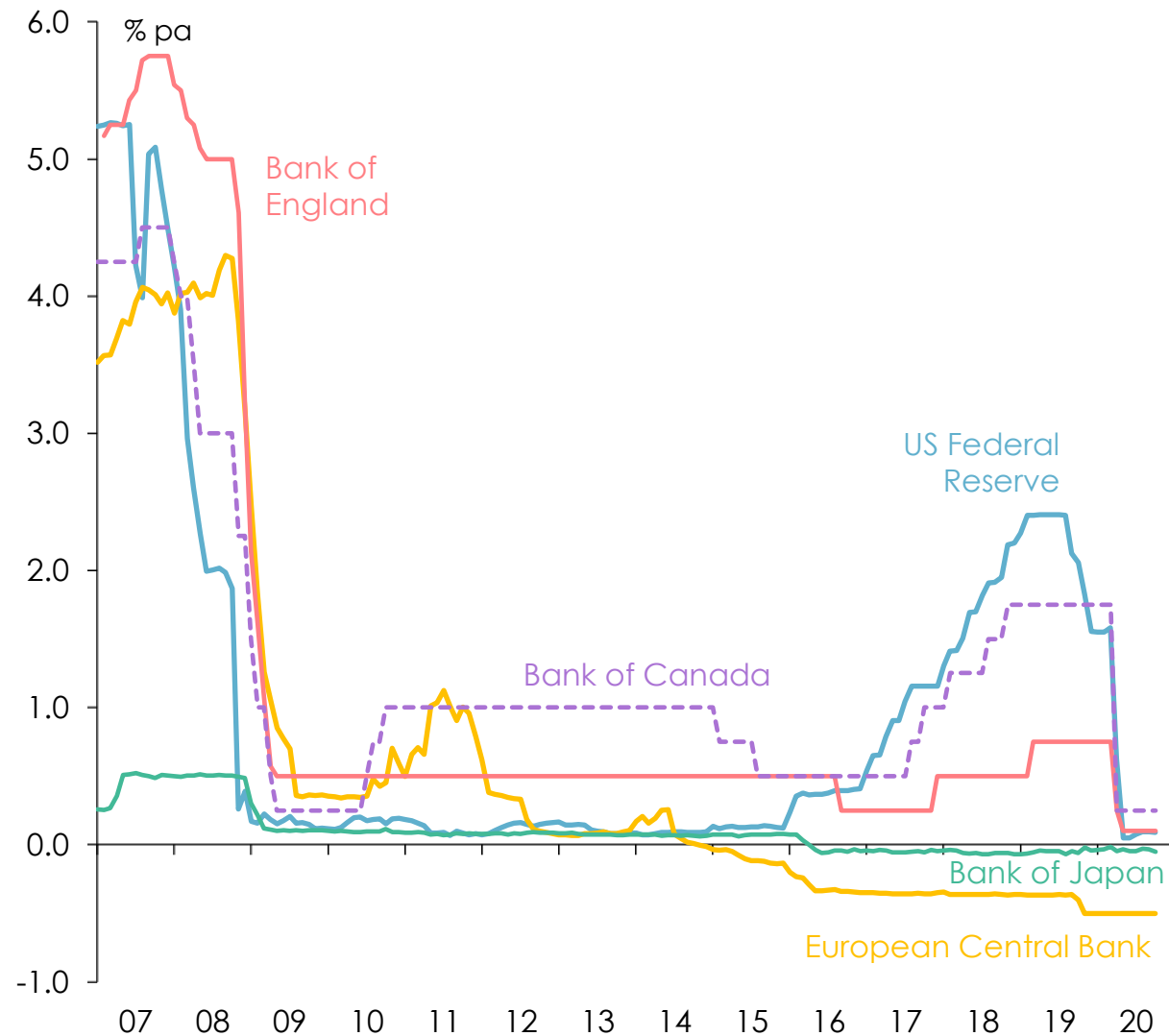
Governments around the world are doing more by way of fiscal stimulus than they did during the global financial crisis



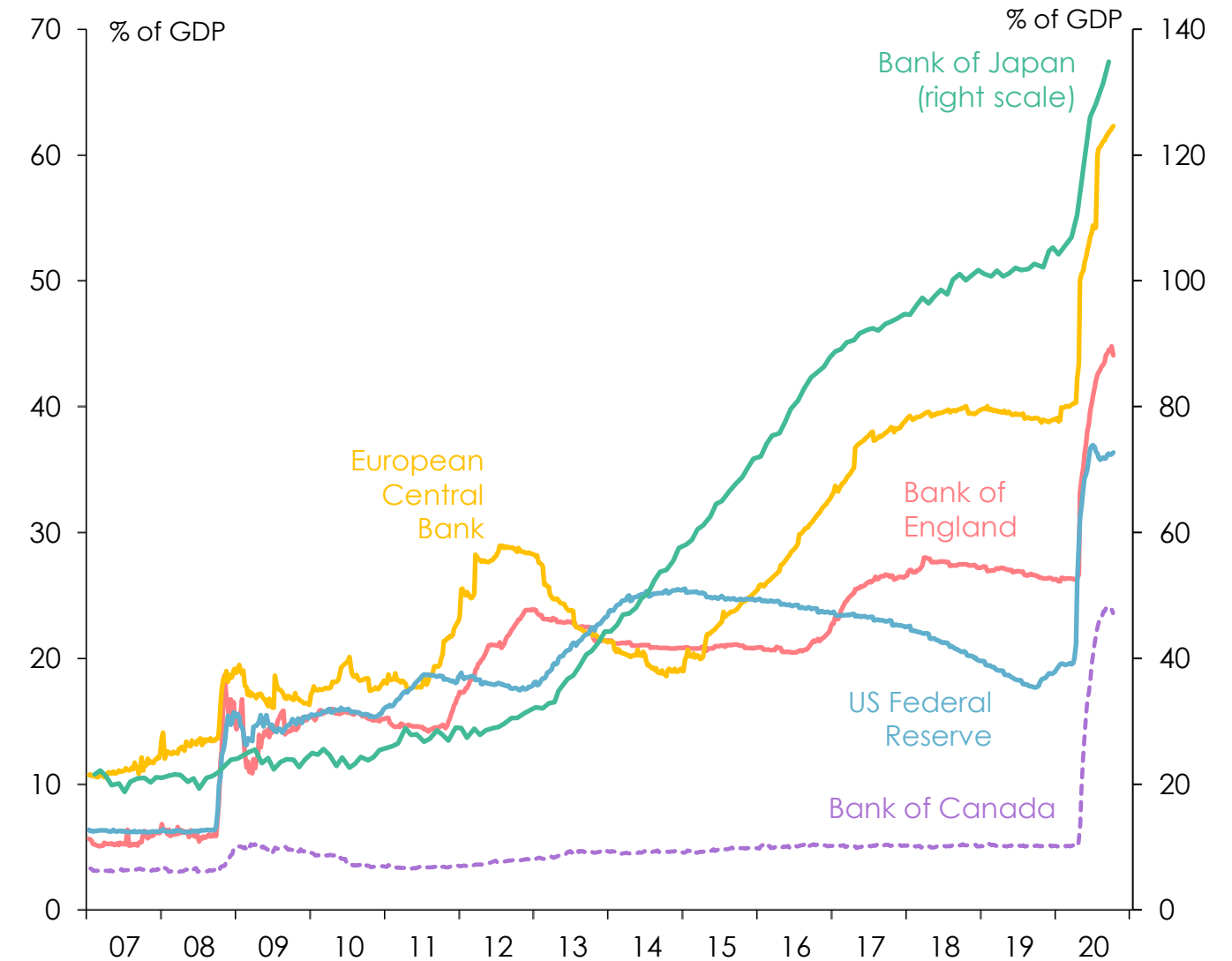
Note: UK data does not include the measures announced by the Chancellor on 8th July; China debt is gross debt, not net; Australian data are for the federal government only and are for fiscal years ended 30th June; NZ data are for fiscal years ended 31st March. Sources: International Monetary Fund, [Fiscal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

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

Major central bank policy interest rates



Major central bank balance sheets

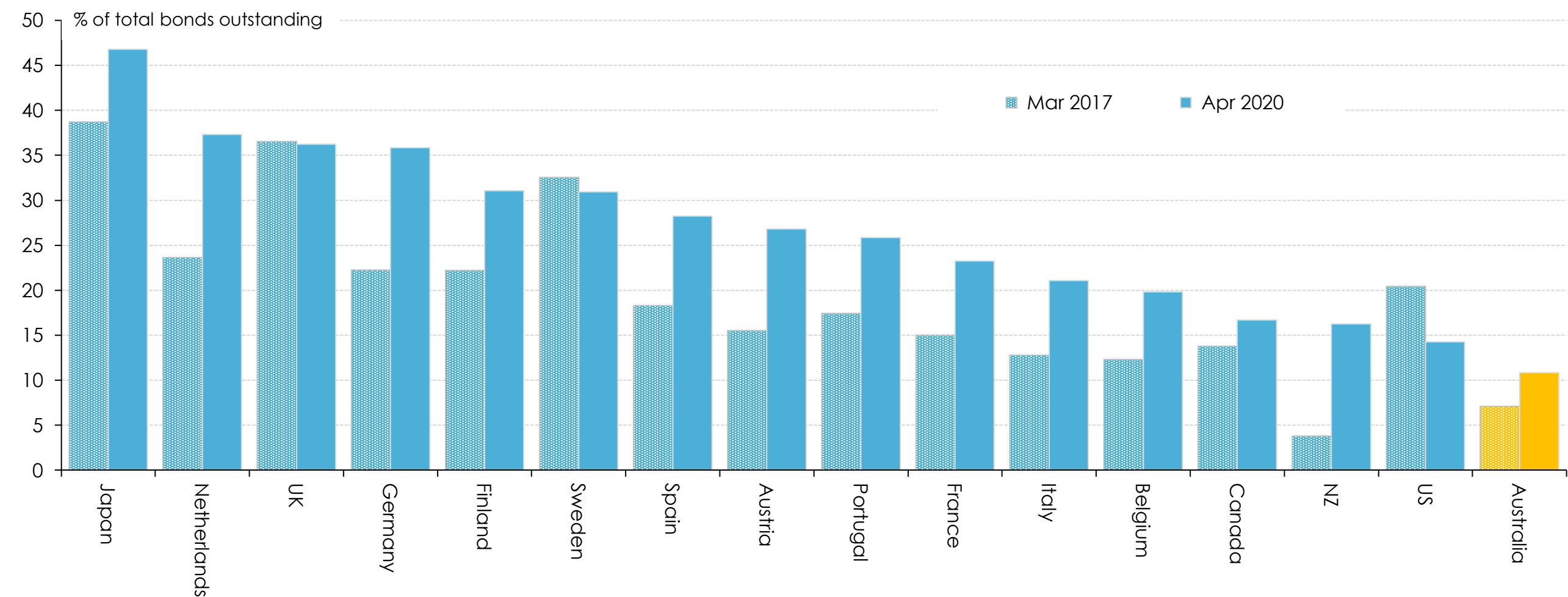


Note: estimates of European Central Bank assets as a pc of GDP for weeks since the beginning of April have been revised upwards by around 5 pc points of GDP following the publication by Eurostat this week of estimates of Q2 nominal GDP (as happened with estimates of Bank of England assets as a pc of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

Sources: [US Federal Reserve](#); [European Central Bank](#); [Bank of Japan](#); [Bank of England](#); [Bank of Canada](#); national statistical agencies; Corinna.

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).

The Fed this week gave a bit more substance to the new monetary policy framework outlined by Chair Jerome Powell in August ...

- ❑ The Fed's policy-setting Open Market Committee last month approved changes to its [Statement on Longer-Run Goals and Monetary Policy Strategy](#), which Jerome Powell enlarged on in his address to the (virtual) Jackson Hole policy conference hosted by the Kansas City Fed
- ❑ The Fed has adjusted its inflation target from “2%” to “an average of 2% over time”
 - this sounds a bit like the RBA's long-standing ‘flexible inflation target’ of ‘2-3% on average over the course of the cycle’
 - but the Fed is actually a bit more specific, spelling out that “following periods when inflation has been running persistently below 2%” (which it has been since 2012) “appropriate monetary policy will likely aim to achieve inflation moderately above 2% for some time”
- ❑ The Fed has also (significantly) changed the way it interprets the “maximum employment” part of its ‘dual mandate’
 - the new Statement emphasizes that “maximum employment is a broad and inclusive goal” and that monetary policy decisions will be informed by its assessments of the “*shortfalls* of employment from its maximum level” rather than (as previously) “*deviations* from its maximum level” (emphasis in the original)
 - Powell explained in his speech that this means that “employment can run at or above real-time estimates of its maximum level without causing concern, unless accompanied by signs of unwanted increases in inflation or the emergence of other risks that could impede the attainment of our goals” (other risks probably refers to risks to financial stability)
- ❑ This week the Federal Open Market Committee (FOMC) formally committed to achieving “inflation moderately above 2% for some time so that inflation averages 2% over time”
 - and indicated that it will keep its target range for the Fed funds rate at 0-1/4% “until labour market conditions have reached levels consistent with [its] assessments of maximum employment and inflation has risen to 2% and is on track to moderately exceed [sic] 2% for some time”

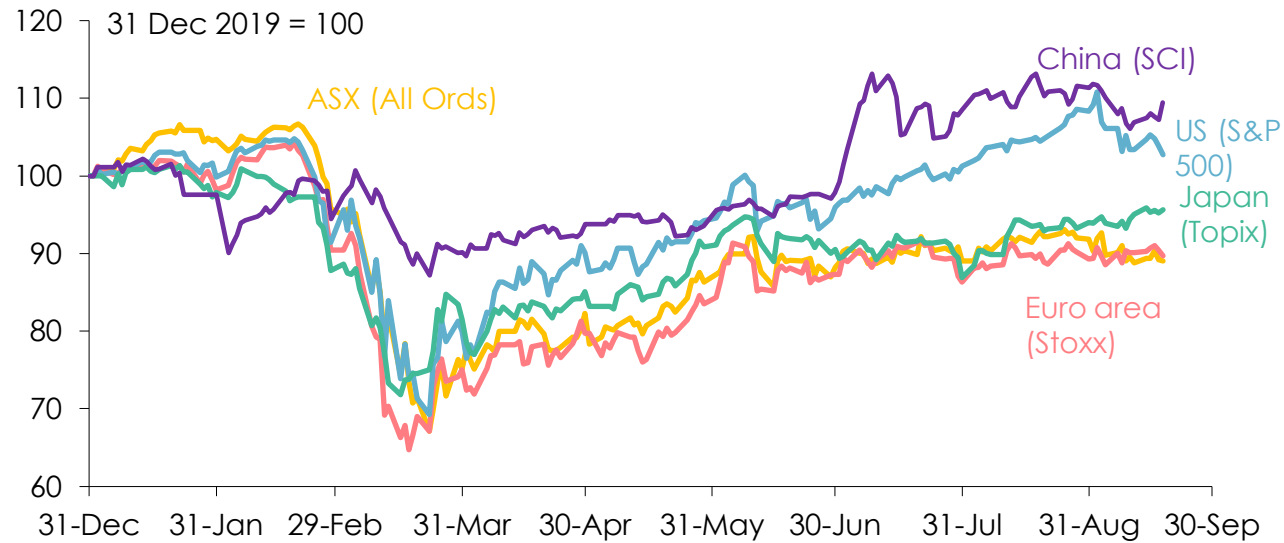
Note: Jerome Powell's 27th August Jackson Hole speech is [here](#); the FOMC's 16th September statement is [here](#).

... while the Bank of England is (like the RBNZ) entertaining the possibility of negative interest rates

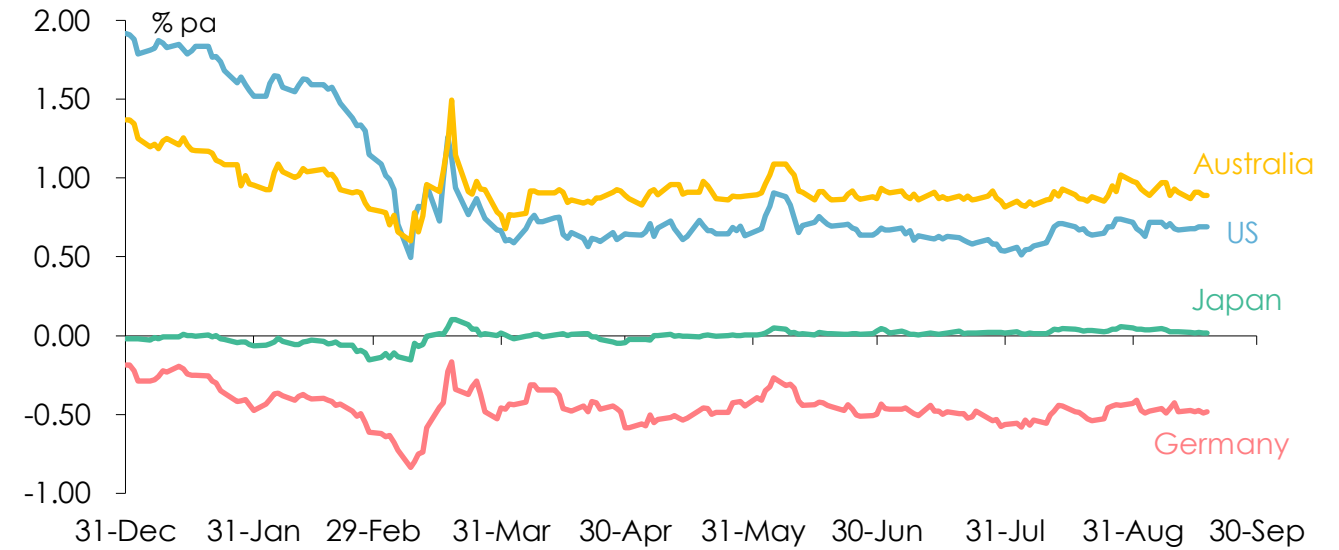
- ❑ The [minutes](#) of the Bank of England's Monetary Policy Committee meeting held this past Wednesday (published on Thursday) indicate that the Committee had “been briefed on the Bank's plans to explore how a negative Bank Rate could be implemented effectively, should the outlook for inflation and output warrant it at some point”
 - this follows an extended discussion of the “pros and cons” of negative policy interest rates in the Bank's [August Monetary Policy Report](#), which noted that moving to negative policy rates could be less effective in stimulating economic activity than previous reductions in [positive] rates, because interest rates on household deposits probably wouldn't go below zero, so that banks' profitability could fall, adversely affecting their ability to lend (and to pass negative rates on to their loan customers) – which could in turn “provide a headwind to spending”
- ❑ The Reserve Bank of New Zealand is also actively considering the possibility of a negative official cash rate (OCR):
 - in May, the RBNZ's Deputy Governor [wrote to bank CEOs](#) informing them that “negative interest rate functionality ... remains a priority from an operational and risk management perspective” and asking them to “discuss [with the RBNZ] the purpose of zero interest rate floor clauses” in retail loan product documentation
 - The RBNZ's [August Monetary Policy Statement](#) reported that, having considered a range of ‘alternative monetary policy tools’ that could be used to “achieve its remit objectives”, the Monetary Policy Committee “expressed a preference for a negative OCR, and a ‘Funding for Lending’ program in addition to its current program of bond purchases
- ❑ The ECB and BoJ have had negative policy interest rates since 2016 (see [slide 26](#)) and the Swiss National Bank since 2014
 - it is perhaps instructive that none of these central banks have taken their policy rates further into negative territory since the onset of the pandemic (which is what one would have expected them to do if they believed that negative rates could stimulate economy activity (the main motivation for the SNB's negative rates appears to be preventing currency appreciation)
 - Sweden's Riksbank, which had instituted a negative policy rate in 2015, [abandoned the policy](#) in January this year, and hasn't reverted to it since the onset of the pandemic

Asian stockmarkets rose this week though others fell; the US\$ weakened some more, especially against the yen, while bonds moved sideways

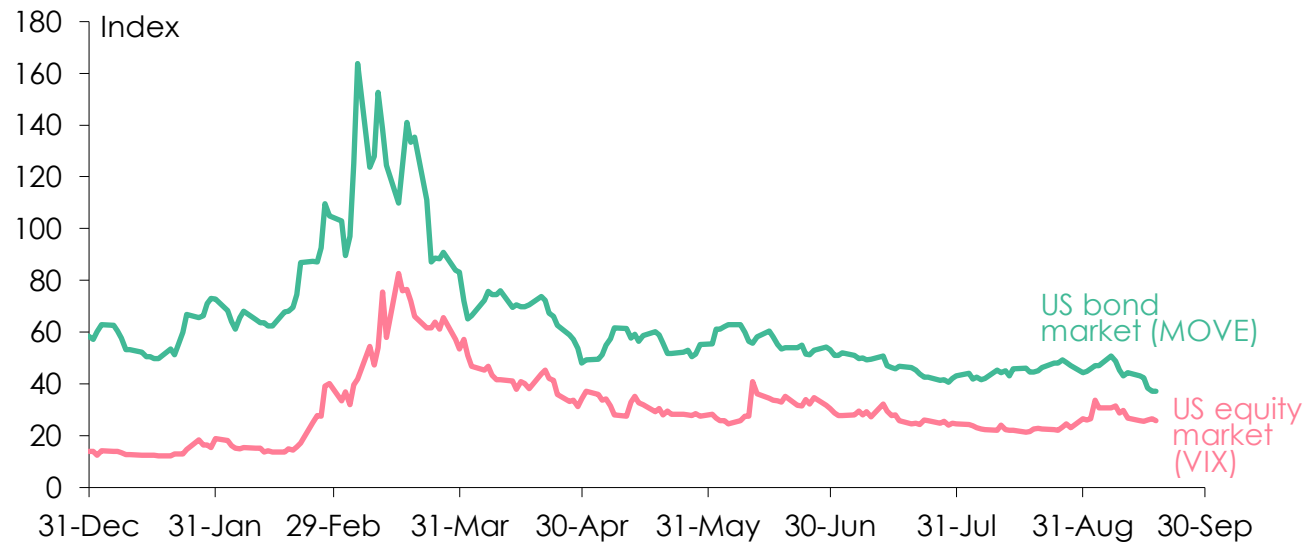
Stock markets



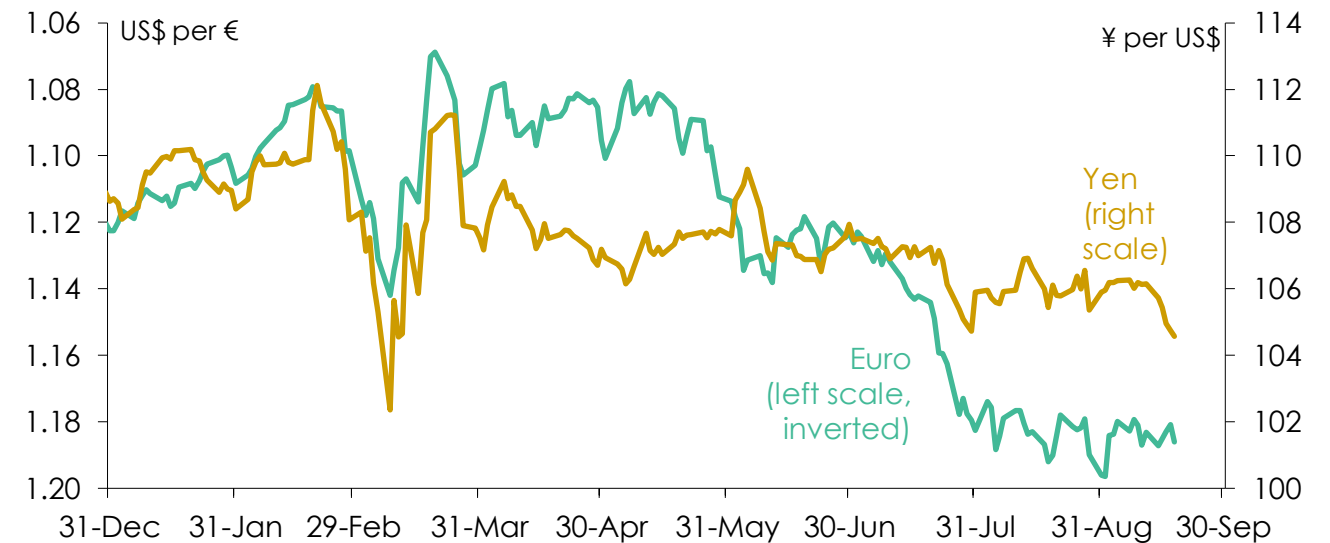
10-year bond yields



Measures of market volatility



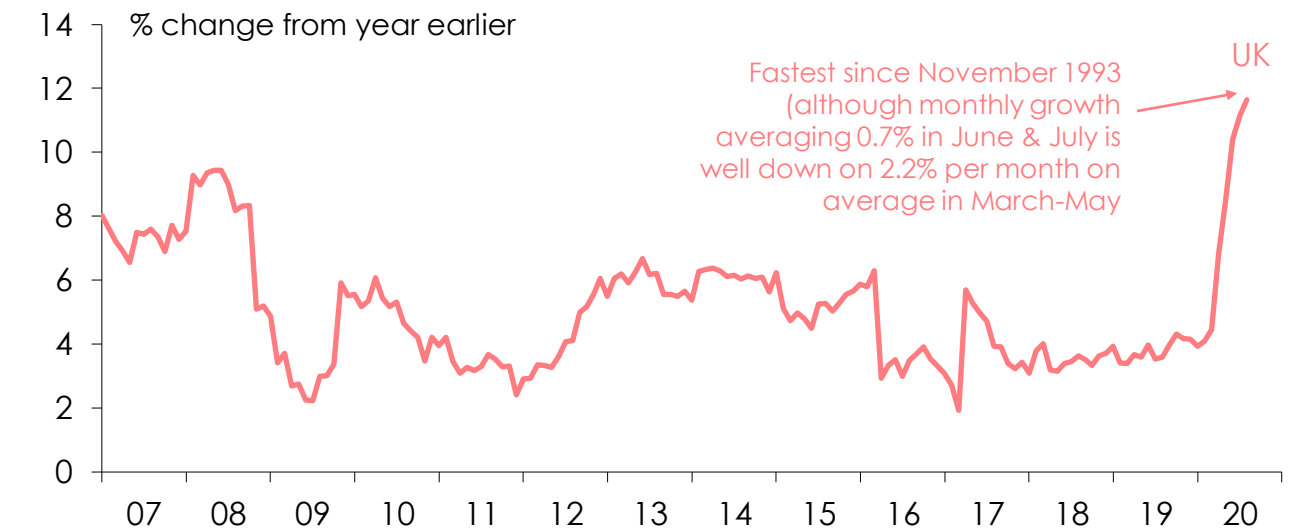
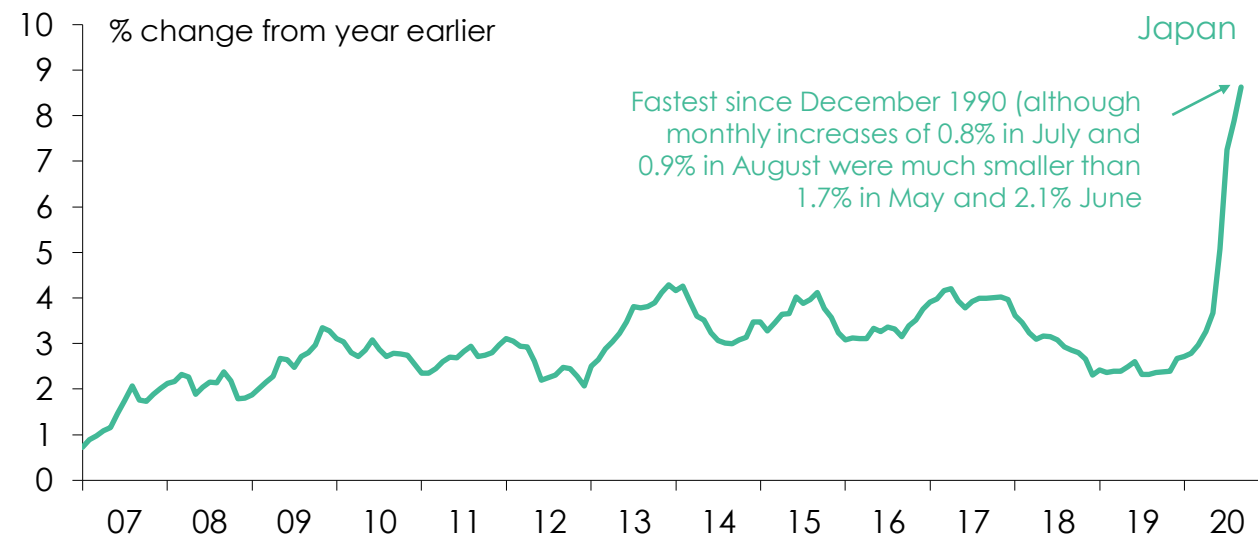
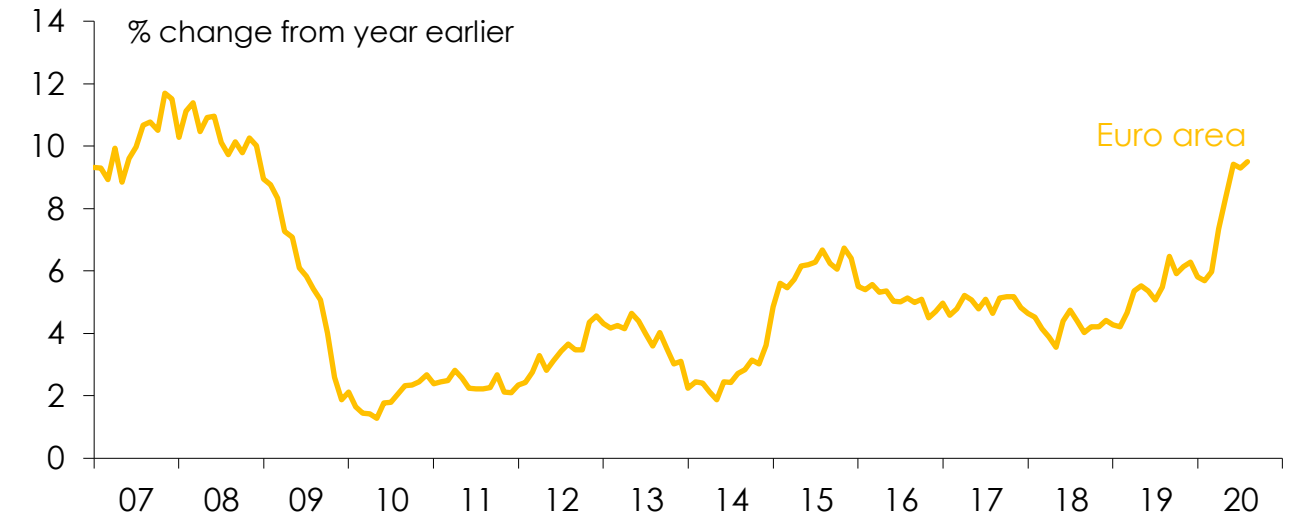
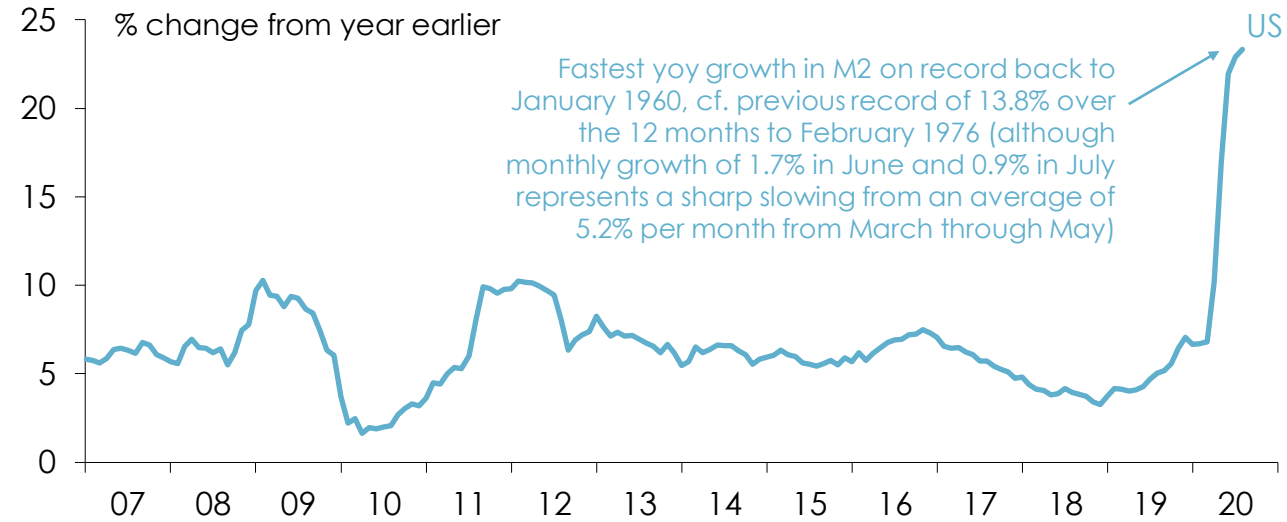
US dollar vs euro and yen



Source: Refinitiv Datastream. Data up to 18th September.

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

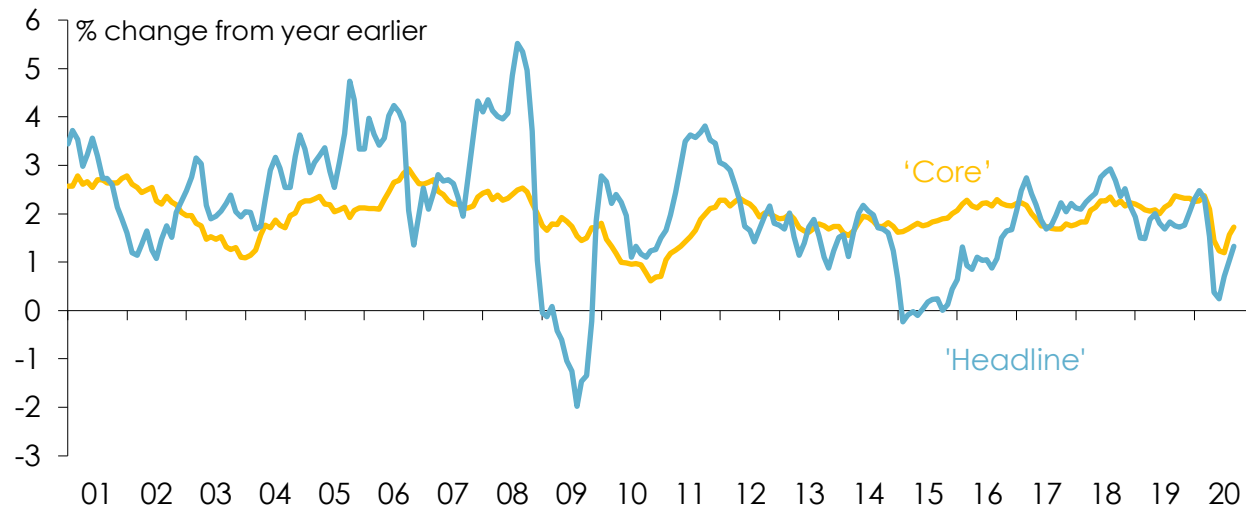
M2 money supply growth



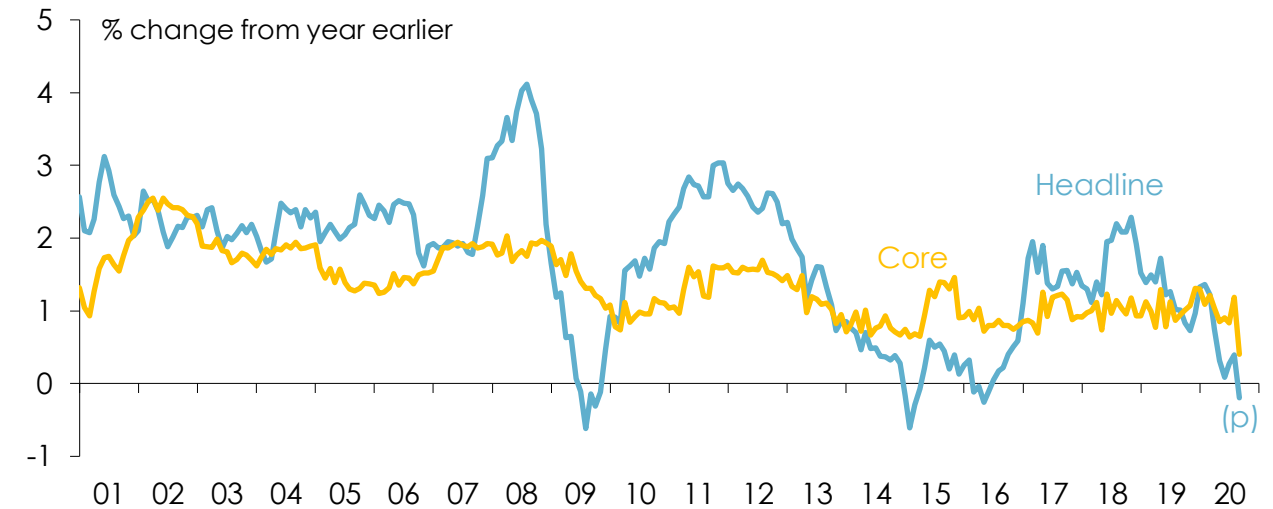
Note: Japan is M2+CDs. Sources: US Federal Reserve; European Central Bank; Bank of Japan; Bank of England.

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

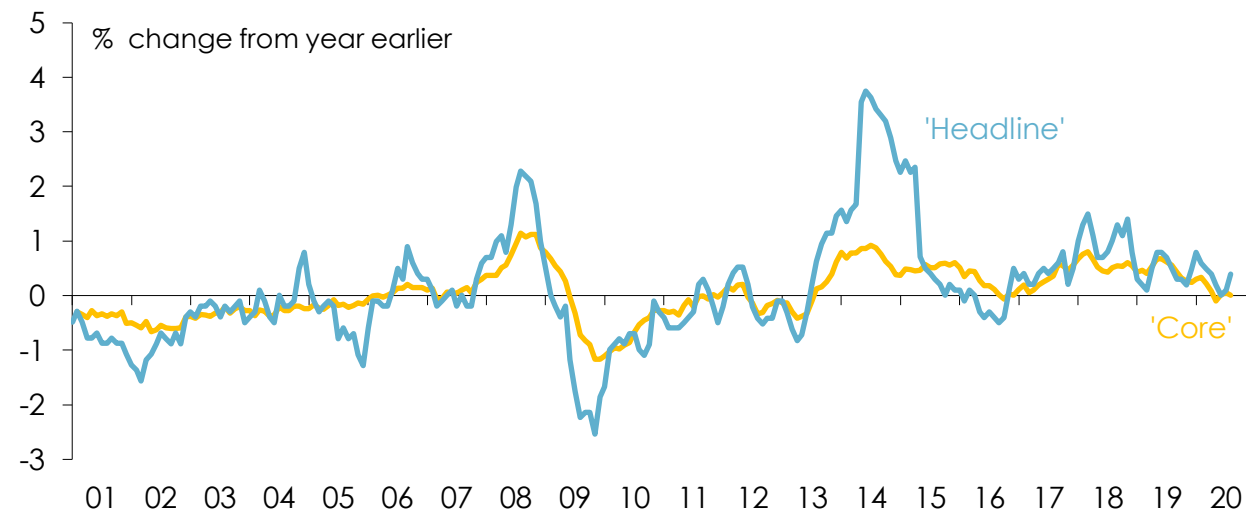
‘Headline’ and ‘core’ inflation - US



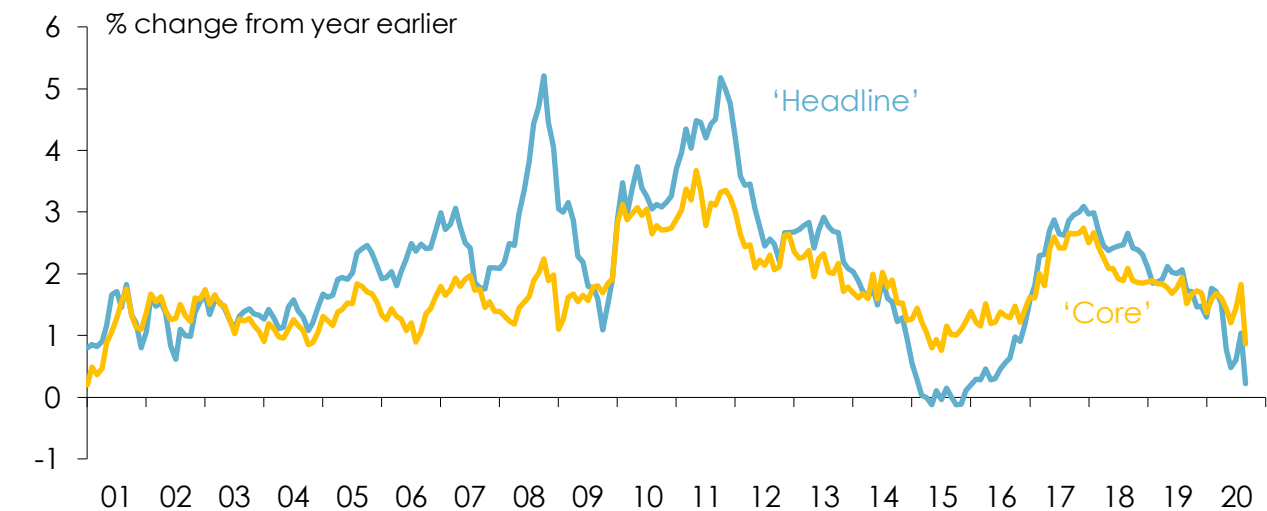
‘Headline’ and ‘core’ inflation – Euro area



‘Headline’ and ‘core’ inflation - Japan

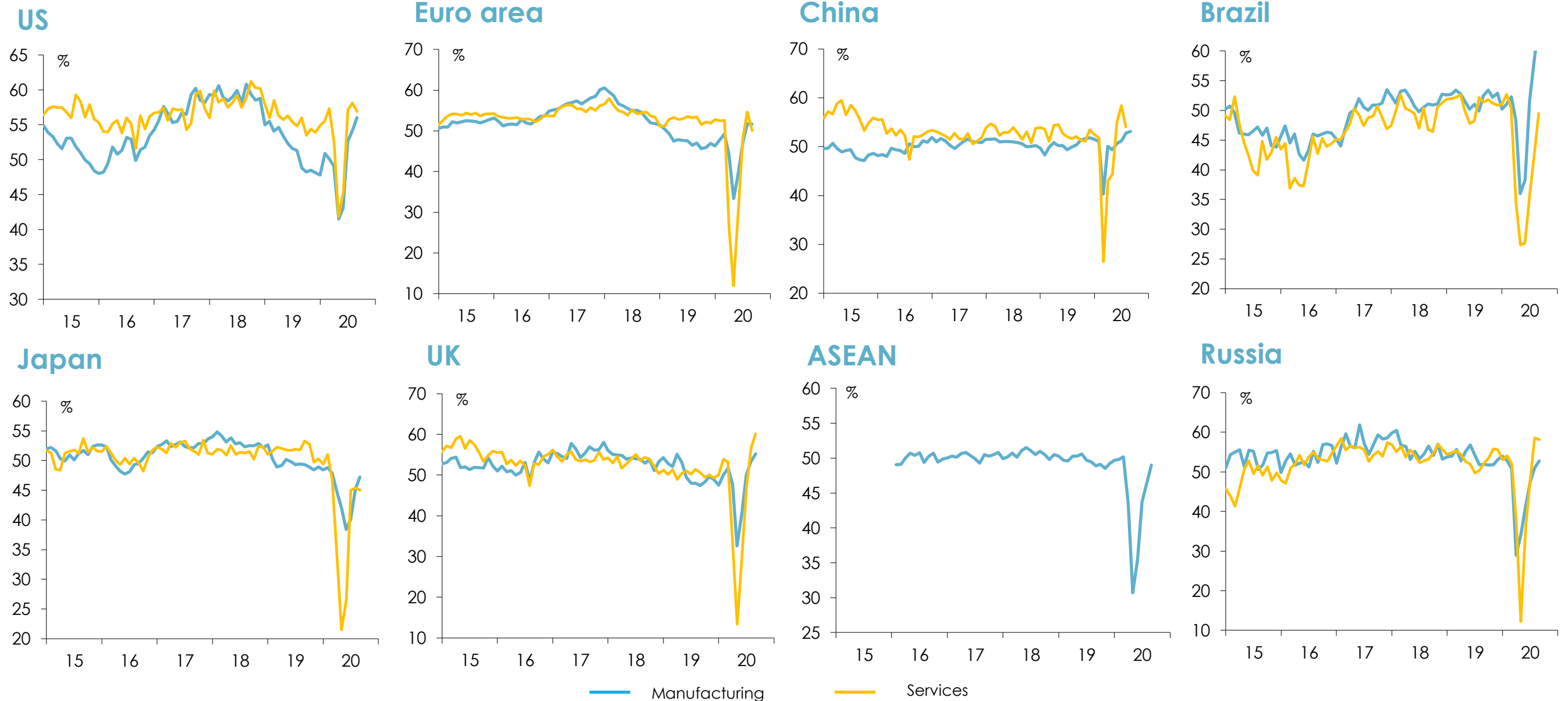


‘Headline’ and ‘core’ inflation – UK



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

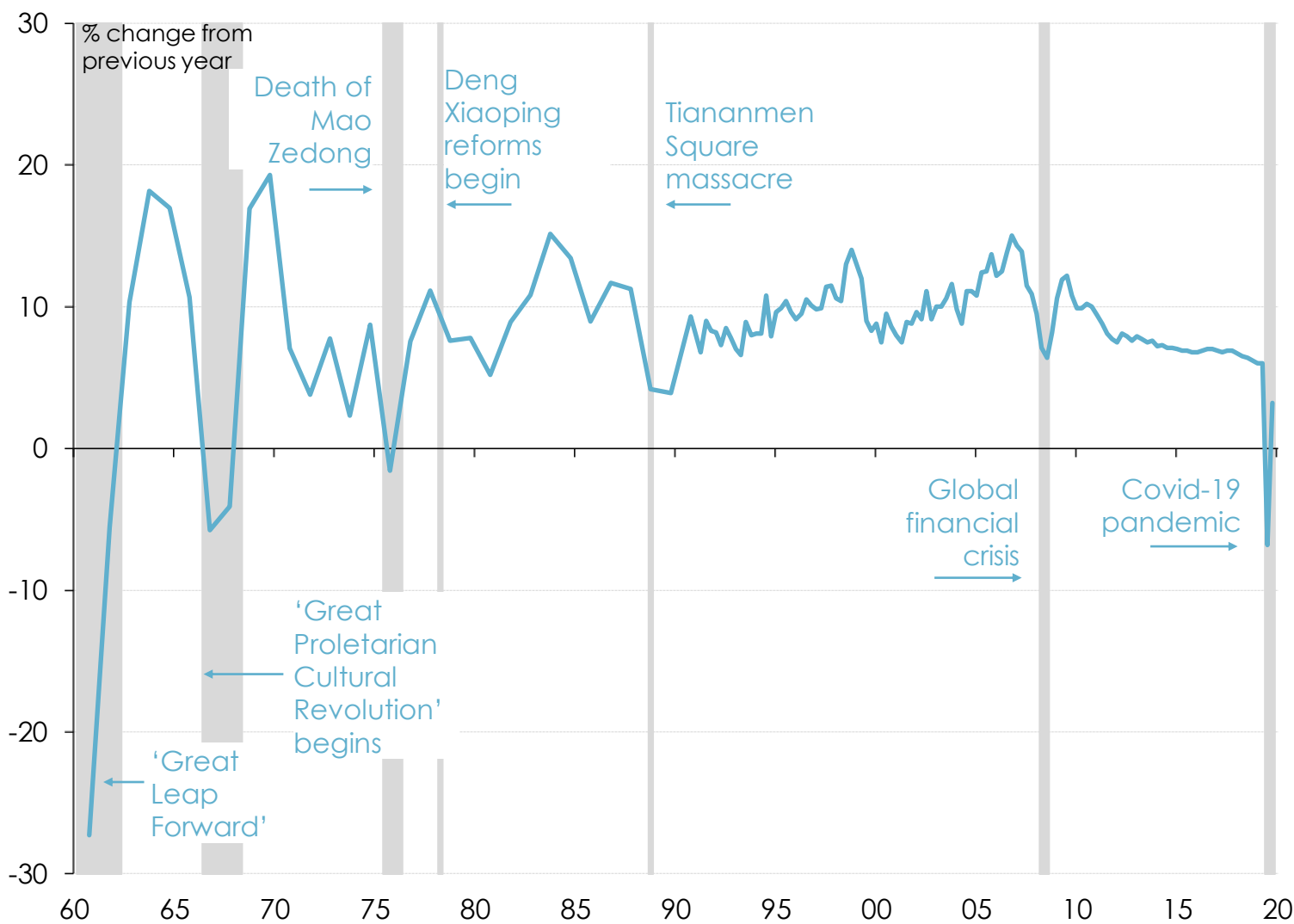
Purchasing managers' indices (PMIs) point to continued expansion in both manufacturing and services sectors in major economies in August



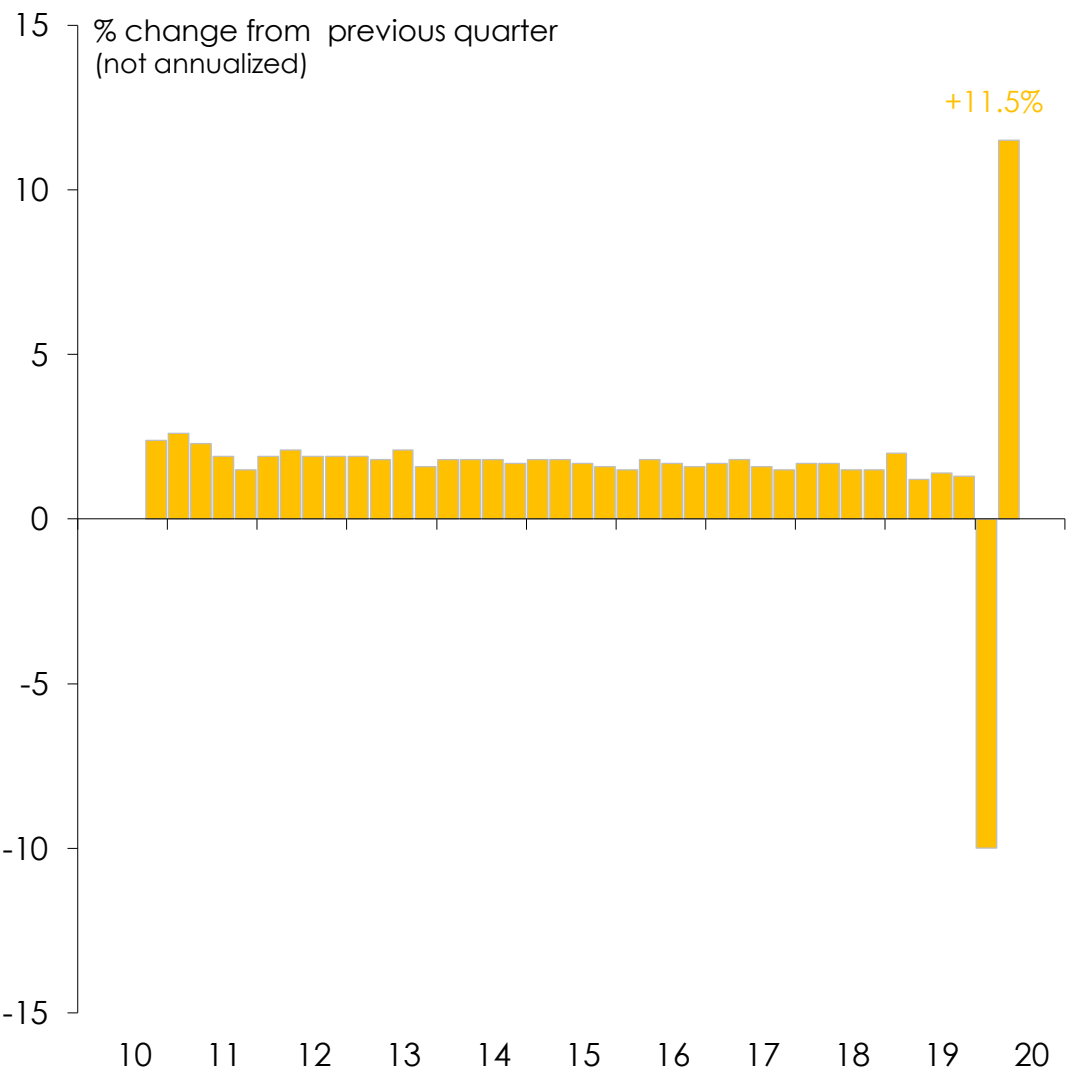
Note: Purchasing Managers' Indexes (PMIs) are derived from surveys of senior executives, who are asked to report whether various dimensions of business activity recorded an increase, decrease or no change compared with the previous month. A reading of 50 indicates an overall increase cf. the previous month, and a reading of less than 50 indicates a decrease. Latest data are for August. See also PMIs for other Asia-Pacific economies on [slide 41](#). 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



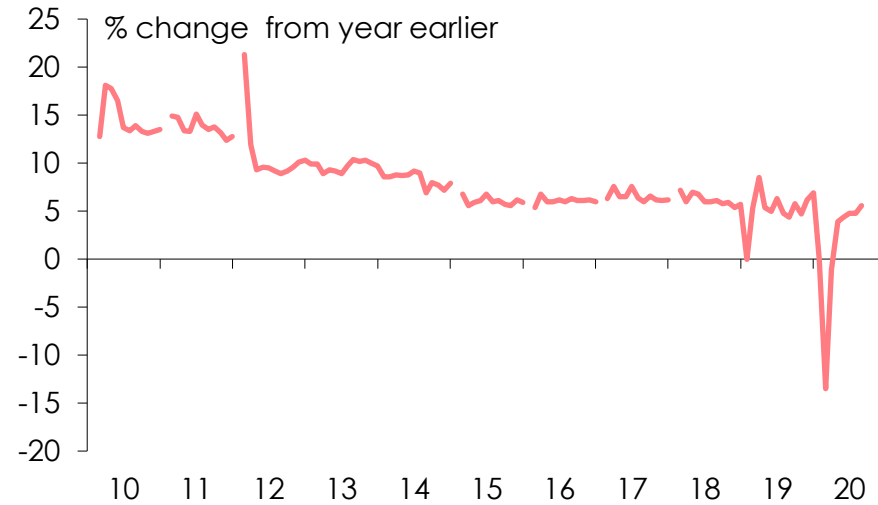
Quarterly real GDP growth, 2010-2020



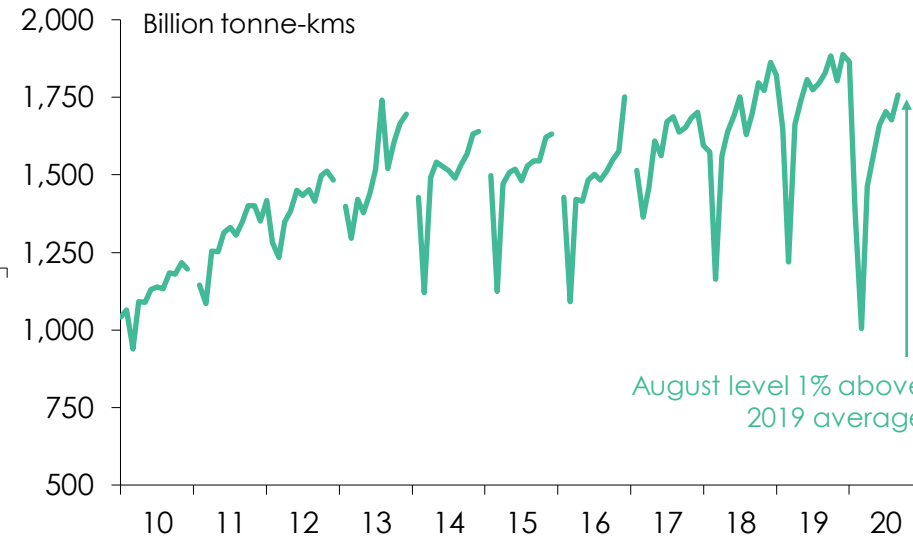
Note: In the left-hand chart, GDP growth rates are annual averages up to the December quarter of 1991, and then quarter-on-corresponding-quarter-of-previous-year thereafter. Sources: China National Bureau of Statistics.

The production side of the Chinese economy has continued to recover in Q3 and some areas are almost back to pre-pandemic levels

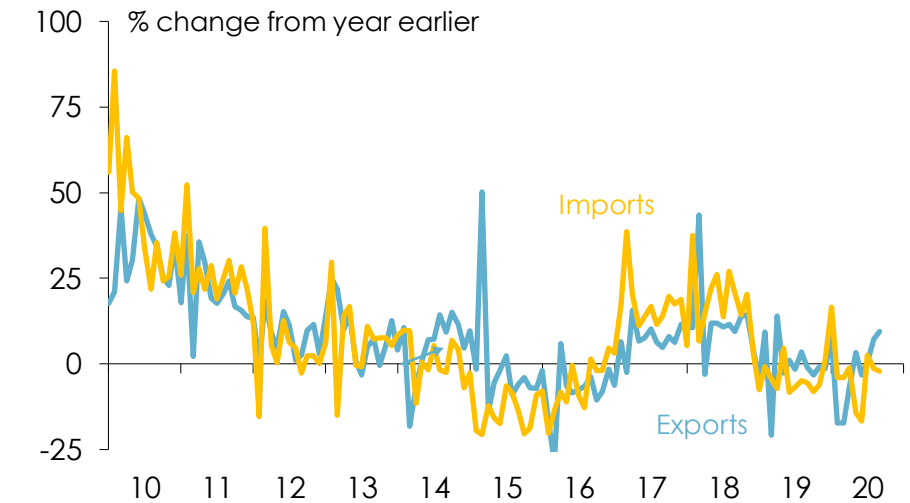
Industrial production



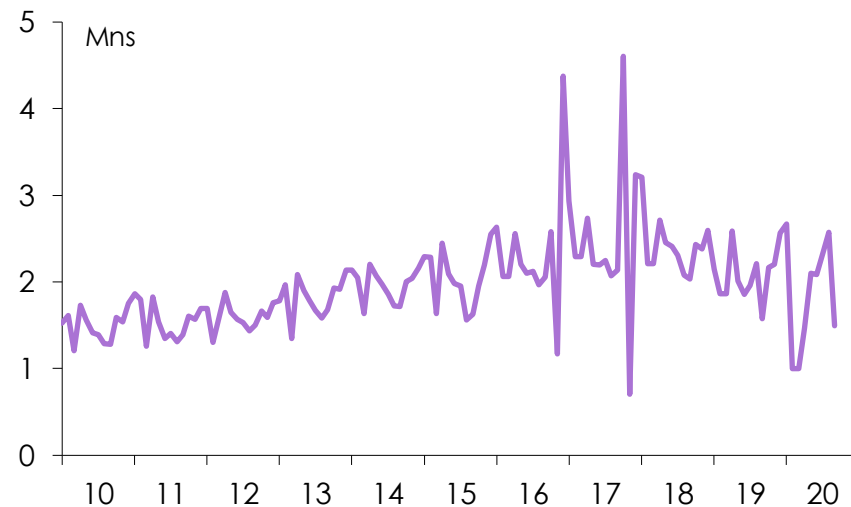
Freight traffic volumes



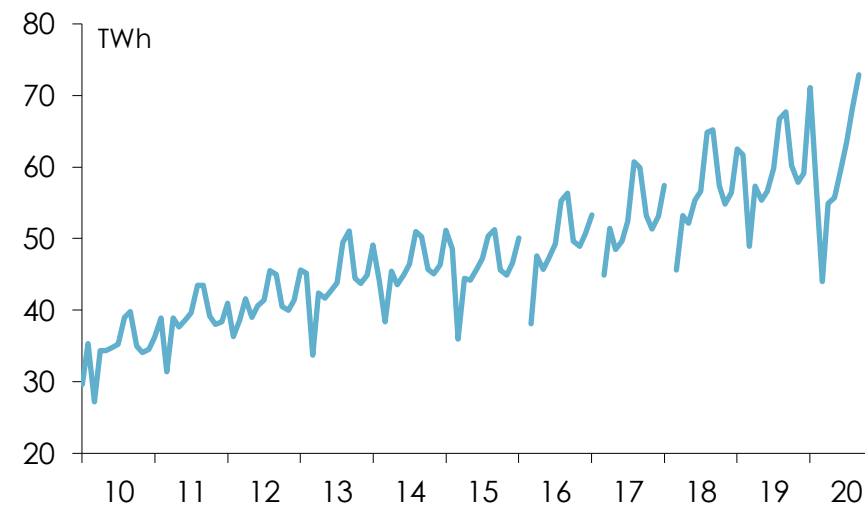
Merchandise trade



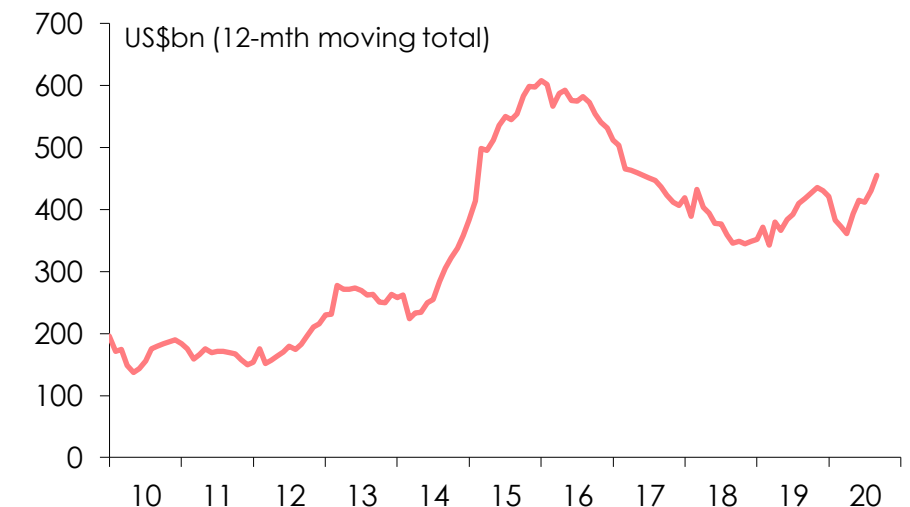
Motor vehicle production



Primary electricity production



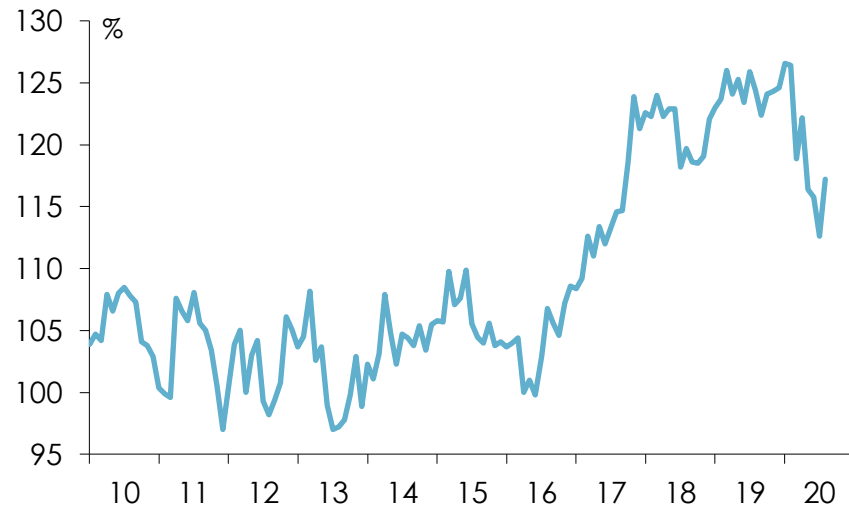
Merchandise trade balance



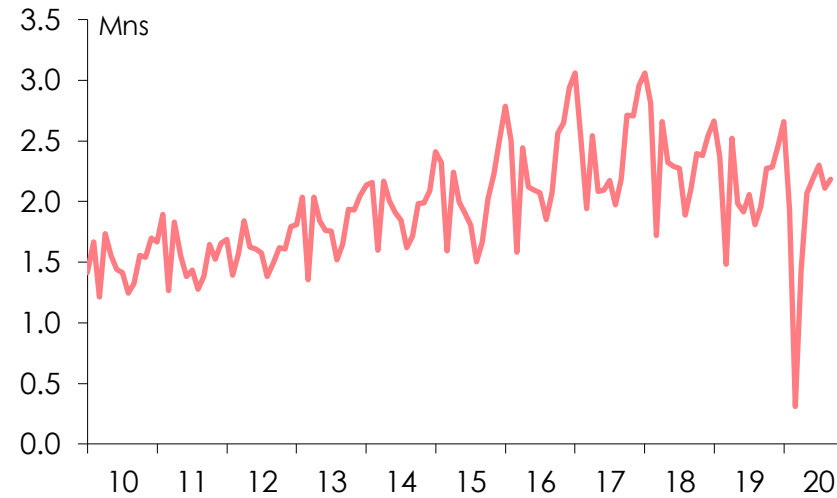
Sources: China National Bureau of Statistics; China Association of Automobile Manufacturers; China General Administration of Customs. Latest data are for August.

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

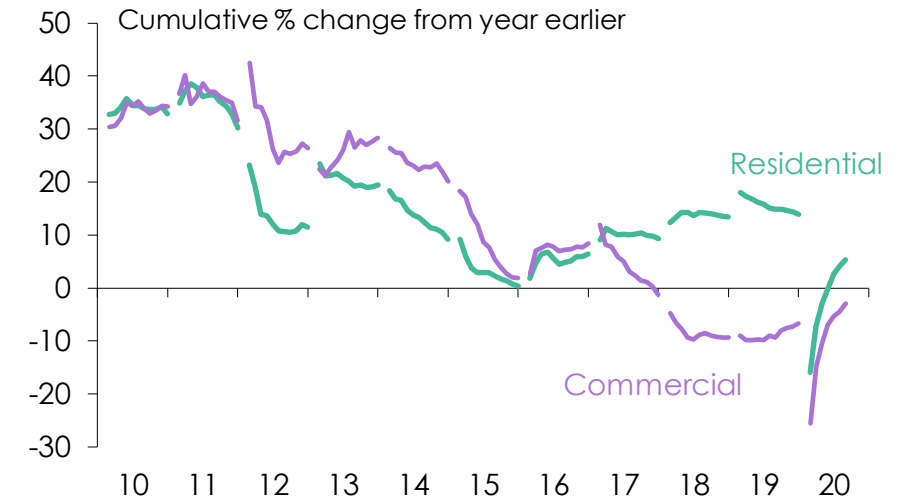
Consumer sentiment



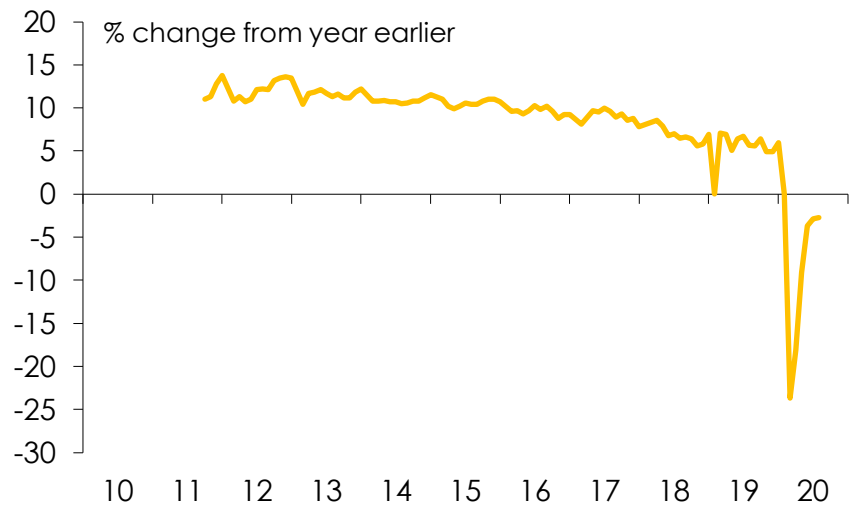
Motor vehicle sales



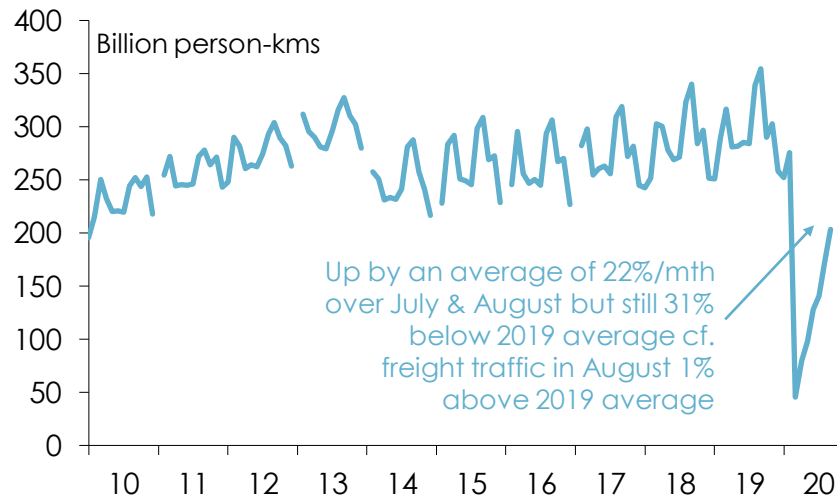
Real estate investment



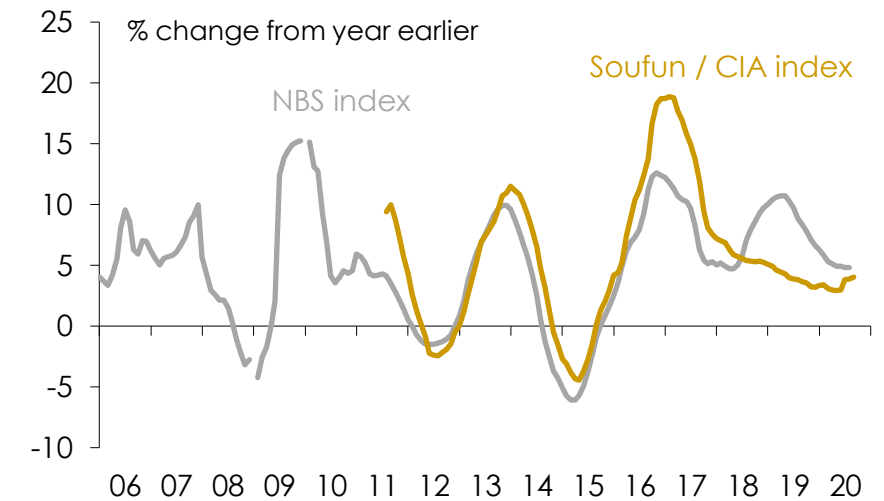
Retail sales volume



Passenger traffic volumes



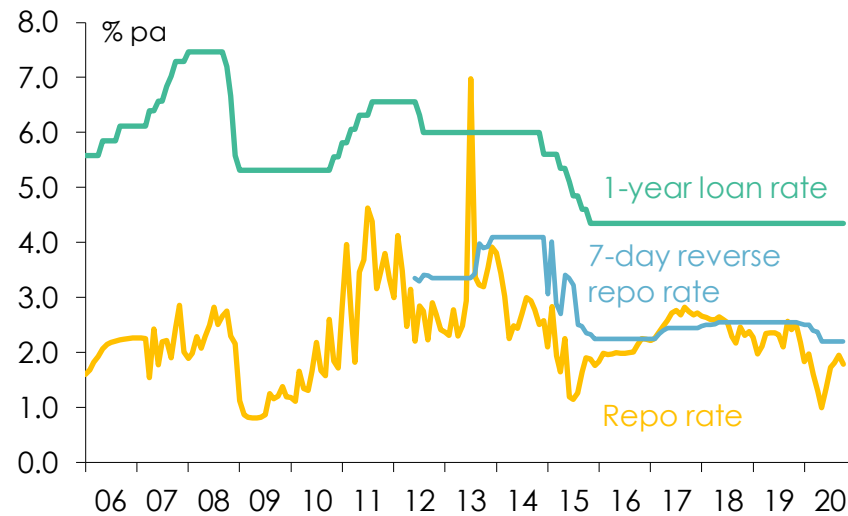
Residential real estate prices



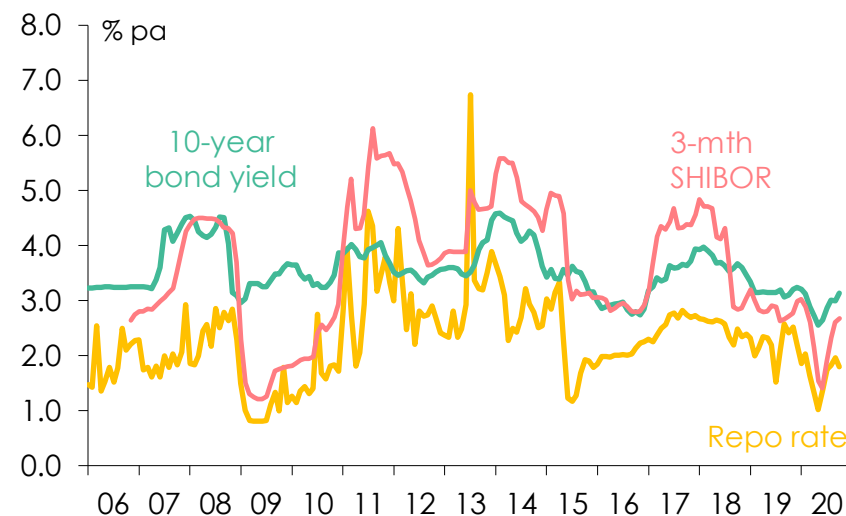
Sources: China National Bureau of Statistics; China Association of Automobile Manufacturers; China Index Academy. Latest data are for August, except for consumer sentiment index and passenger traffic volumes, which are for July.

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

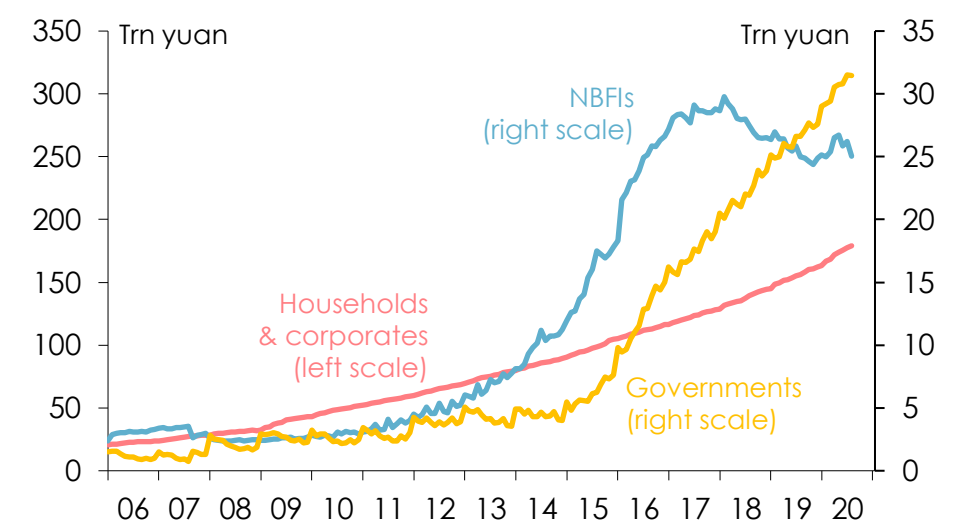
PBoC policy interest rates



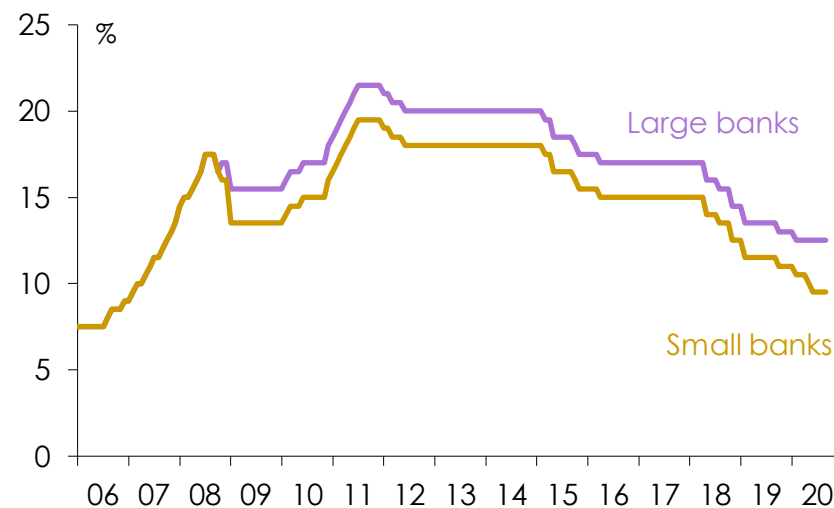
Market interest rates



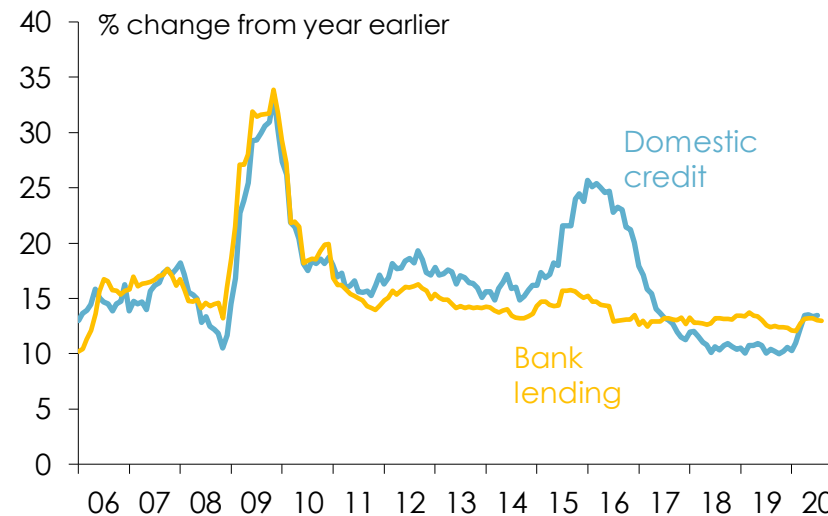
Depository corporation assets



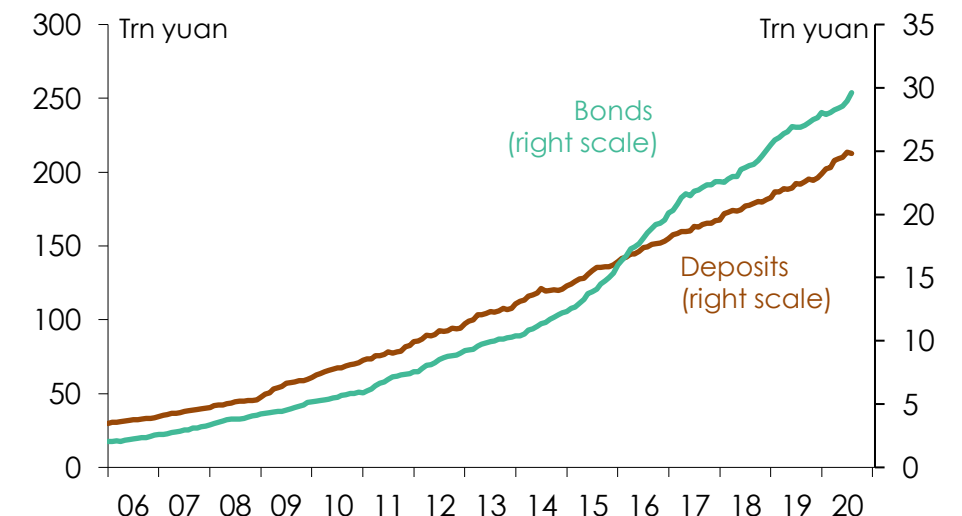
Bank reserve requirement ratios



Credit growth



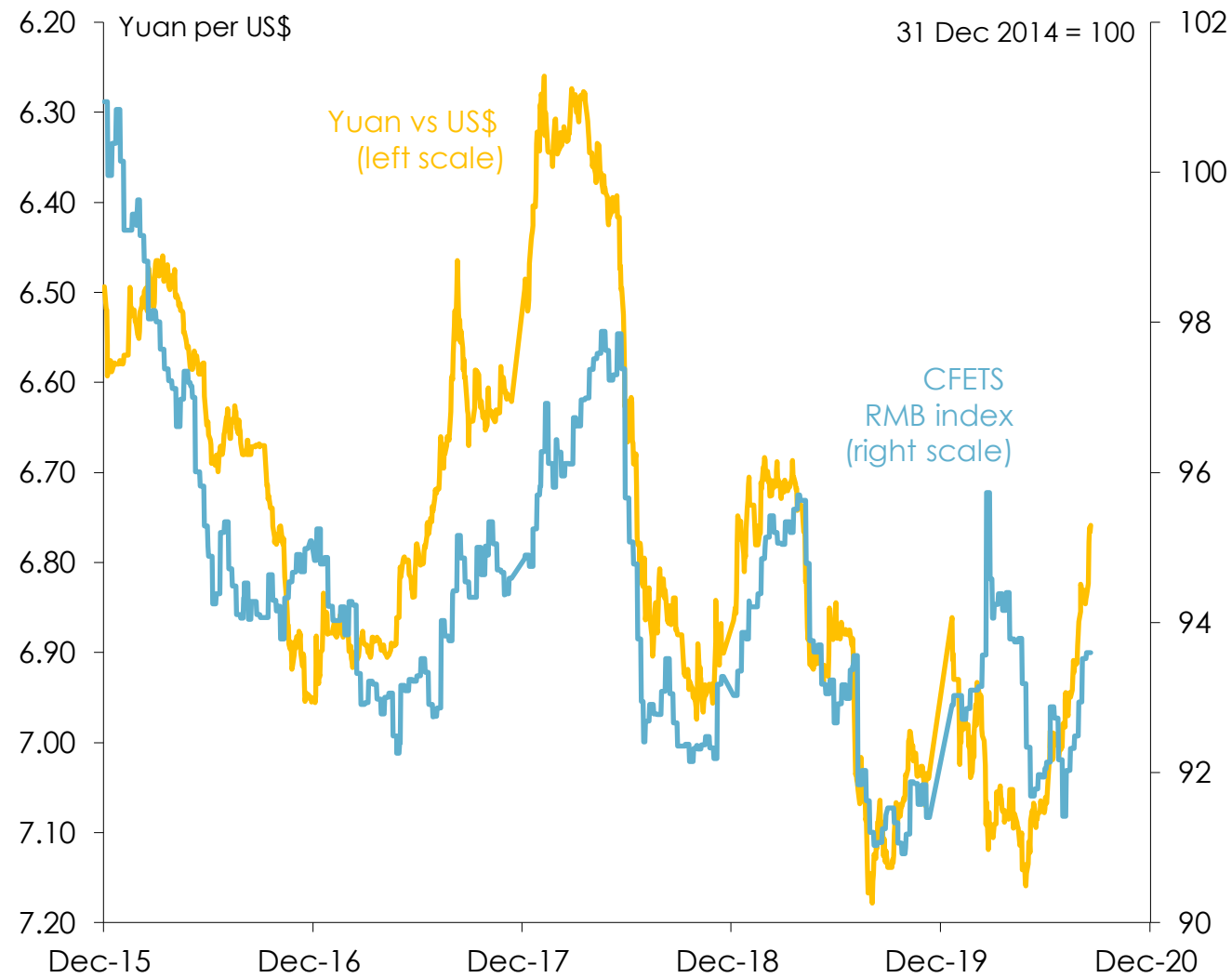
Depository corporation liabilities



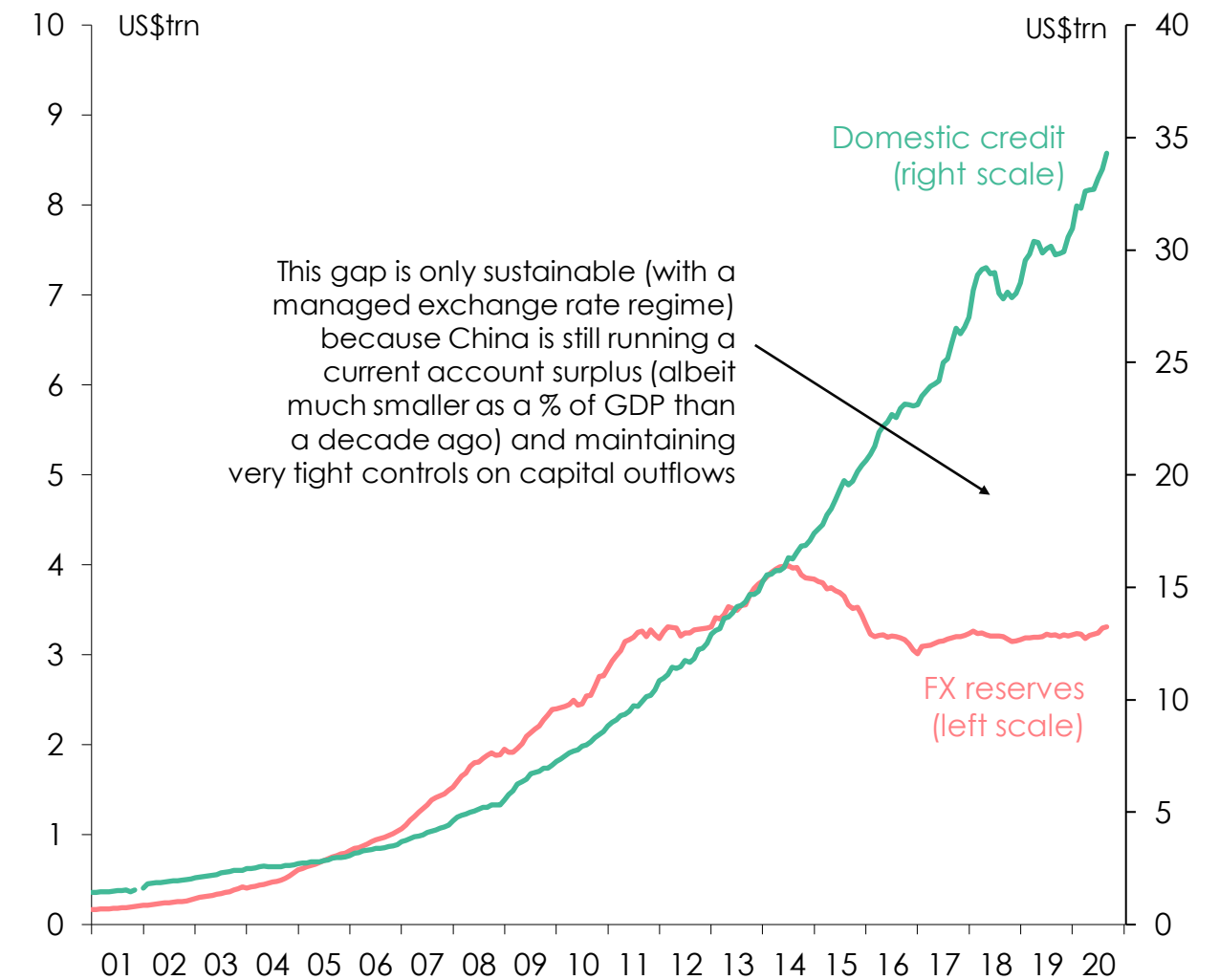
Note: 'SHIBOR' is the Shanghai Inter-Bank Offered Rate. Sources: Refinitiv Datastream; People's Bank of China. Latest interest data are for the week ended 14th August; latest credit and financial system data are for July.

This week the Rmb rose 1.2% in both trade-weighted terms and against the US\$, bringing its appreciation against the US\$ since May to 5³/₄%

Chinese yuan vs US\$ and trade-weighted index

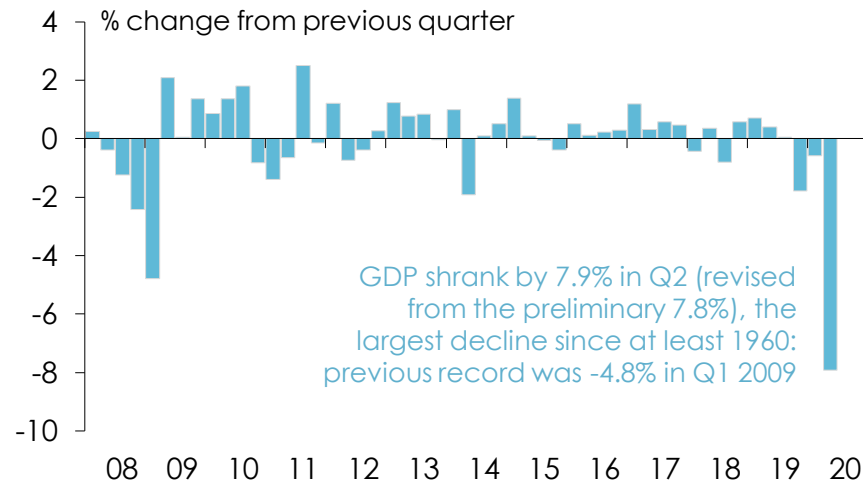


FX reserves and domestic credit

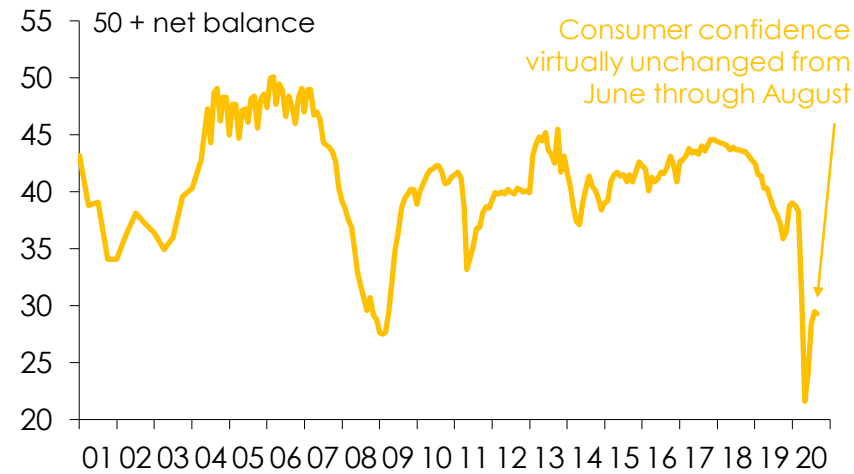


Japan entered its fourth recession since 2000 after hiking its GST rate last October, and the pandemic has worsened it

Real GDP



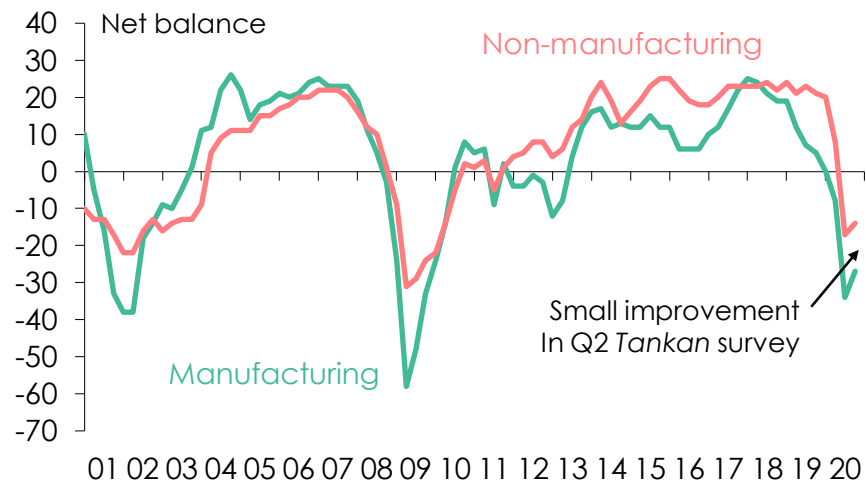
Consumer confidence



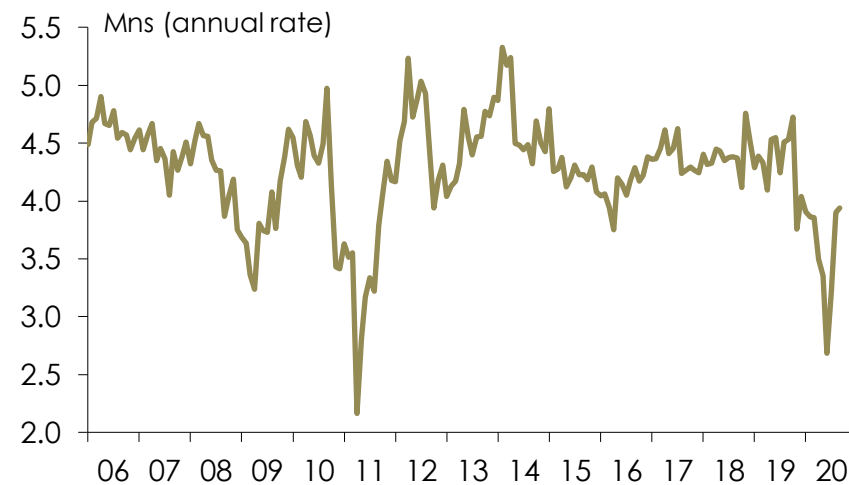
Unemployment



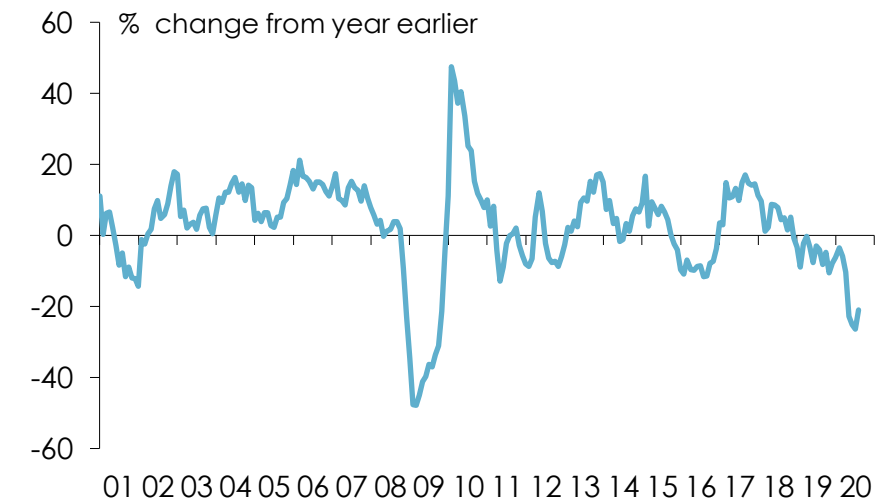
Business conditions – large firms



Motor vehicle sales



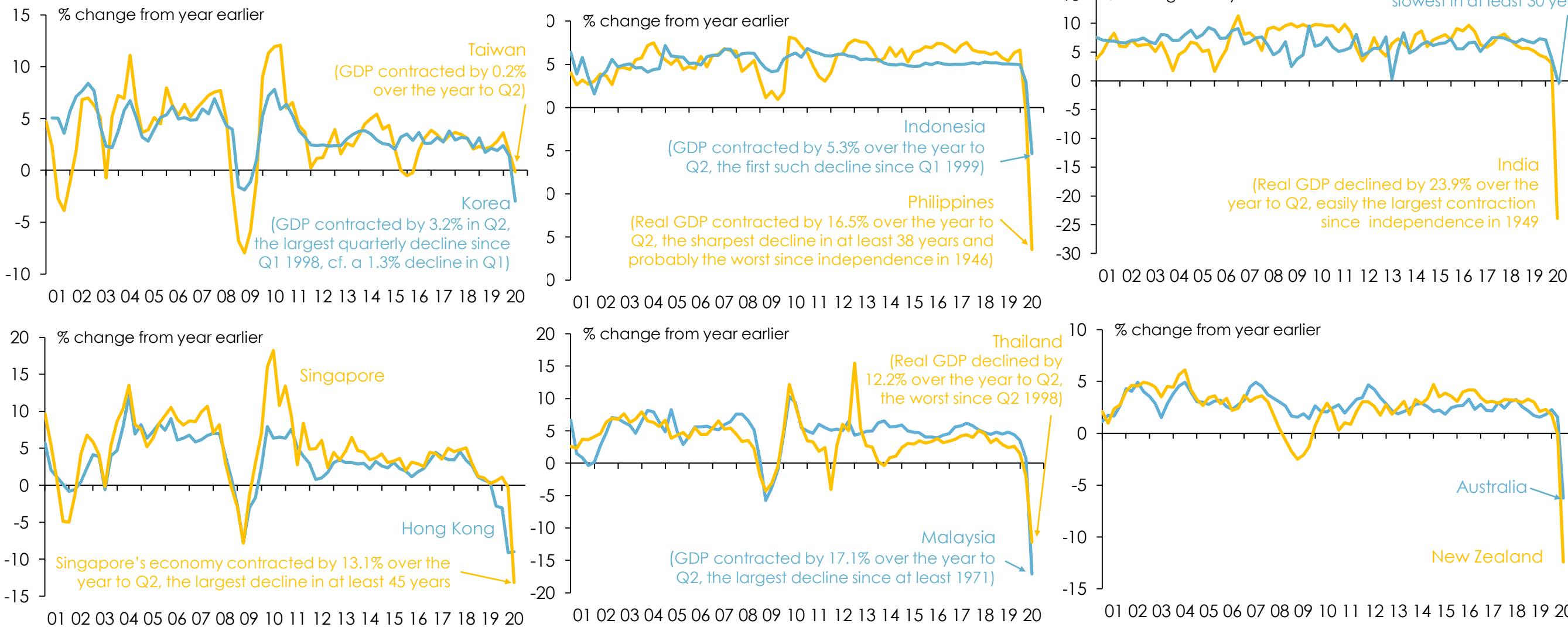
Merchandise export volumes



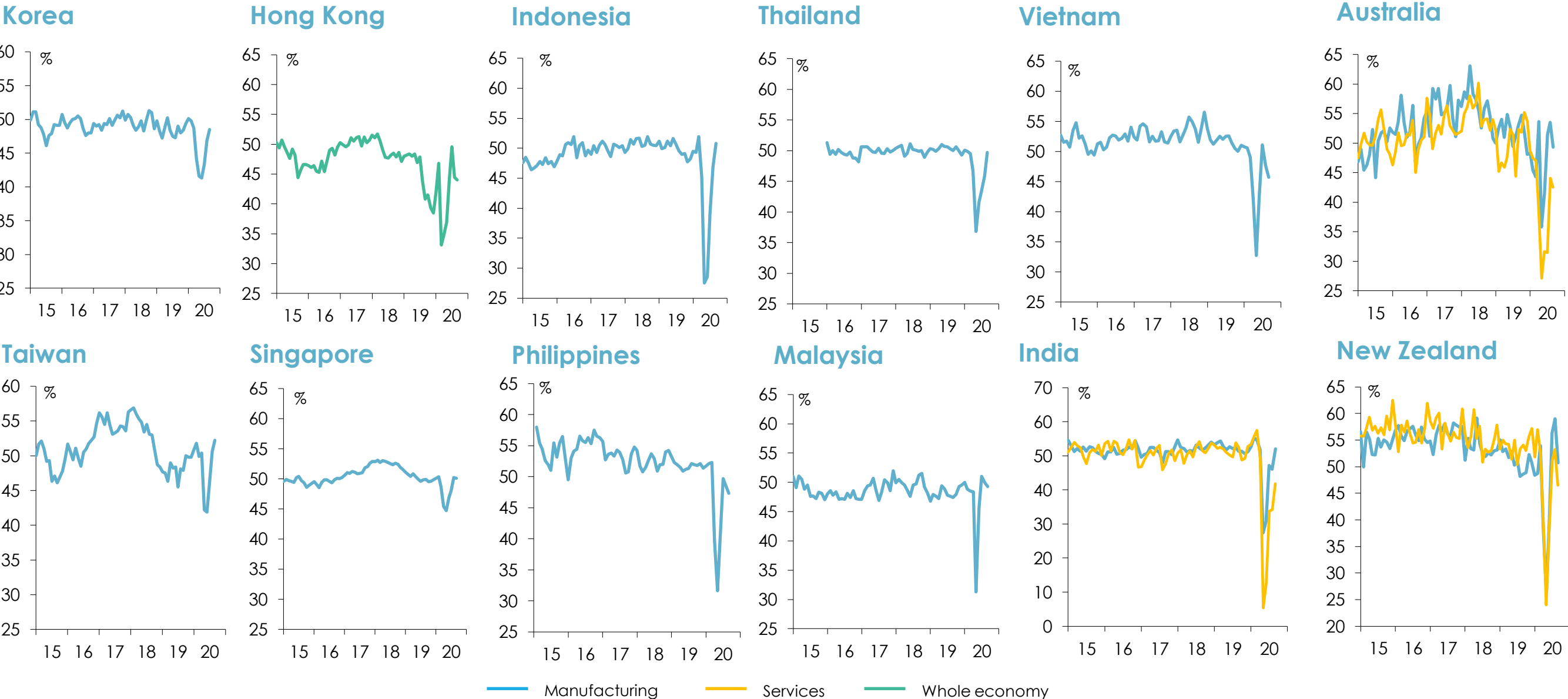
Sources: Japan Cabinet Office; Bank of Japan; Japan Automobile Dealers' Association; Ministry of Health, Labour & Welfare.

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



Manufacturing PMIs rose further in August in most Asia-Pacific economies except for Philippines, Vietnam, Australia & NZ: India services also still weak

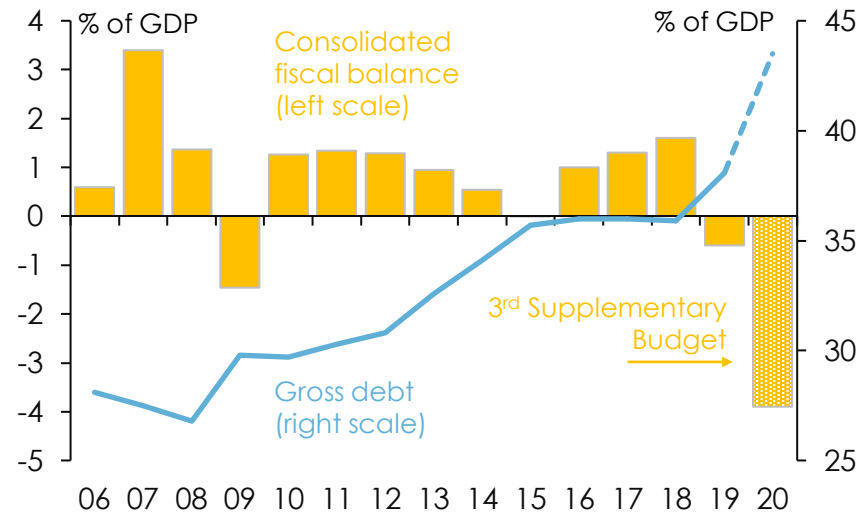


Note: Purchasing Managers' Indexes (PMIs) are derived from surveys of senior executives, who are asked to report whether various dimensions of business activity recorded an increase, decrease or no change compared with the previous month. A reading of 50 indicates an overall increase cf. the previous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

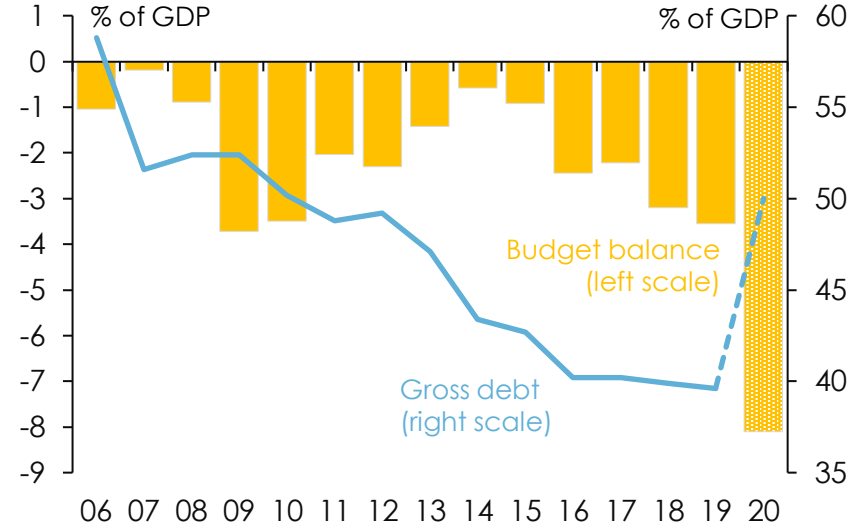
Sources: IHS Markit; Singapore Institute of Purchasing & Materials Management; Australian Industry Group; Business NZ; Refinitiv Datastream.

The Korean and Philippines central banks have engaged in different variants of 'quantitative easing' ...

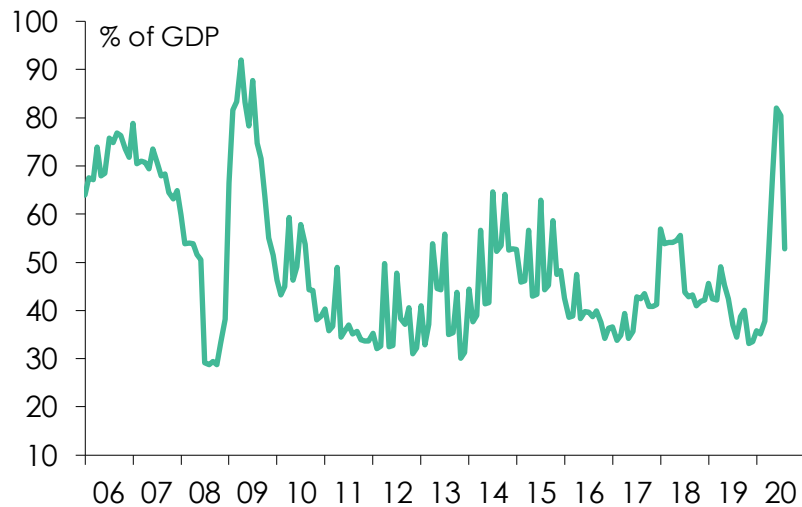
Korea central government budget



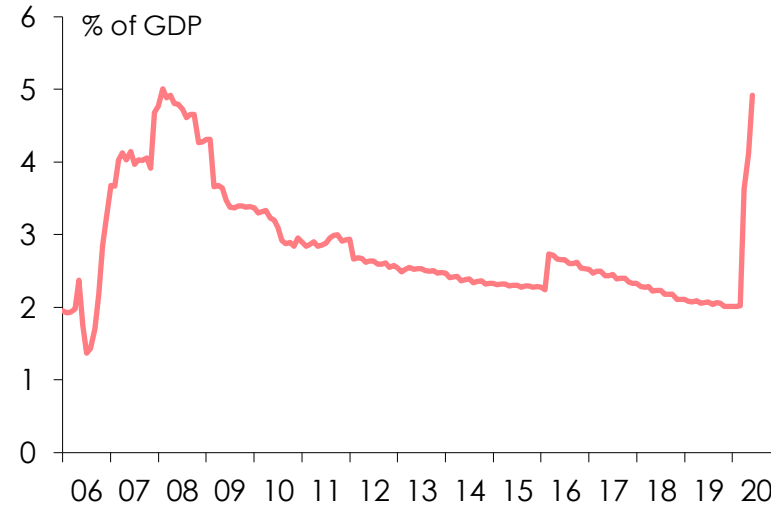
Philippines NG budget



BoK domestic assets



BSP claims on national gov't

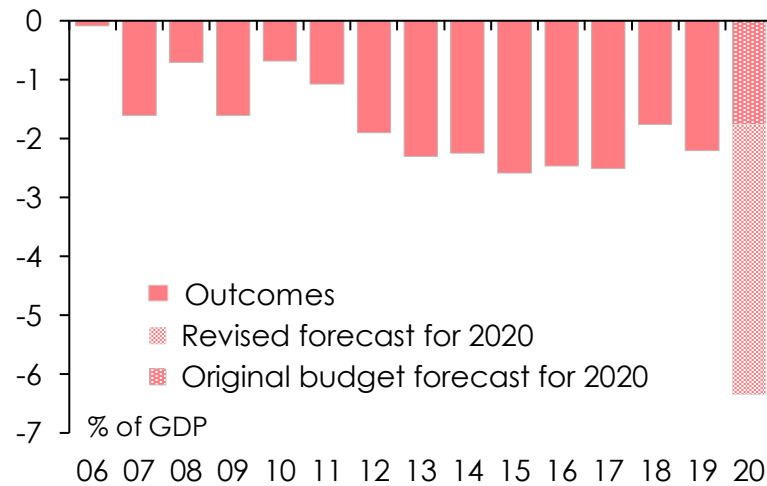


- ❑ The Bank of Korea has cut its policy rate by 100bp so far this year to a record low of 0.50%
- ❑ After its last rate cut in May, Governor Lee Ju-Yeol indicated the BoK was considering using 'unconventional monetary tools' to support growth
 - since March, the BoK has been willing to supply 'unlimited liquidity' to financial institutions, accepting a wider range of collateral in repos
 - In April the BoK lent ₩8 trn to a ₩10 trn SPV established to buy corporate bonds and CP
- ❑ BoK's total domestic assets more than doubled between end-February and end-May – reflecting increased holdings of bonds, reverse repos and lending to both government and the private sector – but fell back to 53% in July, as loans were repaid and repos reversed
- ❑ 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 reportedly bought another ₱500bn in the secondary market through to the end of July

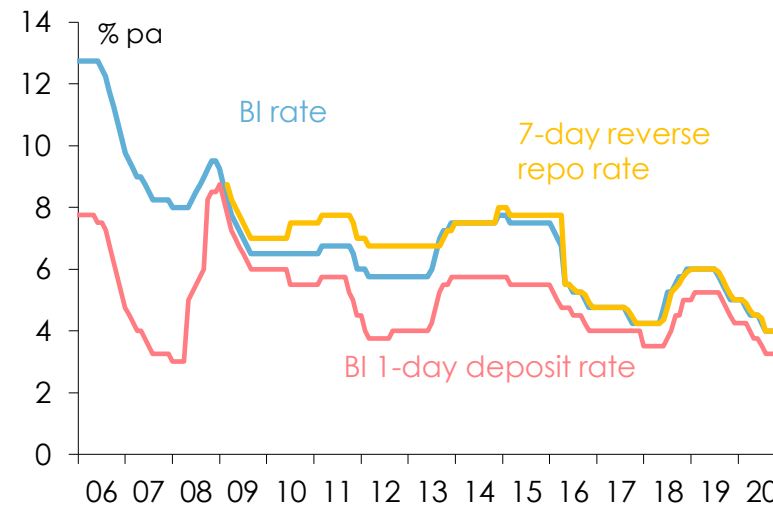
Sources: Korean Ministry of Economy and Finance; Bank of Korea; Philippines Development Budget Co-ordination Committee; Bureau of the Treasury; Bangko Sentral ng Pilipinas.

... as has Bank Indonesia, but its independence could be at risk from proposals currently under consideration

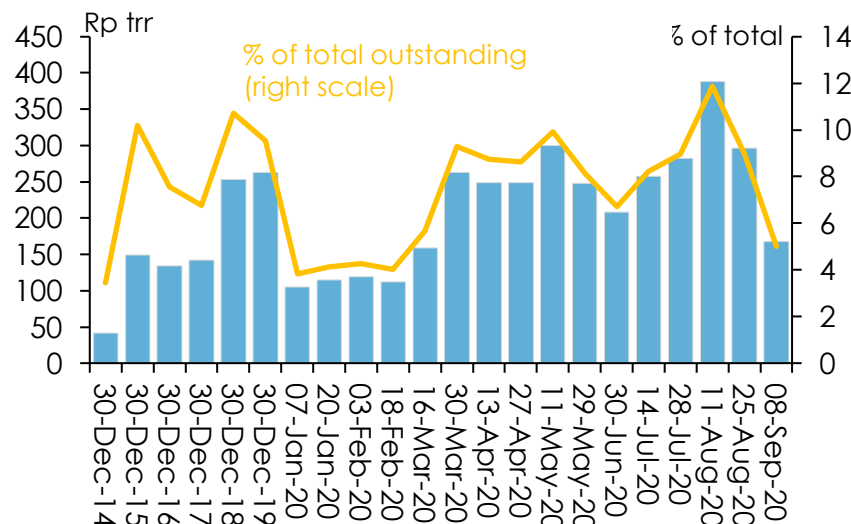
Indonesia budget deficit



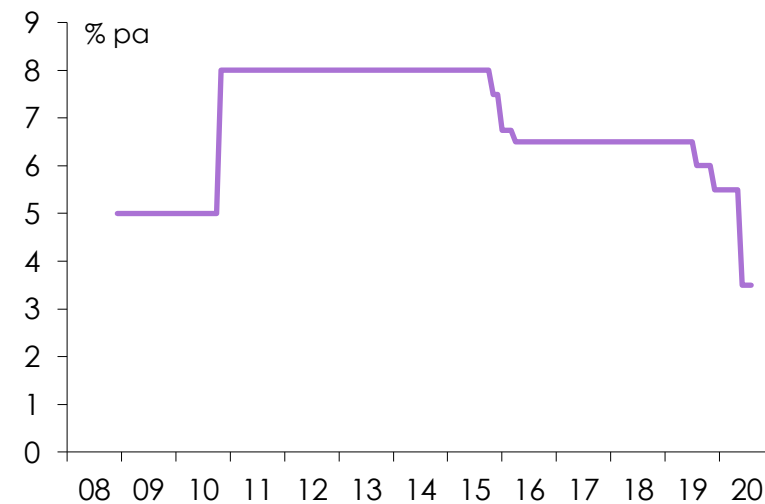
BI monetary policy rates



BI holdings of tradeable SBNs



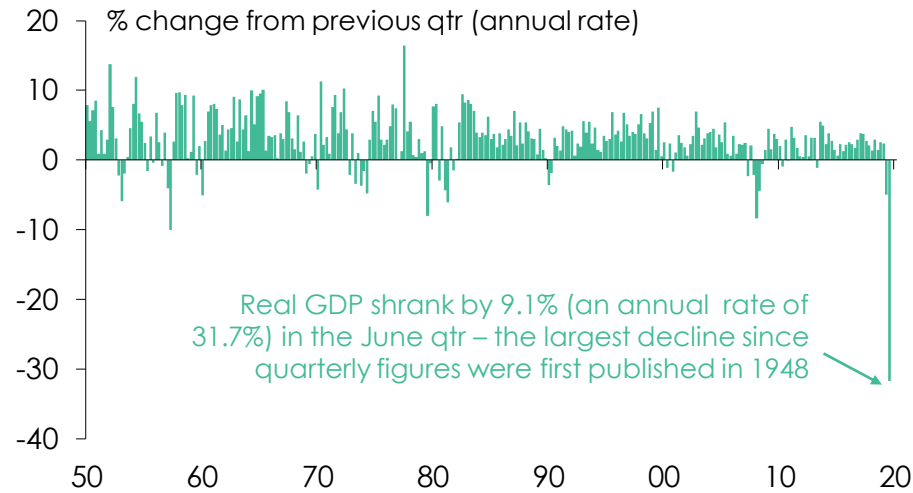
Bank reserve requirement ratio



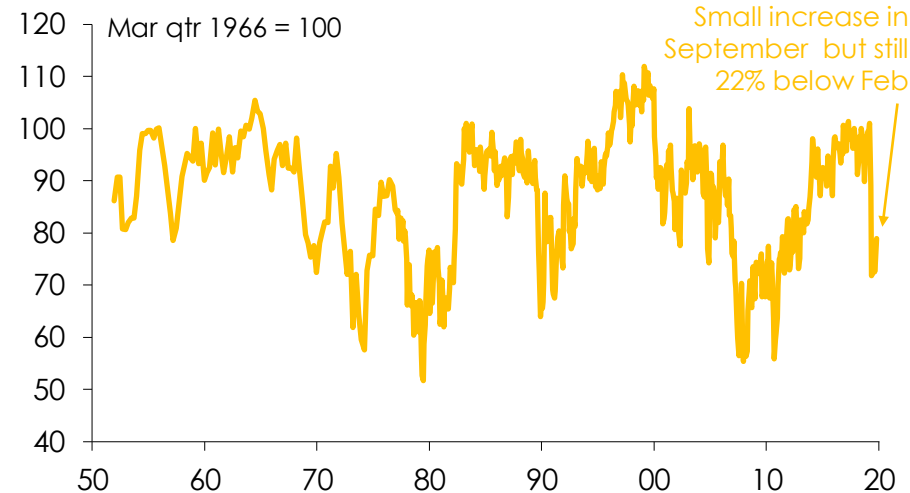
- ❑ In July, the Indonesian Government and Bank Indonesia (BI) formally agreed a 'burden-sharing' scheme under which BI will directly purchase bonds equivalent to 25% of this year's budget financing requirement (and return the interest received to the Government), as well as subsidizing interest payments on other bonds
- ❑ Finance Minister Sri Mulyani Indrawati and, separately, a group of parliamentarians, have proposed a 'Perppu' ('Decree in lieu of Law') on 'Financial System Reform' which would, among other things:
 - give BI an employment mandate in addition to its inflation target;
 - give the Finance Minister and other ministers voting rights on the BI's policy-making board
 - 'allow' BI to purchase zero-coupon government bonds 'at a discount, and to provide 'temporary financing' to offset revenue shortfalls of up to 20% of revenue projections
 - transfer responsibility for bank supervision to BI from the Financial Services Authority (OJK)
- ❑ There's nothing untoward about the first or fourth of these proposals – but the second is worrying, and the third could be as well

The US economy experienced its sharpest contraction since the 1930s in the first half of 2020, although growth has turned moderately positive in Q3

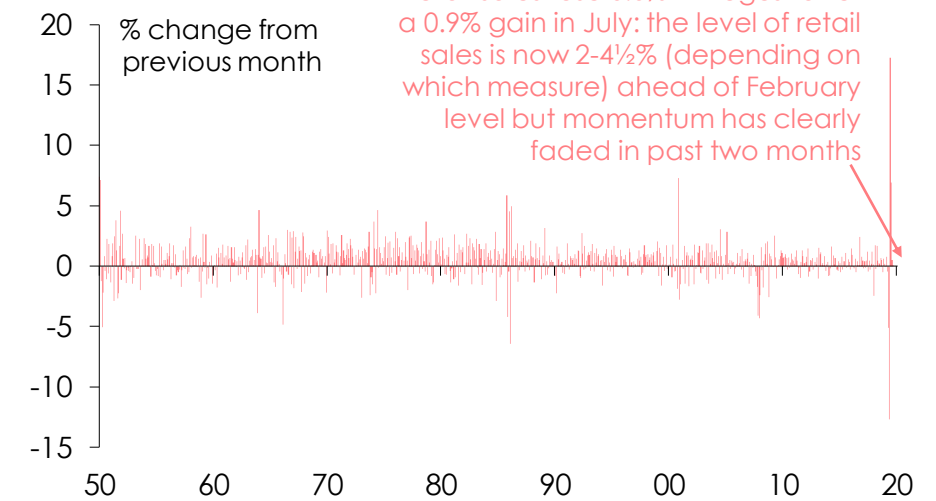
Real GDP



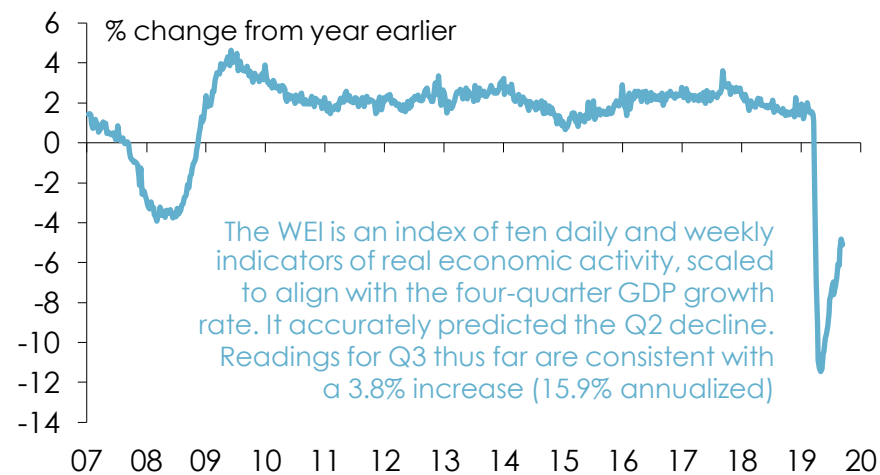
Consumer confidence



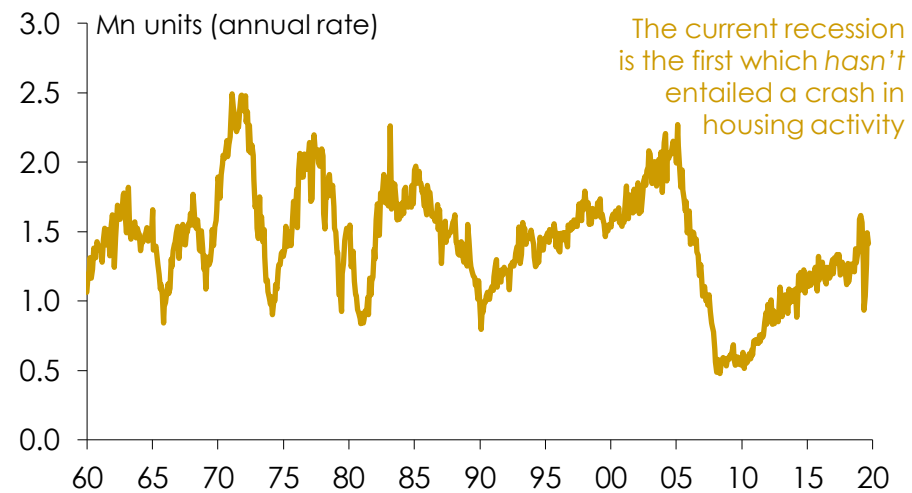
Retail sales



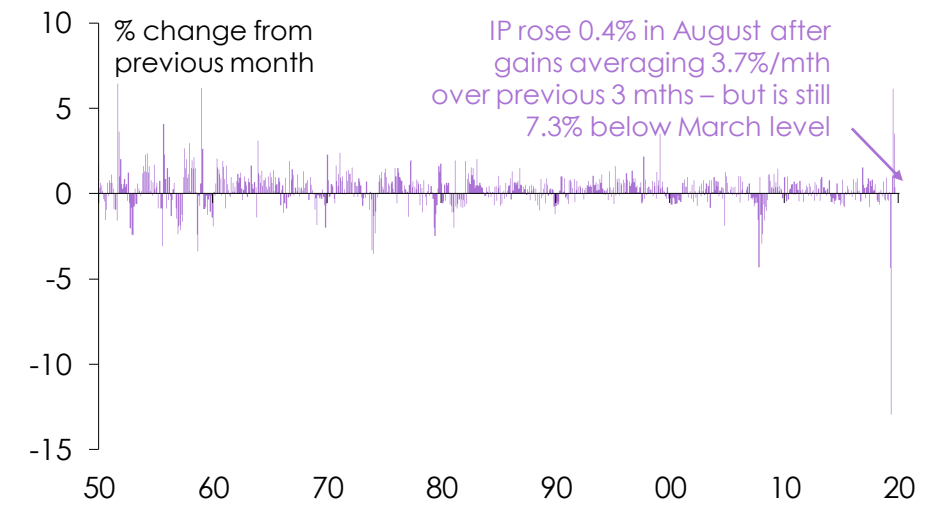
NY Fed weekly economic index



Housing starts

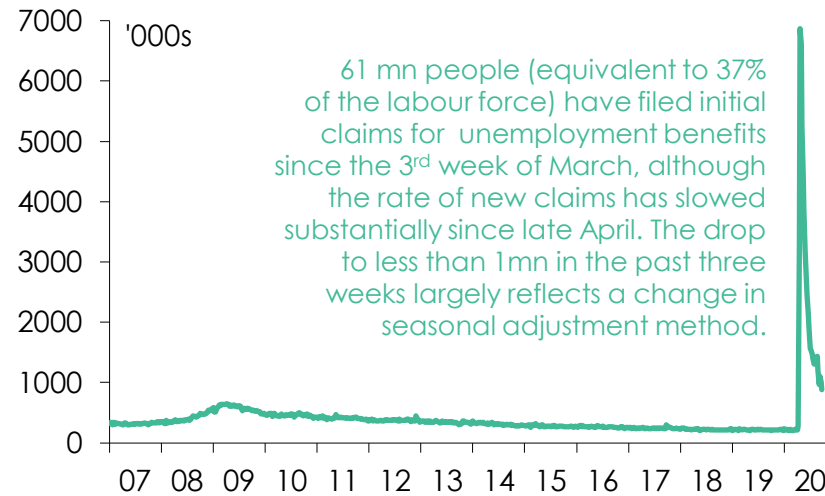


Industrial production

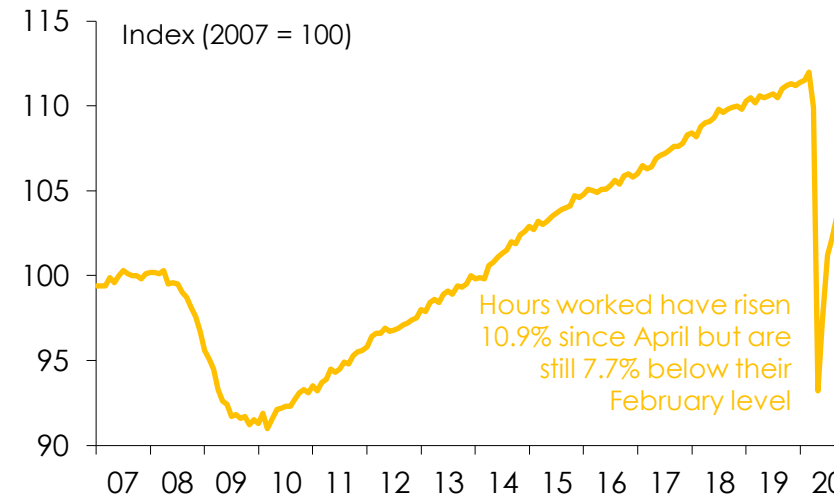


48% of the 22mn jobs lost in the US in March and April have been regained over the past four months while unemployment has fallen to 8.4%

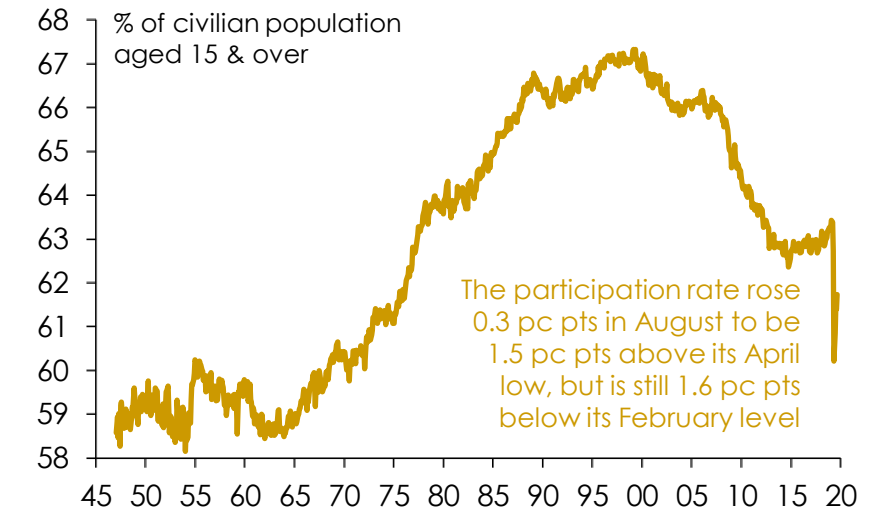
Unemployment benefit claims



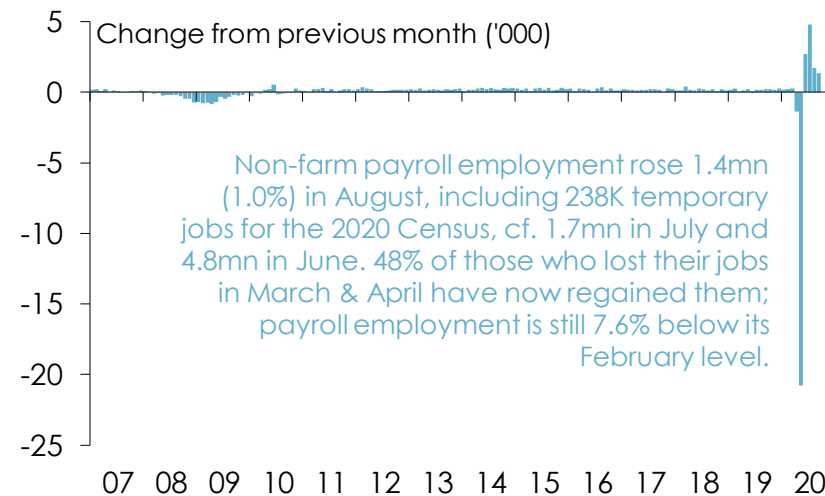
Hours worked (private sector)



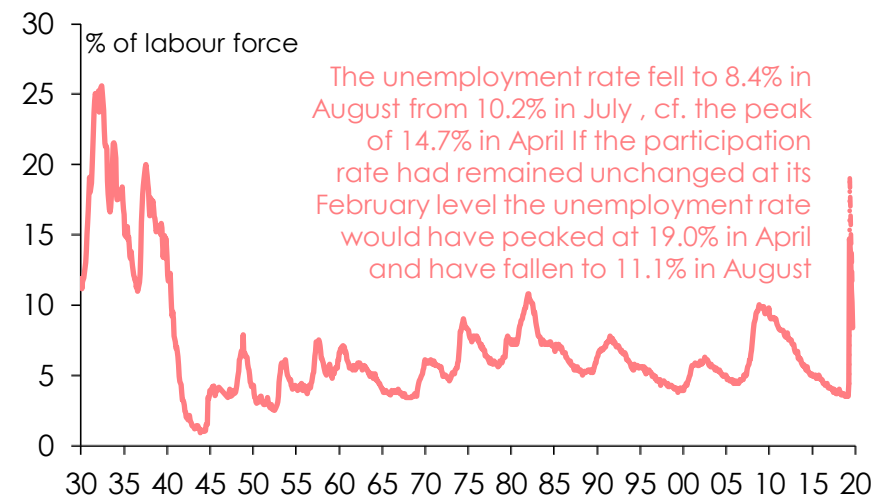
Labour force participation rate



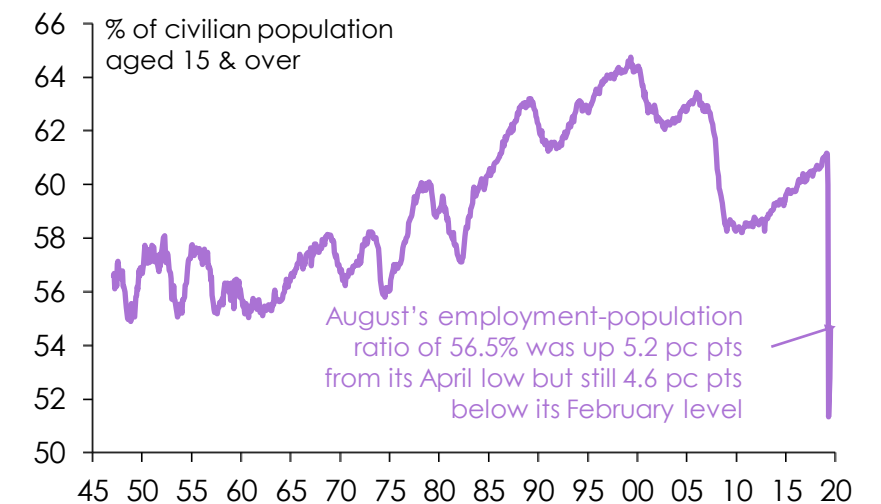
Non-farm payroll employment



Unemployment rate

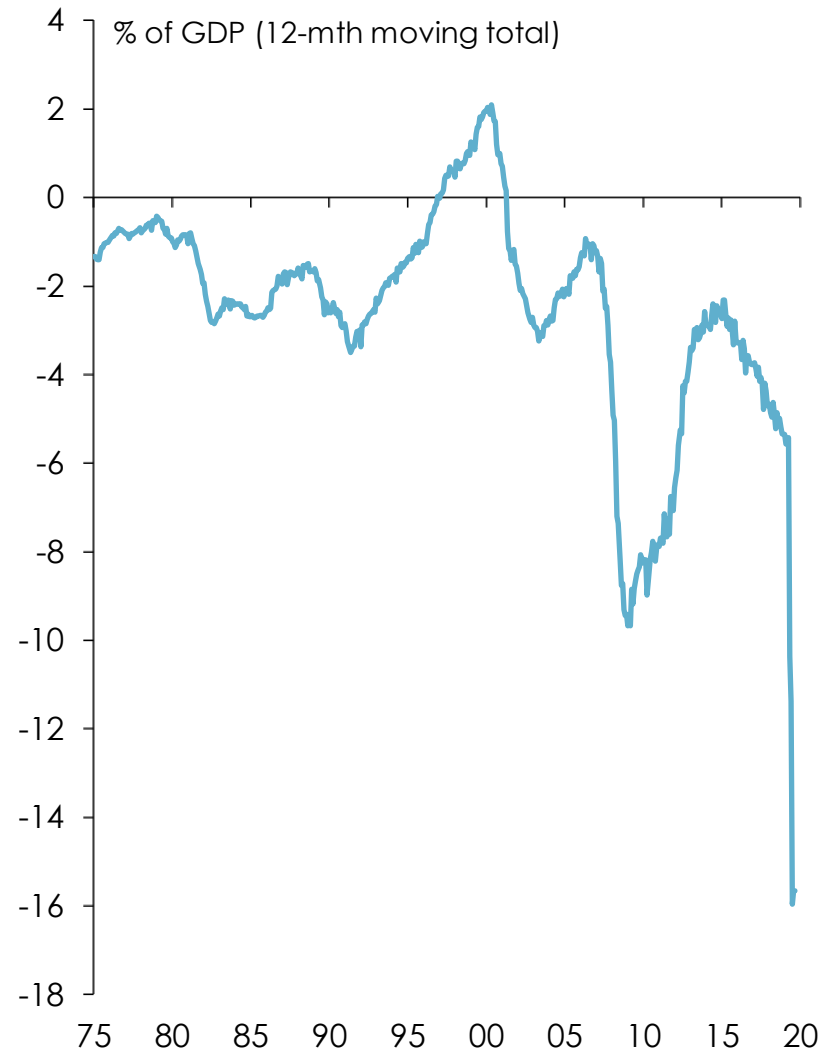


Employment to population ratio

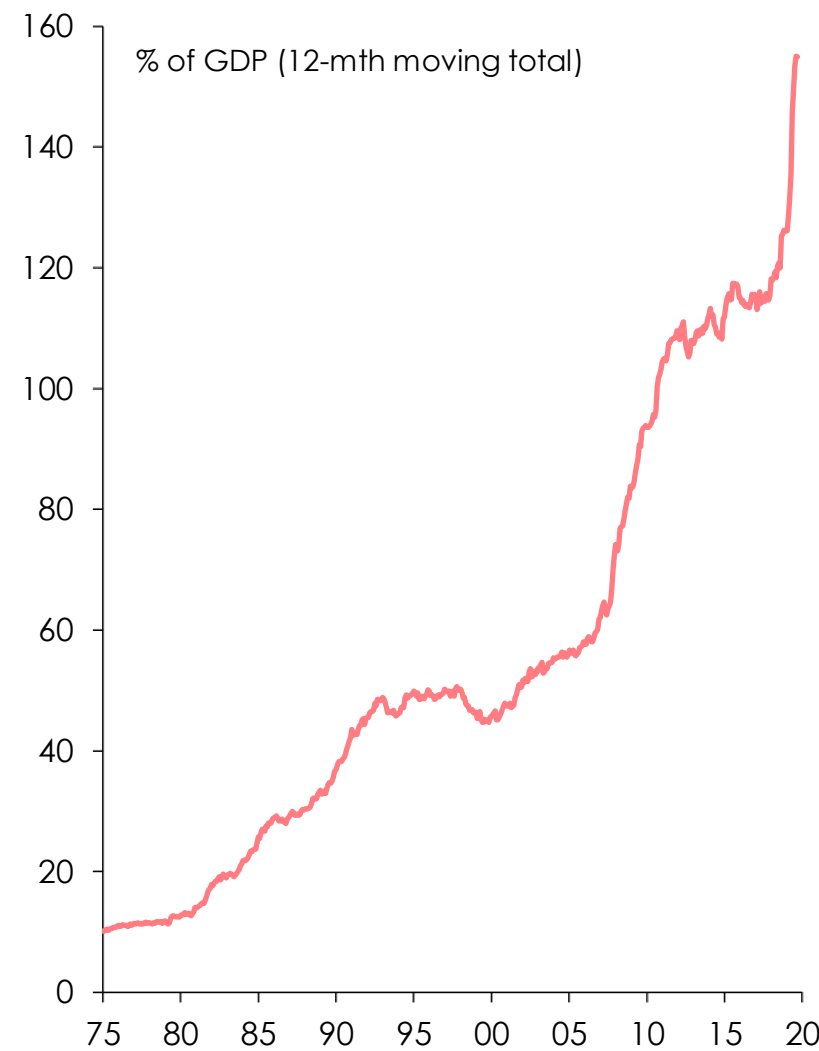


The US budget deficit has blown out dramatically since the end of March, reaching nearly 16% of GDP in the 12 months ended August

US Federal budget deficit



US gross Federal debt

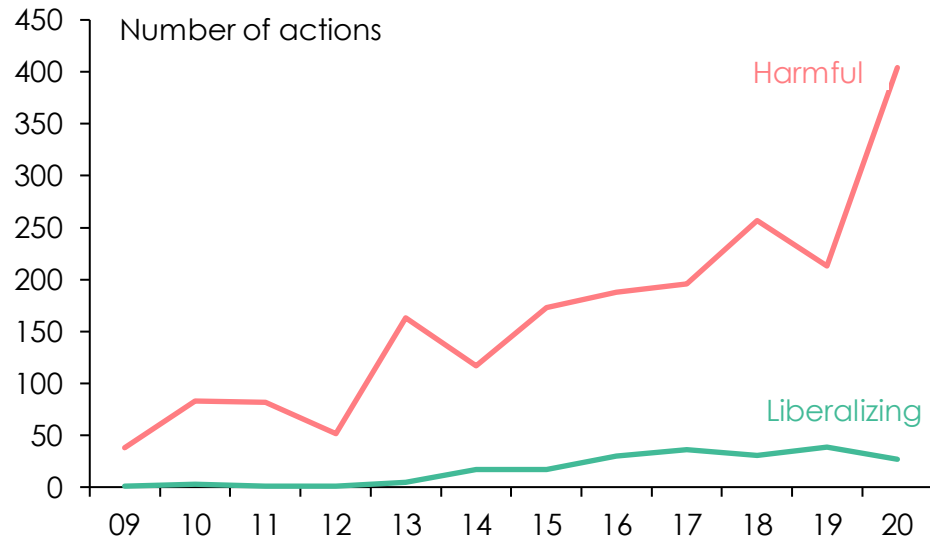


- ❑ The US budget deficit widened from US\$582bn (3.3% of GDP) in 2016 (Obama's last year in office) to US\$1 trn (5.4% of GDP) in 2019, while gross federal debt rose from US\$20.4 trn (115% of GDP) to \$24.1trn (126% of GDP)
- ❑ The budget was in deficit by US\$200bn in August, about the same as the two previous Augusts, after narrowing sharply to US\$63bn in July due to the receipt of tax payments deferred from the normal dates in Q2
- ❑ However the 12-month moving total deficit remains close to US\$3 trn (15.7% of GDP), cf. a peak of 9.7% of GDP during the GFC (and the largest since 20.8% of GDP in FY 1945)
- ❑ The market value of gross federal debt remained unchanged at \$29trn (155% of GDP)
- ❑ Last month the non-partisan Congressional Budget Office forecast that the deficit would blow out to US\$3.3trn (16% of GDP) in FY 2020 (the largest since 1945) and remain above US\$1trn pa until at least 2030, with gross debt reaching \$38trn by 2030

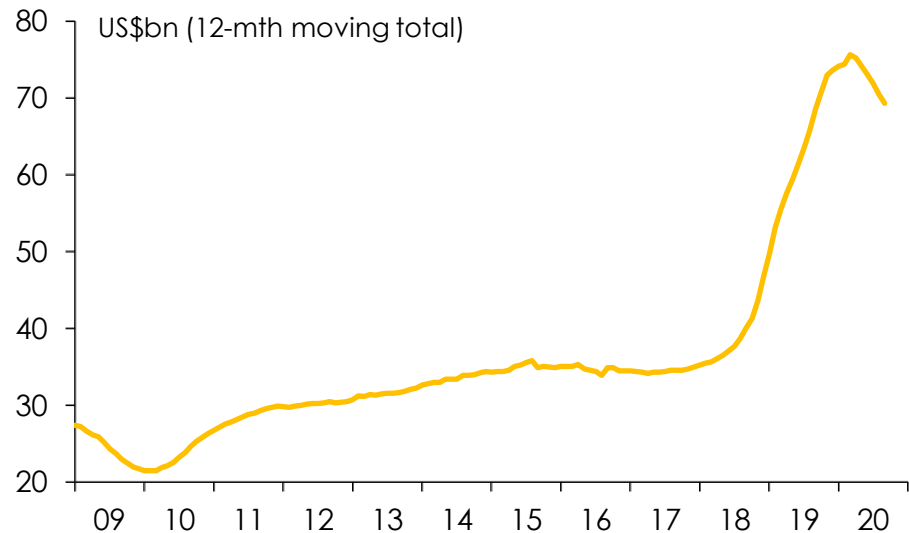
Note: The measure of US gross federal debt is at market value. Sources: [US Treasury Department](#); [Federal Reserve Bank of Dallas](#); US Bureau of Economic Analysis; [US Congressional Budget Office](#); Corinna. September budget data will be released on 12th October.

President Trump's tariffs have hurt consumers and business, haven't created jobs (on net), and haven't helped US 'national security'

US trade policy actions



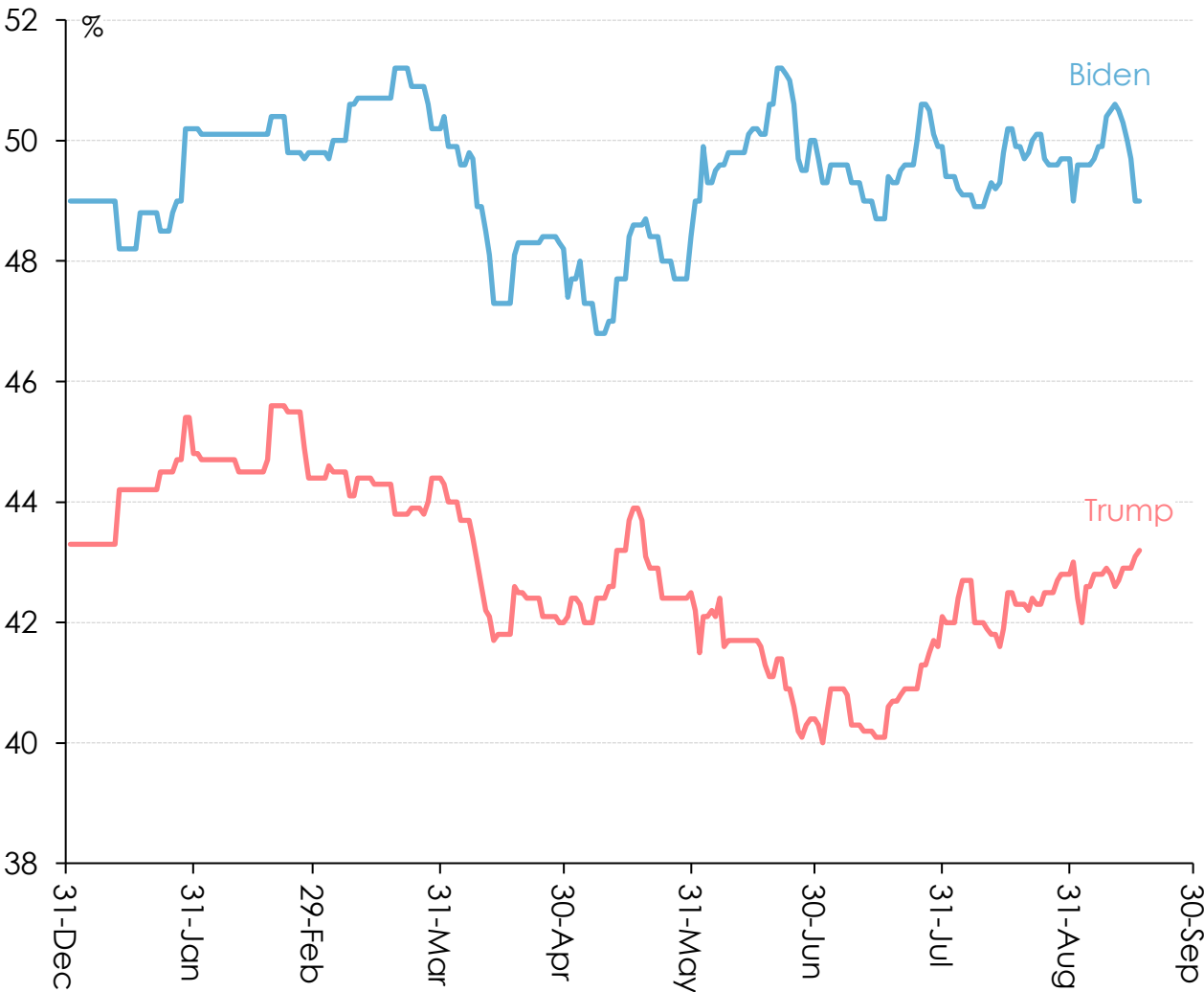
US customs duty revenue



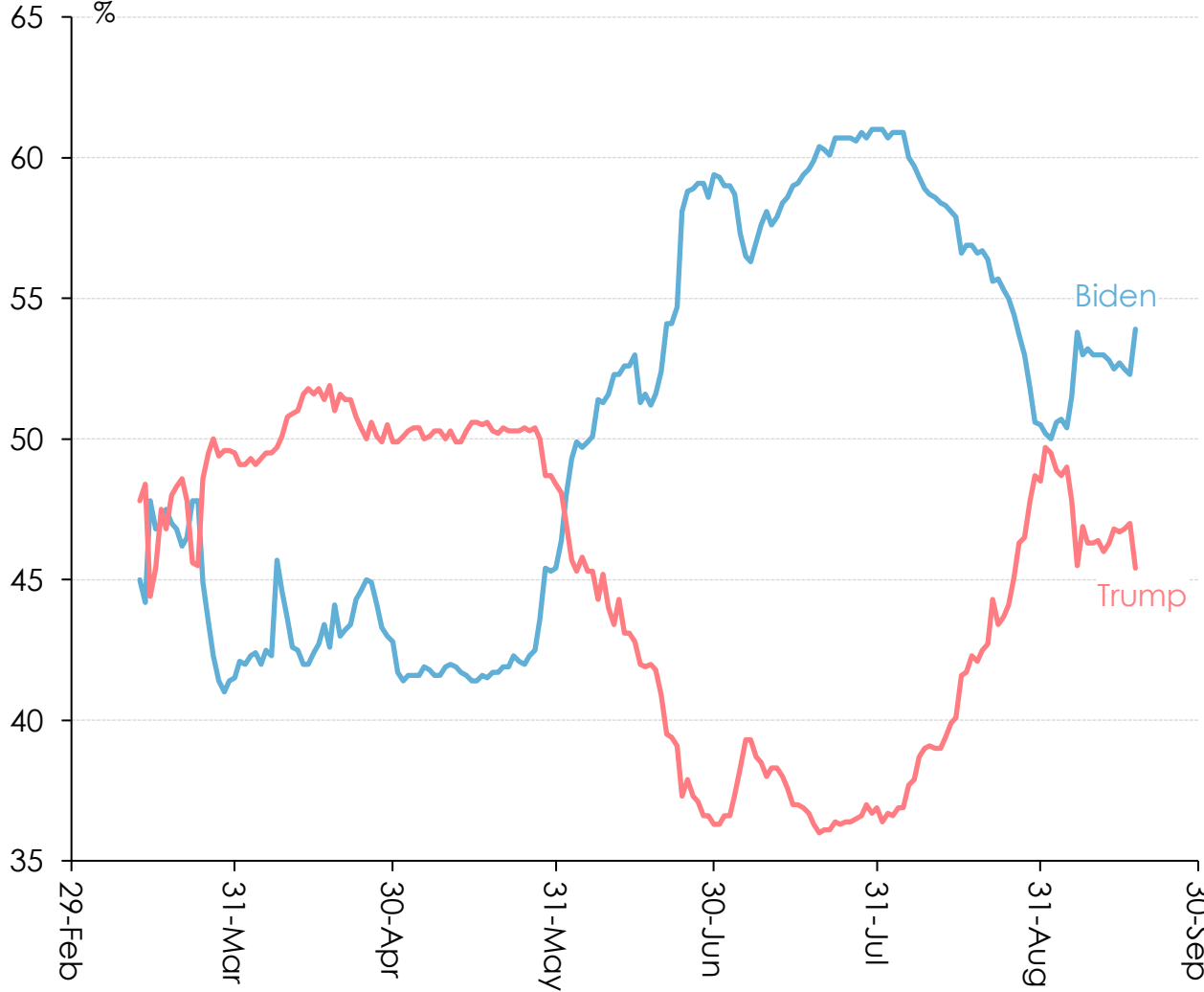
- ❑ The Washington DC-based Brookings Institution this week published a [useful and incisive analysis](#) of the impact of the Trump Administration's trade policies
- ❑ It suggests, first, that the average American household has paid anywhere between “several hundred” and “a thousand dollars or more” per annum in higher prices attributable to tariffs
 - consistent with what is widely understood by economists, but (sadly) by few others, that tariffs are *not* something governments make foreigners pay to their goods into a country, but rather something they make *their own consumers* (or businesses) pay to keep foreign goods out of a country
- ❑ Second, it shows that while the Administration's tariffs have created ‘several thousand’ jobs in the US steel industry, and about 1,800 jobs in manufacture of washing machines, these and other gains in import-competing industries have been more than offset by “losses in industries that use imported inputs and face retaliation on their foreign exports”
 - moreover, American consumers appear to have paid (in total) US\$817,000 in higher prices for every new job in the washing machine industry, and US\$900,000 for every new job in the steel industry
- ❑ Third, it concludes that the Administration's trade policies have “made the US a less desirable trade partner for other countries”
- ❑ And fourth, it concludes that “while there might be a case for ensuring domestic production capacity” for items like steel or aluminium, the Administration's tariffs have “antagonized many of America's closest security partners” and made it “more difficult for the US to push back when other countries cloak protectionism in tenuous appeals to national security”

Biden’s opinion poll lead over Trump narrowed this week, but his betting odds lead widened: will another Supreme Court vacancy have an impact?

Winner of November US Presidential election
– average of all opinion polls



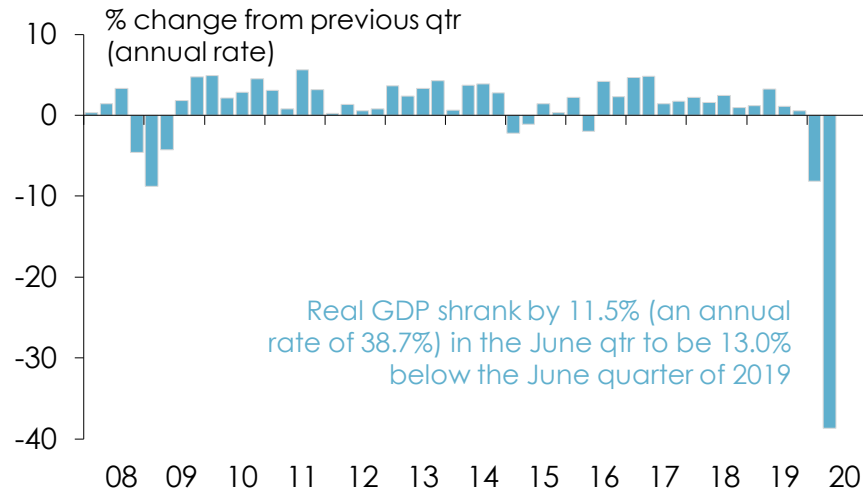
Winner of November US Presidential election
– betting odds



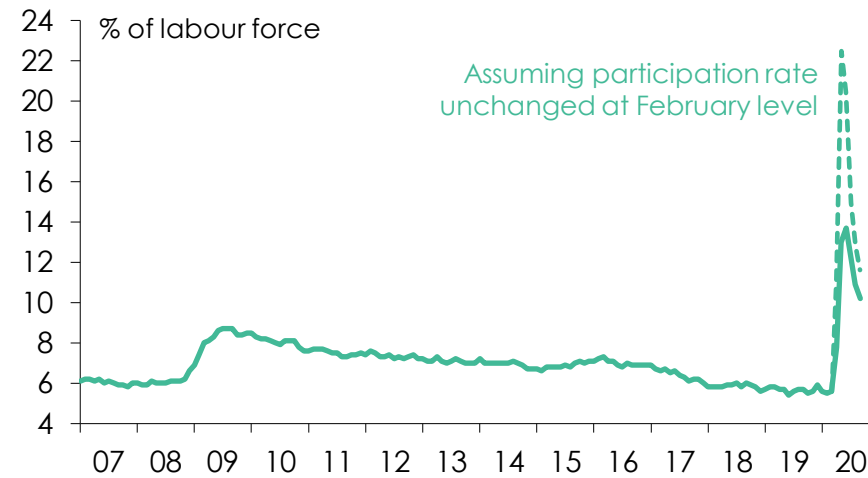
Note: The opinion poll average is based on 9 different polls; the betting odds average is based on 6 different markets. Latest opinion poll data are for 17th September and latest betting odds data are for 18th September. Source: [RealClearPolitics](#).

Canada has had a more severe recession than the US – or Australia (although Canadian house prices are holding up remarkably well)

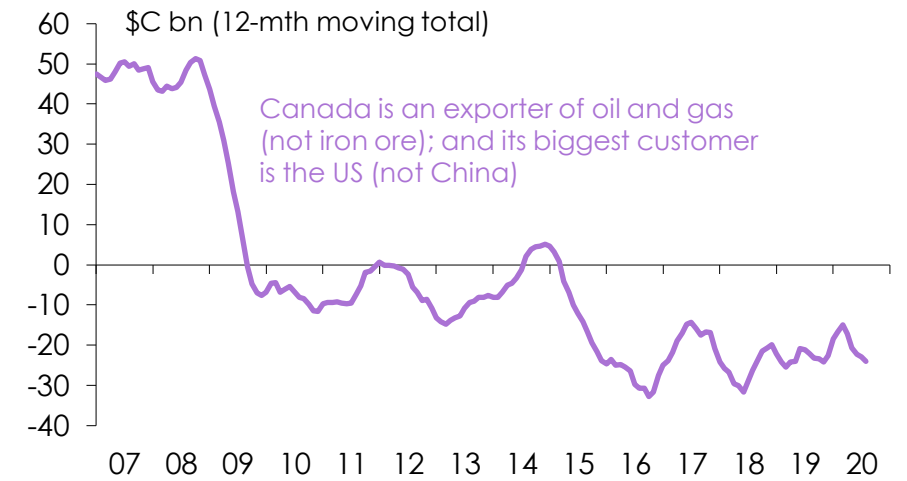
Real GDP



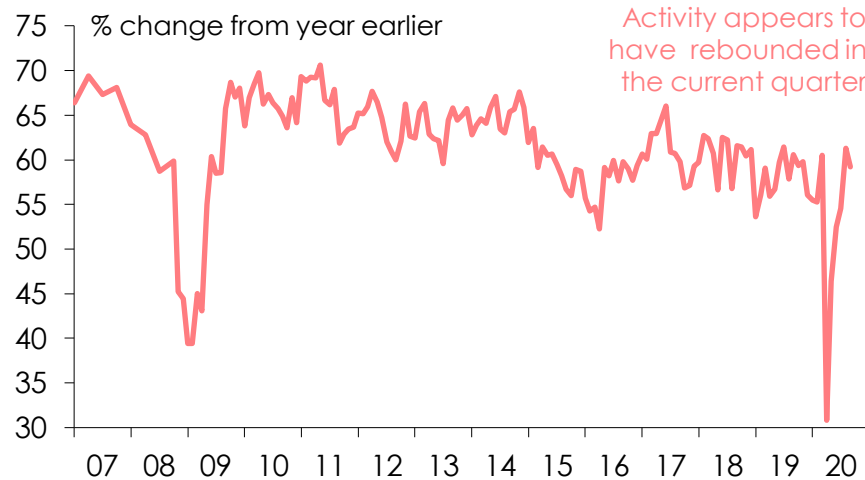
Unemployment rate



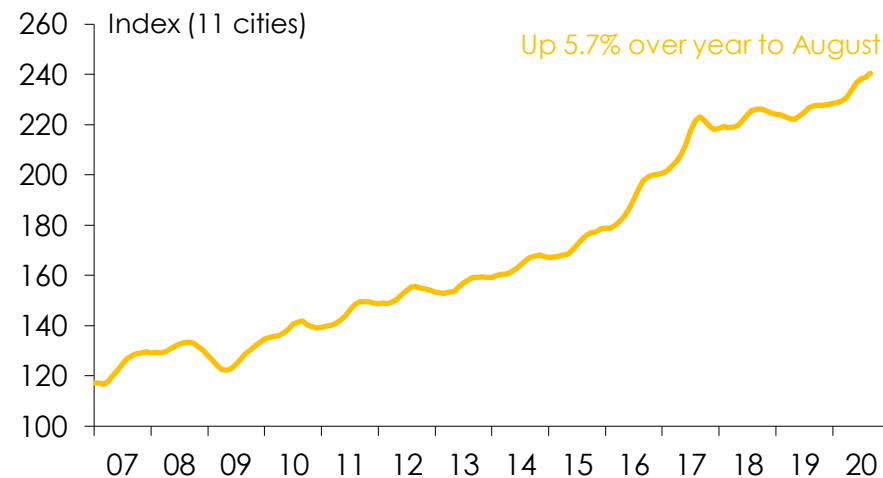
Merchandise trade balance



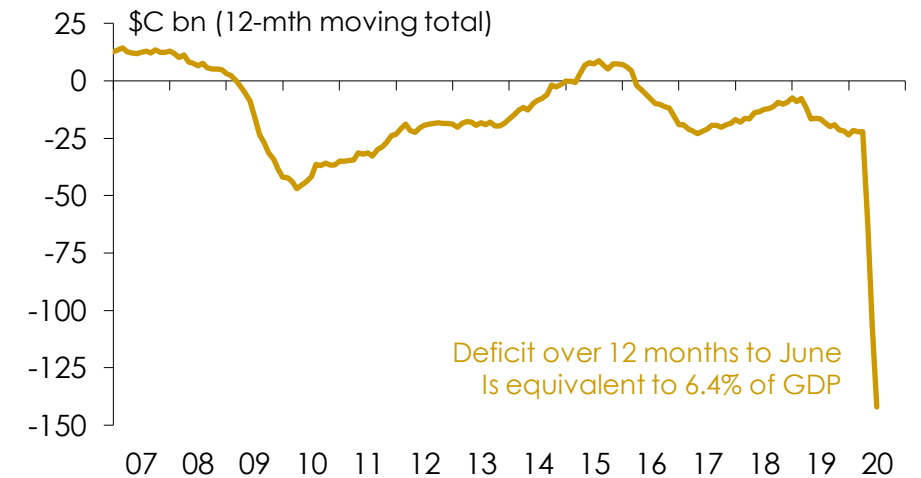
CFIB 'business barometer'



House prices

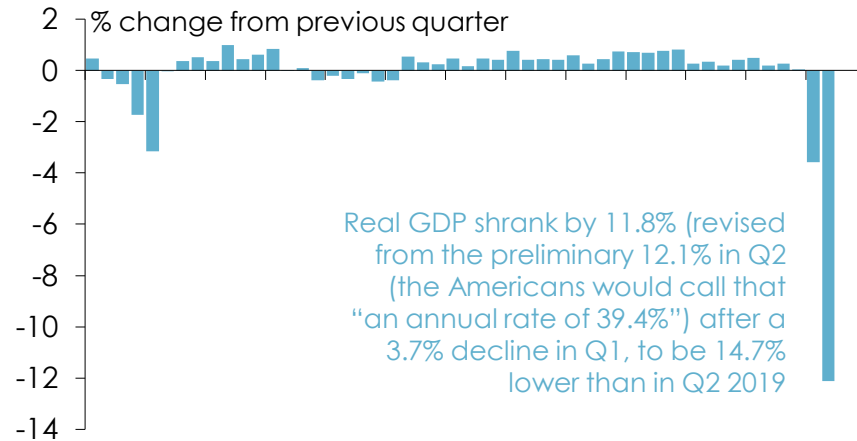


Federal budget balance

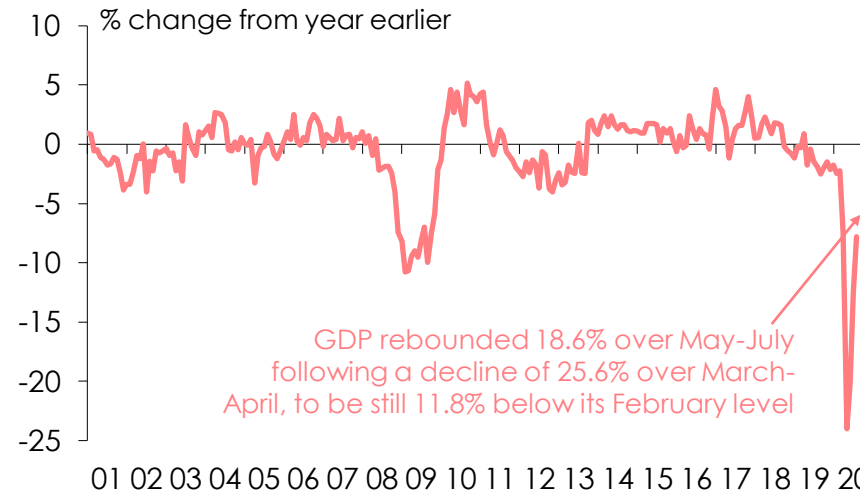


Europe has experienced a larger contraction in real GDP than the US – although unemployment hasn't risen nearly as much

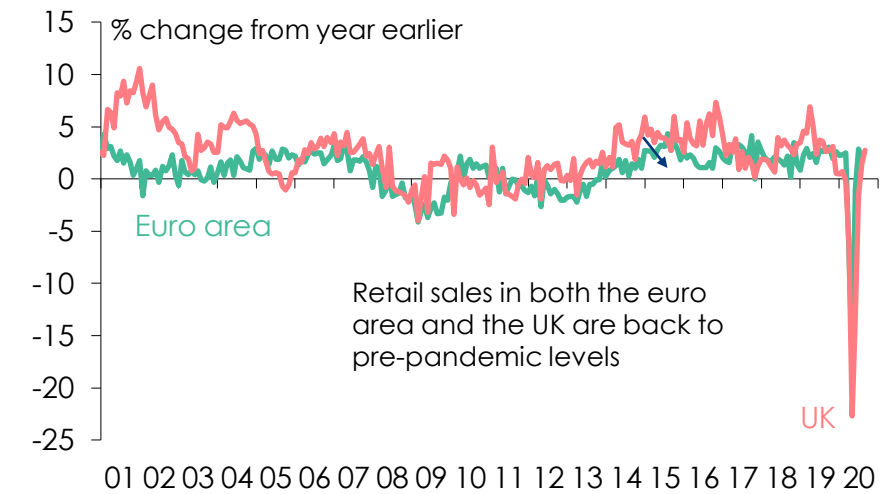
Euro area real GDP



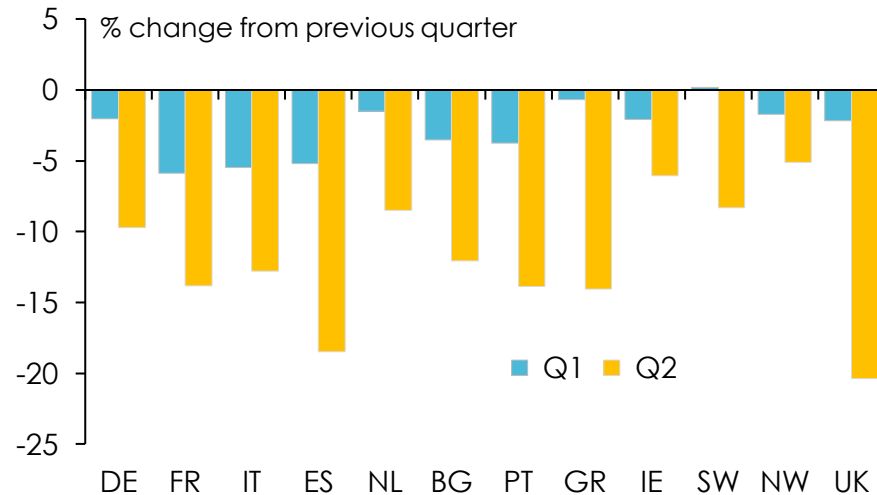
UK monthly GDP



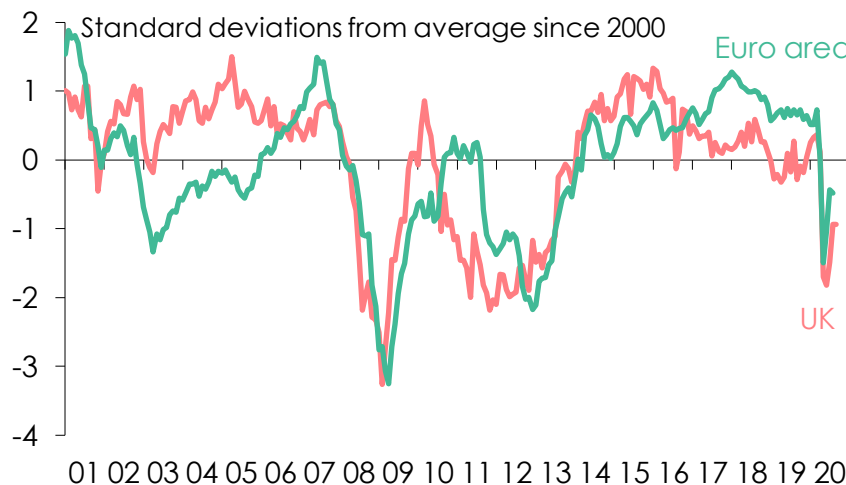
Retail sales volume



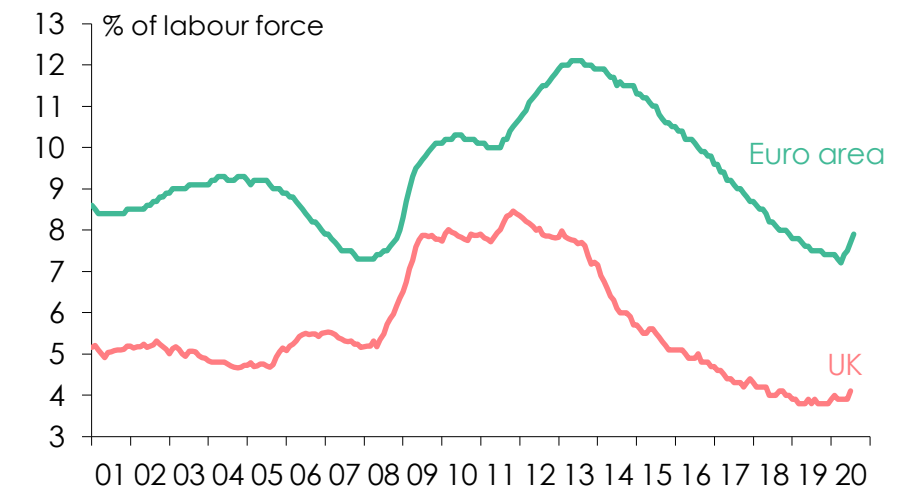
Quarterly GDP by country



Consumer confidence



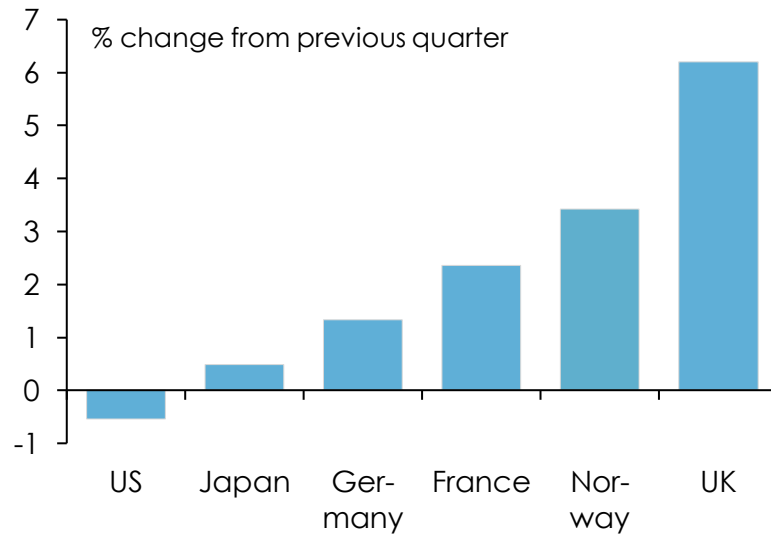
Unemployment



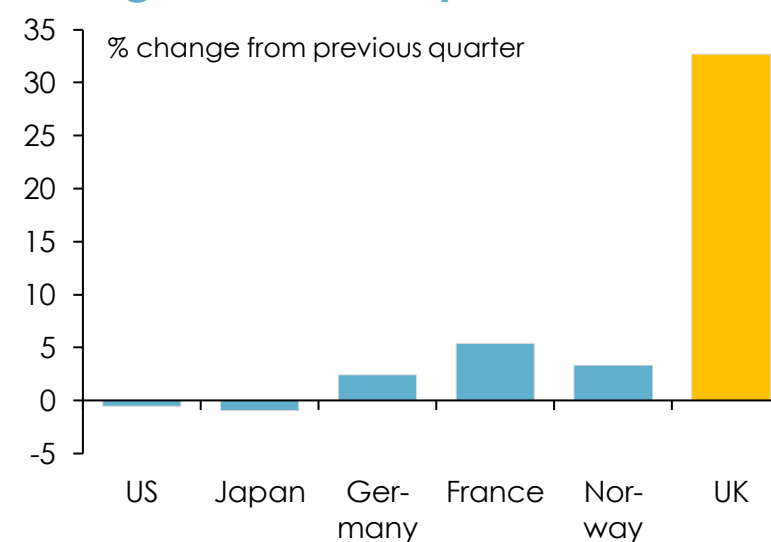
Sources: Eurostat; UK Office for National Statistics; Confederation of British Industry. The UK unemployment rate is published as a 3-month moving average

There's something fishy about the deflators used in compiling the UK's Q2 national accounts

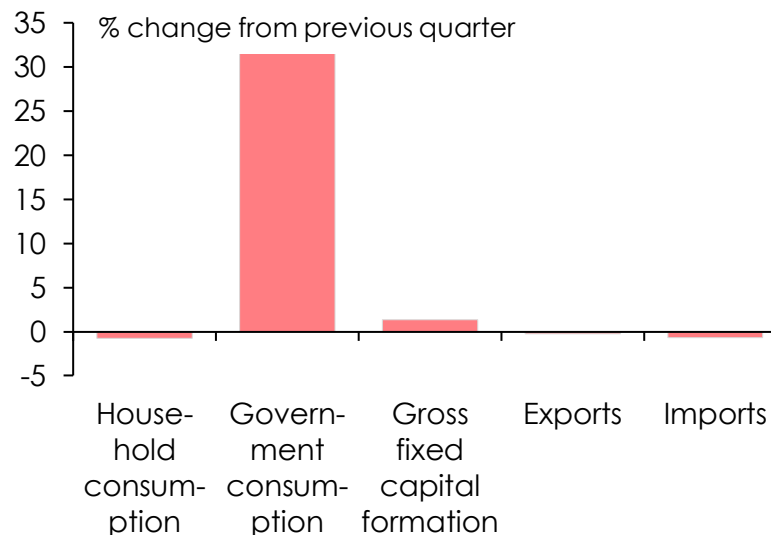
Q2 GDP deflators



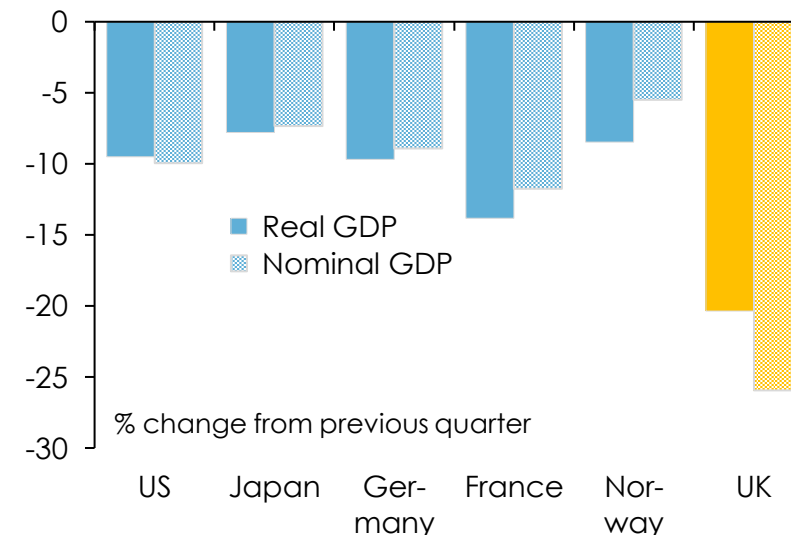
Q2 gov't consumption deflators



UK Q2 expenditure deflators



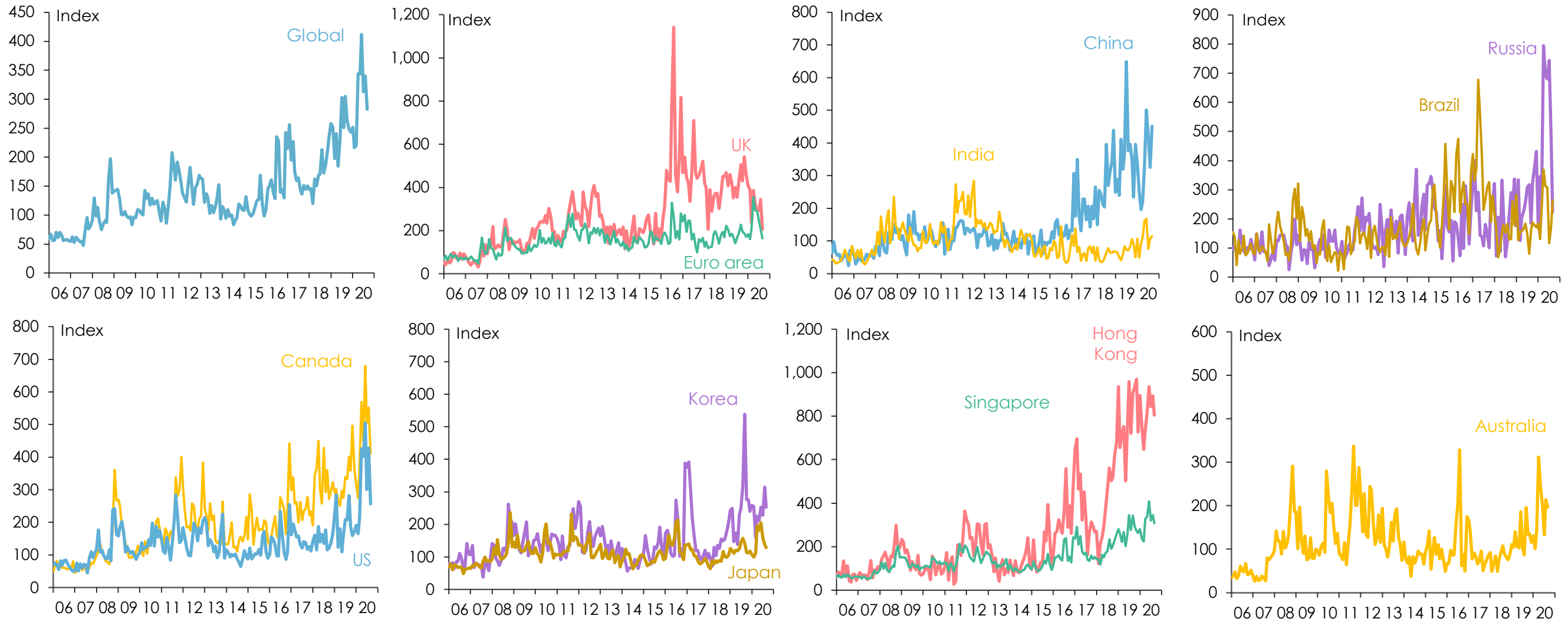
Q2 real and nominal GDP



- ❑ According to the UK's Office for National Statistics, the UK's real GDP fell by 20.4% in Q2, but nominal GDP fell by 25.9% - implying that prices (as measured by the implicit price deflator of GDP) rose by 6.2% in Q2
- ❑ This is totally inconsistent with all other measures of UK inflation in Q2 – for example the CPI was flat, producer output prices fell 0.3% and producer input prices fell 7.3%
- ❑ Closer inspection of the Q2 national accounts shows that the main contributor to the rise in the GDP deflator was a 33% increase in the deflator for government consumption
- ❑ ONS commentary on the Q2 estimates implies that this was a by-product of the way they accounted for school closures, cancellation of elective surgery, etc, due to Covid-19
- ❑ However none of the other major economies which have so far published Q2 national accounts have reported anything similar
- ❑ It could be that real GDP fell by (even) more in Q2 than estimated, or nominal GDP by less

Uncertainty about economic policy declined everywhere but China in August, but remains elevated by historical standards in most economies

Economic policy uncertainty indices

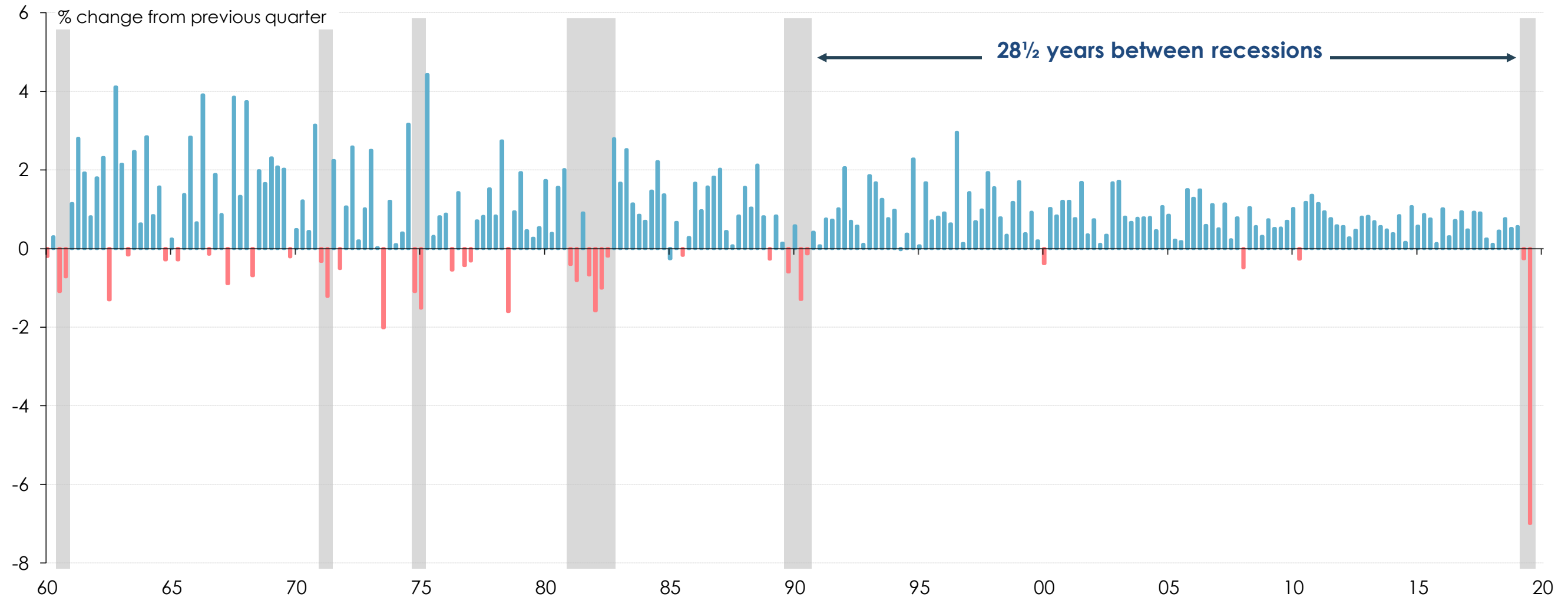


Note: The Economic Policy Uncertainty Index is derived from a count of newspaper articles containing the words “uncertain” or “uncertainty”, “economy” or “economic”, and policy-relevant terms pertaining to regulation, monetary or fiscal policy, central bank, taxation, tariffs, deficit, budget, etc. The 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: [Global Policy Uncertainty](#); Scott Banker, Nick Bloom & Steven Davis, ‘Measuring Economic Policy Uncertainty’, *Quarterly Journal of Economics*, 131, no. 4 (November 2016), pp. 1593-1636.

Australia

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

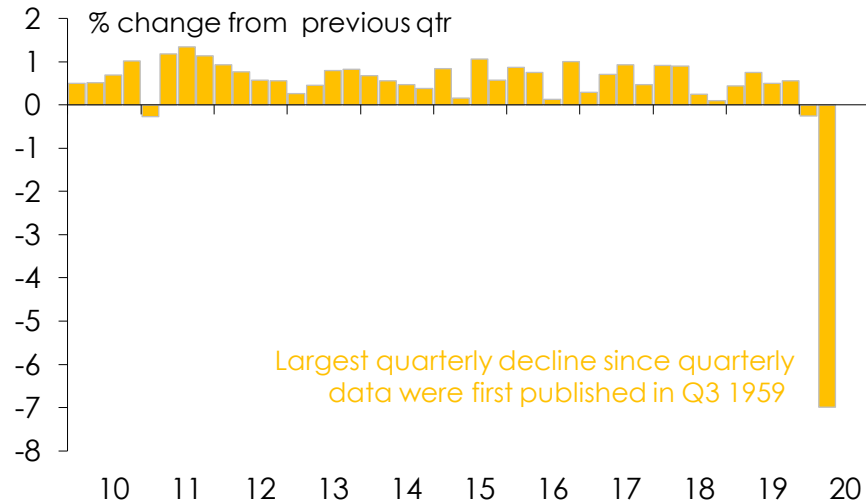
Quarterly growth in Australian real GDP, 1960-2020



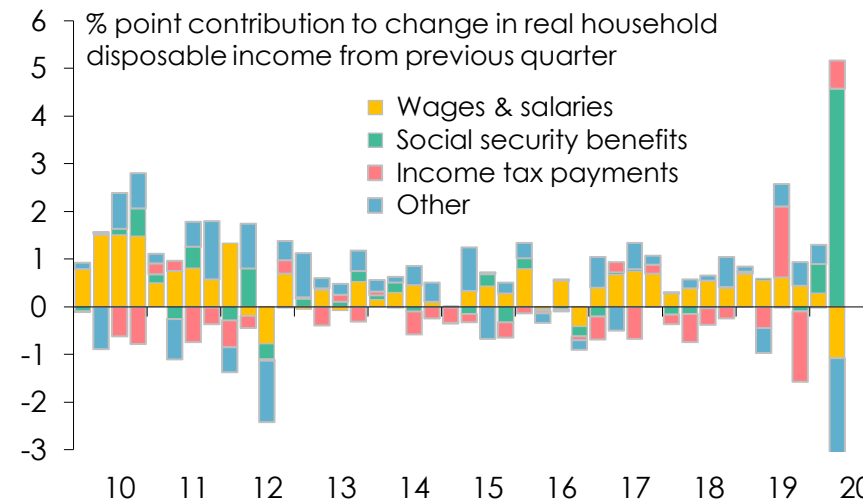
Note: Shaded areas denote recessions. Source: ABS, [Australian National Accounts: National Income, Expenditure and Product](#), June quarter 2020.

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

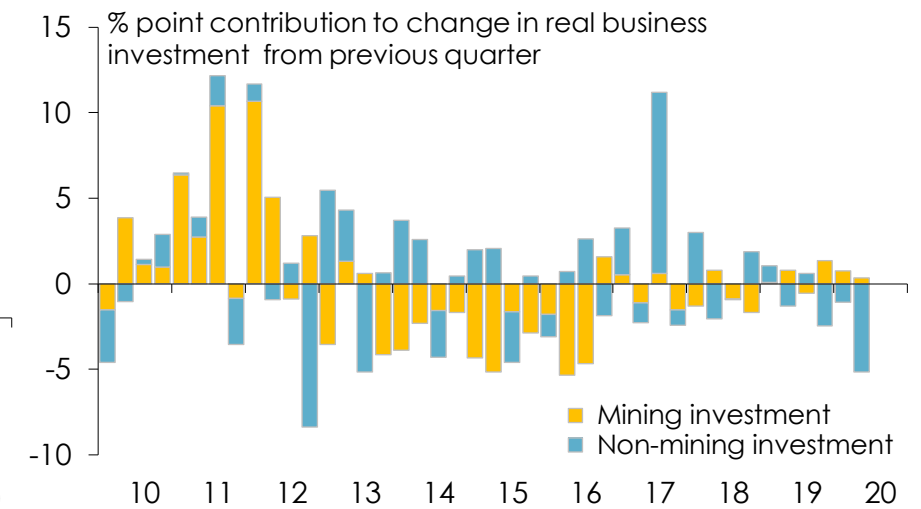
Quarterly change in real GDP



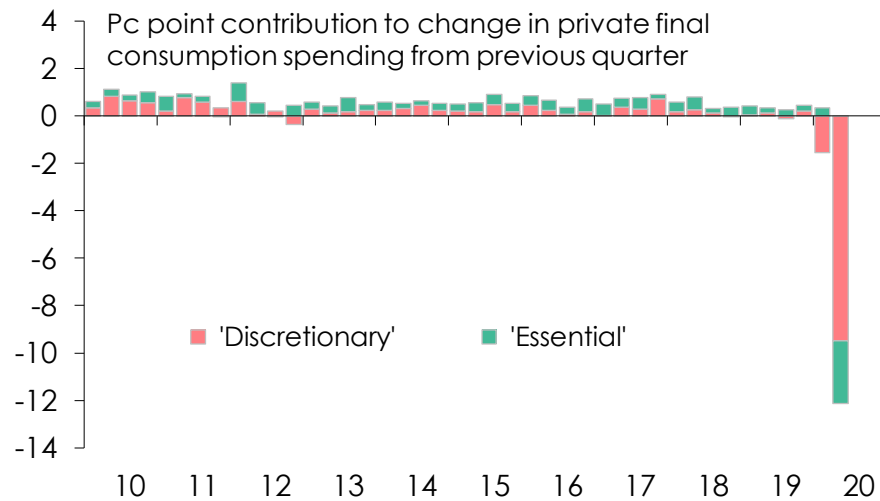
Household disposable income



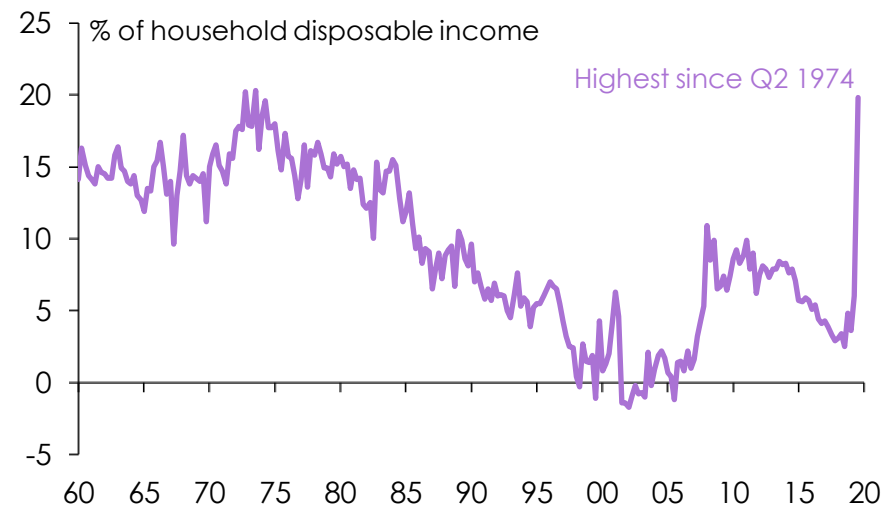
Business investment expenditure



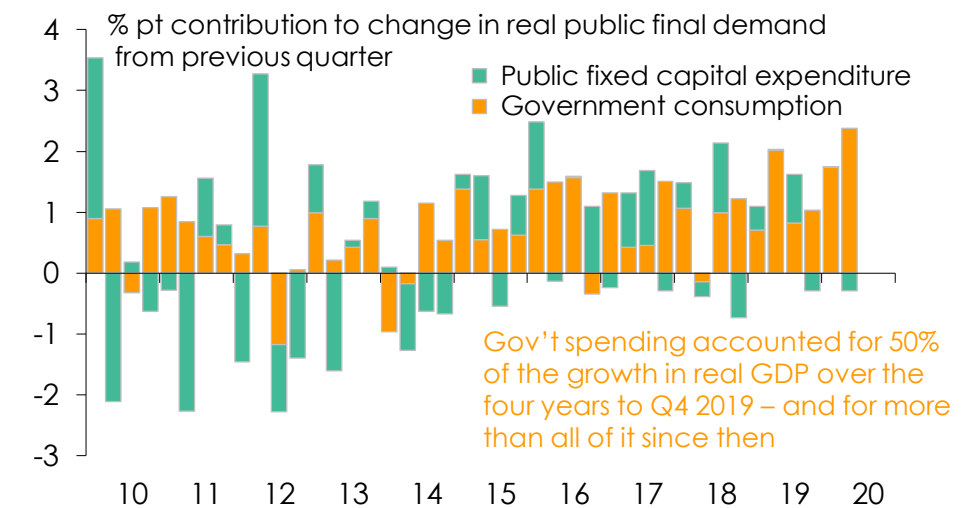
Household consumption expenditure



Household saving rate



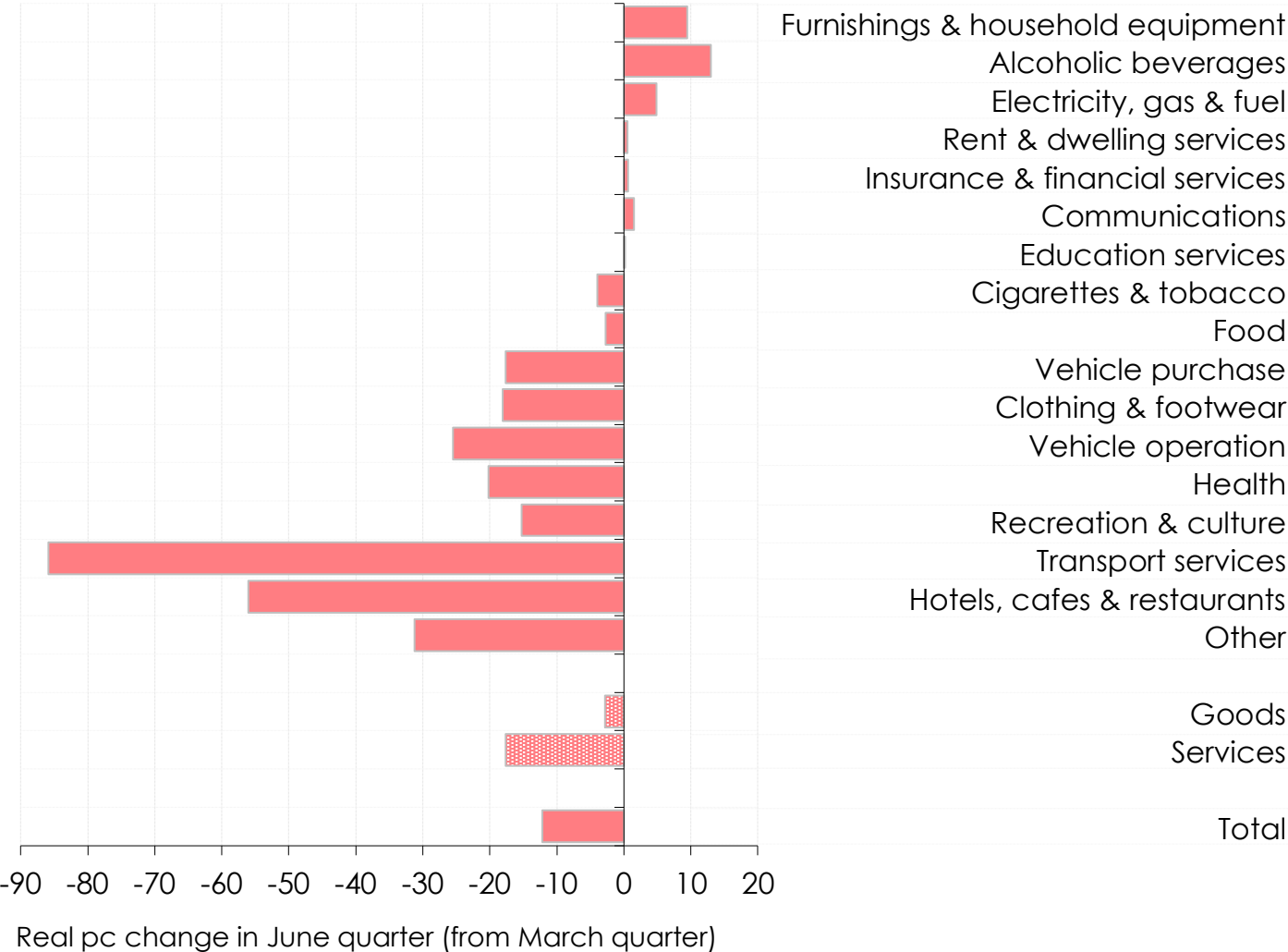
Public expenditure



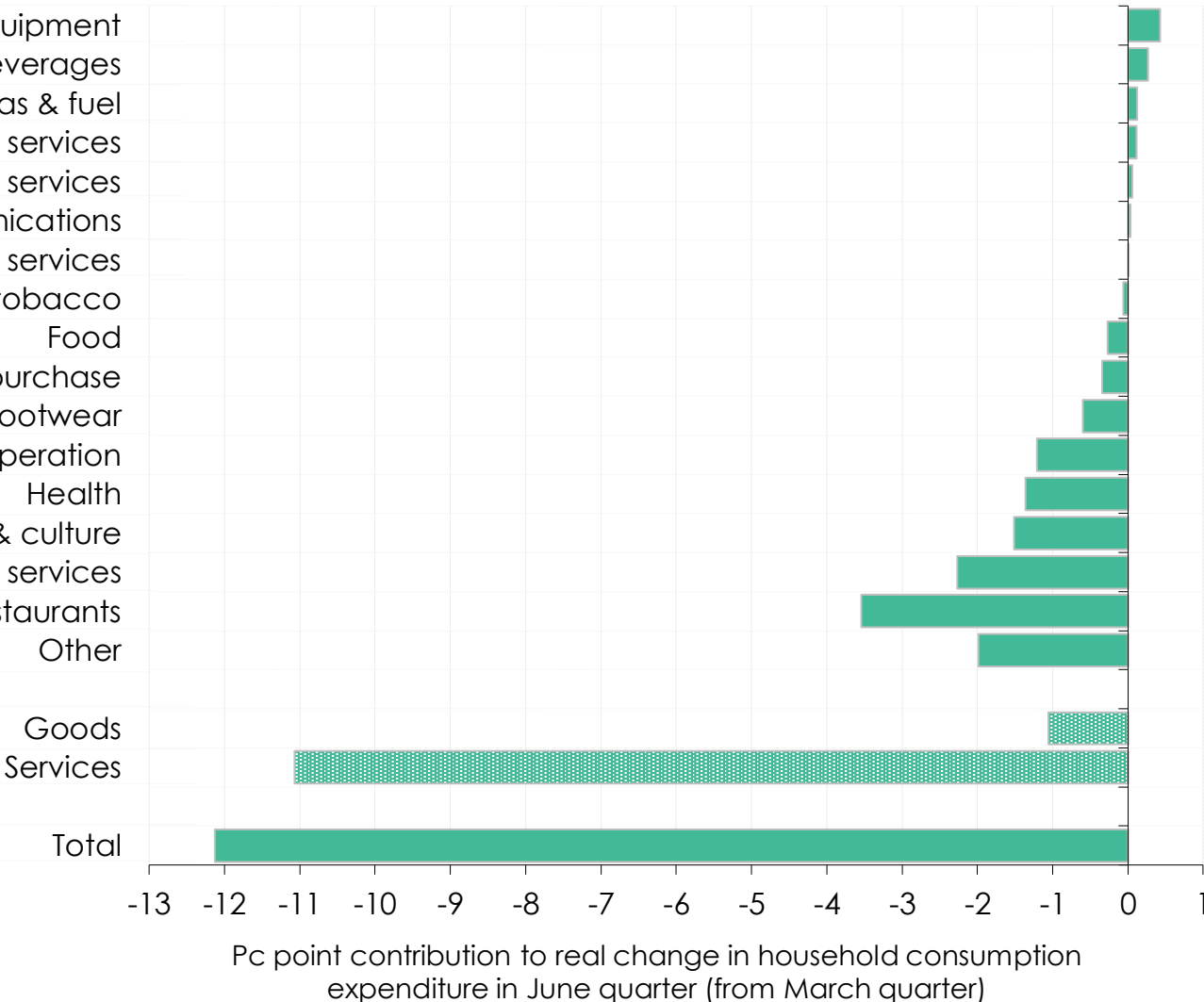
Note: 'Essential' household consumption expenditure comprises food; rent & other dwelling services; electricity, gas & other fuel; operation of vehicles; rail, bus & taxi services; communications; health; education; and insurance & other financial services. Components of household disposable income are deflated by the implicit price deflator of household final consumption expenditure. Source: [ABS](#). September quarter national accounts will be released on 2nd December.

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

Change in household consumption spending, by category, June quarter



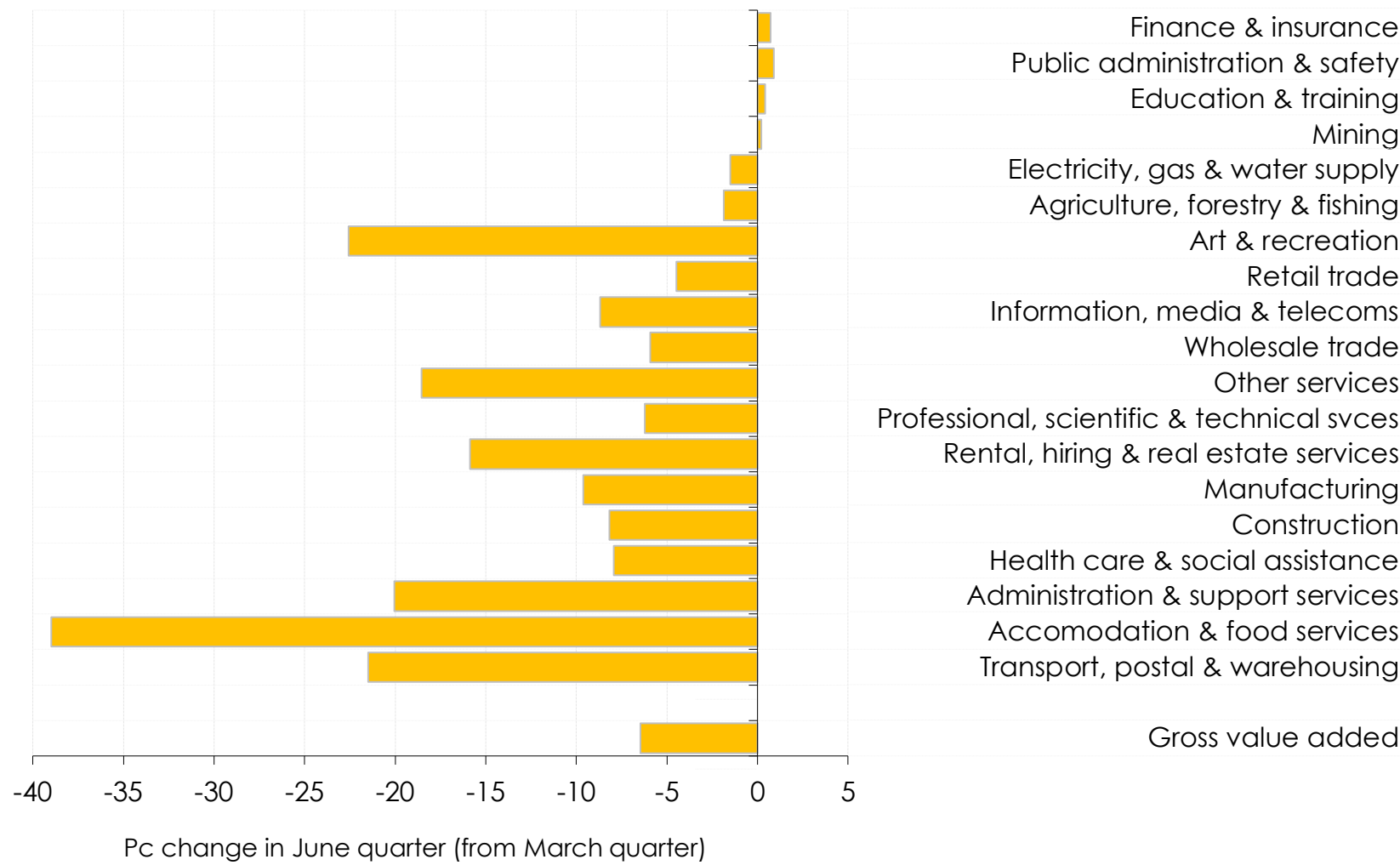
Contribution to change in household consumption spending, by category, June quarter



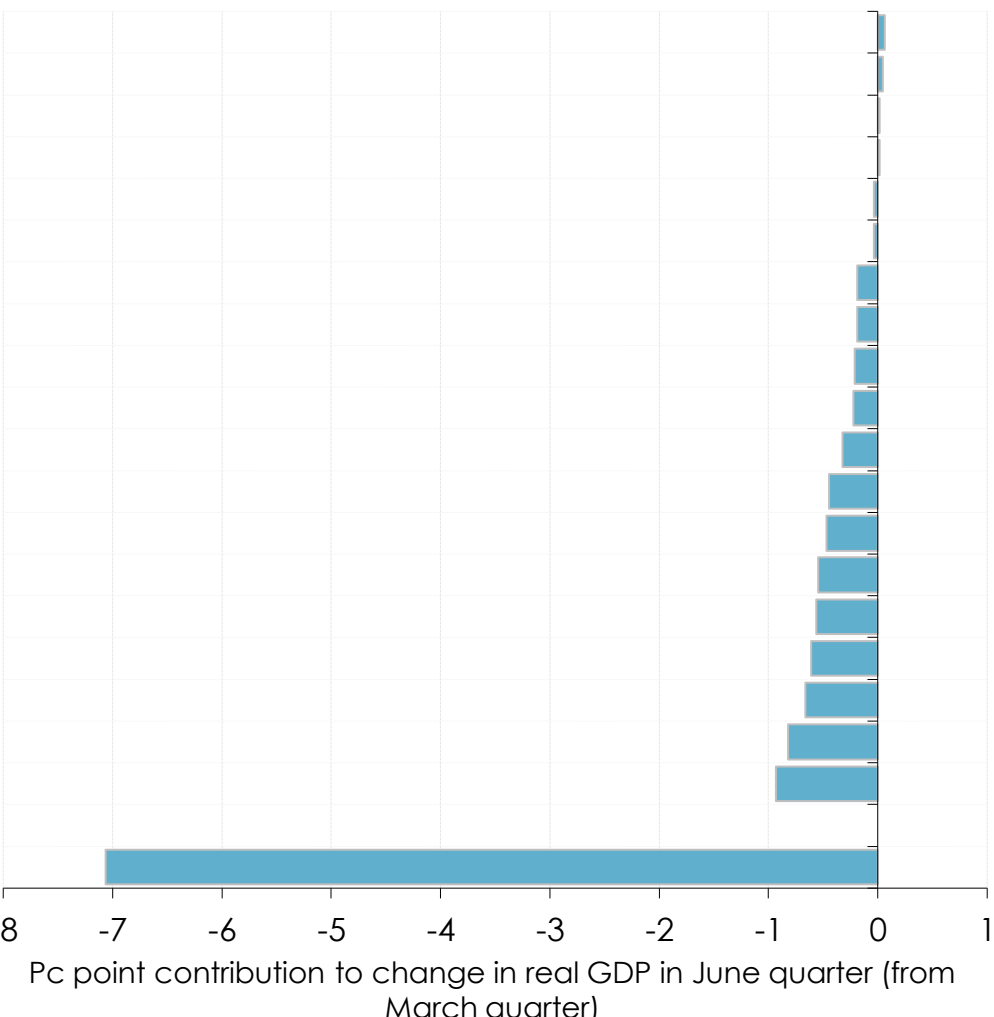
Note: 'Rent and dwelling services' includes the imputed rent which home-owners pay to (and receive from) themselves in the national accounts (so that changes in the home-ownership rate over time don't distort measured household consumption or GDP). Source: [ABS](#).

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

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



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



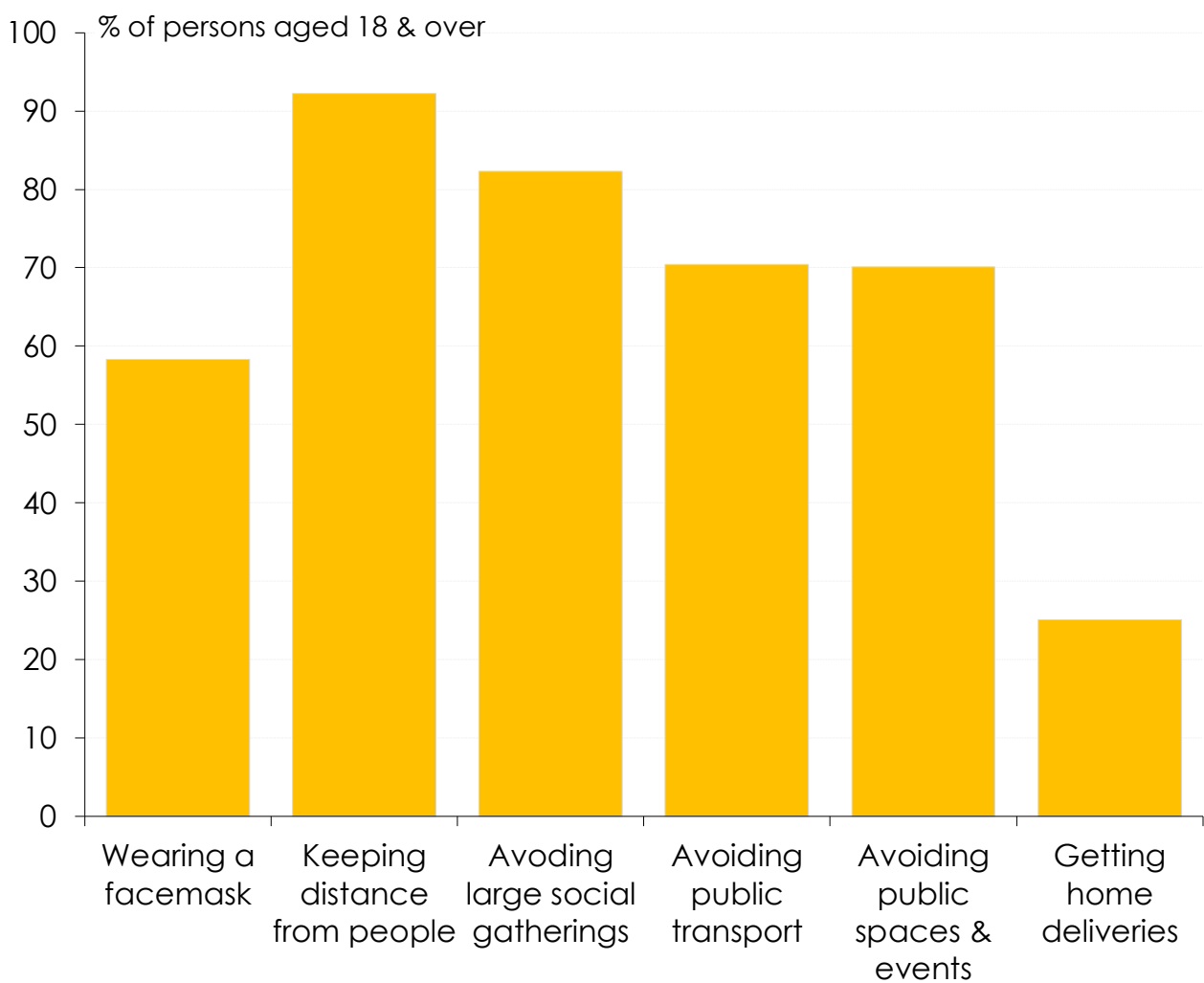
Note: Changes in, and contributions to the change in real GDP from, ownership of dwellings and net indirect taxes are not shown in the above charts. Source: [ABS](#).

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

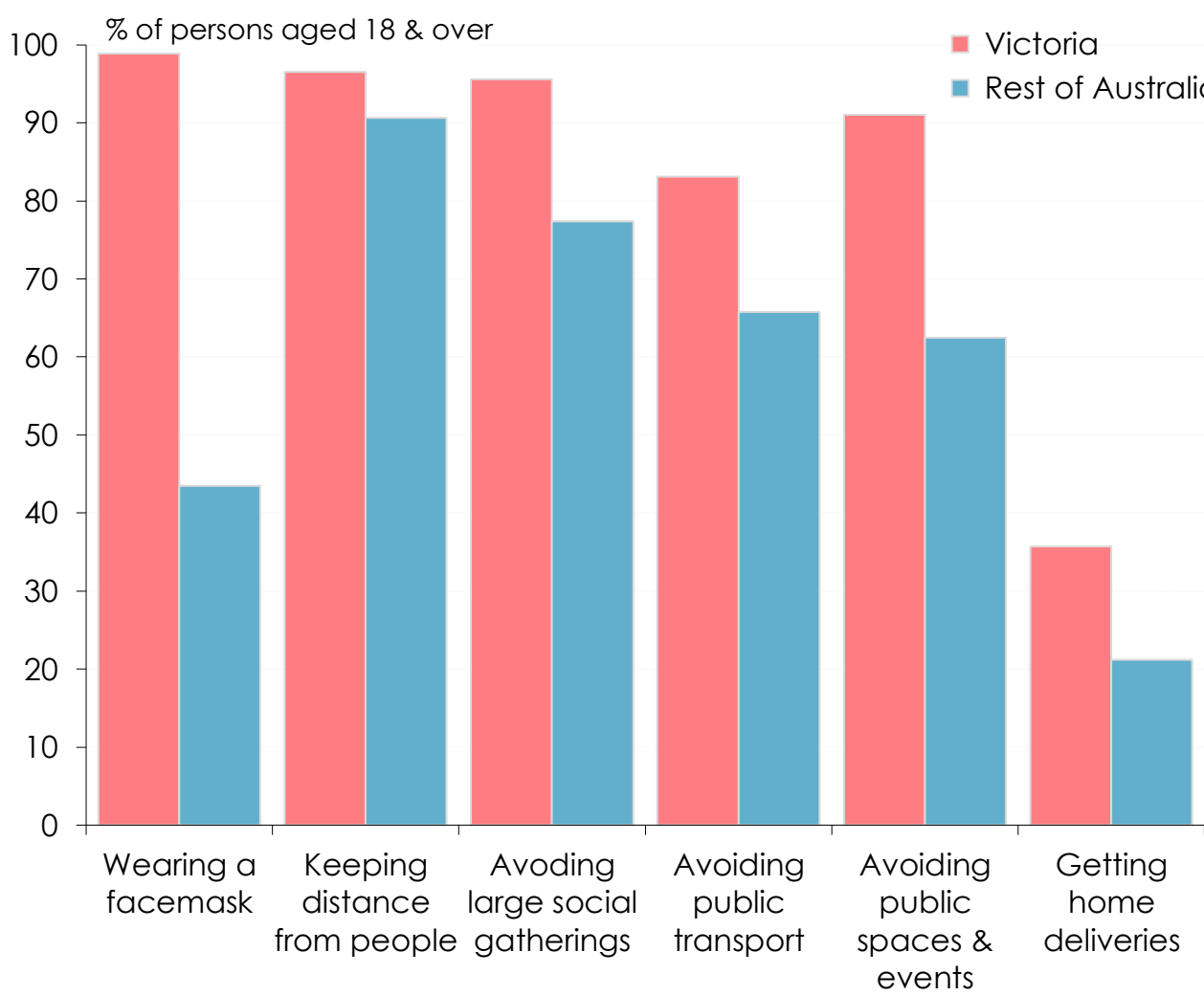
- ❑ **‘Social distancing’ requirements will be relaxed gradually rather than ‘all at once’ – and (as seen in Victoria) restrictions can be re-imposed in response to new outbreaks)**
 - new health and safety regulations will likely limit the number of employees and customers who can be ‘on premises’ (which 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
 - some households will be able to draw down on savings accumulated during the shutdown (see [slide 55](#)), but others will want to rebuild savings (or superannuation balances) drawn down over the past six months
 - households with mortgages who have deferred repayments will face higher or longer mortgage repayments, constraining their spending capacity to some extent
 - household spending may also be affected by ‘negative wealth effects’ from lower property prices
- ❑ **Despite the recent extensions to JobKeeper and Jobseeker, on current policy settings there will still be an effective tightening of fiscal policy at the beginning of each of the December and March quarters**
- ❑ **International borders (except with NZ) will likely remain closed until a vaccine is widely available – which is in turn 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**

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

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



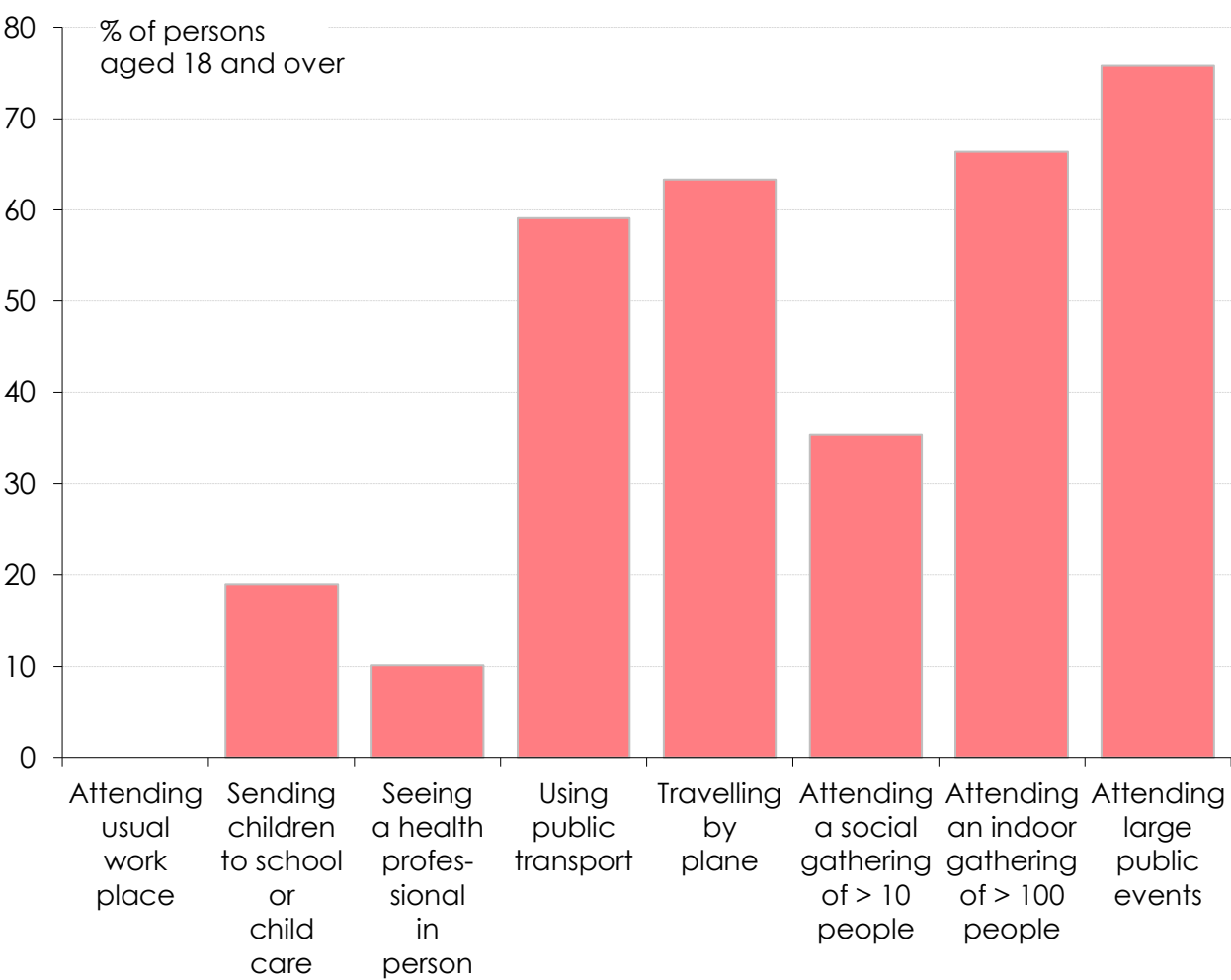
Precautions taken by people living in Victoria and elsewhere in Australia, mid-August 2020



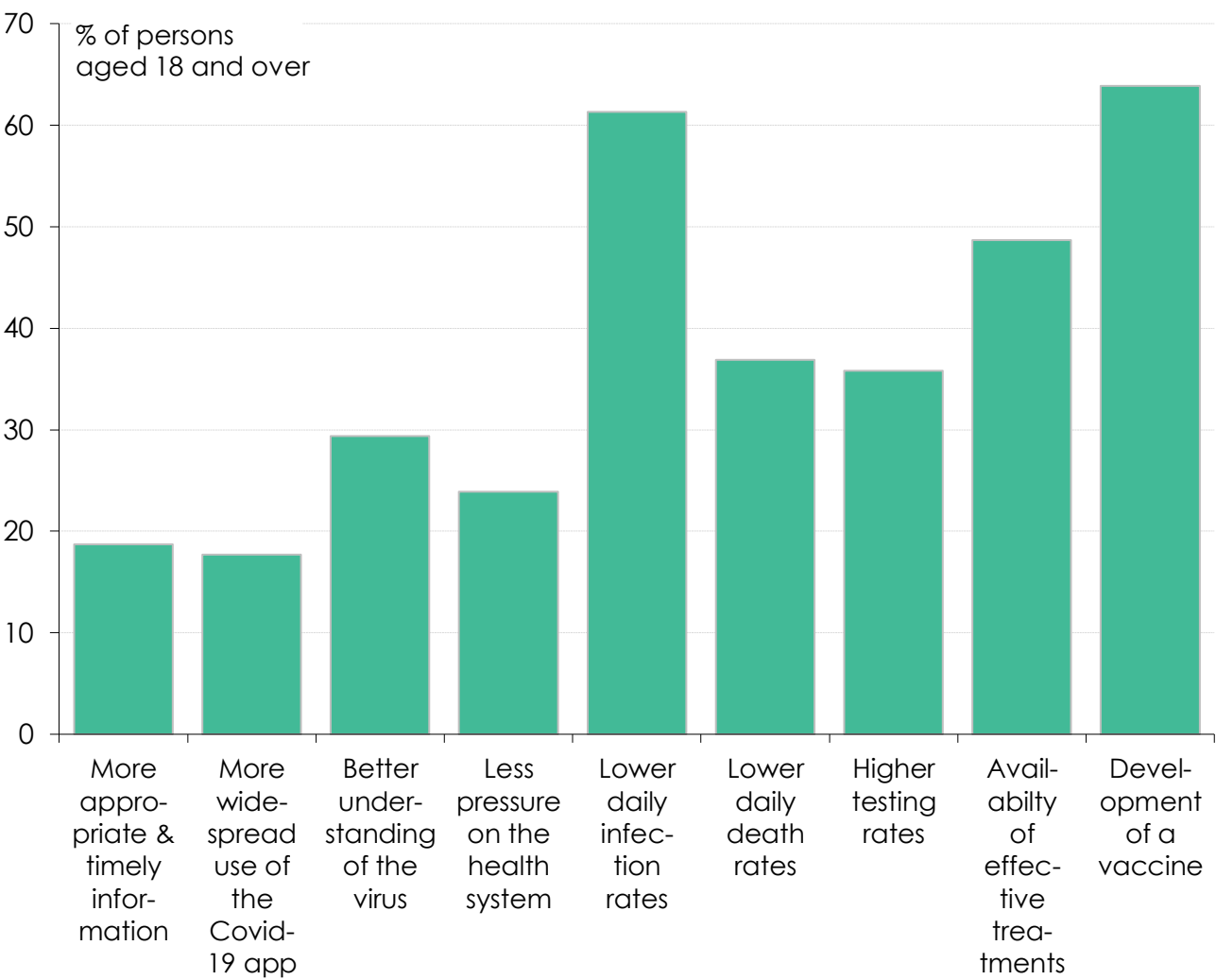
Source: ABS, [Household impacts of Covid-19](#), August 2020 (published 31st August).

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

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



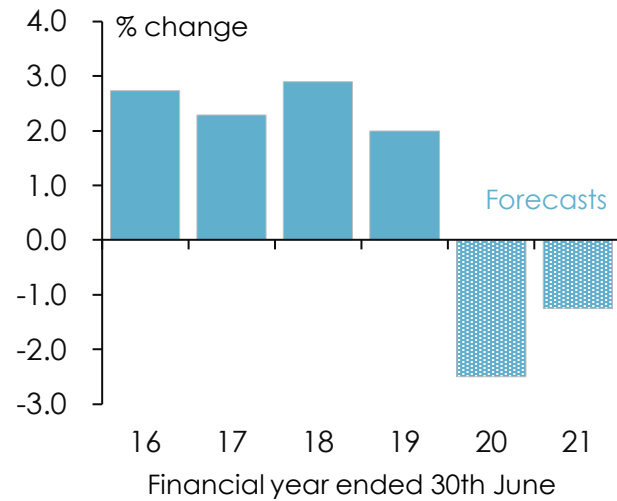
Actions that would improve people’s comfort with activities as restrictions are eased



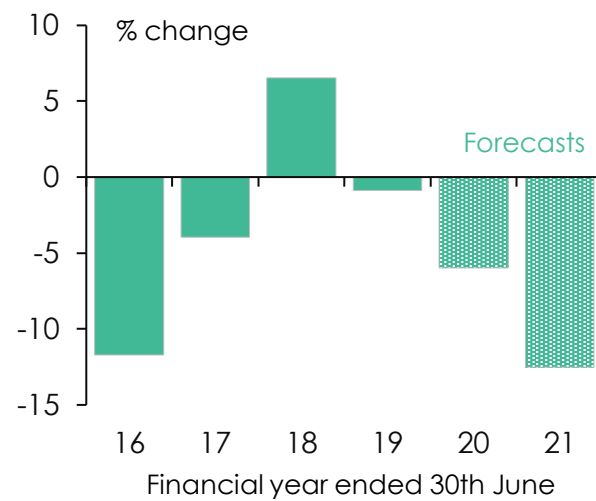
Source: ABS, [Household impacts of Covid-19](#), 26th-29th May (published 15th June).

Treasury's most recent forecasts, published in late July, will be revised (downwards, except for unemployment) in the Budget on 6th October

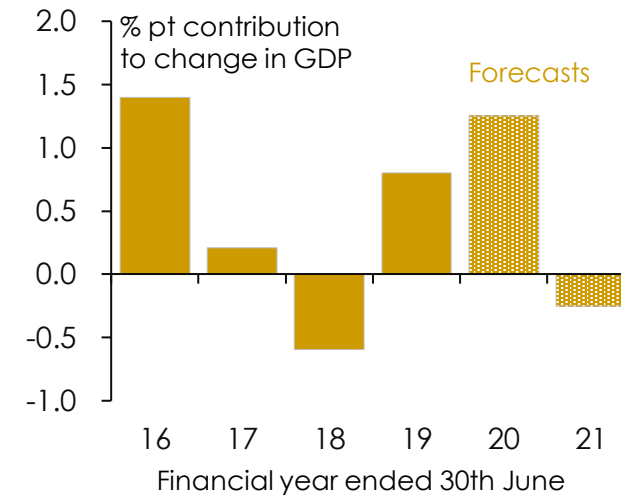
Household consumption



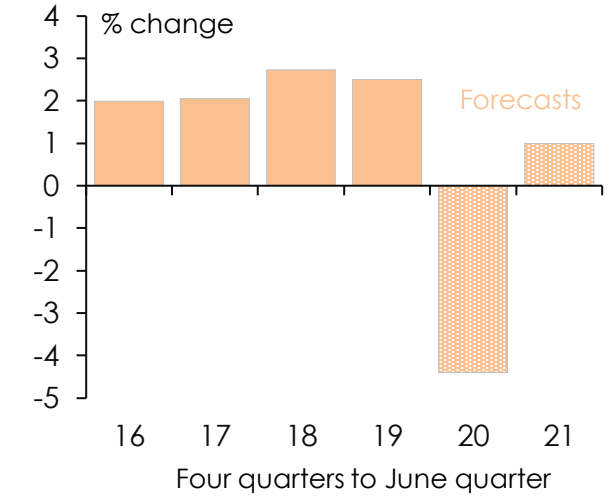
Business investment



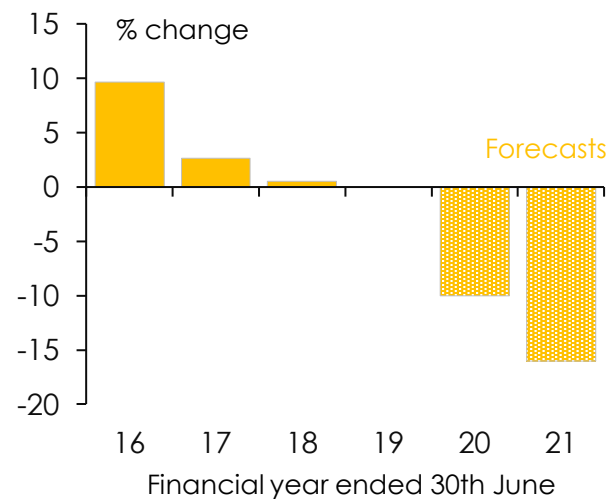
Net exports



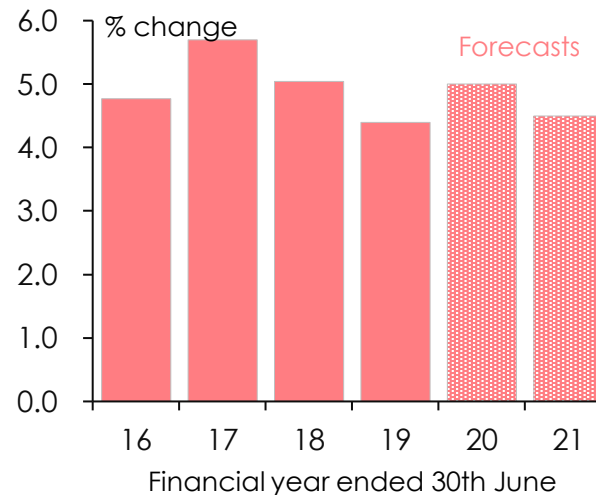
Employment



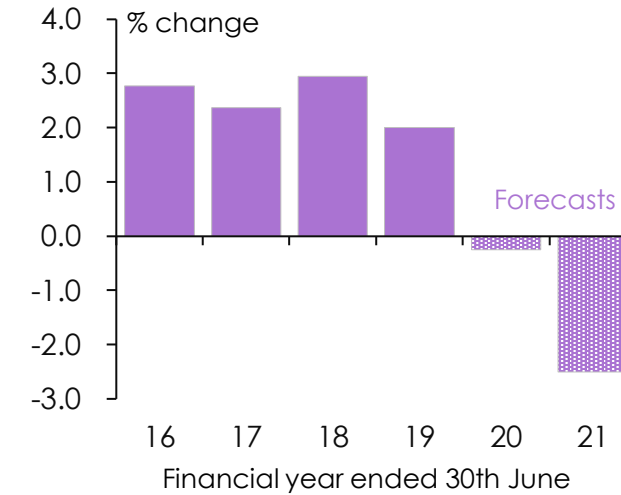
Dwelling investment



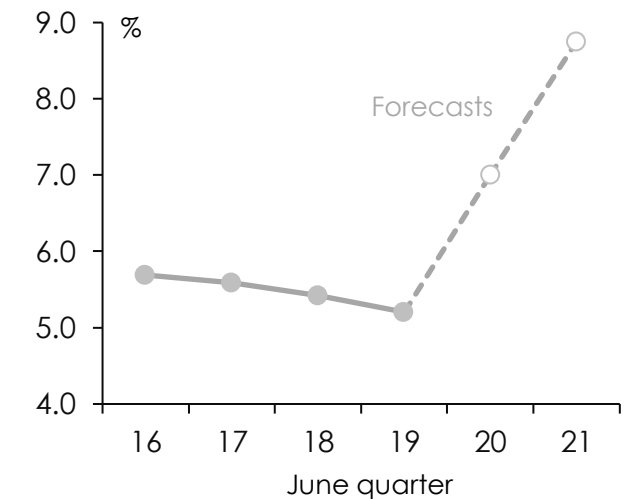
Public spending



GDP



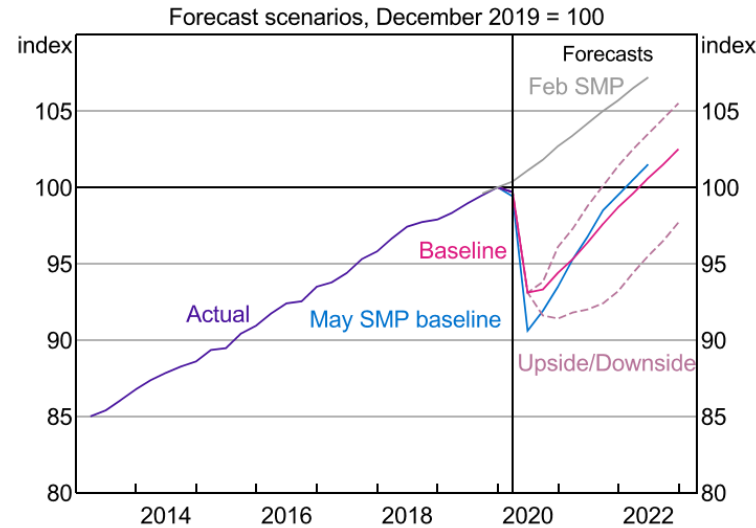
Unemployment rate



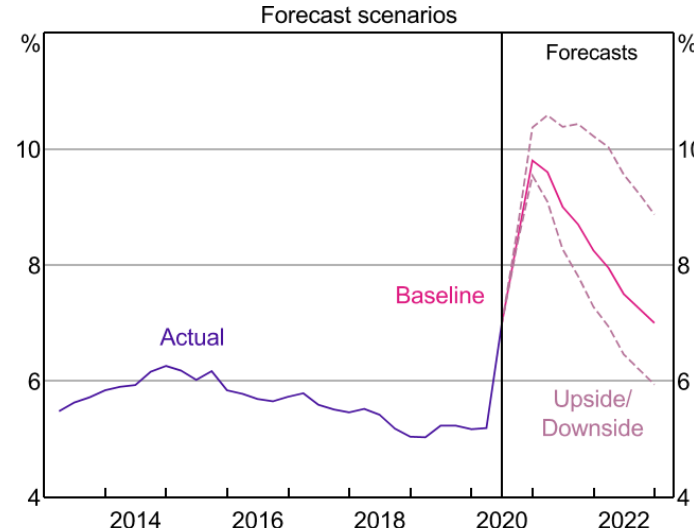
Note: Business investment and public spending exclude transactions in second-hand assets. Employment growth is June quarter on June quarter; unemployment rate is June quarter. Assumptions include current restrictions in Melbourne ending after 6 weeks, no further restrictions imposed, and other restrictions 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.

In its latest quarterly Monetary Policy Statement, the RBA slightly lowered its sights on the economic recovery from the pandemic

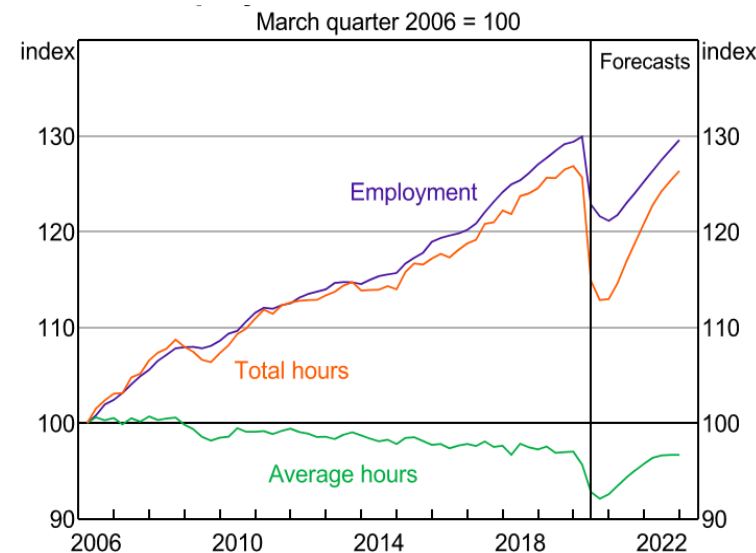
GDP



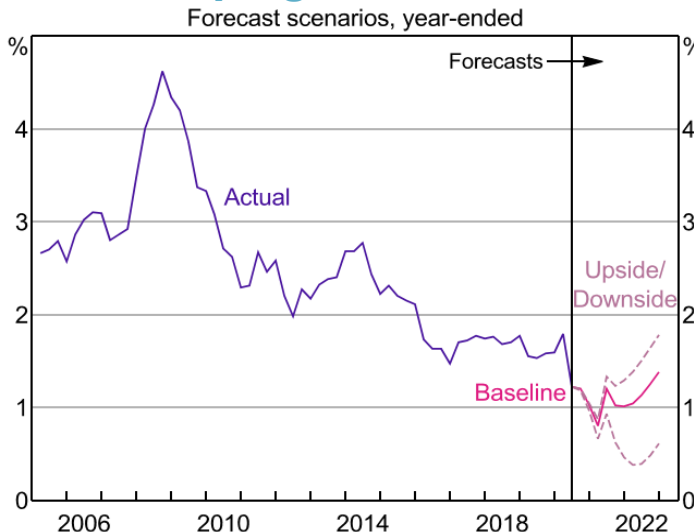
Unemployment



Employment & hours worked



'Underlying' inflation



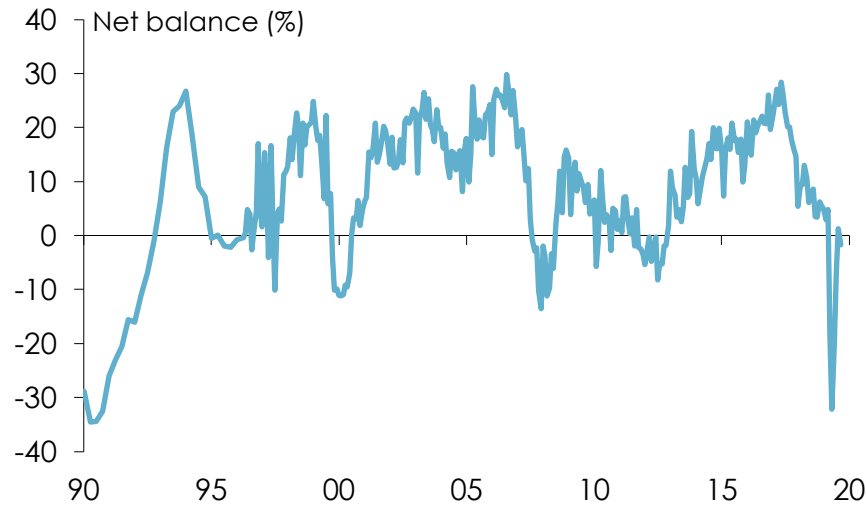
- ❑ The short-run economic effects of the initial 'lockdown' turned out to be less than the RBA had assumed in May – but it thinks the “on-going effects of weak demand are likely to be larger”, with additional headwinds stemming from the new Victorian 'lockdown'
- ❑ The RBA's latest 'baseline' scenario 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'.

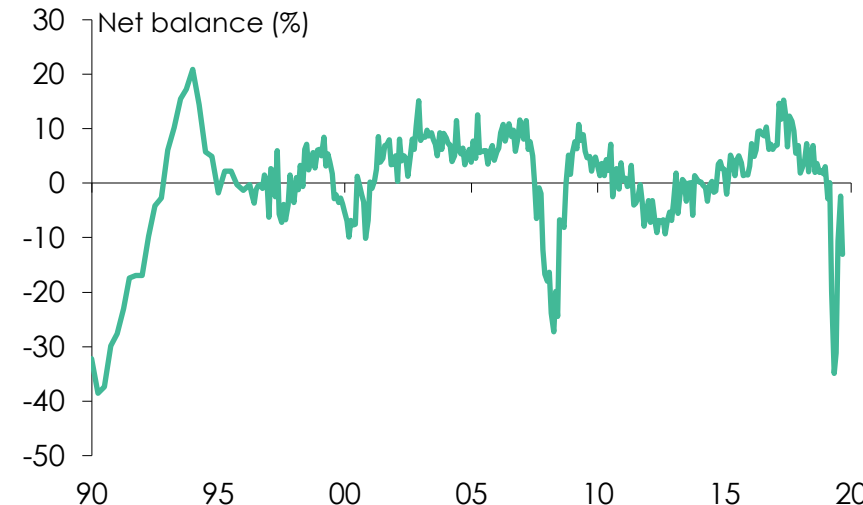
Source: Reserve Bank of Australia, [Statement on Monetary Policy](#), 7th August 2020.

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

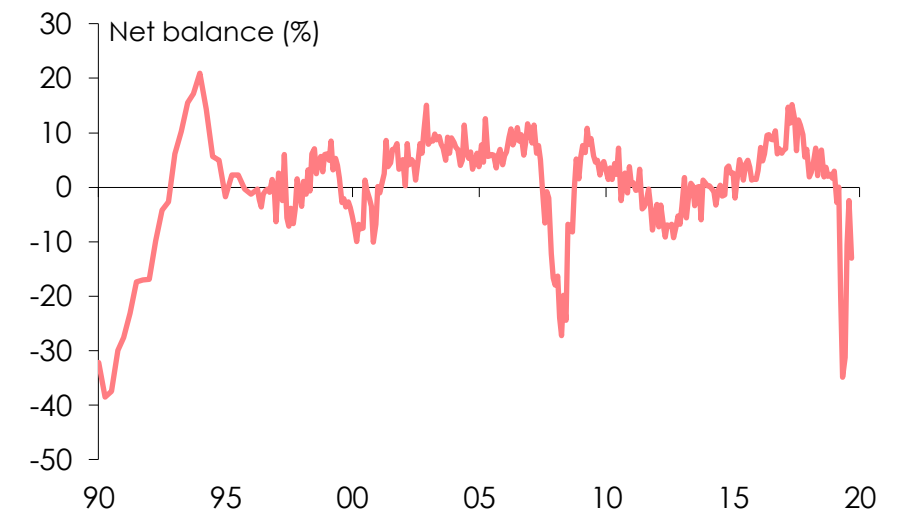
Trading conditions



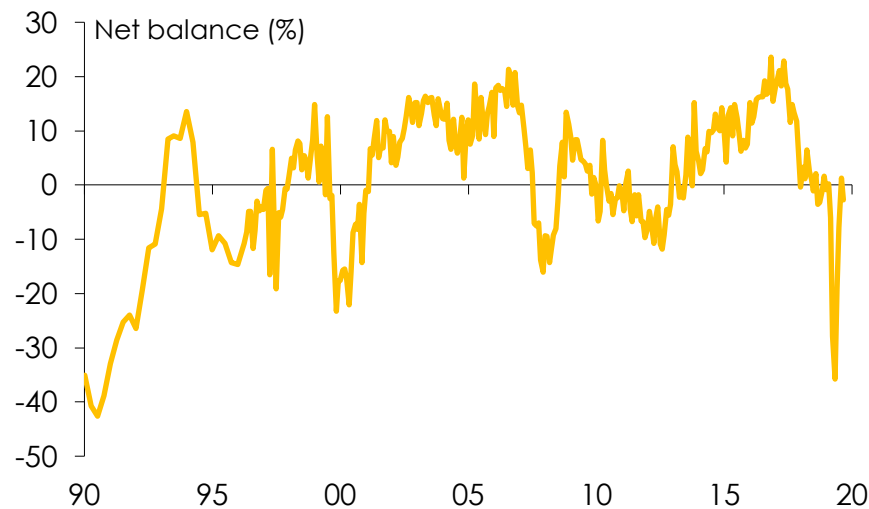
Forward orders



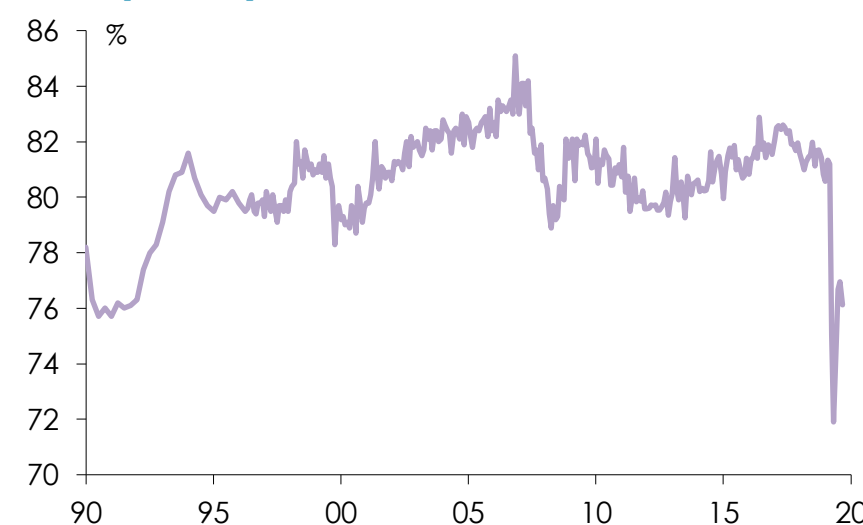
Employee hiring intentions



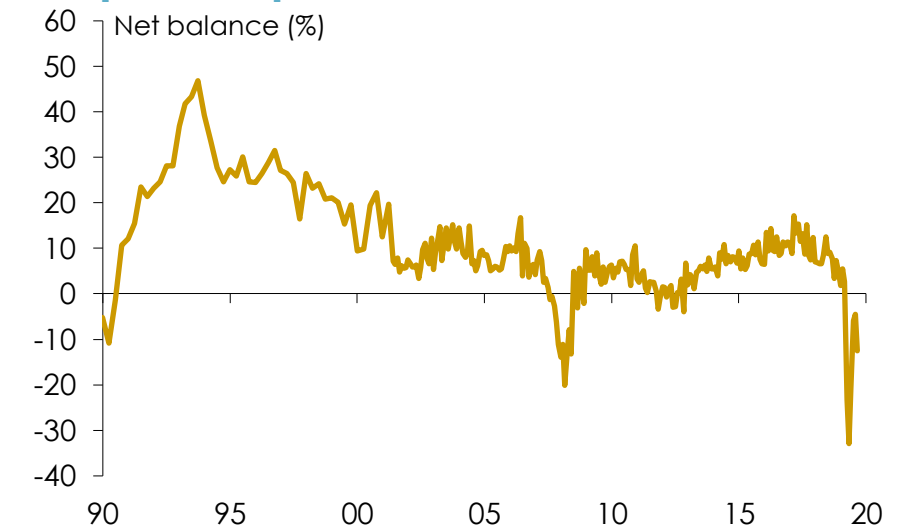
Profitability



Capacity utilization



Capital expenditure intentions

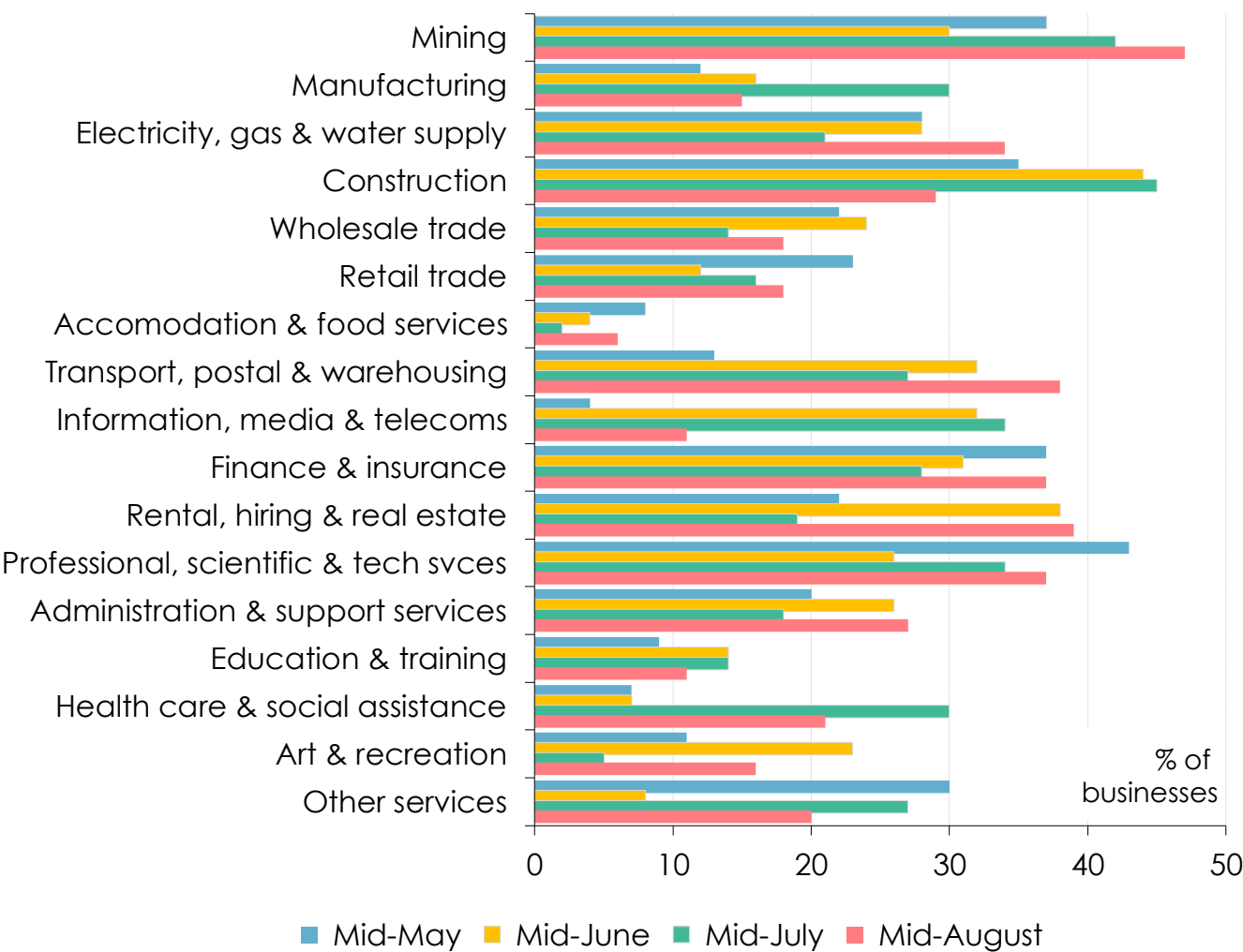


Note: Quarterly data up to March 1987 (May 2002 for capex intentions), monthly thereafter (latest data August 2020). See also chart of business confidence on [slide 77](#).

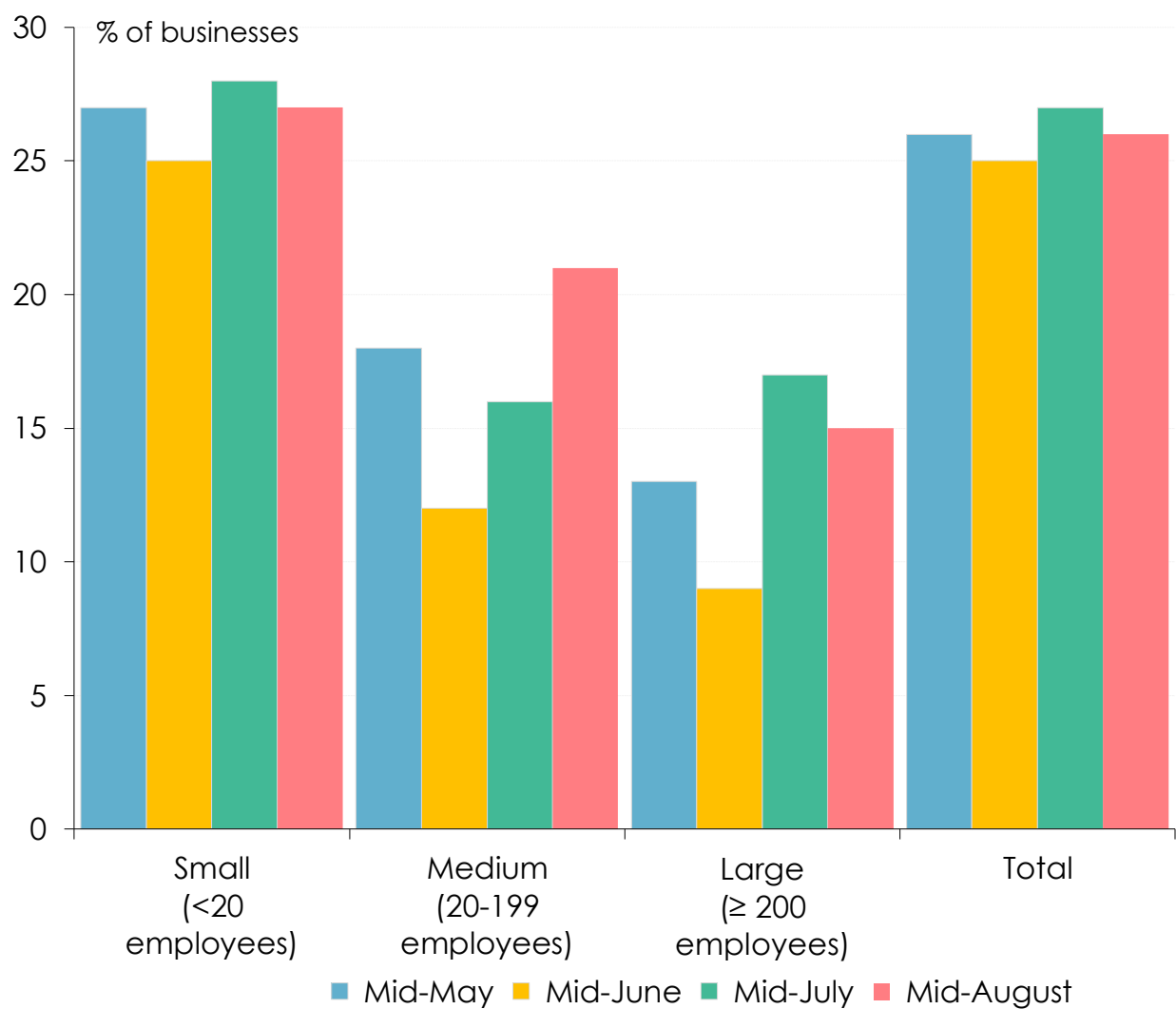
Source: National Australia Bank [Monthly Business Survey](#) August 2020; August survey results will be released on Monday 5th October (the day before the delayed federal Budget).

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

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



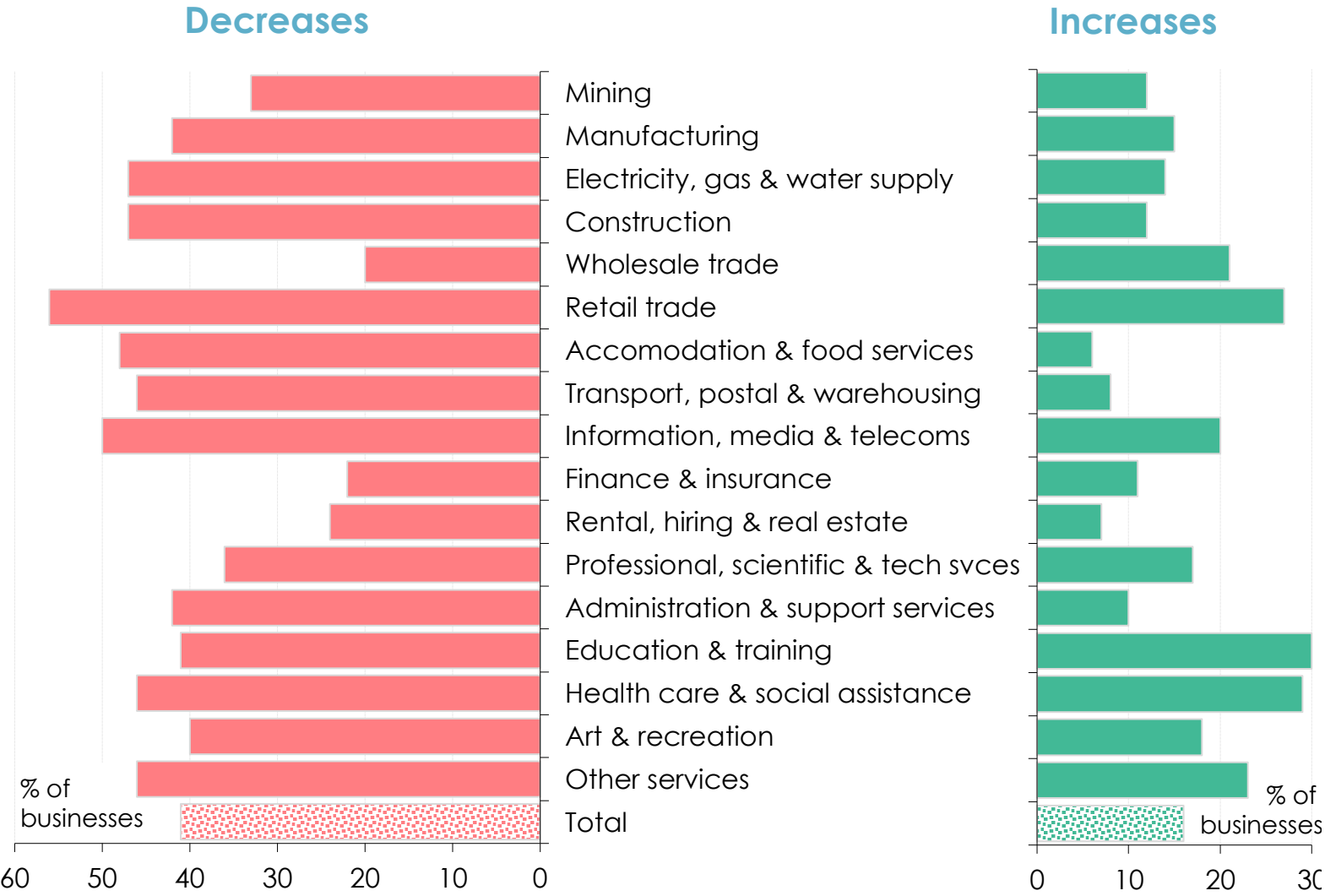
Proportion of 'trading businesses' which are operating 'as normal' – by size



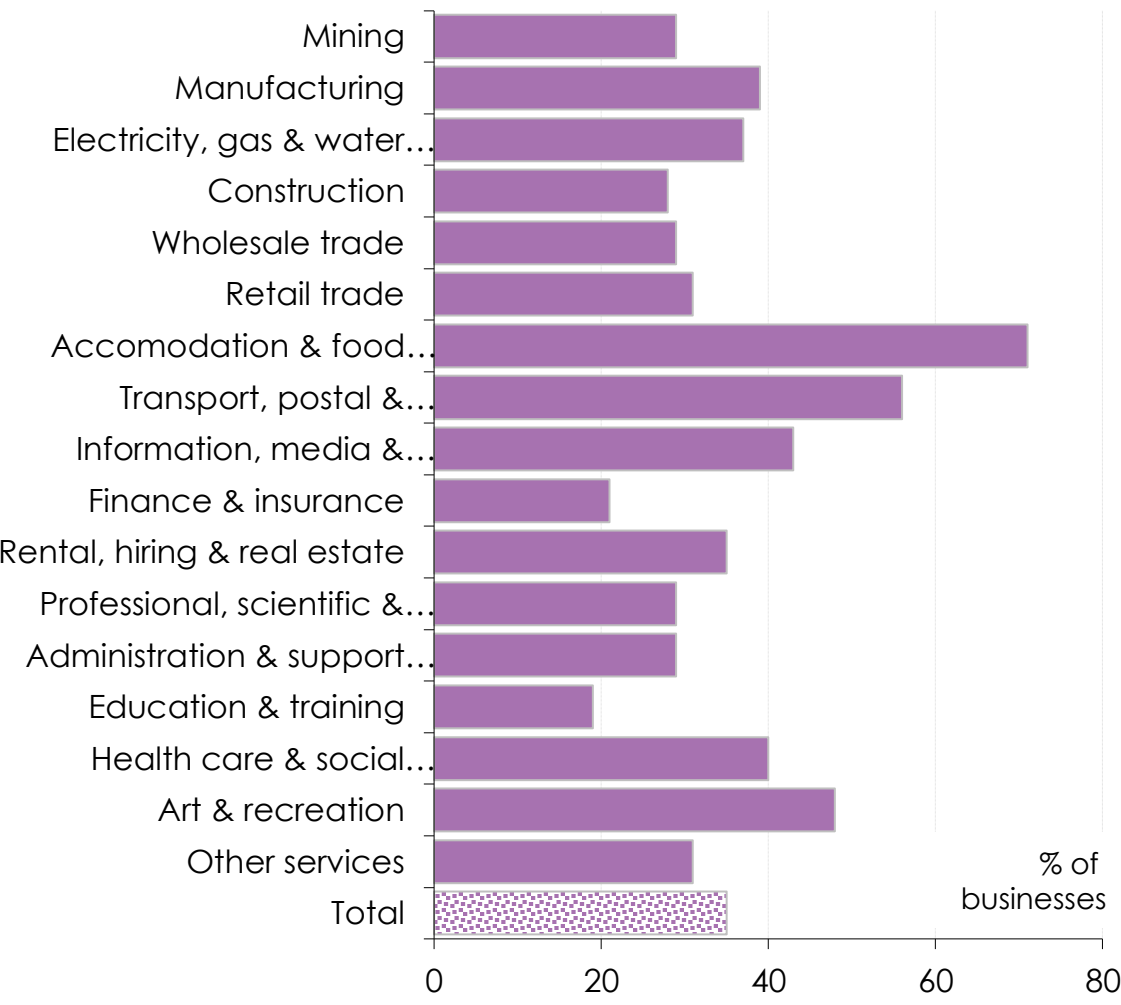
Source: ABS, [Business Impacts of Covid-19](#), May 2020 (based on survey conducted between 13th and 22nd May), June 2020 (based on survey conducted between 10th and 17th June), July (survey conducted between 15th and 23rd July) and August (survey conducted between 12th and 19th August)

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

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



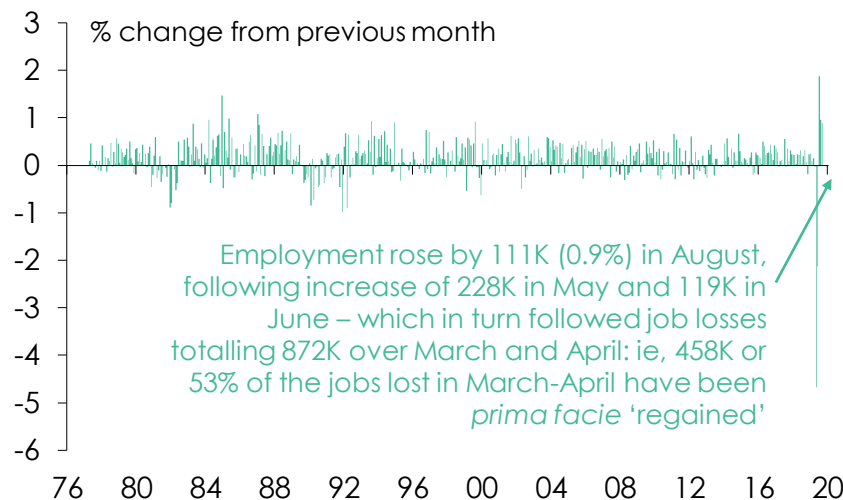
Businesses who would find it difficult, or very difficult, to meet financial commitments over the next three months, August 2020



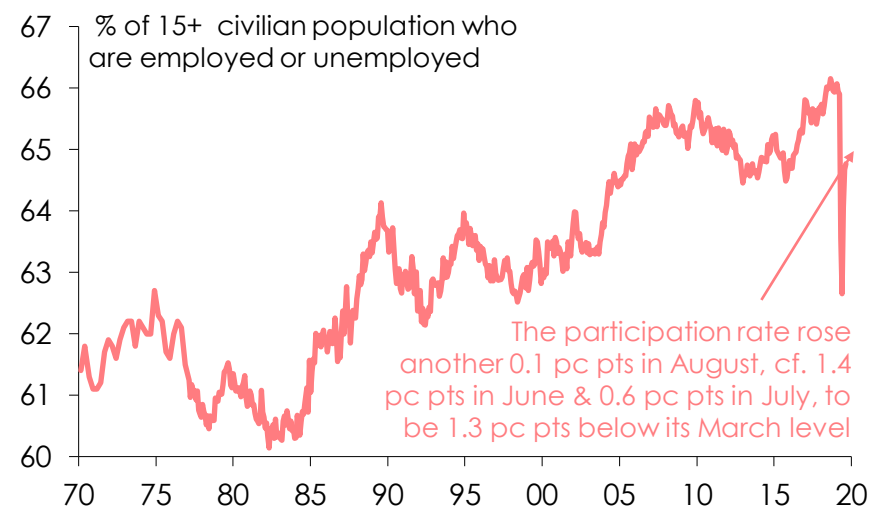
Source: ABS, [Business Impacts of Covid-19](#), August 2020 (based on survey conducted between 12th and 19th August).

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

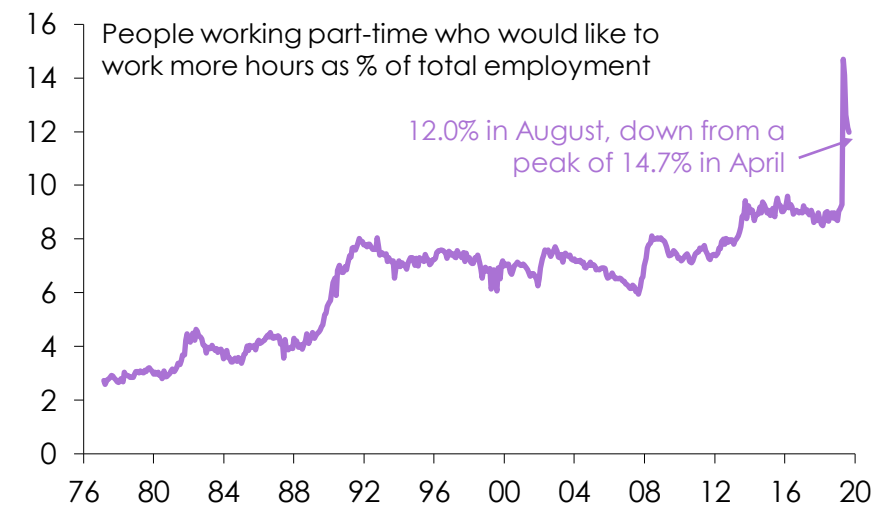
Employment



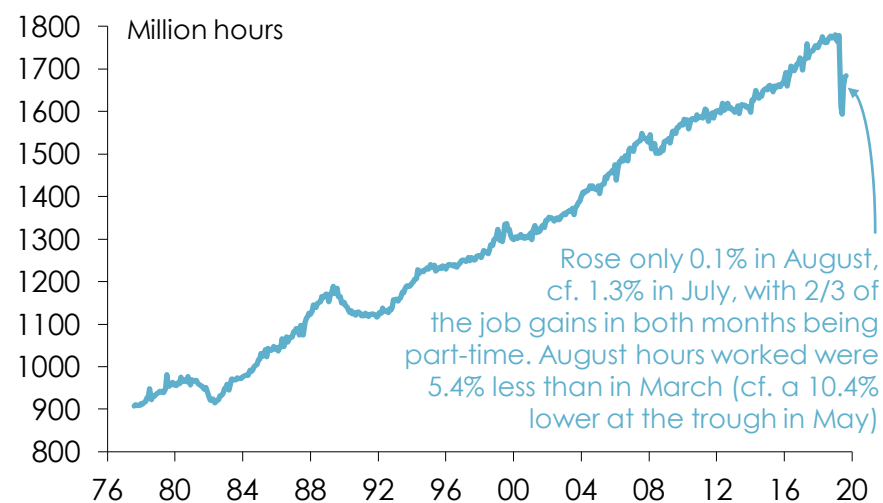
Labour force participation rate



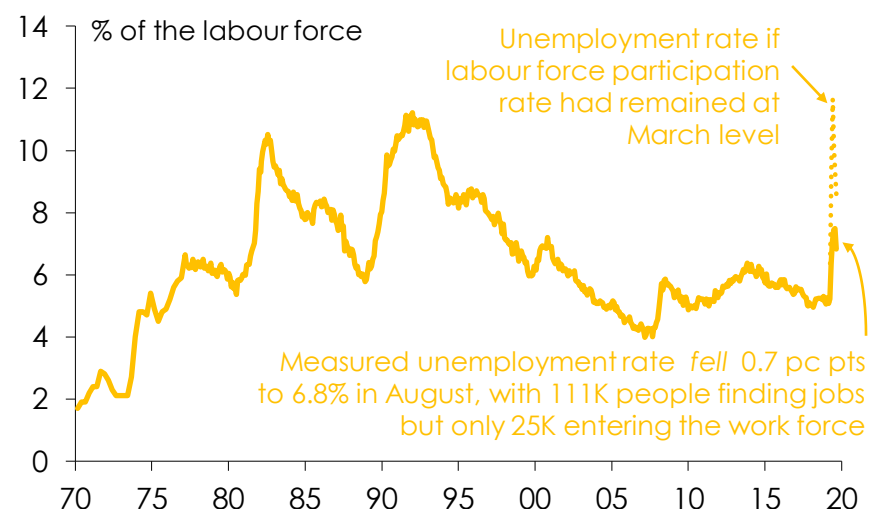
Under-employment ratio



Total hours worked



Unemployment rate



'Under-utilization' rate

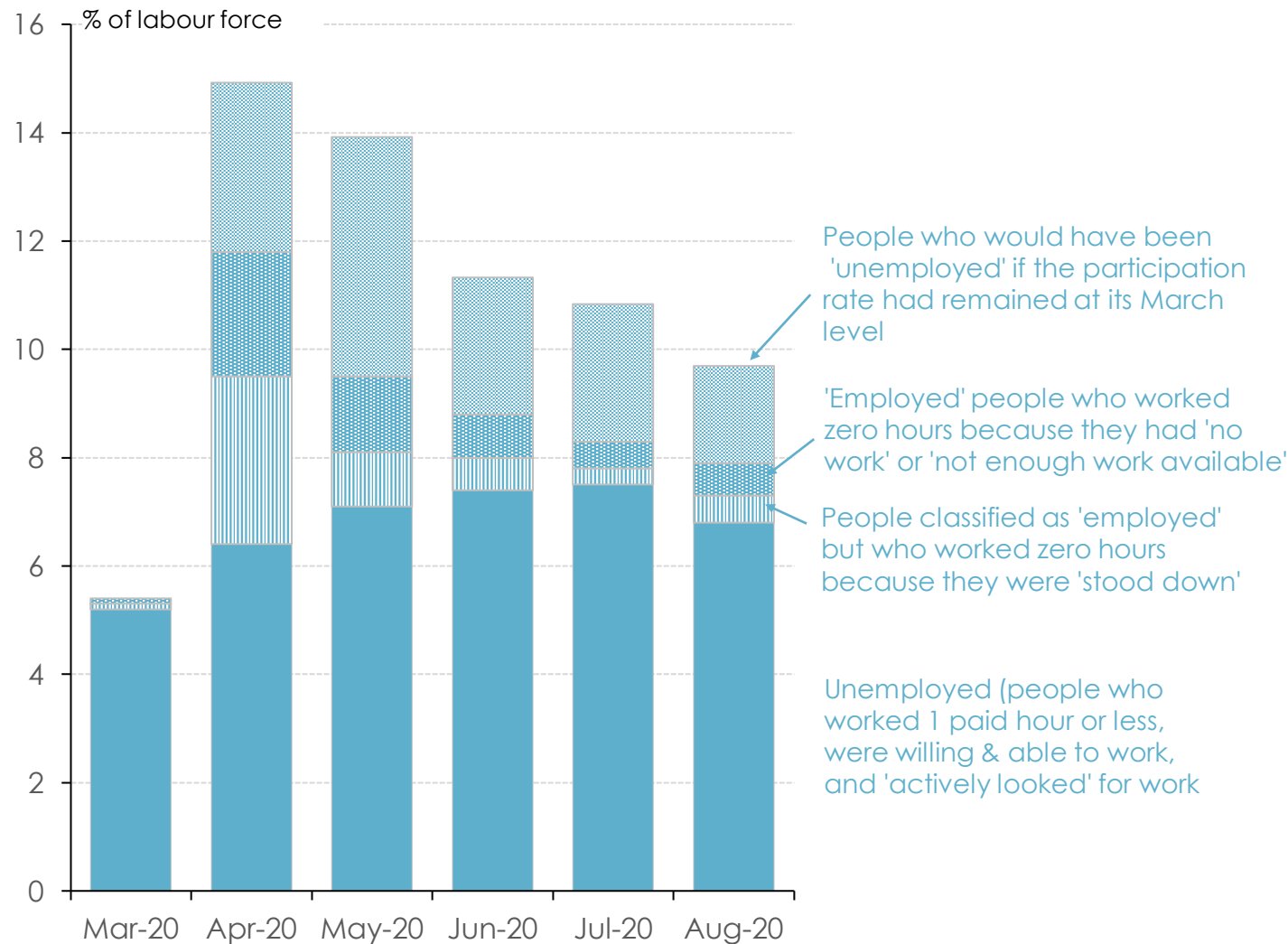


Note: The ABS classifies people on JobKeeper who worked zero hours in the survey week as 'employed'. Had it not done so, the unemployment rate in August would have been 7.9% (down from 11.8% in April) – see also next slide. The 'under-employment ratio' is the percentage of employed persons who are working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

Source: ABS, [Labour Force, Australia](#). September data will be released on 15th October.

The unemployment rate would have been 9.7% in August if people working zero hours and those who dropped out of the labour force were counted

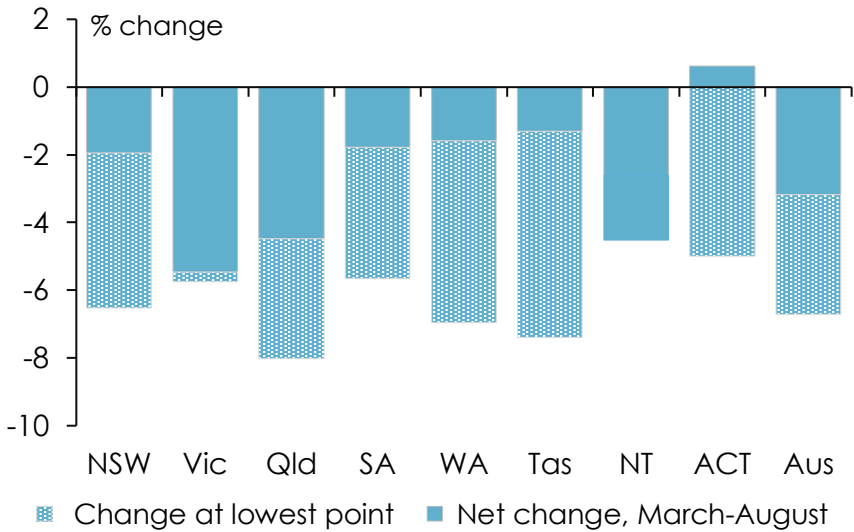
Alternative measures of unemployment



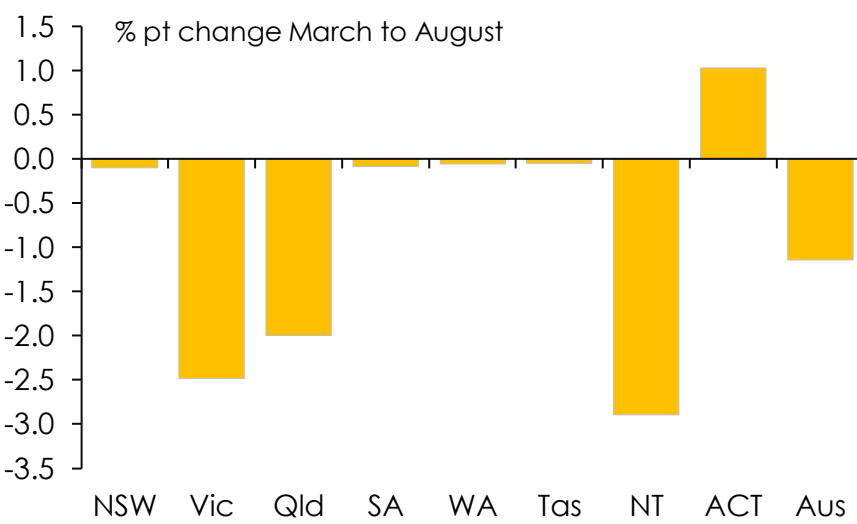
- ❑ The Government's JobKeeper program has paid eligible employers a subsidy of \$1500 per fortnight for each eligible employee kept on the payroll since 30th March
- ❑ From 28th September the JobKeeper payment will reduce to \$1200 per fortnight, with a lower rate of \$750 per fortnight for employees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

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

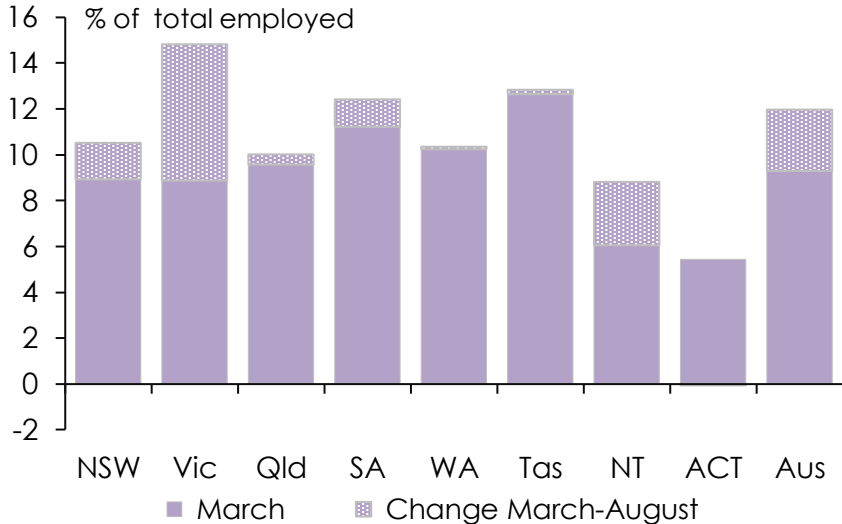
Employment



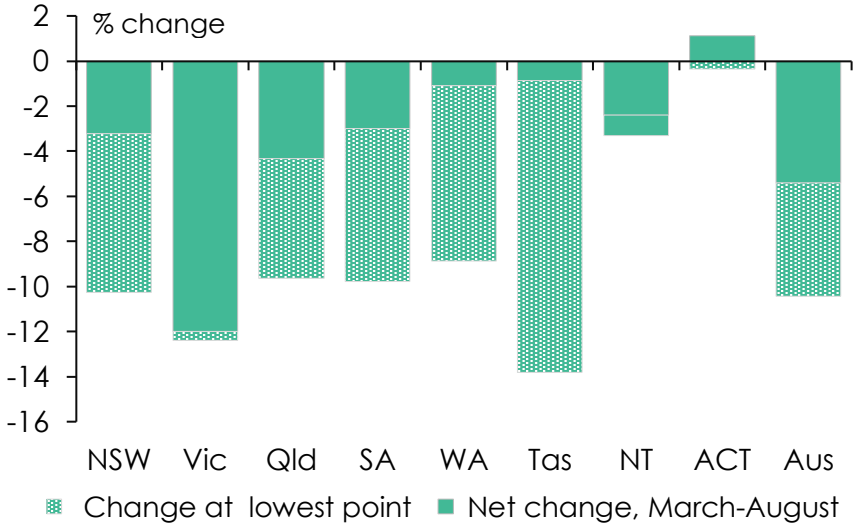
Labour force participation rate



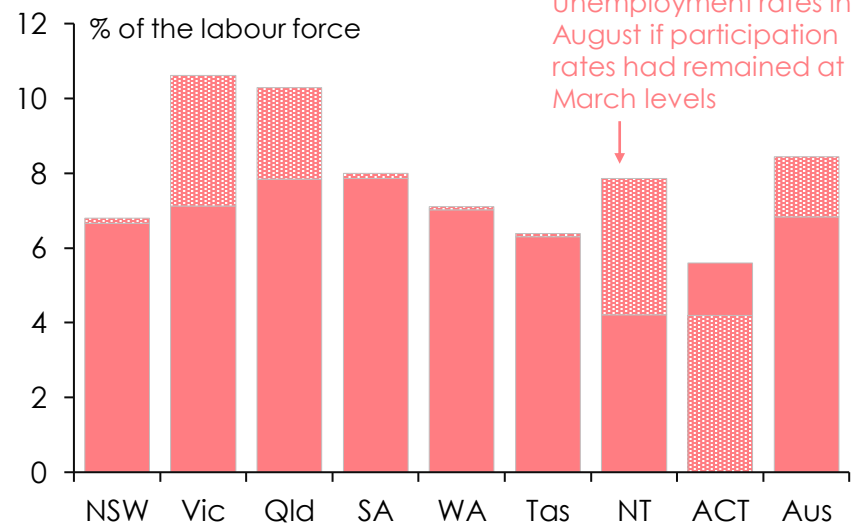
Under-employment ratio



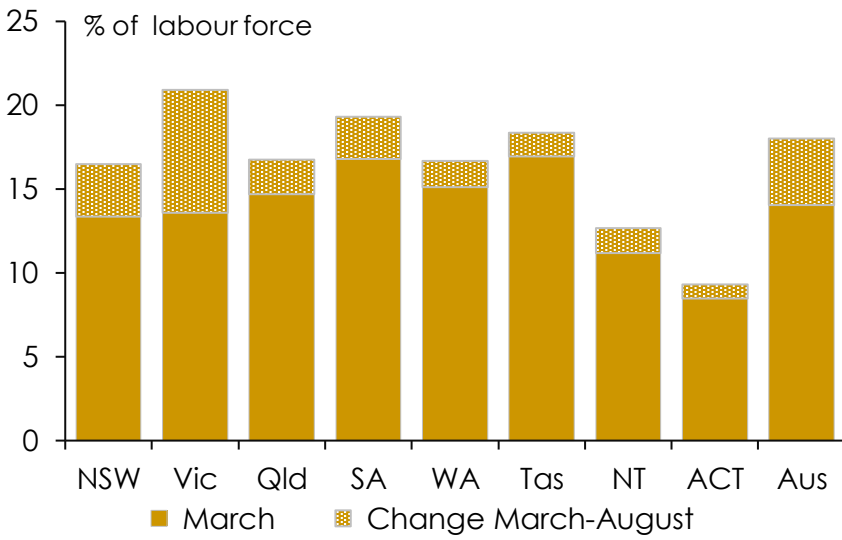
Total hours worked



Unemployment rate



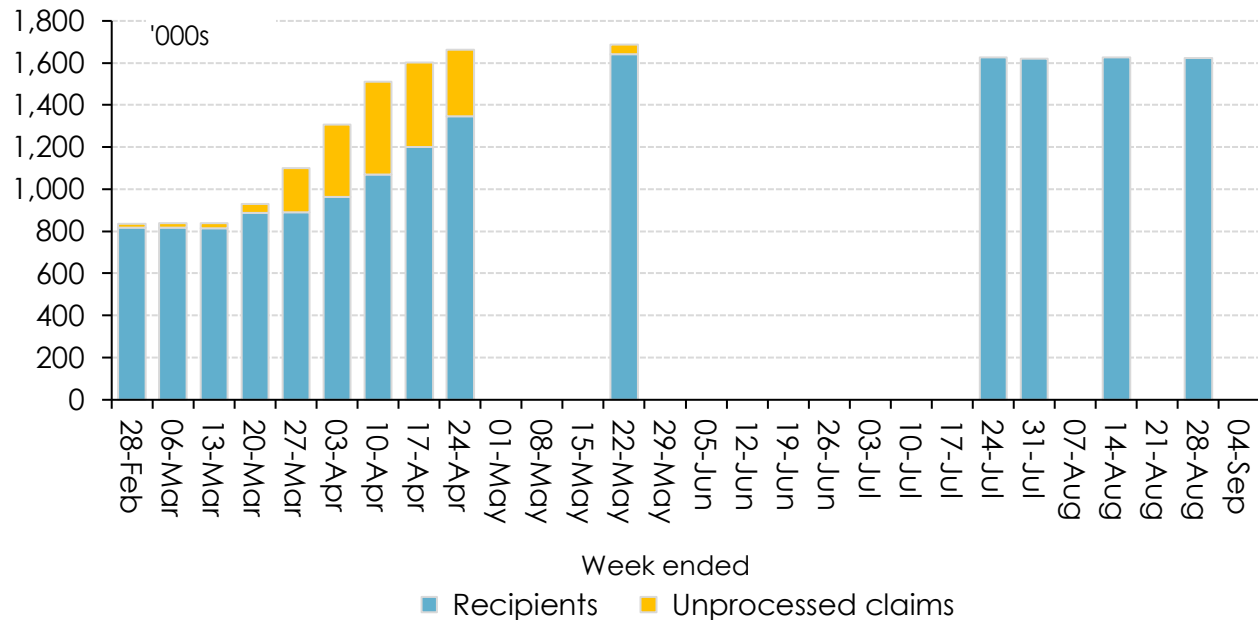
'Under-utilization' rate



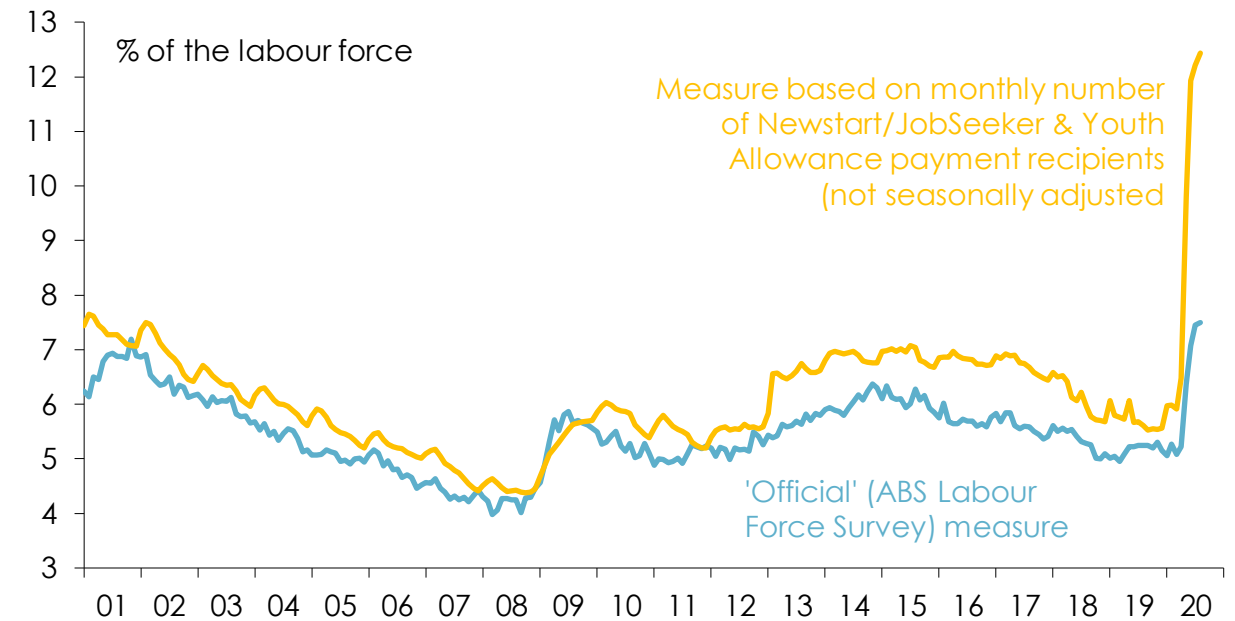
Note: The 'under-employment ratio' is the percentage of employed persons who are working fewer hours than they are willing and able to work. The 'under-utilization rate' is the proportion of the labour force who are unemployed or underemployed. Source: ABS, [Labour Force, Australia](#); September data will be released on 15th October.

The Australian Government (unlike the US Government) seems to regard weekly data on the number of joblessness beneficiaries as a 'state secret'

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



Jobless income support beneficiaries and labour force survey unemployed as a pc of the labour force

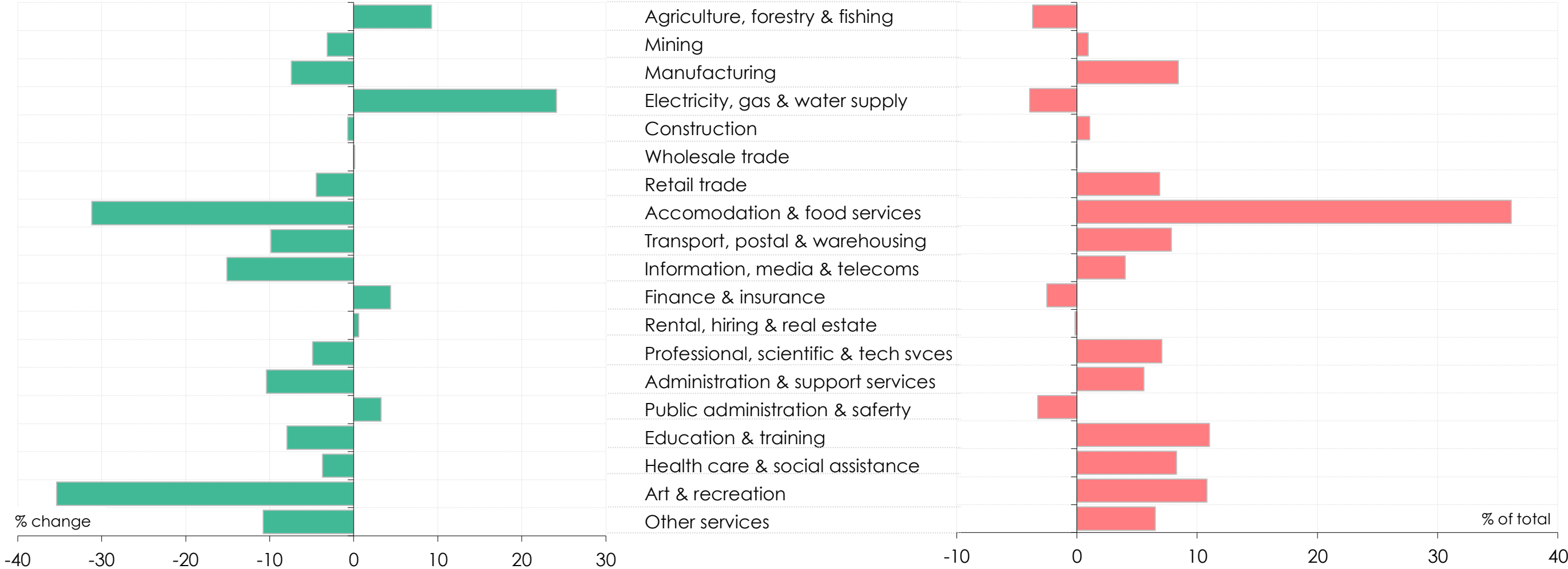


- ❑ The Department of Social Services (DSS) compiles weekly data on the number of people receiving JobSeeker and Youth Allowance (Other) payments, which are supplied to Ministers; historically, only monthly data has been made publicly available
- ❑ On two occasions earlier this year the Secretary of DSS provided weekly data to the Senate Select Committee on Covid-19, and on 29th July promised to provide fortnightly and monthly data to this Committee; however so far only three sets of data have been provided, the latest being for 28th August, and the Government is keeping the weekly data secret
- ❑ By contrast, the US Labor Department has been making the equivalent data (the 'initial claims' series) available every Thursday morning since 1968: there is no valid reason why Australia shouldn't do the same

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

Change in employment between February and March 2020, by industry

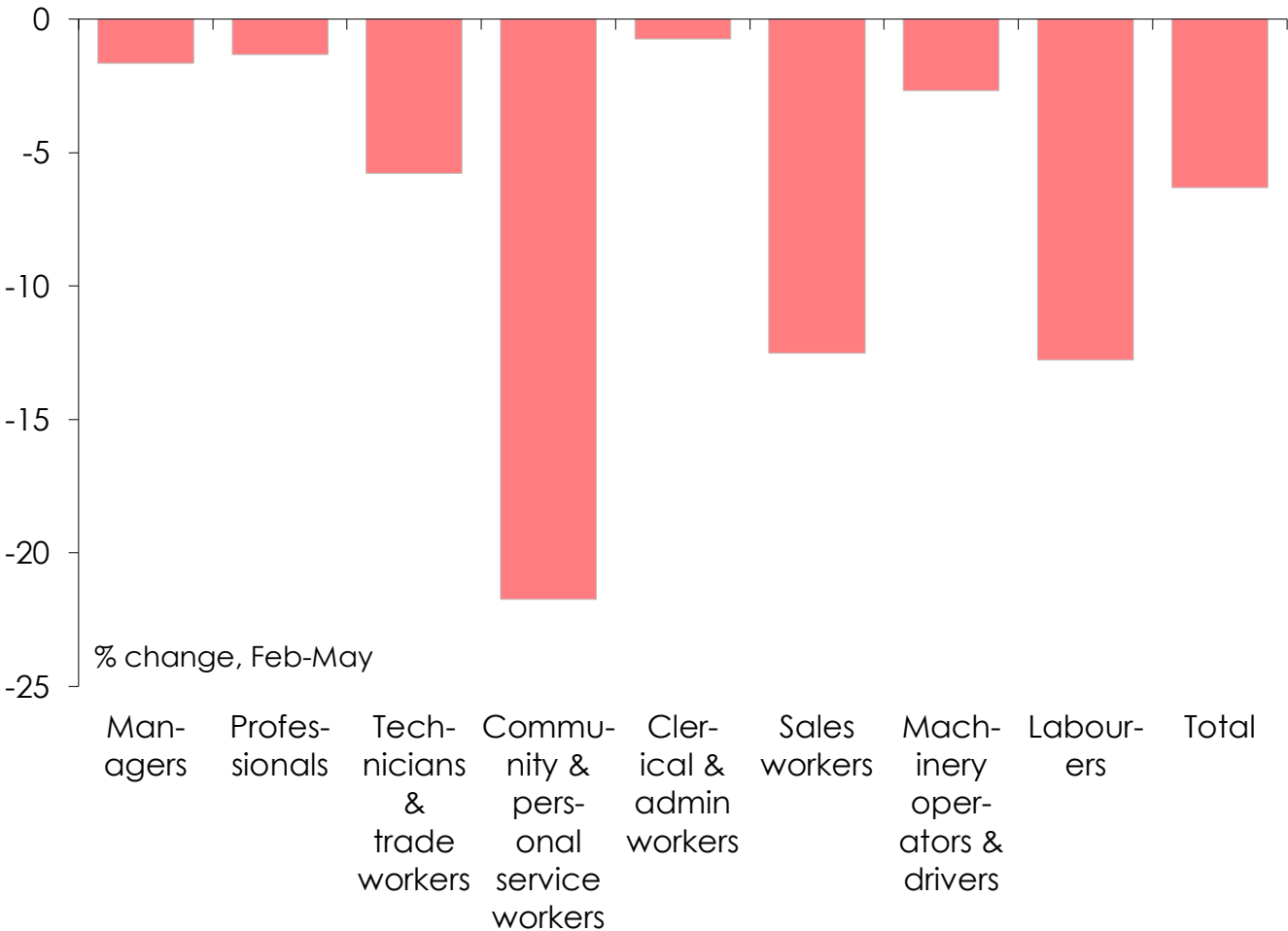
Proportion of change in total employment between February and March 2020, by industry



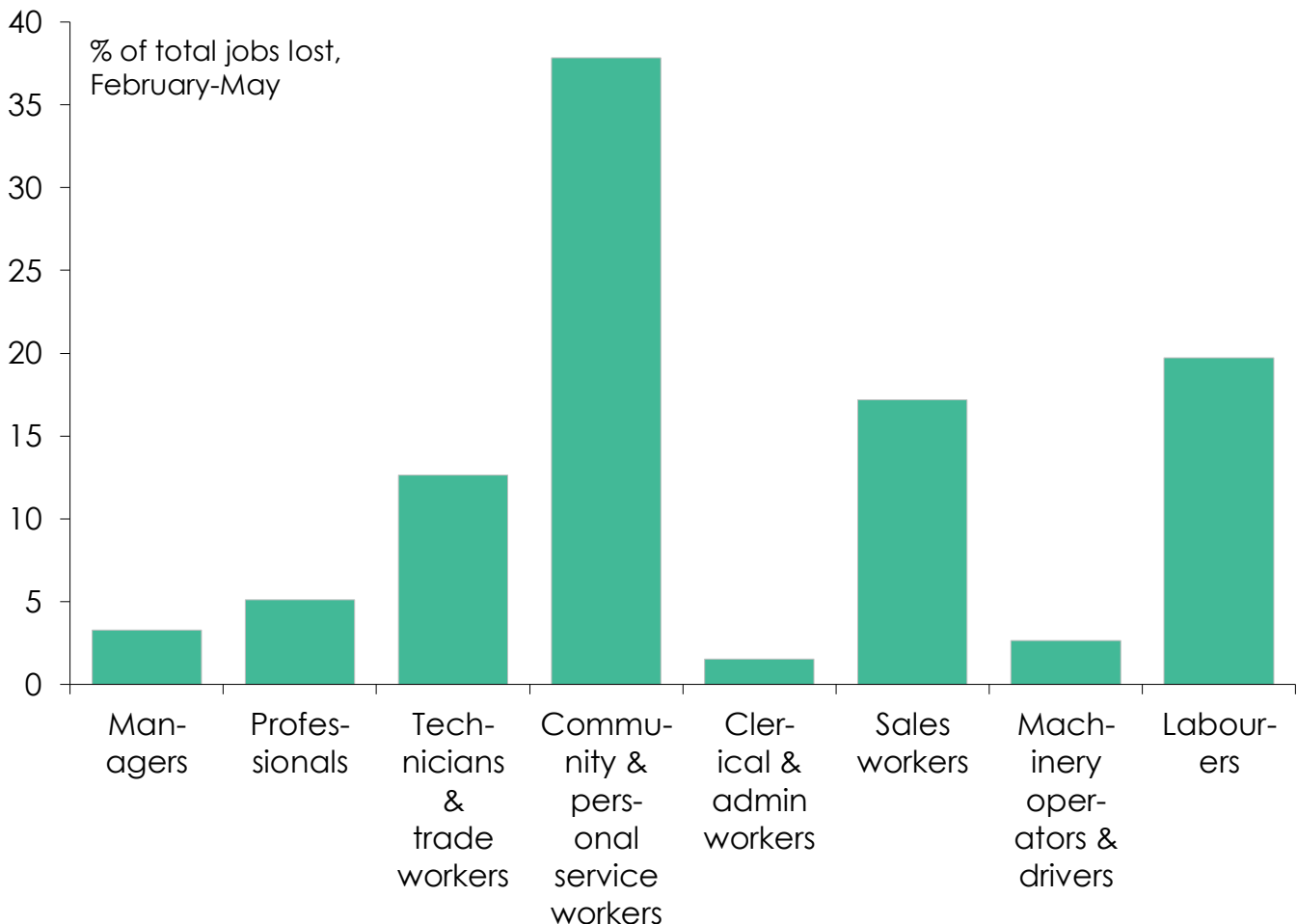
Note: The accommodation & food services, education & training, and arts & recreation services sectors accounted for 15% of total employment in February.
Source: ABS, [Labour Force, Australia, Detailed, Quarterly](#), May 2020. August data will be released on 24th September.

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



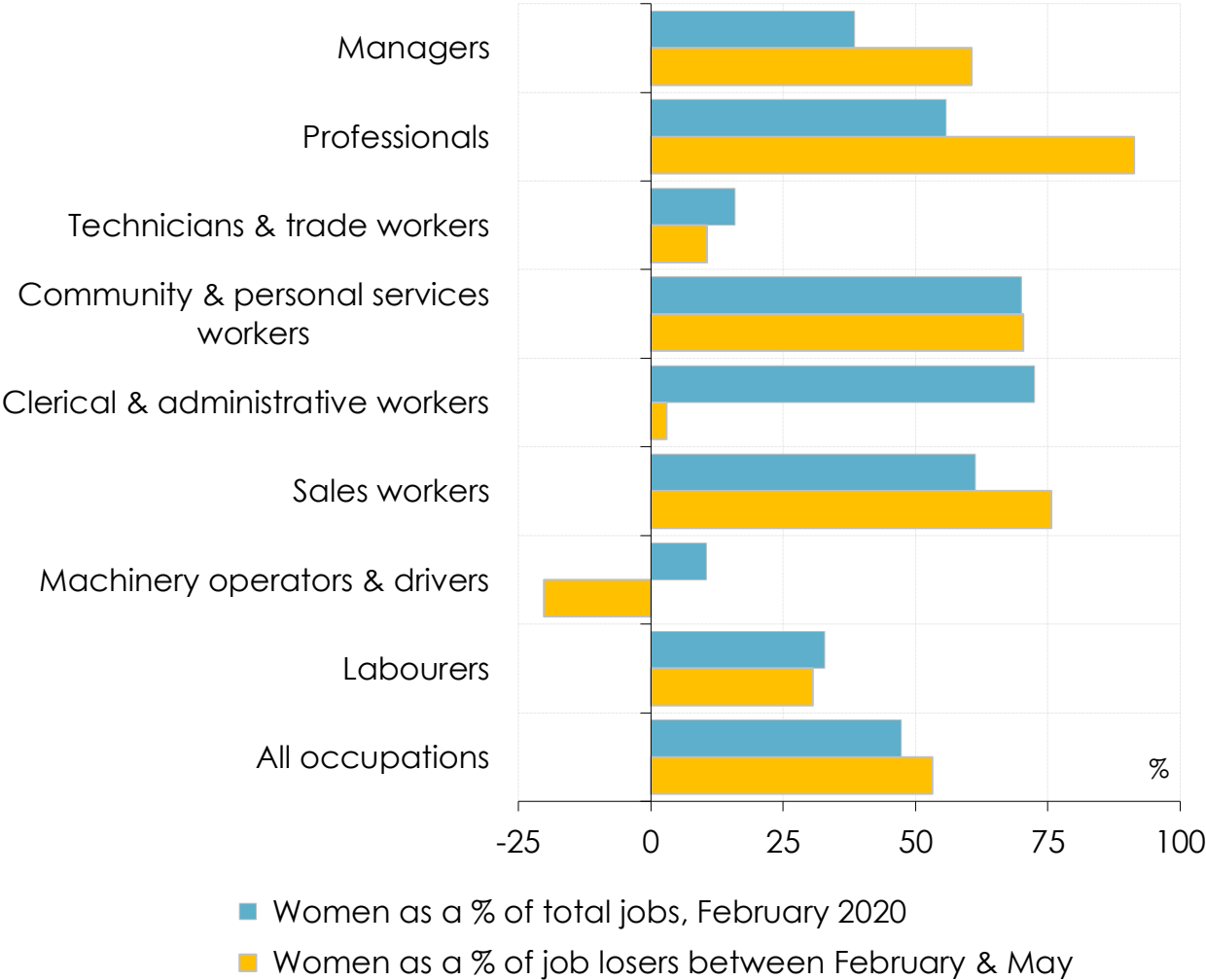
Proportion of change in total employment between February and March 2020, by occupation



Source: ABS, [Labour Force, Australia, Detailed, Quarterly](#), 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



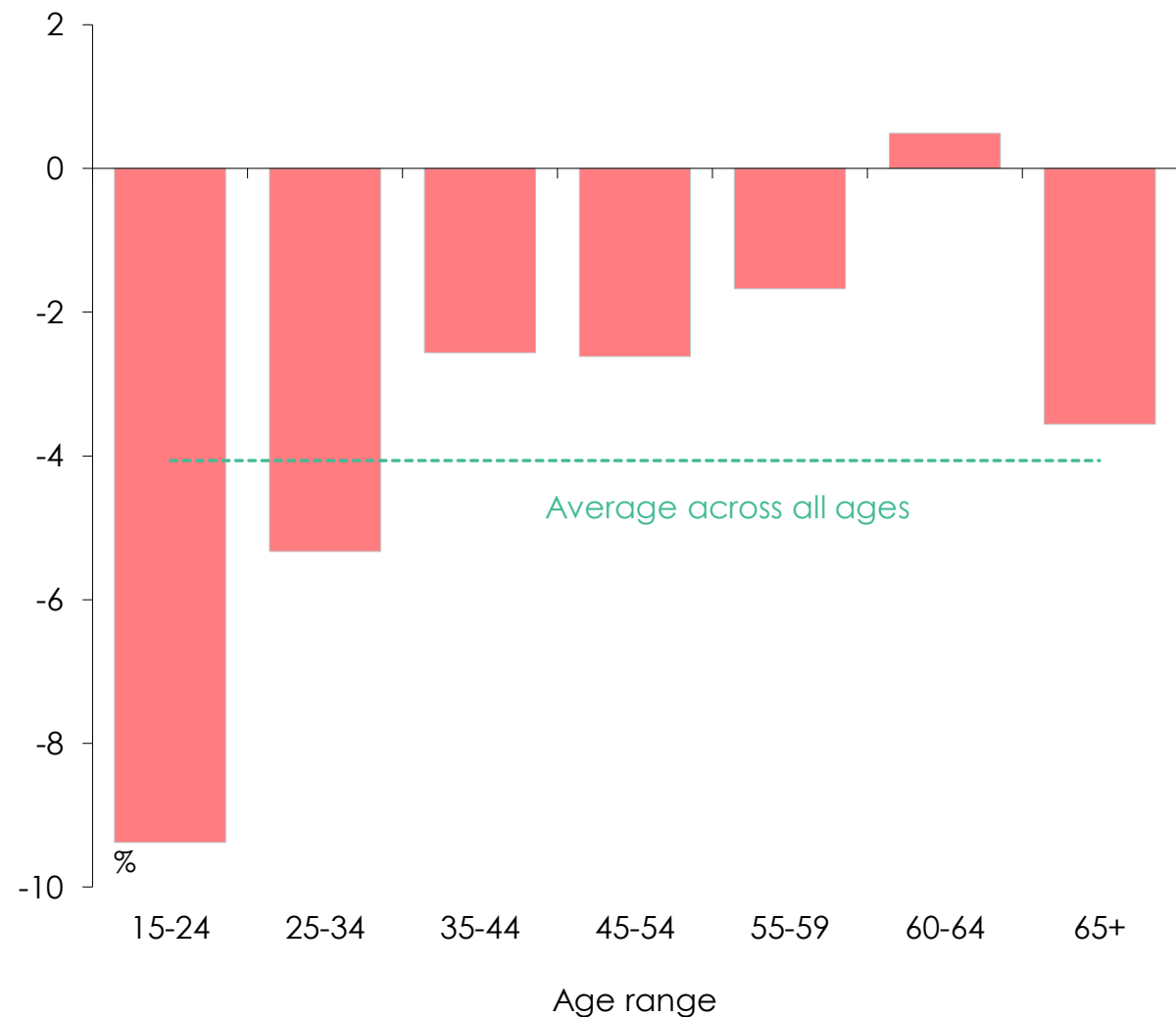
Women’s share of jobs in February, and of job losses since February, by industry



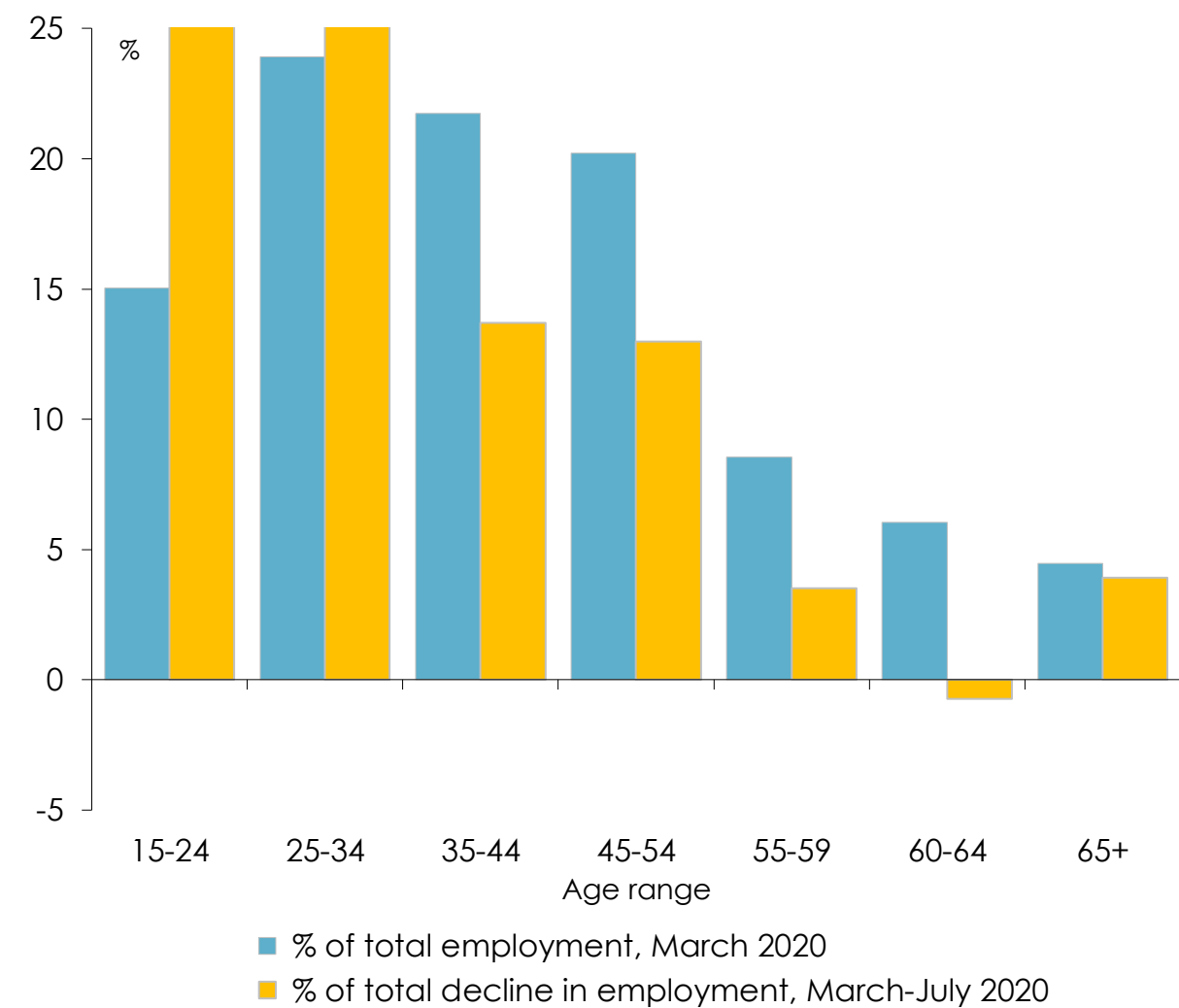
Note: Data depicted in these charts are not seasonally adjust. “nm” = “not meaningful”, because employment of women in the industry thus marked either increased between February and May 2020; or fell despite total employment in that industry rising between February and May.
Source: ABS, [Labour Force, Australia, Detailed, Quarterly](#), May 2020. August data will be released on 24th September.

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

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



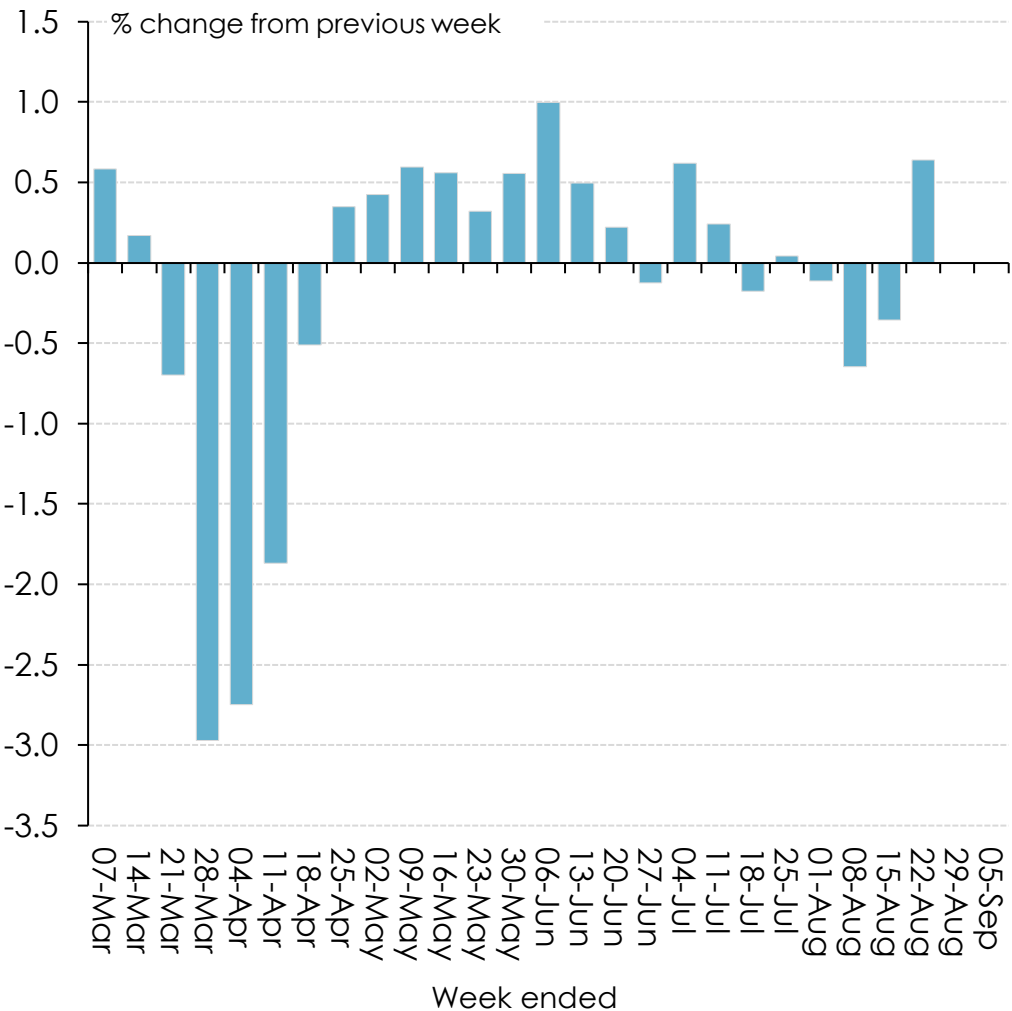
Share of total job losses between March and July 2020 and share of total employment in March, by age group



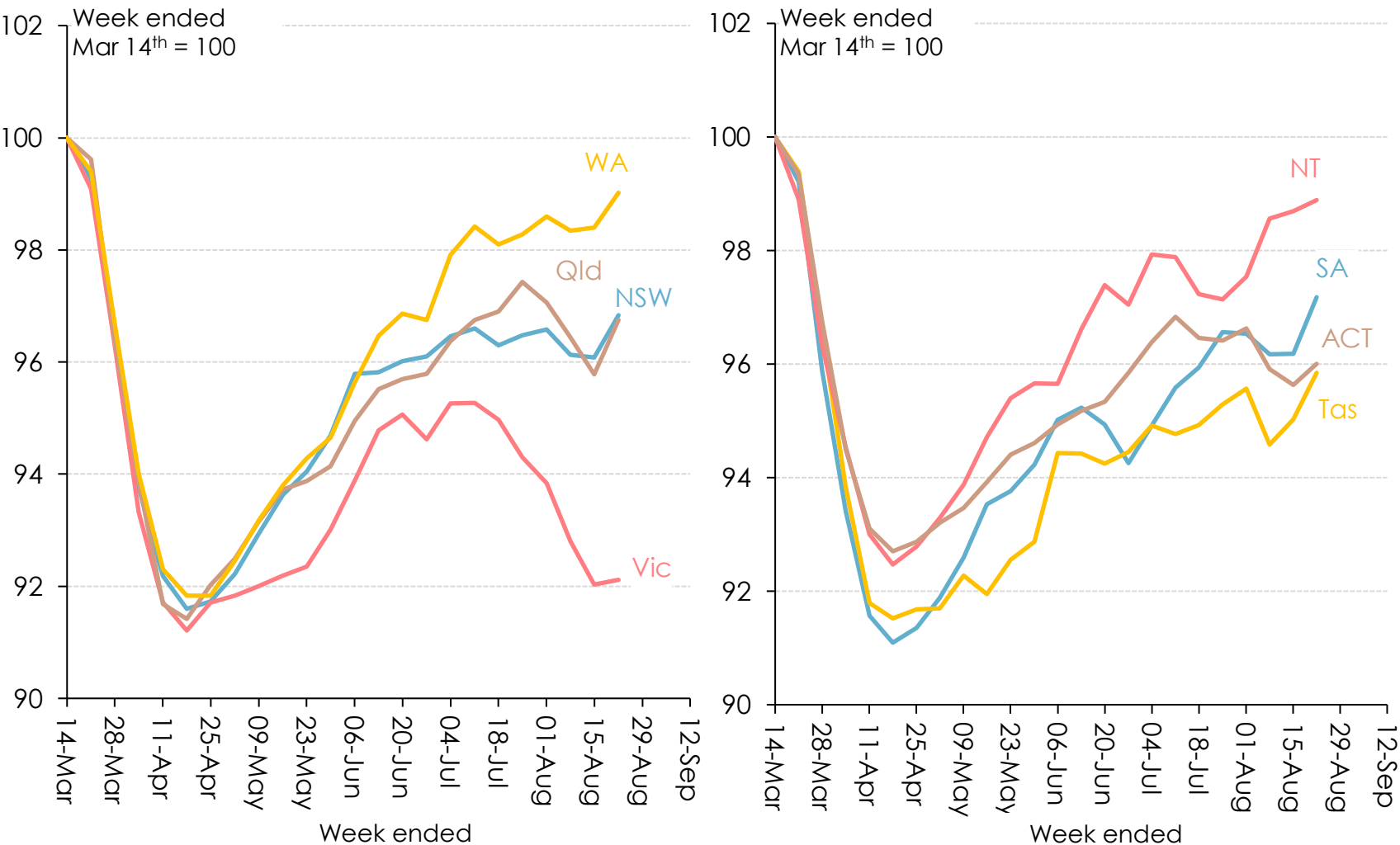
Source: ABS, [Labour Force, Australia - Detailed](#), July 2020; Corinna. August data will be released on 24th September.

Victoria continued to be a substantial drag on employment growth through mid-August, but in other states job number picked up in late August

Weekly change in number of payroll jobs



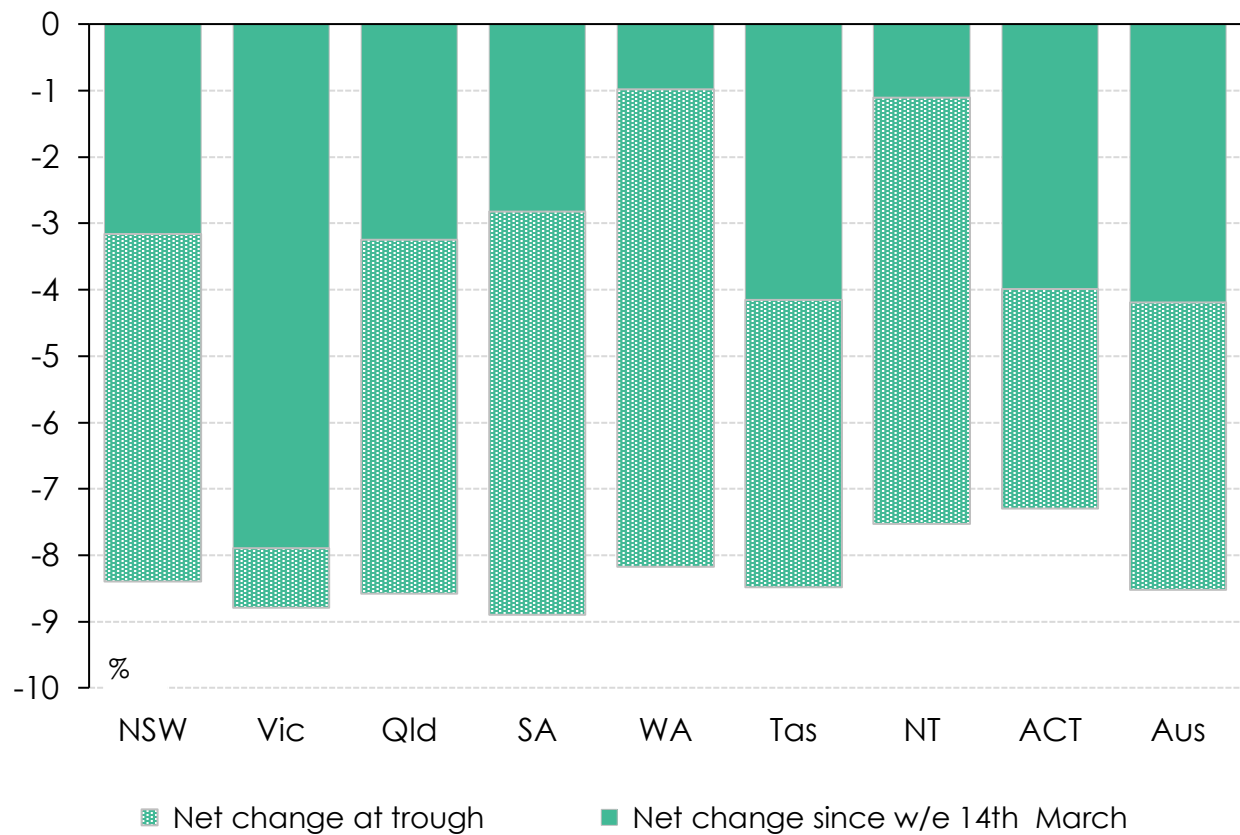
Payroll jobs by State & Territory



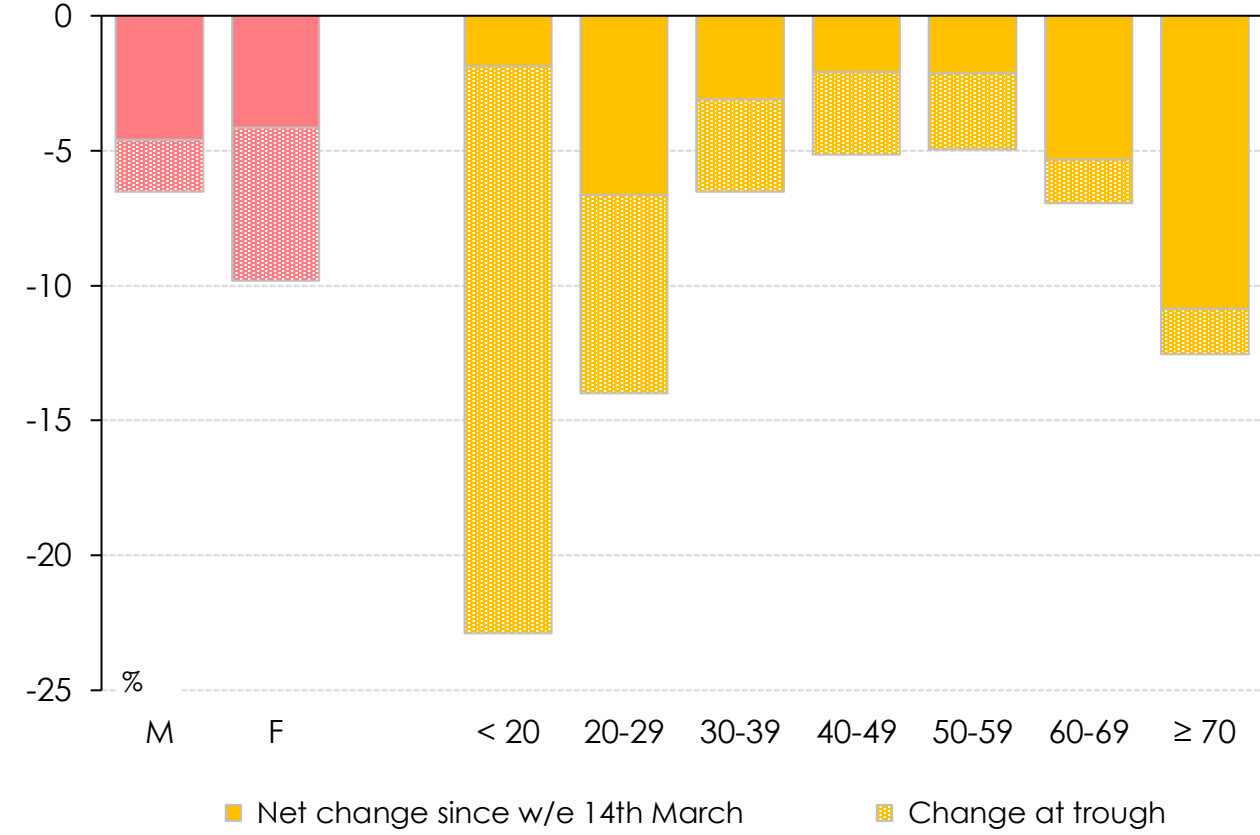
Source: ABS, [Weekly Payroll Jobs and Wages in Australia](#). Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's Singe Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. People with two 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 5th September will be released on 22nd September.

Victoria has experienced the largest net job losses, by a wide margin: but it's no longer true that women and young people 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



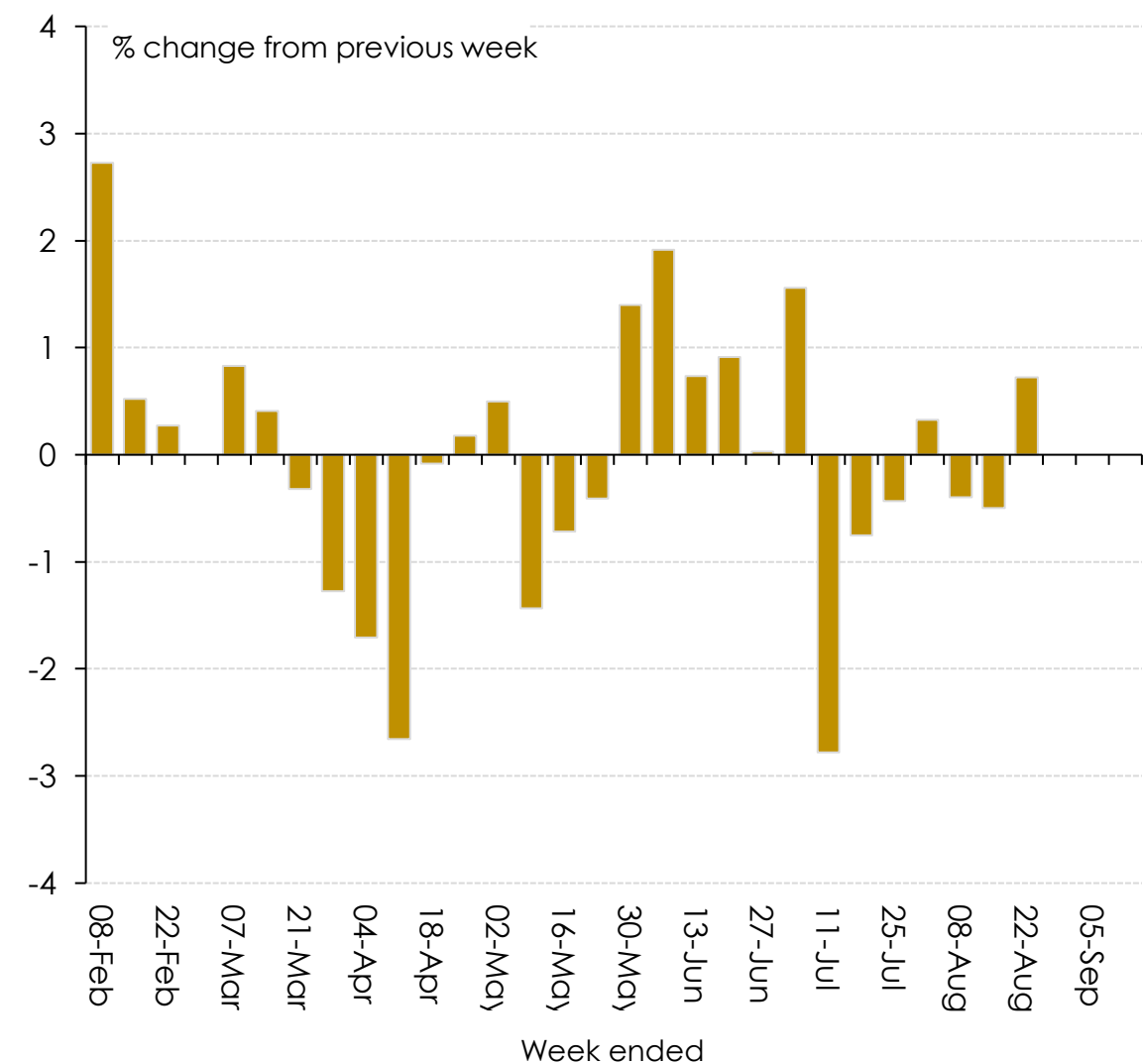
☐ **Vic payroll jobs are still down 8% on net from pre-pandemic: other states between 1% and 4¼%**

☐ **It's no longer the case that women and young people have borne the brunt of job losses**

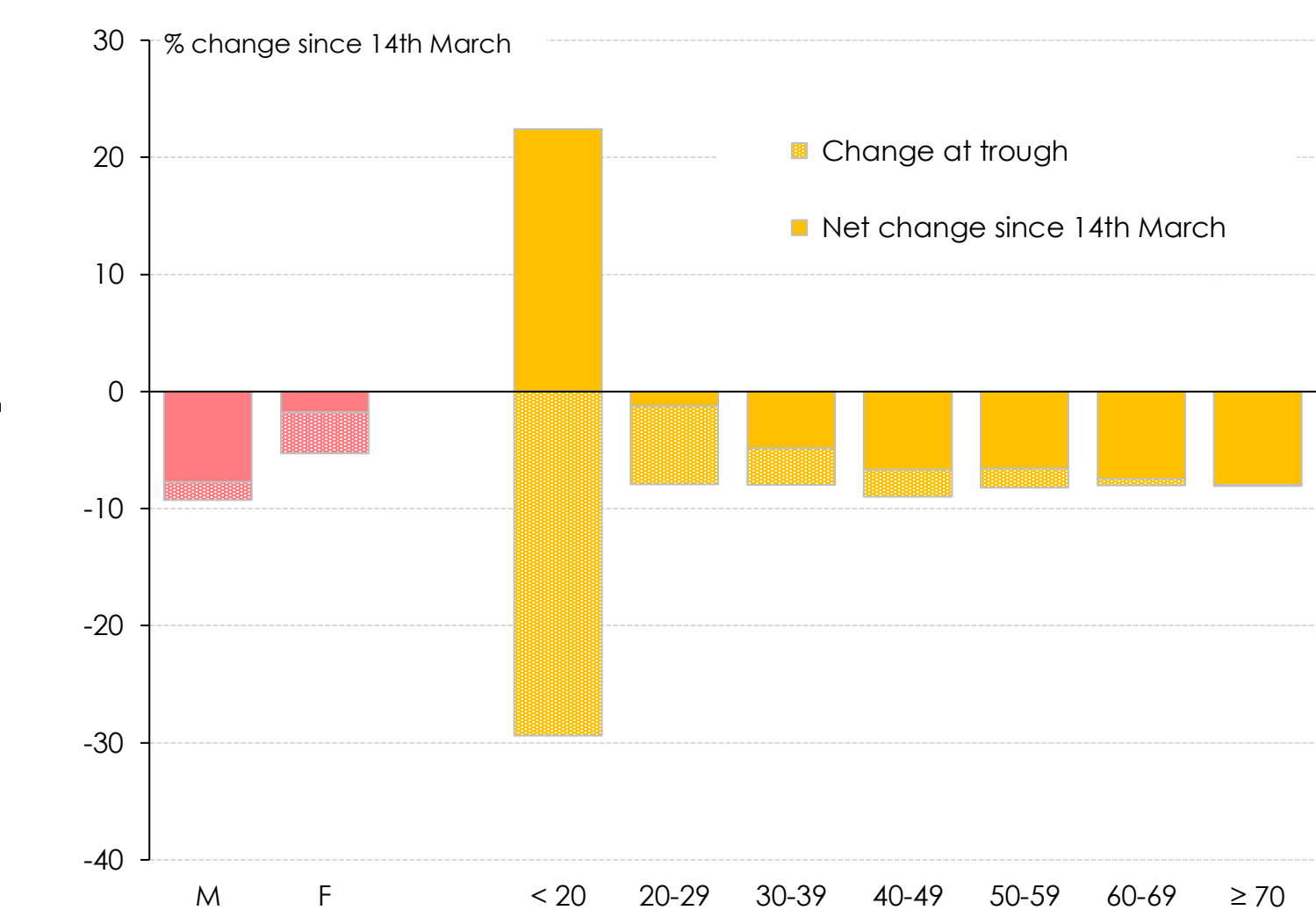
Source: ABS, [Weekly Payroll Jobs and Wages in Australia](#). Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's Single Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. People with 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 5th September will be released on 22nd September.

Wage payments rose 0.7% in the 3rd week of August after falling in five of the previous six weeks by a total of 4½%

Weekly change in total wages paid



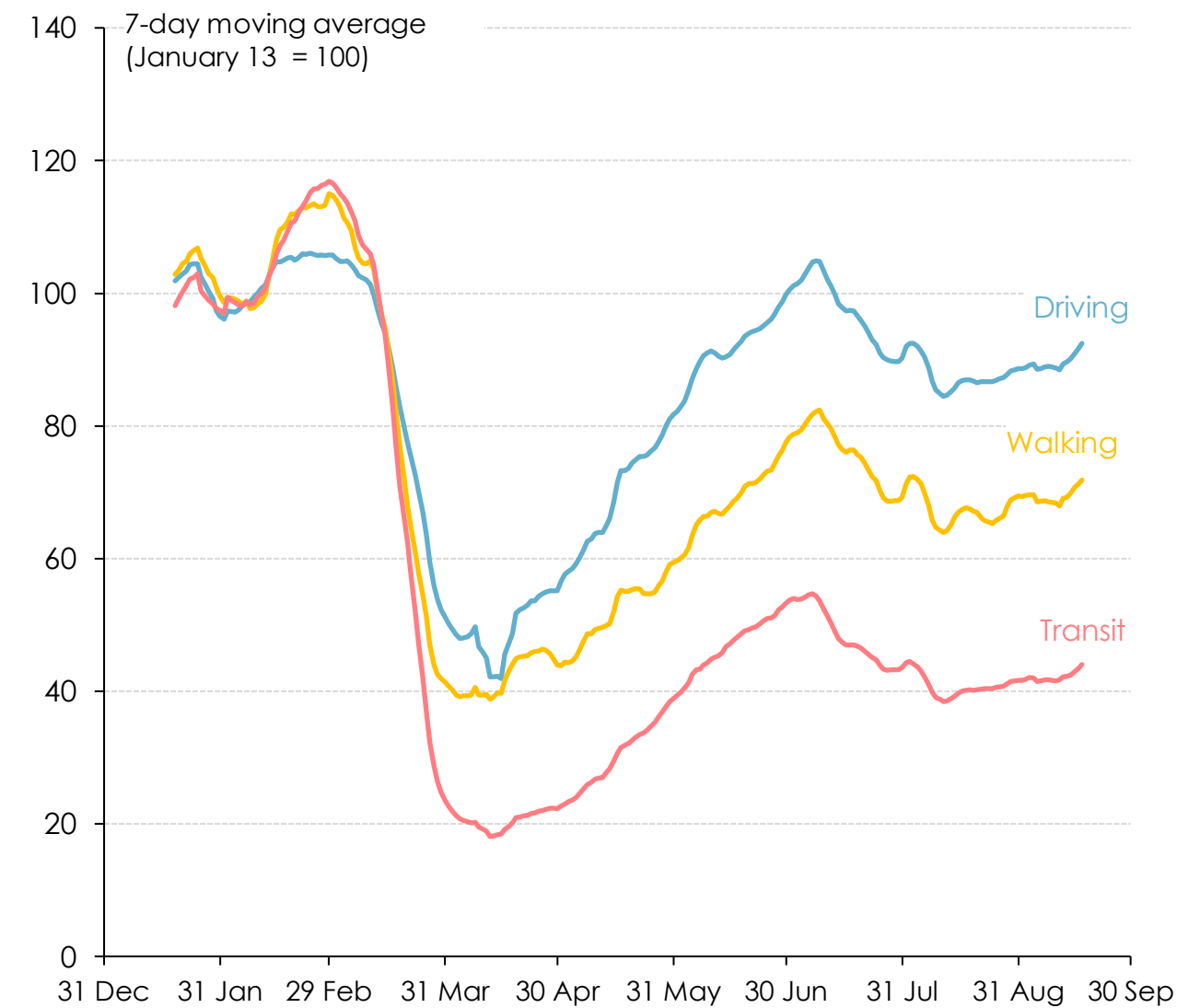
Change in total wages paid by gender and age group



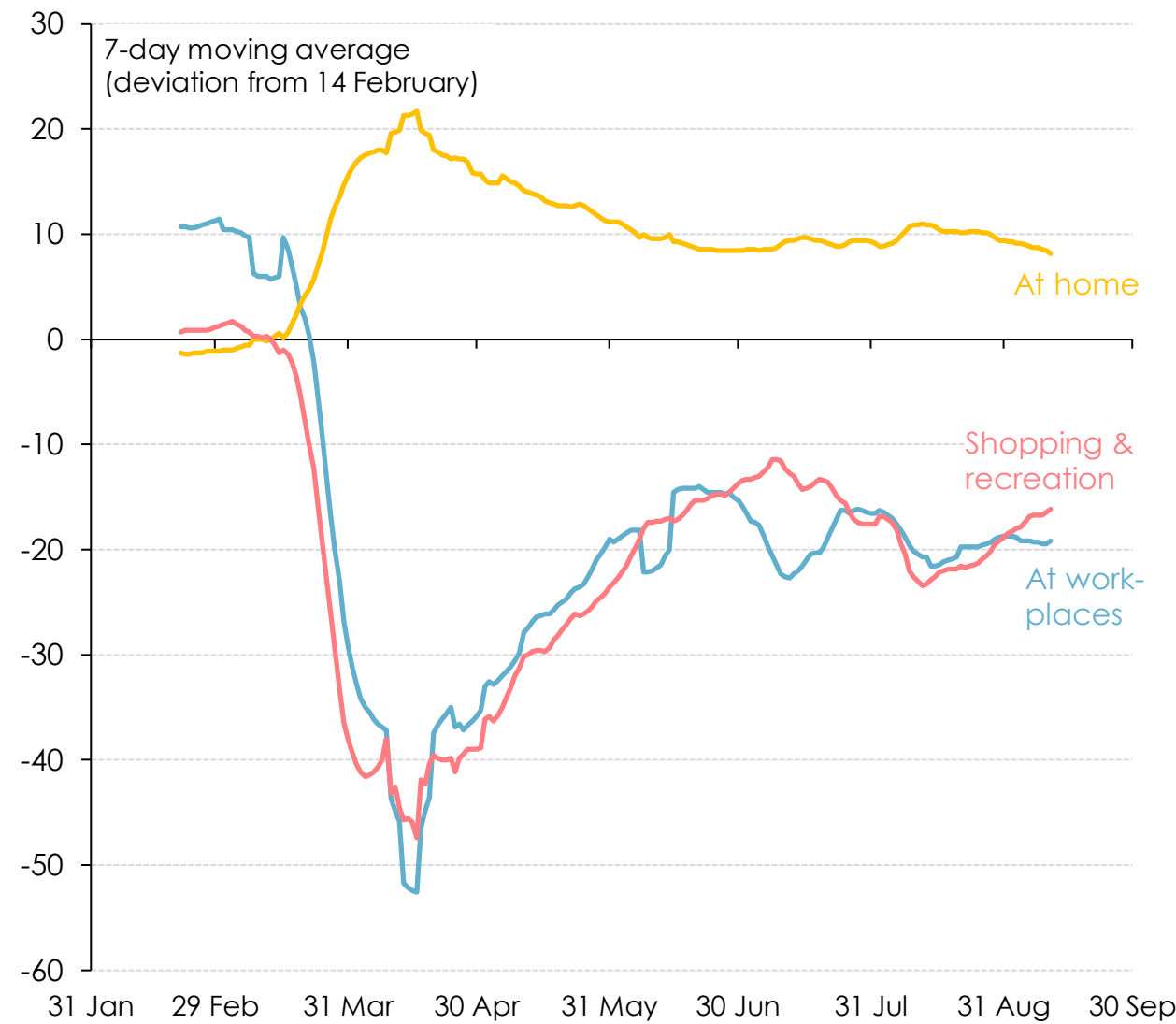
Note: The smaller fall in women's wages than men's likely reflects the fact that JobKeeper payments (at a flat rate of \$1500 per employee per fortnight) represent a higher proportion of women's (lower) average earnings than men's. Ditto for teenagers (most of whom work part-time). Source: ABS, [Weekly Payroll Jobs and Wages in Australia](#). '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).

There's been a slight increase in mobility over the past four weeks, after the decline due to the imposition of the stage 4 lockdown in Victoria

Time spent driving, walking and in transit



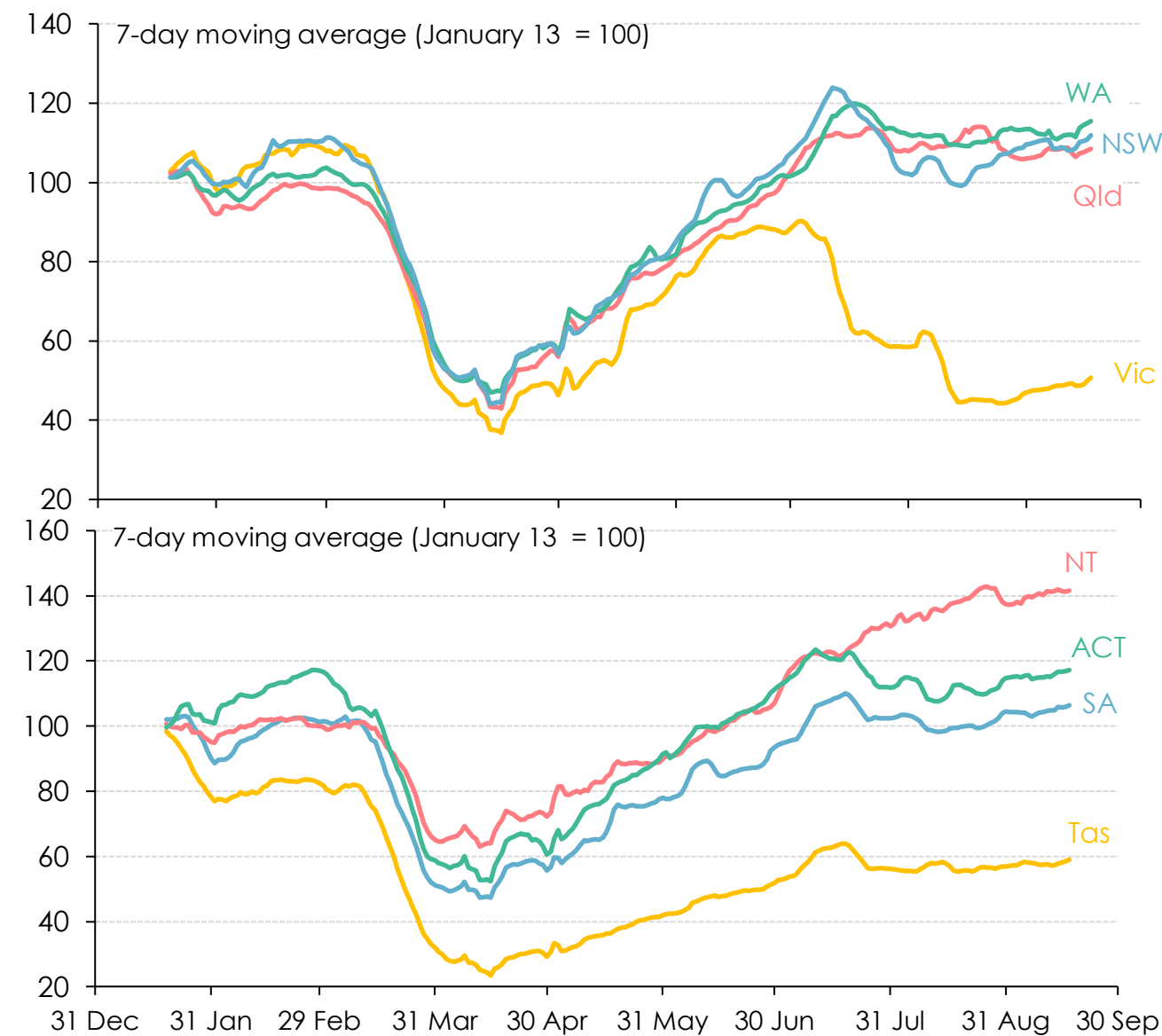
Time spent working, at home, shopping & playing



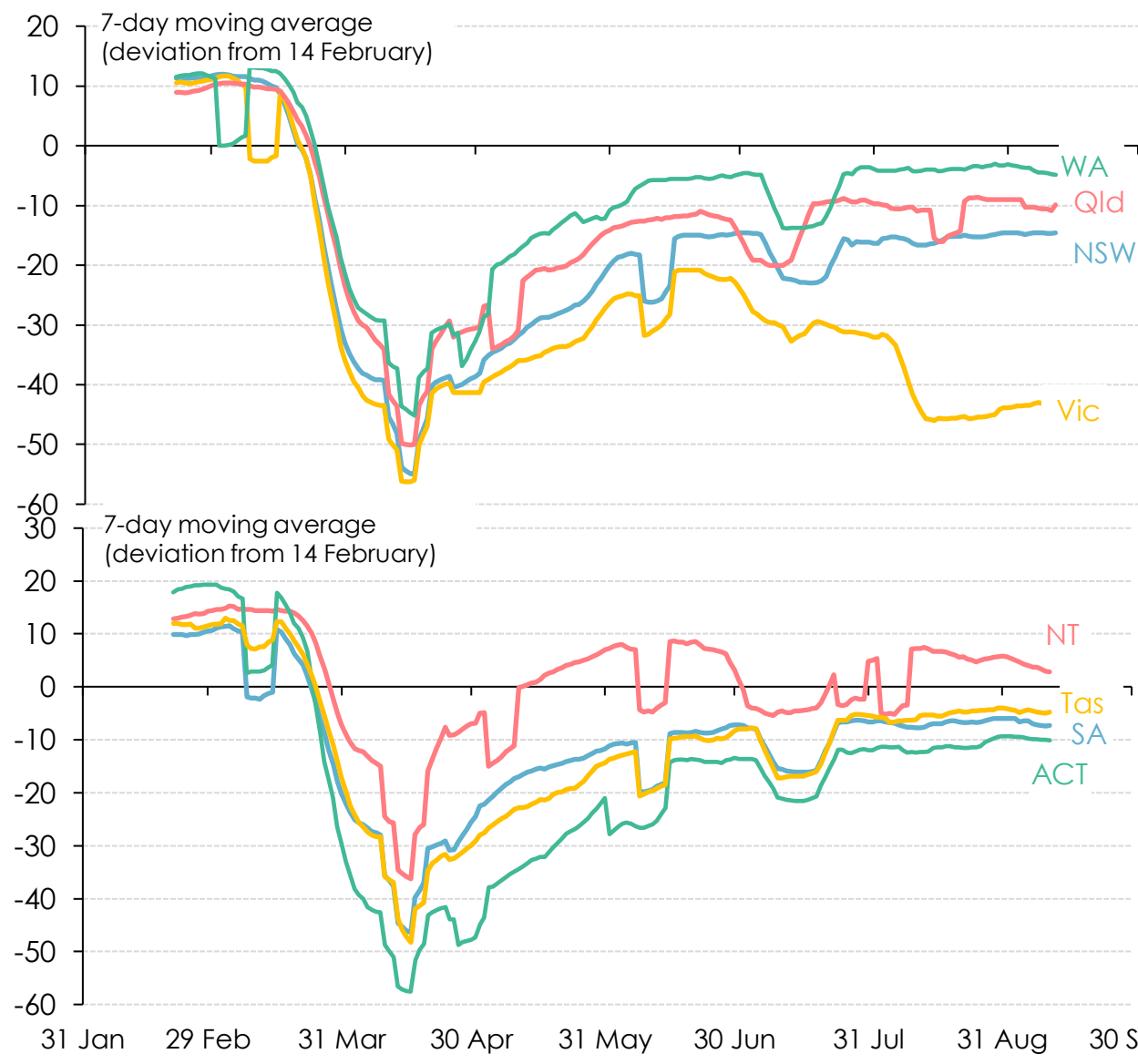
Note: 'transit' means using public transport. Note also that these data will reflect normal seasonal variations in activities as well as the effects of government restrictions and individual responses to the risks posed by the virus. Sources: [Apple Mobility Trends Reports](#) (data up to 16th September); [Google Community Mobility Reports](#) (data up to 11th September). For state-level data see [next slide](#).

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

Time spent driving, by State and Territory



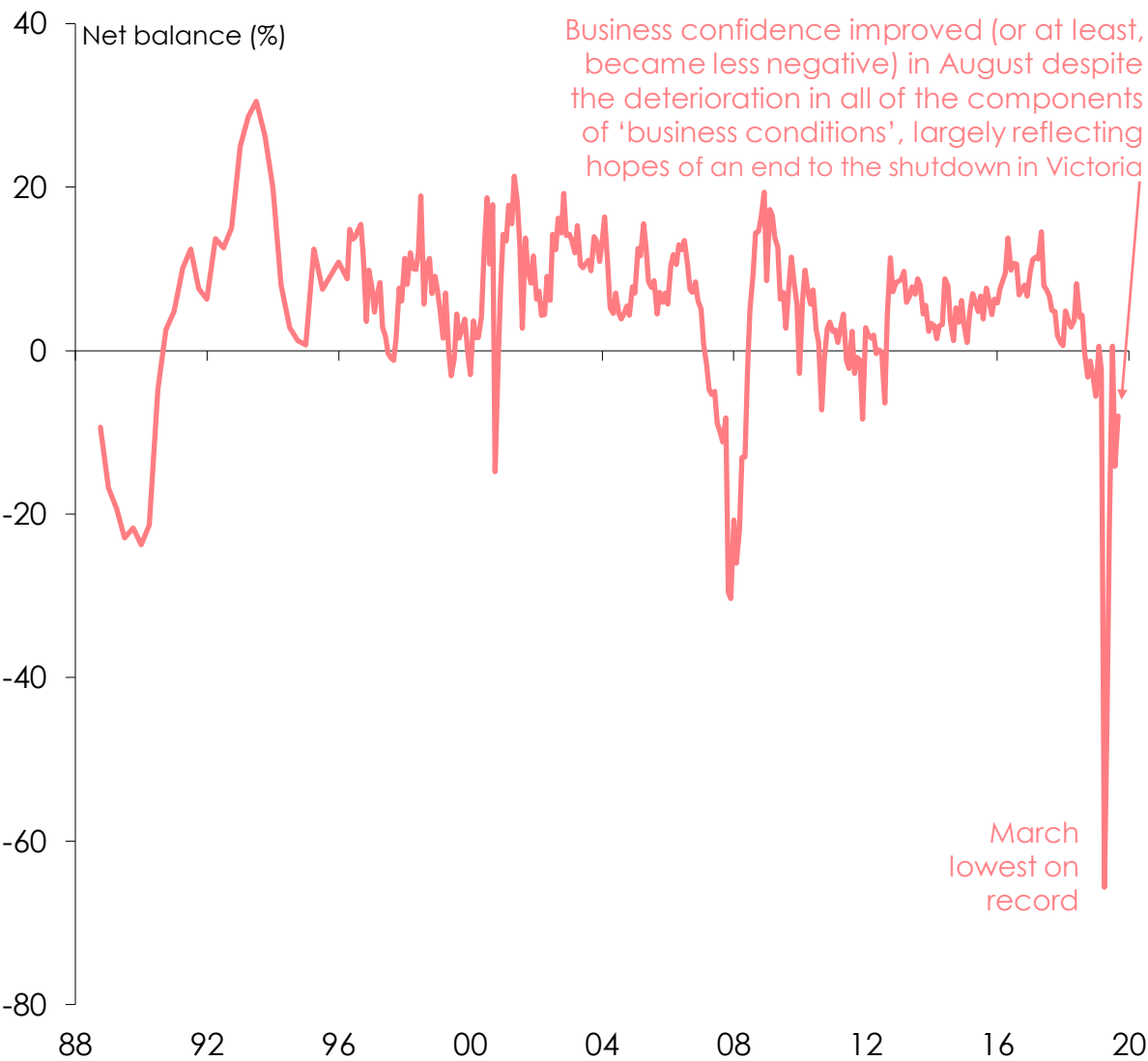
Time spent working, by State and Territory



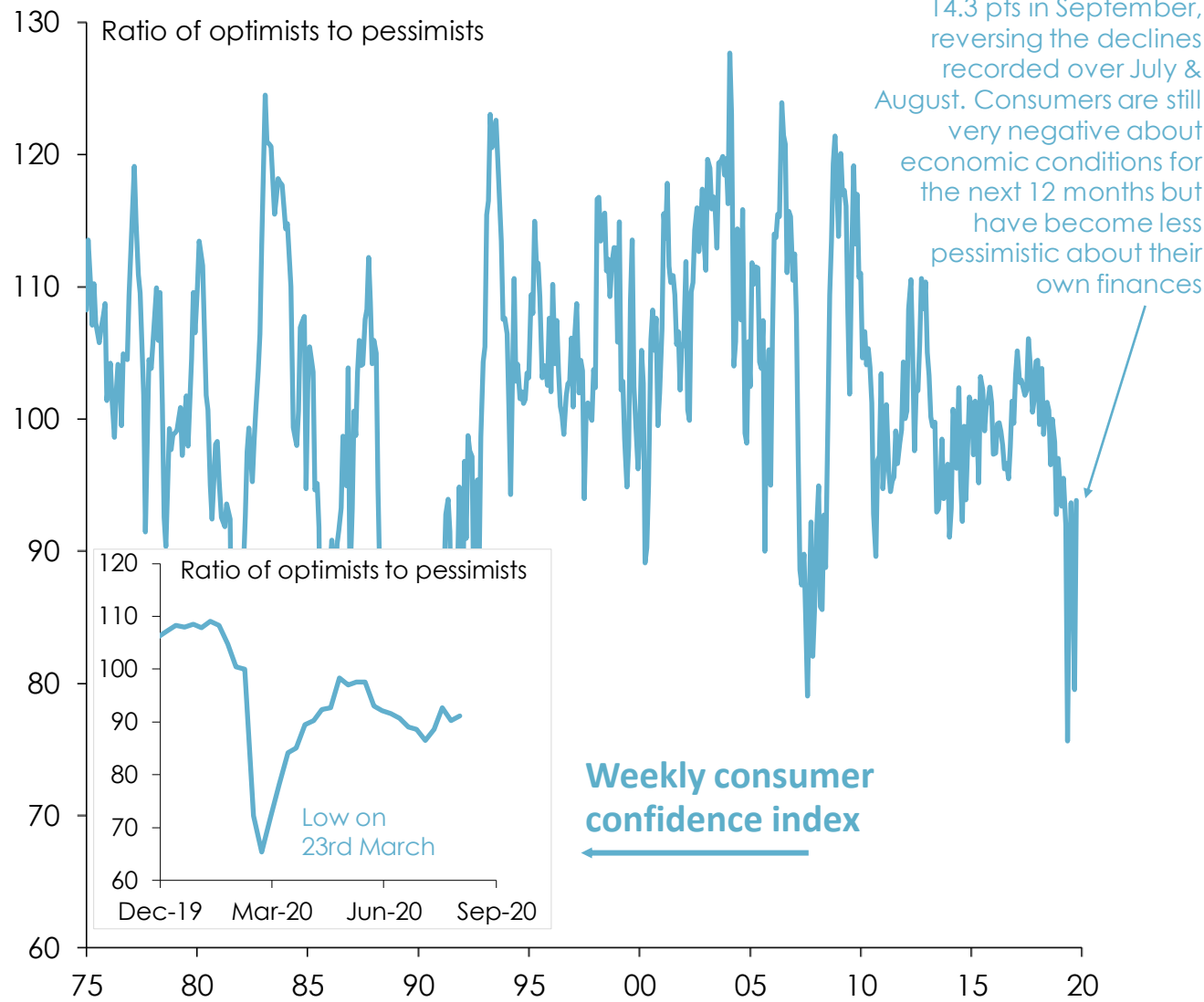
Note: these data will reflect normal seasonal variations in activities as well as the effects of government restrictions and individual responses to the risks posed by the virus. Sources: [Apple Mobility Trends Reports](#) (data up to 16th September); [Google Community Mobility Reports](#) (data up to 11th September).

Business confidence improved a bit in August but remains weak by historical standards, consumer confidence improved in September

Business confidence

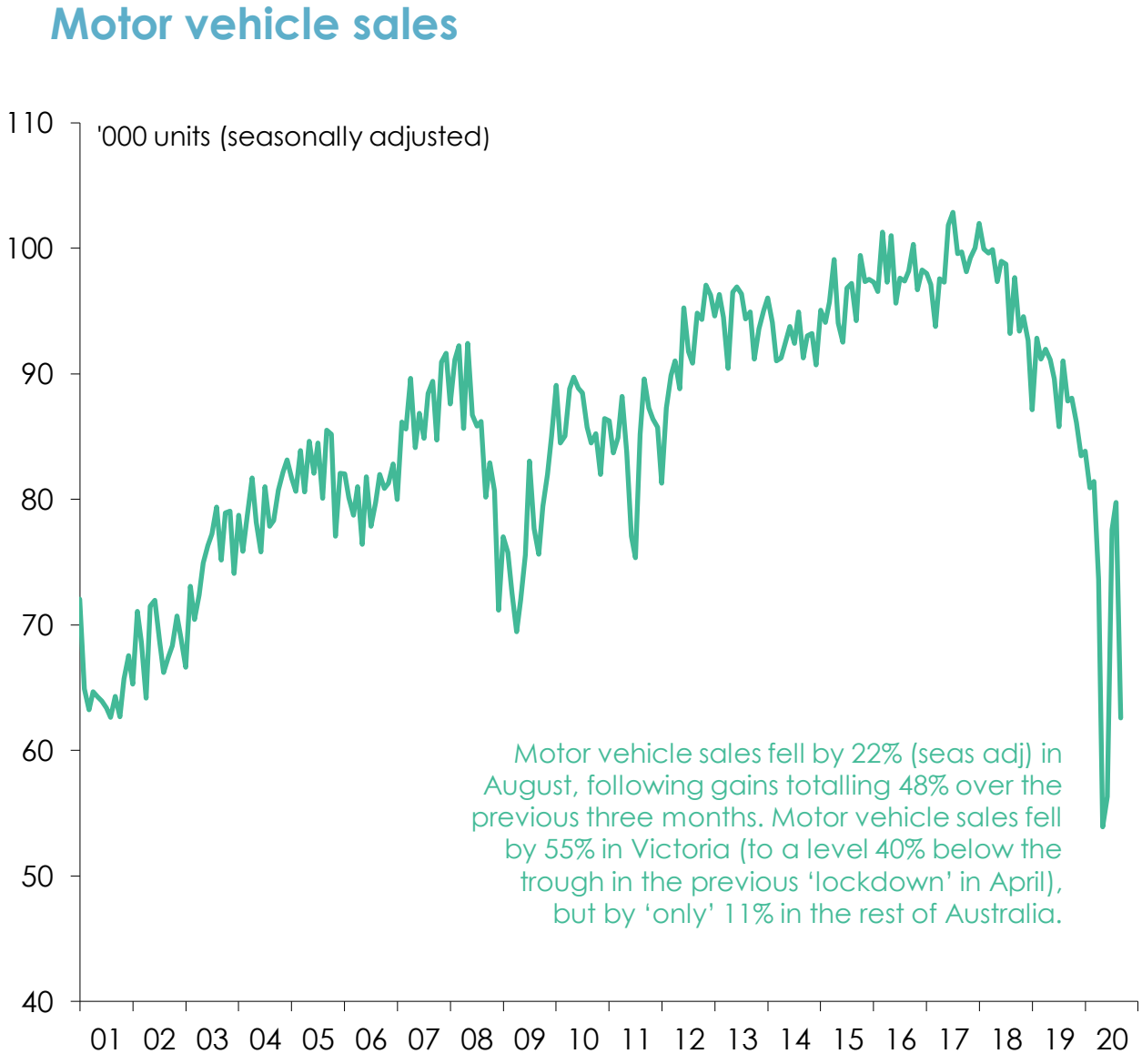
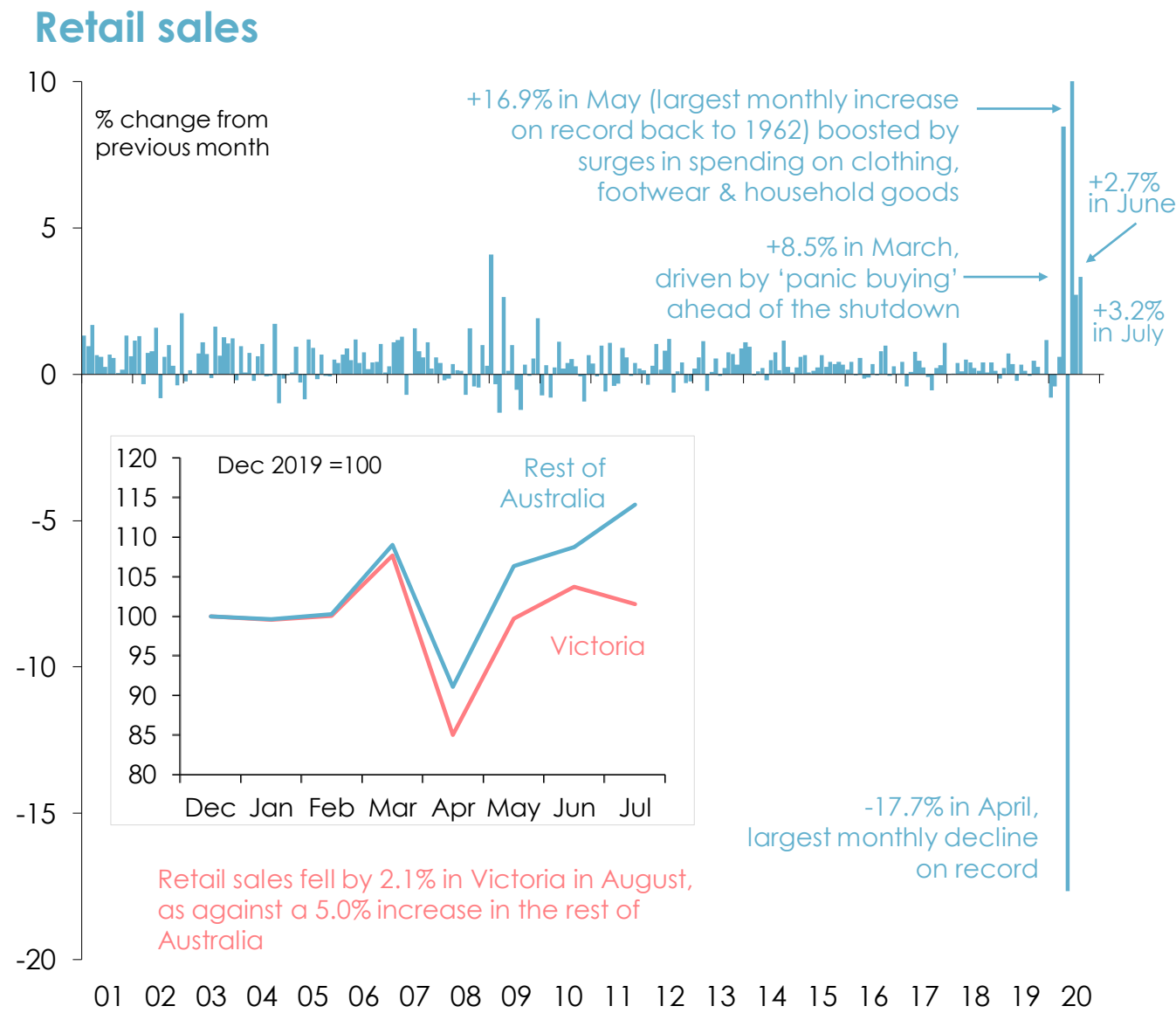


Consumer confidence



Sources: National Australia Bank; Westpac-Melbourne Institute; ANZ-Roy Morgan (weekly index). See [slide 63](#) for other components of the NAB monthly business survey from which the business confidence figure is derived. September business confidence data will be released on 5th October, and October business confidence on 7th October.

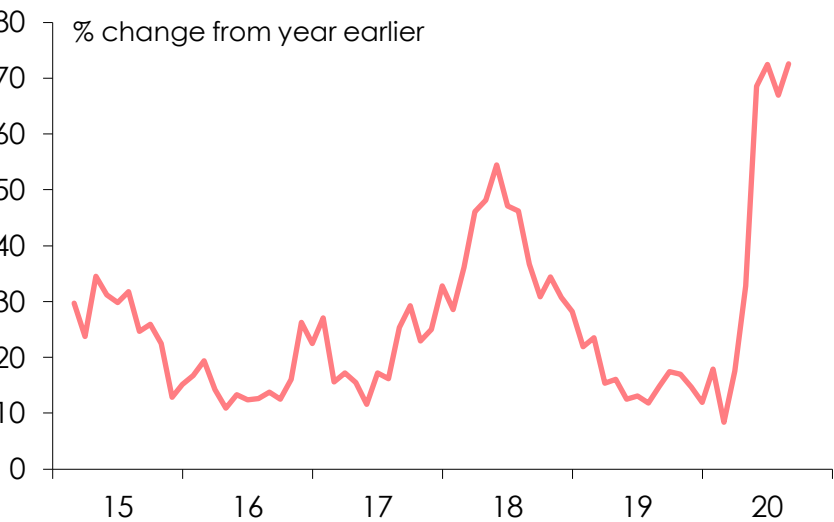
Retail sales rose 3.2% in July (despite a 2% fall in Victoria), while motor vehicle sales fell 22% in August (dragged down by a 55% slump in Victoria)



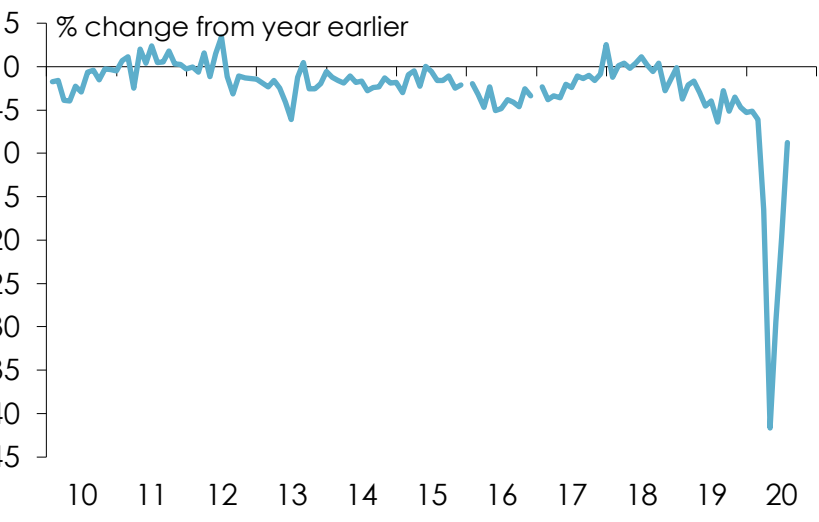
Sources: ABS, [Retail Trade, Australia](#); Federal Chamber of Automotive Industries [VFACTS](#) (seasonal adjustment of FCAI data by Corinna). Retail sales data are up to July and motor vehicle sales to August. Preliminary retail sales data for August will be released on 23rd September, and final data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

The pandemic and lockdown prompted some dramatic changes in how Australians made payments, accelerating trends already under way

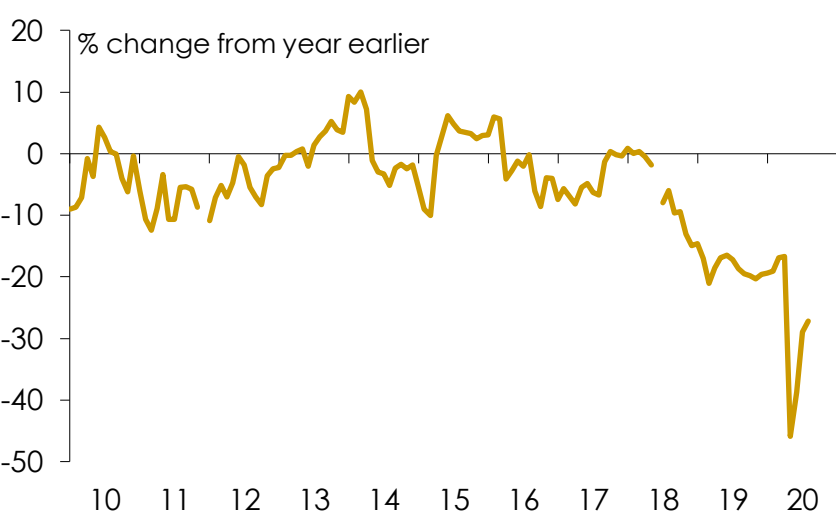
Growth in online retail sales



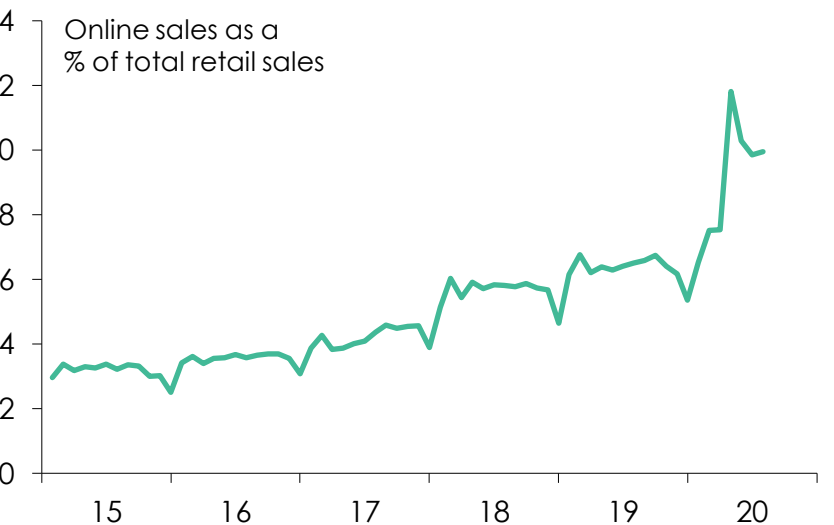
ATM cash withdrawals



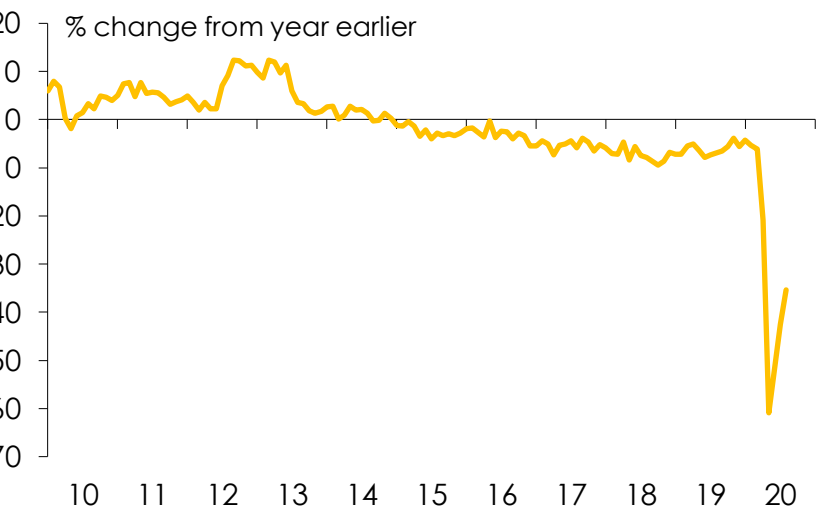
Credit card cash advances



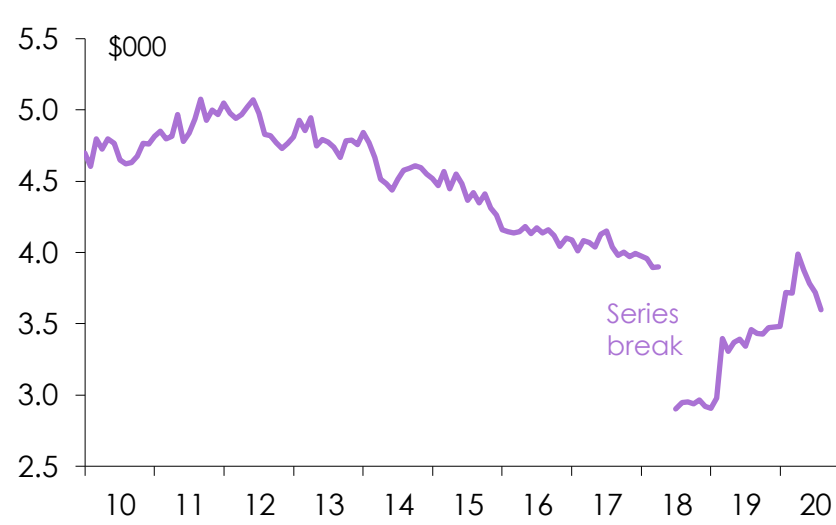
Online retail 'market share'



Debit card cash-outs



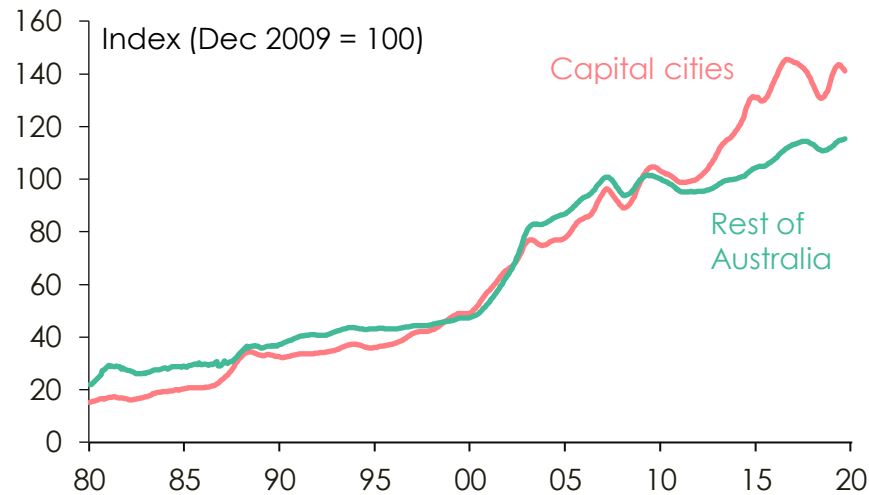
Direct entry payments



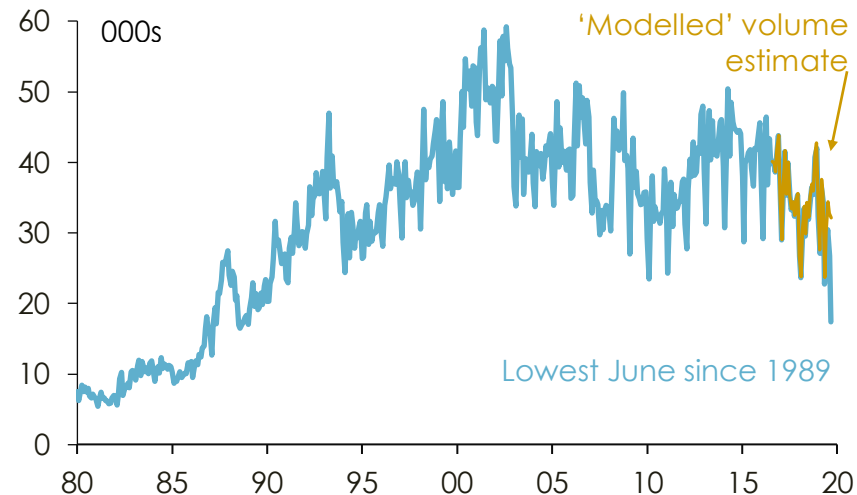
Sources: ABS, [Retail Trade, Australia](#); RBA, [Statistical Tables](#), C1, C2, C4 and C6. Latest data are for July; online retail sales data for August will be released on 2nd October, and payments system data for August on 8th October.

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

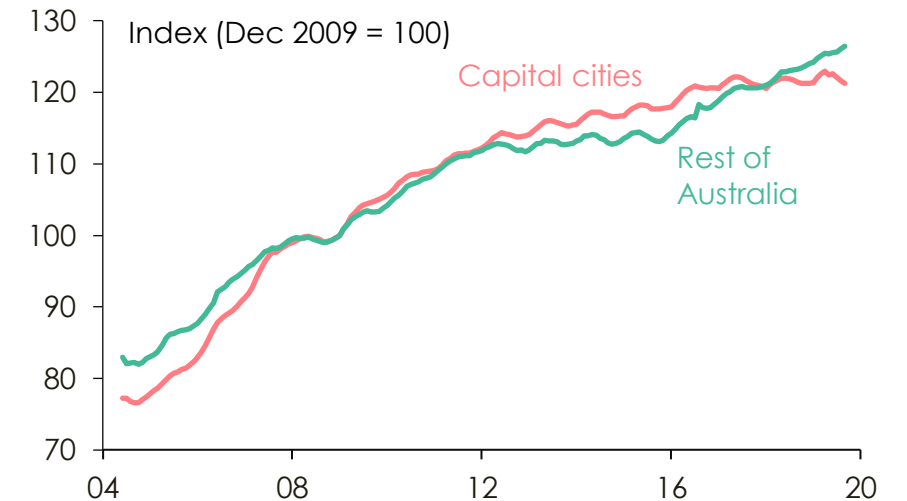
Residential property prices



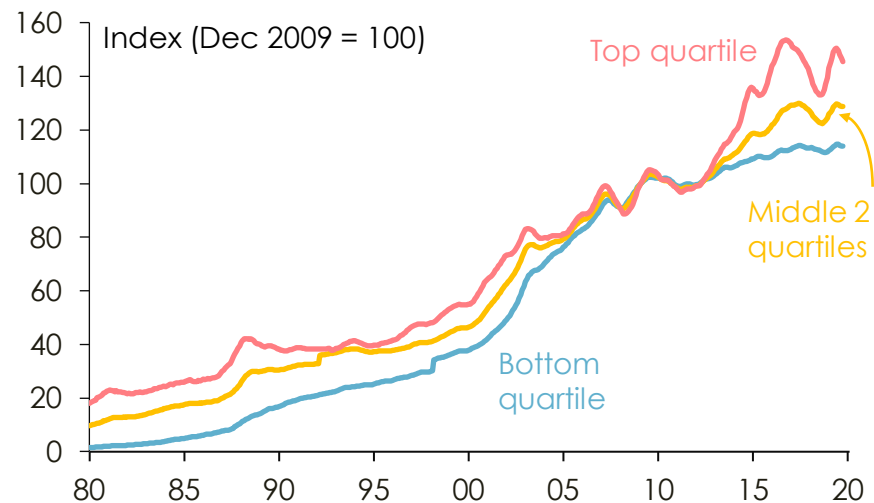
Residential property sales volumes



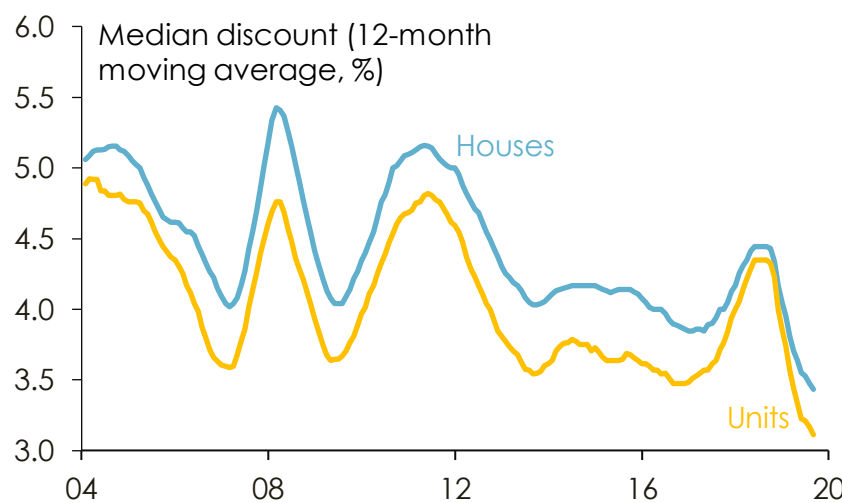
Residential rents



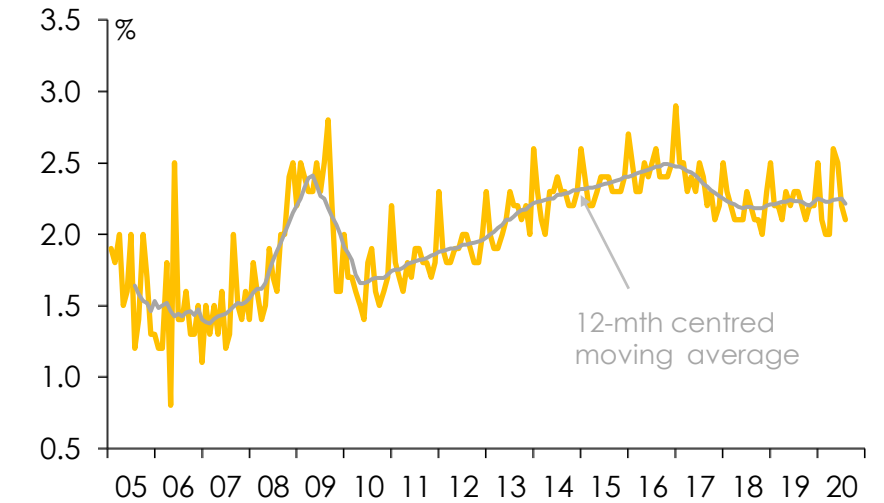
Property prices by tier



Vendor discounting



Capital city rental vacancy rates

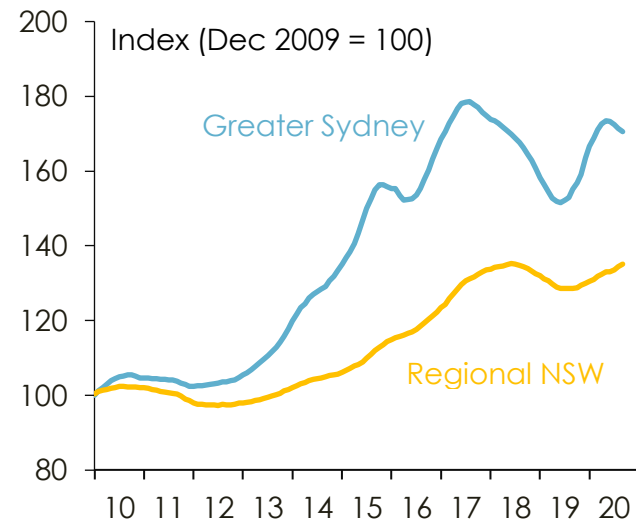


Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Property price data are now seasonally adjusted. The index of residential rents uses a similar methodology to measure the 'organic' change in underlying rents. The 'modelled' sales volume estimates seek to account for delays in receiving information on transactions that have yet to settle (which can be more than six weeks after the contract date). Latest data are for August 2020; September data will be released on 1st October

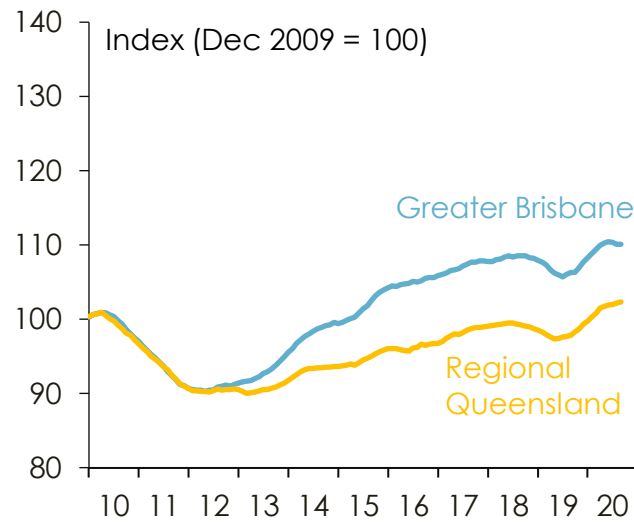
Sources: [CoreLogic](#); [SQM Research](#).

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

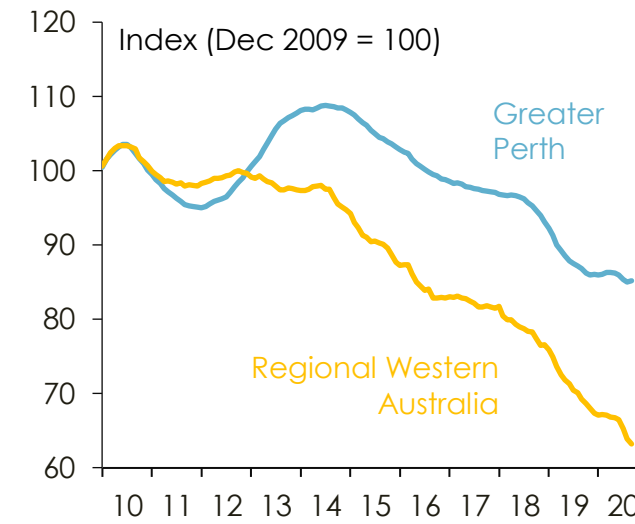
New South Wales



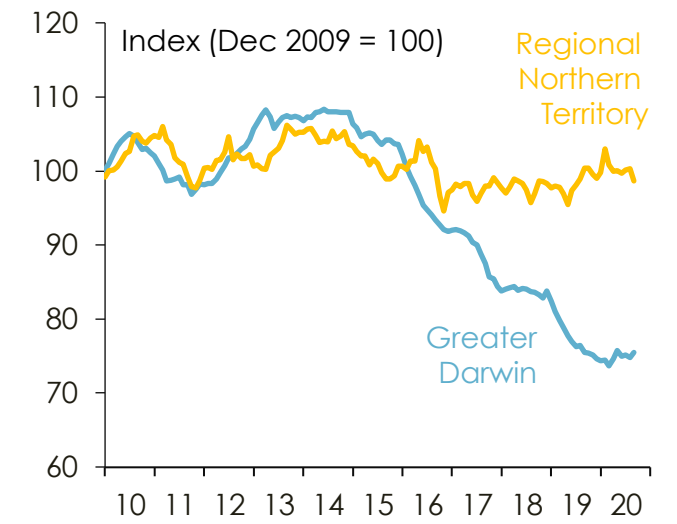
Queensland



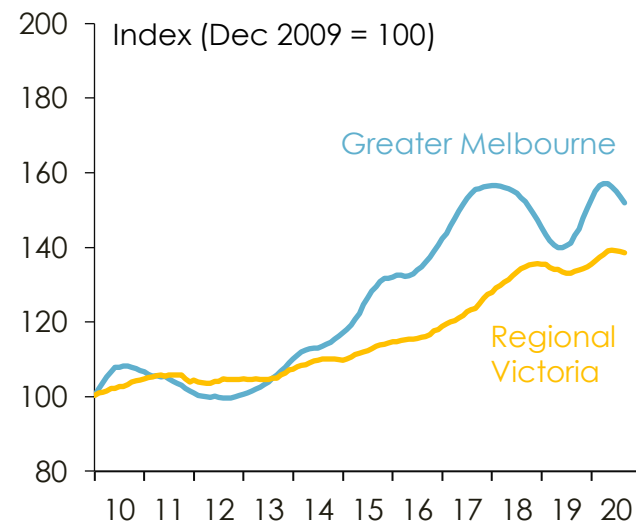
Western Australia



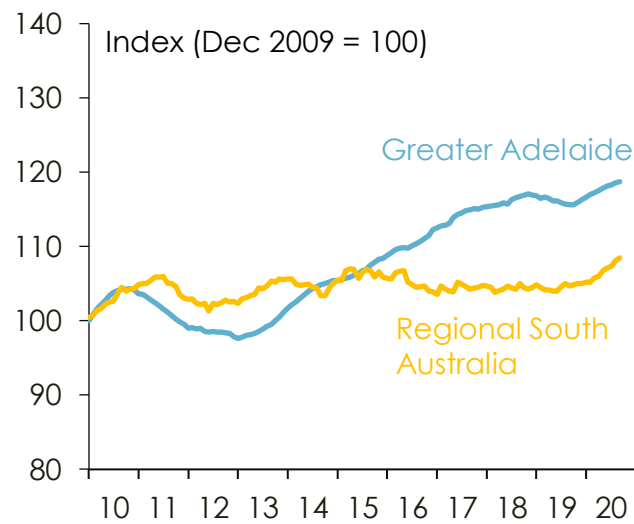
Northern Territory



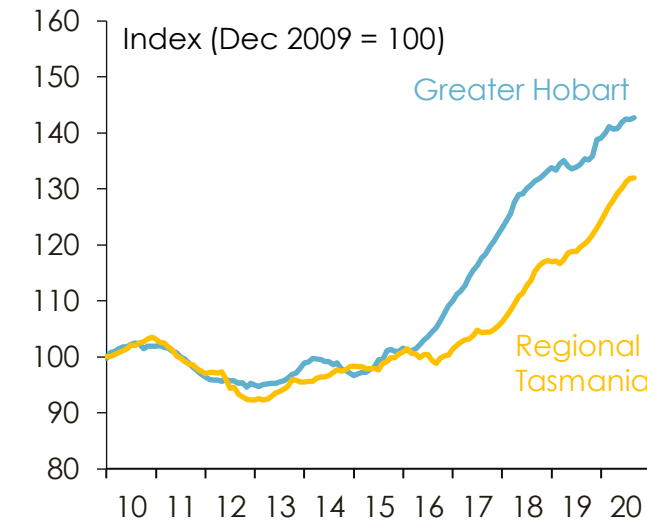
Victoria



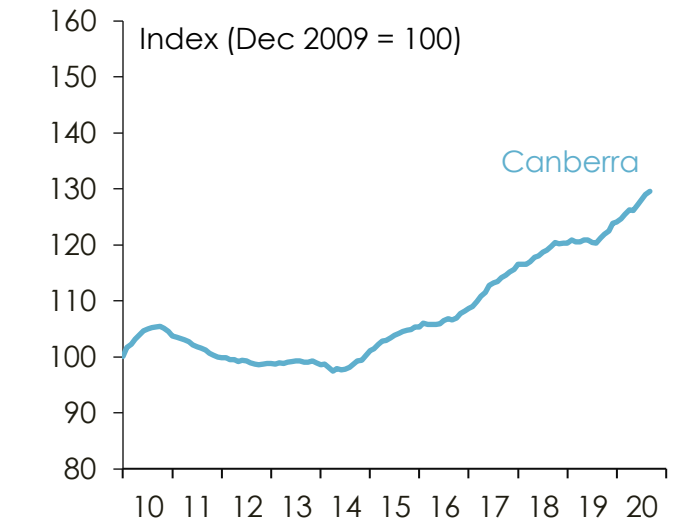
South Australia



Tasmania



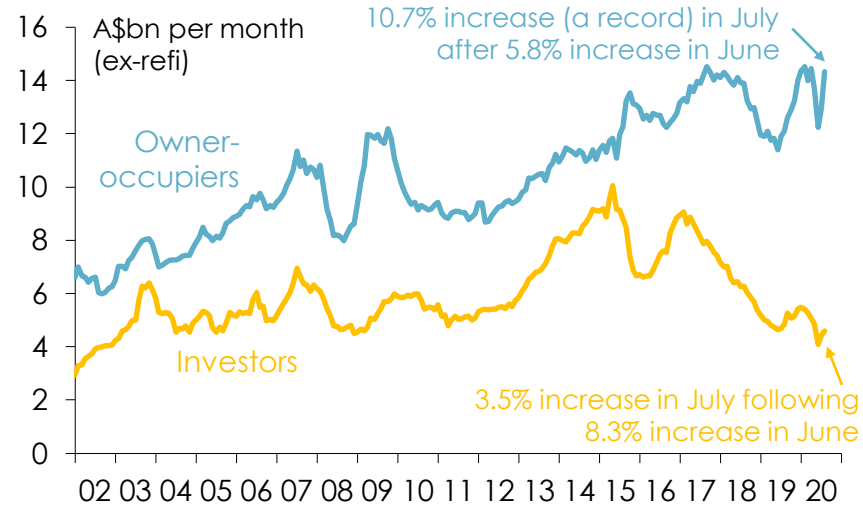
Australian Capital Territory



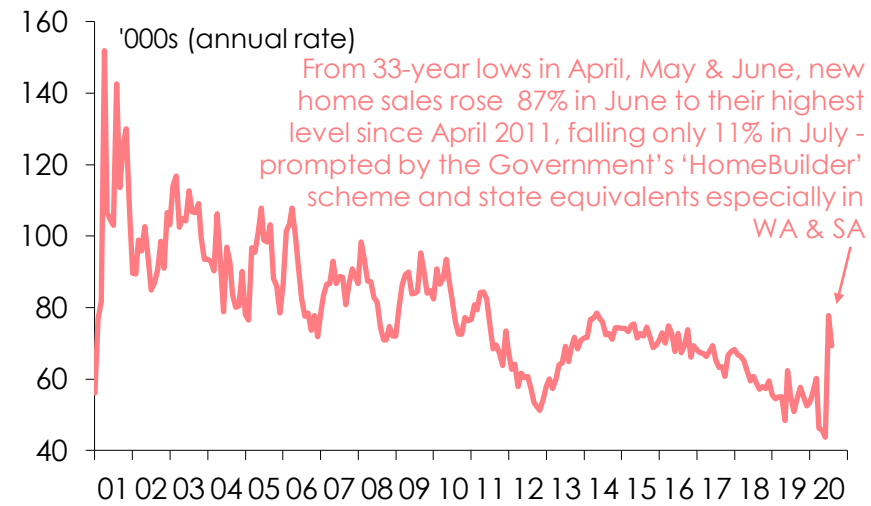
Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Property price data are now seasonally adjusted. Latest data are for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

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

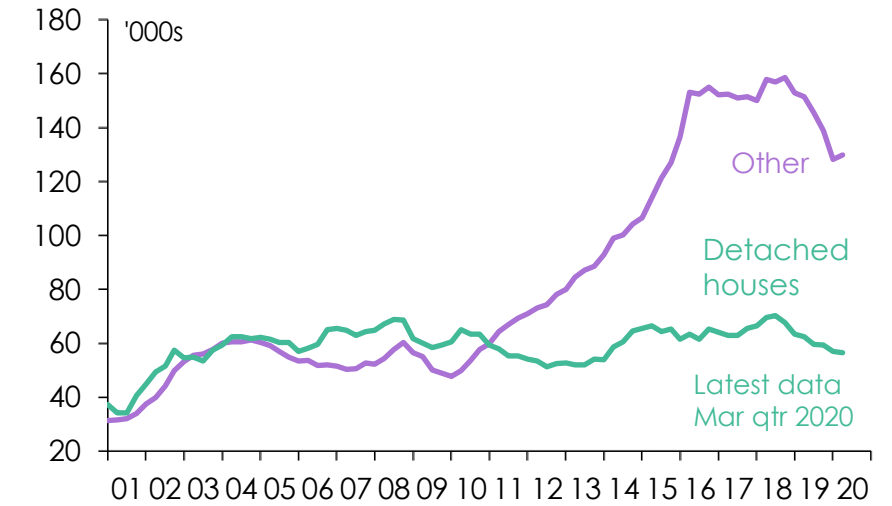
Housing finance commitments



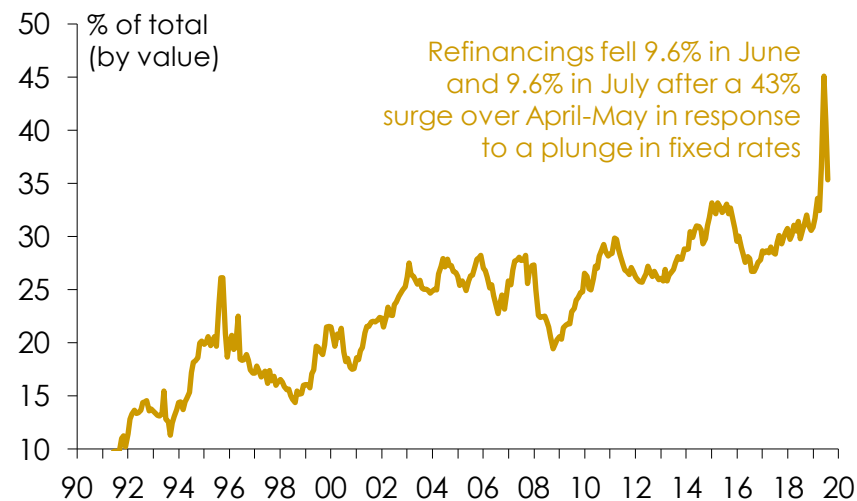
Large builders' new home sales



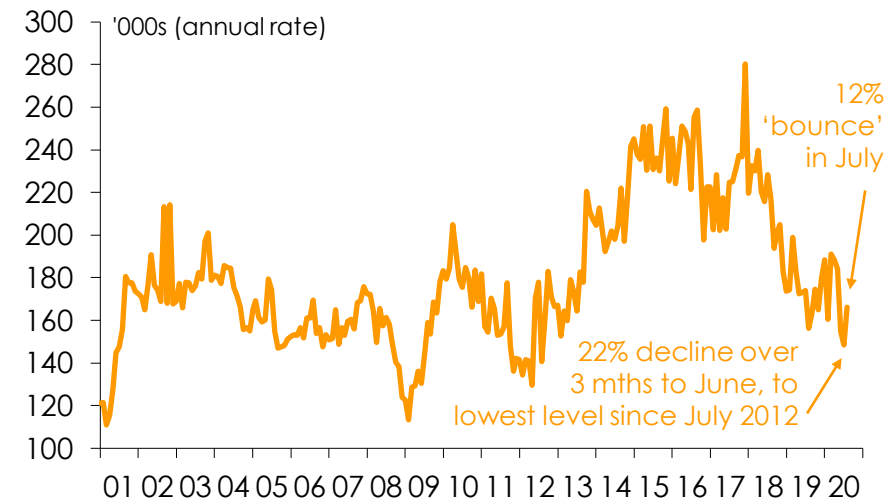
Dwellings under construction



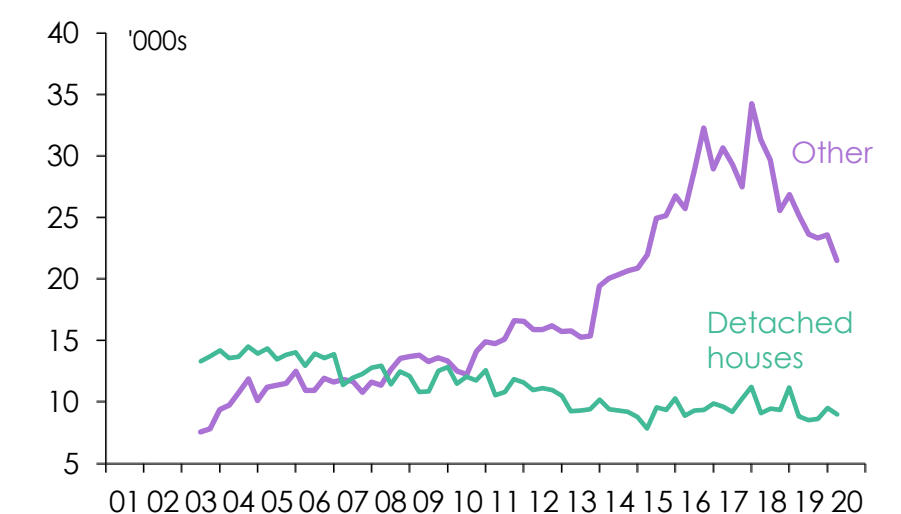
Refinancings as pc of total



Residential building approvals



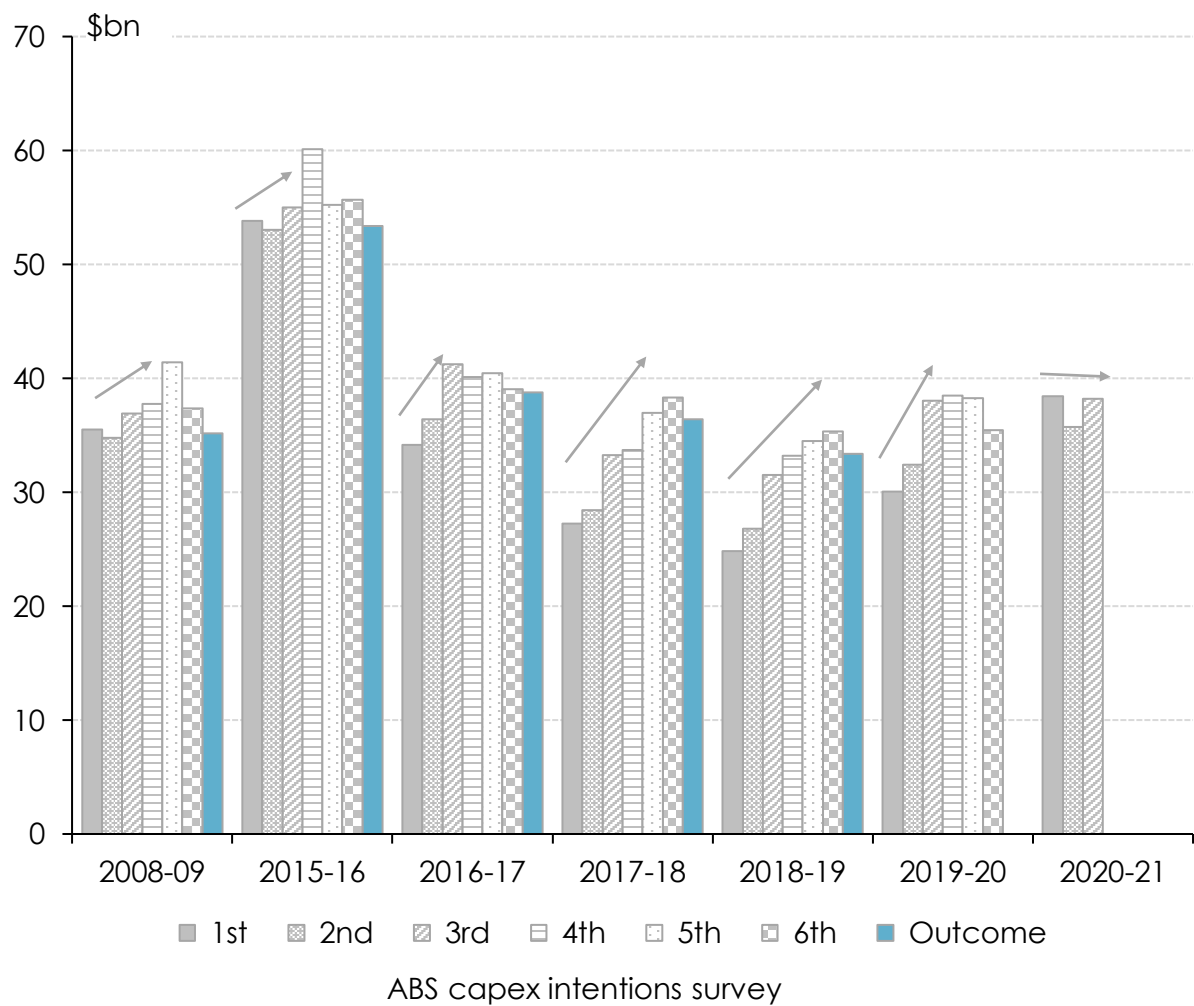
'Pipeline' of work yet to be done



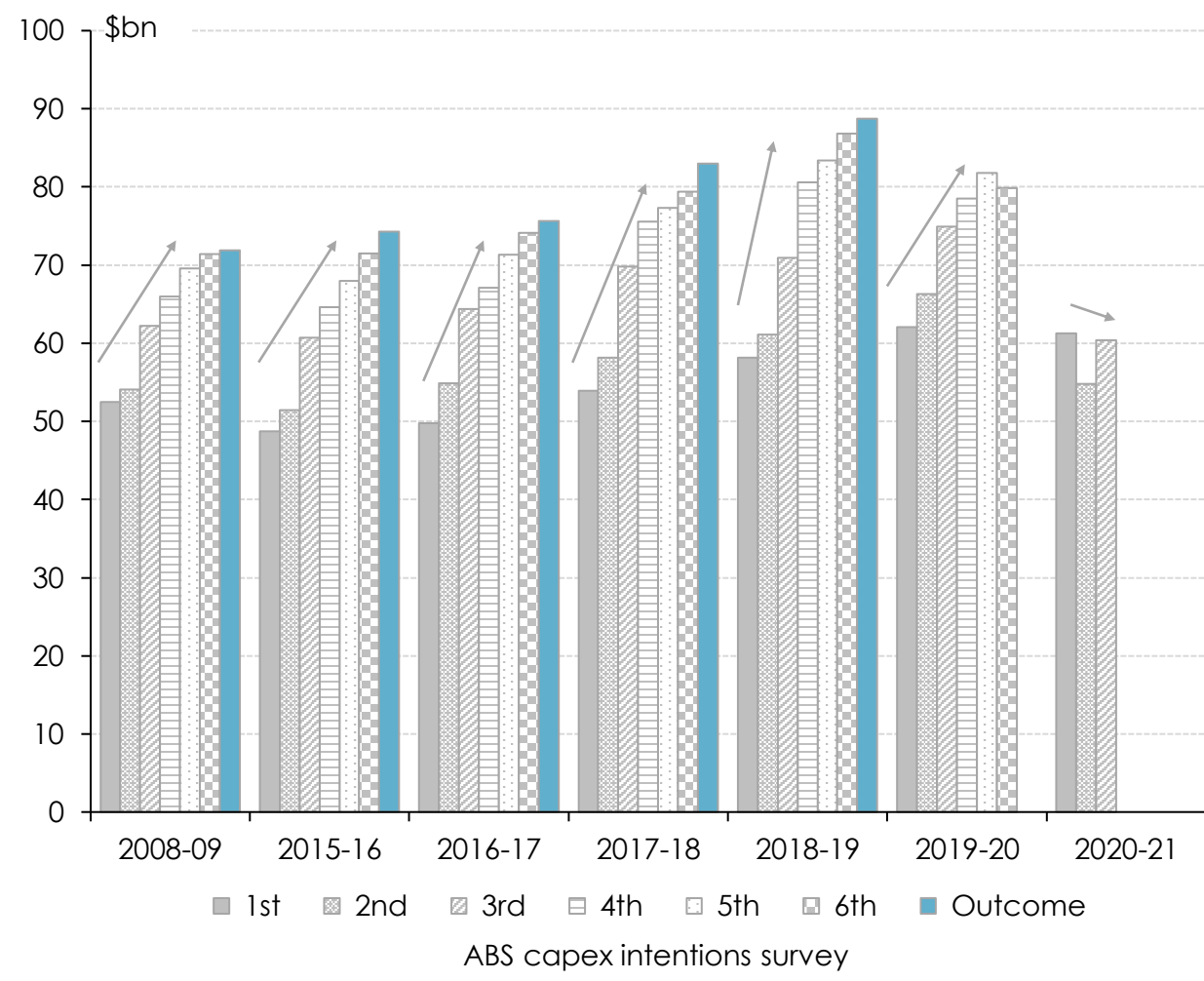
Note: 'New home sales' are of detached dwellings only and exclude small-scale builders. Sources: ABS; Housing Industry Association. August residential building approvals will be released on 30th September; August housing finance commitments on 9th October; and June quarter dwellings under construction and 'pipeline' data on 14th October.

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

Capital expenditure intentions - mining



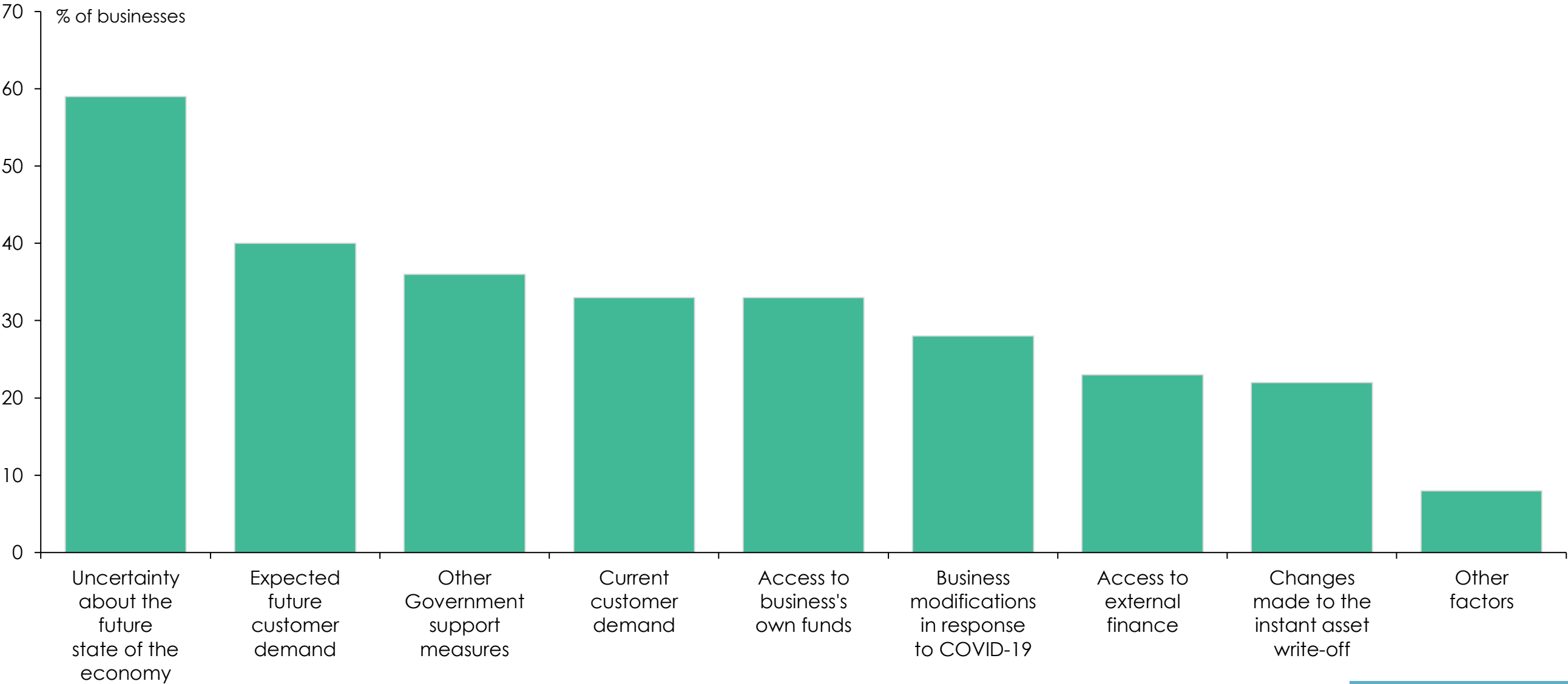
Capital expenditure intentions – non-mining



Note: The ABS conducts six surveys of business' capital expenditure intentions in respect of each financial year. The first is conducted in January & February prior to the commencement of the financial year, the second in May & June, the third in July & August of the financial year, the fourth in October & November, the fifth in January & February of the financial year, and the sixth in May & June. The outcome (actual capital expenditure in the financial year) is determined from the survey taken in July & August after the end of the financial year. The survey excludes businesses in the agriculture, forestry & fishing; and public administration and safety sectors, and also superannuation funds. The education & training, and health care & social assistance sectors have been included in the surveys since December 2019 but are not included in the above charts (to assist in comparisons). Source: ABS, [Private New Capital Expenditure and Expected Expenditure, Australia](#) (next update 26th November).

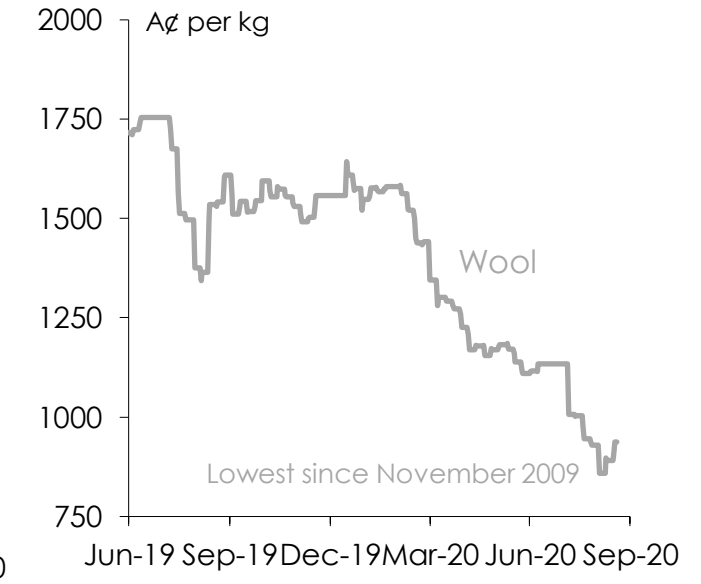
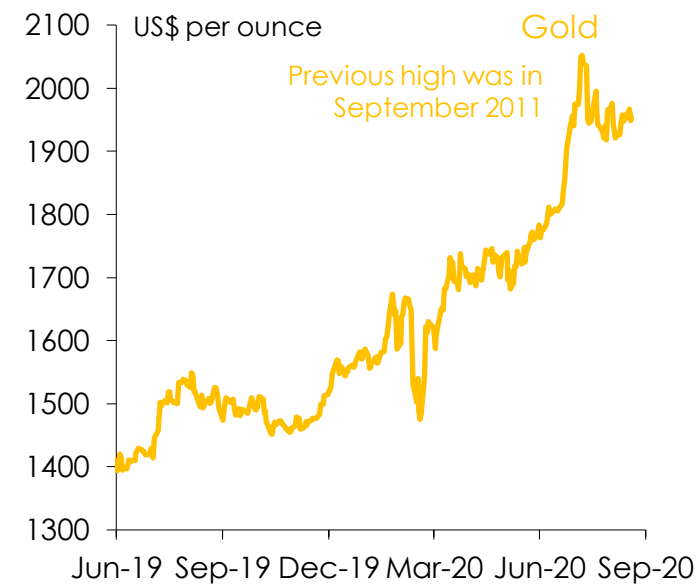
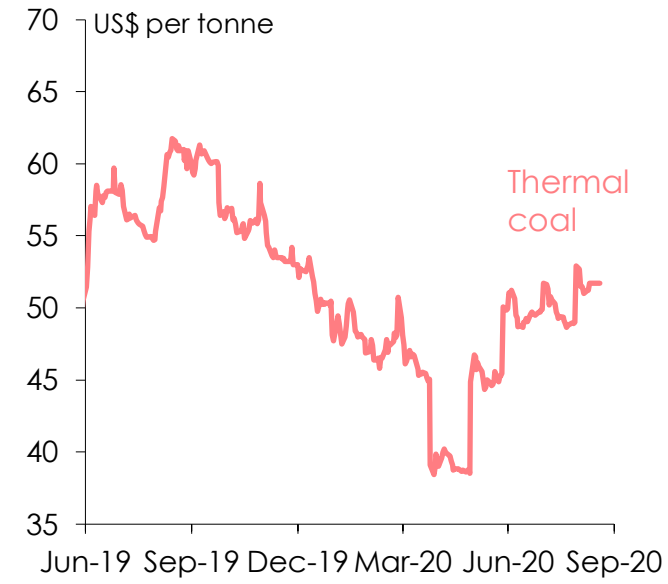
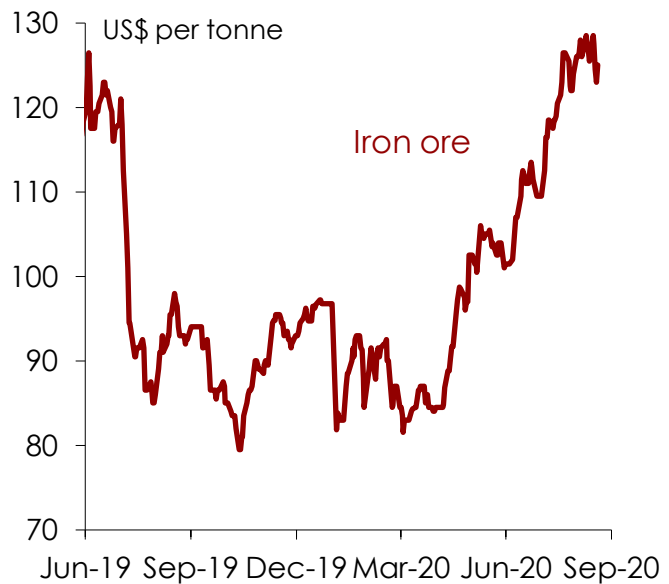
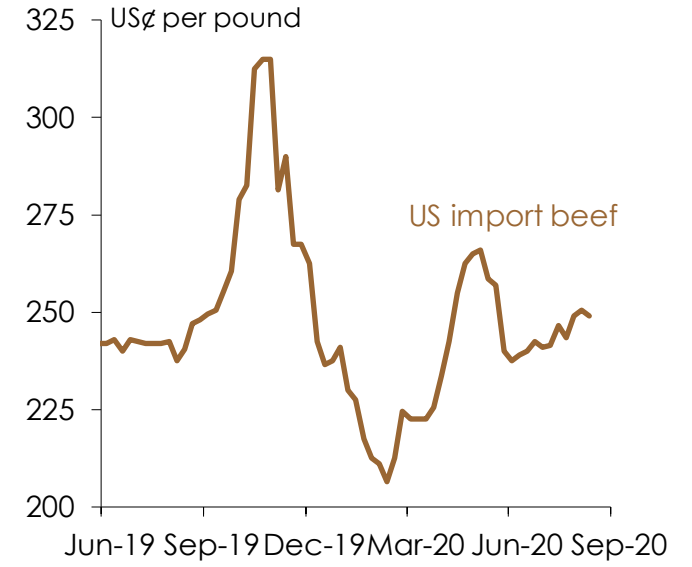
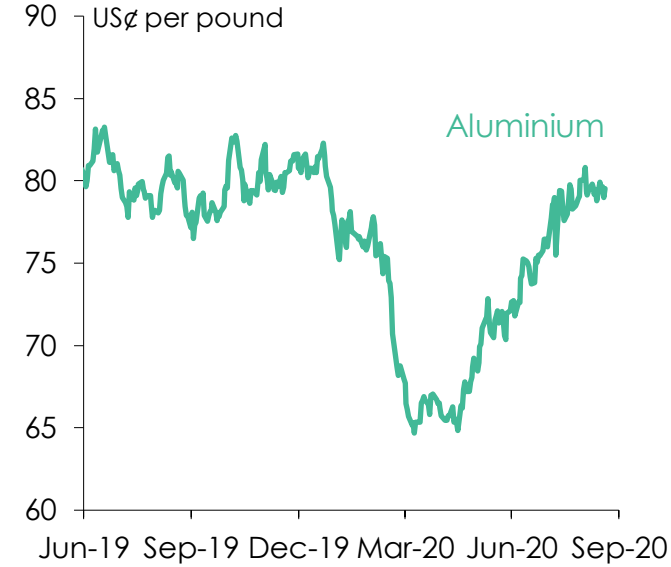
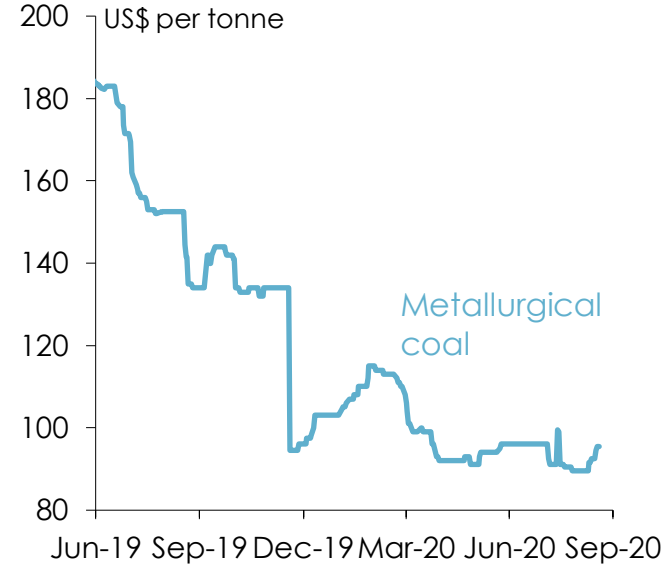
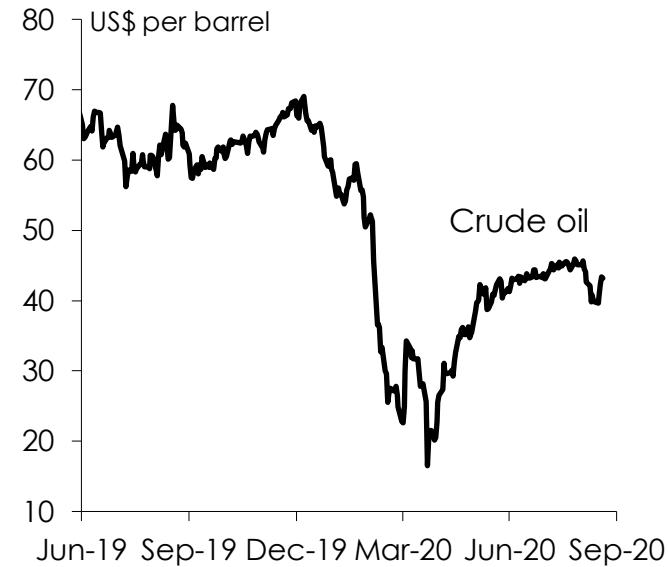
Uncertainty about the economic outlook is the most important factor weighing on business capex decisions

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



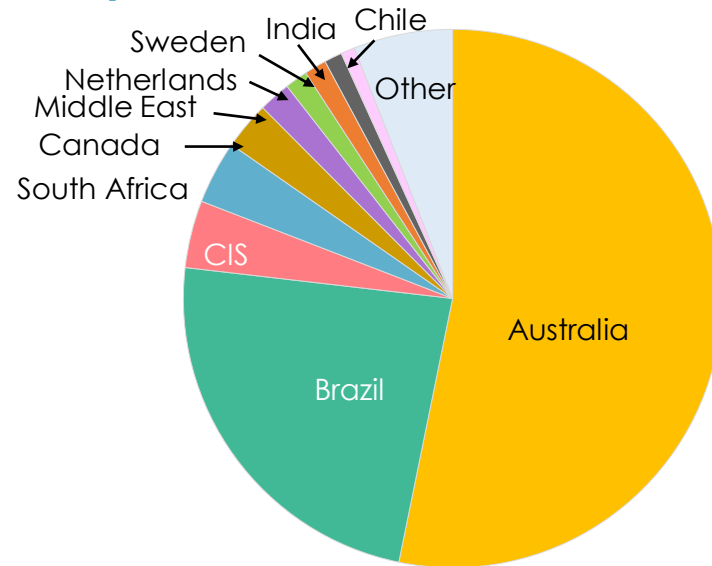
Source: ABS, [Business Impacts of Covid-19](#), August 2020 (based on survey conducted between 12th and 19th August).

Oil prices recovered about half their decline over the previous two weeks, met coal rose 6¾% but iron ore fell 2%, while wool has stopped falling

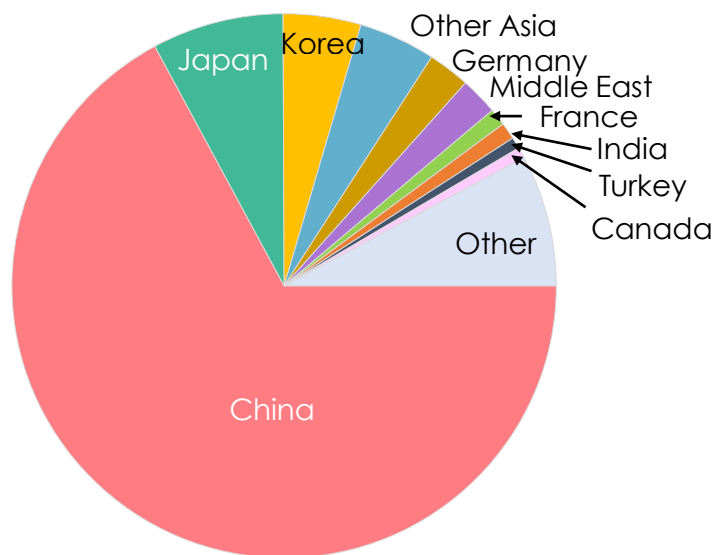


The resilience of iron ore prices stems from strong Chinese demand, declining Chinese production and constraints on Brazilian exports

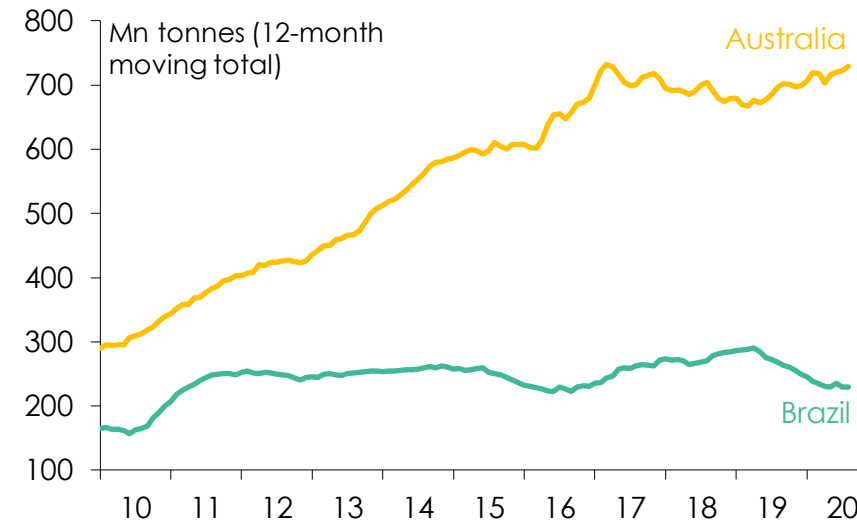
Iron ore exports, 2018



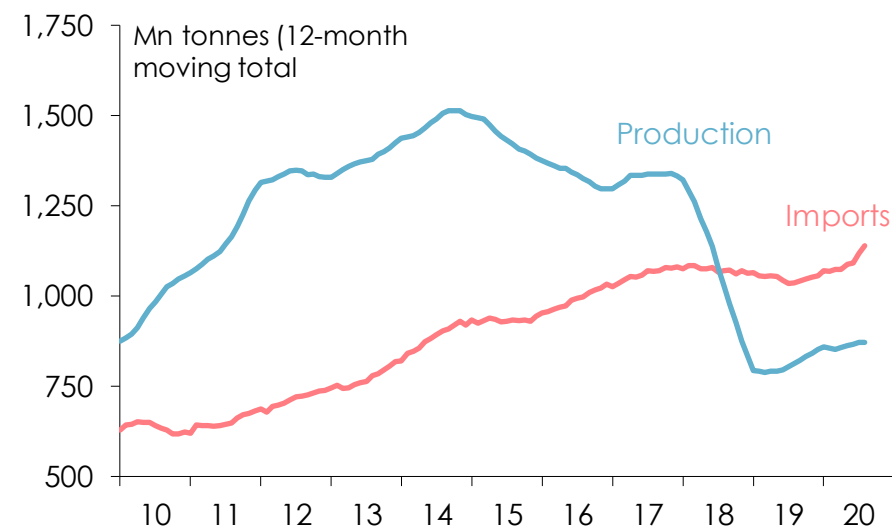
Iron ore imports, 2018



Australia & Brazil iron ore exports



China iron ore production & imports

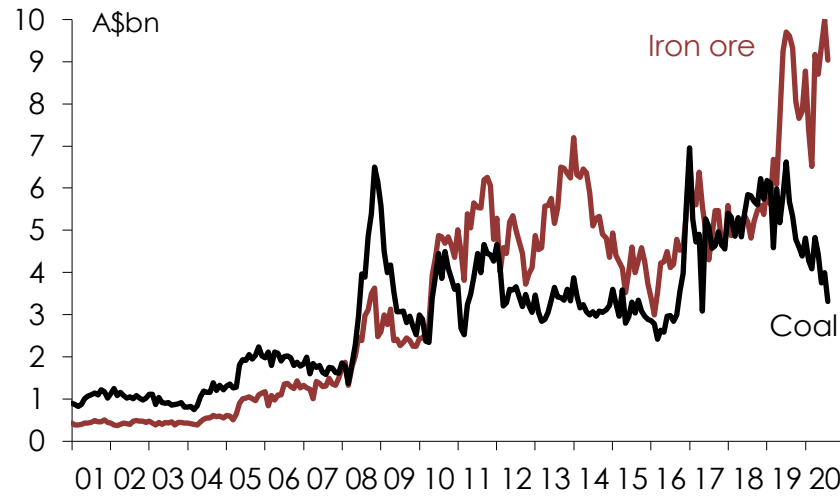


- ❑ The global seaborne iron ore trade is dominated by shipments from Australia & Brazil to China (which accounts for 53% of global steel production and 51% of steel use)
- ❑ Chinese iron ore production has fallen by more than 34% since 2017, largely because of rapidly declining quality – forcing Chinese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

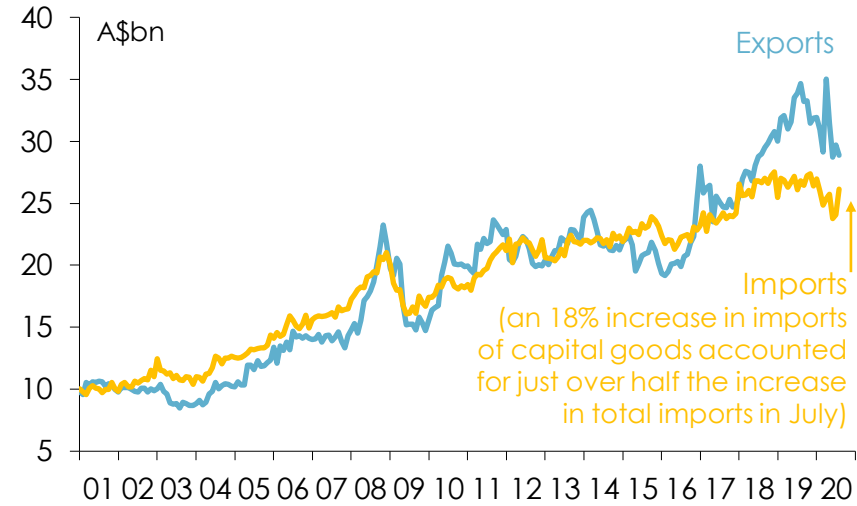
Note: Export volume data for Australia and Brazil derived by dividing export values (in US\$) from ABS and IGBE by the average US\$ price of Chinese iron ore imports.
Sources: World Steel Association; China National Bureau of Statistics; China General Administration of Customs; Refinitiv Datastream;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

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

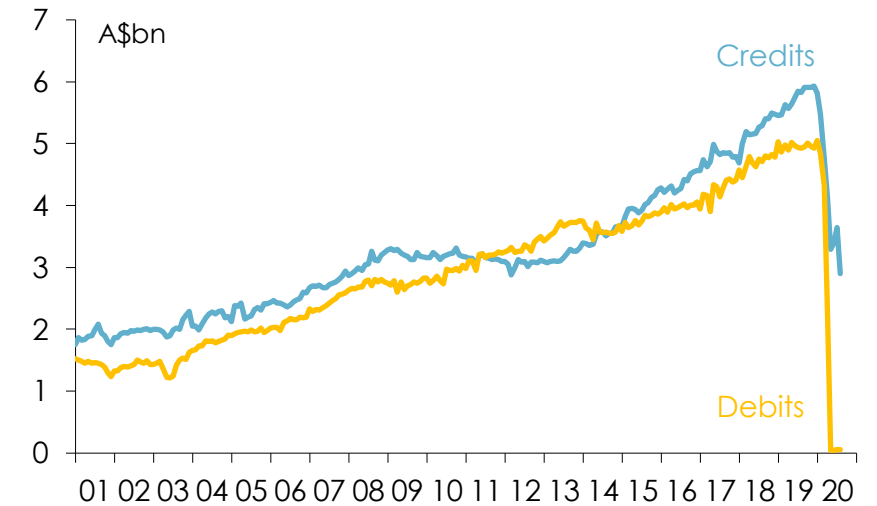
Iron ore and coal exports



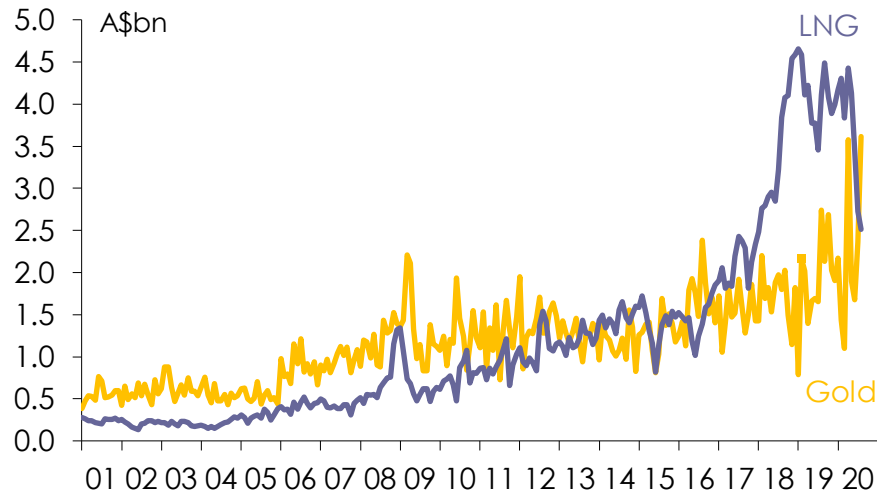
Merchandise exports and imports



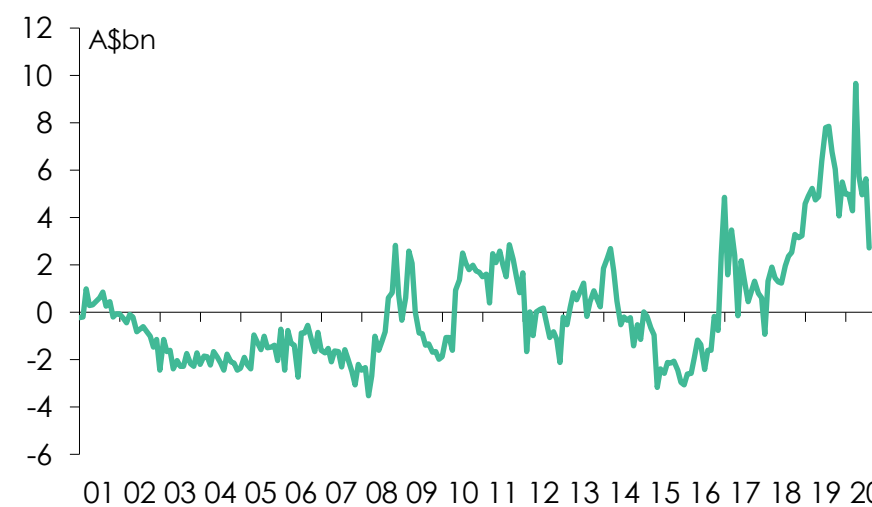
Tourism-related services trade



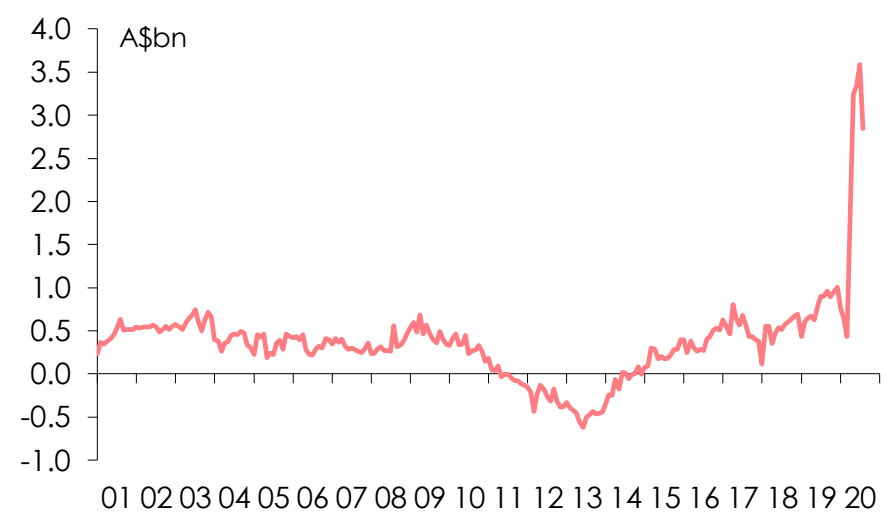
LNG and gold exports



Merchandise trade balance



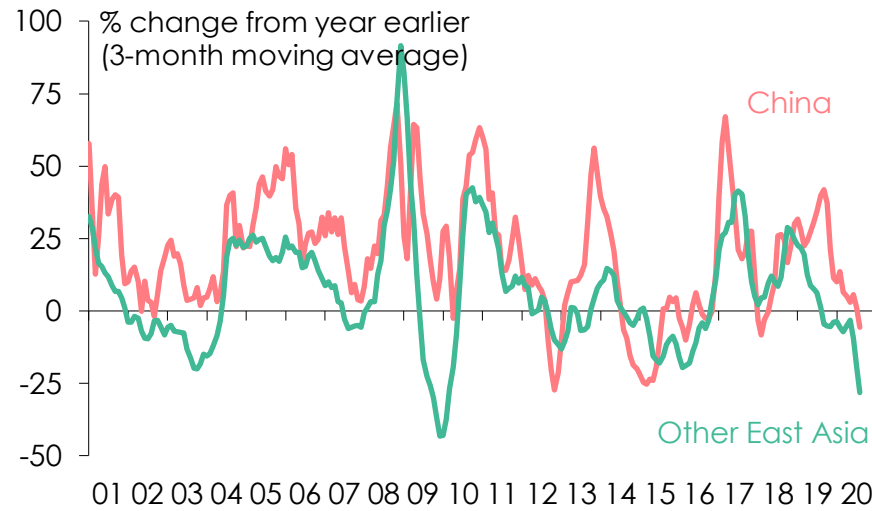
Tourism services trade balance



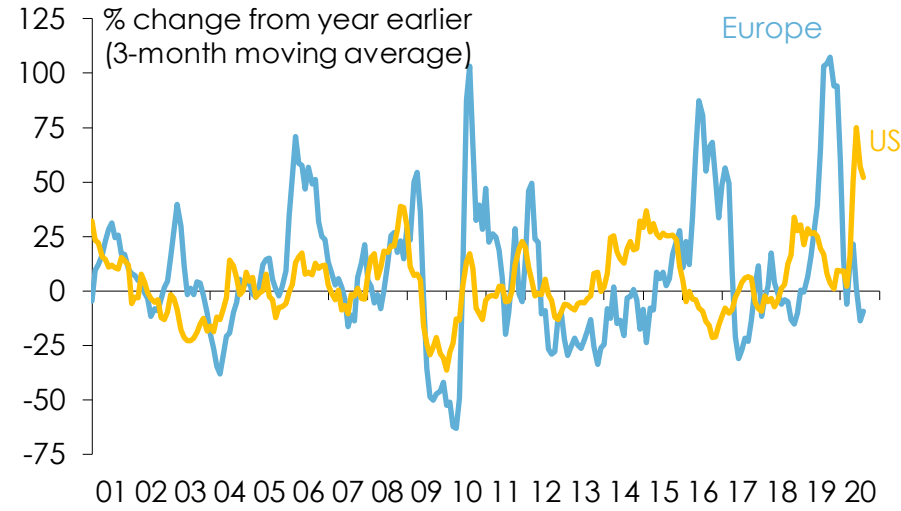
Source: ABS, [International Trade in Goods and Services, Australia](#). Latest data are for July: August data will be released on 6th October.

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

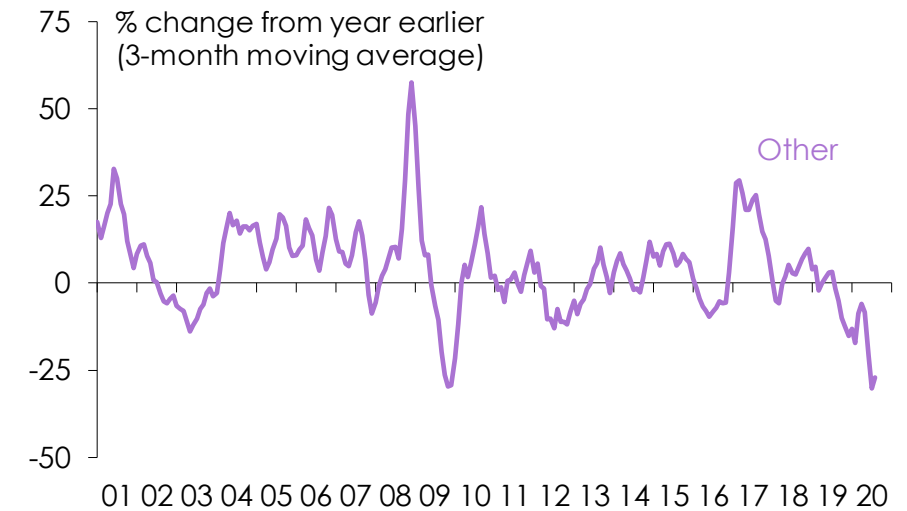
Merchandise exports – East Asia



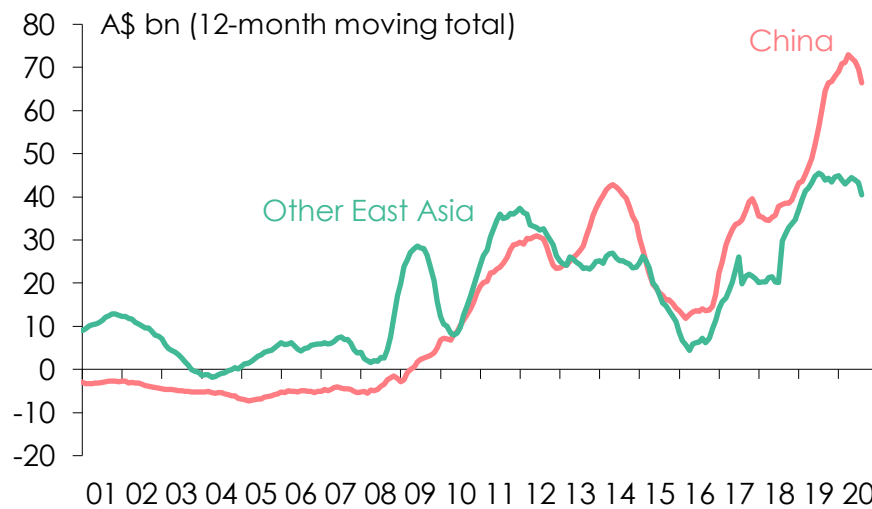
Merchandise exports – US & Europe



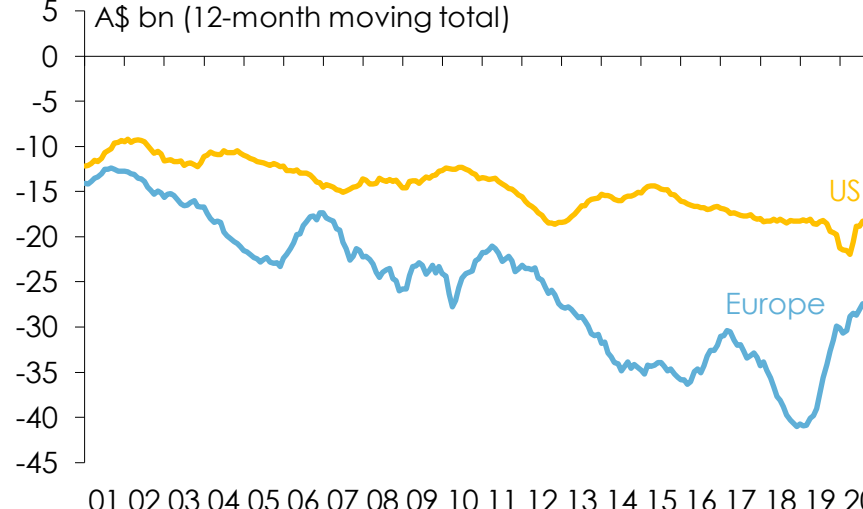
Merchandise exports – other



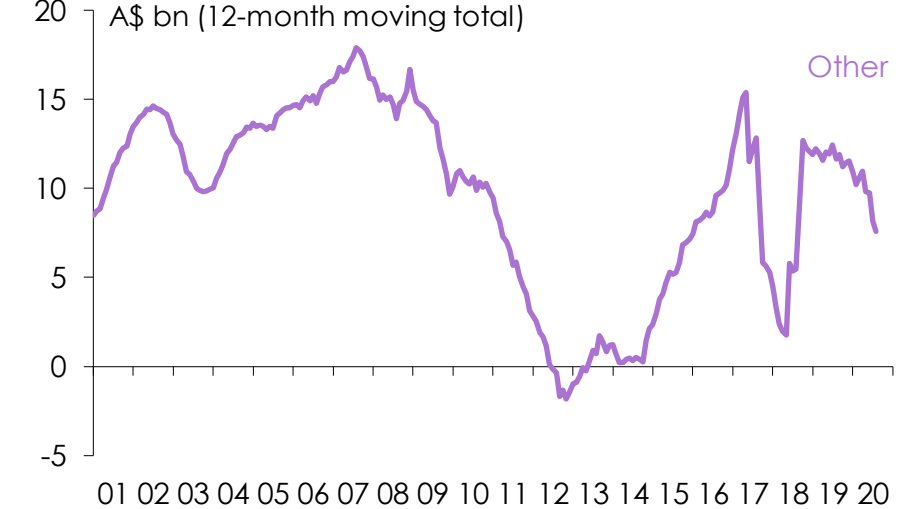
Goods trade balance – East Asia



Goods trade balance – US & Europe



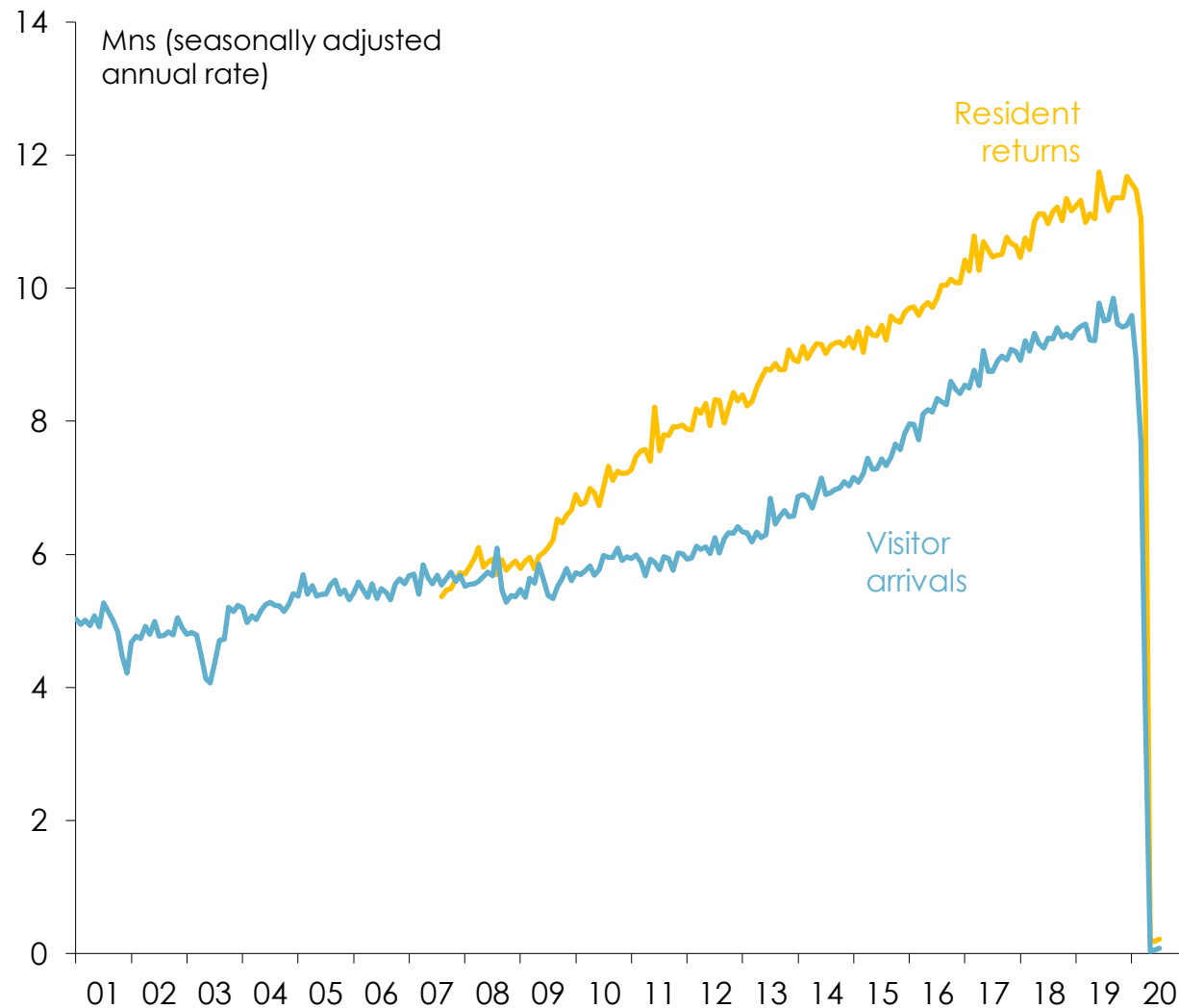
Goods trade balance – other



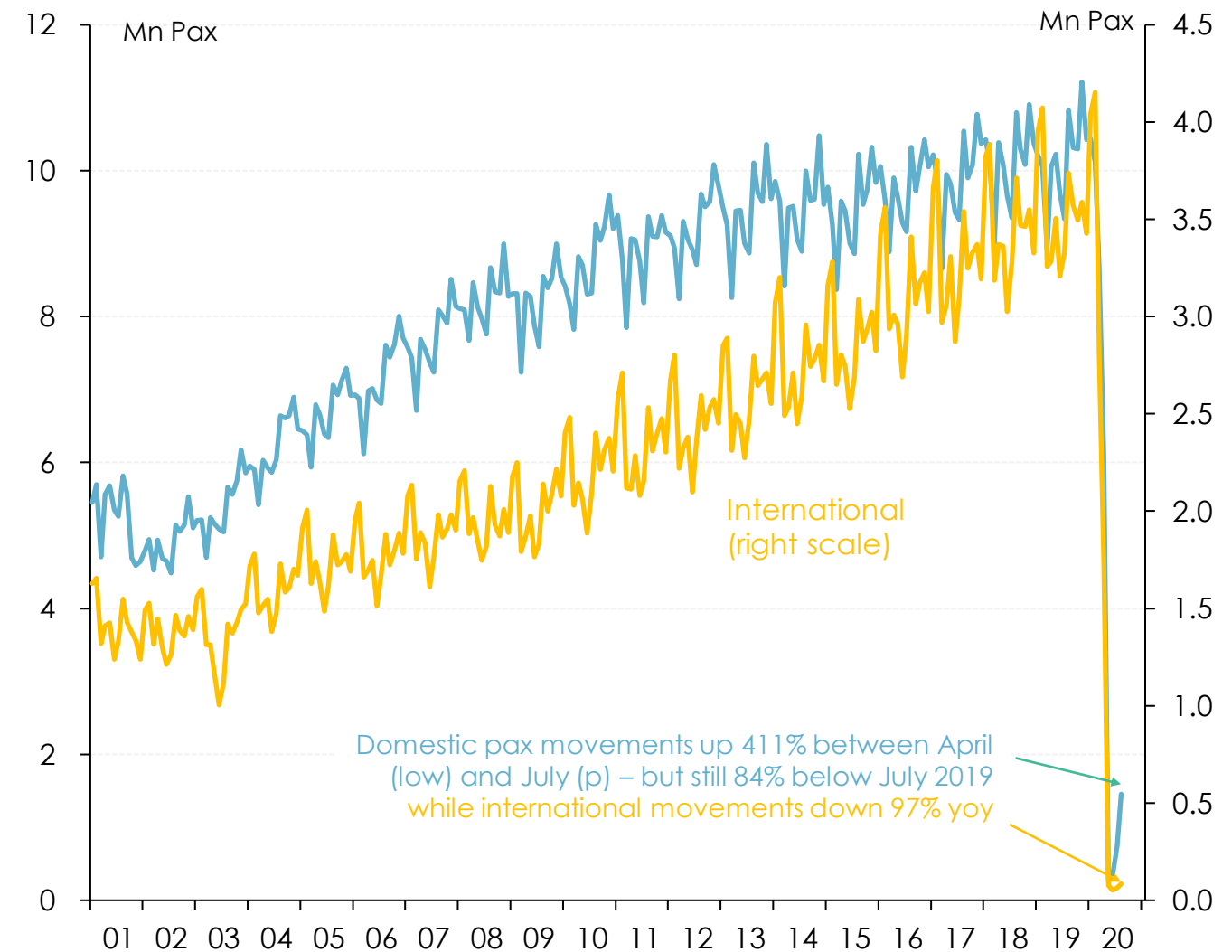
Note: 'Other East Asia' includes Japan, Korea, Taiwan, Hong Kong and ASEAN. 'Europe' includes the EU, UK and Switzerland. 'Other' includes India, New Zealand and the Pacific, Canada, Latin America, Africa, the Middle East and others not included in the foregoing. Source: ABS, [International Trade in Goods and Services, Australia](#). Latest data is for July; August data released on 6th October.

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

Short-term visitor arrivals and resident returns



Airport passenger movements

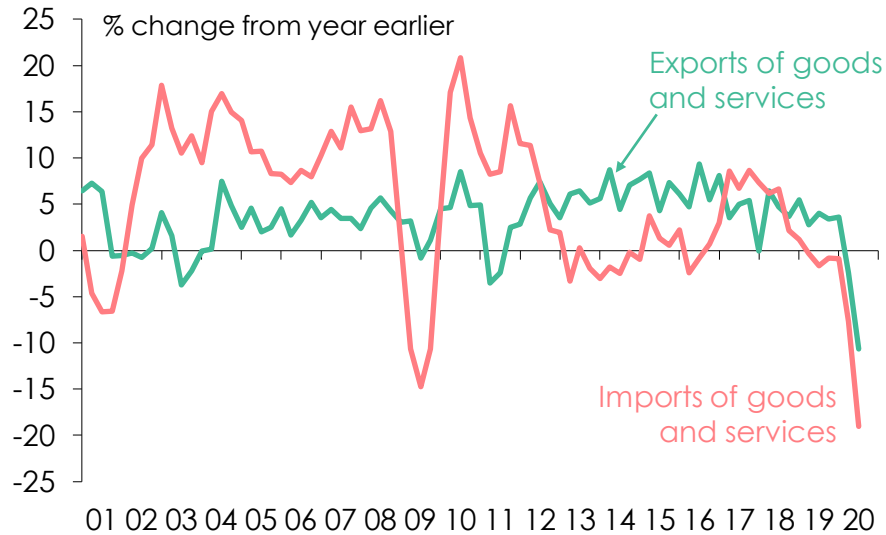


Note: The ABS has suspended publication of seasonally adjusted estimates of short-term visitor arrivals and resident returns, so published original estimates for April 2020 (and beyond) have been seasonally adjusted by Corinna using the same seasonal factors as for the corresponding month of 2019. Latest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

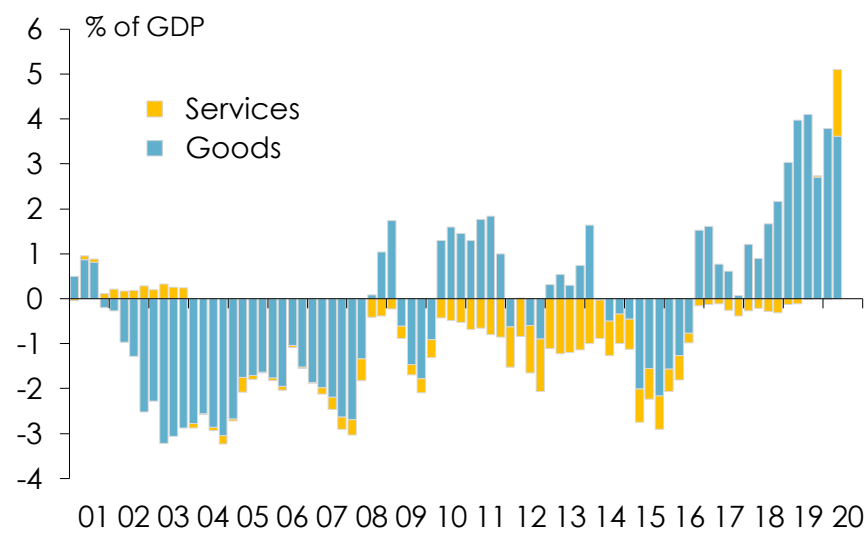
Sources: ABS; Bureau of Industry, Transport and Resources Economics (BITRE); Sydney Airport Ltd; Corinna.

Australia recorded its largest-ever current account surplus in Q2, and is now a capital exporter, paying down debt and building up equity assets

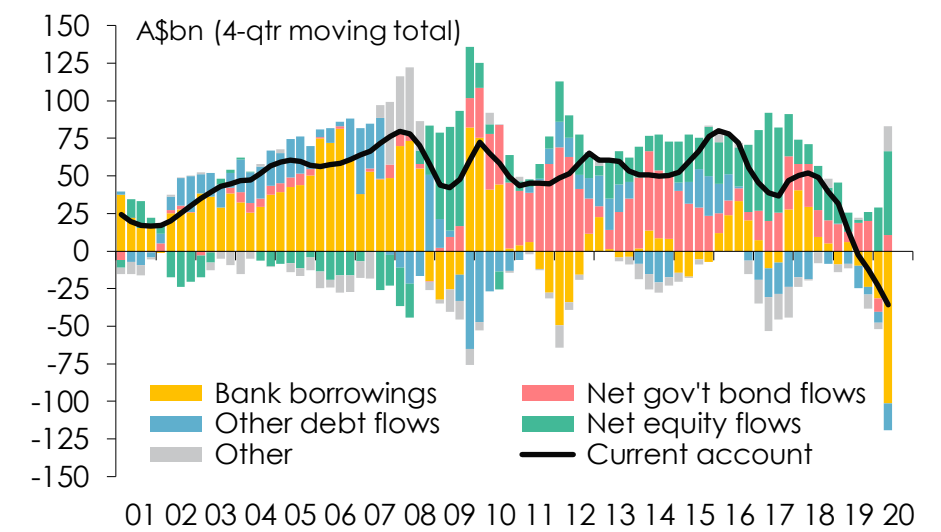
Export and import volumes



Goods & services trade balances



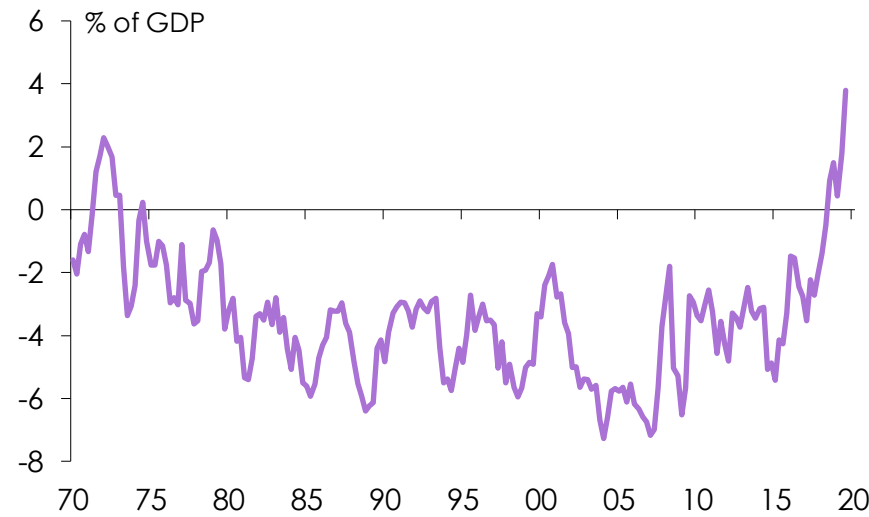
Capital flows



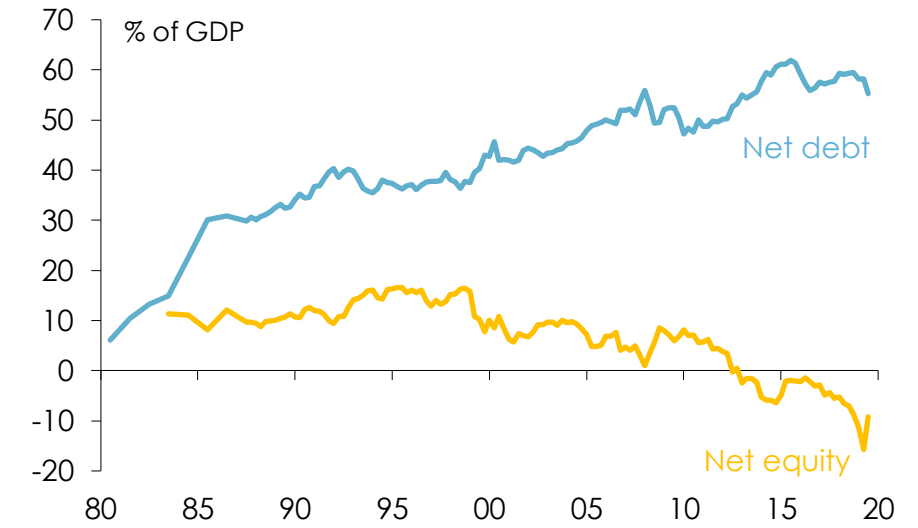
Export and import prices



Current account balance



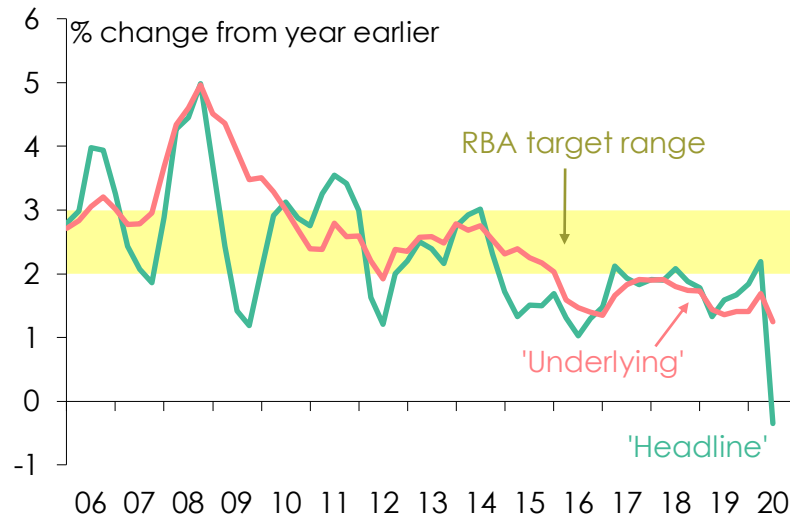
Net international investment position



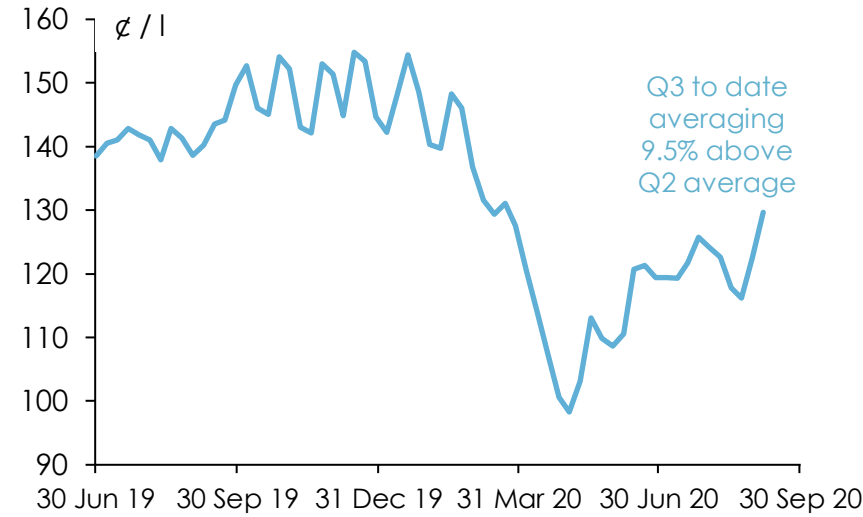
Source: ABS, [Balance of Payments and International Investment Position, Australia](#). September quarter data will be released on 1st December.

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

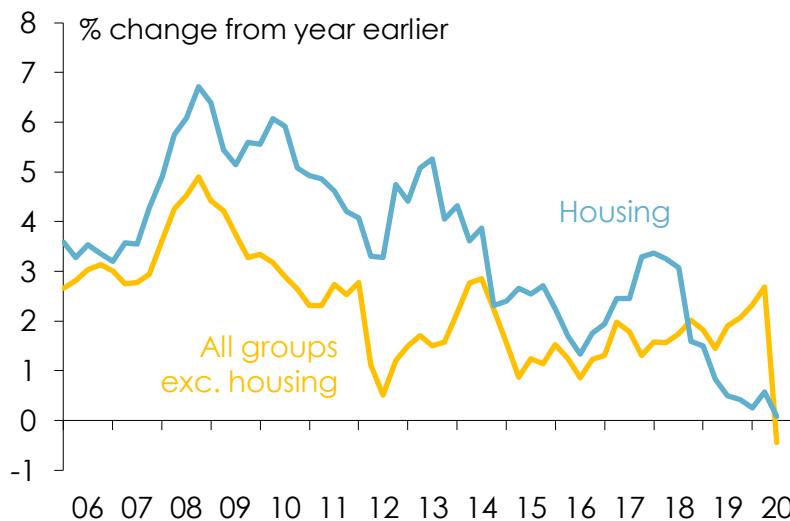
Consumer prices



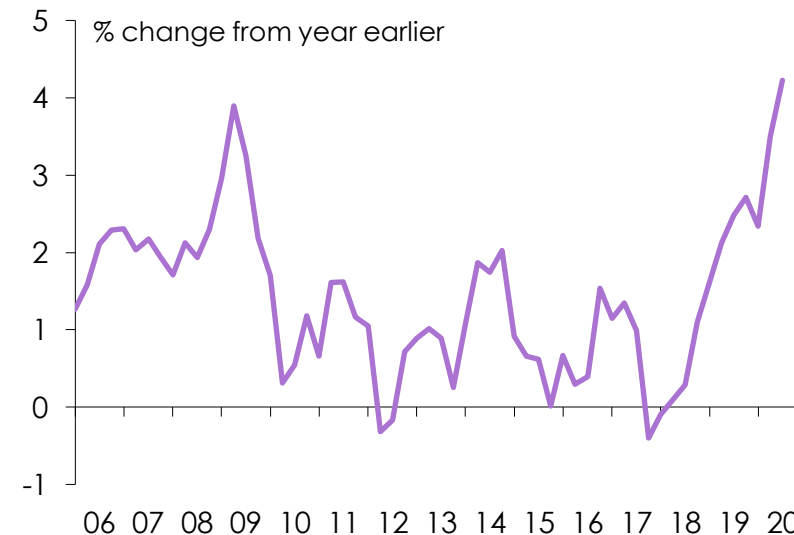
Retail petrol prices



Housing costs in the CPI



Retail sales implicit price deflator



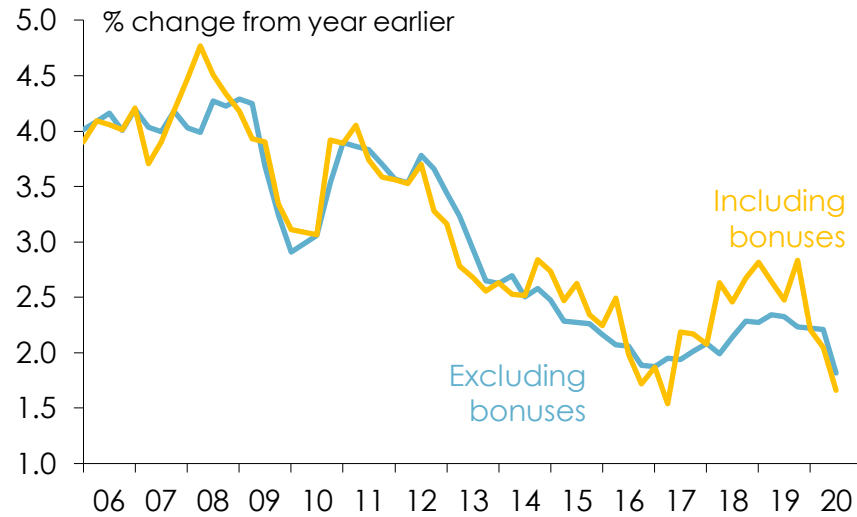
- ❑ The CPI fell (by 1.9%) in the June quarter, the largest quarterly decline since 1931 and only the 11th decline in 60 years
- ❑ The annual 'headline' inflation rate fell to -0.3%, the lowest since Q3 1997 (which was artificially induced by falling mortgage rates, which are no longer included in the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

Note: 'Underlying' inflation is the average of the weighted median and trimmed mean CPIs. Wage price indices exclude bonuses.

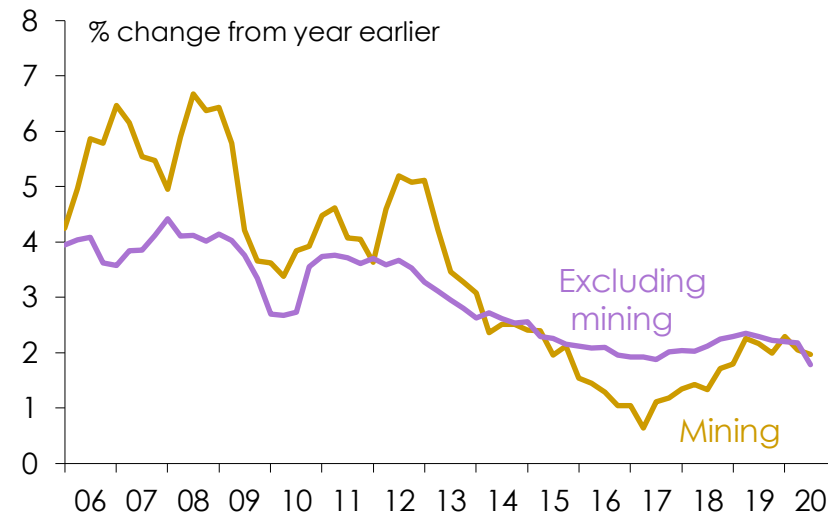
Sources: ABS, [Consumer Price Index, Australia](#); [Australian Institute of Petroleum](#). The September quarter (Q3) CPI will be released on 28th October.

Wages growth over the year to the June quarter was the lowest for at least 23 years

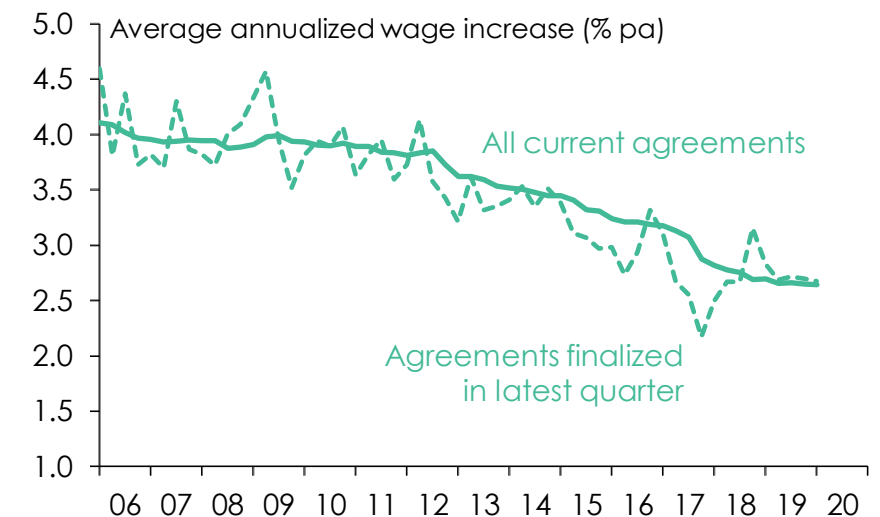
Wage price index – all sectors



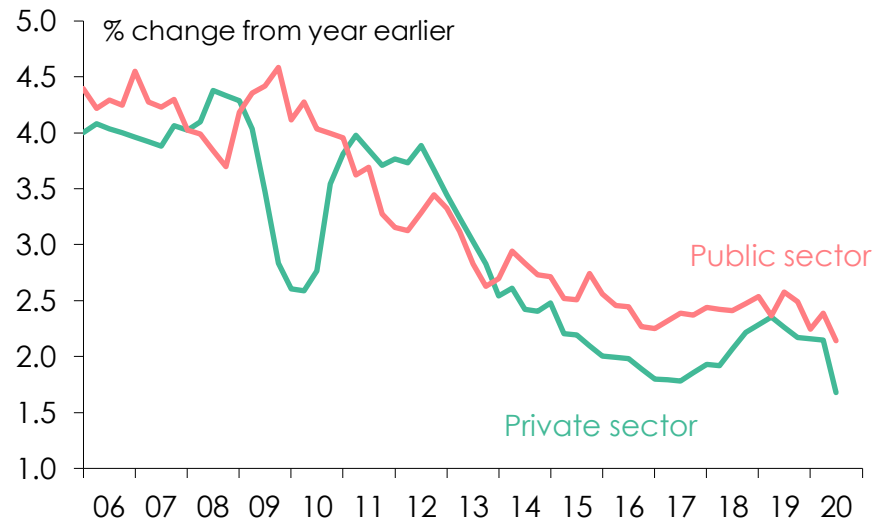
WPI by industry



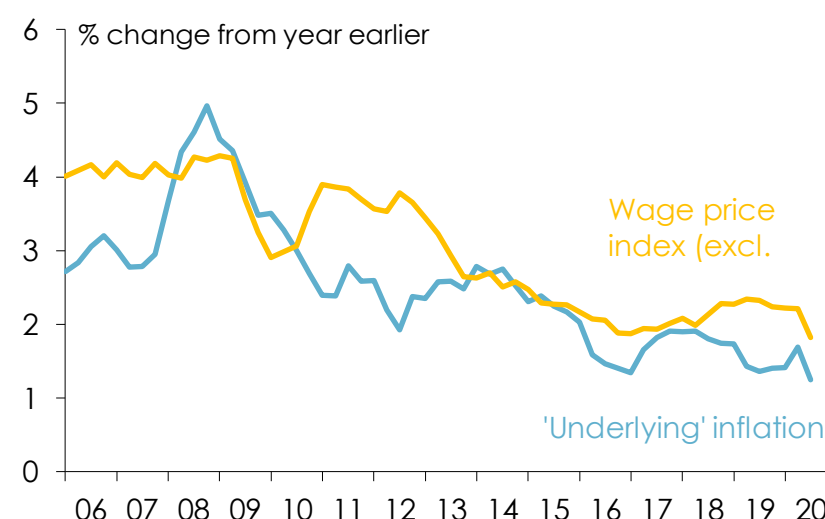
Enterprise bargaining agreements



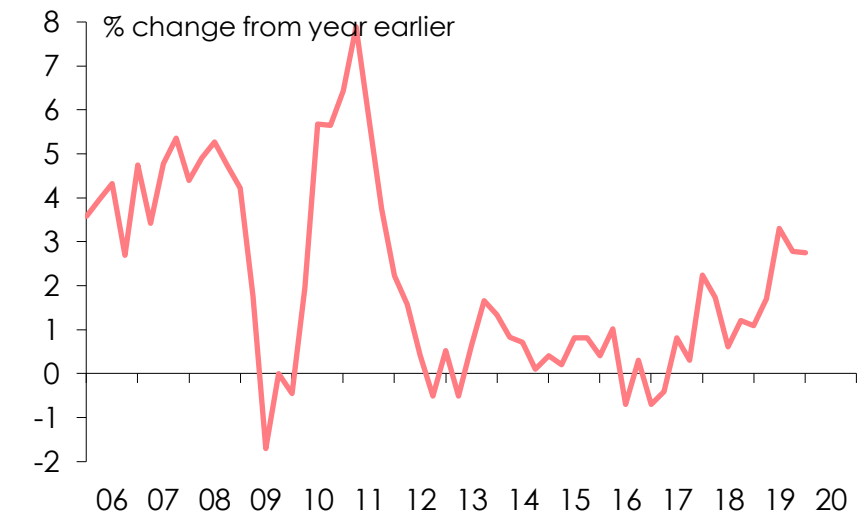
WPI – private vs public sectors



WPI and 'underlying' CPI inflation



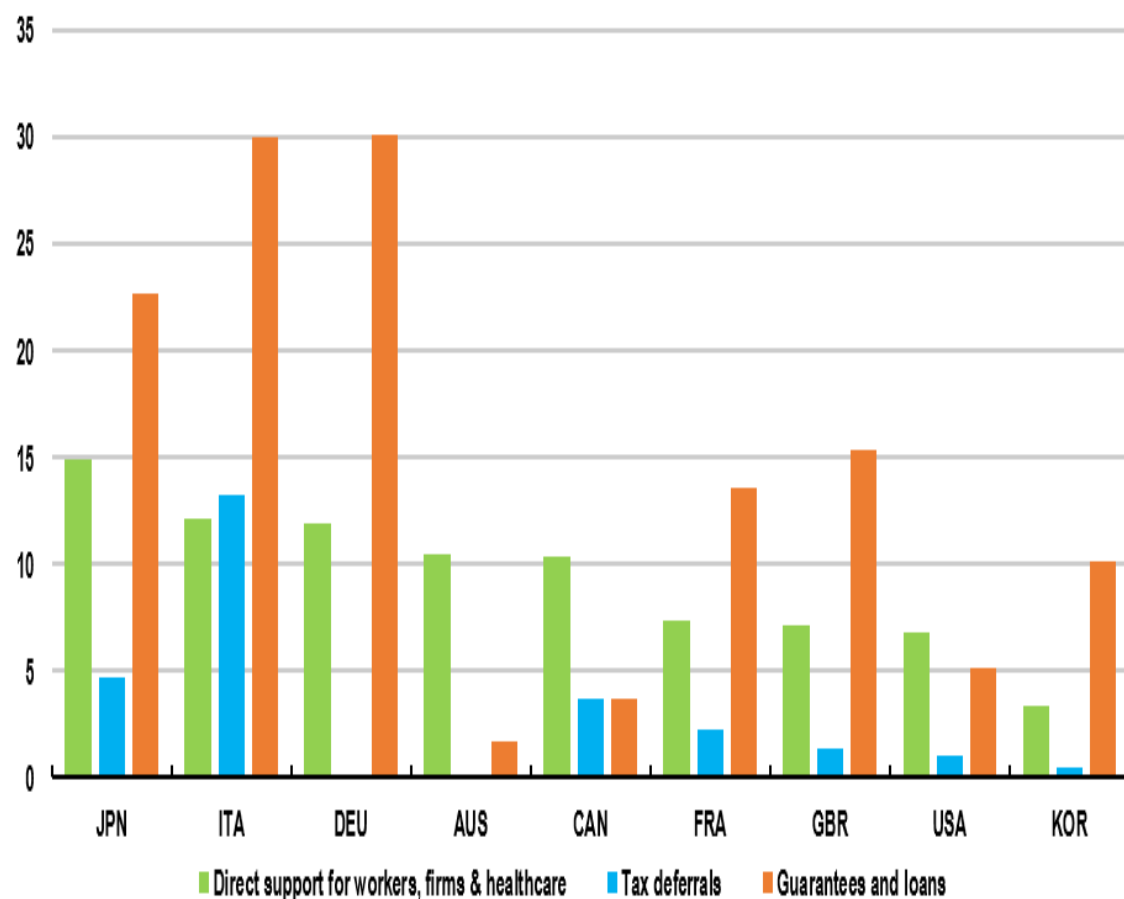
Unit labour costs



Note: Unit labour costs is compensation of employees (including fringe benefits and social insurance contributions) per hour worked divided by (real) gross value added per hour worked (ie, labour productivity) for the non-farm sector. Source: ABS; Attorney-General's Department. September quarter WPI data will be released on 18th November.

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

Fiscal policy responses to Covid-19 – selected OECD economies, % of 2019 GDP

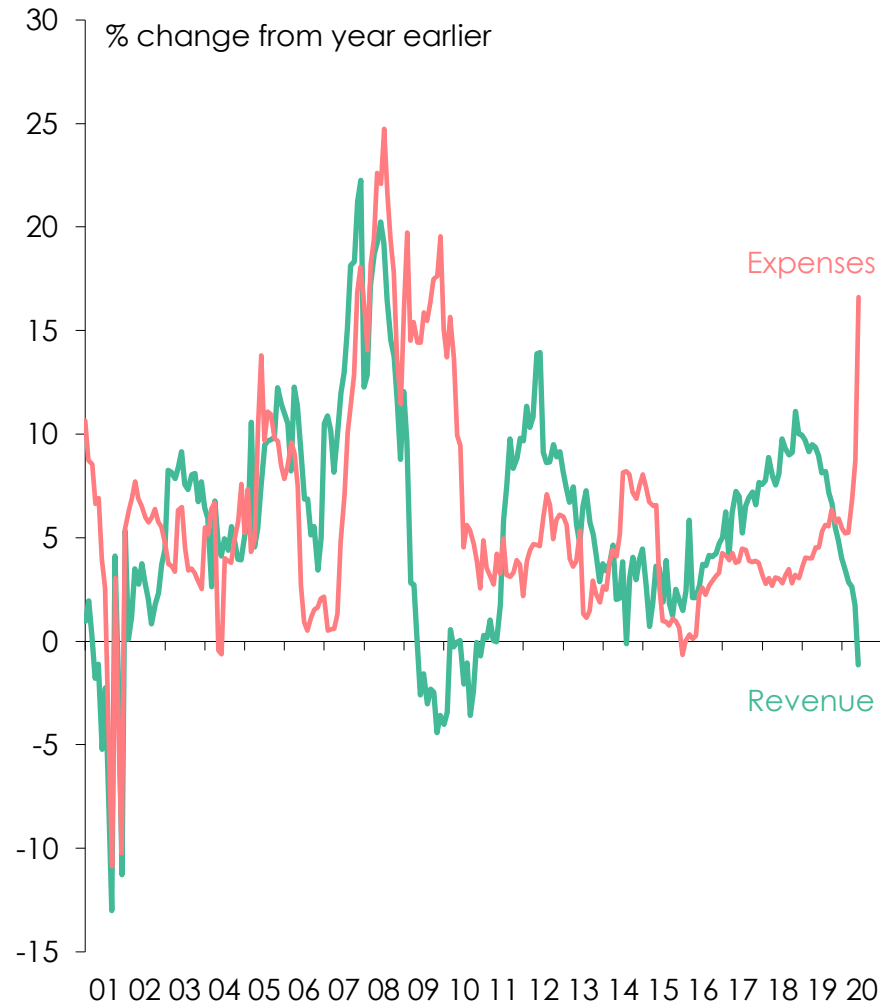


Note: Countries are ranked (from left to right) by the scale of support with a direct budget impact (ie the sum of the green and blue bars). Estimates include measures announced up to 14th September. Source: OECD, [Economic Outlook, Interim Report September 2020](#), 16th September 2020.

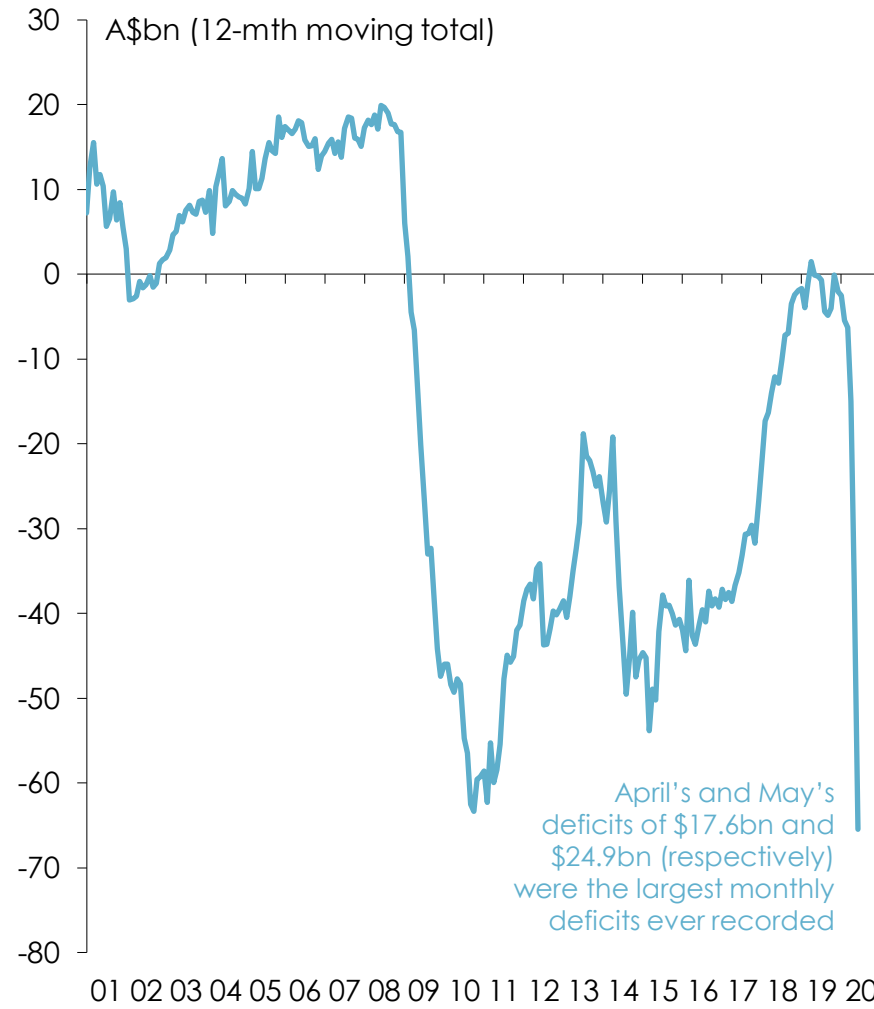
- ❑ Policy measures announced thus far by the Australian Government total \$192bn over FYs 2019-20 and 2020-21 or about 9% of one year's GDP – which is large by international standards (and double what was done during the GFC)
 - including an additional \$15bn for Jobkeeper announced this week in response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

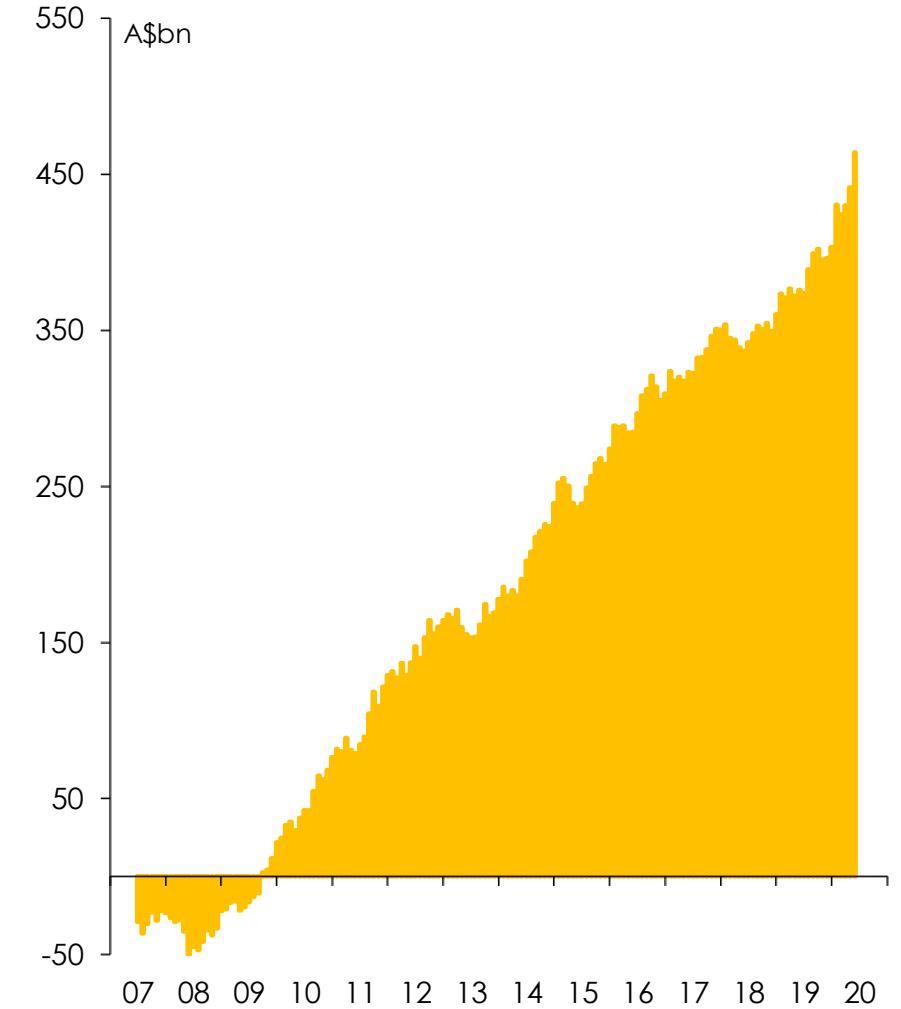
Australian Government revenue and expenses



Australian Government 'underlying' cash balance



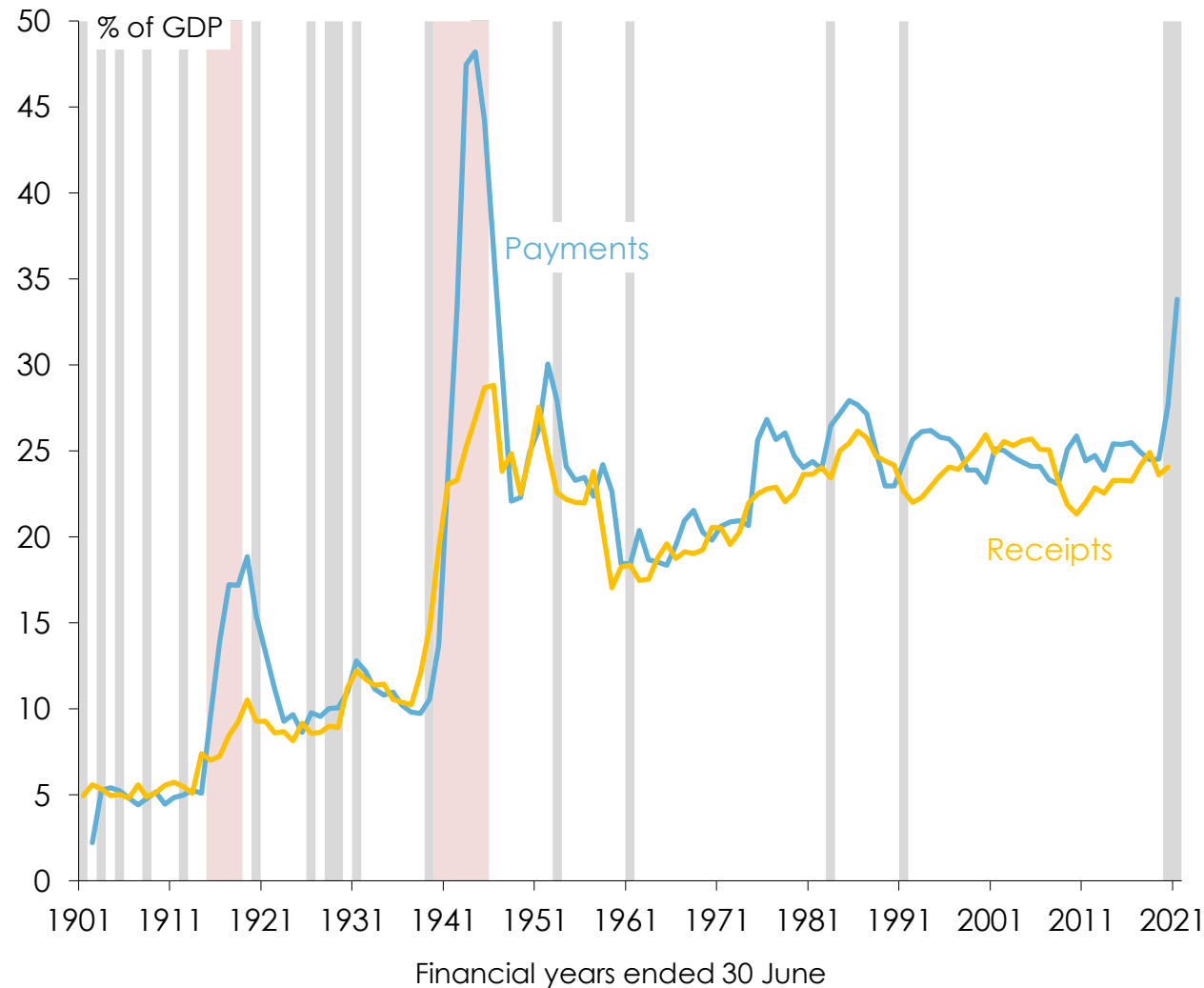
Australian Government net debt



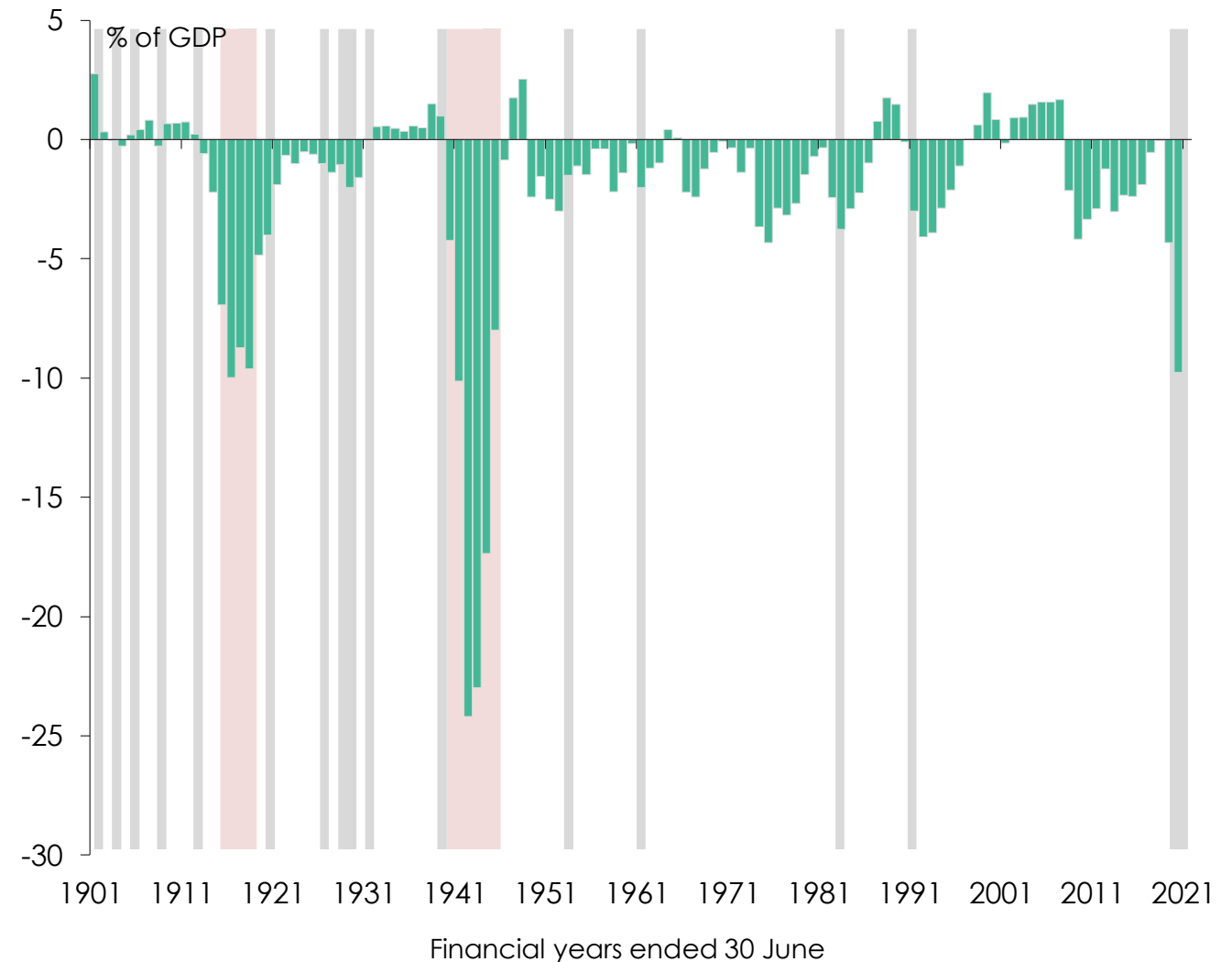
Note: Revenue and expenses are accrual accounting items. The 'underlying' cash balance is (cash) receipts minus payments, excluding transactions in financial assets for policy purposes and net earnings of the Future Fund. Net debt is total interest-bearing liabilities (government securities, deposits,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



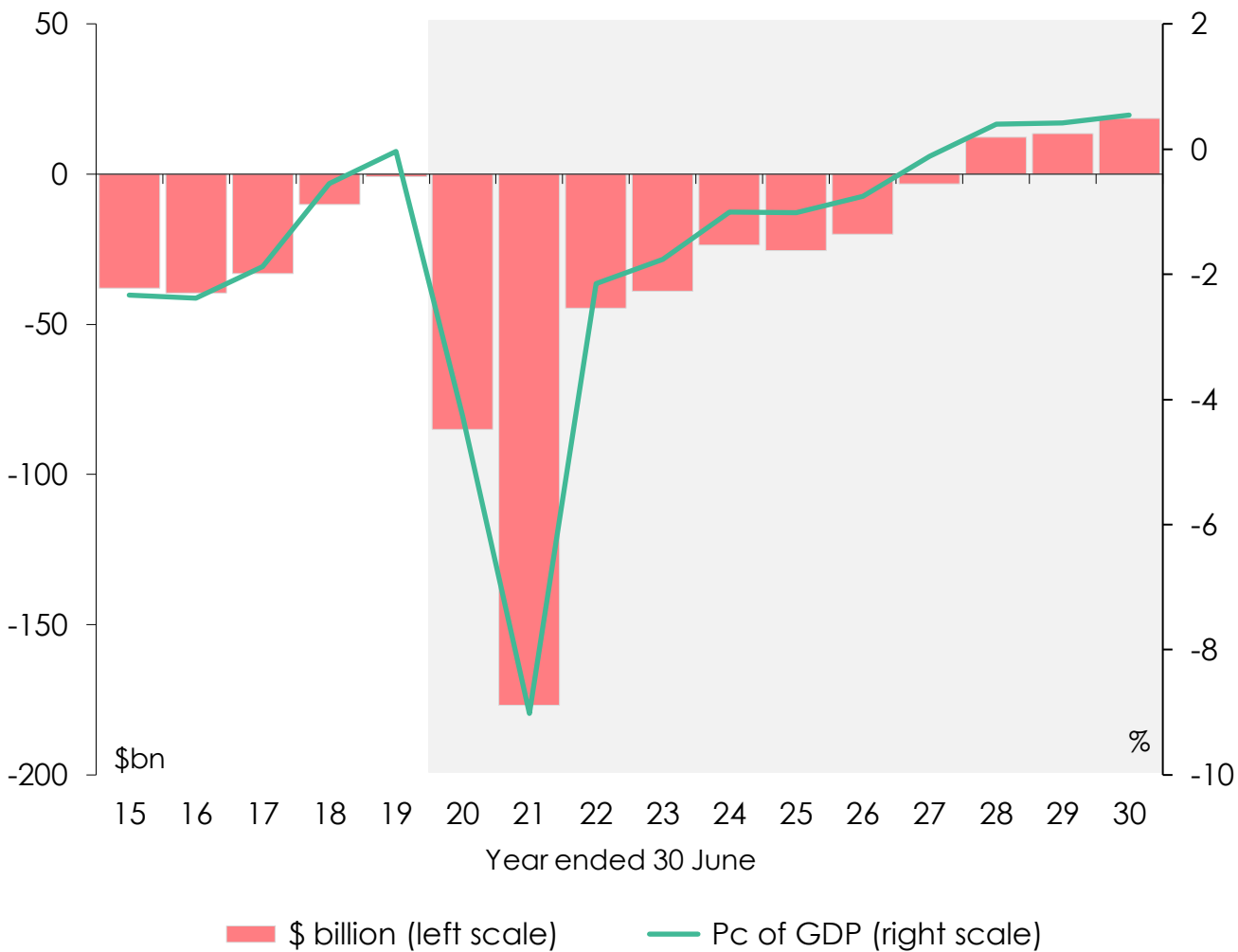
Australian Government budget deficit or surplus



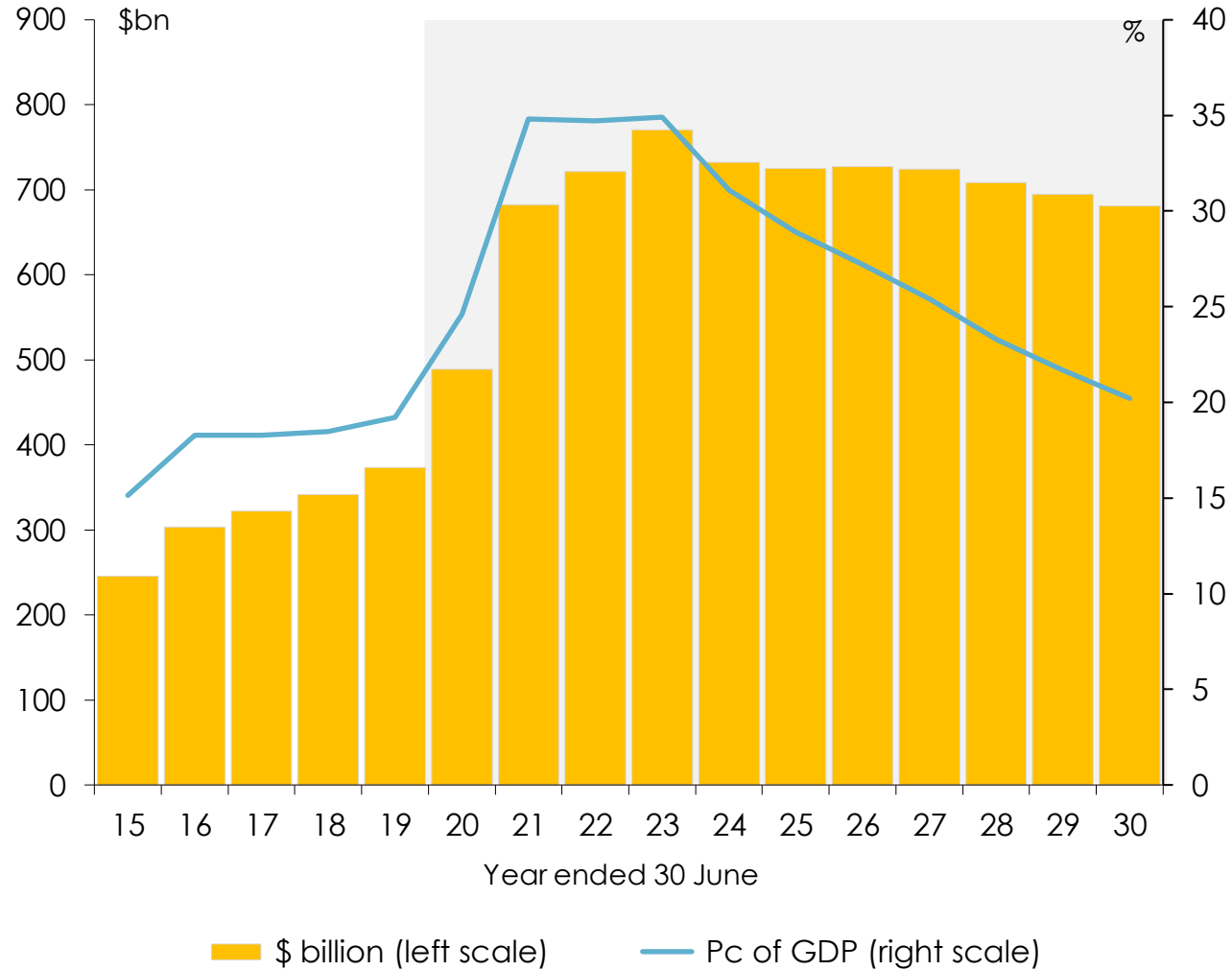
Note: Payments and the budget surplus or deficit are 'underlying' (that is, exclude 'net investments in financial assets for policy purposes') after 1989-90, when state governments became responsible for issuing their own debt, and 'headline' before that. Areas shaded in grey are fiscal years in which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

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

‘Underlying’ cash balance projections to 2029-30



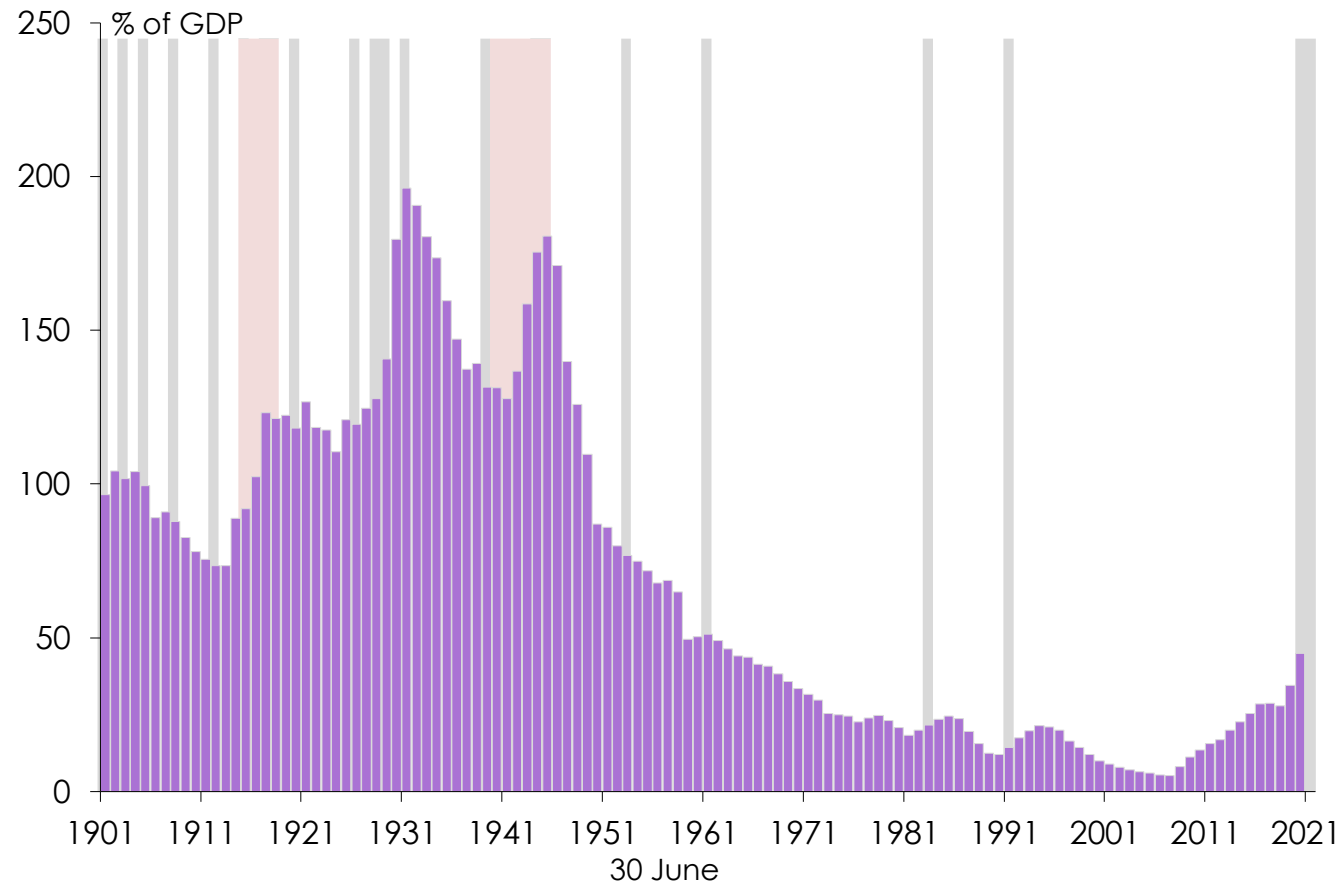
Net debt projections to 2029-30



Note: Shaded area denote estimates (for 2019-20) or projections. Estimates and projections expressed in dollars have been inferred by Corinna from the PBO’s baseline projections expressed as a pc of GDP, PBO projections of real GDP (starting with RBA SoMP forecasts) and Corinna estimates of the GDP deflator. PBO projections only allow for the impact of Covid-19 and measures taken in response to it (including, in particular, the impact of border closures on forecasts for immigration and hence population growth), and not for any other developments which may affect long-term economic or fiscal projections (in either direction).
Sources: Parliamentary Budget Office (PBO), *Updated medium-term fiscal scenarios: impact of COVID-19 pandemic and response*, Canberra, 21st August; Corinna.

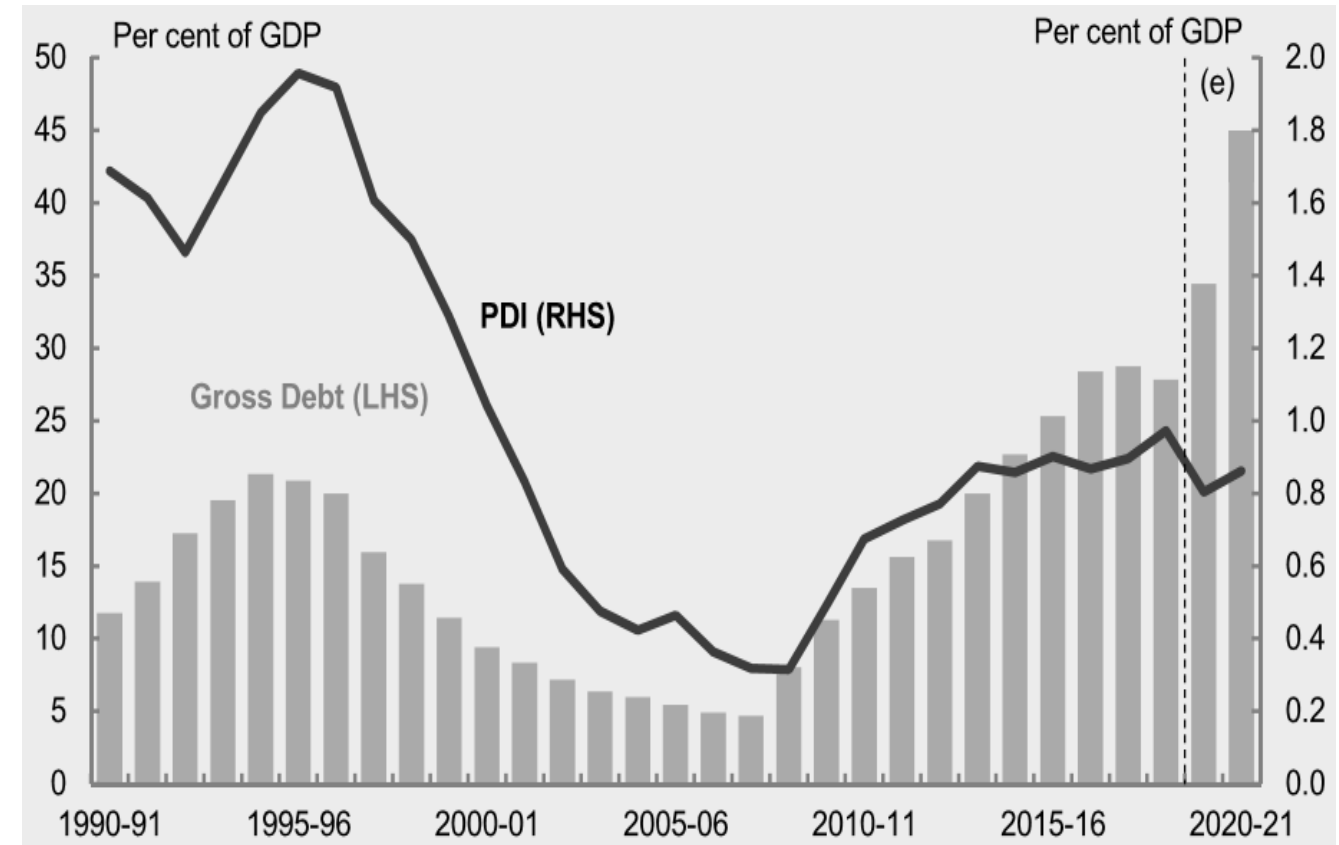
However there's no need for undue alarm at the level of debt which will be incurred by the Australian Government

Australian Government gross public debt



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

Gross public debt and public debt interest payments

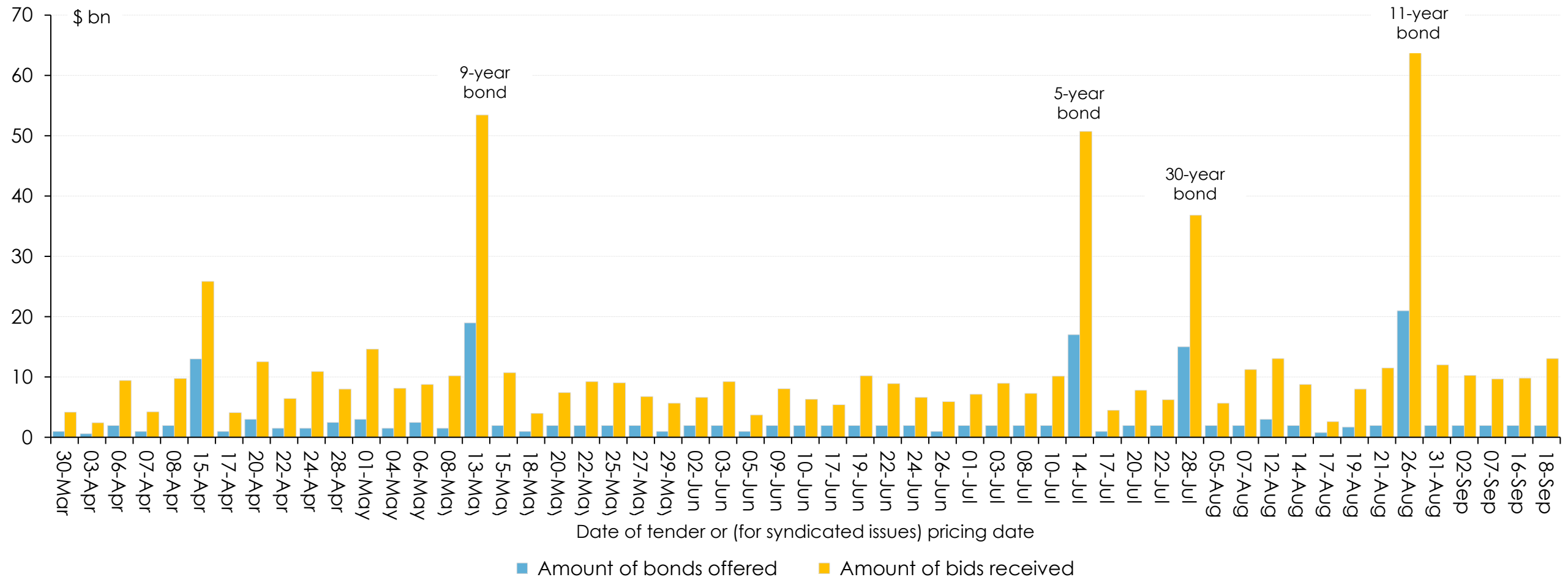


- ❑ Thanks to much lower interest rates, the Government will actually be spending less on interest payments, as a pc of GDP, in 2020-21 than in any of 2013-14 through 2018-19

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

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

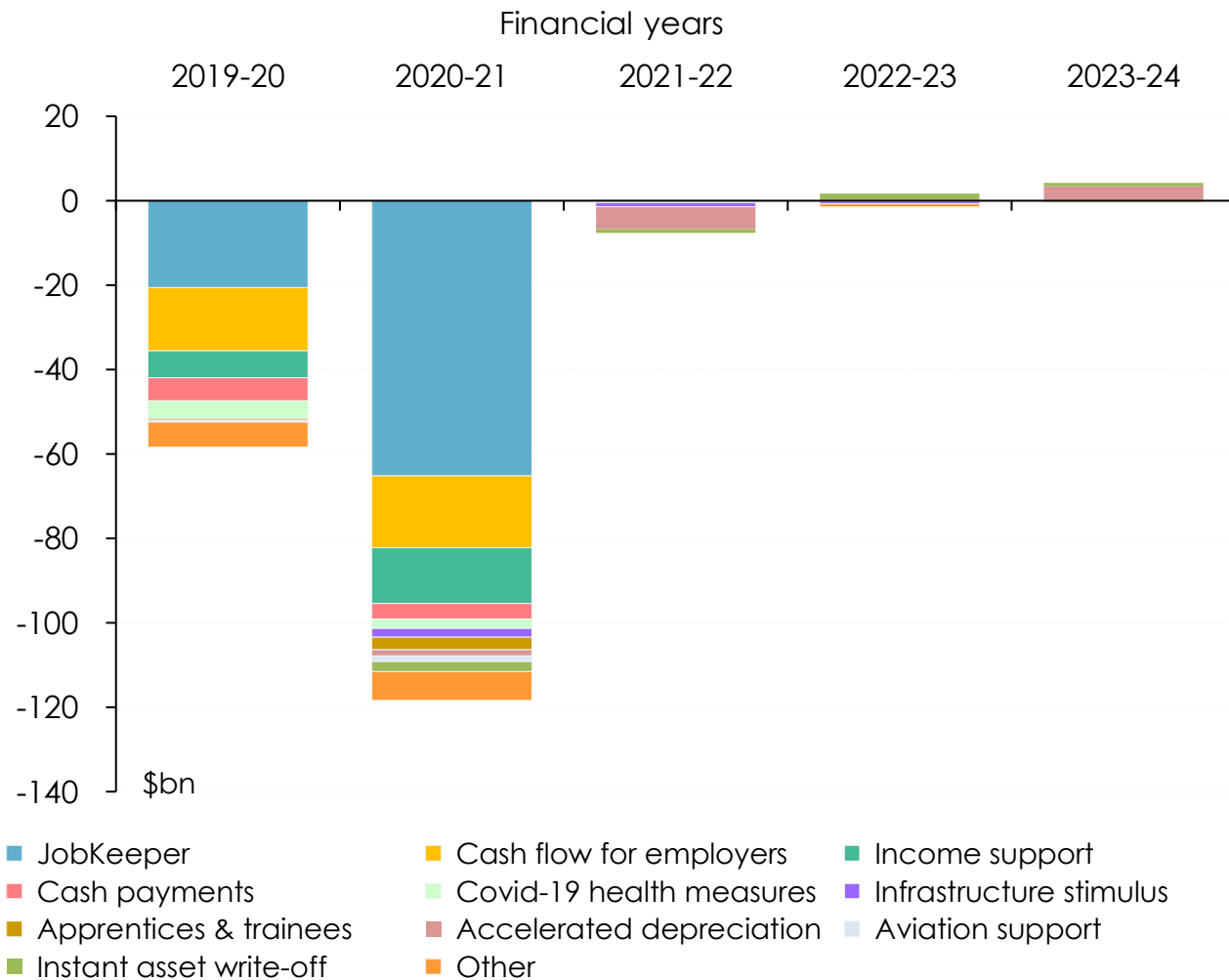
Australian government bond issuance since March 2020



- ❑ Since 30th March, the Australian Office of Financial Management (which conducts the Government's borrowing programs) has issued \$176.1bn of Treasury bonds - based on the volume of bids received it could have borrowed \$639bn with yields at most 3 basis points (0.03 of a pc point) above the highest yields actually accepted

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 December 2019 on the Australian Government's 'underlying' cash balance

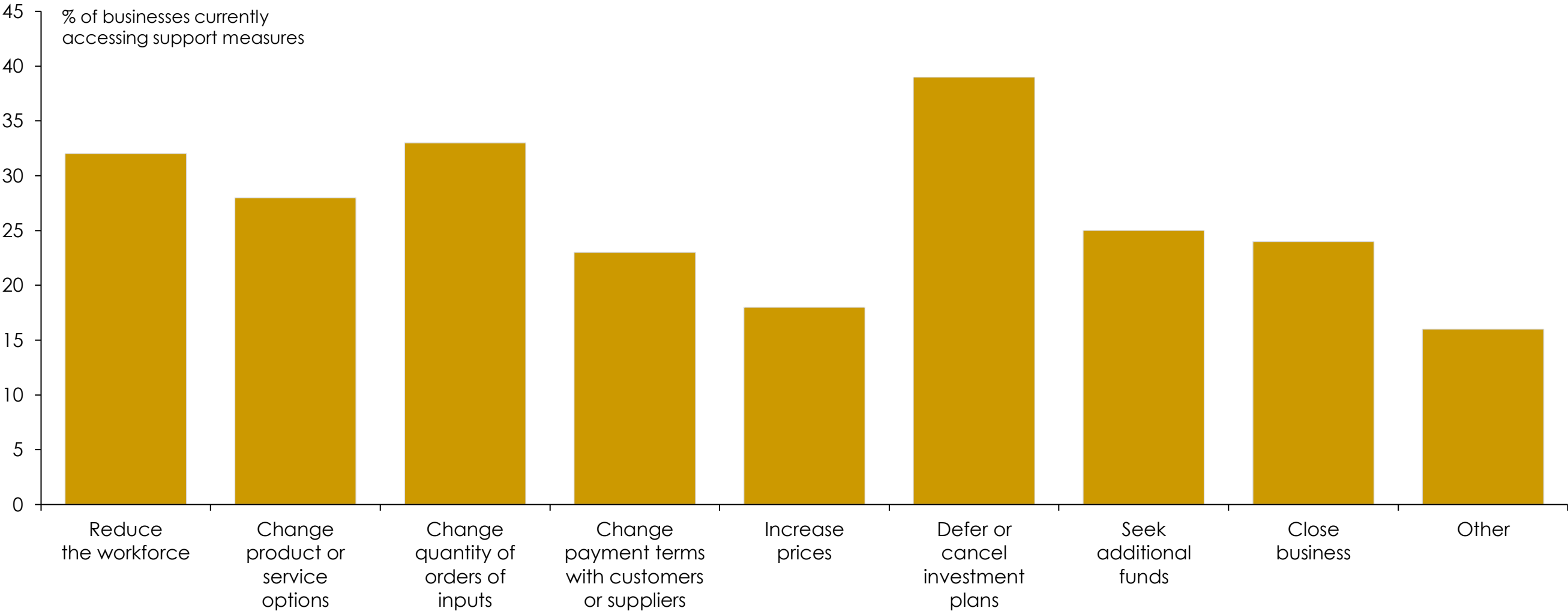


- 'Policy decisions' taken since last December's Mid-Year Economic & Fiscal Outlook (MYEFO) represent a discretionary fiscal stimulus equivalent to 2.9% of GDP in 2019-20 and 6.3% of GDP in 2020-21
- Treasury estimates that this fiscal support boosted by real GDP (relative to what it would have been 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
- July's decisions to extend 'JobKeeper', and the elevated level of 'JobSeeker' payments (albeit at lower levels) beyond end-September until the end of March have lowered the 'fiscal cliff' that was looming at the end of September
 - nonetheless, as things currently stand there will still be a significant tightening of fiscal policy at the end of this and the next two quarters
- The OECD this week **cautioned** that "premature withdrawal of fiscal support would stifle growth", and advised that "prospects for a sustainable recovery could also be strengthened if governments move beyond income support and stimulate aggregate demand directly through public investment"

Source: Australian Government, [Economic and Fiscal Update](#), 23rd July 2020, Appendix A.

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

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



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

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

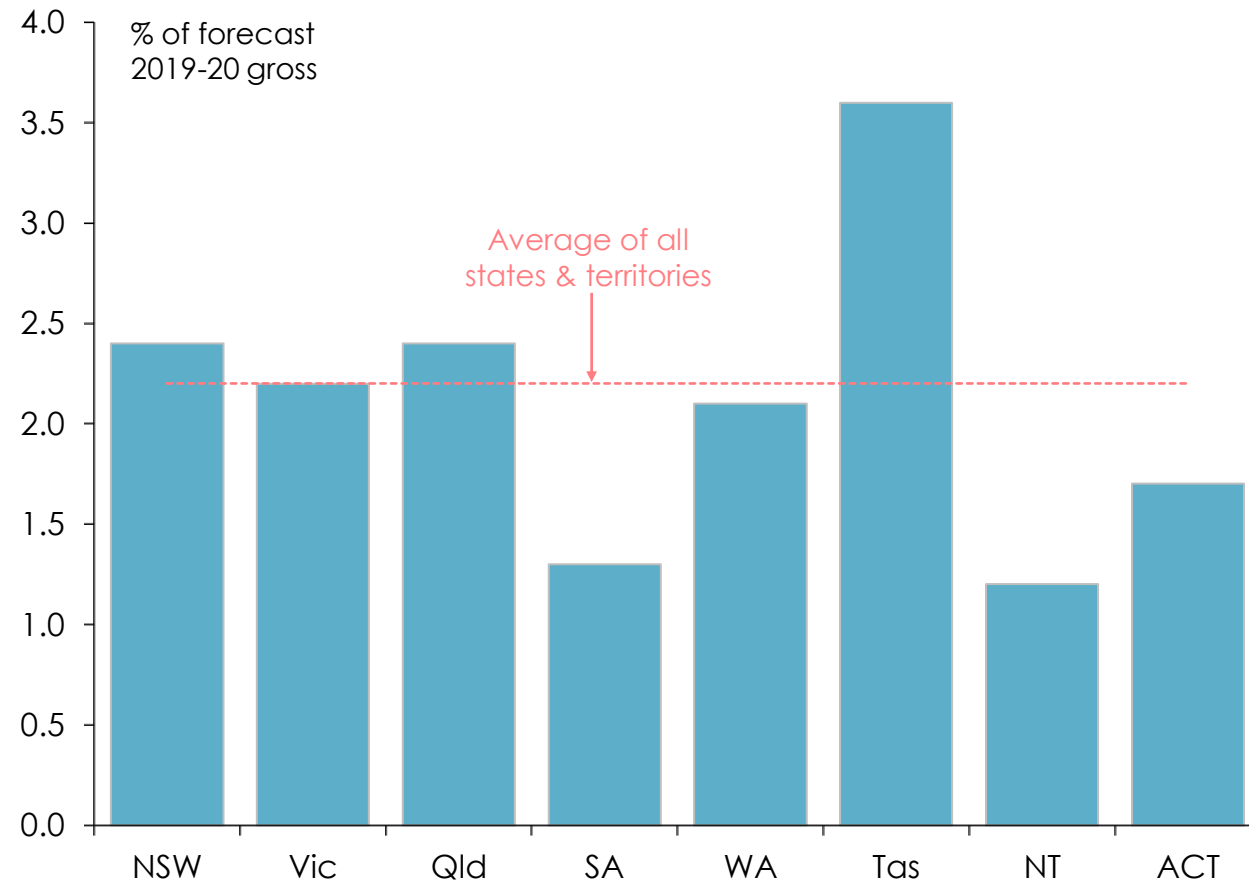
Rates from 2024-25	New thresholds from 2024-25
Nil	Up to \$18,200 pa
19 %	\$18,201 – \$45,000 pa
30 %	\$45,001 – \$200,000 pa
45 %	Above \$200,000 pa
Low income tax offset	Up to \$700

- ❑ Treasurer Josh Frydenberg has again foreshadowed bringing forward the personal income tax cuts currently legislated to come into effect on 1st July 2022, as a way to ‘boost aggregate demand, boost consumption [and] put more money in people’s pockets’
 - this could be a central feature of the (delayed) Budget which he will present on 6th October
- ❑ The tax cuts were estimated to ‘cost’ \$4½bn (in revenue foregone) in FY2022-23 and (together with the further cuts legislated to take effect from the beginning of FY2023-2024) \$143bn over the ten years to 2029-30
- ❑ Bringing forward these tax cuts would likely provide some lift to demand and activity – but, inevitably, at least some of the boost in after-tax incomes would be saved and/or used to pay down debt
 - as happened with the enhanced tax refunds paid out in the Sep quarter of last year, and (even more starkly) with the government payments made to social security beneficiaries and (via JobKeeper) employees – [slide 55](#)
- ❑ A more effective option would be to provide time-limited, tradeable vouchers to households (perhaps subject to an upper income limit) valid for spending in prescribed areas (eg tourism, child-care, re-training or skills upgrading)
 - which would ensure that money was spent in areas most in need of support, or of greatest assistance to recovery, in a timely manner

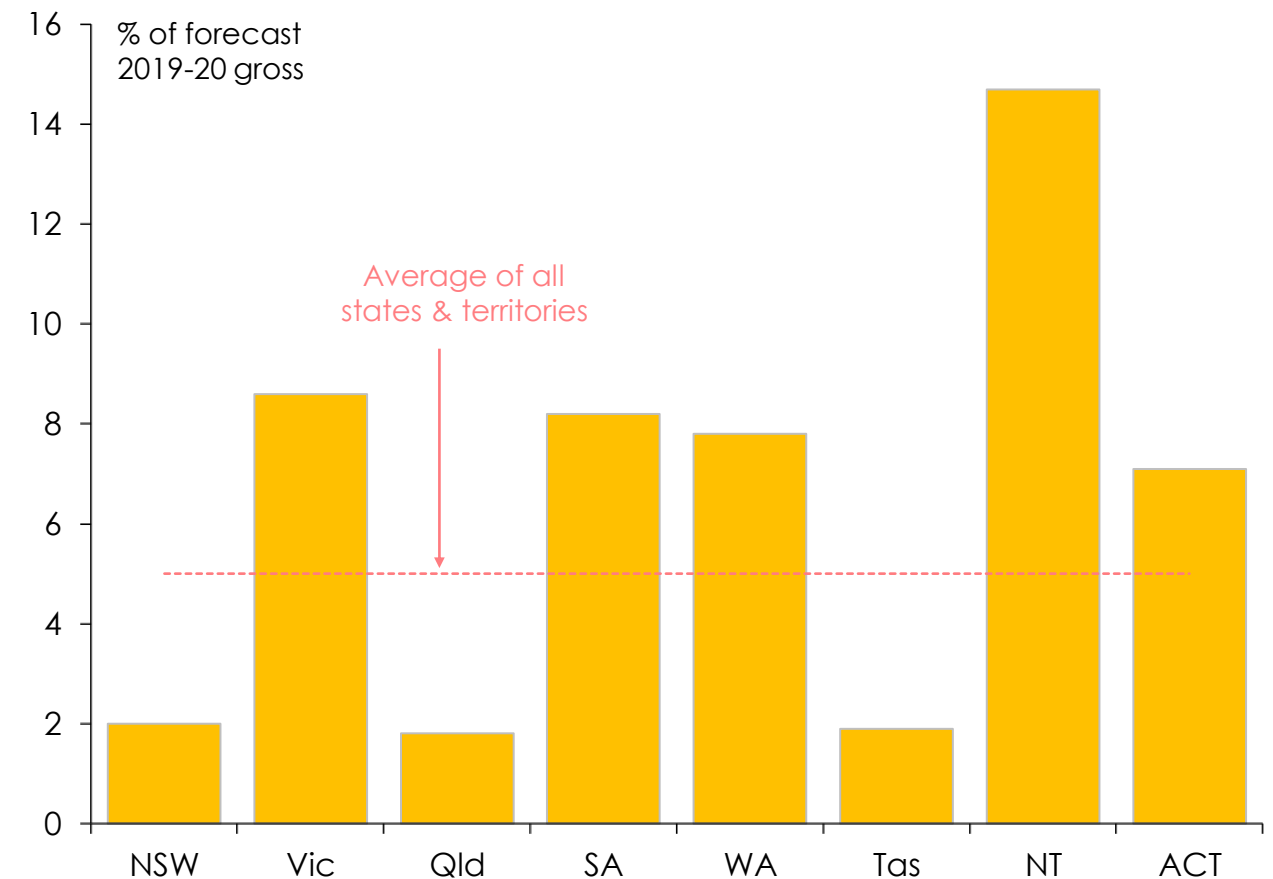
Source: Australian Government, 2019-20, [Budget Paper No. 1, Budget Strategy and Outlook](#), April 2019.

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

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



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

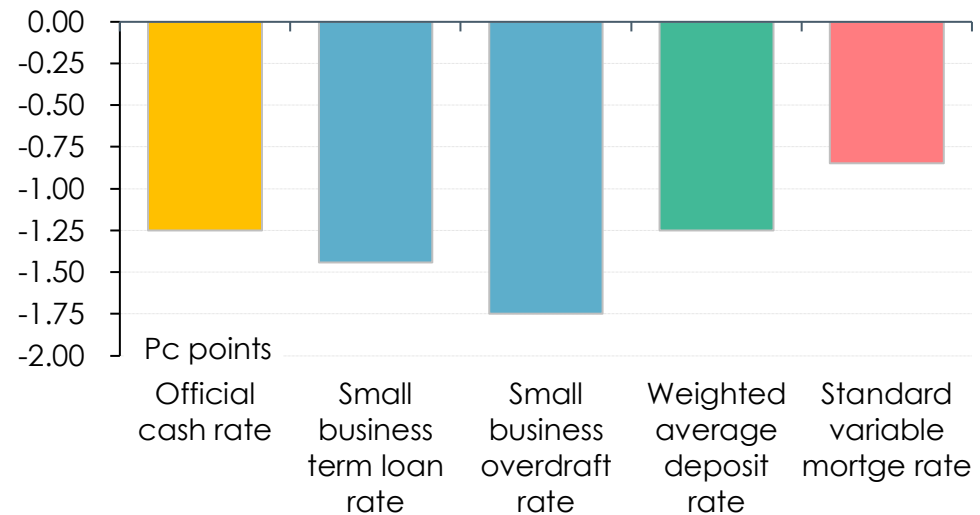


- ❑ This month RBA Governor Phillip Lowe advised state and territory governments to spend an additional \$40bn (2% of GDP) on infrastructure investment – an amount which S&P Global Ratings said state and territory balance sheets had “plenty of room to accommodate”

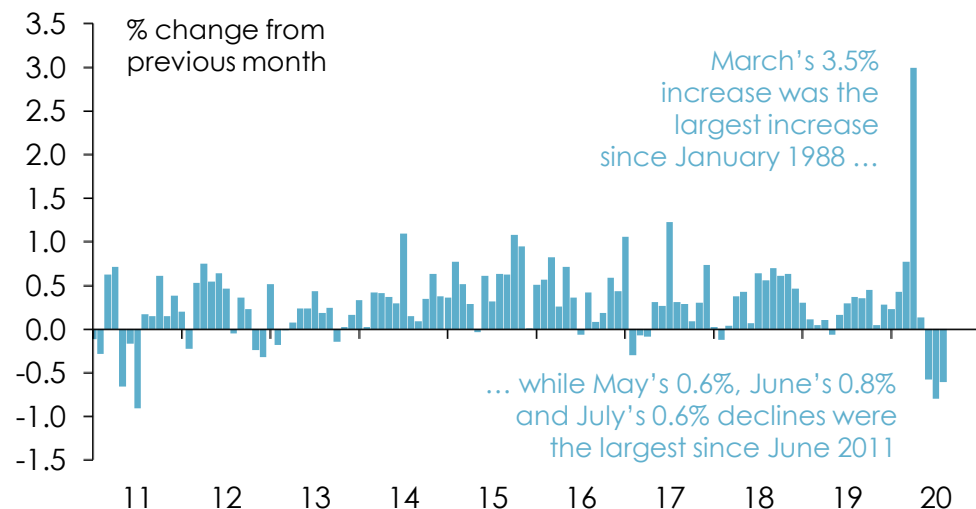
Sources: Commonwealth Treasury, 6th August 2020; Australian Financial Review, 14th August 2020; The Australian, 22nd August 2020.

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

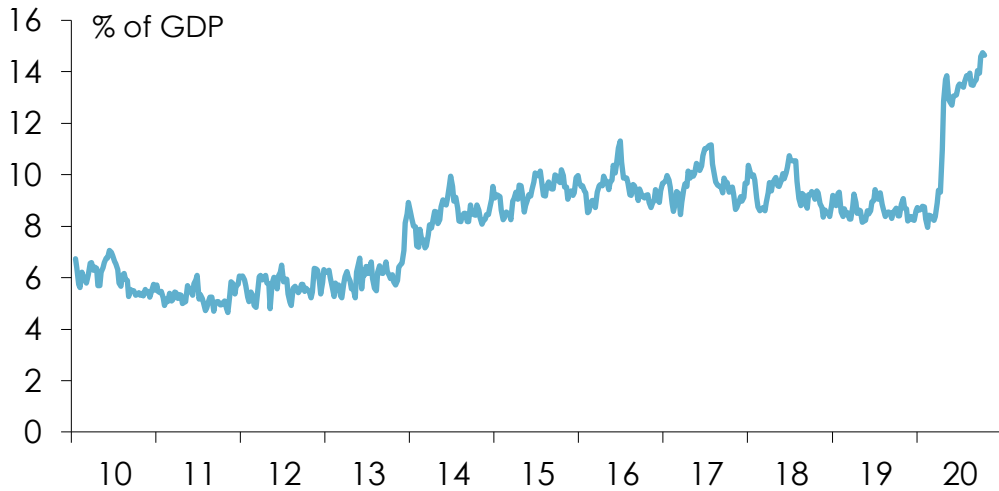


Source: Reserve Bank of Australia.

- ❑ 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 (at the peak in May about 11% of mortgages, now down to 9%, and about 16% 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
- ❑ 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
- ❑ Press reports this month have suggested that the RBA & APRA will phase out the 'Committed Liquidity Facility' for banks introduced as part of Basel III (at a time when the stock of Australian bonds was very low) – this will likely see the banks hold more bonds over time, though not necessarily by \$226bn (the amount of CLF)

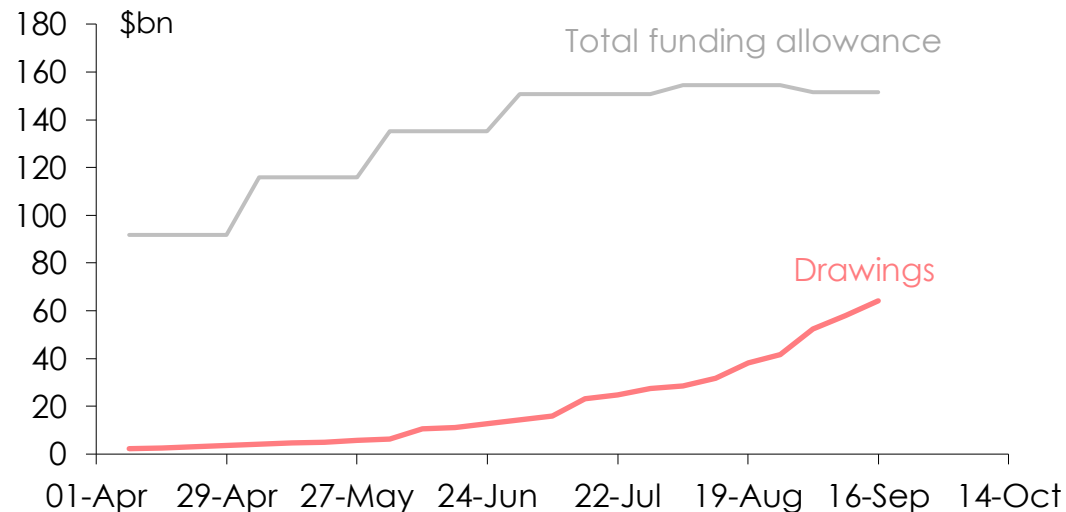
With official interest rates as low as they can go, the RBA has implemented a range of 'quantitative' monetary policy measures

Reserve Bank assets as a pc of GDP



- ❑ The RBA has kept its cash rate target at 0.25% since March, but has allowed the actual rate to drift down to 0.13%
 - the RBA has committed to keeping the target at this level 'until progress is made towards full employment' and 'it is confident inflation will be sustainably within the 2-3% target band' – which the RBA Governor last month said was likely to be at least three years away (see [slide 109](#))
- ❑ RBA 'quantitative easing' continues to target 3-year yields at 0.25%
 - the RBA didn't buy any bonds this week; to date it has purchased \$62.1bn of bonds under its BoJ-style QE of which \$12bn has been since it resumed purchases in the first week of August after a 3-month hiatus (see [next slide](#))
 - RBA assets are now equivalent to 14.6 % of GDP (cf. BoC 23¾%, US Fed 36%, BoE 44¾%, ECB 62%, BoJ 135% - see [slide 26](#)) and RBNZ 20¾%
- ❑ The [minutes](#) of this month's RBA Board meeting (released Tuesday) indicate that the Board would "continue to consider how further monetary measures could support the recovery"
 - suggesting that a further cut in the cash rate target, or broadening of the scope of QE to target longer-term rates, could be considered if warranted
- ❑ The RBA has provided \$64bn of three-year funding at 0.25% pa to banks and other lenders for on-lending to business, especially SMEs, through its Term Funding Facility
 - of which \$6.2bn was provided in the week ended Wednesday
 - as of this week up to \$151.7bn was notionally available through the TFF
 - at last month's Board meeting the RBA extended the period for which the TFF will be available from 30th September to 30th June next year

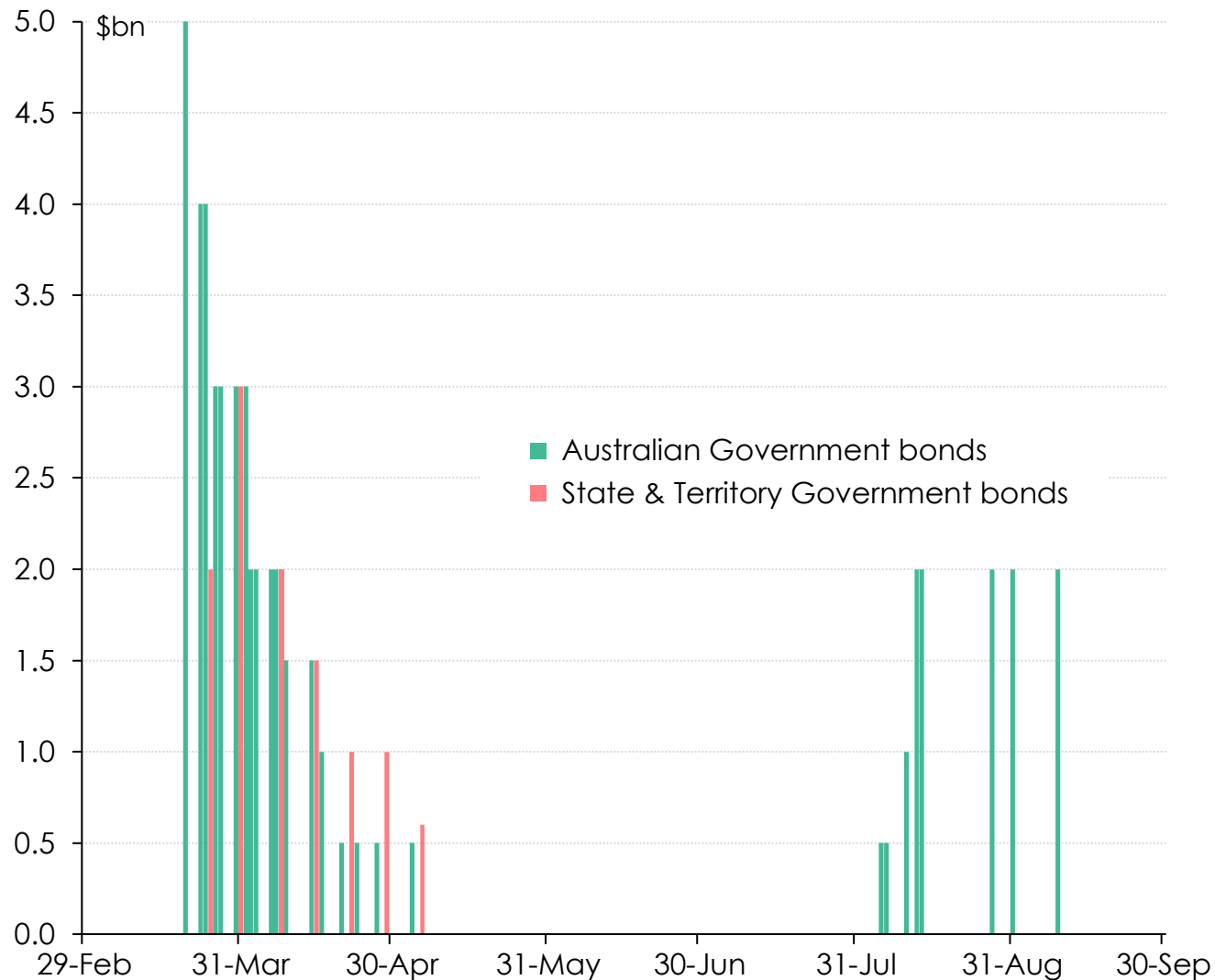
RBA term funding facility



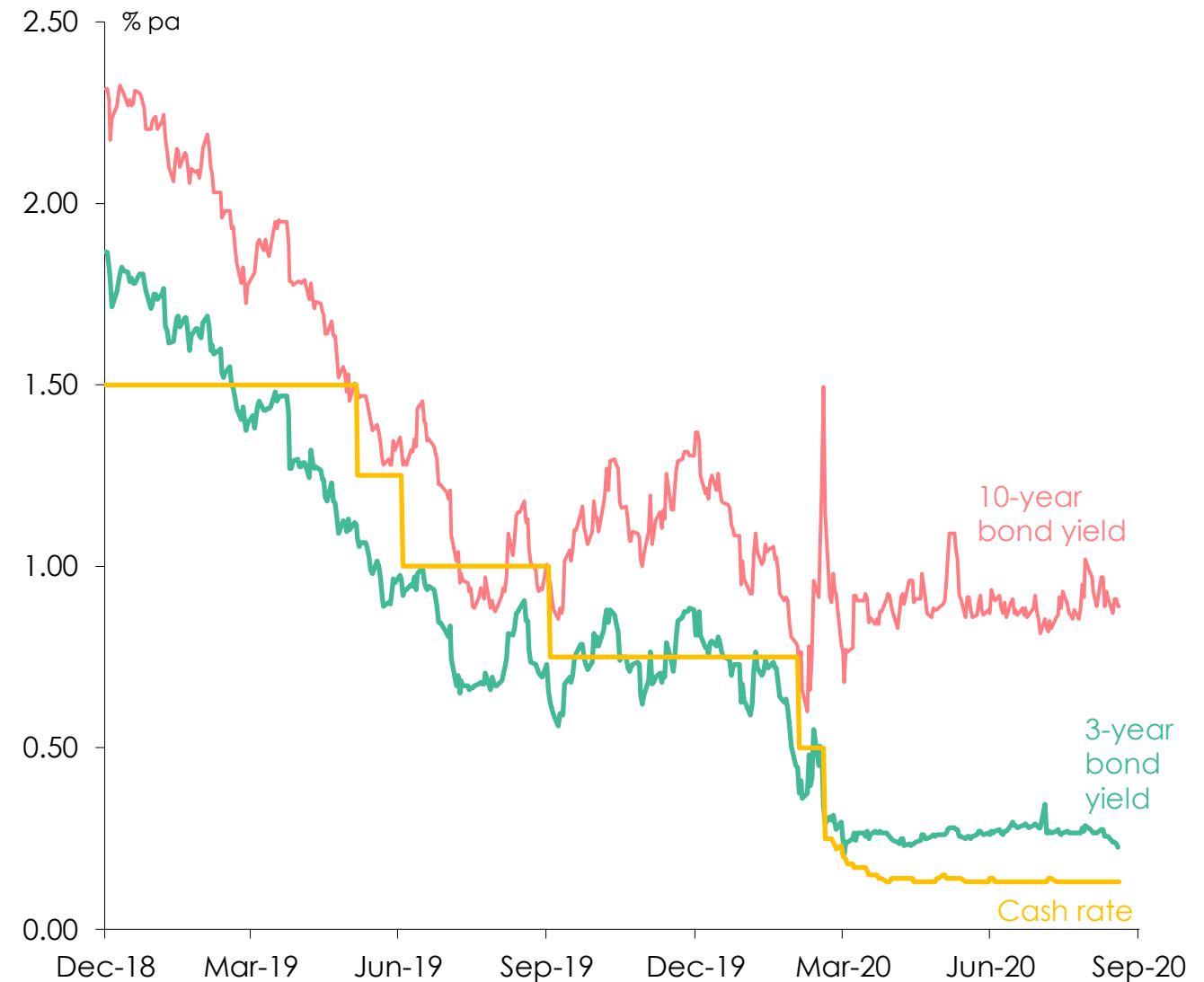
Source: Reserve Bank of Australia, [Statistical Tables](#) A1 and A3.

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

RBA open market bond purchases



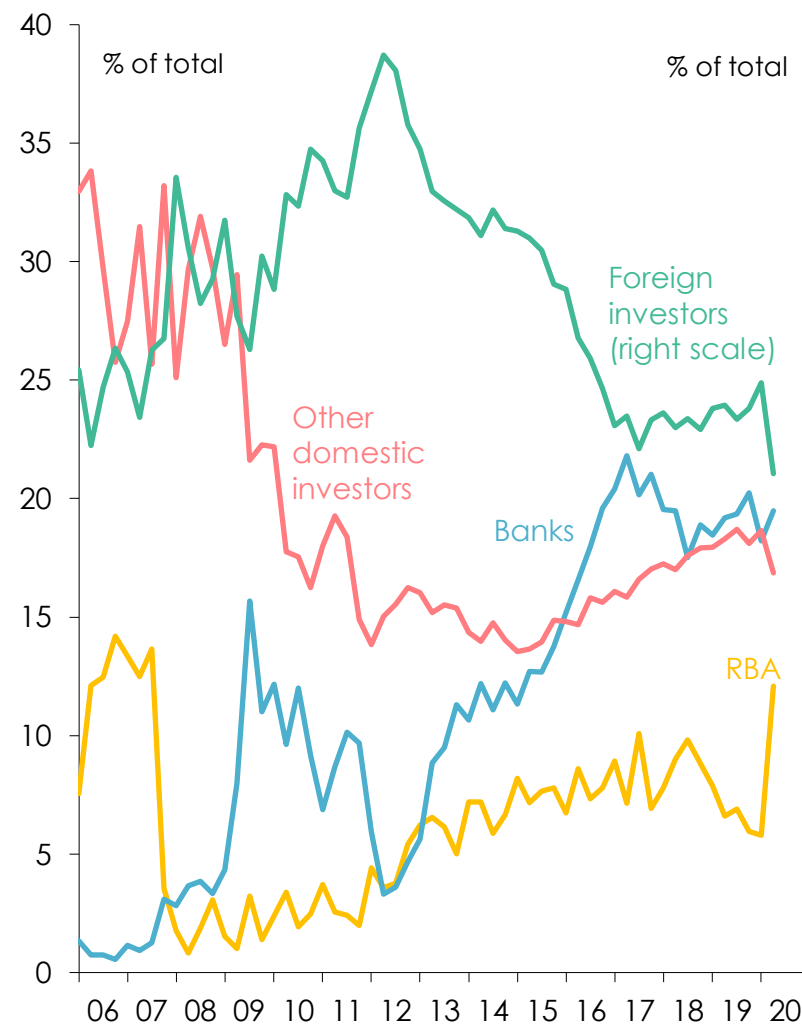
Interest rates



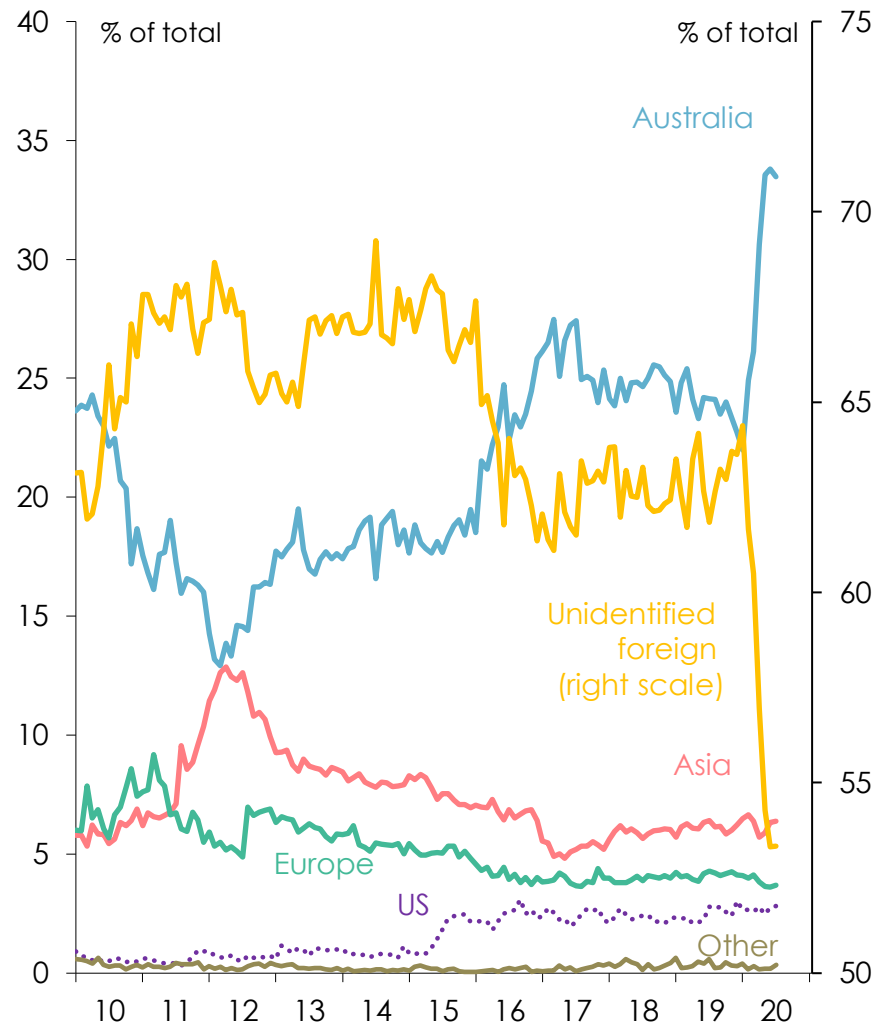
Source: Reserve Bank of Australia, [Statistical Tables](#) A3 and F2. Data up to 18th September.

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

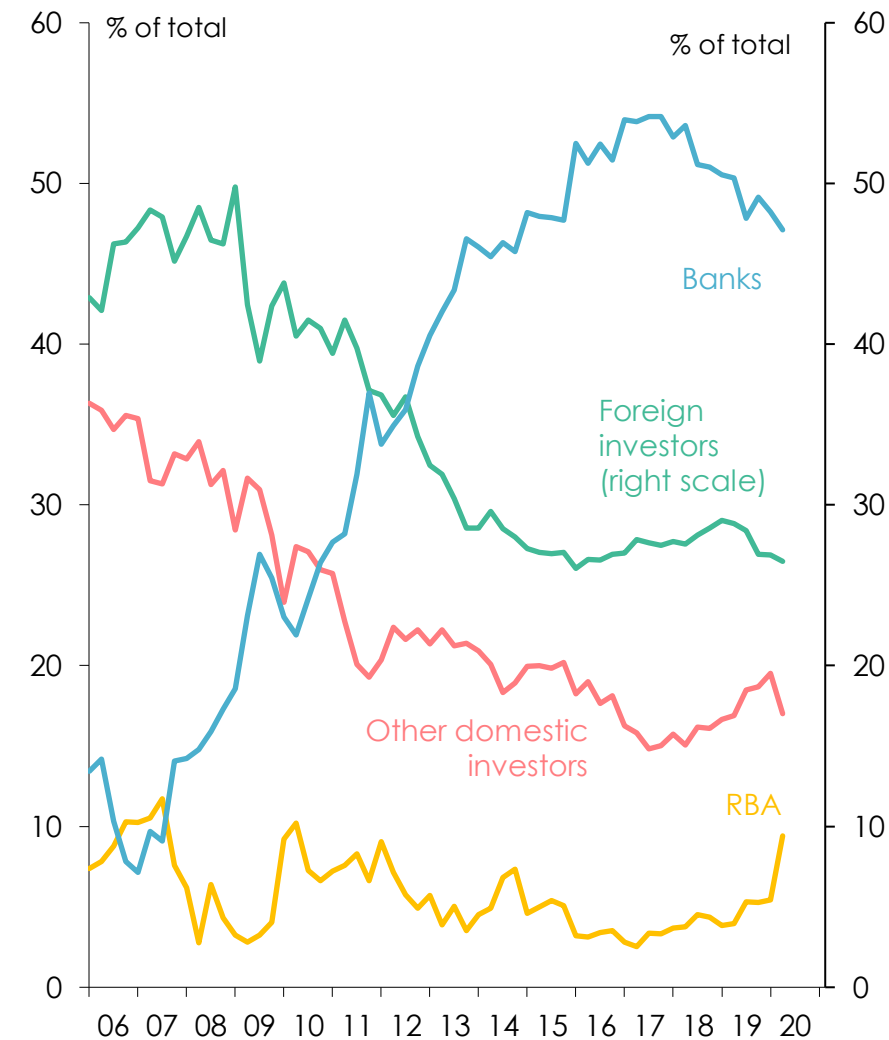
Holder of Australian Government bonds



Nationality of Australian Government bond holders



Holder of State and Territory Government bonds

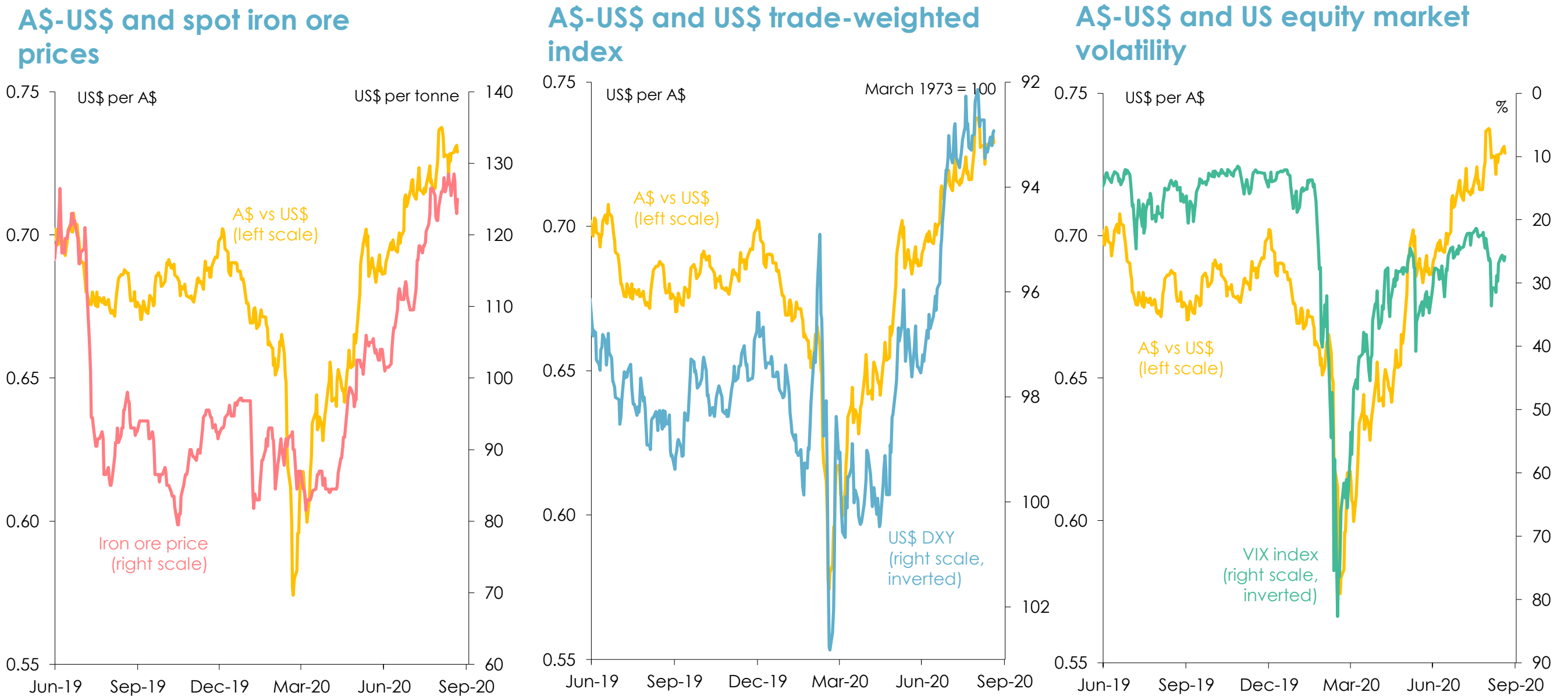


Sources: ABS (Finance & Wealth Accounts); Australian Office of Financial Management. June quarter data will be released on 24th September.

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

- ❑ Speaking to the Parliamentary Economics Committee on 14th August RBA Governor Lowe again characterized negative interest rates as “extraordinary unlikely”, monetary financing of budget deficits (aka ‘modern monetary theory’) as “not on the agenda in Australia”, and FX market intervention to drive the A\$ down as something the RBA is “not prepared to [do] ... unless the currency is misaligned, and I don’t think it is”
- ❑ The Governor indicated that, on the basis of its current outlook (see [slide 60](#)) it is likely to be at least three years before the RBA’s stipulated conditions for raising the cash rate will be met
- ❑ The Governor defended the RBA’s adoption of a BoJ-style approach to QE – targeting the 3-year yield at 0.25% pa as opposed to a fixed program of bond purchases – saying this was “a more direct way of achieving ... low funding costs” and that it “reinforces the [RBA’s] forward guidance regarding the cash rate”
 - however the Governor didn’t rule out “a separate bond buying program”, or “tweaks” to the RBA’s Term Funding Facility, if doing so were likely to “get traction” in a future environment where “people ... want to invest and expand”
- ❑ The Governor re-iterated that the “expected increase in public debt” resulting from the blow-out in budget deficits is “entirely manageable and ... affordable”
 - and moreover that borrowing “today to help people, keep them in jobs and boost public investment at a time when private investment is very weak” was “the right thing to do”
- ❑ The RBA’s approach to the use of monetary policy in current circumstance is increasingly different from that of the RBNZ, whose Governor last month again flagged the possibility of negative interest rates, coupled with a ‘Funding for Lending Program’ to enable banks to lend to their customers at negative rates, and direct FX market intervention to push the NZ\$ lower (see [slide 124](#))
 - The RBNZ this month also announced an expansion (in size) and extension (in time) of its ECB-style bond-buying program (which is already three times as large, as a pc of GDP, as the RBA’s)

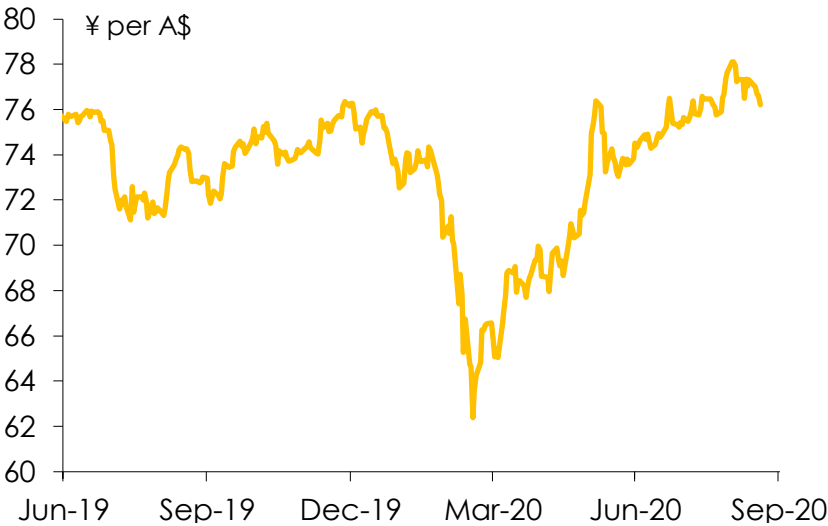
The A\$ was little changed over the past week at just below US73¢ with lower iron ore prices offsetting the effect of a weaker US dollar



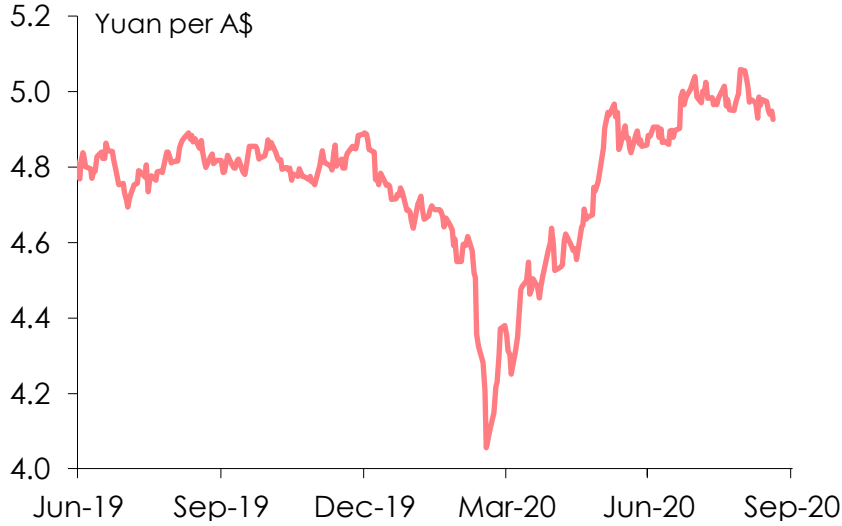
Note: The VIX index is a measure of the implied volatility of S&P500 options and is widely interpreted as an indicator of investor risk appetite or aversion. For an explanation of the factors underpinning the strength in the iron ore price see [slide 88](#) Source: Refinitiv Datastream. Data up to 18th September.

The A\$ lost ground against Asian currencies and the NZ\$ this week, while sterling recovered a little bit of the previous week's plunge

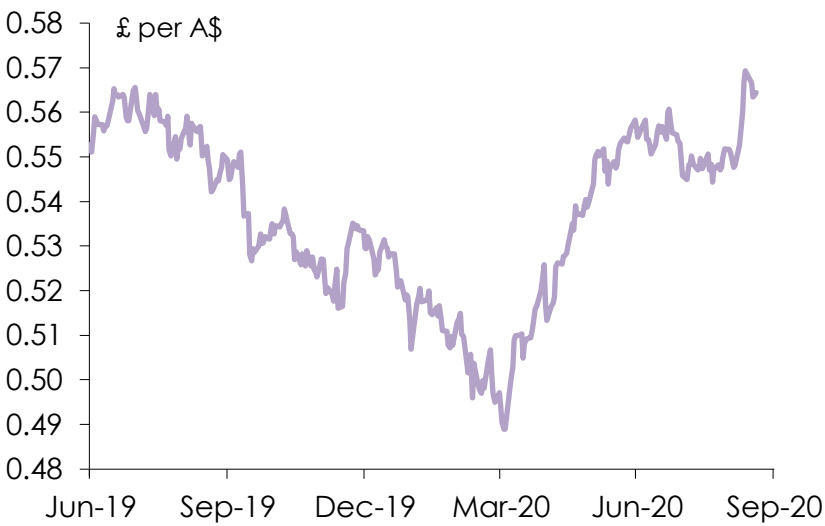
A\$ vs Japanese yen



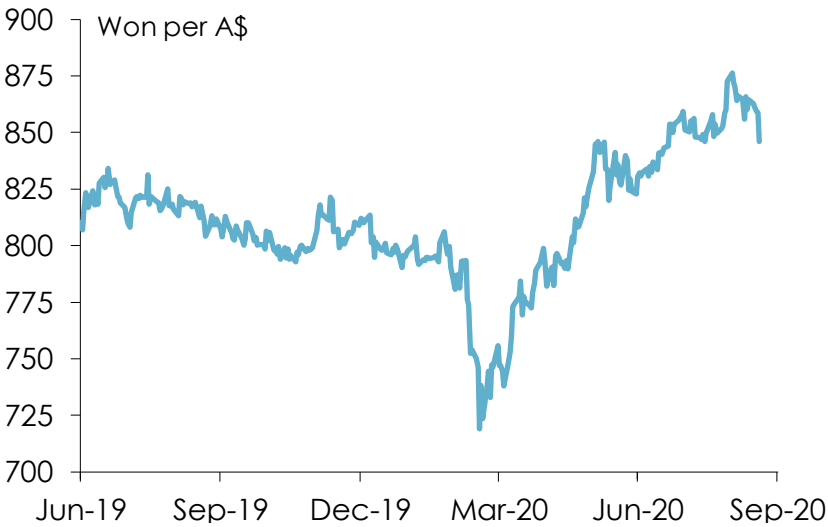
A\$ vs Chinese yuan



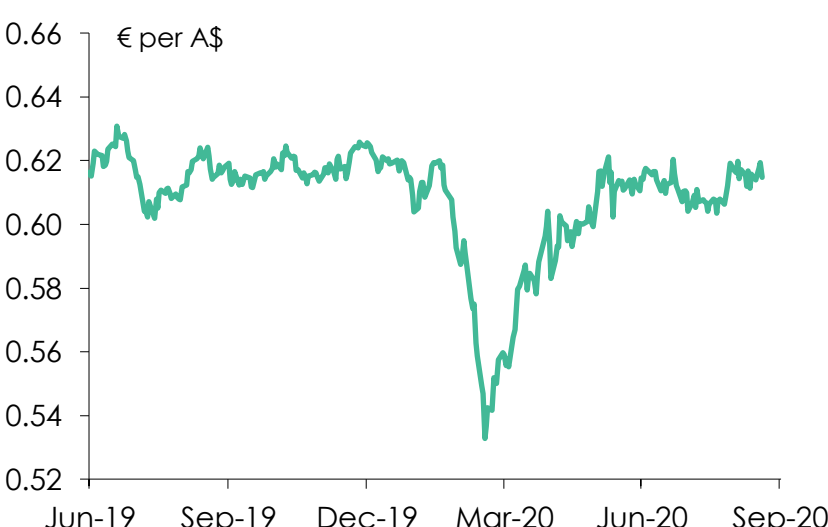
A\$ vs British pound



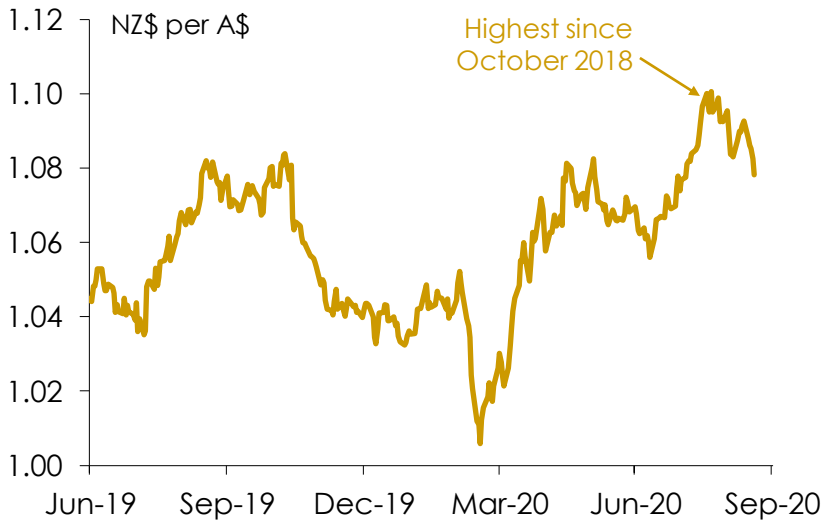
A\$ vs Korean won



A\$ vs Euro



A\$ vs NZ\$



Source: Refinitiv Datastream. Data up to 18th September.

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

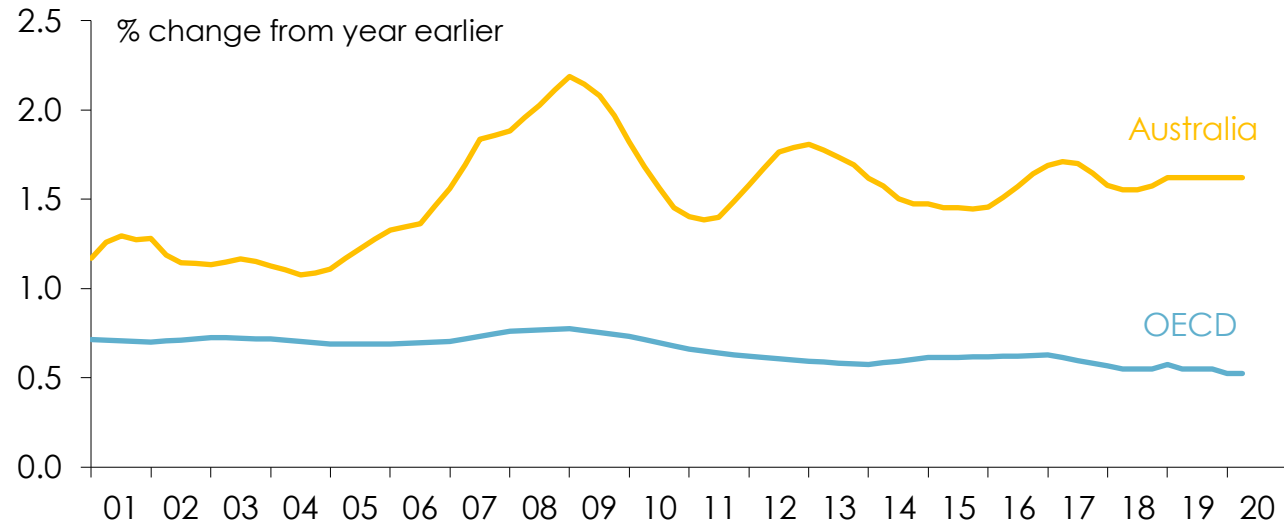
❑ **(Mostly) good macro-economic policy – especially by comparison with other 'advanced' economies**

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

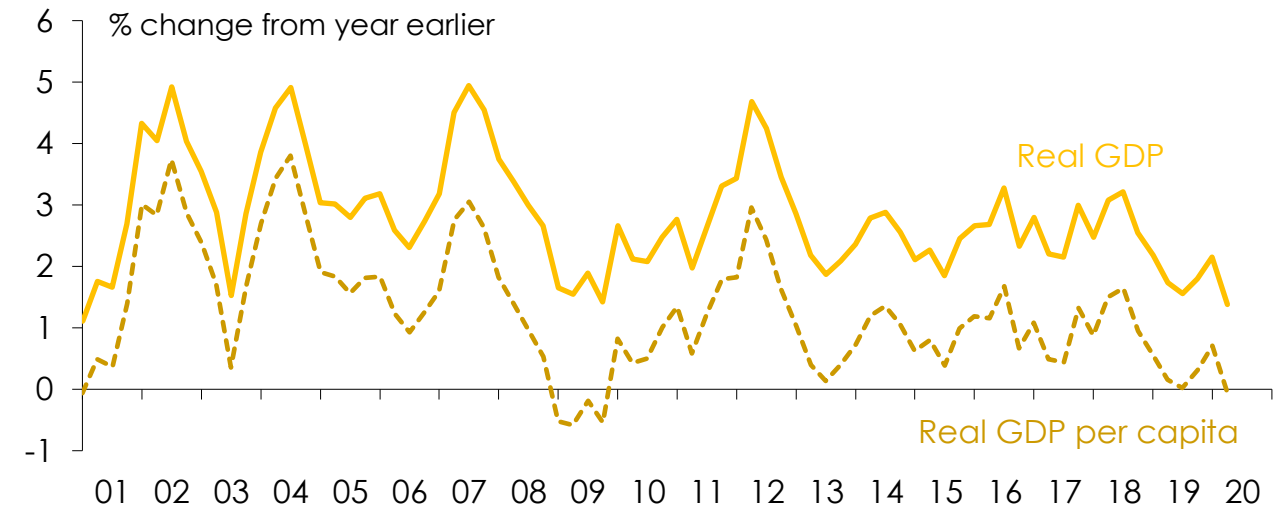
The first three of these are likely to be of less assistance from now on

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

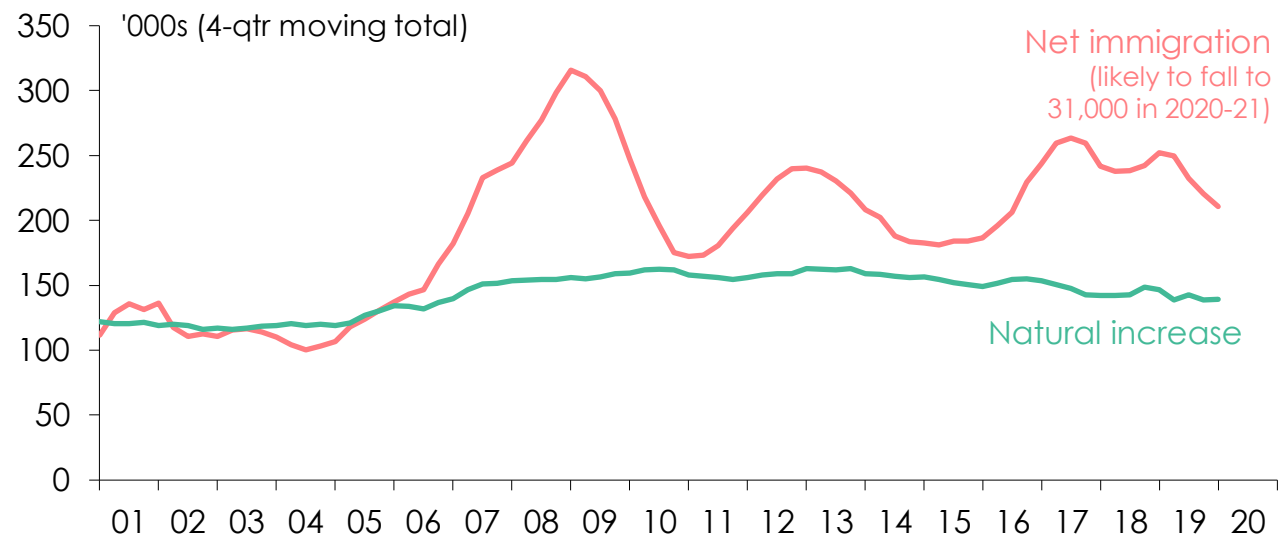
Australia and OECD population growth



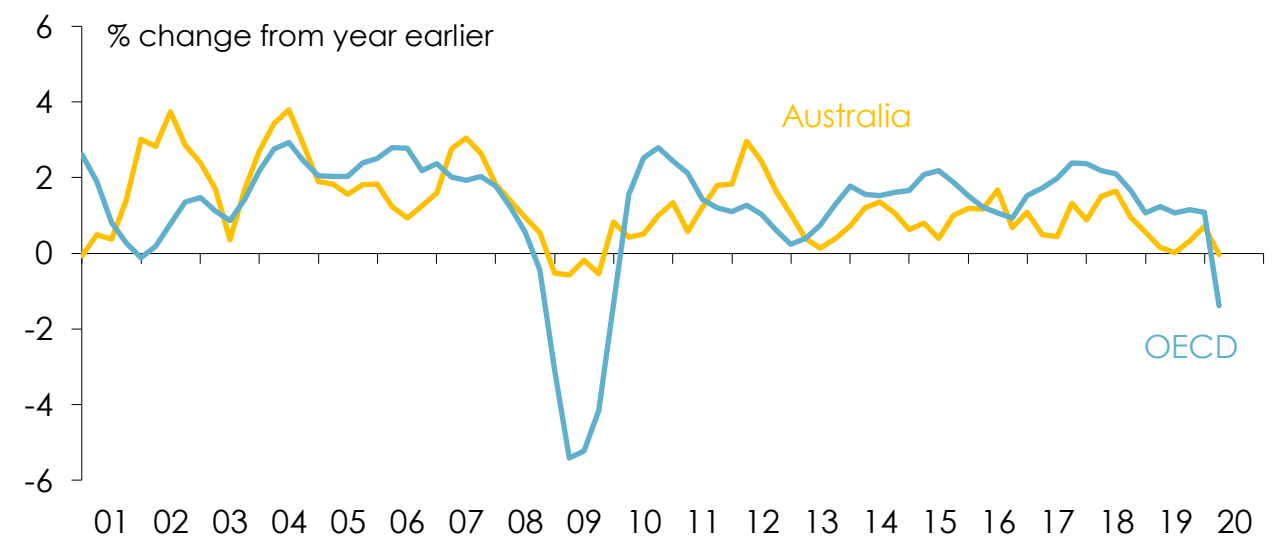
Australian GDP and per capita GDP growth



Sources of Australia's population growth



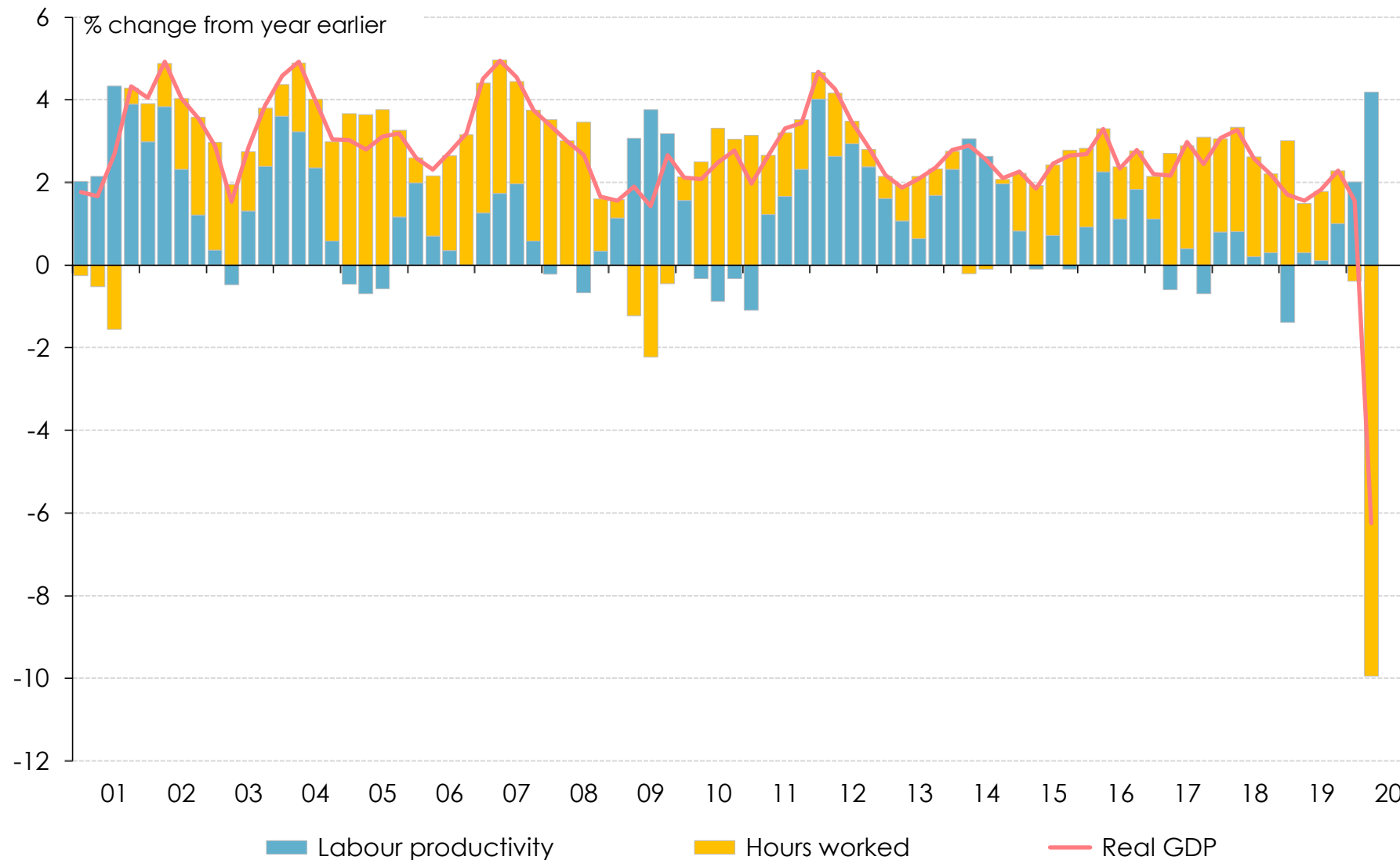
Australia and OECD per capita real GDP growth



Note: Q2 2020 data not shown in the charts of GDP and per capita 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

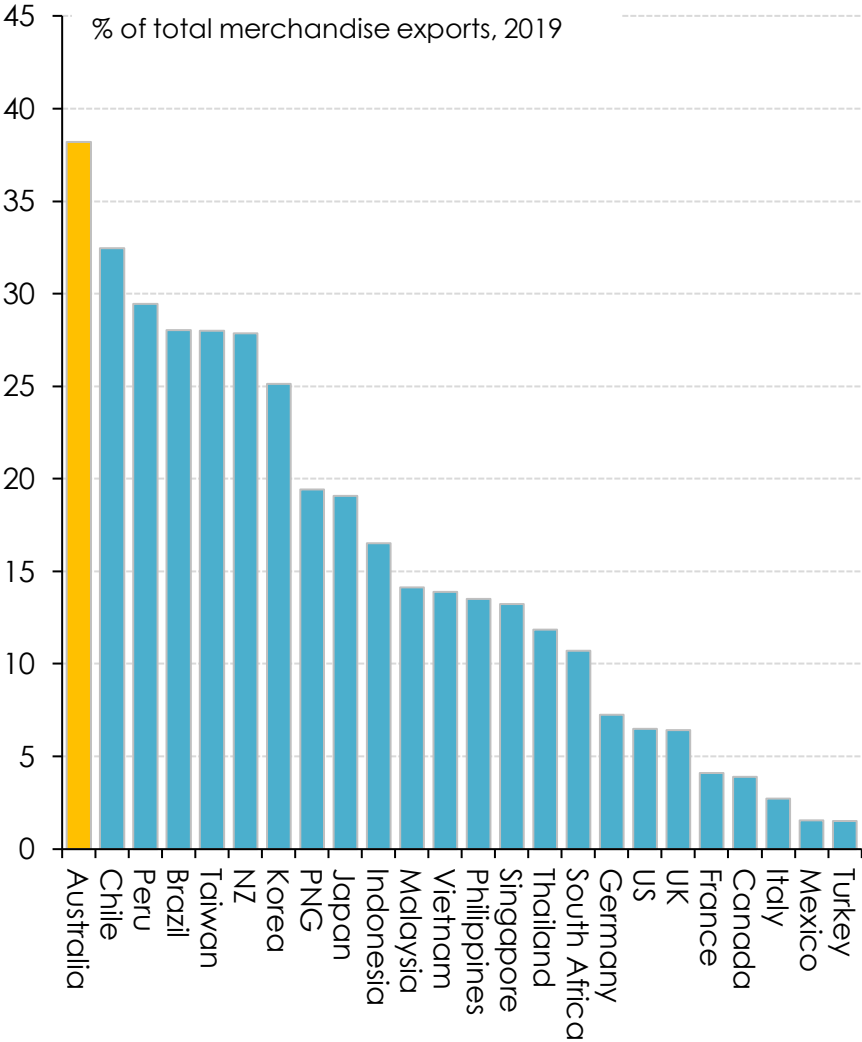


- Over the five years between the end of the 'mining boom' and the onset of the Covid-19 pandemic, 72% of Australia's real GDP growth came from increased labour input, and only 28% from labour productivity growth
- By contrast, between the end of the early 1990s recession and the onset of the global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

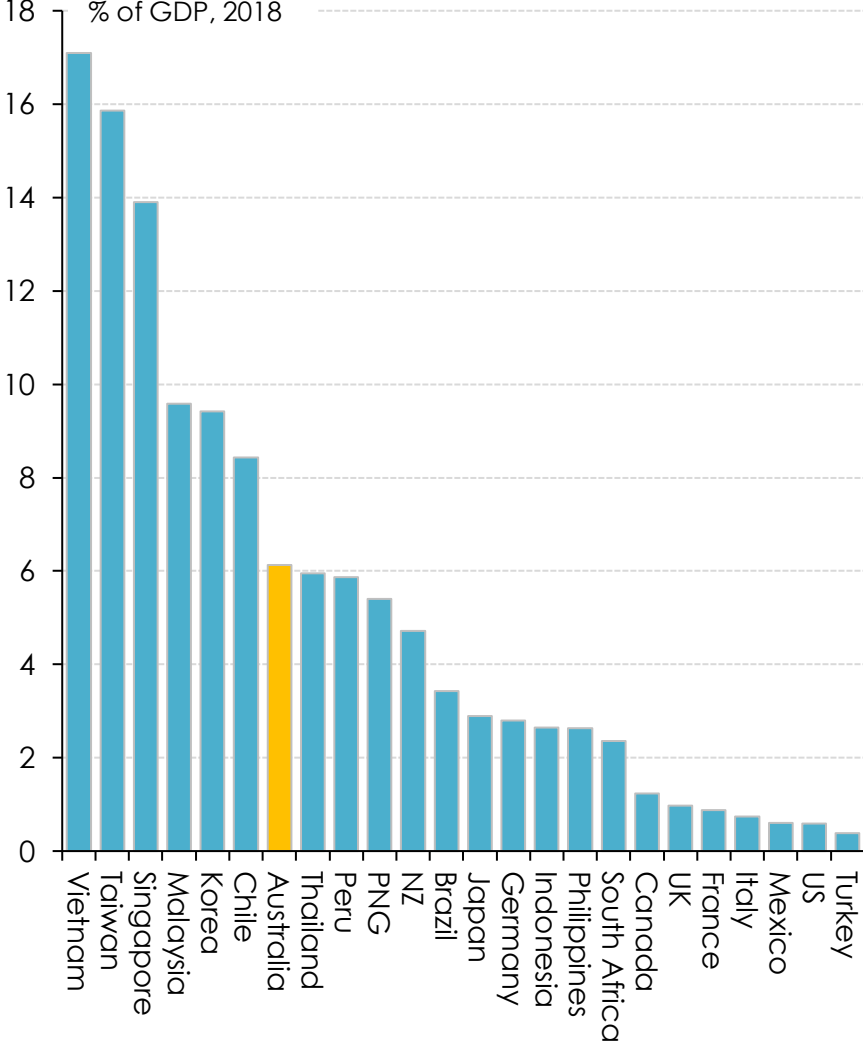
Source: ABS, [Australian National Accounts: National Income, Expenditure and Product](#), June quarter 2020; Corinna.

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

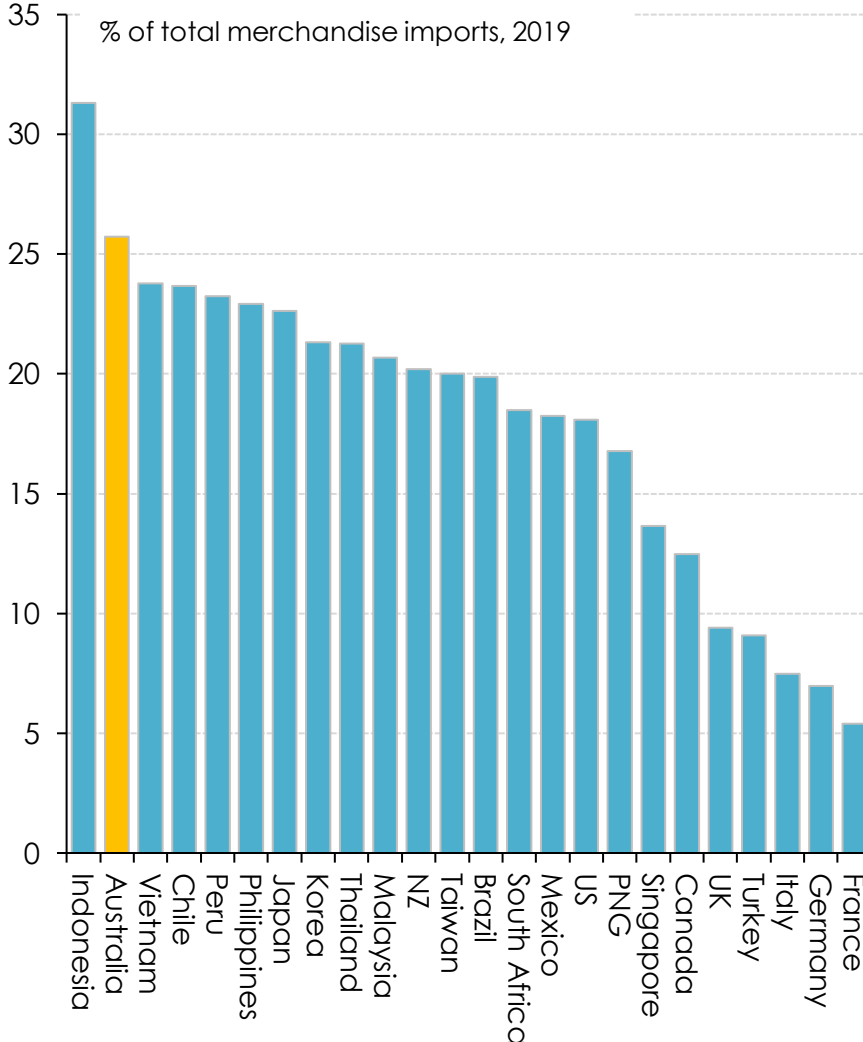
Merchandise exports to China as a pc of total



Merchandise exports to China as a pc of GDP



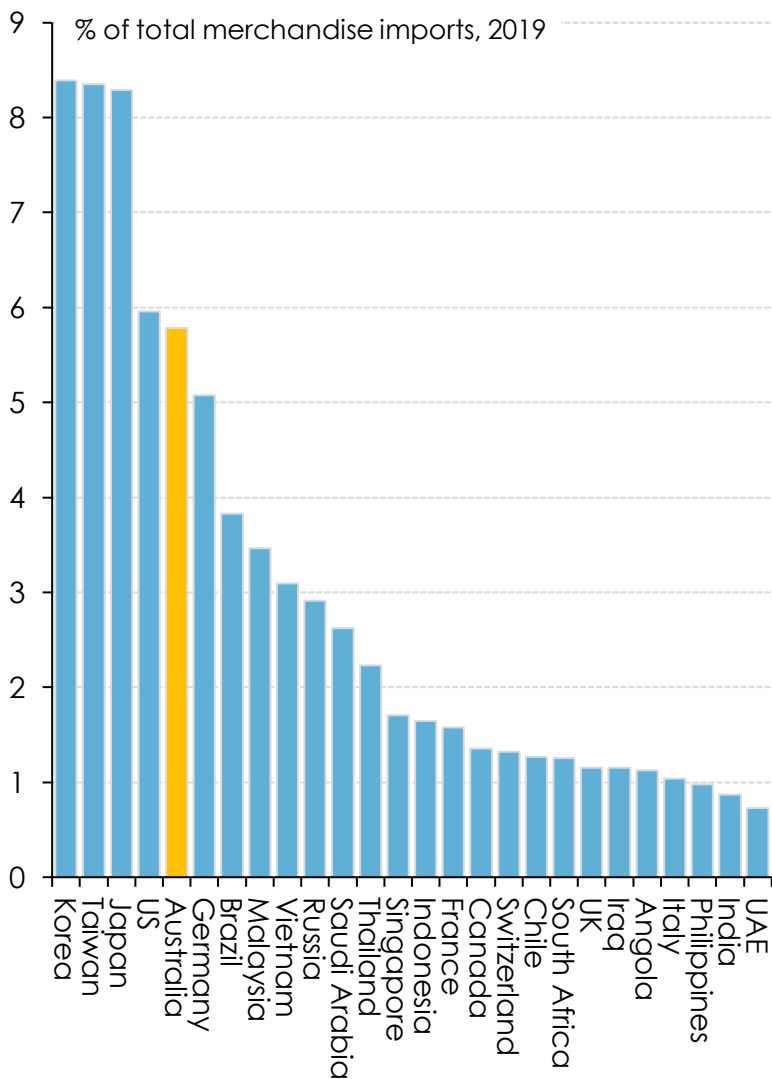
Merchandise imports from China as a pc of total



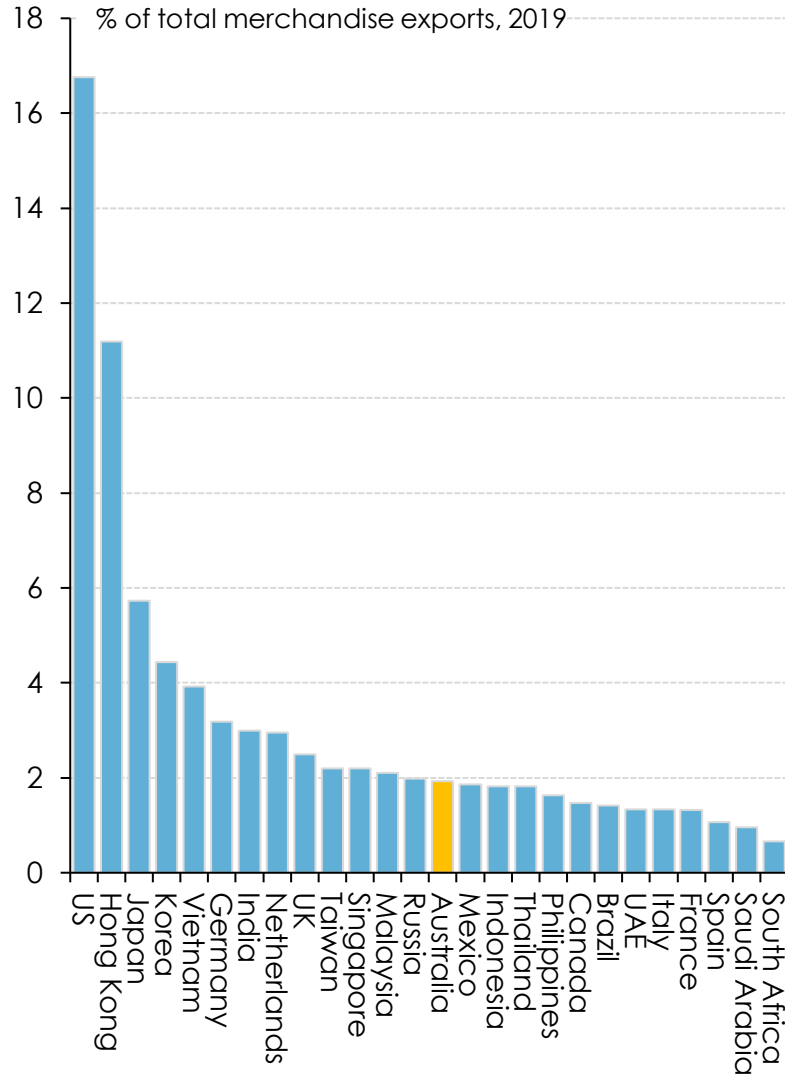
Sources: IMF, Direction of Trade Statistics; Taiwan Ministry of Economic Affairs, Bureau of Foreign Trade.

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

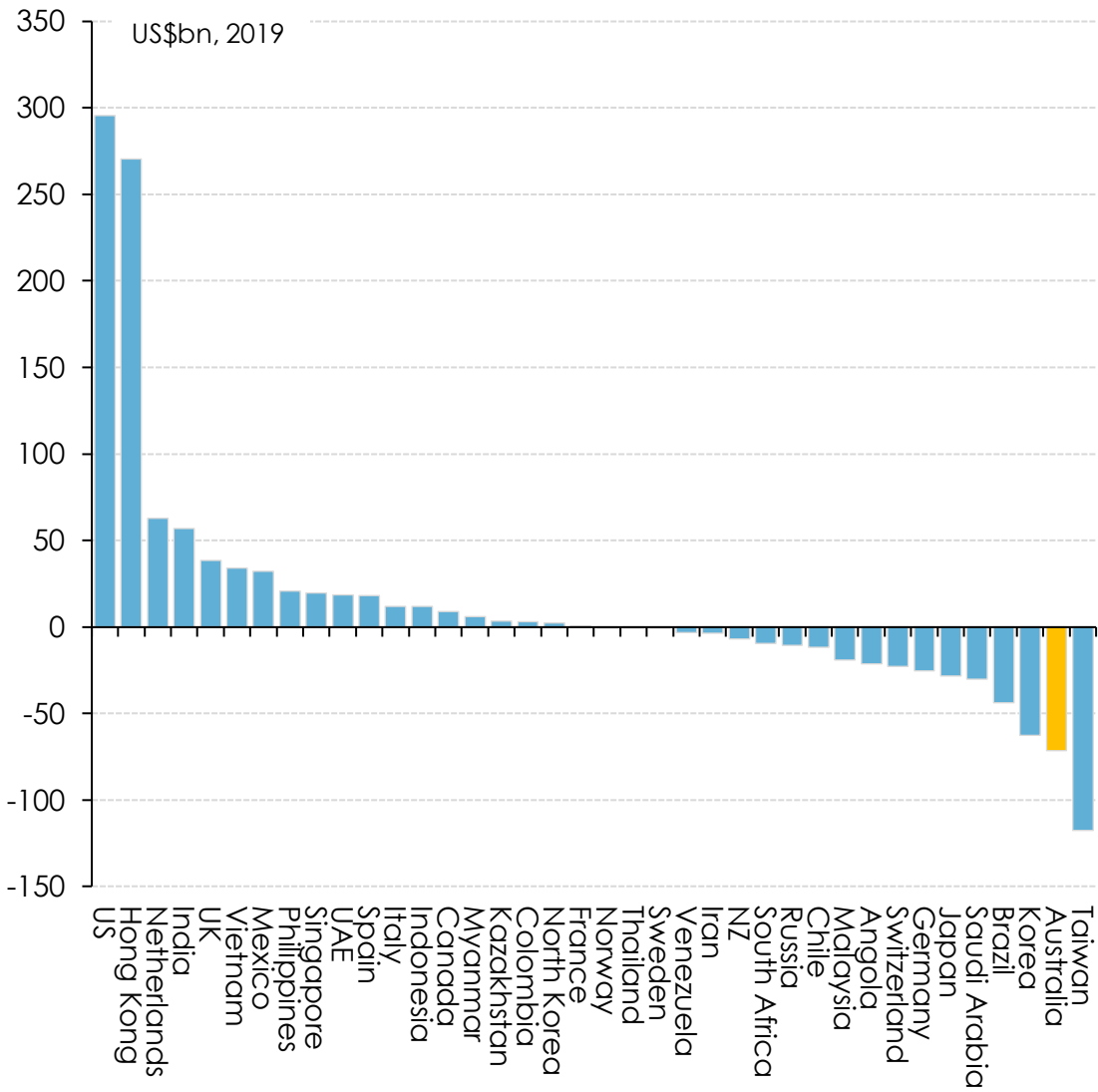
China's sources of imports



China's export destinations



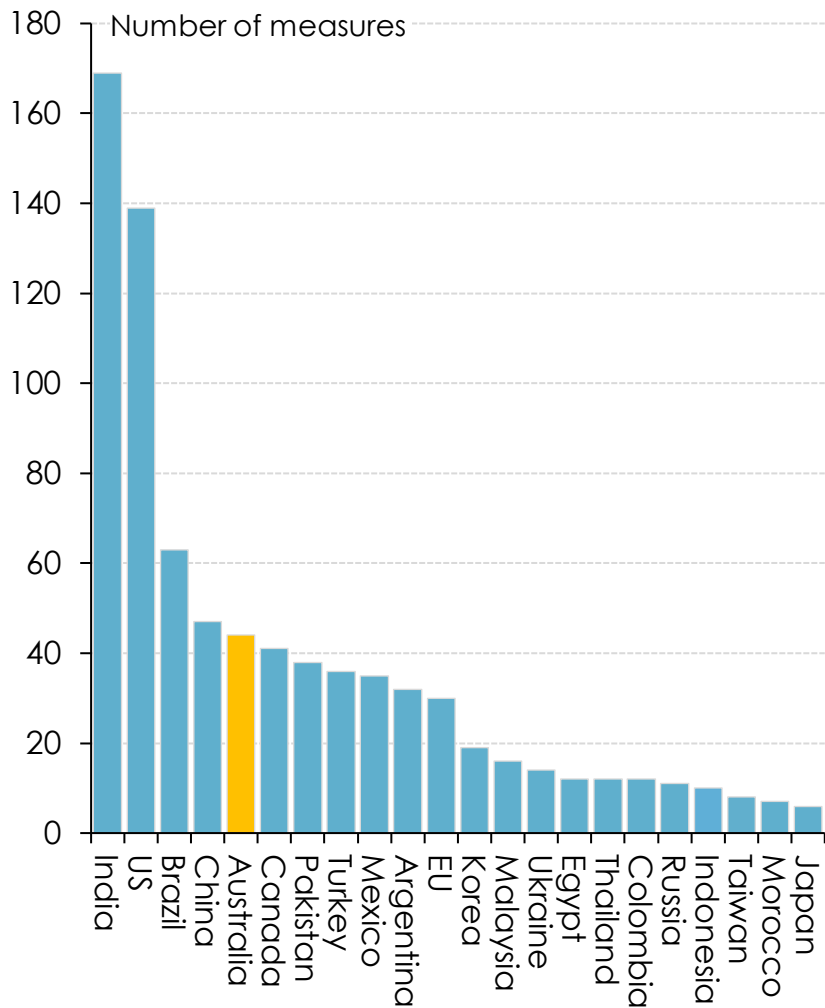
China's bilateral merchandise trade balances



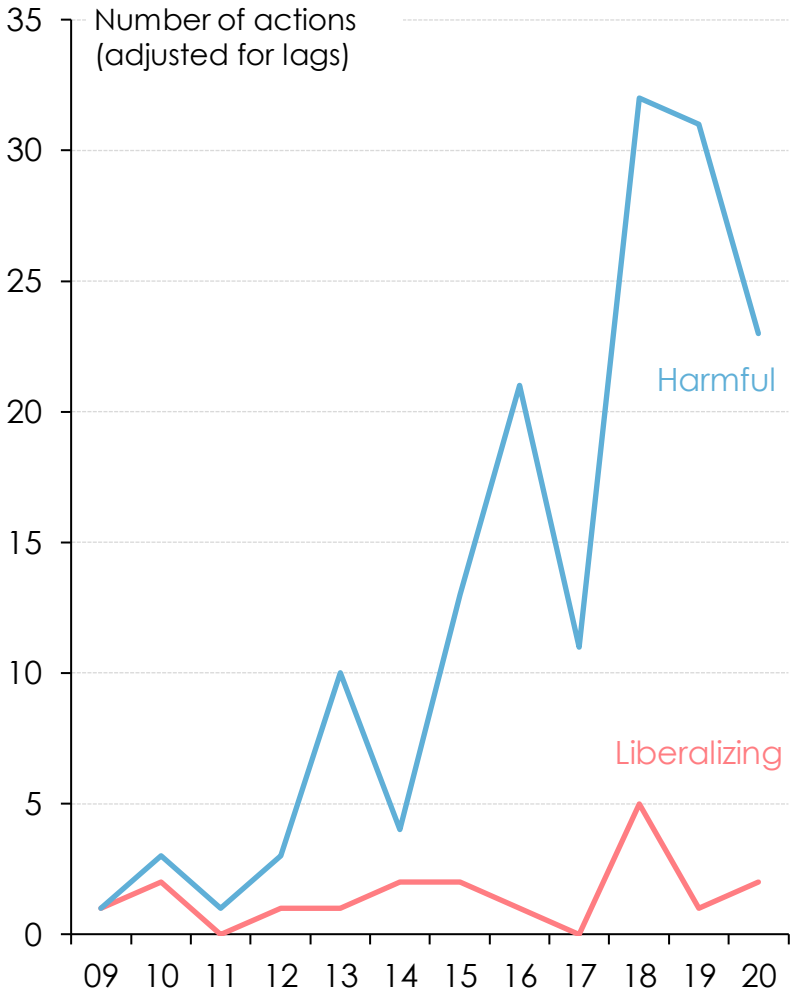
Source: International Monetary Fund, Direction of Trade Statistics.

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

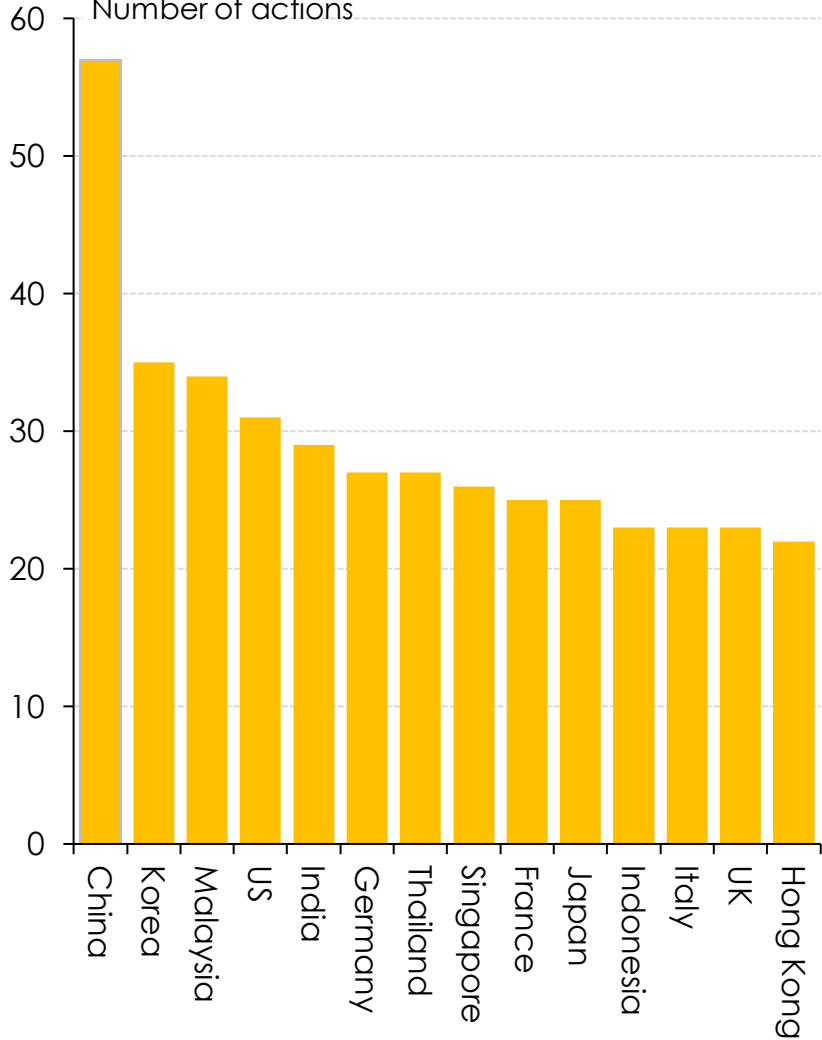
Number of anti-dumping measures imposed, 2015-19



Australian trade policy measures since 2009

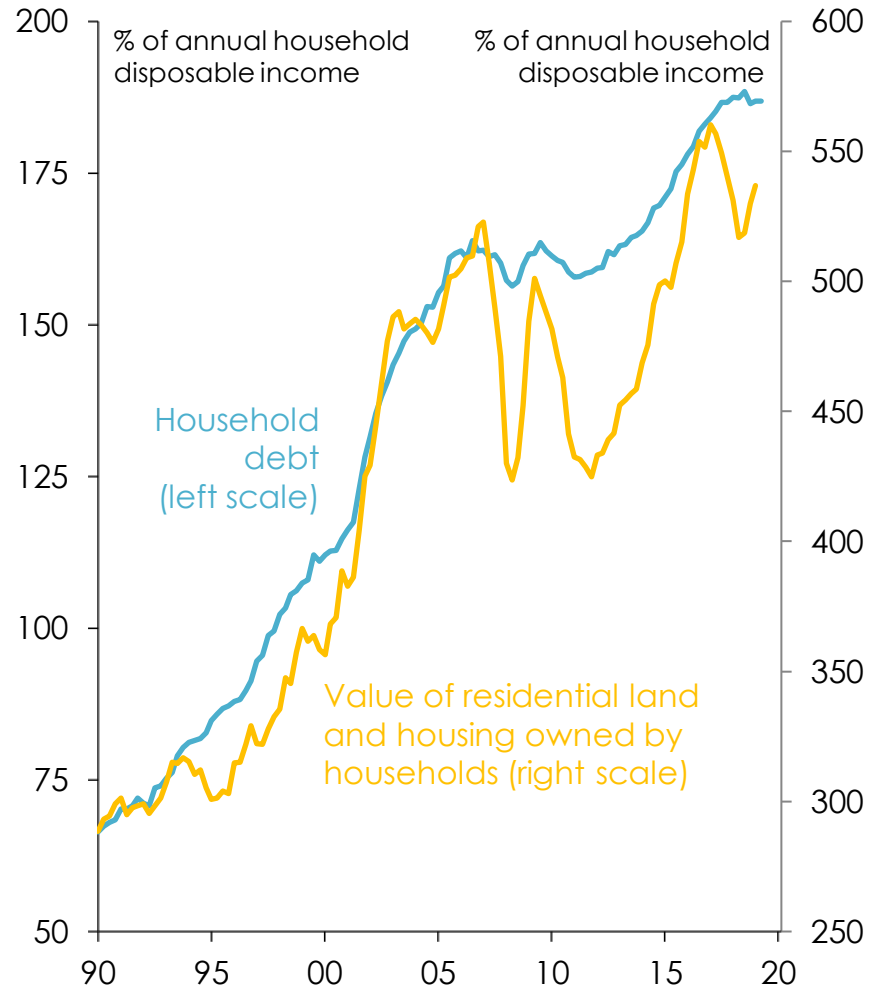


Countries adversely affected by 'harmful' Australian trade actions

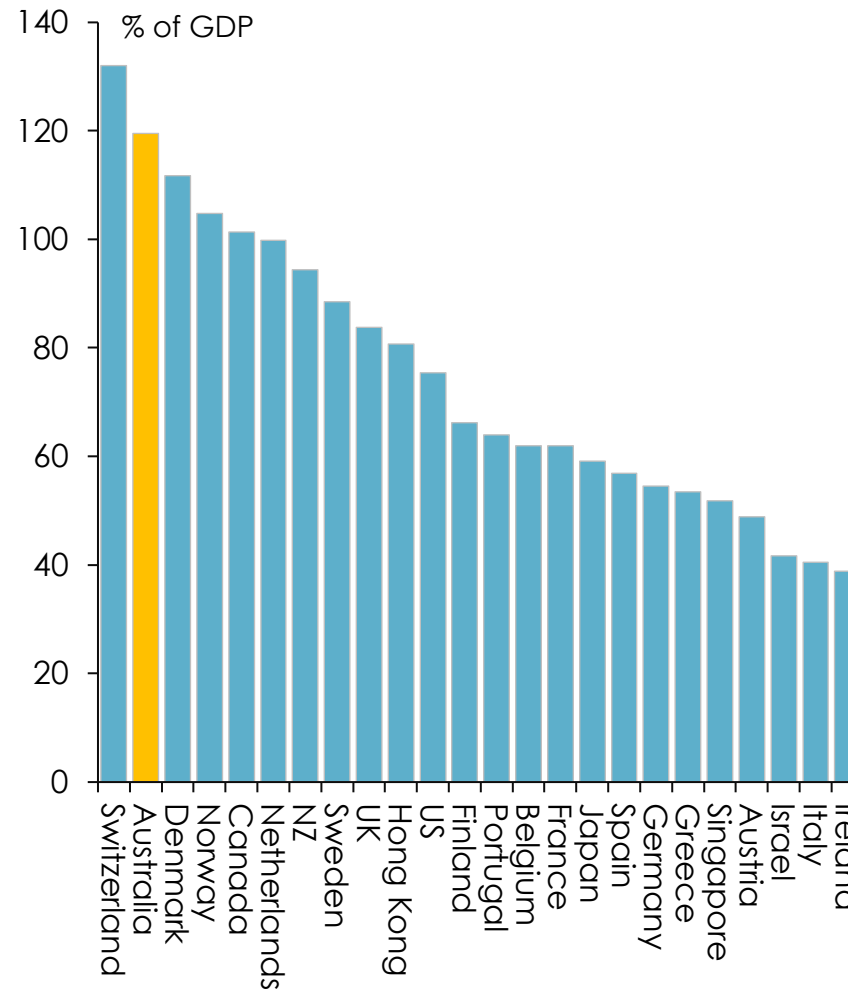


Rising property prices and household debt are unlikely to underpin Australian economic growth as they have done for most of the past 30 years

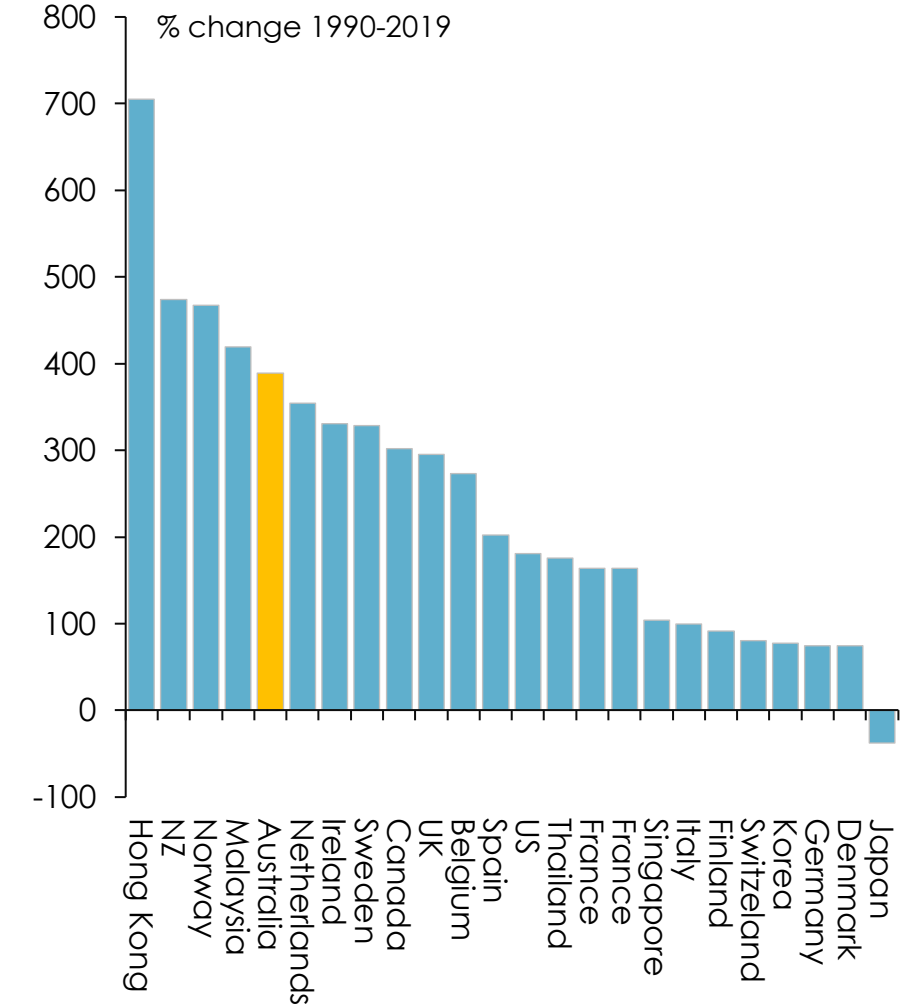
Australian housing wealth and household debt



Household debt as a pc of GDP, December 2019



Increase in residential property prices, 1990-2019

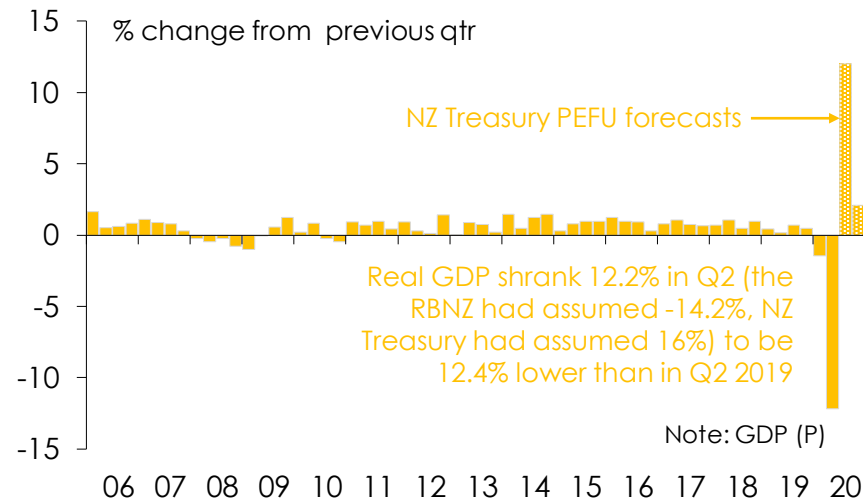


Note: Singapore property price increase is from March quarter 1999. Sources: ABS; Bank for International Settlements, [Property price statistics](#).

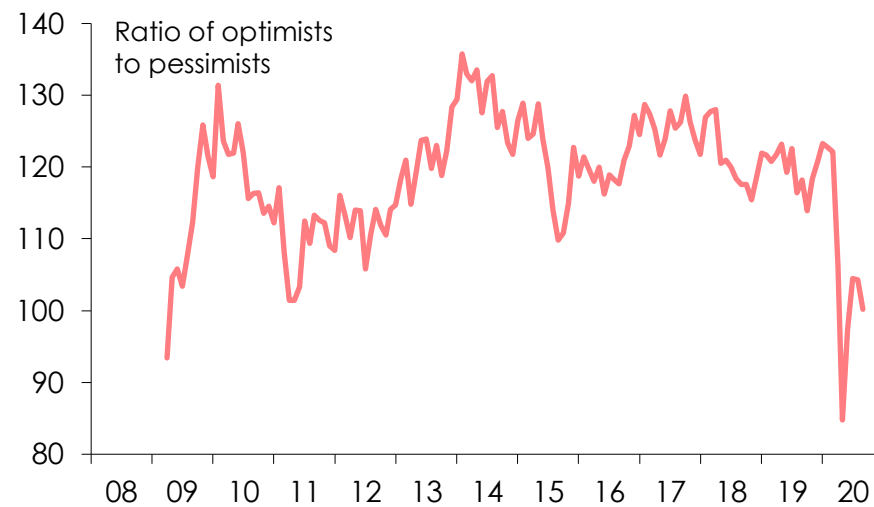
New Zealand

New Zealand's economy shrank 12.2% in Q2 – less than expected – and the budget position isn't quite as dire as forecast in the May Budget

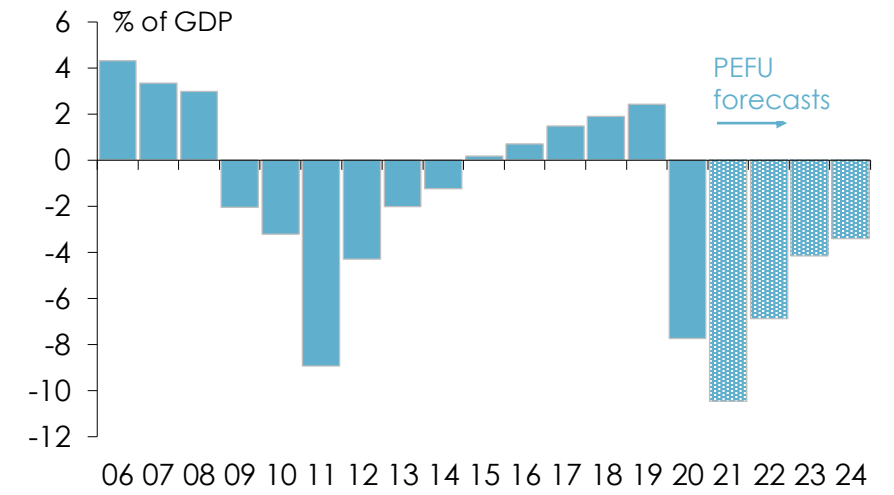
Real GDP



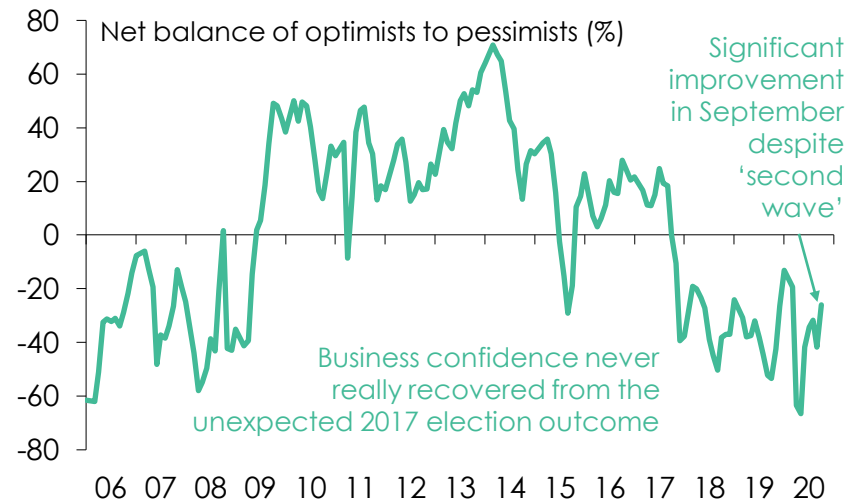
Consumer confidence



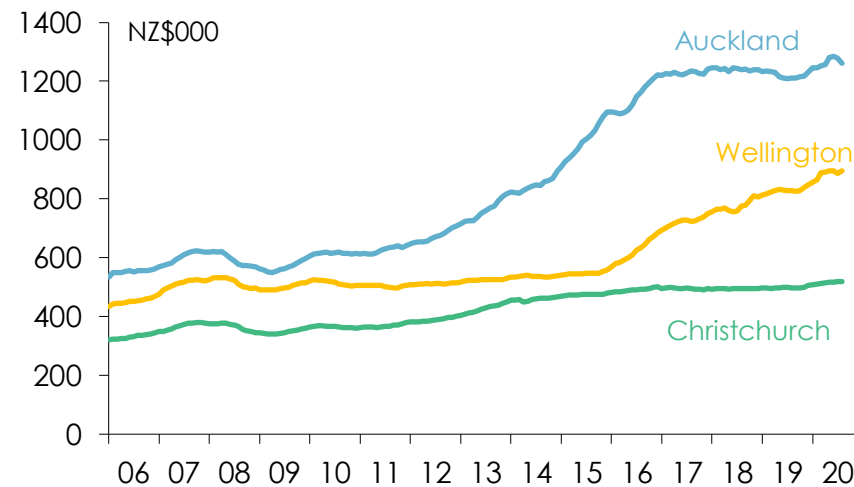
NZ government budget balance



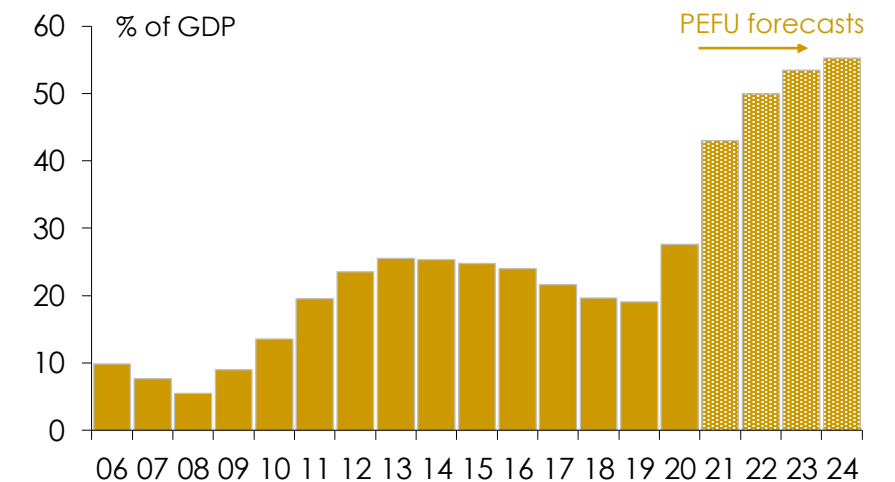
Business confidence



Residential property prices



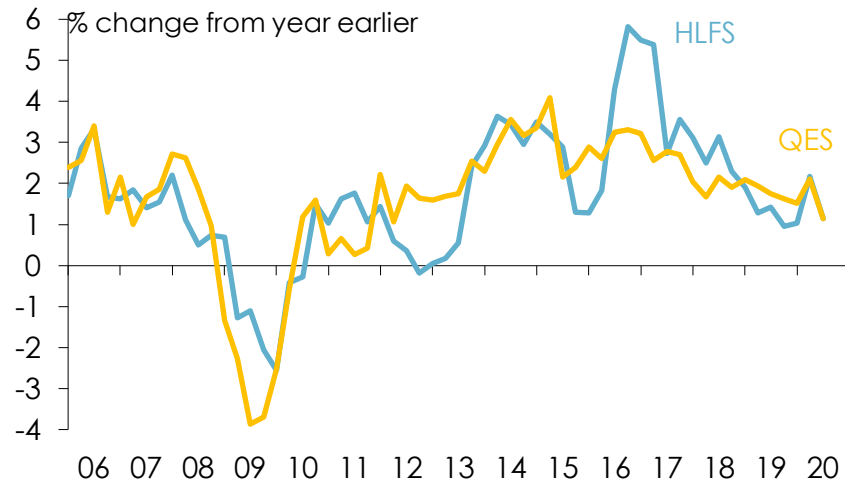
NZ 'core Crown debt'



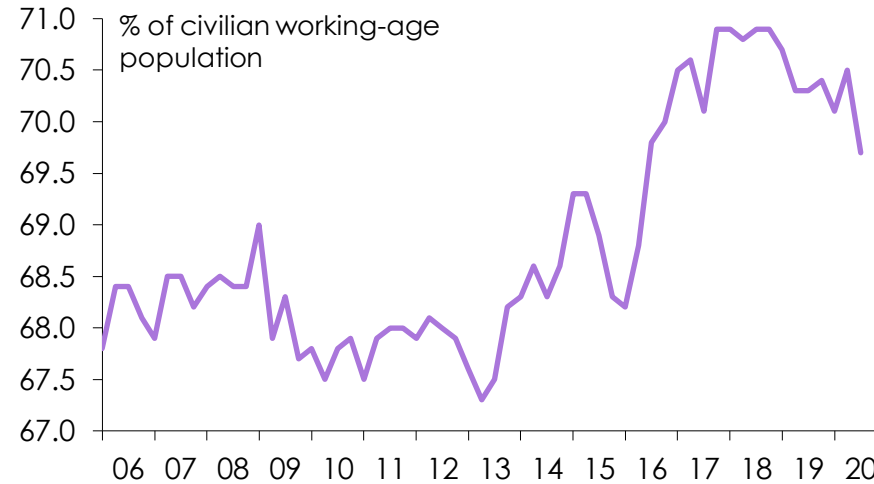
Note: New Zealand uses GDP(P) as its preferred measure of GDP. Unemployment rates are quarterly. The measure of the NZ Government budget balance is 'OBEGAL', operating balance excluding gains and losses (an accrual accounting measure). Net 'core Crown debt' excludes assets of the NZ Super Fund, student 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 [Pre-Election Economic and Fiscal Update](#) 2020.

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

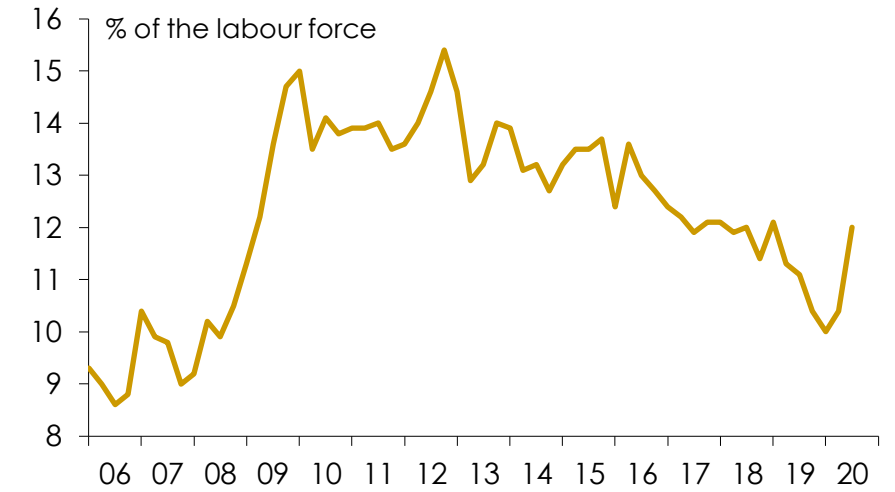
Employment



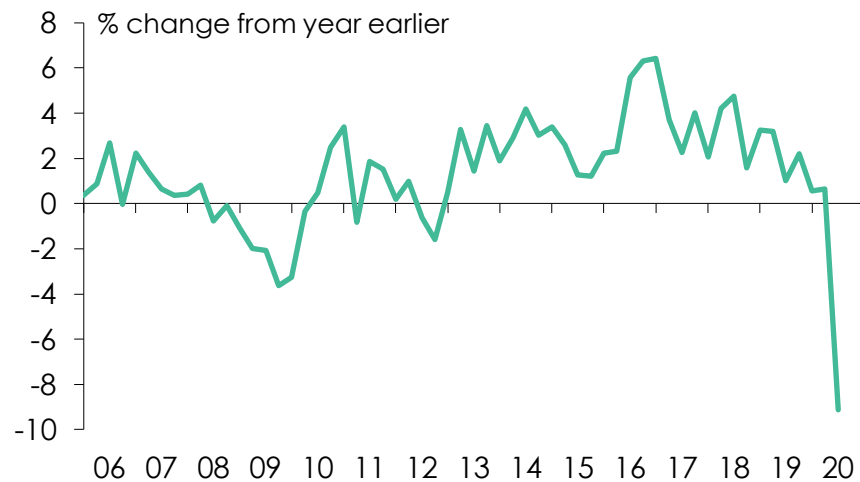
Labour force participation rate



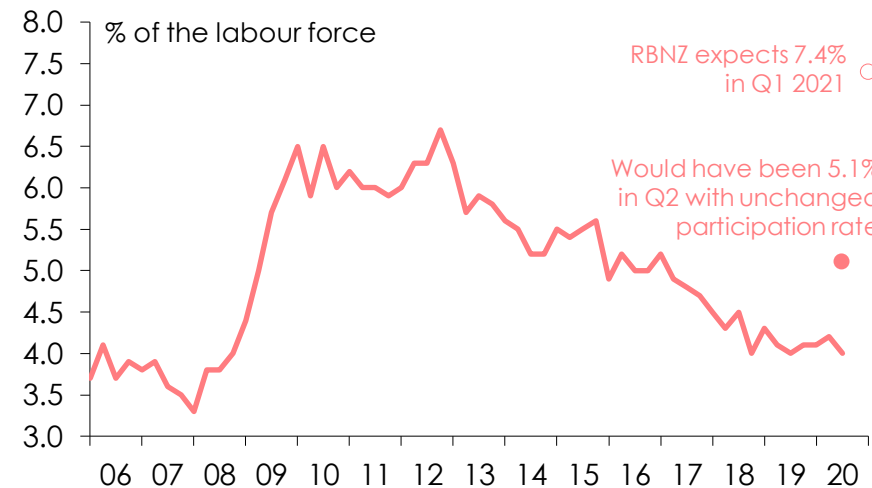
Labour force under-utilization rate



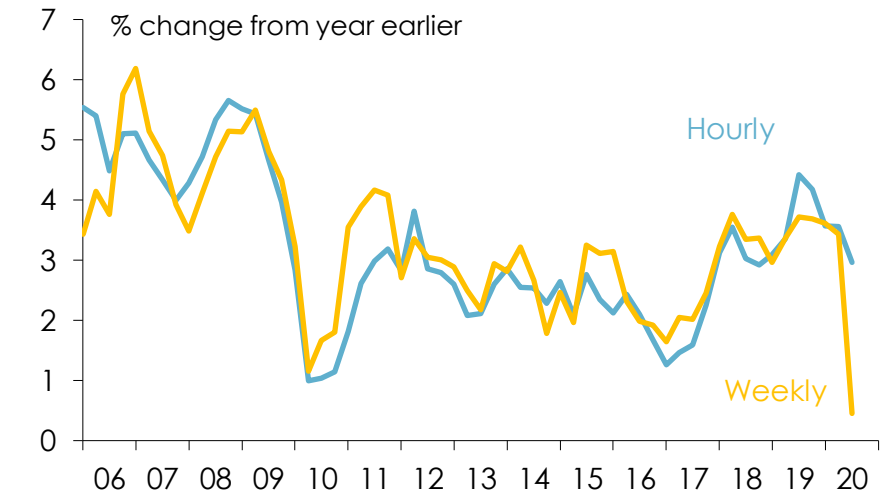
Hours worked



Unemployment rate



Average weekly earnings

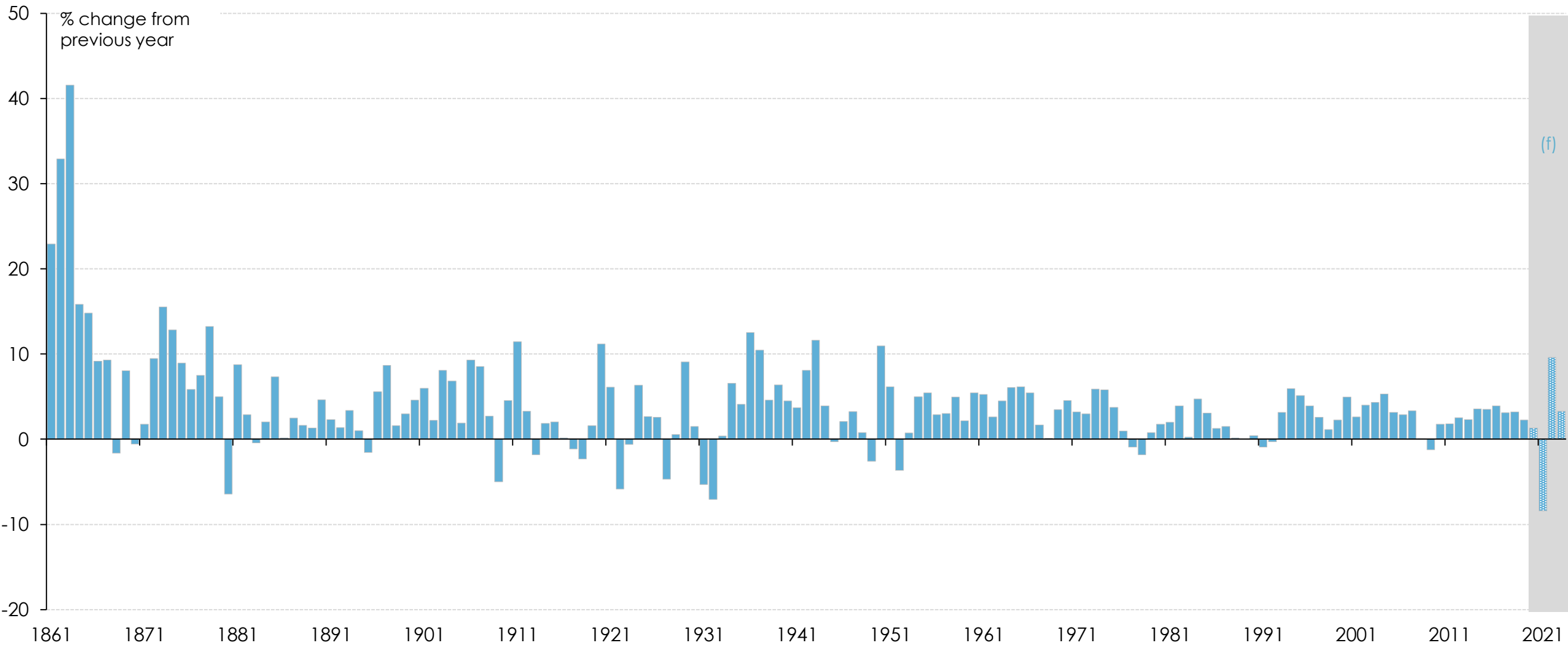


Note: New Zealand labour force data are only published quarterly. There are two 'headline' series on employment – the household labour force survey (HLFS) which counts the number of people in employment during the quarter; and the quarterly employment survey (QES), which counts the number of 'filled 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](https://www.stats.govt.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

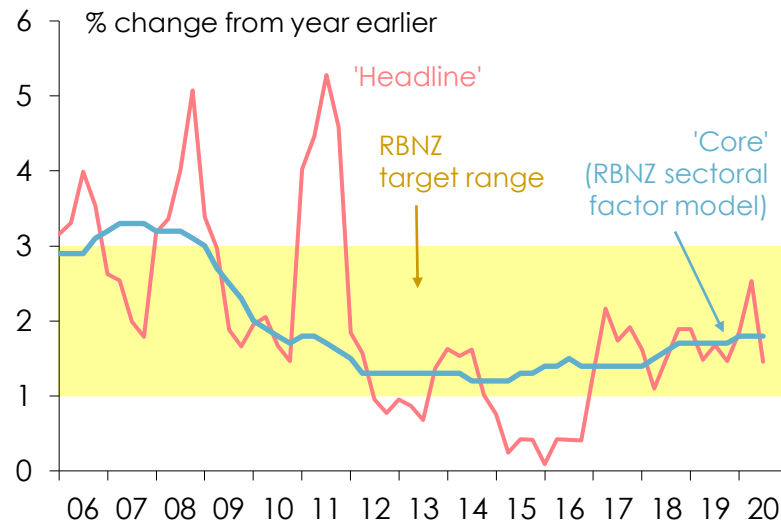
Annual growth in New Zealand real GDP, 1861-2023



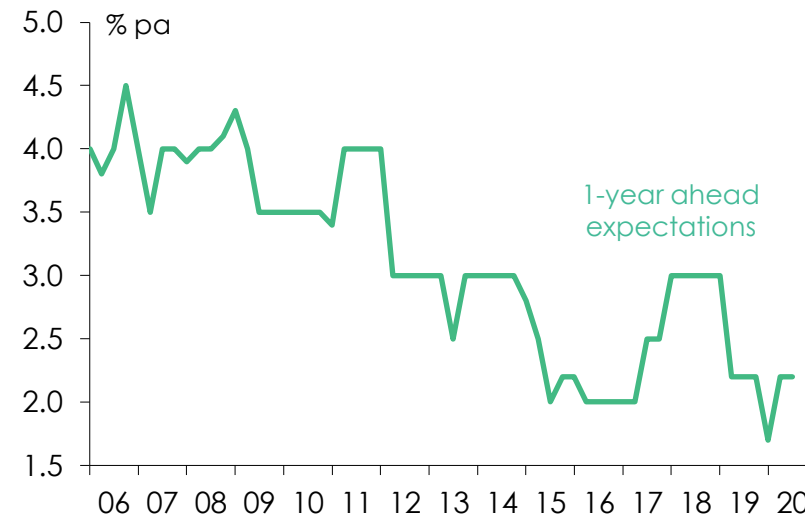
Note: Forecasts are for years ended 31 March. Source: RBNZ, [Monetary Policy Statement](#), May 2020.

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

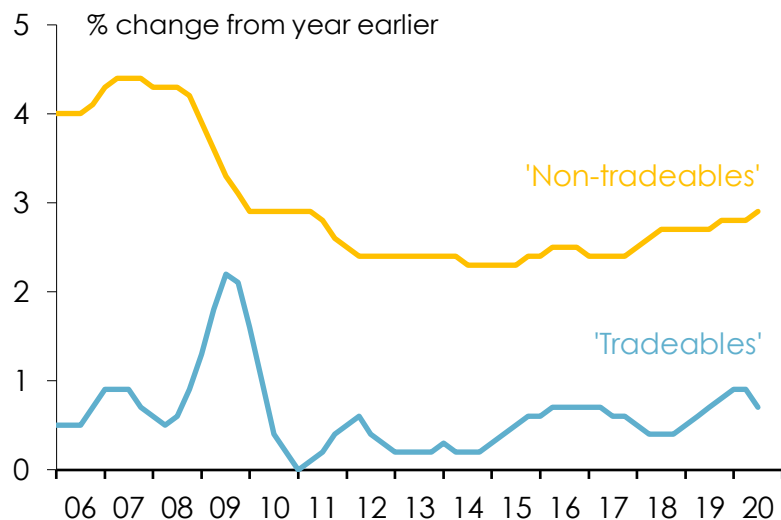
Consumer prices



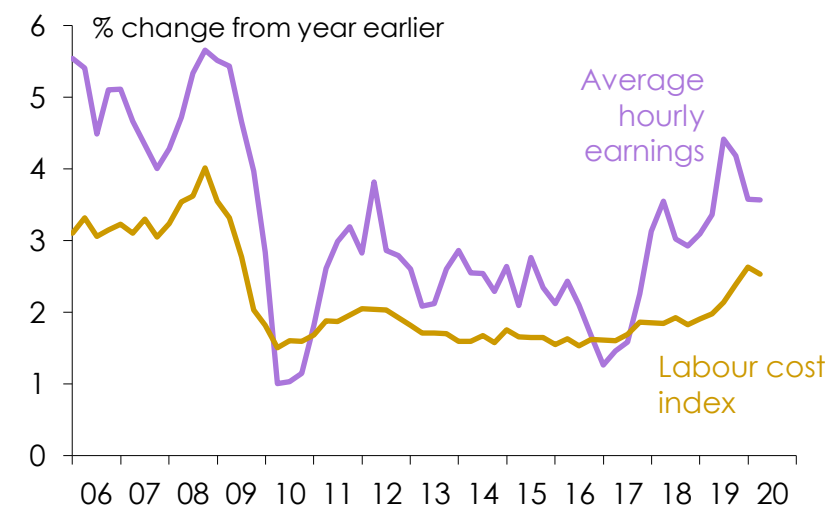
Household inflation expectations



Components of 'core' inflation



Labour costs

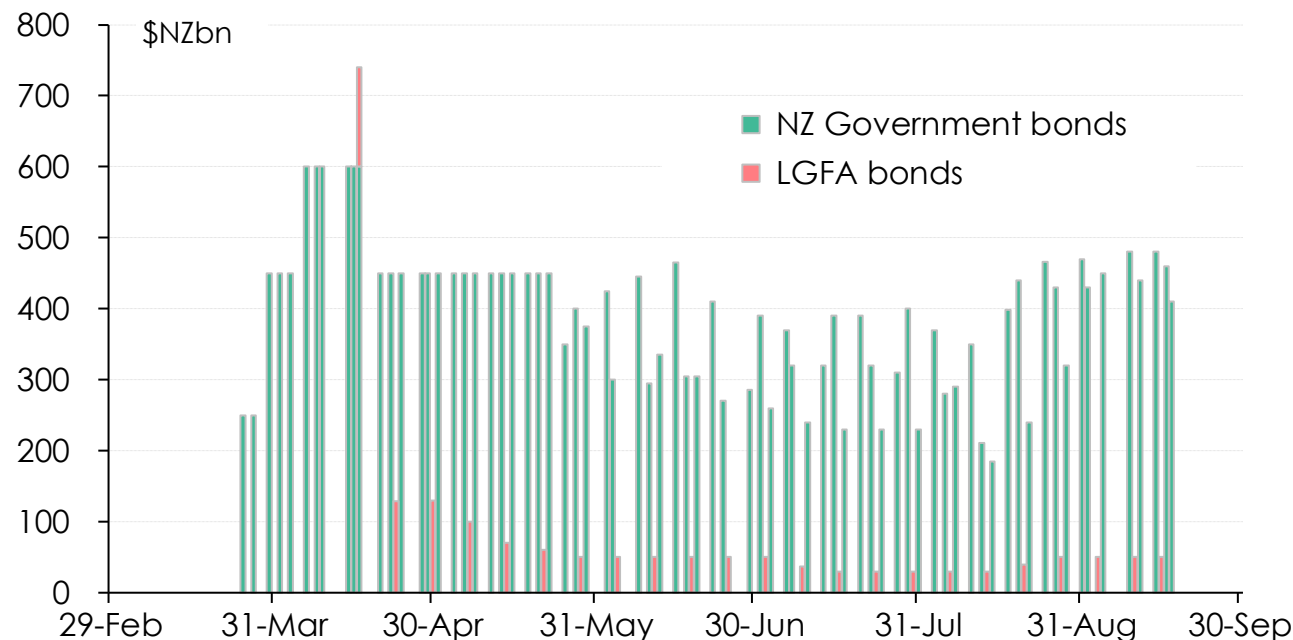


- ❑ The CPI fell 0.5% in the June quarter, reflecting a 12% fall in petrol prices, partly offset by a 16% increase in food prices and SNZ's inability to capture fully the effect of freeze on residential rents between 26th March and 25th September
- ❑ The June quarter result cut the annual 'headline' 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

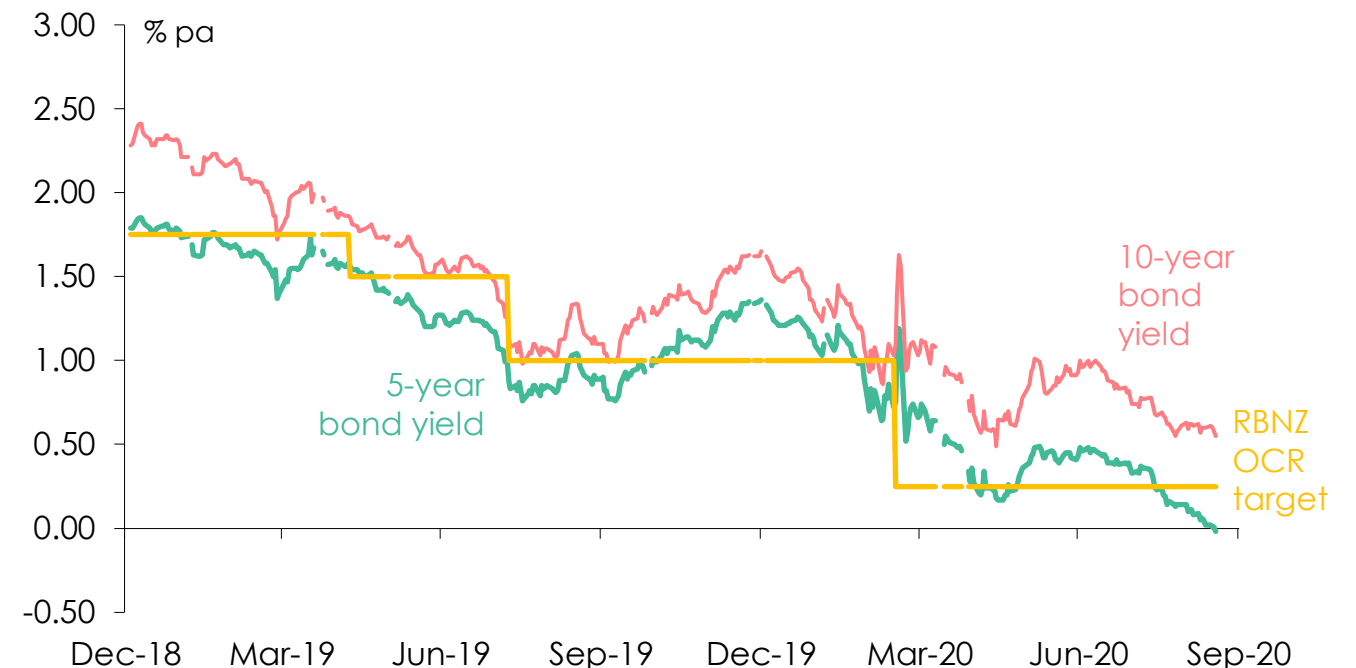
Sources: [Statistics NZ](#); Reserve Bank of New Zealand. September quarter CPI will be released on 23rd October.

The RBNZ has expanded its 'QE' program, floated the possibility of negative rates (again), as well as a 'funding for lending' program

RBNZ open market bond purchases



New Zealand interest rates

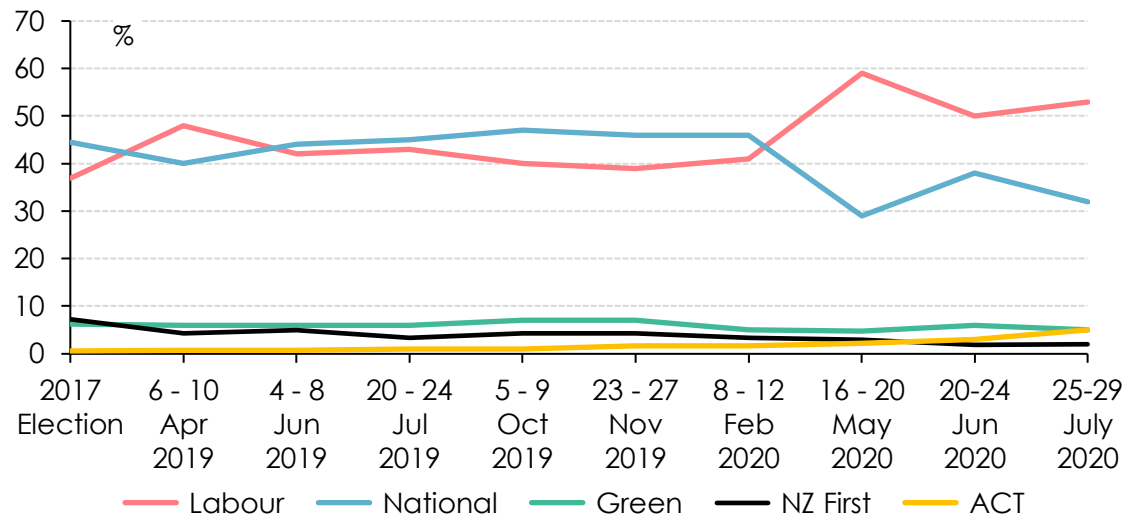


- ❑ RBNZ has adopted an ECB-style QE, establishing a Large Scale Asset Program initially set at \$NZ33bn (10½% of GDP), increased to \$60bn (19½% of GDP) in May, and last month to \$100bn (32½% of GDP) by June 2022
- ❑ This week the RBNZ bought NZ\$1.4bn of bonds, the largest weekly total since June, and bringing its total purchases since 25th March to \$NZ30.8bn (10% of GDP): 3- and 5-year yields traded at negative yields this week
- ❑ At last month's RBNZ Monetary Policy Committee meeting the RBNZ again floated the possibility of a negative OCR target, possibly backed by a 'Funding for Lending Program' to make funds available to banks at close to the OCR (on the understanding that they in turn lent to their customers at negative rates), as well as outright purchases of foreign assets in pursuit of a lower NZ\$

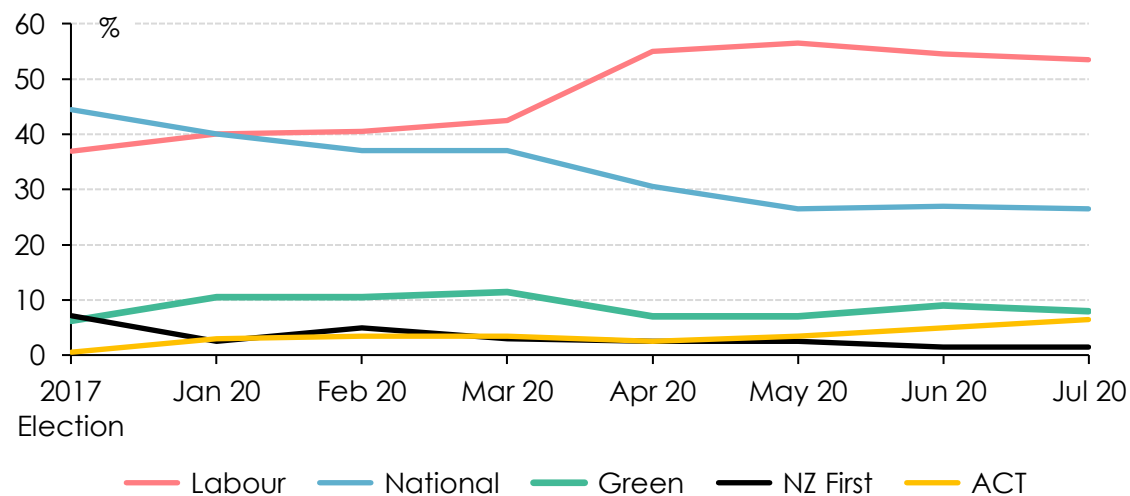
Note: LGFA = Local Government Financing Authority. Source: Reserve Bank of New Zealand, [Statistics](#) Tables B2 and D3. Data up to 18th September.

PM Jacinda Ardern's Labour Party continues to hold a commanding lead in opinion polls for the 17th October election

Colmar-Brunton 1-News poll



Roy Morgan poll



Note: 'ACT' is the Association of Consumers and Taxpayers, a libertarian party which currently holds one constituency seat in the NZ Parliament. Sources: [New Zealand Electoral Commission](#); [Colmar Brunton](#); [Roy Morgan Research](#).

- ❑ New Zealand uses a 'mixed member proportional' (MMP) system to determine the composition of its 120-seat Parliament
 - each voter has two votes, one for his or her constituency and one for a party list
 - 71 members are elected from constituencies, while 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
- ❑ 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)
- ❑ This week Labour promised to introduce a new top personal income tax rate of 39% on incomes over NZ\$ 180K (currently the top rate is 33% and it applies to incomes of over NZ\$70K)
- ❑ For the second time this year, 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 Roy Morgan, if repeated at the election would give Labour enough seats to govern in its own right
 - The NZ First Party of veteran Deputy PM Winston Peters would lose all its seats, while the libertarian ACT could potentially win six seats

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 has pointed out, "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 59](#) and [slide 77](#))**
- ❑ **Accelerated decline in the use of cash for transactions (see [slide 81](#))**
- ❑ **Re-think of relationships with China (see [slide 90](#) and [slides 115-117](#))**
 - 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 48](#)) 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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