ECONOMIC IMPACT OF THE CORONAVIRUS PANDEMIC

13th JUNE 2020



What's new?

The world

- ☐ The number of Covid-19 cases is approaching 7½mn, with almost 880,000 new cases in the past week (the highest weekly number so far) and over 30,000 new deaths
- Most countries including many which have yet to 'flatten' their infection curves – have continued to ease social distancing restrictions
- US Fed Chair Jerome Powell challenged the 'V-shaped' recovery view which financial markets had embraced over the past two months, and foreshadowed the adoption of 'yield curve control' in the medium term
- □ Stock markets fell sharply on Thursday and ended the week down ~4-6% (Australia only down 2½%)
- □ The World Bank and the OECD published global growth forecasts which were much more bearish than those of the IMF in early April WB sees -5.2% in 2020 and +4.2% in 2021, OECD has -6.0 & 5.2%, cf IMF -3.0 & +5.8%
- □ 'QE' is triggering much more rapid money supply growth than it did in the GFC US M2 grew 23% yoy in May, the fastest in at least 60 years (see slide 19)
- □ UK monthly GDP measure fell 20% in April to be 24.5% below April 2019 if replicated for Q2 as a whole this would be the worst annual decline since 1706

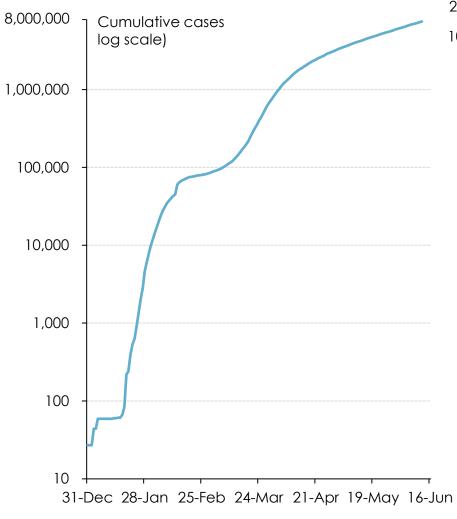
Australia

- Australia recorded only 34 new Covid-19 cases this week, the lowest weekly total since February, with no new deaths for the 3rd week in a row; the number of 'active' cases is now less than 150 cf. a peak of 4,700 on 3rd April
- Most states & territories announced further easing of restrictions, with Qld to open its borders on 10th July though no indication when WA, SA, Tas or NT will do so
- ☐ Consumer confidence improved again in June and is now back to pre-pandemic levels (though still below its long-run average)
- ☐ The shutdown has accelerated changes in the way Australians shop and make payments (see slide 45)
- ☐ The RBA is having much greater success with its 'QE' program than the RBNZ, despite the latter being twice as large as a pc of GDP (see slides 58-59)
- Measured unemployment likely rose in May (the market consensus is 6.9%) from April's 6.2%, in data to be released Thursday; meanwhile the ABS will release weekly payroll jobs data for the weeks ended 9th through 30th May on Tuesday

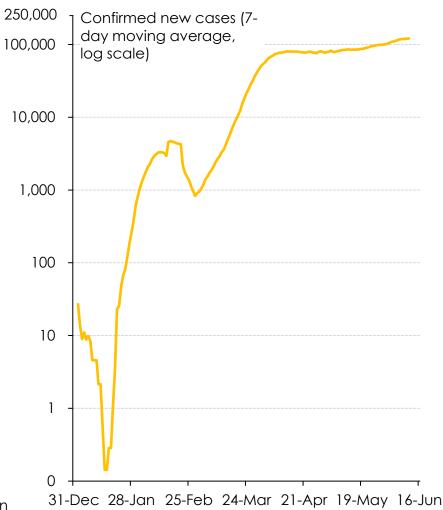


There have now been almost 7½mn cases of Covid-19 worldwide, and more than 421,000 deaths – and neither curve has been flattened, yet

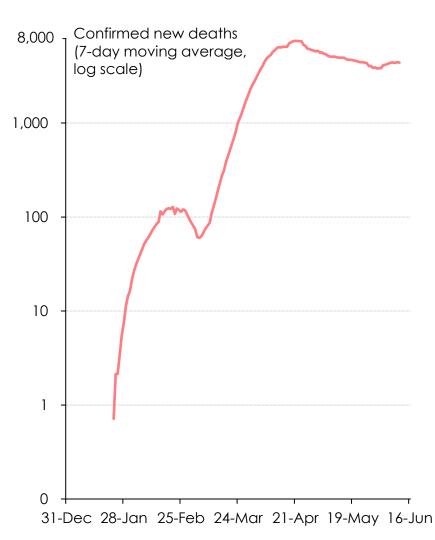
Cumulative confirmed cases – global total



New confirmed cases – global total



New deaths – global total

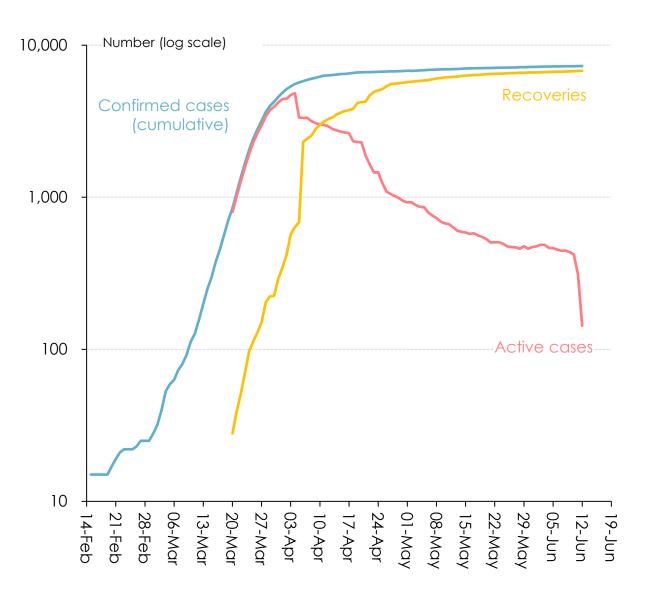


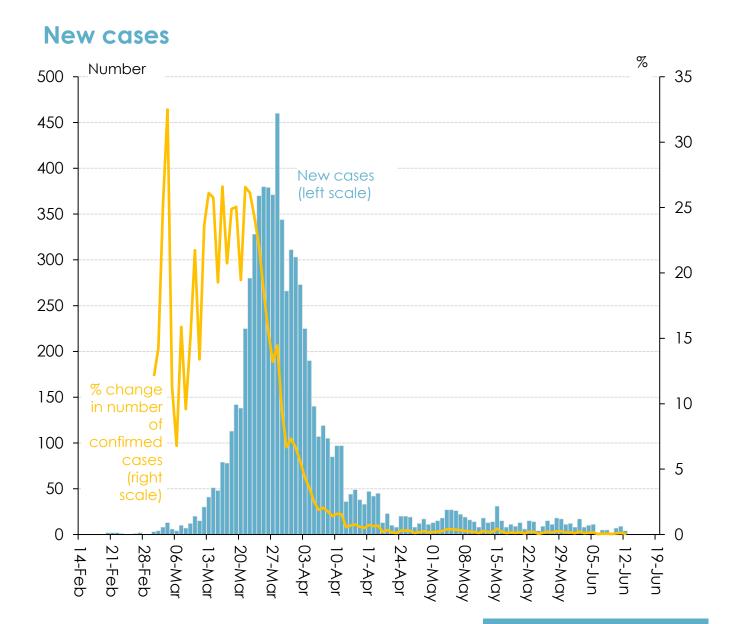




Growth in the number of confirmed cases in Australia has slowed substantially

Confirmed cases

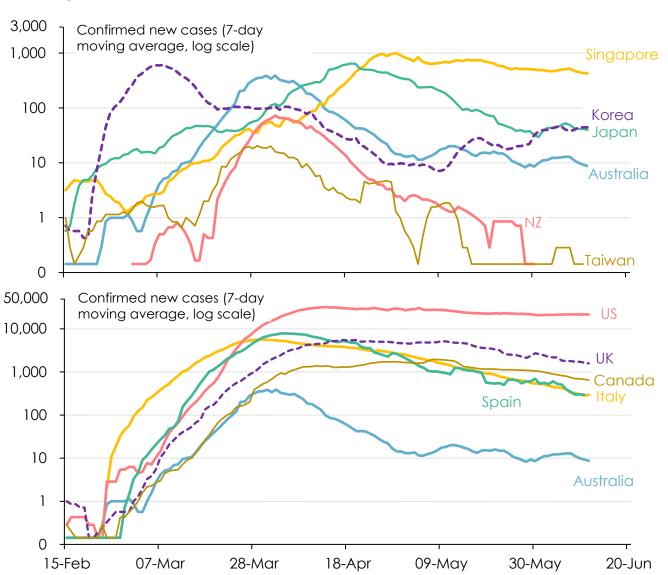




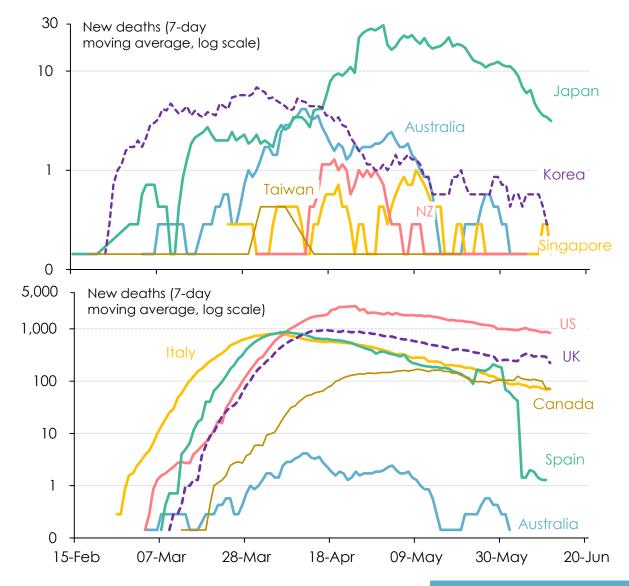


Australia, New Zealand and a number of Asian nations have hade greater success in containing the virus than North America or Europe

Daily new cases



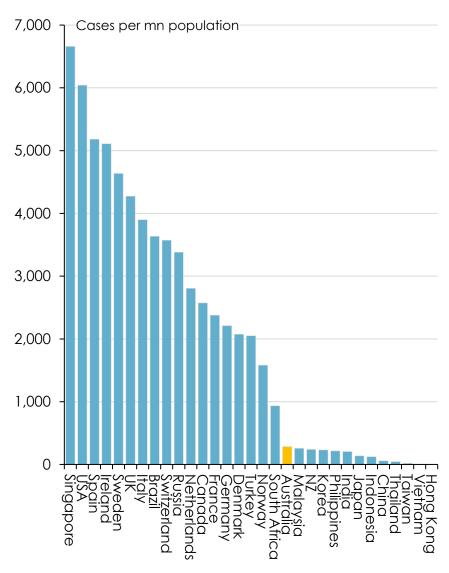
Daily new deaths



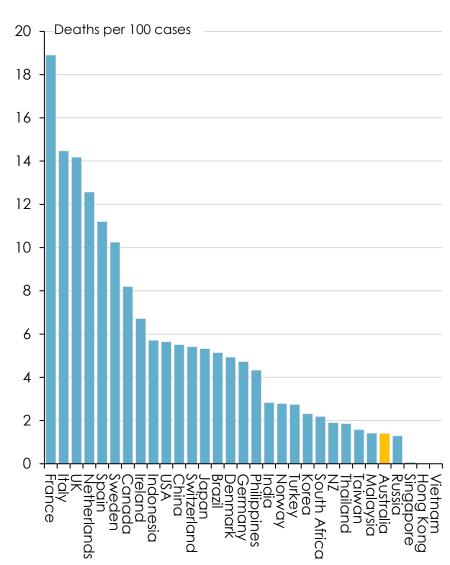


The virus appears (so far) to have been less infectious, and less lethal, in Australia than in most other countries

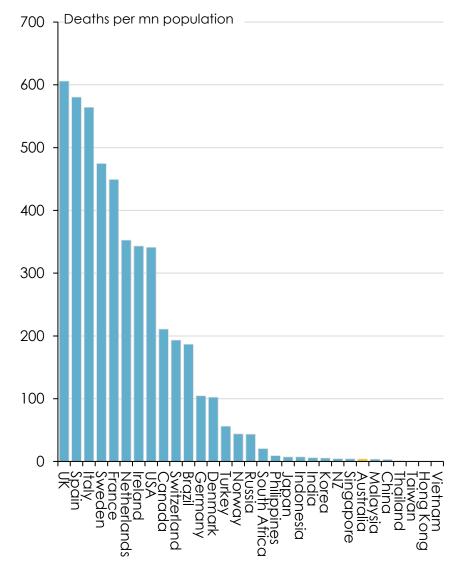
Apparent infection rate



Apparent death rate



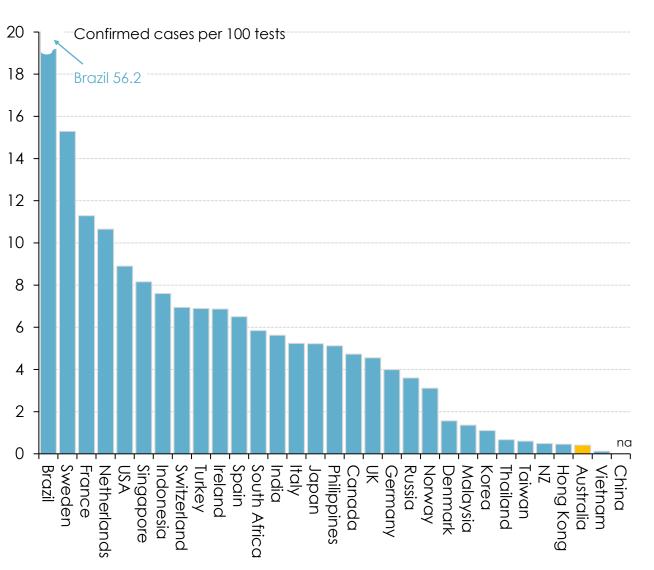
Deaths per mn population



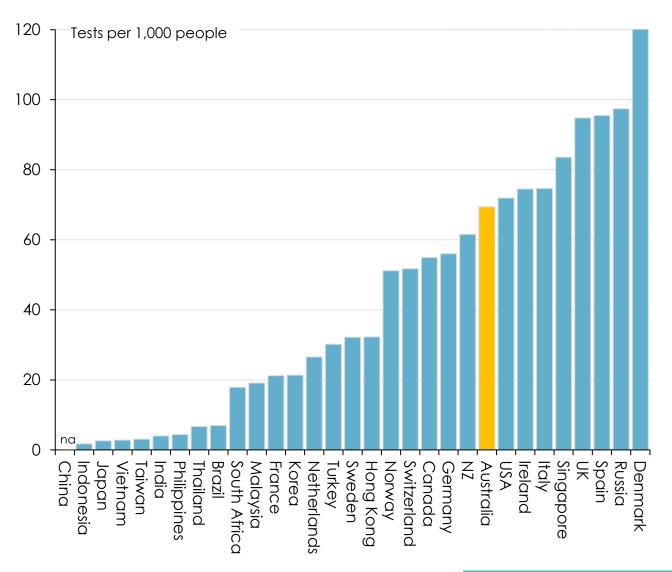


Australia's testing regime appears sufficiently broad for the low infection and death rates to be seen as 'credible' (ie not due to low testing)

Confirmed cases per 100 tests



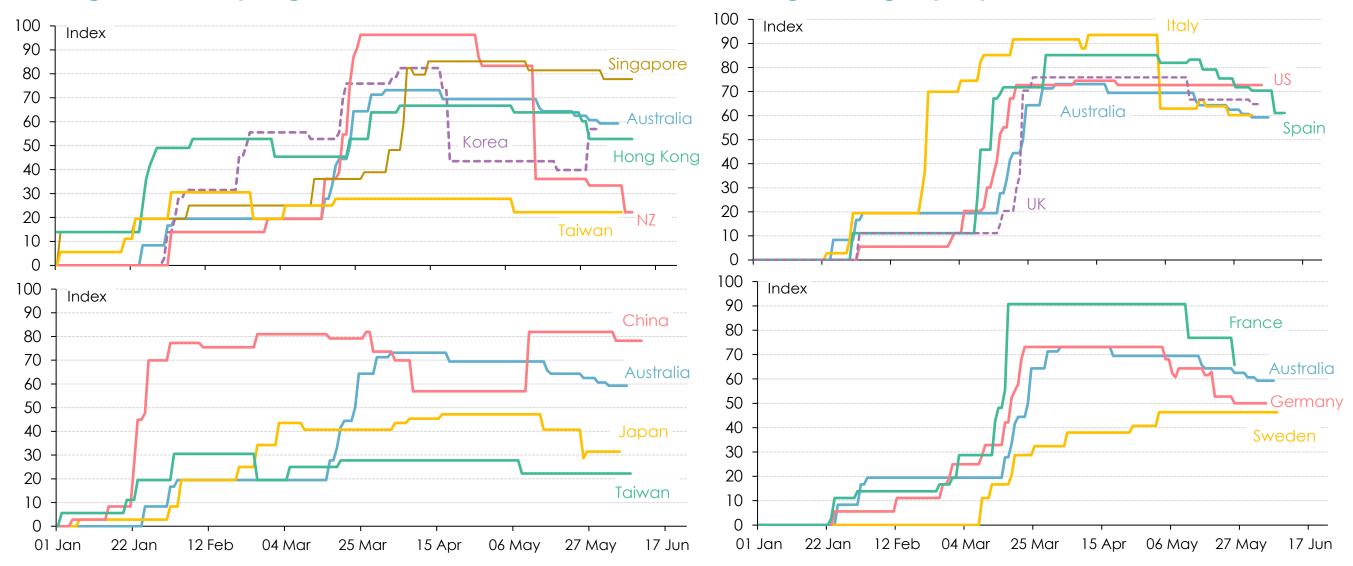
Tests per thousand of population





Comparative isolation and early shutdowns have helped Australia (and New Zealand) contain the spread of Covid-19

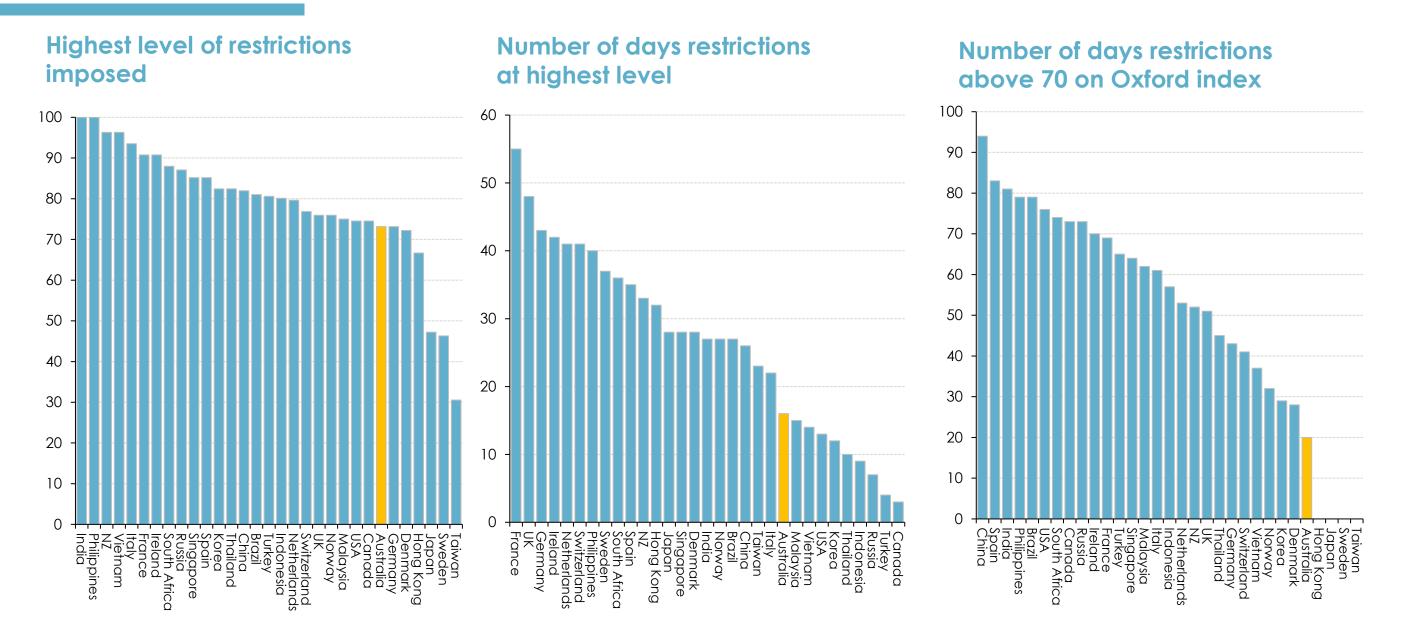
Timing and severity of government restrictions on movement and gathering of people



The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. Source: Blavatnik School of Government, Oxford University. Data up to 31st May – 11h June.



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

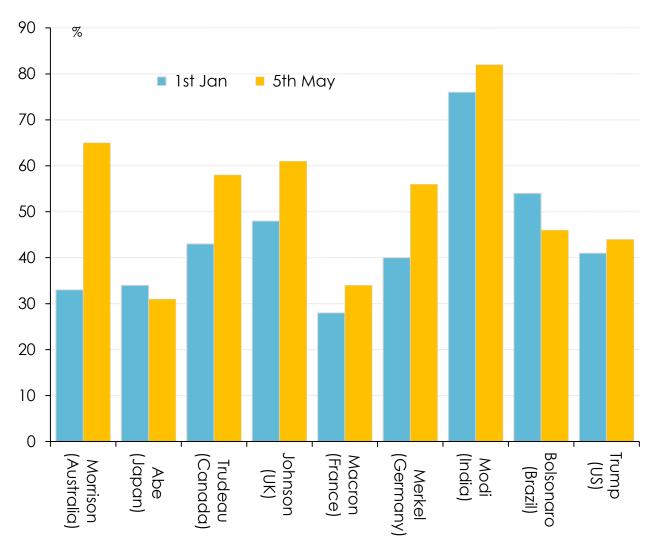


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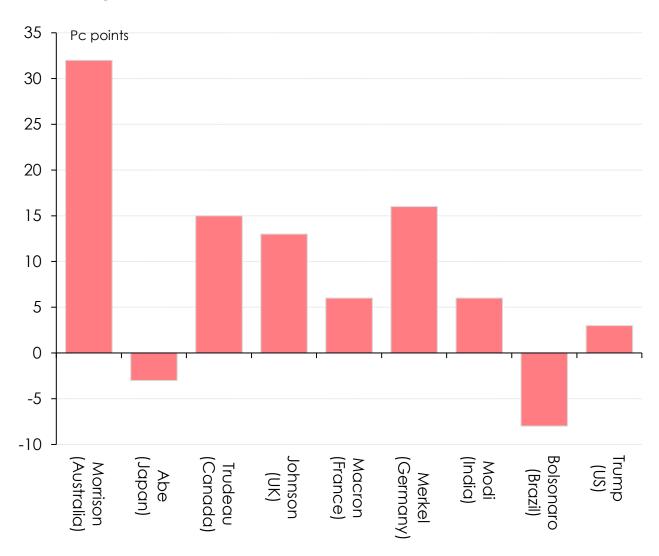


Australians have (so far) strongly approved the Government's handling of the pandemic

Voter approval of leaders' performance before and after the coronavirus outbreak



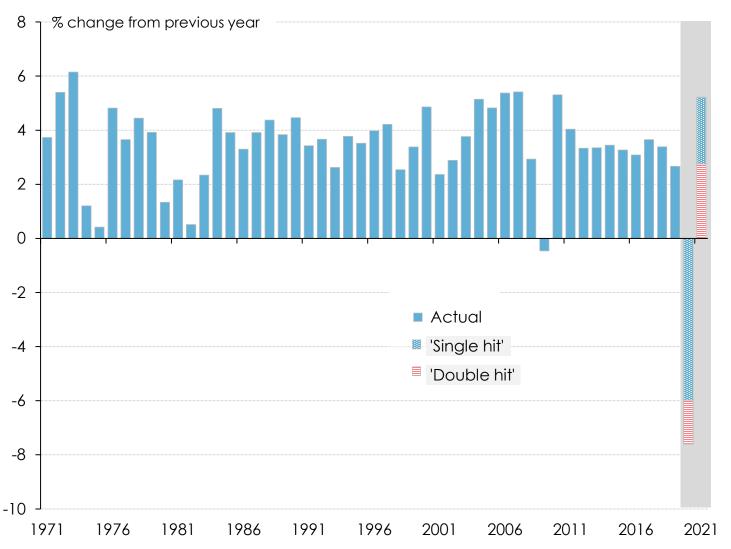
Change in voter approval ratings since 1st January



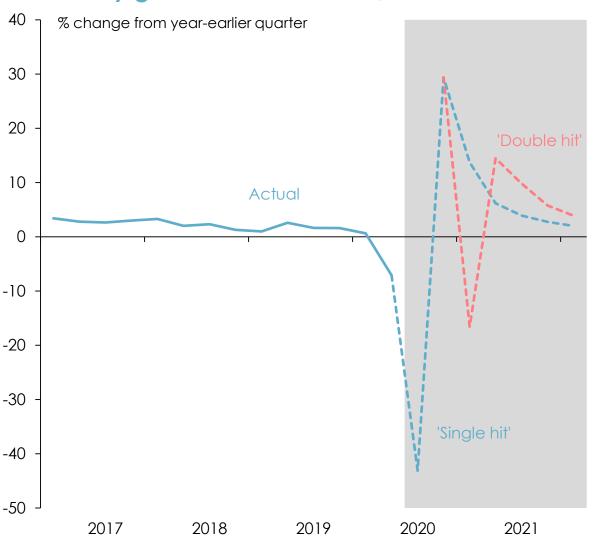


The OECD forecast a 6% decline in world GDP this year, followed by a 5.2% rebound in 2021 – or -7.2% followed by +2.8% if there's a 'second wave'

Annual growth in global real GDP, 1961-2021



Quarterly growth and forecasts, 2017-2021

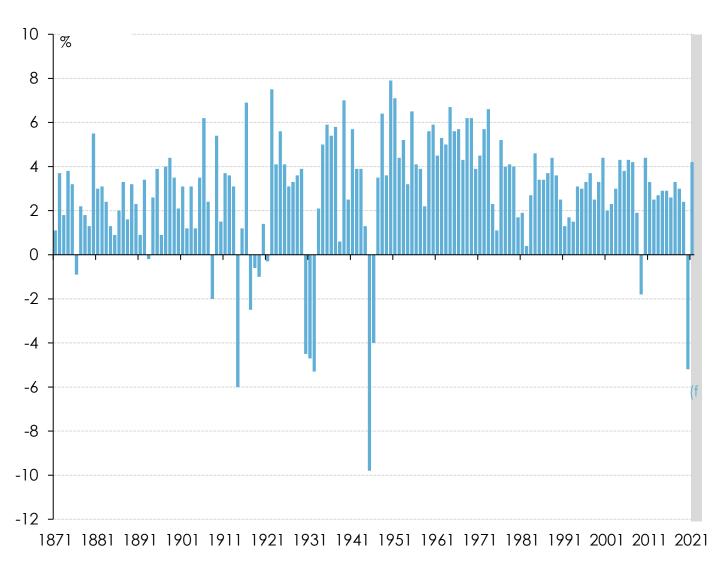


Note: The 'double hit' scenario assumes a 'second wave' of Covid-19 infections and deaths "in all economies towards the end of this year", while the 'single hit' scenario assumes this 'second wave is avoided'. The OECD regards each scenario as "equally likely". Source: OECD, Economic Outlook, No. 107,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

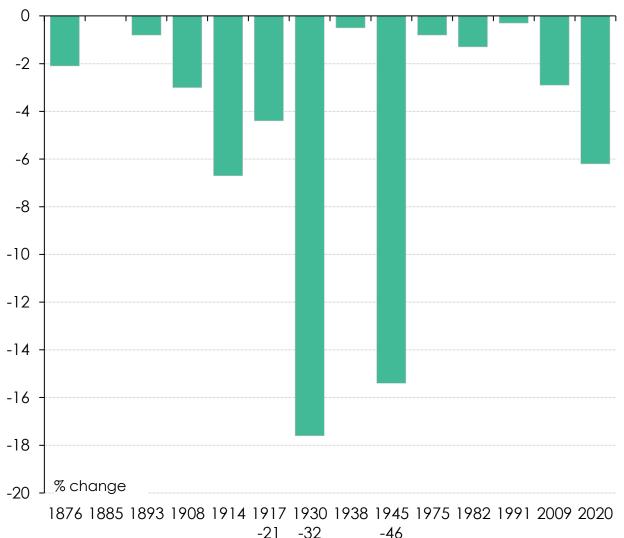


The World Bank this week forecast a 5,.2% decline in world GDP this year, with a 4.2% increase in 2021- the 4^{th} worst global downturn in 150 years

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.



The World Bank and the OECD are more bearish than the IMF on the global economic outlook, on the Euro area for this year, and on China for next year

Major global institutions' growth forecasts for 2020 and 2021 compared

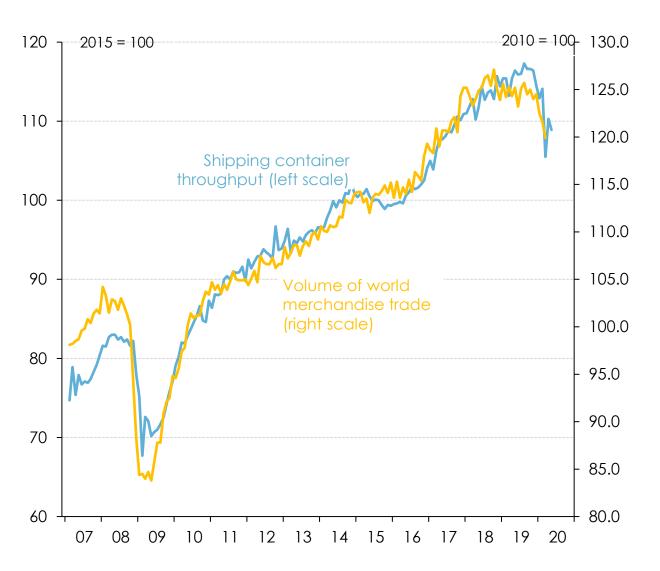
	Actual	IMF		World Bank		OECD*	
	2019	2020	2021	2020	2021	2020	2021
US	2.3	-6.1	4.5	-6.1	4.0	-7.3	4.1
China	6.1	1.2	9.2	1.0	6.9	-2.6	6.8
Euro area	1.2	-7.5	4.7	-9.1	4.5	-9.1	6.5
India	4.2	1.9	7.4	-3.2	3.1	-3.7	7.9
Japan	0.7	-5.2	3.0	-6.1	2.5	-6.0	2.1
UK	1.4	-6.5	4.0	na	na	-11.5	9.0
Australia	1.8	-6.7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



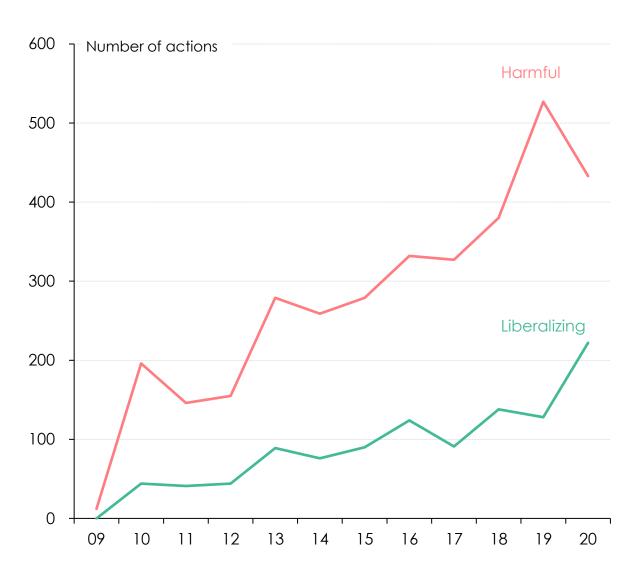
^{*} OECD forecasts are their 'single hit' scenario to be consistent with the assumptions of the other institutions. Note that the IMF forecasts were published 8 weeks before the World Bank and OECD forecasts. Source: International Monetary Fund (IMF), World Economic Outlook, 14th April 2020; The World Bank, Global Economic Prospects, 8th June 2020; Organization for Economic Co-operation & Development (OECD), Economic Outlook, Volume 2020 Issue 1, 10th June 2020.

World merchandise trade volumes have fallen, though so far not as much as during the GFC – despite a less amenable trade policy environment

World trade volumes and container throughput



Pro- and anti-trade policy interventions



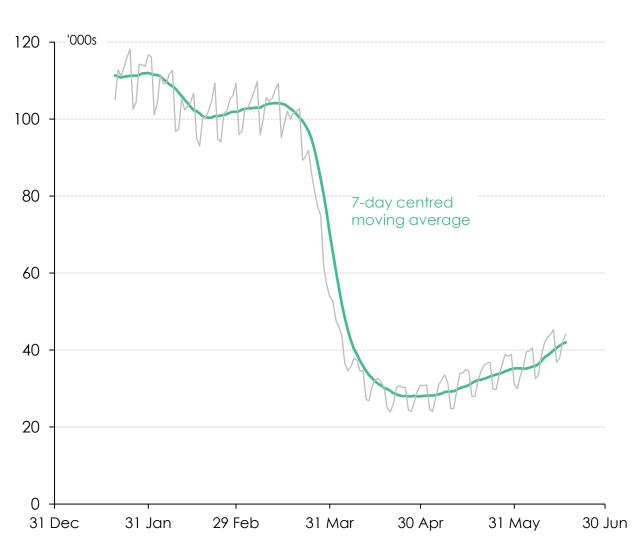
Note: The shipping container throughput index is based on reports from 91 ports around the world handling over 60% of global container shipping.

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; Global Trade Alert Global Dynamics.

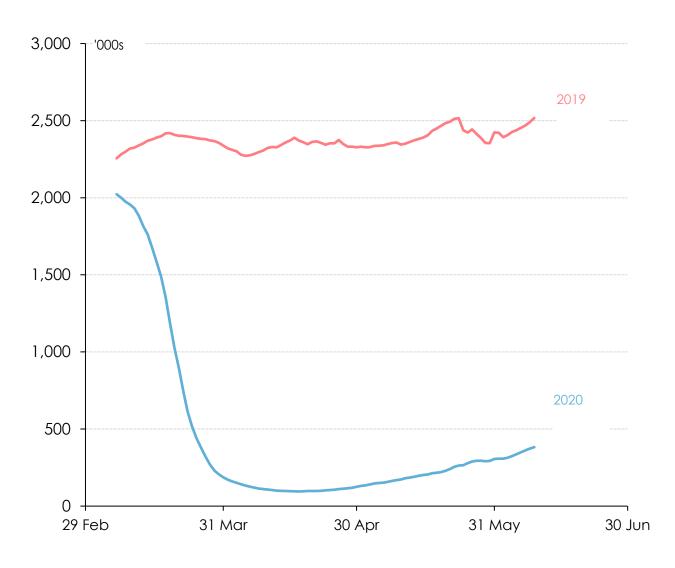


Air travel has 'bottomed out' but remains at very low levels globally (still awaiting 'take off')

Daily commercial flights worldwide



Daily US TSA security checks

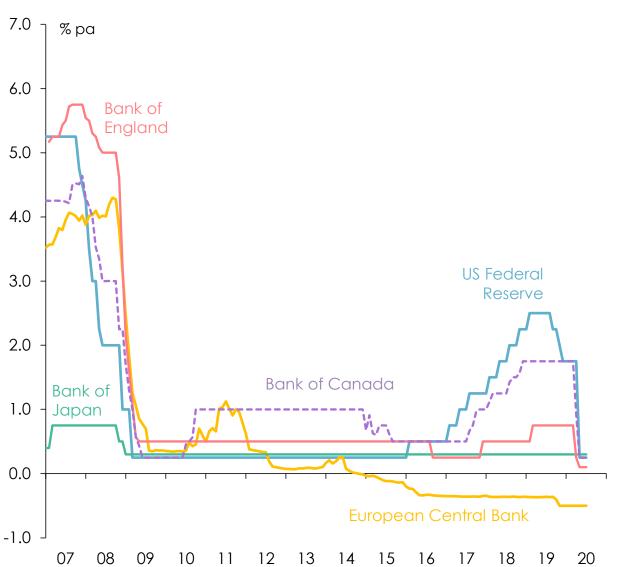


Note: Commercial flights include commercial passenger flights, cargo flights, charter flights, and some business jet flights. Sources: Flightradat24.com; US Transport Safety Administration.

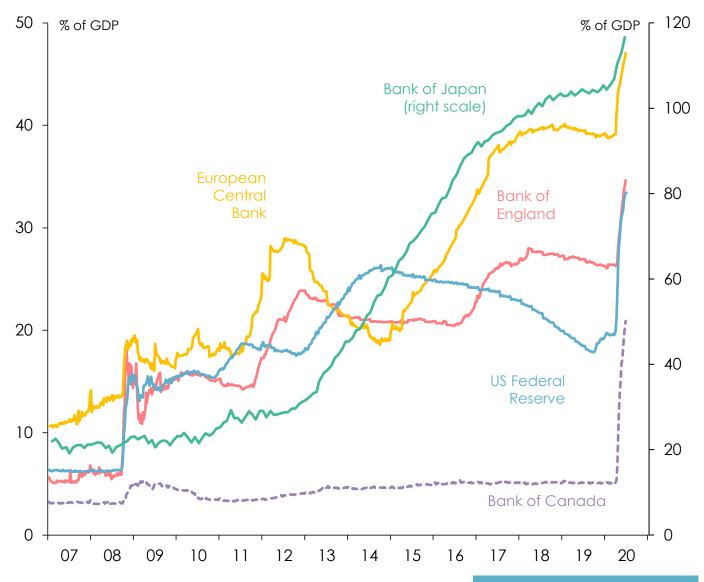


Major central banks have cut interest rates to record lows, and done more 'quantitative easing' than during the global financial crisis

Major central bank policy interest rates



Major central bank balance sheets

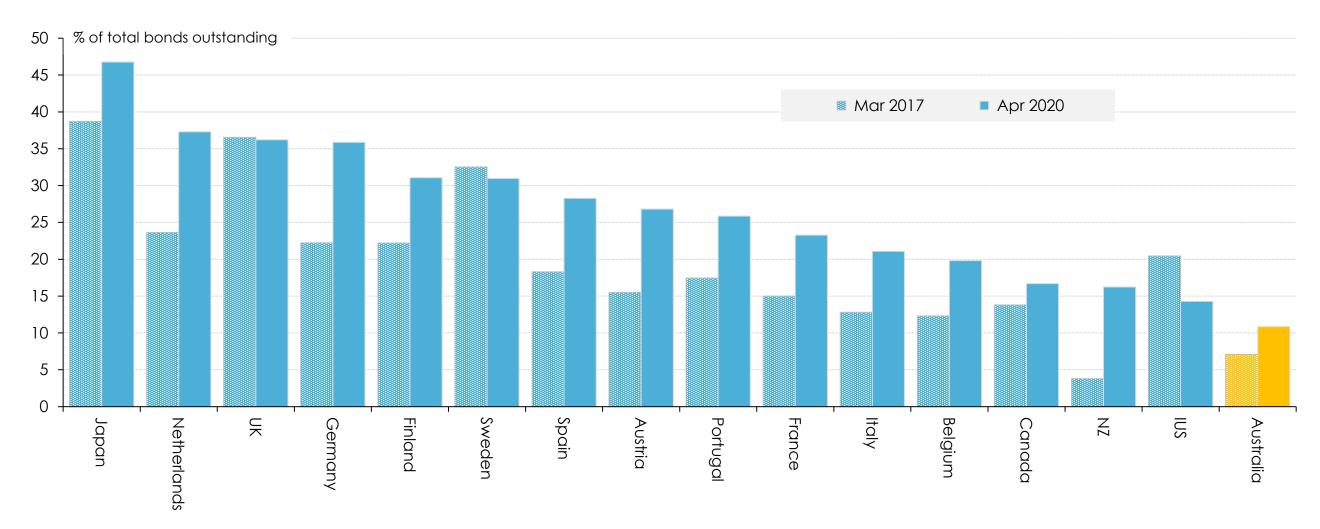






Central banks now hold significant proportions of total government debt in a growing number of countries

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 other are from OECD, Economic Outlook No. 107 (June 2020) and No. 104 (June 2017).



Markets had been supported by central bank actions and optimism about economic recovery, but were dowsed this week by gloomy Fed forecasts

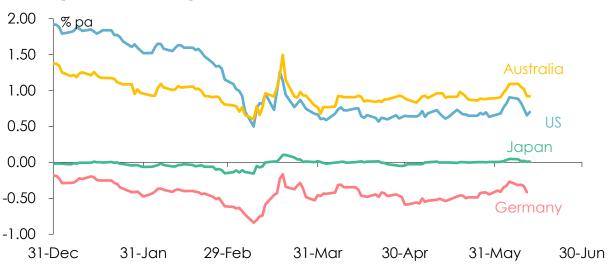
Stock markets



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





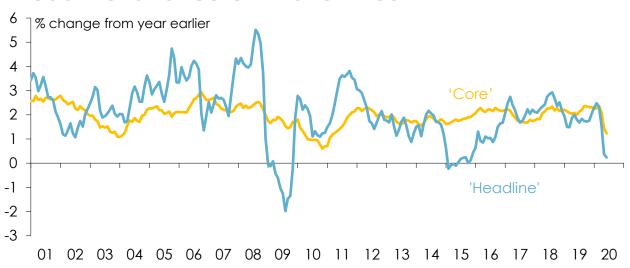






...but so far at least, inflation has been falling rather than rising, even discounting the impact of lower oil prices

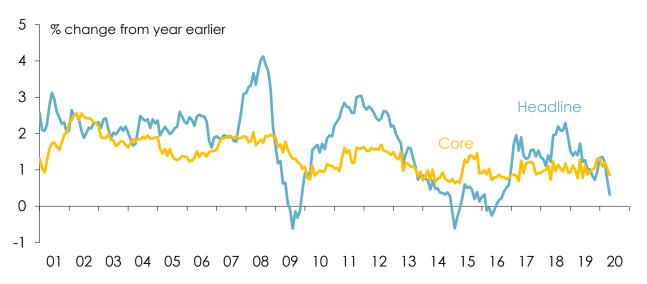
'Headline' and 'core' inflation - US



'Headline' and 'core' inflation - Japan



'Headline' and 'core' inflation – Euro area



'Headline' and 'core' inflation – UK

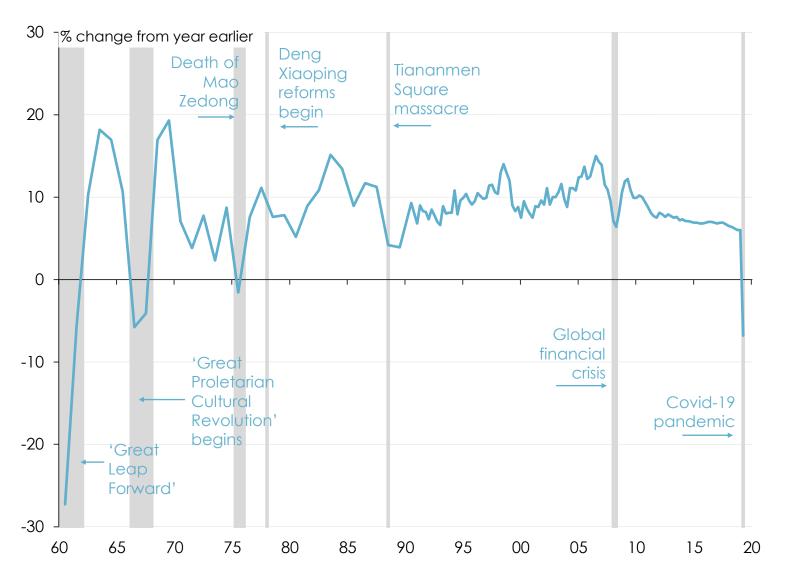


Note: 'Core' inflation is the CPI excluding food & energy in the US; excluding food, energy, alcohol & tobacco in the euro area; and excluding energy & seasonal foods in the UK. The 'core' inflation measure for Japan is the weighted median CPI calculated by the Bank of Japan. Sources: US Bureau of Labor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

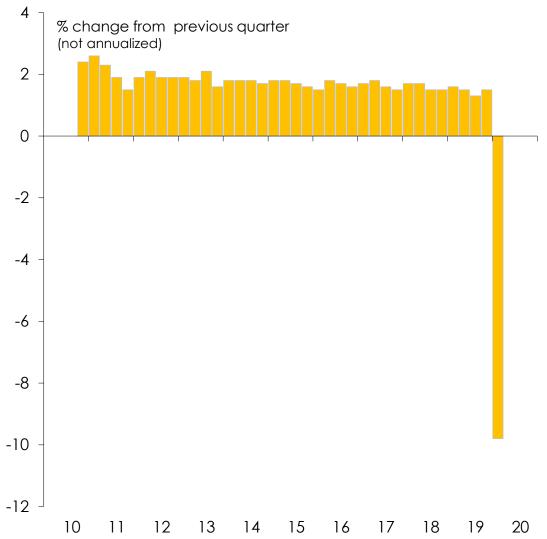


China experienced its sharpest economic downturn in the first quarter of this year since the beginning of the 'Cultural Revolution'

Real GDP growth, from year earlier, 1961-2020



Quarterly real GDP growth, 2010-2020





Production has rebounded in the current quarter, although not yet to prepandemic levels

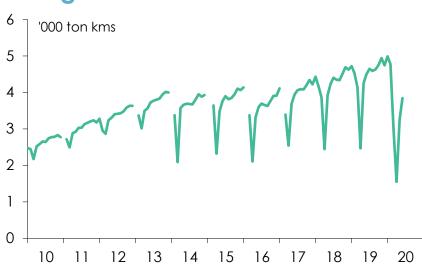
Manufacturing PMIs



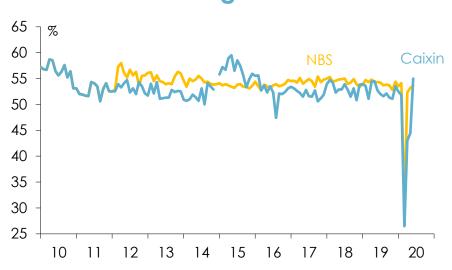
Industrial production



Freight traffic



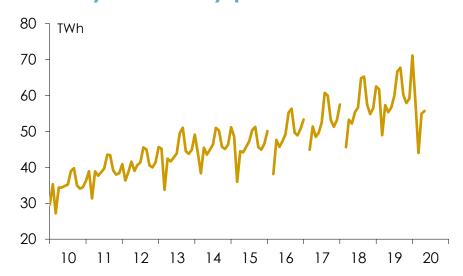
Non-manufacturing PMIs



Motor vehicle production



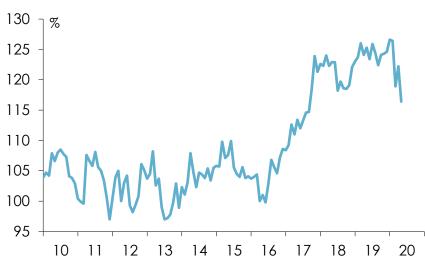
Primary electricity production





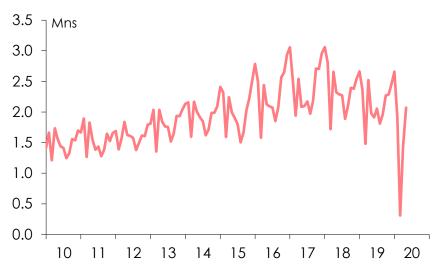
However the 'demand' side of the Chinese economy – both household and business – still looks soft

Consumer sentiment

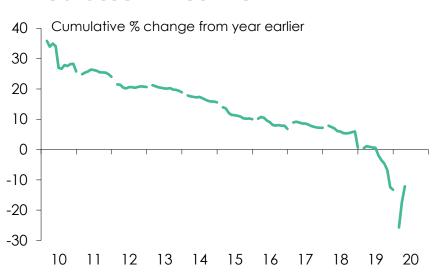




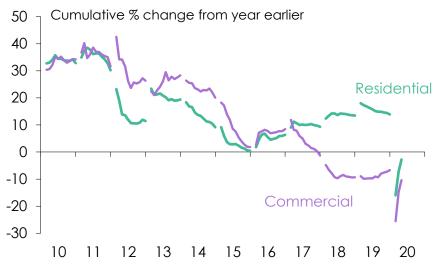
Motor vehicle sales



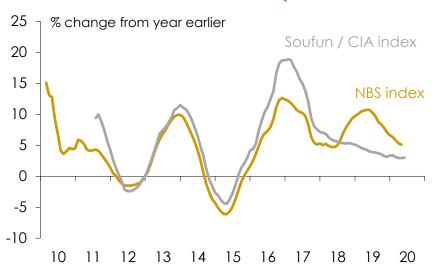
Fixed asset investment



Real estate investment



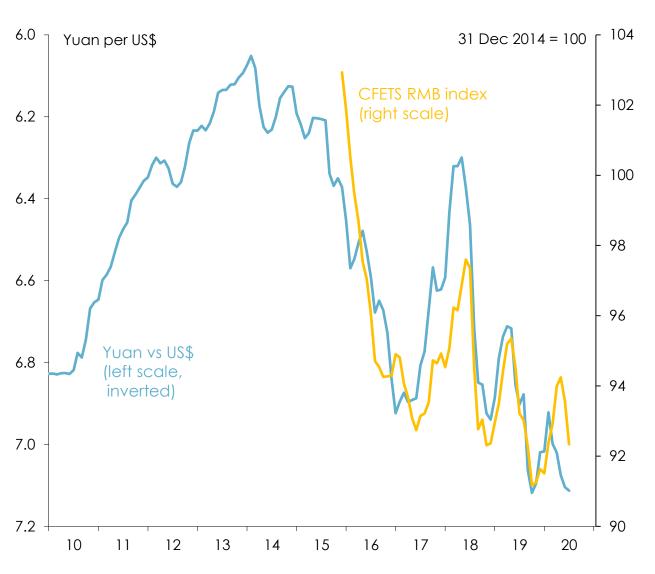
Residential real estate prices



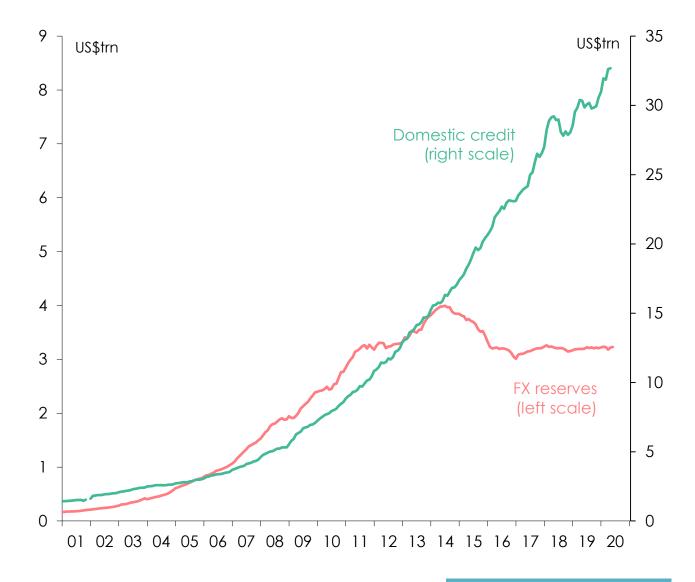


China has allowed the yuan to depreciate against the US\$ and in trade-weighted terms – but is the FX regime sustainable in the long term?

Chinese yuan vs US\$ and trade-weighted index



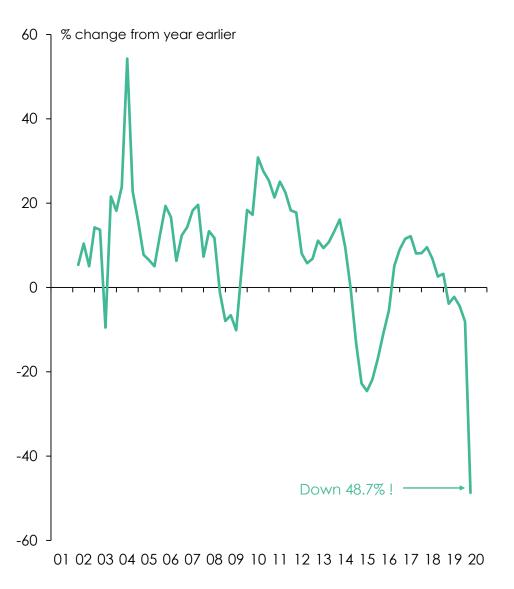
FX reserves and domestic credit



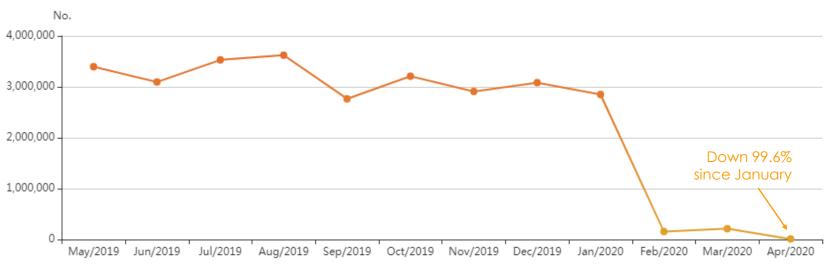


The world's worst recession is probably in Macau

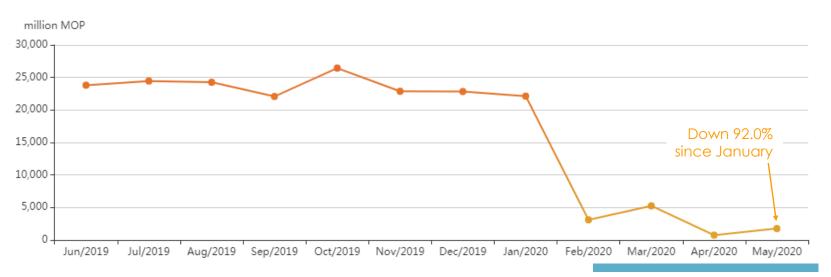
Macau - real GDP



Visitor arrivals



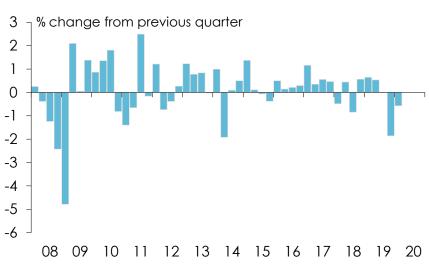
Gambling revenue



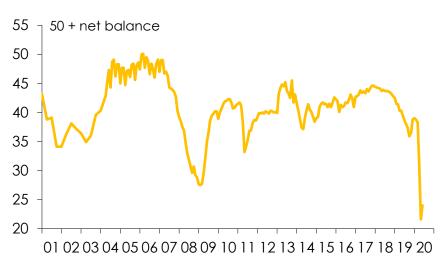


Japan entered its fourth recession since 2000 after hiking its GST rate last October, and the pandemic has worsened it

Real GDP



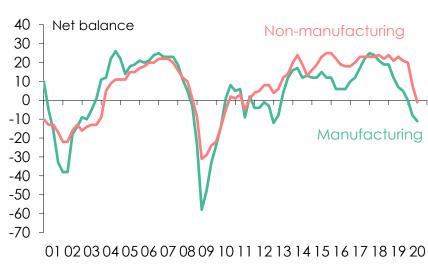
Consumer confidence



Unemployment



Business sentiment



Passenger vehicle sales

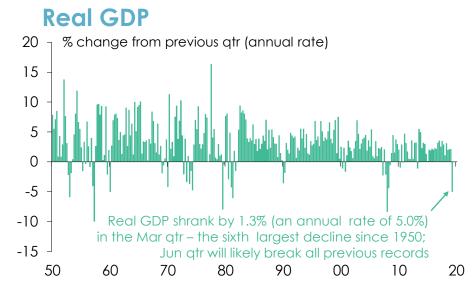


Merchandise exports

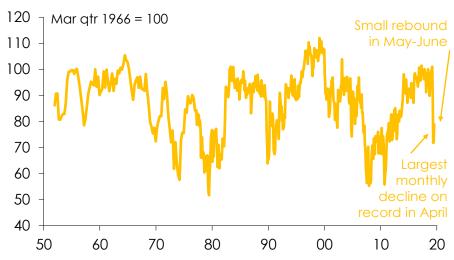




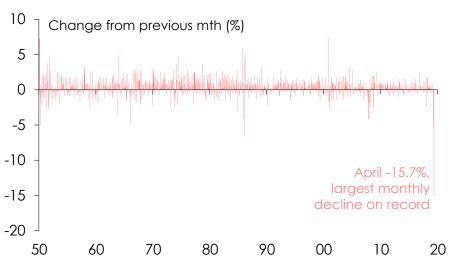
The US economy is experiencing its sharpest contraction since the 1930s







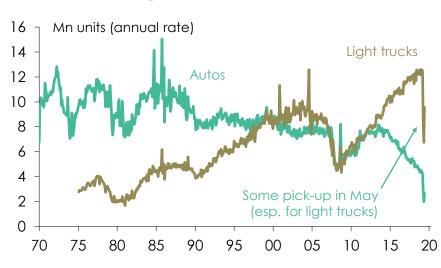
Retail sales



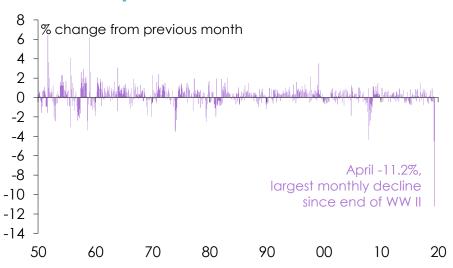
NY Fed weekly economic index



Auto and light truck sales



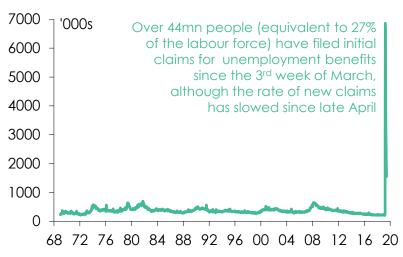
Industrial production



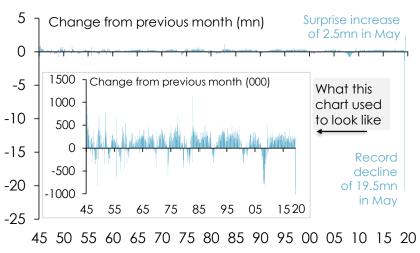


The impact on the US labour market has been particularly severe – although employment rose, and unemployment fell, in May

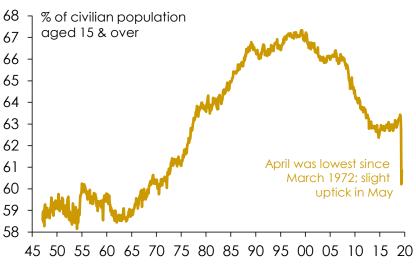
Unemployment benefit claims



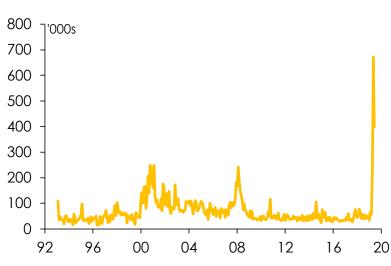
Non-farm payroll employment



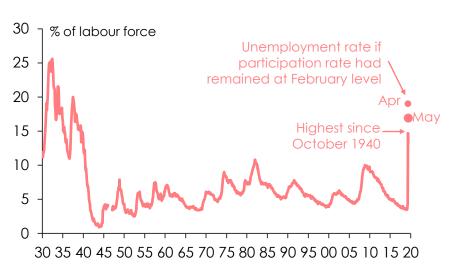
Labour force participation rate



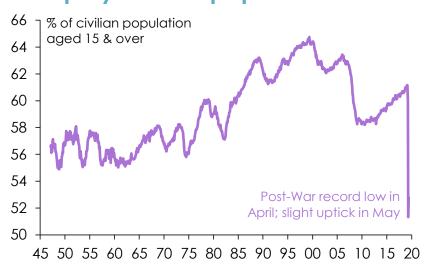
Layoff announcements



Unemployment rate



Employment to population ratio



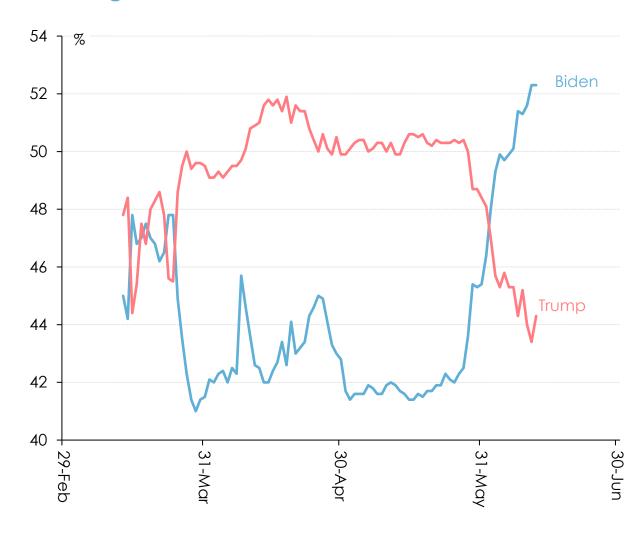


Both opinion polls and, now, betting odds are pointing to Joe Biden defeating Donald Trump in the November US Presidential election

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



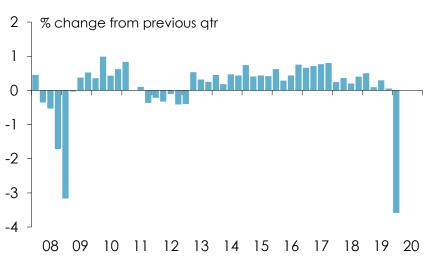
Winner of November US Presidential election – betting odds





Europe is also experiencing a sharp downturn although unemployment probably won't rise as much as in the US

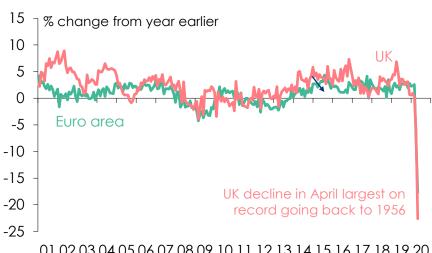
Euro area real GDP



UK monthly GDP

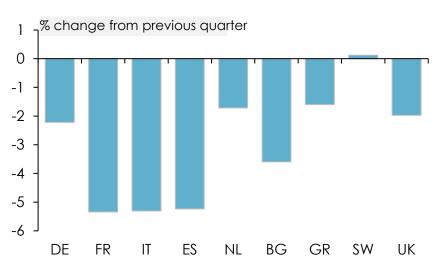


Retail sales volume

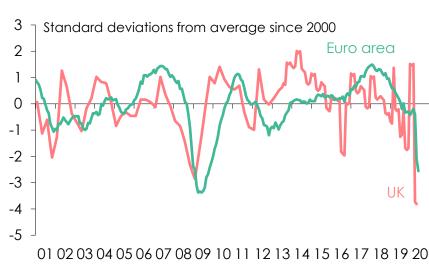


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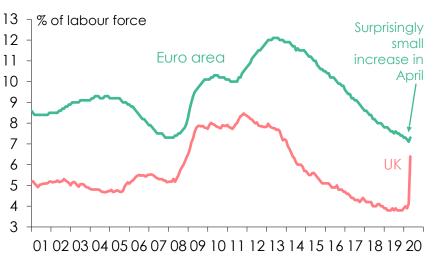
March quarter GDP by country



Business confidence



Unemployment

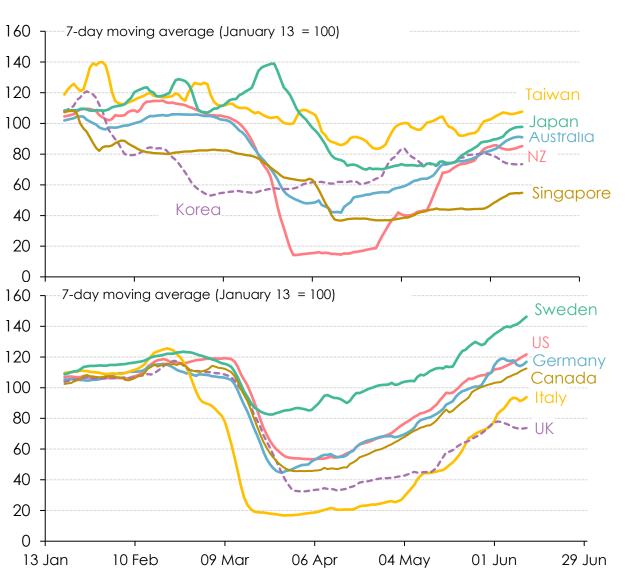


Sources: Eurostat; UK Office for National Statistics; Confederation of British Industry. The UK unemployment rate is published as a 3-month moving average; the most recent observation (for May) is derived by adding to the 'claimant count' unemployment rate the average margin between that rate and the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

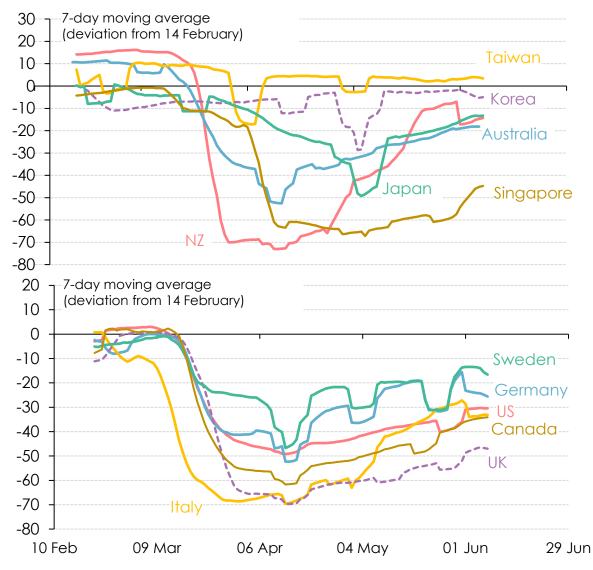


Mobility data suggest that people around the world are emerging from lockdown and gradually starting to go back to work

Time spent driving



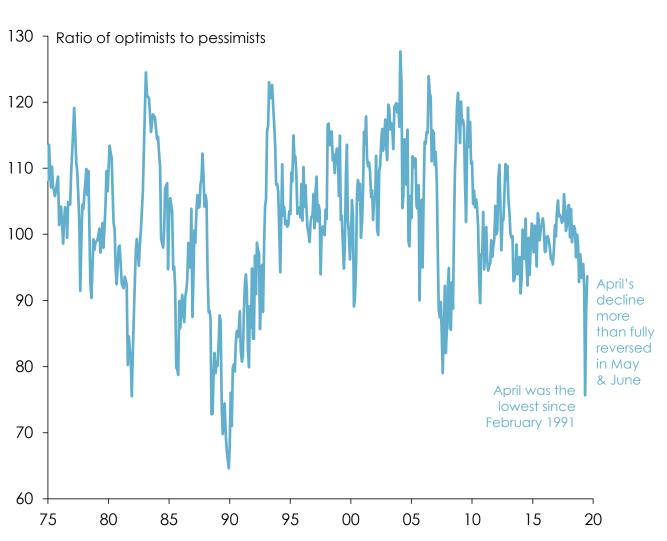
Time spent in work places



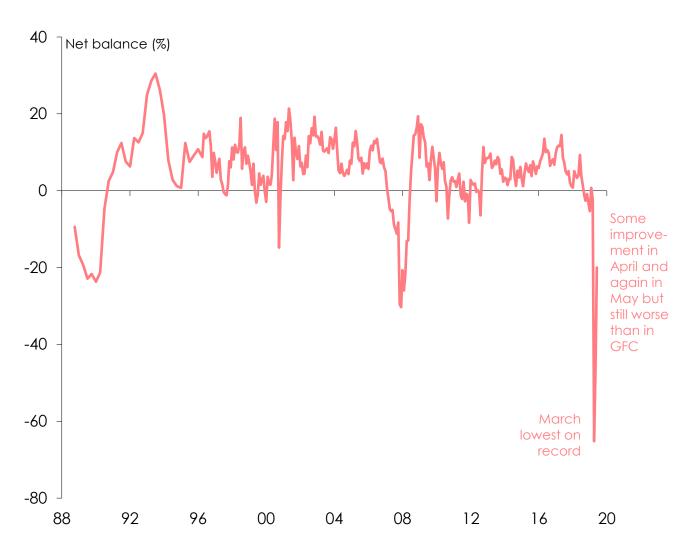


Consumer confidence is now (June) back to pre-pandemic levels, though business confidence was still quite weak as of May

Consumer confidence



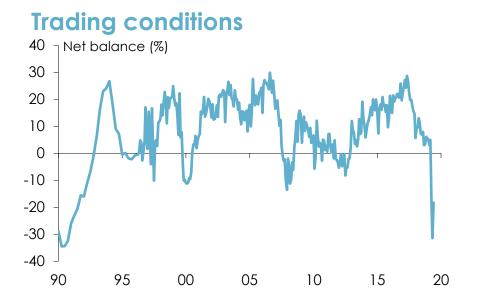
Business confidence

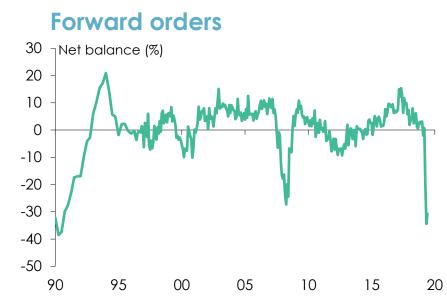


Sources: Westpac-Melbourne Institute; National Australia Bank.

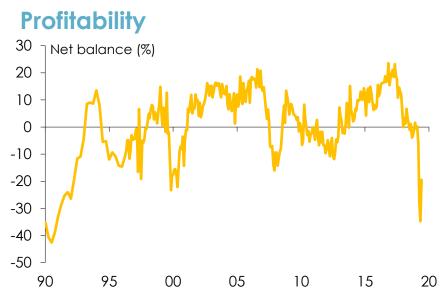


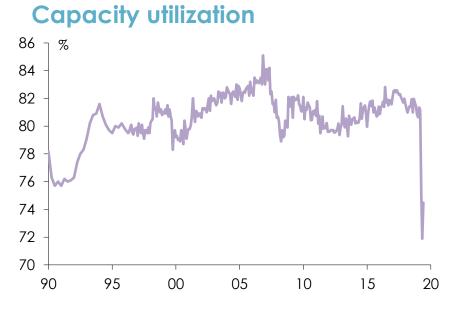
Trading conditions & profitability have improved since March but forward orders remain very weak, while hiring and capex intentions remain low

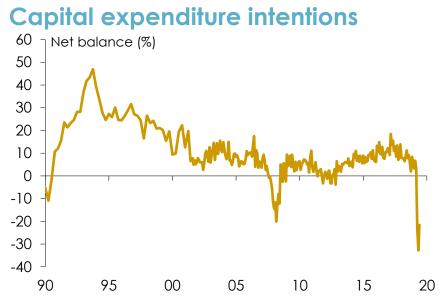






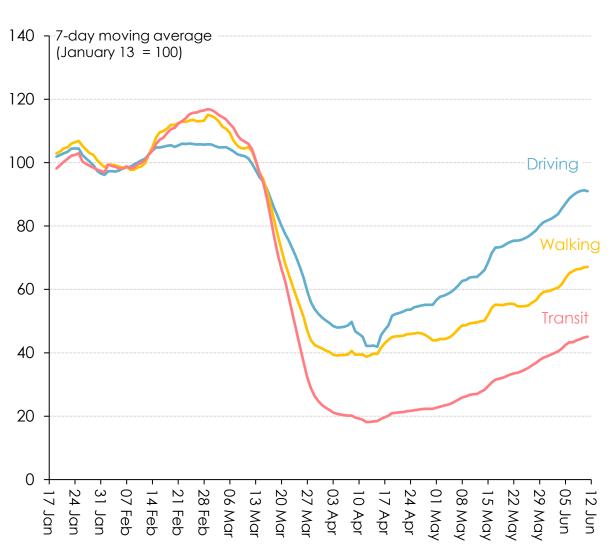




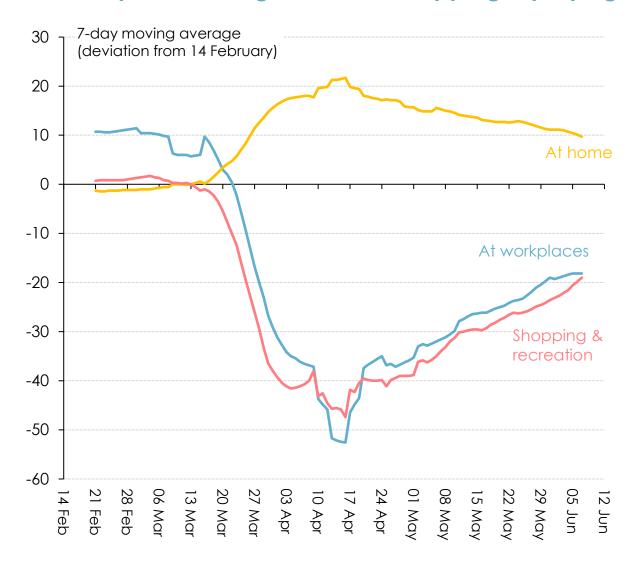


Australians stayed home while restrictions were in force, but are now starting to get out and about again

Time spent driving, walking and in transit



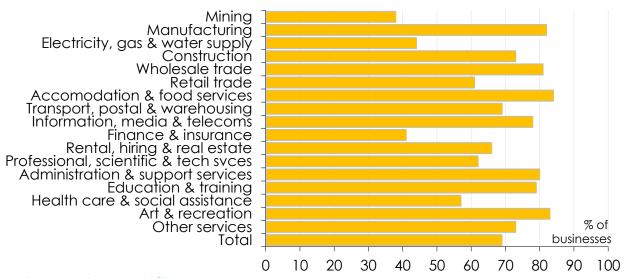
Time spent working, at home, shopping & playing



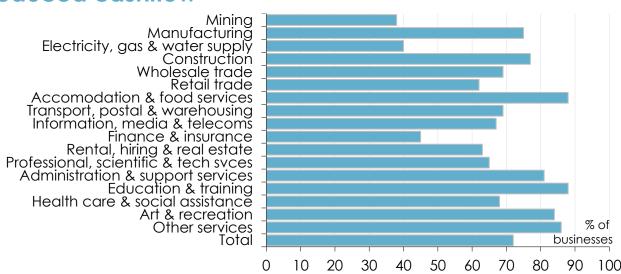


A wide range of businesses have been (or expect to be) affected by government-mandated 'social distancing' measures

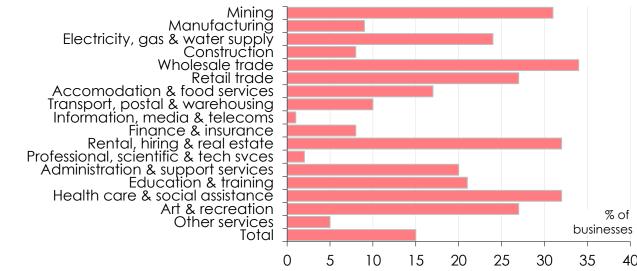
Reduced demand



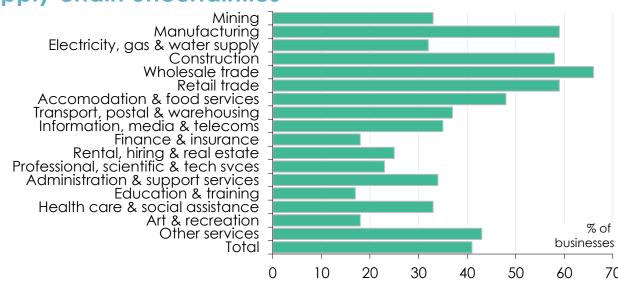
Reduced cashflow



Staff shortages



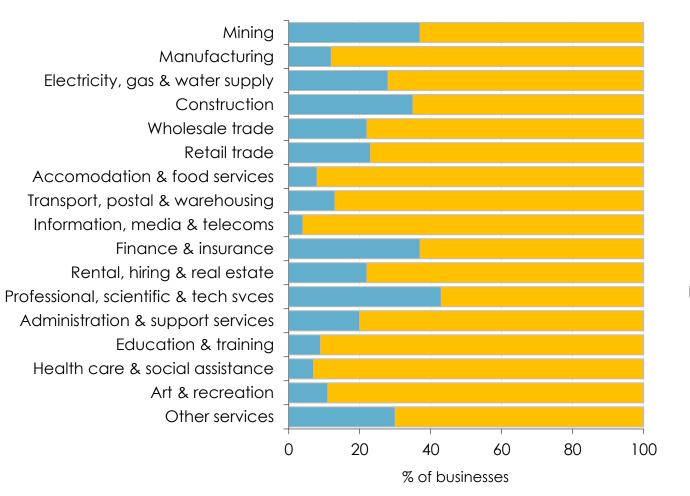
Supply chain uncertainties



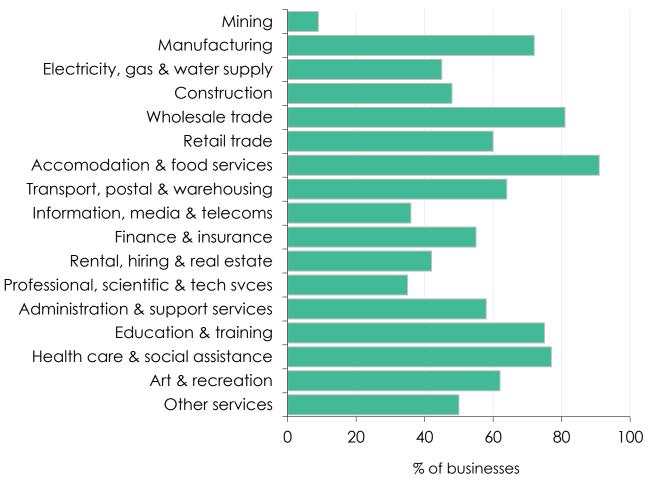


Most businesses are operating under 'modified conditions', and around half have made changes to employment arrangements

How businesses say they have been affected by government-imposed restrictions



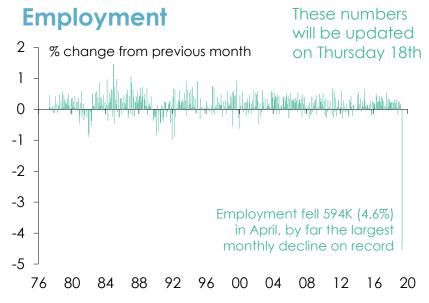
Businesses which have made changes to employment arrangements



Operating as normal
Operating under modified conditions



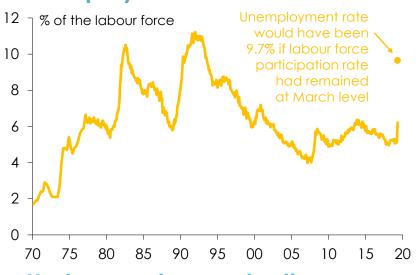
Nearly 600,000 jobs were lost in April, although more than 80% of joblosers quit the labour force, limiting the rise in (measured) unemployment



Labour force participation rate



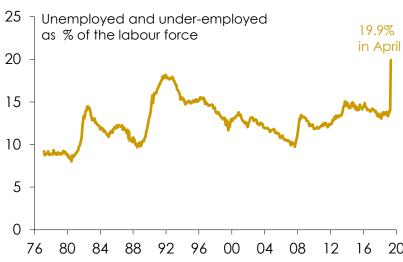
Unemployment rate



Under-employment ratio

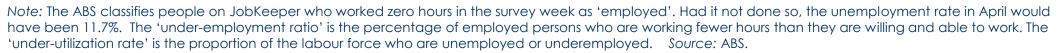


'Under-utilization' rate



Total hours worked

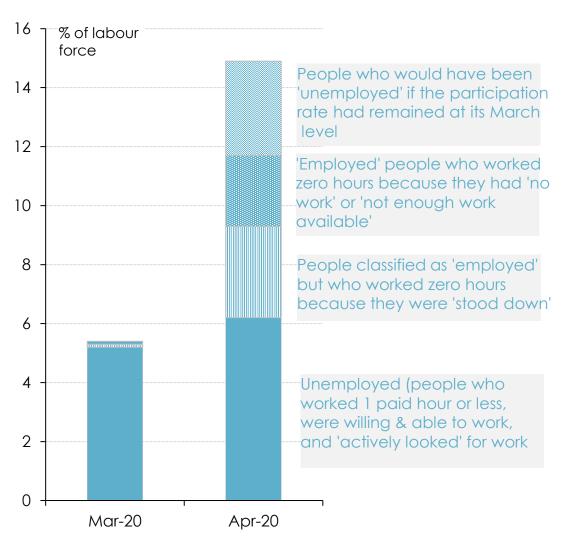






How the Government's JobKeeper program has helped to reduce measured unemployment

Alternative measures of unemployment

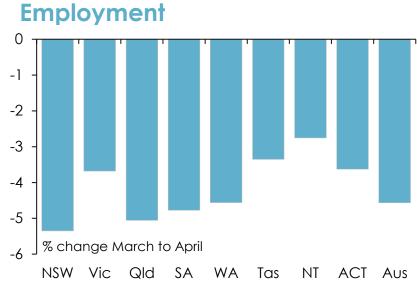


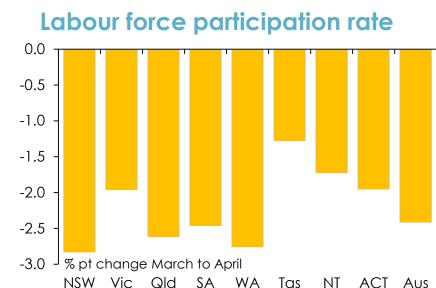
- The Government's JobKeeper program pays eligible employers a subsidy of \$1500 per fortnight for each eligible employee kept on the payroll between 30 March and 27 September
- Eligible employers are those with
 - annual turnover of <\$1bn whose turnover has fallen by >30%
 - annual turnover of >\$1bn (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
- ☐ The Government now estimates about 3½mn employees are receiving subsidized wages through JobKeeper (down from 6mn initially forecast)

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Source: ABS; Corinna.

Job losses in April were greatest in NSW & Queensland, although hours worked fell by more in Victoria, SA, WA and Tasmania

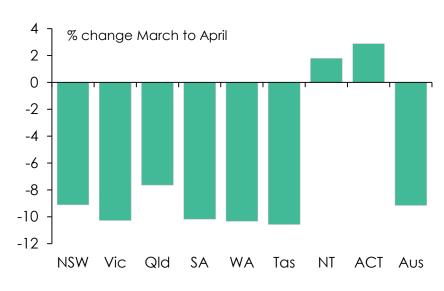




Under-employment ratio



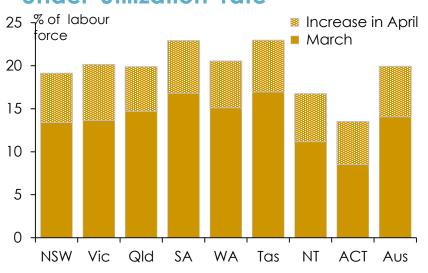
Total hours worked







'Under-utilization' rate

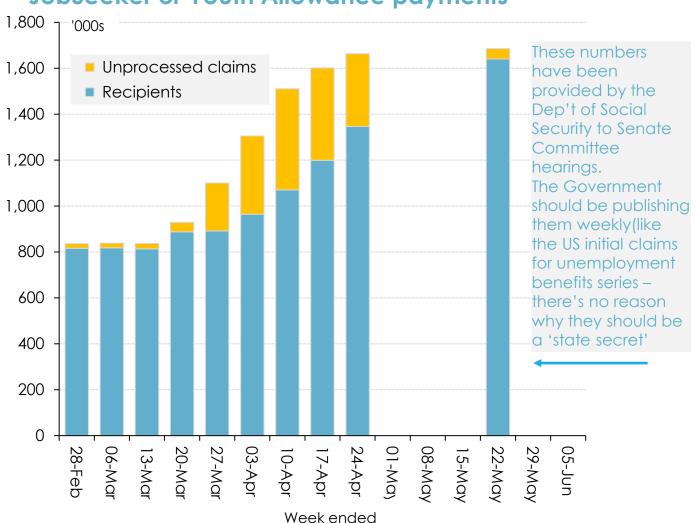


Note: The 'under-employment ratio' is the percentage of employed persons who are working fewer hours than they are willing and able to work. The 'under-utilization rate' is the proportion of the labour force who are unemployed or underemployed. May data will be released on Thursday 18th June. Source: ABS.

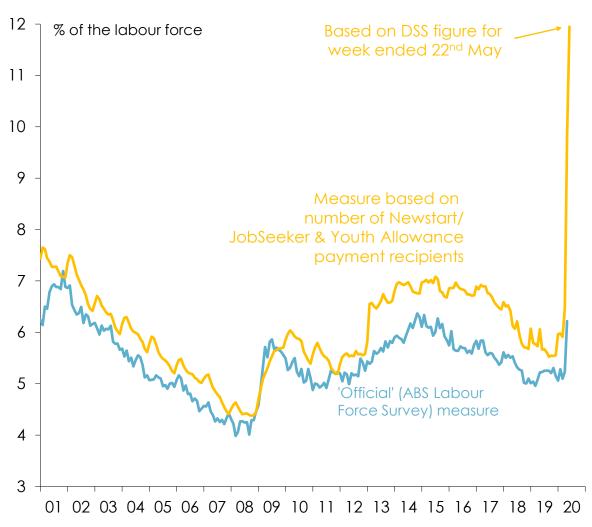


The measured unemployment rate is understating the 'true' extent of job losses

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



Alternative measures of the 'unemployment rate'

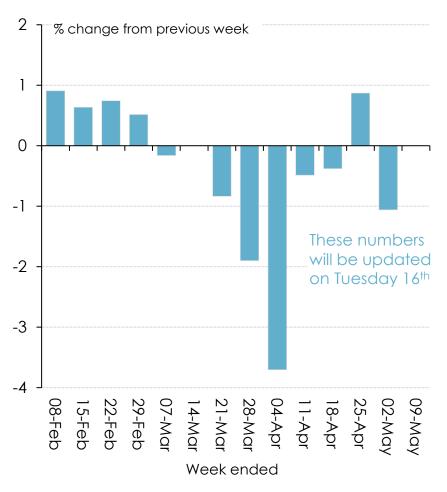




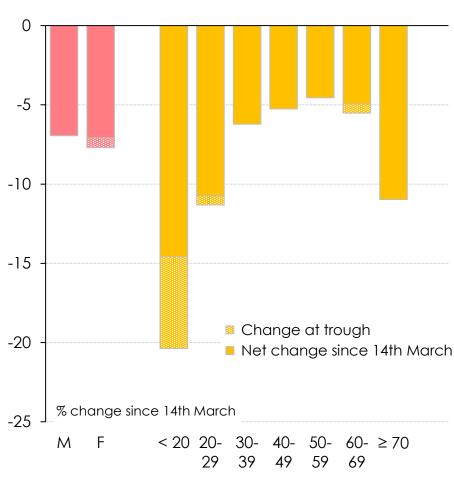


Payroll employment has fallen by 71/4% since 'social distancing' restrictions were imposed from mid-March, but the pace of job losses has slowed

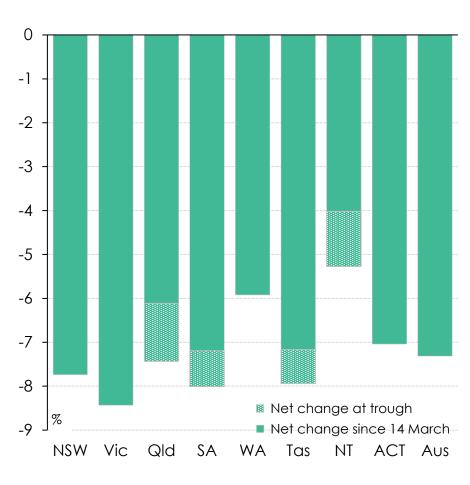
Weekly change in number of payroll jobs



Change in payroll jobs by age & gender



Change in payroll jobs by State & Territory

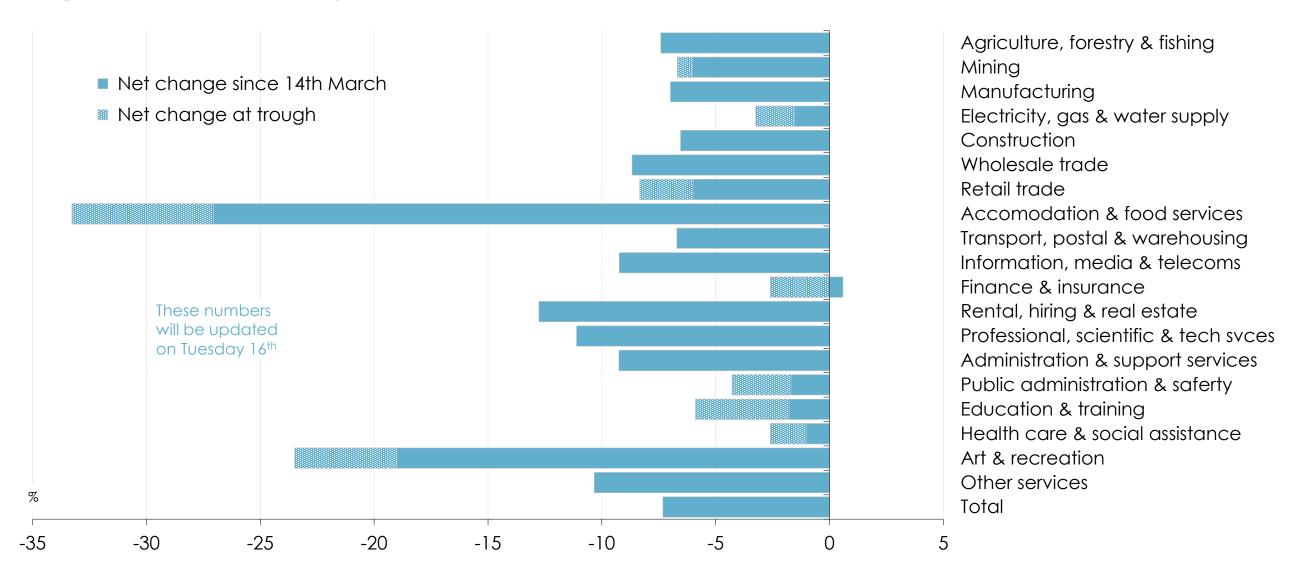


Source: ABS. Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's Singe Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. Data are not seasonally adjusted.



Employment has fallen much more sharply in services sectors than in sectors producing or distributing goods

Change in number of payroll jobs between 14th March and 2nd May, by industry

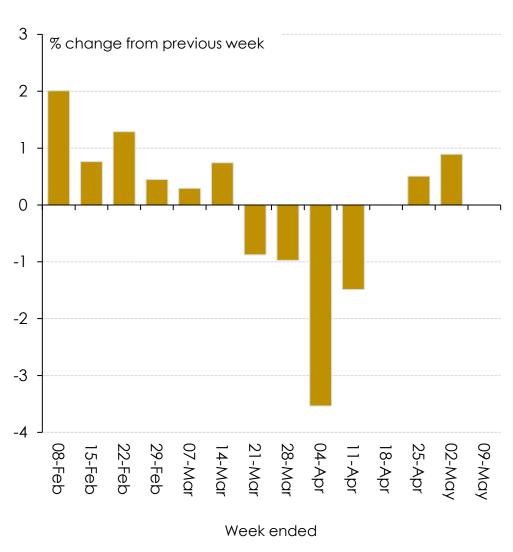


Source: ABS. Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's Single Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. Data are not seasonally adjusted.

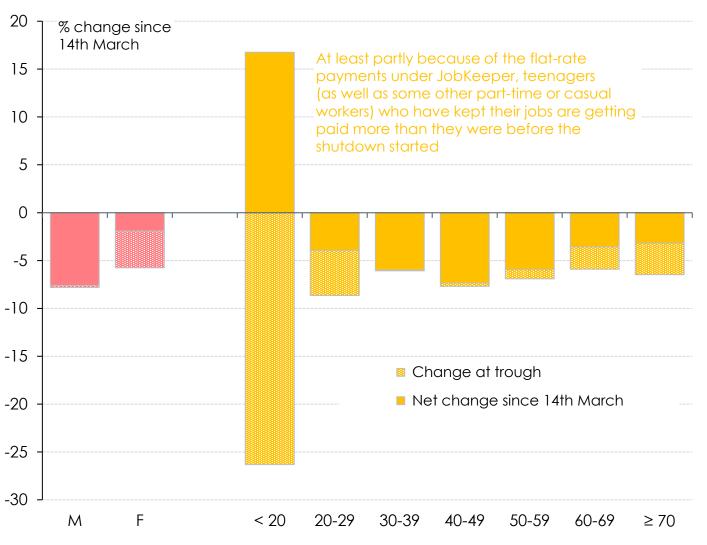


Wages have risen since the Government's JobKeeper program started, and teenagers are getting paid more than they were before the shutdown

Weekly change in total wages paid



Change in total wages paid by gender and age group

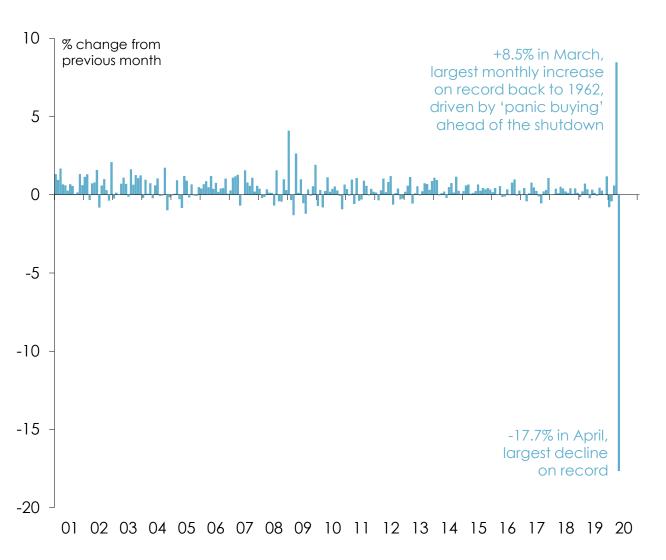


Source: ABS. Data refers to the wages paid by businesses participating in the Australian Taxation Office's Singe Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. Data are not seasonally adjusted.

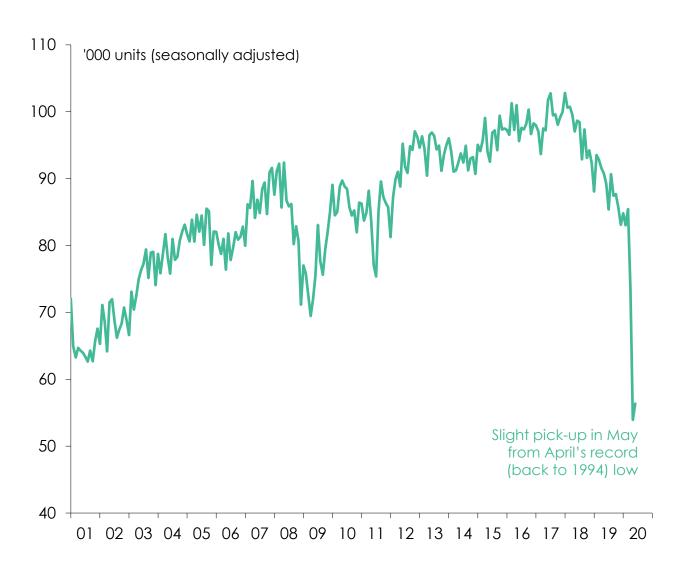


Retail sales fell 18% in April after a surge of 'panic buying' in March, while car sales are at their lowest level in at least 26 years

Retail sales



Motor vehicle sales

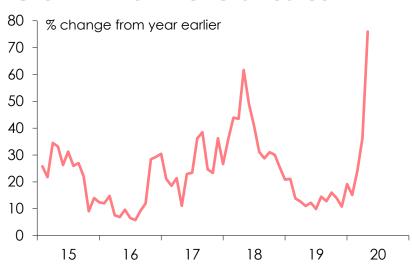


Sources: ABC; Federal Chamber of Automotive Industries VFACTS (seasonal adjustment of FCAI data by Corinna)



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

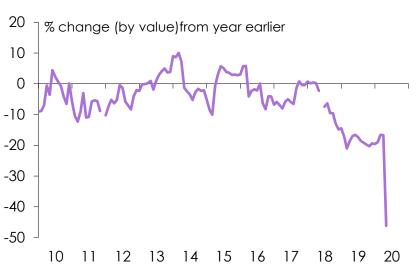
Growth in online retail sales



ATM cash withdrawals



Credit card cash advances



Online retail 'market share'



Debit card cash-outs



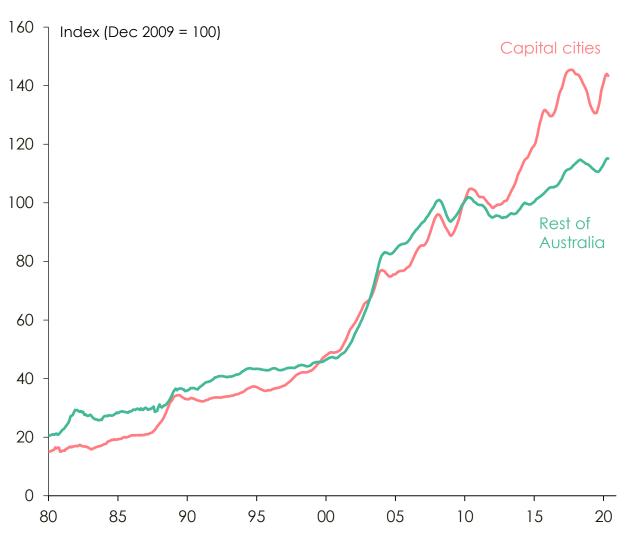
Direct entry payments



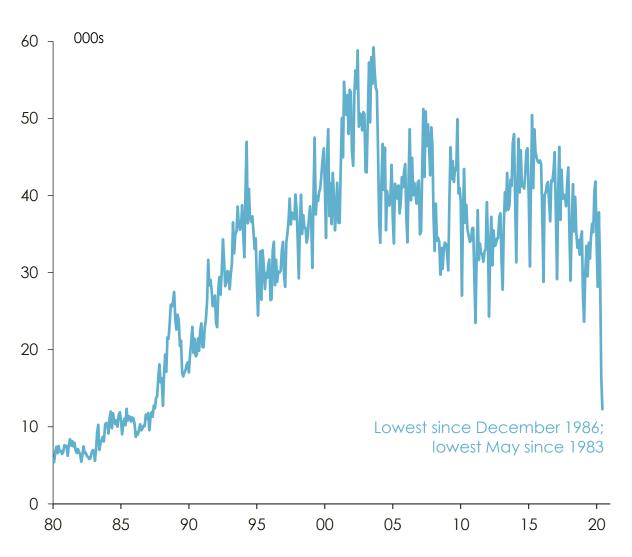


Property prices have held up thus far (despite a small fall in May), but sales volumes have fallen to their lowest level in more than 30 years

Residential property prices



Residential property sales volumes

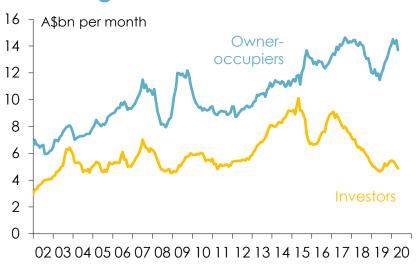


Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Latest data are for May 2020. Source: CoreLogic.



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

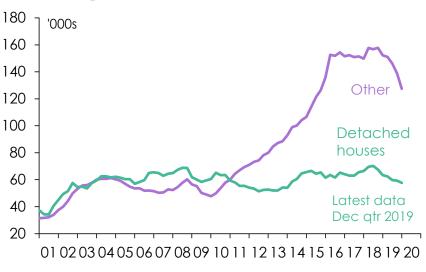
Housing finance commitments



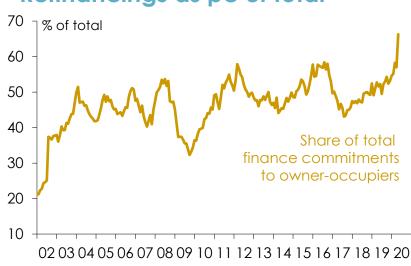
Large builders' new home sales



Dwellings under construction



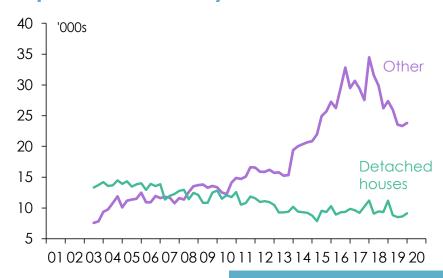
Refinancings as pc of total



Residential building approvals



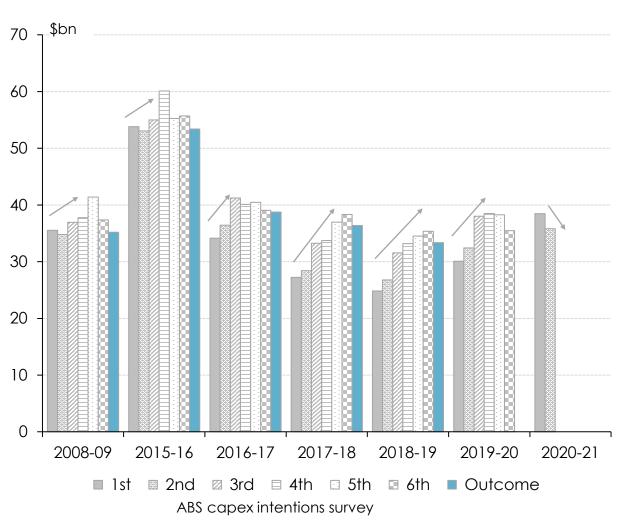
'Pipeline' of work yet to be done



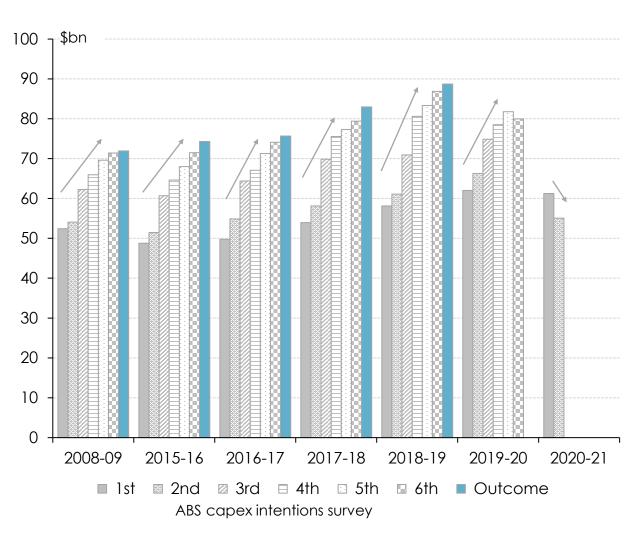


Businesses have cut back their capital expenditure intentions for 2020-21, which is unusual for this time of year

Capital expenditure intentions - mining



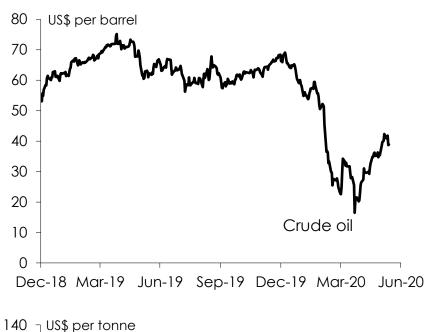
Capital expenditure intentions – non-mining

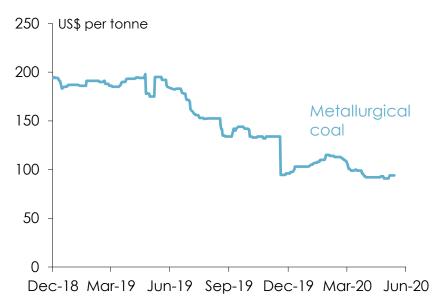


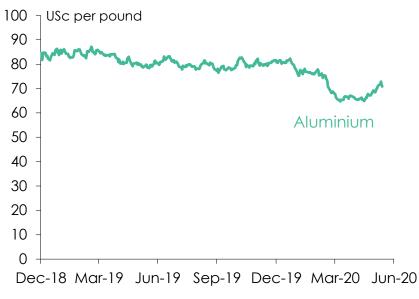
Note: The ABS conducts six surveys of business' capital expenditure intentions in respect of each financial year. The first is conducted in January & February prior to the commencement of the financial year, the second in May & June, the third in July & August of the financial year, the fourth in October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



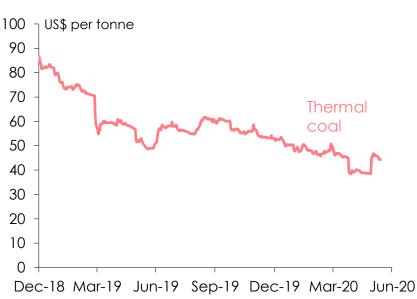
Despite a sharp fall in oil prices, Australian export commodity prices have proved relatively resilient (unlike during the GFC)

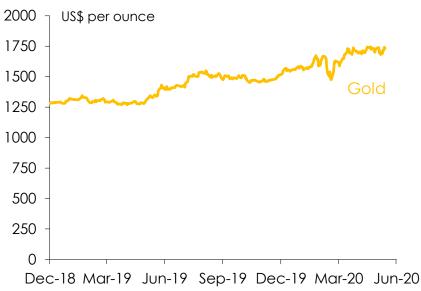








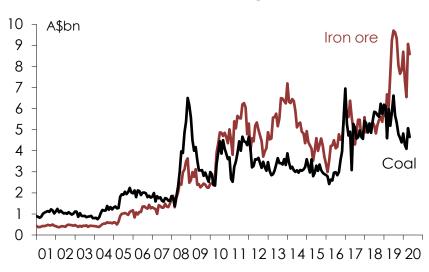




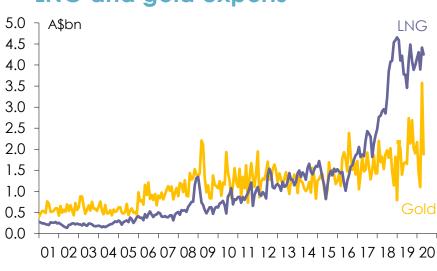


Australian exports have held up remarkably well, while even the tourism trade balance has improved

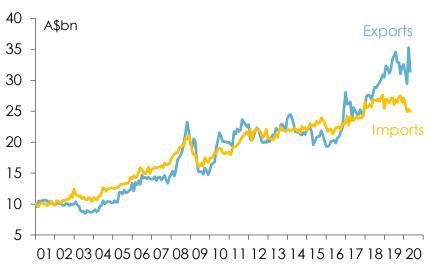
Iron ore and coal exports



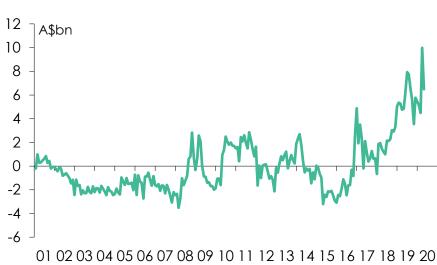
LNG and gold exports



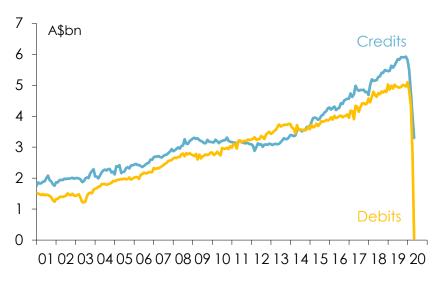
Merchandise exports and imports



Merchandise trade balance



Tourism-related services trade



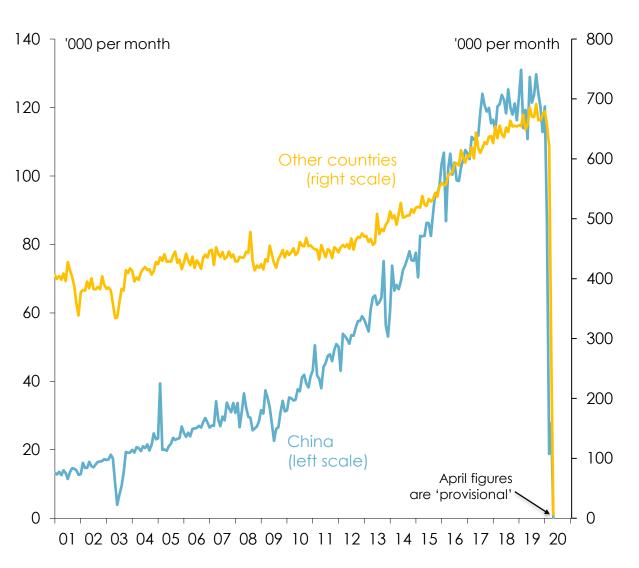
Tourism services trade balance



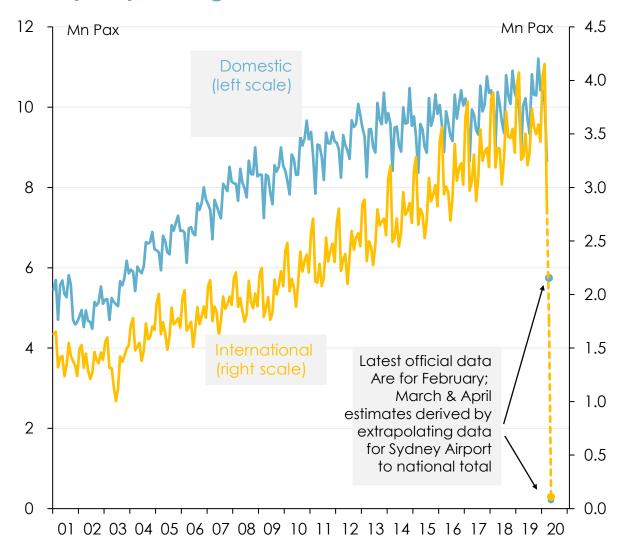


Tourism and aviation have been severely impacted by the closure of international and most state borders

Short-term visitor arrivals



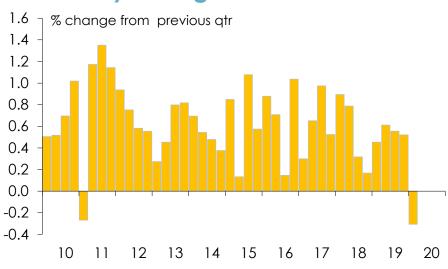
Airport passenger movements



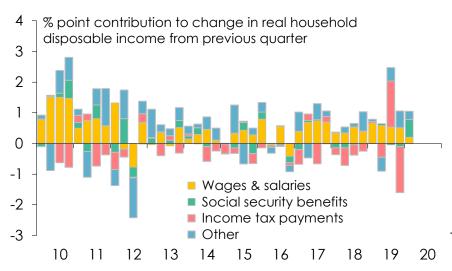


Real GDP declined in Q1 for the first time in 9 years, reflecting the impact of bushfires and 'social distancing' restrictions on private demand

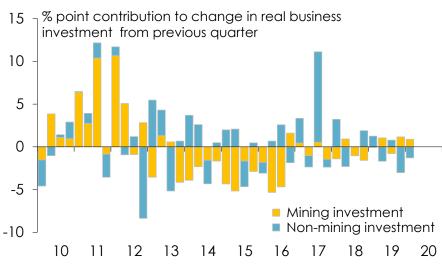
Quarterly change in real GDP



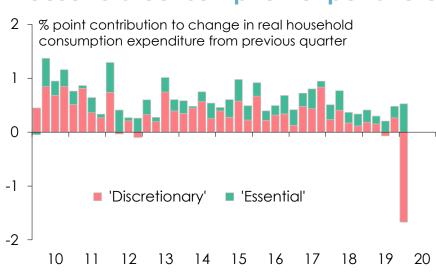
Household disposable income



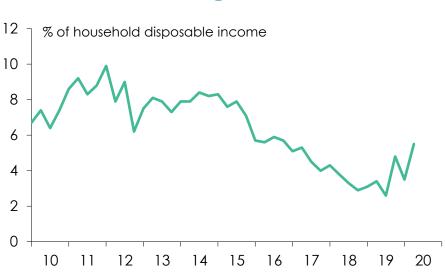
Business investment expenditure



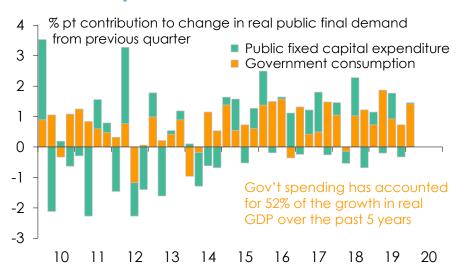
Household consumption expenditure



Household saving rate



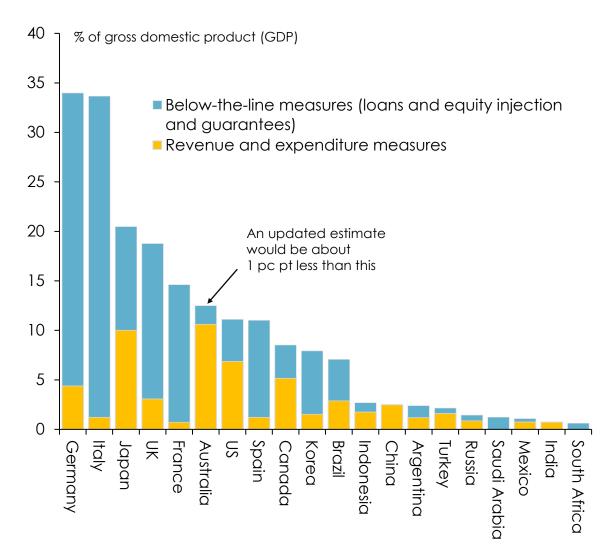
Public expenditure





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

Policy responses to Covid-19 – G20 countries

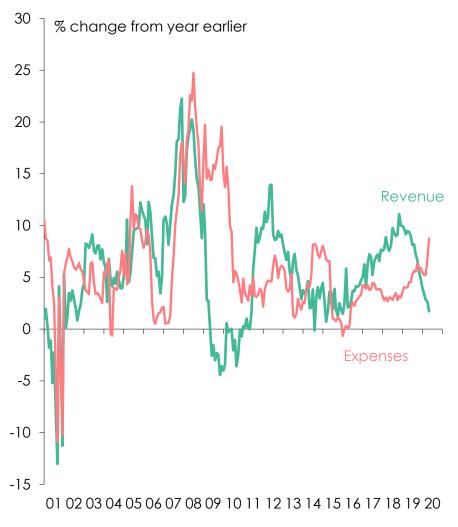


- □ Policy measures announced thus far by the Australian Government total \$180bn (allowing for the downward revision to the cost of JobKeeper), or about 9% of GDP which is large by international standards (and double what was done during the GFC)
- Principal objectives of policy measures have been to
 - maximize the 'survival prospects' of businesses affected by the shutdown
 - 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 has resulted in some anomalies
- Policy measures also designed to be readily 'switched off' once the need for them has passed
 - most of them scheduled to terminate at the end of September
 - which does create some risks of a 'setback' at that time unless the Government 'tapers' some programs

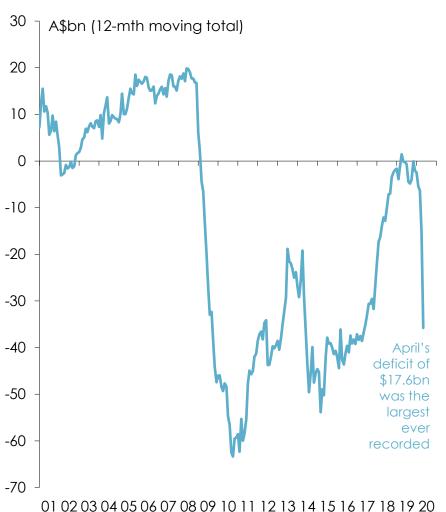
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The Australian Government's 'bottom line' has begun to deteriorate sharply, and ...

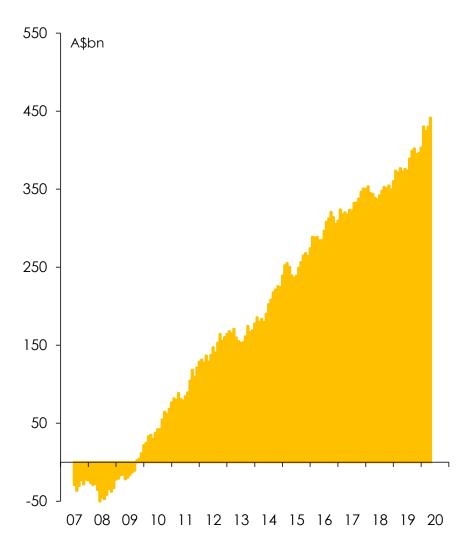
Australian Government revenue and expenses



Australian Government 'underlying' cash balance



Australian Government net debt

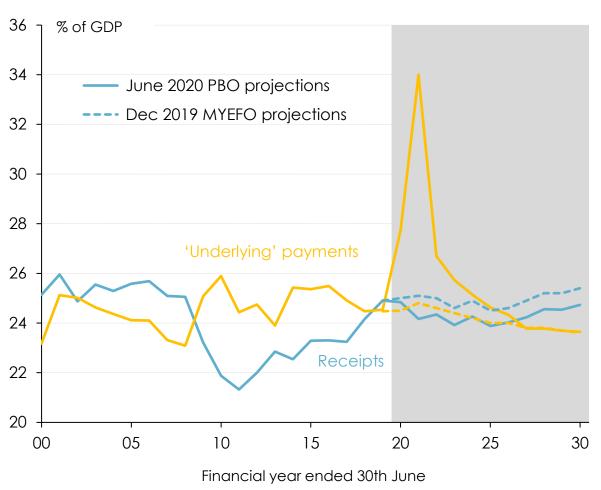


Note: Revenue and expenses are accrual accounting items. The 'underlying' cash balance is (cash) receipts minus payments, excluding transactions in financial assets for policy purposes and net earnings of the Future Fund. Net debt is total interest-bearing liabilities (government securities, deposits,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

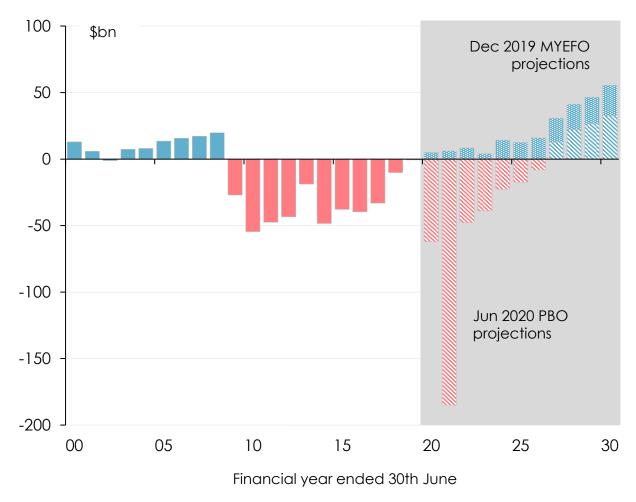


... will blow out to over \$60bn in 2019-20, around \$185bn in 2020-21, and won't return to surplus (on unchanged policies) until 2026-27 – but ...

Australian Government receipts and 'underlying' payments



Australian Government 'underlying' cash balance

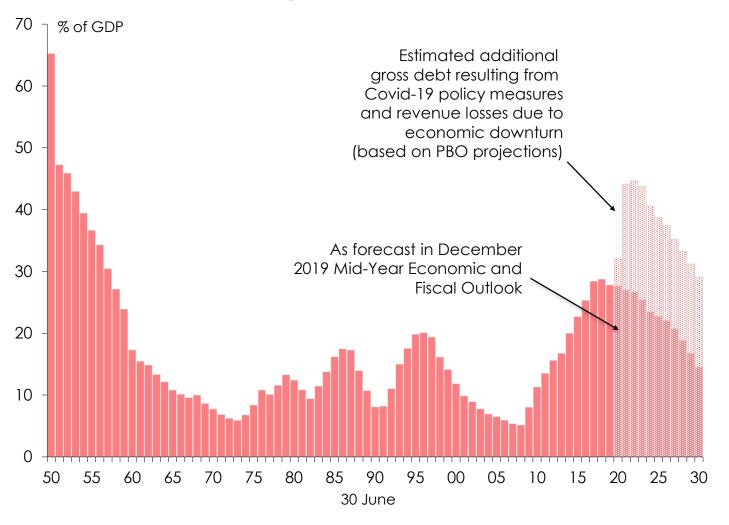


Note: 'Underlying' payments excludes net investment in financial assets for policy purposes. The 'underlying' cash balance also excludes net earnings of the Future Fund prior to 2020-21. Sources: Australian Government, Mid-Year Economic and Fiscal Outlook (MYEFO), December 2019; Parliamentary Budget Office (PBO), Mediumterm fiscal projections: impact of Covid-19 pandemic and response (5th June 2020). The PBO projections were compiled using the RBA's 'baseline' scenario outlined in its May 8th Statement on Monetary Policy for economic parameters.

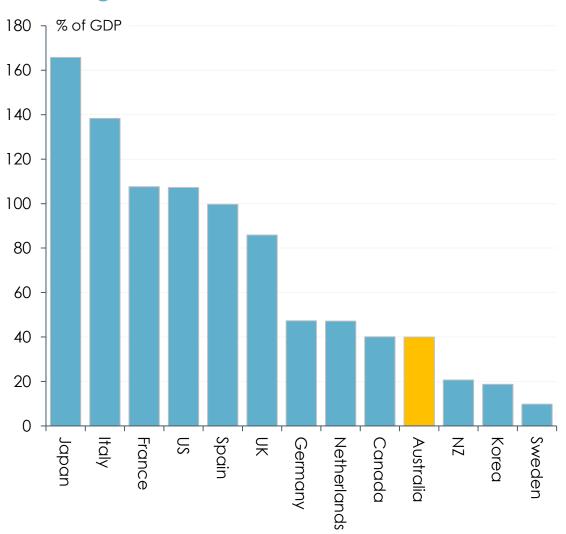


... there's no need for undue alarm at the level of debt which will be incurred by the Australian Government

Australian Government gross public debt



General government net debt, 2021

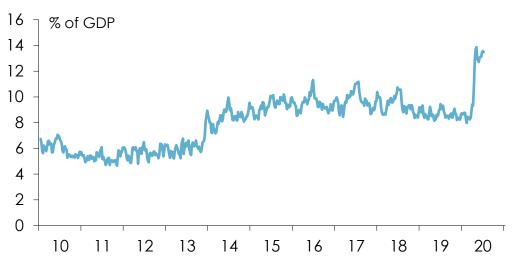


Note: Estimates of additional gross debt from 2019-20 onwards are derived by assuming that gross debt rises by the same dollar amount as net debt projected by the Parliamentary Budget Office in its 'baseline' scenario. Sources: Katrina Di Marco, Mitchell Pirie and Wilson Au-Yeung, A History of Public Debt in Australia (Australian Treasury, 2011); Australian Government, Mid-Year Economic and Fiscal Outlook (MYEFO), December 2019; Parliamentary Budget Office (PBO), Medium-term fiscal projections: impact of Covid-19 pandemic and response (5th June 2020); International Monetary Fund, Fiscal Monitor, April 2020.

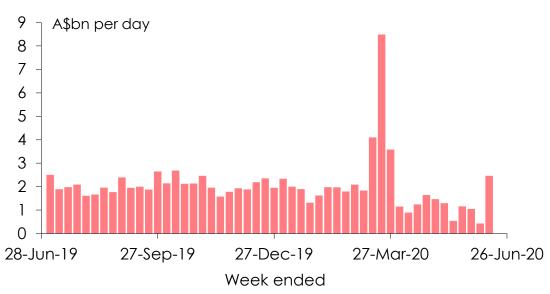


With official interest rates as low as they can go, the RBA has implemented a range of 'quantitative' monetary policy measures

Reserve Bank assets as a pc of GDP



Reserve Bank daily repo transactions

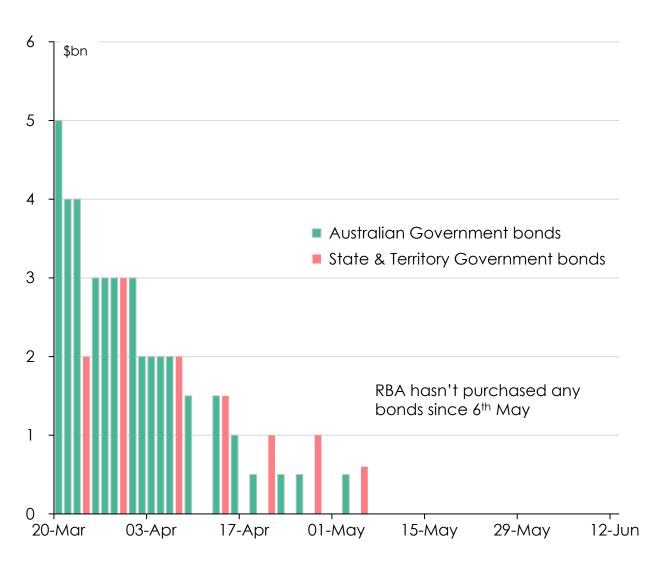


- ☐ Cash rate cut to 0.25%
 - the RBA has committed to keeping it at this level for an extended period
 - RBA has 'no appetite' for negative rates
- RBA has committed to purchase bonds in the secondary market with a view to keeping the 3-year yield at 0.25%
 - to date RBA bond purchases amount to \$50bn ($\sim 2\frac{1}{2}\%$ of GDP)
 - the RBA hasn't purchased any bonds since 6th May
 - RBA assets are now equivalent to 13½% of GDP(cf. BoC 20%, US Fed 33%, BoE 35%, ECB 47%, BoJ 117% see slide 16) and RBNZ 15%
- RBA provided additional liquidity through 'open market operations' to prevent disruption of credit markets in March
 - RBA repo transactions averaged just over \$1bn a day in April and May, down from peak of almost \$8½bn a day in 3rd week of March
 - but increased to an average of almost \$2½bn a day last week
- ☐ 'Term Funding Facility' to provide up to \$90bn at 0.25% pa to lending institutions for increased lending, especially to businesses with annual turnover of less than \$50mn
 - to date \$10½bn has been provided through this facility
 - of which \$41/4bn was taken up this past week

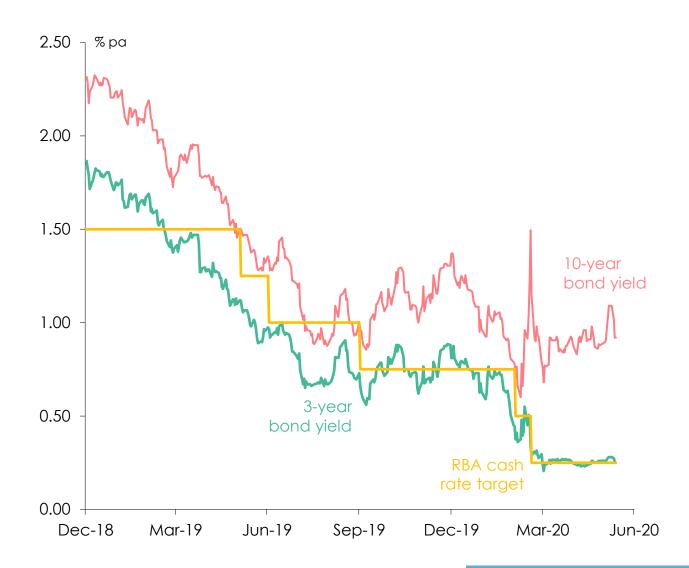


RBA's bond purchases are targeted at keeping the 3-yeard bond yield at 0.25% pa

RBA open market bond purchases



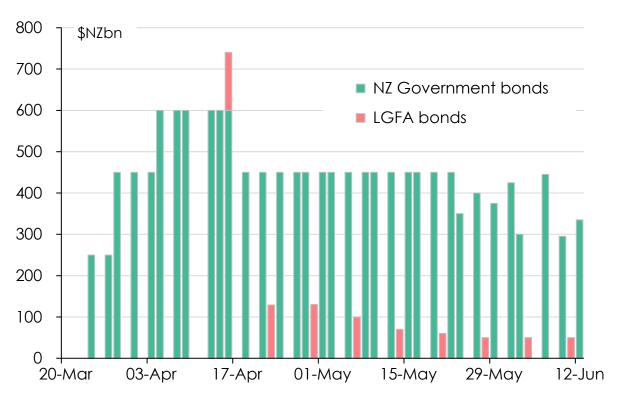
Interest rates



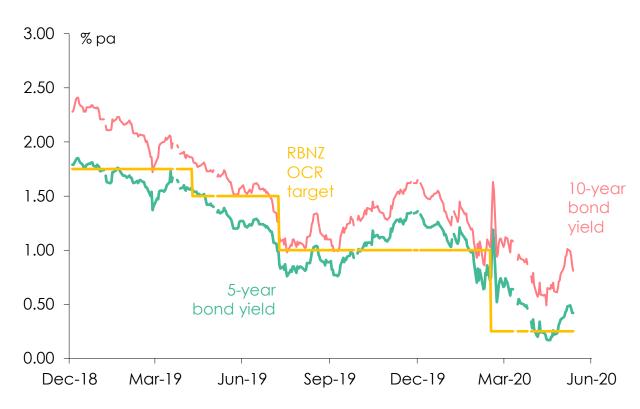


The RBNZ's 'QE' program has been larger than the RBA's, but less successful in stabilizing bond yields

RBNZ open market bond purchases



New Zealand interest rates

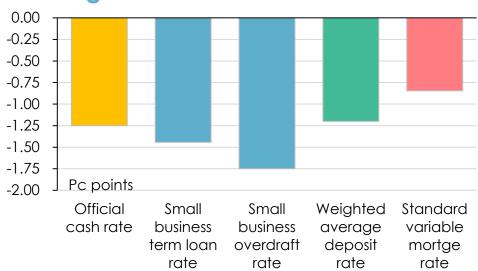


- □ RBNZ has adopted an ECB-style QE program, establishing a Large Scale Asset Program initially set at \$NZ33bn (10½% of GDP), since increased to \$60bn (19% of GDP)
- □ Since 25th March RBNZ bond purchases have amounted to \$NZ16bn (5% of GDP) but have been less successful than the RBA's in stabilizing medium-term bond yields
- ☐ The RBNZ has asked banks to prepare operationally for the possibility of negative interest rates

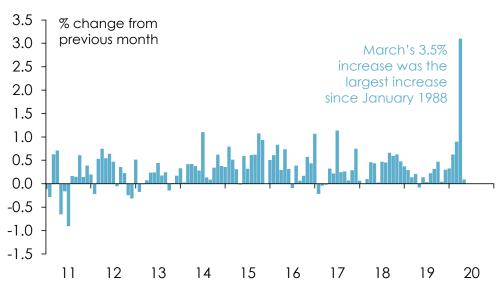


For now at least, banks are 'part of the solution', not 'part of the problem'

Changes in interest rates since June 2019



Business credit outstanding



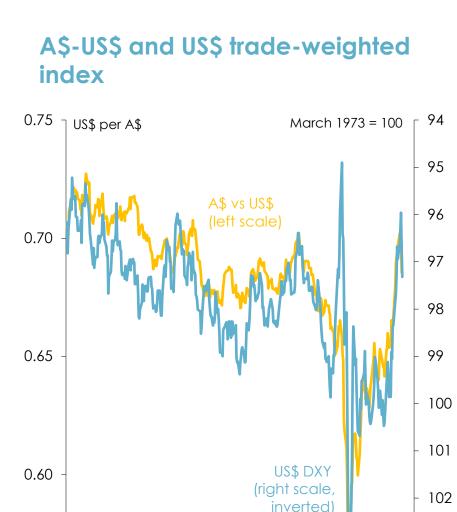
- □ Banks have cut interest rates on small business loans by more than the official cash rate since June last year (when the RBA started cutting rates again)
- ☐ Supported by the RBA's Term Lending Facility, lending to business rose by more in March this year than in any month in the past 32 years
 - In addition banks have extended 'repayment holidays' of up to six months to business and home mortgage borrowers who request it (about 10% 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
- Major banks have cut or deferred dividends
- At end-2019, the Australian banking system had a Common Equity Tier 1 capital ratio of 11.3% of risk-weighted assets well above the 10.5% required for major banks since 2017
 - APRA will allow banks CET1 ratios to drop below the 2017 requirements during the Covid-19 period provided they remain above other minimum prudential capital requirements
- Banks will be hit by increased loan impairment charges after 30th September



Source: Reserve Bank of Australia.

After getting back to US70¢ on the back of higher iron ore prices, a weaker US\$ and stronger risk appetites, the A\$ fell back to 68½¢ this week



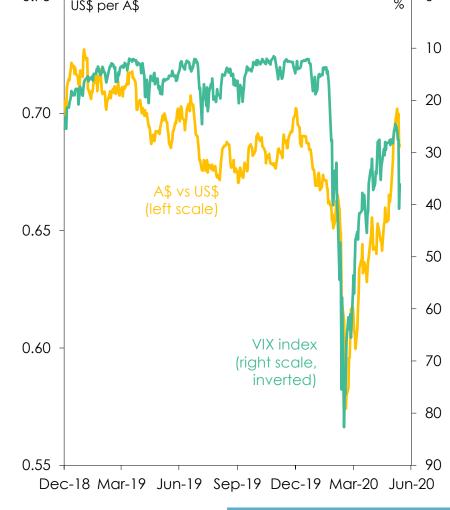


Dec-18 Mar-19 Jun-19 Sep-19 Dec-19 Mar-20 Jun-20

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

5 U\$\$ per A\$



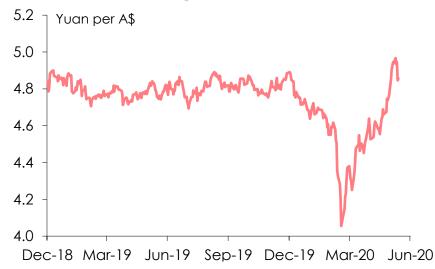


The A\$ fell back a little against other currencies this past week, after recouping most of its Feb-Mar losses during the preceding 11 weeks

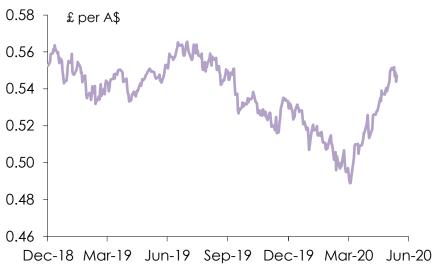
A\$ vs Japanese yen



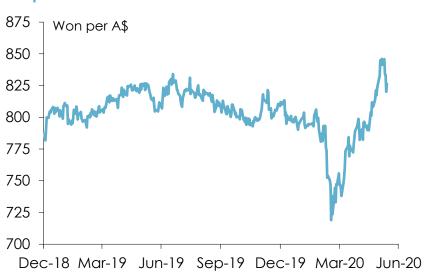
A\$ vs Chinese yuan



A\$ vs British pound



A\$ vs Korean won



AS vs Euro



A\$ vs NZ\$

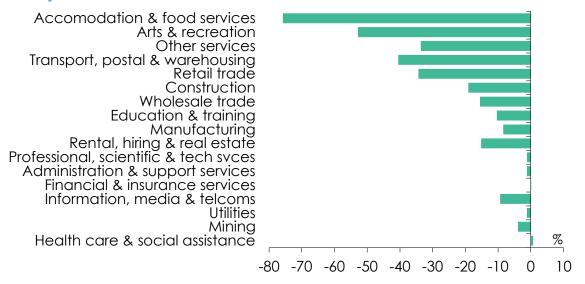




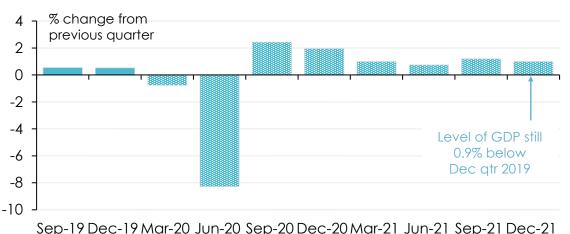


With 'social distancing' restrictions gradually eased from mid-May on, GDP could fall by about 9% and unemployment peak around 10%

Projected peak-to-trough decline in output, by sector



Projected quarterly real GDP profile

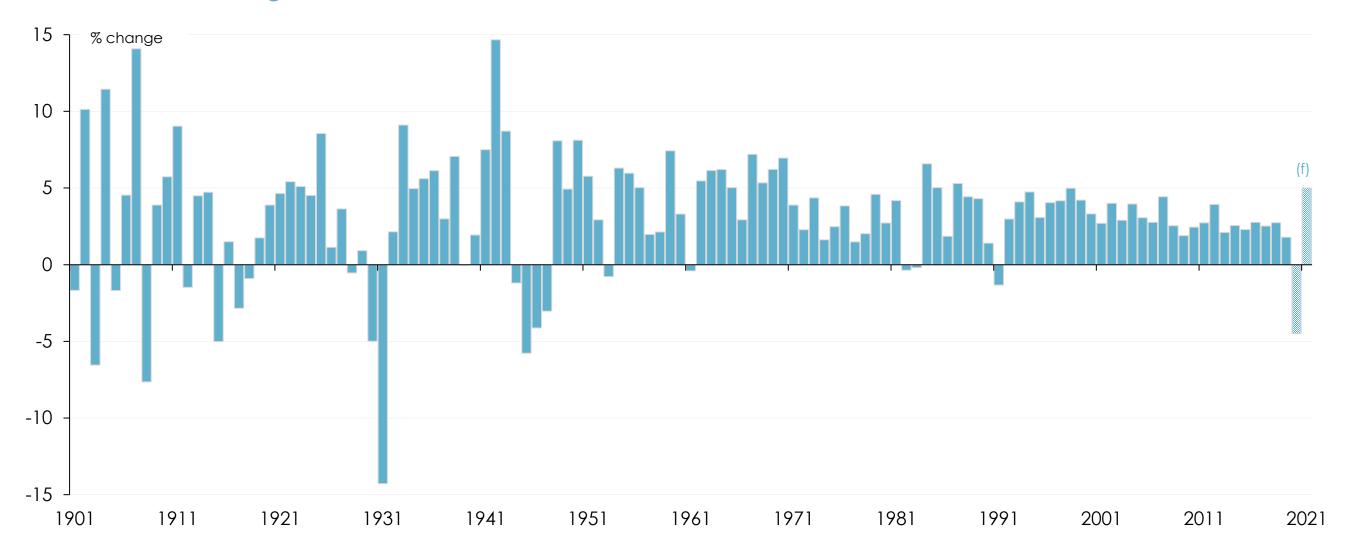


- GDP forecasts have been constructed using estimates of notional monthly changes in gross value added by industry, rather than the conventional approach of quarterly changes in the major expenditure components of GDP (consumption, housing & business investment, government spending, net exports etc)
- When the lock-down began, governments were indicating that restrictions would likely remain in force until the end of September
- On that basis, real GDP seemed likely to decline by at least 12 % between Dec atr 2019 and the probable trough in Sep atr 2020
- However with restrictions being eased (gradually) from mid-May onwards, the peak-to-trough decline in GDP may be 9% or less, with positive growth resuming in the Sep atr
- That would imply year-average growth of about -3/4 for FY 2019-20 and -21/4% for FY 2020-21; or -41/2% for CY2020 and +3% for CY 2021
- Even with an earlier easing of restrictions, a 'V-shaped' recovery looks unlikely (see slide 68) – and some additional fiscal stimulus is likely to be required to support the recovery that will occur
- Unemployment now seems likely to peak at around 8% rather than 10% as feared initially – although how far unemployment rises in practice is very sensitive to whether people who have lost jobs remain 'in the labour force'



The contraction in real GDP in 2020 will still be the largest since the Great Depression

Australian real GDP growth since 1901

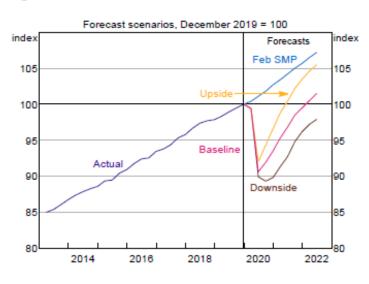




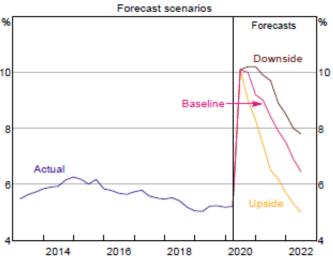
The RBA's most recent Monetary Policy Statement presented three alternative scenarios

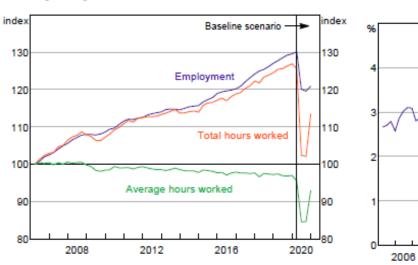
GDP

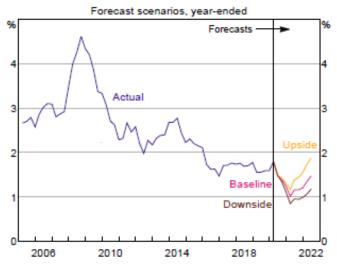
Employment



Unemployment







'Underlying' inflation

- The RBA's 'baseline' scenario assumes that most 'social distancing' restrictions are lifted by the end of the September quarter, apart from those on large public gatherings and events, and international borders (which aren't opened until early 2021)
- In this scenario real GDP declines by 5% in 2020 but rebounds by 4% in 2021, while unemployment peaks at around 10% in the current (June guarter) and declines to 61/2% by Dec atr 2021
- The RBA's 'upside' scenario assumes most restrictions are phased out over coming months (which is more in line with the Government's "Three Step Plan" announced on 9th May
- Under this scenario most of the initial decline in real GDP is reversed by mid-2021, while unemployment could be back to 51/4% by mid-2022
- The 'downside' scenario assumes restrictions are retained for longer or need to be reimposed
- In this scenario GDP would remain close to its trough through end-2020, and unemployment would remain close to 10% until 'well into 2021'



The Government's "3-Step Framework" for the easing of restrictions doesn't amount to a complete recovery

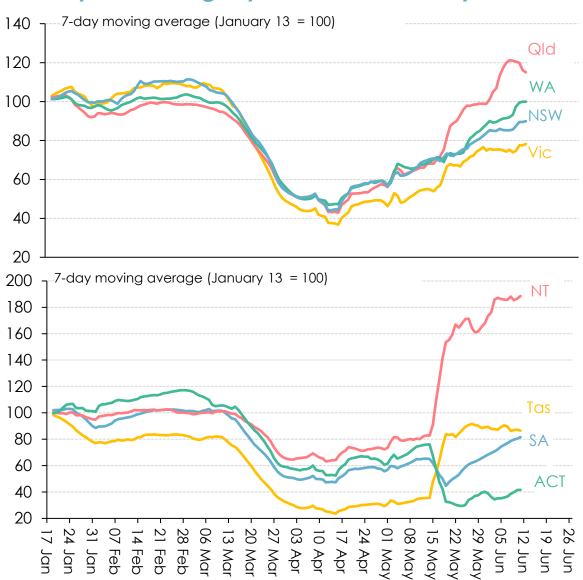
	GATHERINGS & WORK	EDUCATION & CHILDCARE	RETAIL & SALES	CAFES & RESTAURANTS	ENTERTAINMENT & AMUSEMENT VENUES	SPORT & RECREATION	ACCOMMODATION	DOMESTIC TRAVEL
Step 1	Non-work gatherings of up to 10 Up to 5 visitors at home in addition to normal residents Work from home if it works for you and your employer Workplaces develop a COVIDSafe plan Avoid public transport in peak hour	Child care centres, primary and secondary schools open as per state and territory plans Universities/technical colleges to increase face-to-face where possible and prioritise hands-on, skills based learning	Retail stores open Retail stores and shopping centre managers must develop COVIDSafe plans Auctions/open homes can have gatherings of up to 10, recording contact details	May open and seat up to 10 patrons at one time Need to maintain an average density of 4m² per person Food courts are to remain closed to seated patrons	To remain closed: Indoor movie theatres, concert venues, stadiums, galleries, museums, zoos, pubs, registered and licensed clubs, nightclubs, gaming venues, strip clubs and brothels Exception: Restaurants or cafes in these venues may seat up to 10 patrons at one time	No indoor physical activity including gyms Community centres, outdoor gyms, playgrounds and skate parks allow up to 10 people Outdoor sport (up to 10 people) consistent with the AIS Framework for Rebooting Sport Pools open with restrictions	Continue current arrangements for caravan parks and camping grounds (closed to tourists in some states and territories) Hostels and hotels are open for accommodation	Allow local and regional travel for recreation Refer to state and territory governments for border restrictions and biosecurity conditions
Step 2	Non-work gatherings of up to 20 States and territories may allow larger numbers in some circumstances Work from home if it works for you and your employer Workplaces develop a COVIDSafe plan Avoid public transport in peak hour	Child care centres, primary and secondary schools open as per state and territory plans Universities/technical colleges to increase face-to-face where possible and prioritise hands-on, skills based learning	Retail stores open Retail stores and shopping centre managers must develop COVIDSafe plans Auctions/open homes can have gatherings of up to 20, recording contact details	Cafes and restaurants can seat up to 20 patrons at one time Need to maintain an average density of 4m² per person Food courts are to remain closed to seated patrons	Indoor movie theatres, concert venues, stadiums, galleries, museums, zoos may have up to 20 patrons To remain closed: pubs, registered and licensed clubs, RSL clubs, casinos, nightclubs, strip clubs and brothels Exception: Restaurants or cafes in these venues may seat up to 20 patrons at one time	Up to 20 people allowed to participate in outdoor sports consistent with the AIS Framework for Rebooting Sport Up to 20 people allowed to participate in all indoor sports, including gyms Need to maintain an average density of 4m² per person Pools open with restrictions	Caravan parks and camping grounds fully open All accommodation areas open and allow gatherings of up to 20 people	Allow local and regional travel for recreation Consider allowing interstate recreational travel depending on the situation in each state and territory Refer to state and territory governments for biosecurity conditions
Step 3	Non-work gatherings of up to 100 people Larger gatherings to be considered Return to workplace Workplaces develop a COVIDSafe plan Avoid public transport in peak hour	Child care centres, primary and secondary schools open as per state and territory plans Universities/technical colleges to increase face-to-face where possible and prioritise hands-on, skills based learning Consider reopening residential colleges and international student travel	Retail stores open Retail stores and shopping centre managers must develop COVIDSafe plans Auctions/open homes can have gatherings of up to 100, recording contact details	Cafes, restaurants and food courts can seat up to 100 people Need to maintain an average density of 4m² per person	Venues open in Step 2 may have up to 100 patrons Consideration will be given to opening bar areas and gaming rooms Exception: Restaurants or cafes in these venues may seat up to 100 patrons at one time To remain closed: strip clubs and brothels	All venues allowed to operate with gatherings of up to 100 people Need to maintain an average density of 4m² per person Community sport expansion to be considered consistent with the AIS Framework for Rebooting Sport	All accommodation areas open and allow gatherings of up to 100 people	Allow interstate travel Refer to state and territory governments for biosecurity conditions

- Treasury expects 250,000 jobs to be regained, and \$3bn of GDP to be recouped, from 'Step 1'
- Full implementation of all 3 steps is expected to enable 850,000 people to return to work, and generate \$9.4bn per month of additional GDP
- These figures
 compare with job
 losses to date of
 around 975,000,
 and Treasury
 estimates of a
 \$50bn decline in
 GDP during the
 June quarter
 (about \$16bn per
 month)

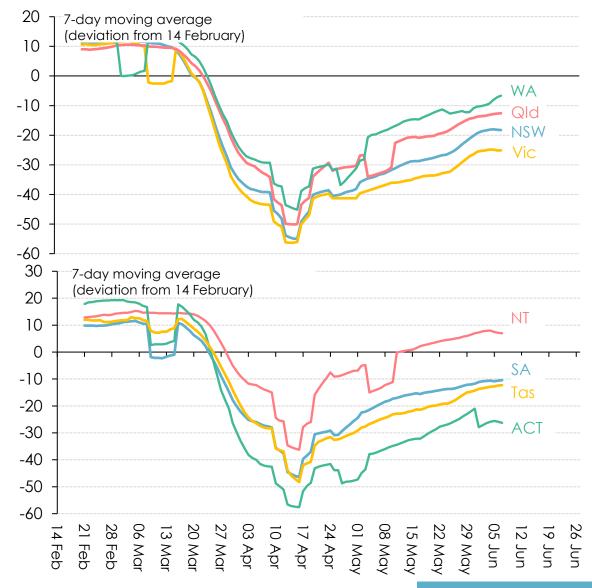
SAUL ESLAKE
CORINNA ECONOMIC ADVISORY

Mobility data suggest Northern Territory, Queensland & Western Australia returning to 'normal' fastest, with New South Wales & Victoria lagging

Time spent driving, by State and Territory



Time spent working, by State and Territory





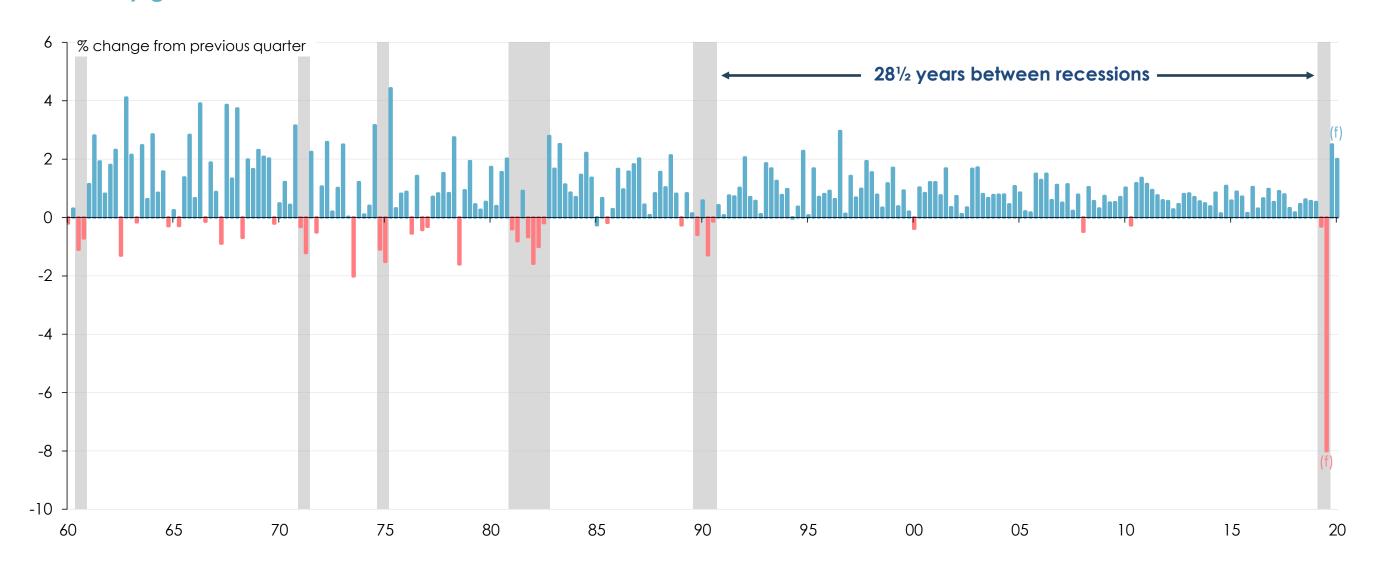
The path out of the current downturn will be more gradual than the path into it was

- □ 'Social distancing' requirements will be relaxed gradually rather than 'all at once'
 - and many people may remain wary of exercising all of their newly-regained 'freedoms'
 - 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
- ☐ 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
- ☐ There is some risk of a 'setback' when government support programs come to an end (nearly all of them at the end of September), or if restrictions on the movement or gathering of people have to be re-imposed
- □ 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)



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 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

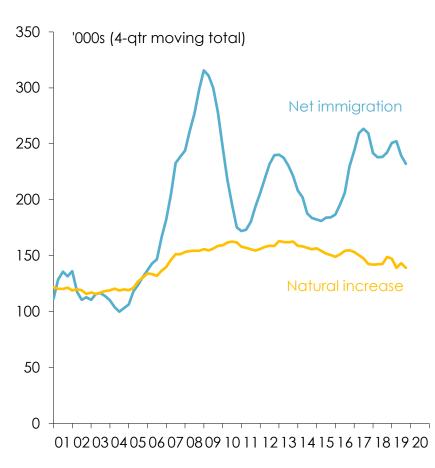
- although we haven't done nearly as well as we once did on the micro-economic front (especially with regard to productivity)

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



A sharply lower immigration intake will detract significantly from Australian economic growth

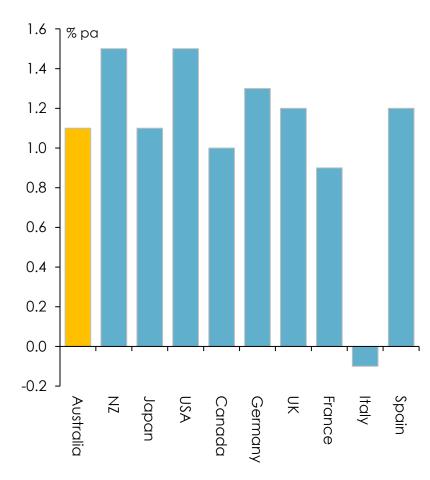
Sources of Australia's population growth



Australian GDP and per capita GDP growth



Real per capita GDP growth, 2010-2019

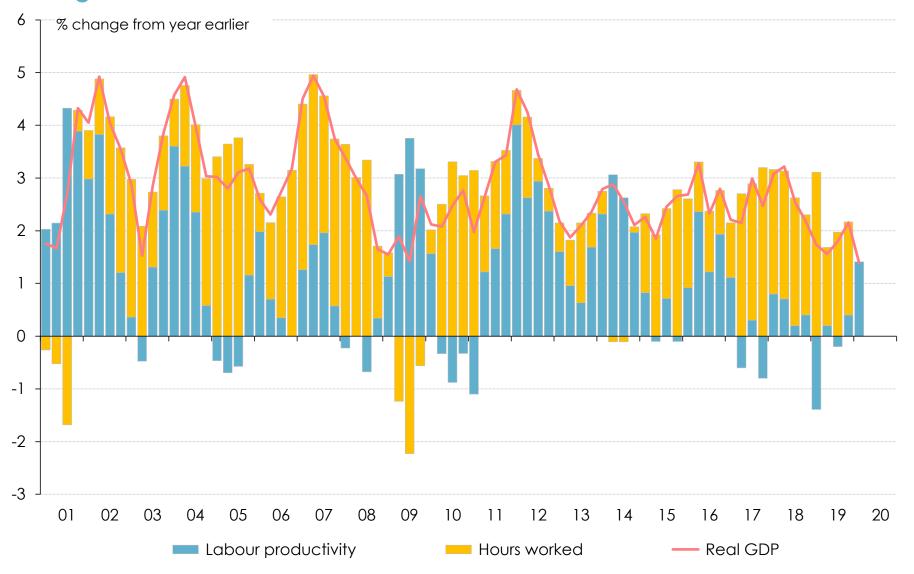


□ Treasury reportedly expects net overseas migration to fall by 30% in 2019-20 (ie to about 168,000) and by a further ~ 80% in 2020-21 (ie to about 36,000)



Australia has come to rely much more heavily on increased labour input to drive economic growth in recent years

Labour input and labour productivity contributions to Australian real GDP growth

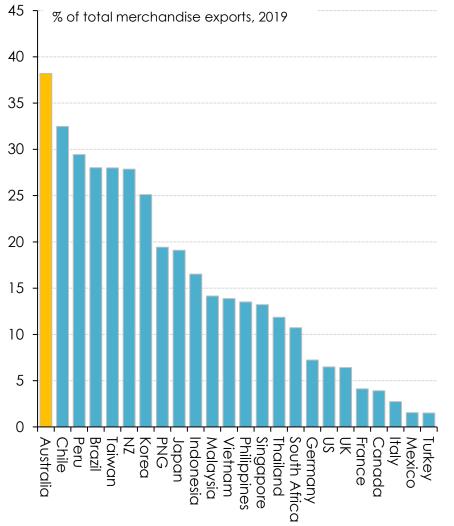


- Over the past five years, 72% of Australia's real GDP growth has come from increased labour input, and only 28% from labour productivity growth
- By contrast, between the end of the early 1990s recession and the onset of the global financial crisis, 46% of Australia's real GDP growth came from increased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

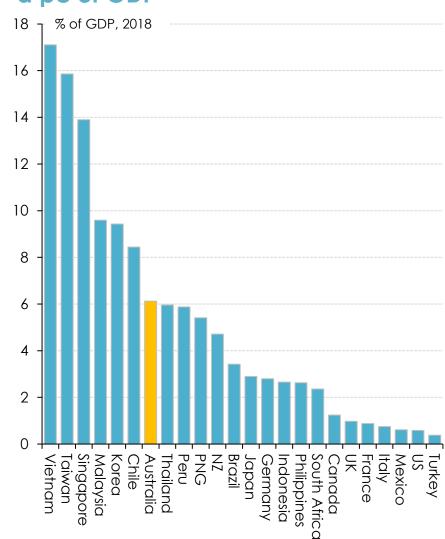


Australia has benefited enormously from its economic relationship with China over the past 25 years, but will that continue to be the case?

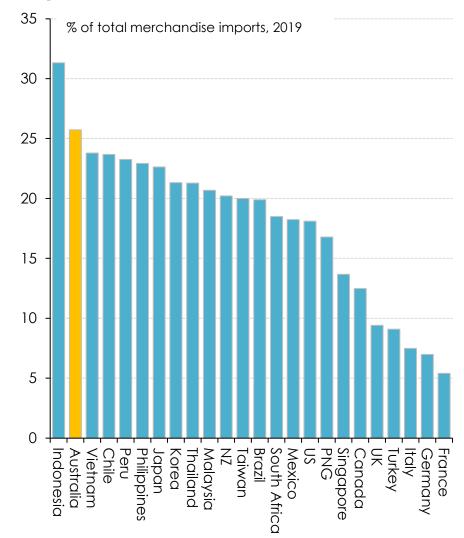
Merchandise exports to China as a pc of total



Merchandise exports to China as a pc of GDP



Merchandise imports from China as a pc of total





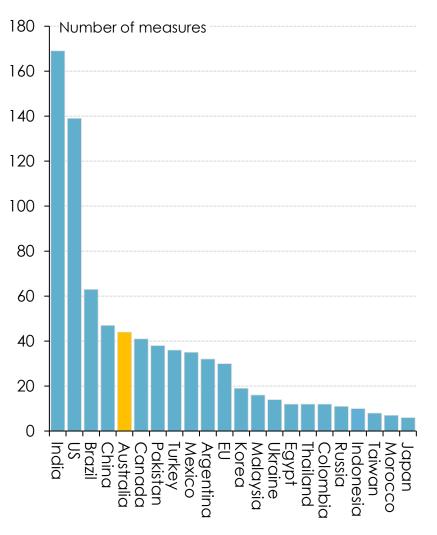
Australia is China's 5th biggest source of imports (of goods), 14th biggest export market, and has the 2nd-largest bilateral trade surplus with China

China's sources of imports China's export destinations China's bilateral merchandise trade balances US\$bn, 2019 7% of total merchandise imports, 2019 % of total merchandise exports, 2019 300 16 250 14 200 12 6 150 10 100 8 50 -100

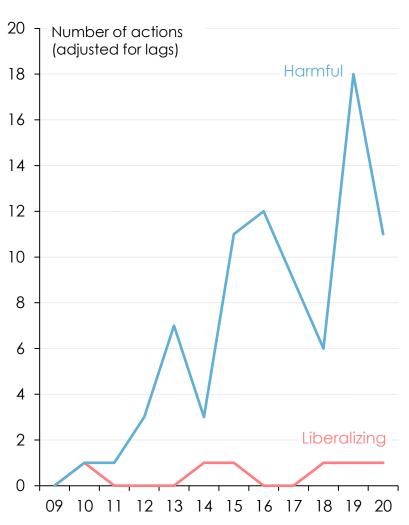


China's actions against Australian exports of barley, beef, coal and iron ore aren't justified, but we aren't complete innocents either

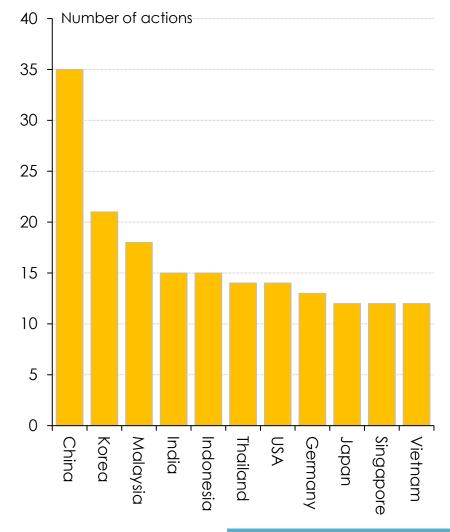
Number of anti-dumping measures imposed, 2015-19



Australian trade policy measures since 2009



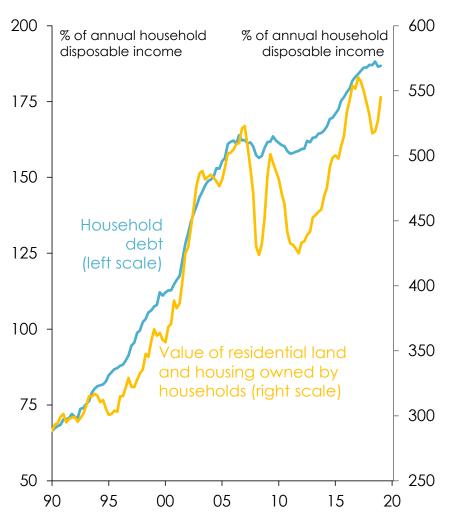
Countries adversely affected by 'harmful' Australian trade actions



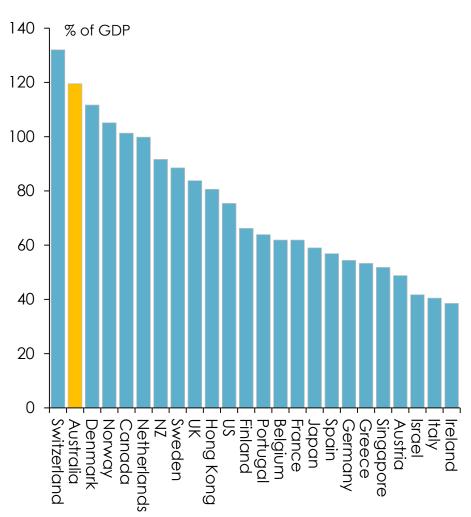


Rising property prices and household debt are unlikely to underpin Australian economic growth as they have done for most of the past 30 years

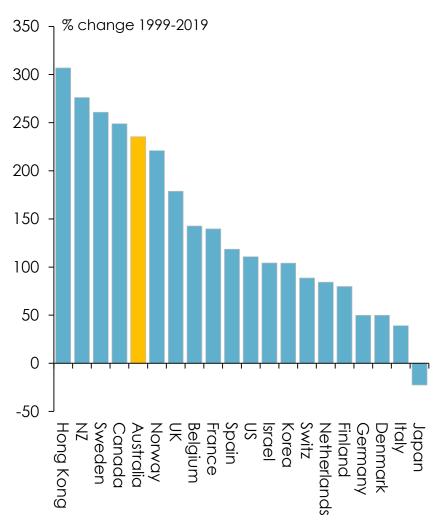
Australian housing wealth and household debt



Household debt as a pc of GDP, December 2019



Increase in residential property prices, 1999-2019





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 mor during future downturns 						
 there may be heightened demand for hitherto unprecedented government intervention to address other issues (for example climate change) 						
Interest rates likely to be (much) lower for (much) longer						
 not least in order to make servicing of elevated government debt burdens more tolerable 						
- reduced role for conventional monetary policy in managing economic cycles						
Changes in ways of working						
 at least some employers and employees are likely to maintain the option of (or preference for) 'working from home' possible implications for demand for commercial office space 						
Accelerated decline in the use of cash for transactions						
Re-think of relationships with China						
especially challenging for Australia given our unusual (for an 'advanced' economy) economic relationship with China						
Erosion of respect for US leadership and competence						
- unless Trump loses the November election and Riden can reverse the damage done to perceptions of the US						



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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