ECONOMIC IMPACT OF THE CORONAVIRUS PANDEMIC

29TH AUGUST 2020



What's new?

The world

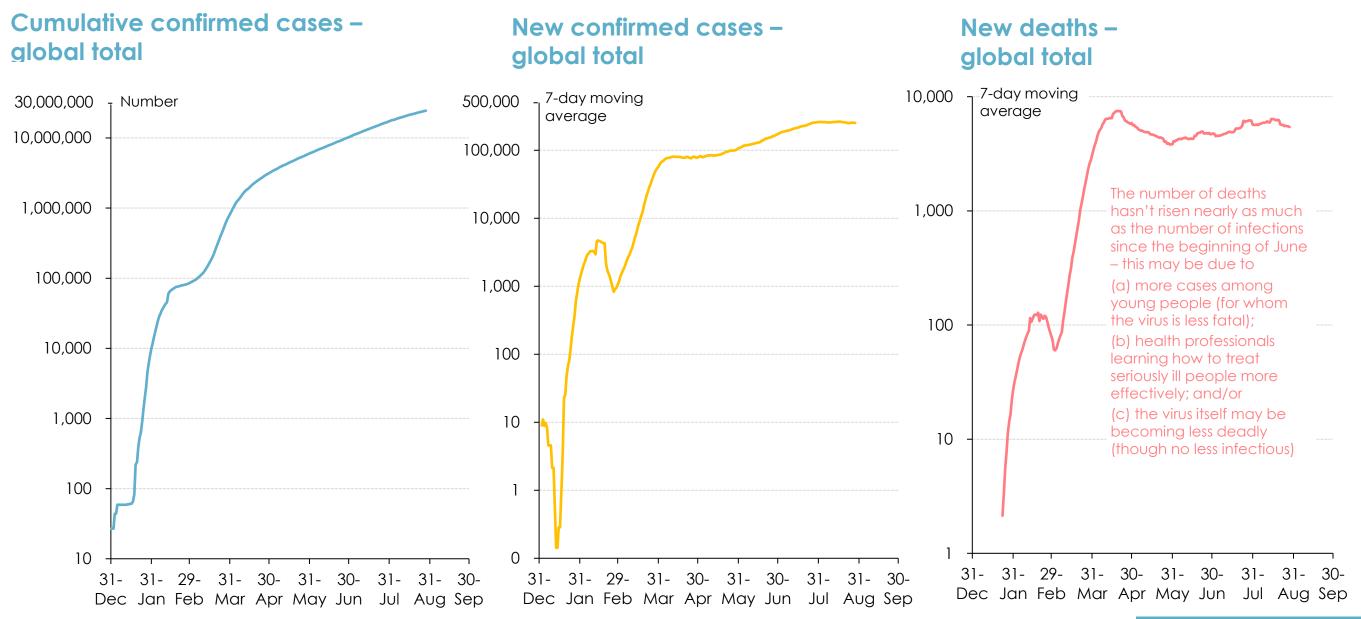
- □ 1,760,448 new Covid-19 cases were confirmed this week, the smallest number in six weeks, taking the cumulative total to just under 24½mn; while 37,975 people died (the smallest total in six weeks) taking the total number of deaths to 832,002 (slide 4)
- Nine countries (the US, India, Brazil, Mexico, Colombia, Peru, Iraq, Indonesia & the Philippines), with 33% of the world's population, accounted for 72% of last week's new cases the rate of new infections is now falling in the US, Brazil & Colombia, is still rising in India & Indonesia, and has started rising again in Turkey (slide 5)
- □ A growing number of countries including in particular New Zealand – are experiencing a renewed rise in infections (<u>slide 7</u>) and are re-imposing restrictions (<u>slide 14</u>)
- ☐ The US Federal Reserve signalled a major change in its monetary policy framework, shifting to a more flexible inflation target (2% 'on average') and (more importantly) abandoning the idea of 'preemptively' tightening monetary policy as unemployment falls towards its 'full employment' level (slide 29)
- □ The Fed's announcement was followed by a (further) drop in the US dollar (slide 30) which also saw the A\$ rise to a two-year high of U\$73.7¢ (slide 104)
- □ 41 countries have now reported Q2 GDP data the biggest contractions so far have been in Macau, Peru & Spain (slide 20)
- □ Canada's economy shrank by 11.5% (an annualized rate of 39%) in Q2, much more than the US: Canada is experiencing a deeper downturn than Australia partly because it sells oil and gas (rather than iron ore) to the US (rather than China), and partly because it's doing a lot less fiscal stimulus (slide 48)

Australia

- Australia recorded 1,041 new Covid-19 cases this week, the lowest in 8 weeks; there were 3,344 active cases on Friday (the lowest numbers since 21st July) while 111 people died, bringing the death toll to 583 (slide 8)
- □ Victoria accounted for 970 (93%) of the new cases reported this week, less than 30% of the numbers recorded in the first two weeks of August (slide 9) although the State Government has given no indication as to when the current 'lockdown' might be eased
- The number of payroll jobs in Victoria fell by 3.1% over the five weeks to the week ended 8th August enough to drag the national total down by 1% but payroll jobs also fell in NSW, the NT and the ACT (slide 71)
- As of mid-August only 26% of businesses were operating 'normally', a proportion which hasn't changed significantly since May (slide 61), with more than one-third of businesses reporting they will find it 'difficult' or 'very difficult' to meet their financial commitments over the next three months (slide 62)
- Business capex intentions for FY 2020-21 haven't been revised down over the past three months as much as feared but nor have they been revised up, as they have been in every previous year since at least FY 1987-88 (slide 82), and 'uncertainty about the future state of the economy' is by far the most important reason for that (slide 83)
- □ The Australian Government's debt management agency attracted bids of \$66bn for a \$21bn offering of 11-year bonds carrying a 1% coupon, showing that the Government is having absolutely no difficulty financing its ballooning budget deficit (slide 95)
- ☐ The RBA was back in the (secondary) bond market this week, buying \$2bn of bonds as part of its 'yield curve control' program (slide 102)

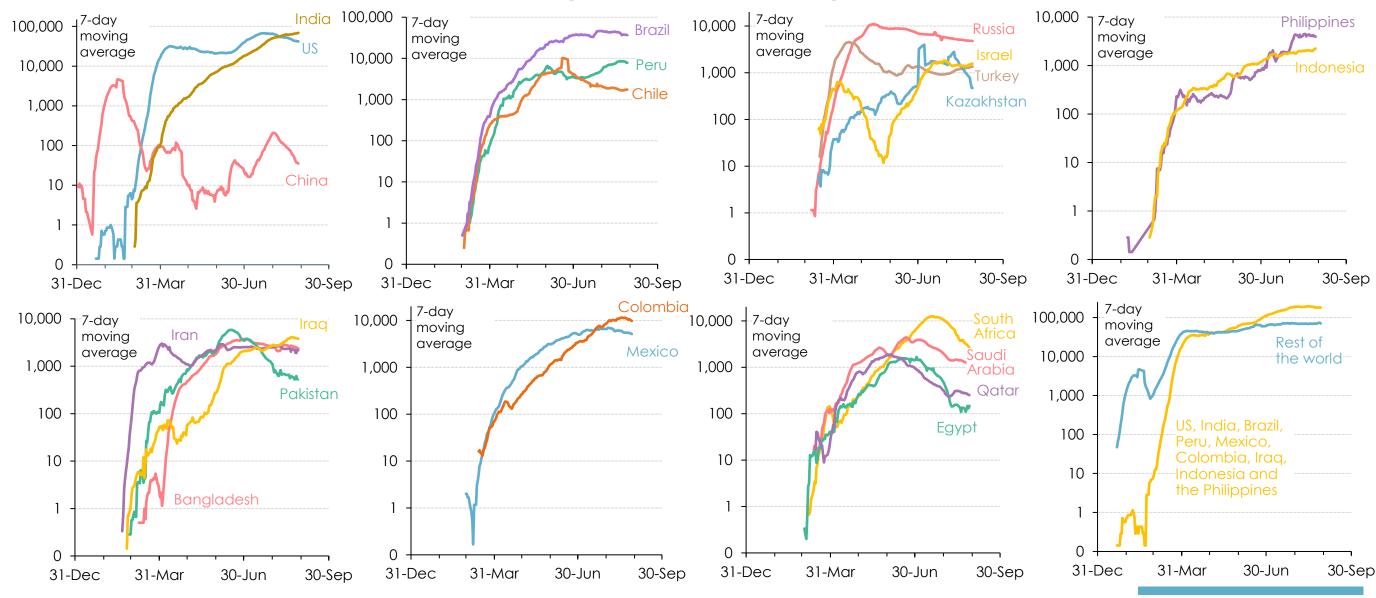
The virus

1.76mn new cases were recorded this week, bringing the cumulative total to 24.5mn – although the global infections curve now seems to be flattening



Nine countries with 33% of the world's population accounted for 72% of last week's new cases

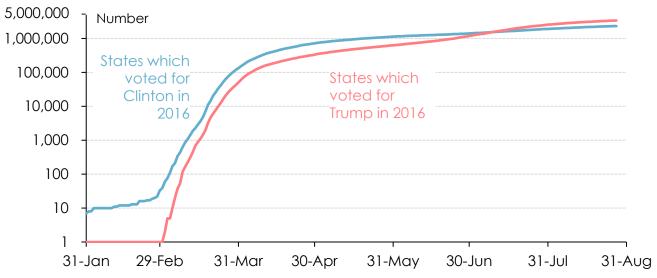
Daily new cases – 22 countries with (mostly) large populations and large numbers of new cases



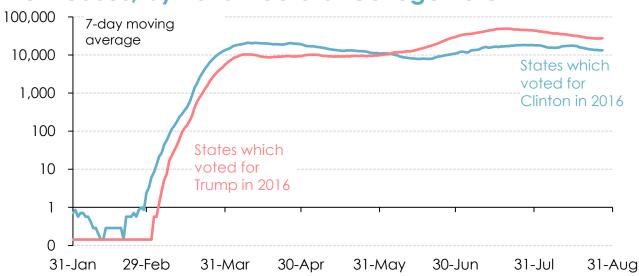
Note: All charts are on logarithmic scales. Data up to 28th August. Source: University of Oxford, Our World in Data; Corinna.

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

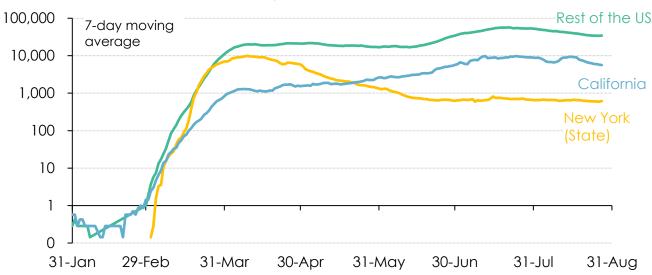
Cumulative cases, by 2016 Electoral College vote



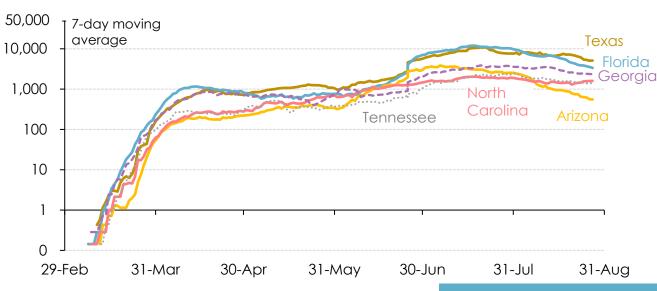
New cases, by 2016 Electoral College vote



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



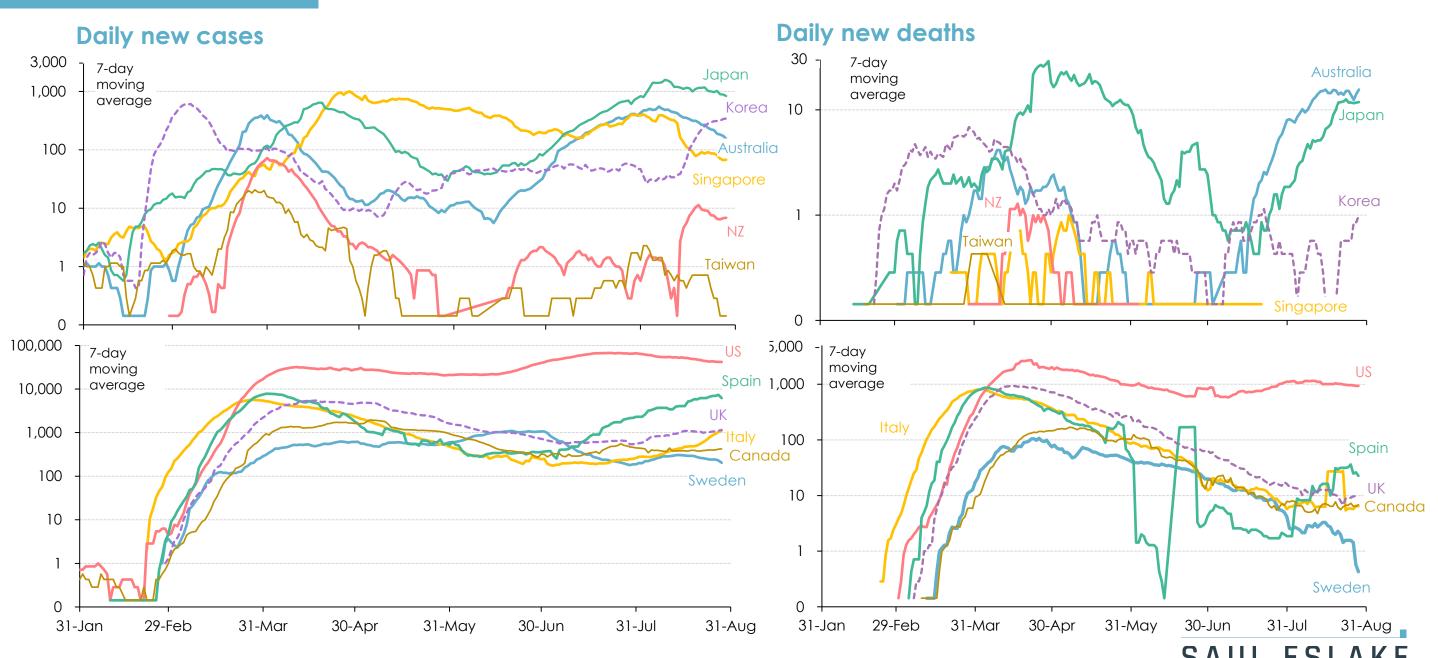
States with fastest recent increases in new cases



Note: All charts are on logarithmic scale. Cases for Maine (whose Electoral College votes are awarded separately by each of its two Congressional districts) are split by how each of its 16 counties voted in 2016. Sources: USAFacts.org; Centers for Disease Control and Prevention; Corinna. Latest data are for 27th August.

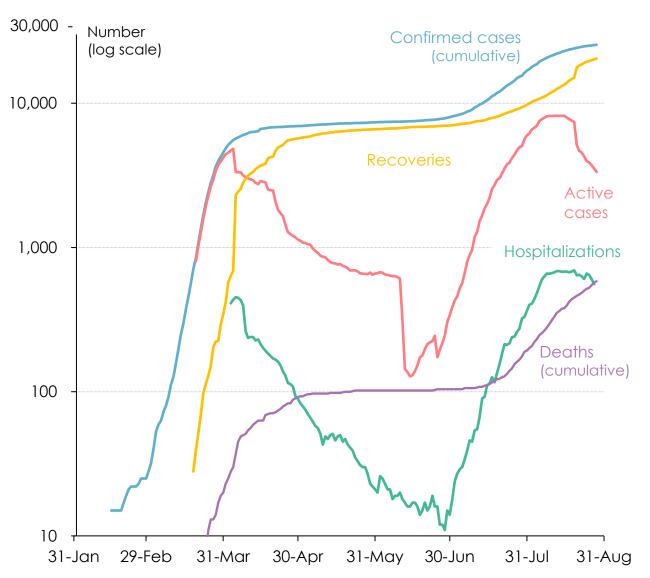


A growing number of 'advanced' nations are experiencing 'second waves' of new cases – but Australia is one of the few also with a surge in deaths

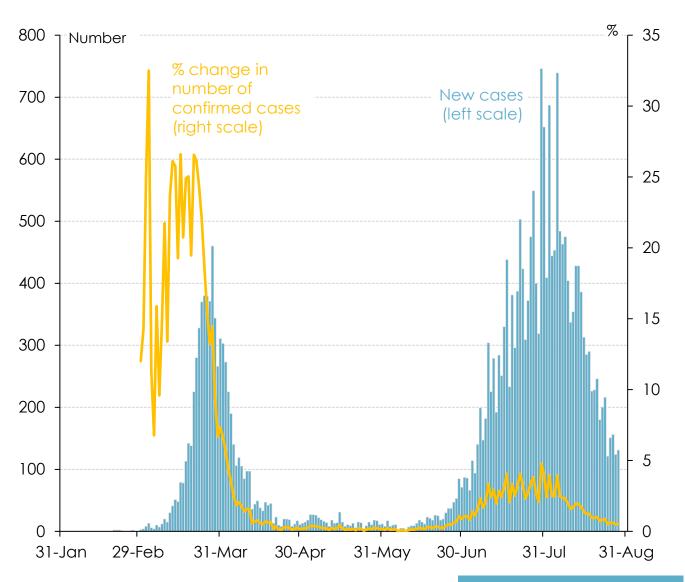


The number of new cases in Australia has slowed over the past couple of weeks, hospitalizations have plateaued and deaths should peak soon

Cases, recoveries, hospitalizations and deaths



New cases

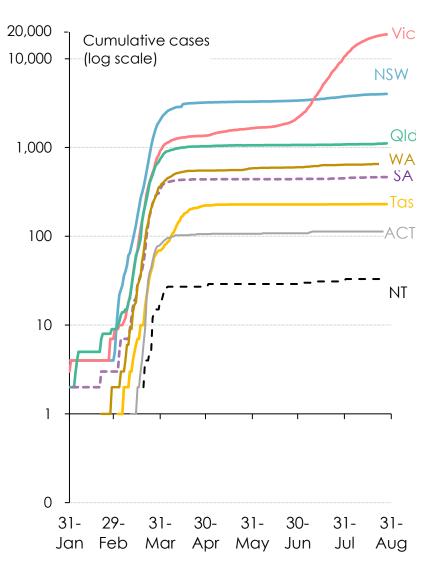


Note: Data up to 28th August. Source: covid19data.com.au

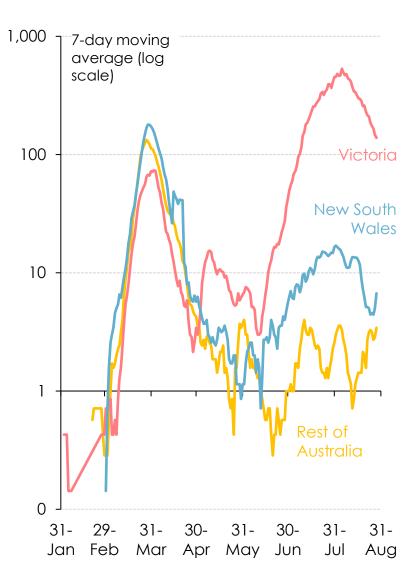


96.4% of Australia's new cases over the past 5 weeks have been in Victoria (and most of the rest in NSW) – but Victoria's second wave has now peaked

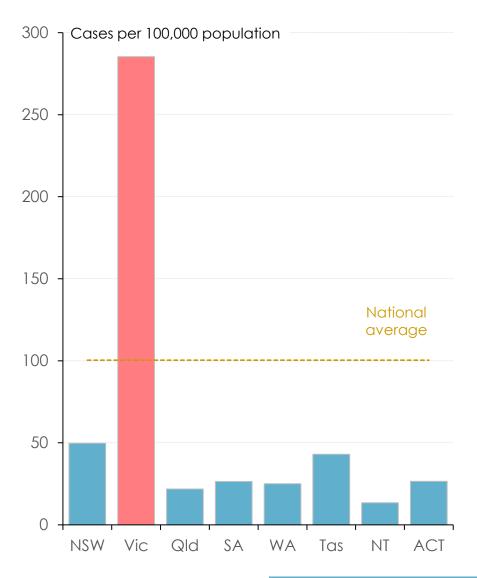
Cumulative cases, by State

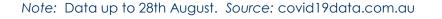


New cases



Cases per 100,000 population

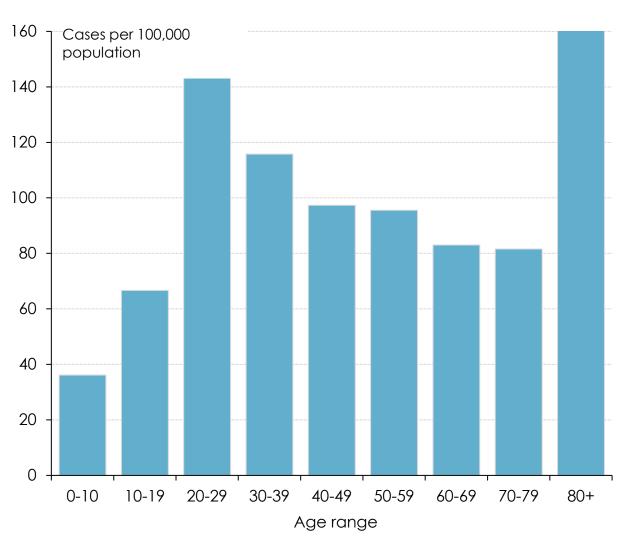




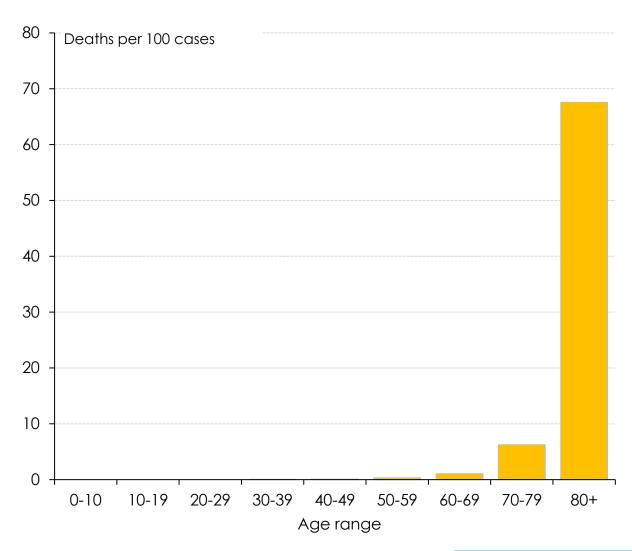


Infection rates now higher among people in their 20s & 30s than among those in their 40s, 50s, 60s or 70s, though fatality rates are higher for over-60s

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



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

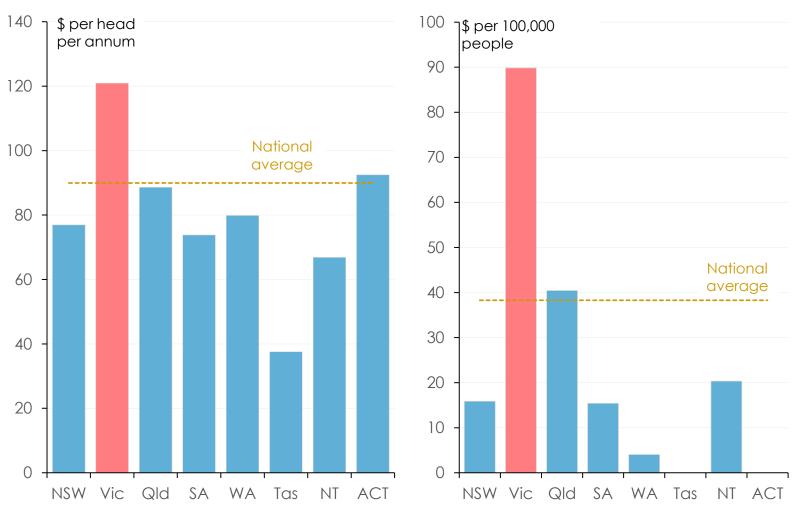




Victoria just "doesn't get" that its heavy-handed policing of restrictions hasn't worked – rather, it has 'doubled down' on fining people

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

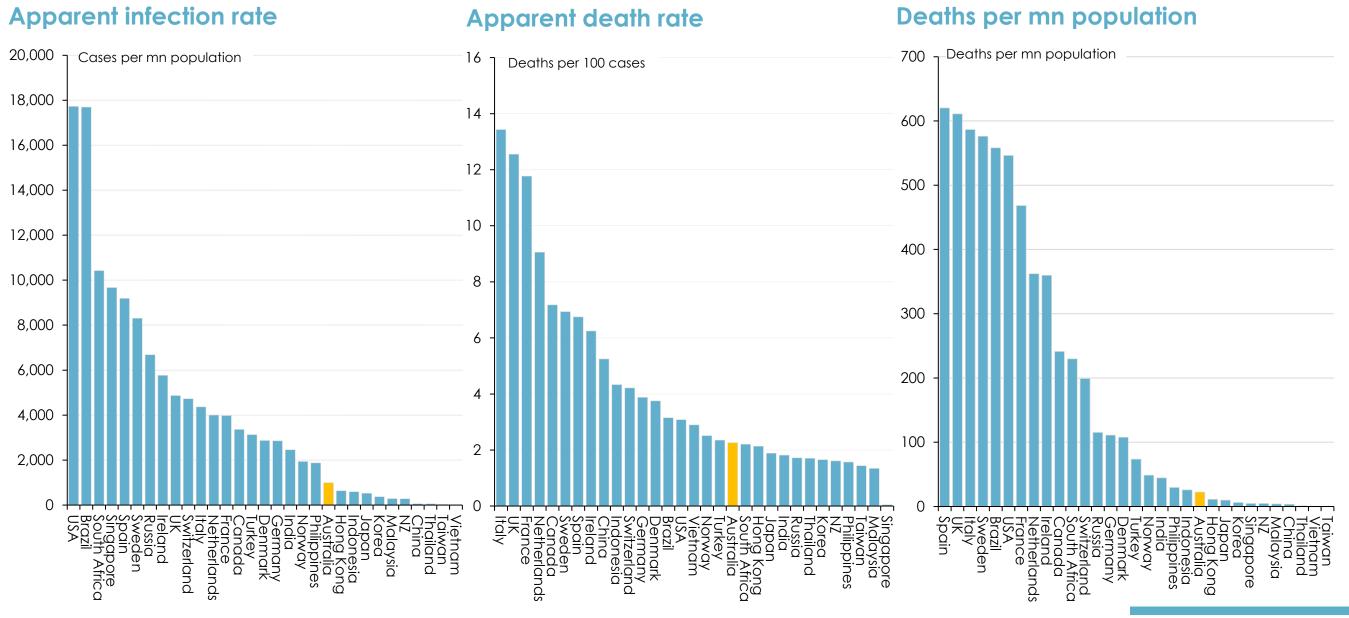




Note: fines for breaches of Covid-19 regulations are for the period between when 'stage 3' lockdowns started in late March and the last week of May when restrictions began to be eased. Sources: State and Territory annual financial reports and 2019-20 Mid-Year Budget Reviews; ABS; Tammy Mills, 'Ahead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

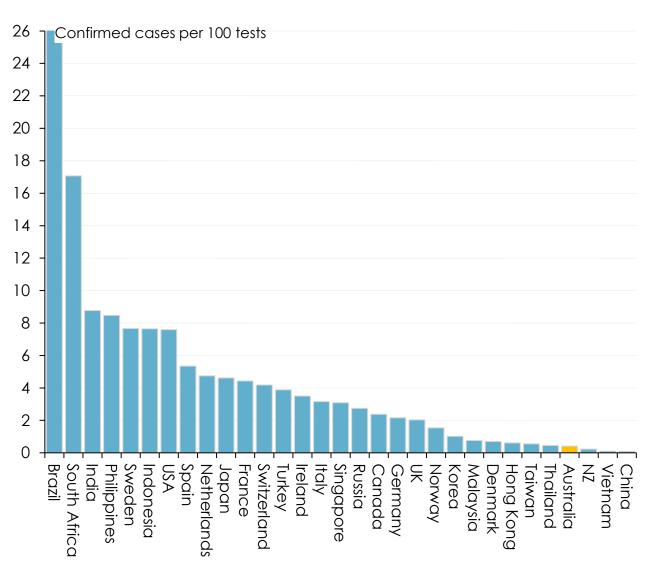
- Despite its image as Australia's 'most progressive' state, Victoria has long extracted more money from its citizens through fines than any other jurisdiction (irrespective of which party is in power)
- This 'authoritarian' approach carried over into Victoria's enforcement of the first 'lockdown'
 -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

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

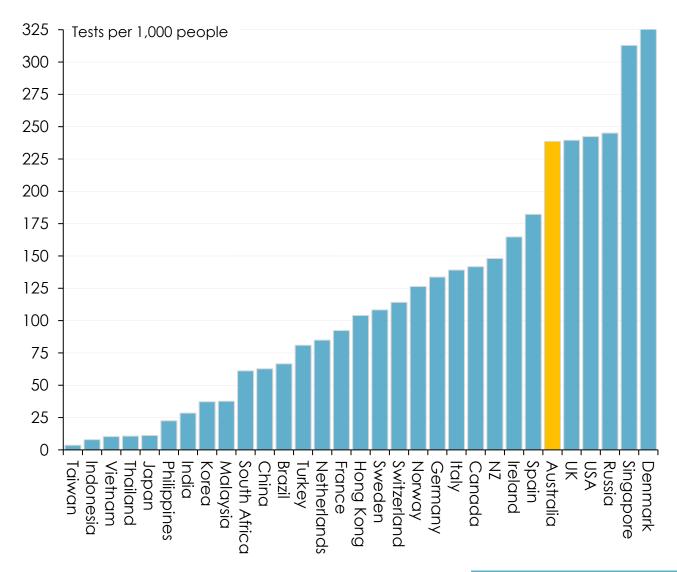


Australia's testing regime appears sufficiently broad for the low infection and death rates to be seen as 'credible' (ie not due to low testing)

Confirmed cases per 100 tests



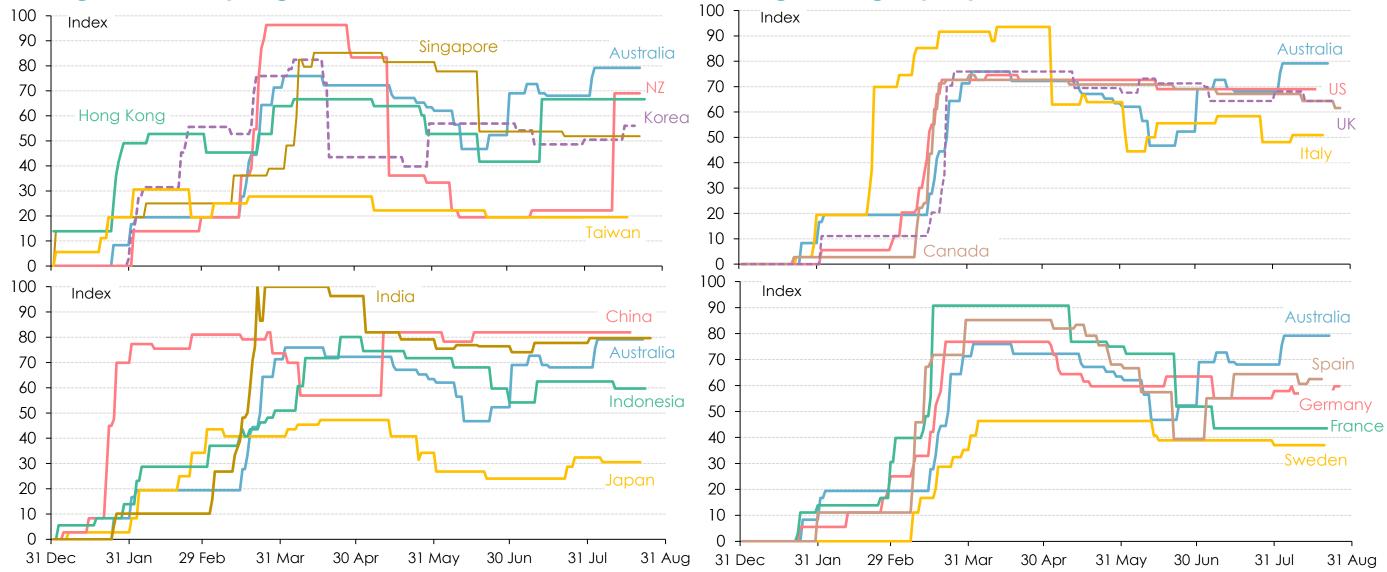
Tests per thousand of population





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

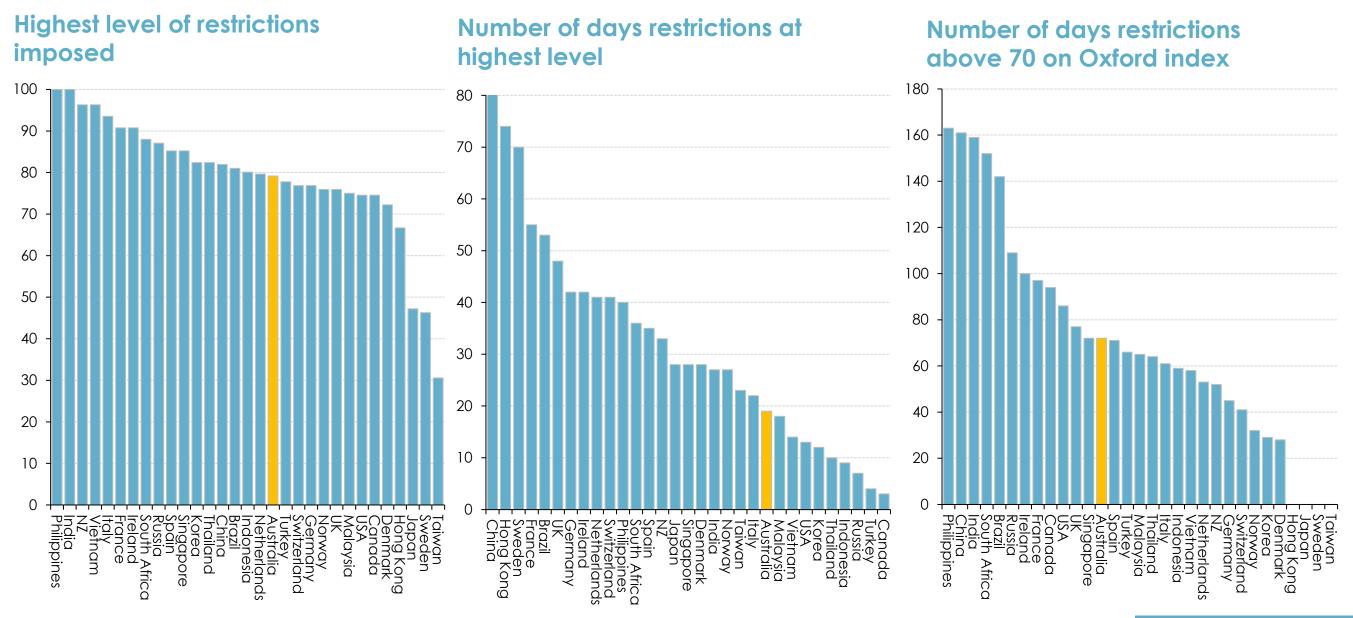
Timing and severity of government restrictions on movement and gathering of people



The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. The increase in the index for Australia since 1 July reflects the lockdown imposed on 36 Melbourne suburbs in response to outbreaks there. Source: Blavatnik School of Government, Oxford University. Data up to 17th – 27th August.



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

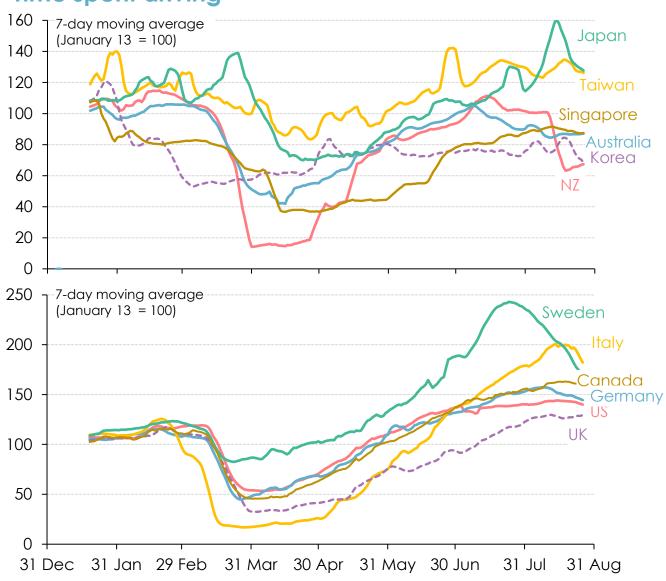


The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. Source: Blavatnik School of Government, Oxford University. Data up to 7th – 20th August.

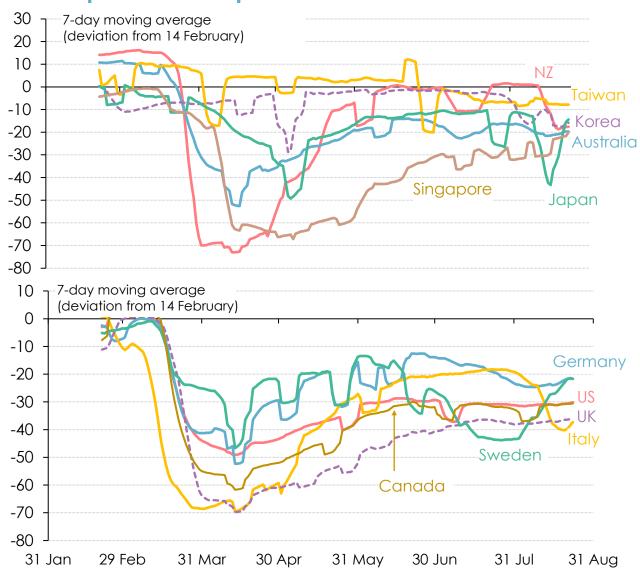


The uptrend in mobility since April has begun to peter out in countries where restrictions have been re-imposed

Time spent driving



Time spent in work places

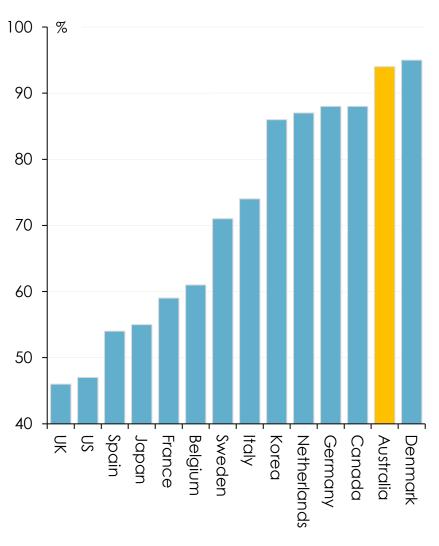


Note: these data will reflect normal seasonal variations in activities as well as the effects of government restrictions and individual responses to the risks posed by the virus. Sources: Apple Mobility Trends Reports (data up to 26th August); Google Covid-19 Community Mobility Reports (data up to 24th August).

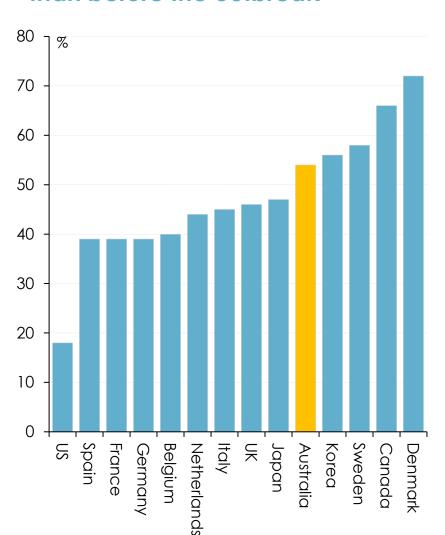


Australians seem very satisfied with their government's handling of Covid-19 – like Danes and Canadians but unlike Americans and Britons

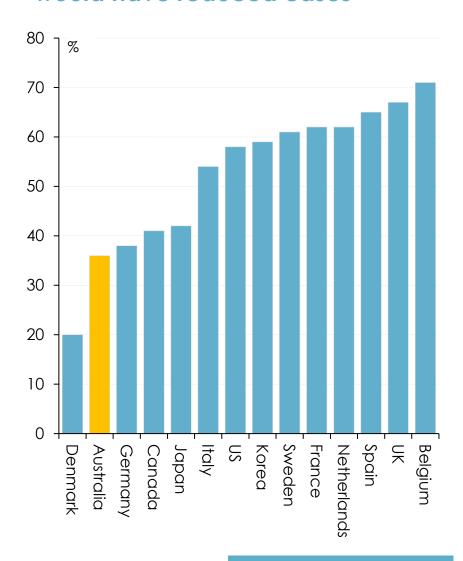
'My country has done a good job handling Covid-19'



'My country is now more united than before the outbreak'



'More international co-operation would have reduced cases'





The world

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

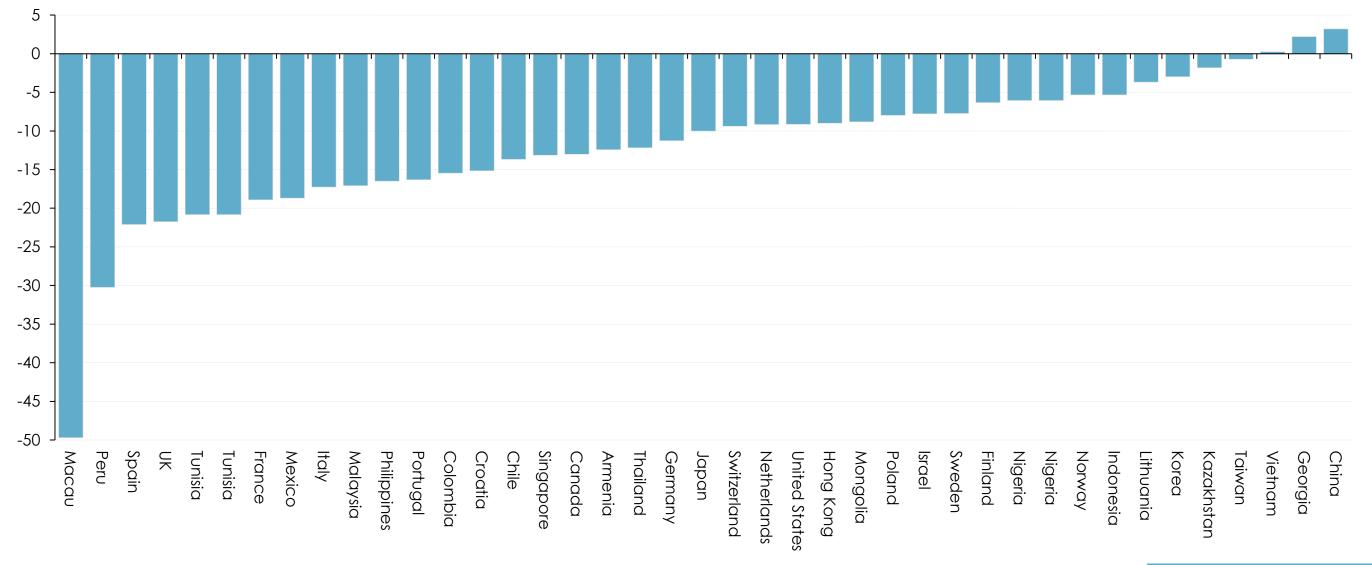
World and OECD area real GDP growth





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

Real GDP growth over the year to Q2 2020





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

Major global institutions' growth forecasts for 2020 and 2021 compared

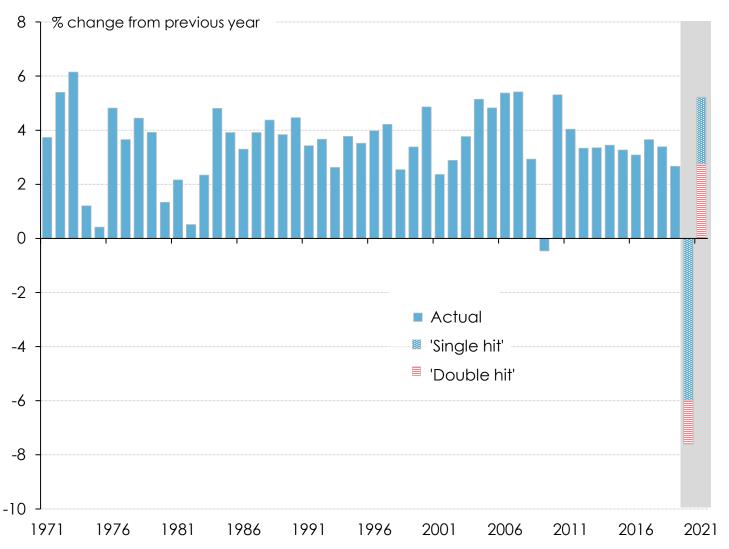
	Actual	IMF		World Bank		OECD*		Australian Treasury	
	2019	2020	2021	2020	2021	2020	2021	2020	2021
US	2.3	-6.1	4.5	-6.1	4.0	-7.3	4.1	-8.0	4.8
China	6.1	1.2	9.2	1.0	6.9	-2.6	6.8	1.8	8.3
Euro area	1.2	-7.5	4.7	-9.1	4.5	-9.1	6.5	-8.8	5.0
India	4.2	1.9	7.4	-3.2	3.1	-3.7	7.9	-4.0	4.3
Japan	0.7	-5.2	3.0	-6.1	2.5	-6.0	2.1	-6.3	2.8
UK	1.4	-6.5	4.0	na	na	-11.5	9.0	na	na
Australia	1.8	-6.7	7.1	na	na	-5.0	4.1	-3.8	2.5
New Zealand	2.2	-7.2 [†]	5.9 [†]	na	na	-8.9	6.6	na	na
World	2.9	-3.0	5.8	-5.2	4.2	-6.0	5.2	-4.8	5.0
World trade	0.9	-11.0	8.4	-13.4	5.3	-9.5	6.0	na	na



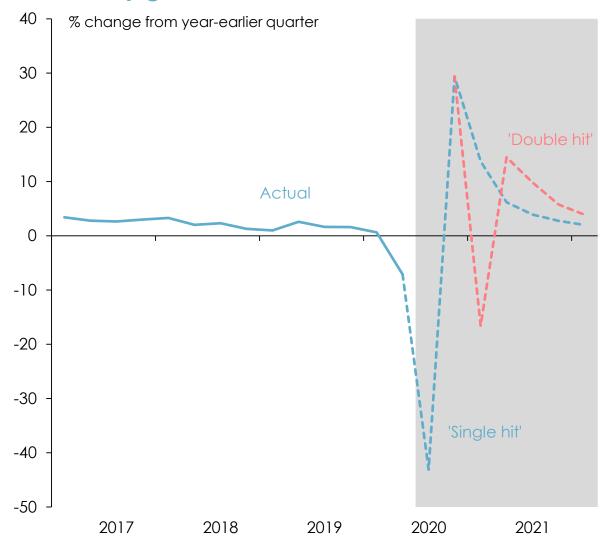
^{*} OECD forecasts are their 'single hit' scenario to be consistent with the assumptions of the other institutions. † The IMF did not publish revised forecasts for New Zealand in its latest WEO publication. Sources: International Monetary Fund (IMF), World Economic Outlook, 24th June 2020; The World Bank, Global Economic Prospects, 8th June 2020; Organization for Economic Co-operation & Development (OECD), Economic Outlook, Volume 2020 Issue 1, 10th June 2020; Australian Treasury, Economic and Fiscal Update, 23rd July 2020.

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

Annual growth in global real GDP, 1961-2021



Quarterly growth and forecasts, 2017-2021

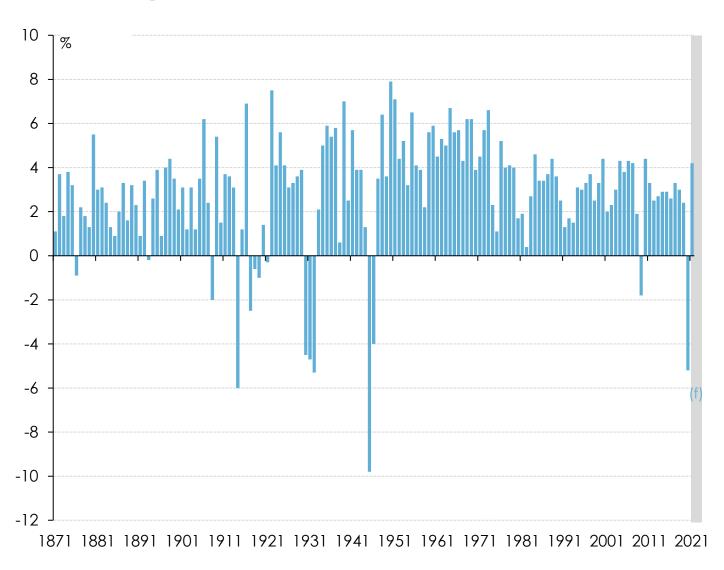


Note: The 'double hit' scenario assumes a 'second wave' of Covid-19 infections and deaths "in all economies towards the end of this year", while the 'single hit' scenario assumes this 'second wave is avoided'. The OECD regards each scenario as "equally likely". Source: OECD, Economic Outlook, No. 107,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

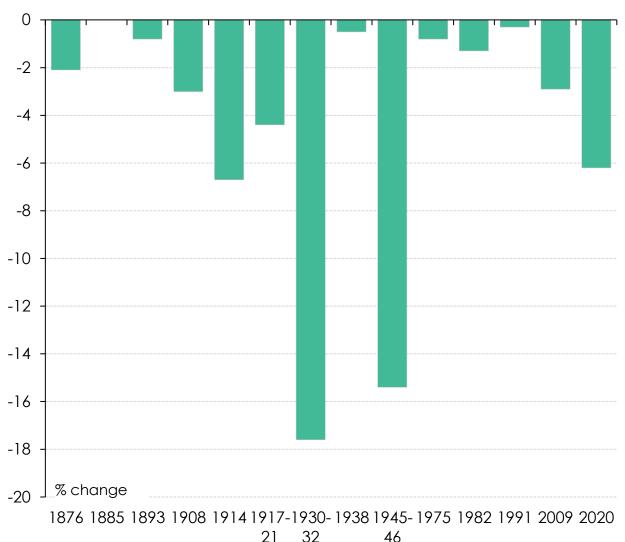


The World Bank forecasts a 5.2% decline in world GDP this year, with a 4.2% increase in 2021- the 4th worst global downturn in 150 years

Growth in global real GDP, 1871-2001



Cumulative decline in real per capita GDP during global recessions

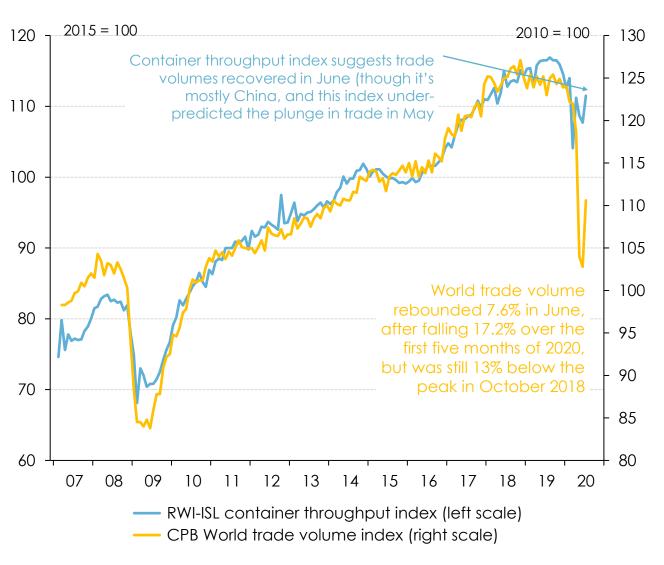


Source: The World Bank, Global Economic Prospects, 8th June 2020.

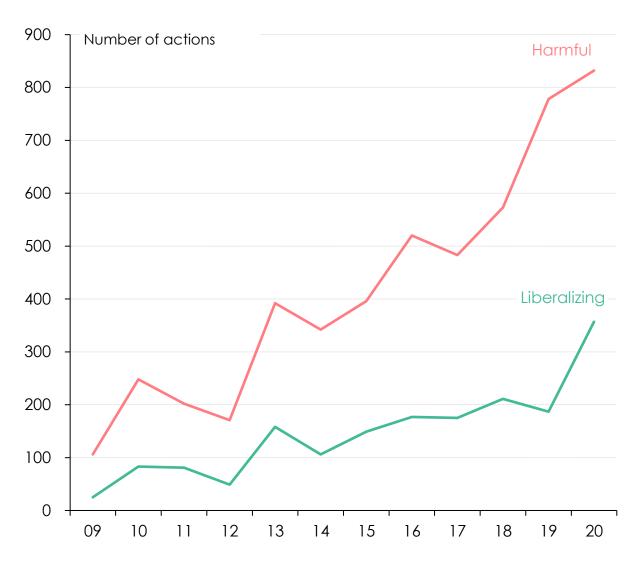


World merchandise trade volumes rebounded in June but are still 13% below their October 2018 peak

World trade volumes and container throughput



Pro- and anti-trade policy interventions



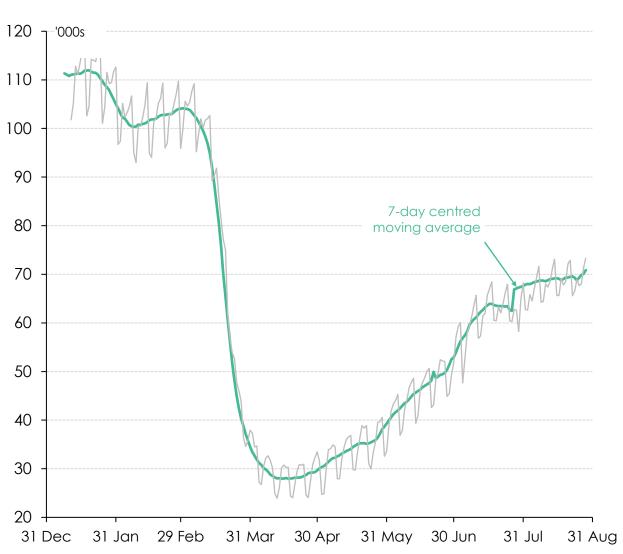
Note: The shipping container throughput index is based on reports from 91 ports around the world handling over 60% of global container shipping.

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 (latest report 28th August).

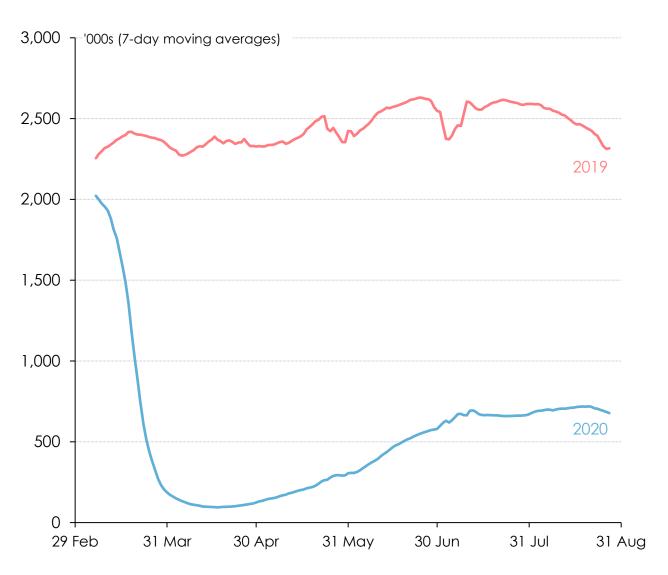


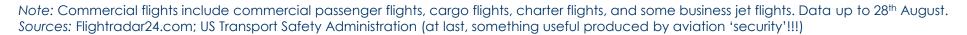
Global aviation traffic has picked up a bit further during the peak northern hemisphere holiday season, but seems to have remained flat in the US

Daily commercial flights worldwide



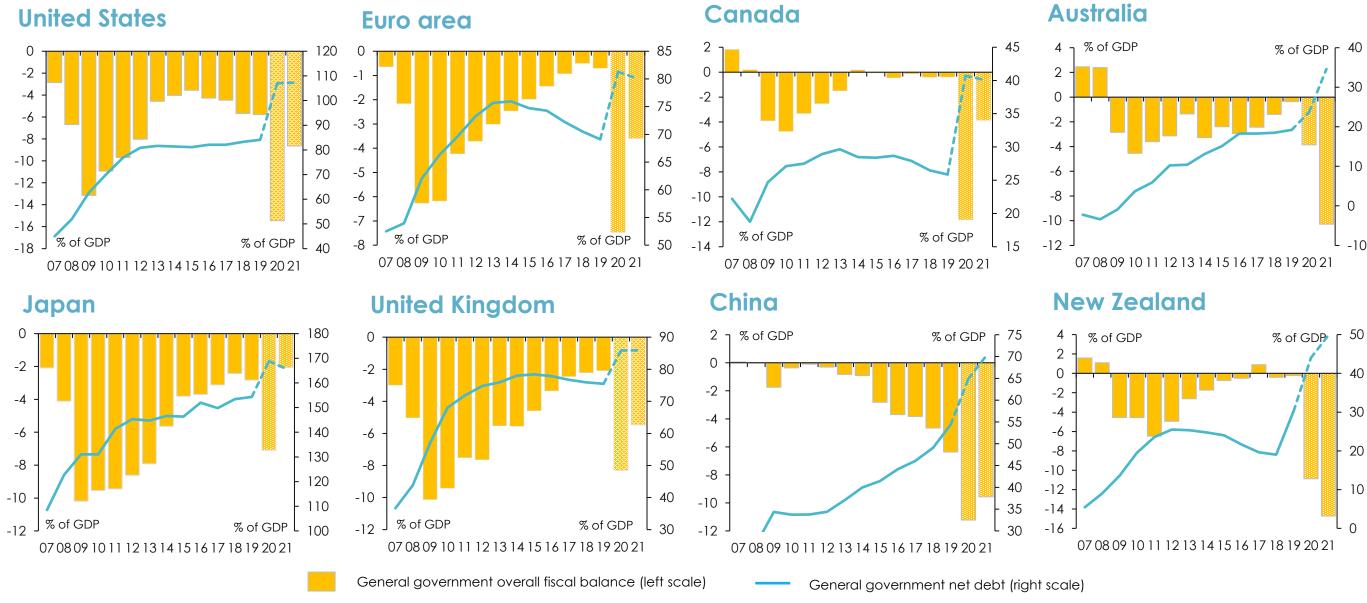
Daily US TSA security checks







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

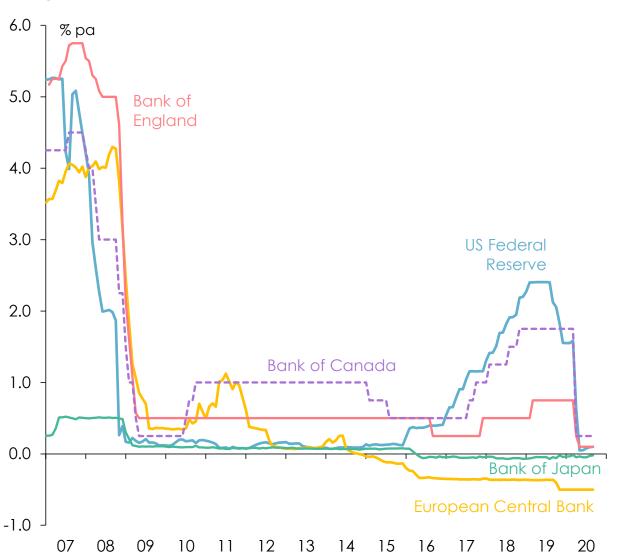


Note: UK data does not include the measures announced by the Chancellor on 8th July; China debt is gross debt, not net; Australian data are for the federal government only and are for fiscal years ended 30th June; NZ data are for fiscal years ended 31st March. Sources: International Monetary Fund, Fiscal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

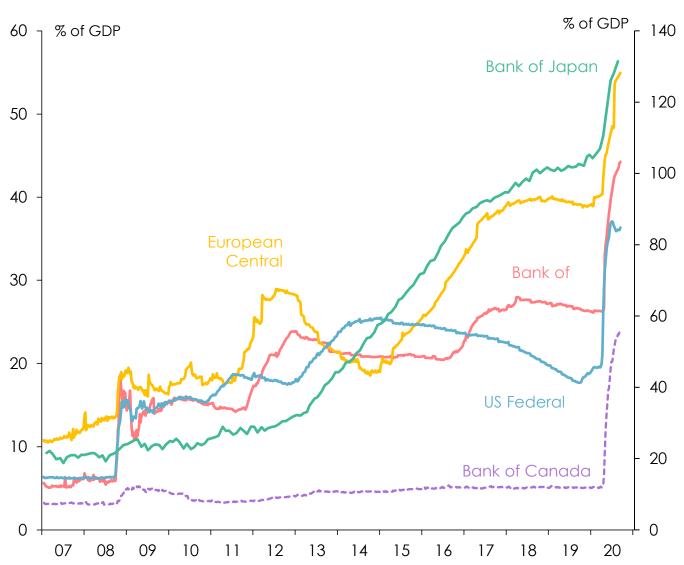


Major central banks have cut interest rates to record lows, and done more 'quantitative easing' than during the global financial crisis

Major central bank policy interest rates



Major central bank balance sheets

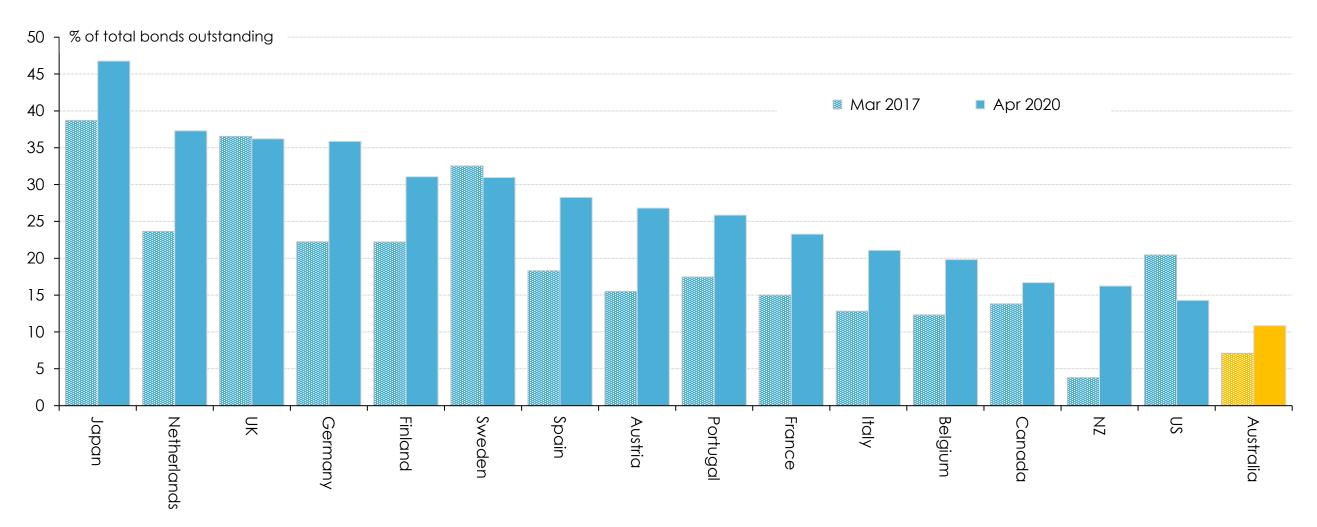


Note: estimates of Bank of England assets as a pc of GDP for weeks since the beginning of April have been revised upwards sharply following the incorporation of Q2 nominal GDP data as the denominator (but on that score see also <u>slide 50</u>). Estimates of US Fed, and BoJ assets as a pc of GDP have also been revised up with the use of Q2 nominal GDP as the denominator, but less sharply. ECB and BoC assets since April are still expressed as a pc of Q1 GDP. ,. 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).



US Federal Reserve Chair Jerome Powell signalled what looks like a significant shift in its monetary policy-making framework

- ☐ The Fed's policy-setting Open Market Committee this week approved changes to its <u>Statement on Longer-Run</u> <u>Goals and Monetary Policy Strategy</u>, which Jerome Powell enlarged on in his address to (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 amounts to an abandonment of former Fed Chairman William McChesney Martin's famous 1955 dictum that the Fed's job is "to take away the punch bowl just as the party gets going" or, as others have put it, not waiting until it can see "the whites of inflation's eyes" before starting to raise interest rates
 - it might also be a tacit acknowledgement on Powell's part that it was (with the benefit of hindsight) a mistake to have raised interest rates by as much as it did between 2017 and 2019



The US stockmarket struck more new highs this week (mainly driven by tech stocks), bond yields rose, and the US dollar fell

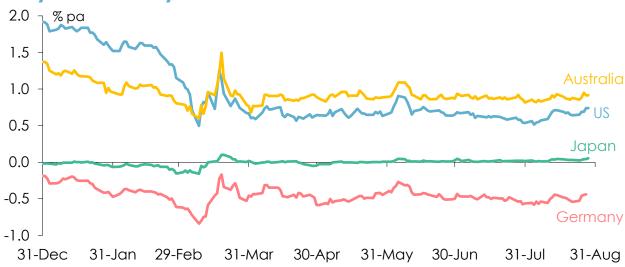
Stock markets



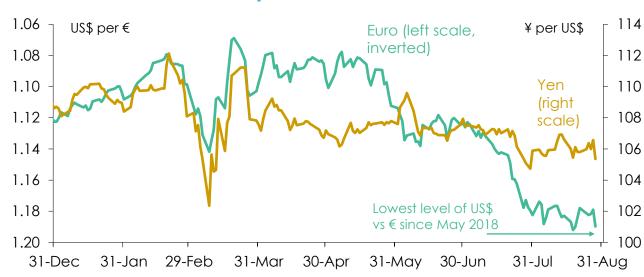
Measures of market volatility



10-year bond yields



US dollar vs euro and yen





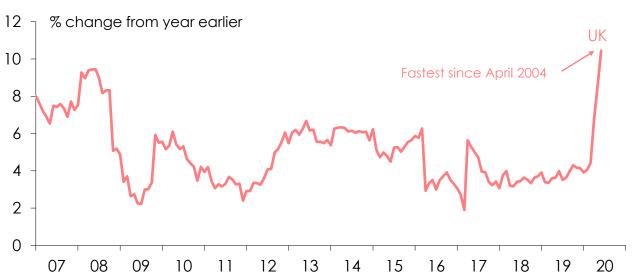
'Quantitative easing' has prompted a more rapid acceleration in money supply growth than it did during the global financial crisis ...

M2 money supply growth





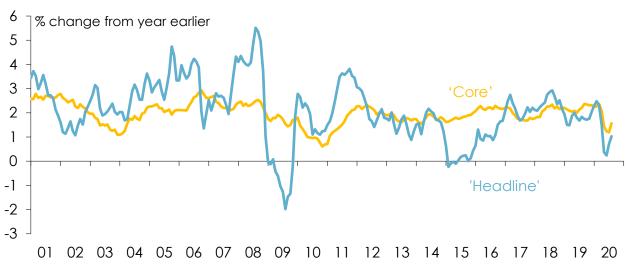




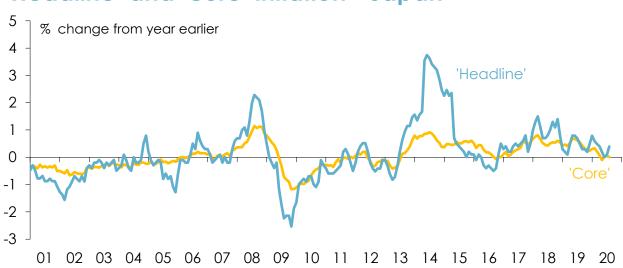


...but so far at least, inflation has remained below central bank targets – although both 'headline' and 'core' inflation ticked up in July

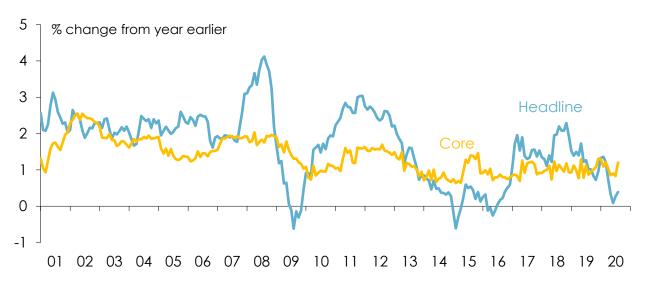
'Headline' and 'core' inflation - US



'Headline' and 'core' inflation - Japan



'Headline' and 'core' inflation – Euro area



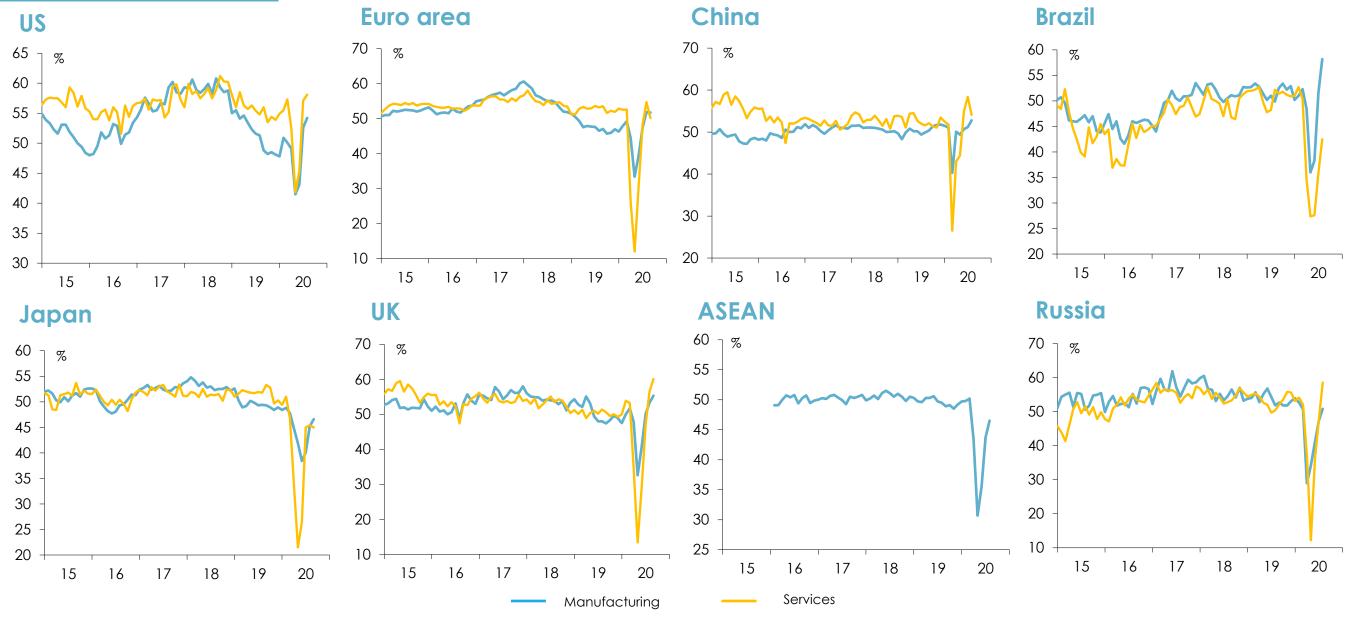
'Headline' and 'core' inflation – UK



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



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

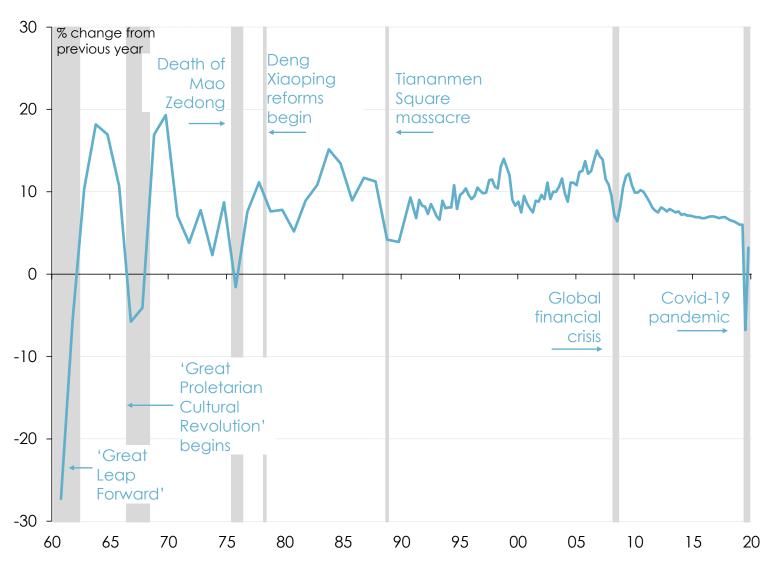


Note: Purchasing Managers' Indexes (PMIs) are derived from surveys of senior executives, who are asked to report whether various dimensions of business activity recorded an increase, decrease or no change compared with the previous month. A reading of 50 indicates an overall increase cf. the previous month, and a reading of less than 50 indicates a decrease. Latest data for Japan, the euro area and the UK are preliminary August; all others are for July. See also PMIs for other Asia-Pacific economies on slide 41. Sources: US Institute of Supply Management; INH Markit; Caixin; Refinitiv Datastream.

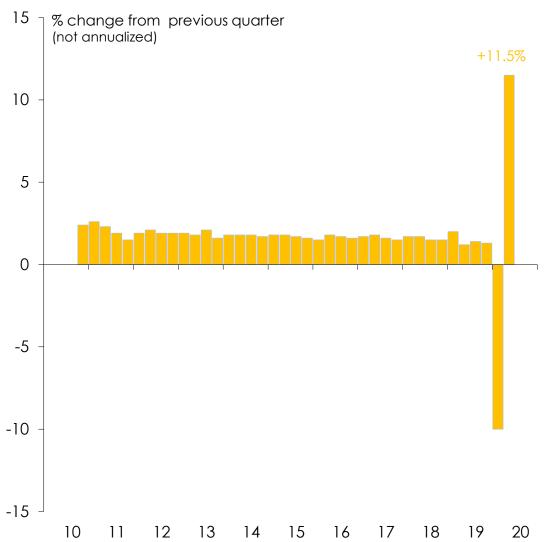


China's economy rebounded strongly in Q2 from what had been the worst downturn in almost 60 years in Q1

Real GDP growth, from year earlier, 1961-2020



Quarterly real GDP growth, 2010-2020



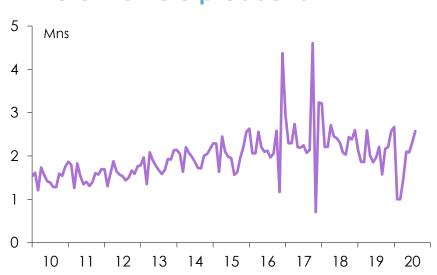


The production side of the Chinese economy rebounded strongly in the June quarter

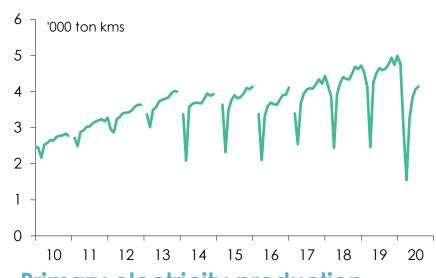
Industrial production



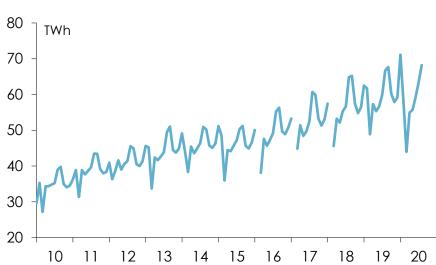
Motor vehicle production



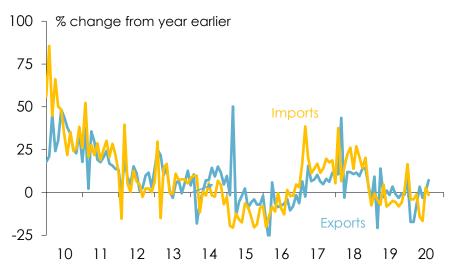
Freight traffic volumes



Primary electricity production



Merchandise trade



Merchandise trade balance



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

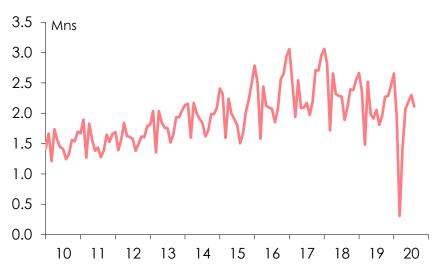


However the 'demand' side of the Chinese economy – both household and business – is recovering rather more gradually

Consumer sentiment



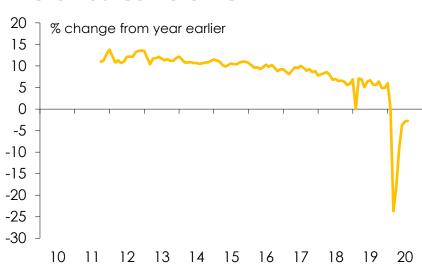
Motor vehicle sales



Real estate investment



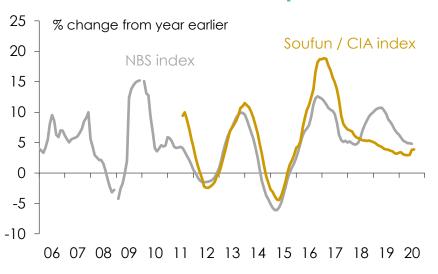
Retail sales volume



Passenger traffic volumes



Residential real estate prices





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

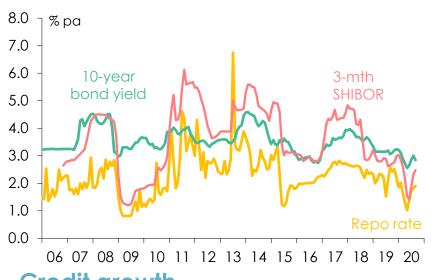
PBoC policy interest rates



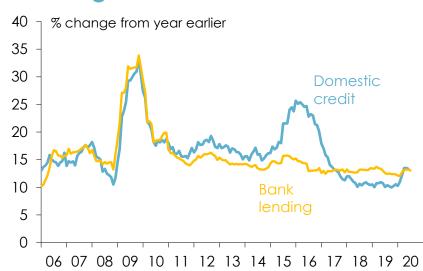
Bank reserve requirement ratios



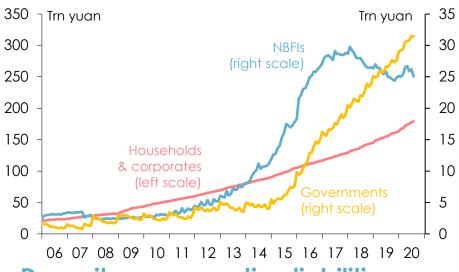
Market interest rates



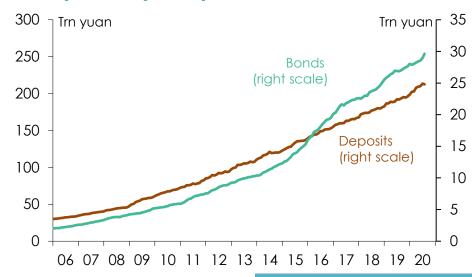
Credit growth



Depository corporation assets



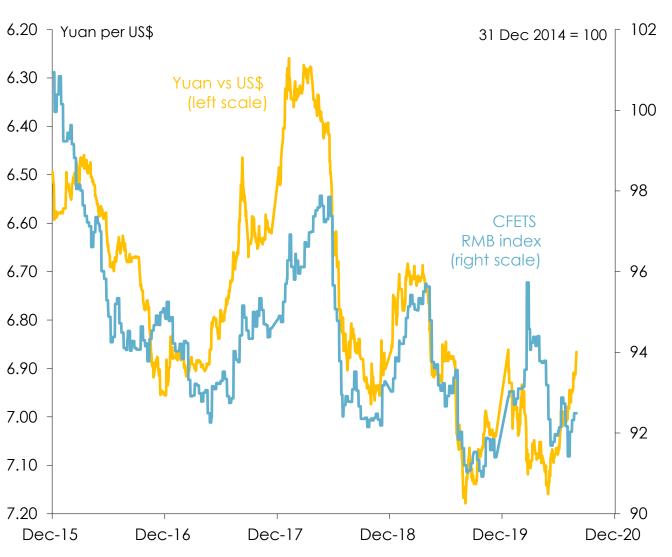
Depository corporation liabilities



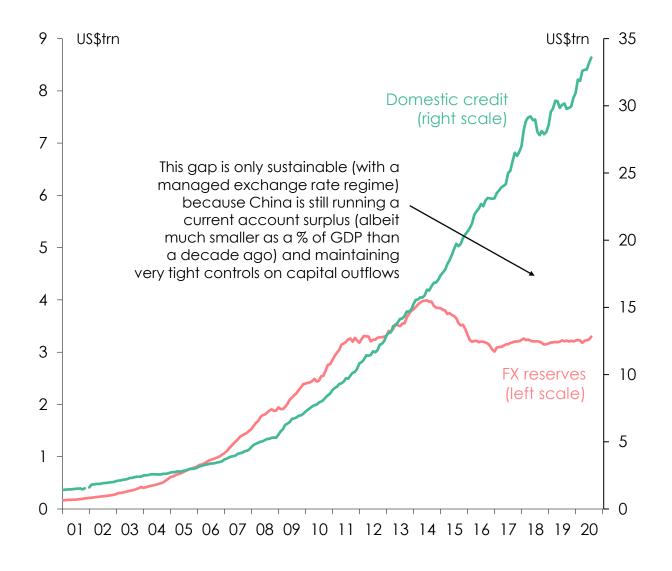


Since late May the Rmb has risen 4.1% against the US\$ but only 0.2% in trade-weighted terms

Chinese yuan vs US\$ and trade-weighted index



FX reserves and domestic credit



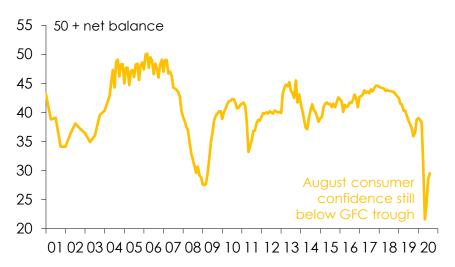


Japan entered its fourth recession since 2000 after hiking its GST rate last October, and the pandemic has worsened it

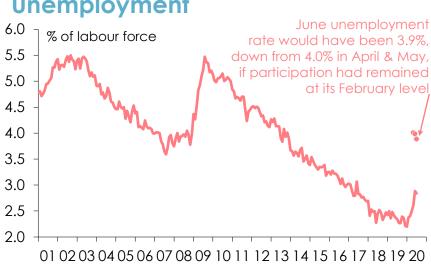
Real GDP



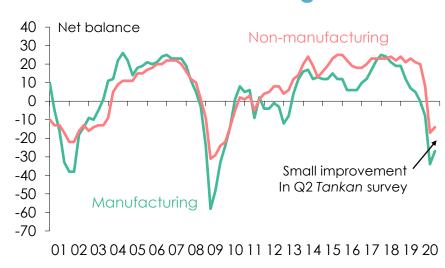
Consumer confidence



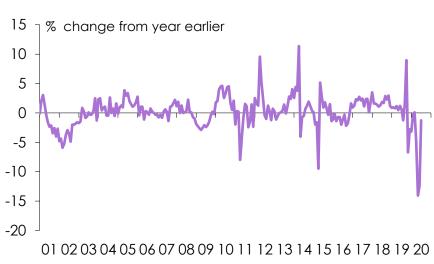
Unemployment



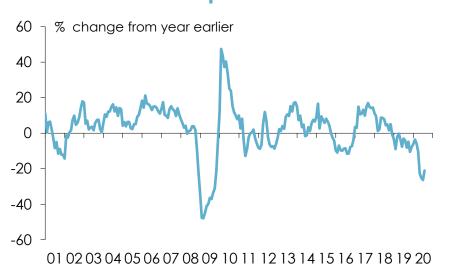
Business conditions – large firms



Retail sales



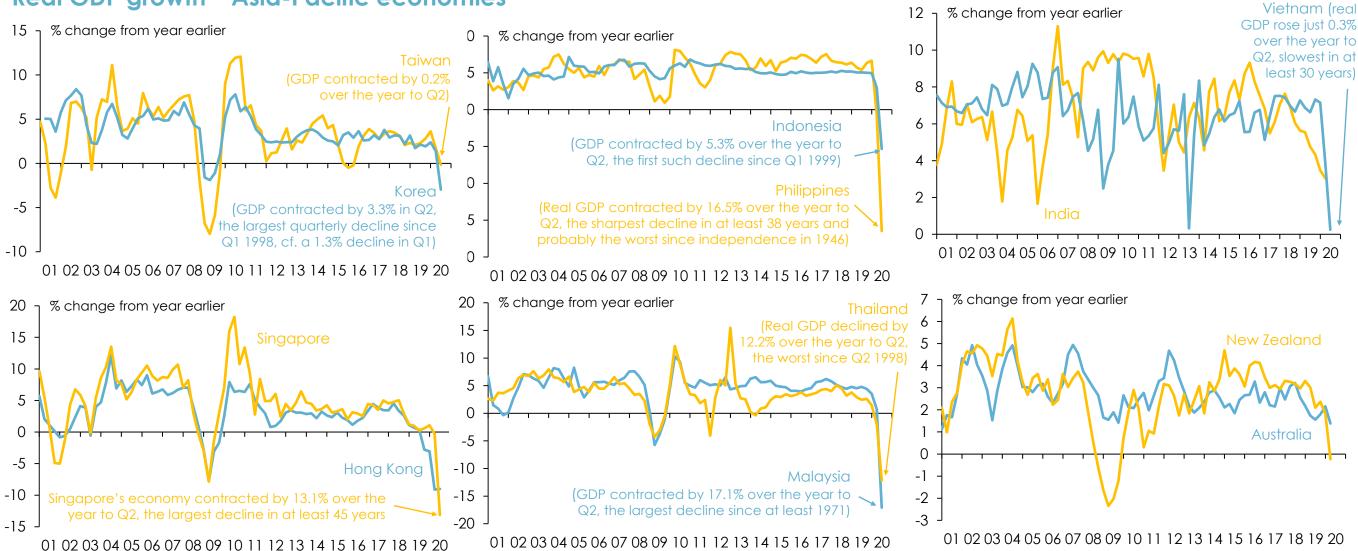
Merchandise export volumes





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

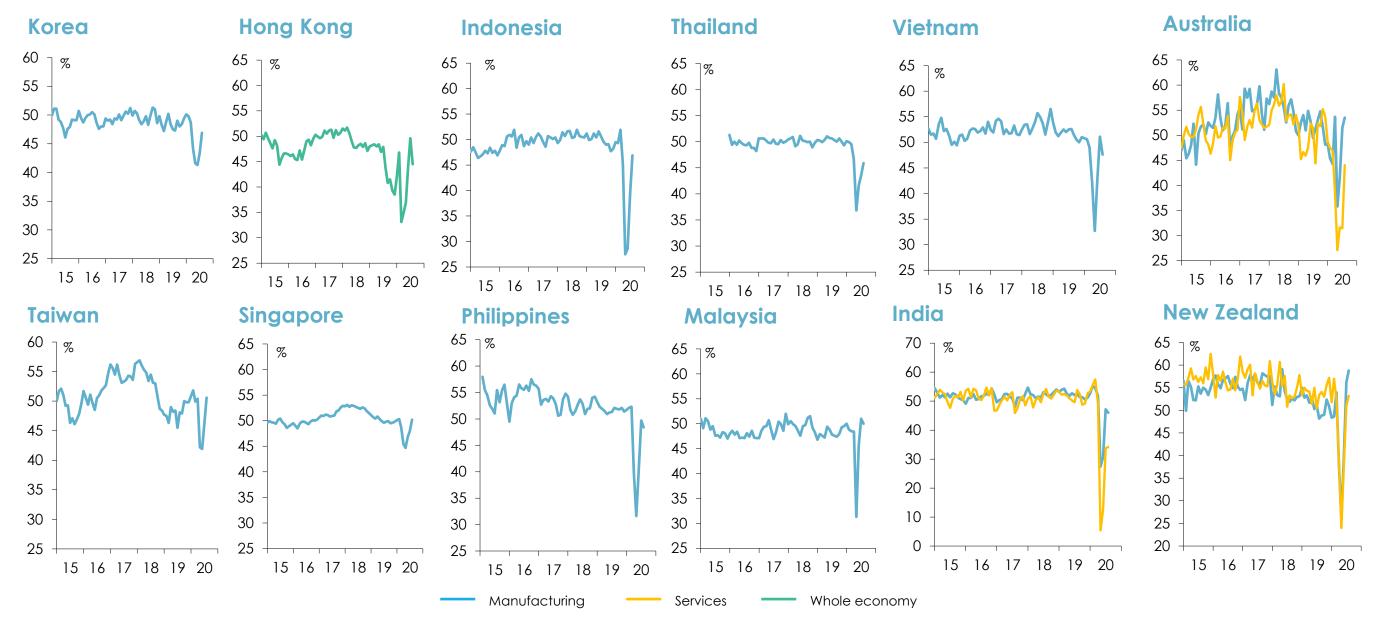
Real GDP growth – Asia-Pacific economies



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



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

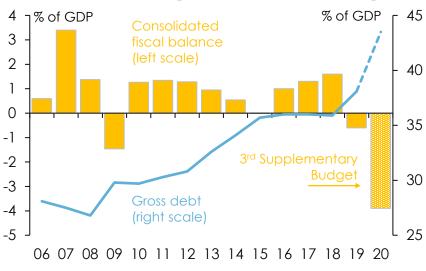


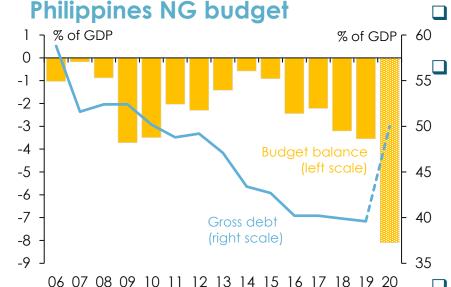
Note: Purchasing Managers' Indexes (PMIs) are derived from surveys of senior executives, who are asked to report whether various dimensions of business activity recorded an increase, decrease or no change compared with the previous month. A reading of 50 indicates an overall increase cf. the previous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

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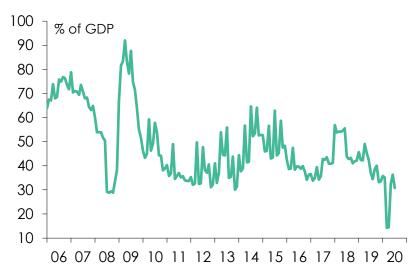
Some Asian central banks have engaged in various forms of 'quantitative easing'

Korea central government budget

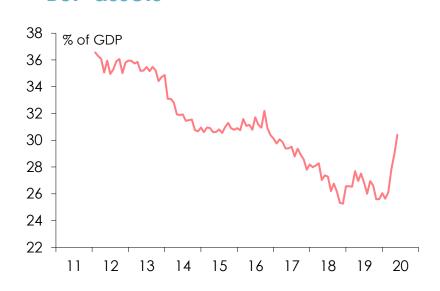




BoK domestic assets



BSP assets



The Bank of Korea has cut its policy rate by 100bp so far this year to a record low of 0.50%

After its last rate cut in May, Governor Lee Ju-Yeol indicated the BoK was considering using 'unconventional monetary tools' to support growth

- since March, the BoK has been willing to supply 'unlimited liquidity' to financial institutions, accepting a wider range of collateral in repos
- this month the BoK lent #8 trn to a #10 trn SPV established to buy corporate bonds and CP

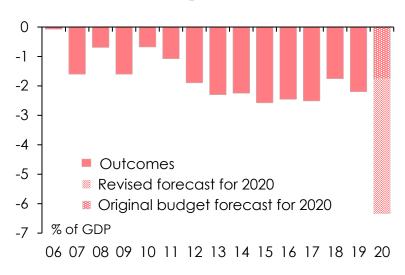
The BoK's total domestic assets more than doubled between end-February and end-May, from 40% of GDP to 84% - reflecting increased holdings of bonds, reverse repos and lending to both government and the private sector

- The Philippines National Government (NG) expects its budget deficit to reach 8.1% of GDP this year, and public debt to rise to 50% of GDP
- In March, the BSP purchased ₱300bn (US\$6bn) of bonds directly from the Treasury Bureau under a 6-mth repo arrangement, and reportedly bought another ₱500bn in the secondary market through to the end of July

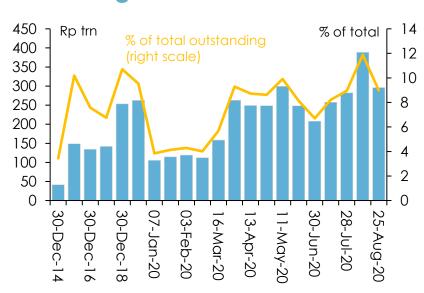


Bank Indonesia has entered into a formal agreement with the Indonesian Government to purchase debt directly, and subsidize other debt issuance

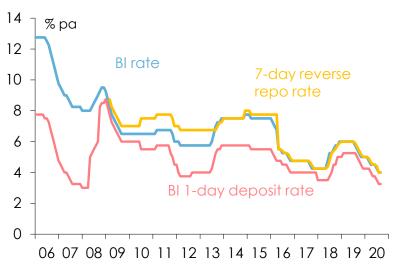
Indonesia budget deficit



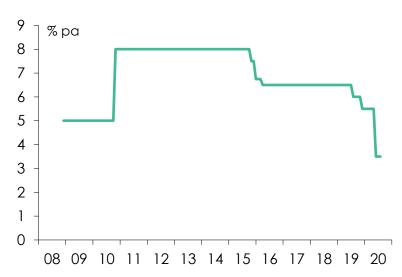
BI holdings of tradeable SBNs



BI monetary policy rates



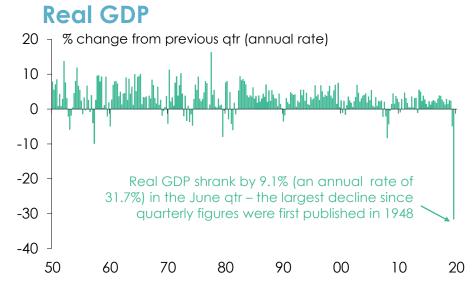
Bank reserve requirement ratio



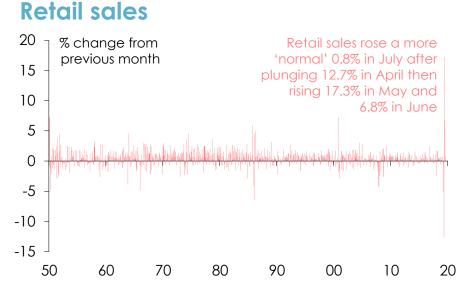
- In July the Indonesian Government and Bank Indonesia agreed on a 'burden sharing' scheme under which BI will directly purchase from the Government almost Rp400 trn of bonds (SBNs) equivalent to about ¼ of this year's financing requirement at its benchmark reverse reporate, and return the interest received to the Government
 - earlier this month BI purchased Rp82 trn of bonds directly from the Finance Ministry
 - but its SBN holdings declined in the second half of August
- □ BI will also subsidise the interest on another Rp177trn of bonds issued to fund loans to micro, small and medium-sized businesses
- ☐ This follows BI's decision in mid-April to cut banks' reserve requirement ratio by 200bp, coupled with a requirement that banks use the funds thus 'freed up' to purchase SBNs
 - banks' holdings of SBNs have since increased by Rp 346 trn (46%)
- BI calls all this 'synergic monetary expansion'
- BI is also doing conventional monetary policy: it cut its policy indicator rates by 25bp at last month's policy meeting

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

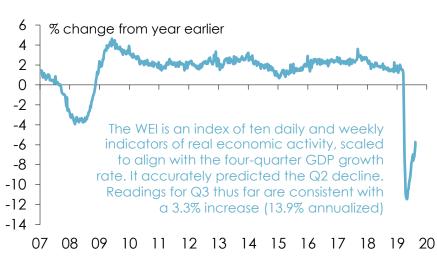
The US economy experienced its sharpest contraction since the 1930s in the first half of 2020, although growth has turned moderately positive in Q3







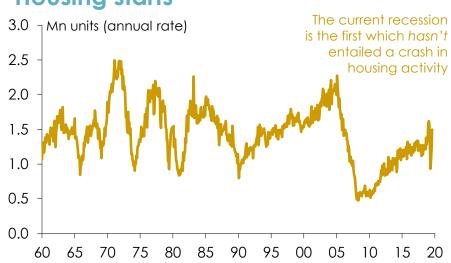






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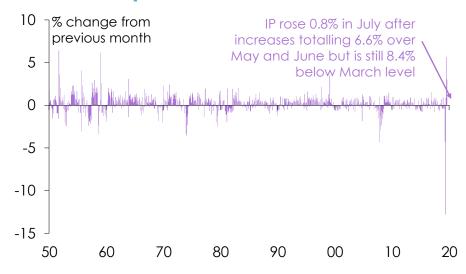
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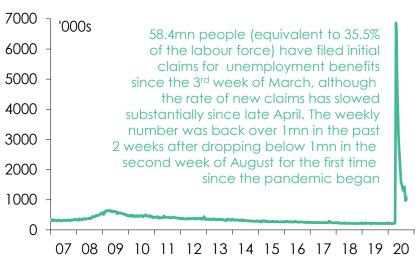
Industrial production



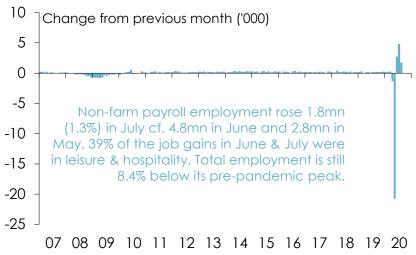
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42% of the 22mn jobs lost in the US in March and April have been regained over May, June and July

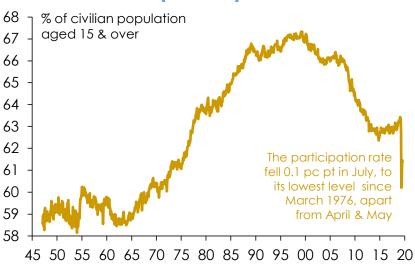
Unemployment benefit claims



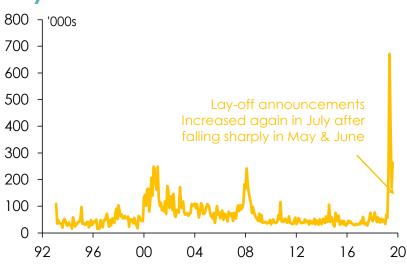
Non-farm payroll employment



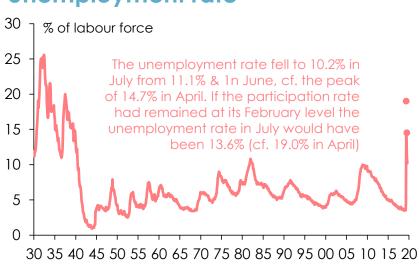
Labour force participation rate



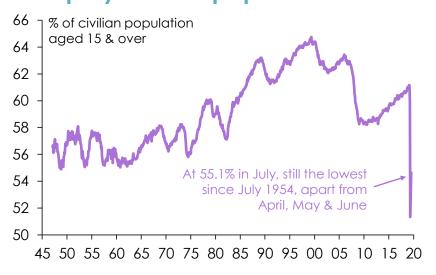
Layoff announcements



Unemployment rate



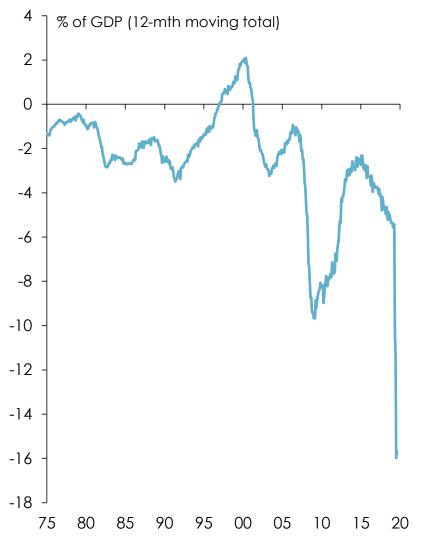
Employment to population ratio



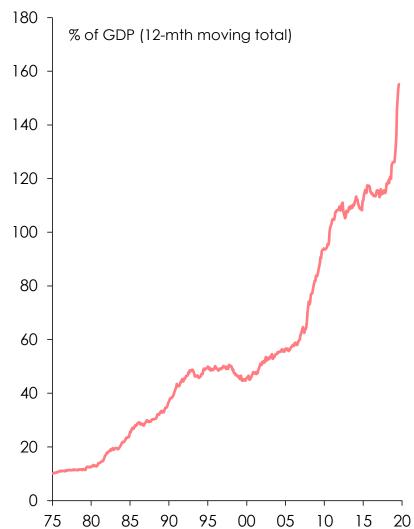


The US budget deficit has blown out dramatically since the end of March, reaching 16% of GDP in the 12 months ended July

US Federal budget deficit



US gross Federal debt



- The US federal budget deficit widened from US\$582bn (3.3% of GDP) in 2016 (Obama's last year in office) to US\$1 trn (5.4% of GDP) in 2019, while gross federal debt rose from US\$20.4 trn (115% of GDP) to \$24.1trn (126% of GDP)
- In March, the Congressional Budget Office forecast the deficit would remain above U\$1trn every year over the next decade, reaching U\$\$1.7 trn (5.6% of GDP) by 2030
- □ The budget deficit narrowed sharply in July, to US\$63bn (from \$864bn in June), reflecting the deferral from April to July of tax payments by companies and self-employed individuals
- □ However the 12-month moving total deficit remained close to US\$3 trn (16.0% of GDP), cf. a peak of 9.7% of GDP during the GFC (and the largest since 20.8% of GDP in FY 1945)
 - Gross federal debt increased by US\$300 bn to US\$28.9 trn (155% of GDP)

Note: The measure of US gross federal debt is at market value. Sources: US Treasury Department; Federal Reserve Bank of Dallas; US Bureau of Economic Analysis; US Congressional Budget Office; Corinna. August budget data will be released on 10th September.

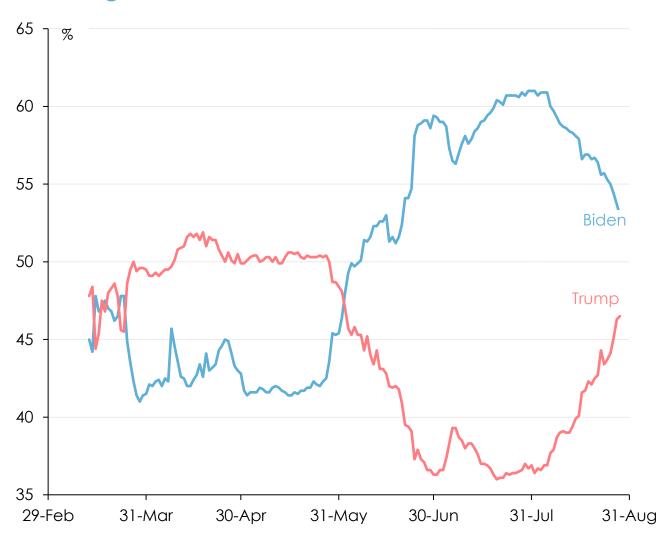


Biden's lead over Trump in opinion polls narrowed a little bit this week, but his lead in betting markets declined sharply to its narrowest since June

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



Winner of November US Presidential election – betting odds

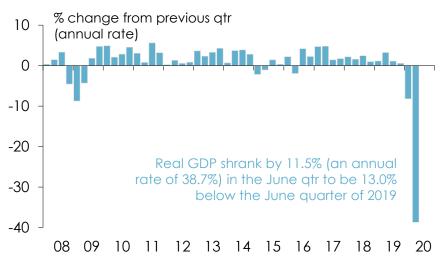




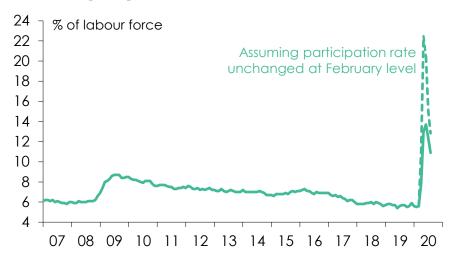


Canada has had a more severe recession than the US – or Australia (although Canadian house prices are holding up remarkably well)

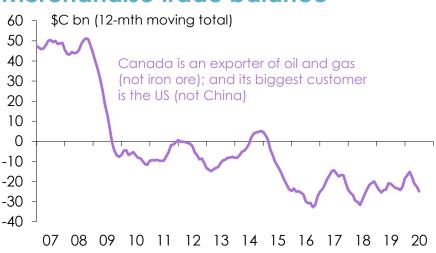
Real GDP



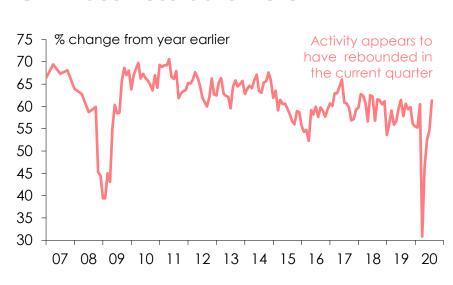
Unemployment rate



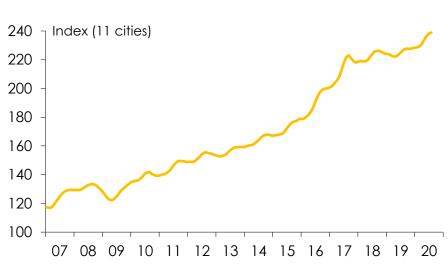
Merchandise trade balance



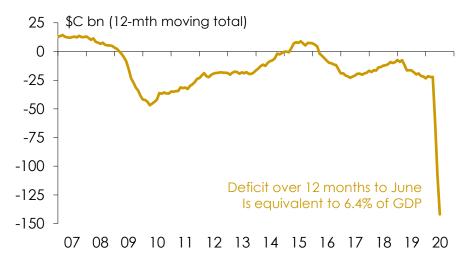
CFIB 'business barometer'



House prices



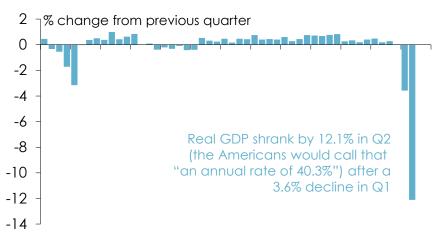
Federal budget balance





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

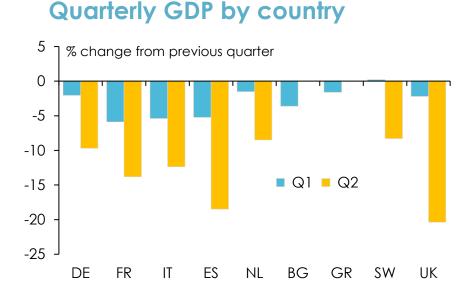
Euro area real GDP



UK monthly GDP

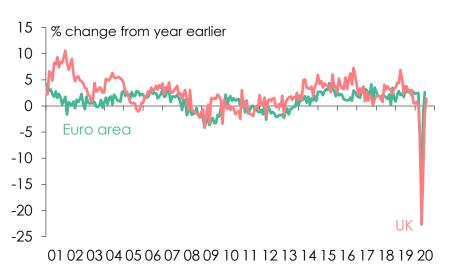


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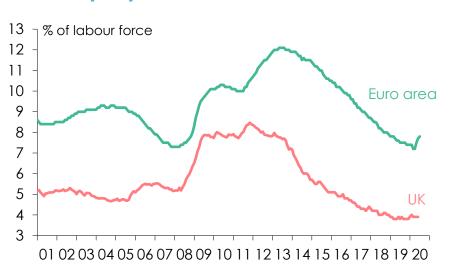




Retail sales volume



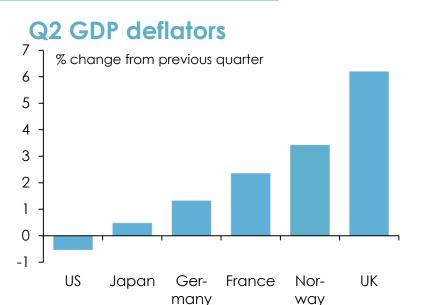
Unemployment



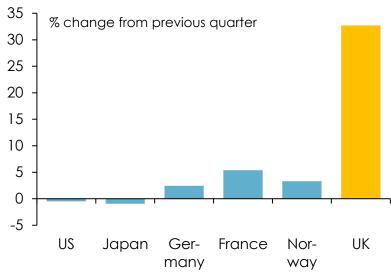




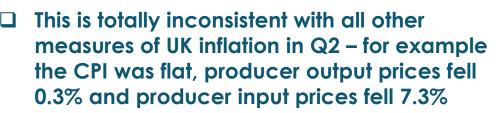
There's something fishy about the deflators used in compiling the UK's Q2 national accounts

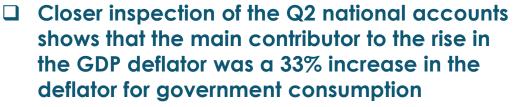


Q2 gov't consumption deflators



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



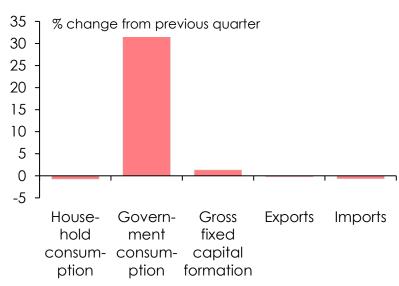


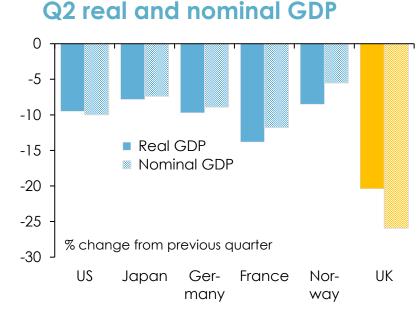


☐ However none of the other major economies which have so far published Q2 national accounts have reported anything similar

It could be that real GDP fell by (even) more in Q2 than estimated, or nominal GDP by less

UK Q2 expenditure deflators

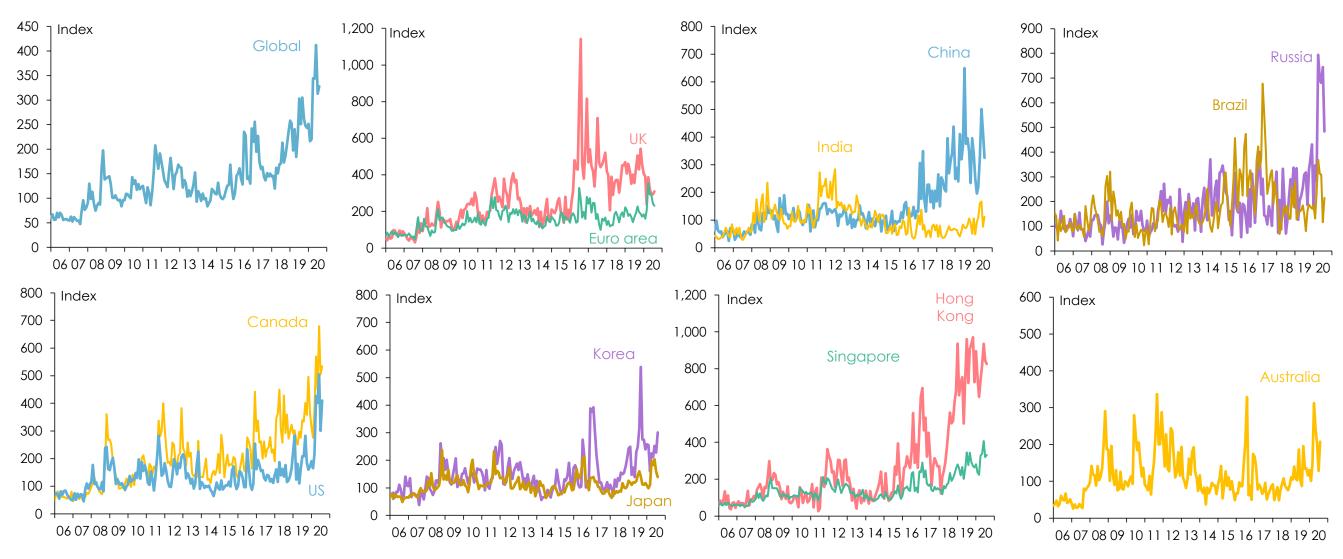






Uncertainty about economic policy increased in the US, Canada, Korea, India & Australia in July but declined in China, Japan and Europe

Economic policy uncertainty indices



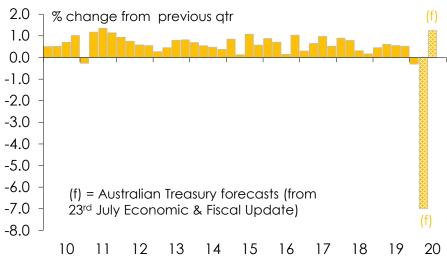
Note: The Economic Policy Uncertainty Index is derived from a count of newspaper articles containing the words "uncertain" or "uncertainty", "economy" or "economic", and policy-relevant terms pertaining to regulation, monetary or fiscal policy, central bank, taxation, tariffs, deficit, budget, etc. The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



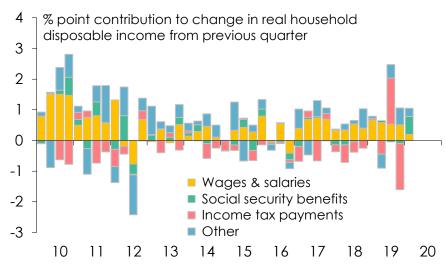
Australia

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

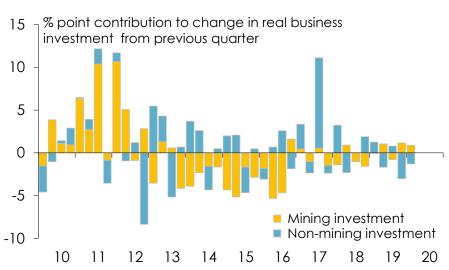
Quarterly change in real GDP



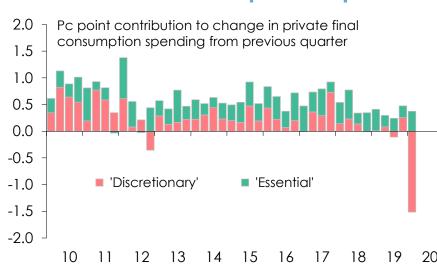
Household disposable income



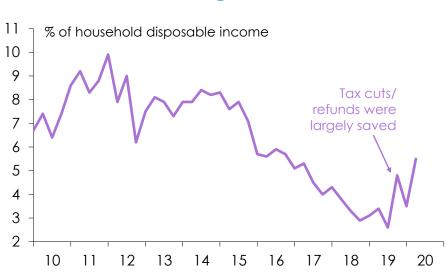
Business investment expenditure



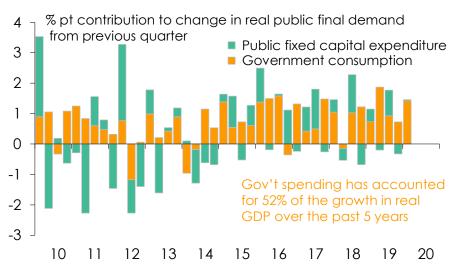
Household consumption expenditure



Household saving rate



Public expenditure

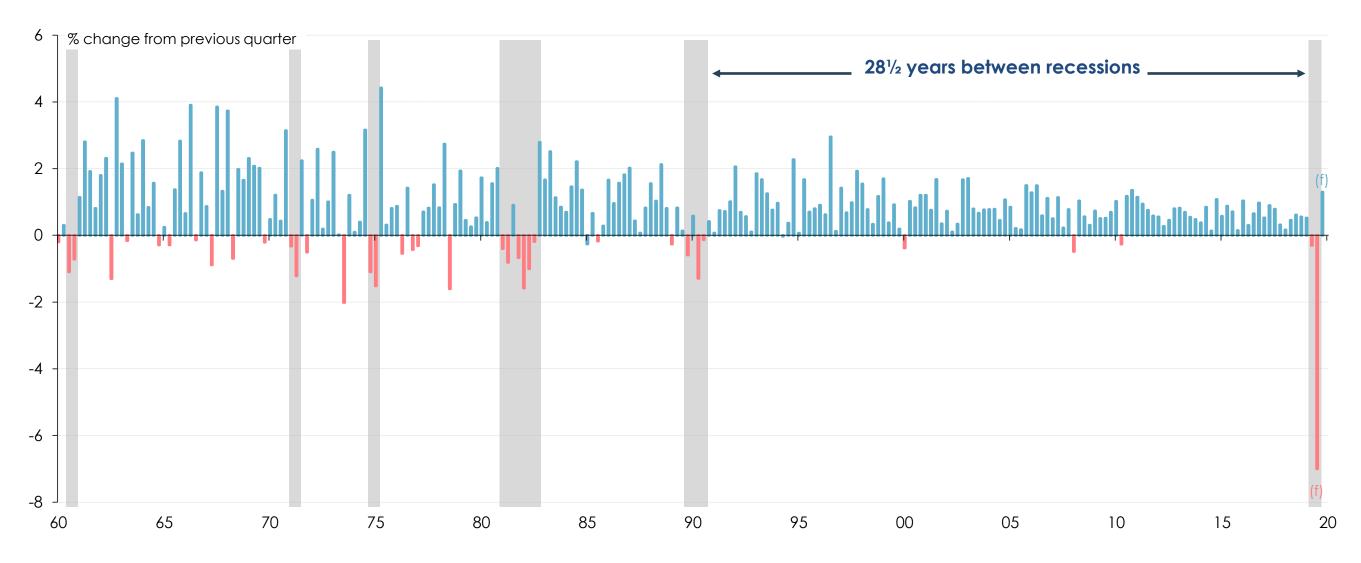


Note: 'Essential' household consumption expenditure comprises food; rent & other dwelling services; electricity, gas & other fuel; operation of vehicles; rail, bus & taxi services; communications; health; education; and insurance & other financial services. Components of household disposable income are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



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



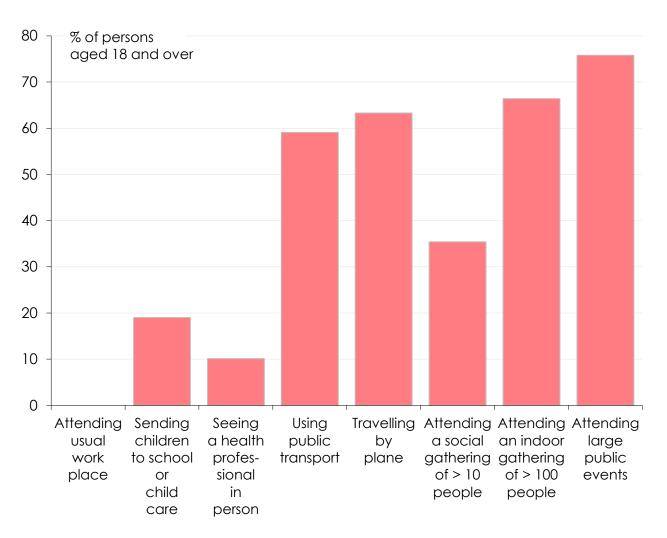


The path out of the current downturn will be more gradual than the path into it was

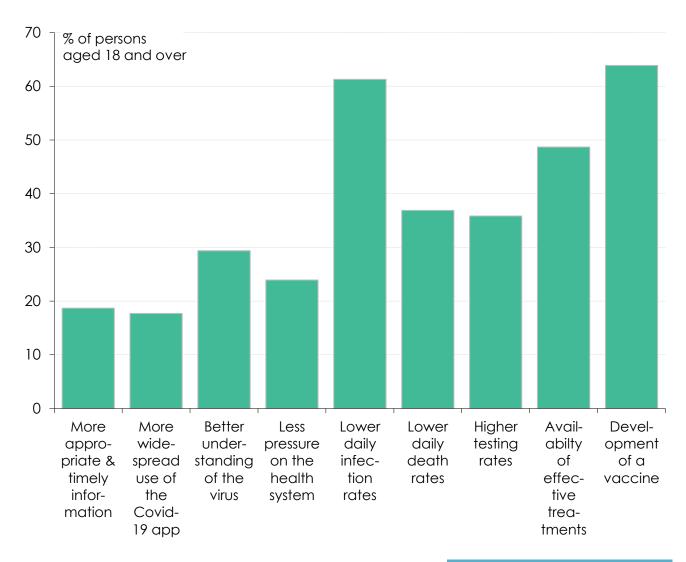
- □ 'Social distancing' requirements will be relaxed gradually rather than 'all at once' and (as seen in Victoria) restrictions can be re-imposed in response to new outbreaks)
 - new health and safety regulations will likely limit the number of employees and customers who can be 'on premises'
 (which may make it uneconomic for some businesses to re-open until restrictions are relaxed
 - and many people may remain wary of exercising all of their newly-regained 'freedoms' (see next slide)
- ☐ At least some businesses won't have survived the shutdown period, and many of those which do will not immediately return to pre-outbreak levels of employment
 - so employment will remain below pre-outbreak levels for some time rather than 'snapping back' quickly
 - and those returning to work may work reduced hours (compared with pre-outbreak) for some time
- ☐ The recovery in household spending is likely to be gradual, rather than rapid
 - if the recovery in employment is only gradual, so too will be the recovery in household disposable income
 - most households will have run down discretionary savings to at least some extent, as well as having their superannuation balances depleted by market movements and/or withdrawals – and so will likely want to rebuild savings
 - households with mortgages who have deferred repayments will face higher or longer mortgage repayments, constraining their spending capacity to some extent
 - household spending may also be affected by 'negative wealth effects' from lower property prices
- □ Despite the recent extensions to JobKeeper and Jobseeker, on current policy settings there will still be an effective tightening of fiscal policy at the beginning of each of the December and March quarters
- □ International borders (except with NZ) will likely remain closed until a vaccine is widely available which is in turn likely to be at least 12 months away
 - implying that there will be no near-term recovery in international tourism or international education
- ☐ Businesses are likely to be very hesitant about investment spending for an extended period (with some exceptions)

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

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

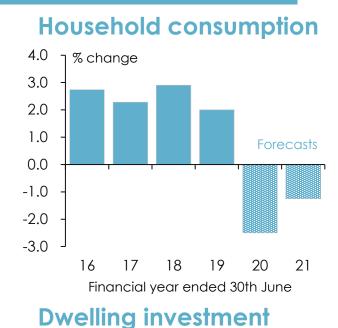


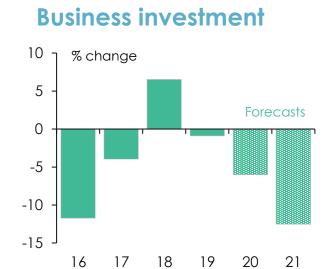
Actions that would improve people's comfort with activities as restrictions are eased

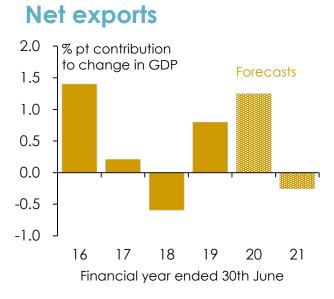


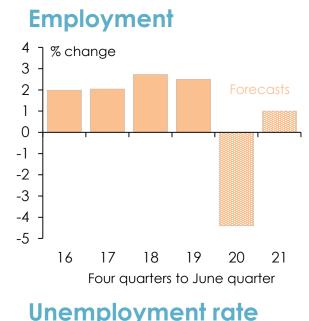


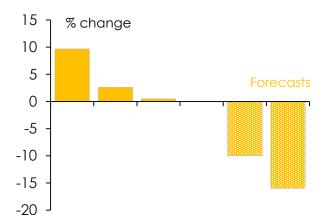
Treasury's most recent forecasts, published last month, assumed a 6-week 'stage 3' shutdown in Victoria and no other 'second waves' ...







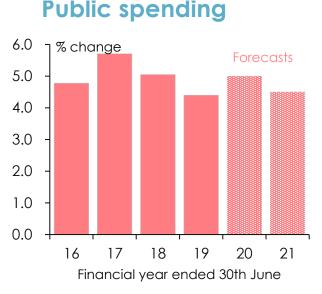




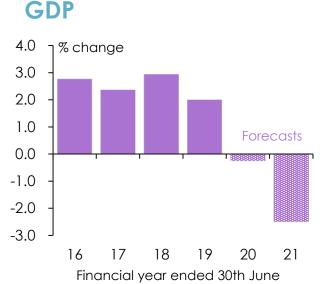
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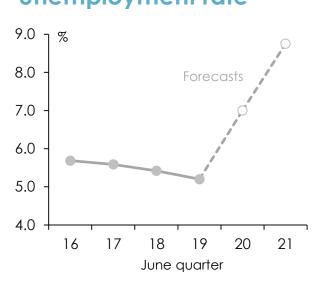
Financial year ended 30th June

21



Financial year ended 30th June





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



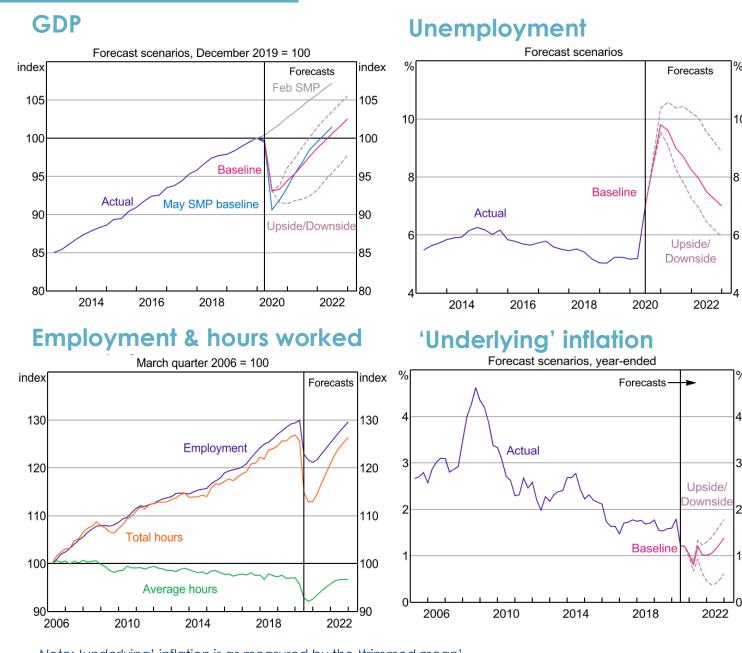
.. but those forecasts will need to be revised downwards as a result of the harsher, longer, 'lockdown' in Victoria

☐ In the Federal Government's July Economic & Fiscal Update, Treasury had estimated that real GDP had contracted by 7% in the June quarter, and forecast that it would increase by $1\frac{1}{2}\%$ in the September quarter the forecast explicitly assumed that Victoria's 'stage 3' lockdown restrictions were "not extended further", but rather would be eased from mid-September onwards, with the borders with NSW and SA opening on 19th August Treasury also suggested that "if similar large scale restrictions were reimposed across Australia, this would ... cost the economy at least \$2bn per week" for context, Treasury's forecasts implied that September quarter real GDP would be equivalent to about \$35\%bn per week ☐ This week, the Prime Minister suggested that, based on "preliminary estimates from Treasury", the new 'stage 4' restrictions in Melbourne and Mitchell Shire, combined with the extension of 'stage 3' restrictions to the rest of Victoria, would shrink real GDP by "between \$7bn and \$9bn" in the September quarter these estimates appear to include (not unreasonably) additional allowance for 'spill-over effects' on other states due to supply-chain disruptions and an adverse impact on consumer and business confidence \Box If correct, these Treasury estimates imply that (all else being equal), rather than increasing by $1\frac{1}{2}\%$ in the September quarter, real GDP is now expected to decline by between 0.1% and 0.5% (following the 0.3% decline) in the March quarter and an expected 7% decline in the June quarter) - this would mean Australia's recession extended into a third quarter, with a peak-to-trough decline of 71/4-73/4% ☐ It could also mean that growth in the December quarter (for which Treasury did not provide an estimate in the July Update) could be stronger than previously expected, based on a mechanical 'bounce-back' in Victoria provided that isn't overwhelmed by the tightening of fiscal policy which will (on current policy settings) occur at the beginning of the December quarter (see slide 96) ☐ Treasury has also reportedly raised its forecast for the December quarter peak in the unemployment rate to 10% (from $9\frac{1}{3}$ in July), with the 'effective' rate now expected to peak in the 'high 13s'

CORINNA ECONOMIC ADVISORY

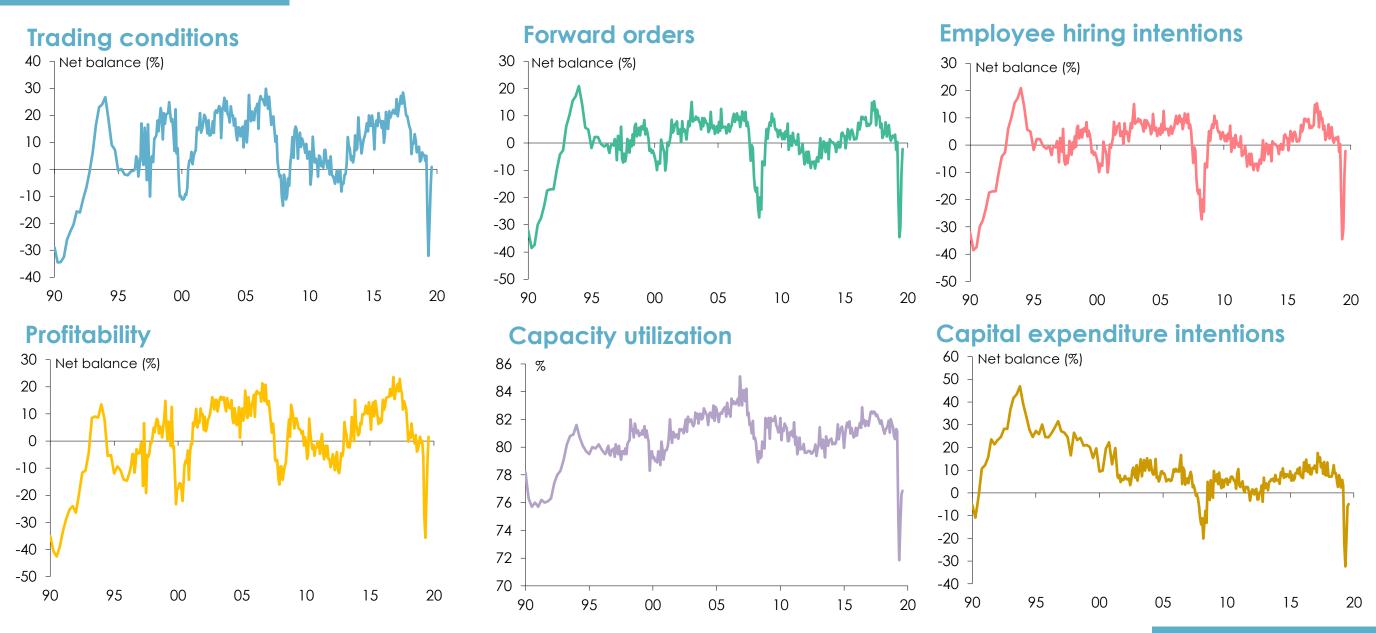
despite an easing of eligibility criteria in response to the Victorian 'lockdown'

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



- ☐ 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

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

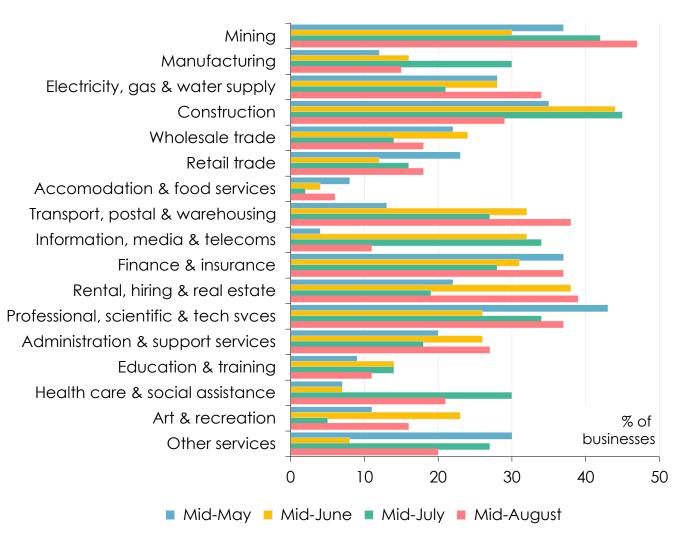


Note: Quarterly data up to March 1987 (May 2002 for capex intentions), monthly thereafter (latest data July 2020 – note that the July survey was conducted before the announcement of 'stage 4' restrictions in Victoria. See also chart of business confidence on <u>slide 76</u>). Source: National Australia Bank (August survey results will be released on 8th September).

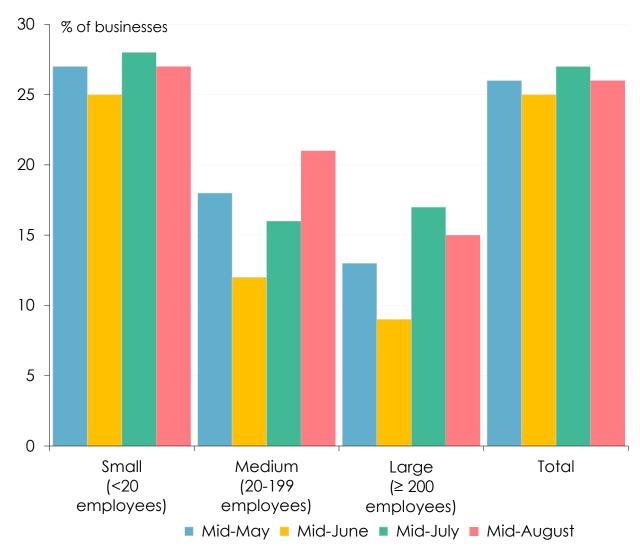


Still only about one-quarter of businesses are operating 'as normal' – with fewer large business operating as 'normal' than small ones

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



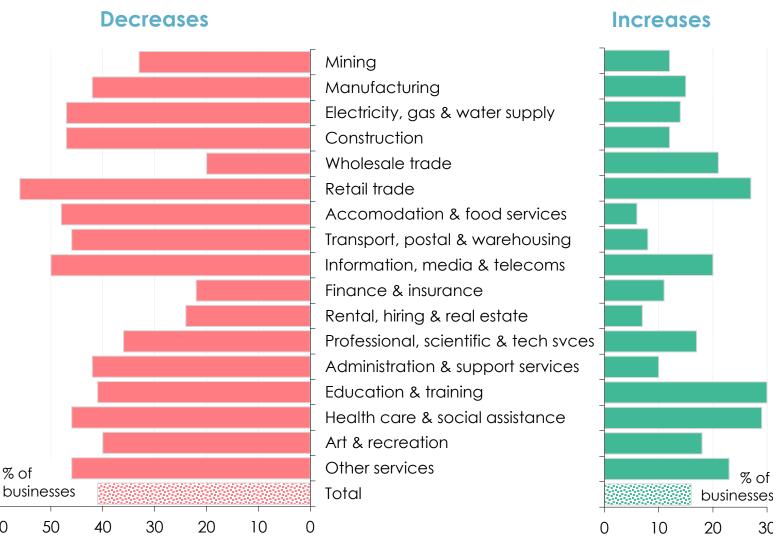
Proportion of 'trading businesses' which are operating 'as normal' – by size



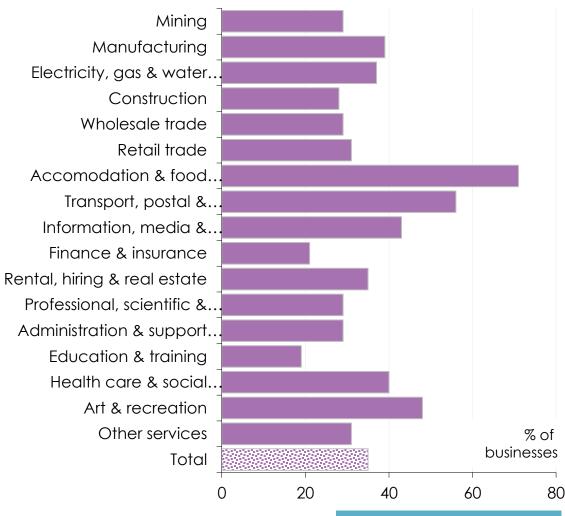


40% of all businesses reported lower revenue in August compared with last year – and 35% say they will have trouble meeting financial commitments

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



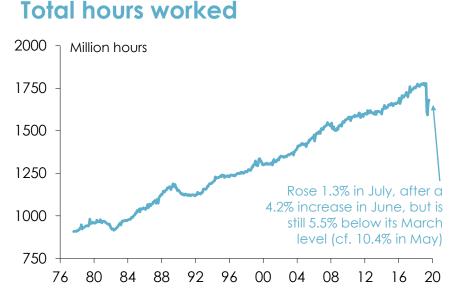
Businesses who would find it difficult, or very difficult, to meet financial commitments over the next three months, August 2020



CORINNA ECONOMIC ADVISORY

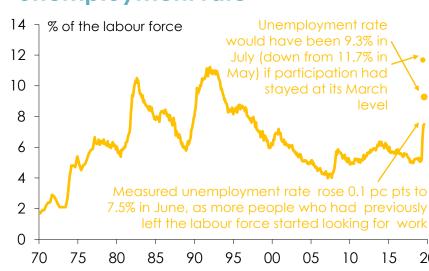
343,100 (39%) of those who lost their jobs in March-April are now back at work, while another 86,000 started looking for work

Employment % change from previous month -2 Employment rose by 115K (0.9%) in July, -3 after a 228K increase in June, which in turn followed job losses of 872K in April & May. -4 Employment is still 4.1% below its prepandemic peak -5 08 12 16 20



Labour force participation rate

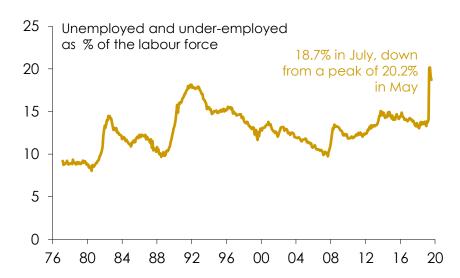




Under-employment ratio



'Under-utilization' rate

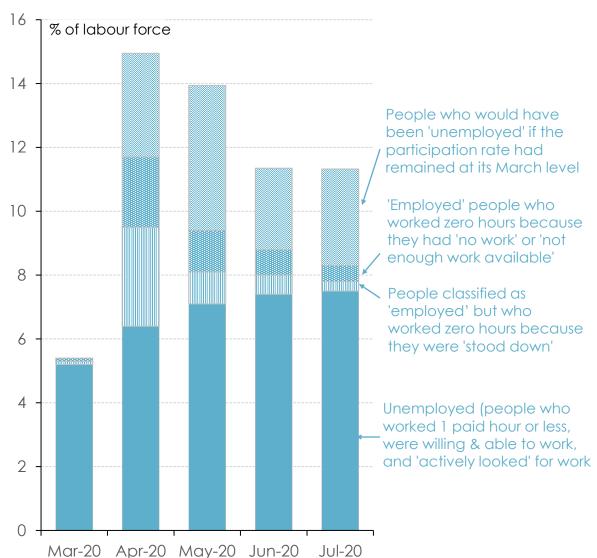


Note: The ABS classifies people on JobKeeper who worked zero hours in the survey week as 'employed'. Had it not done so, the unemployment rate in May would have been 9.5% (down from 11.7% in April). The 'under-employment ratio' is the percentage of employed persons who are working fewer hours than they are willing and able to work. The 'under-utilization rate' is the proportion of the labour force who are unemployed or underemployed. Source: ABS. August data will be released on 17th September.



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

Alternative measures of unemployment

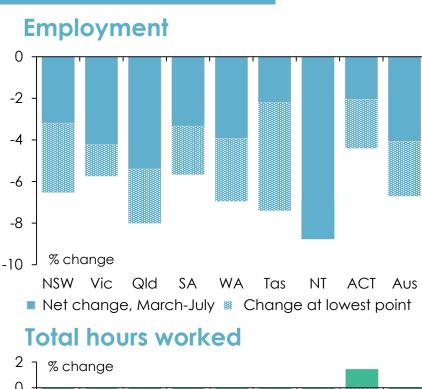


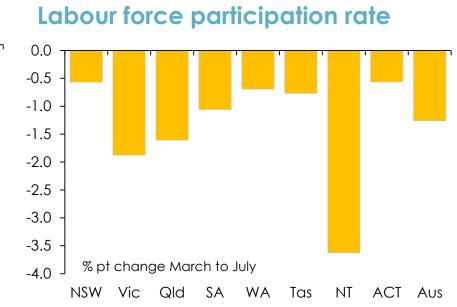
- ☐ The Government's JobKeeper program pays eligible employers a subsidy of \$1500 per fortnight for each eligible employee kept on the payroll between 30 March and 27 September (the level of payments will step down in October and January)
- ☐ Eligible employers are those with
 - annual turnover of 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

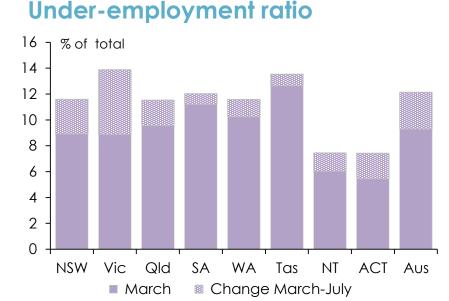
CORINNA ECONOMIC ADVISORY

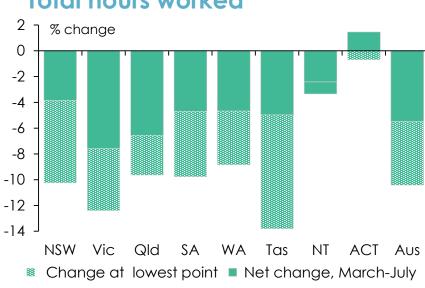
Source: ABS; Corinna.

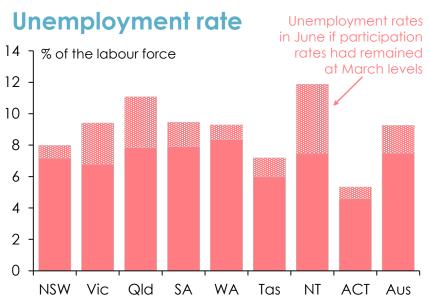
Tasmania, NSW and WA have seen the strongest recoveries in employment over the past two months

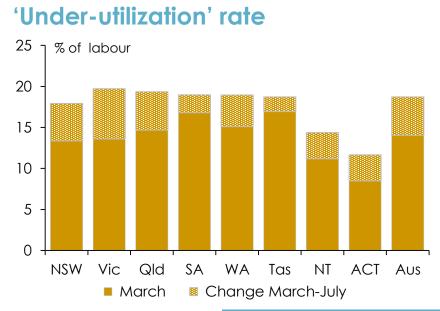






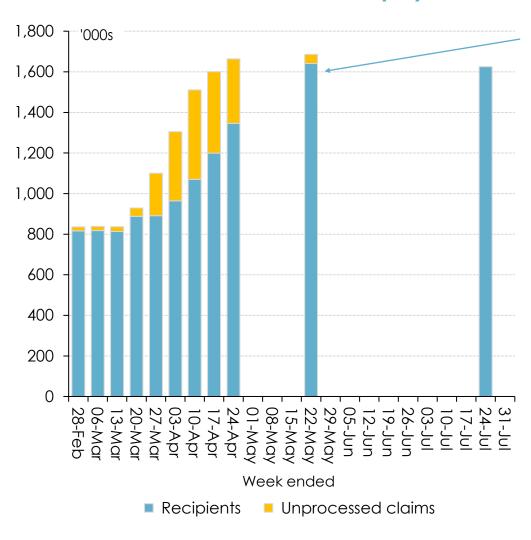






The measured unemployment rate is understating the 'true' extent of job losses

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

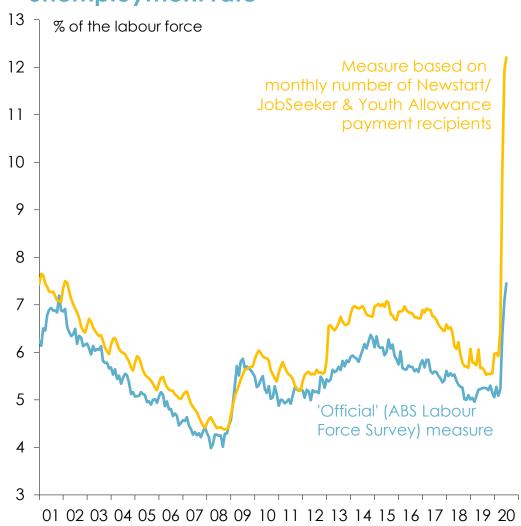


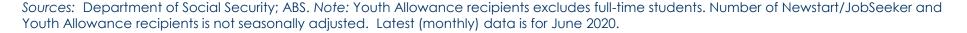
These numbers (up to 22nd May) were provided by the Dep't of Social Security to a Senate Economics Committee hearing.

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

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

Alternative measures of the 'unemployment rate'



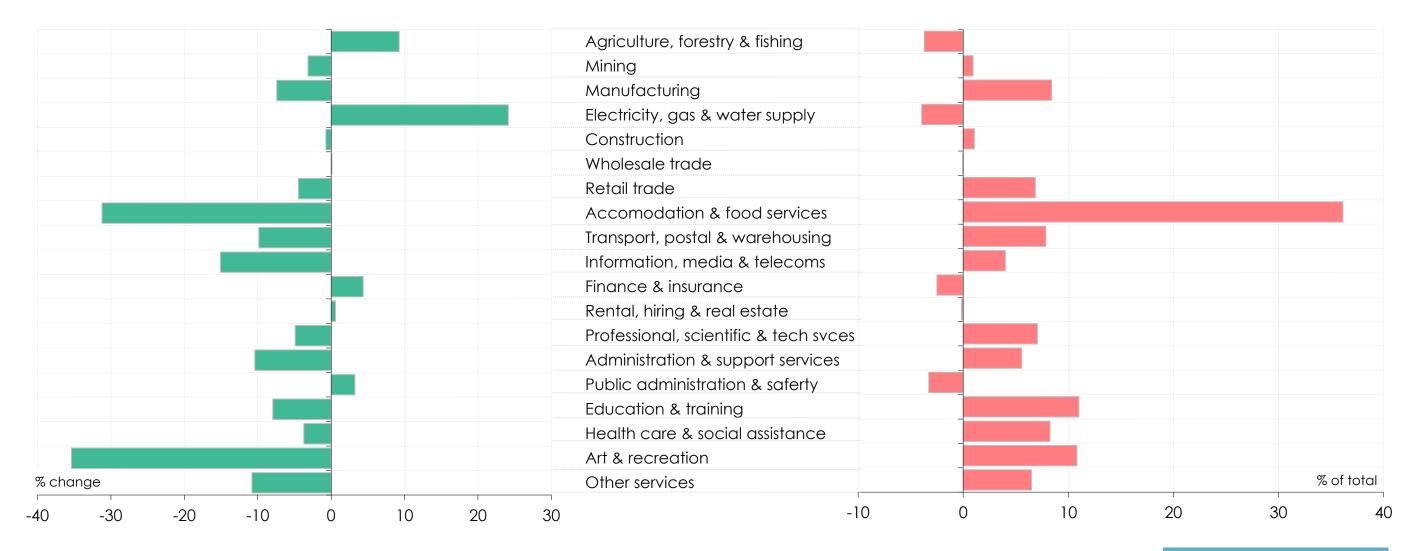




58% of total job losses between February & May were in accommodation & food services, education & training, and arts & recreation

Change in employment between February and March 2020, by industry

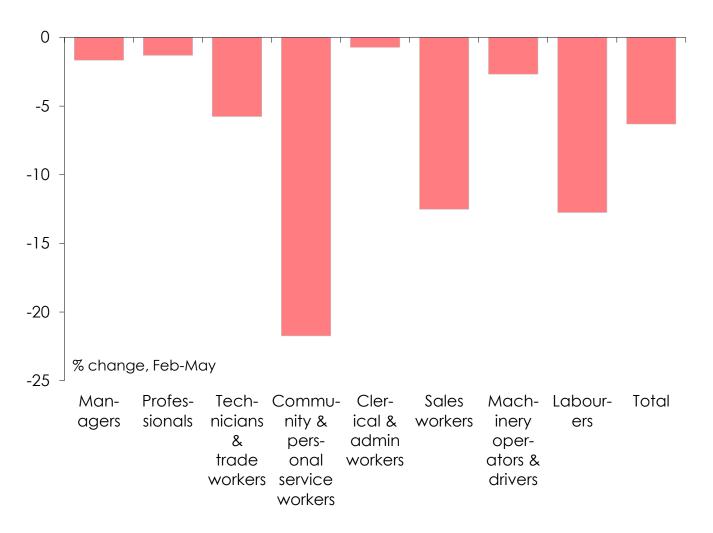
Proportion of change in total employment between February and March 2020, by industry



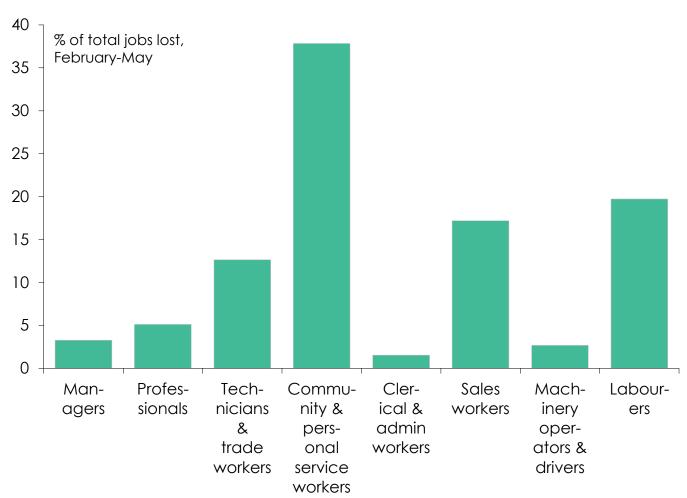


Community & personal service workers, sales workers and labourers have accounted for 75% of job losses since February

Change in employment between February and March 2020, by occupation



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



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

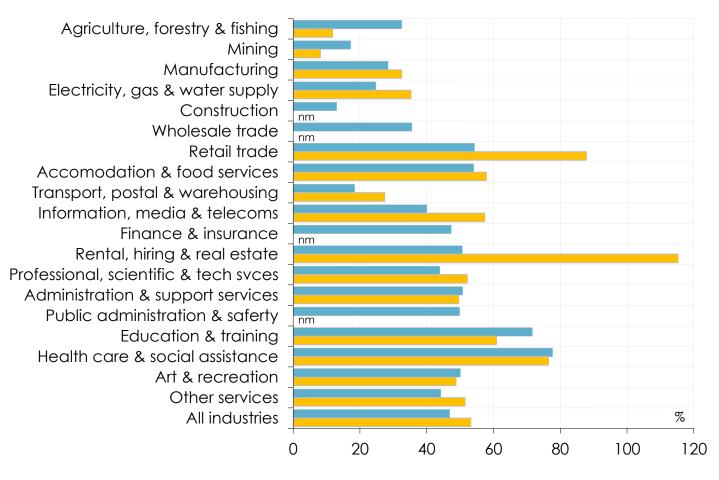


Women bore 53% of the job losses between February & May, in part because they typically work in occupations or industries which have been hardest hit

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



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



Women as a % of total jobs, February 2020

Women as a % of job losers between February & May

Women as a % of job losers between February & May

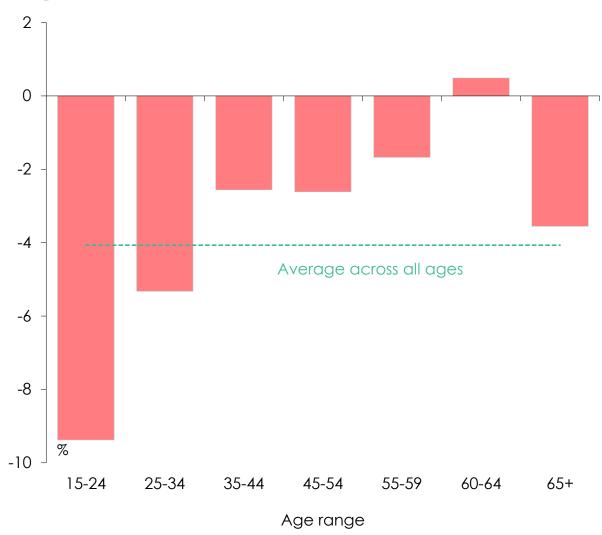
Note: Data depicted in these charts are not seasonally adjust. "nm" = "not meaningful", because employment of women in the industry thus marked either increased between February and May 2020; or fell despite total employment in that industry rising between February and May.

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

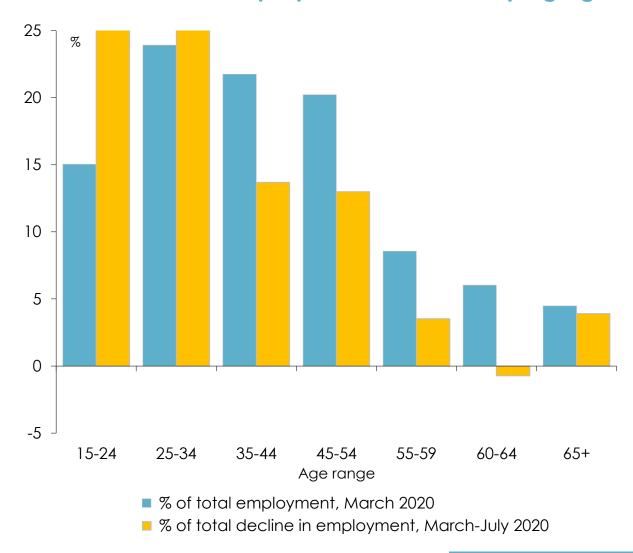


People aged 15-34 accounted for 39% of total pre-pandemic employment but have experienced 66% of the jobs lost since March

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

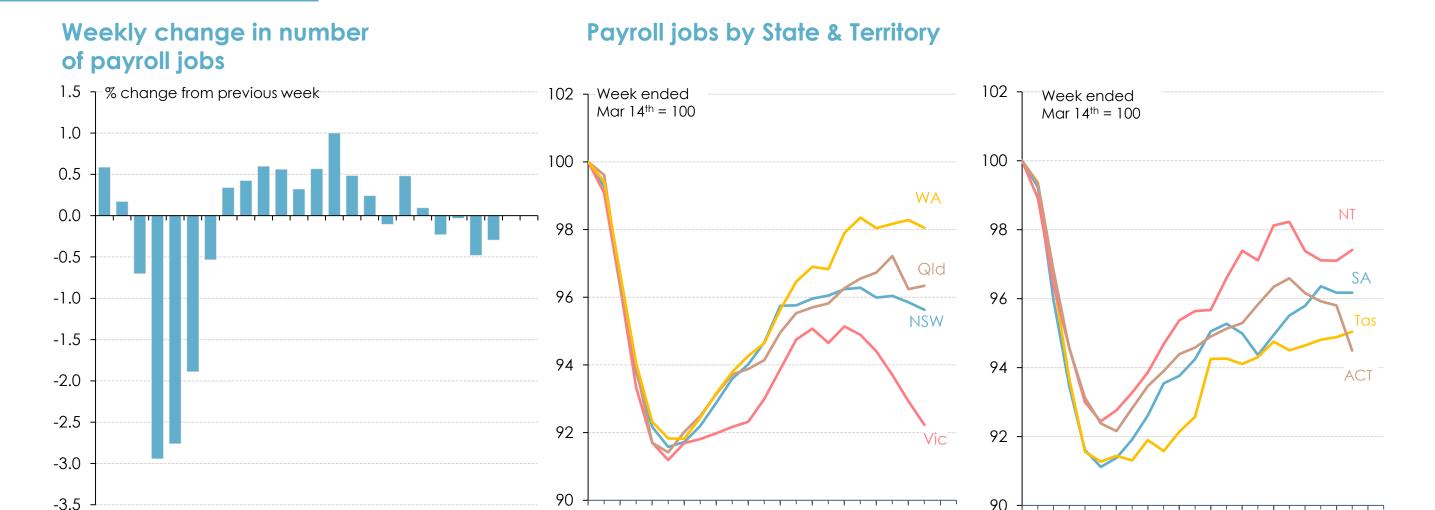


Share of total job losses between March and July 2020 and share of total employment in March, by age group





Victoria now more clearly a drag on employment growth while jobs stabilize in other states and territories



25-Apr

23-May

06-Jun

Week ended

20-Jun

04-Jul

18-Jul

Source: ABS. 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 22nd August will be released on 8th September.



18-Jul

25-Apr

09-Мау

06-Jun

Week ended

20-Jun

23-May

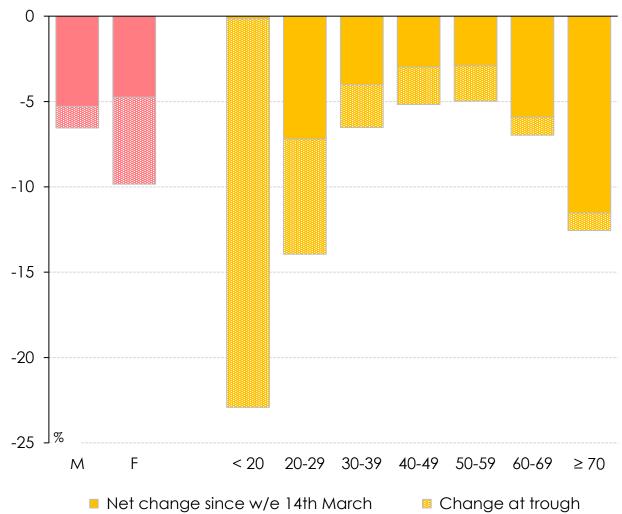
Week ended

Victoria has experienced by far the largest net loss of payroll jobs, followed by the ACT and Tasmania: differences by age & gender have narrowed

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



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

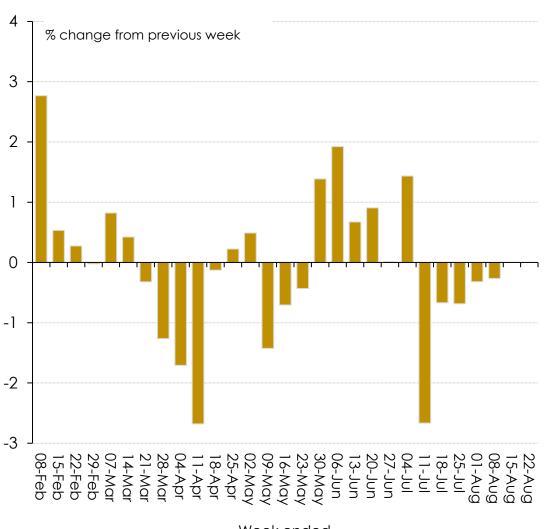


Source: ABS. Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's Singe Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. People with two or more jobs (about 6% of the total) are double-counted; employers and the self-employed are not included. '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. Data for weeks up to week ended 22nd August will be released on 8th September.

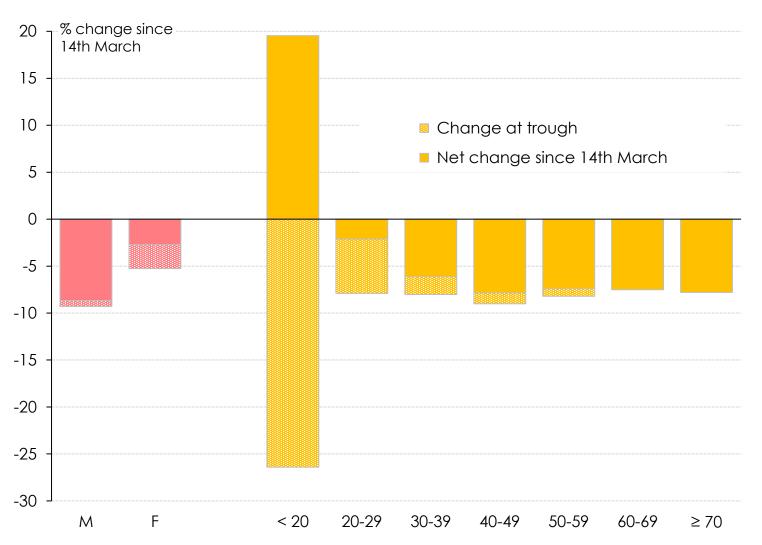


Wage payments have fallen by $4\frac{1}{2}\%$ since mid-July and are now only 1.7% above the trough in the third week of May

Weekly change in total wages paid



Change in total wages paid by gender and age group



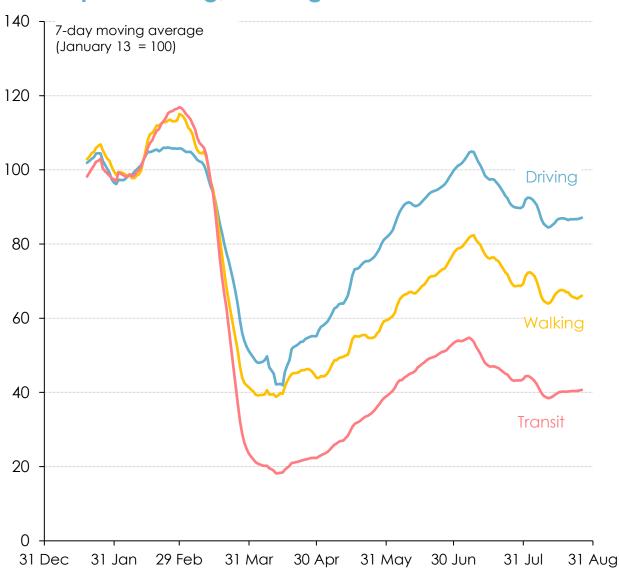
Week ended

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

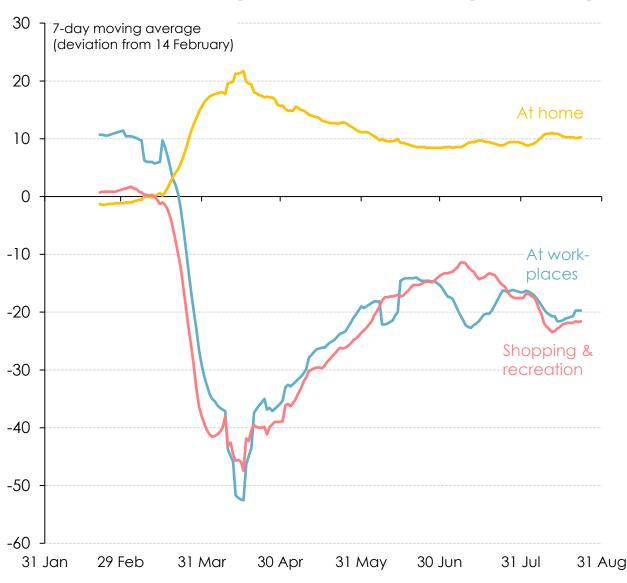


The decline in mobility prompted by the imposition of harsher restrictions in Victoria seems to have 'bottomed out' over the past two weeks

Time spent driving, walking and in transit



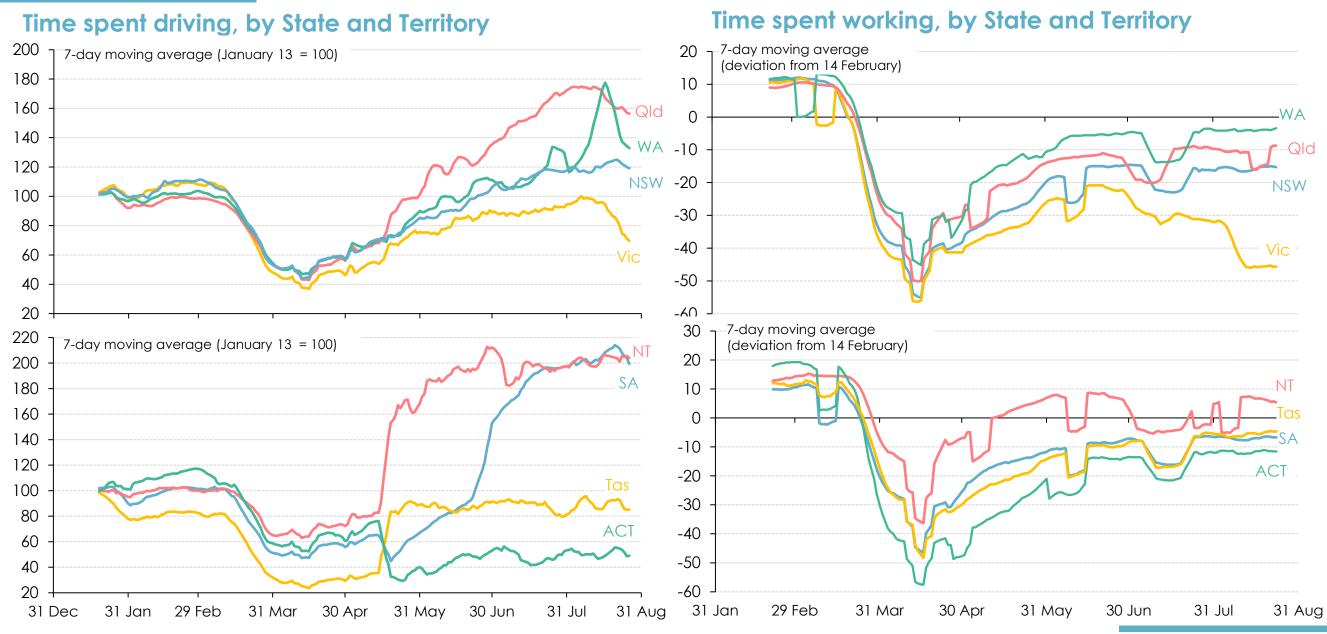
Time spent working, at home, shopping & playing



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 26th August); Google Covid-19 Community Mobility Reports (data up to 24th August). For state-level data see <u>next slide</u>.



The impact of 'stage 4' restrictions on mobility in Victoria is clear, but most mobility measures in other states have also been tracking sideways

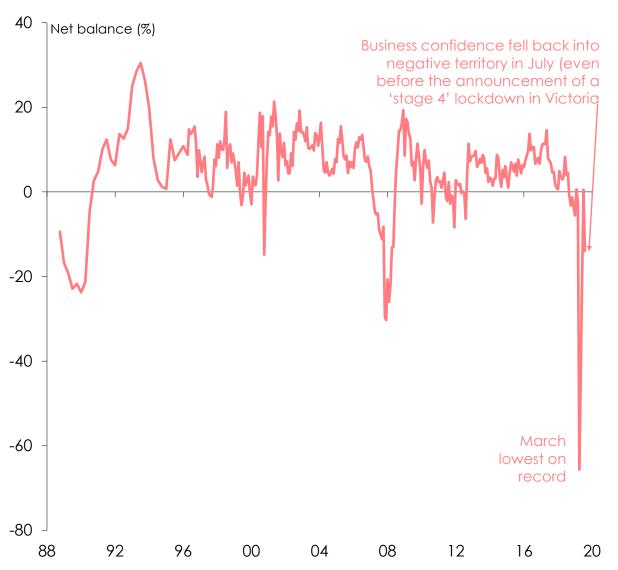


Note: these data will reflect normal seasonal variations in activities as well as the effects of government restrictions and individual responses to the risks posed by the virus. Sources: Apple Mobility Trends Reports (data up to 26th August); Google Covid-19 Community Mobility Reports (data up to 24th August).

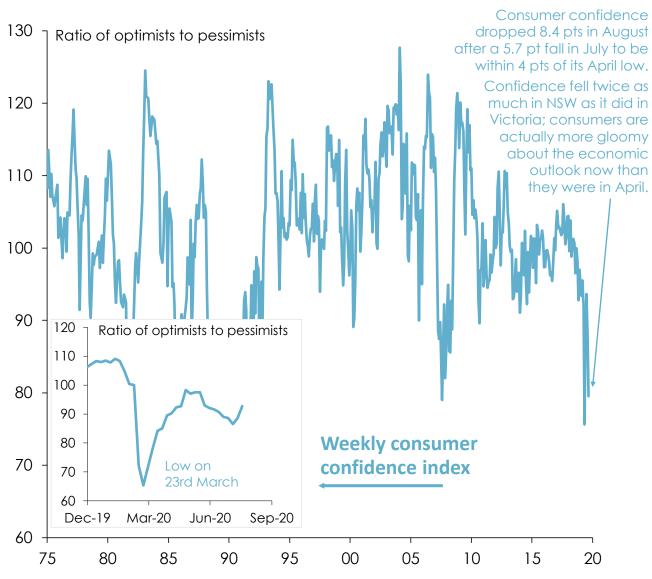


Business confidence fell back in July (before the 'stage 4' restrictions in Victoria were announced), and consumer confidence fell more in August

Business confidence



Consumer confidence

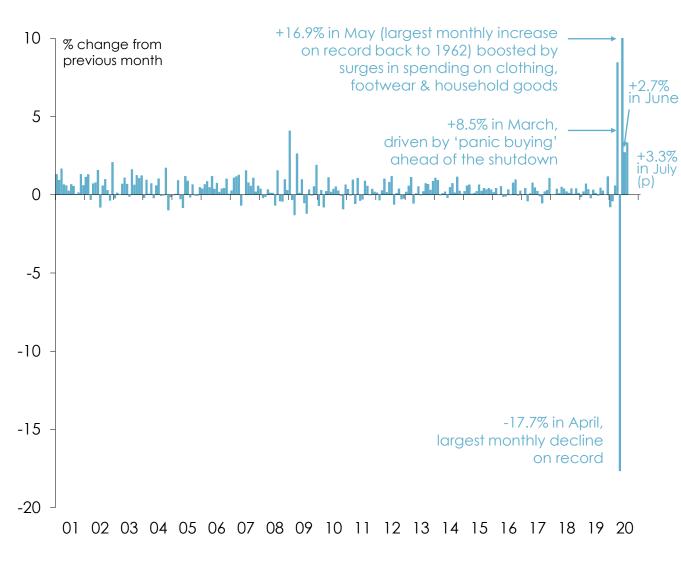


Sources: National Australia Bank; Westpac-Melbourne Institute; ANZ-Roy Morgan (weekly index). See <u>slide 60</u> for other components of the NAB monthly business survey from which the business confidence figure is derived/ August business confidence and September consumer confidence data will be released on 8th and 9th September, respectively.

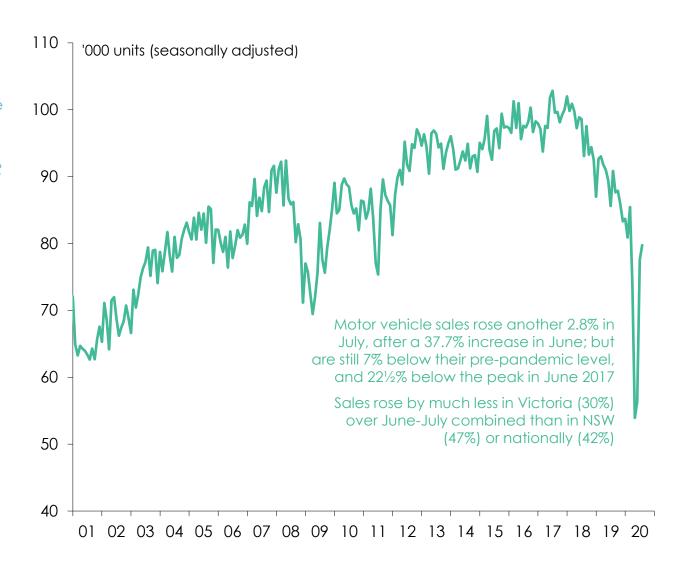


Retail sales rose 3.3% in July (preliminary estimate), led by a surge in supermarket sales in Victoria ahead of the lockdown

Retail sales



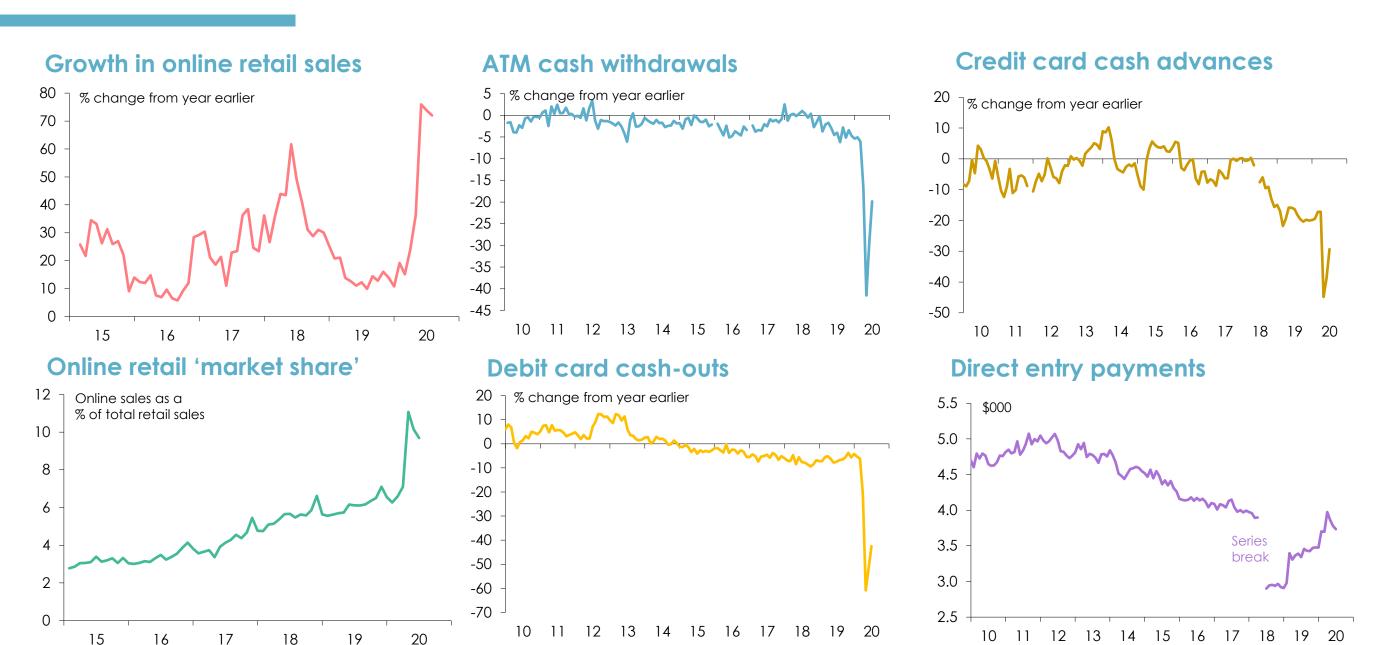
Motor vehicle sales





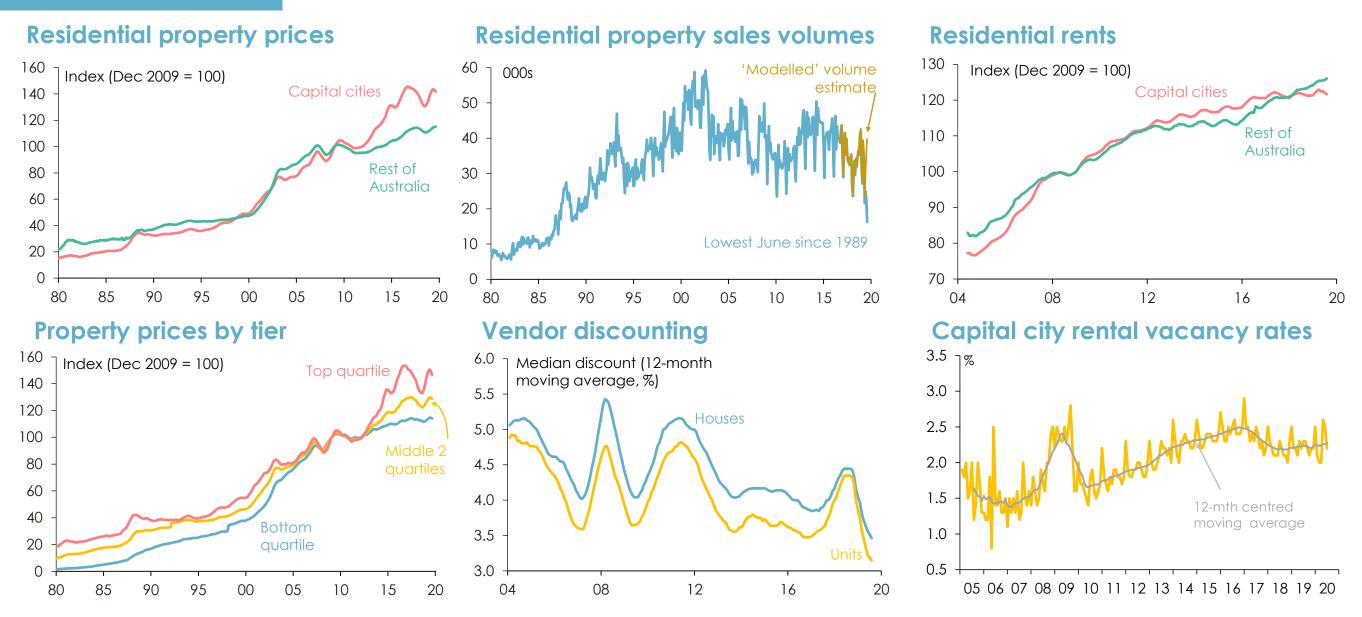


The pandemic and lockdown has accelerated changes in the way Australians shop, and make payments



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

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



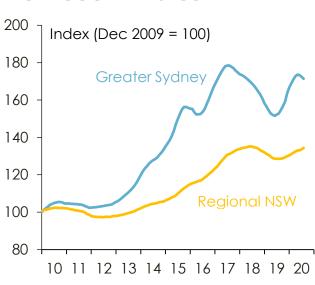
Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Property price data are now seasonally adjusted. The index of residential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

Sources: CoreLogic; SQM Research.

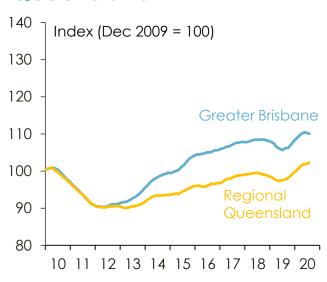


Property prices have fallen more in regional WA, Melbourne, Perth, Darwin and Sydney since March than in other cities or regions

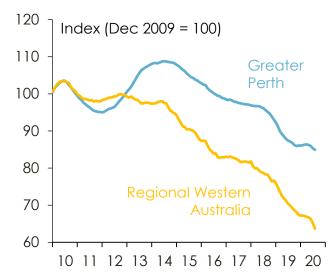
New South Wales



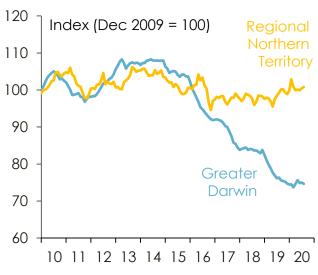
Queensland



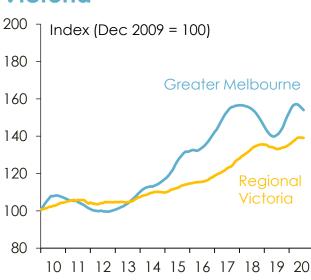
Western Australia



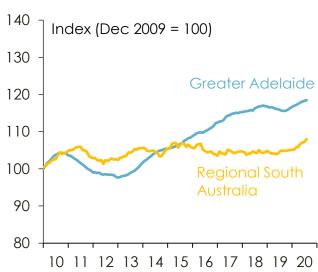
Northern Territory



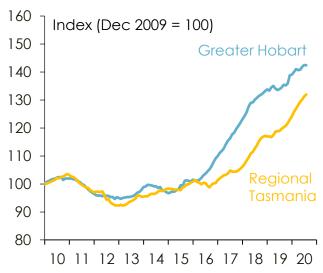
Victoria



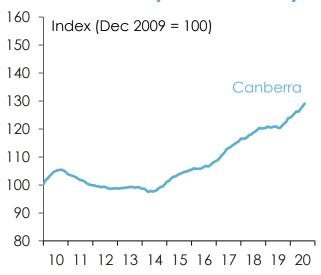
South Australia



Tasmania



Australian Capital Territory

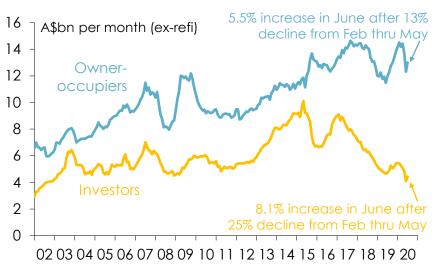


Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Property price data are now seasonally adjusted. Latest data are for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

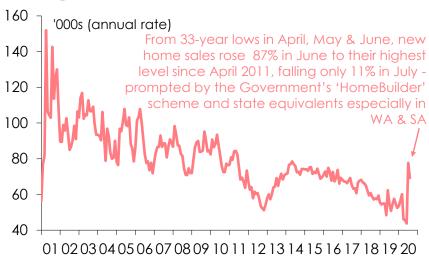


Residential building activity will turn down over the next few months and longer-term will be adversely affected by sharply lower immigration

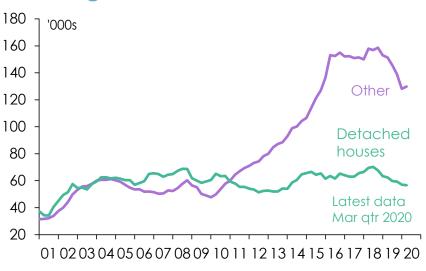
Housing finance commitments



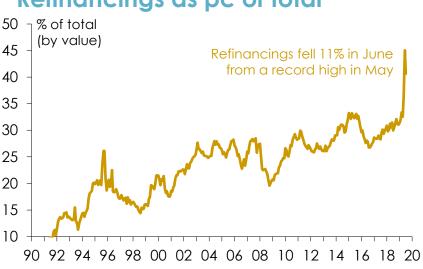
Large builders' new home sales



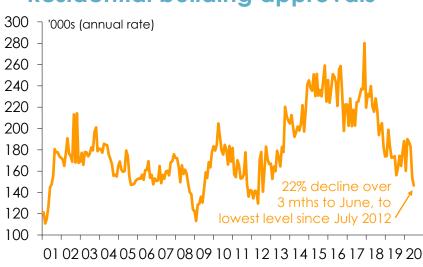
Dwellings under construction



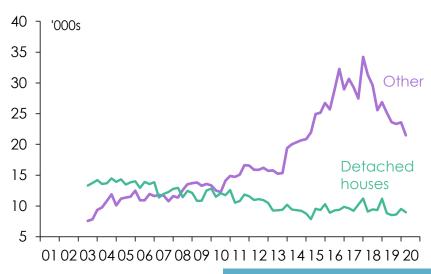
Refinancings as pc of total



Residential building approvals



'Pipeline' of work yet to be done

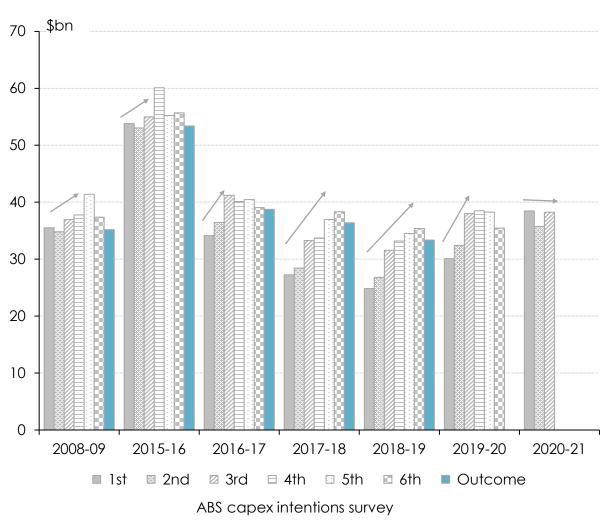


Note: 'New home sales' are of detached dwellings only and exclude small-scale builders. Sources: ABS; Housing Industry Association. July residential building approvals will be released on 1st September; July housing finance data on 9th September; and June quarter dwellings under construction and 'pipeline'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

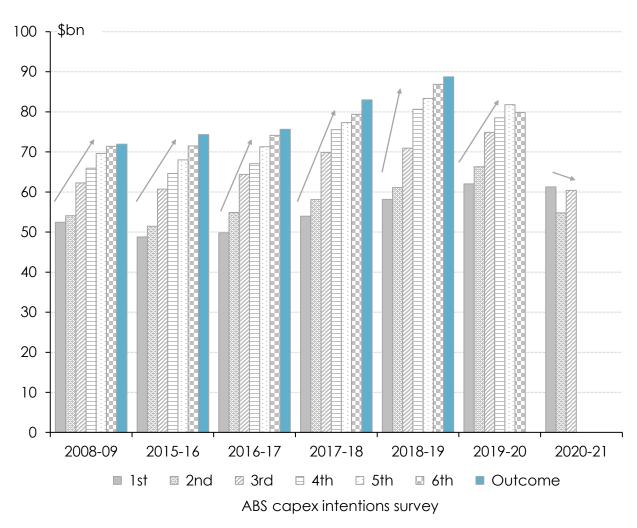


Business capex intentions for the current financial year are lower than they were six months ago – for the first time in at least 33 years

Capital expenditure intentions - mining



Capital expenditure intentions – non-mining

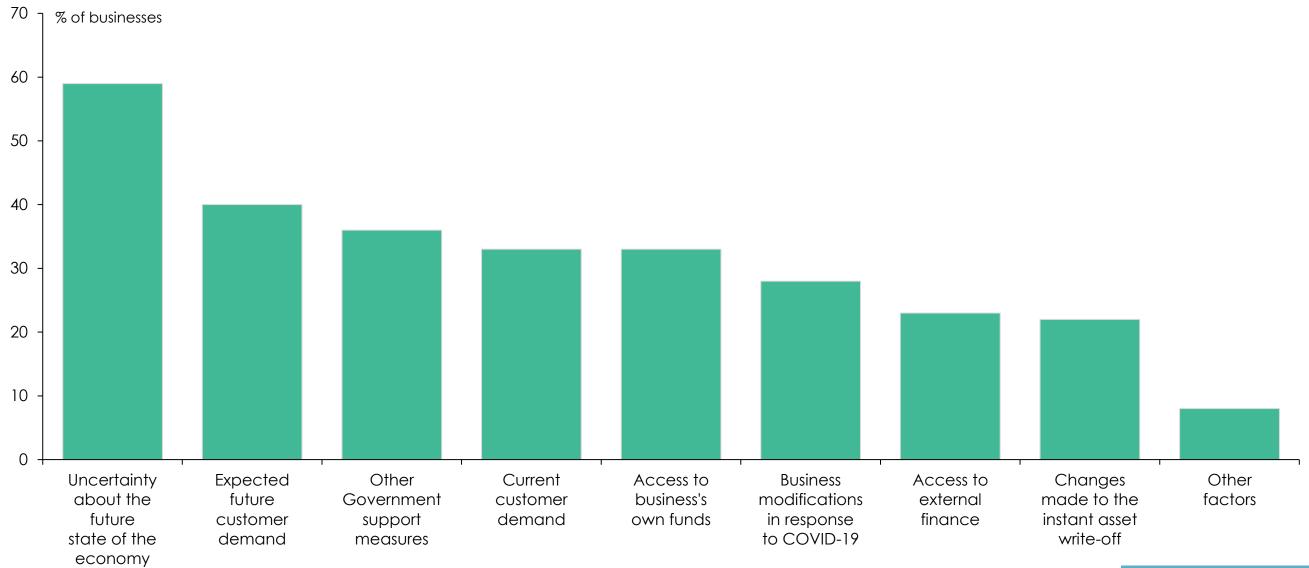


Note: The ABS conducts six surveys of business' capital expenditure intentions in respect of each financial year. The first is conducted in January & February prior to the commencement of the financial year, the second in May & June, the third in July & August of the financial year, the fourth in October & 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 (next update 26th November).



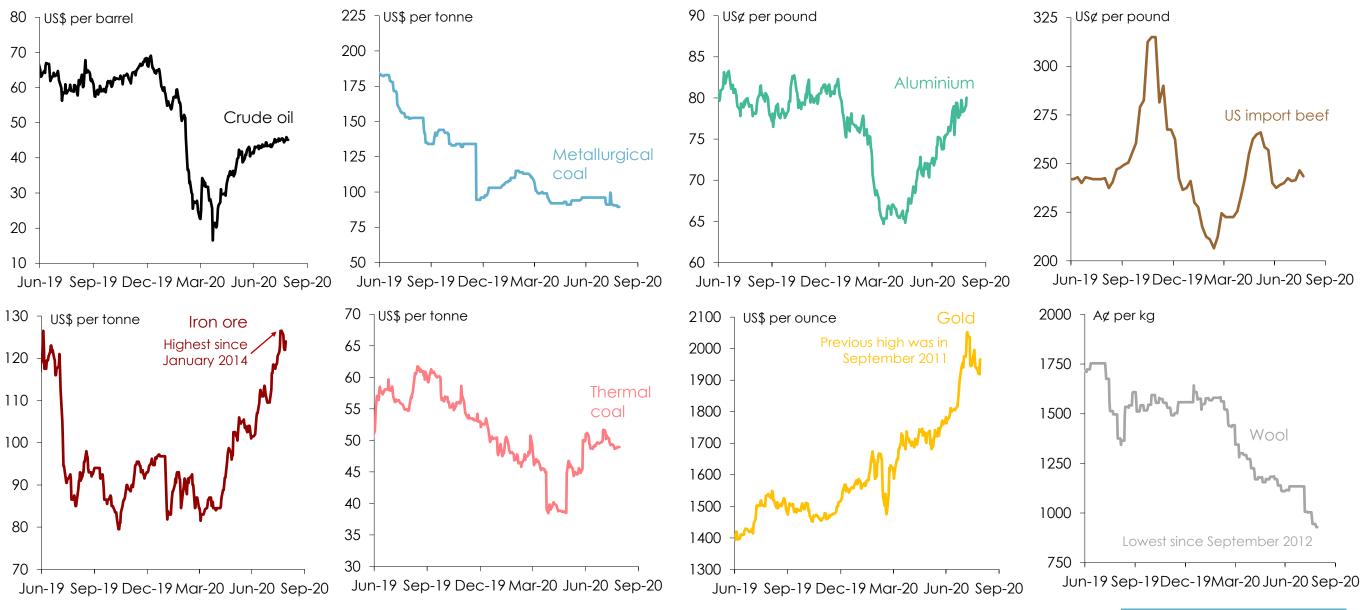
Uncertainty about the economic outlook is the most important factor weighing on business capex decisions

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





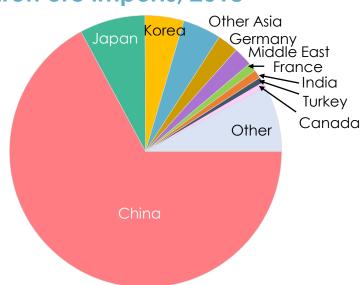
Iron ore prices remained close to $7\frac{1}{2}$ -year highs this week, base metals were stronger, but wool prices fell to an 8-year low



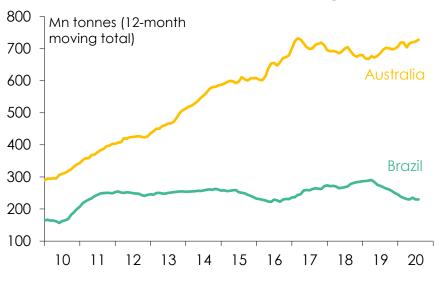
The resilience of iron ore prices stems from strong Chinese demand, declining Chinese production and constraints on Brazilian exports



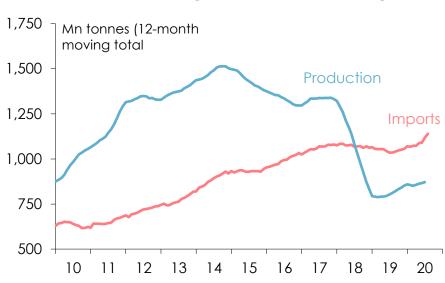
Iron ore imports, 2018



Australia & Brazil iron ore exports



China iron ore production & imports

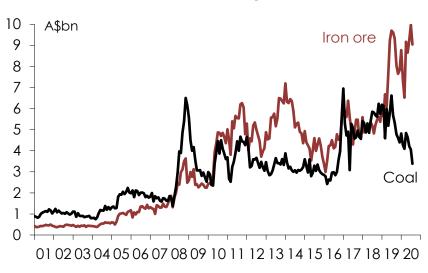


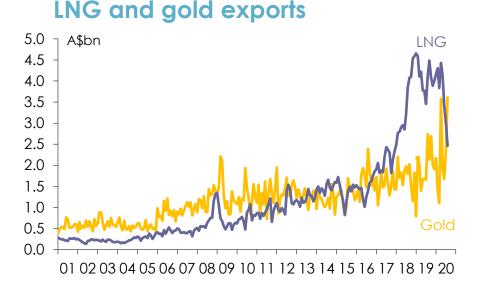
- The global seaborne iron ore trade is dominated by shipments from Australia & Brazil to China (which accounts for 53% of global steel production and 51% of steel use)
- Chinese iron ore production has fallen by more than 34% since 2017, largely because of rapidly declining quality forcing Chinese steel 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"



Australia's goods trade surplus shrank to \$3.3bn in July, its lowest since November 2018, reflecting a $4\frac{1}{2}$ % fall in exports and a $4\frac{1}{2}$ % rise in imports

Iron ore and coal exports

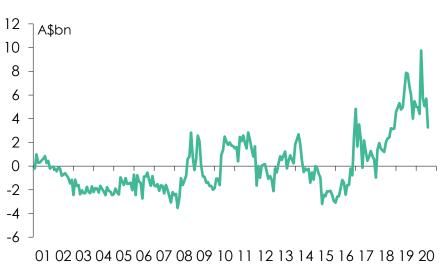




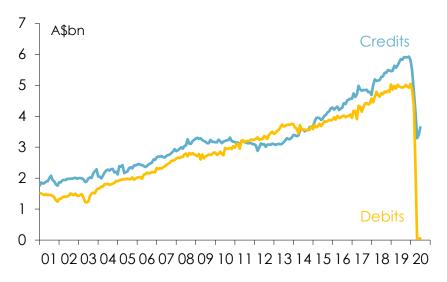
Merchandise exports and imports



Merchandise trade balance



Tourism-related services trade



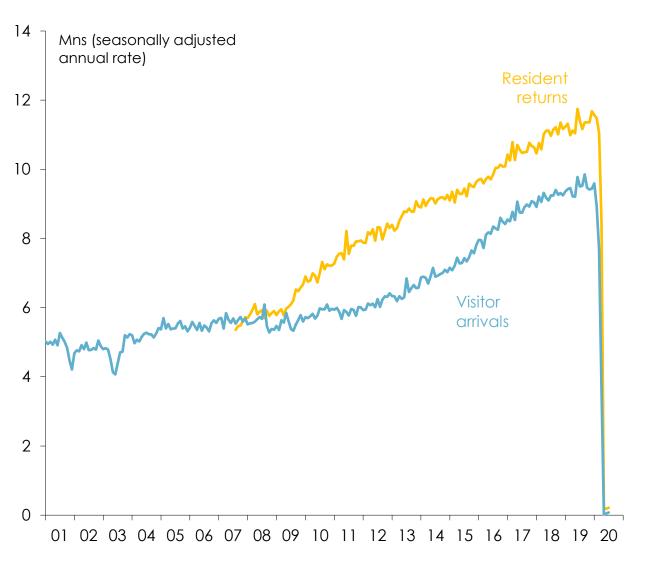
Tourism services trade balance



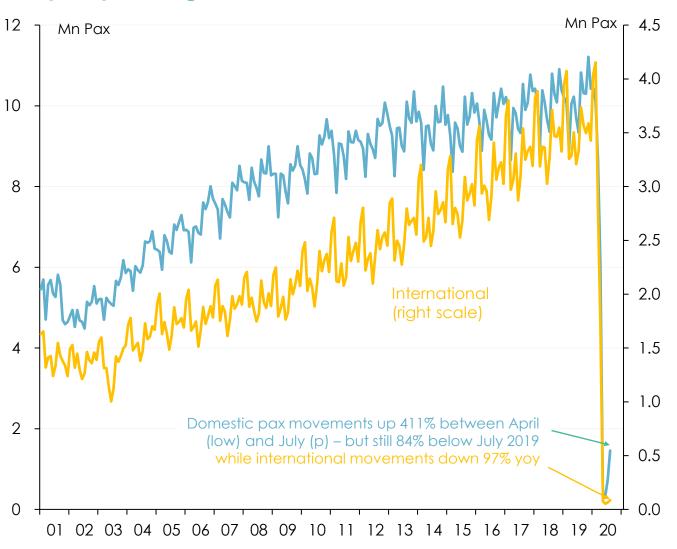


Tourism and aviation have been severely impacted by the closure of international and most state borders

Short-term visitor arrivals and resident returns



Airport passenger movements



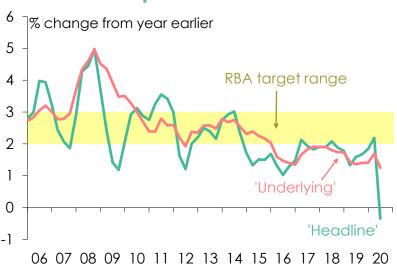
Note: The ABS has suspended publication of seasonally adjusted estimates of short-term visitor arrivals and resident returns, so published original estimates for April 2020 (and beyond) have been seasonally adjusted by Corinna using the same seasonal factors as for the corresponding month of 2019. Latest 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.

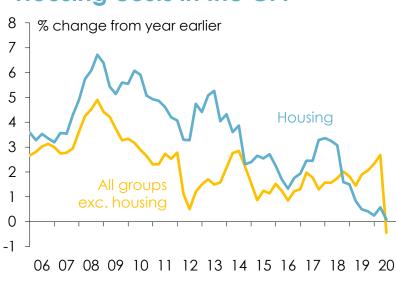


Inflation turned negative, temporarily, in Q2 and will remain below the RBA's target until at least the second half of 2021

Consumer prices



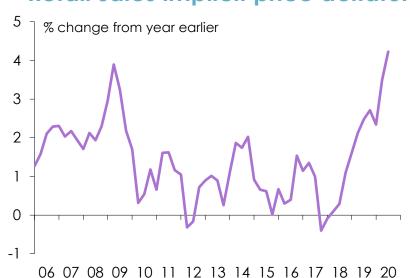
Housing costs in the CPI



Retail petrol prices



Retail sales implicit price deflator

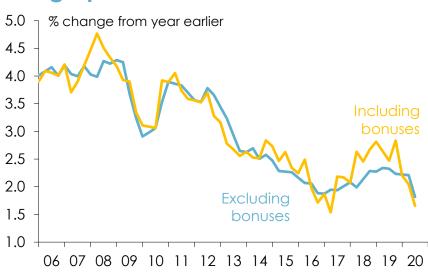


- The CPI fell (by 1.9%) in the June quarter, the largest quarterly decline since 1931 and only the 11th decline in 60 years
- The annual 'headline' inflation rate fell to 0.3%, the lowest since Q3 1997 (which was artificially induced by falling mortgage rates, which are no longer included in the CPI), 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

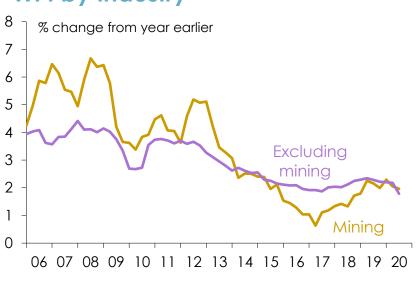


Wages growth over the year to the June quarter was the lowest for at least 23 years

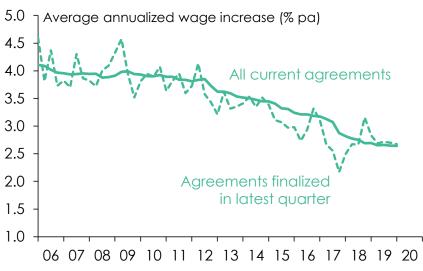
Wage price index – all sectors



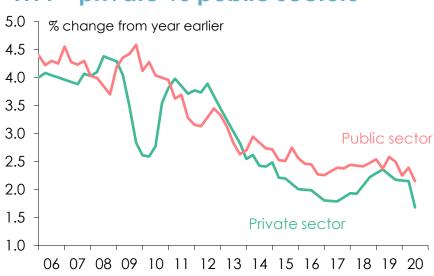
WPI by industry



Enterprise bargaining agreements



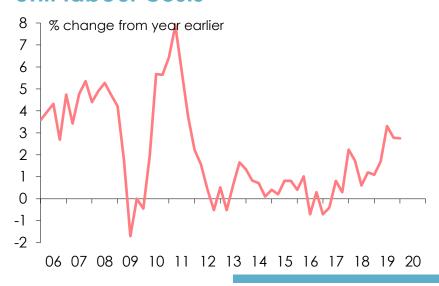
WPI – private vs public sectors



WPI and 'underlying' CPI inflation

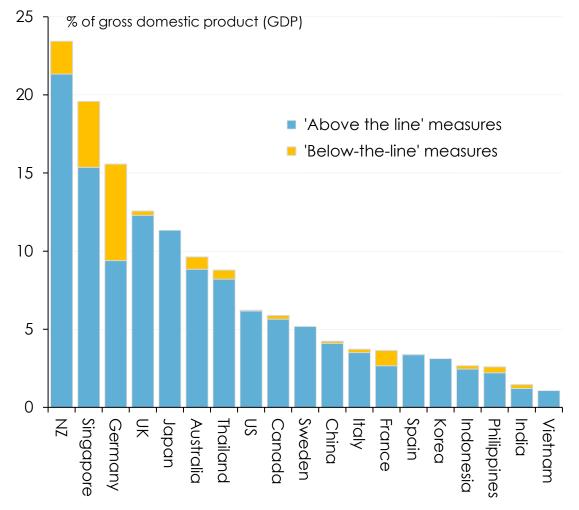


Unit labour costs



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

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



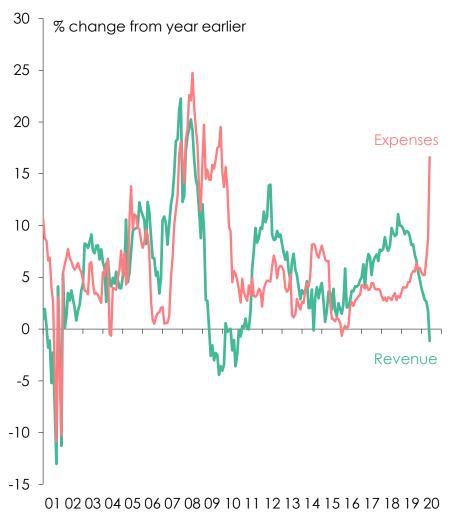
Note: 'Above the line' measures comprise additional or accelerated spending and deferred or foregone revenue. 'Below the line' measures comprise equity injections, loans, asset purchases and debt assumptions, but do not include loan guarantees or other contingent liabilities. Source: IMF, Fiscal Monitor: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

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

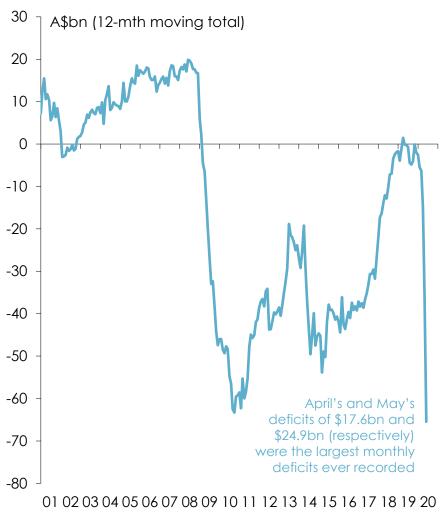


The Australian Government's 'bottom line' has begun to deteriorate sharply, and ...

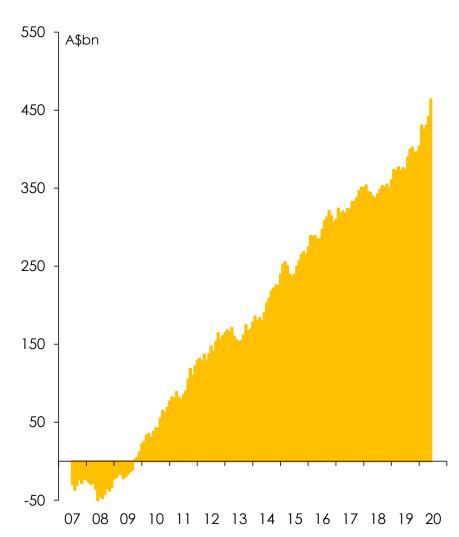
Australian Government revenue and expenses



Australian Government 'underlying' cash balance



Australian Government net debt

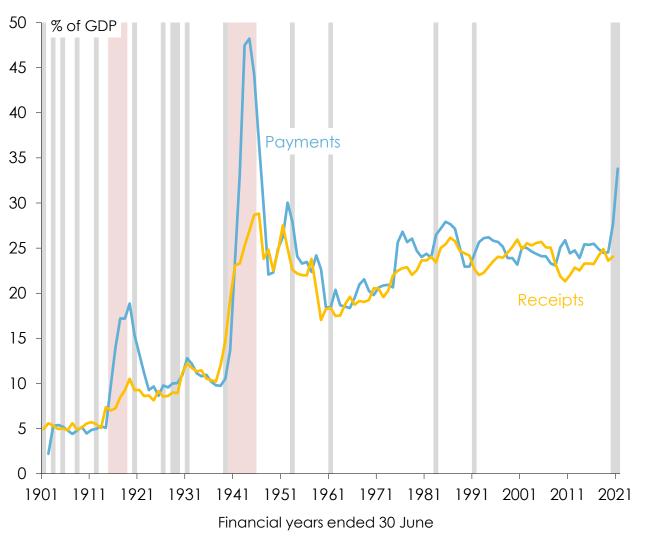


Note: Revenue and expenses are accrual accounting items. The 'underlying' cash balance is (cash) receipts minus payments, excluding transactions in financial assets for policy purposes and net earnings of the Future Fund. Net debt is total interest-bearing liabilities (government securities, deposits,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

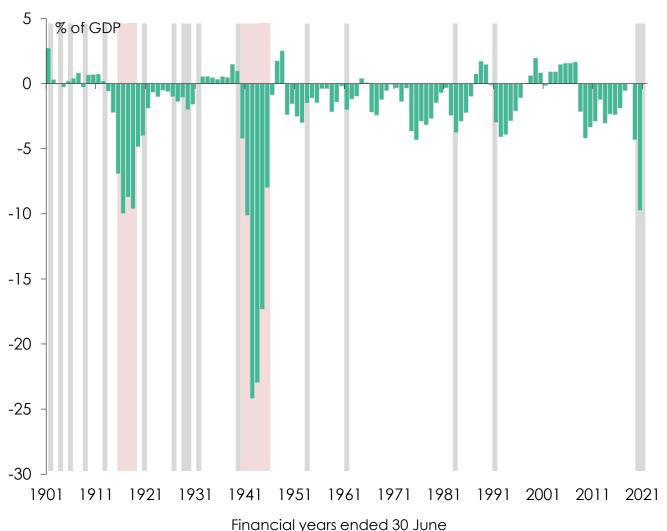


... blew out to \$86bn in 2019-20, and is forecast to widen to \$185bn (9.7% of GDP) in 2020-21, the largest deficit as a pc of GDP since WW II

Australian Government receipts and payments



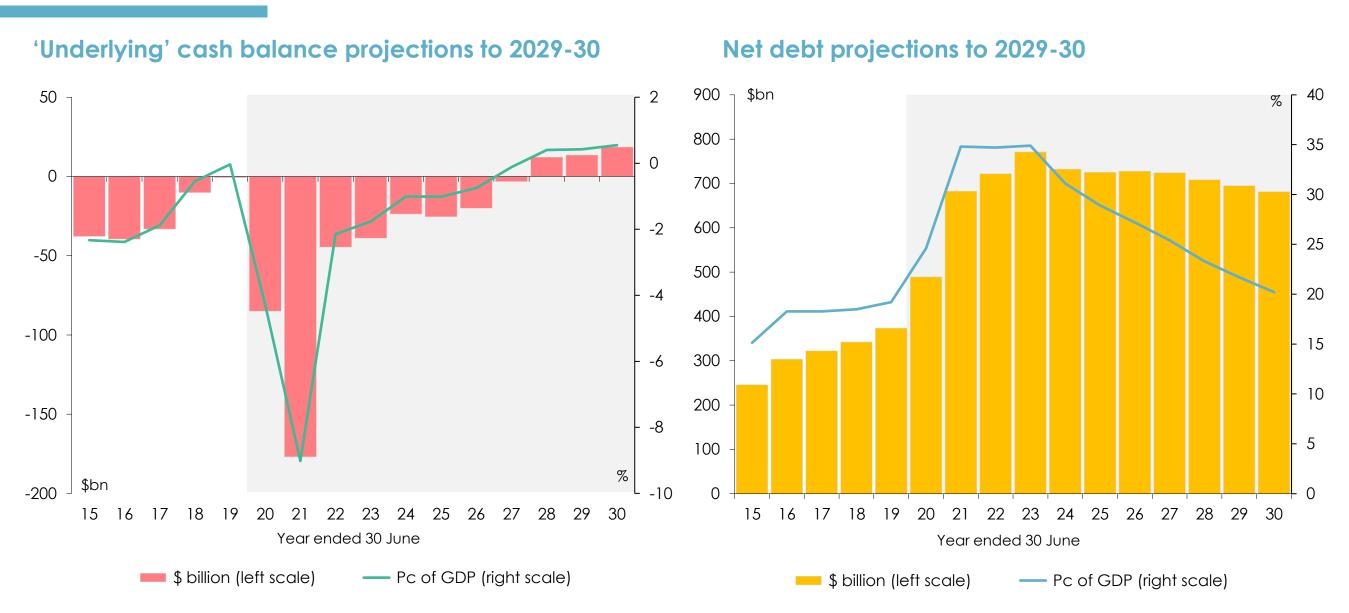
Australian Government budget deficit or surplus



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



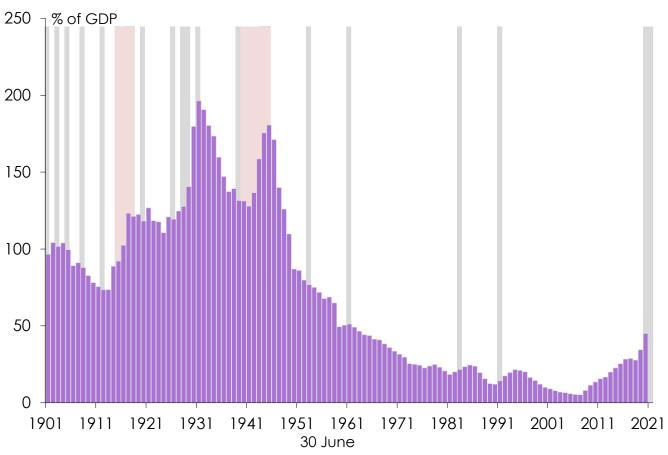
Note: Shaded area denote estimates (for 2019-20) or projections. Estimates and projections expressed in dollars have been inferred by Corinna from the PBO's baseline projections expressed as a pc of GDP, PBO projections of real GDP (starting with RBA SoMP forecasts) and Corinna estimates of the GDP deflator.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



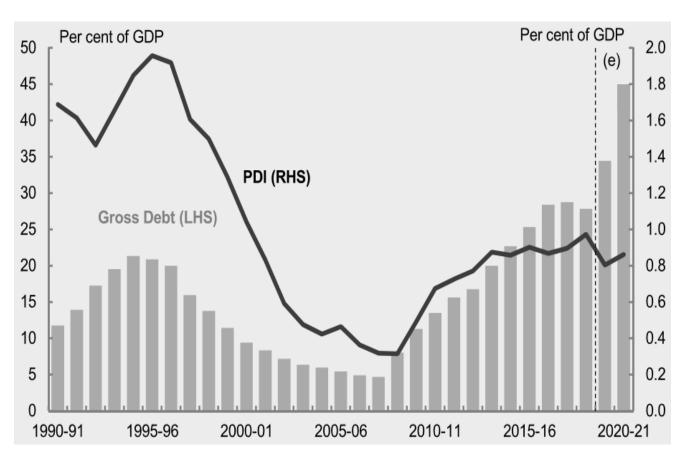
However there's no need for undue alarm at the level of debt which will be incurred by the Australian Government

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



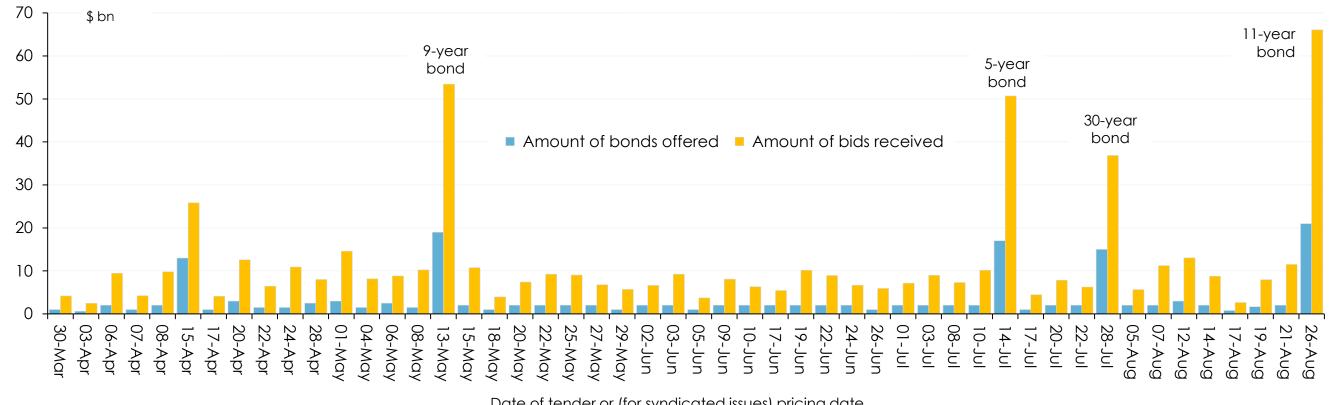
Thanks to much lower interest rates, the Government will actually be spending less on interest payments, as a pc of GDP, in 2020-21 than in any of 2013-14 through 2018-19

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



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

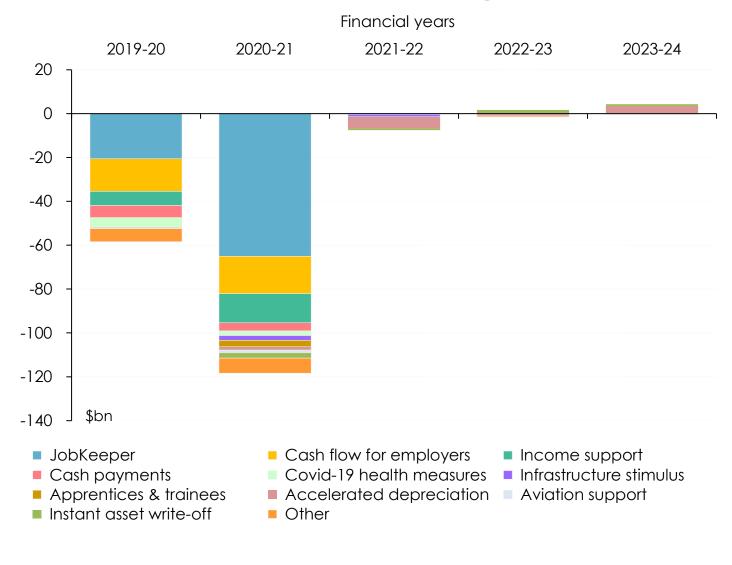
Australian government bond issuance since March 2020



- Date of tender or (for syndicated issues) pricing date
- Since 30th March, the Australian Office of Financial Management (which conducts the Government's borrowing programs) has issued \$166.1bn of Treasury bonds - based on the volume of bids received it could have borrowed \$584bn with yields at most 3 basis points above the highest yields actually accepted
- This week the AOFM attracted \$66bn of offers for \$21bn of 11-year bonds with a 1.0% coupon rate, with accepted bids carrying a weighted average yield of 1.055%

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

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

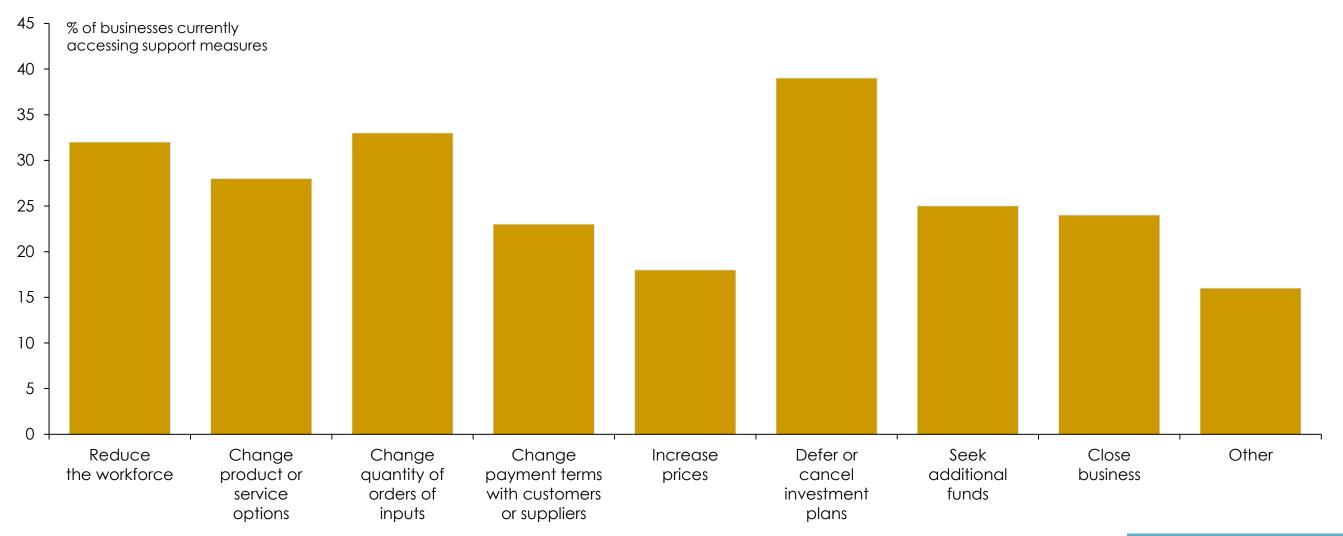


- □ 'Policy decisions' taken since last December's Mid-Year Economic & Fiscal Outlook (MYEFO) represent a discretionary fiscal stimulus equivalent to 2.9% of GDP in 2019-20 and 6.3% of GDP in 2020-21
- □ Treasury estimates that this fiscal support boosted by real GDP (relative to what it would have been otherwise) by 3/4% in 2019-20, and will boost it by around 41/4% in 2020-21
 - and that this support prevented the loss of around 700,000 jobs, lowering the peak unemployment rate by around 5 pc points
- Last month's decisions to extend 'JobKeeper', and the elevated level of 'JobSeeker' payments (albeit at lower levels) beyond end-September until the end of March have lowered the 'fiscal cliff' that was looming at the end of September
 - nonetheless, as things currently stand there will still be a significant tightening of fiscal policy at the end of this and the next two quarters
- ☐ The Government will need to (and probably will) provide more fiscal stimulus in the (delayed) Budget to be presented on 6th October (see <u>slide 98</u>)



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





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

Legislated personal income tax cuts

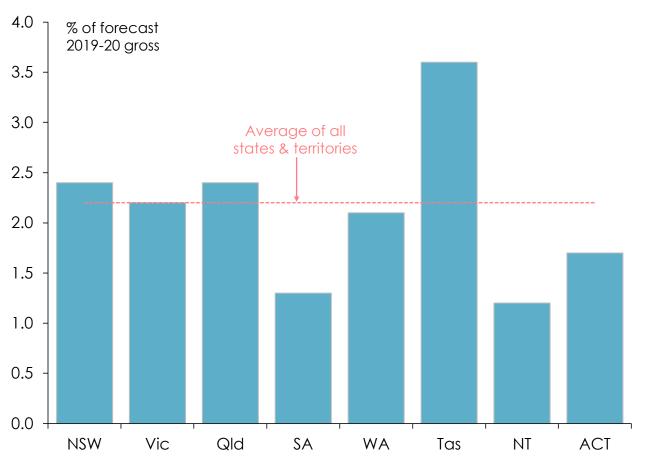
Rates from 2017- 18 to 2023-24	New thresholds from 2018-19 to 2021-22		New thresholds from 2022-23 to 2023-24
Nil	Up to \$18,200 pa		Up to \$18,200 pa
19 %	\$18,201 - \$37,000		\$18,201 - \$45,000
32.5 %	\$37,001 - \$90,000		\$45,001 - \$120,000
37 %	\$90,001 - \$180,000		\$120,001 - \$180,000
45 %	Above \$180,000		Above \$180,000
Low & middle income tax offset	Up to \$1,080		-
Low income tax offset	Up to \$445		Up to \$700
Rates from 2024-25		New thresholds from 2024-25	
Nil		Up to \$18,200 pa	
19 %		\$18,201 - \$45,000 pa	
30 %		\$45,001 - \$200,000 pa	
45 %		Above \$200,000 pa	
Low income tax offset		Up to \$700	

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

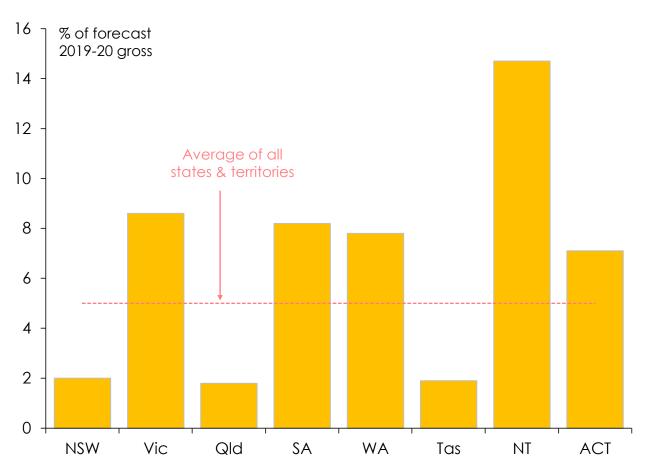
- In July the Government announced extensions to its 'JobKeeper' (wage subsidy) and 'JobSeeker' (income support) schemes
 - 'JobKeeper' will be extended from 28th September to 28th March 2021, but fortnightly payments will step down from \$1500 to \$1200 (or \$750 for people working < 20 hrs per week before 1st March 2020) from 28th September, and then to \$1,000 (\$650 for part-time workers) from 4th January
 - the 'Coronavirus Supplement' paid to JobSeeker recipients (and some others) will be extended beyond 27th September until 31st December, but at a lower fortnightly rate of \$300 (cf. \$550 currently) although recipients will be allowed to earn \$300/fortnight (cf. \$200 currently)
- □ Treasurer Josh Frydenberg has foreshadowed bringing forward the personal income tax cuts currently legislated to come into effect on 1st July 2022, as a way to 'boost aggregate demand, boost consumption [and] put more money in people's pockets'
- ☐ These were estimated to 'cost' \$4½bn (in revenue foregone) in FY2022-23 and (together with the further cuts legislated to take effect from the beginning of FY2023-2024) \$143bn over the ten years to 2029-30
 - bringing forward these tax cuts would likely provide a lift to demand and activity but, inevitably, at least some of the boost in after-tax incomes would be saved and/or used to pay down debt (as happened with the enhanced tax refunds paid out in the Sep quarter of last year slide 53)
 - whereas the same dollar amount spent (eg) on infrastructure, or on cash handouts to low-income earners who don't pay tax, would boost demand by a larger amount

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



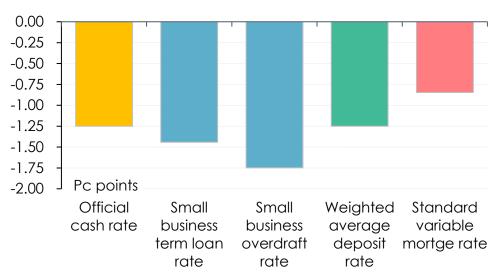
State & territory general government net debt as at 30 June 2020



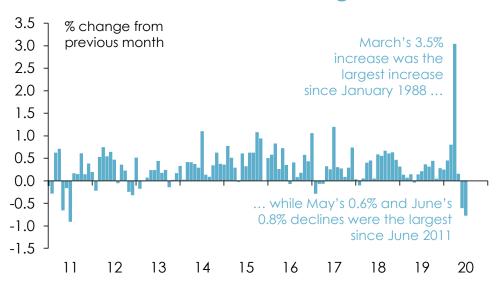
□ This month RBA Governor Phillip Lowe advised state and territory governments to spend an additional \$40bn (2% of GDP) on infrastructure investment – an amount which S&P Global Ratings said state and territory balance sheets had "plenty of room to accommodate"

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

Changes in interest rates since June 2019



Business credit outstanding



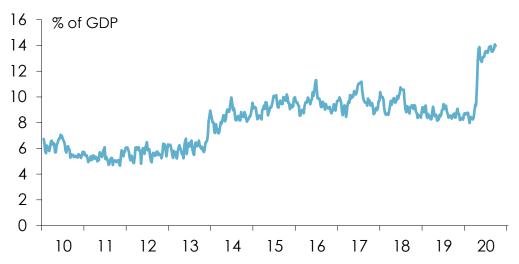
- Banks have cut interest rates on small business loans by more than the official cash rate since June last year (when the RBA started cutting rates again)
- □ Banks have extended 'repayment holidays' to business and home mortgage borrowers who request it (about 12% of mortgages and 20% of SME loans)
 - although it is important to note that under these arrangements interest payments are deferred and capitalized, not foregone
- ☐ These 'repayment holidays' are due to expire at end-September, but banks have announced that they would be extended for up to four months for those customers who were still experiencing difficulties but have good prospects of eventually repaying
- Westpac announced this week it would not pay an interim dividend, while ANZ cut its interim dividend by 70%, following earlier dividend cuts by the other two major banks, NAB & CBA
- ☐ 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



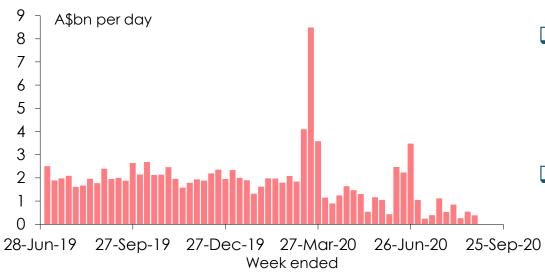


With official interest rates as low as they can go, the RBA has implemented a range of 'quantitative' monetary policy measures

Reserve Bank assets as a pc of GDP



Reserve Bank daily repo transactions

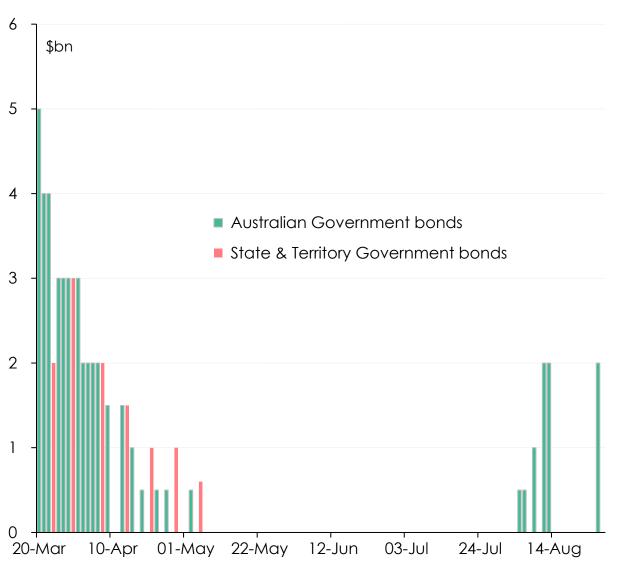


Source: Reserve Bank of Australia.

- ☐ 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 it at this level 'until progress is made towards full employment' and 'it is confident inflation will be sustainably within the 2-3% target band' which the RBA Governor last week said was likely to be at least three years away (see <u>slide 104</u>)
 - the RBA has again re-iterated that it has 'no appetite' for negative rates, or for 'monetary financing of deficits' (see <u>slide 104</u>)
- ☐ The RBA restated its commitment to keeping 3-year yields at 0.25%
 - The RBA was absent from the bond market this week, after buying \$5bn of bonds last week and \$1bn the week before (the first purchases since May)
 - RBA assets are now equivalent to 14% of GDP (cf. BoC 23 $\frac{1}{2}$ %, US Fed 36%, BoE 44 $\frac{1}{2}$ %, ECB 55%, BoJ 131% see slide 27) and RBNZ 18 $\frac{1}{2}$ %
- □ RBA provided additional liquidity through 'open market operations' to prevent disruption of credit markets in March
 - RBA repo transactions averaged \$850mn a day since the beginning of April (except for the last two three weeks of the 2019-20 financial year), down from peak of almost \$8½ bn a day in 3rd week of March
- ☐ 'Term Funding Facility' to provide up to \$155 bn at 0.25% pa to lending institutions for increased lending, especially to businesses with annual turnover of less than \$50 mn
 - to date \$41.6 bn has been provided through this facility (including almost \$10bn in the past two weeks)
 - the RBA expects larger drawings as existing bank funding 'rolls off'

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%

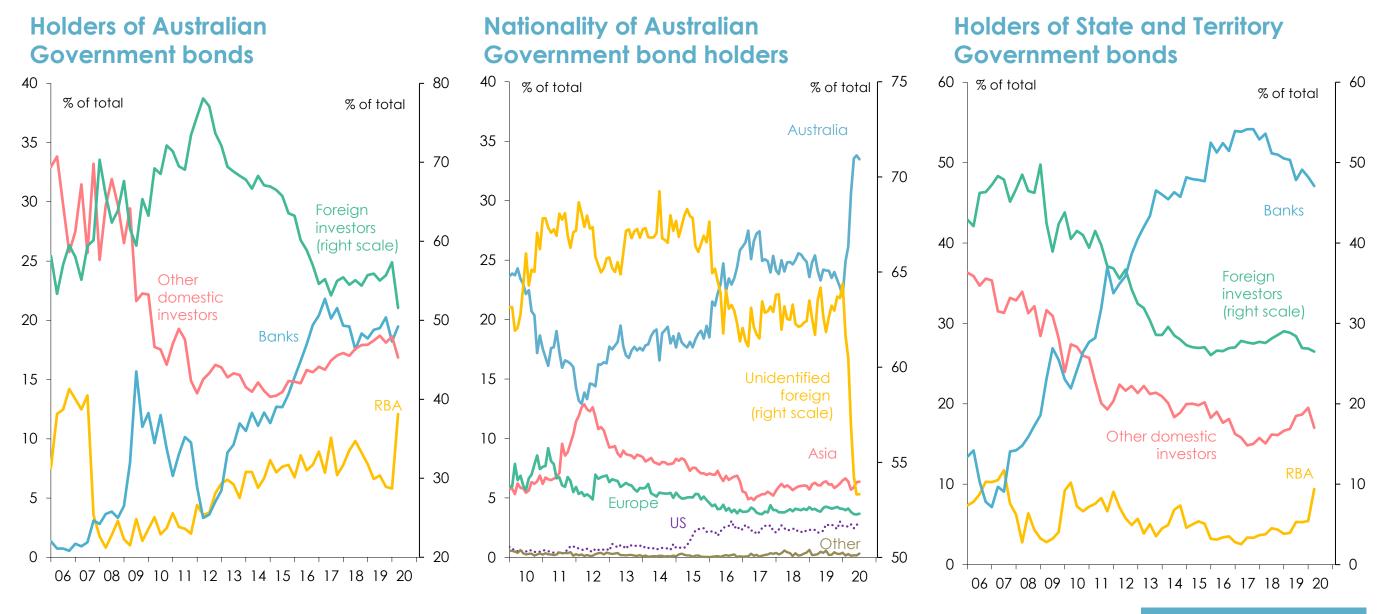
RBA open market bond purchases



Interest rates



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



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

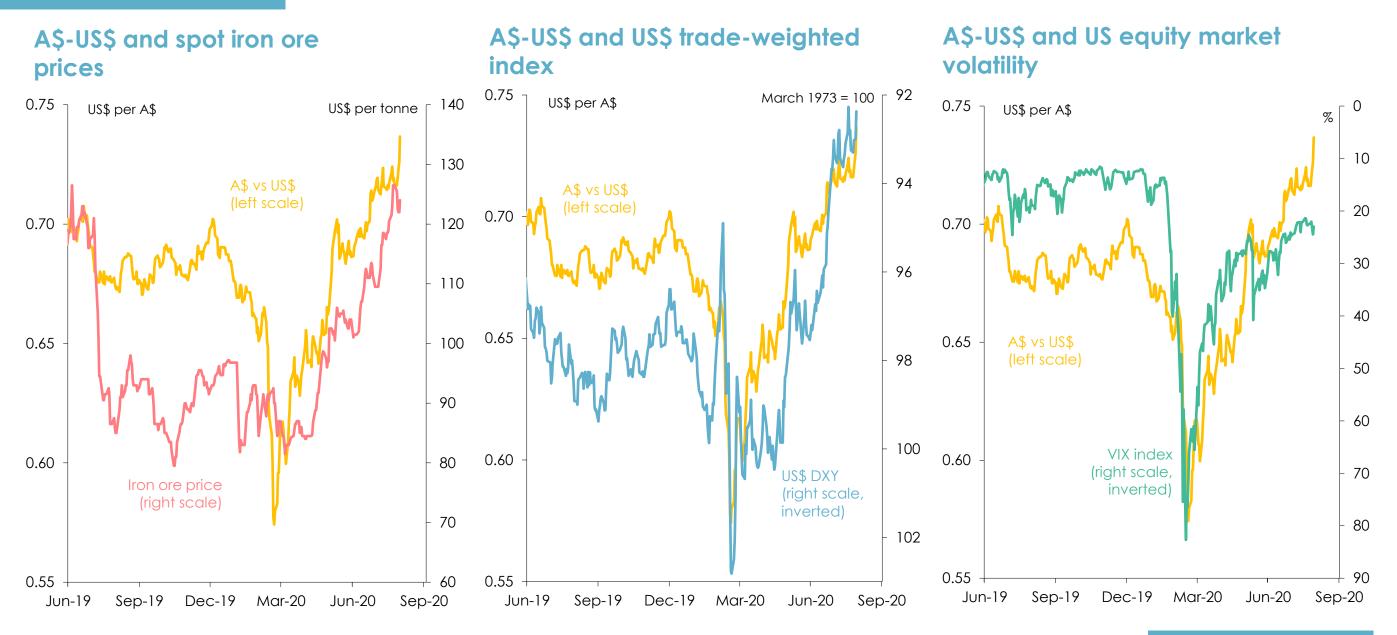
- Speaking to the Parliamentary Economics Committee on 14th August RBA Governor Lowe again characterized negative interest rates as "extraordinary unlikely", monetary financing of budget deficits (aka 'modern monetary theory') as "not on the agenda in Australia", and FX market intervention to drive the 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 59) 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
 - 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"

deficits is "entirely manageable and ... affordable"

- □ The RBA's approach to the use of monetary policy in current circumstance is increasingly different from that of the RBNZ, whose Governor last week 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 <u>slide 119</u>)
 - 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\$ rose to a 2-year high of U\$73.7c at the end of the week, chiefly on the back of a weaker U\$ 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 83. Source: Refinitiv Datastream. Data up to 28th August.



... although the A\$ also rose against Asian and European currencies (but fell a bit against the NZ\$ on profit-taking after a strong run)













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Source: Refinitiv Datastream. Data up to 28th August.

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

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

Population growth

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

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

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

☐ The 'housing boom'

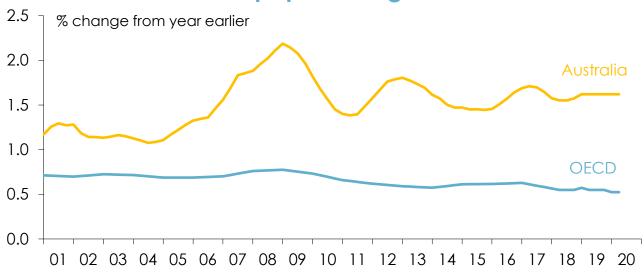
- Australia's 'housing boom' started earlier (mid-1990s) and ended later (2017, rather than 2007-08) than in most other 'advanced' economies (some such as Japan, Italy and France didn't have a housing boom at all)
- the two-way interaction between rising house prices and rising household debt underwrote stronger growth in household consumption spending, for longer, than would have occurred otherwise
- ☐ (Mostly) good macro-economic policy especially by comparison with other 'advanced' economies
 - although we haven't done nearly as well as we once did on the micro-economic front (especially with regard to productivity)

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

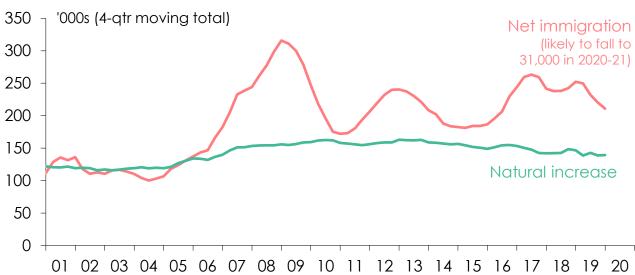


Australia's above-average economic growth over the past 20 years owes a lot to above-average population growth: that's about to change

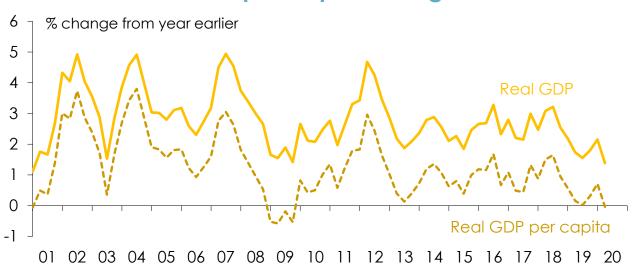
Australia and OECD population growth



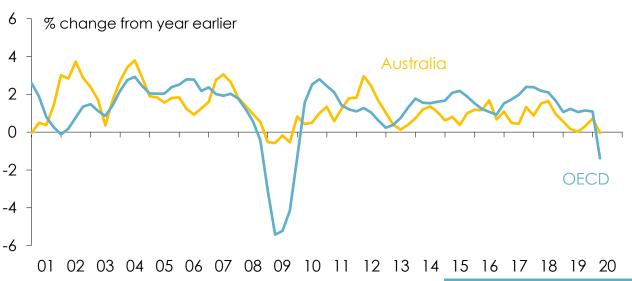
Sources of Australia's population growth



Australian GDP and per capita GDP growth



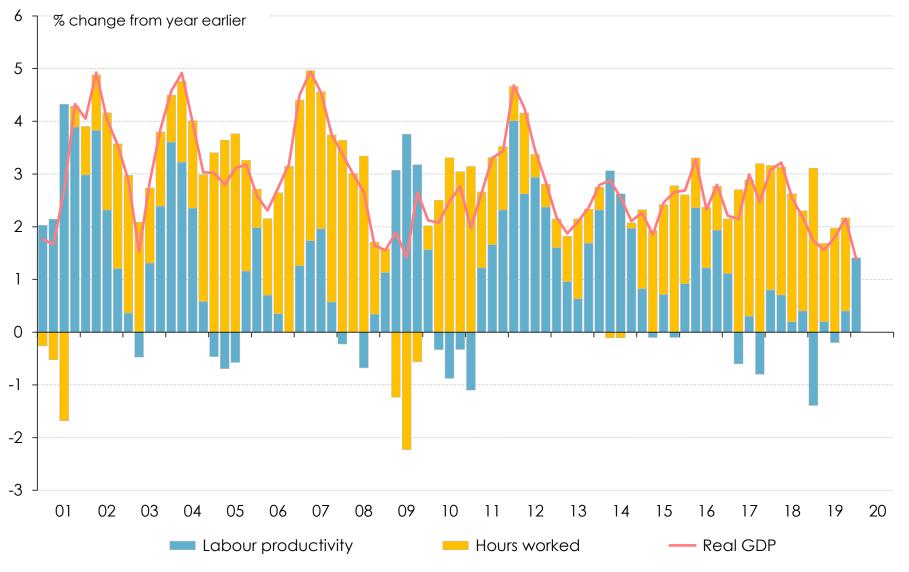
Australia and OECD per capita real GDP growth





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

Labour input and labour productivity contributions to Australian real GDP growth

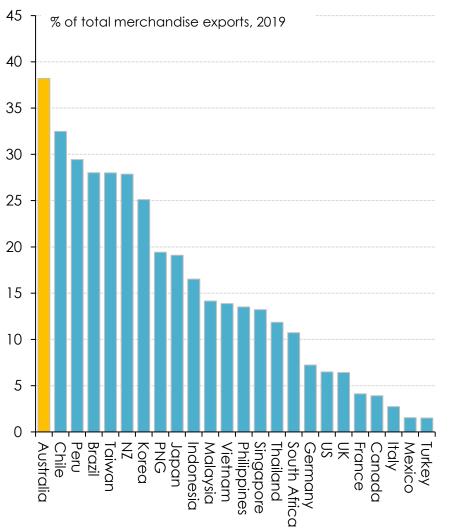


- Over the past five years, 72% of Australia's real GDP growth has come from increased labour input, and only 28% from labour productivity growth
- By contrast, between the end of the early 1990s recession and the onset of the global financial crisis, 46% of Australia's real GDP growth came from increased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

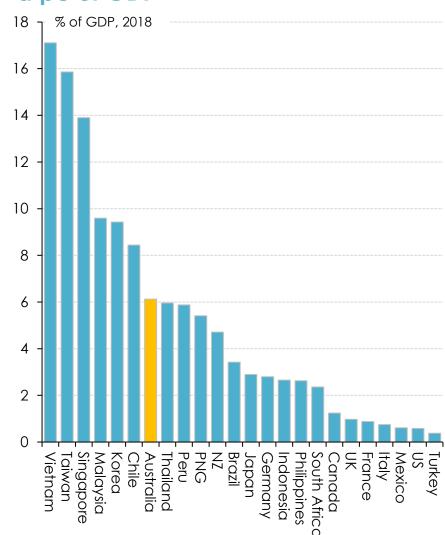


Australia has benefited enormously from its economic relationship with China over the past 25 years, but will that continue to be the case?

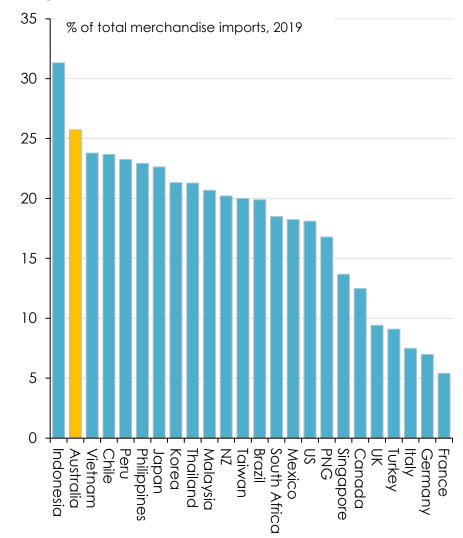
Merchandise exports to China as a pc of total



Merchandise exports to China as a pc of GDP

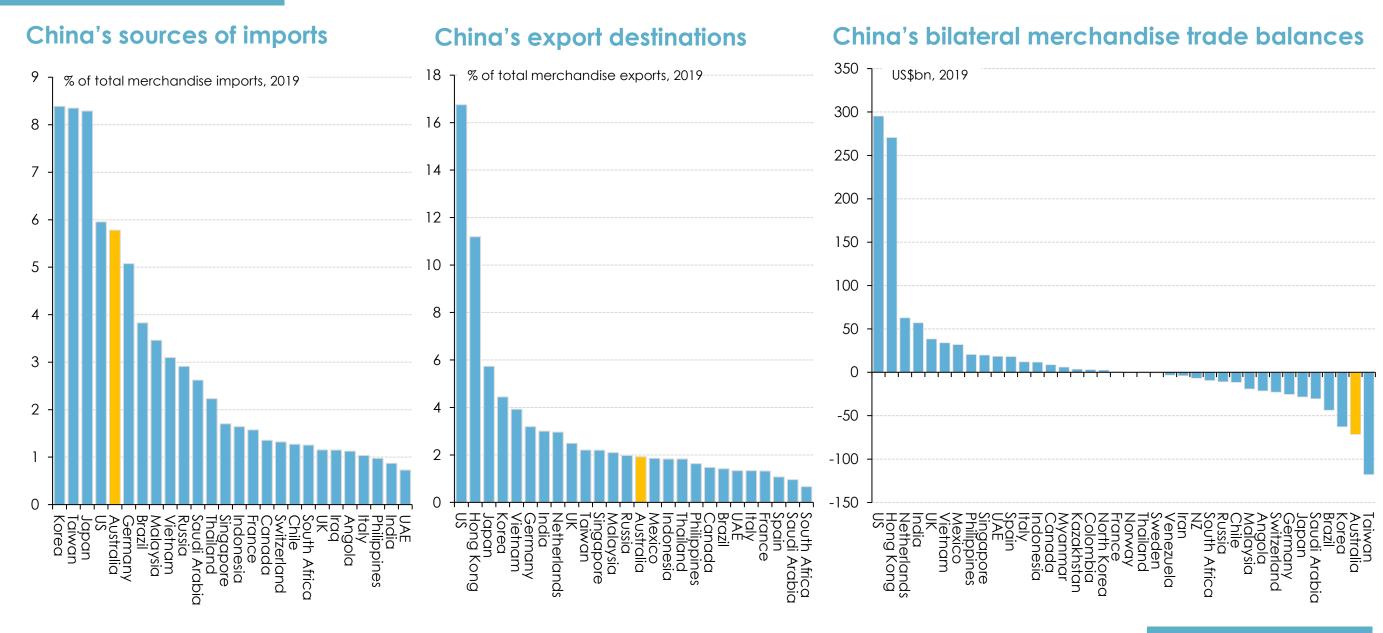


Merchandise imports from China as a pc of total





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

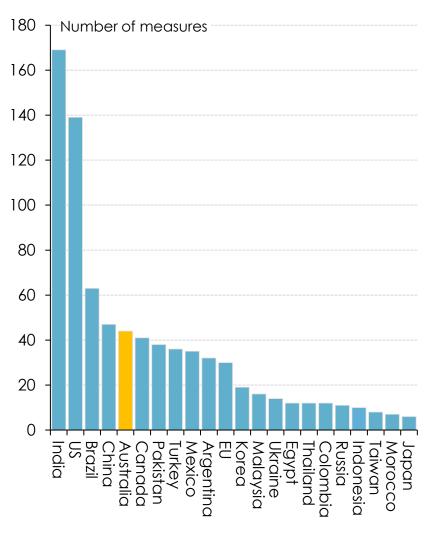




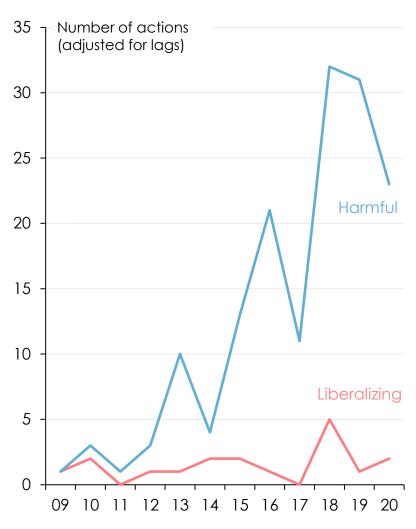


China's threats against Australian exports of barley, beef, wine, coal, tourism and education aren't justified, but we aren't 'Snow White' either

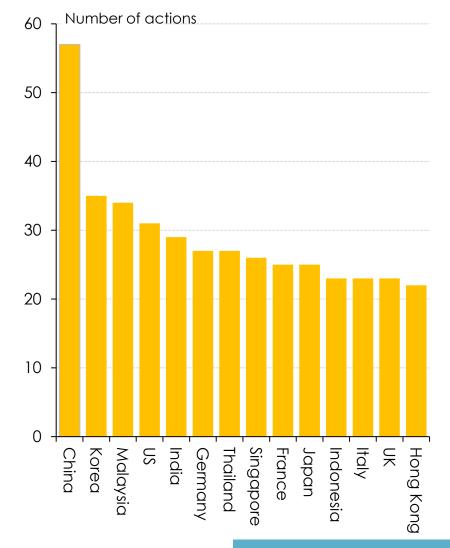
Number of anti-dumping measures imposed, 2015-19



Australian trade policy measures since 2009



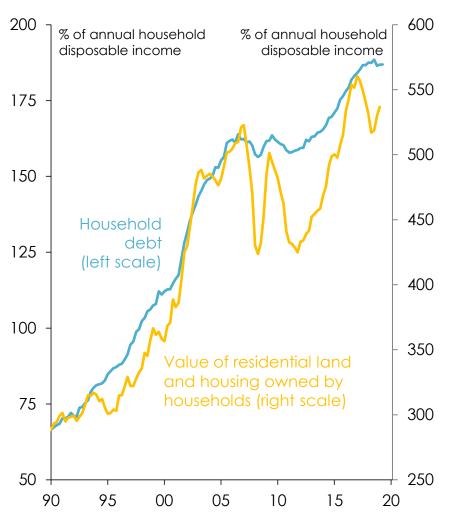
Countries adversely affected by 'harmful' Australian trade actions



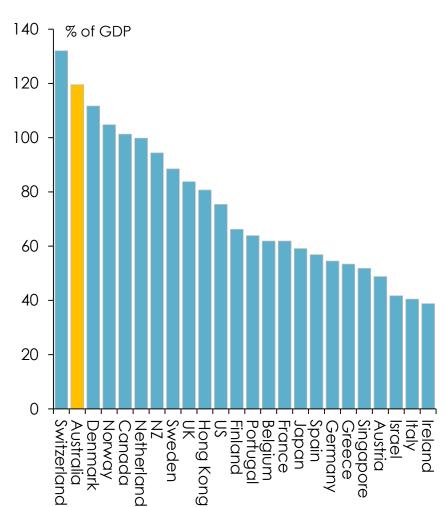


Rising property prices and household debt are unlikely to underpin Australian economic growth as they have done for most of the past 30 years

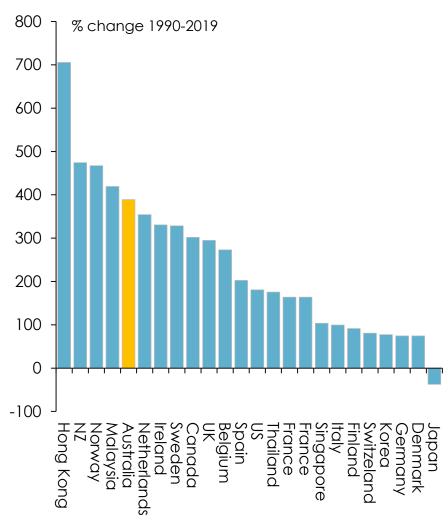
Australian housing wealth and household debt



Household debt as a pc of GDP, December 2019



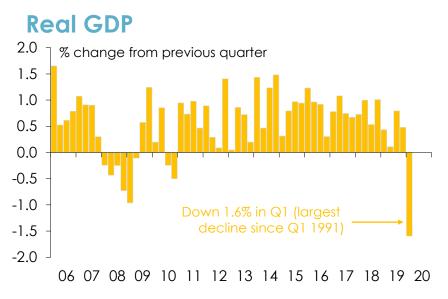
Increase in residential property prices, 1990-2019





New Zealand

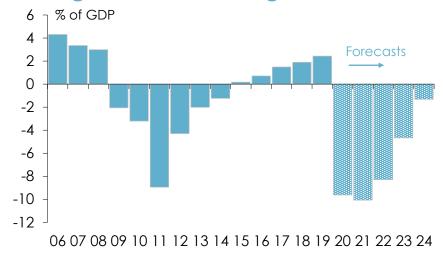
New Zealand has thus far had a sharper economic contraction than Australia – although it has done (and will do) more by way of fiscal policy



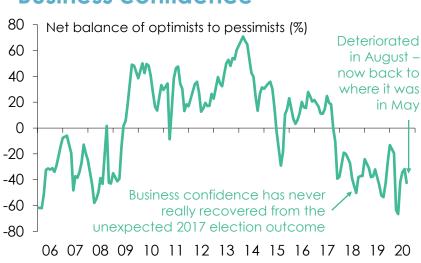




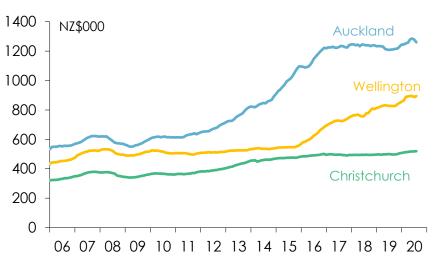
NZ government budget balance



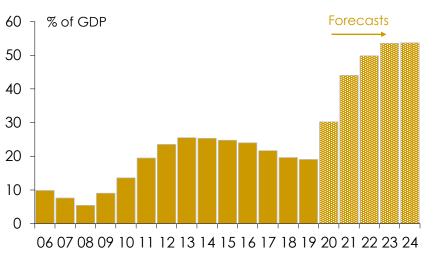
Business confidence



Residential property prices



NZ 'core Crown debt'

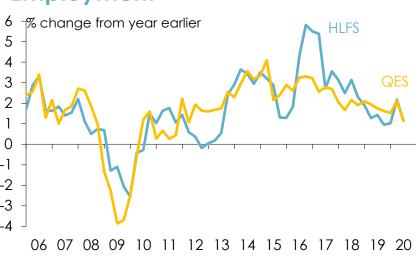


Note: New Zealand uses GDP(P) as its preferred measure of GDP. Unemployment rates are quarterly. The measure of the NZ Government budget balance is 'OBEGAL', operating balance excluding gains and losses (an accrual accounting measure). Net 'core Crown debt' excludes assets of the NZ Super Fund, student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

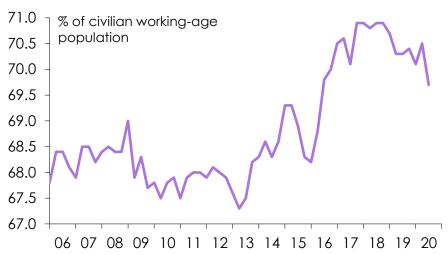


New Zealand's wage subsidy scheme appears to have prevented a large rise in unemployment, although hours worked have fallen sharply

Employment



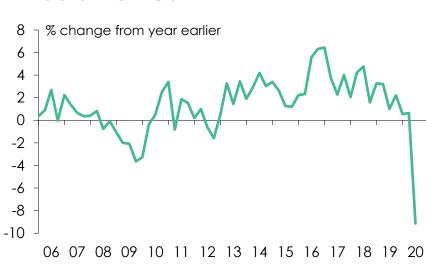
Labour force participation rate



Labour force under-utilization rate



Hours worked



Unemployment rate



Average weekly earnings

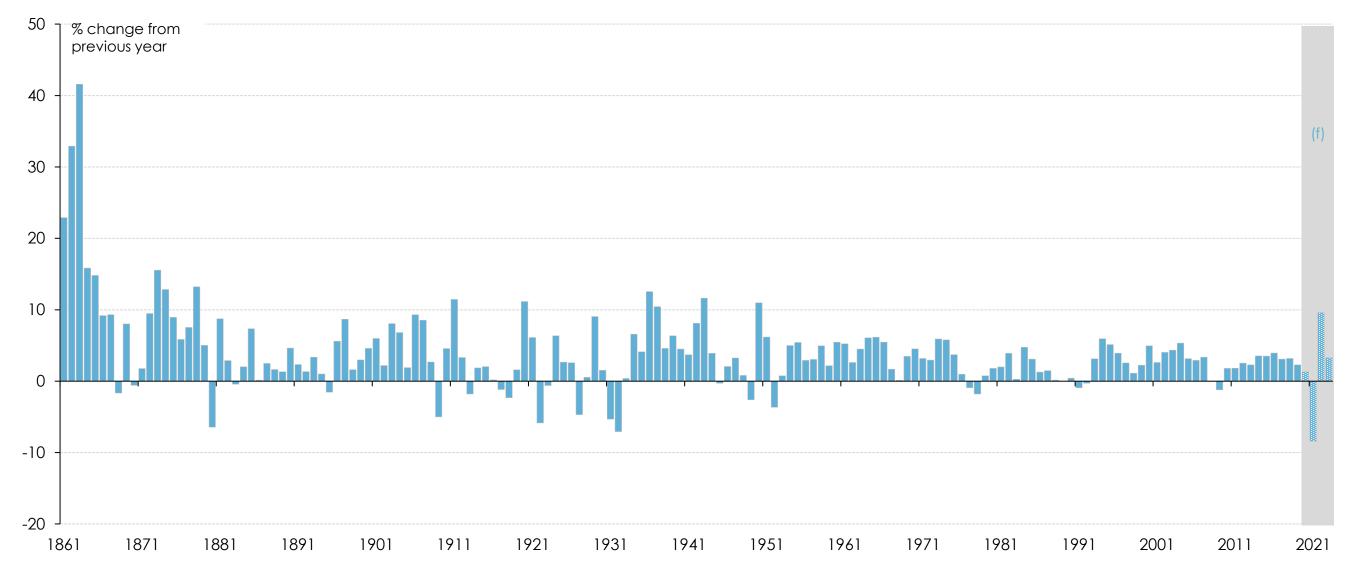


Note: New Zealand labour force data are only published quarterly. There are two 'headline' series on employment – the household labour force survey (HLFS) which counts the number of people in employment during the quarter; and the quarterly employment survey (QES), which counts the number of 'filled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



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

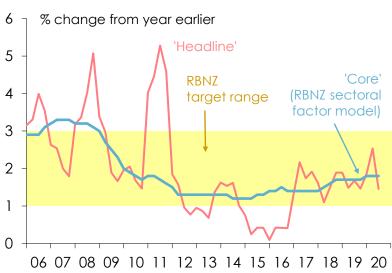
Annual growth in New Zealand real GDP, 1861-2023



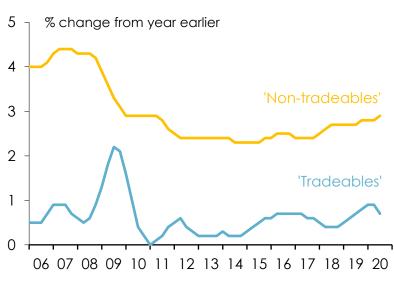


Inflation remained comfortably in the RBNZ's target band in the June quarter

Consumer prices



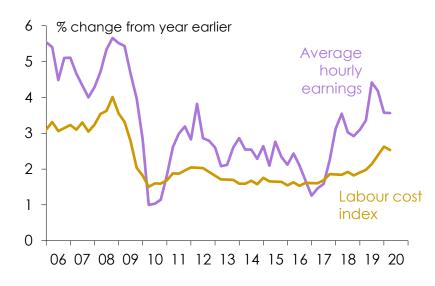
Components of 'core' inflation



Household inflation expectations



Labour costs

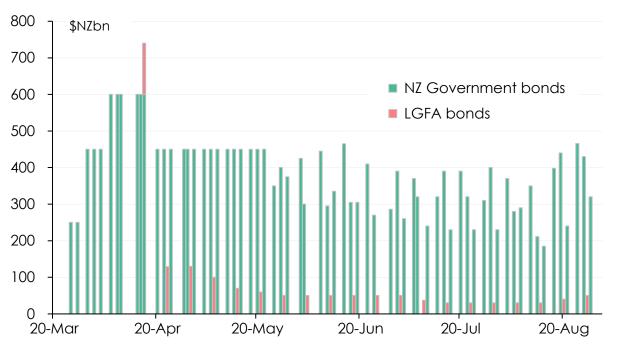


- The CPI fell 0.5% in the June quarter, reflecting a 12% fall in petrol prices, partly offset by a 16% increase in food prices and SNZ's inability to capture fully the effect of freeze on residential rents between 26th March and 25th September
- The June quarter result cut the annual 'headline' inflation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



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

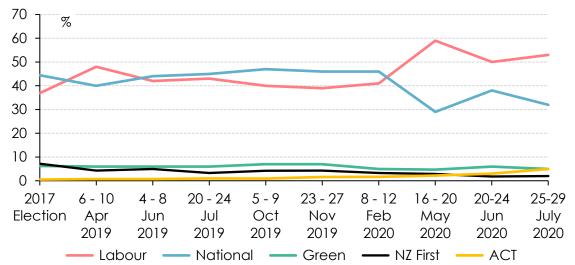


- RBNZ has adopted an ECB-style QE, establishing a Large Scale Asset Program initially set at \$NZ33bn ($10\frac{1}{2}\%$ of GDP), increased to \$60bn (19% of GDP) in May, and last week to \$100bn (32% of GDP) by June 2022
- ☐ This week the RBNZ bought NZ\$1.3bn of bonds, the most since the week ended 19th June, and bringing its total purchases since 25th March to \$NZ27.1bn (8.7% of GDP)
- At this 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\$

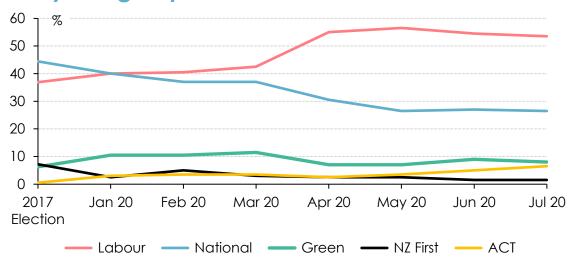
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PM Jacinda Ardern's Labour Party continues to hold a commanding lead in opinion polls for the 17th October election

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: NZ 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
 - 71 members are elected from constituencies (of which 7 are reserved for Māori) on a 'first past the post' basis (as used in Britain)
 - the other 49 are chosen from party lists such that each party has the same share of seats in the Parliament as its share of the national vote, provided it has won at least 5% of the national vote or one constituency seat (similar to the system used for the German Bundestag)
 - each elector has two votes, one for his or her constituency and one for a party list
- Party won 56 seats with 44.6% of the vote, but Labour which won 46 seats with 36.9% of the vote was able to form government in coalition with the conservative-populist NZ First (9 seats with 7.2% of the vote) and the Greens (8 seats with 6.3% of the vote)
- For the second time 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 74)
Accelerated decline in the use of cash for transactions (see slide 78)
Re-think of relationships with China (see slides 110-112)
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 <u>slide 47</u>) 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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