

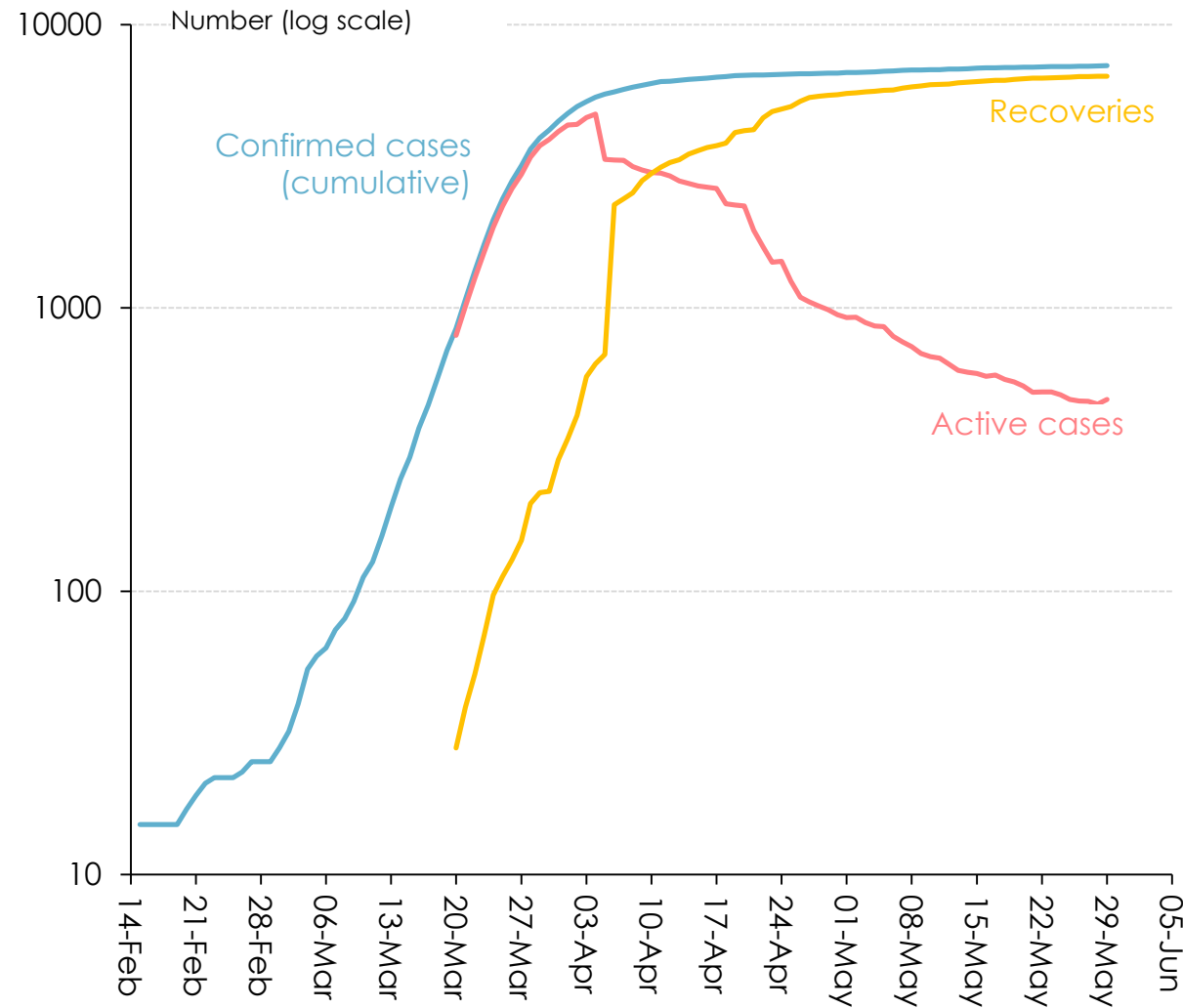
ECONOMIC IMPACT OF THE CORONAVIRUS PANDEMIC

28TH MAY 2020

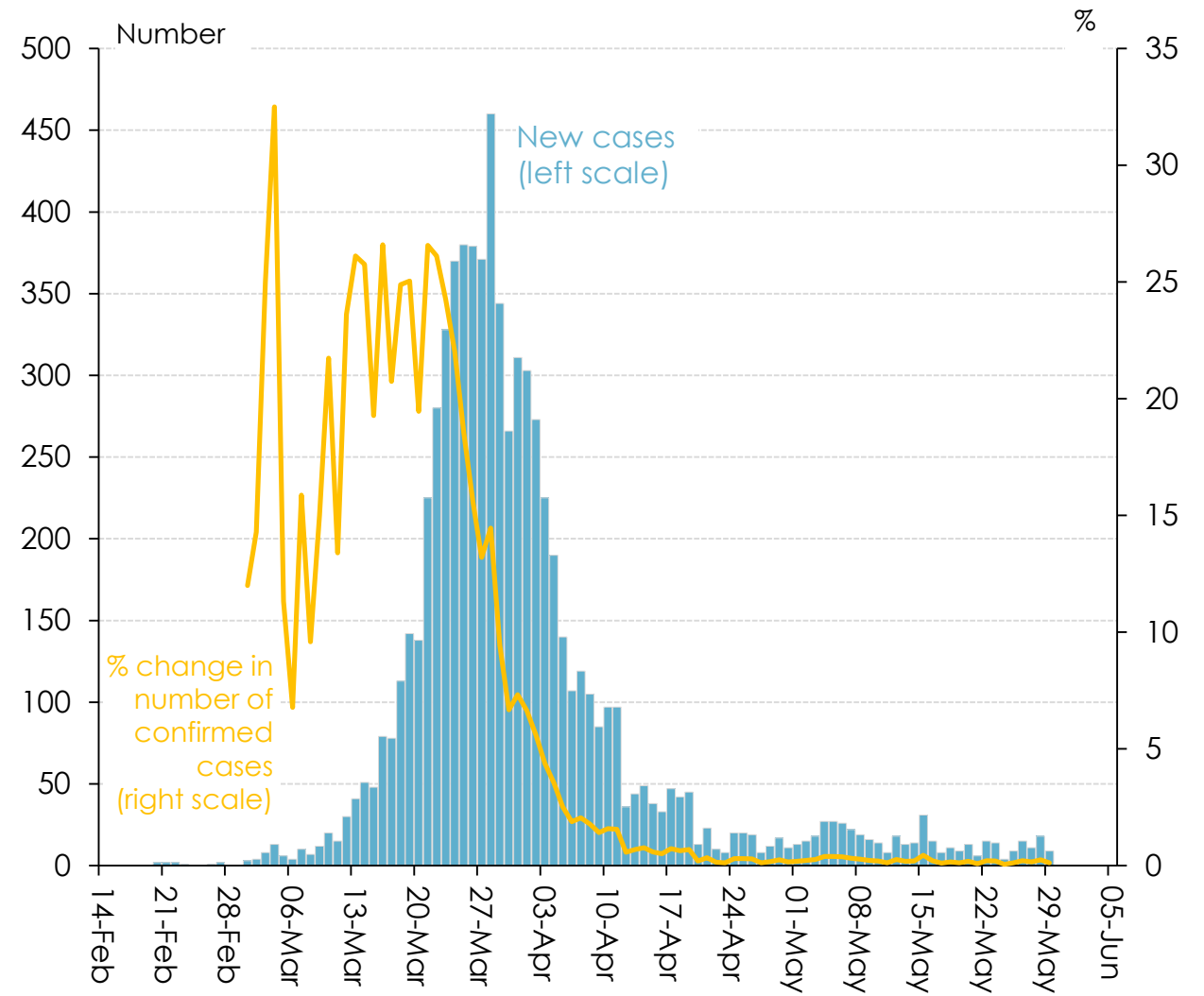
SAUL ESLAKE
CORINNA ECONOMIC ADVISORY PTY LTD

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

Confirmed cases



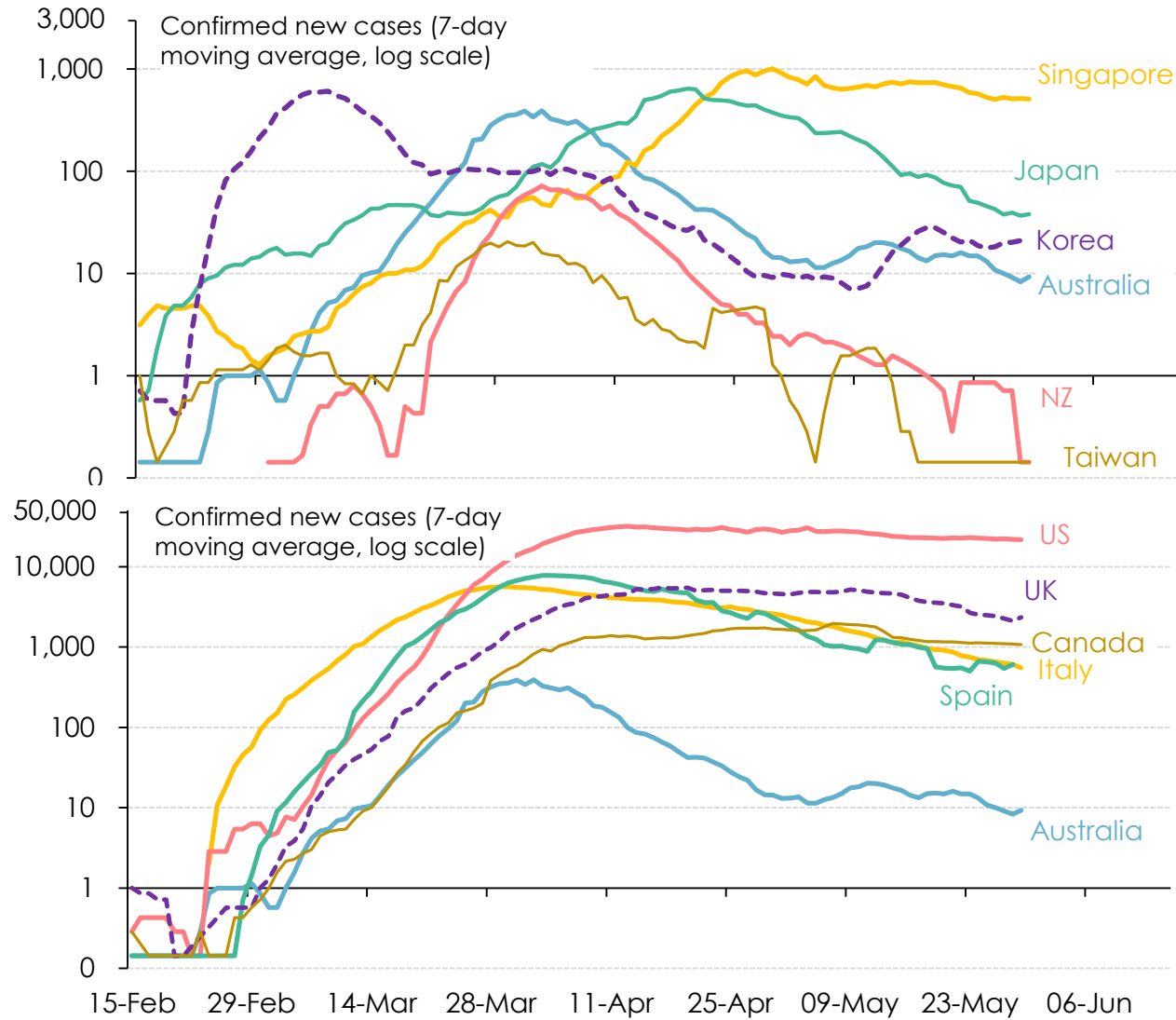
New cases



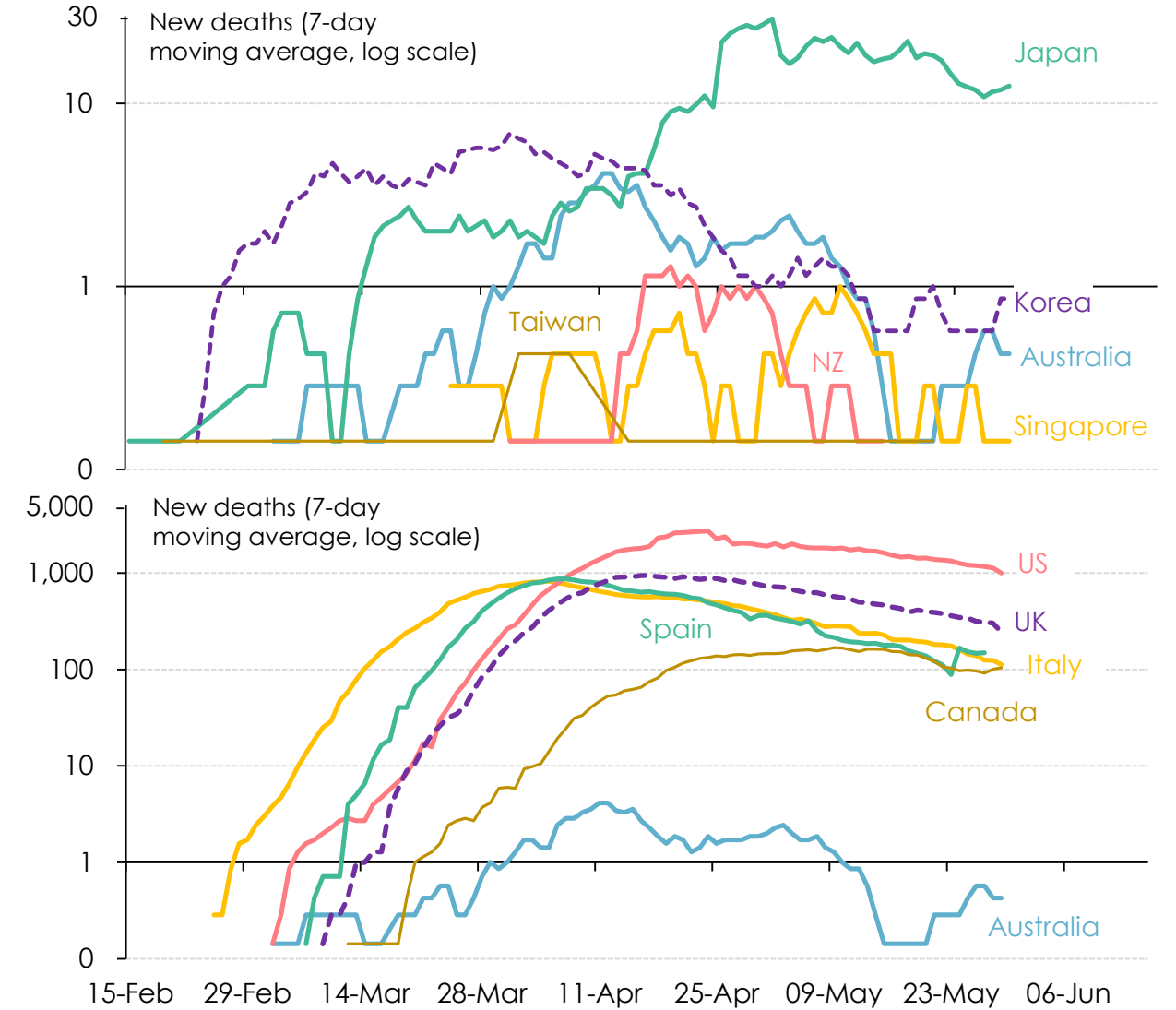
Note: Data up to 29th May. Source: covid19data.com.au

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

Daily new cases



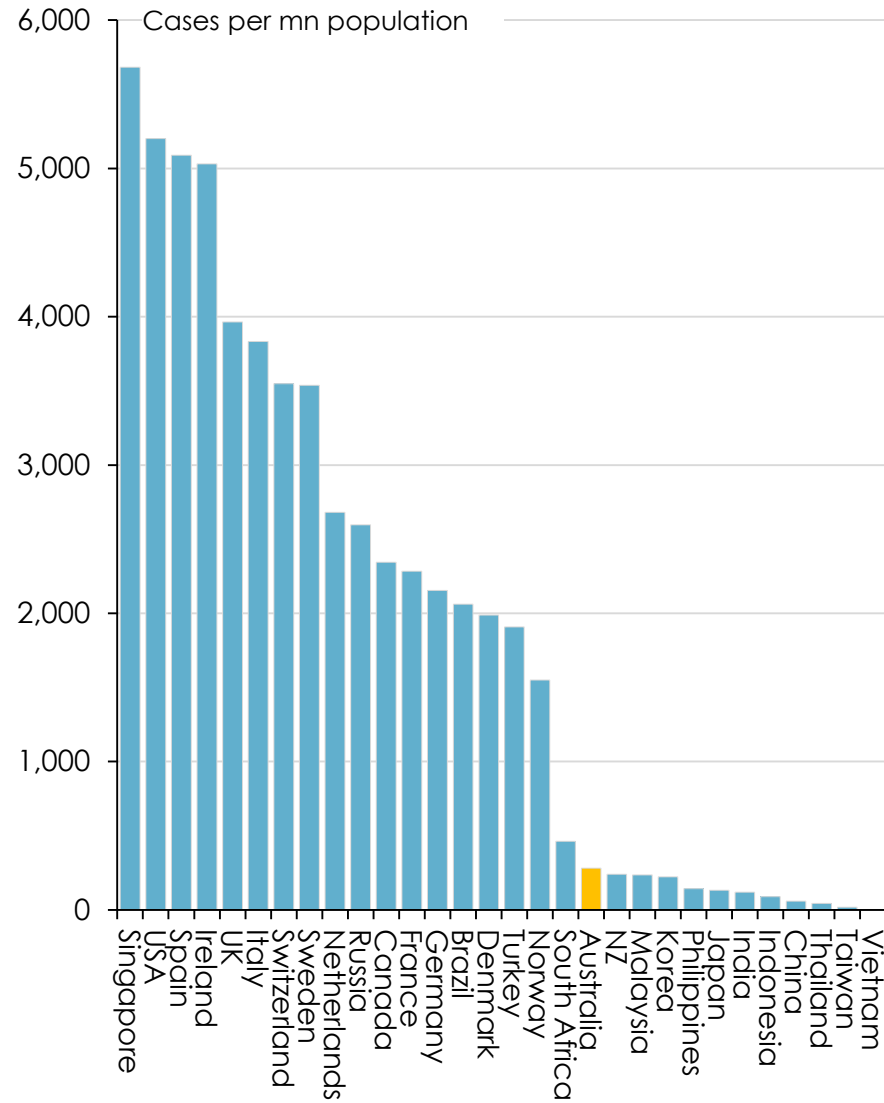
Daily new deaths



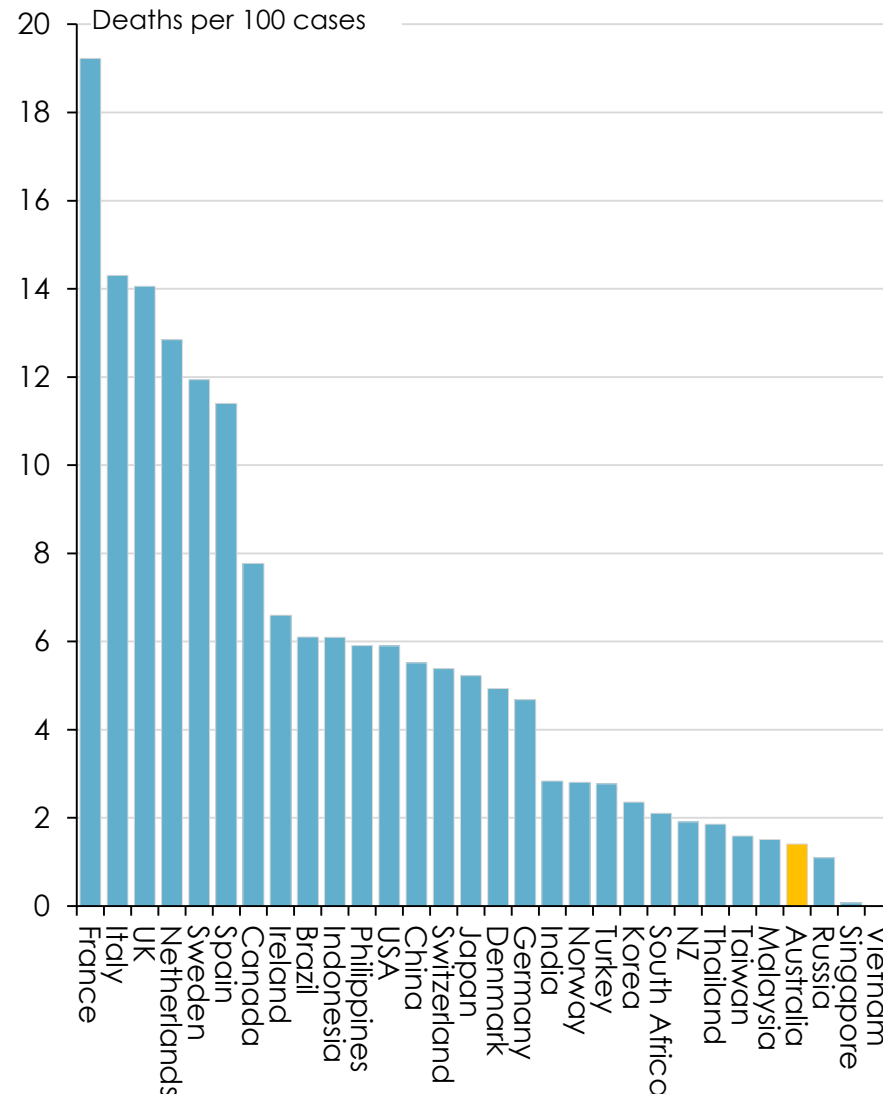
Note: Data up to 29th May (except for Spain, 28th May). Source: University of Oxford, Our World in Data.

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

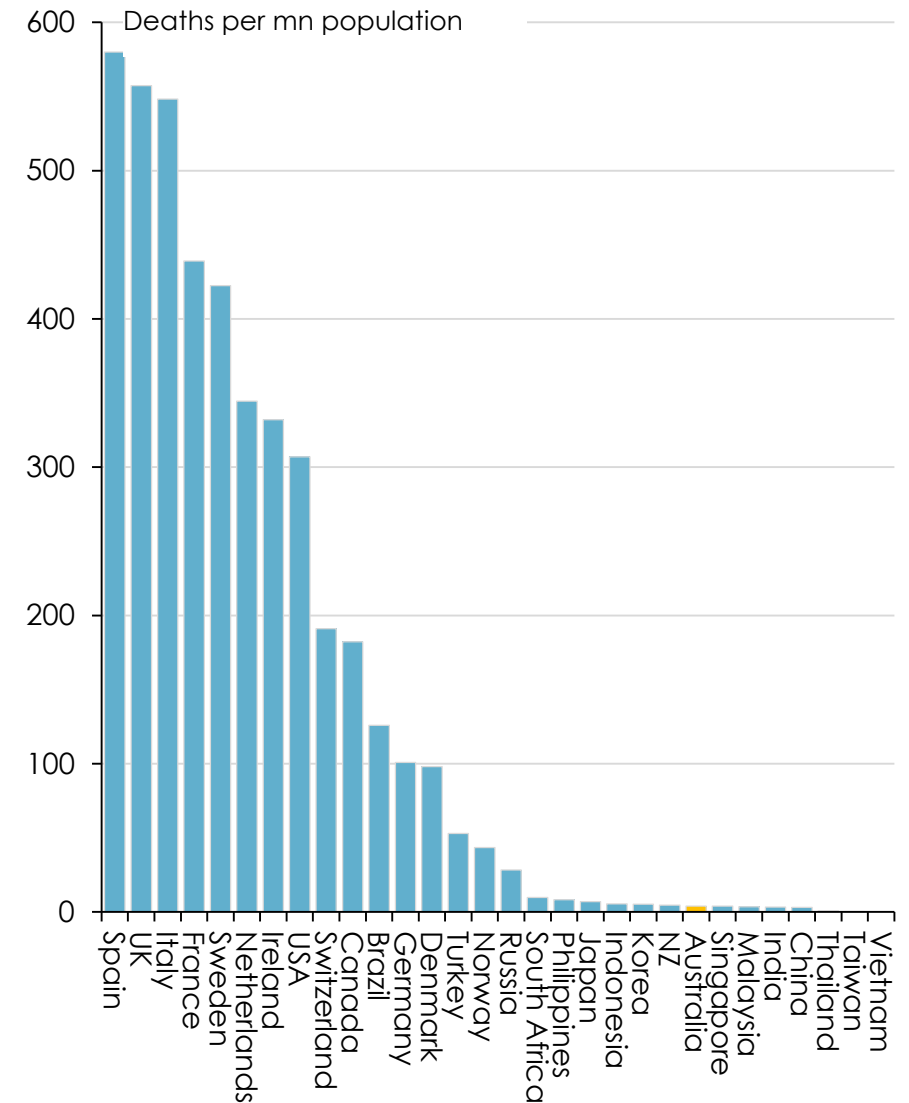
Apparent infection rate



Apparent death rate



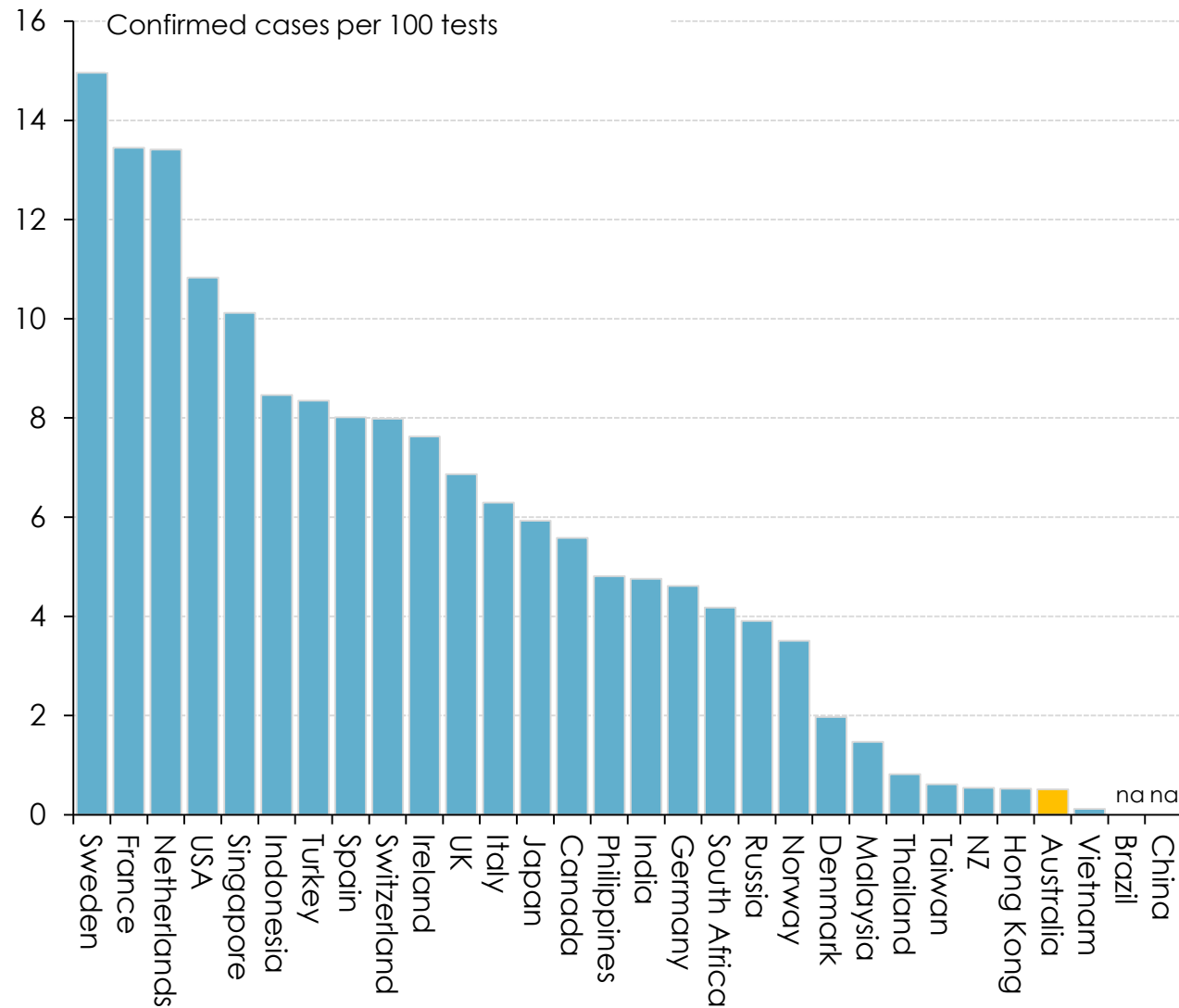
Deaths per mn population



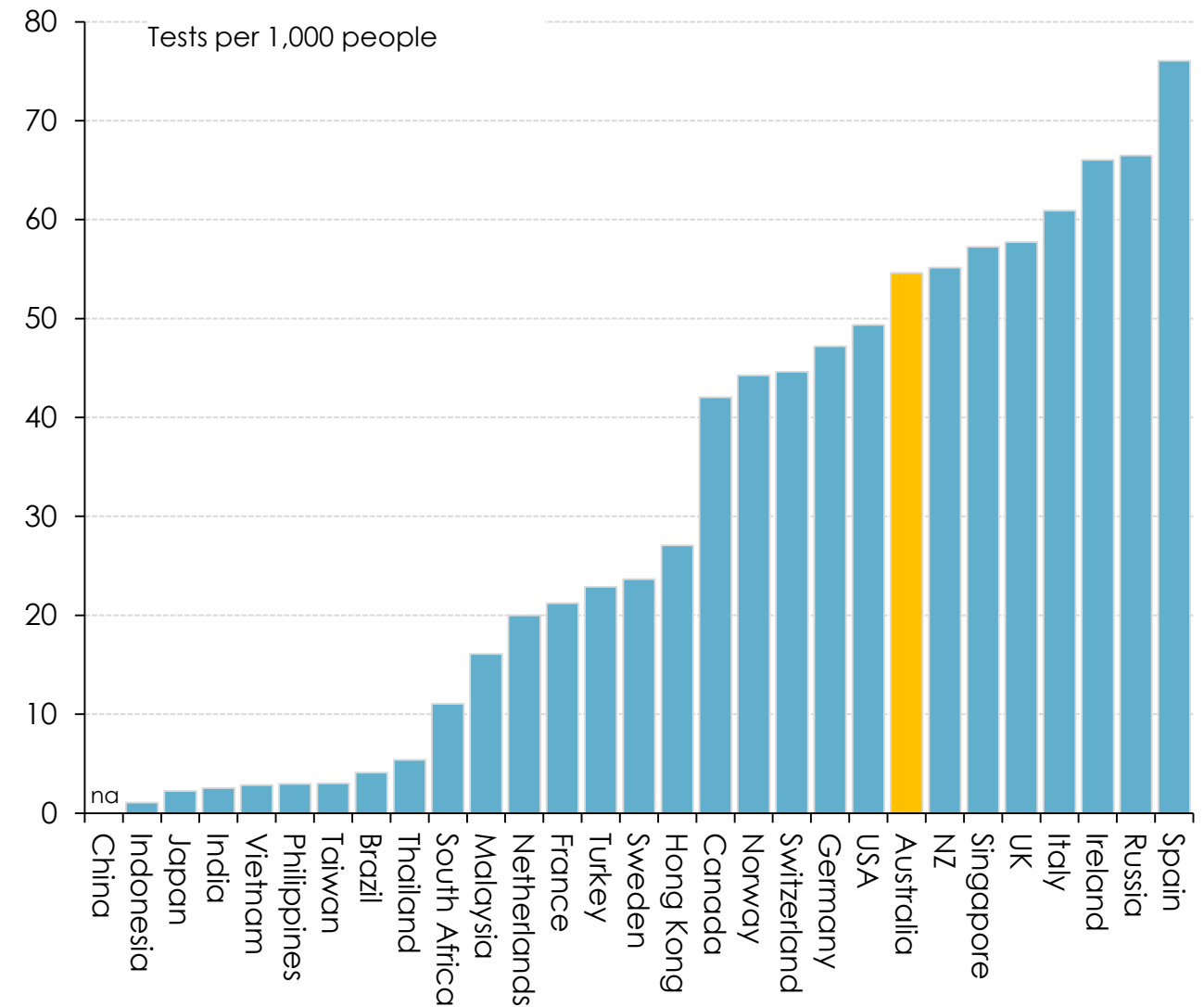
Note: Data up to 29th May (except for Spain, 28th May). Source: Oxford University, Our World in Data.

Australia's testing regime appears sufficiently broad for the infection and death rates to be seen as 'credible'

Confirmed cases per 100 tests



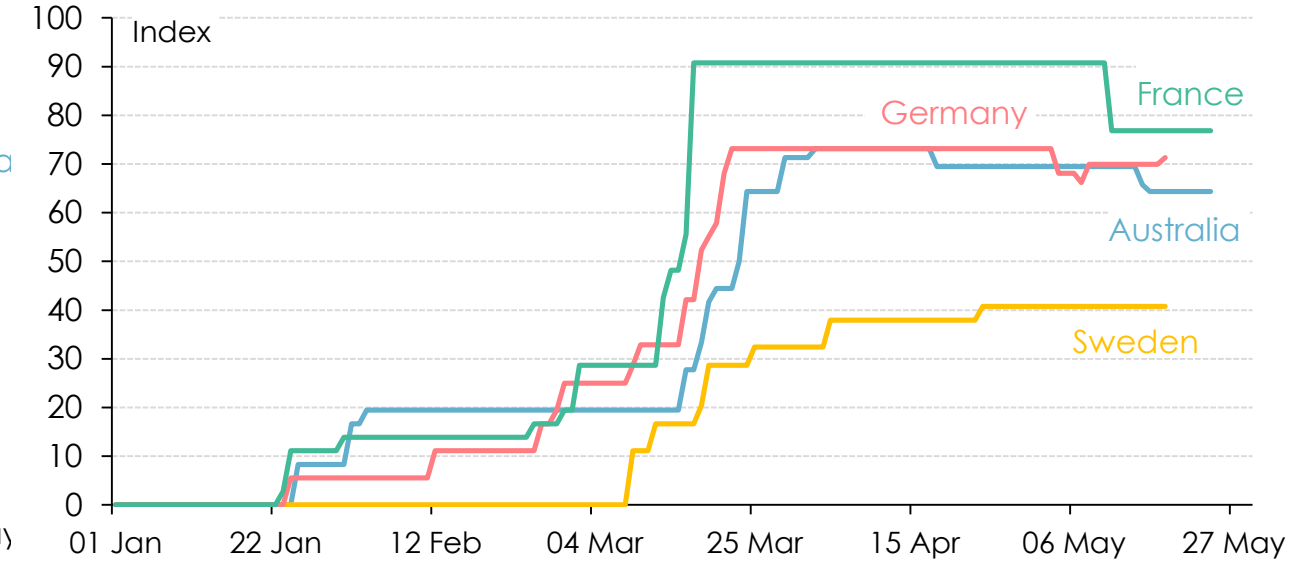
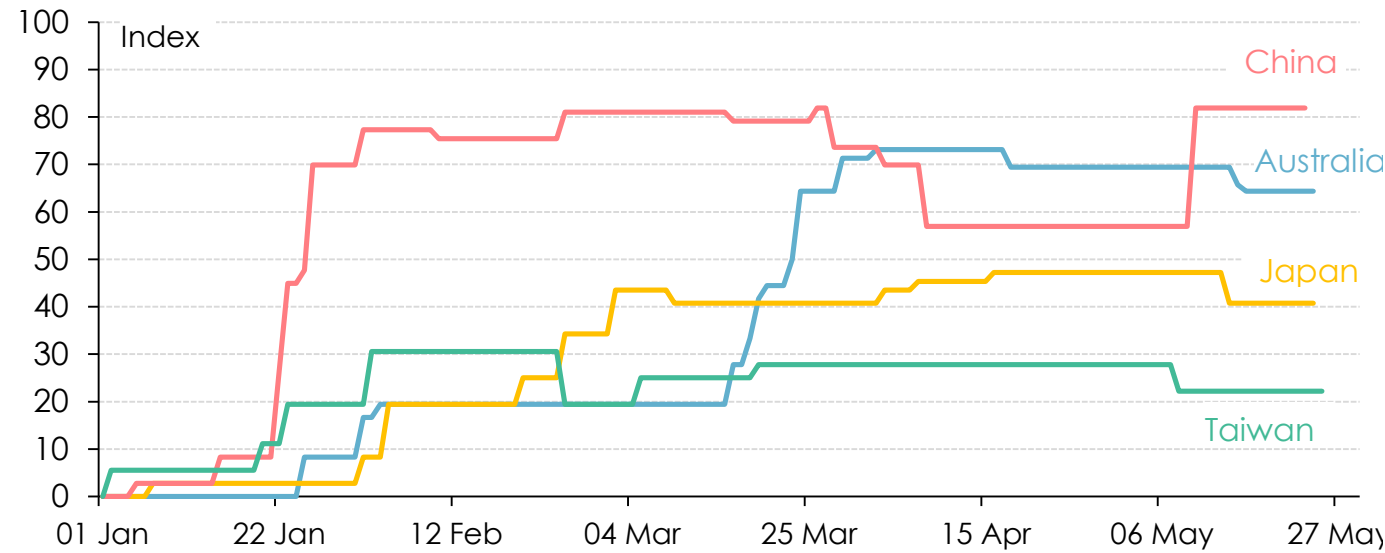
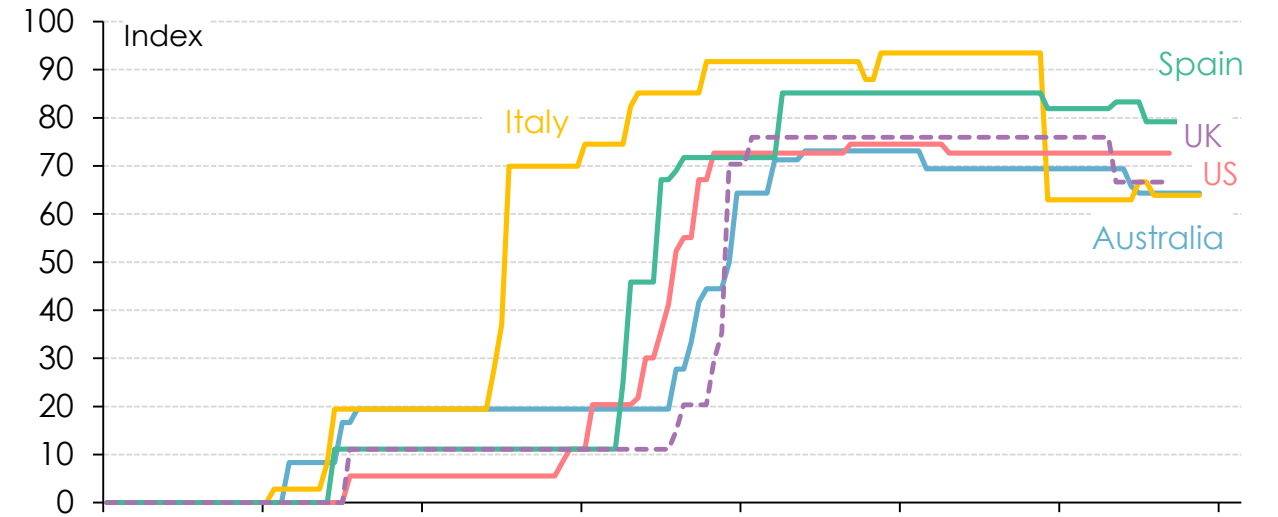
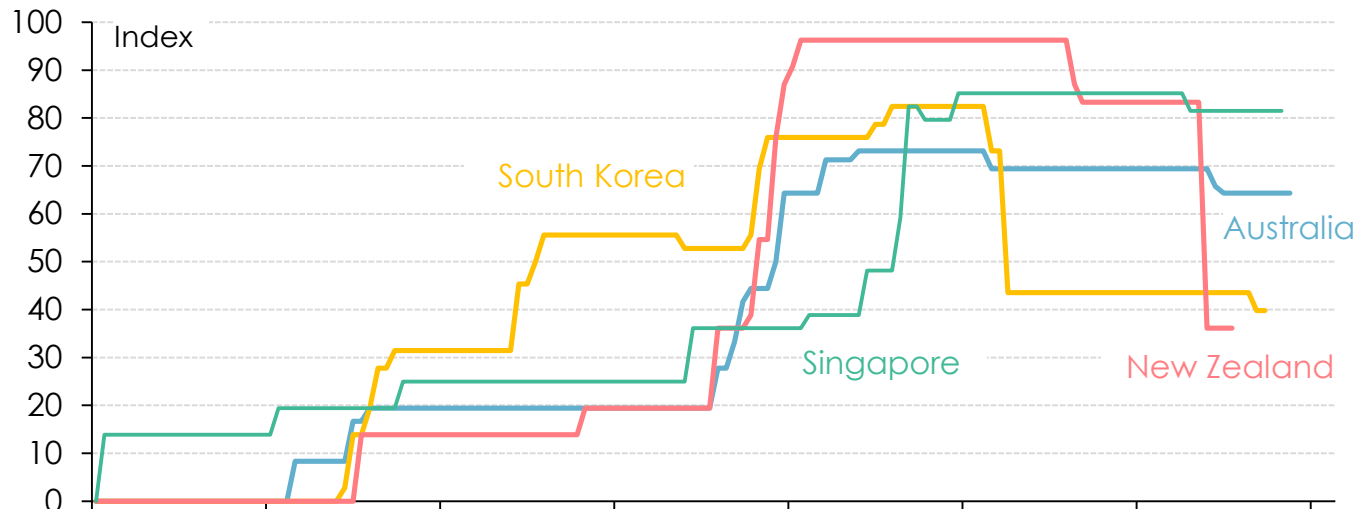
Tests per thousand of population



Note: Data up to 28th May. Source: Worldometers.

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

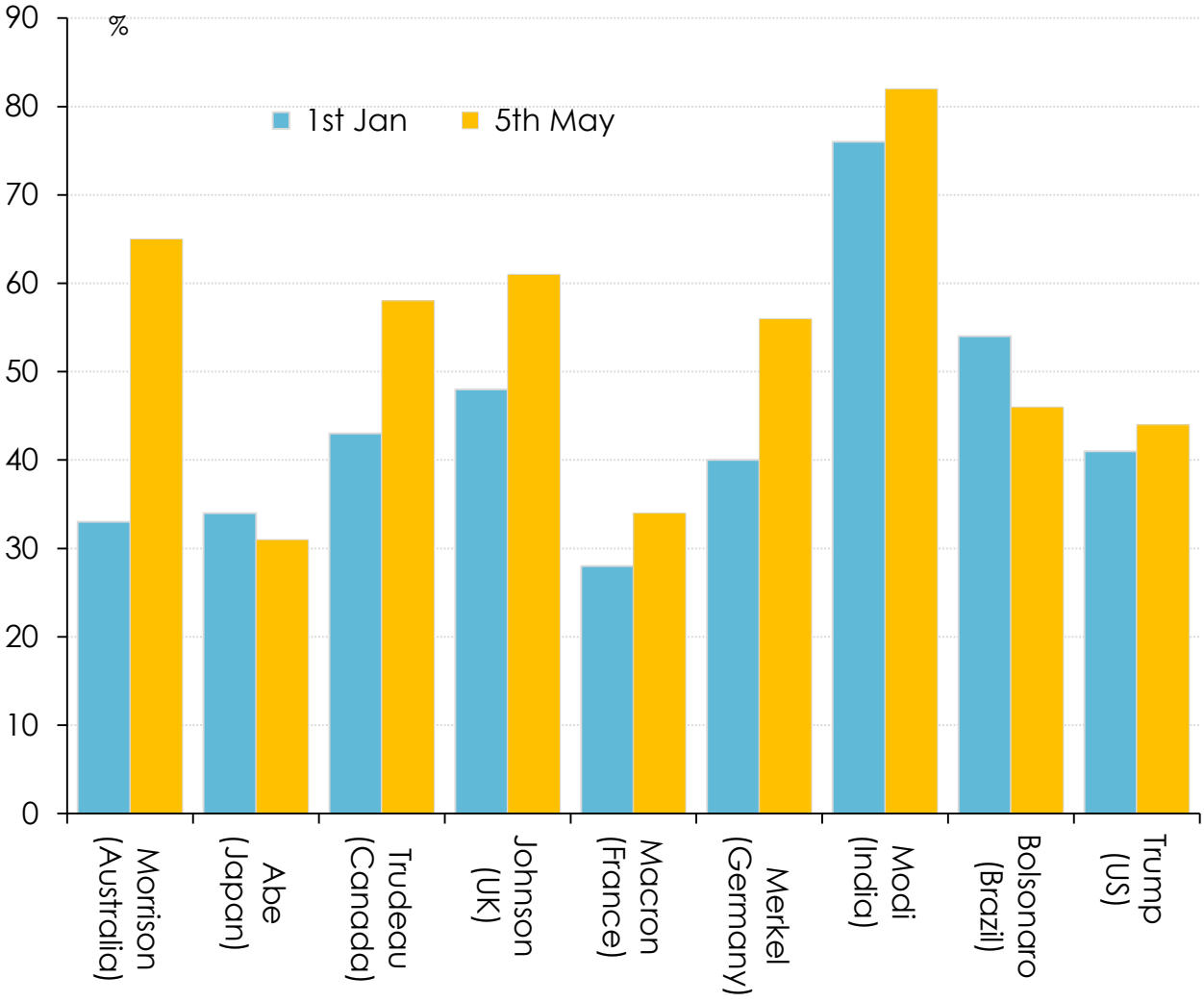
Timing and severity of government restrictions on movement and gathering of people



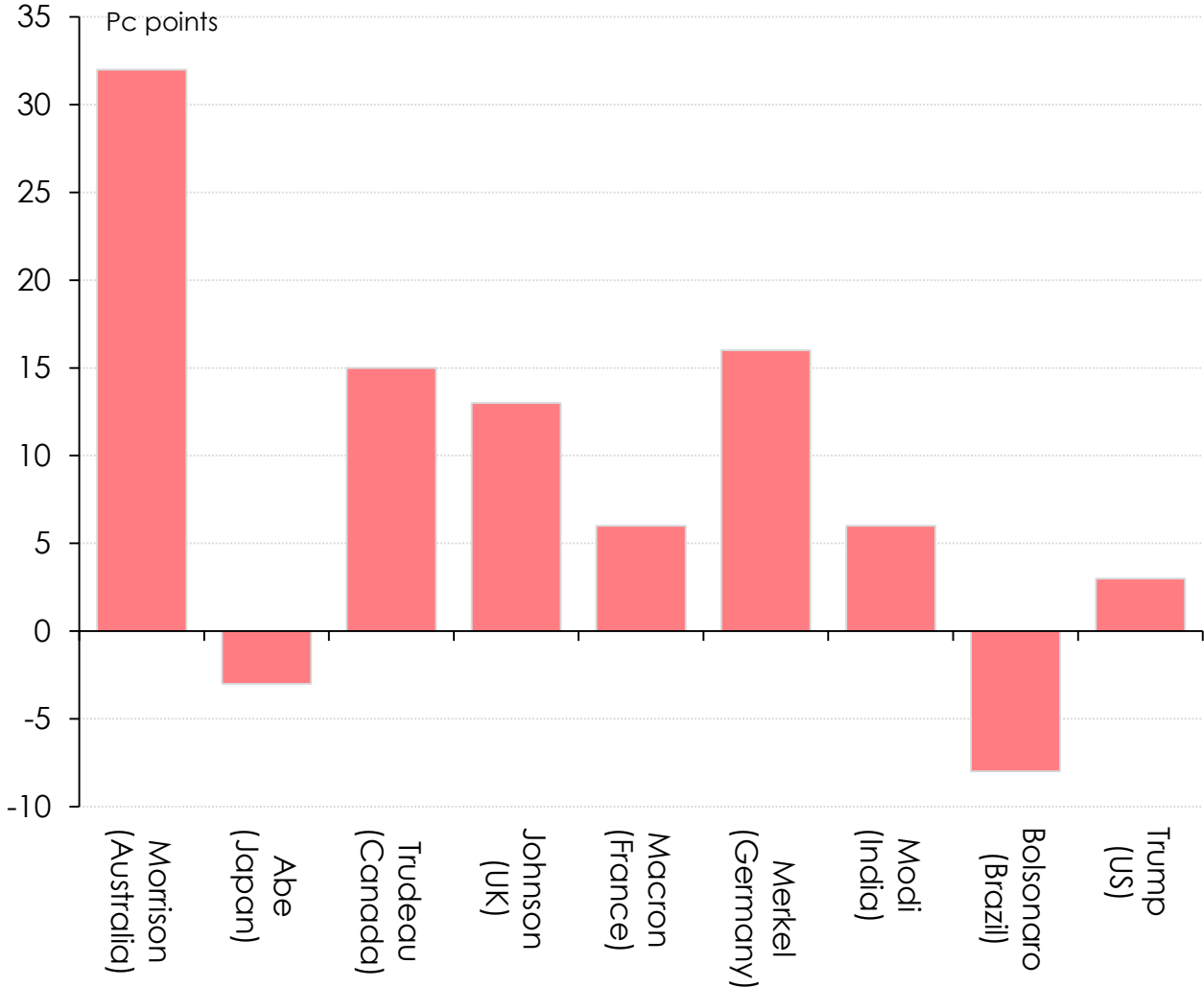
The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. Source: Blavatnik School of Government, Oxford University. Data up to 17th -25th May.

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

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

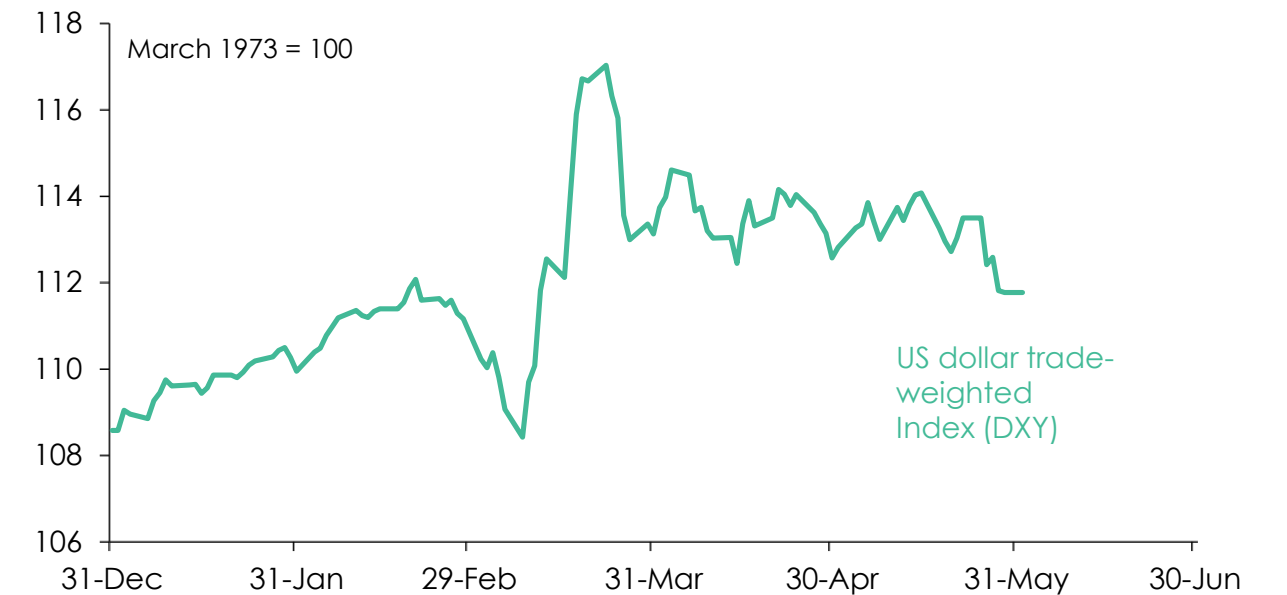
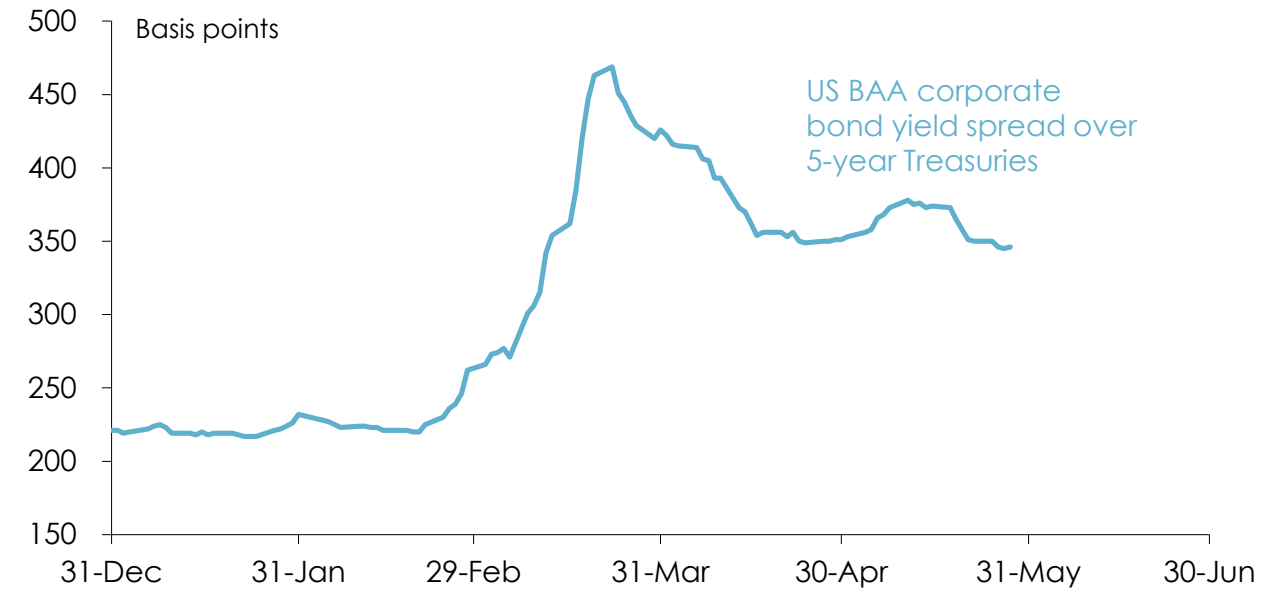
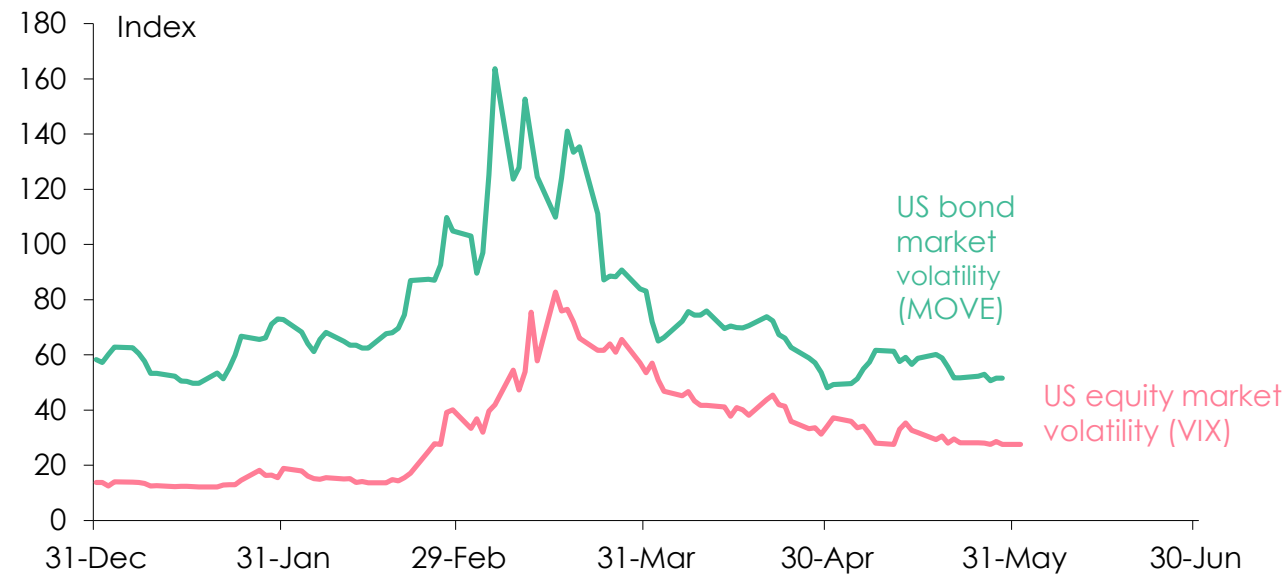
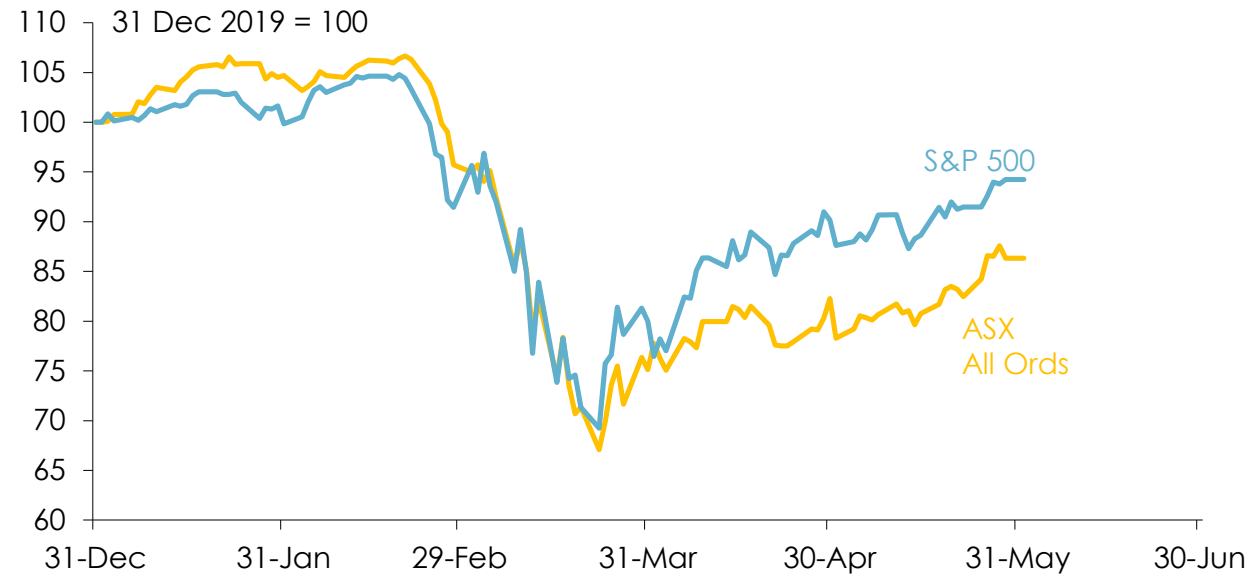


Change in voter approval ratings since 1st January



Source: MorningConsult.

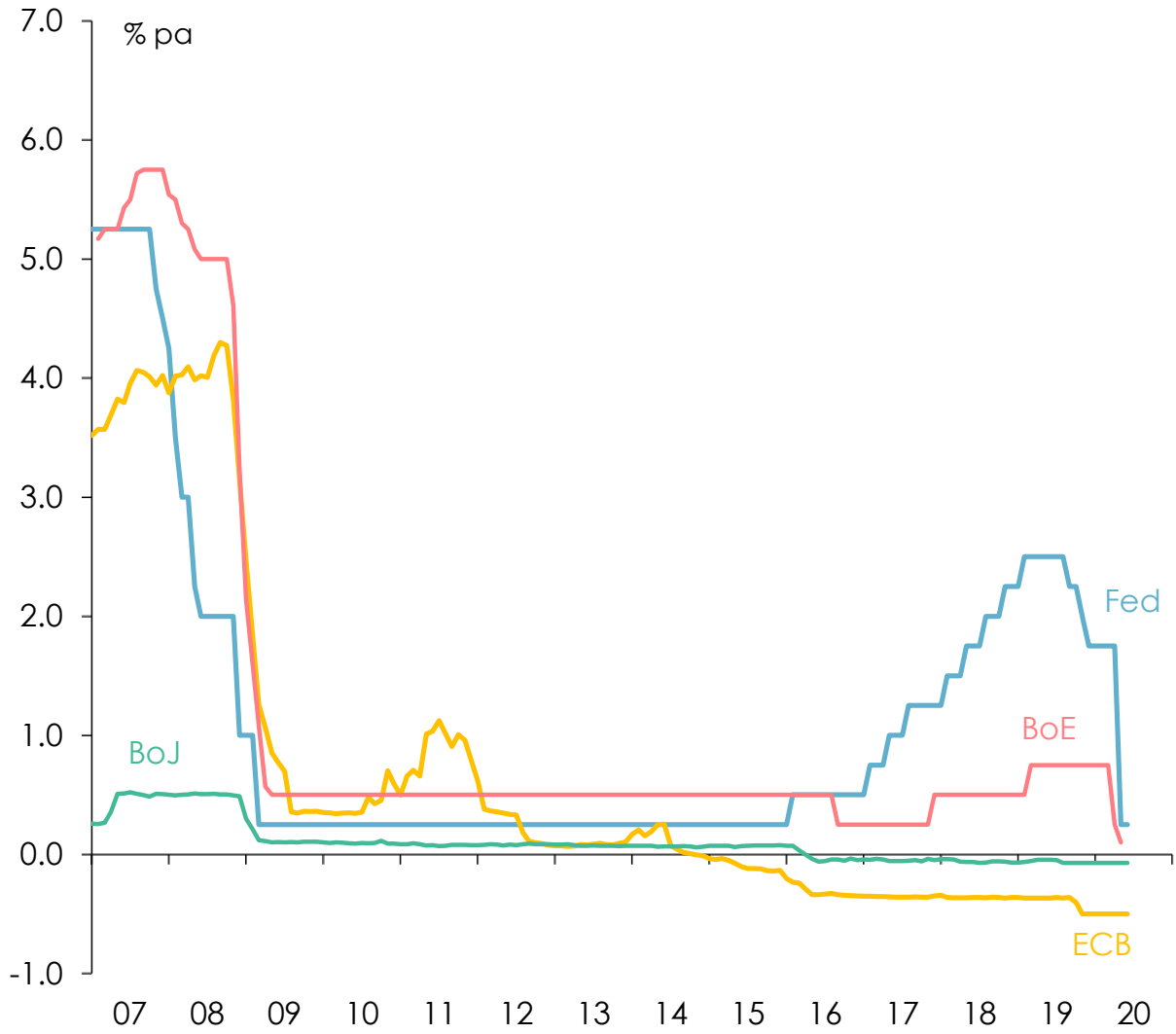
Market reactions initially amplified the economic shock, but central bank actions, easing of restrictions and 'vaccine optimism' have eased strains



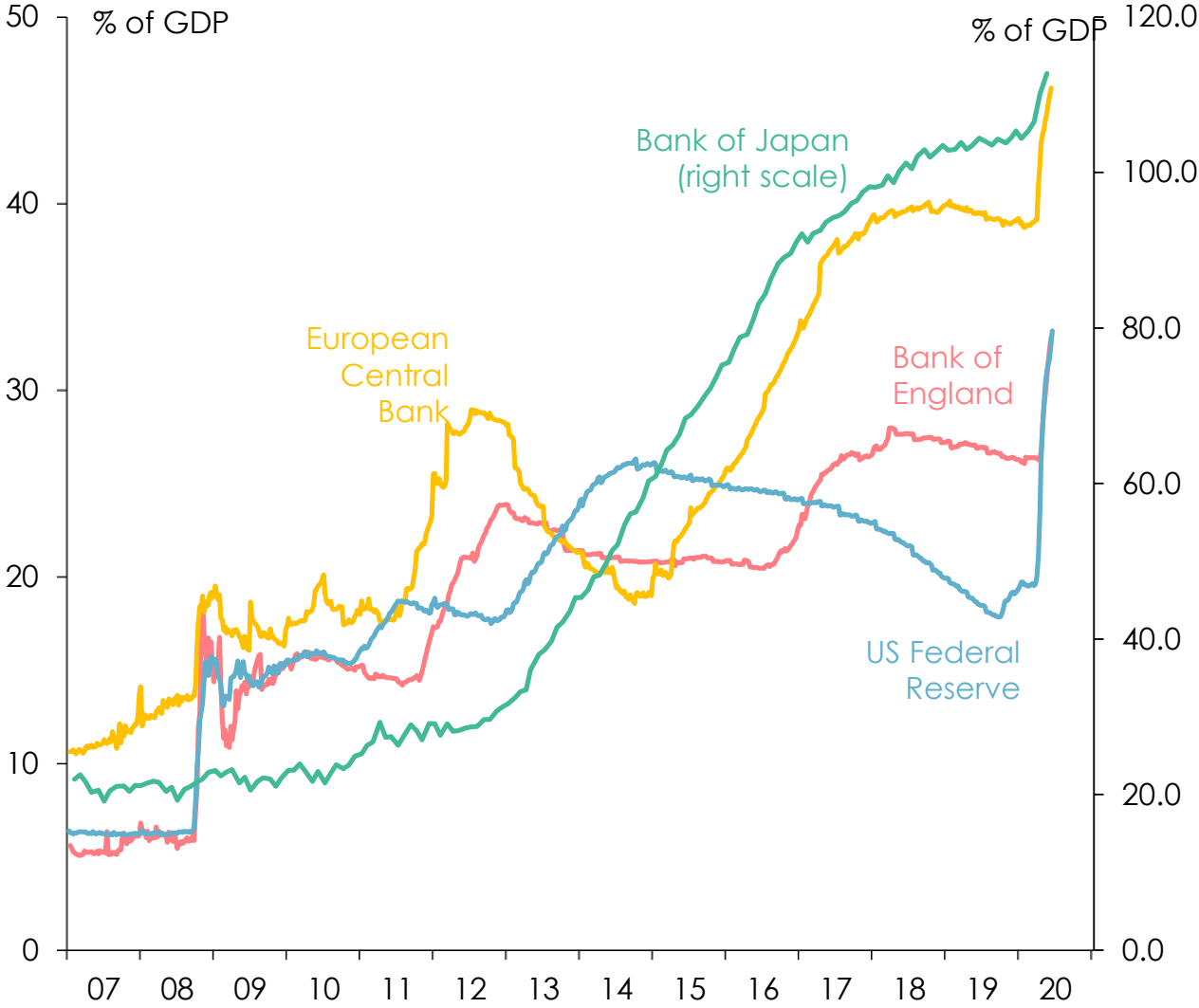
Source: Refinitiv Datastream. Data up to 29th May.

Major central banks have done more 'QE' than they did during the global financial crisis

Major central bank policy interest rates



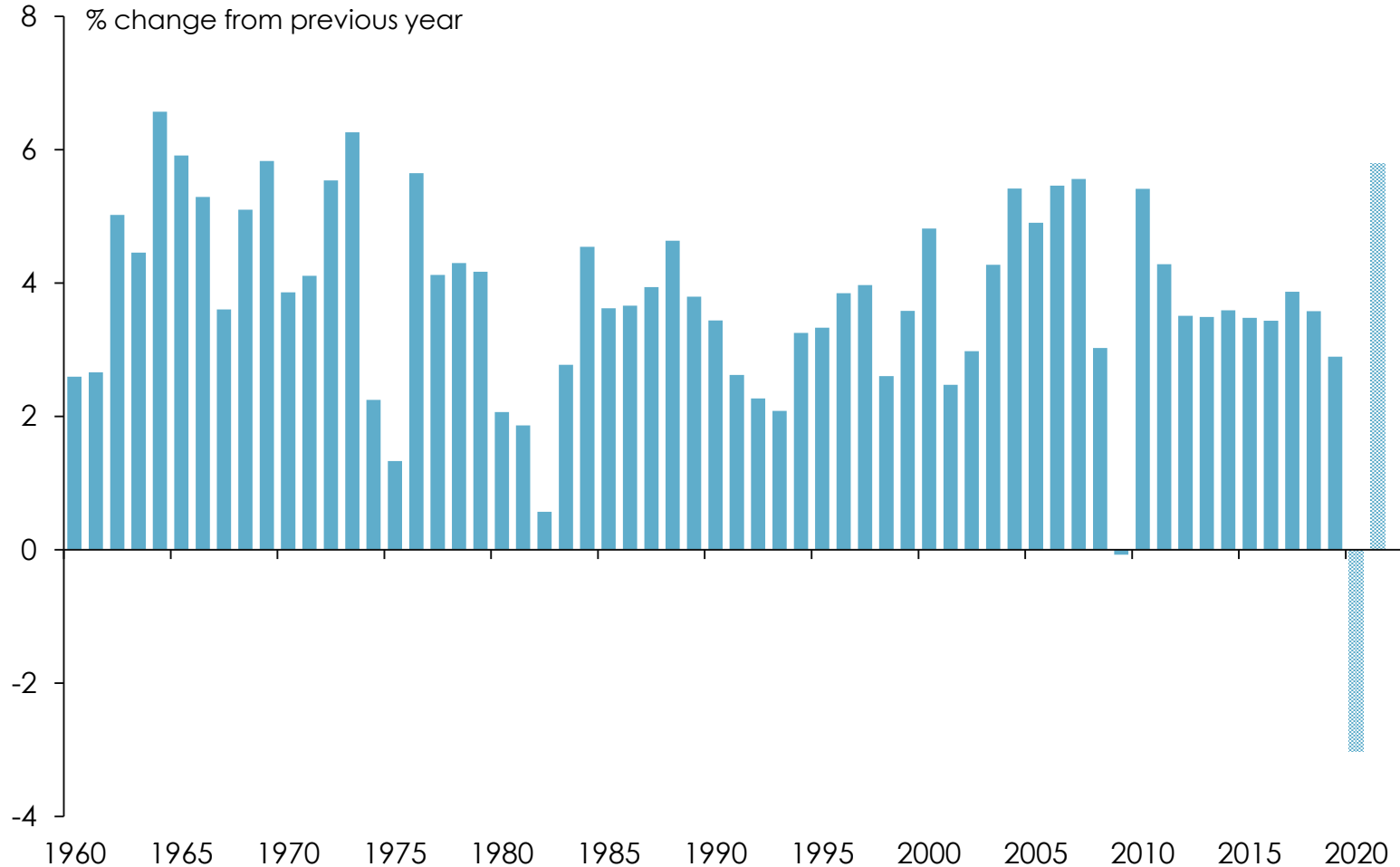
Major central bank balance sheets



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

The IMF is forecasting the sharpest contraction in the world economy since the Great Depression, followed by a sharp snap-back in 2021

Growth in global real GDP



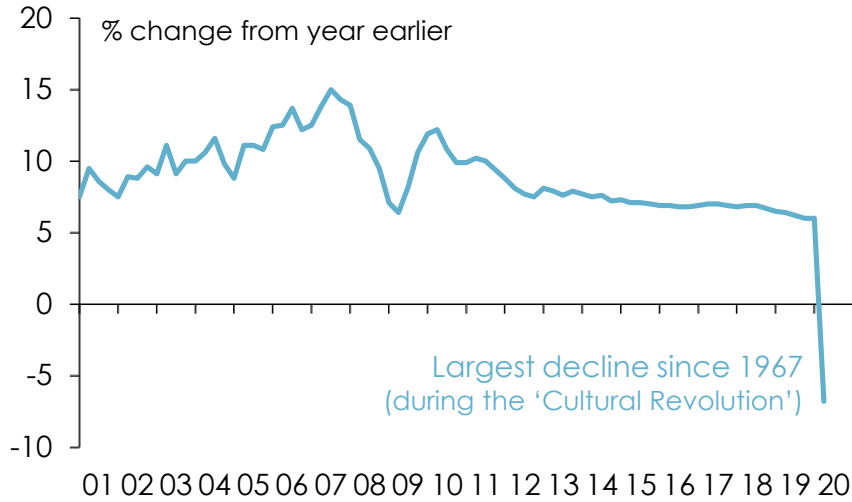
IMF GDP forecasts – selected economies

	2020	2021
US	-6.1	4.5
Euro area	-7.5	4.7
UK	-6.5	4.0
China	1.2	9.2
Japan	-5.2	3.0
Korea	-1.2	3.4
ASEAN	-0.6	7.8
Australia	-6.7	7.1
NZ	-7.2	5.9
World	-3.0	5.8

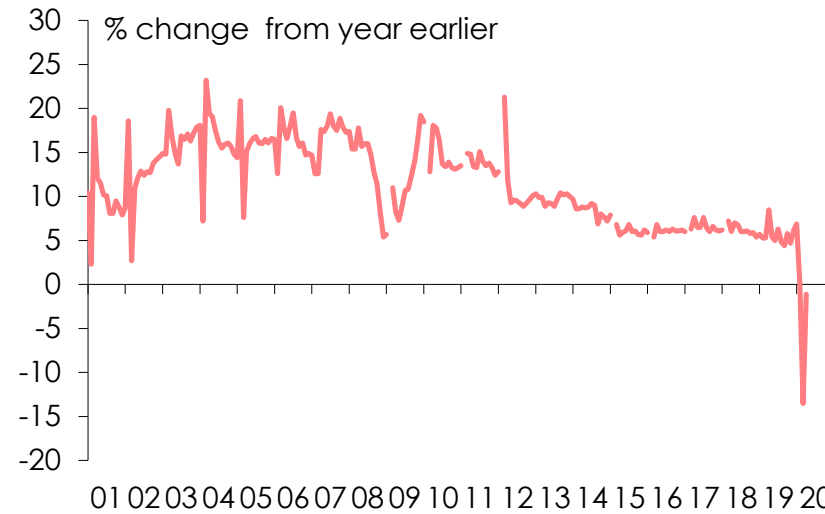
Source: IMF, World Economic outlook, April 2020.

After a sharp contraction in Q1, parts of China's economy are now rebounding – but households remain cautious

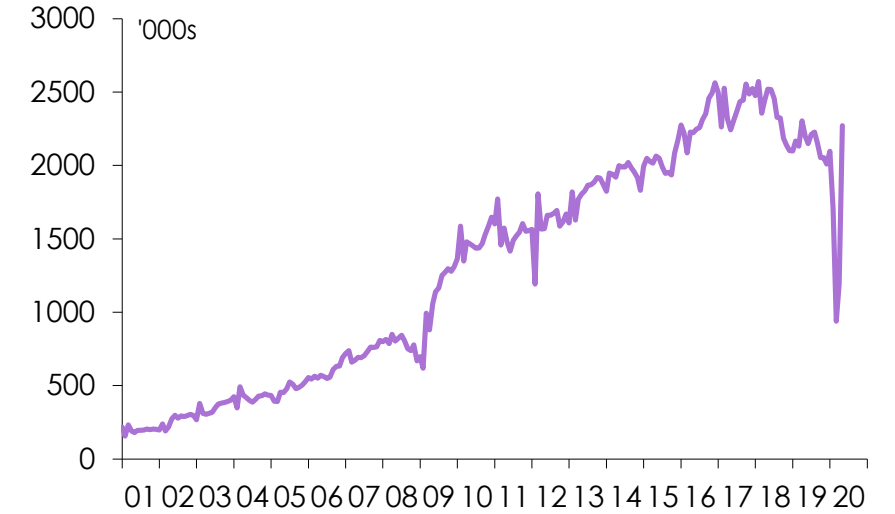
Real GDP



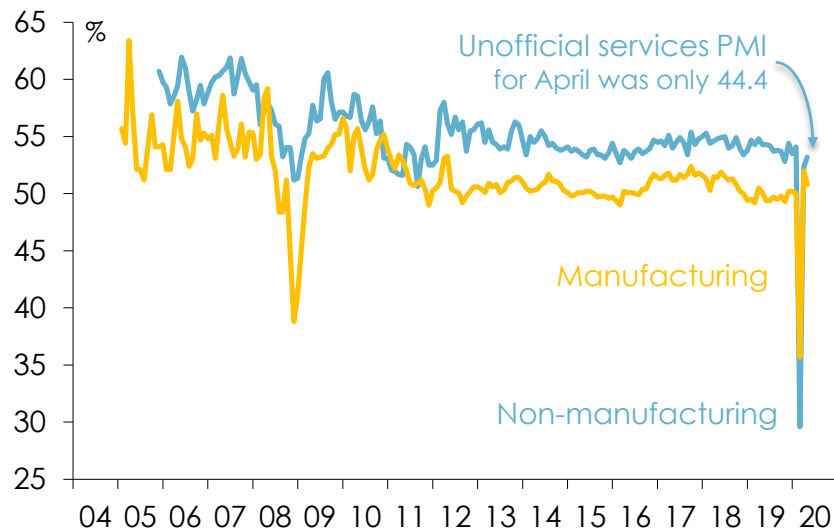
Industrial production



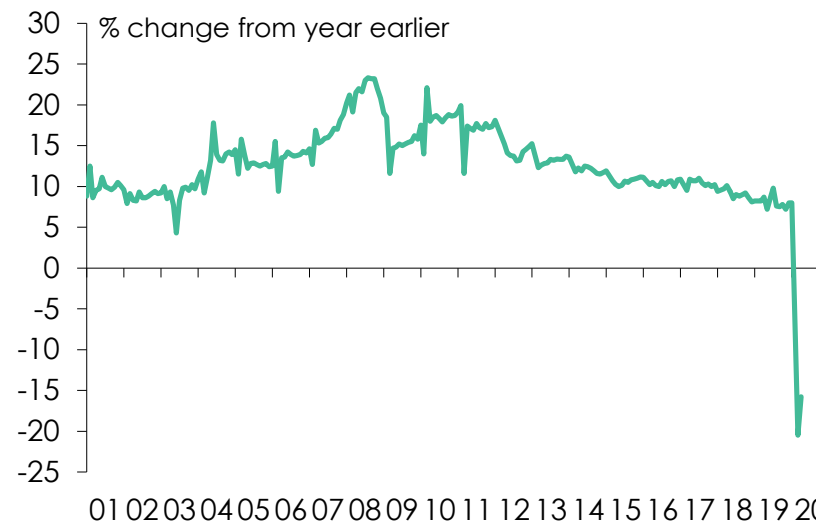
Motor vehicle sales



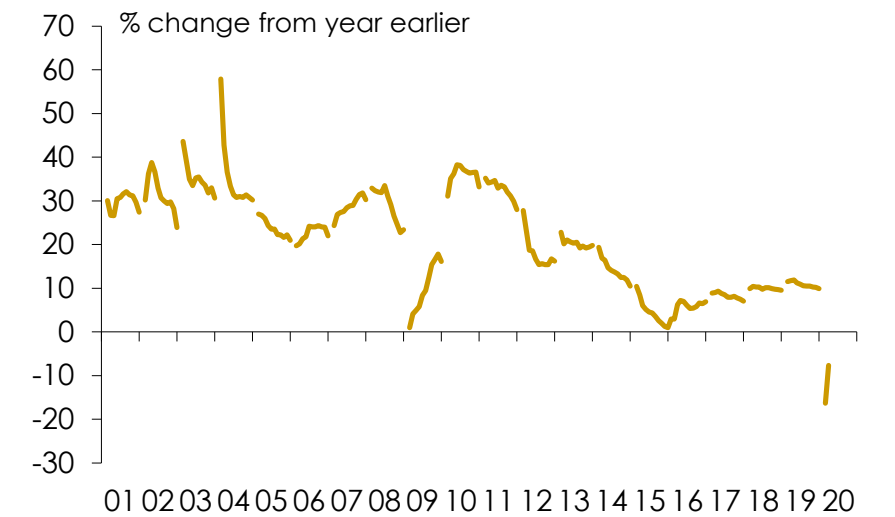
'Official' purchasing managers' indices



Retail sales



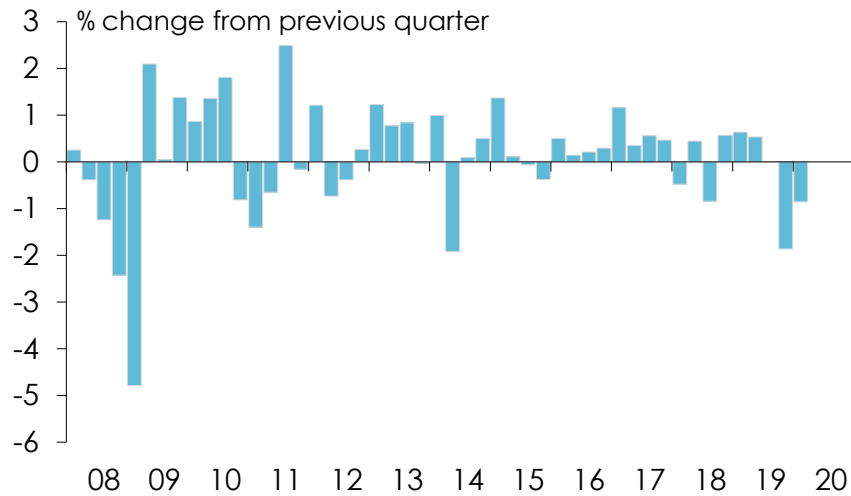
Real estate investment



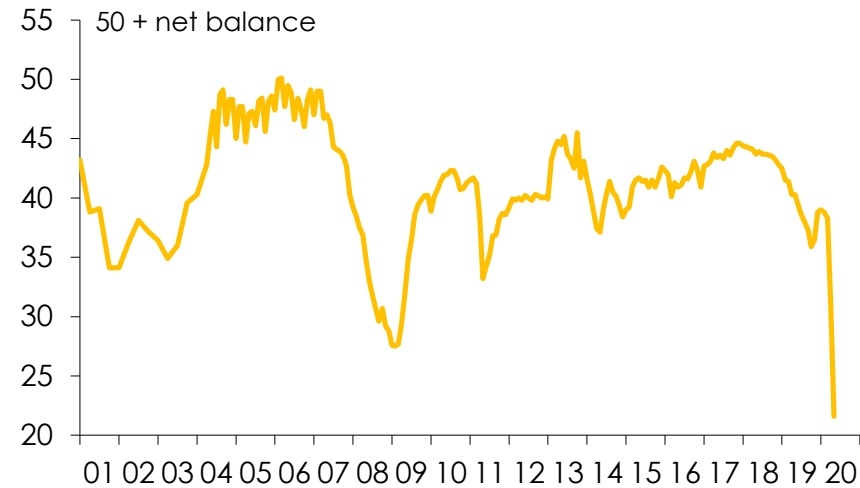
Sources: China National Bureau of Statistics; China Association of Automobile Manufacturers. Note: Motor vehicle sales data seasonally adjusted by Corinna.

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

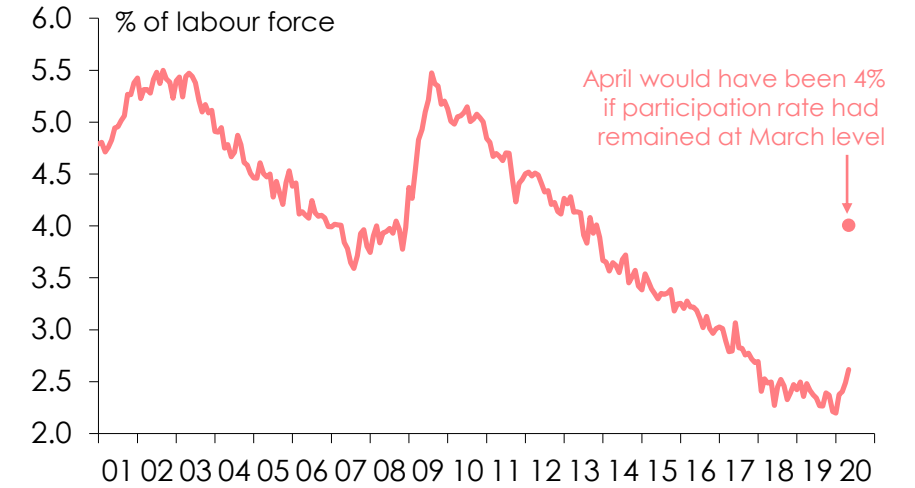
Real GDP



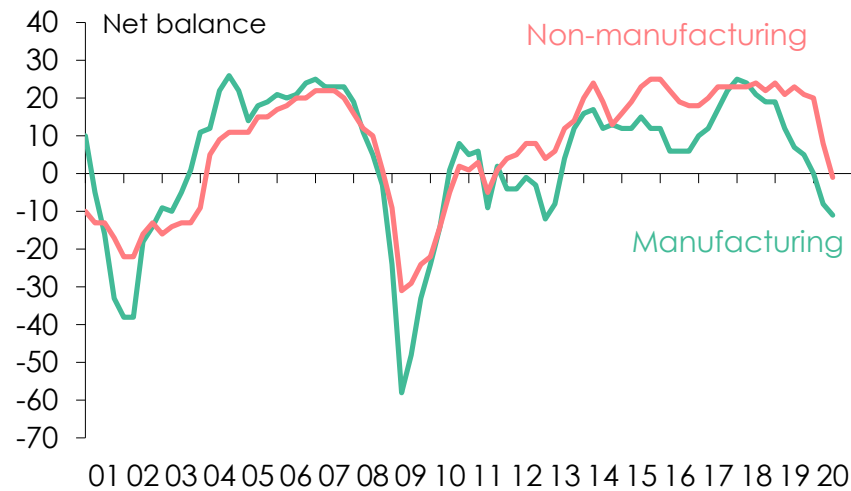
Consumer confidence



Unemployment



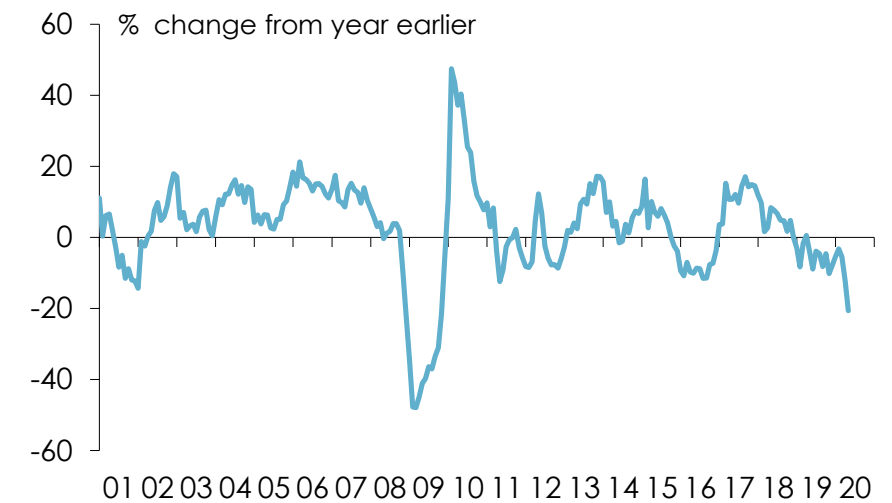
Business sentiment



Passenger vehicle sales



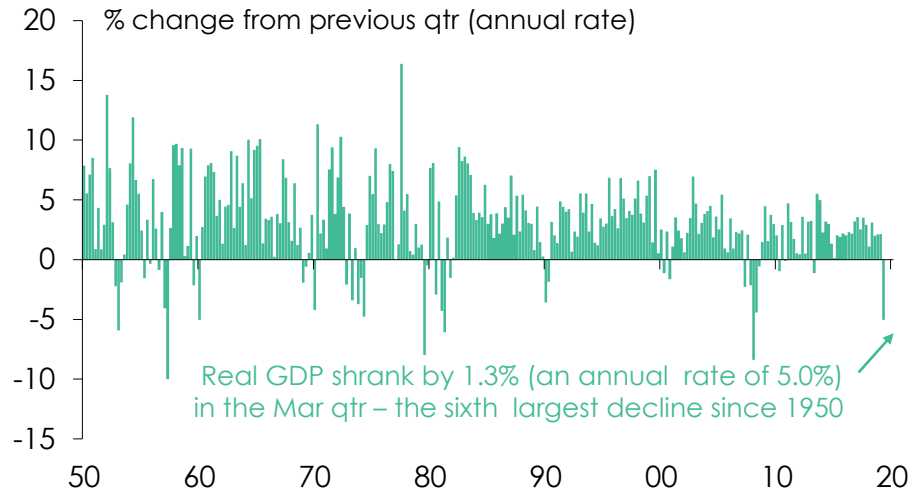
Merchandise exports



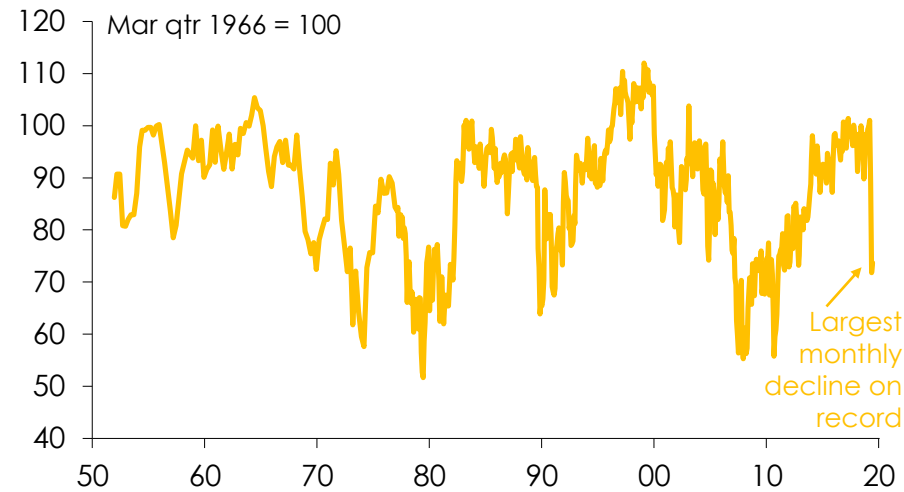
Sources: Japan Cabinet Office; Bank of Japan; Japan Automobile Dealers' Association; Ministry of Health, Labour & Welfare.

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

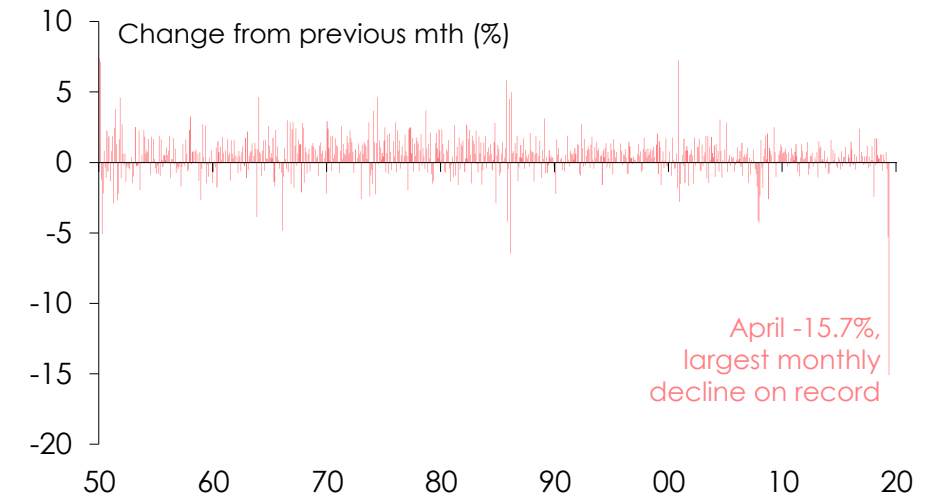
Real GDP



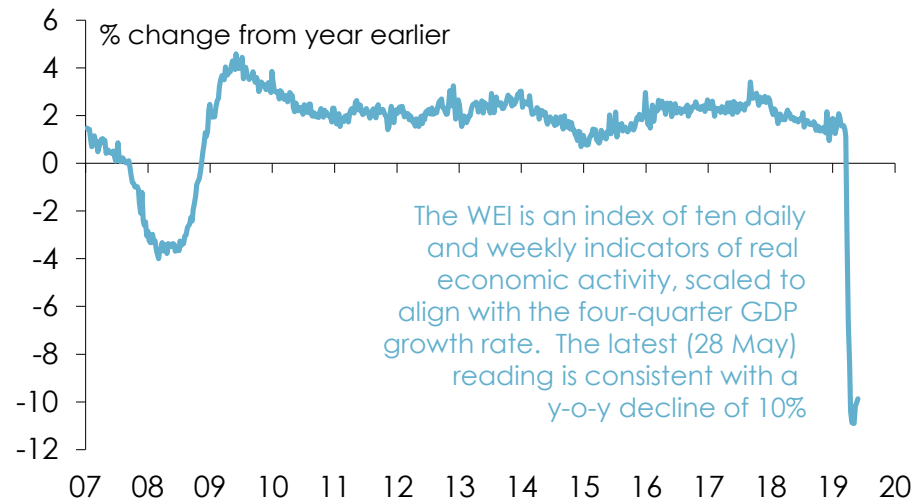
Consumer sentiment



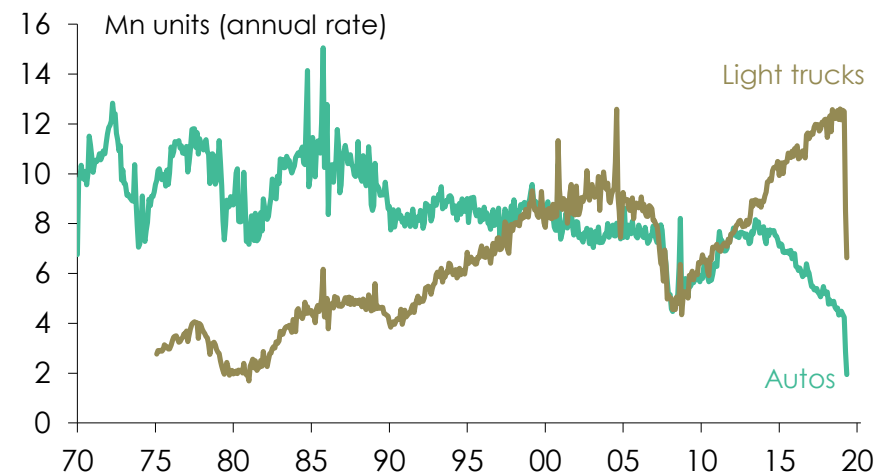
Retail sales



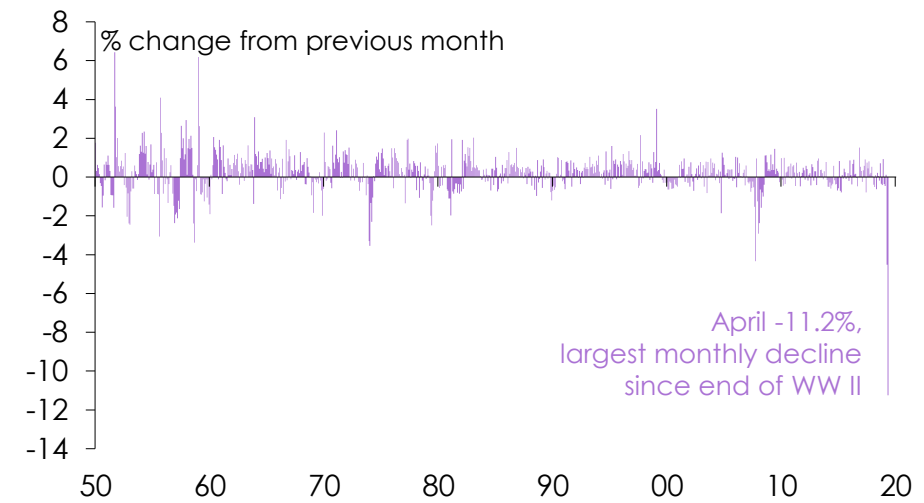
NY Fed weekly economic index



Auto and light truck sales



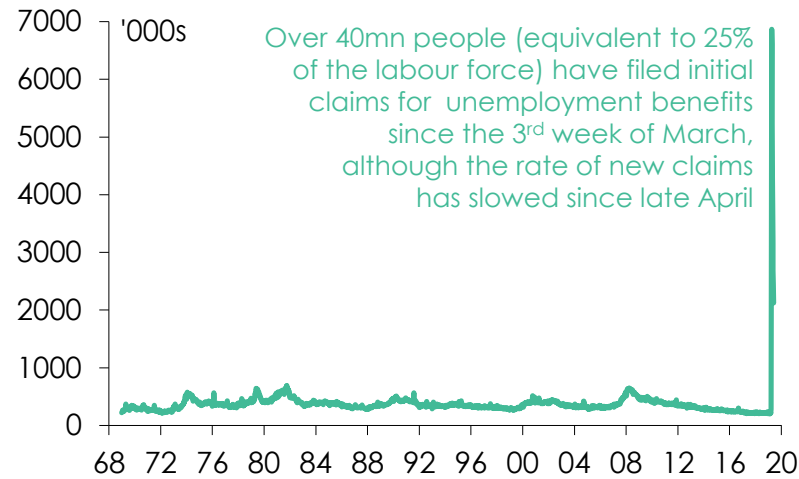
Industrial production



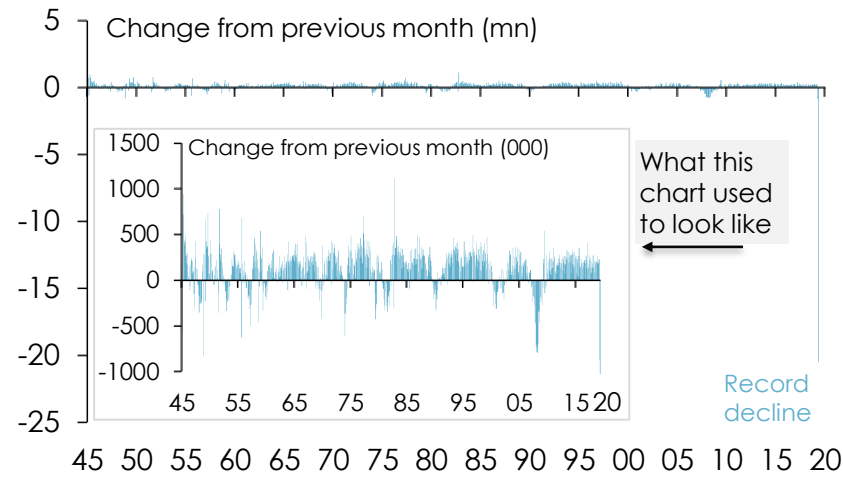
Sources: US Bureau of Economic Analysis; Federal Reserve Bank of New York; Michigan University Survey Research Center; US Commerce Department; Board of Governors of the Federal Reserve System.

The impact on the US labour market has been particularly severe

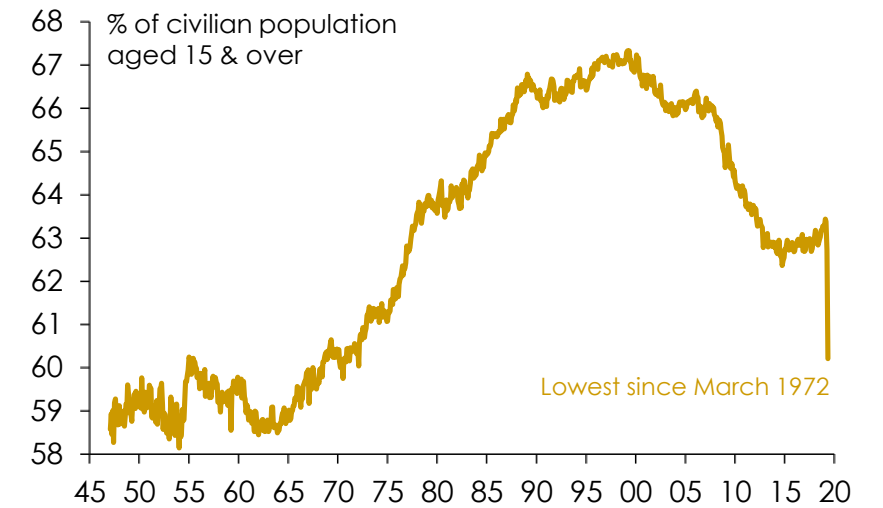
Unemployment benefit claims



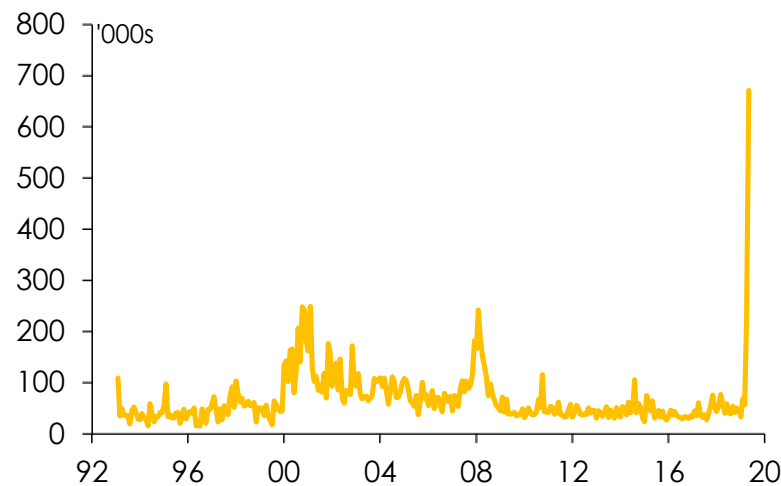
Non-farm payroll employment



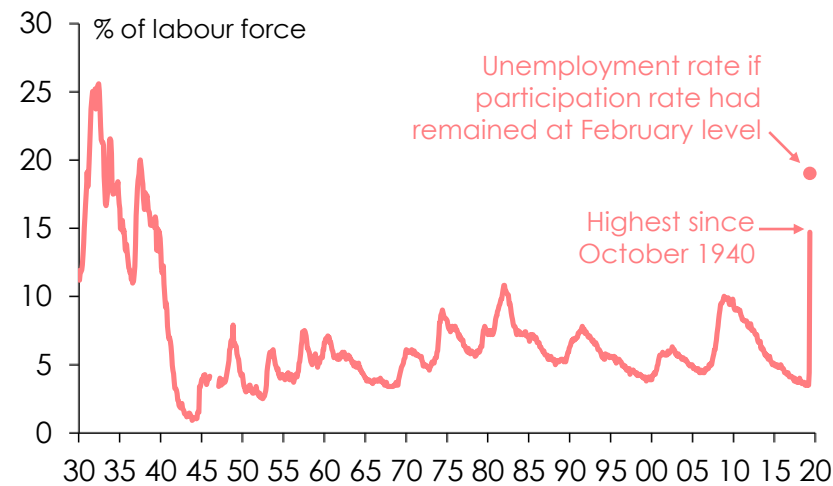
Labour force participation rate



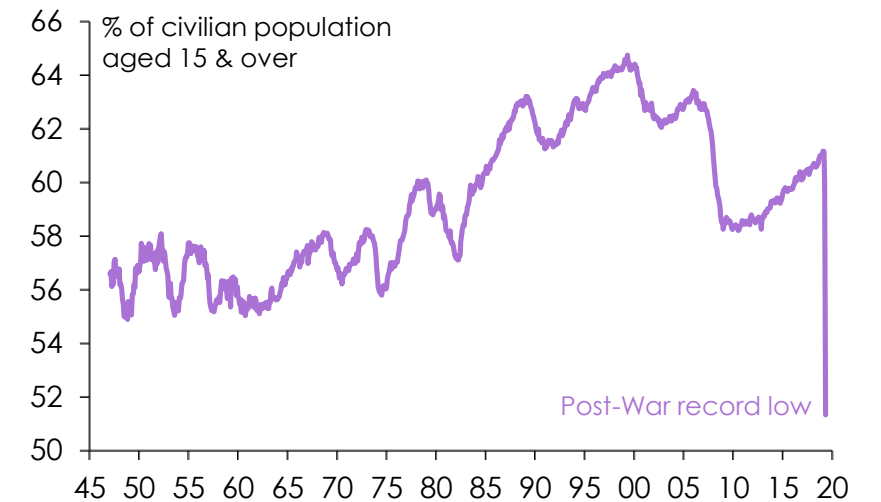
Layoff announcements



Unemployment rate



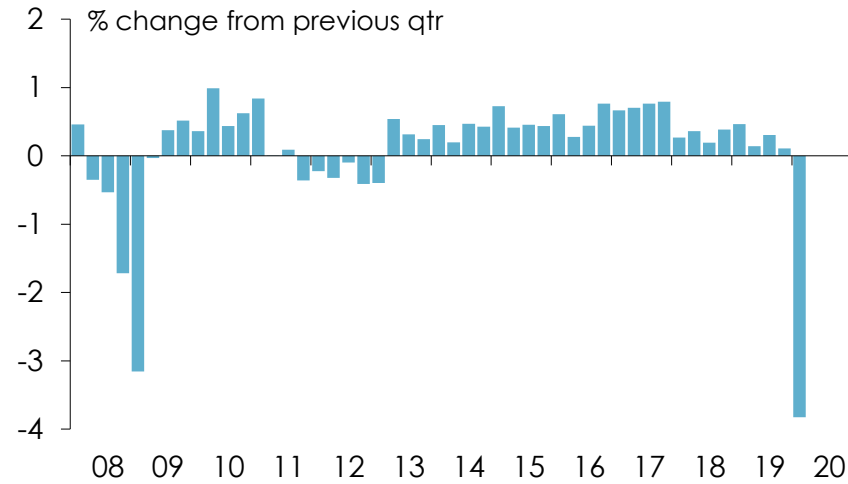
Employment to population ratio



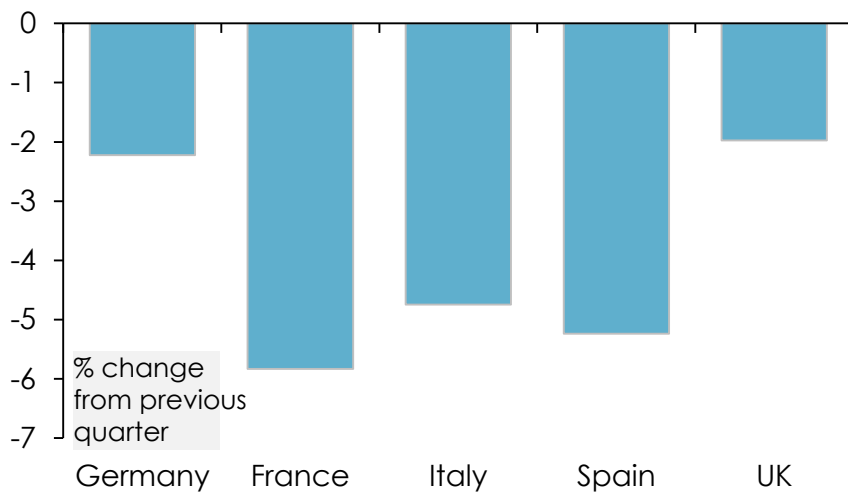
Sources: US Department of Labor; Challenger, Gray & Christmas; US Bureau of Labor Statistics; National Bureau of Economic Research Macro History database.

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

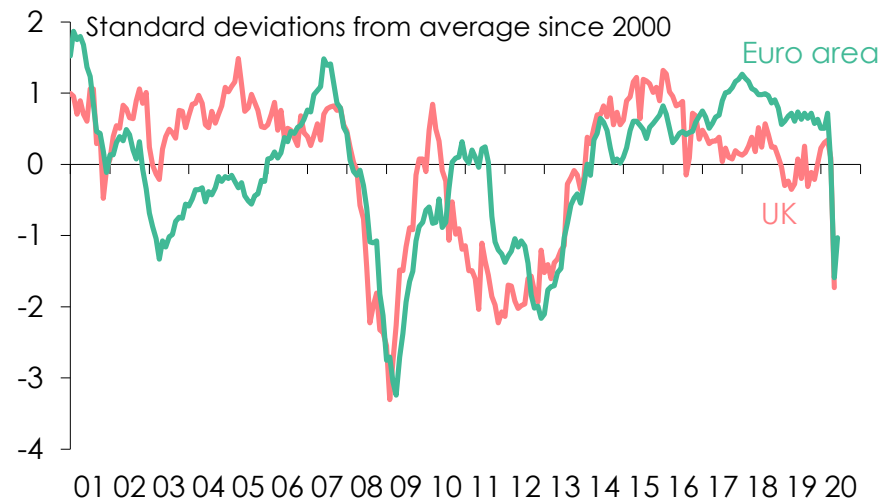
Euro area real GDP



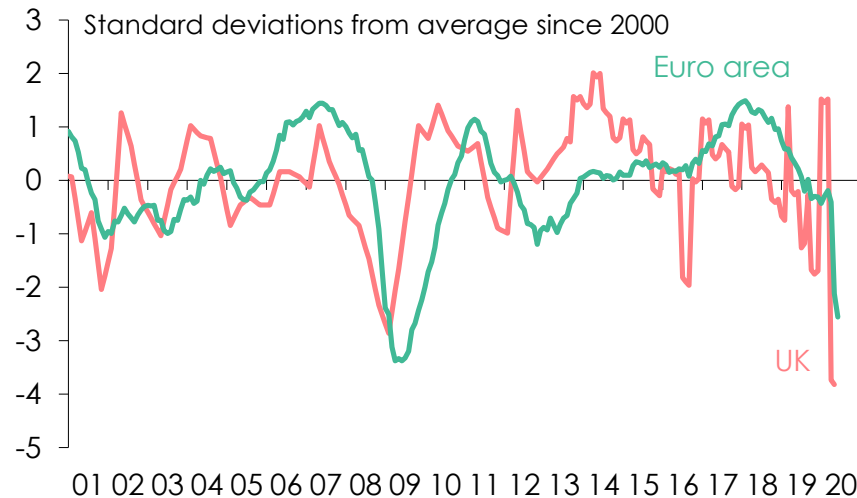
March quarter GDP by country



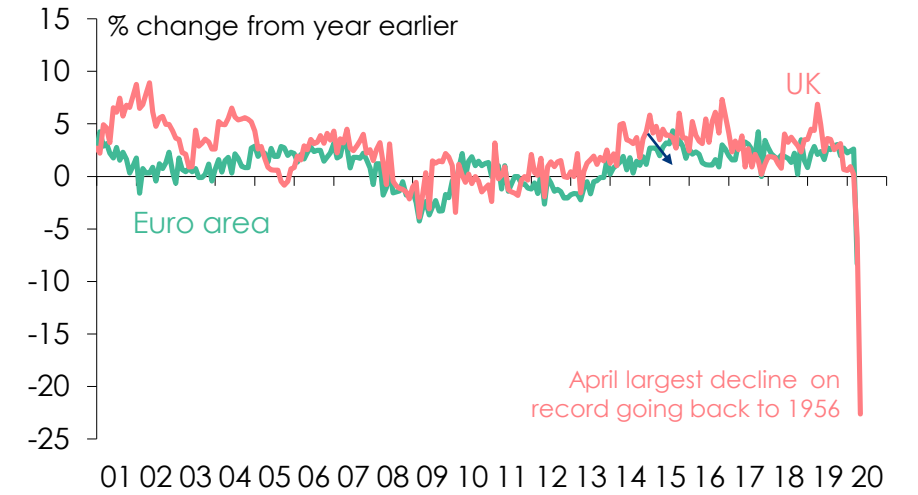
Consumer confidence



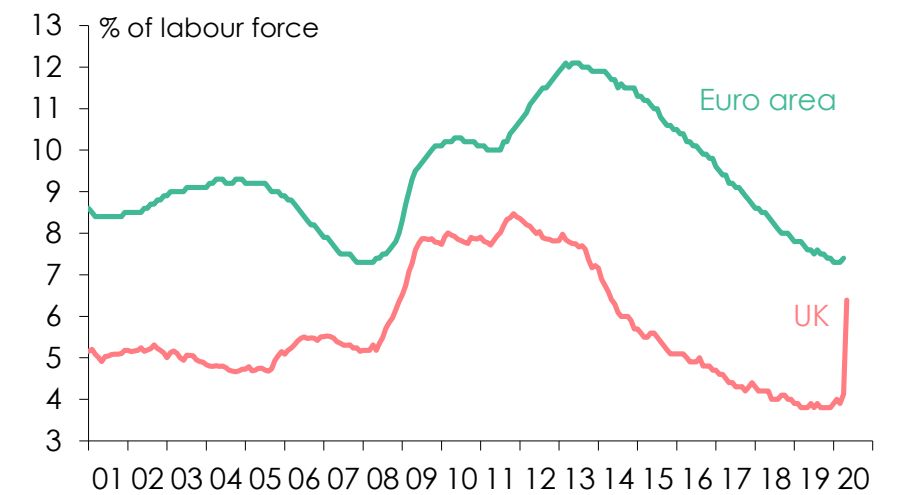
Business confidence



Retail sales volume



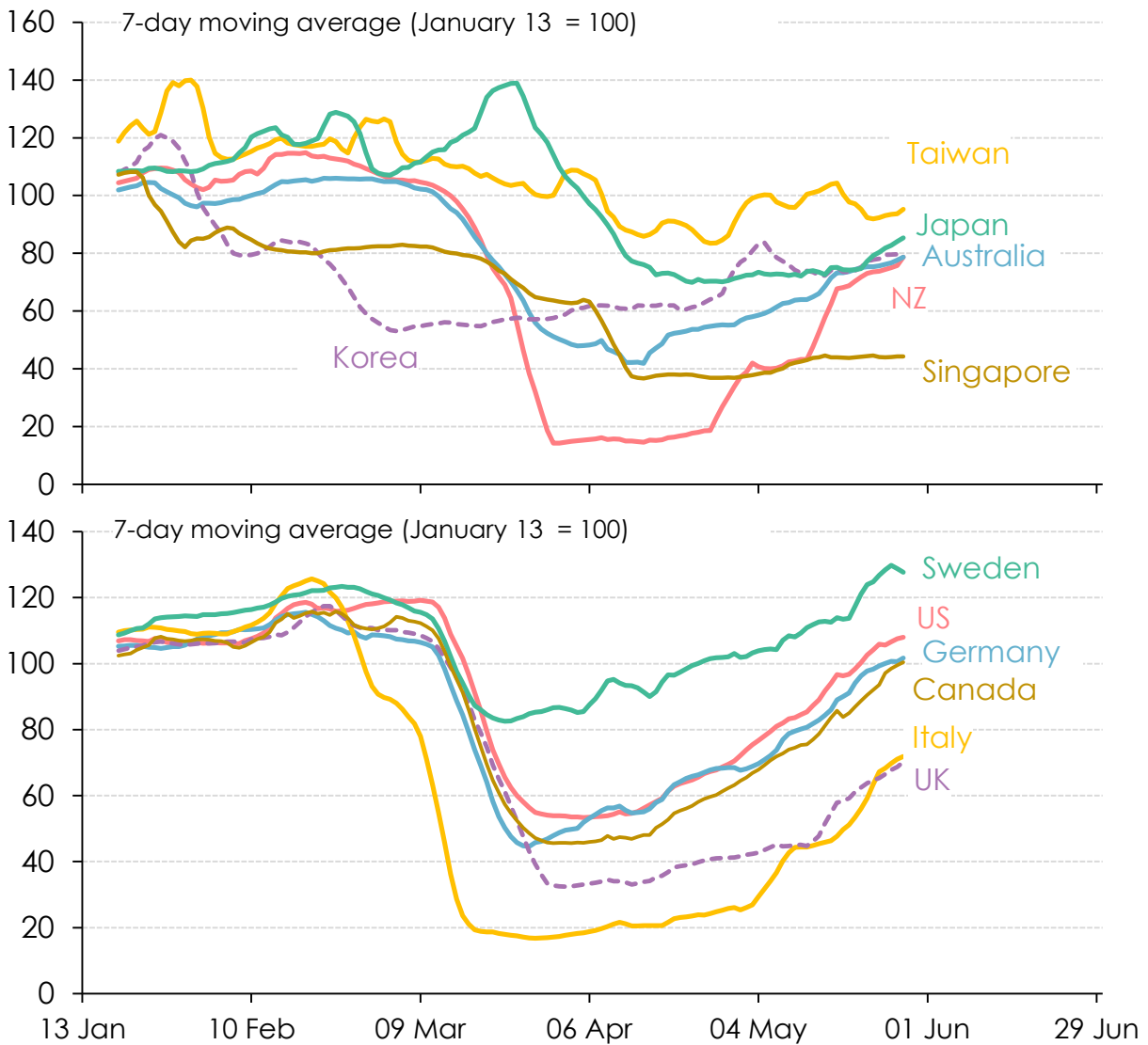
Unemployment



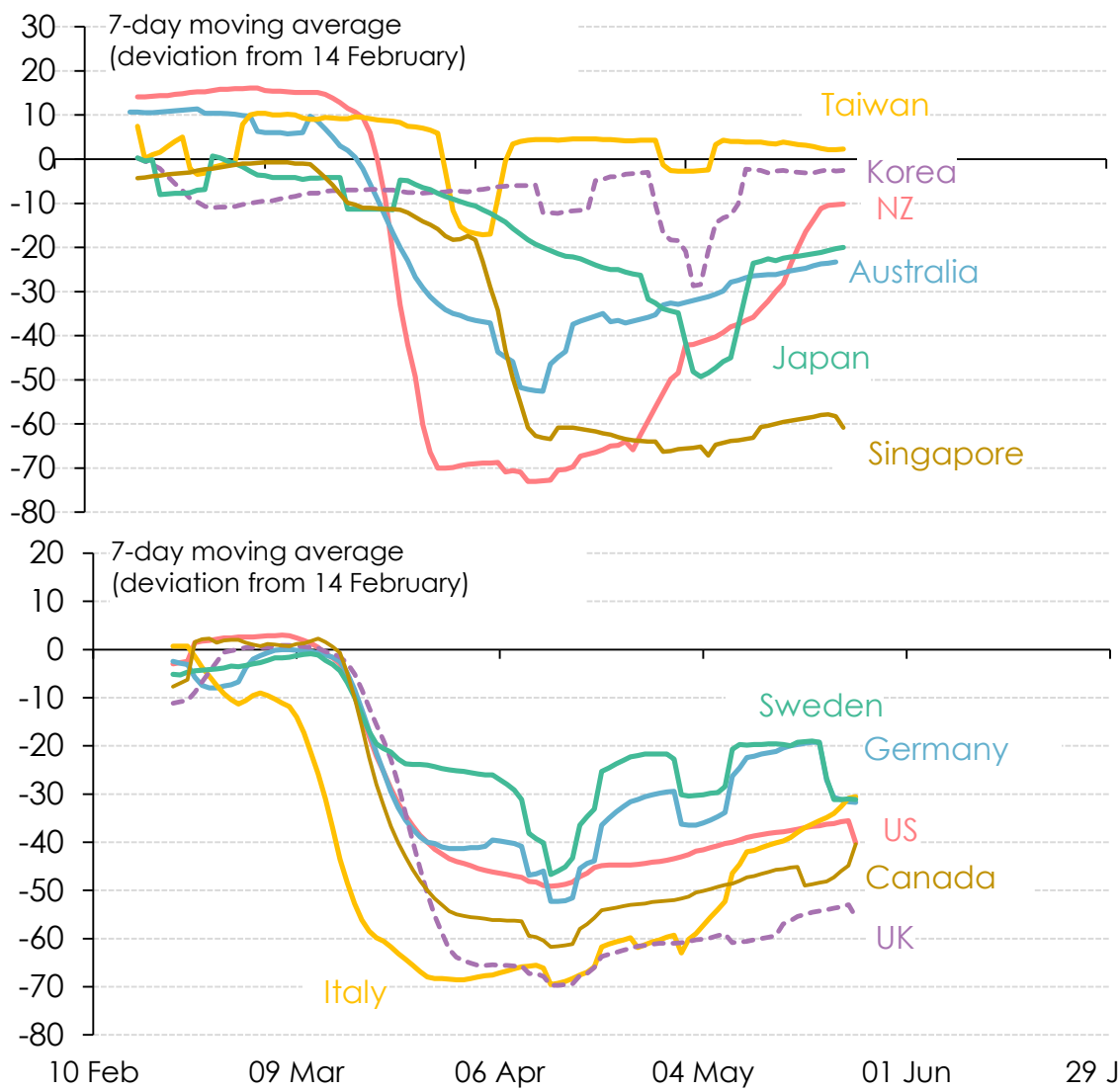
Sources: Eurostat; UK Office for National Statistics; Confederation of British Industry.

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

Time spent driving



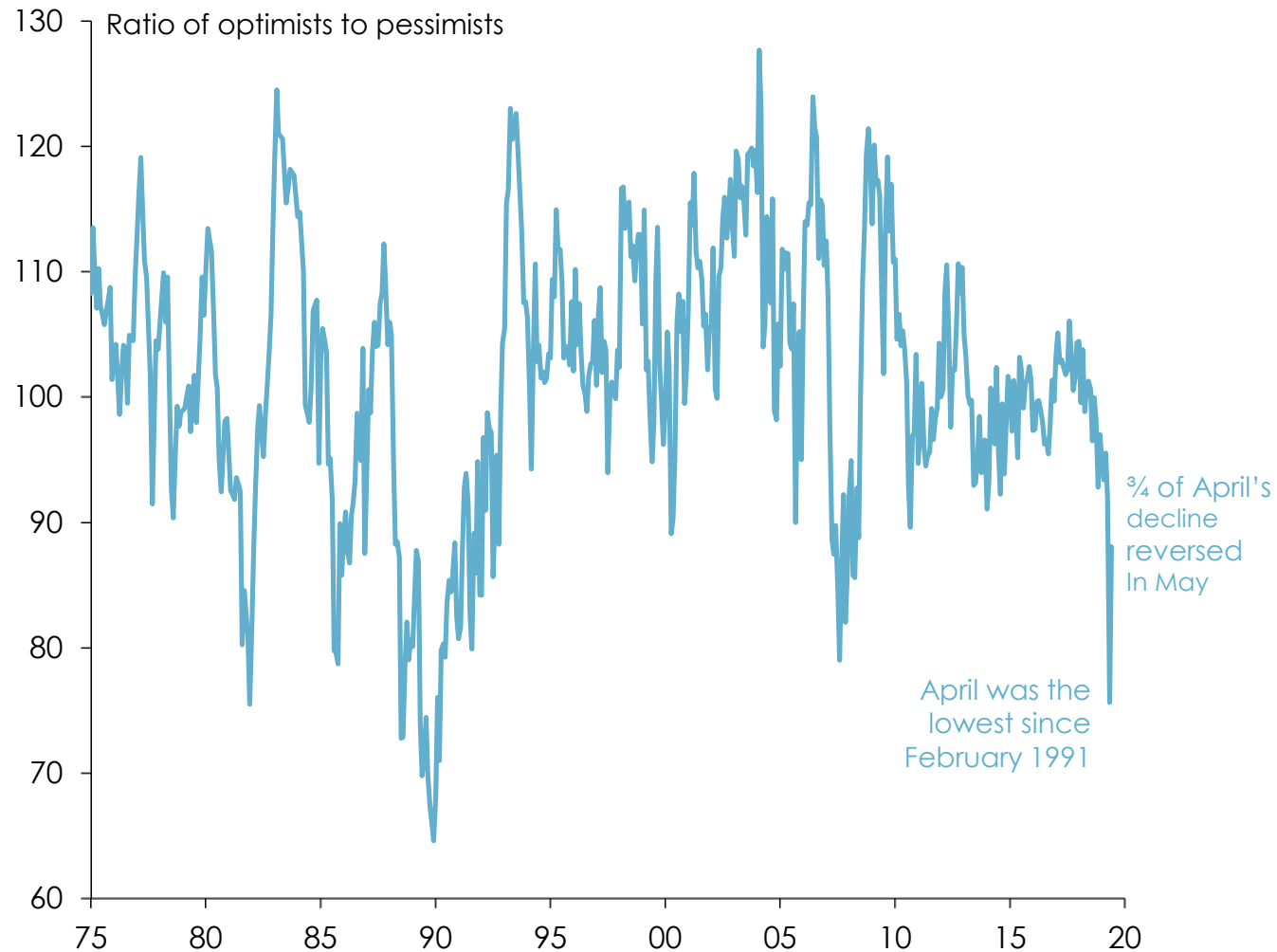
Time spent in work places



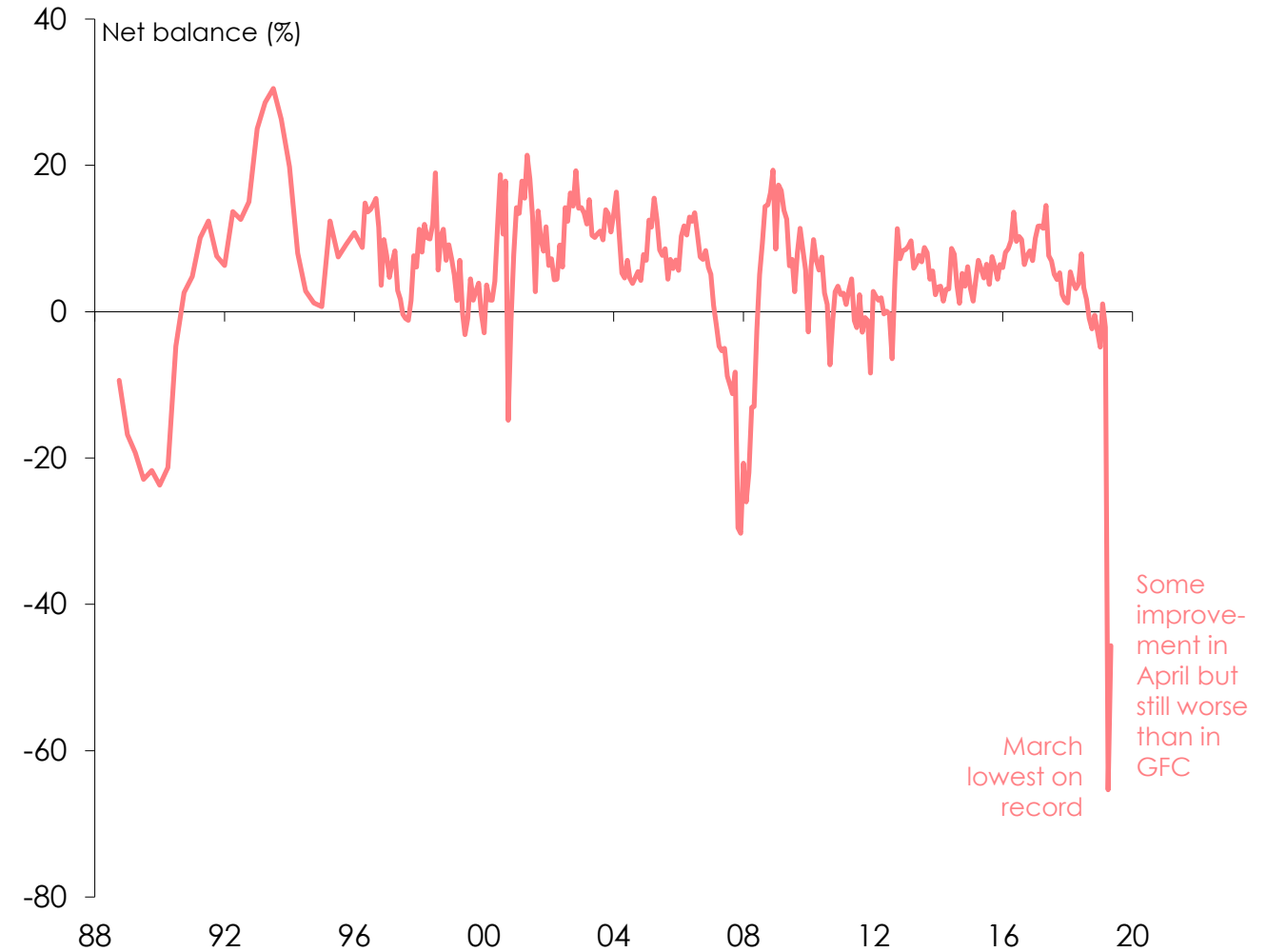
Sources: Apple Mobility Trends Reports (data up to 28th May); Google Covid-19 Community Mobility Reports (data up to 25th May).

In Australia, consumer and business confidence plunged in March, but have staged a partial recovery in April

Consumer confidence



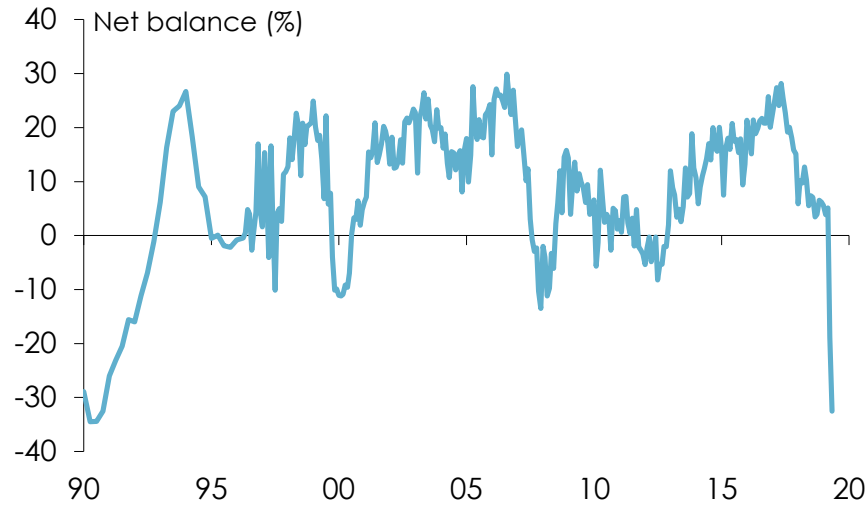
Business confidence



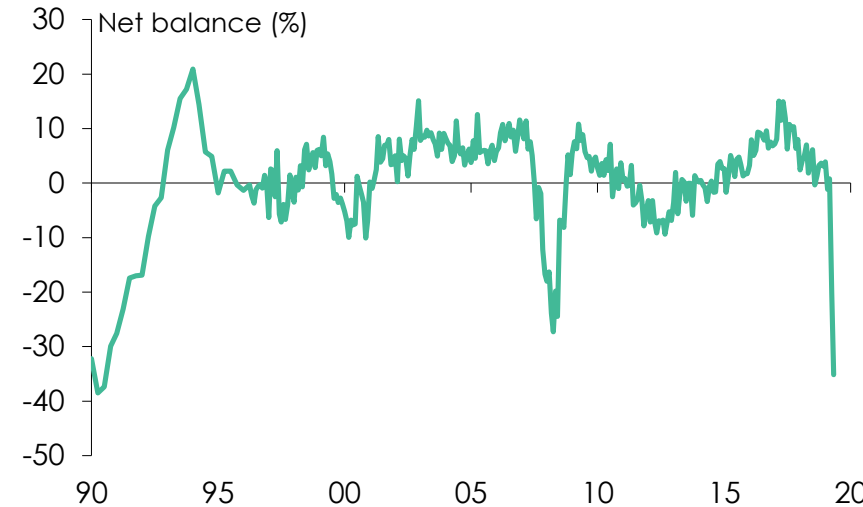
Sources: Westpac-Melbourne Institute; National Australia Bank.

Most of the components of NAB's well-regarded business survey are worse than during the GFC but not as bad as in the early 1990s recession

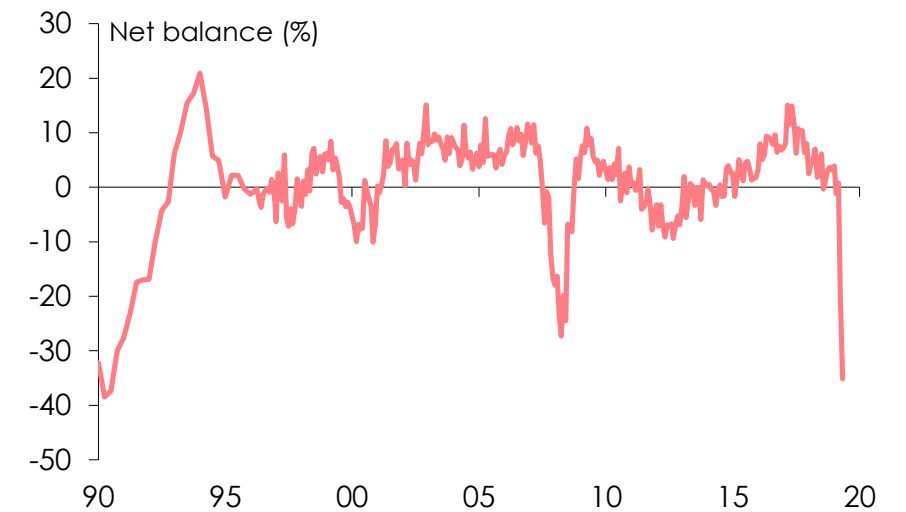
Trading conditions



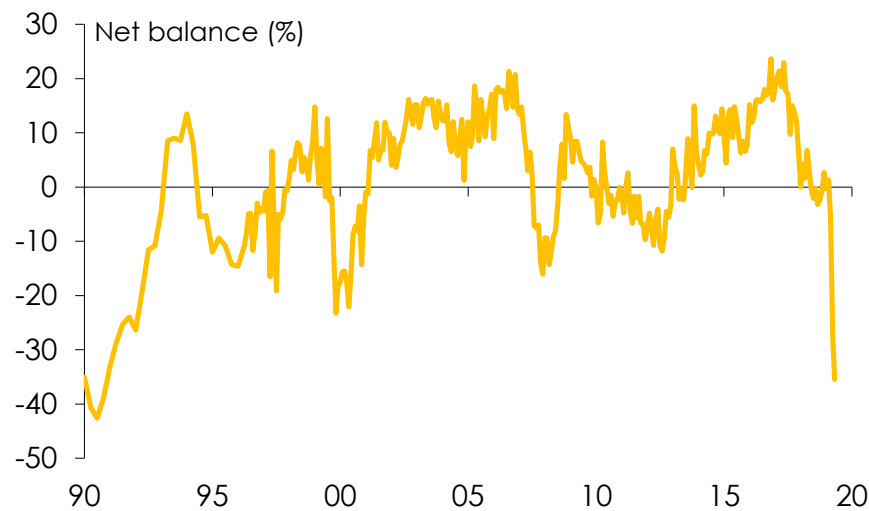
Forward orders



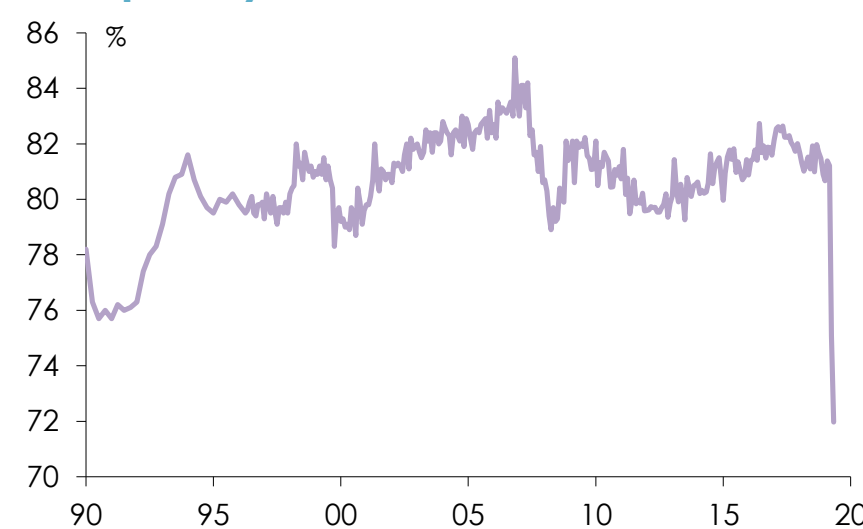
Employee hiring intentions



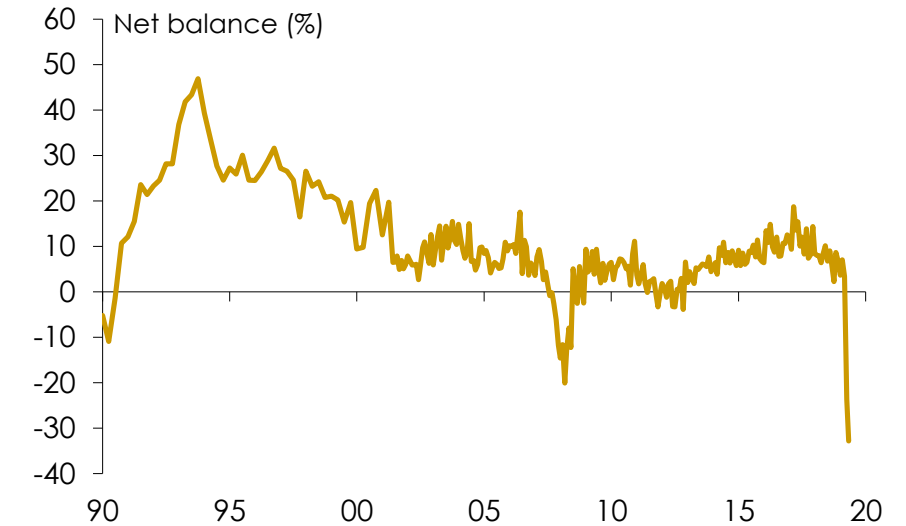
Profitability



Capacity utilization



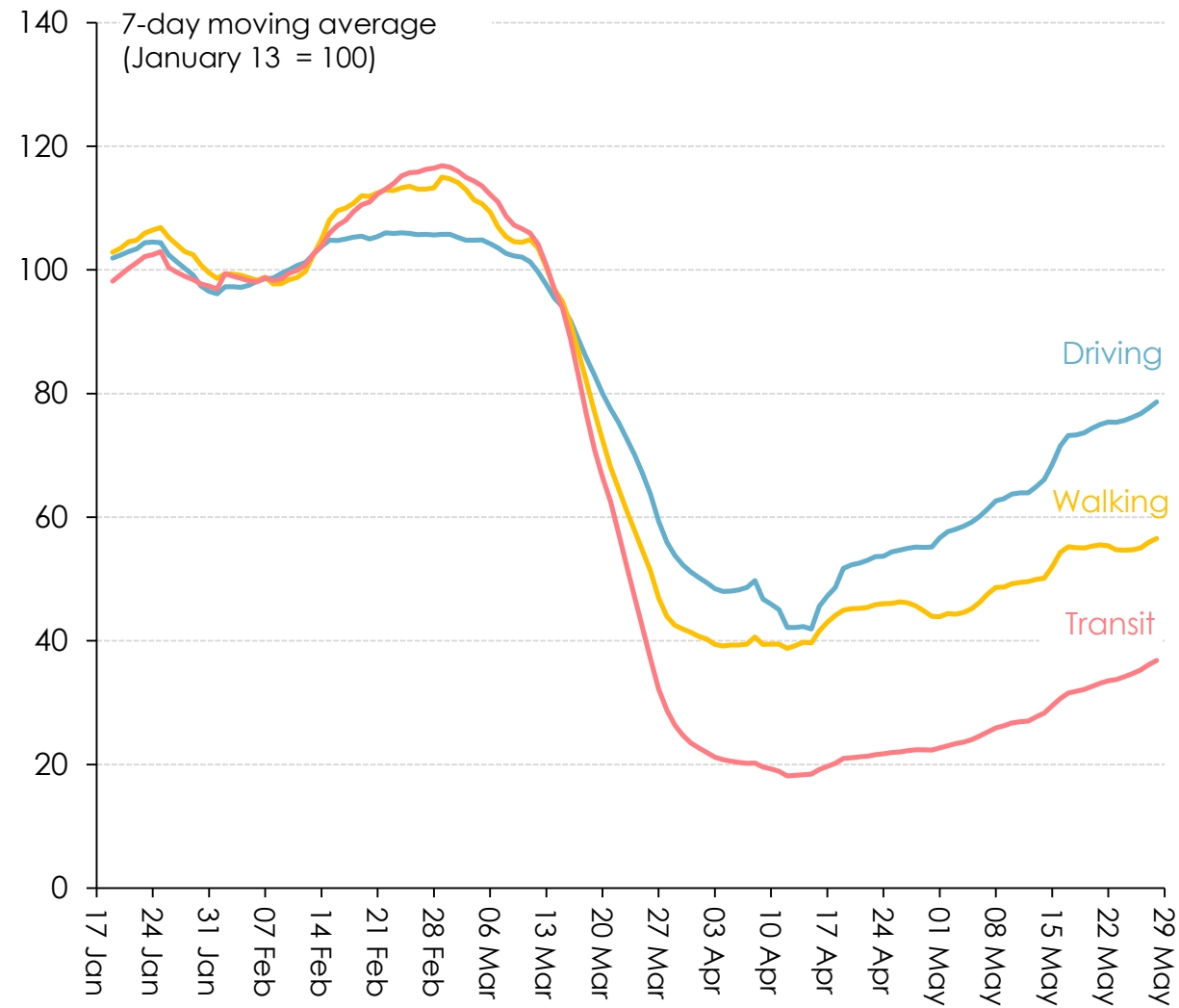
Capital expenditure intentions



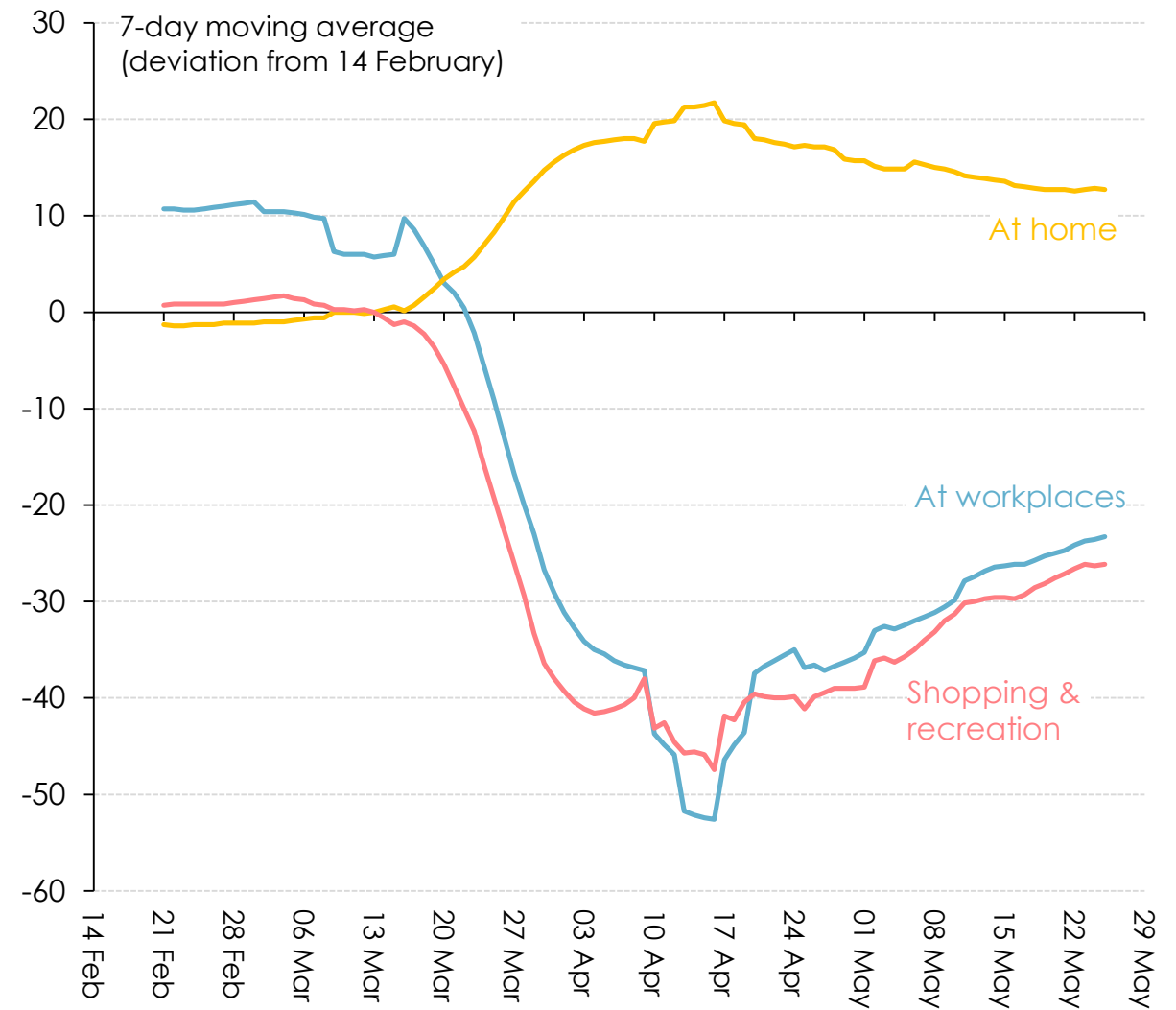
Note: Quarterly data up to March 1987 (May 2002 for capex intentions), monthly thereafter (latest data April 2020). Source: National Australia Bank.

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



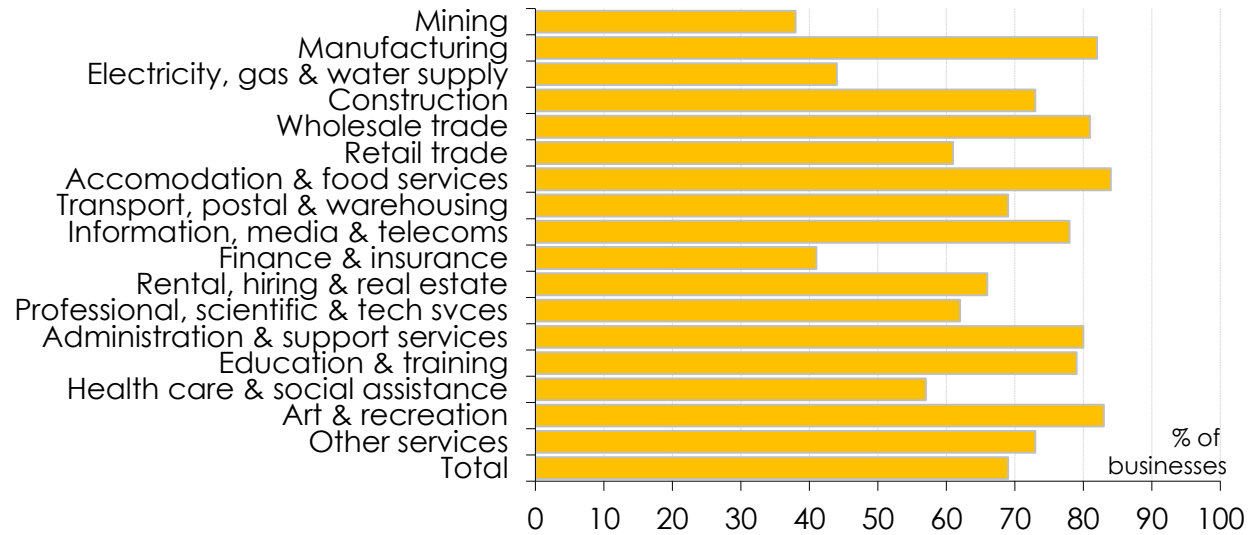
Time spent working, at home, shopping & playing



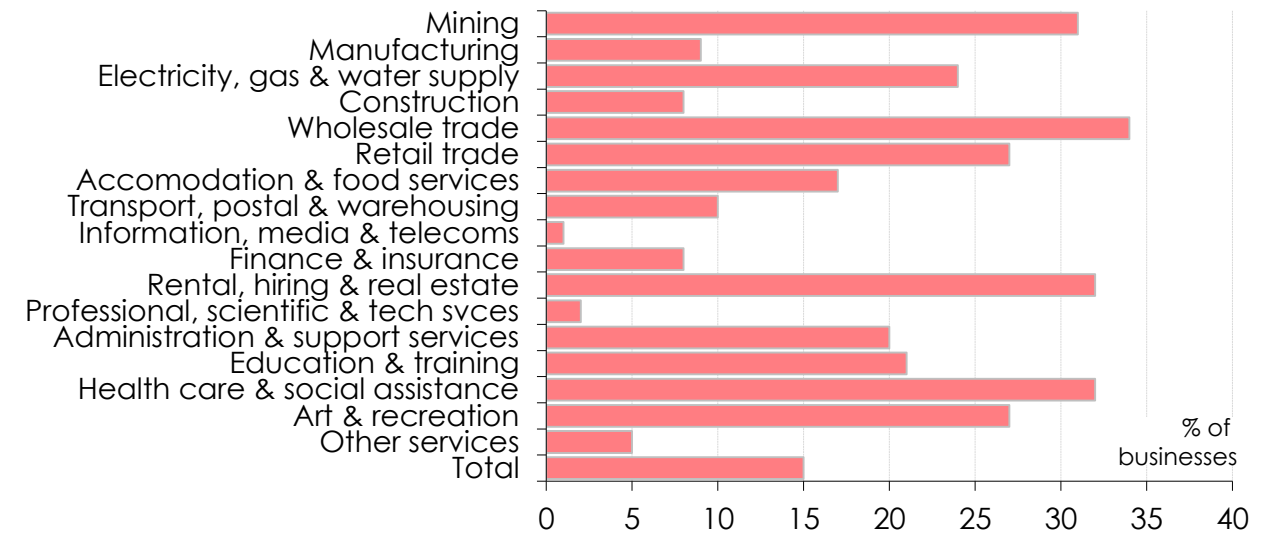
Note: 'transit' means using public transport. Sources: Apple Mobility Trends Reports (data up to 28th May); Google Covid-19 Community Mobility Reports (data up to 25th May).

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

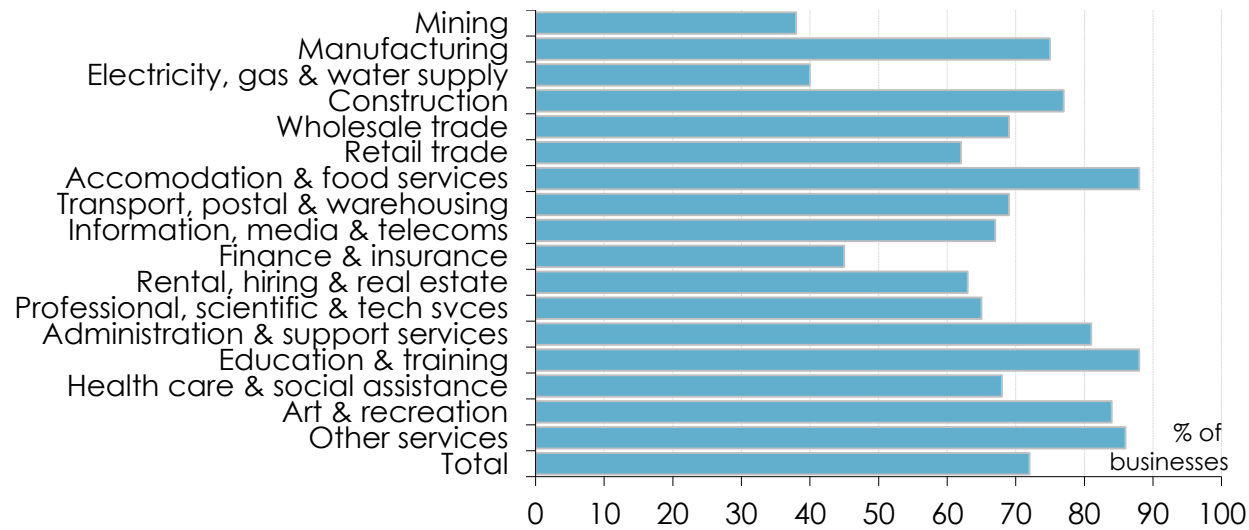
Reduced demand



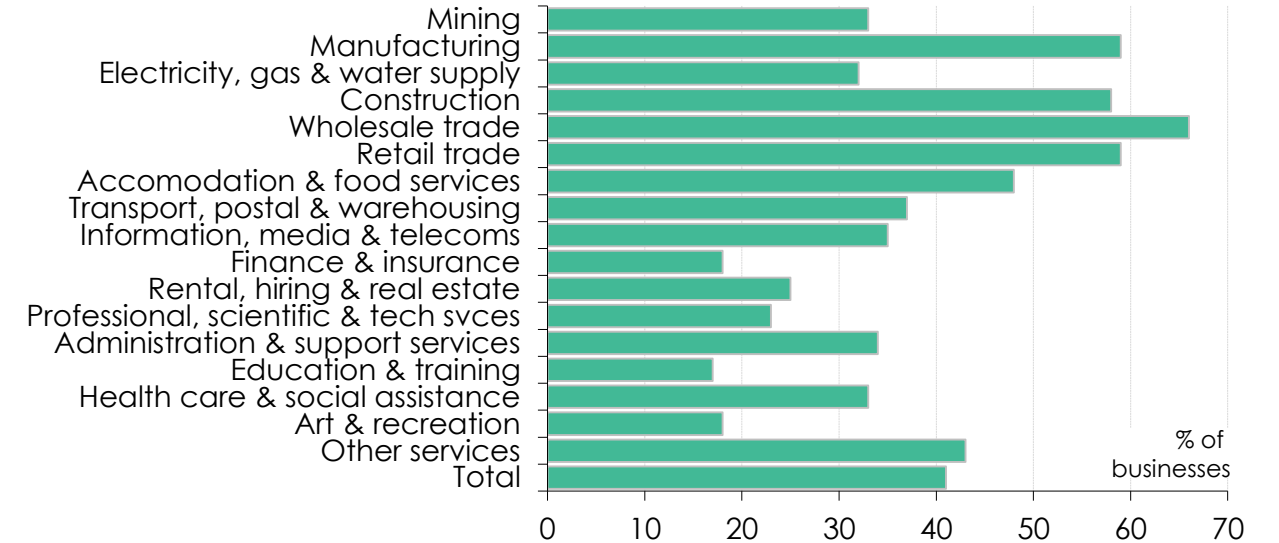
Staff shortages



Reduced cashflow



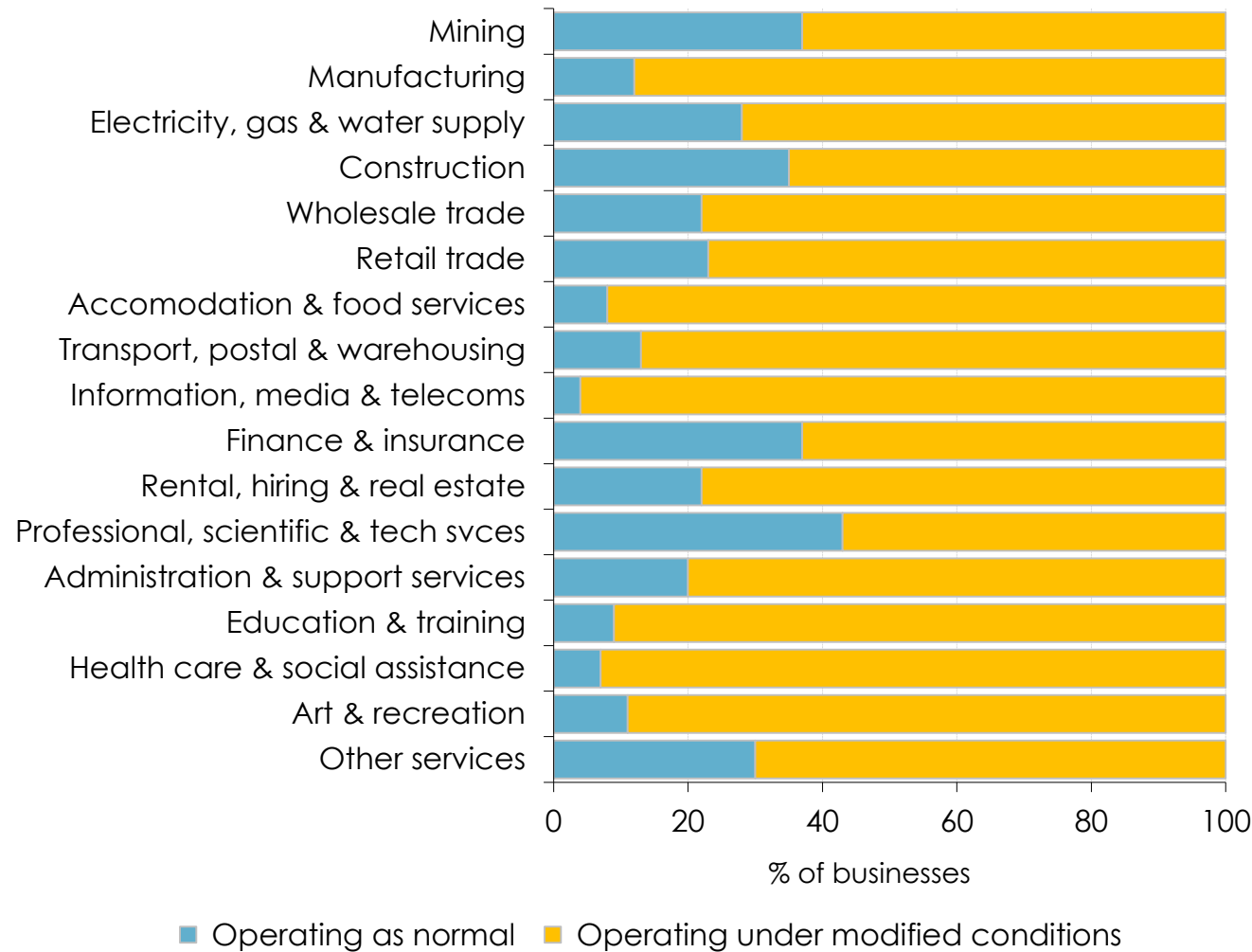
Supply chain uncertainties



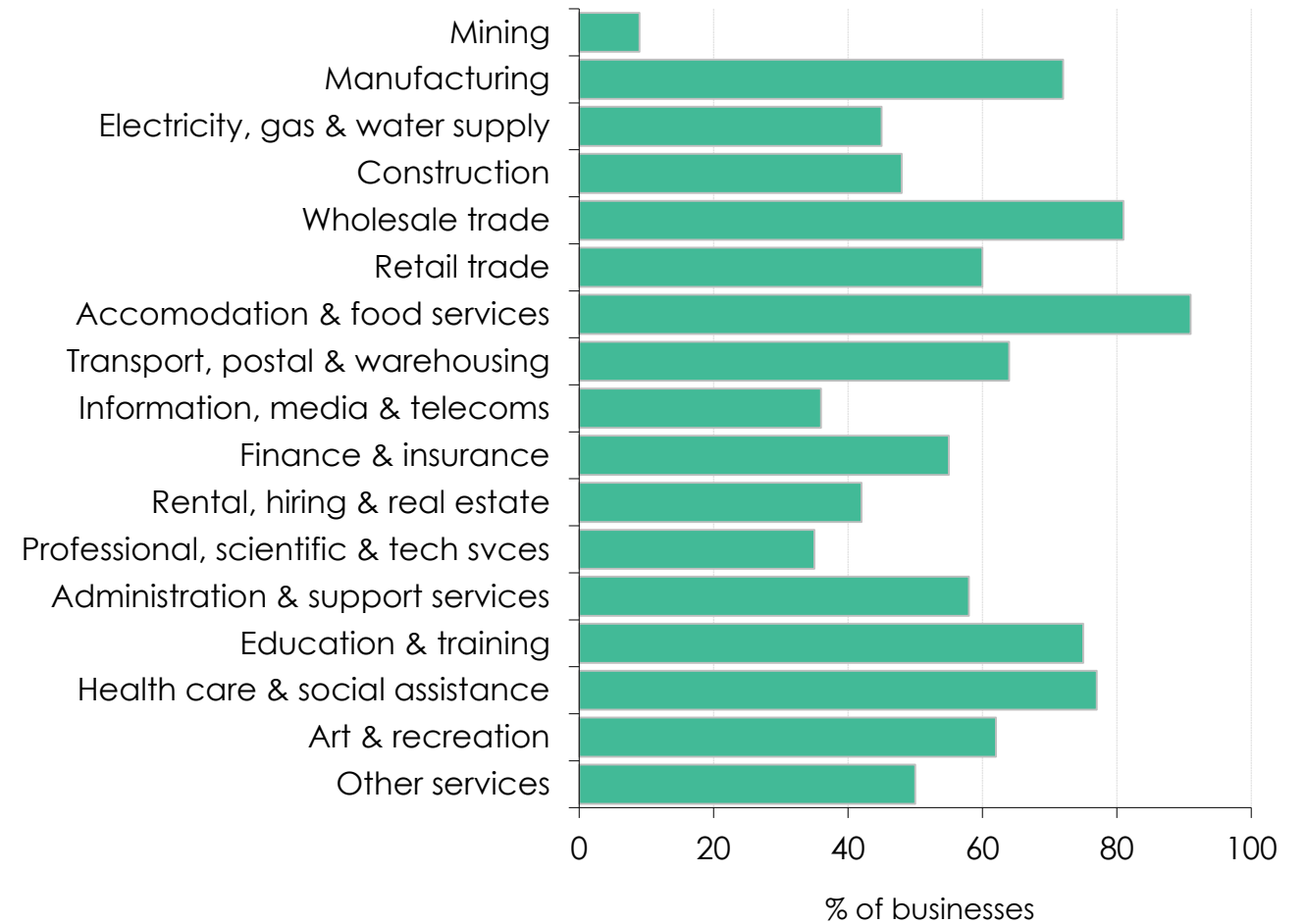
Source: ABS Business Indicators, Business Impacts of COVID-19, April 2020 (based on survey conducted between 22nd and 28th April).

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



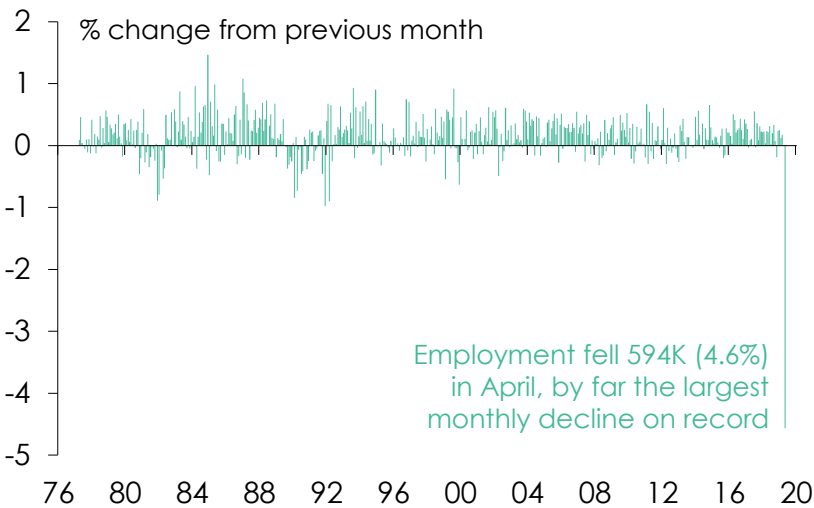
Businesses which have made changes to employment arrangements



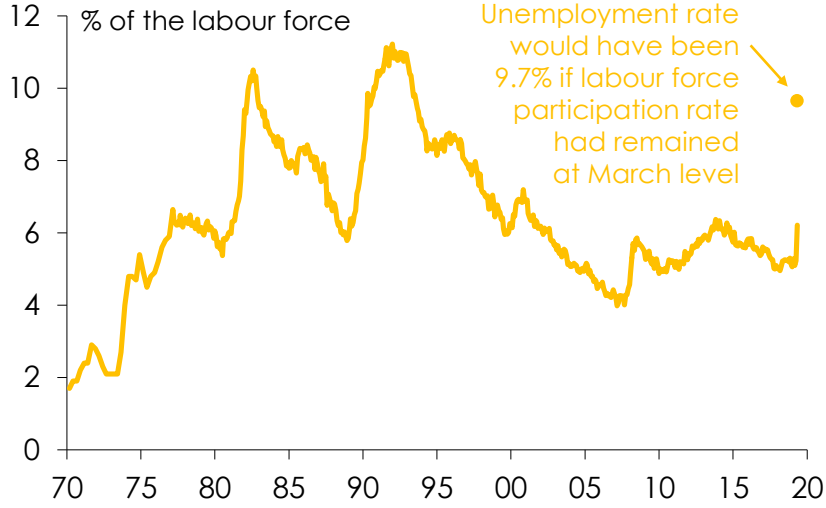
Source: ABS Business Indicators, Business Impacts of COVID-19, May 2020 (based on survey conducted between 13th and 22nd May).

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

Employment



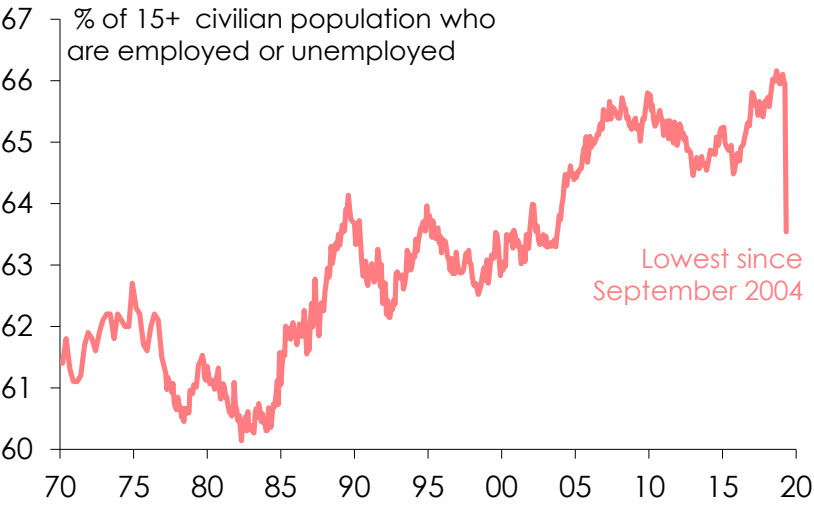
Unemployment rate



'Under-utilization' rate



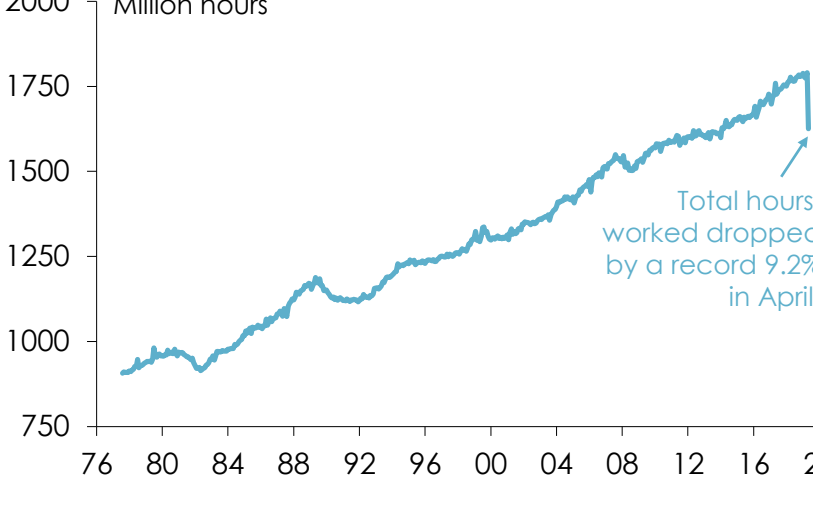
Labour force participation rate



Under-employment ratio



Total hours worked



Note: The ABS classifies people on JobKeeper who worked zero hours in the survey week as 'employed'. Had it not done so, the unemployment rate in April would have been 11.7%. 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.

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

Alternative measures of unemployment

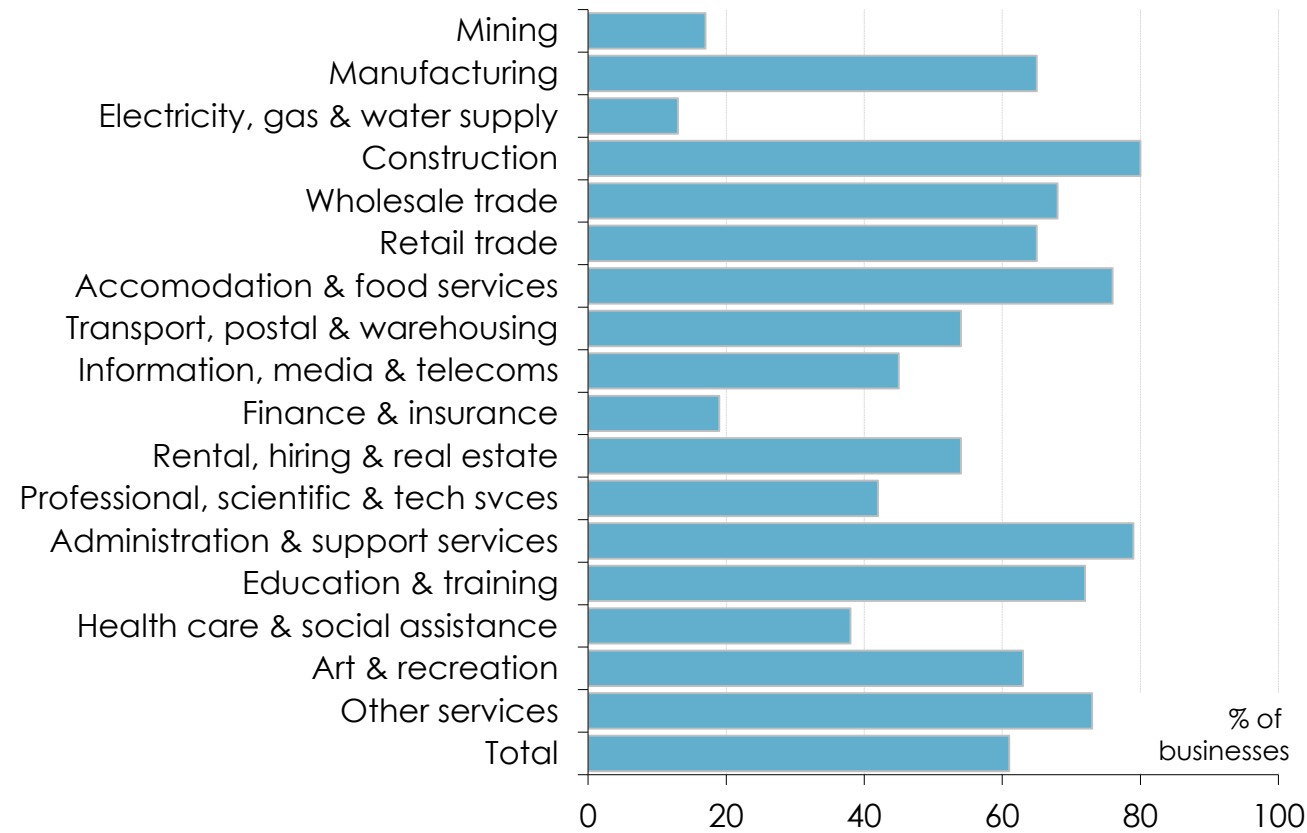


- ❑ The Government's JobKeeper program pays eligible employers a subsidy of \$1500 per fortnight for each eligible employee kept on the payroll between 30 March and 27 September
- ❑ Eligible employers are those with
 - annual turnover of <\$1bn whose turnover has fallen by >30%
 - annual turnover of >\$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)

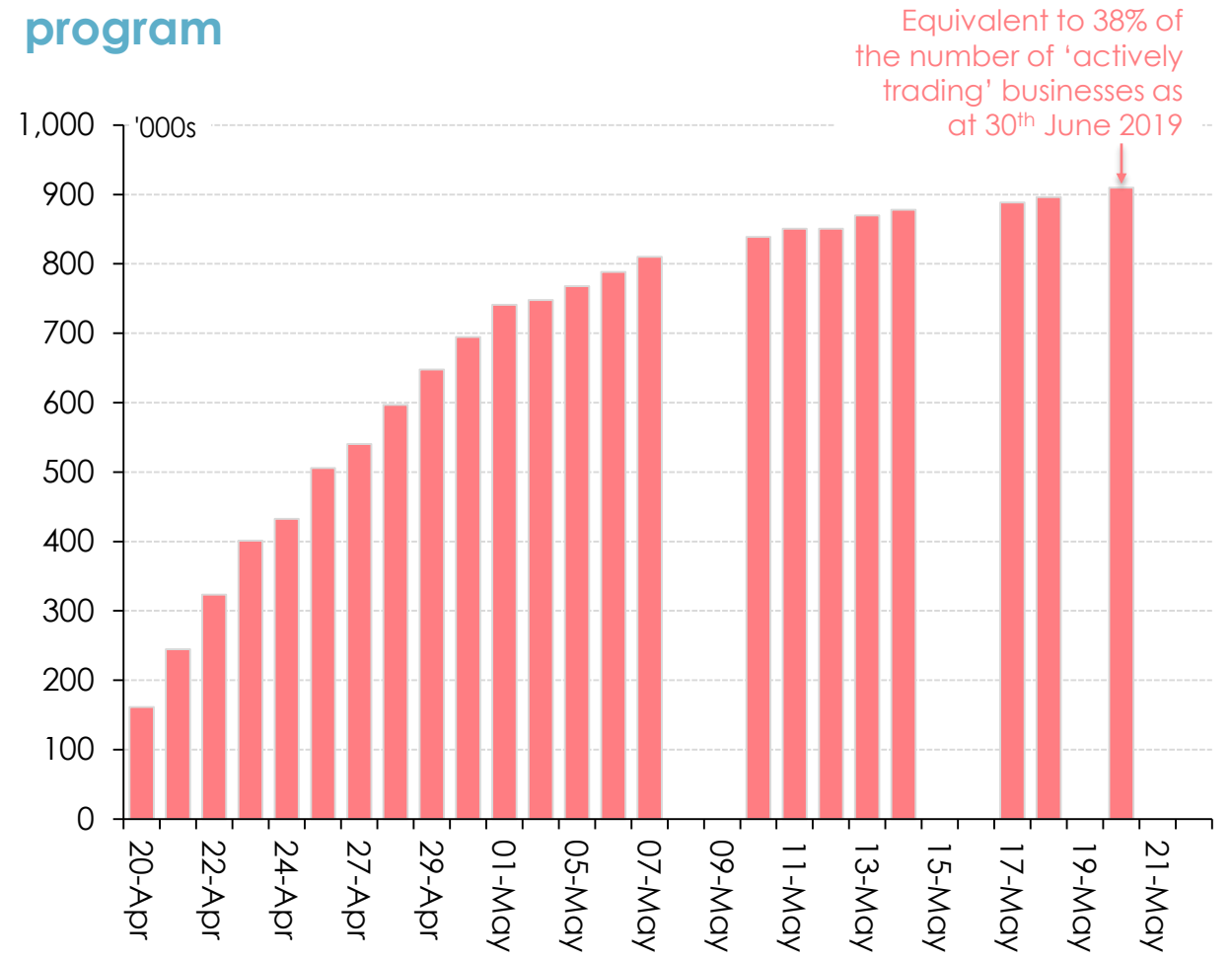
Source: ABS; Corinna.

Although 60% of businesses say they will register for JobKeeper payments, so far fewer than 40% have done so

Businesses expecting to register for participation in JobKeeper program



Number of businesses enrolled in JobKeeper program

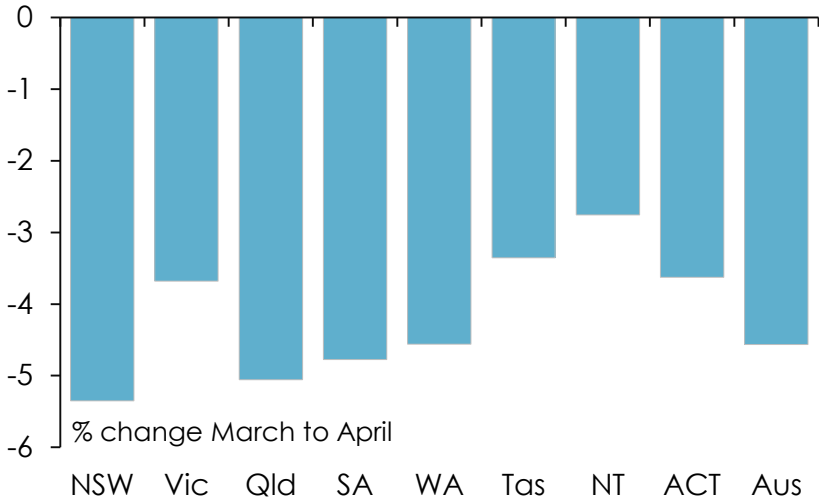


□ Treasury now thinks that about 3½mn workers will be supported by JobKeeper, down from the original estimate of 6½mn – at a cost of \$70bn, down from the original estimate of \$130bn

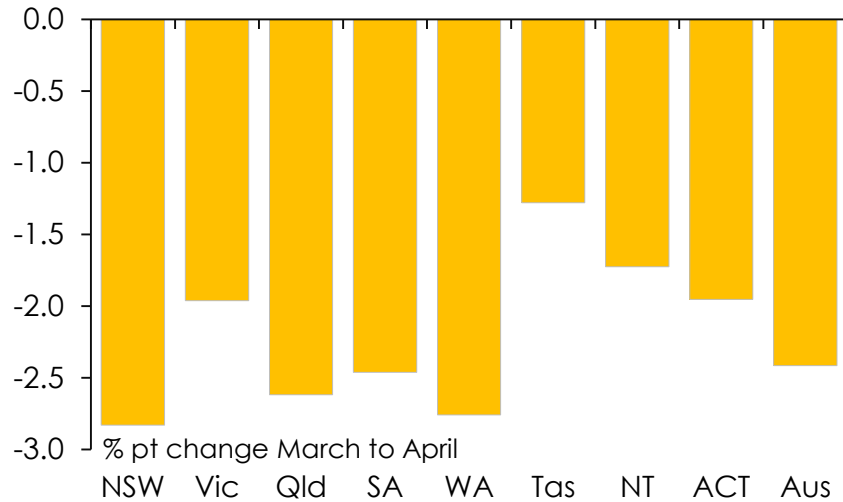
Sources: ABS; Treasury; Australian Financial Review.

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

Employment



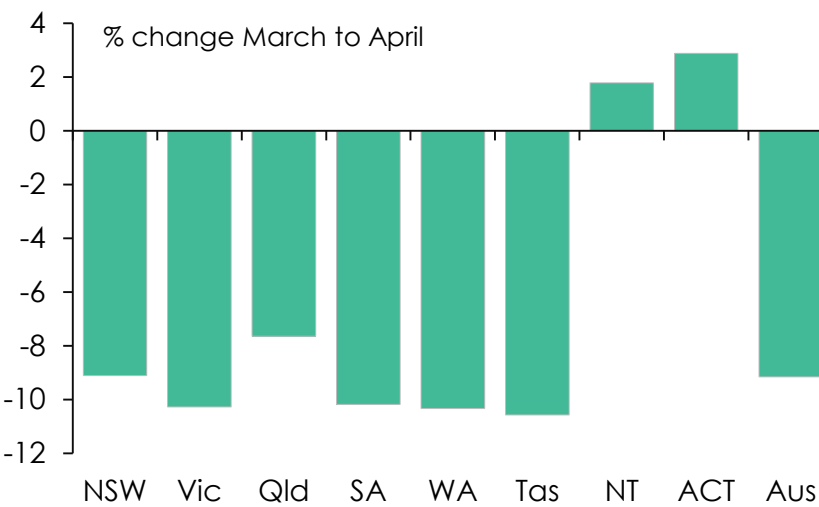
Labour force participation rate



Under-employment ratio



Total hours worked



Unemployment rate



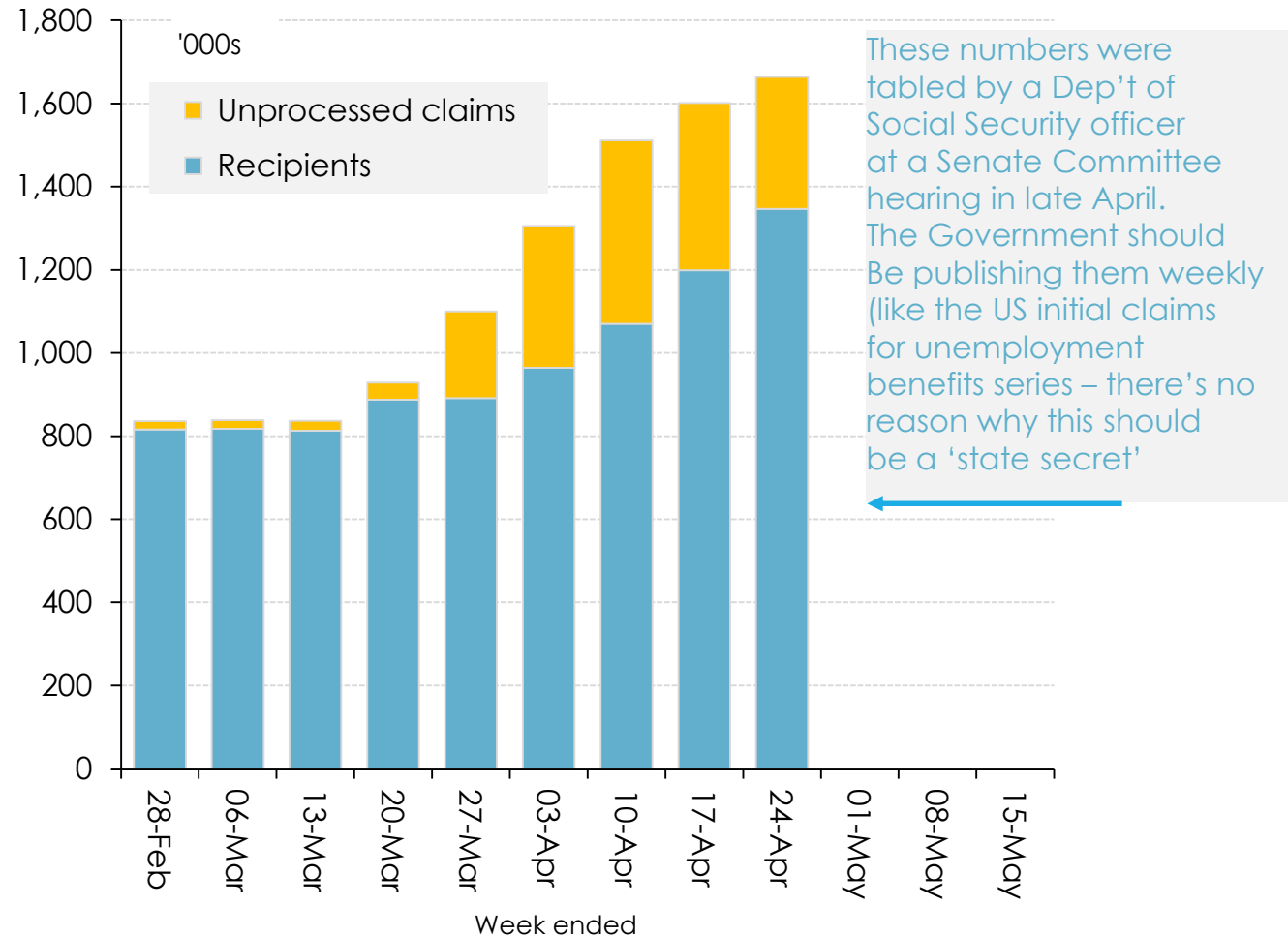
'Under-utilization' rate



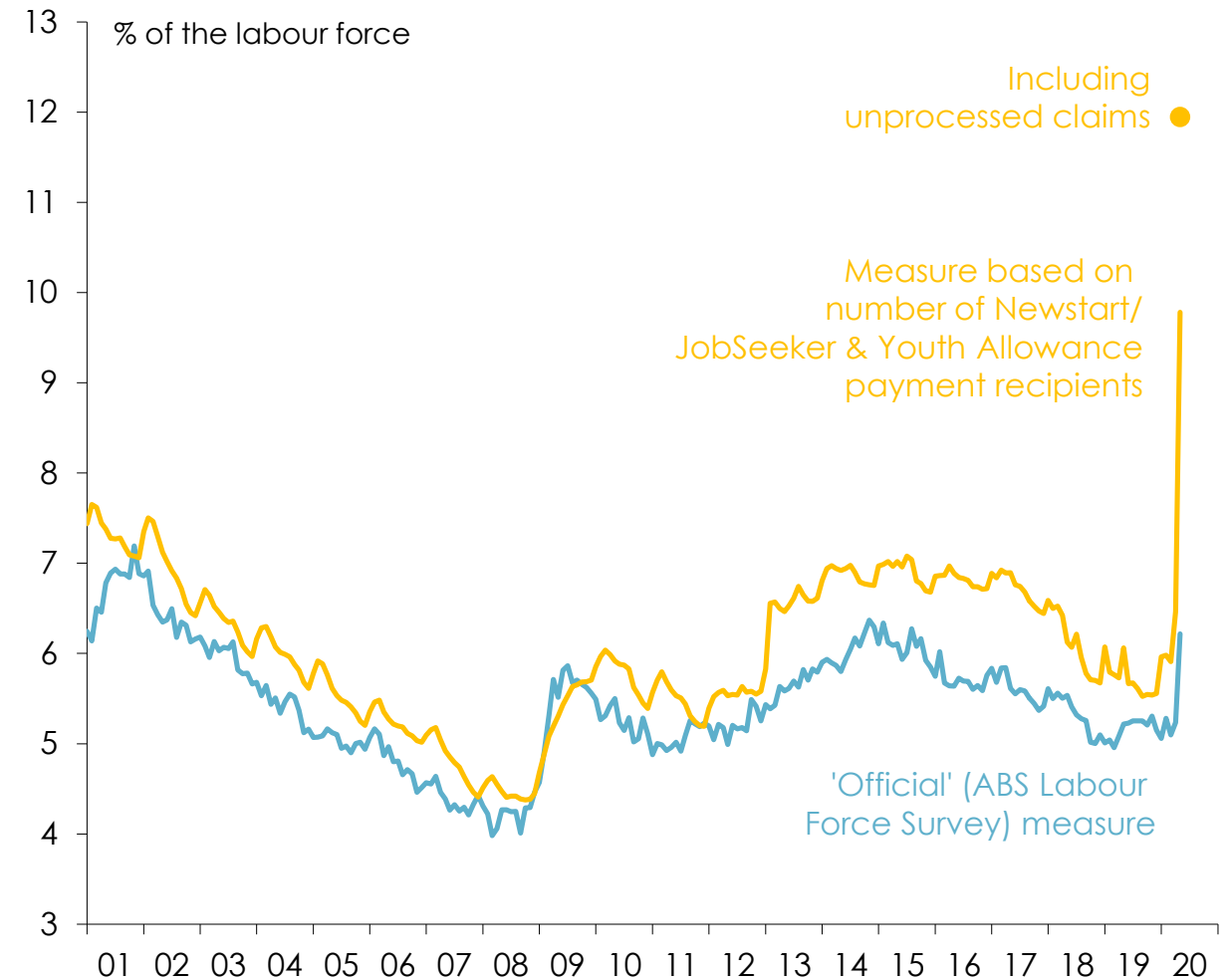
Note: The 'under-employment ratio' is the percentage of employed persons who are working fewer hours than they are willing and able to work. The 'under-utilization rate' is the proportion of the labour force who are unemployed or underemployed. Source: ABS.

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

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



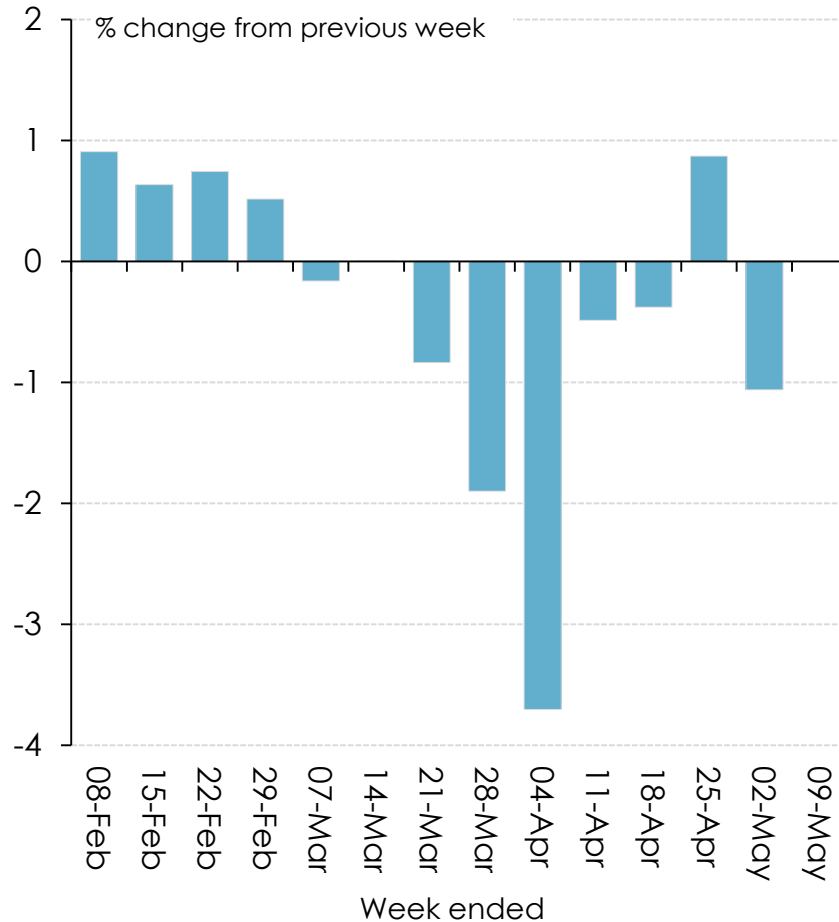
Alternative measures of the 'unemployment rate'



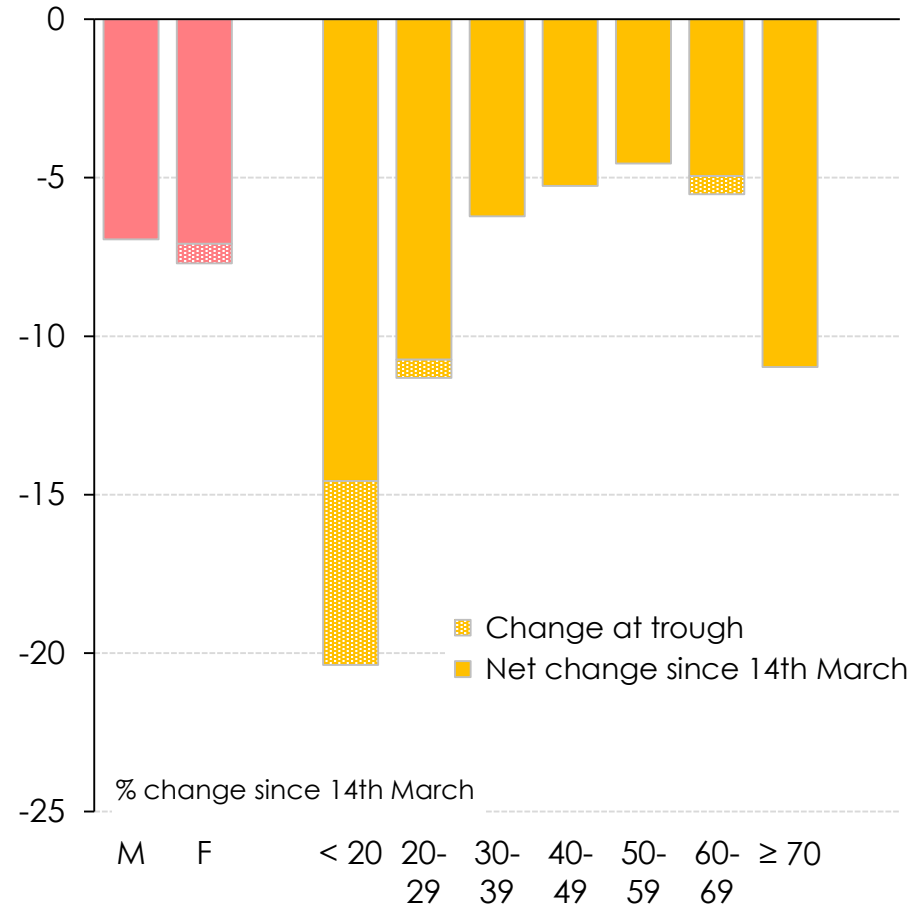
Sources: Department of Social Security; ABS. Note: Youth Allowance recipients excludes full-time students. Number of Newstart/JobSeeker and Youth Allowance recipients is not seasonally adjusted.

Payroll employment has fallen by 7¼% since ‘social distancing’ restrictions were imposed from mid-March, but the pace of job losses has slowed

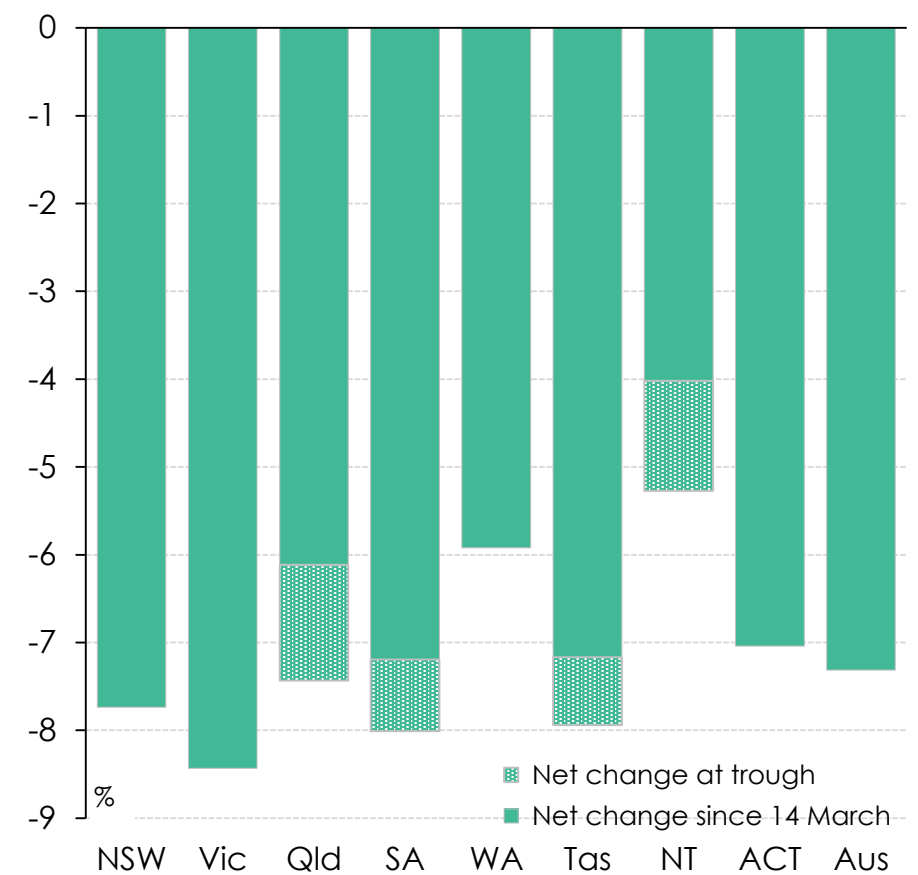
Weekly change in number of payroll jobs



Change in payroll jobs by age & gender



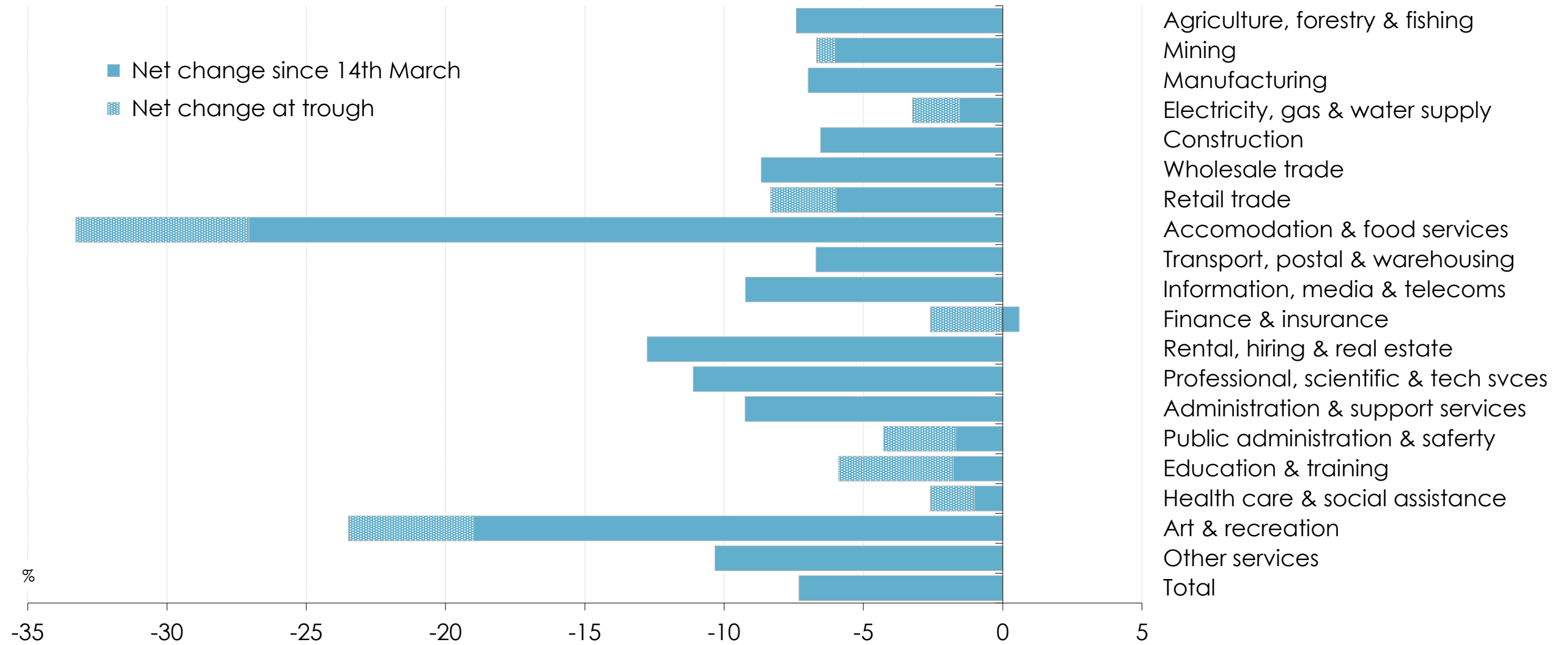
Change in payroll jobs by State & Territory



Source: ABS. Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's 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.

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

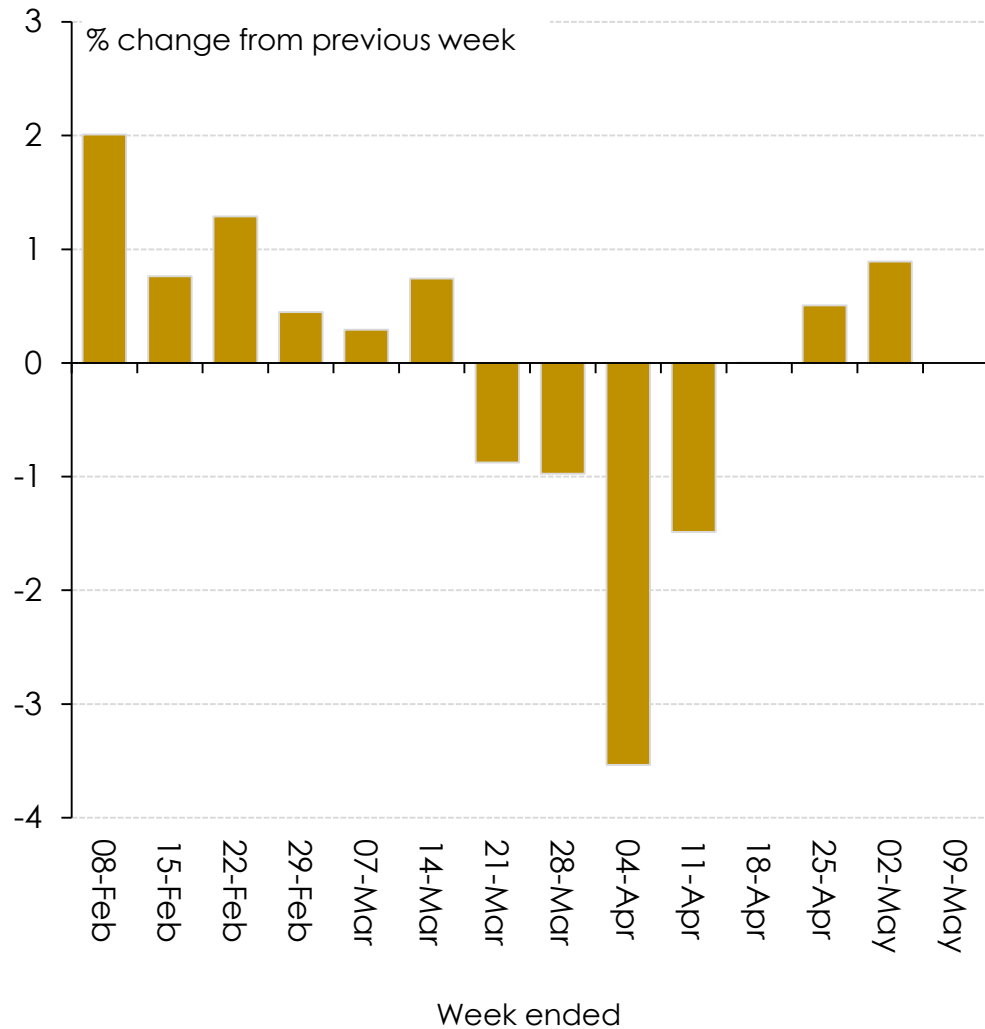
Change in number of payroll jobs between 14th March and 2nd May, by industry



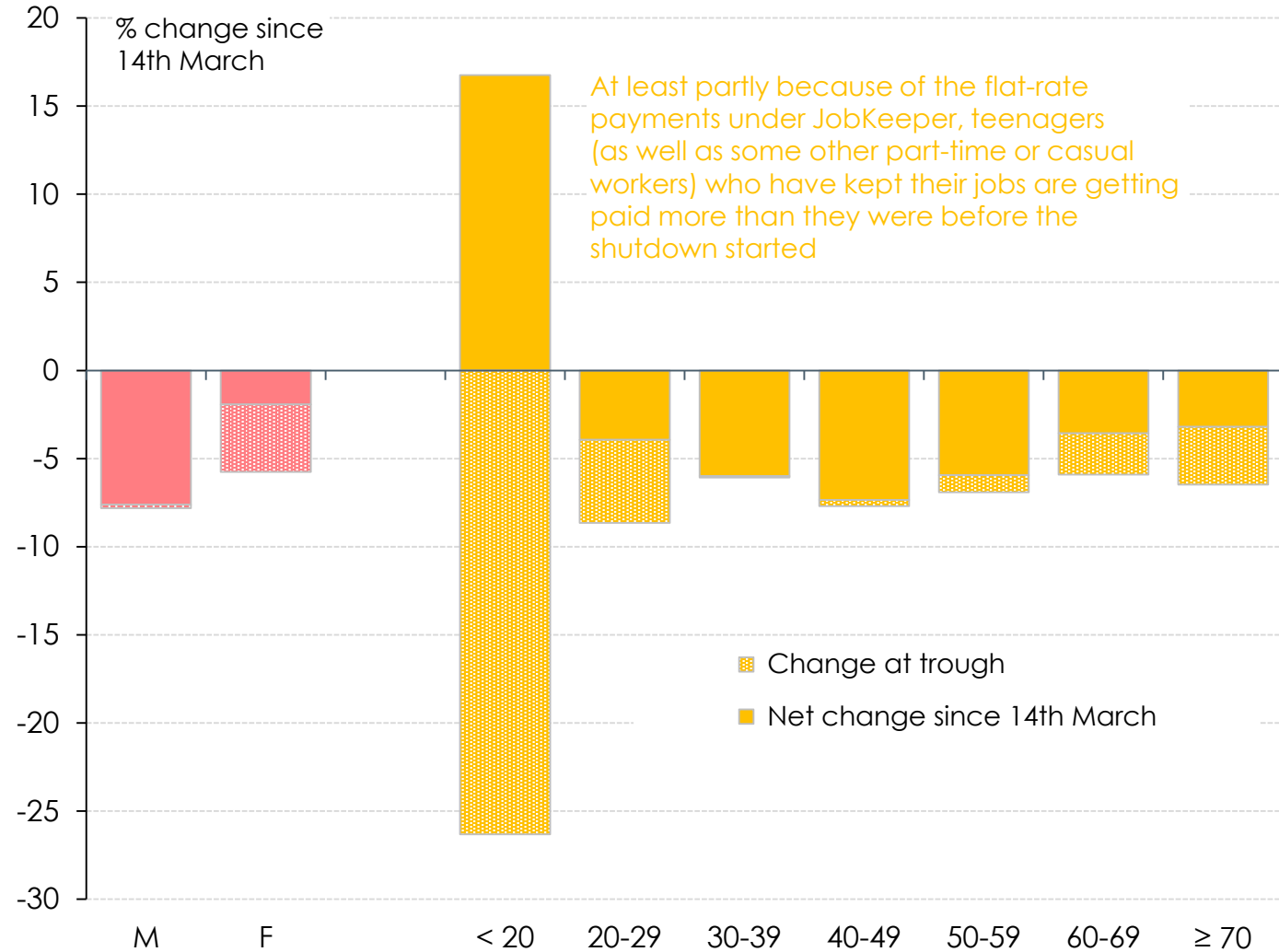
Source: ABS. Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's Single Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. Data are not seasonally adjusted.

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



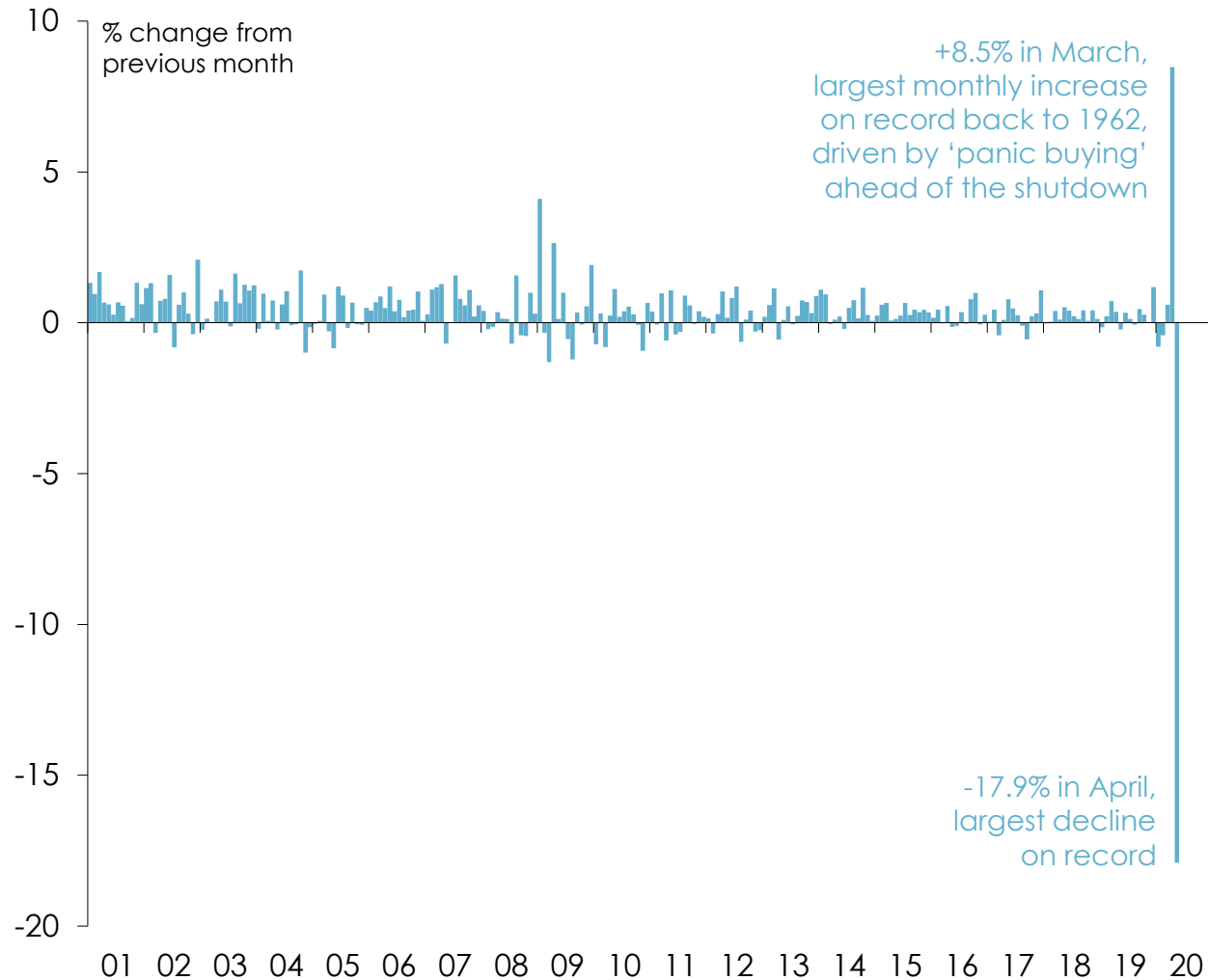
Change in total wages paid by gender and age group



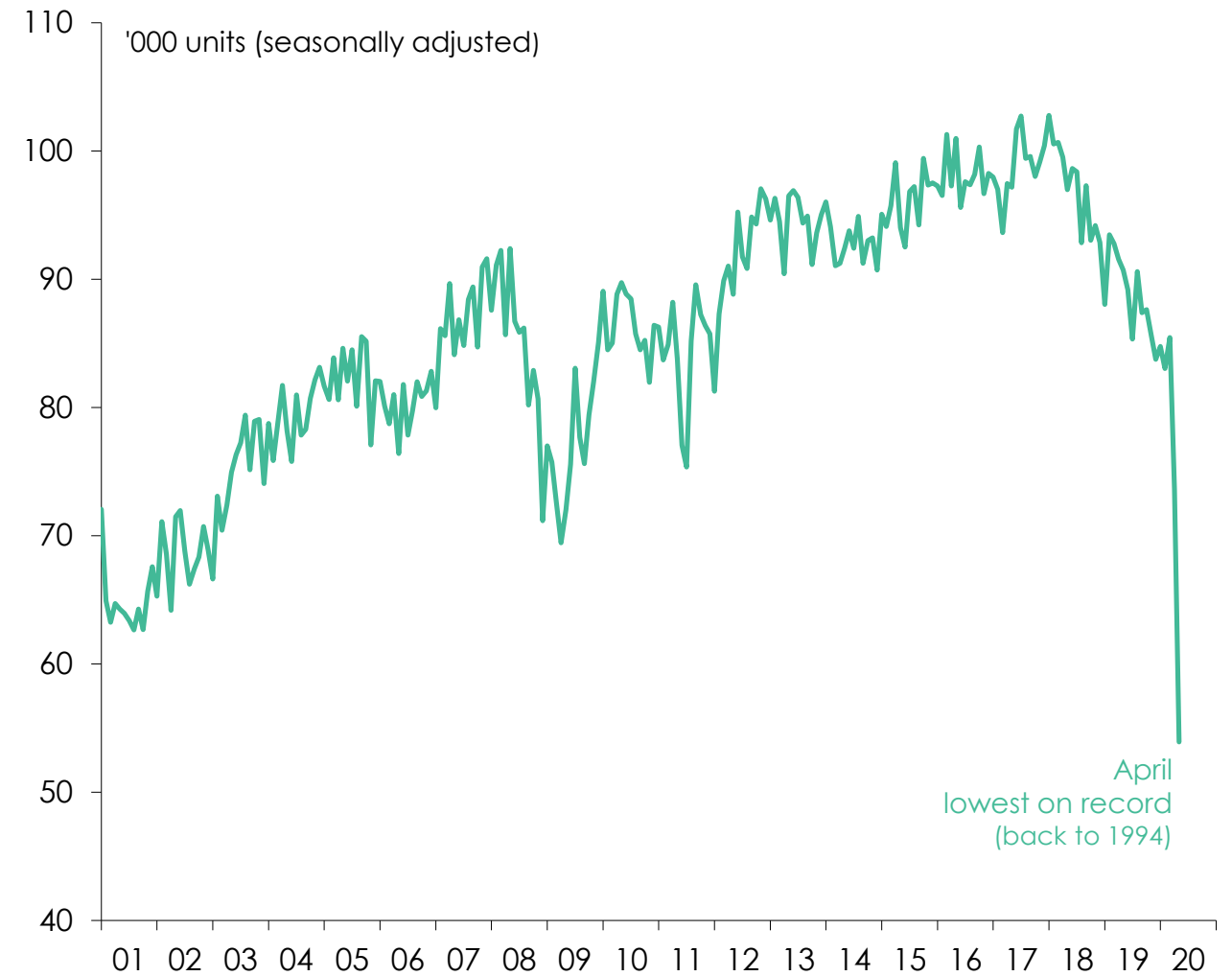
Source: ABS. Data refers to the wages paid by businesses participating in the Australian Taxation Office's Single Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. Data are not seasonally adjusted.

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

Retail sales



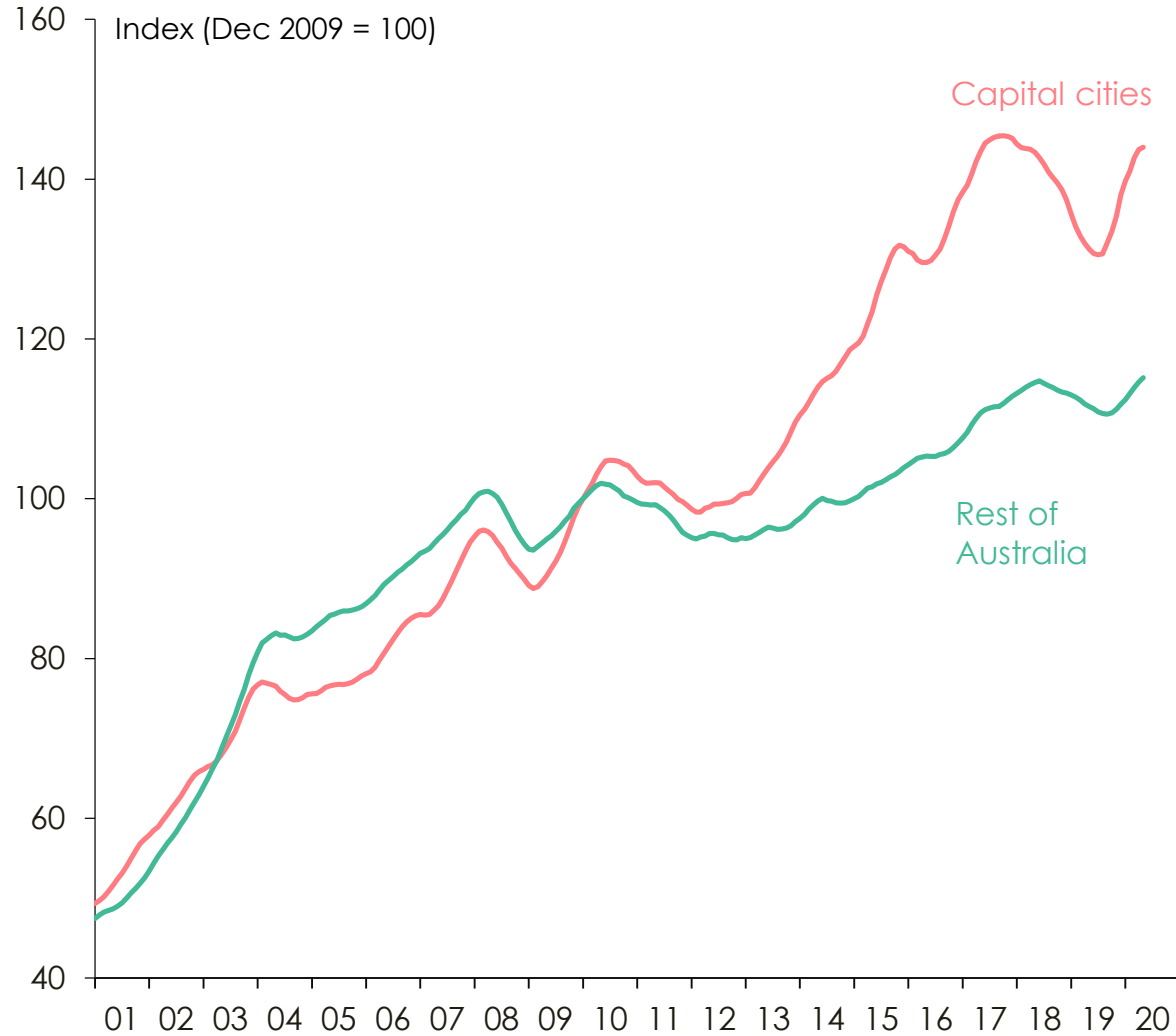
Motor vehicle sales



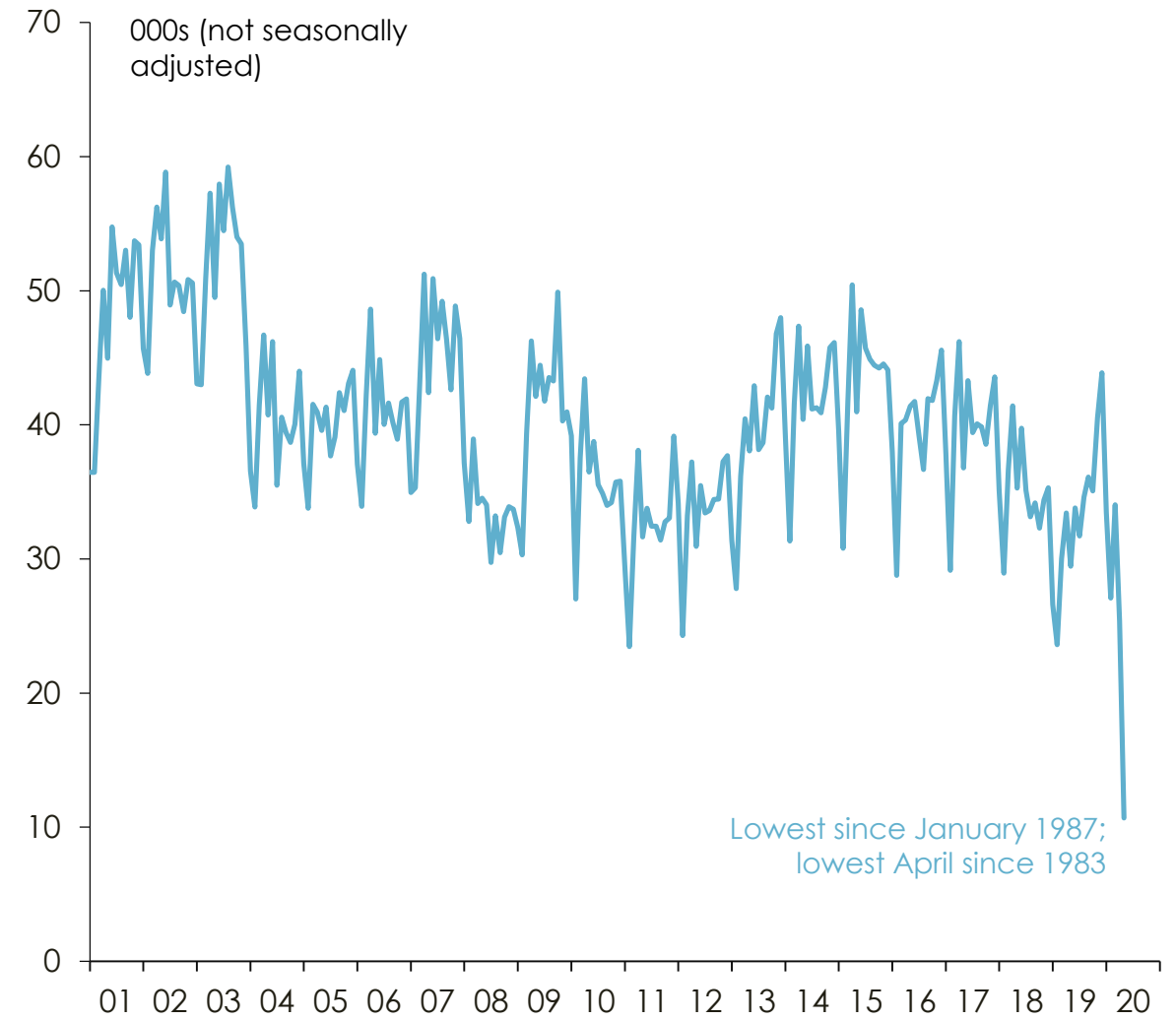
Sources: ABC; Federal Chamber of Automotive Industries VFACTS (seasonal adjustment of FCAI data by Corinna)

Property prices have held up thus far, but transactions volumes have cratered

Residential property prices



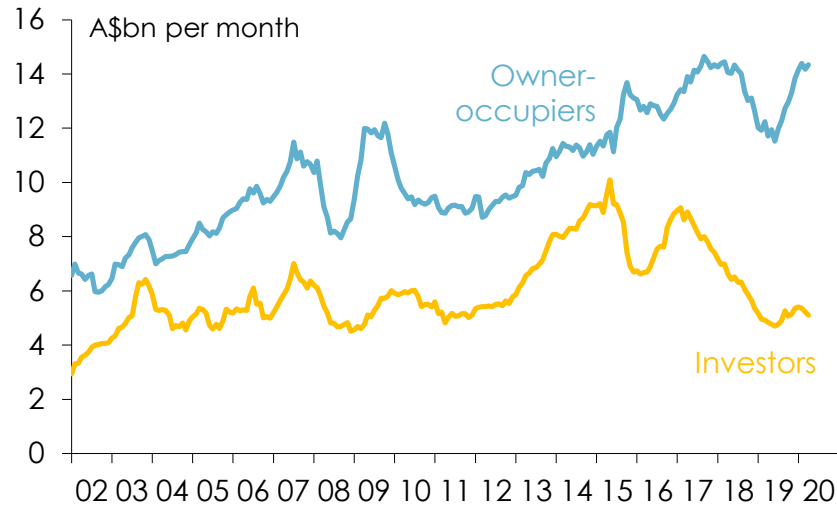
Residential property sales volumes



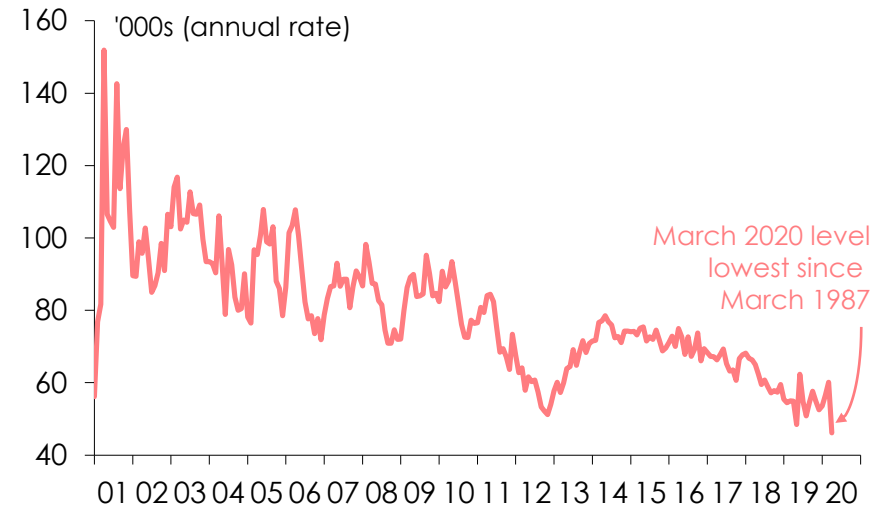
Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Latest data are for April 2020. Source: CoreLogic.

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

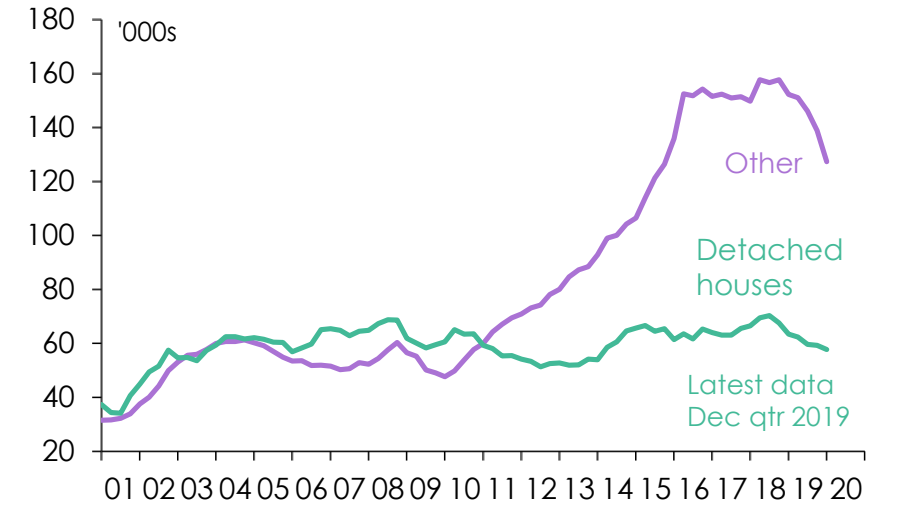
Housing finance commitments



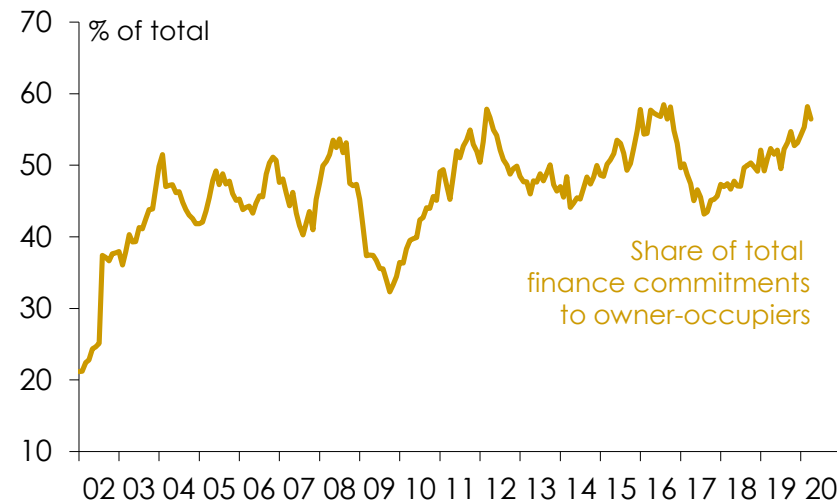
Large builders' new home sales



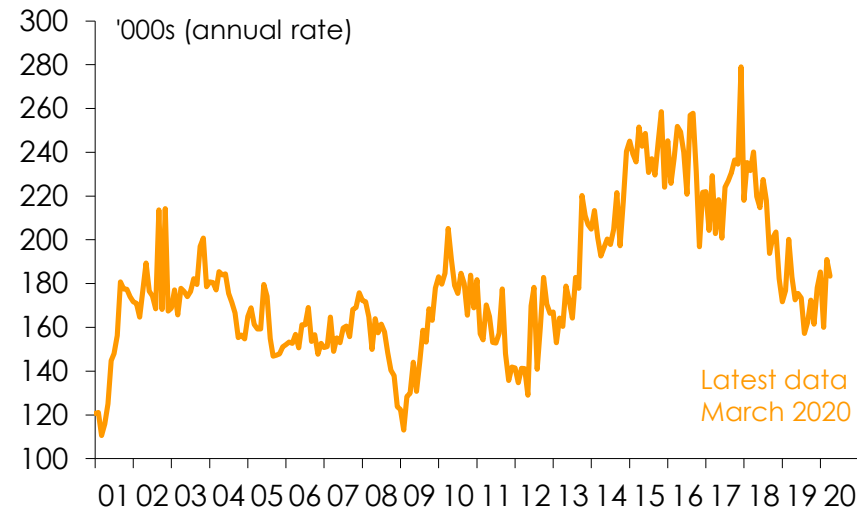
Dwellings under construction



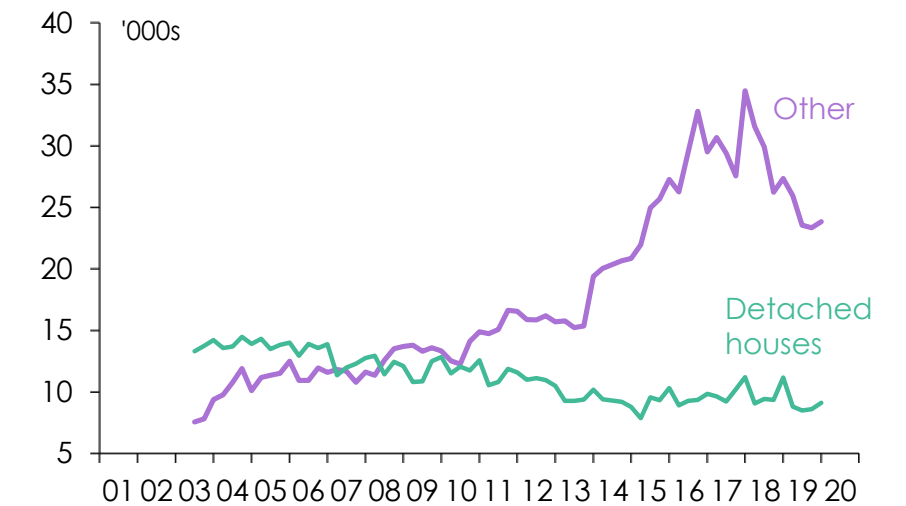
Refinancings as pc of total



Residential building approvals



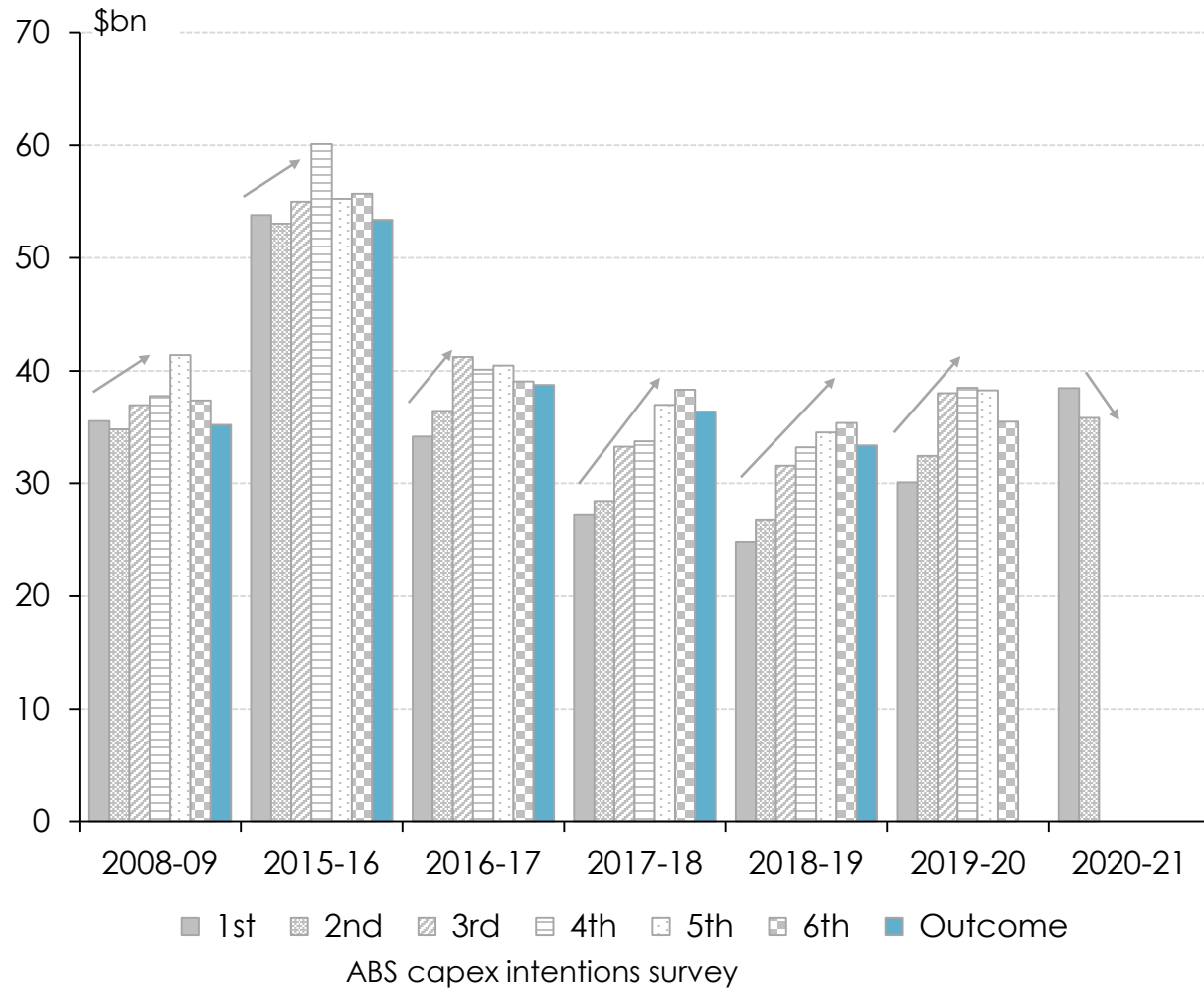
'Pipeline' of work yet to be done



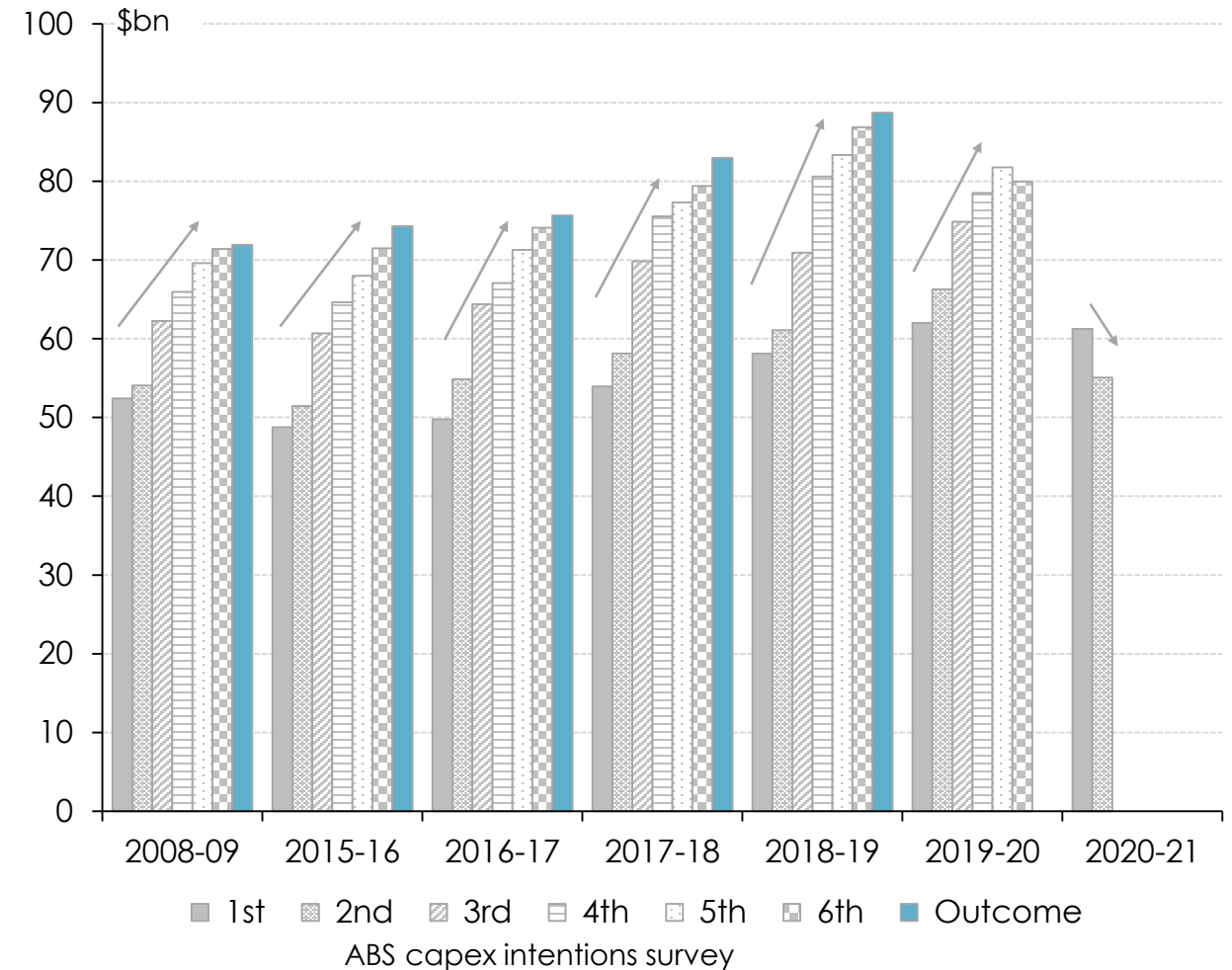
Note: 'New home sales' are of detached dwellings only and exclude small-scale builders. Sources: ABS; Housing Industry Association.

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

Capital expenditure intentions - mining

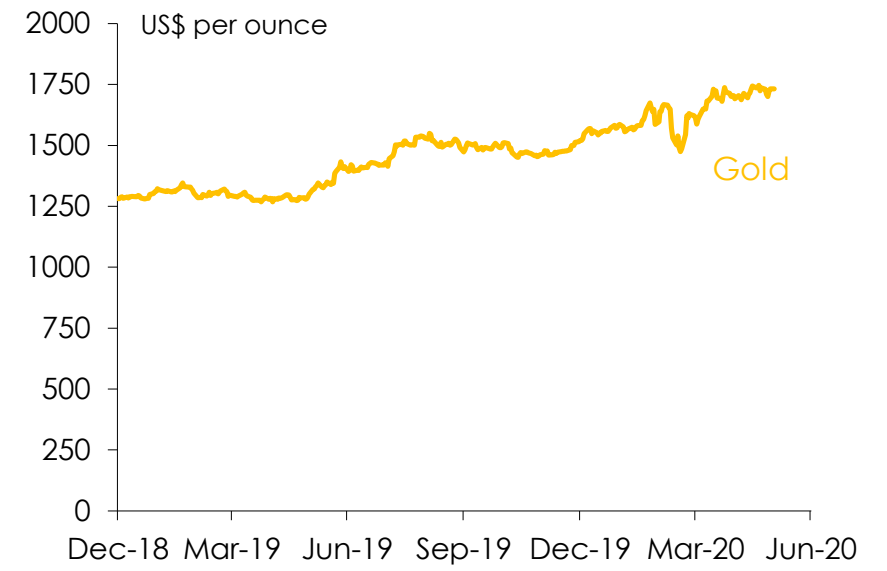
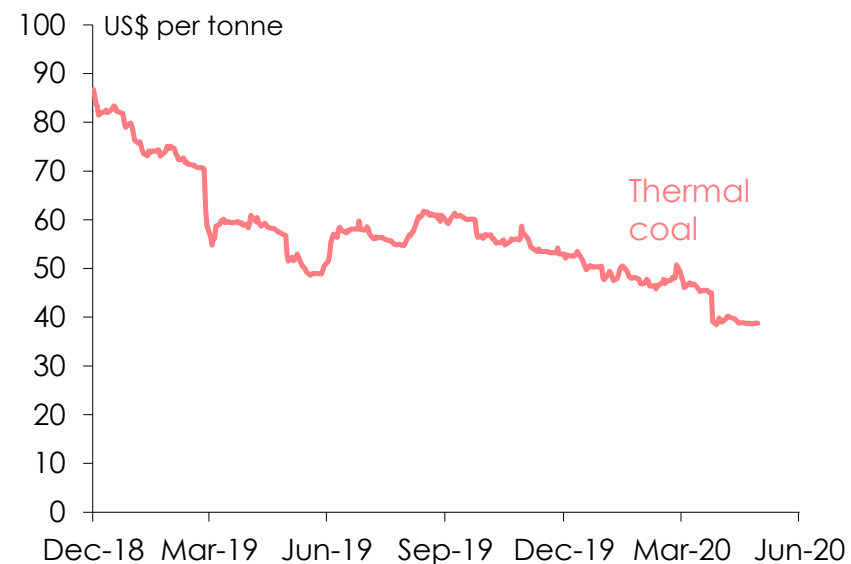
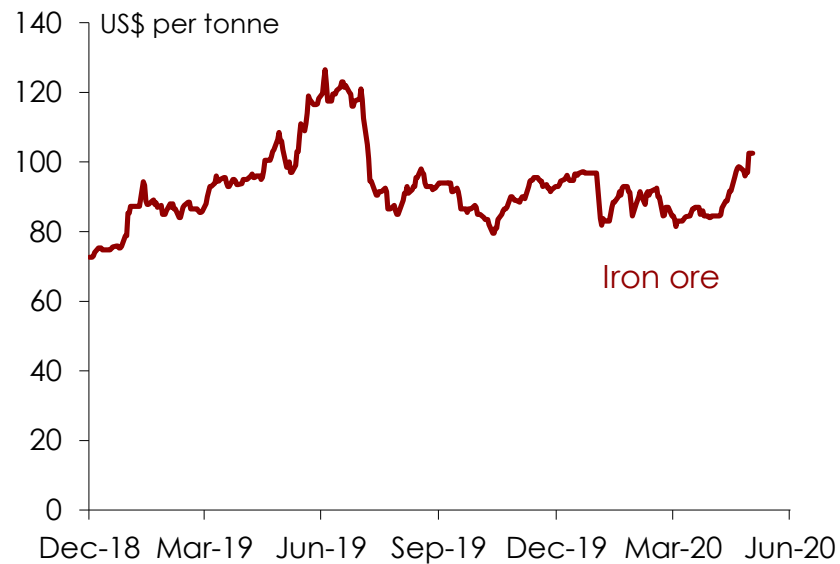
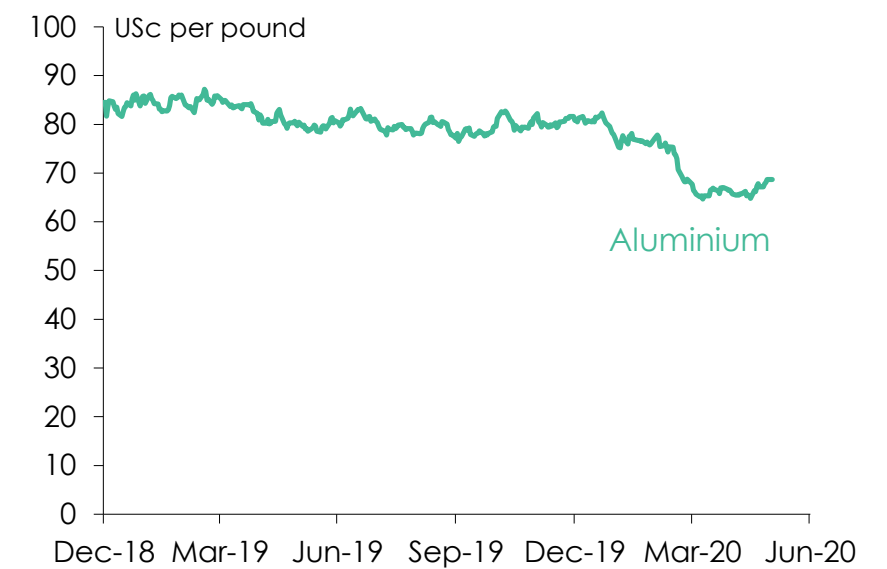
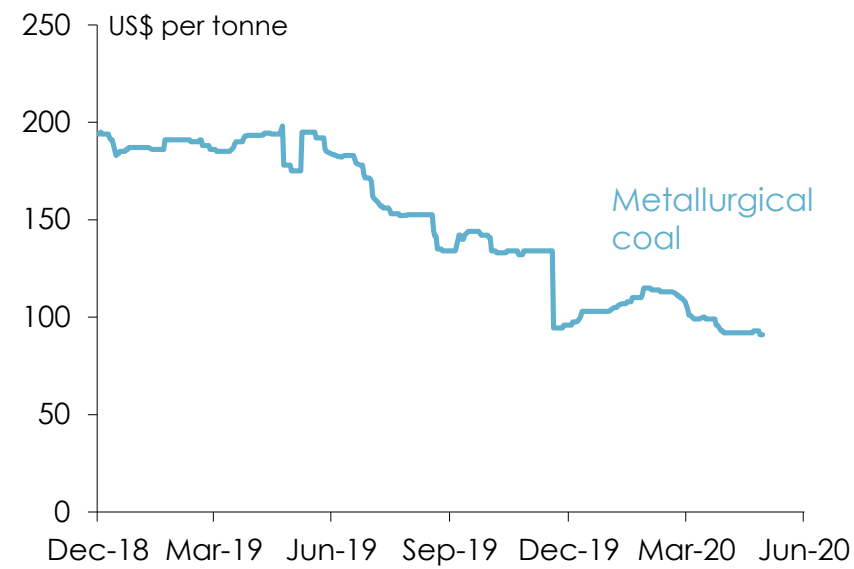
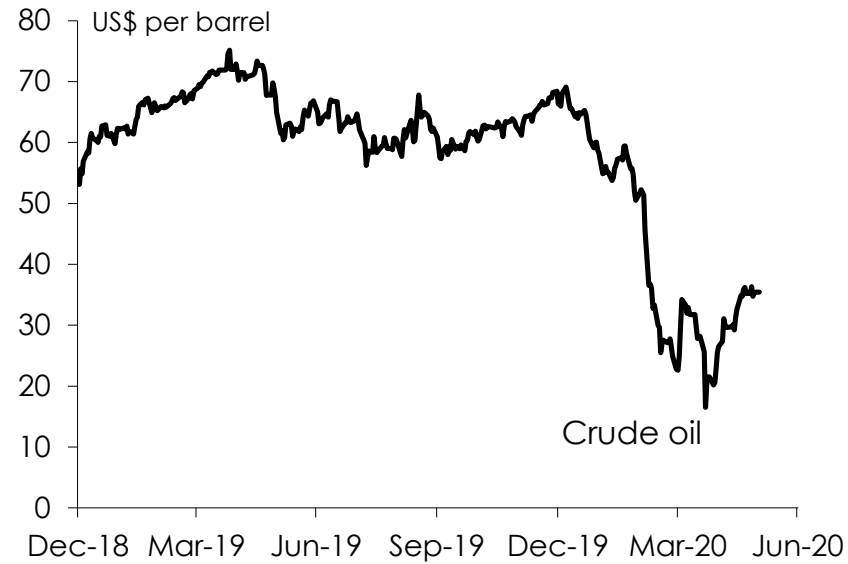


Capital expenditure intentions – non-mining



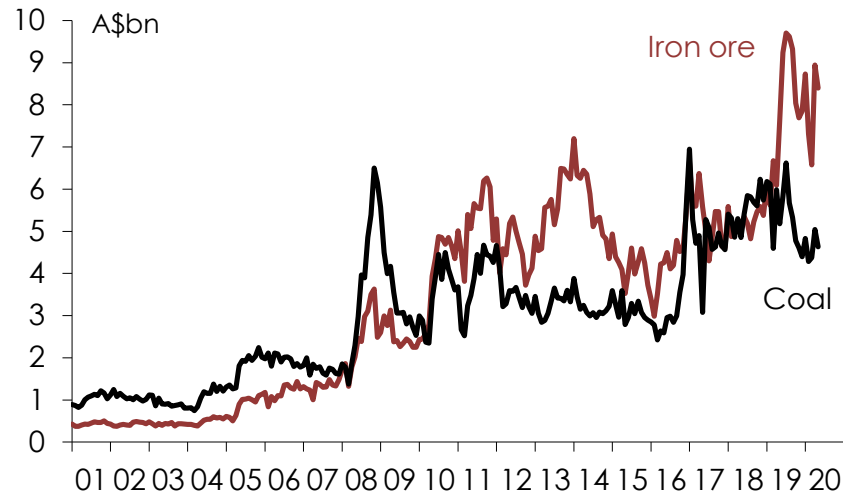
Note: The ABS conducts six surveys of business' capital expenditure intentions in respect of each financial year. The first is conducted in January & February prior to the commencement of the financial year, the second in May & June, the third in July & August of the financial year, the fourth in October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

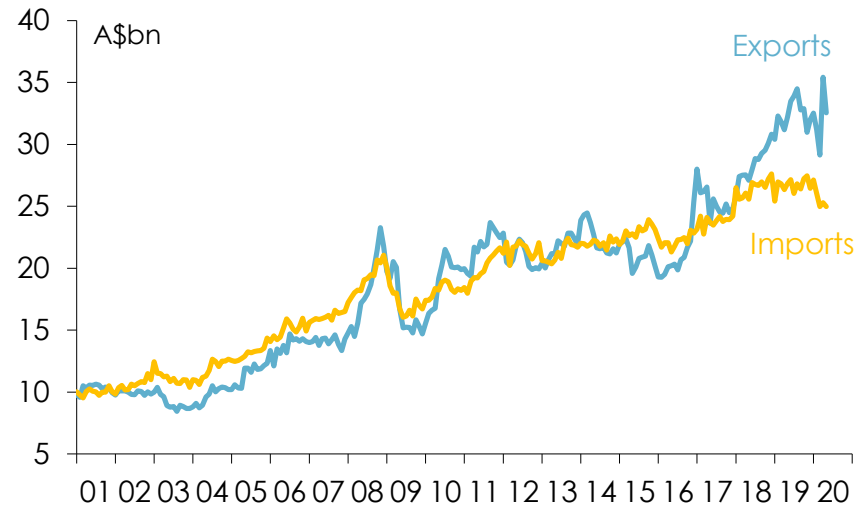


Australian exports have held up remarkably well, while even the tourism trade balance has improved

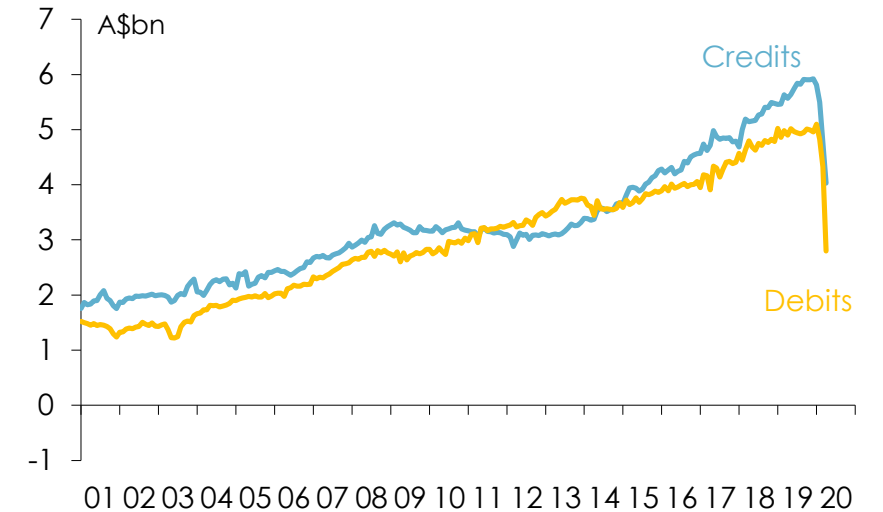
Iron ore and coal exports



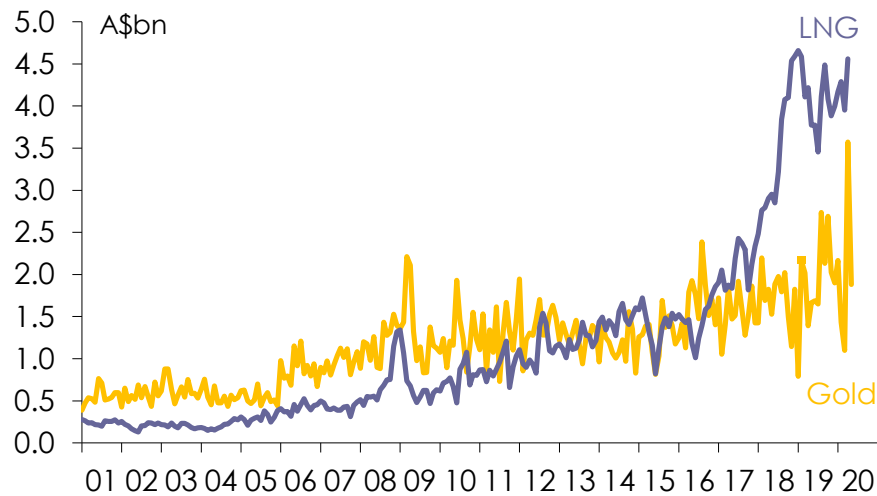
Merchandise exports and imports



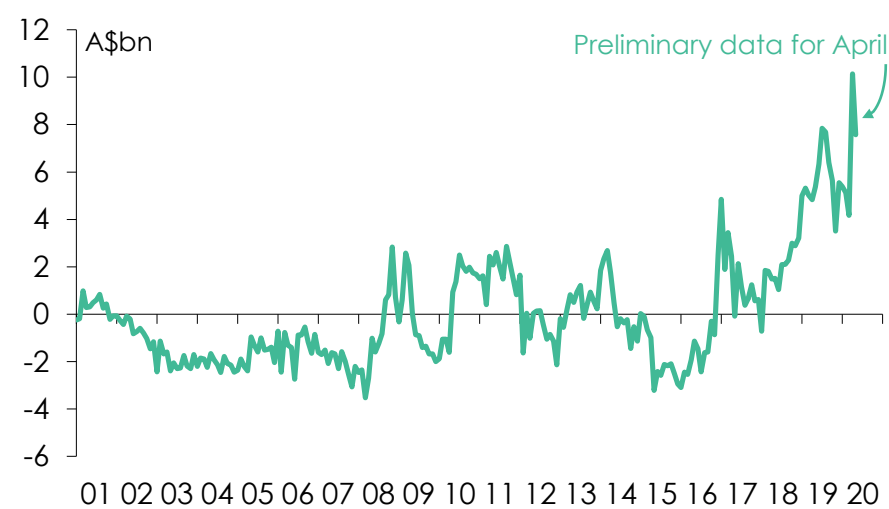
Tourism-related services trade



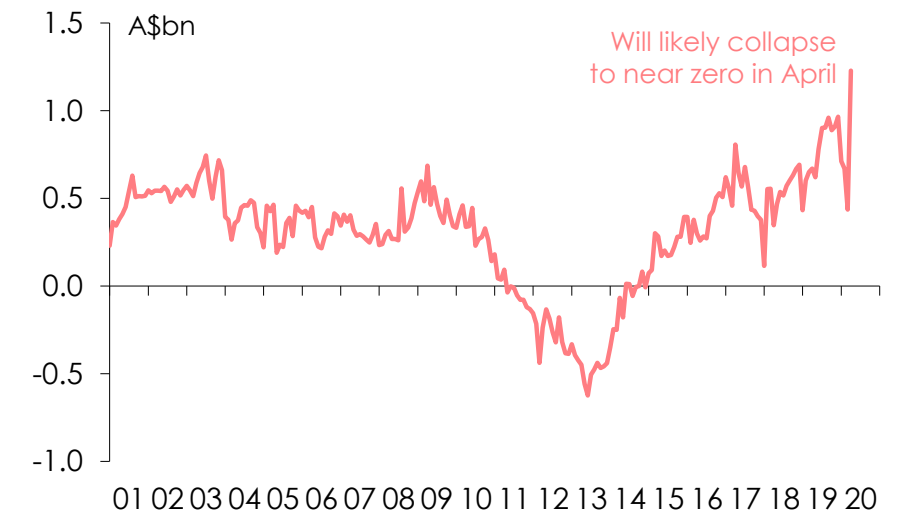
LNG and gold exports



Merchandise trade balance



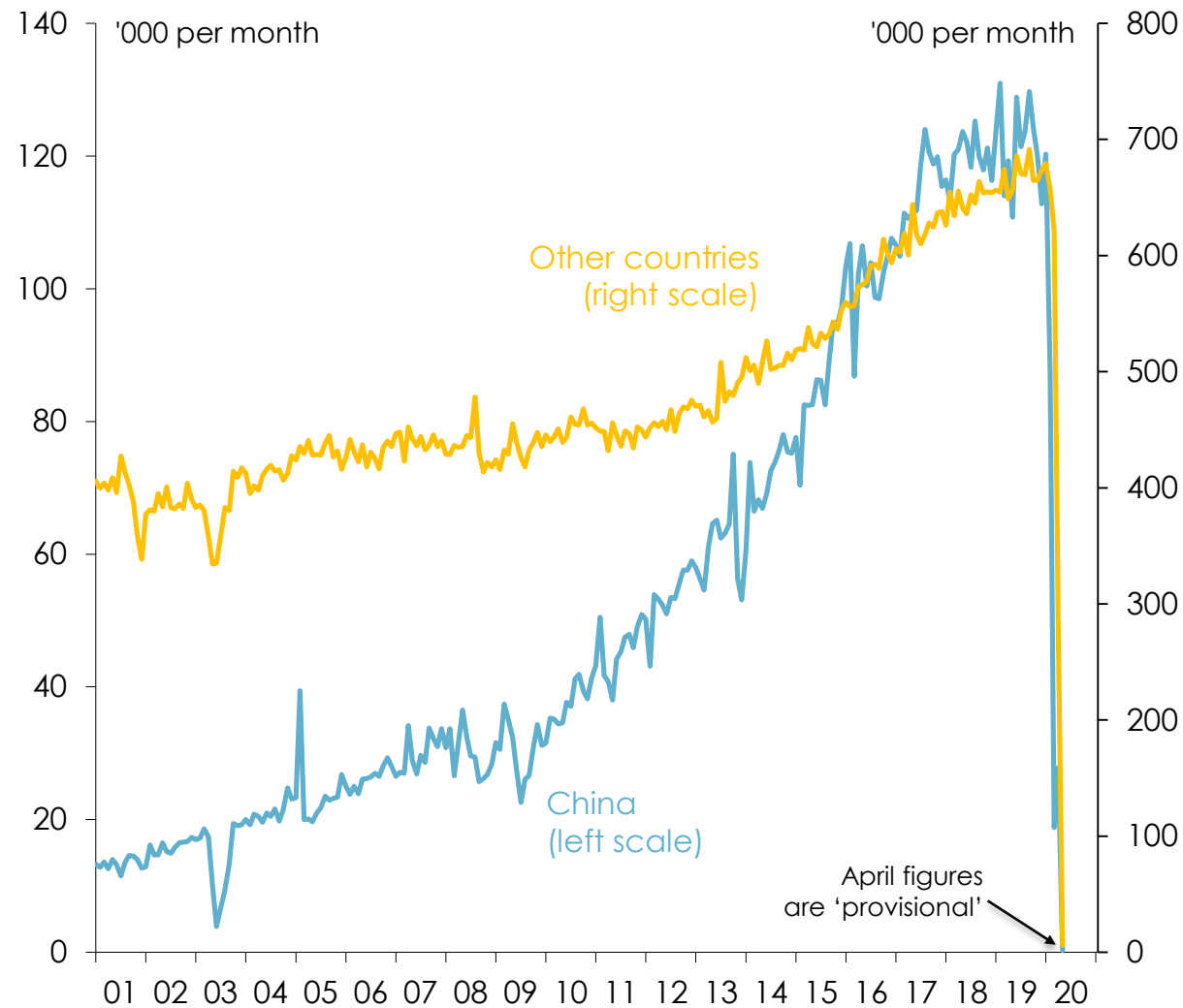
Tourism services trade balance



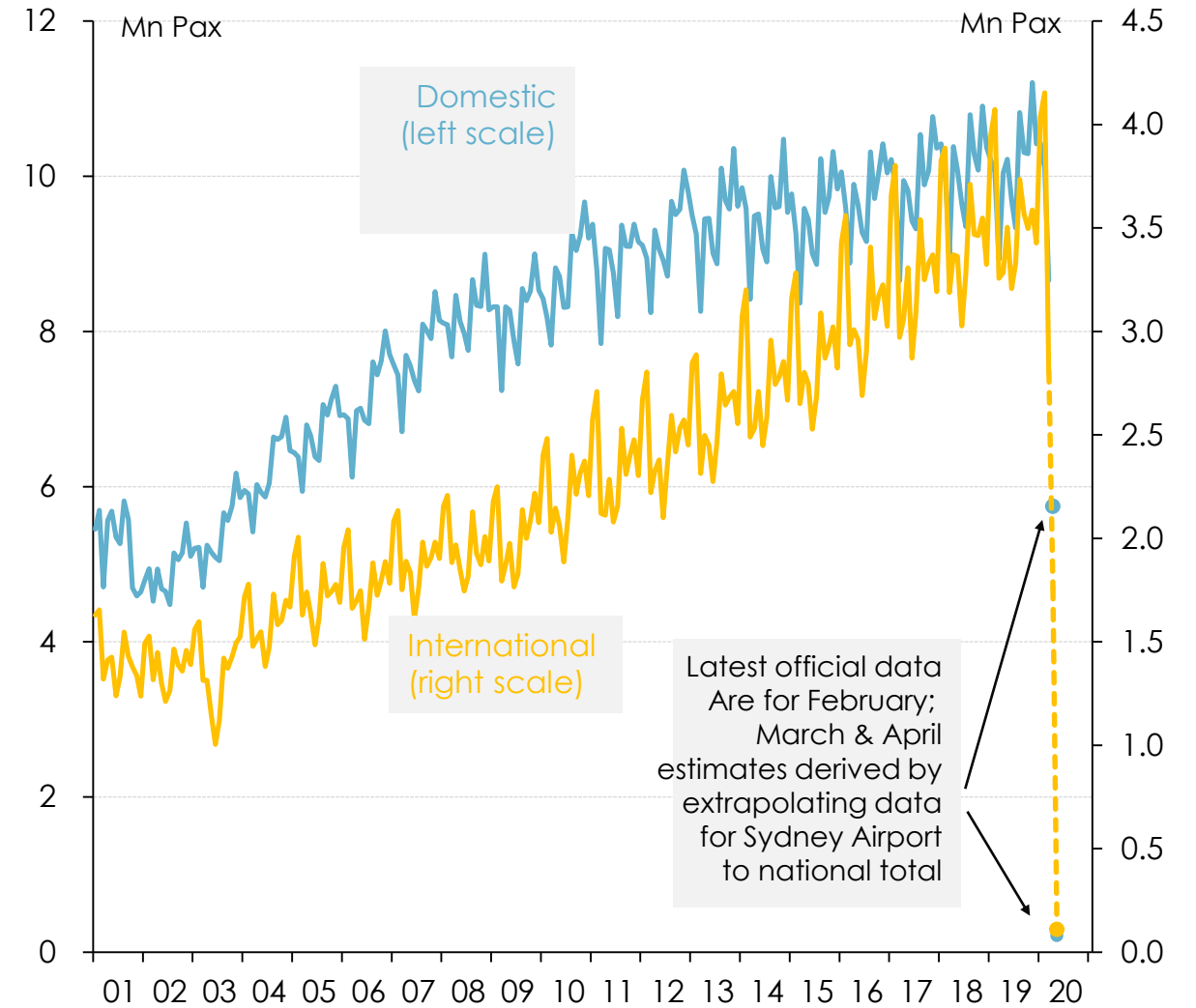
Source: ABS. Data for merchandise trade include preliminary data for April 2020.

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

Short-term visitor arrivals

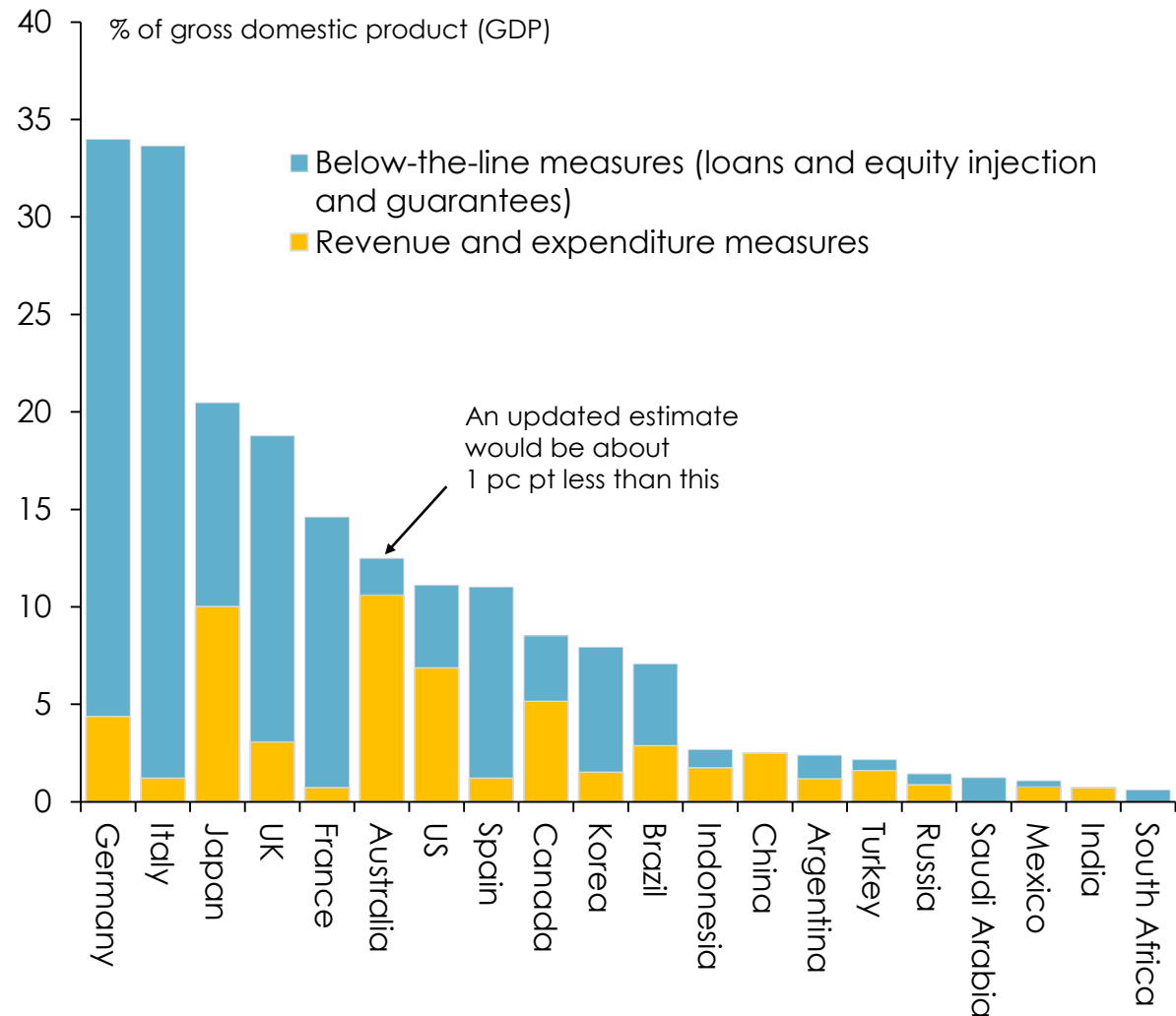


Airport passenger movements



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

Policy responses to Covid-19 – G20 countries



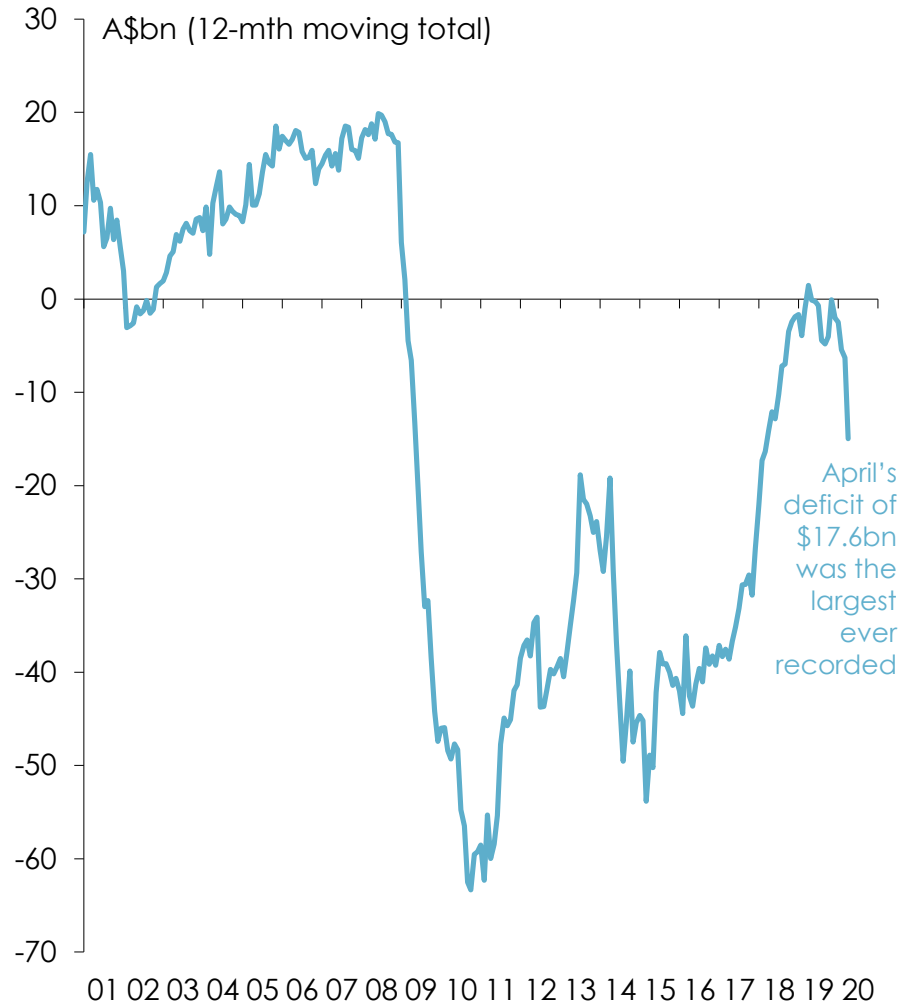
- Policy measures announced thus far by the Australian Government total \$180bn (allowing for the downward revision to the cost of JobKeeper), or about 9% of GDP – which is large by international standards (and double what was done during the GFC)
- Principal objectives of policy measures are to –
 - 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

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

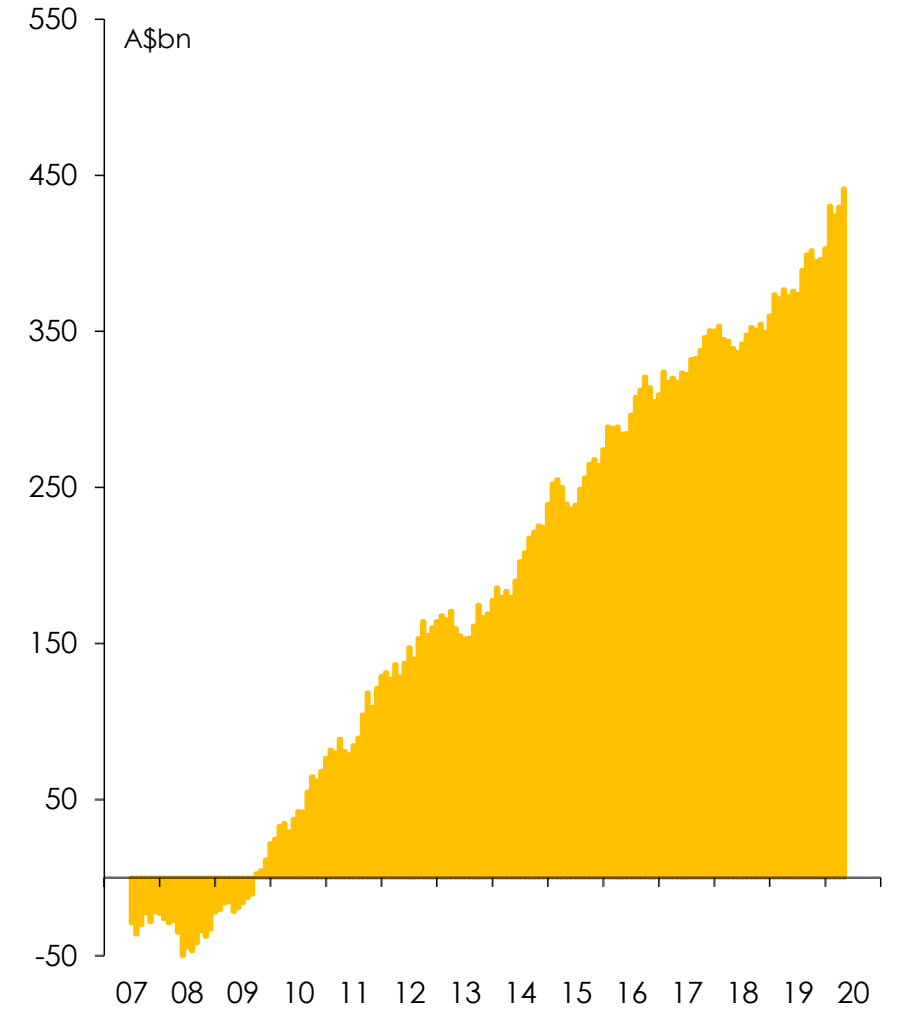
Australian Government revenue and expenses



Australian Government 'underlying' cash balance



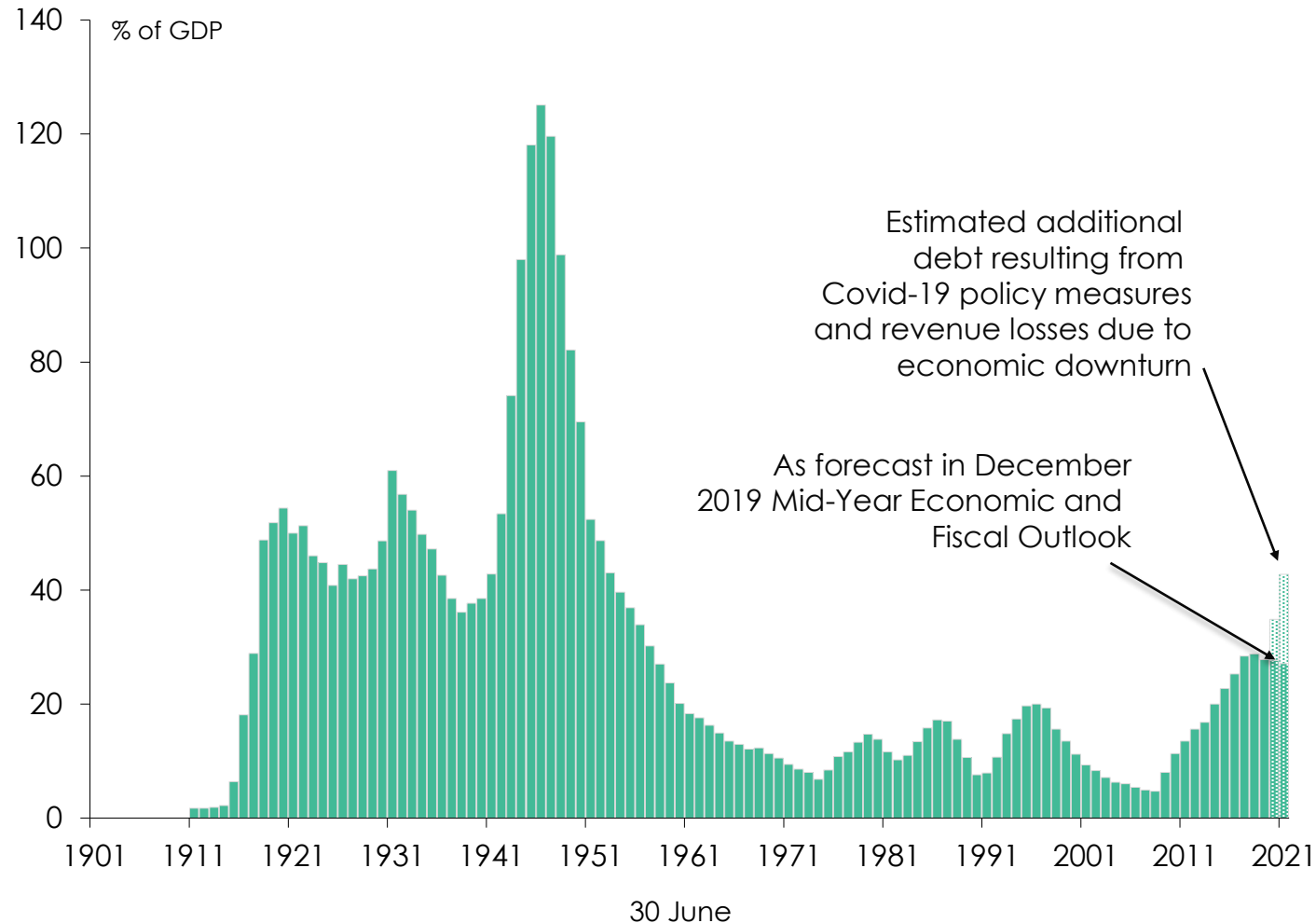
Australian Government net debt



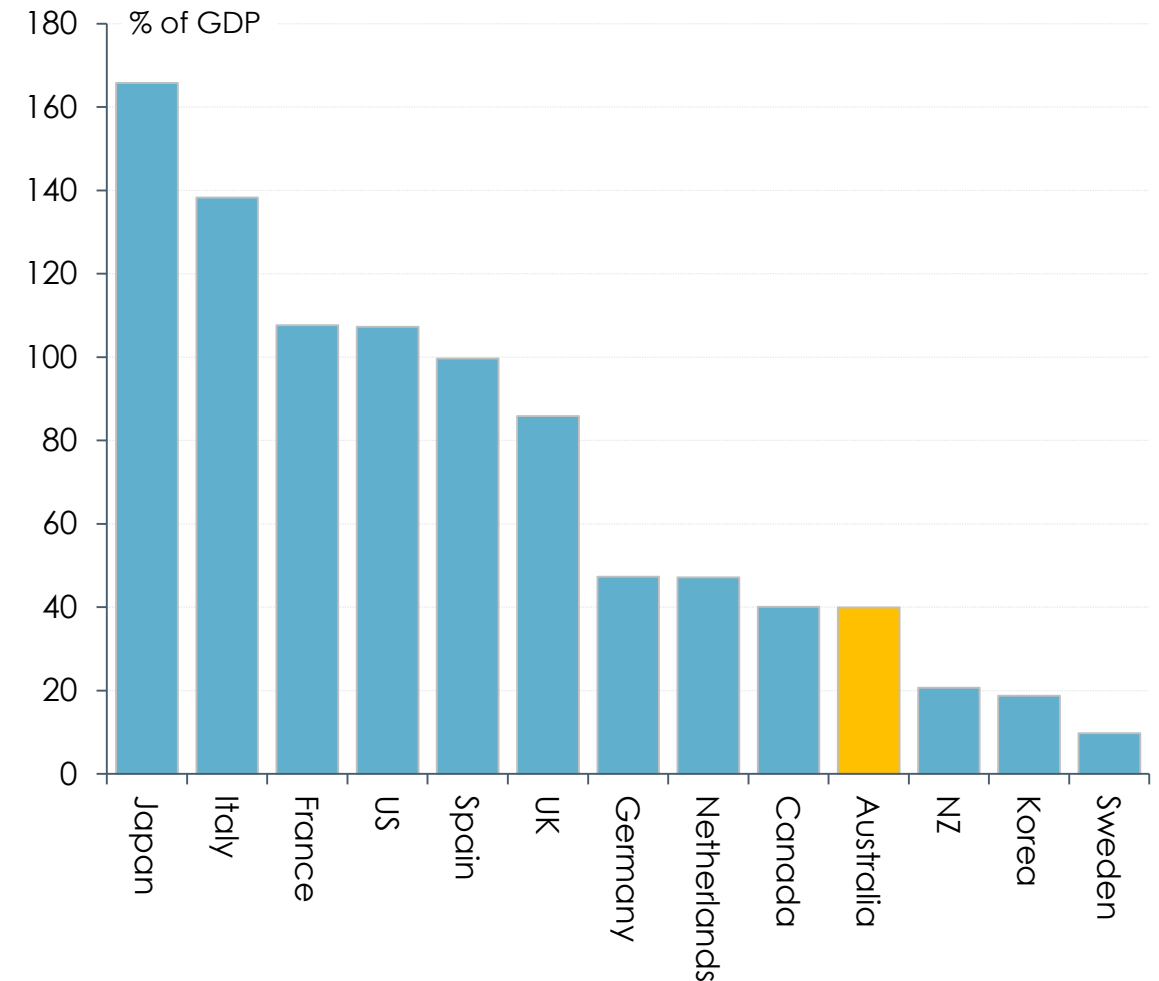
Note: Revenue and expenses are accrual accounting items. The 'underlying' cash balance is (cash) receipts minus payments, excluding transactions in financial assets for policy purposes and net earnings of the Future Fund. Net debt is total interest-bearing liabilities (government securities, deposits,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

... 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

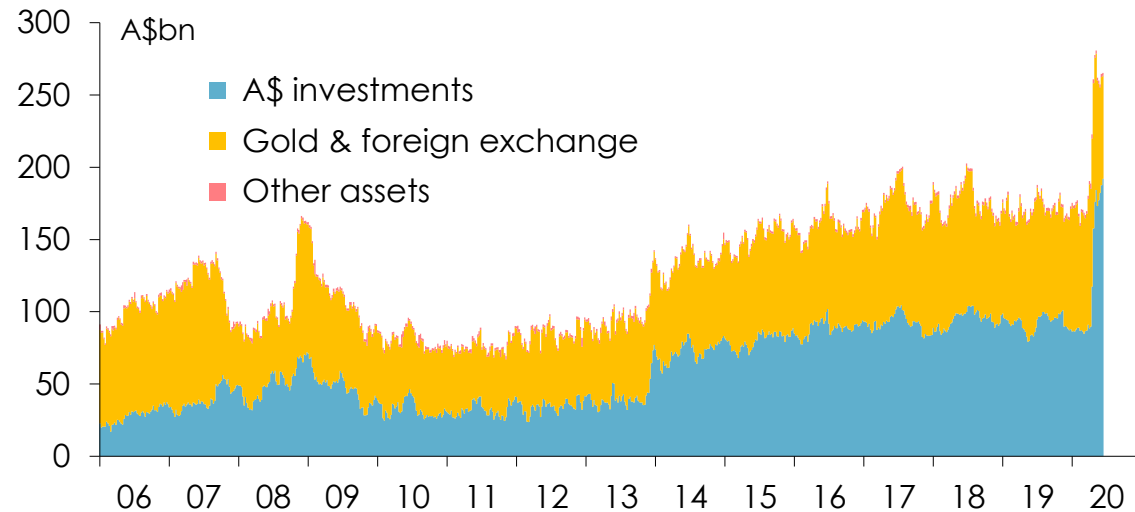


Note: The Australian Government will publish updated forecasts of major budgetary aggregates in mid-June.

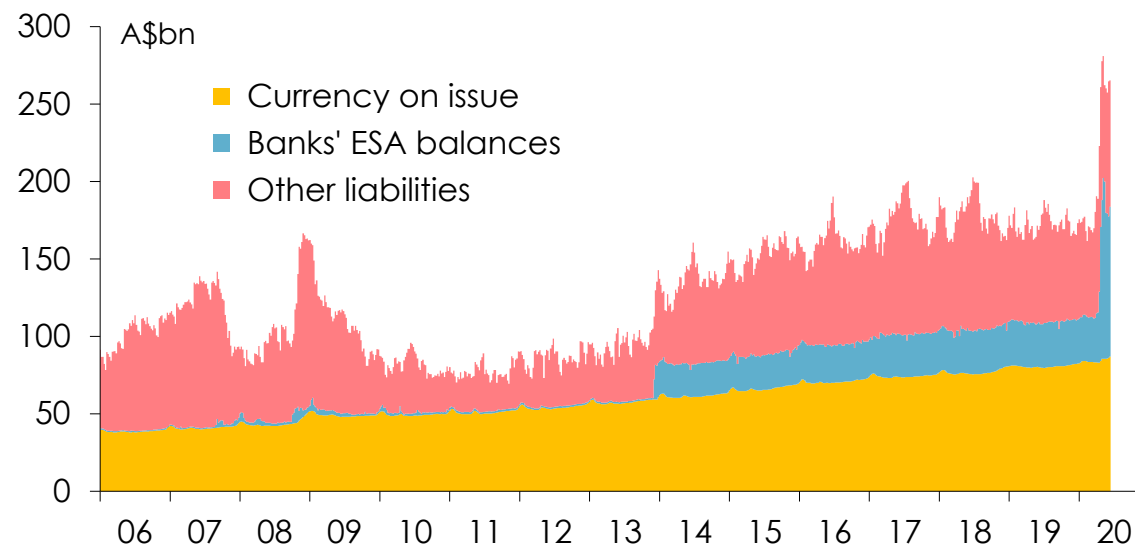
Sources: Katrina Di Marco, Mitchell Pirie and Wilson Au-Yeung, *A History of Public Debt in Australia* (Australian Treasury, 2011); *Mid-Year Economic and Fiscal Outlook*, December 2019; author's estimates; *IMF Fiscal Monitor*, April 2020.

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

Reserve Bank assets



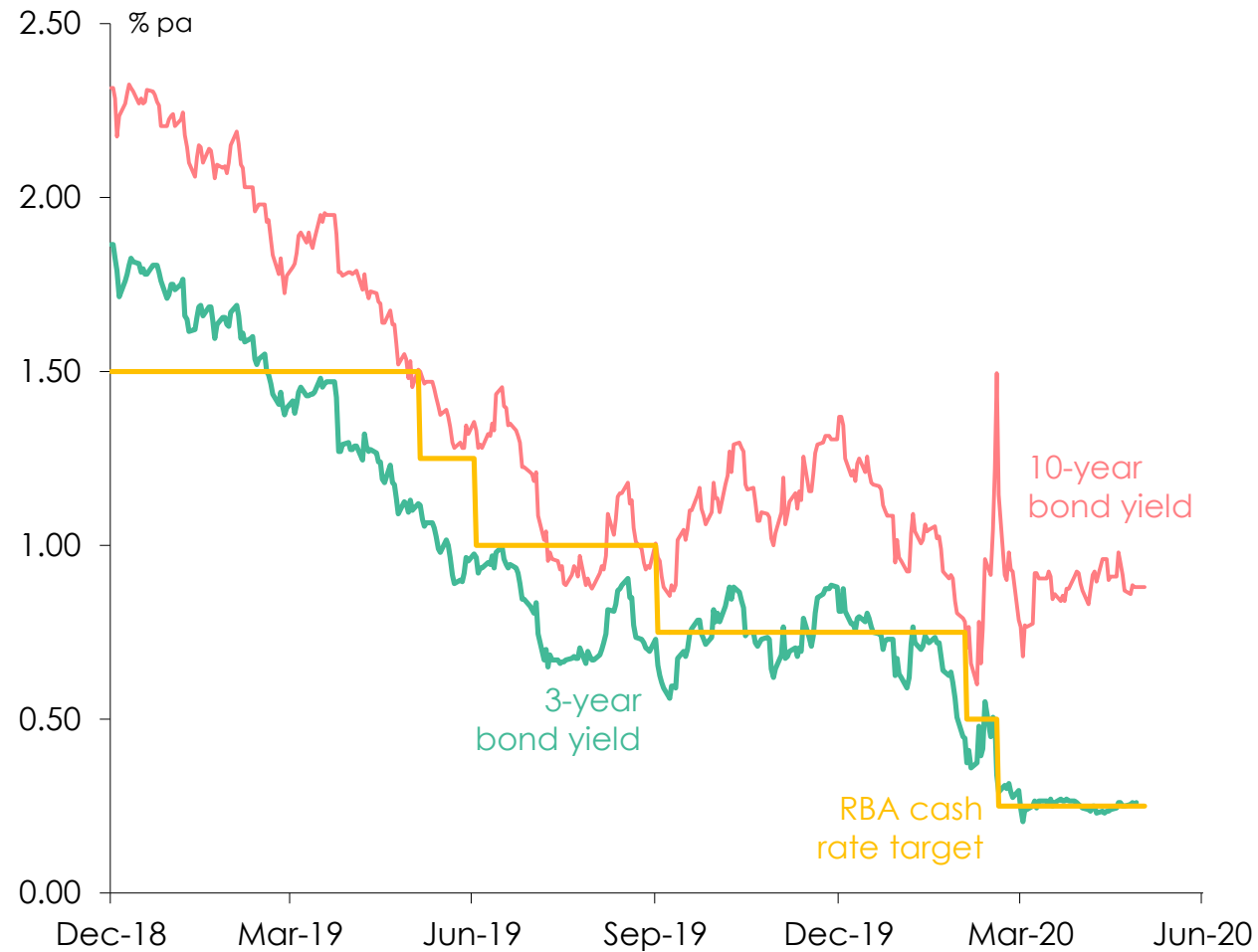
Reserve Bank liabilities



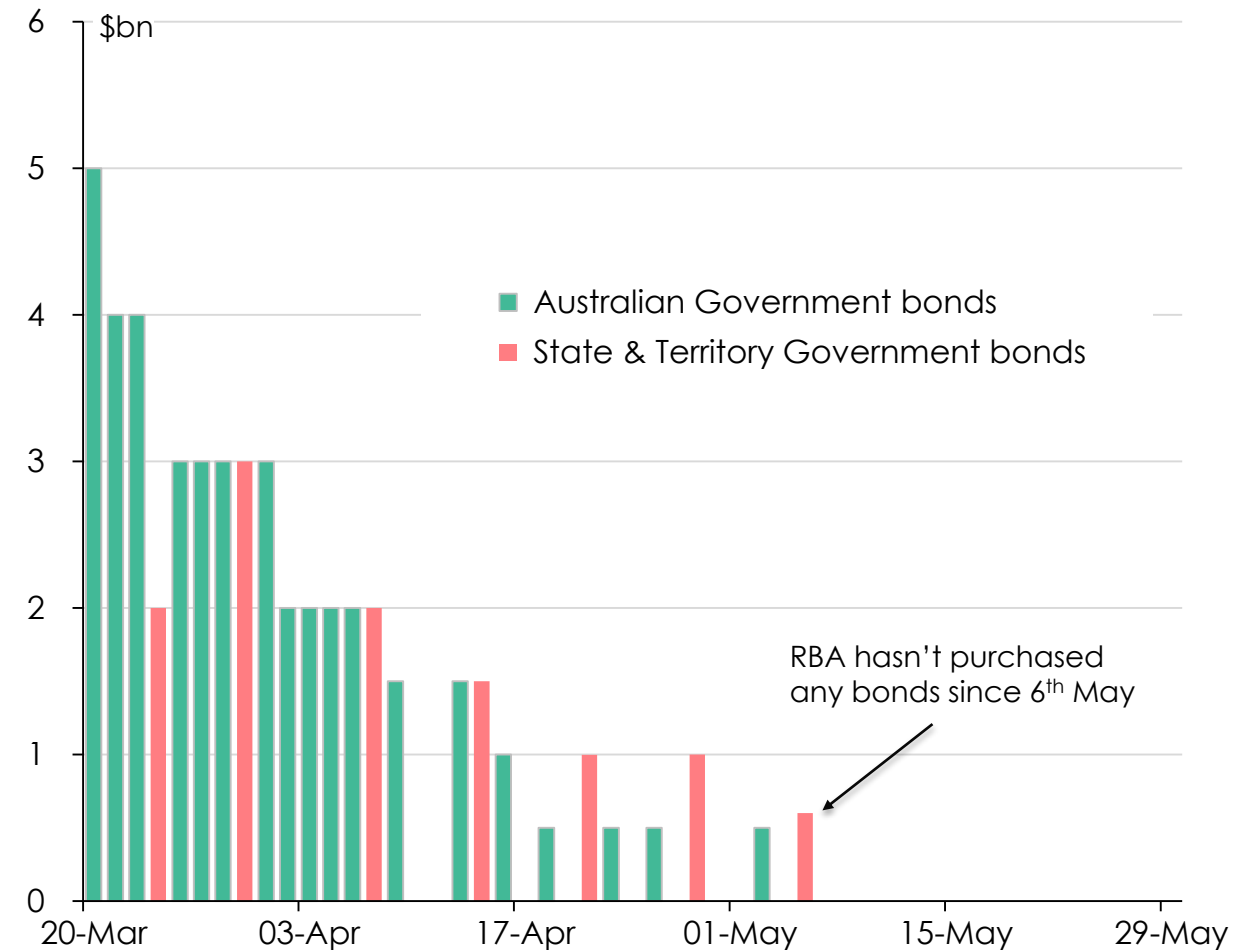
- ❑ Cash rate cut to 0.25% which for practical reasons is the 'lower bound'
 - and RBA has committed to keeping it at this level for an extended period
- ❑ RBA has committed to purchase bonds in the secondary market with a view to keeping the 3-year yield at 0.25%
 - to date the RBA bond purchases amount to \$50bn
- ❑ RBA provided additional liquidity through 'open market operations' to prevent disruption of credit markets
 - RBA repo transactions now averaging less than \$1bn a day, down from peak of almost \$9½bn a day in 3rd week of March
- ❑ '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 \$4.8bn has been provided through this facility
- ❑ Note the RBA is not 'printing money' (currency) in the Zimbabwe / Venezuela sense – rather, the credit being created is ending up on the other side of the RBA's balance sheet in the form of larger bank Exchange Settlement Account (ESA) balances

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

Interest rates

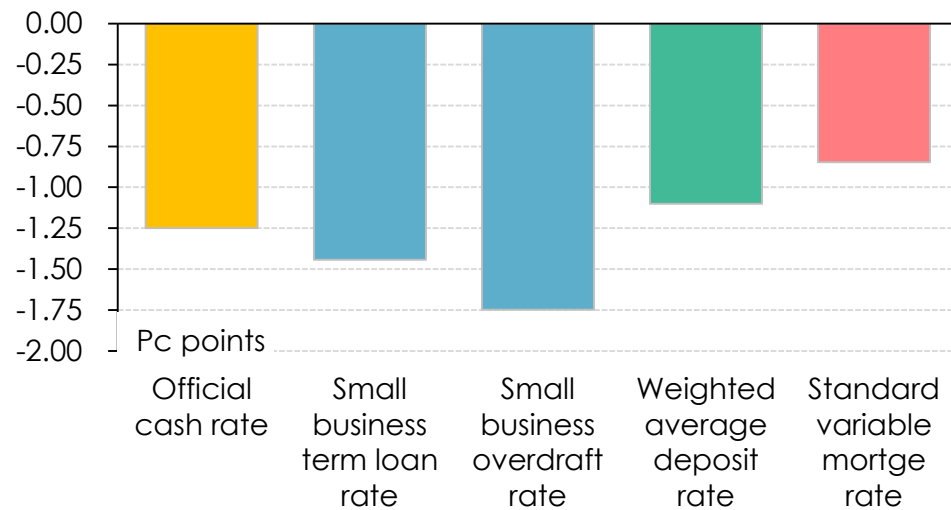


RBA open market bond purchases

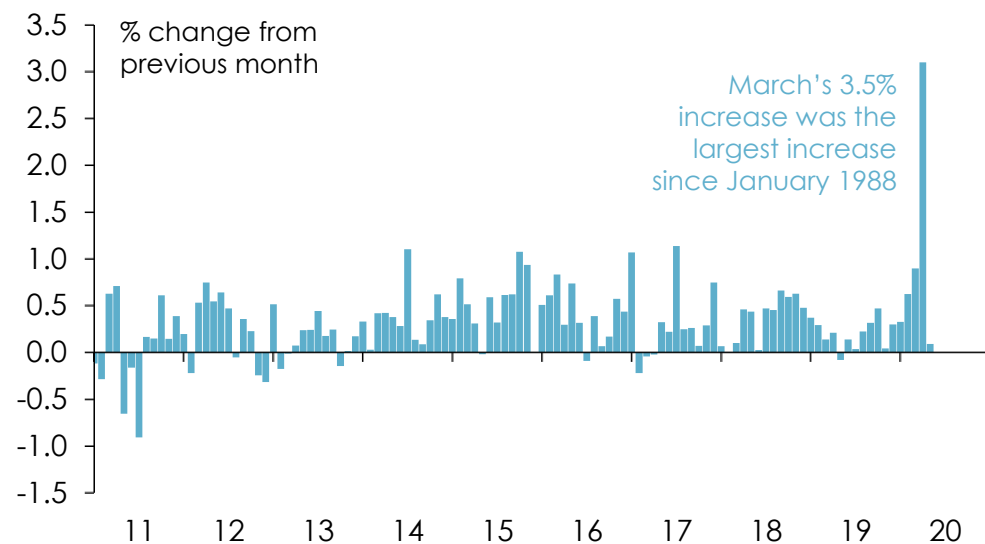


For now at least, banks are 'part of the solution', not 'part of the problem'

Changes in interest rates since June 2019



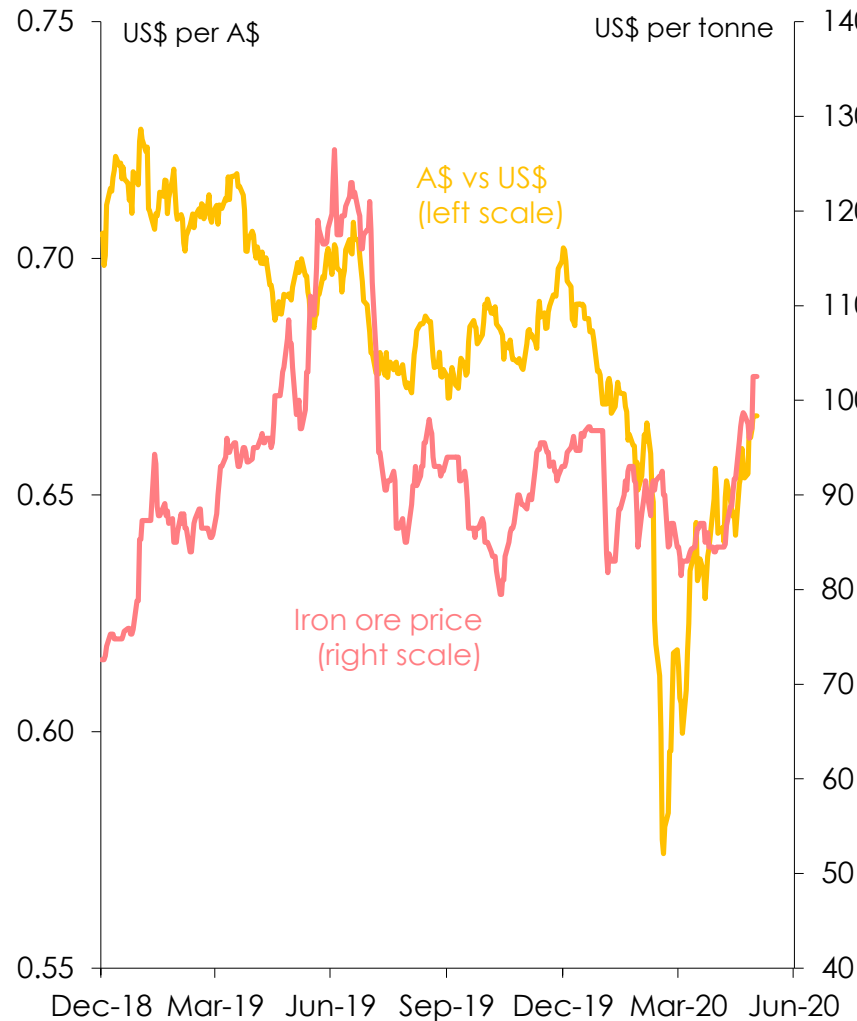
Business credit outstanding



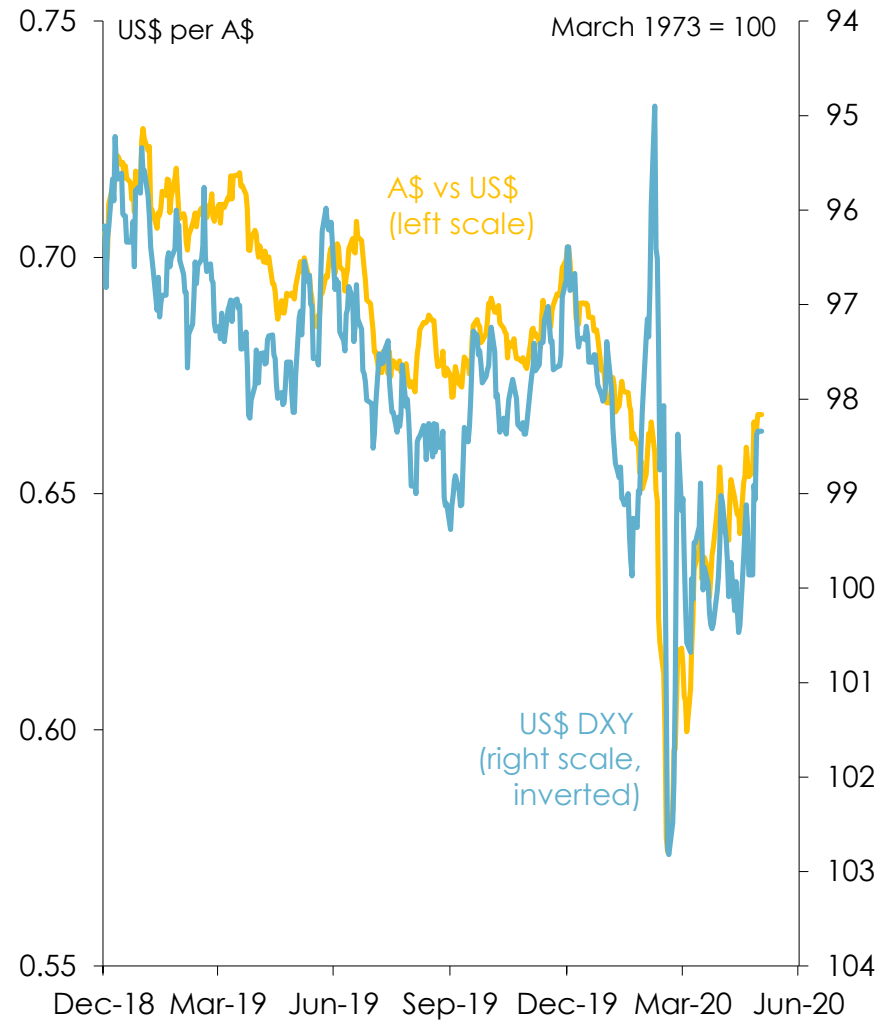
- ❑ Banks have cut interest rates on small business loans by more than the official cash rate since June last year (when the RBA started cutting rates again)
- ❑ Supported by the RBA's Term Lending Facility, lending to business rose by more in March this year than in any month in the past 32 years
- ❑ 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

A\$ fluctuations have been largely driven by movements in the US\$ itself and by changes in investor risk appetite

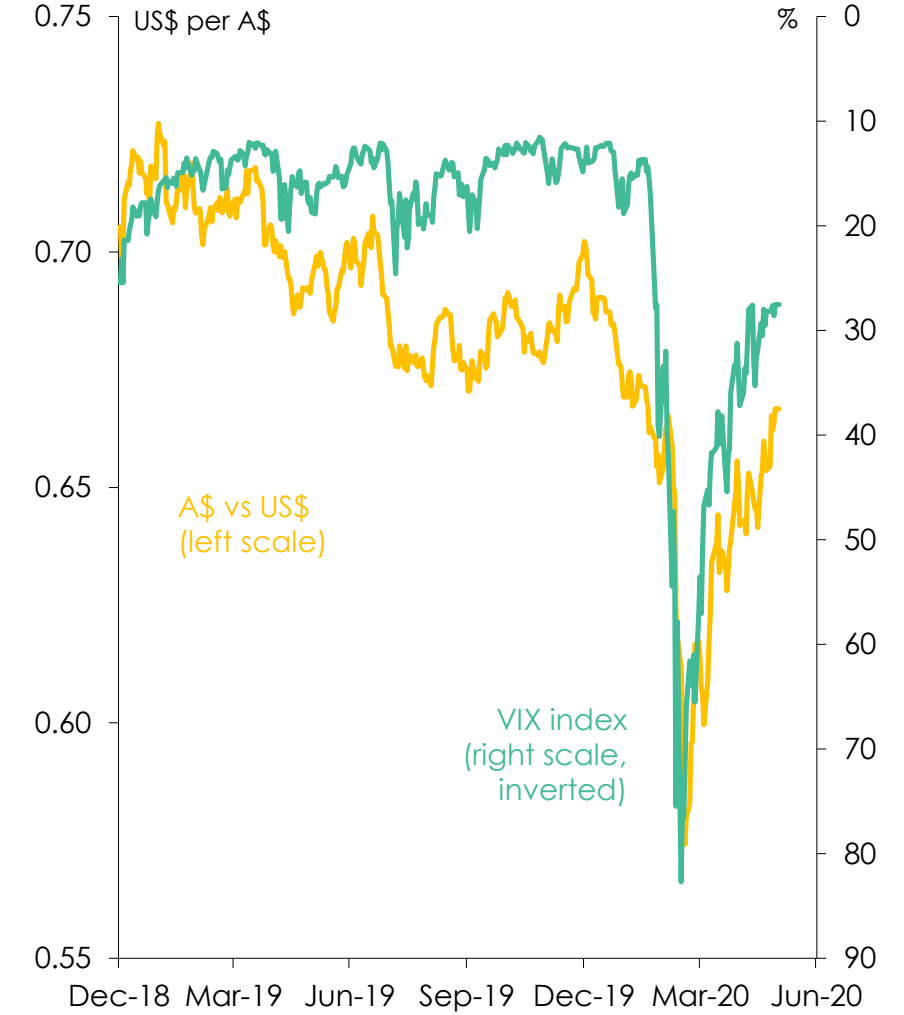
A\$-US\$ and iron ore prices



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



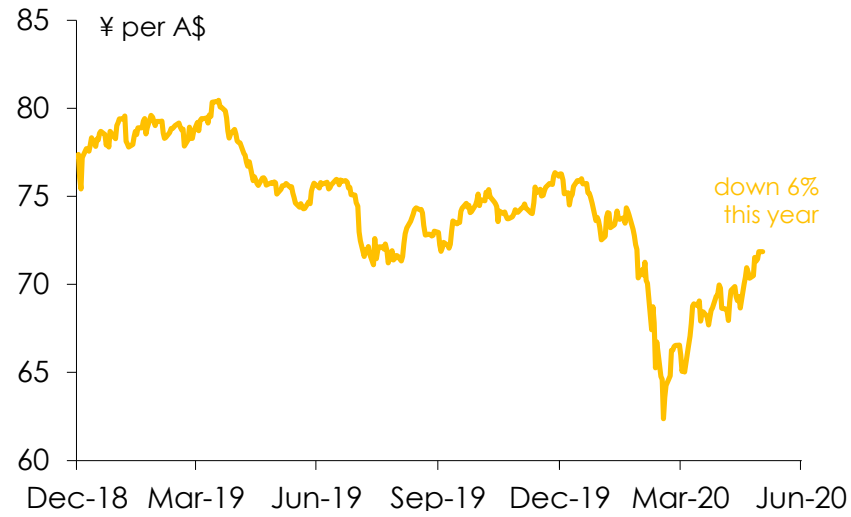
A\$-US\$ and equity market volatility



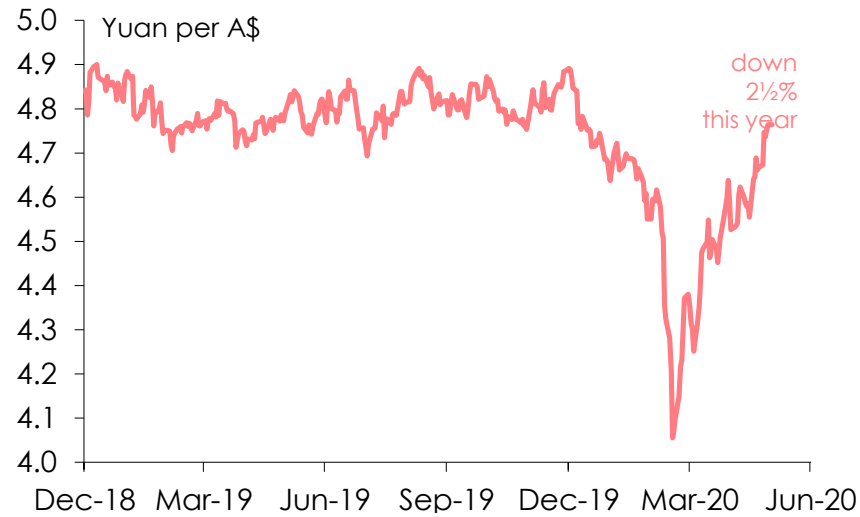
Note: The VIX index is a measure of the implied volatility of S&P500 options, and is widely interpreted as an indicator of investor risk appetite or aversion.
 Source: Refinitiv Datastream. Data up to 29th May.

Apart from the Japanese yen, the A\$ hasn't fallen as much this year against other currencies as it has against the US\$

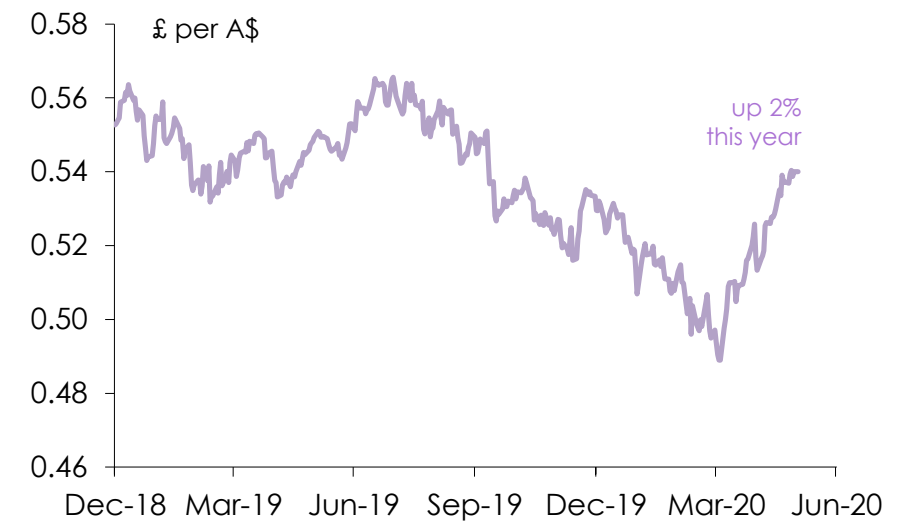
A\$ vs Japanese yen



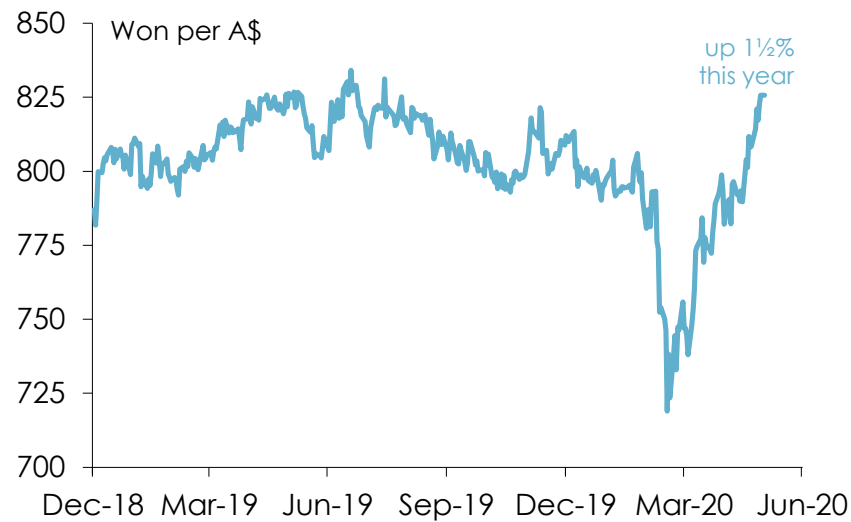
A\$ vs Chinese yuan



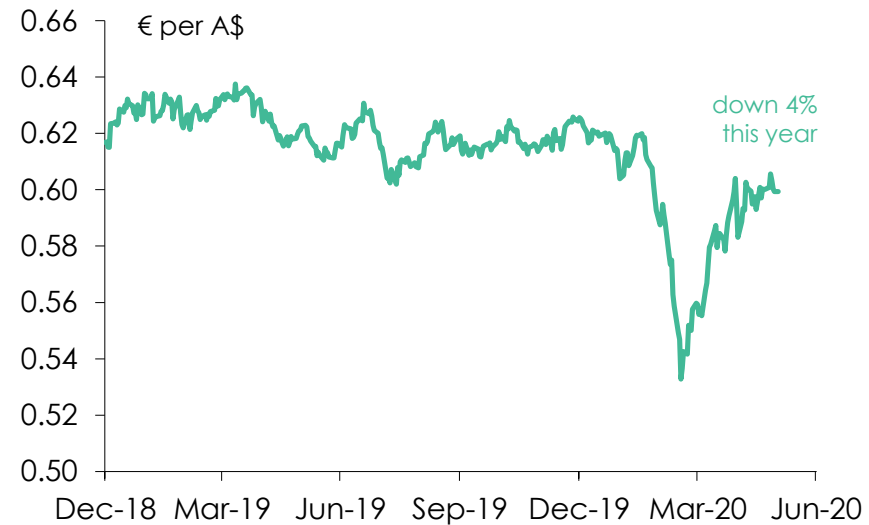
A\$ vs British pound



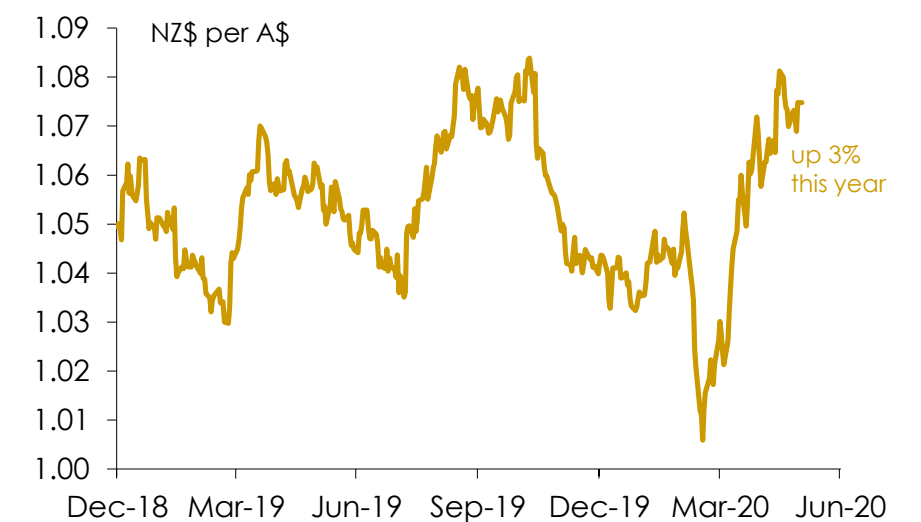
A\$ vs Korean won



A\$ vs Euro



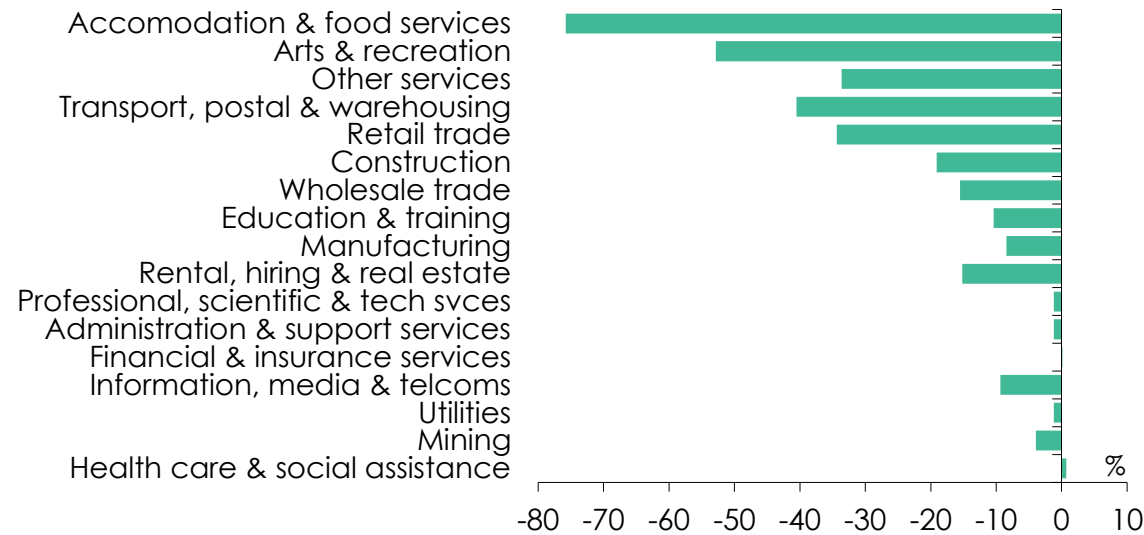
A\$ vs NZ\$



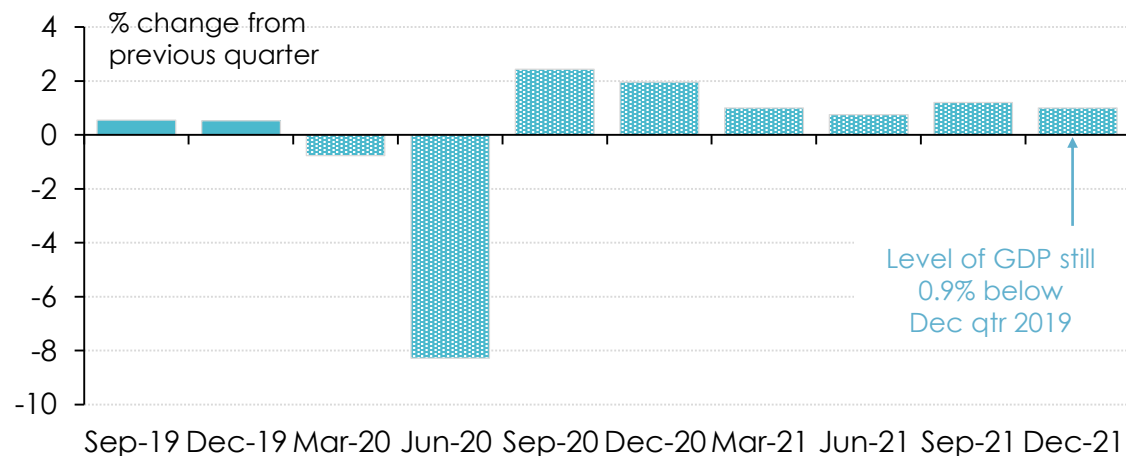
Source: Refinitiv Datastream. Data up to 29th May.

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



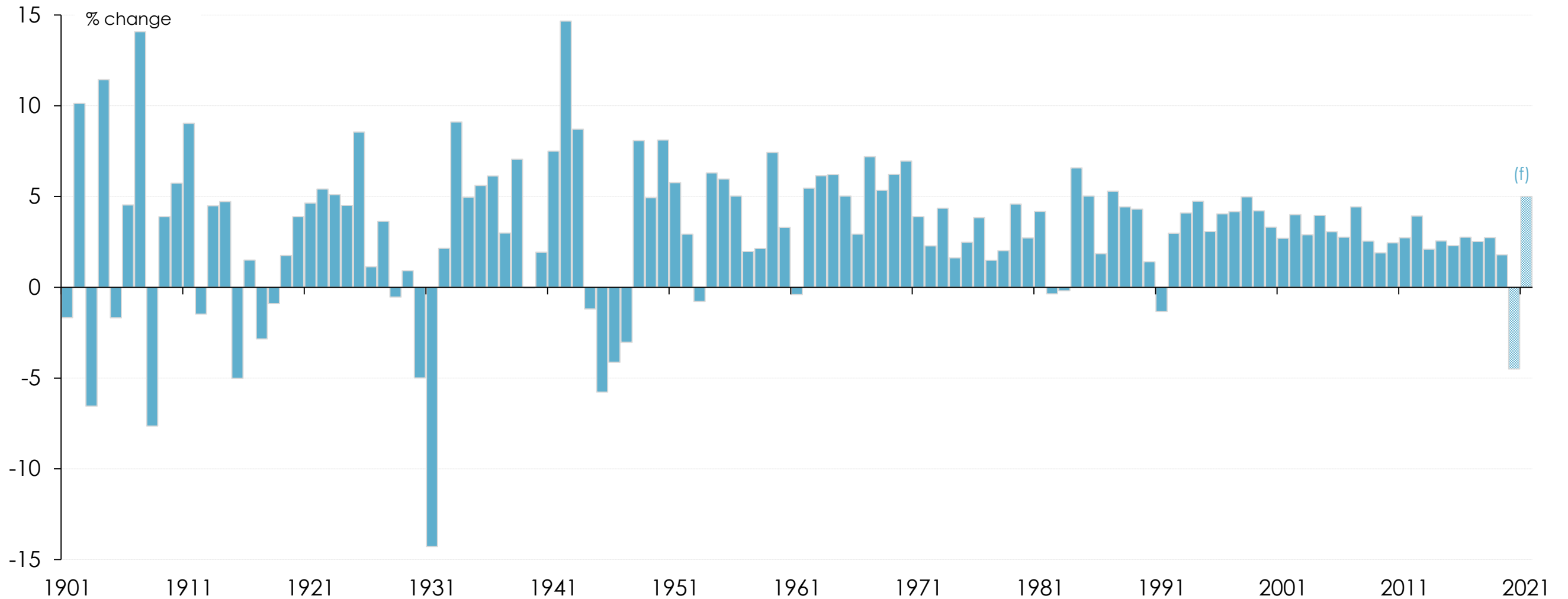
Projected quarterly real GDP profile



- ❑ 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 qtr 2019 and the probable trough in Sep qtr 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 qtr
- ❑ That would imply year-average growth of about $-3/4\%$ for FY 2019-20 and $-2\frac{1}{4}\%$ for FY 2020-21; or $-4\frac{1}{2}\%$ for CY2020 and $+3\%$ for CY 2021
- ❑ Even with an earlier easing of restrictions, a 'V-shaped' recovery looks unlikely (see slide 50) – and some additional fiscal stimulus is likely to be required to support the recovery that will occur
- ❑ Projections of the peak in unemployment are very sensitive to assumptions about labour force participation, but a reasonable 'guess' would be about 10% if one-third of job losers are classed as 'not in the labour force'

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

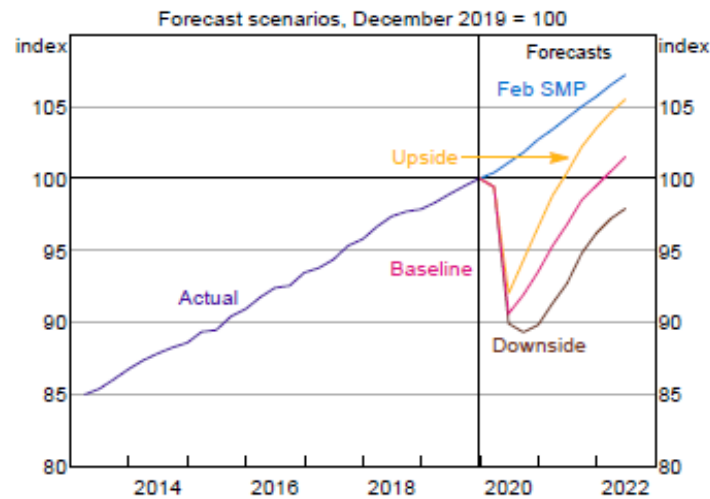
Australian real GDP growth since 1901



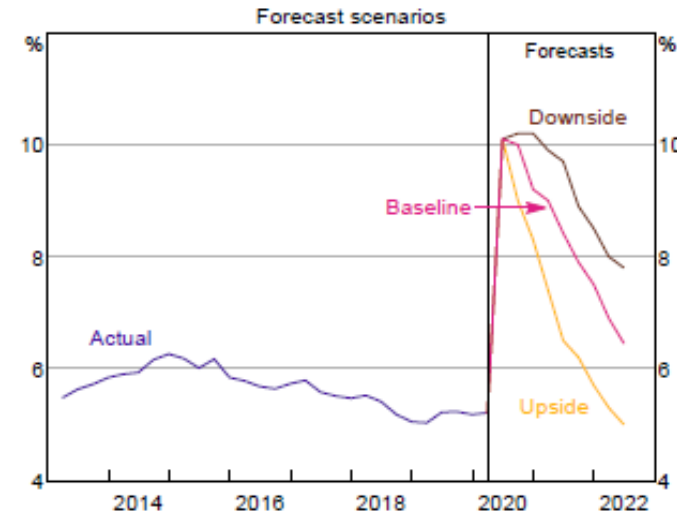
Note: From 1901 to 1960 data are for years ended 30th June; from 1961 onwards data are for years ended 31st December. Sources: ANU Source Papers in Economic History; ABS.

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

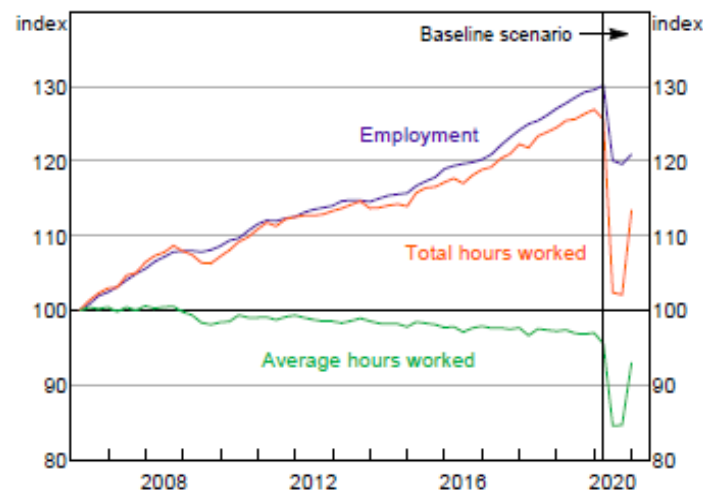
GDP



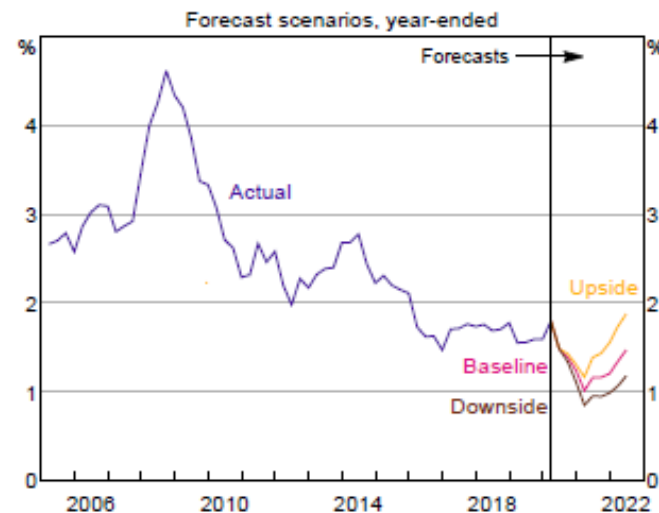
Unemployment



Employment



'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 quarter) and declines to 6½% by Dec qtr 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 5¼% 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'

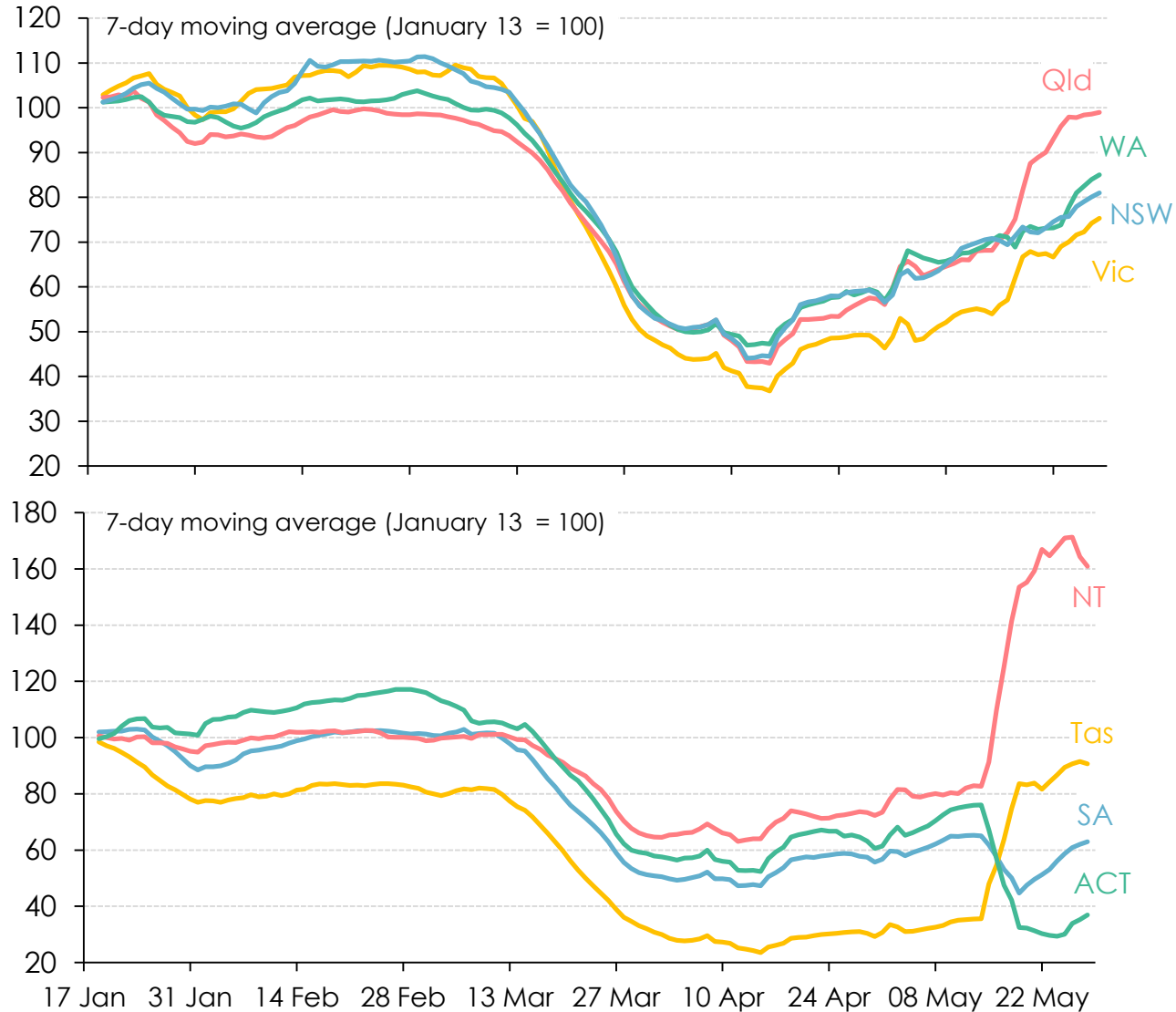
The Government's "3-Step Framework" for the easing of restrictions doesn't amount to a complete recovery

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

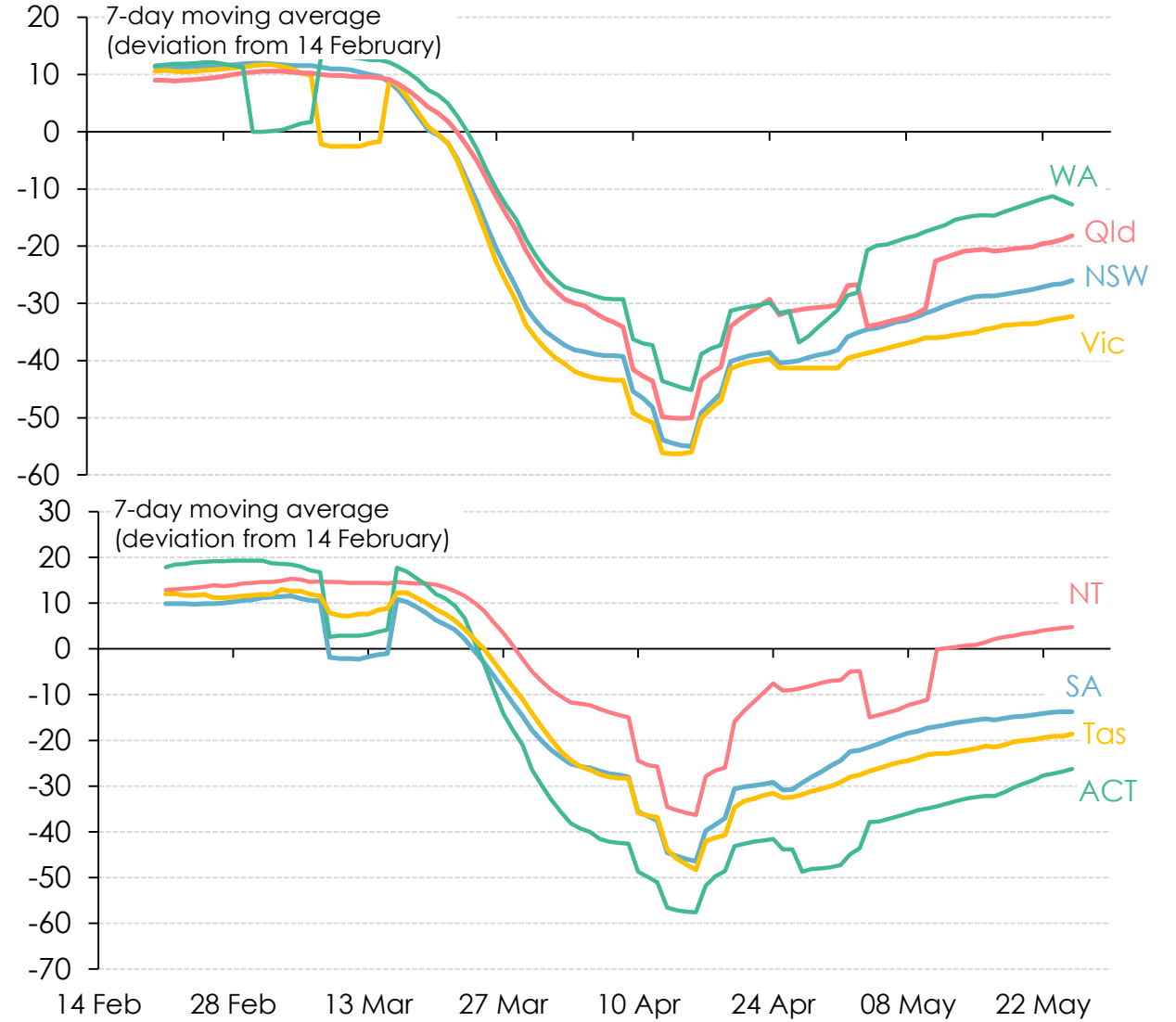
- ❑ Treasury expects 250,000 jobs to be regained, and \$3bn of GDP to be recouped, from 'Step 1'
- ❑ Full implementation of all 3 steps is expected to enable 850,000 people to return to work, and generate \$9.4bn per month of additional GDP
- ❑ These figures compare with job losses to date of around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

States and Territories are easing restrictions at different rates, so their economies will recover at different paces

Time spent driving, by State and Territory



Time spent working, by State and Territory



Sources: Apple Mobility Trends Reports (data up to 25th May); Google Covid-19 Community Mobility Reports (data up to 21st ay).

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, 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 recovery in international tourism or international education
- ❑ **Businesses are likely to be very hesitant about investment spending for an extended period (with some exceptions)**

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

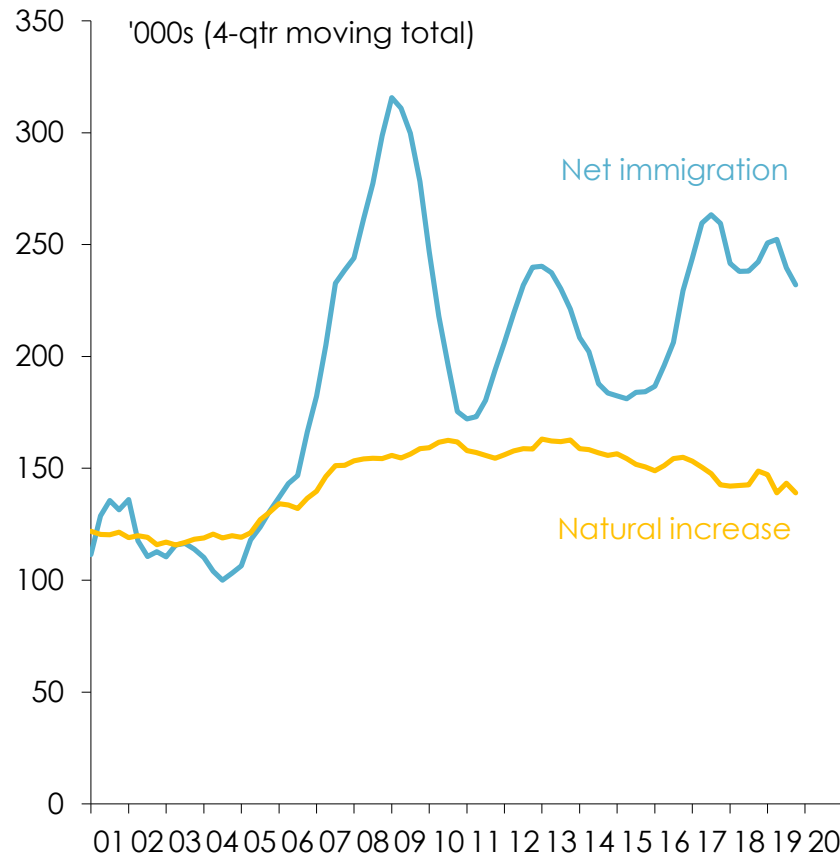
❑ (Mostly) good macro-economic policy – especially by comparison with other 'advanced' economies

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

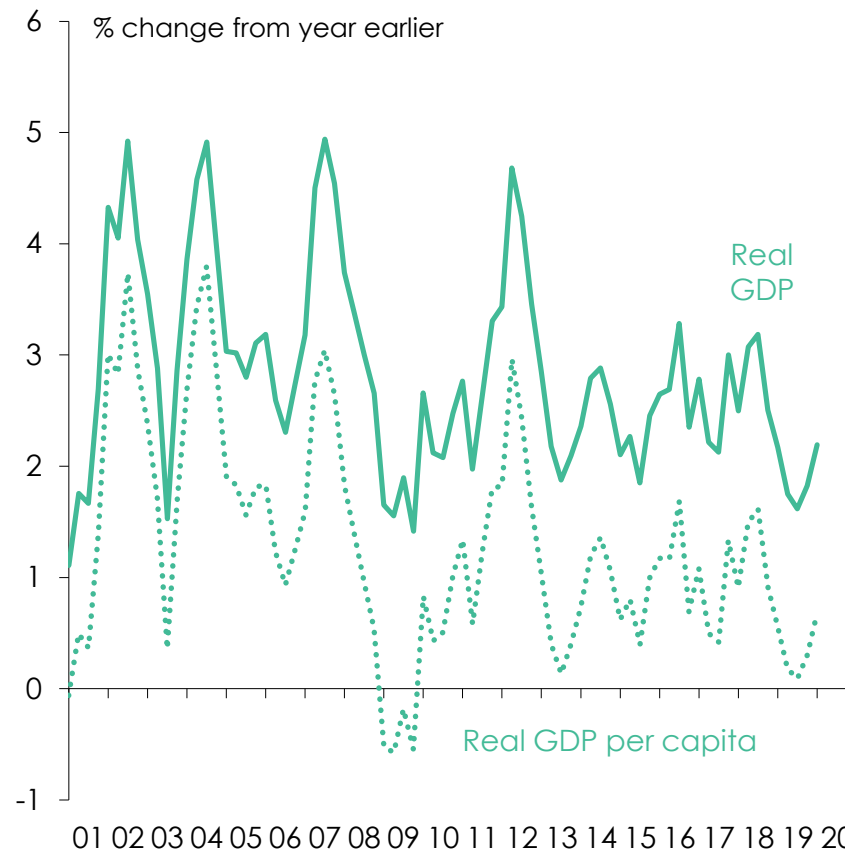
The first three of these are likely to be of less assistance from now on

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

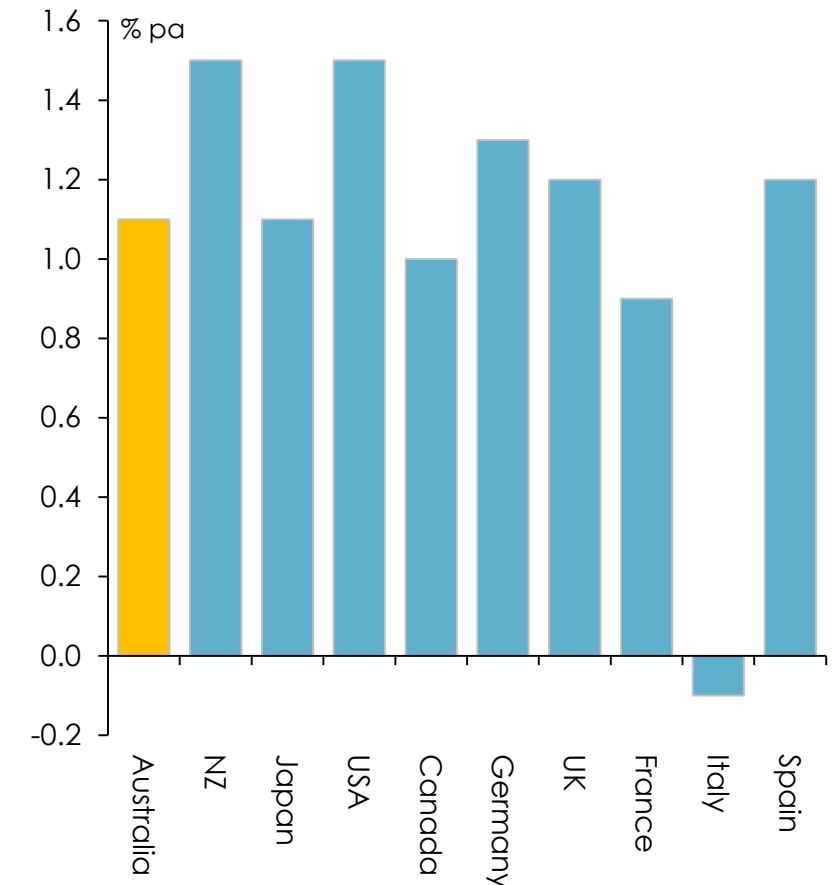
Sources of Australia's population growth



Australian GDP and per capita GDP growth



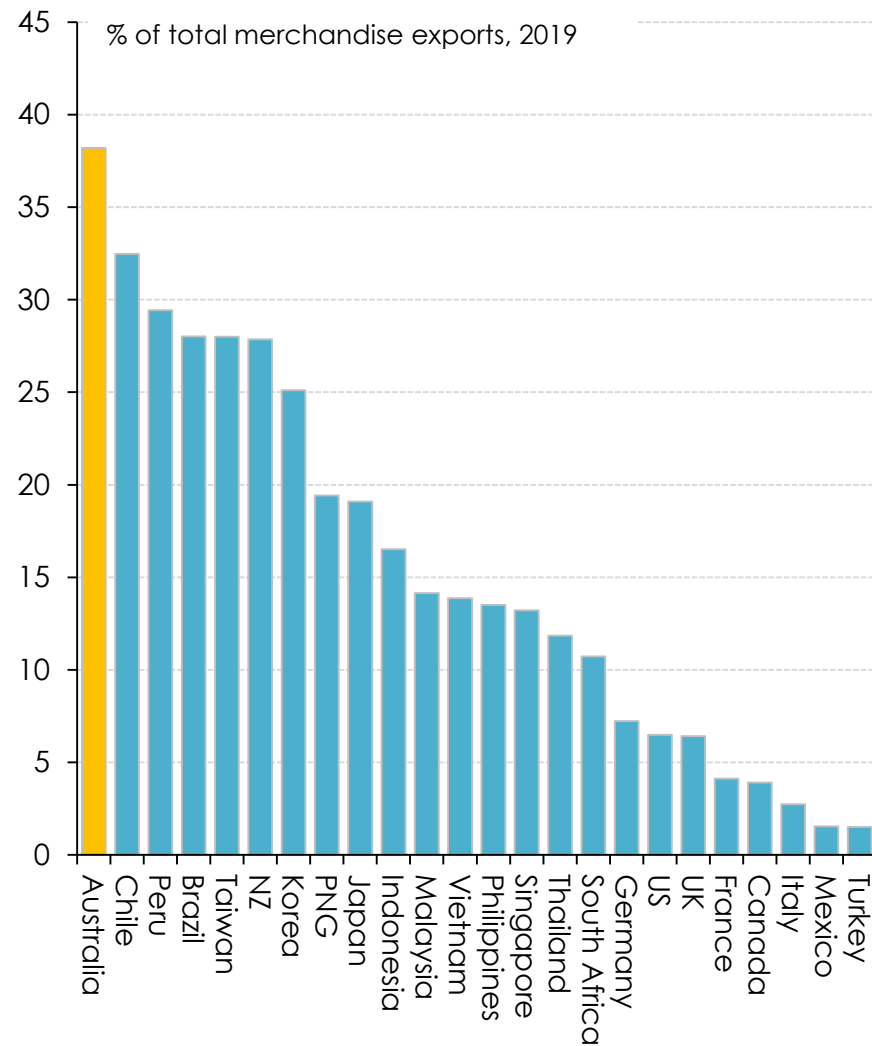
Real per capita GDP growth, 2010-2019



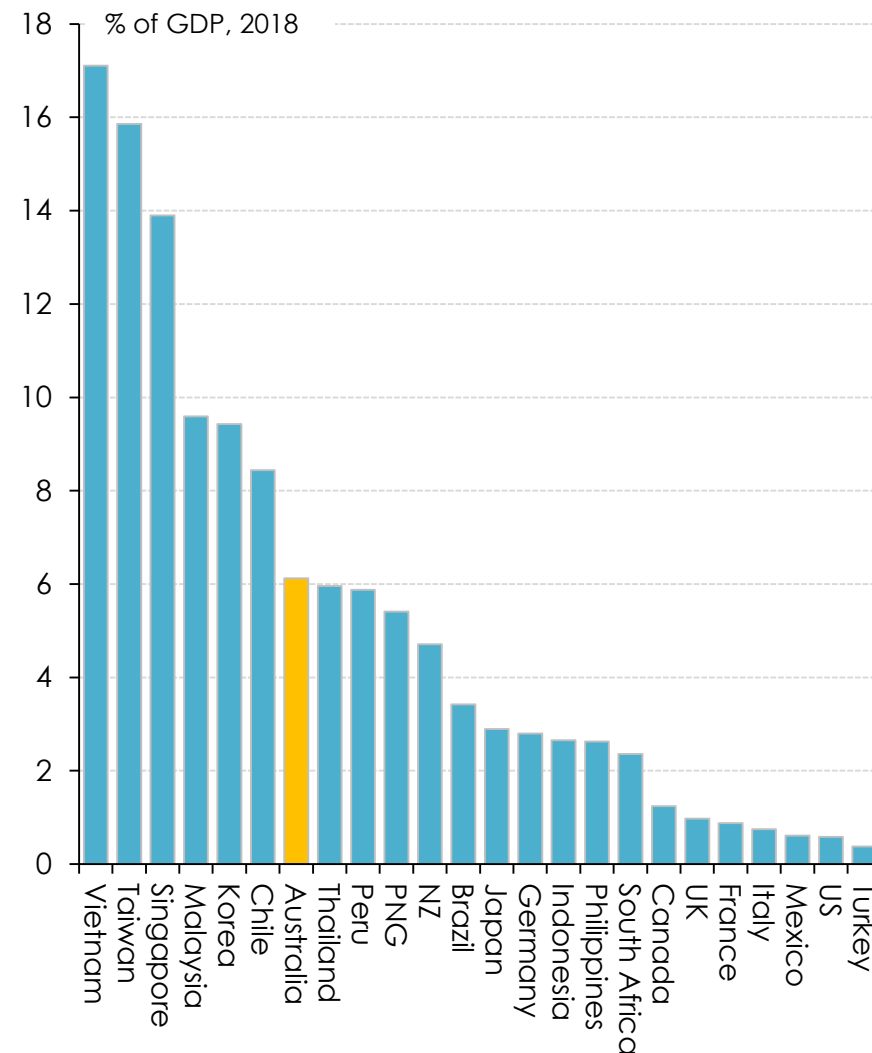
❑ Treasury reportedly expects net overseas migration to fall by 30% in 2019-20 (ie to about 168,000) and by a further ~ 80% in 2020-21 (ie to about 36,000)

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

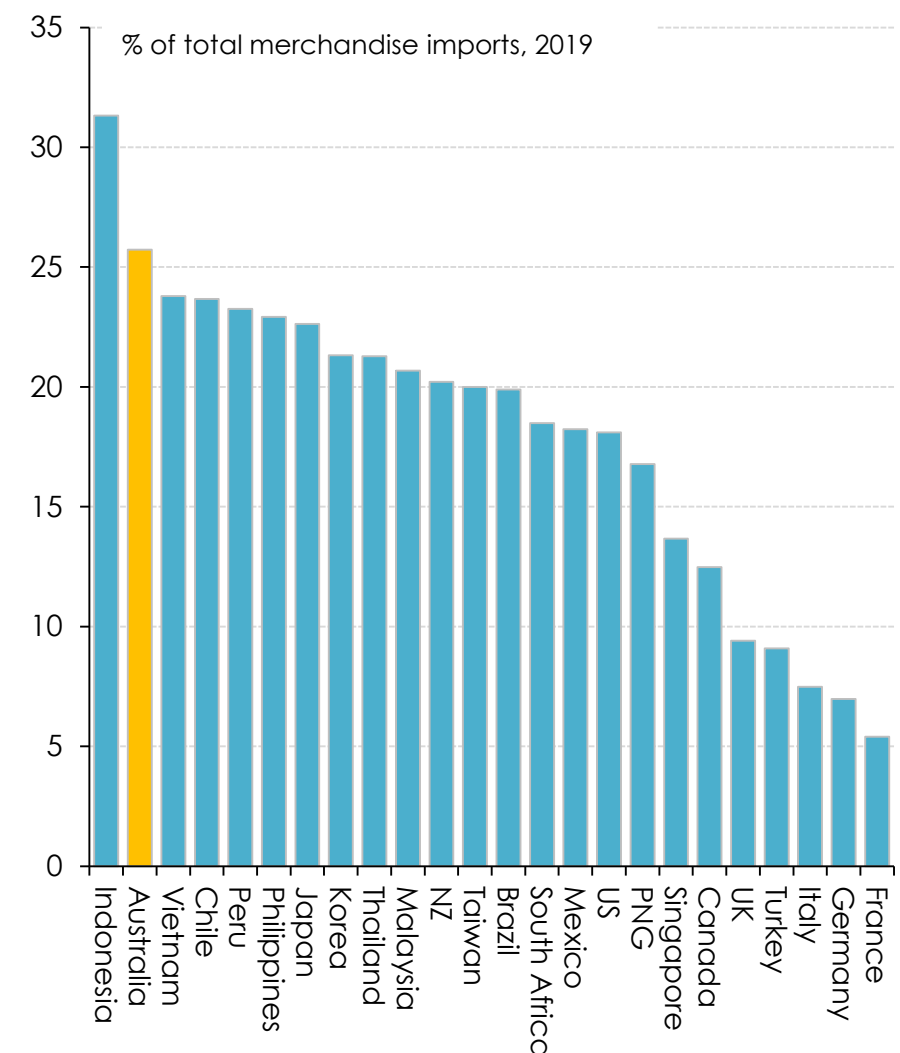
Merchandise exports to China as a pc of total



Merchandise exports to China as a pc of GDP



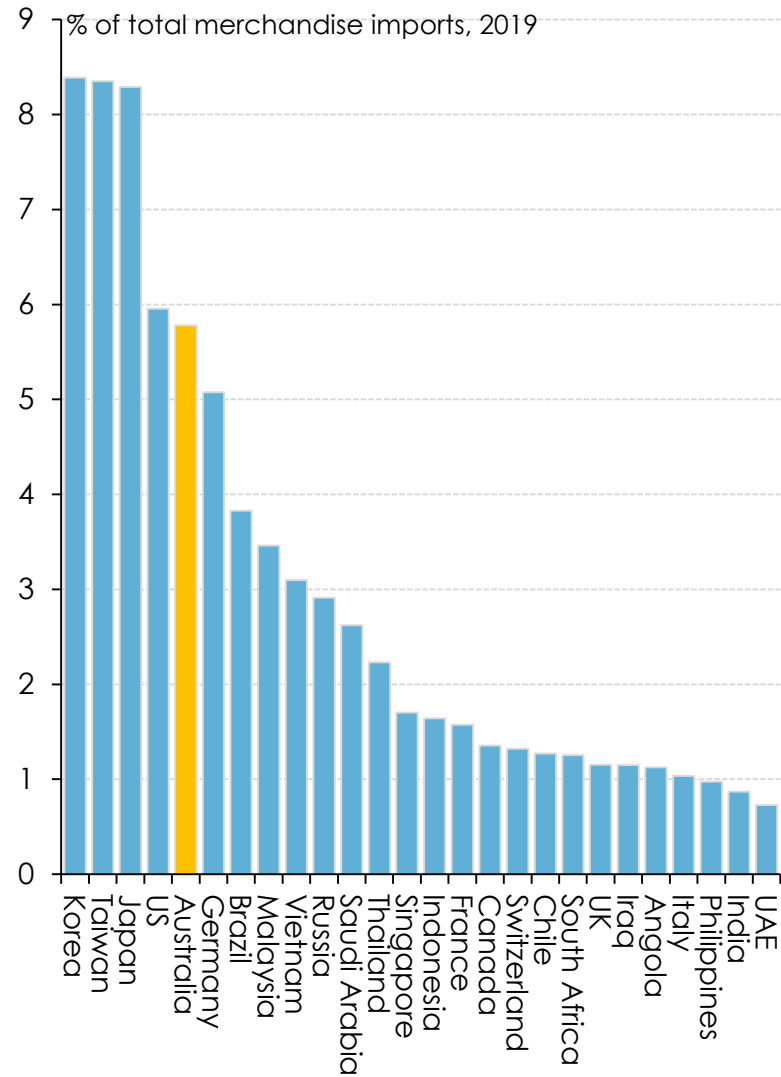
Merchandise imports from China as a pc of total



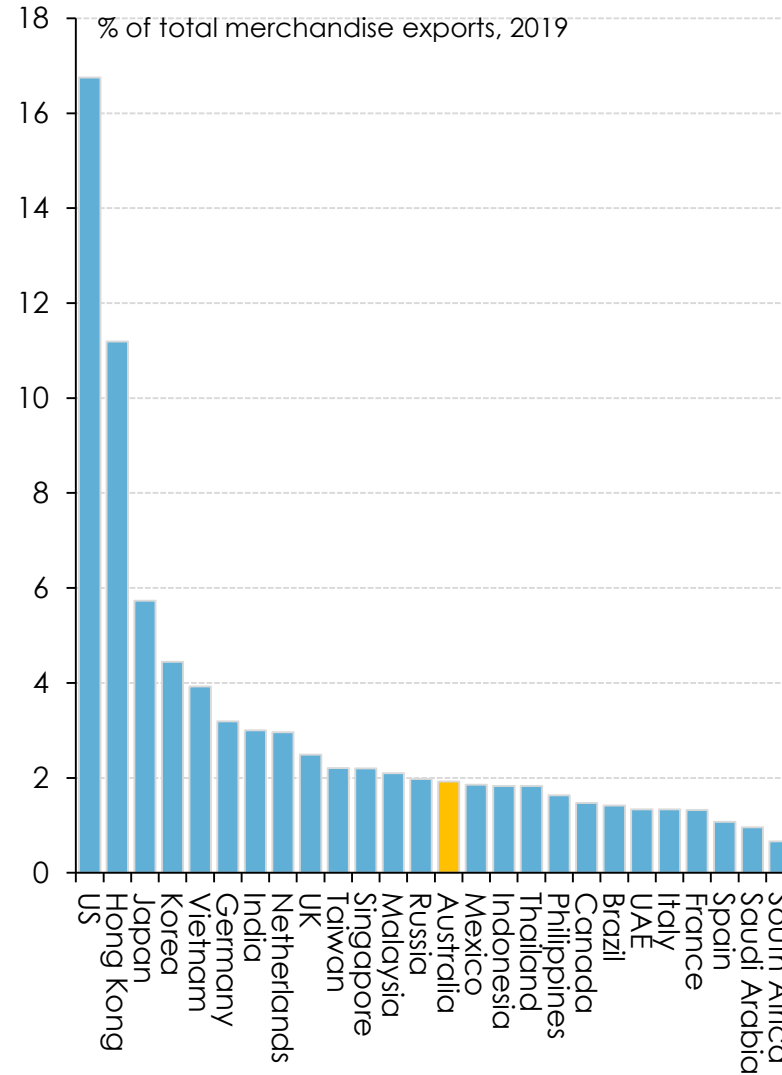
Sources: IMF, Direction of Trade Statistics; Taiwan Ministry of Economic Affairs, Bureau of Foreign Trade.

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

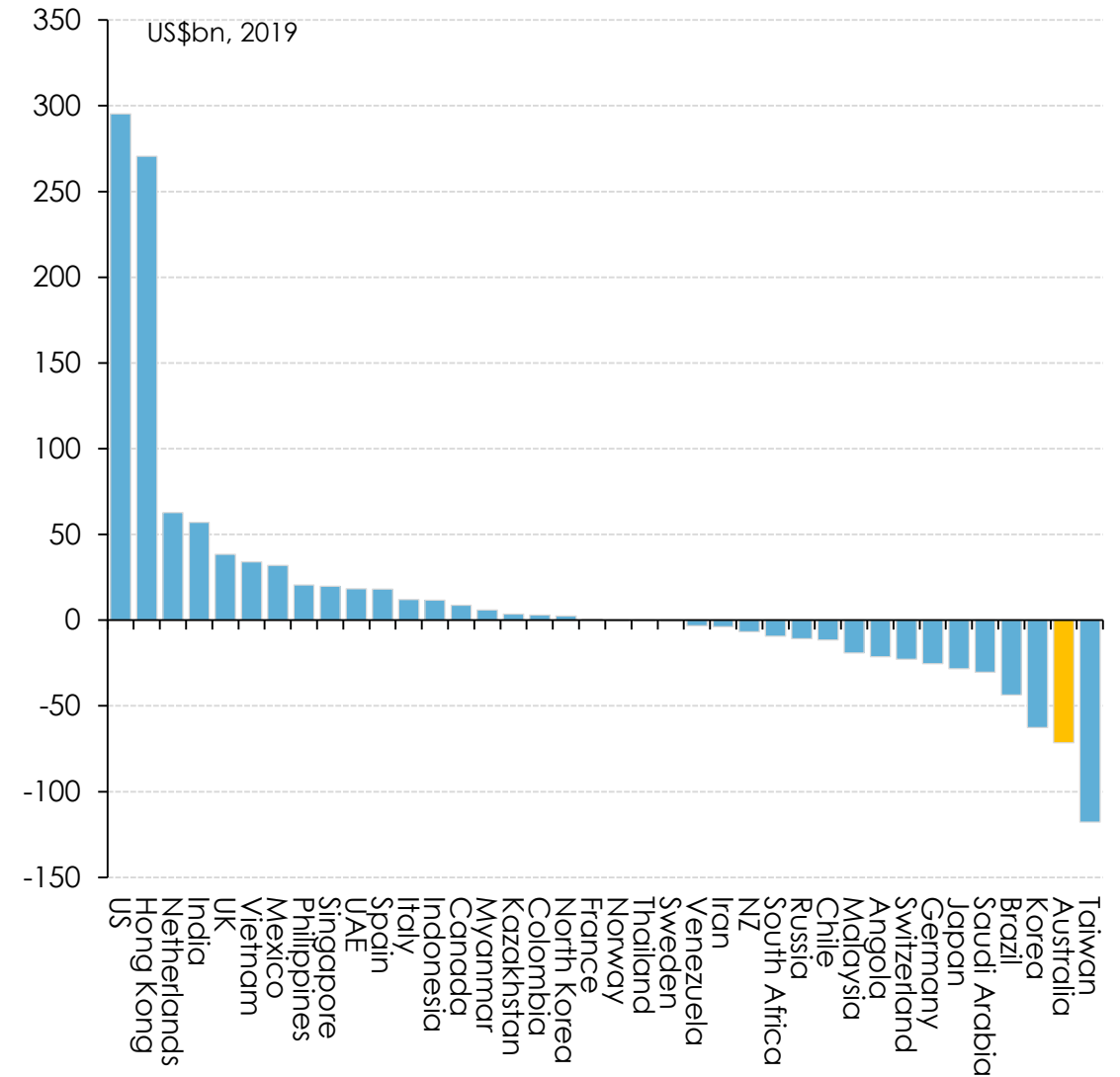
China's sources of imports



China's export destinations



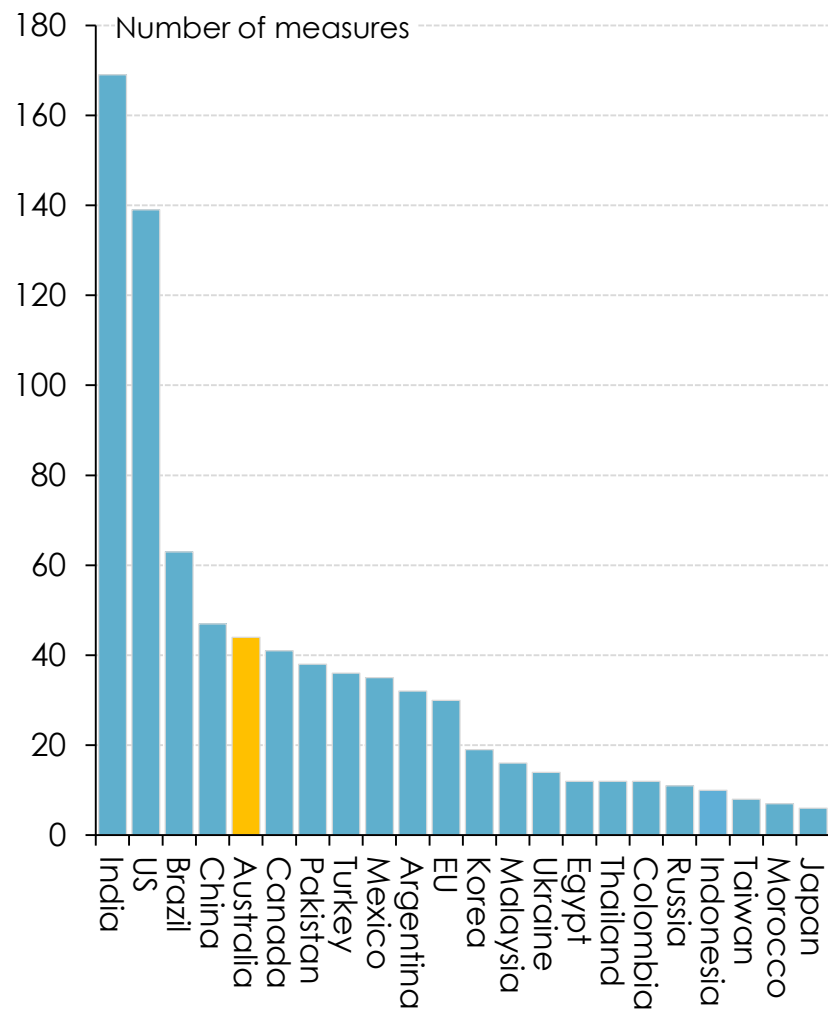
China's bilateral merchandise trade balances



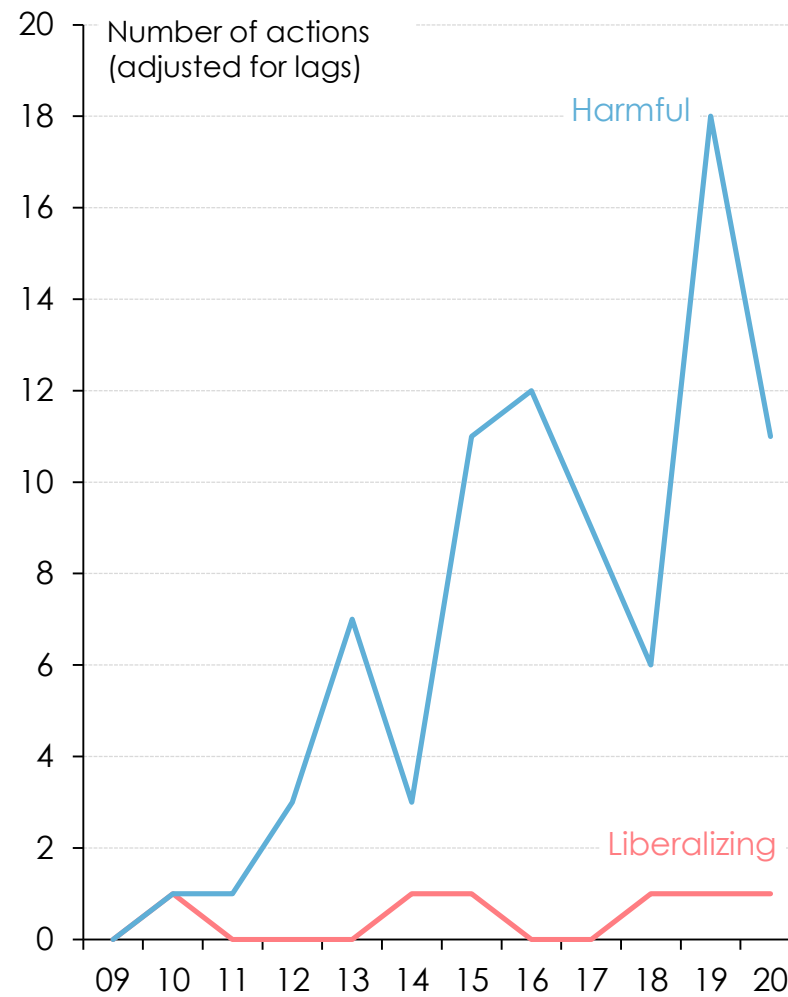
Source: International Monetary Fund, *Direction of Trade Statistics*.

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

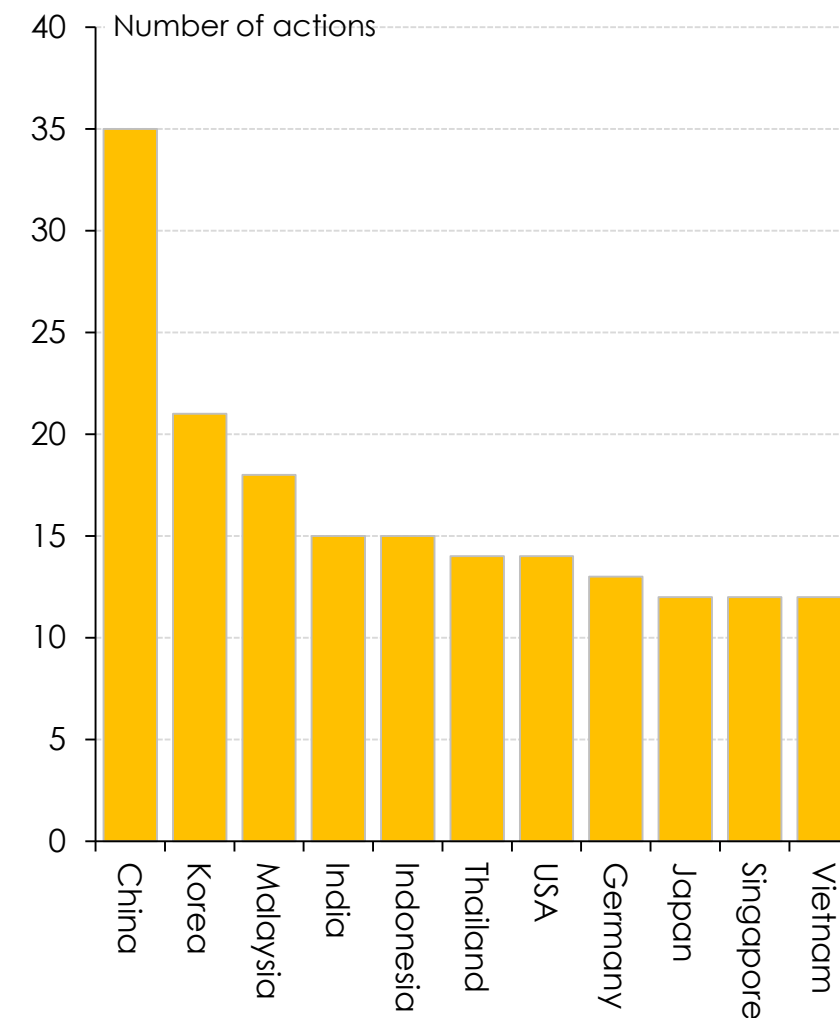
Number of anti-dumping measures imposed, 2015-19



Australian trade policy measures since 2009

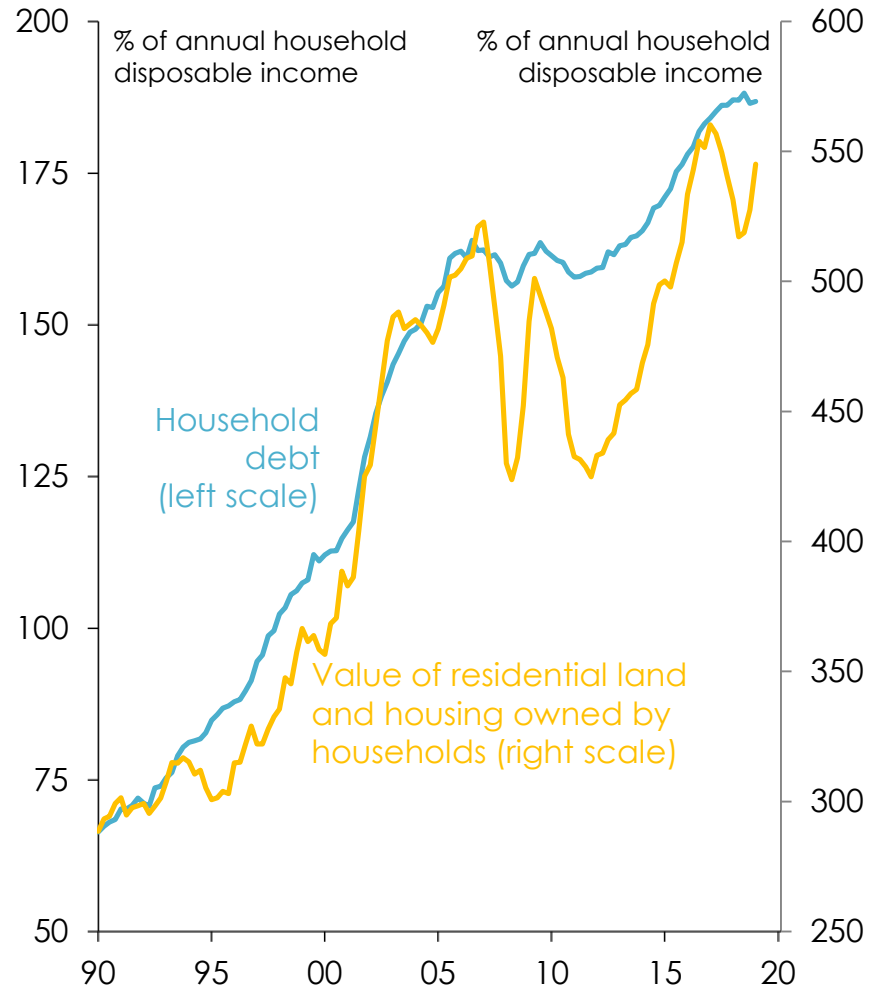


Countries adversely affected by 'harmful' Australian trade actions

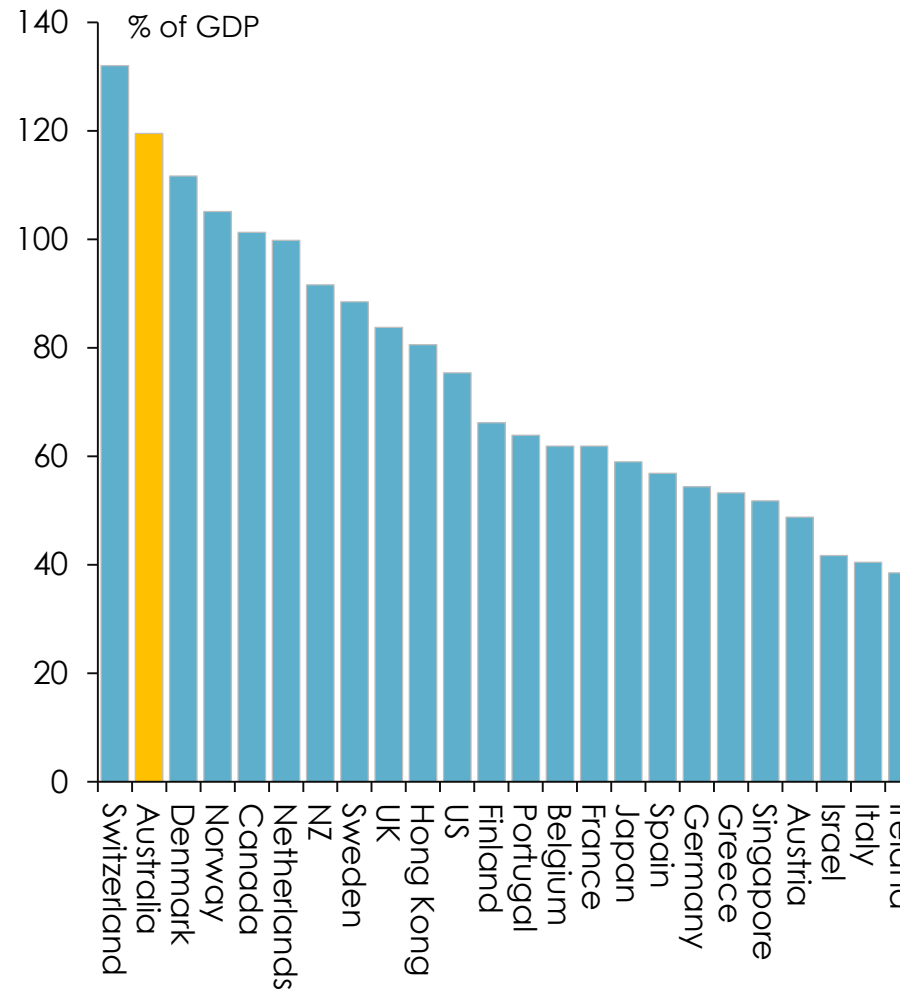


Rising property prices and household debt are unlikely to underpin Australian economic growth as they have done for most of the past 30 years

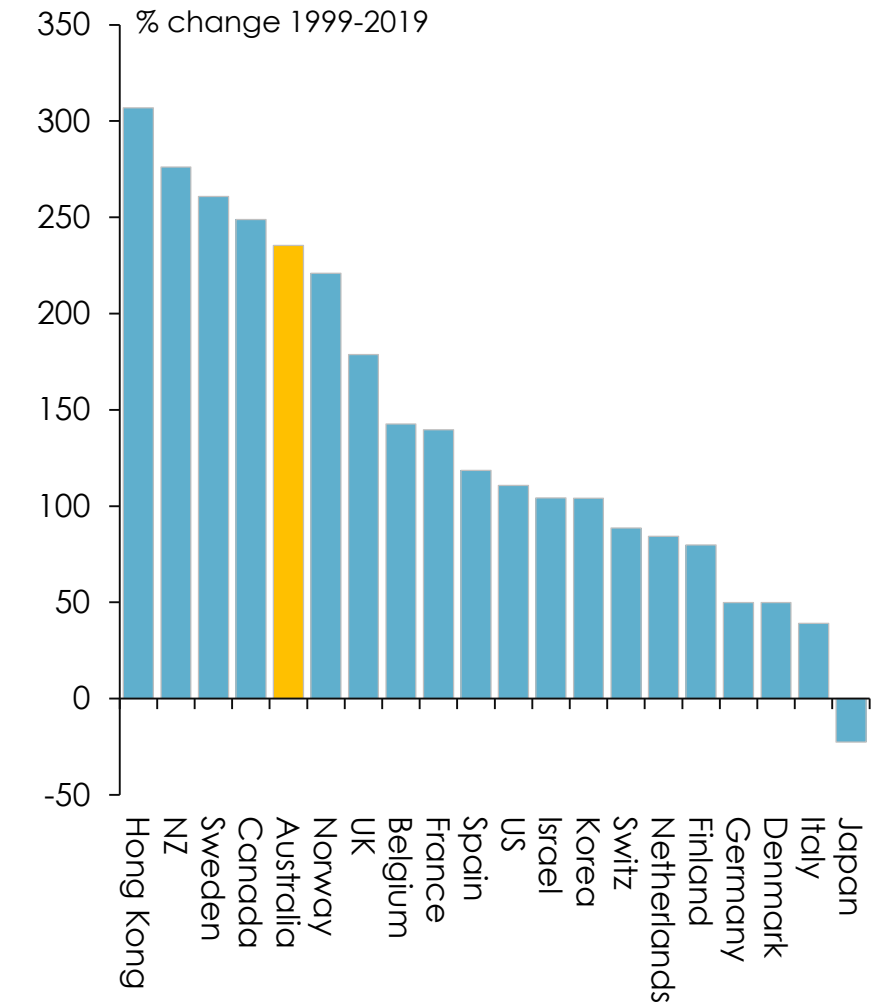
Australian housing wealth and household debt



Household debt as a pc of GDP, December 2019



Increase in residential property prices, 1999-2019



Sources: ABS; Bank for International Settlements.

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 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 Biden 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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