

THE 'POST-COVID' GLOBAL, AUSTRALIAN AND TASMANIAN ECONOMIES

PRESENTATION TO A WEBINAR HOSTED BY THE
AUSTRALIAN-CHINA BUSINESS COUNCIL

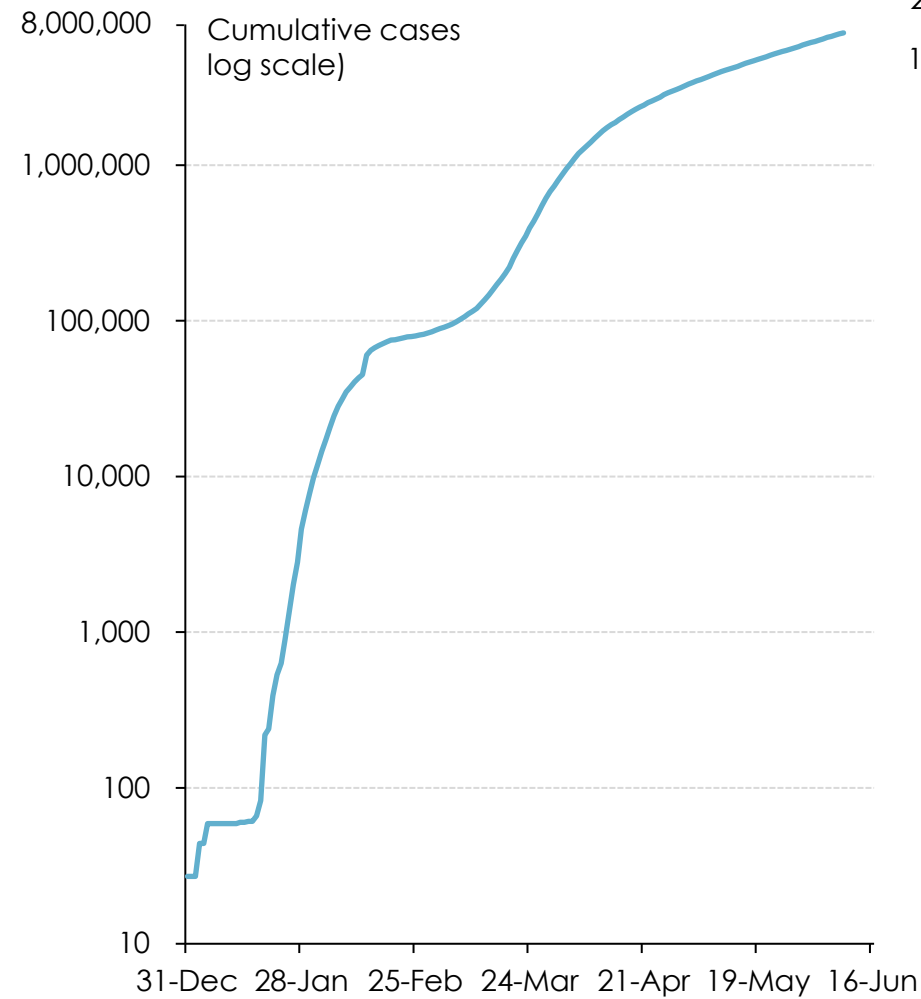
12TH JUNE 2020

SAUL ESLAKE
CORINNA ECONOMIC ADVISORY PTY LTD

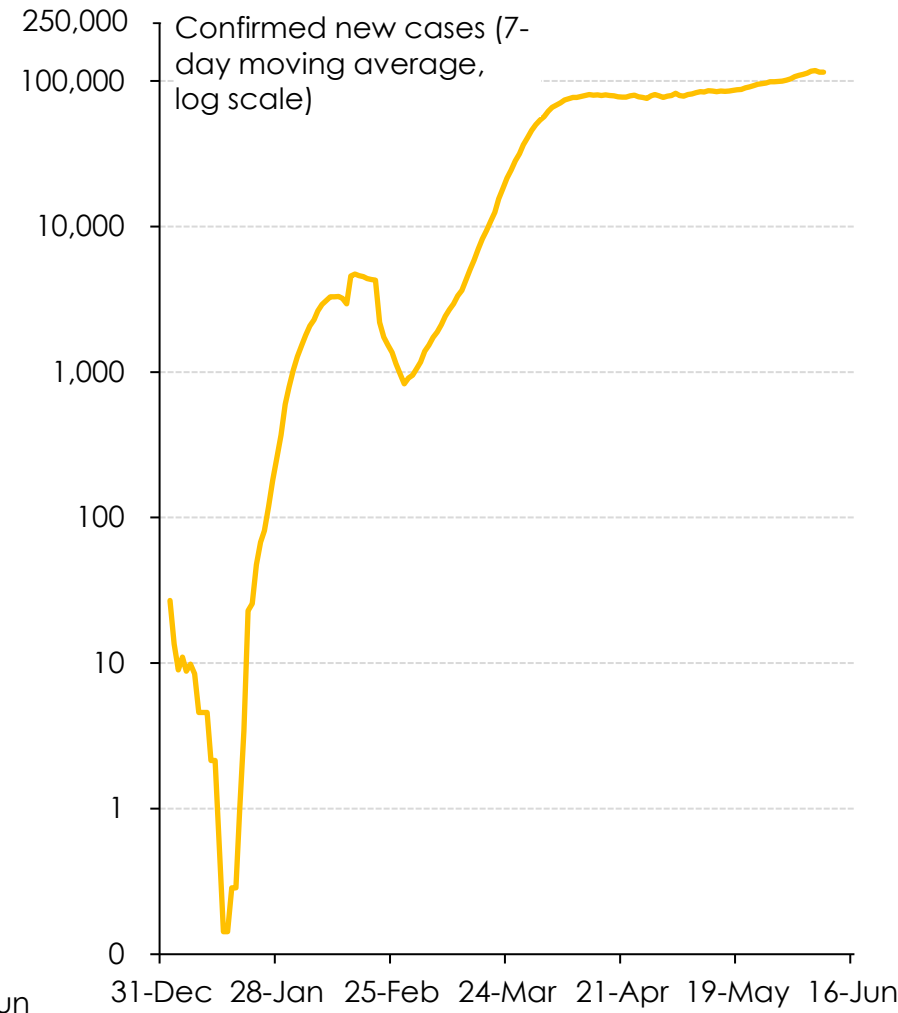
The world

There have now been over 7mn cases of Covid-19 worldwide, and over 405,000 deaths – and neither curve has been flattened, yet

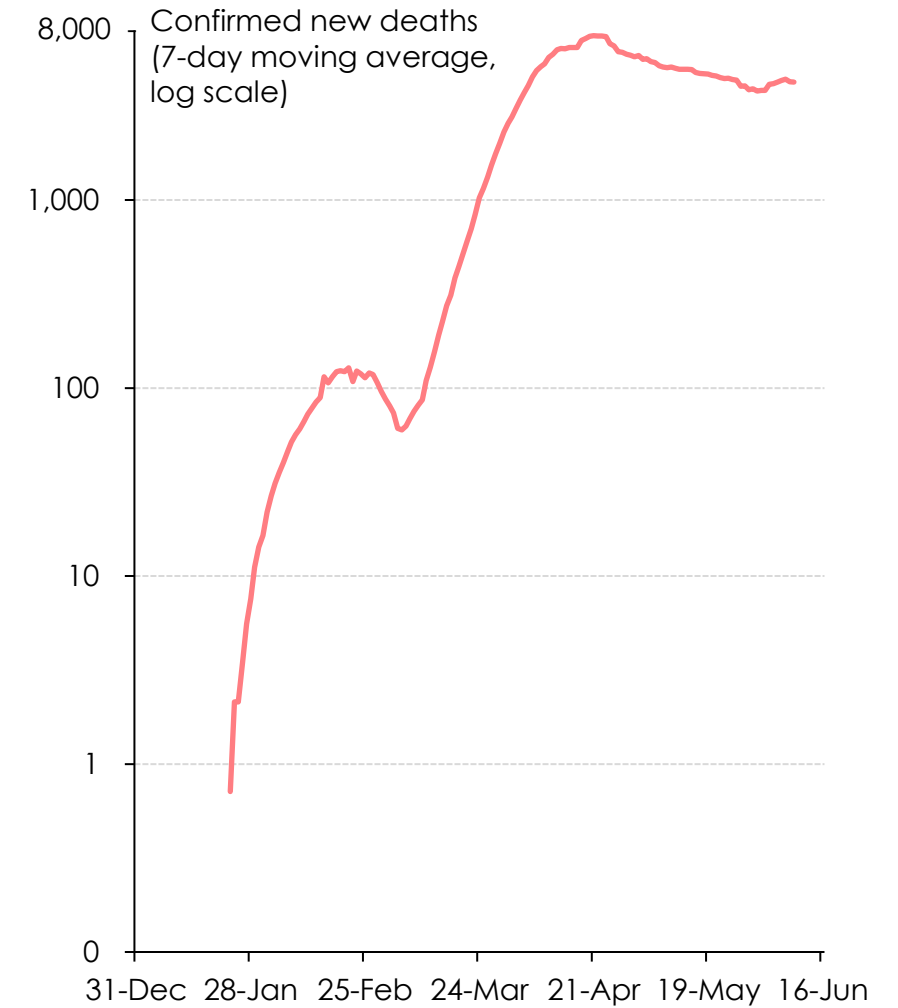
Cumulative confirmed cases – global total



New confirmed cases – global total



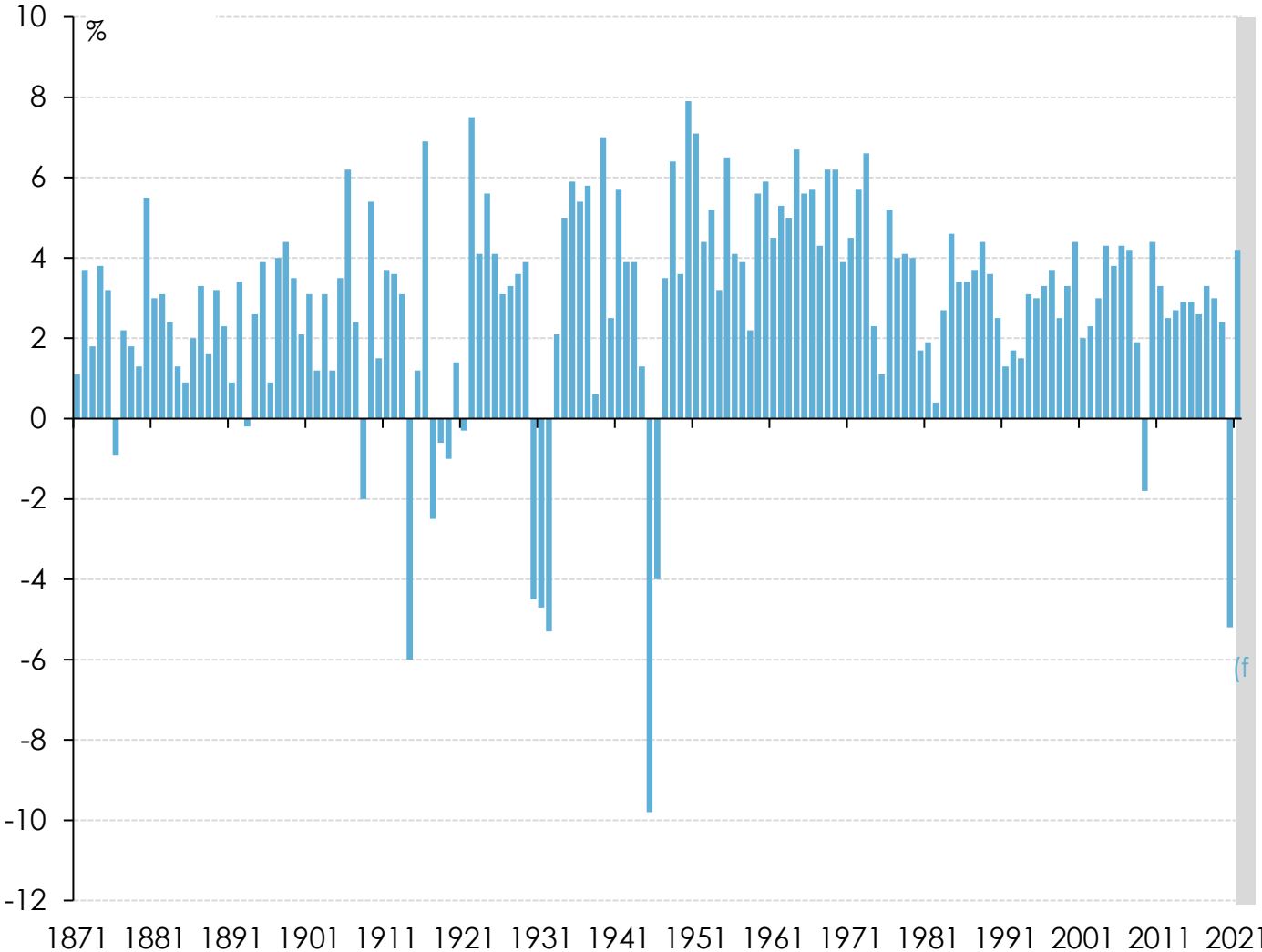
New deaths – global total



Note: Data up to 9th June. Source: University of Oxford, *Our World in Data*.

The World Bank this week forecast that the Covid-19-induced global recession would be the fourth worst in the last 150 years

Growth in global real GDP, 1871-2001



Cumulative decline in real per capita GDP during global recessions

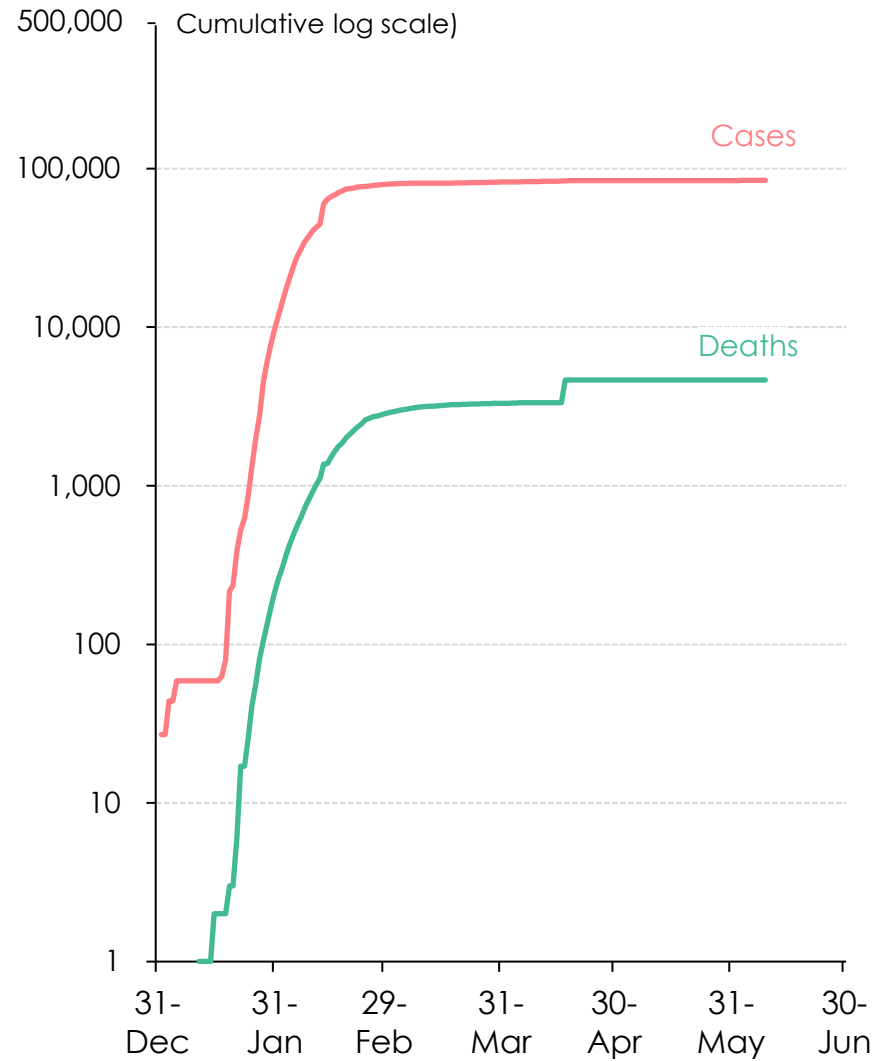


Source: The World Bank, *Global Economic Prospects*, June 2020.

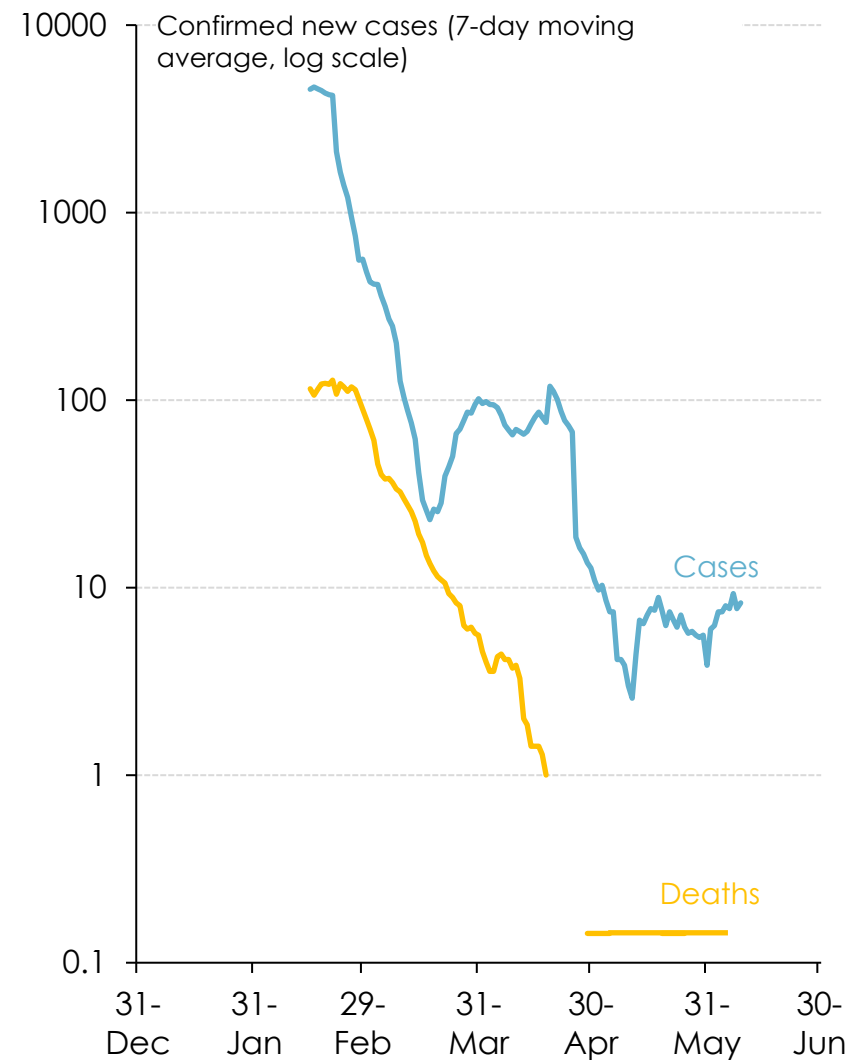
China

China claims to have stopped the spread of Covid-19 from mid-March onwards, although it has experienced isolated outbreaks since then

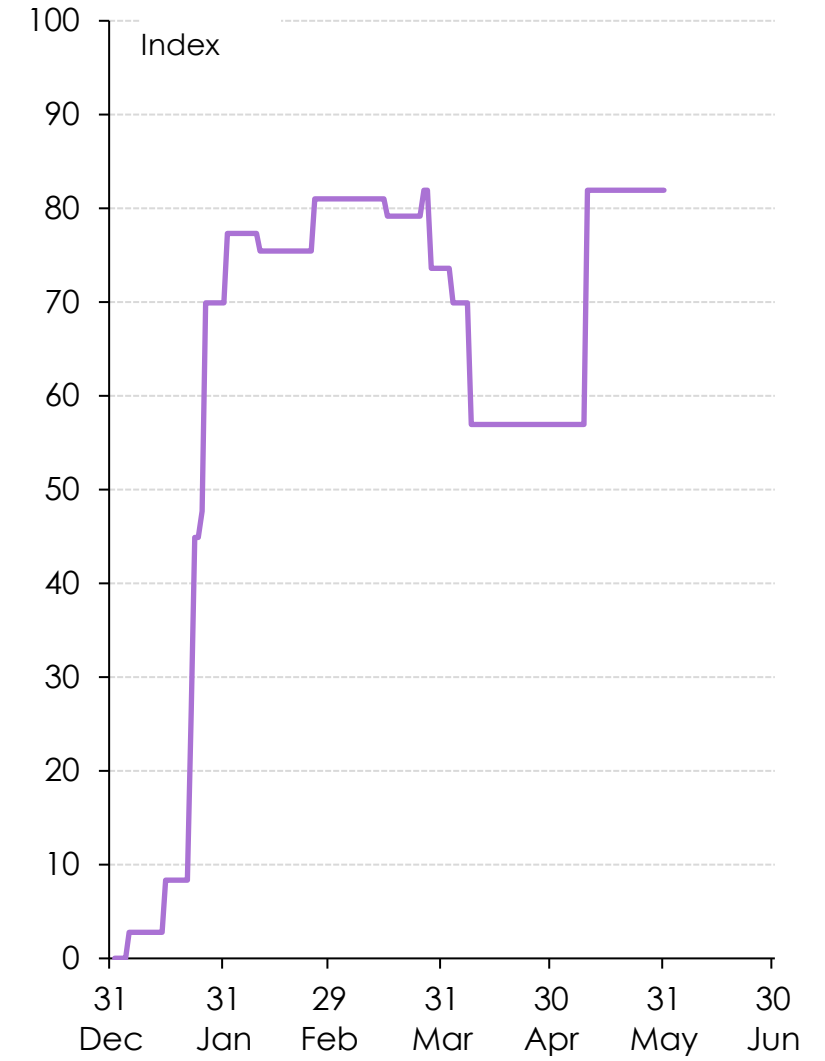
Cumulative cases and deaths



New cases and deaths



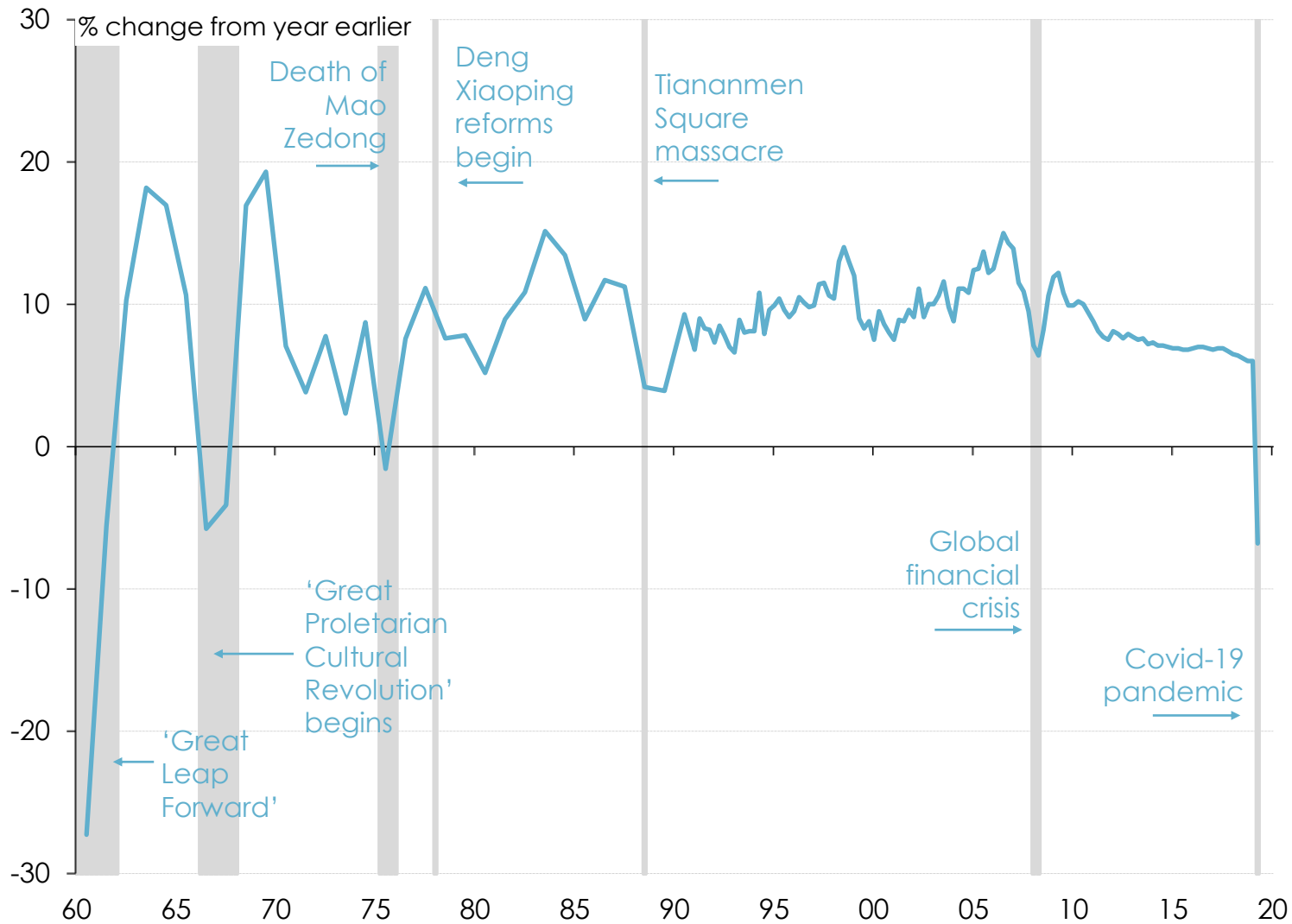
Severity of restrictions



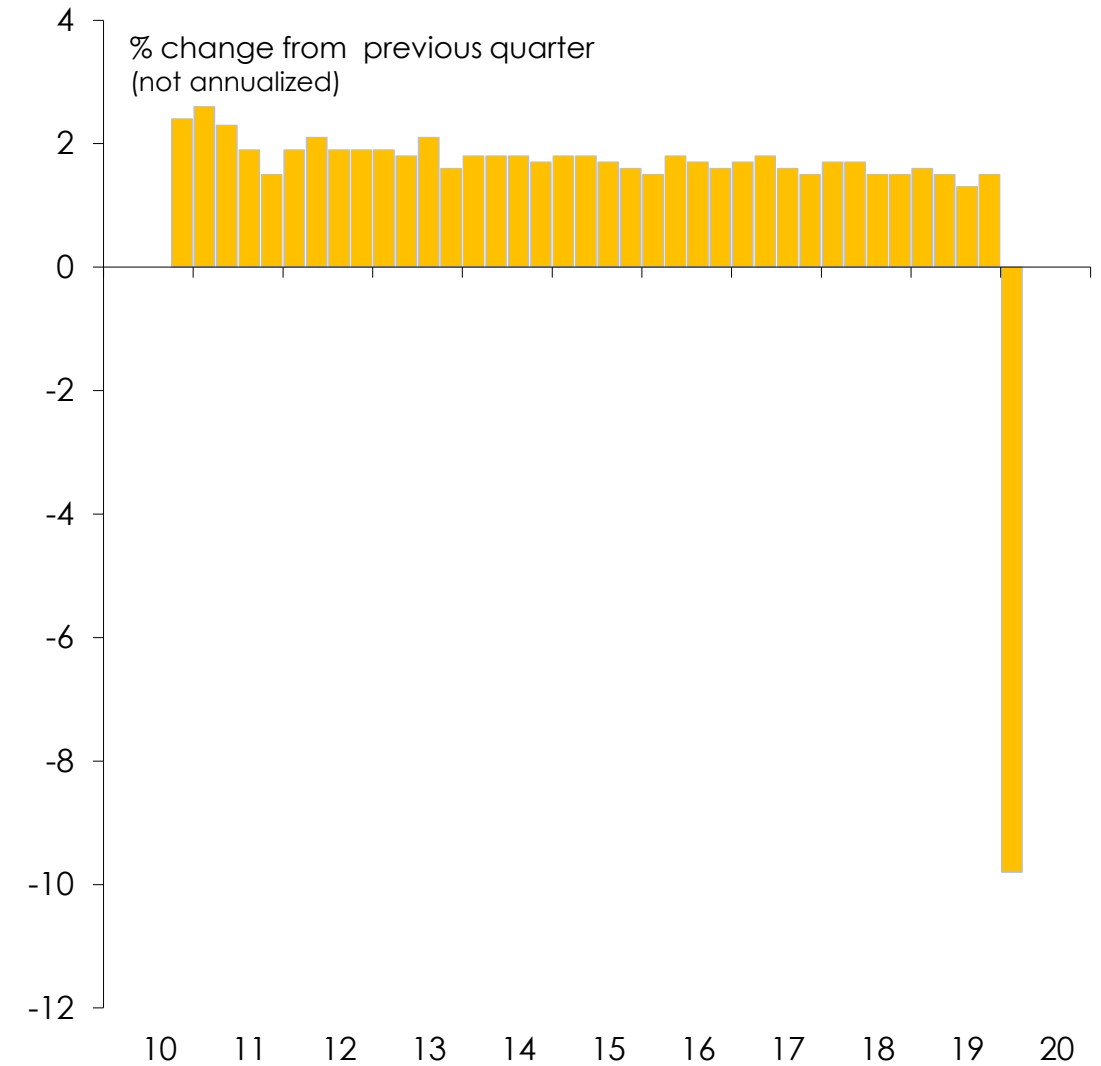
Note: Data up to 9th June. Sources: University of Oxford, Our World in Data; Blavatnik School of Government, Oxford University.

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



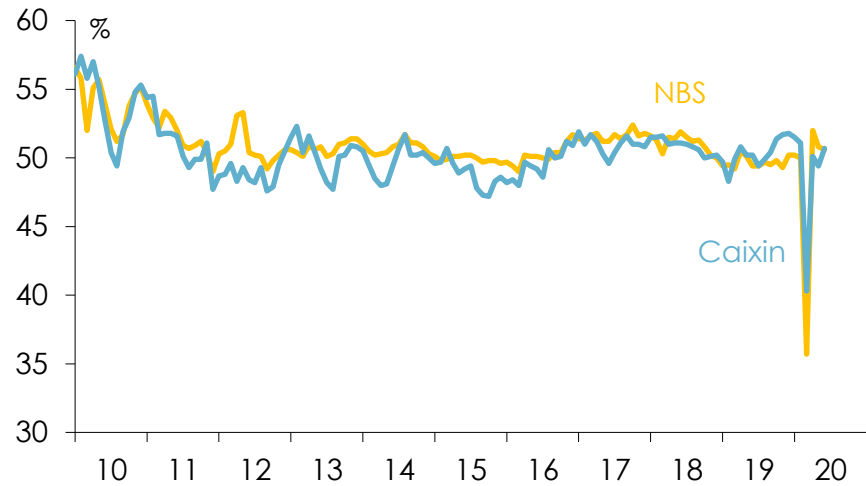
Quarterly real GDP growth, 2010-2020



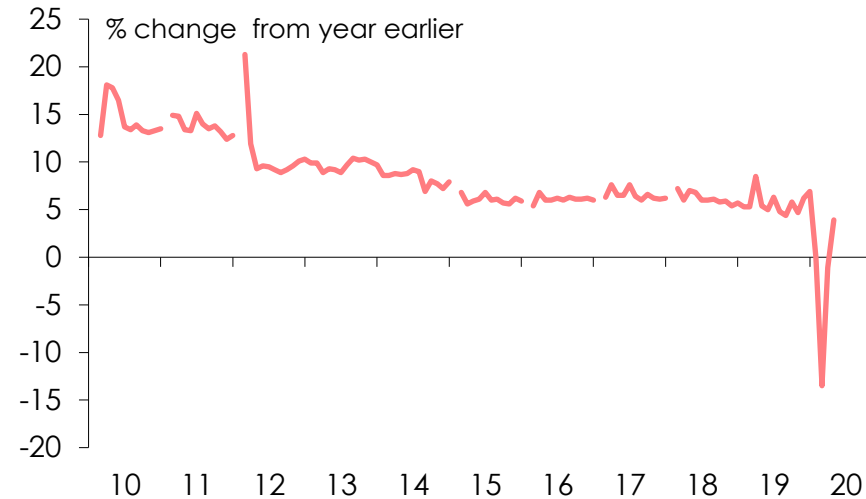
Note: In the left hand chart, GDP growth rates are annual averages up to the December quarter of 1991, and then quarter-on-corresponding-quarter-of-previous-year thereafter. Source: China National Bureau of Statistics.

Production has rebounded in the current quarter, although not yet to pre-pandemic levels

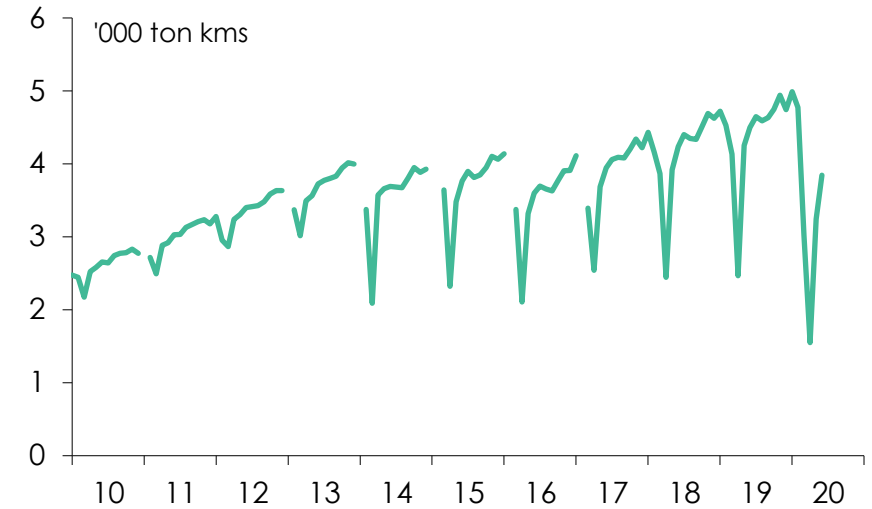
Manufacturing PMIs



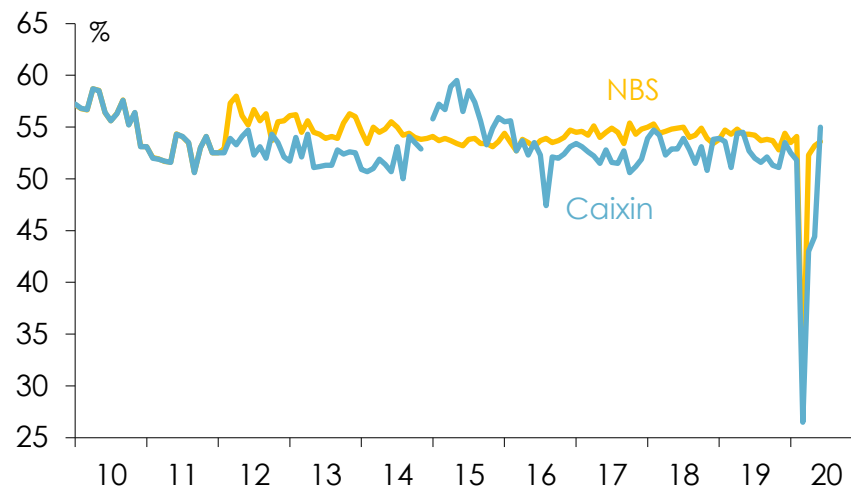
Industrial production



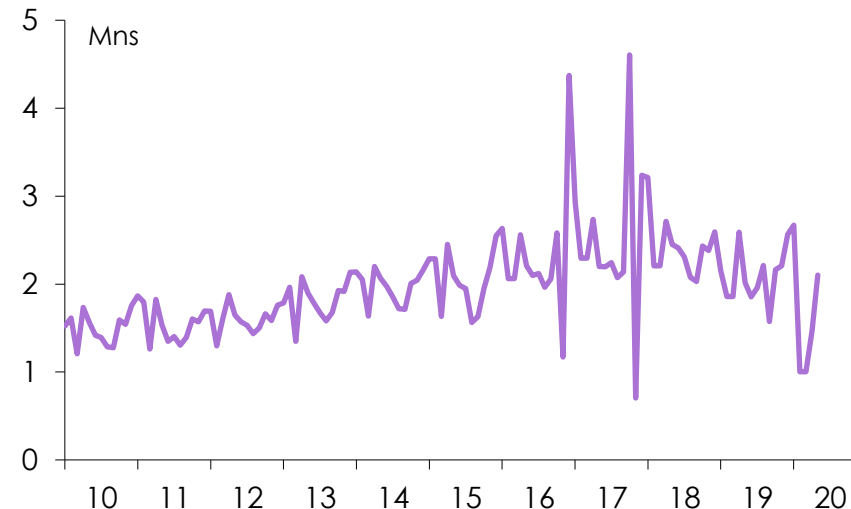
Freight traffic



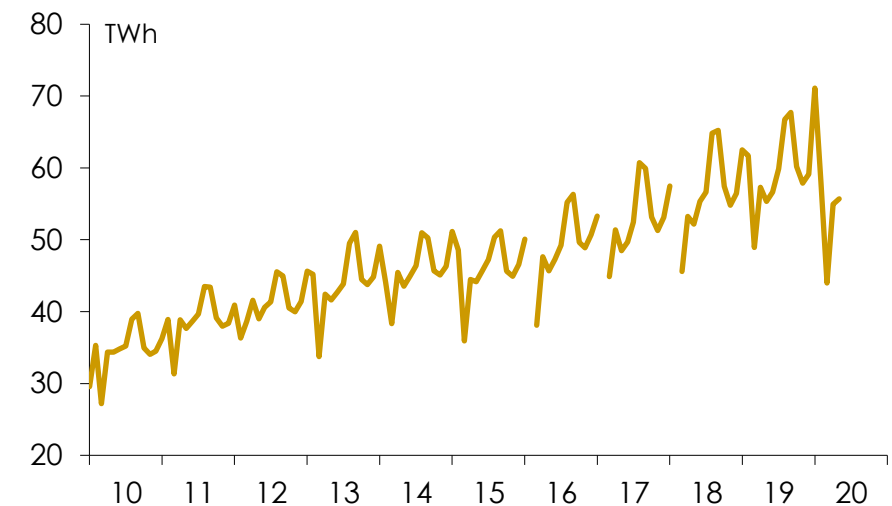
Non-manufacturing PMIs



Motor vehicle production



Primary electricity production



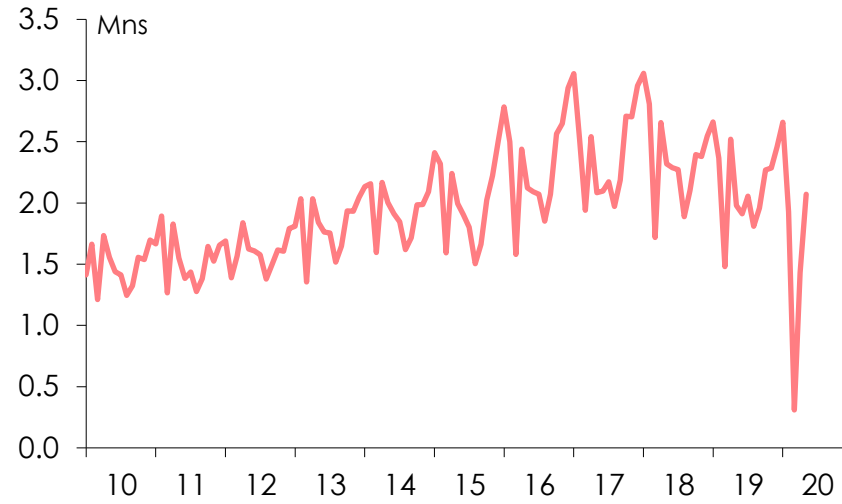
Sources: China National Bureau of Statistics; Caixin; China Association of Automobile Manufacturers.

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

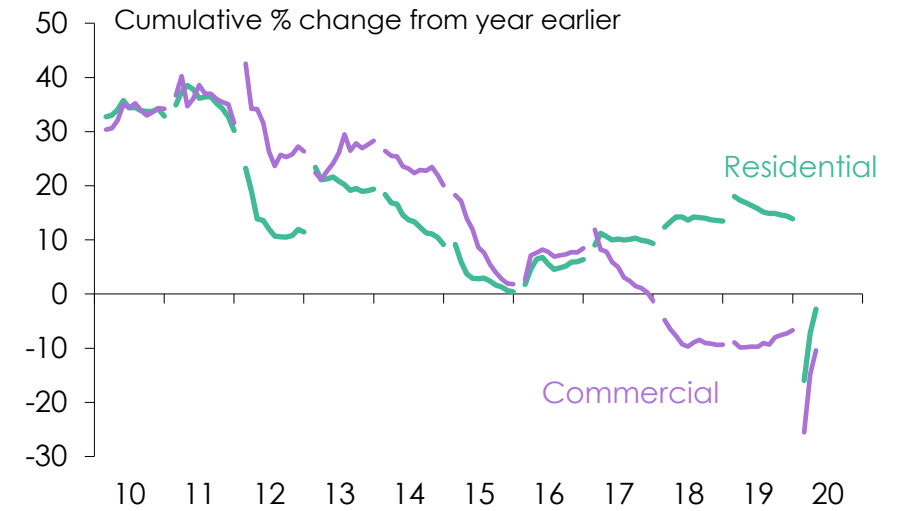
Consumer sentiment



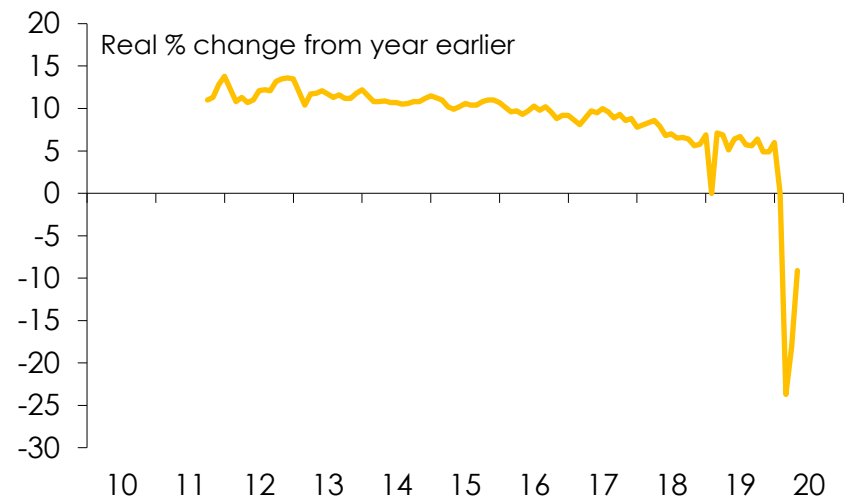
Motor vehicle sales



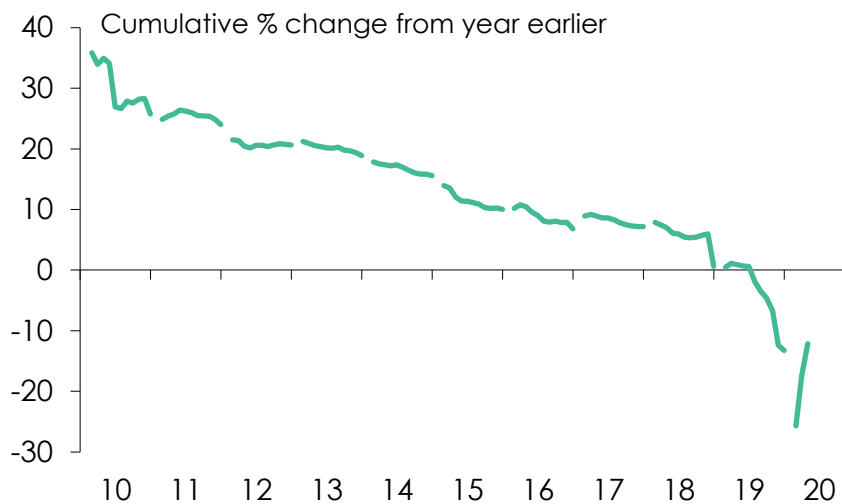
Real estate investment



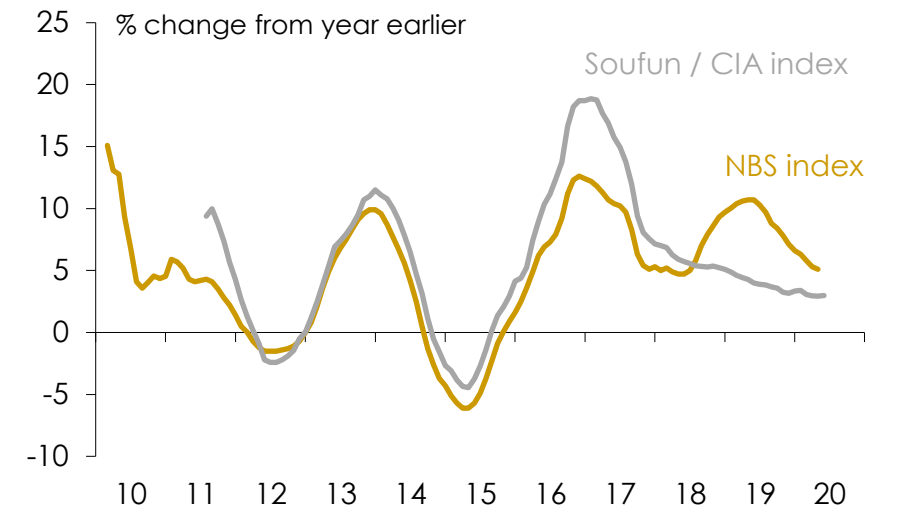
Retail sales volume



Fixed asset investment



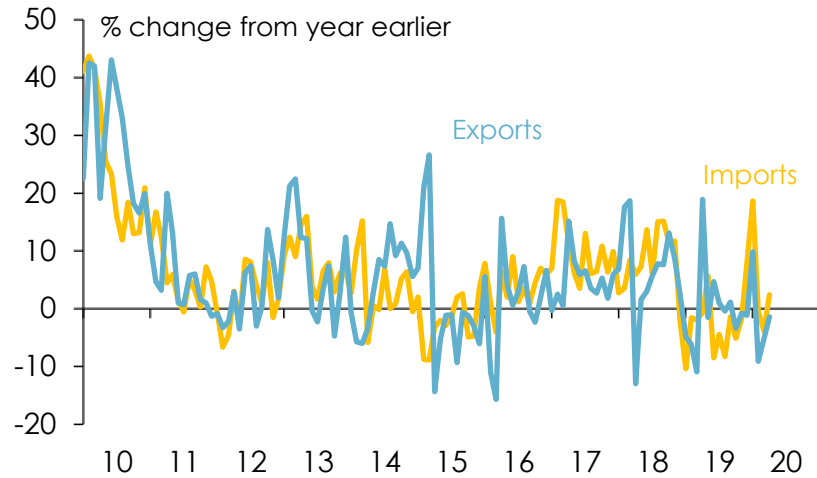
Residential real estate prices



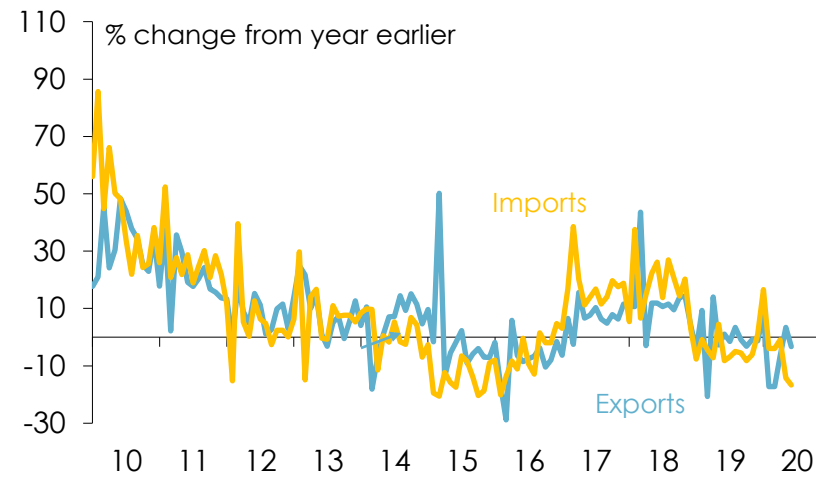
Sources: China National Bureau of Statistics; China Association of Automobile Manufacturers; China Index Academy.

China's trade slowed during 2019, but doesn't (yet) appear to have deteriorated further in the first half of this year

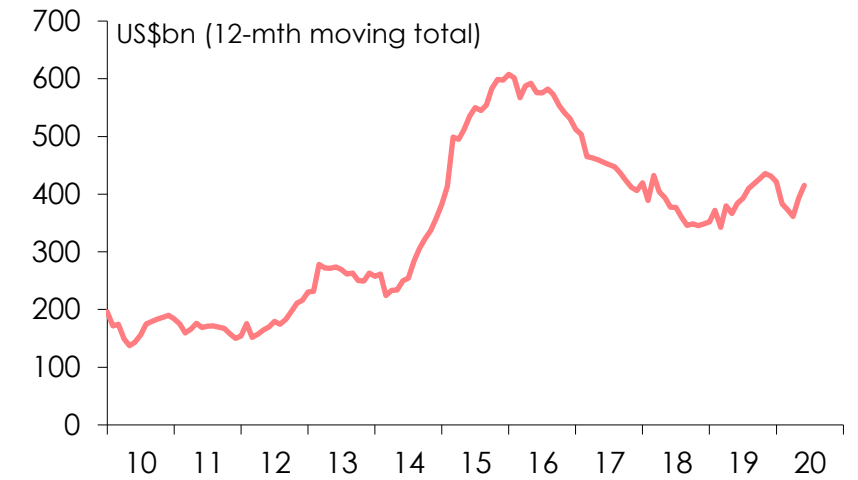
Merchandise trade volumes



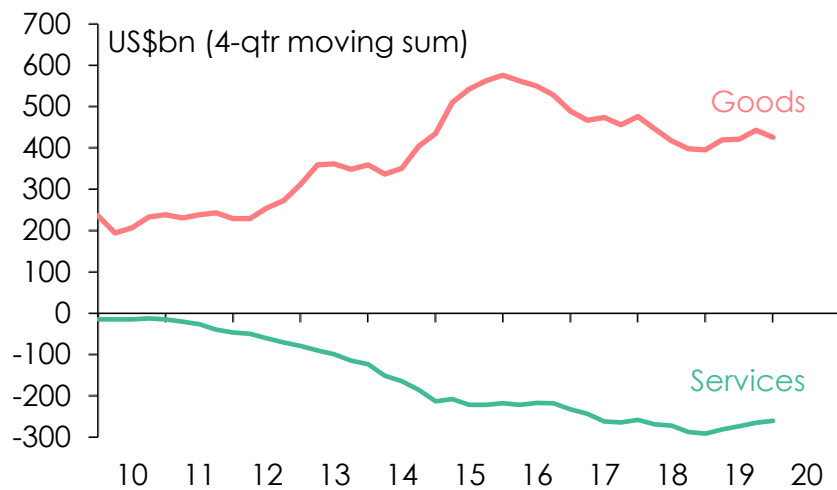
Merchandise trade values



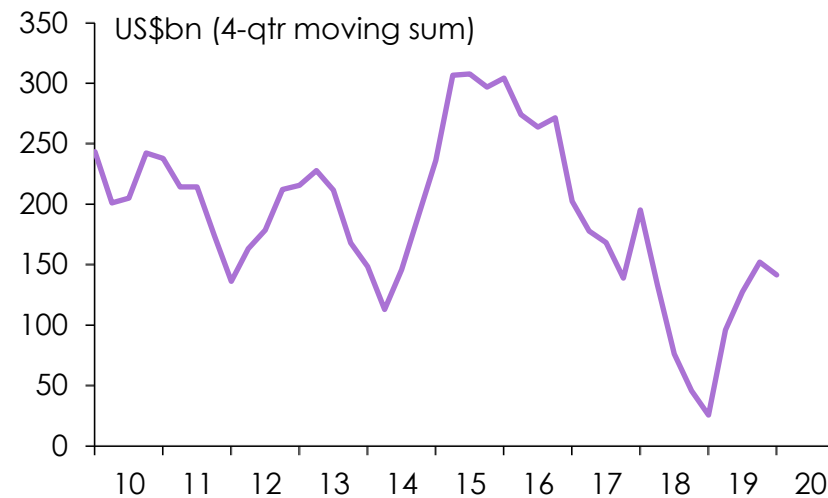
Merchandise trade balance



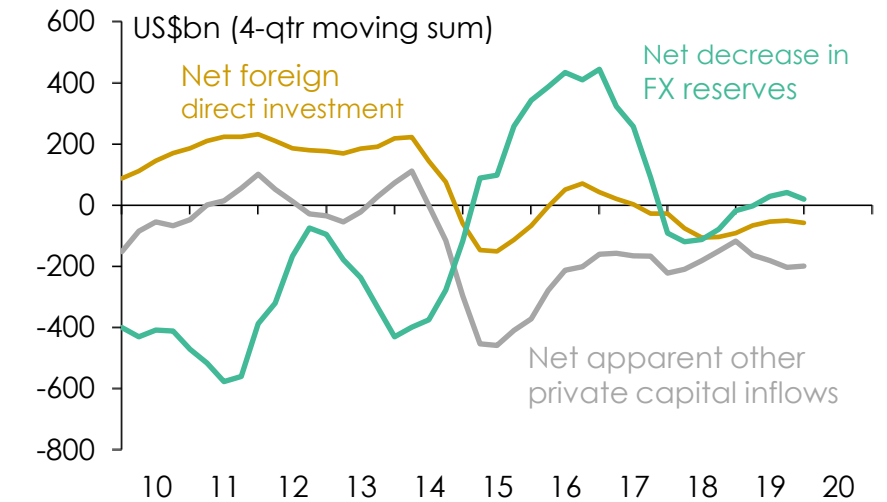
Goods and services balances



Current account balance



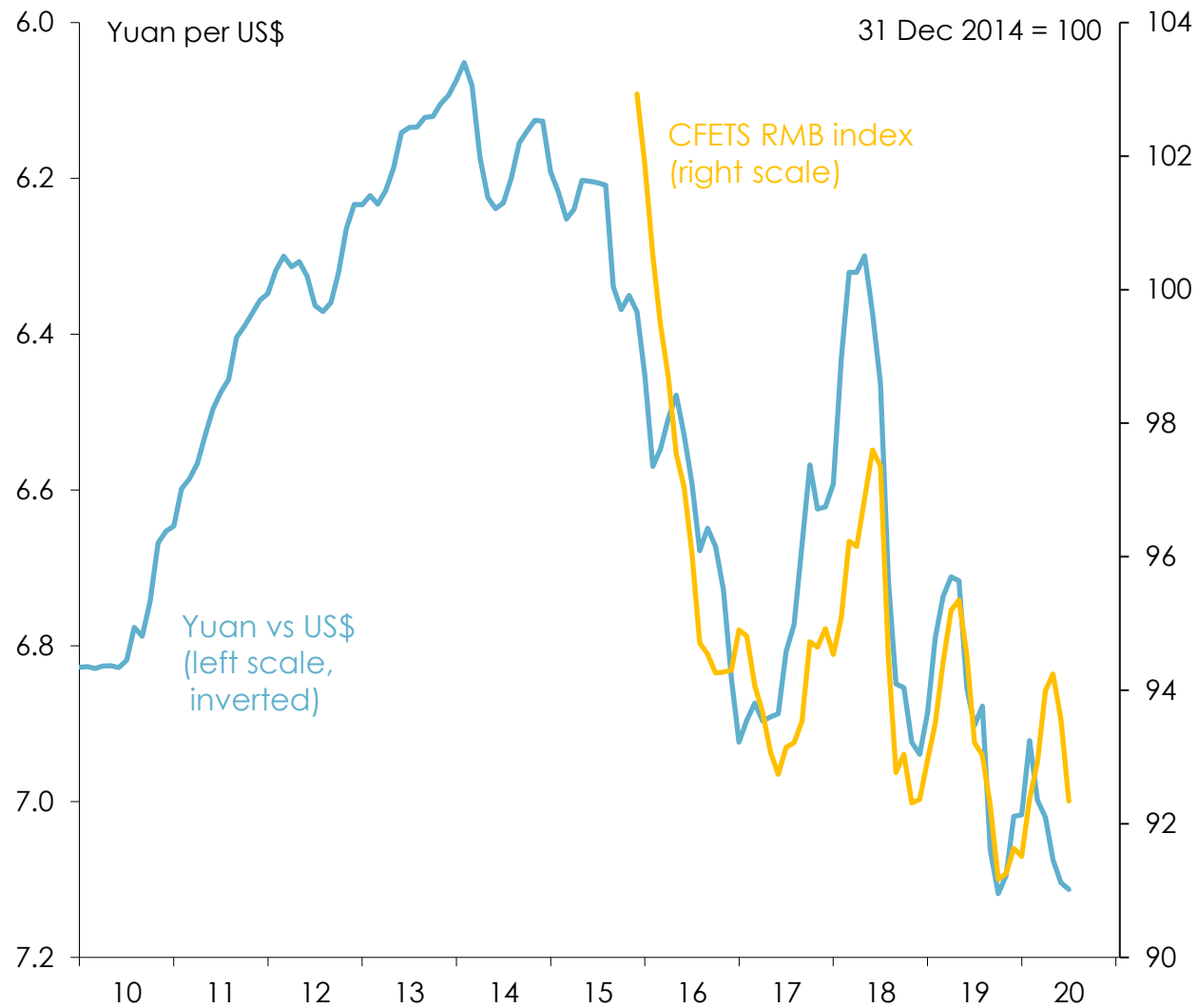
FDI and other capital flows



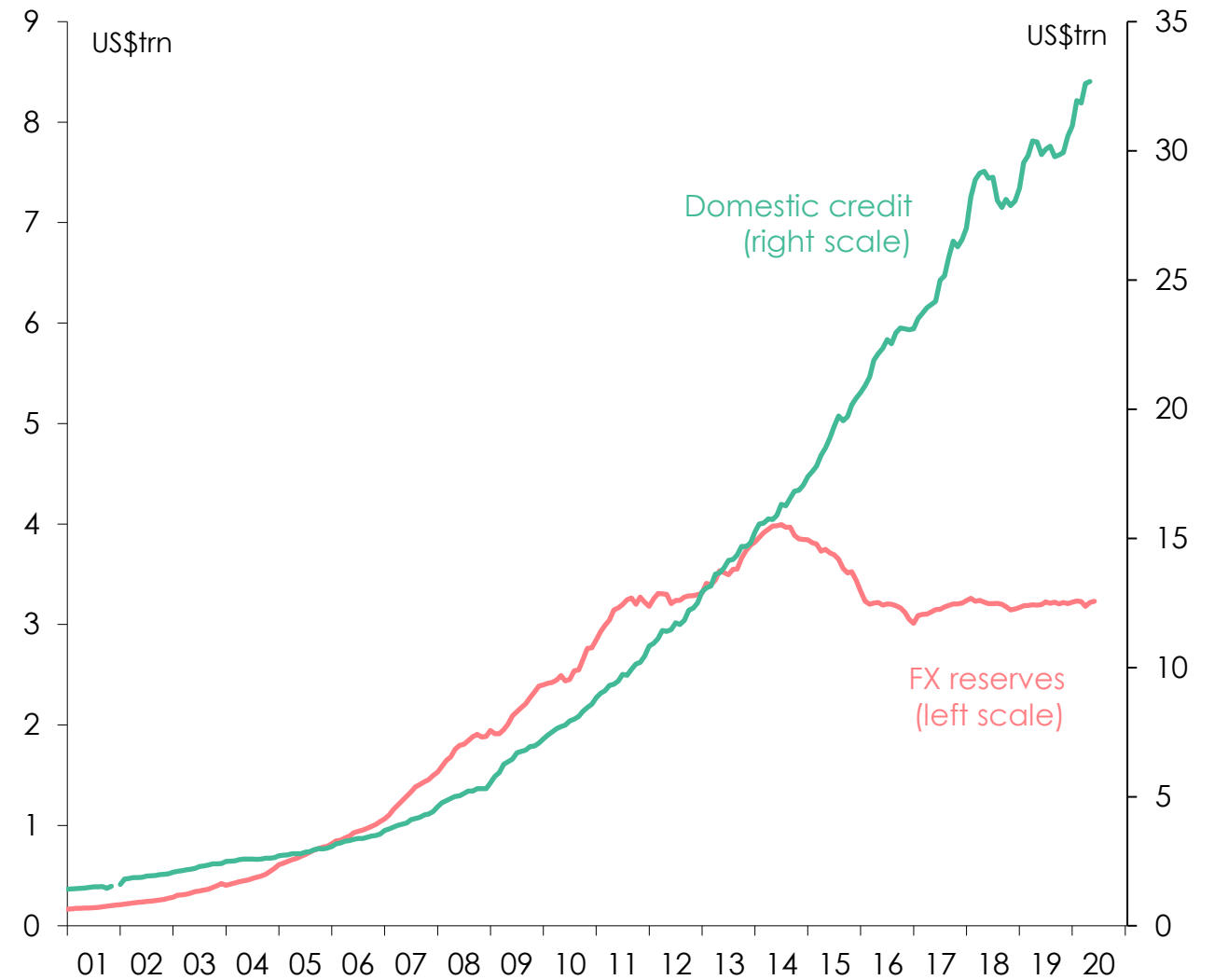
Sources: Netherlands Economic Planning Bureau (CPB); China National Bureau of Statistics.

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

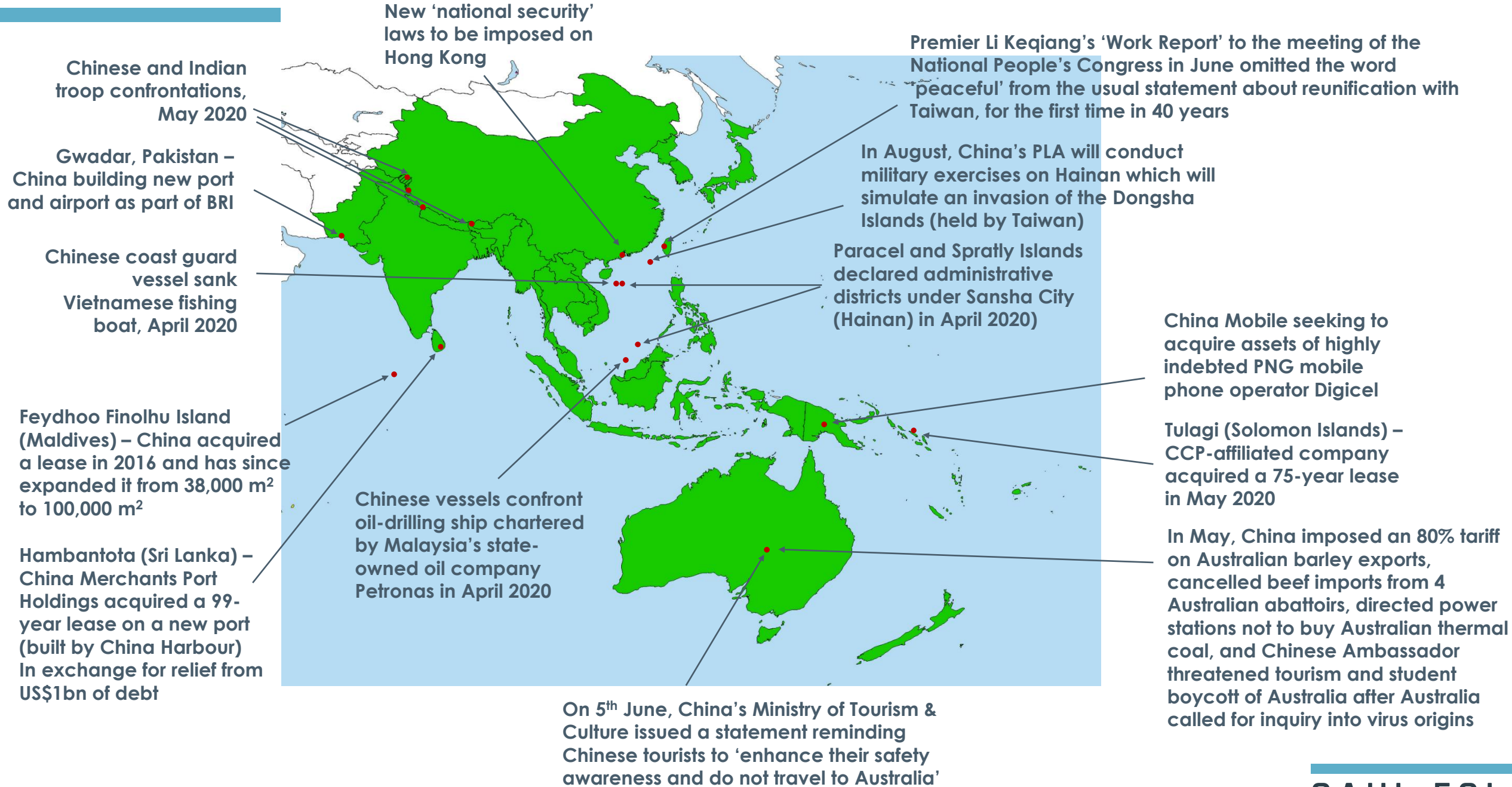


FX reserves and domestic credit



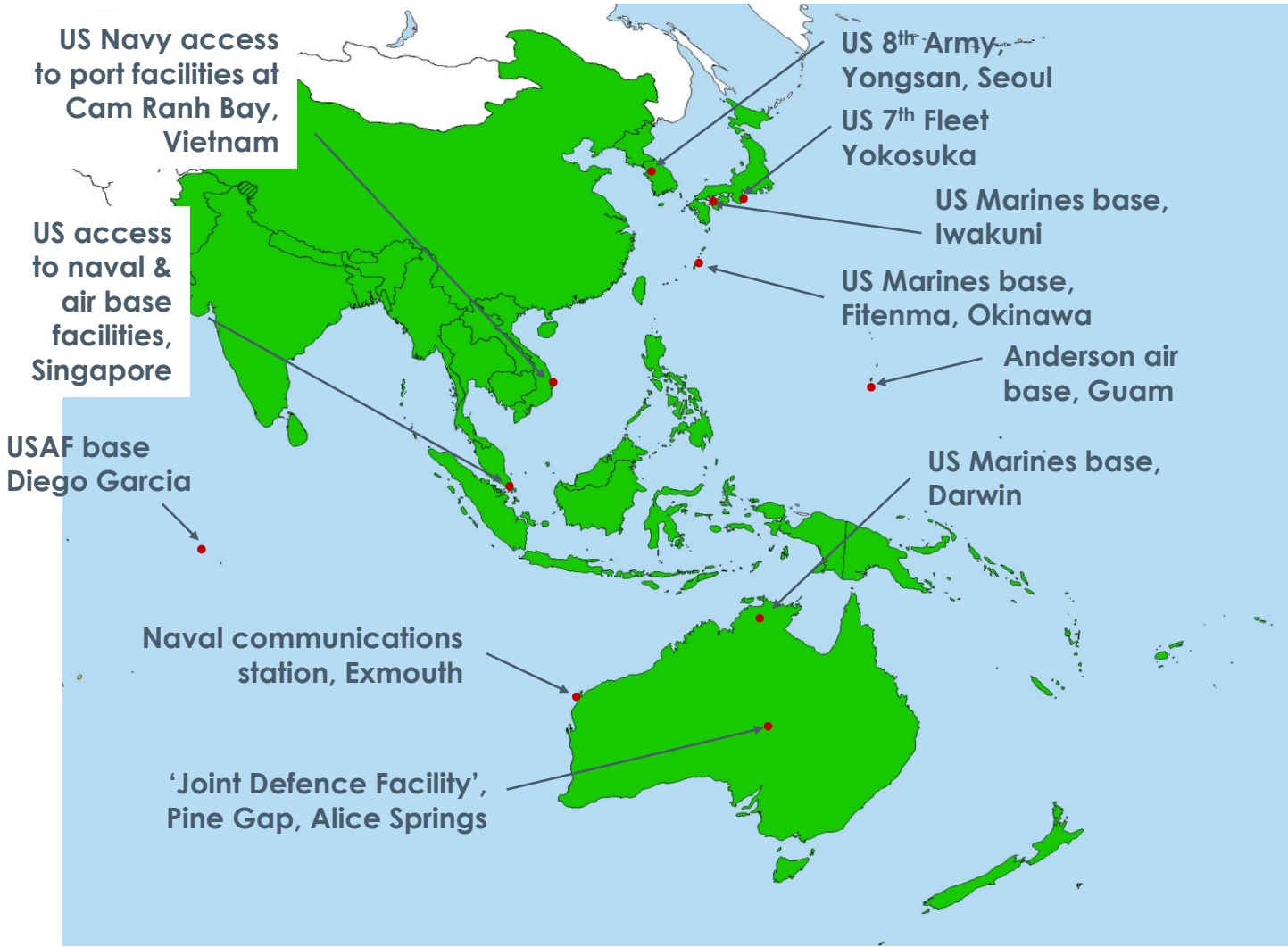
Sources: Refinitiv Datastream; China Foreign Exchange Trading System; People's Bank of China.

China has become more belligerent in its dealings with nearly all of its neighbours – not just Australia

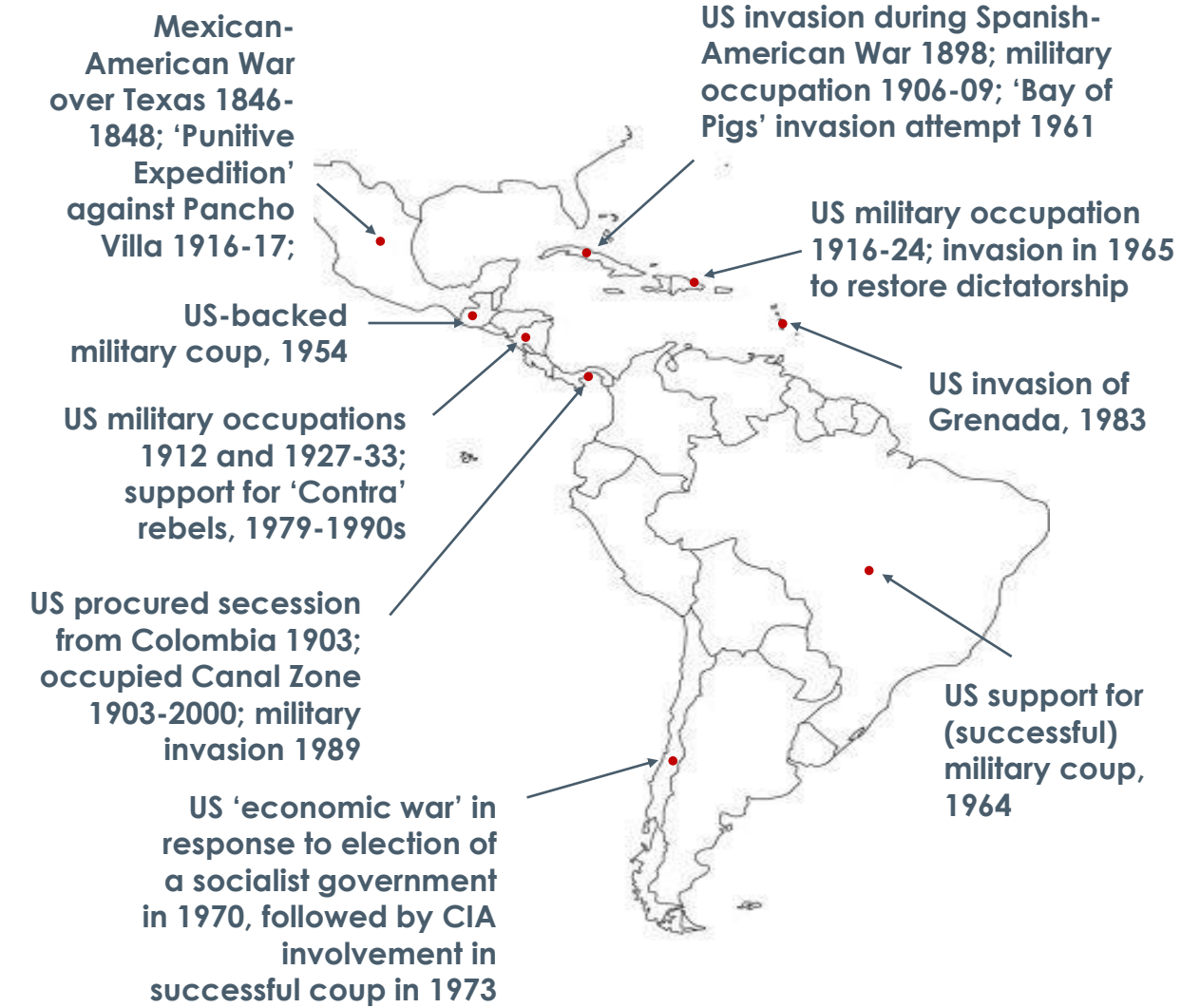


Of course the Chinese would say they're not doing anything the US hasn't, either in the Indo-Pacific or in the Americas

US military presence in the 'Indo-Pacific' region

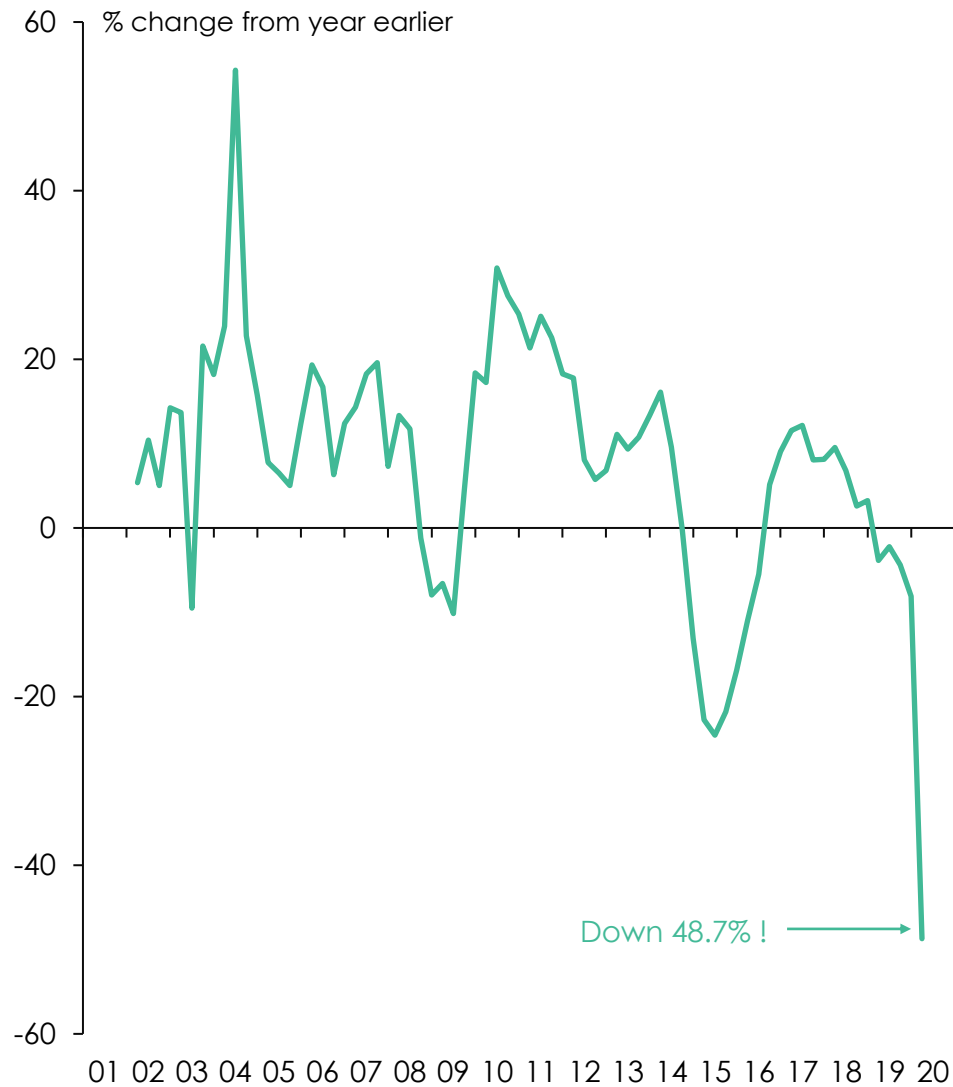


US involvement in Latin America and Caribbean

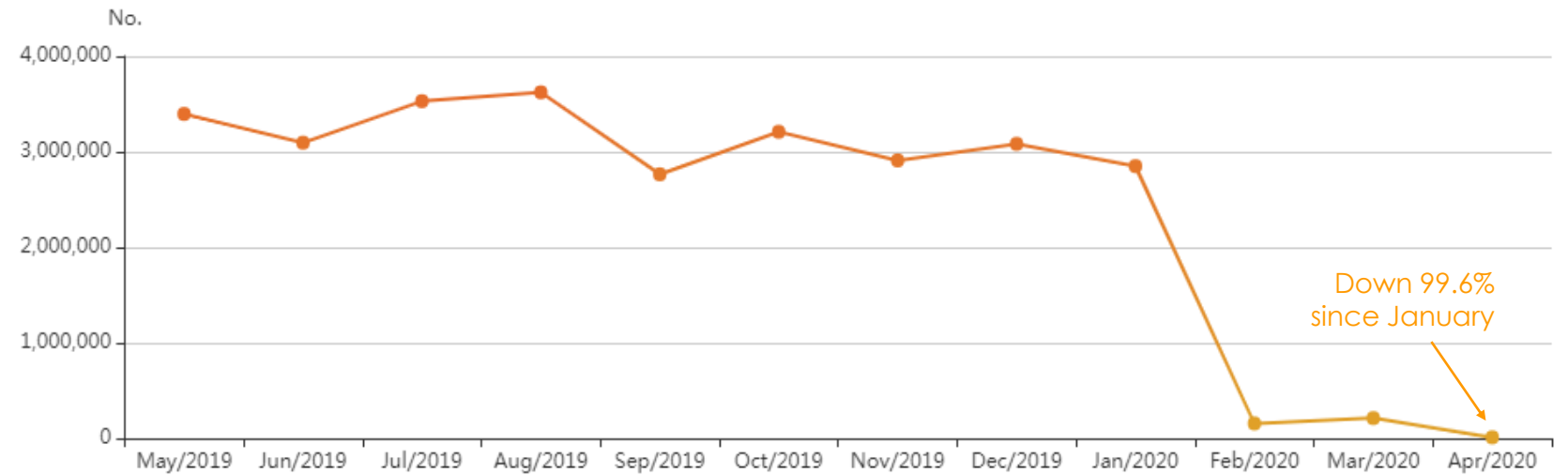


The world's worst recession is probably in Macau

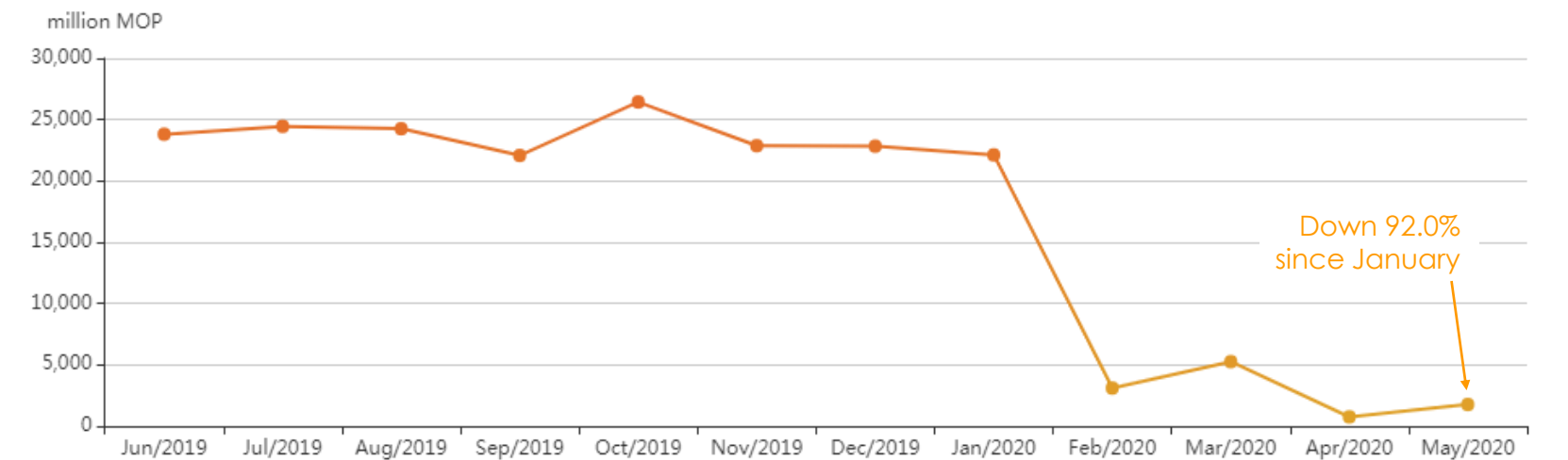
Macau – real GDP



Visitor arrivals



Gambling revenue

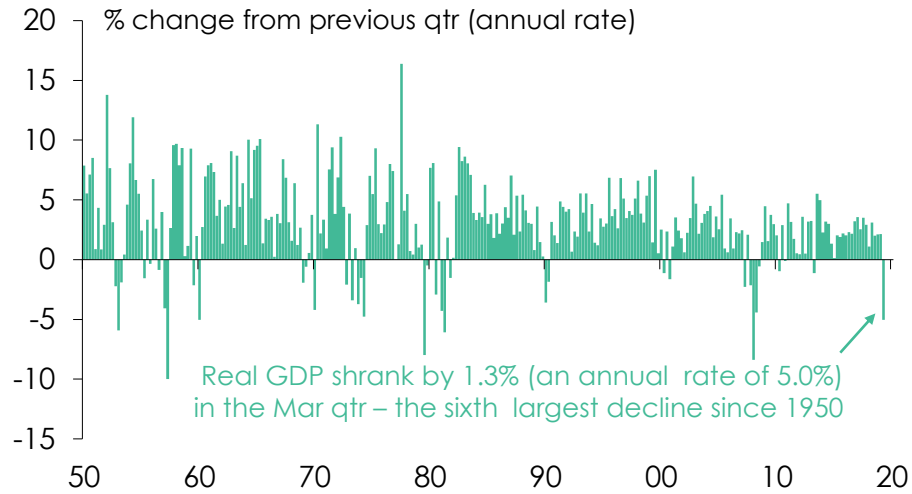


Source: Macau Statistics and Census Service.

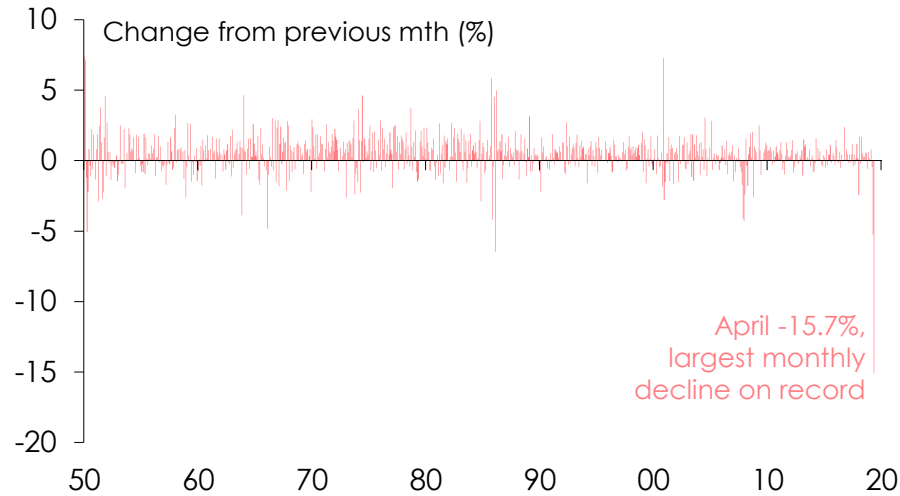
Other parts of the world

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

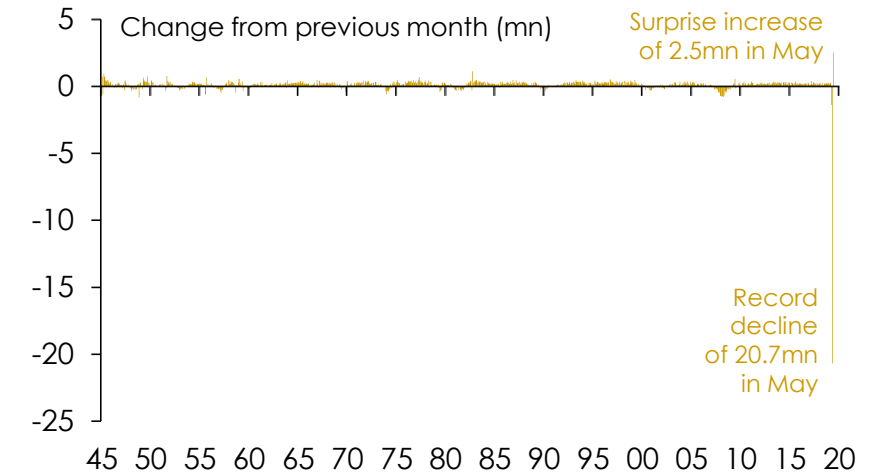
Real GDP



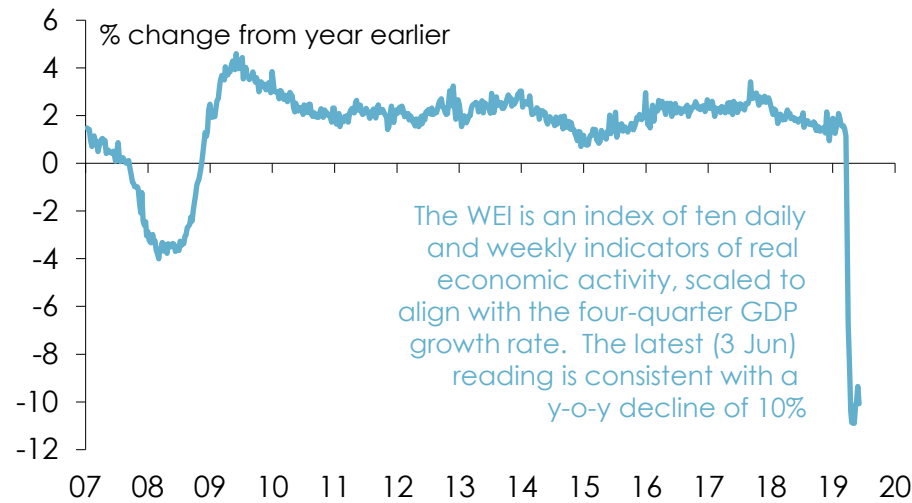
Retail sales



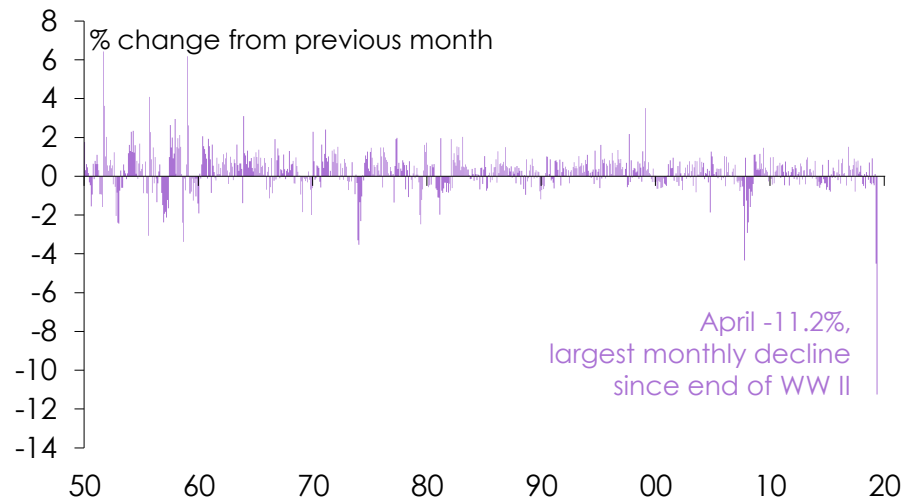
Non-farm payroll employment



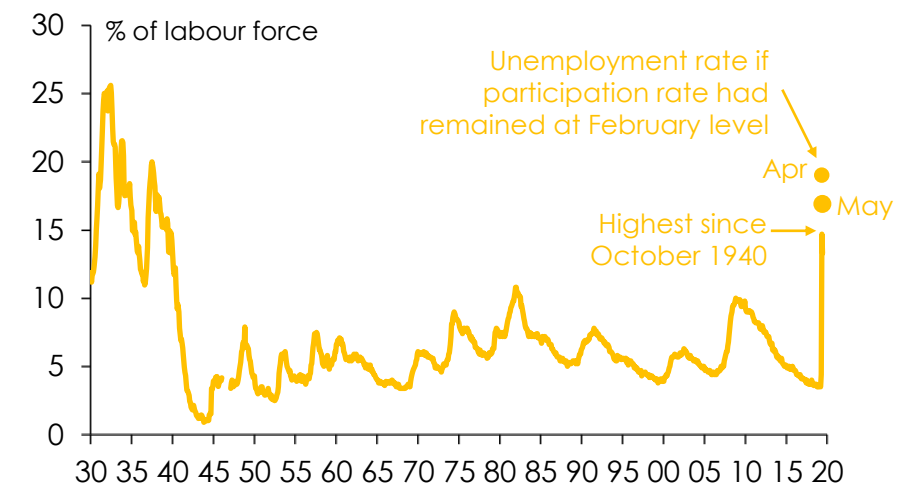
NY Fed weekly economic index



Industrial production

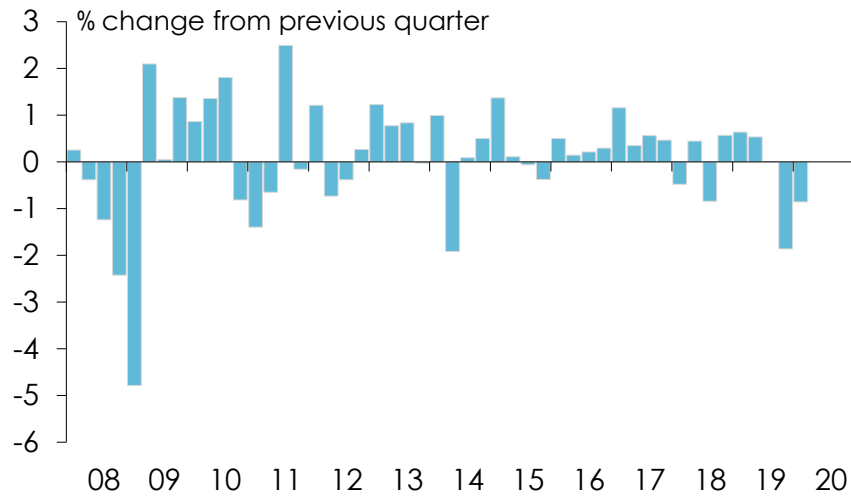


Unemployment rate

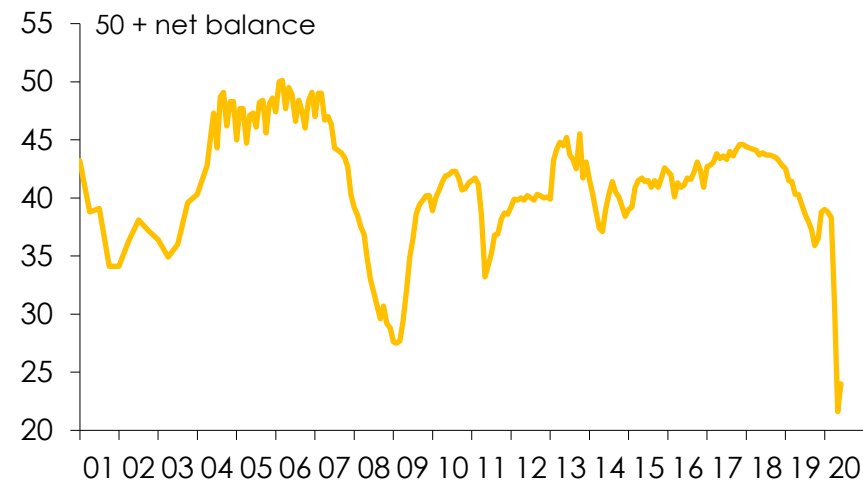


Japan entered its fourth recession since 2000 after hiking its GST rate last October, and the pandemic has worsened it

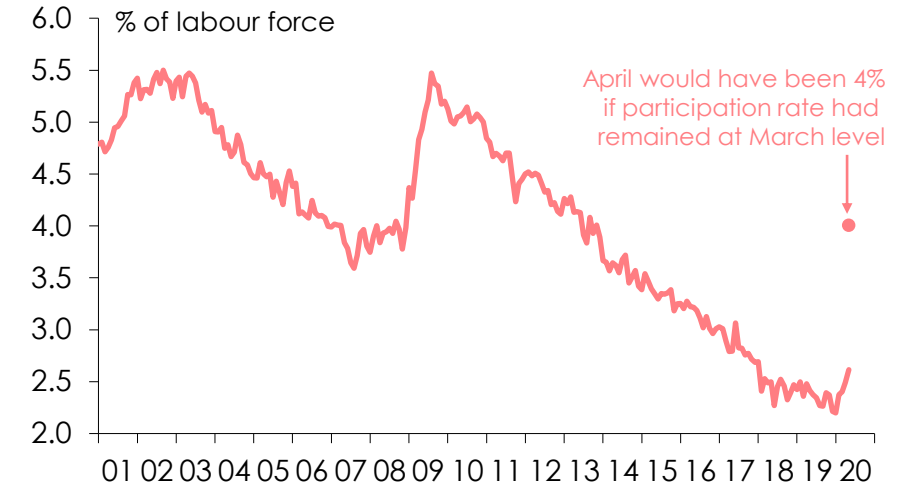
Real GDP



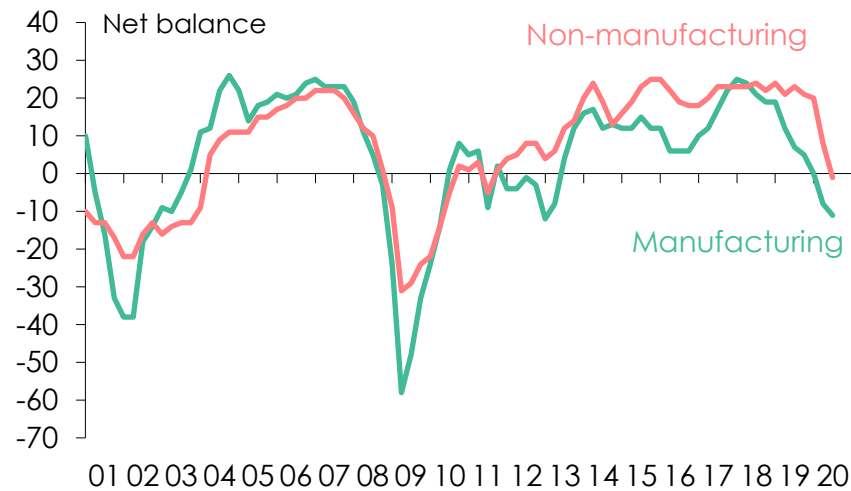
Consumer confidence



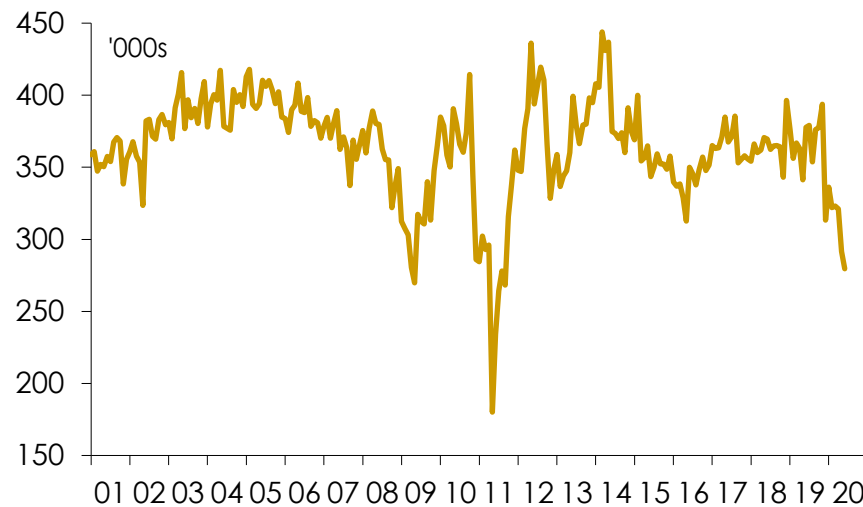
Unemployment



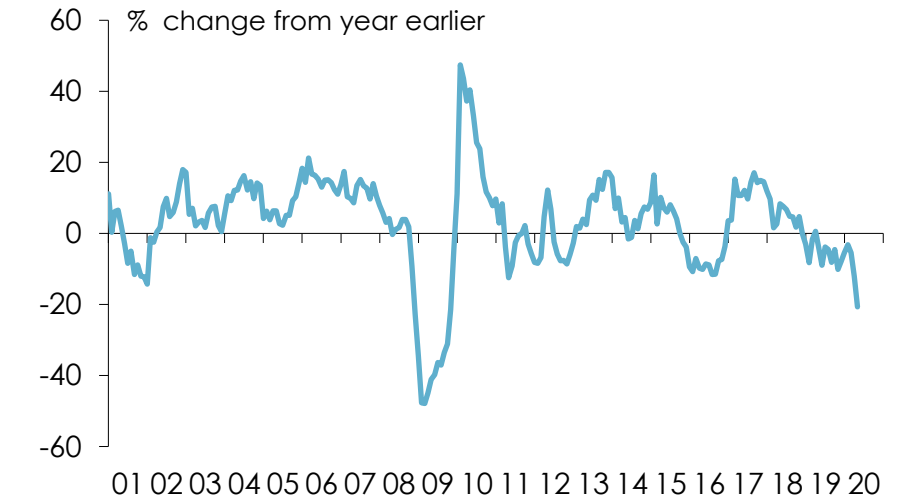
Business sentiment



Passenger vehicle sales



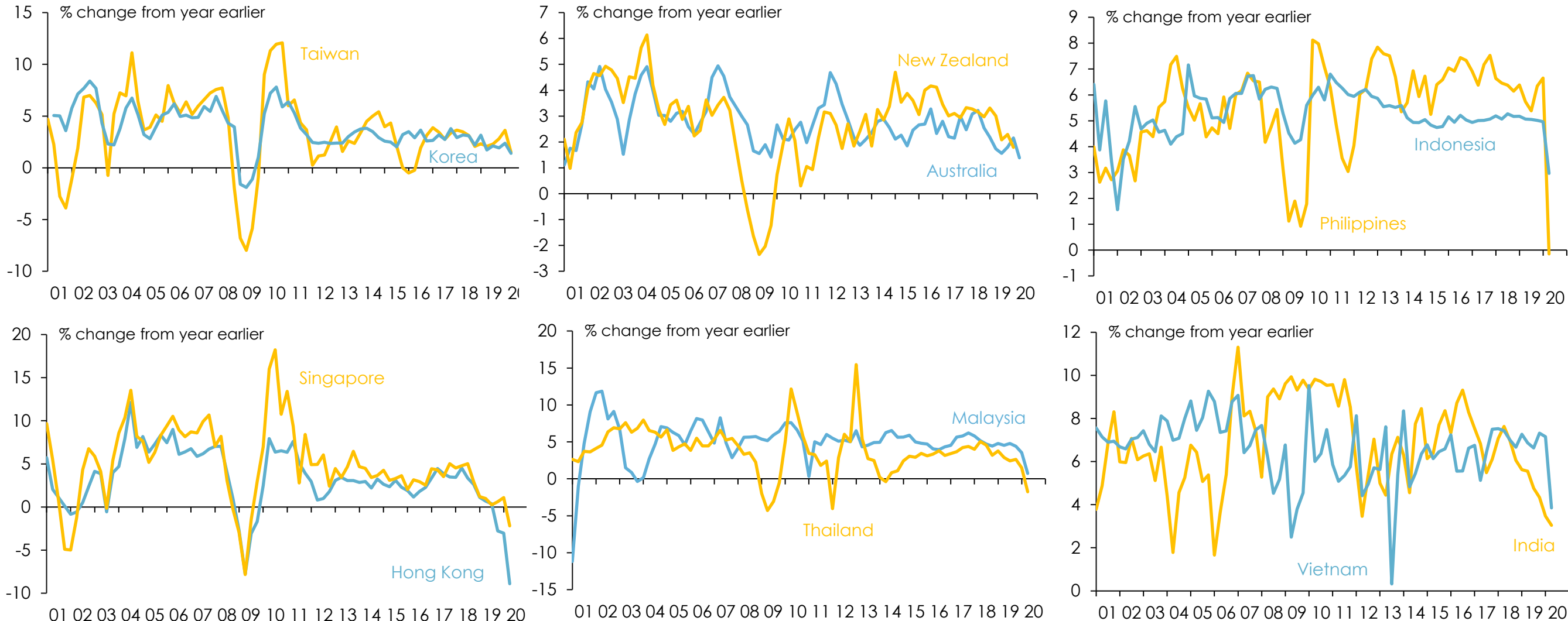
Merchandise exports



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

Most other Asia-Pacific economies also experienced slower growth in the first quarter, with some contracting outright

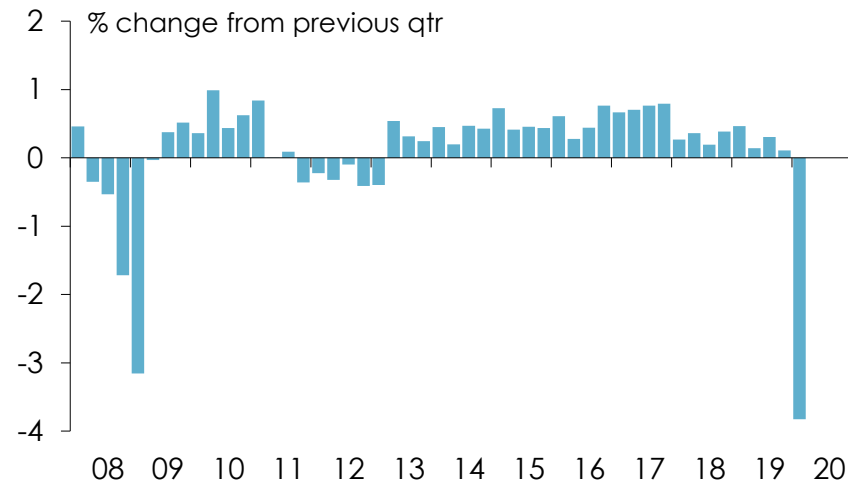
Real GDP growth



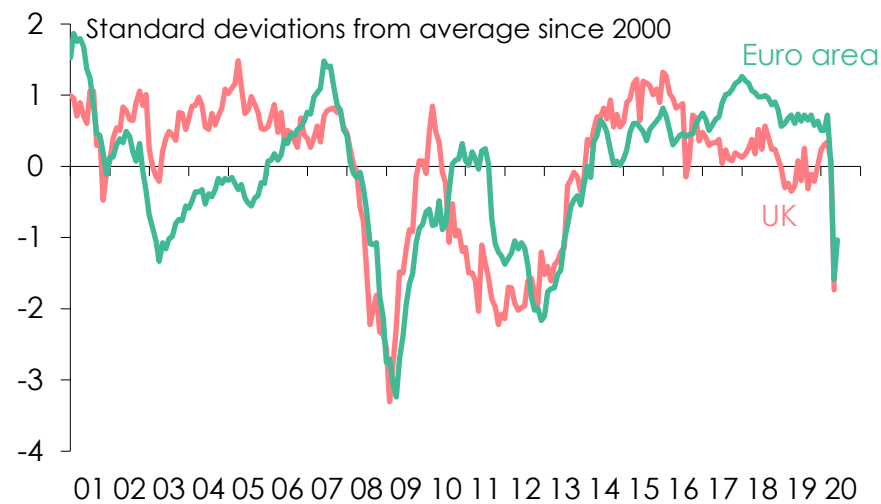
Note: New Zealand is the slowest 'advanced' economy in the world to produce national accounts estimates: its Q1 GDP data won't be released until 18th June.
 Sources: Bank of Korea; Taiwan Directorate-General of Budget, Accounting & Statistics; Hong Kong Census & Statistics Department; Singapore Department of Statistics; Australian Bureau of Statistics; Statistics New Zealand; Department of Statistics Malaysia; Office of the National Economic & Social Development Council of Thailand; Statistics Indonesia; Philippine Statistics Authority; General Statistics Office of Viet Nam; India Ministry of Statistics & Programme Implementation.

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

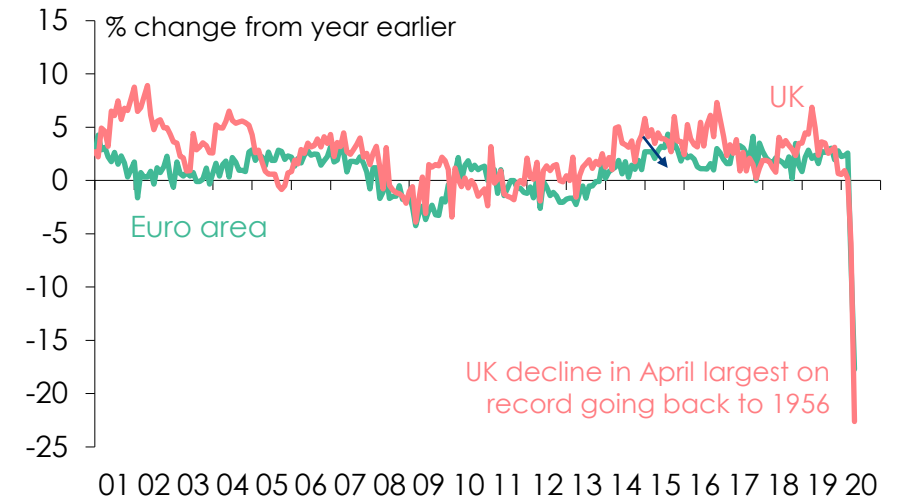
Euro area real GDP



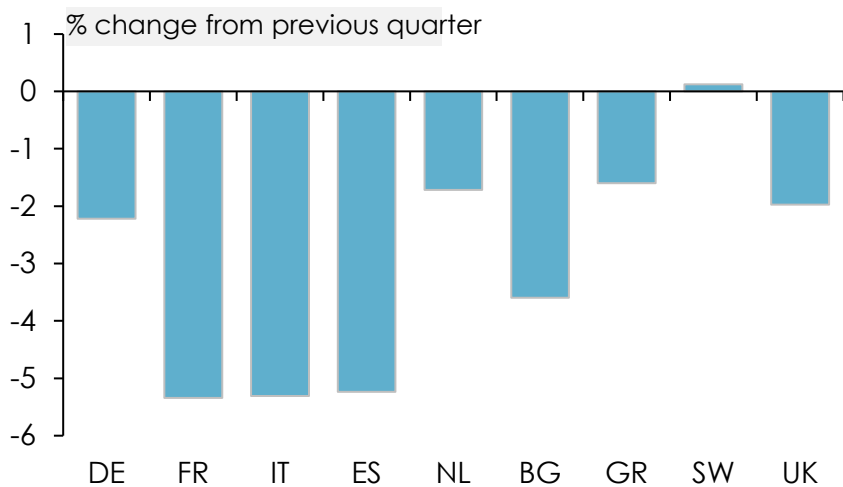
Consumer confidence



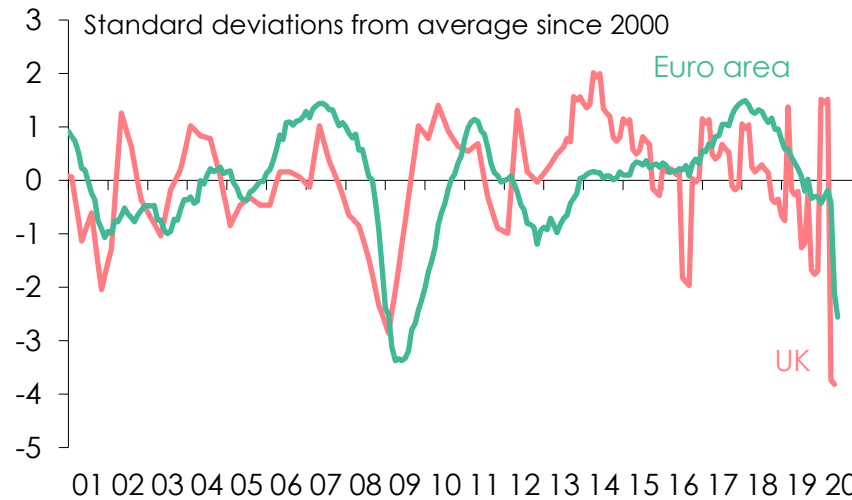
Retail sales volume



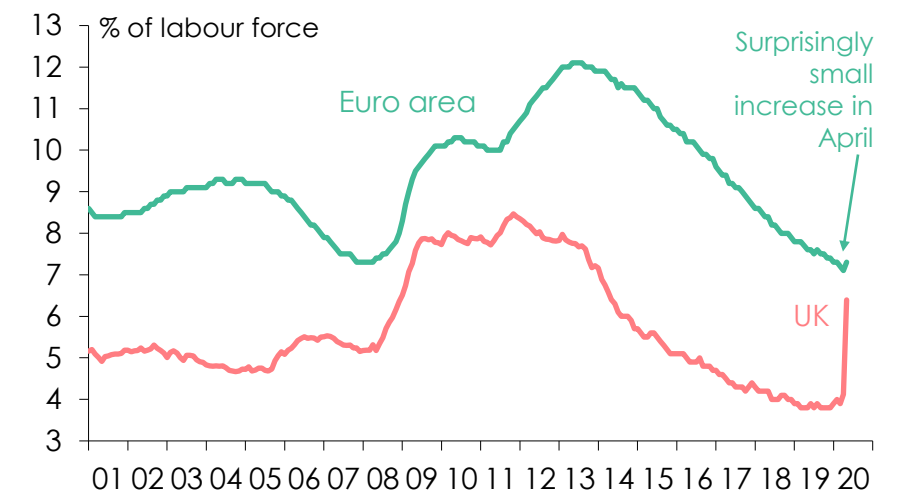
March quarter GDP by country



Business confidence



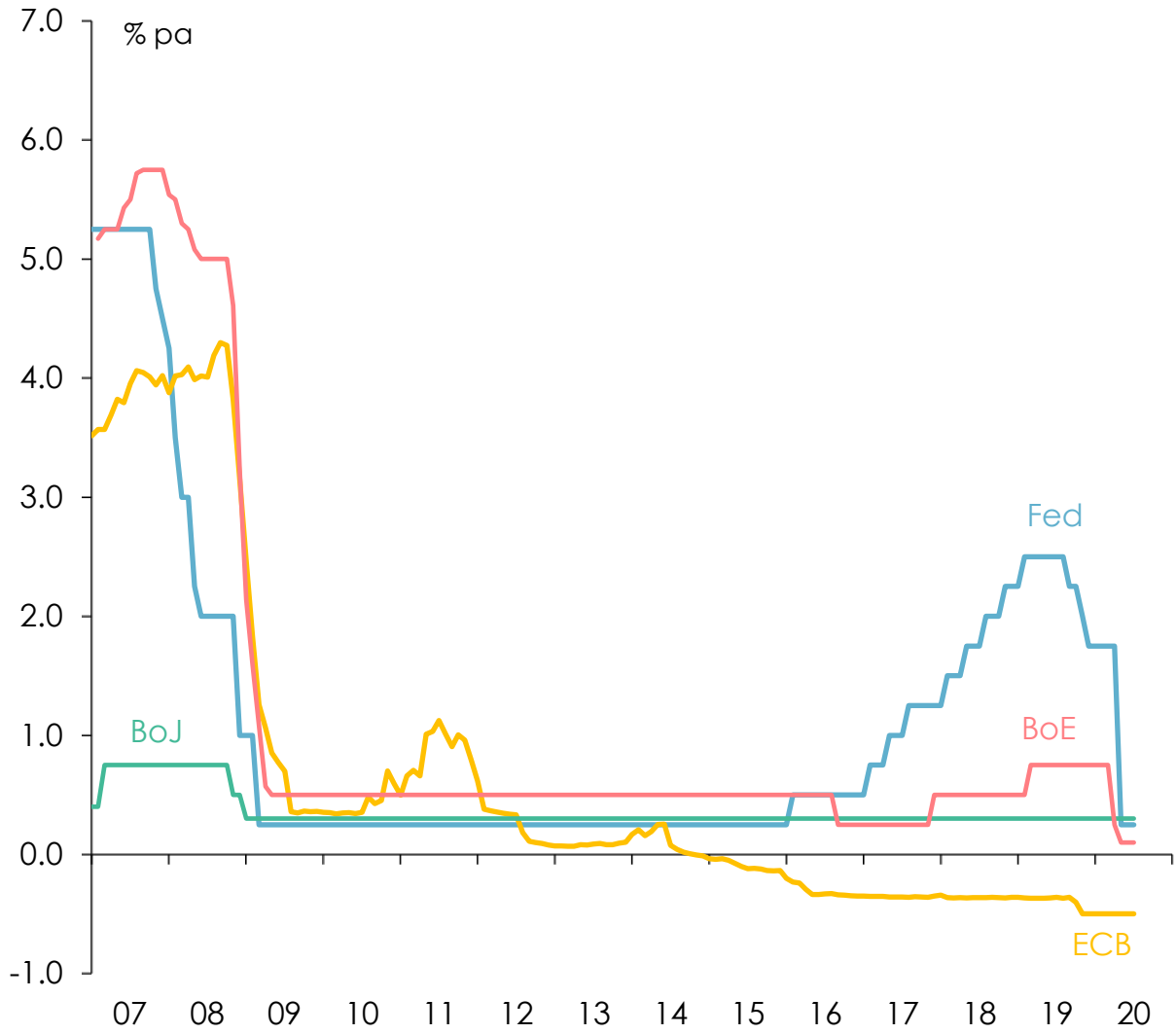
Unemployment



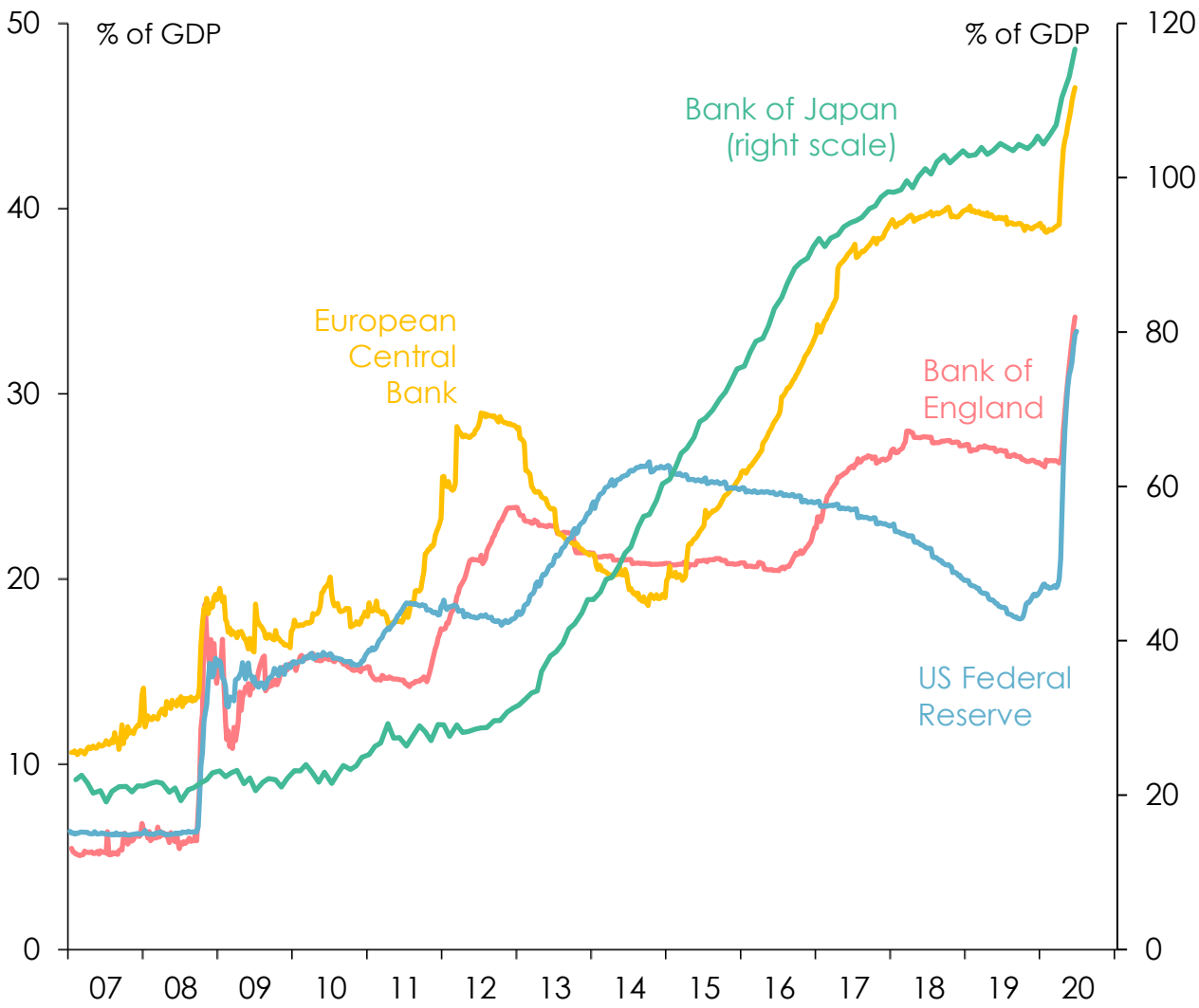
Sources: Eurostat; UK Office for National Statistics; Confederation of British Industry. The UK unemployment rate is published as a 3-month moving average; the most recent observation (for May) is derived by adding to the 'claimant count' unemployment rate the average margin between that rate and the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

Major central banks have done more 'QE' than they did during the global financial crisis – and this week the ECB foreshadowed a whole lot more

Major central bank policy interest rates



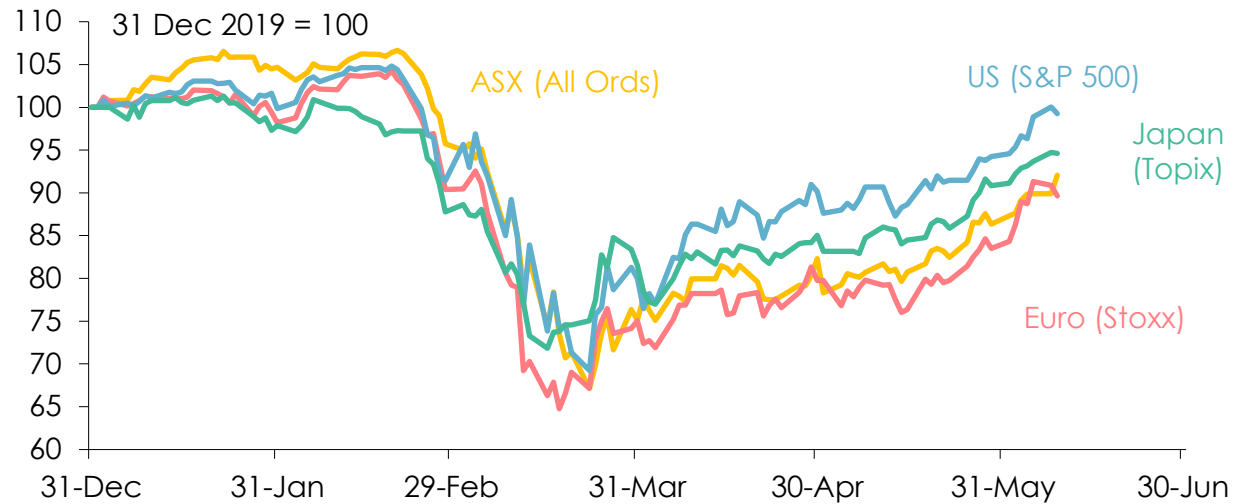
Major central bank balance sheets



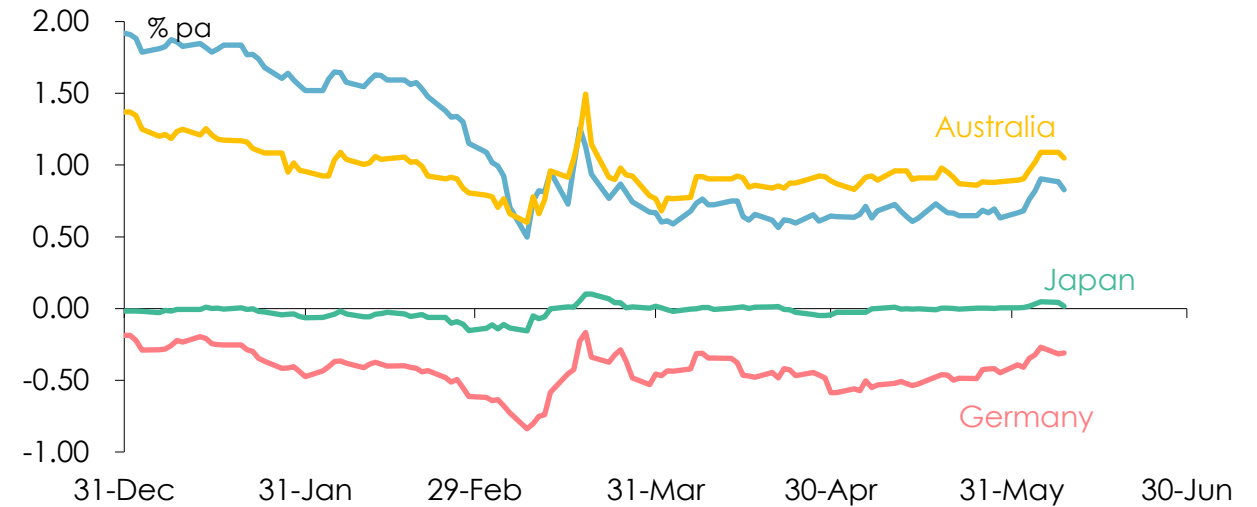
Sources: US Federal Reserve; European Central Bank; Bank of Japan; Bank of England

Central bank actions, and optimism about economic recovery and discovery of a vaccine, have improved risk sentiment in financial markets

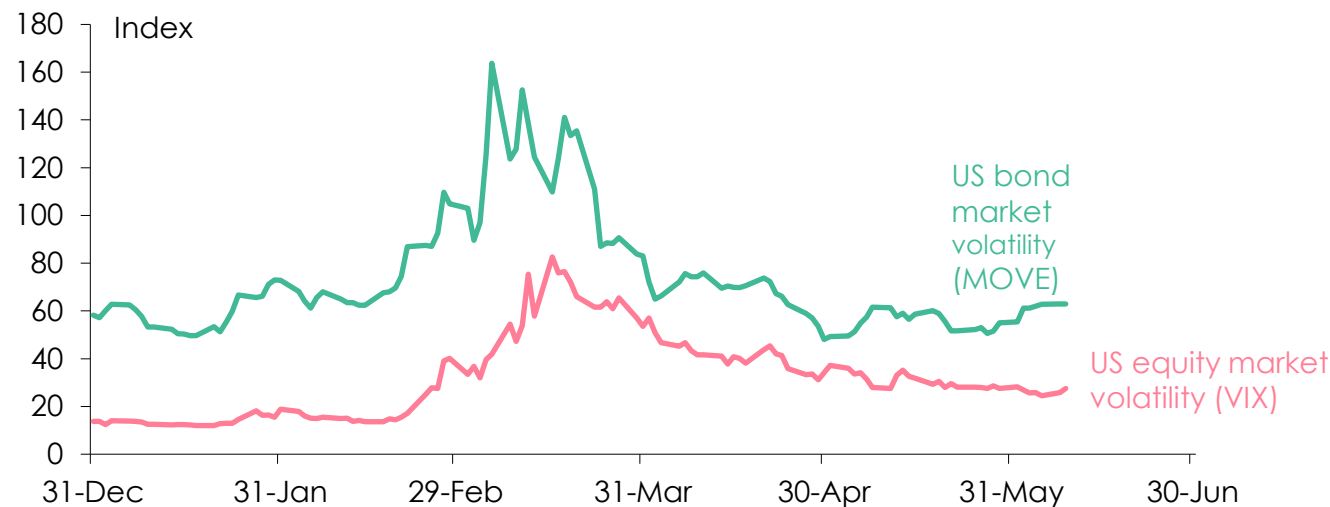
Stock markets



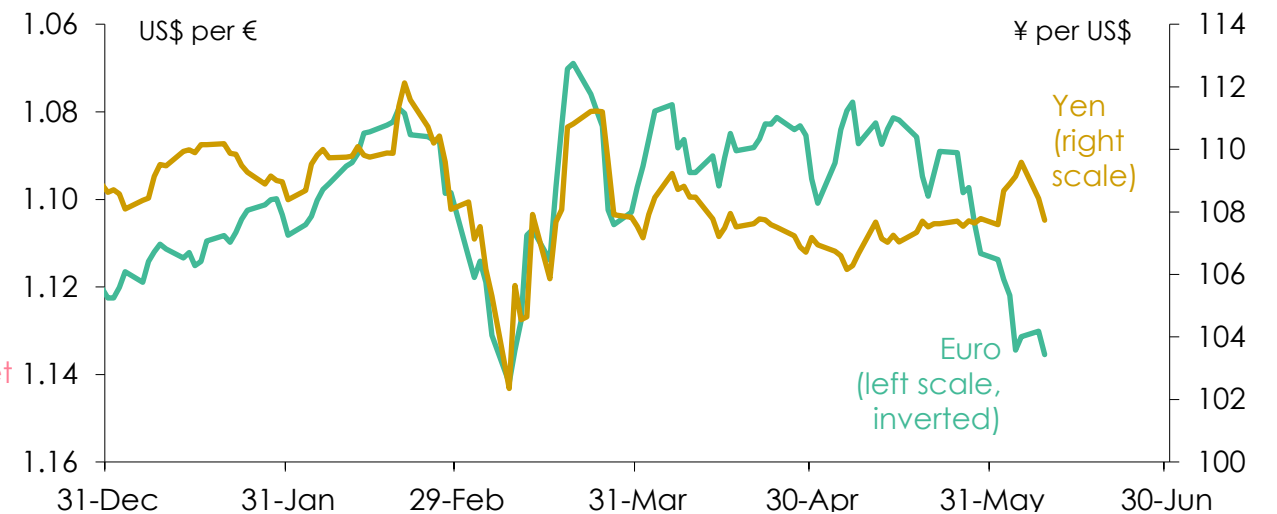
10-year bond yields



Measures of market volatility



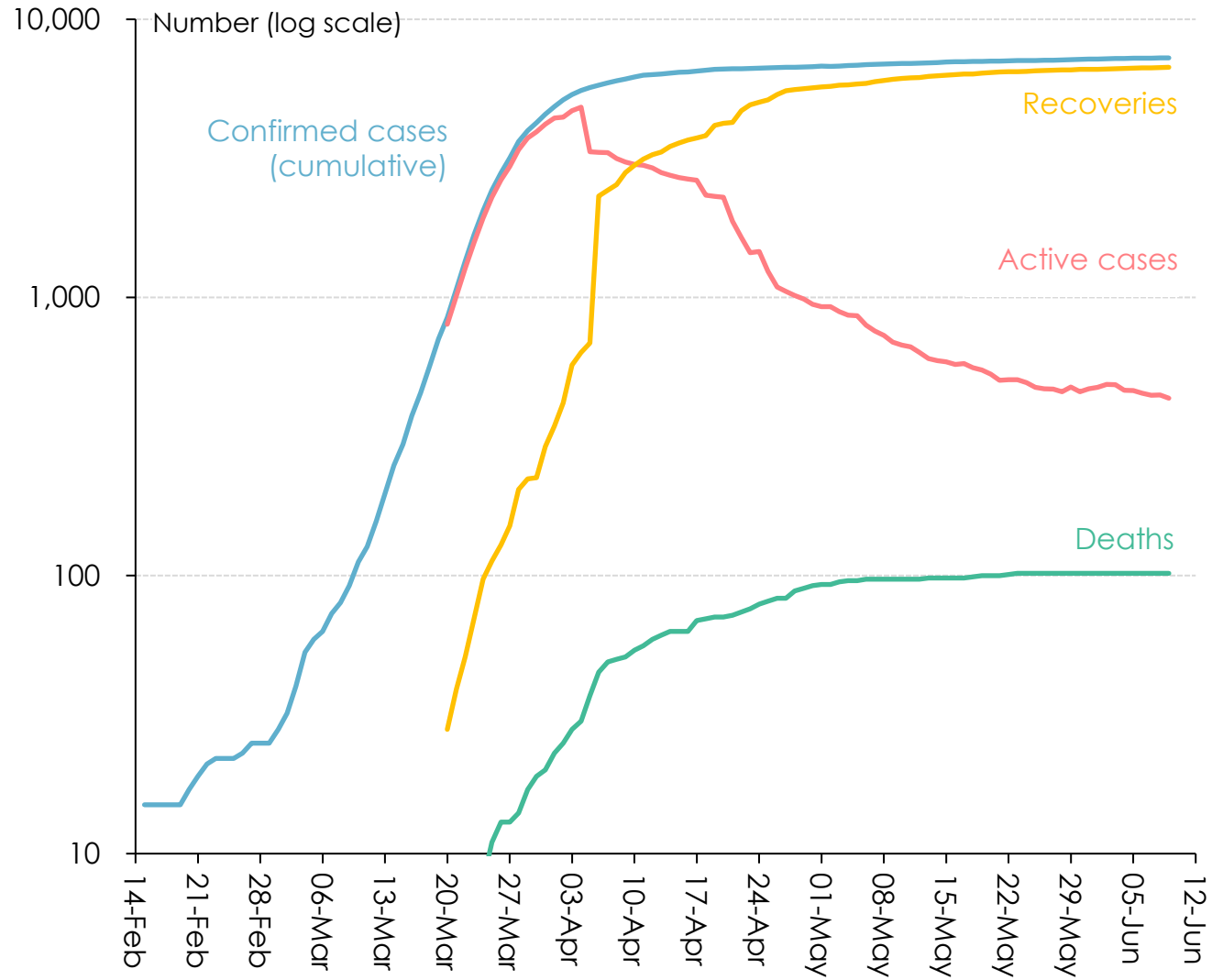
US dollar vs euro and yen



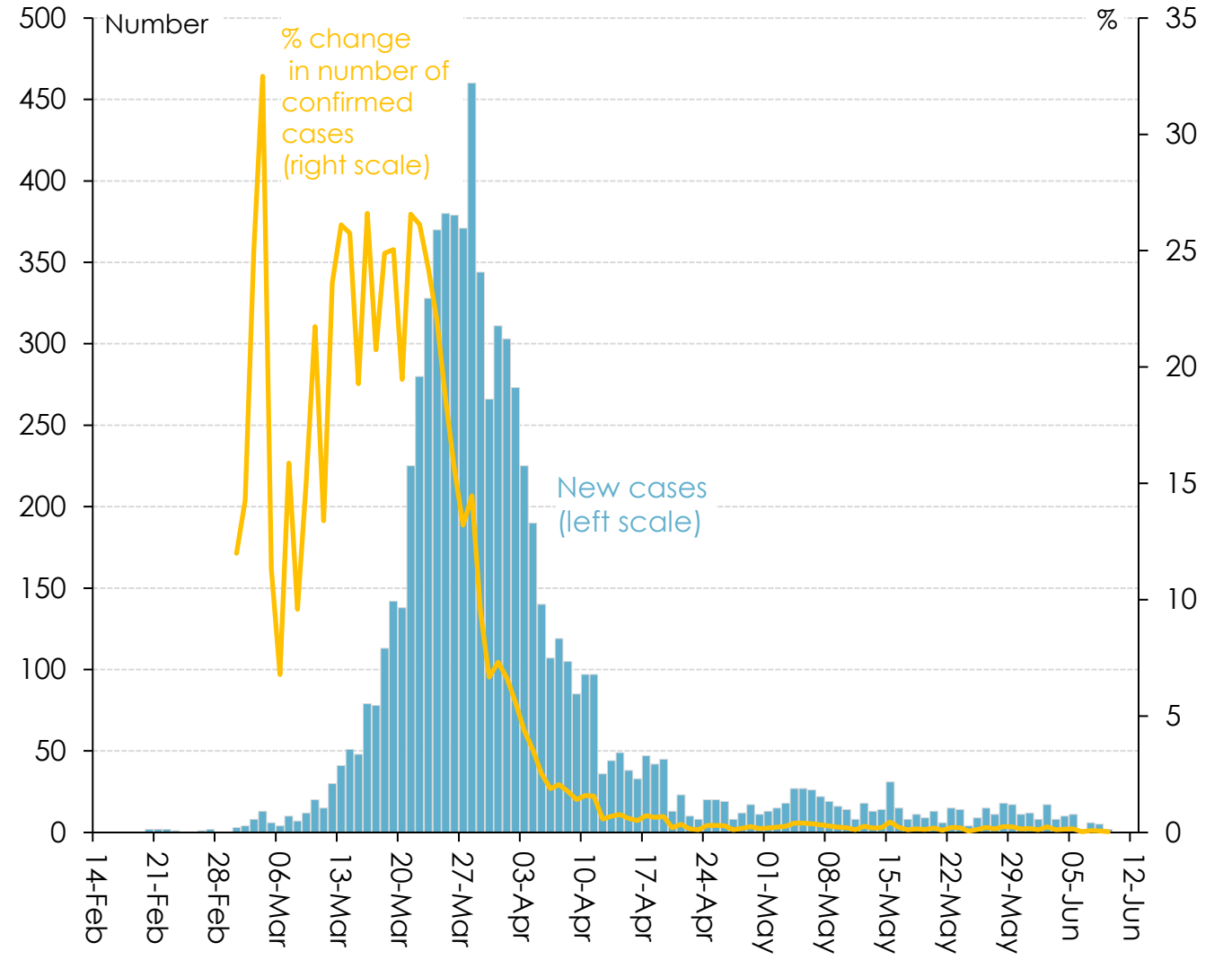
Australia

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

Confirmed cases



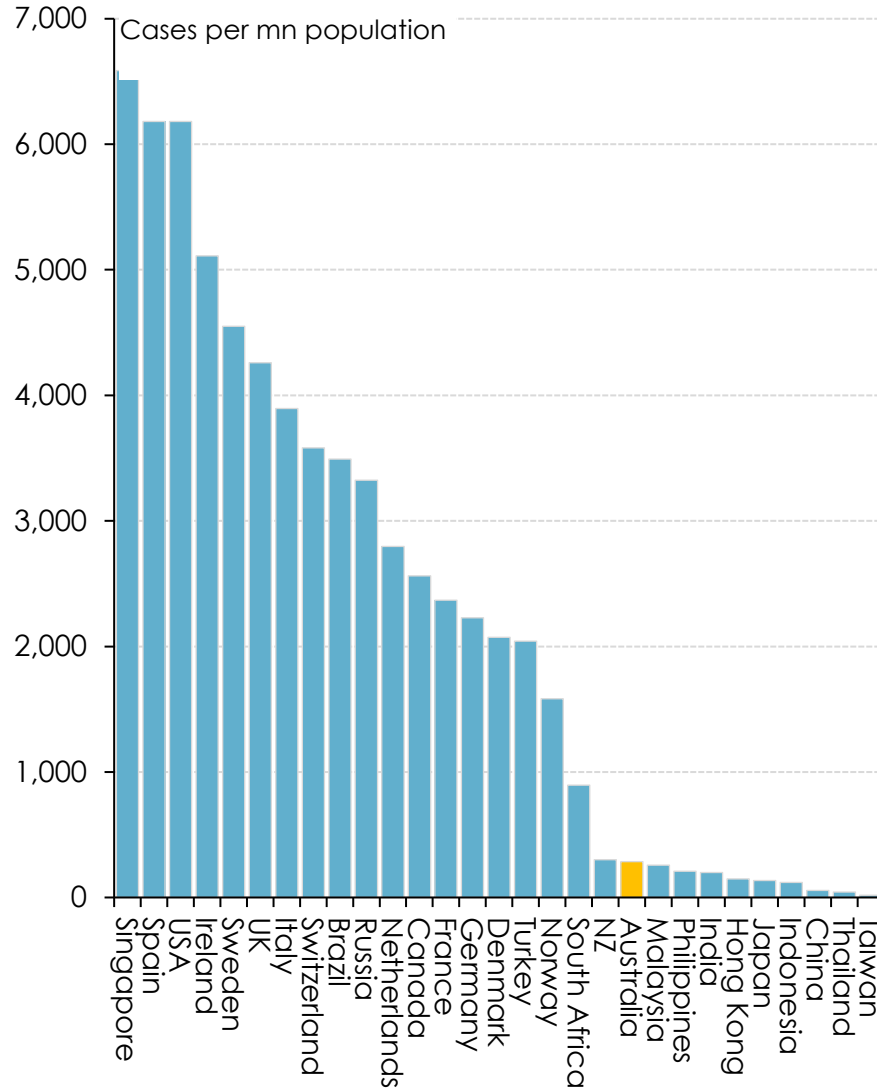
New cases



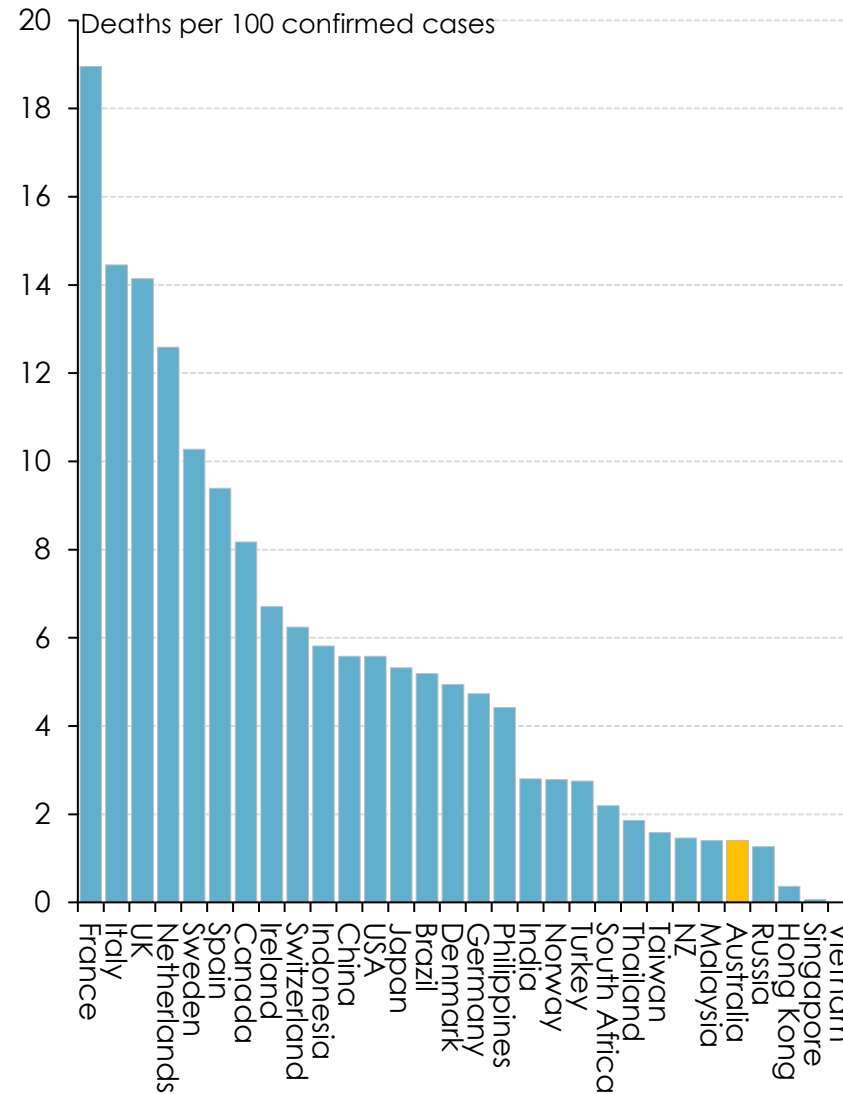
Note: Data up to 9^h June. Source: covid19data.com.au

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

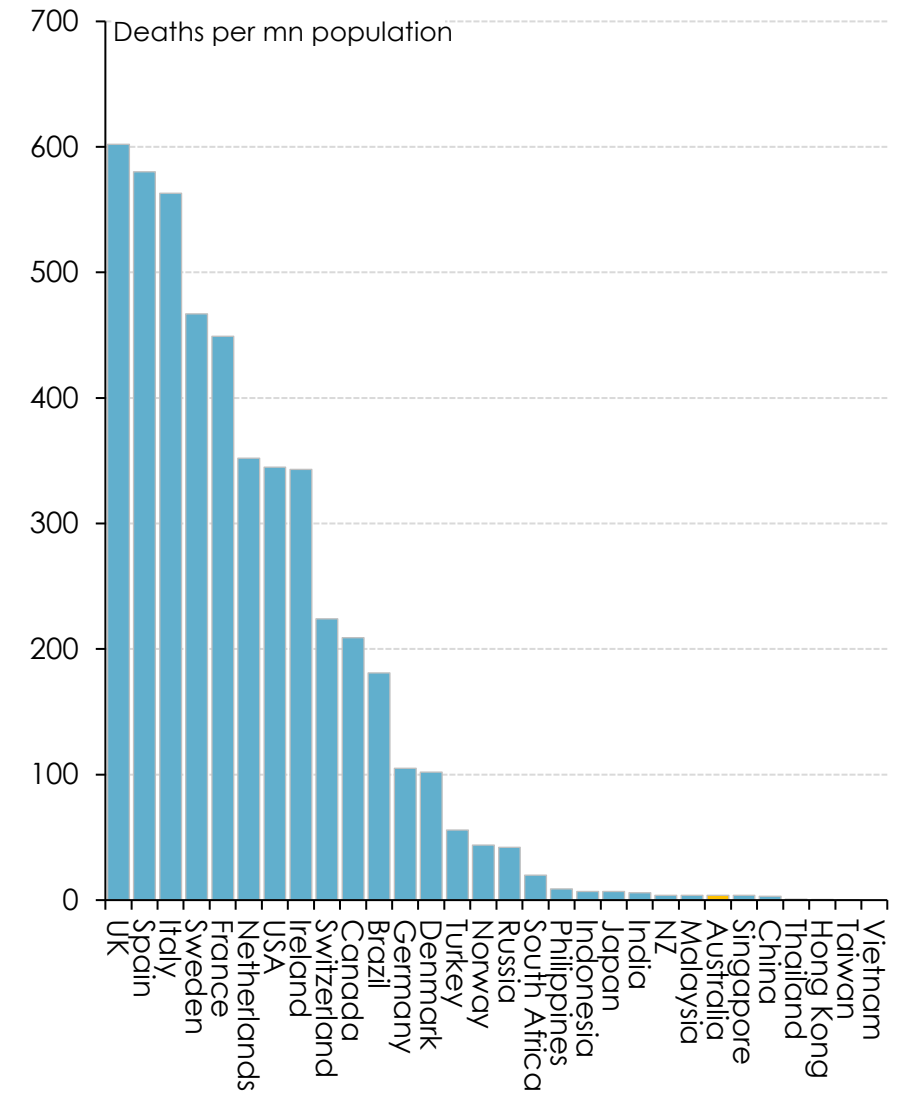
Apparent infection rate



Apparent death rate



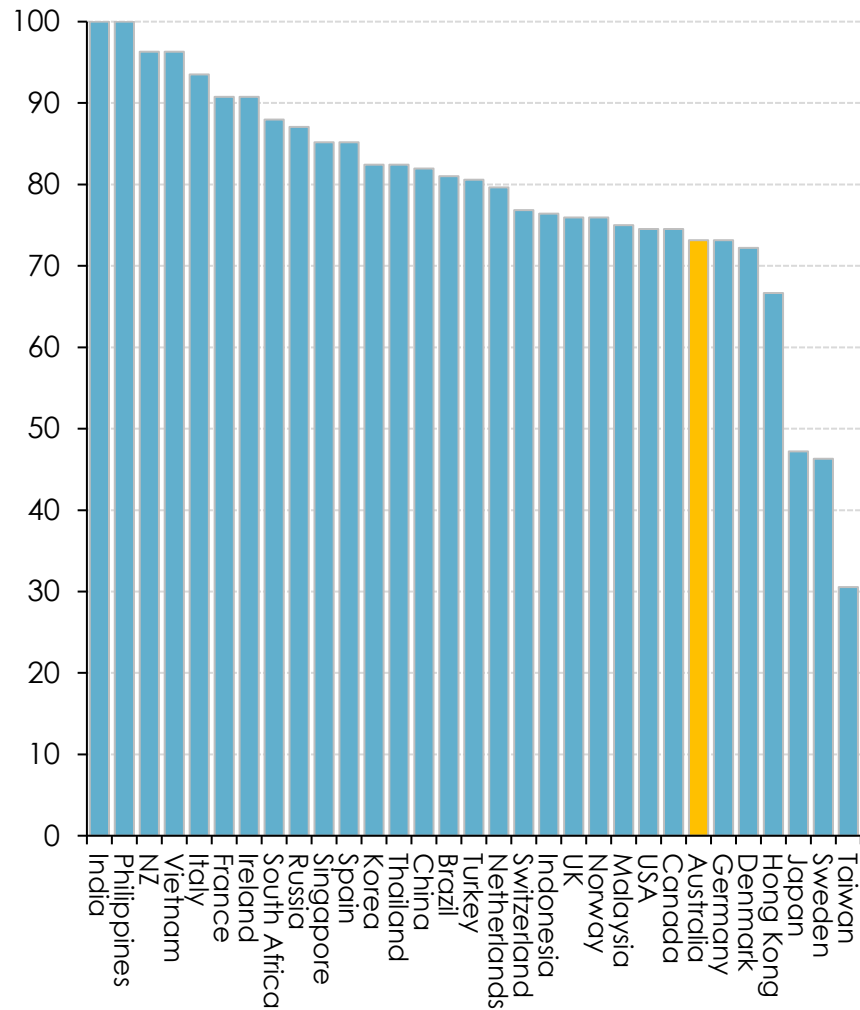
Deaths per mn population



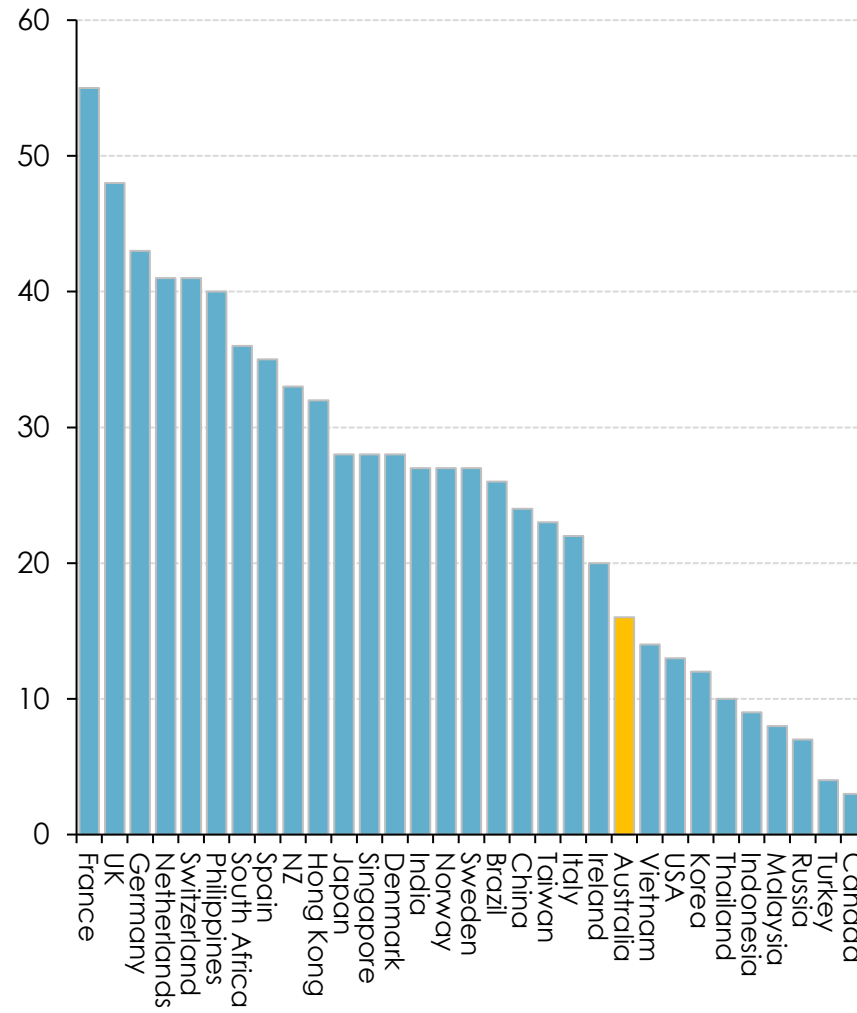
Note: Data up to 9th June. Sources: Worldometers; Corinna.

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

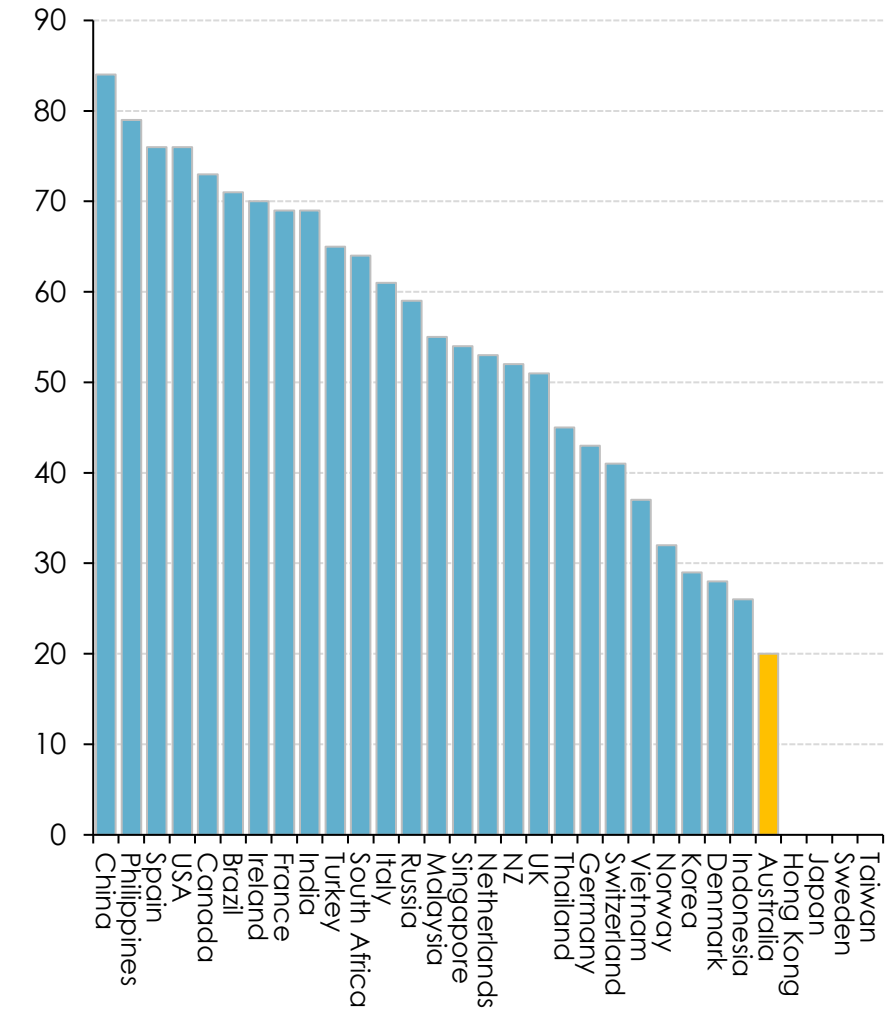
Highest level of restrictions imposed



Number of days restrictions at highest level



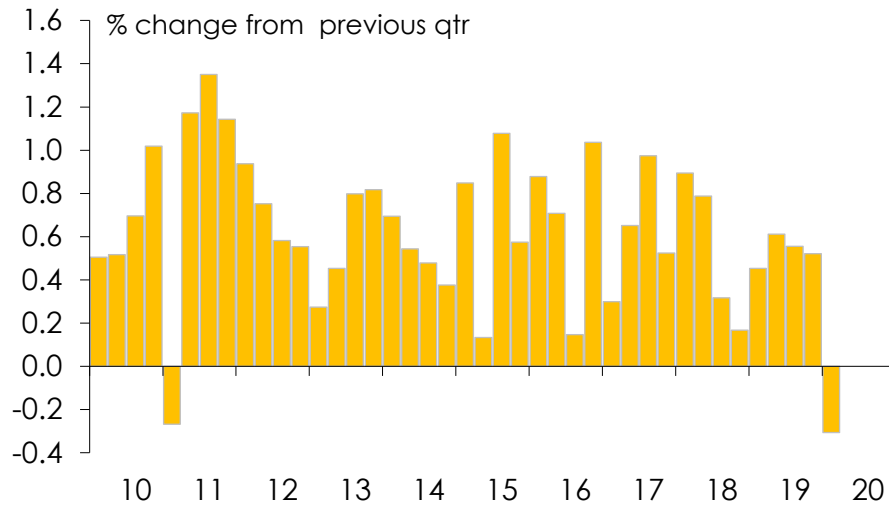
Number of days restrictions above 70 on Oxford index



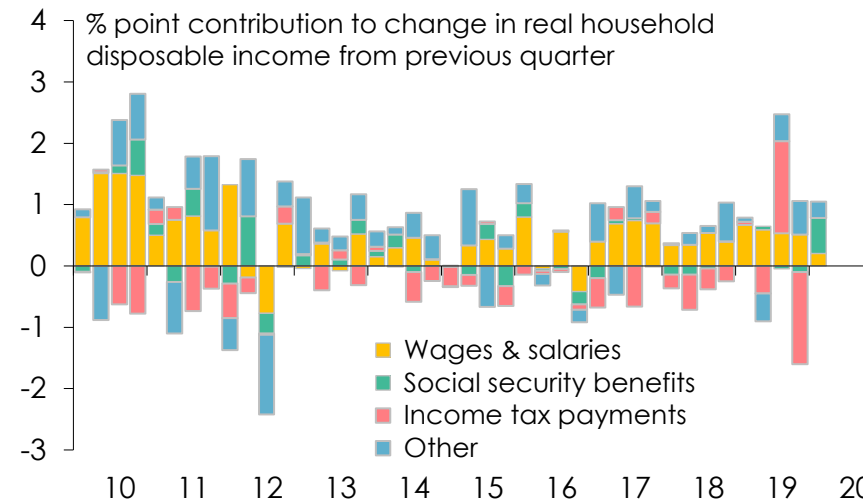
The Oxford COVID-19 Government Response Tracker collects publicly available information on 11 indicators of government response including school and workplace closures, public events cancellations, restrictions on public gatherings, stay at home requirements, public transport closures, domestic and international travel restrictions, public information campaigns, testing and contact tracing. Source: Blavatnik School of Government, Oxford University. Data up to 31st May – 4th June.

The Australian economy contracted in the March quarter, for the first time in 10 years

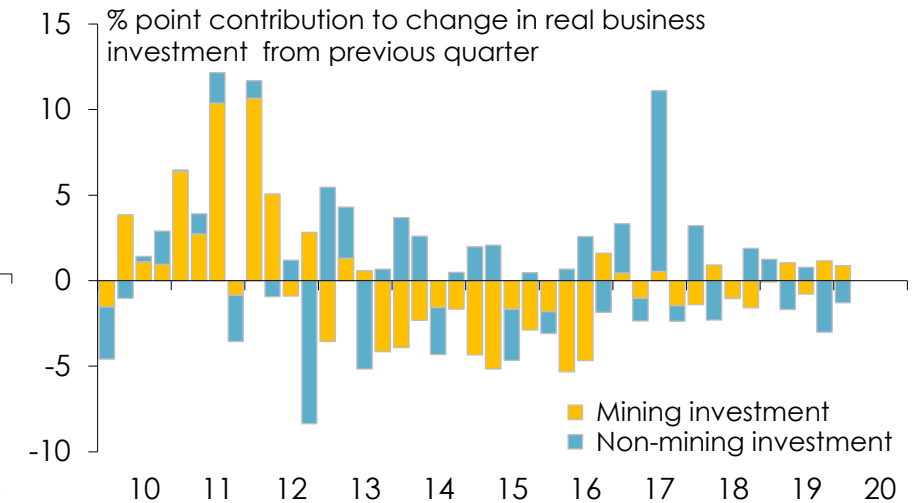
Quarterly change in real GDP



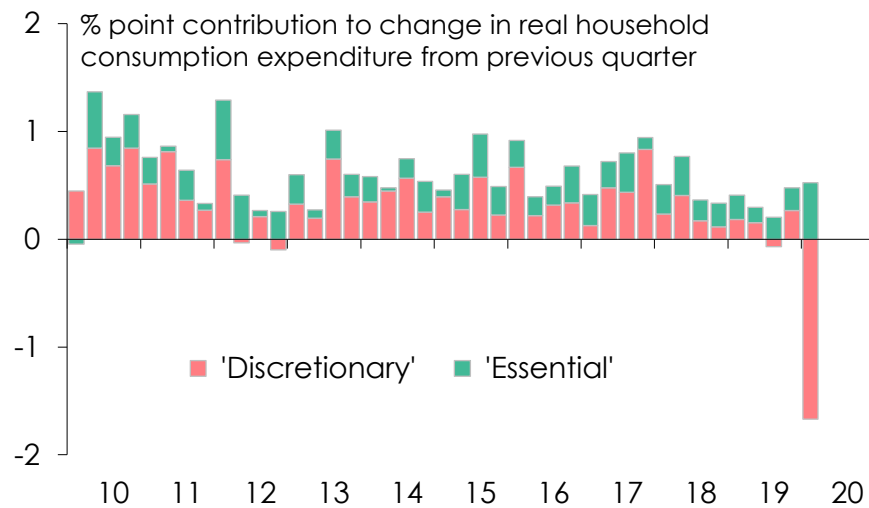
Household disposable income



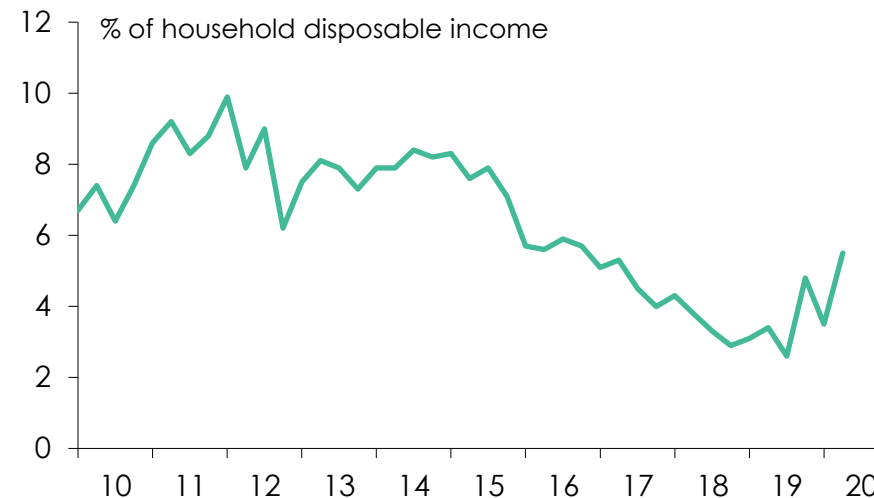
Business investment expenditure



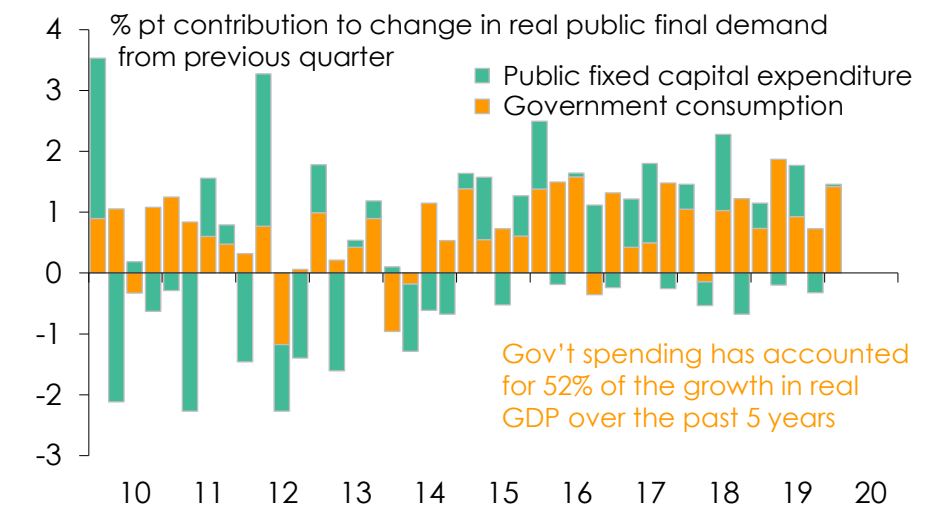
Household consumption expenditure



Household saving rate



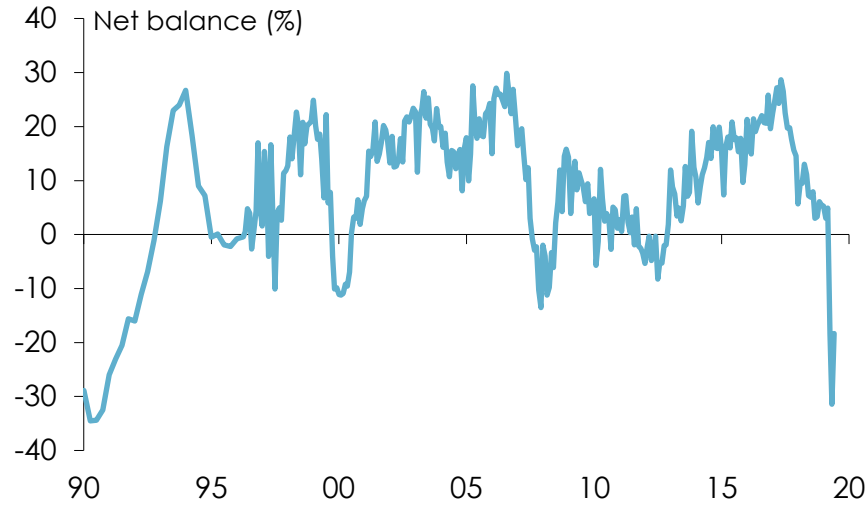
Public expenditure



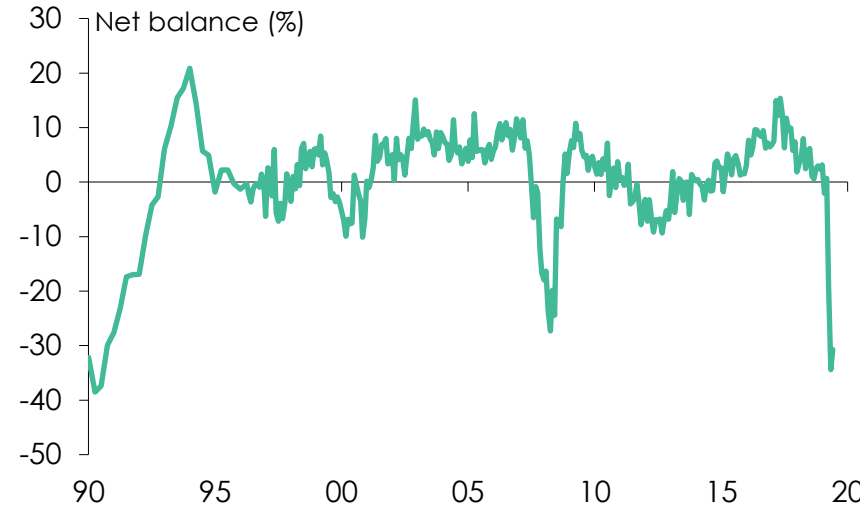
Note: 'Essential' household consumption comprises rent & other dwelling services; food; electricity, gas & other fuel; and health. Components of household disposable income are deflated by the implicit price deflator of household final consumption expenditure. Source: ABS.

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

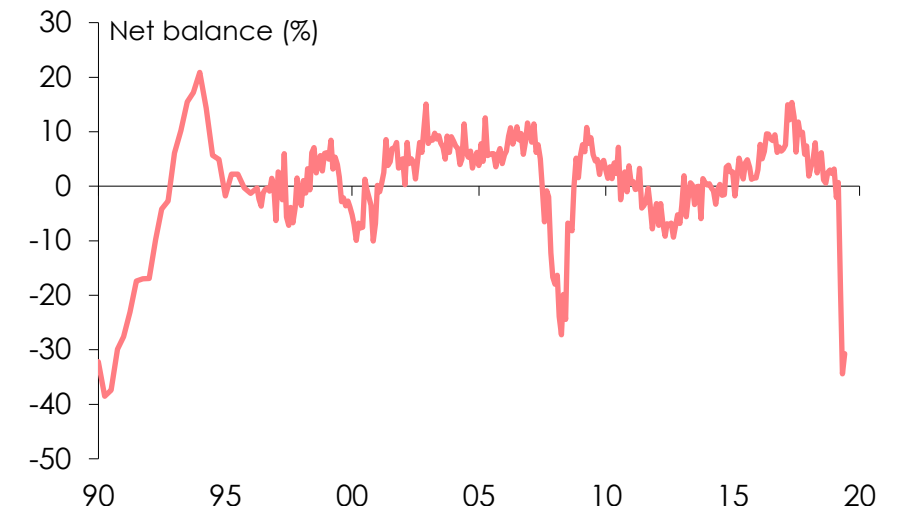
Trading conditions



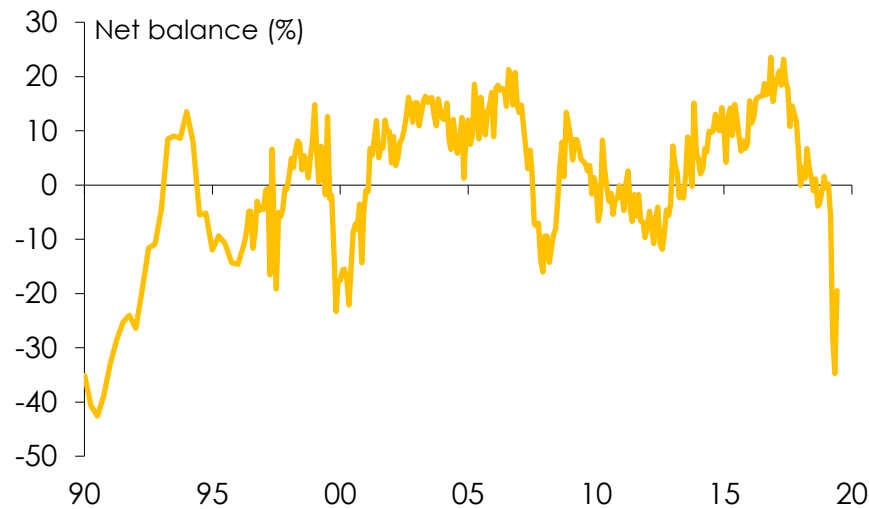
Forward orders



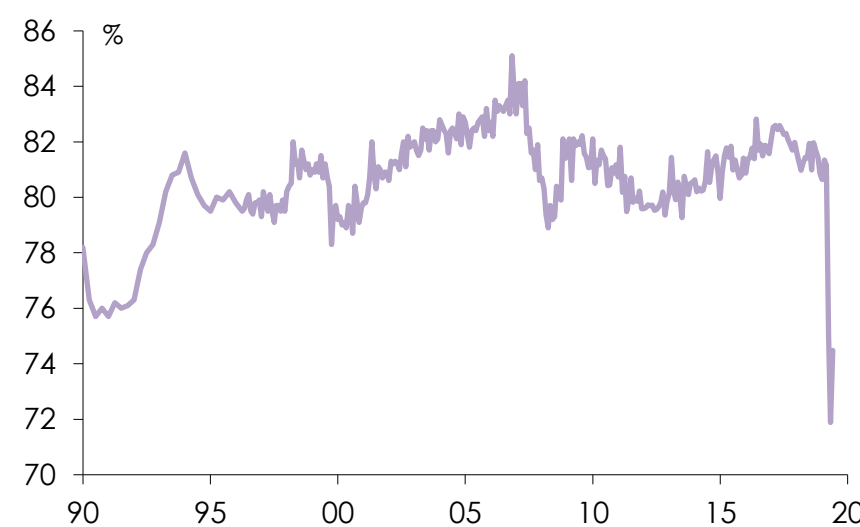
Employee hiring intentions



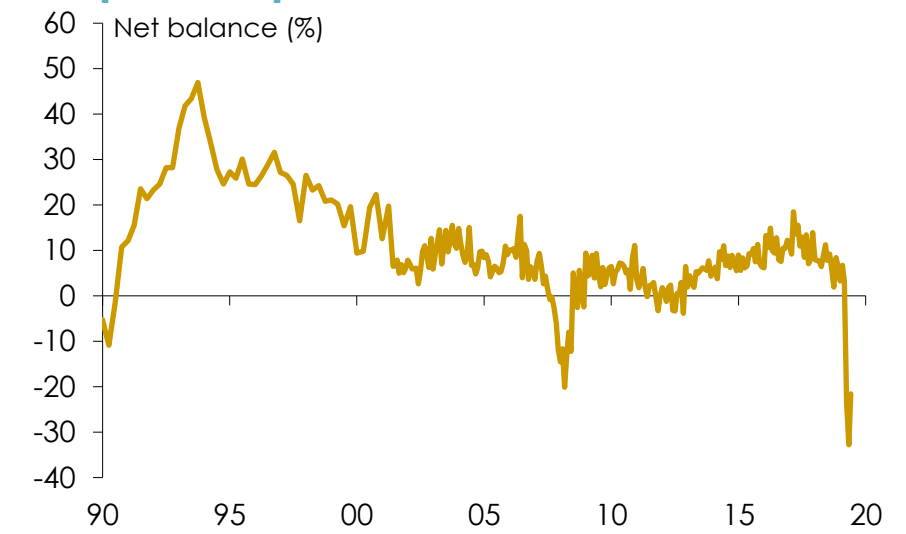
Profitability



Capacity utilization



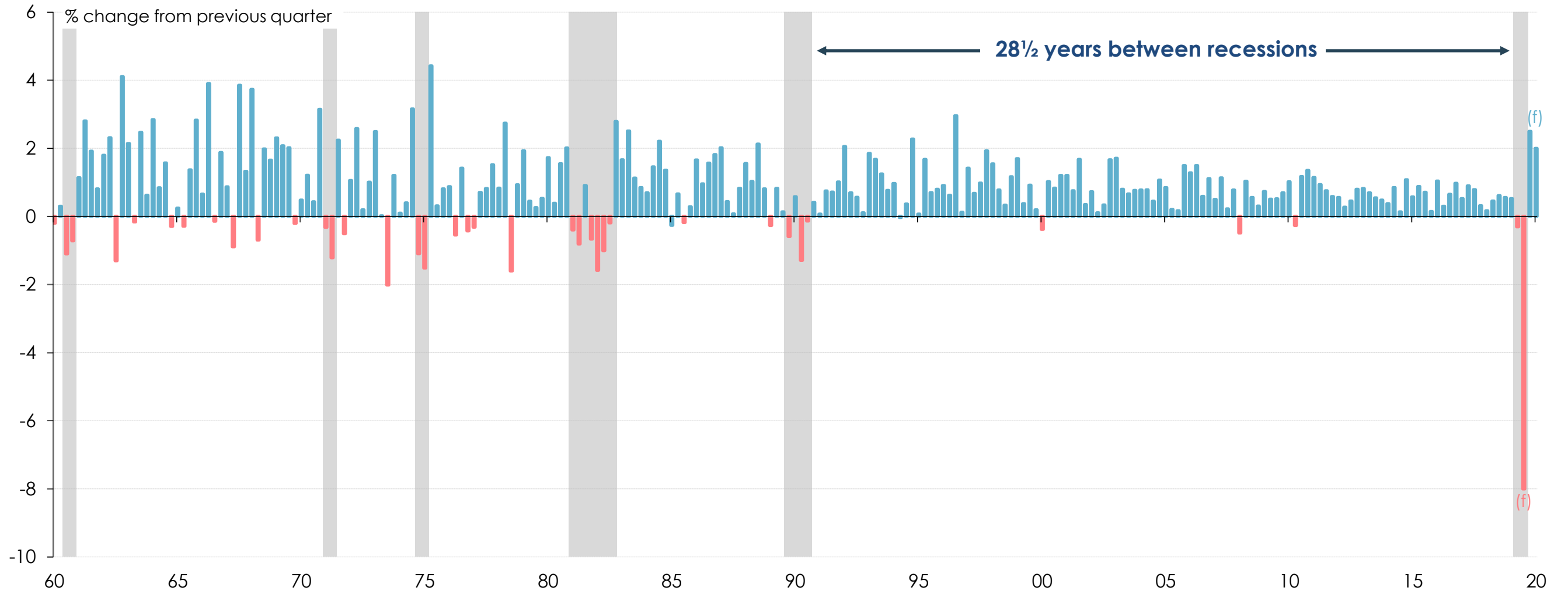
Capital expenditure intentions



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

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

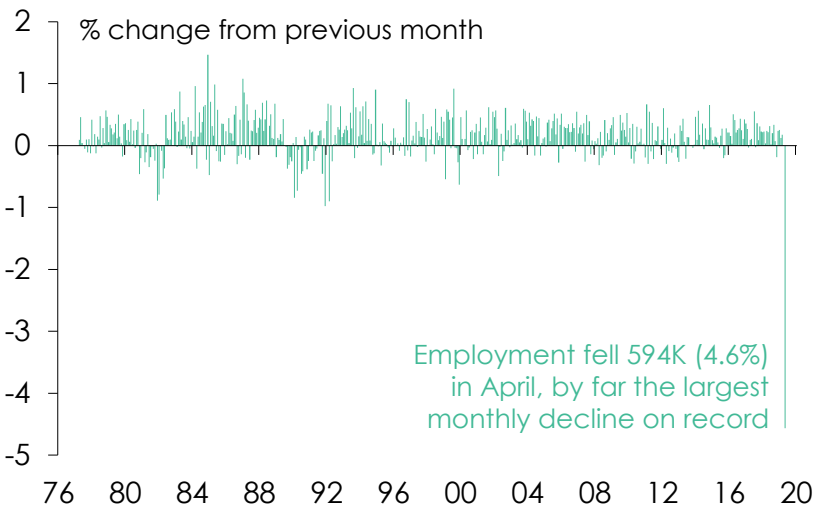
Quarterly growth in Australian real GDP, 1960-2020



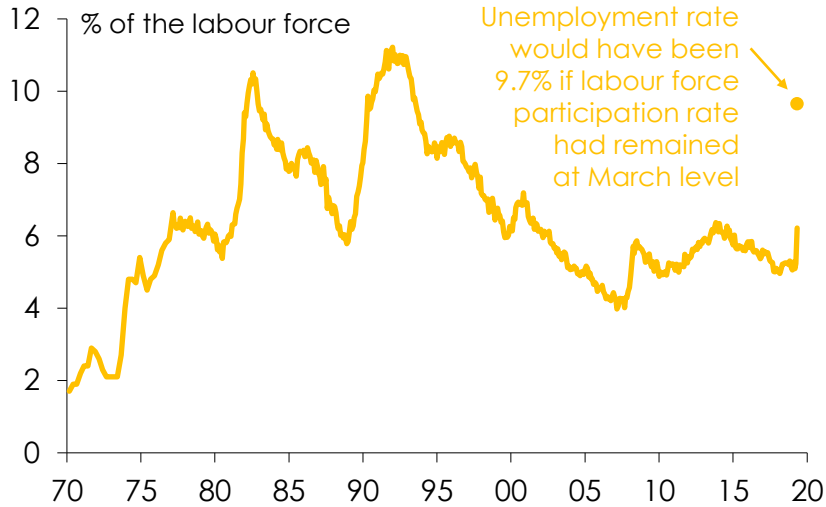
Note: Shaded areas denote recessions. Source: ABS.

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

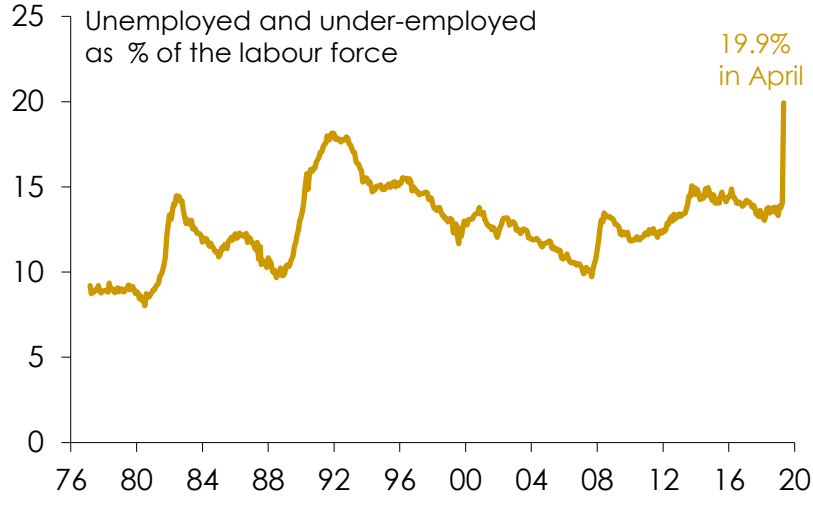
Employment



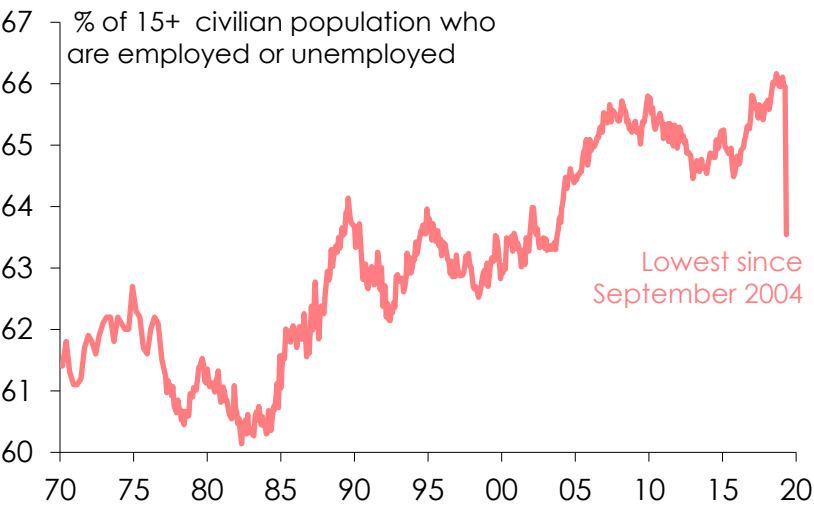
Unemployment rate



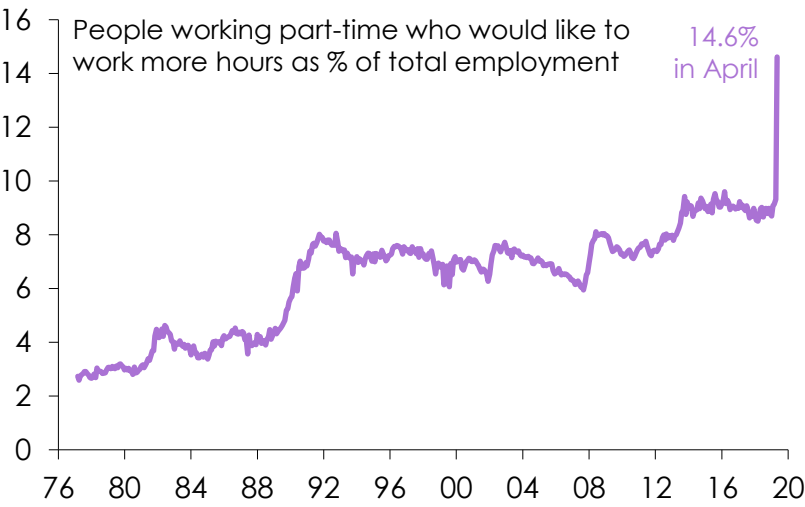
'Under-utilization' rate



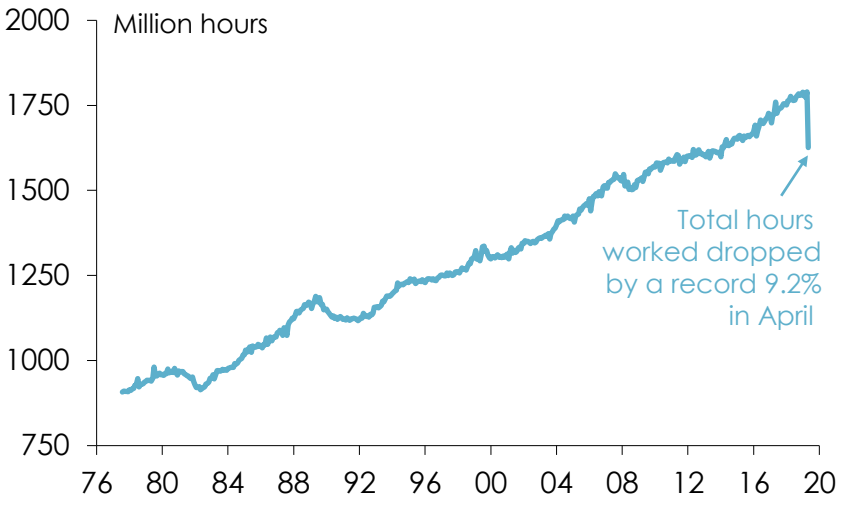
Labour force participation rate



Under-employment ratio



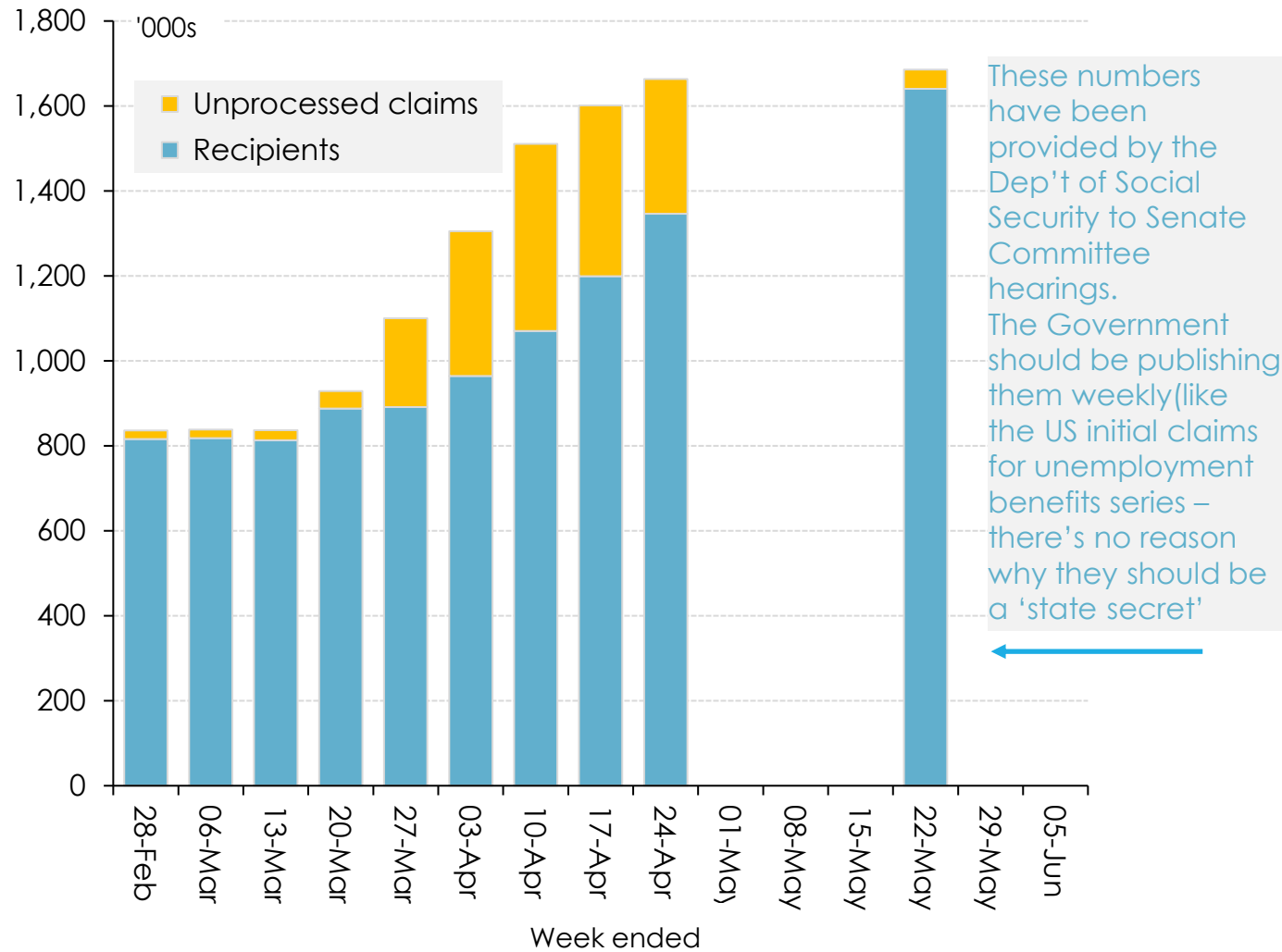
Total hours worked



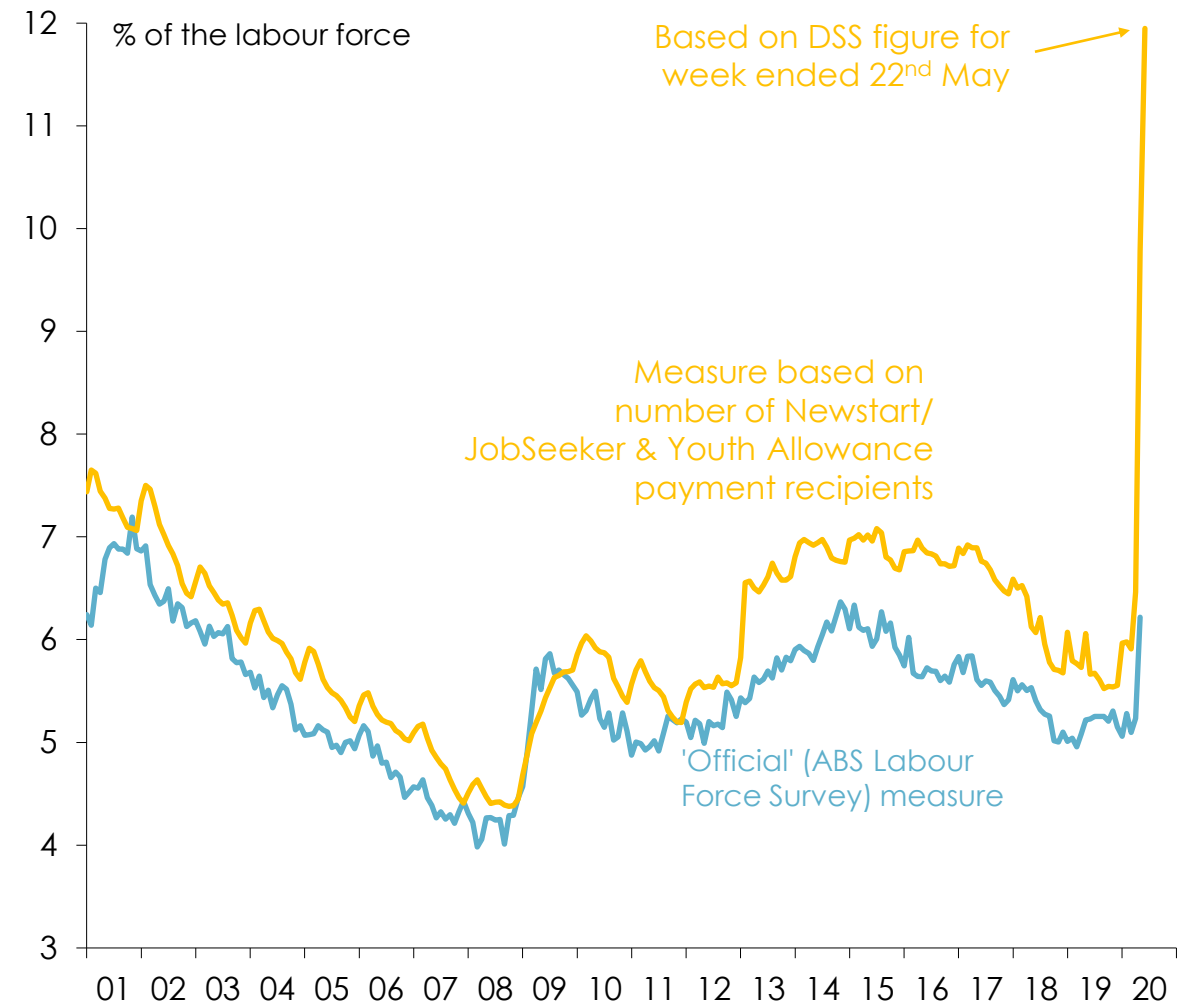
Note: The ABS classifies people on JobKeeper who worked zero hours in the survey week as 'employed'. Had it not done so, the unemployment rate in April would have been 11.7%. The 'under-employment ratio' is the percentage of employed persons who are working fewer hours than they are willing and able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

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

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



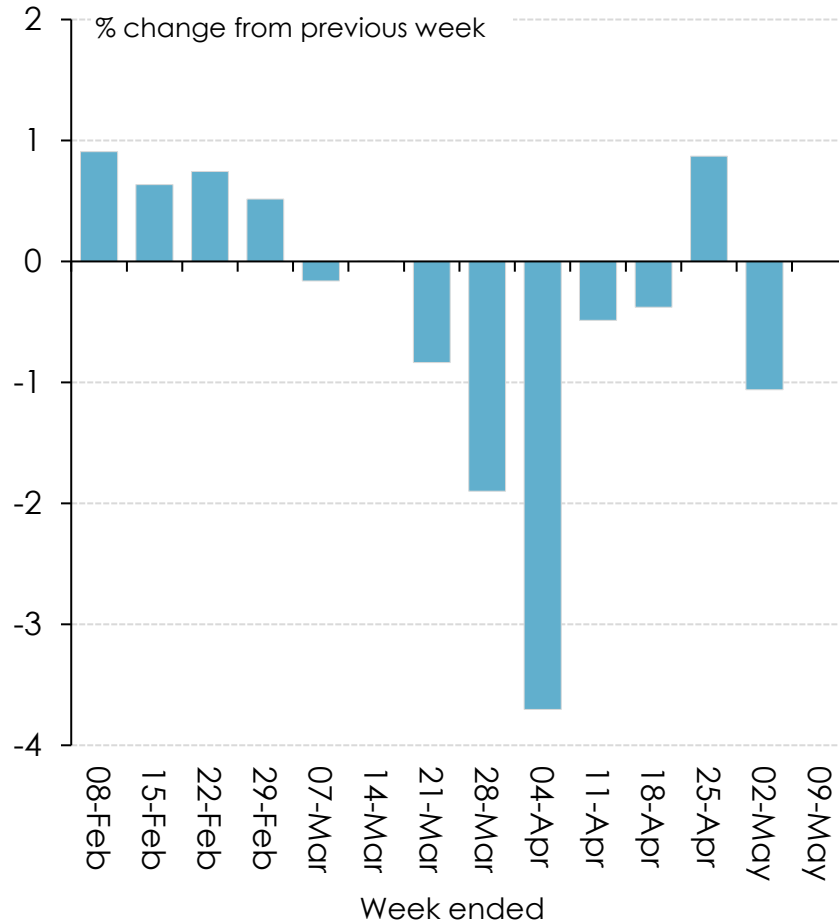
Alternative measures of the 'unemployment rate'



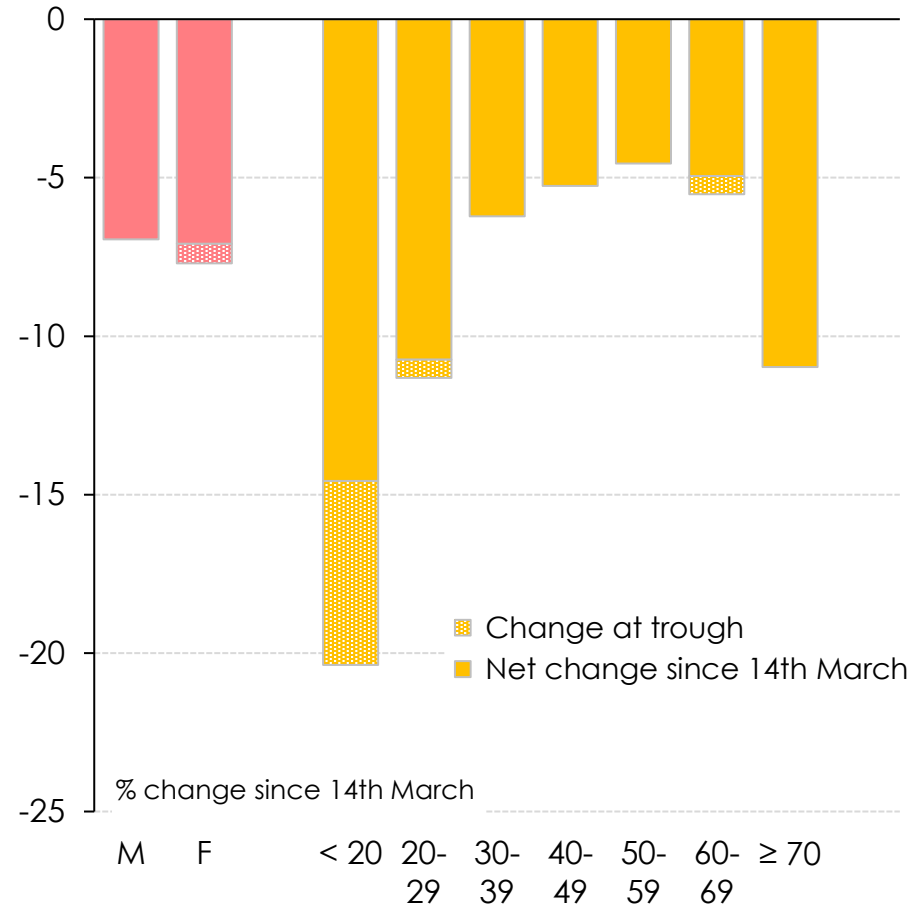
Sources: Department of Social Security; ABS. Note: Youth Allowance recipients excludes full-time students. Number of Newstart/JobSeeker and Youth Allowance recipients is not seasonally adjusted.

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

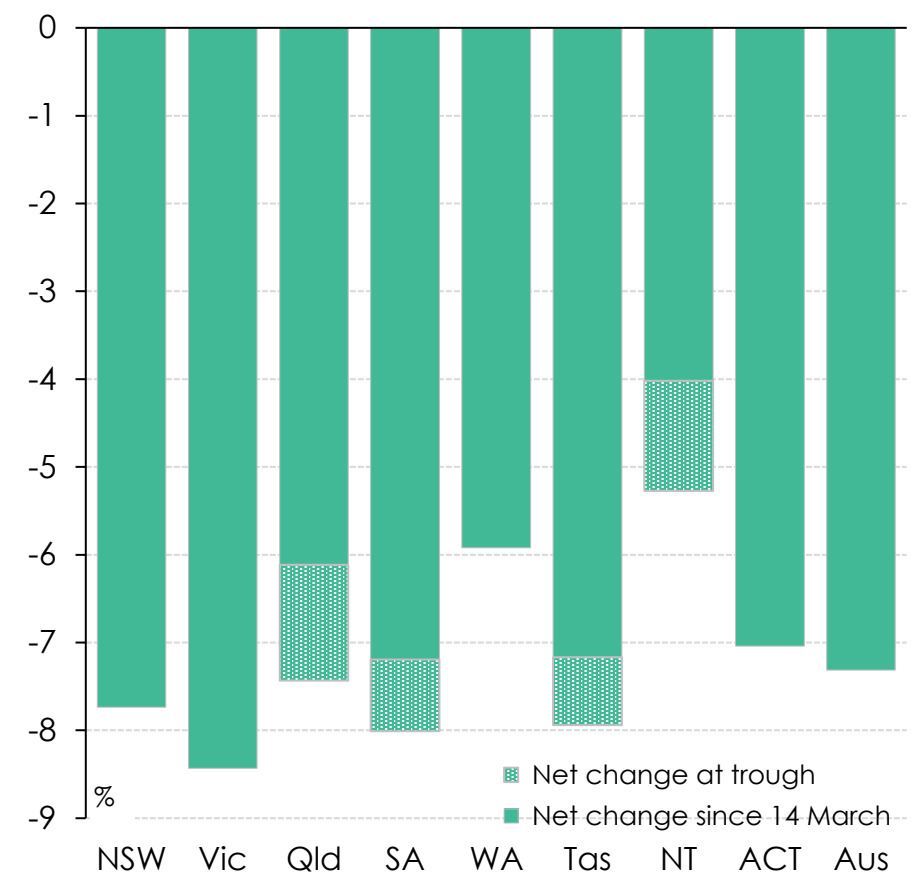
Weekly change in number of payroll jobs



Change in payroll jobs by age & gender



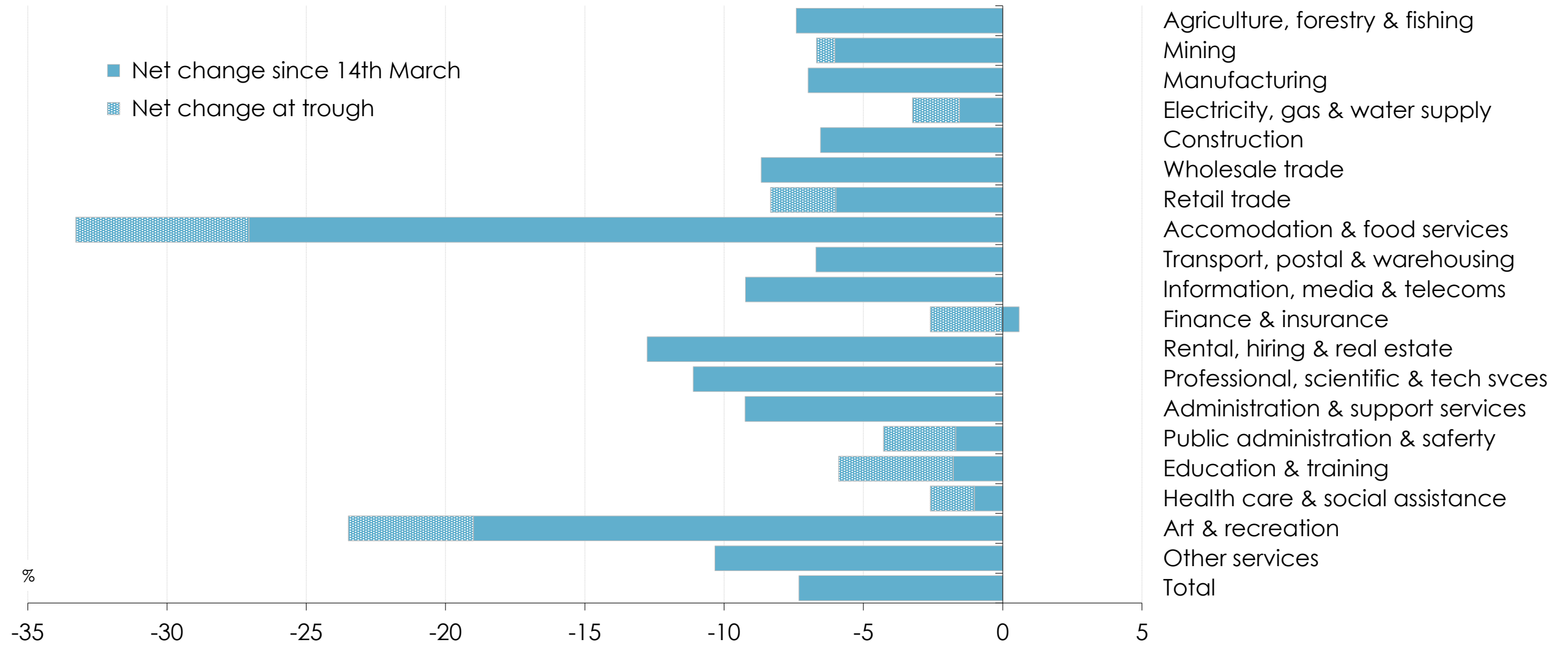
Change in payroll jobs by State & Territory



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

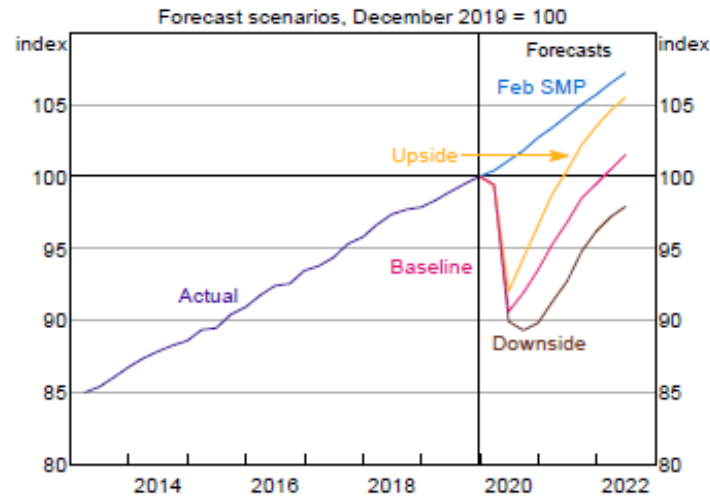
Change in number of payroll jobs between 14th March and 2nd May, by industry



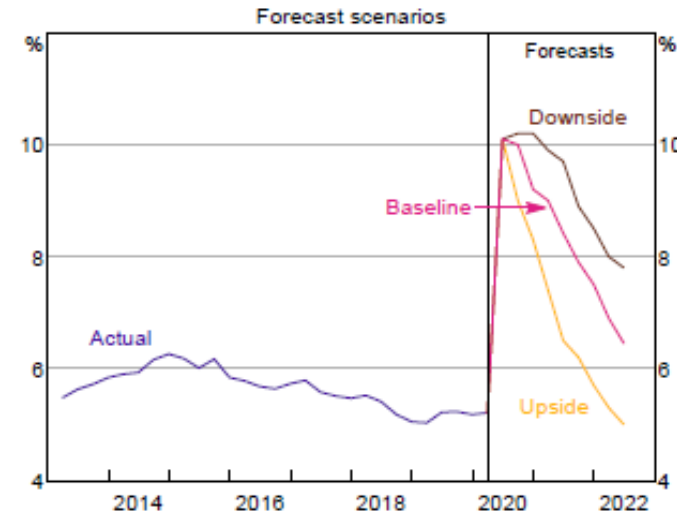
Source: ABS. Data refers to the number of payroll jobs at businesses participating in the Australian Taxation Office's Single Touch Payroll system, which covers 99% of employers with 20 or more employees and about 71% of smaller employees. Data are not seasonally adjusted.

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

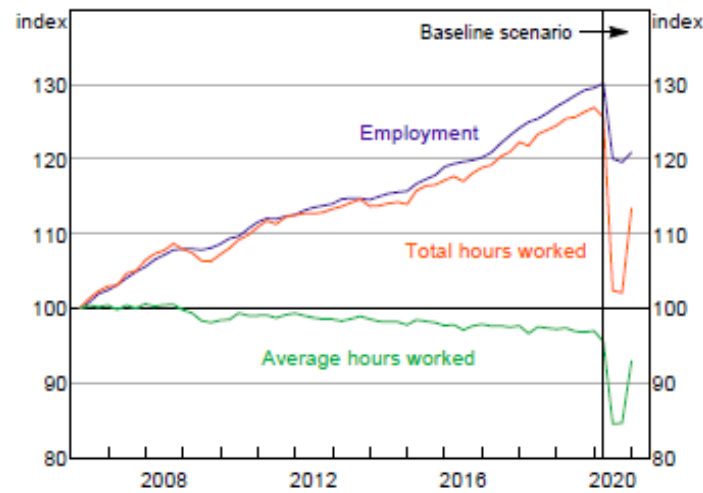
GDP



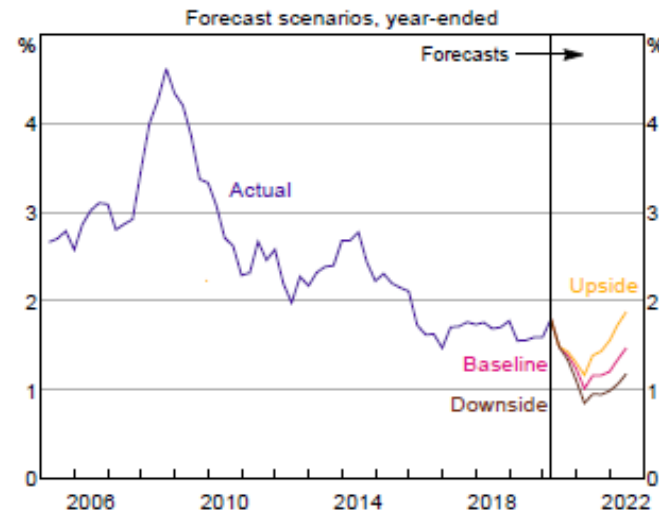
Unemployment



Employment



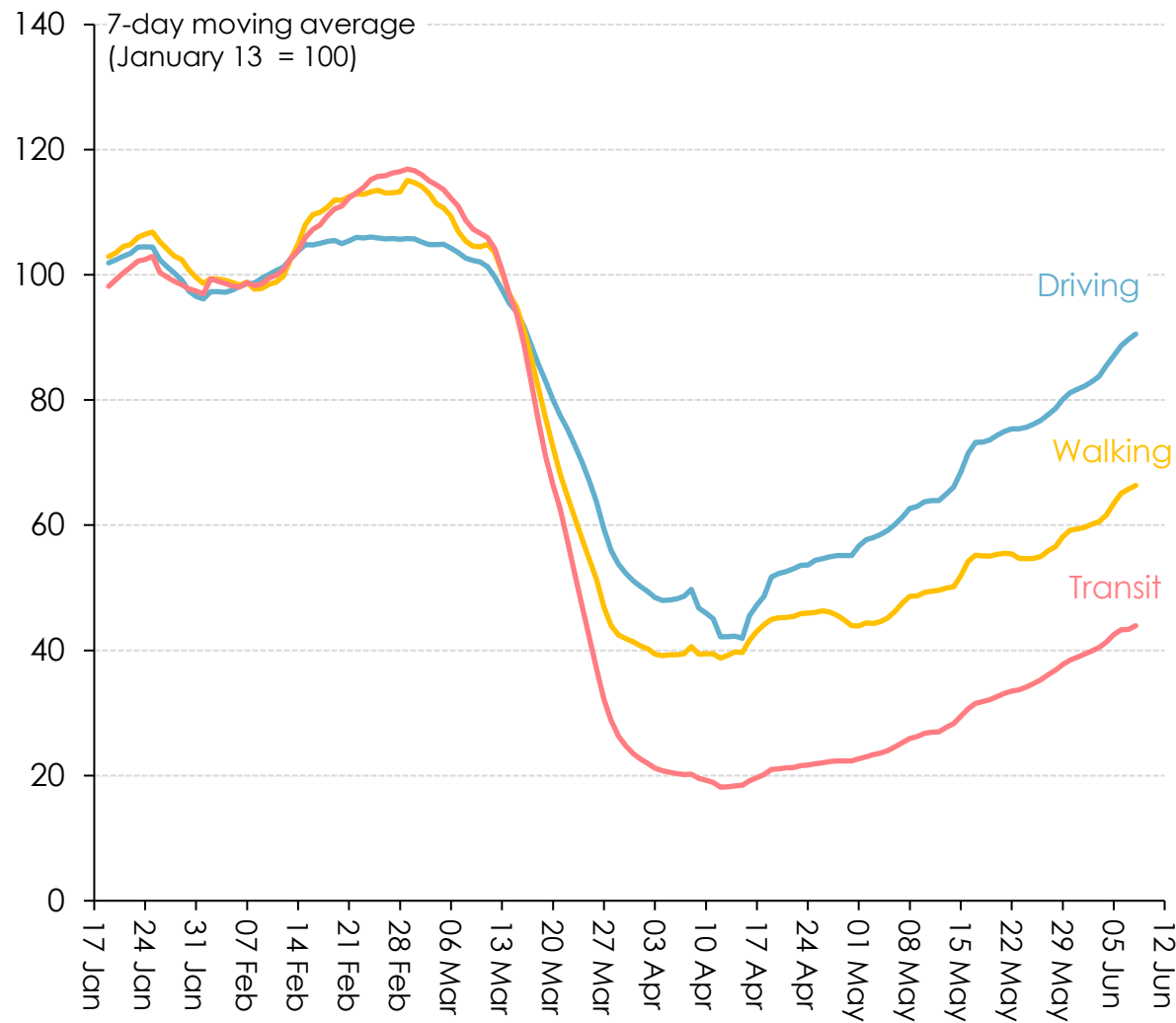
'Underlying' inflation



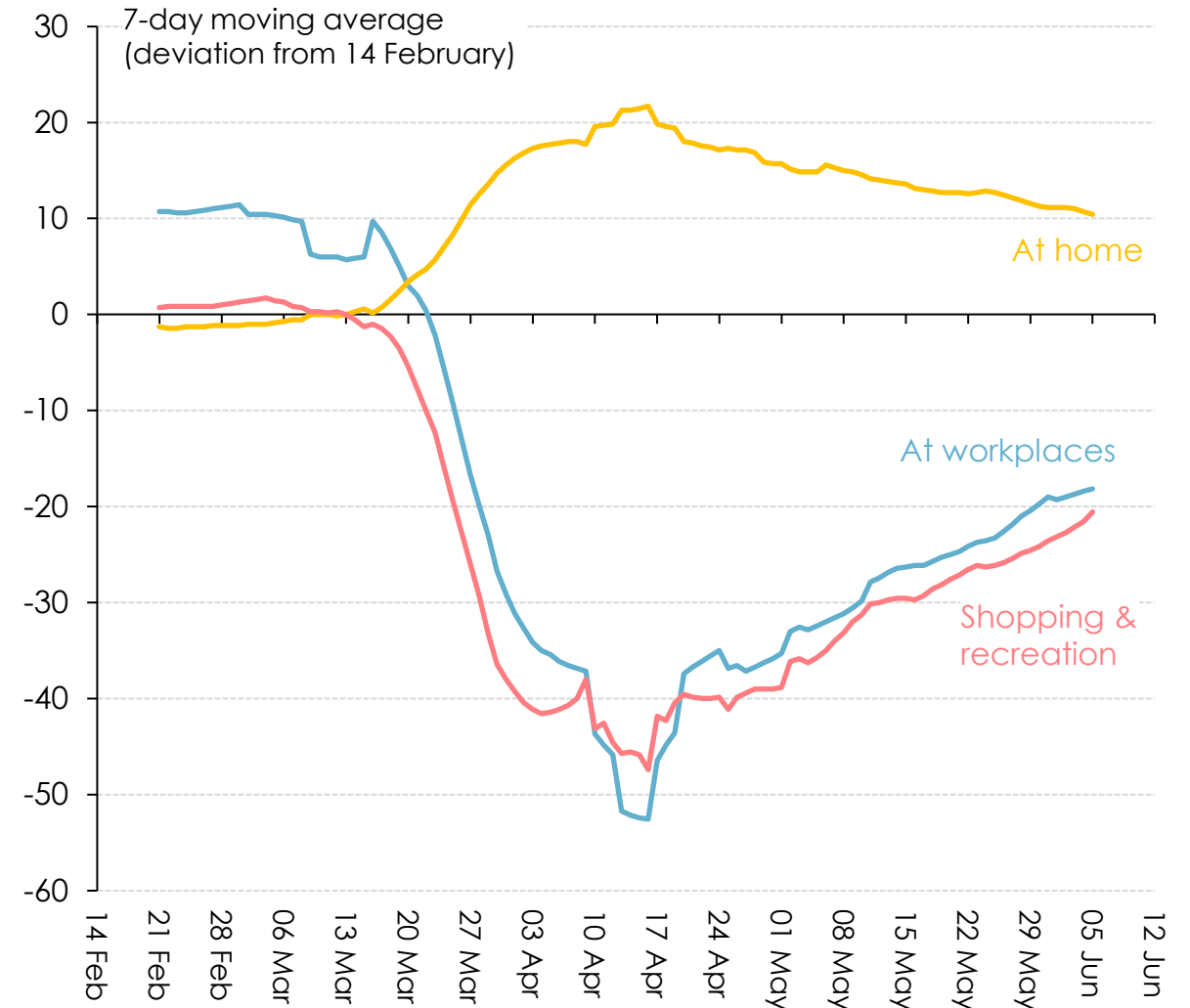
- ❑ The RBA's 'baseline' scenario assumes that most 'social distancing' restrictions are lifted by the end of the September quarter, apart from those on large public gatherings and events, and international borders (which aren't opened until early 2021)
- ❑ In this scenario real GDP declines by 5% in 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'

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

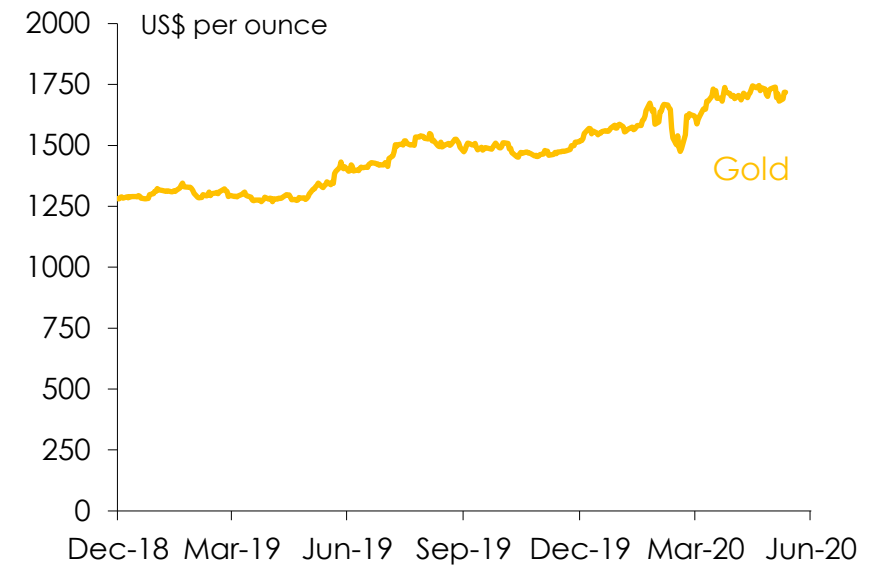
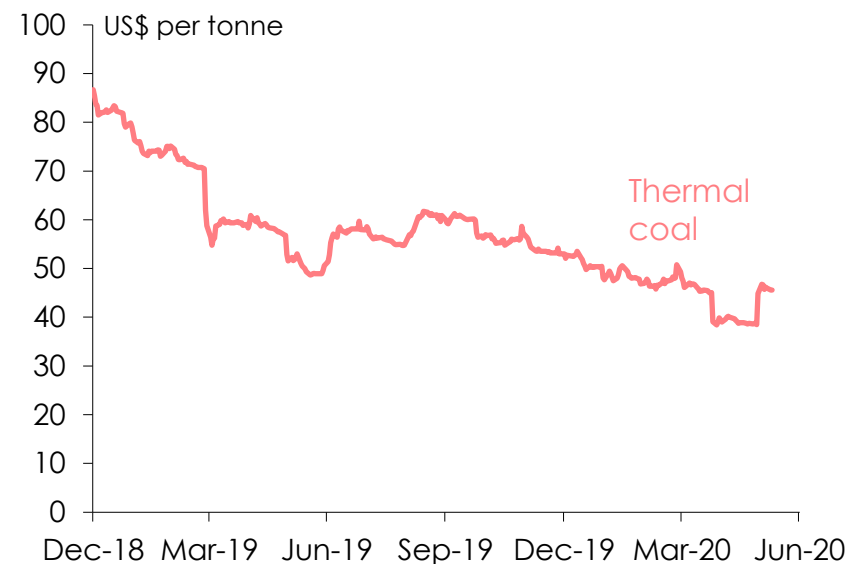
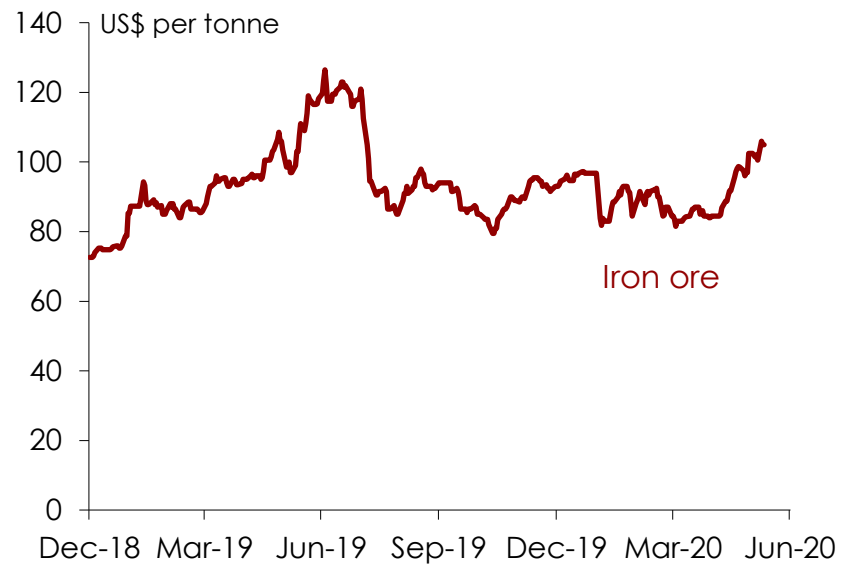
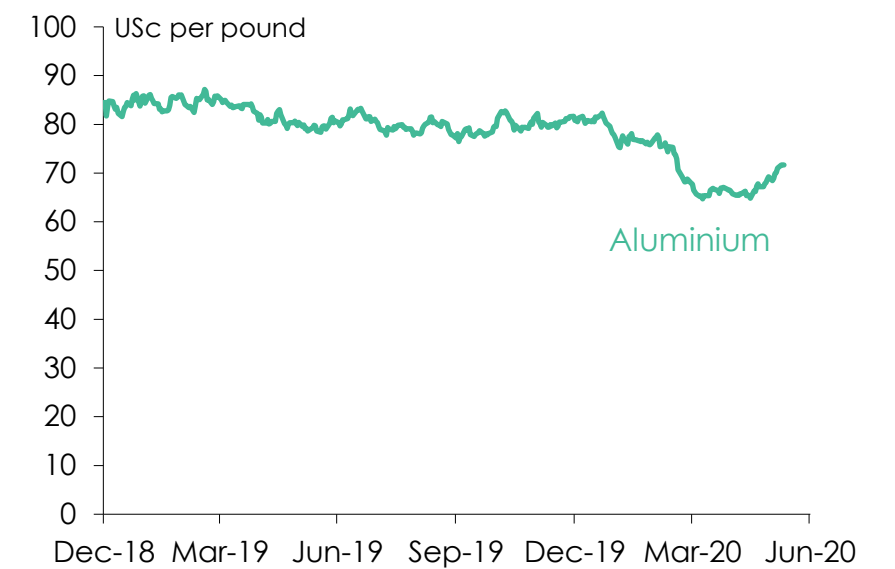
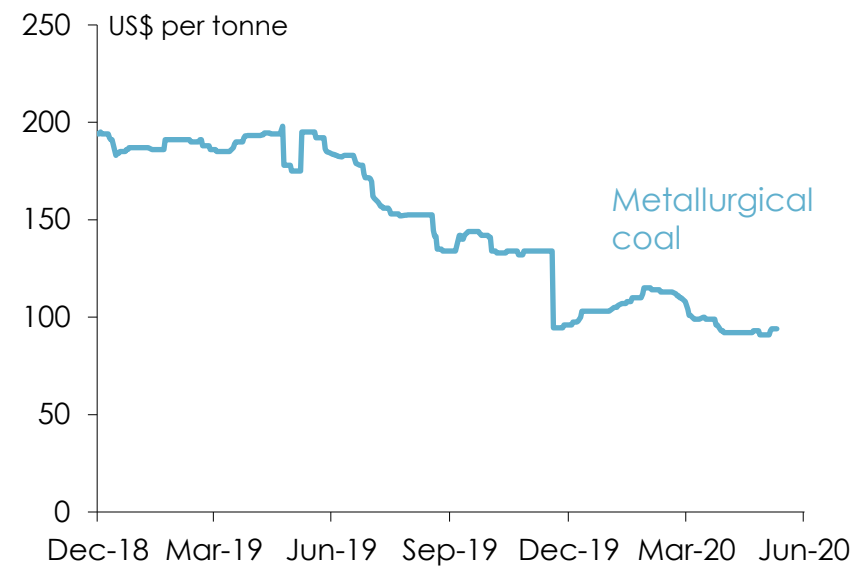
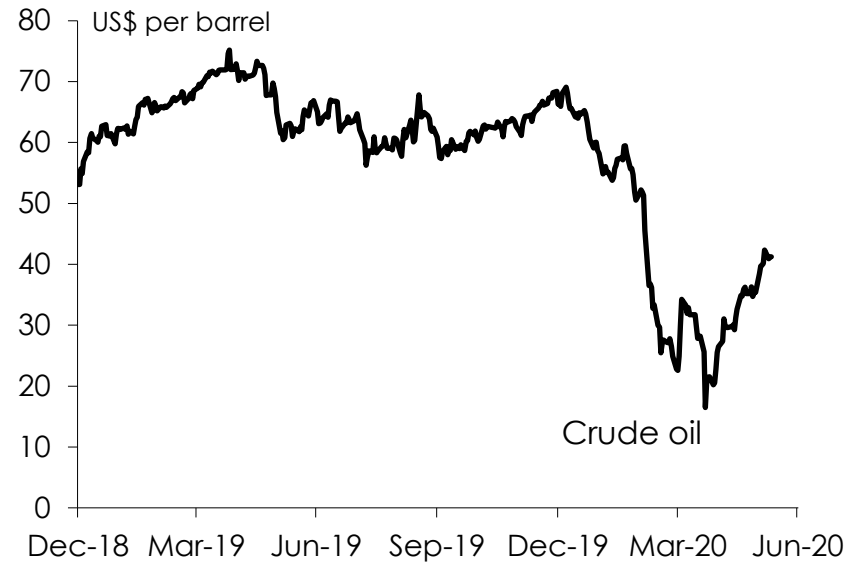


Time spent working, at home, shopping & playing



Note: 'transit' means using public transport. Sources: Apple Mobility Trends Reports (data up to 8th June); Google Covid-19 Community Mobility Reports (data up to 6th June).

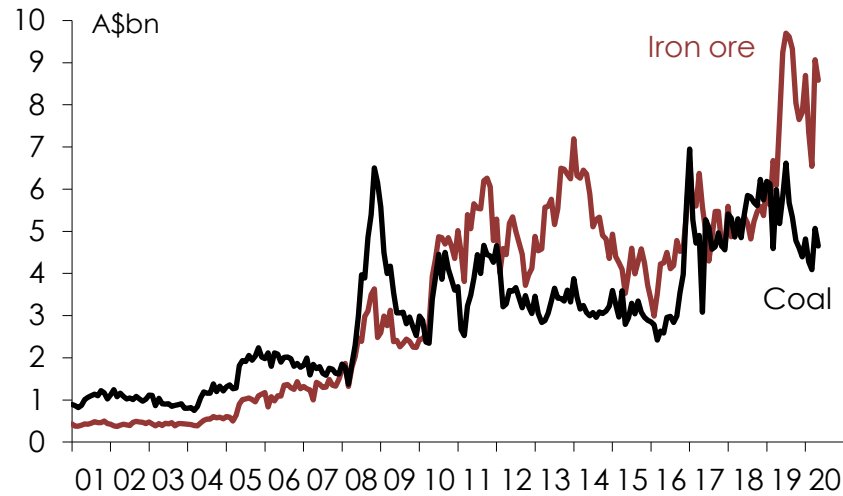
Despite a sharp fall in oil prices, Australian export commodity prices have proved relatively resilient (unlike during the GFC)



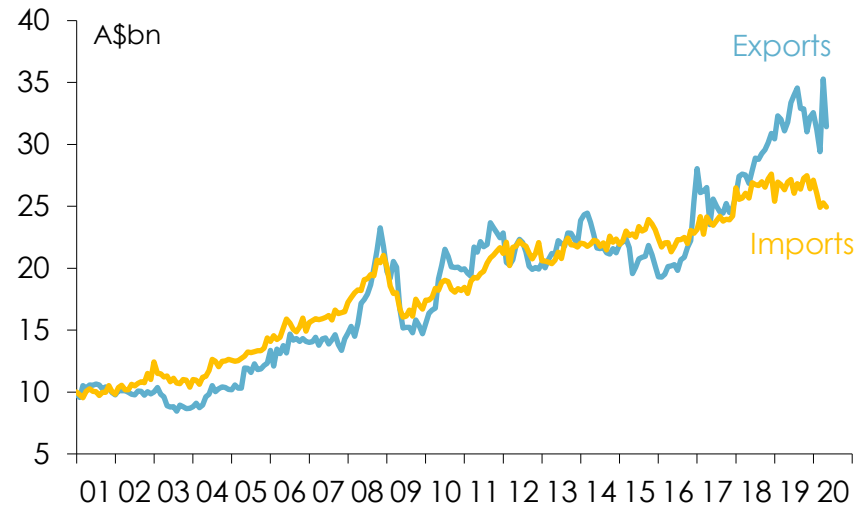
Source: Refinitiv Datastream. Data up to 9th June.

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

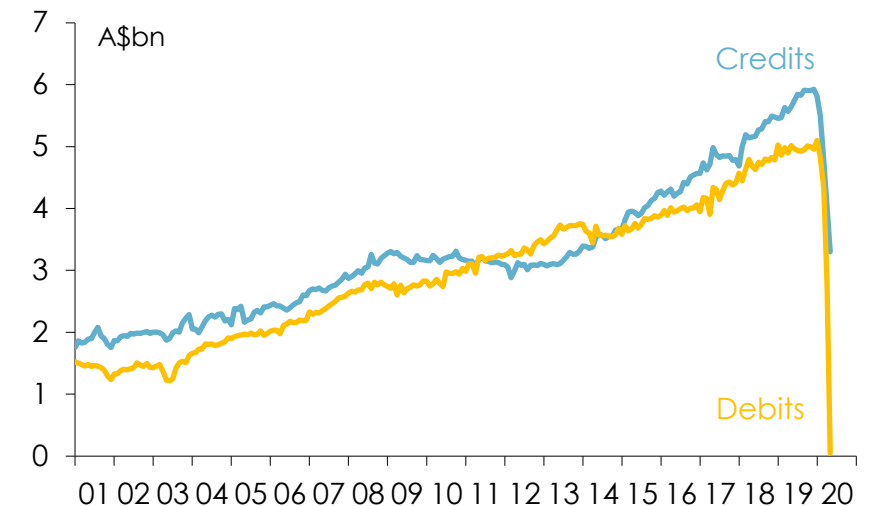
Iron ore and coal exports



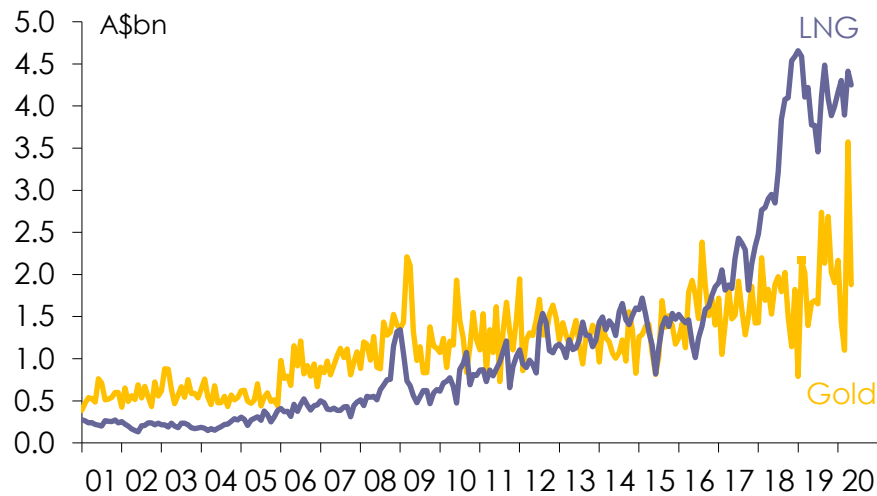
Merchandise exports and imports



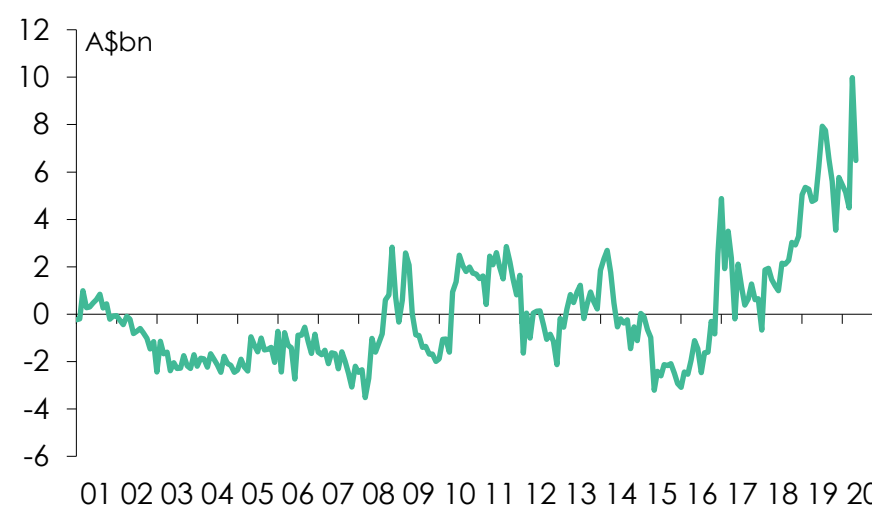
Tourism-related services trade



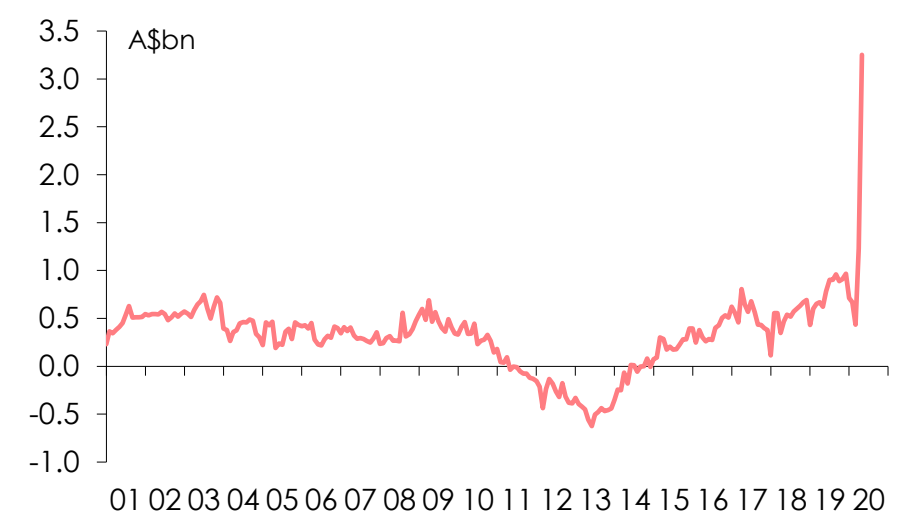
LNG and gold exports



Merchandise trade balance



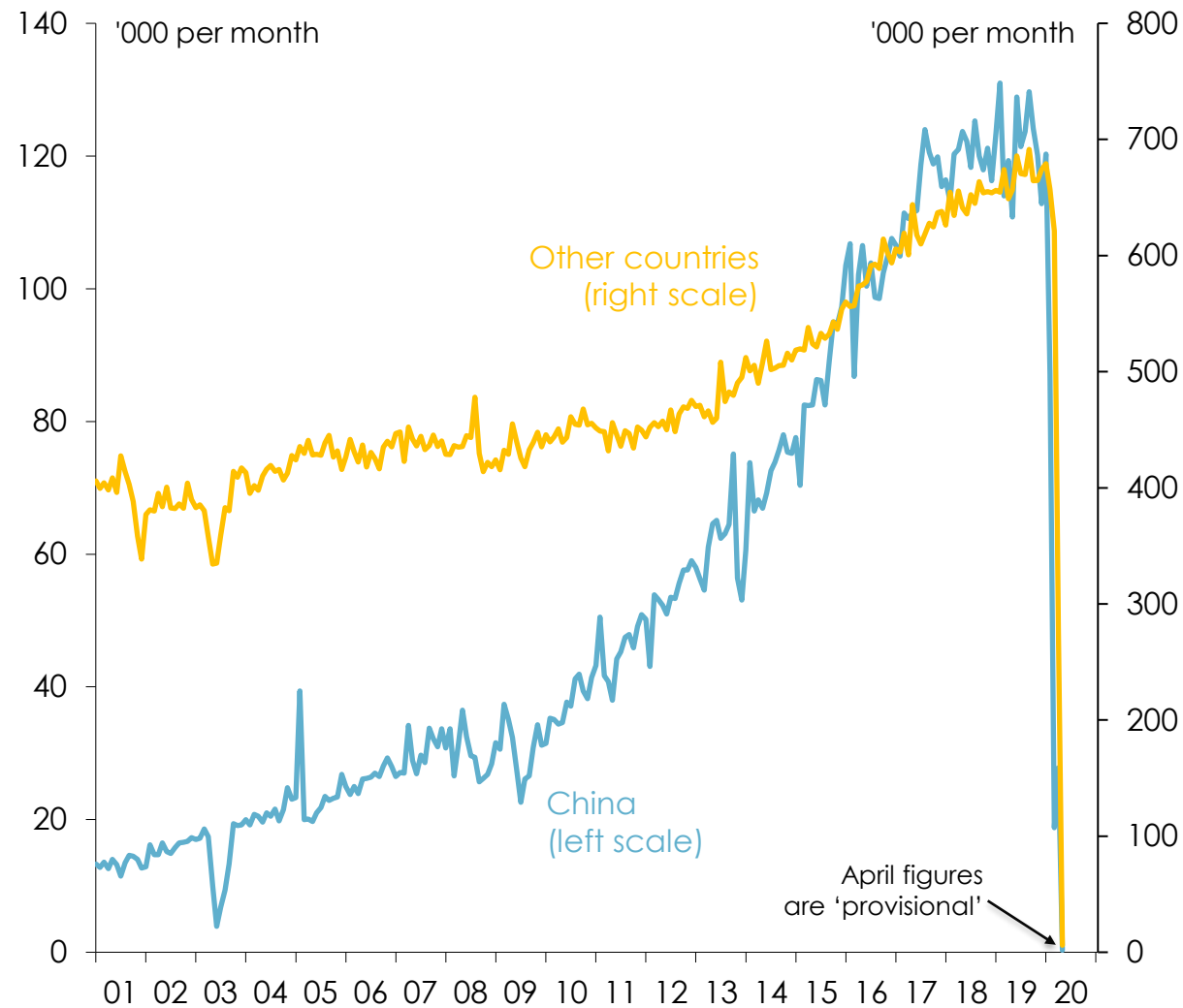
Tourism services trade balance



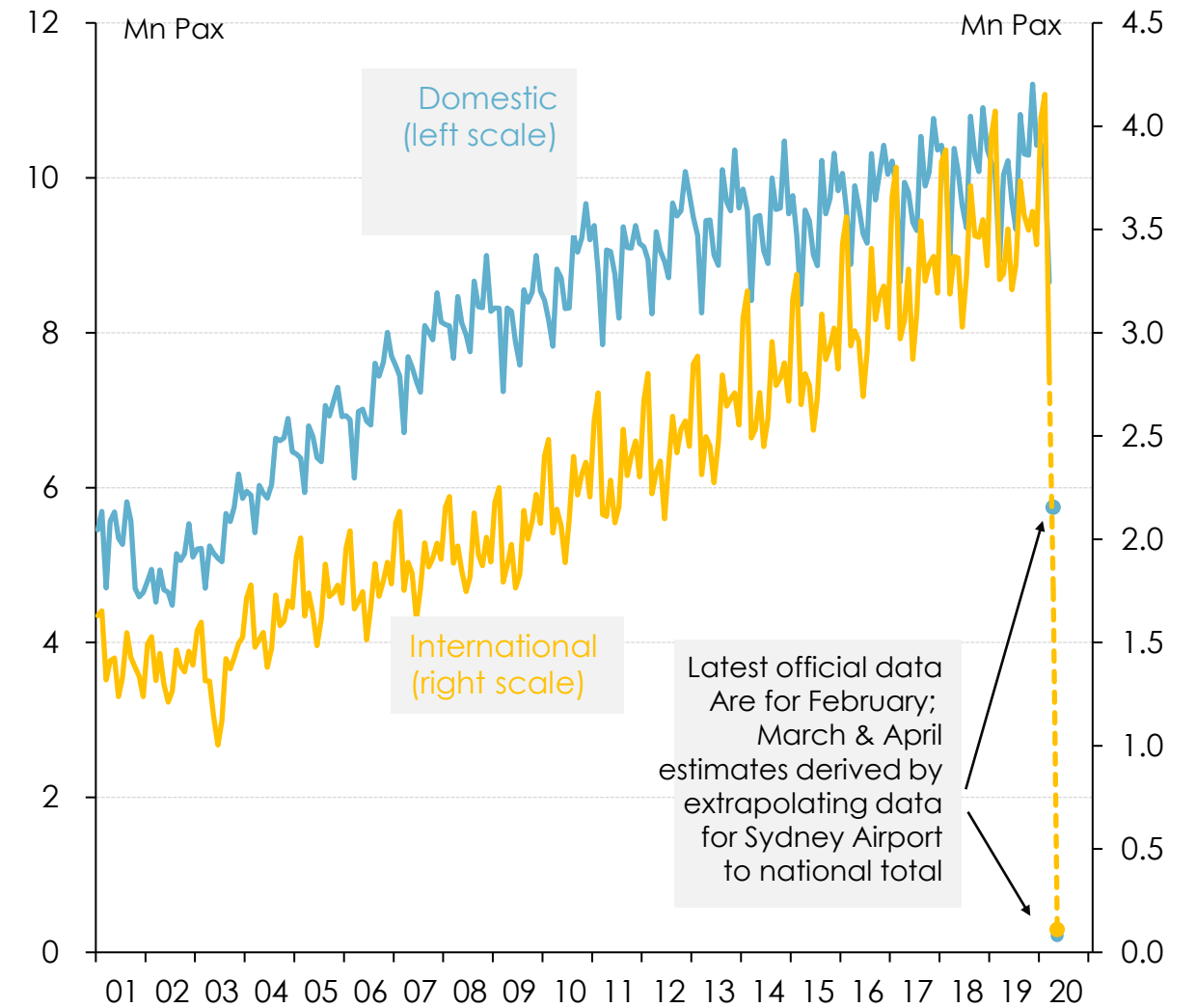
Source: ABS. Data for merchandise trade include preliminary data for April 2020.

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

Short-term visitor arrivals

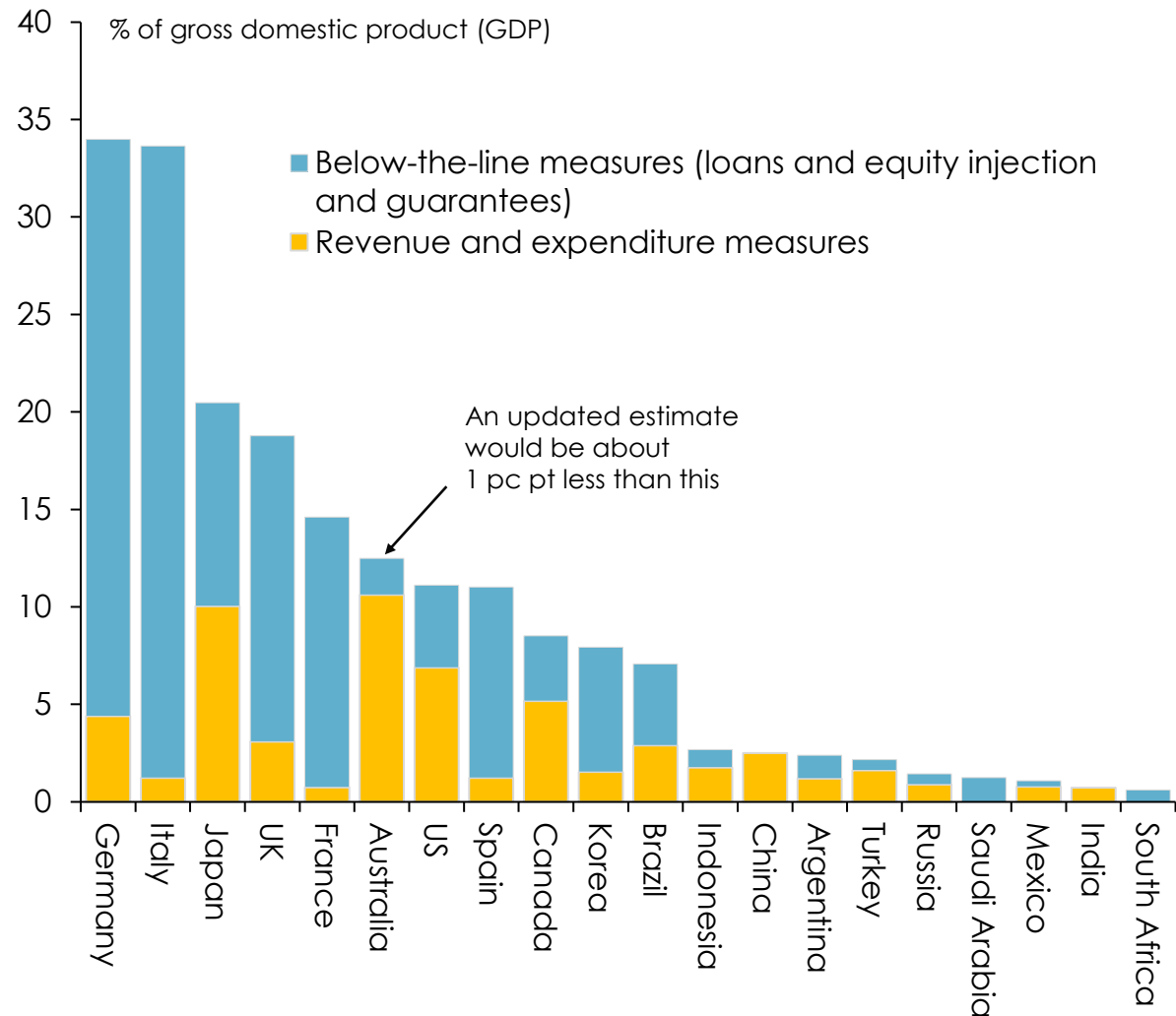


Airport passenger movements



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

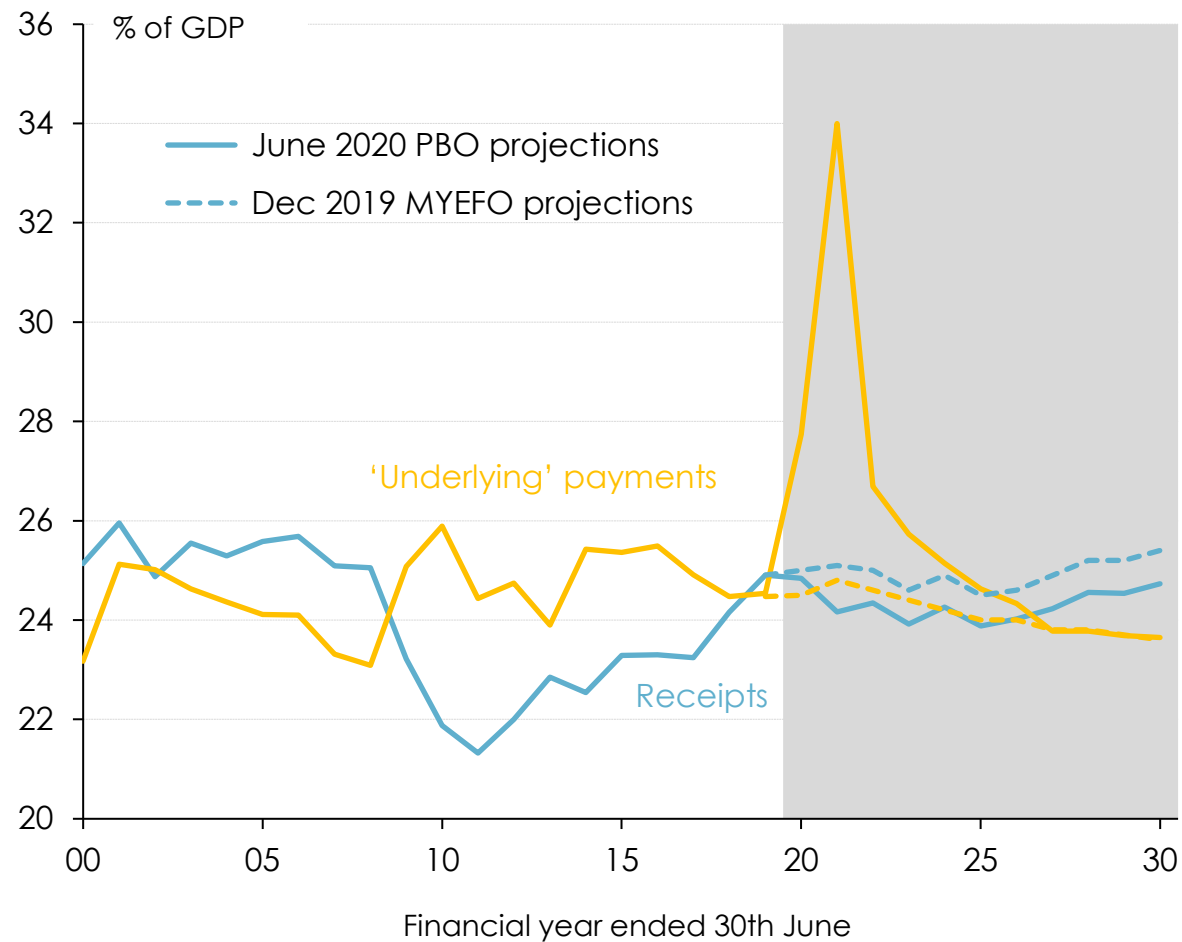
Policy responses to Covid-19 – G20 countries



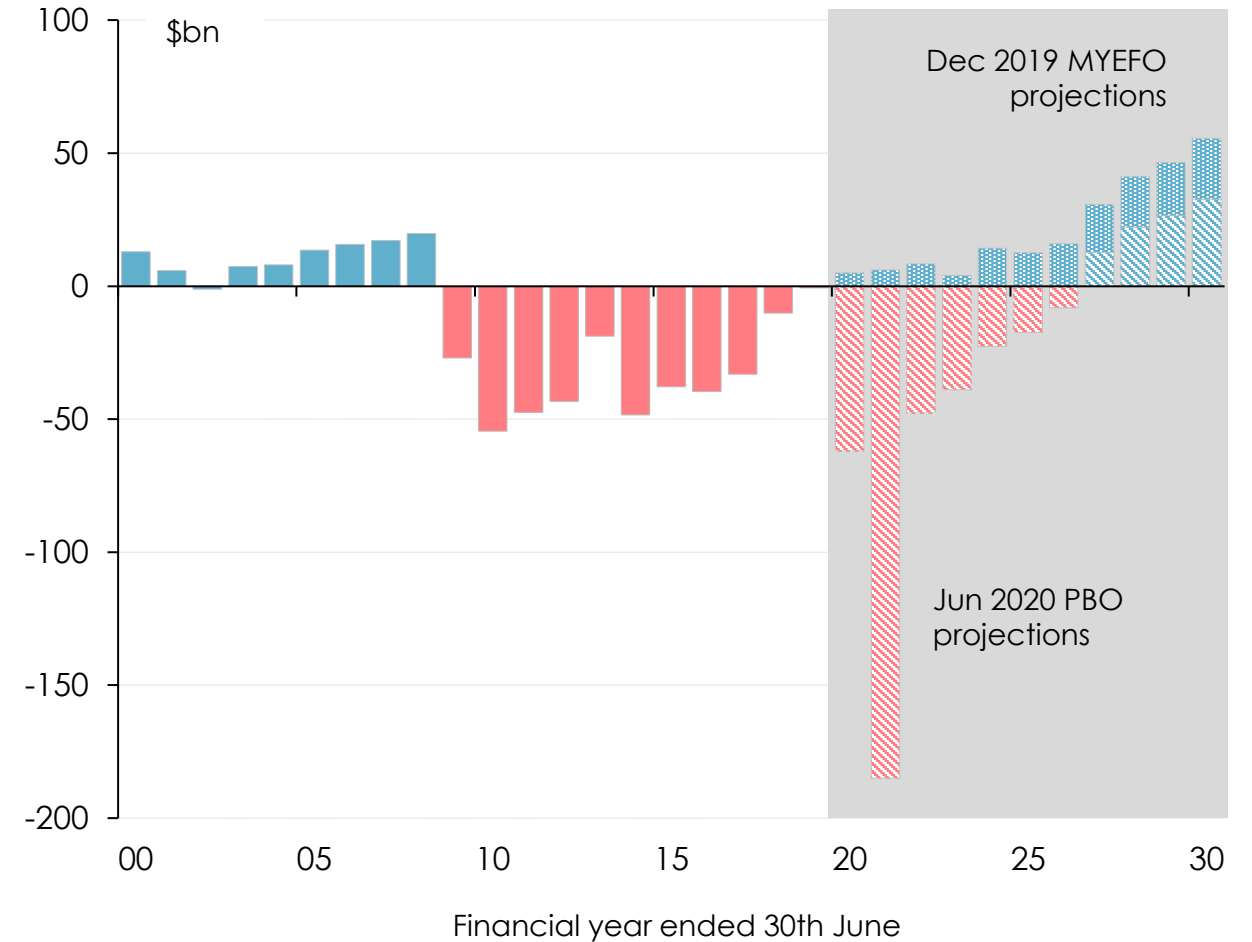
- ❑ Policy measures announced thus far by the Australian Government total \$180bn (allowing for the downward revision to the cost of JobKeeper), or about 9% of GDP – which is large by international standards (and double what was done during the GFC)
- ❑ Principal objectives of policy measures are to –
 - 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 deficit will blow out to over \$60bn in 2019-20, around \$185bn in 2020-21, and won't return to surplus until 2026-27 – but ...

Australian Government receipts and 'underlying' payments



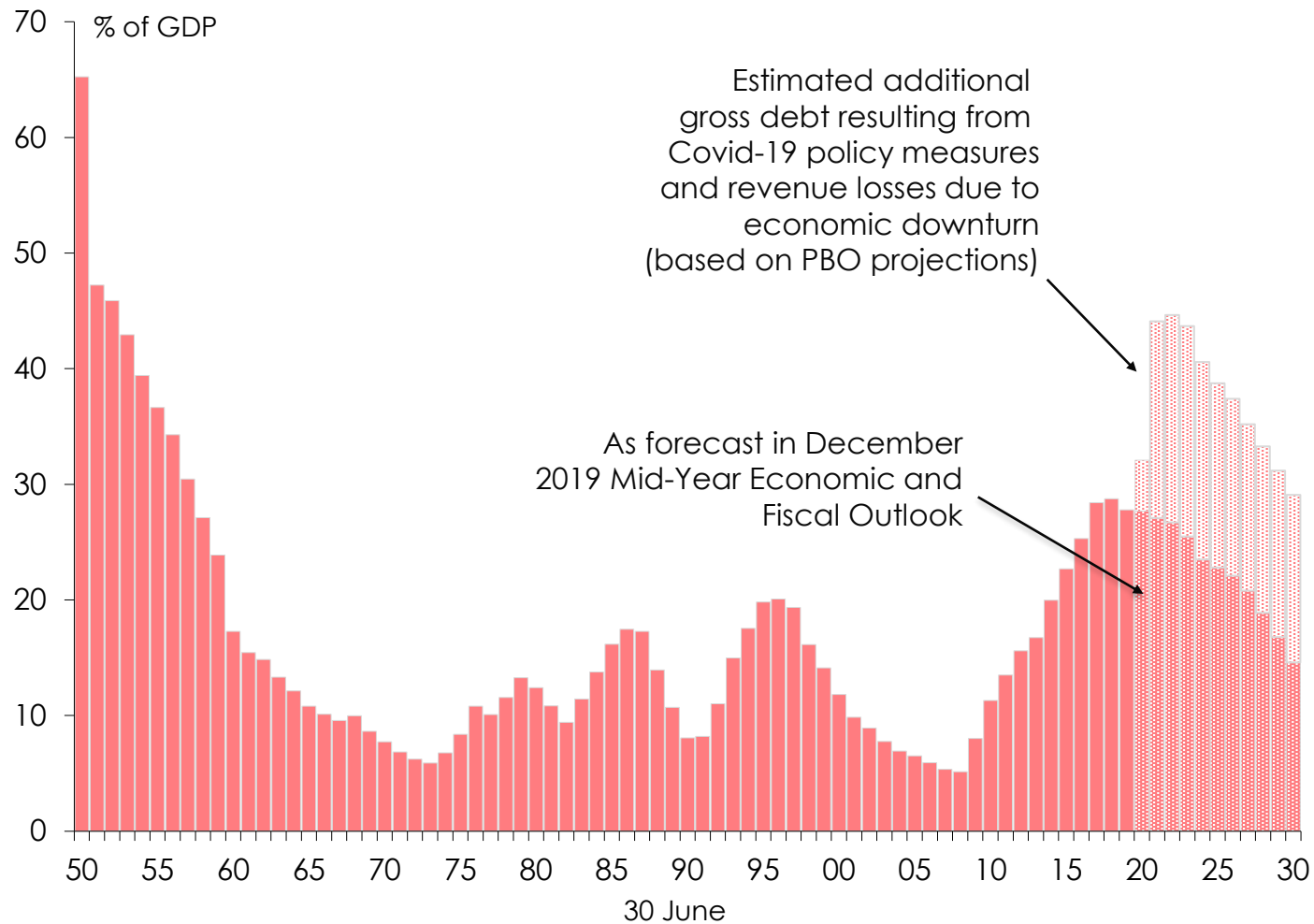
Australian Government 'underlying' cash balance



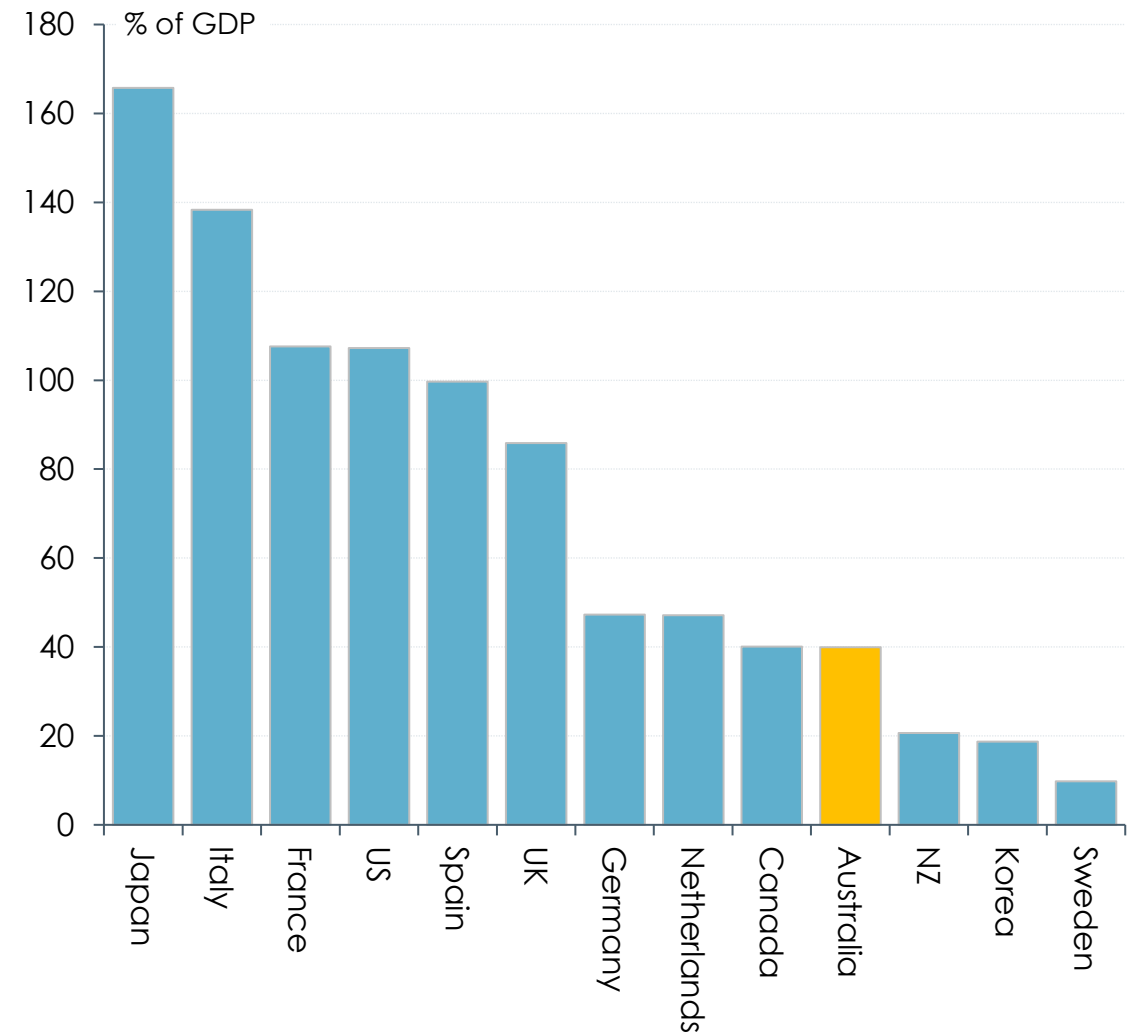
Note: 'Underlying' payments excludes net investment in financial assets for policy purposes. The 'underlying' cash balance also excludes net earnings of the Future Fund prior to 2020-21. Sources: Australian Government, *Mid-Year Economic and Fiscal Outlook (MYEFO)*, December 2019; Parliamentary Budget Office (PBO), *Medium-term 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



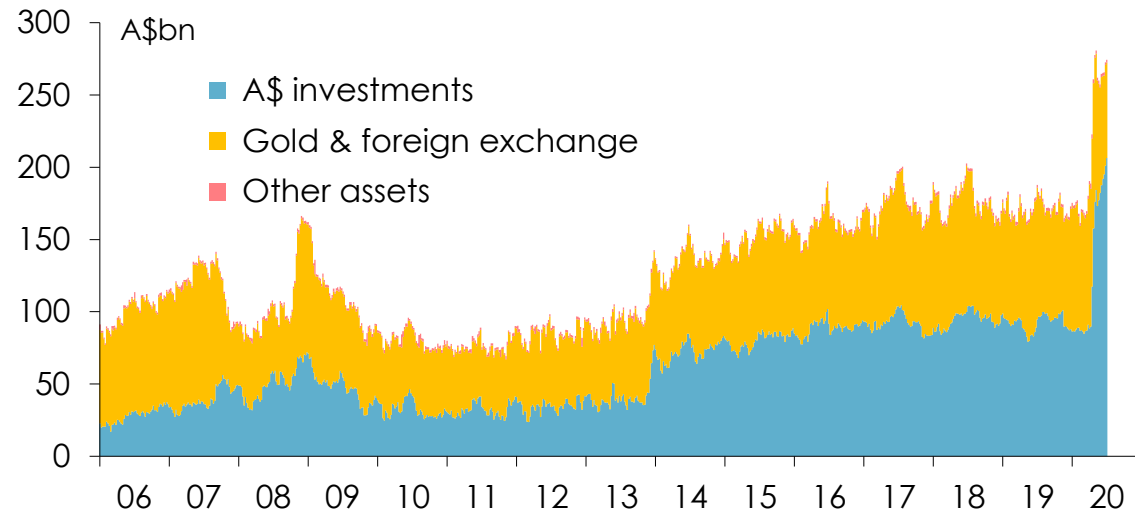
General government net debt, 2021



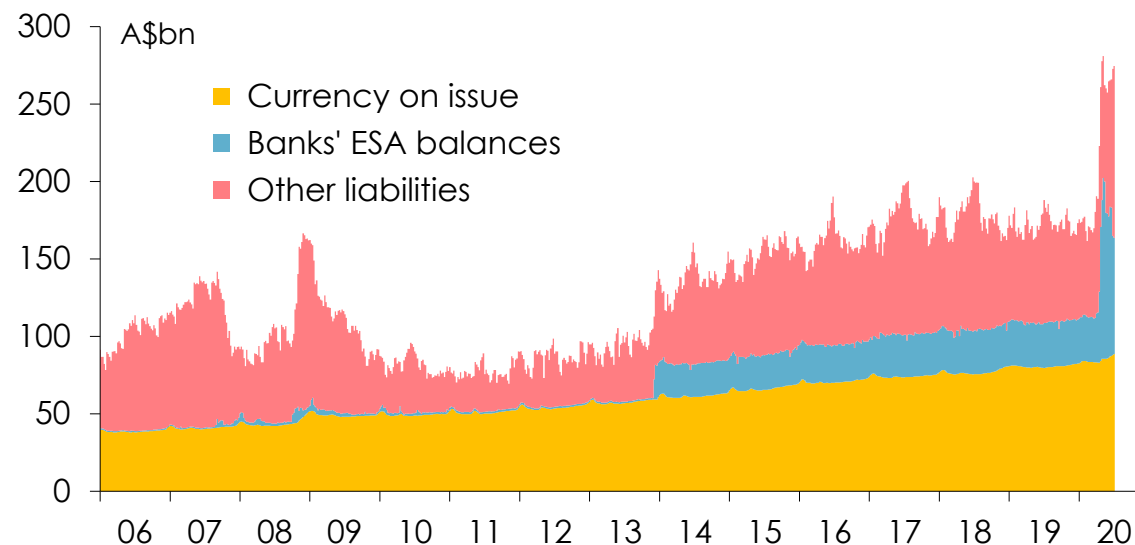
Note: Estimates of additional gross debt from 2019-20 onwards are derived by assuming that gross debt rises by the same dollar amount as net debt projected by the Parliamentary Budget Office in its 'baseline' scenario. Sources: Katrina Di Marco, Mitchell Pirie and Wilson Au-Yeung, *A History of Public 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



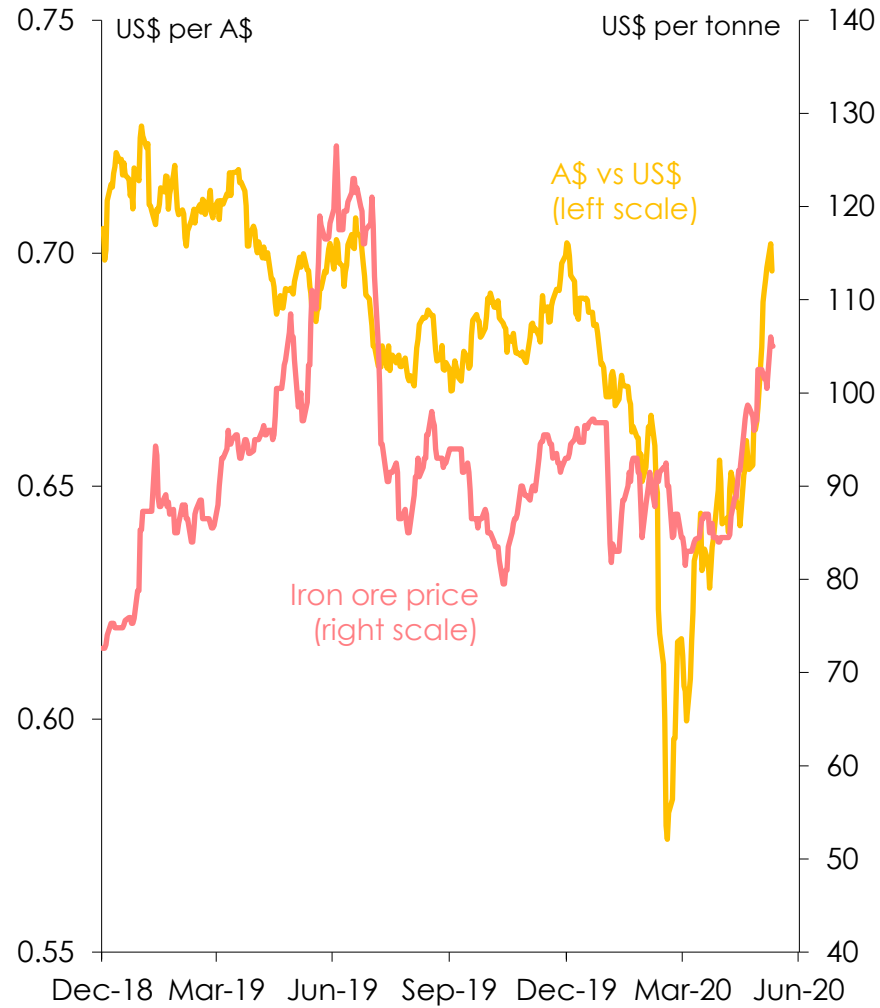
Reserve Bank liabilities



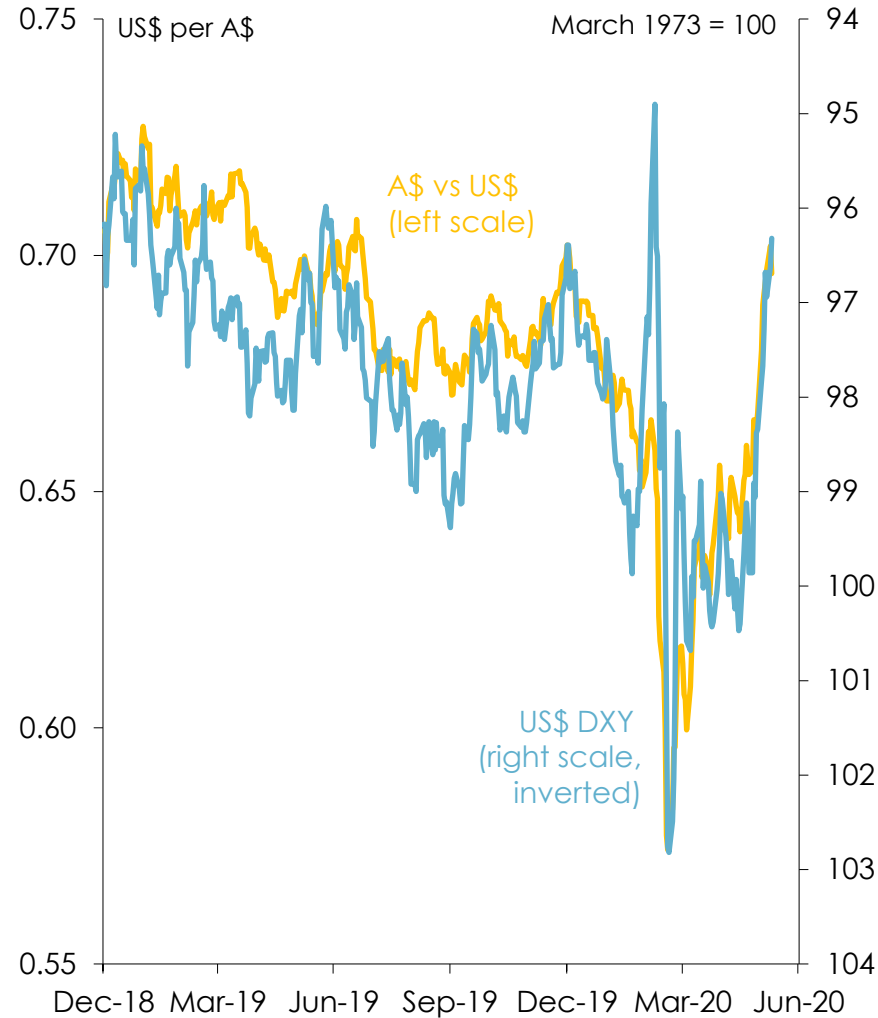
- ❑ Cash rate cut to 0.25% which for practical reasons is the 'lower bound'
 - and RBA has committed to keeping it at this level for an extended period
- ❑ RBA has committed to purchase bonds in the secondary market with a view to keeping the 3-year yield at 0.25%
 - to date the RBA bond purchases amount 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 \$6.3bn 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

Higher iron ore prices, a much weaker US\$ and stronger investor risk appetites have pushed the A\$-US\$ back to almost US70¢

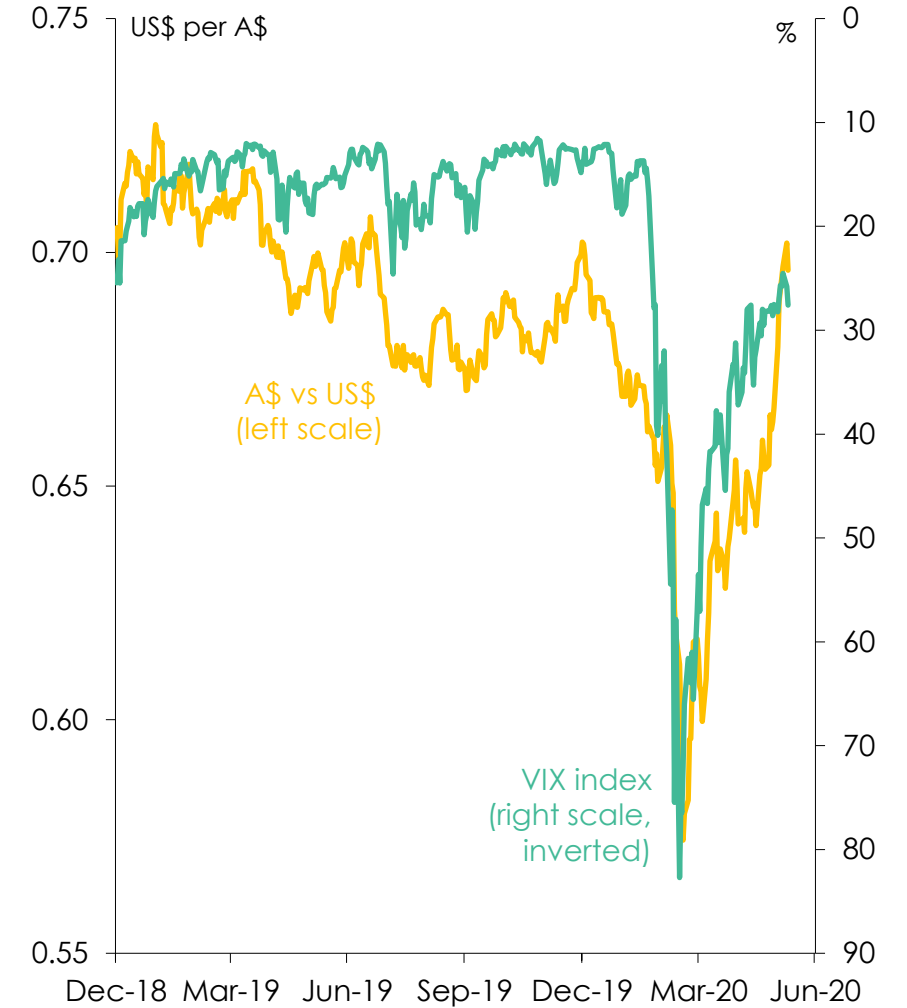
A\$-US\$ and iron ore prices



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



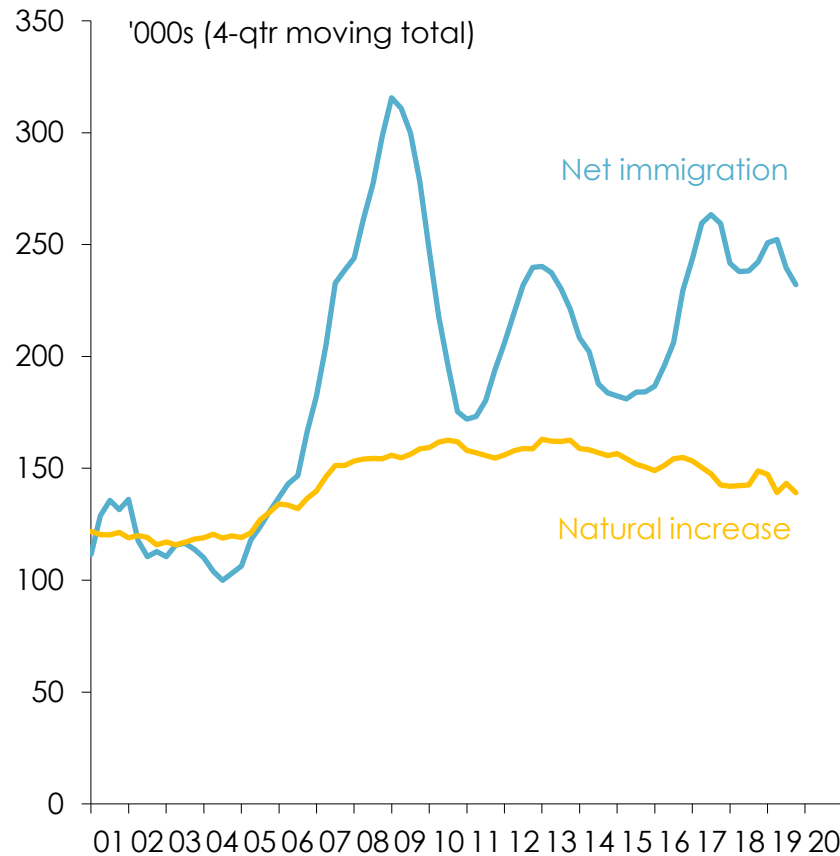
A\$-US\$ and US equity market volatility



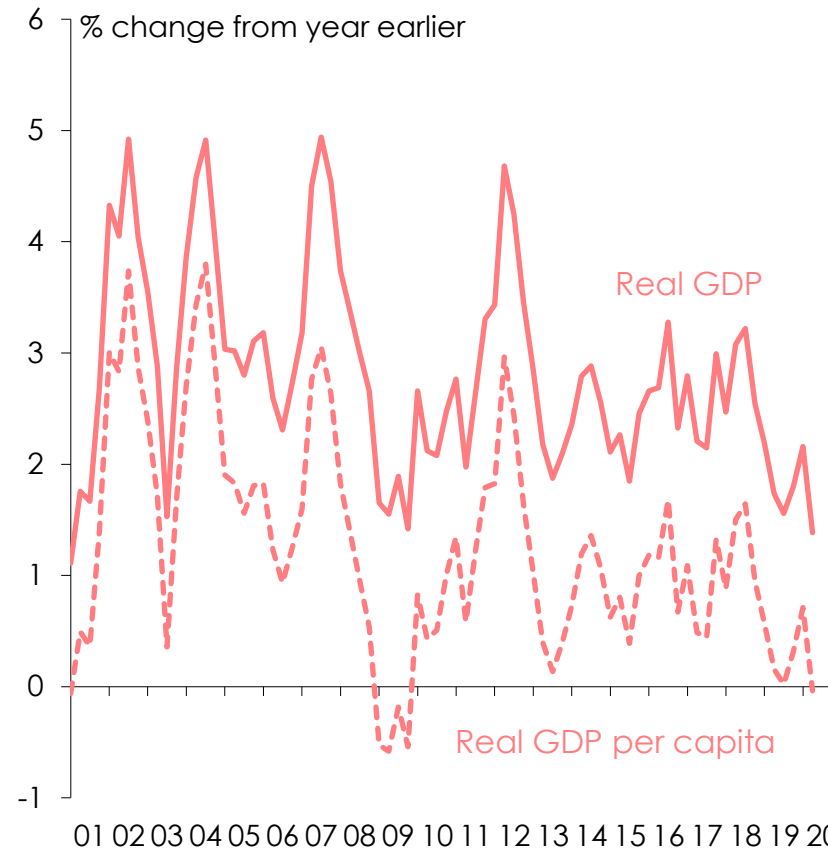
Note: The VIX index is a measure of the implied volatility of S&P500 options, and is widely interpreted as an indicator of investor risk appetite or aversion.
 Source: Refinitiv Datastream. Data up to 9th June.

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

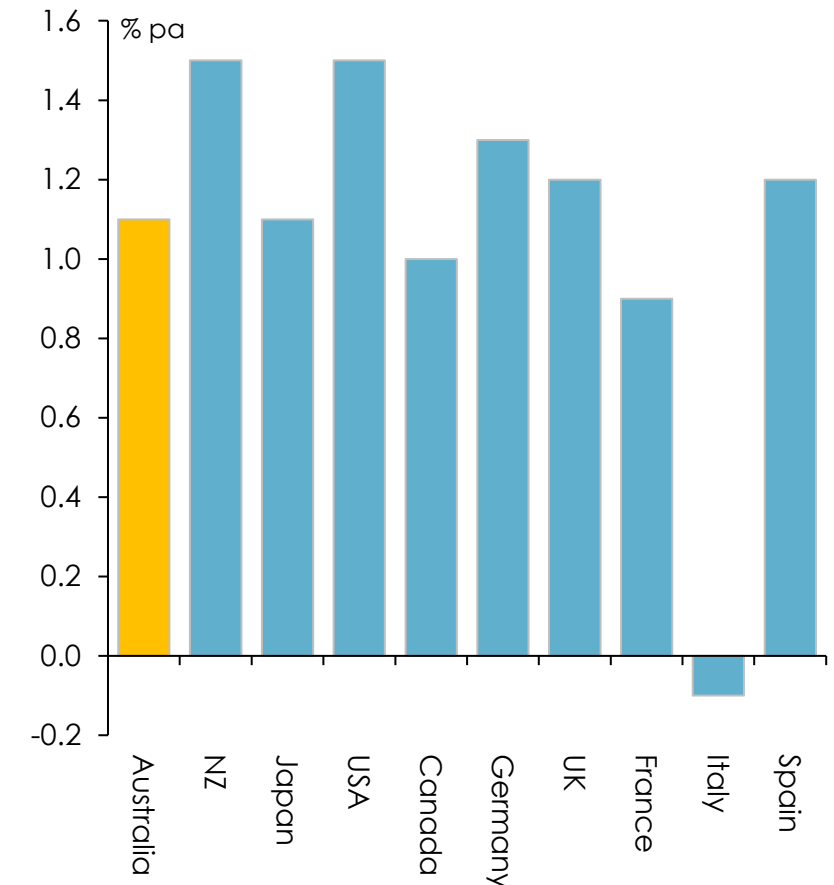
Sources of Australia's population growth



Australian GDP and per capita GDP growth



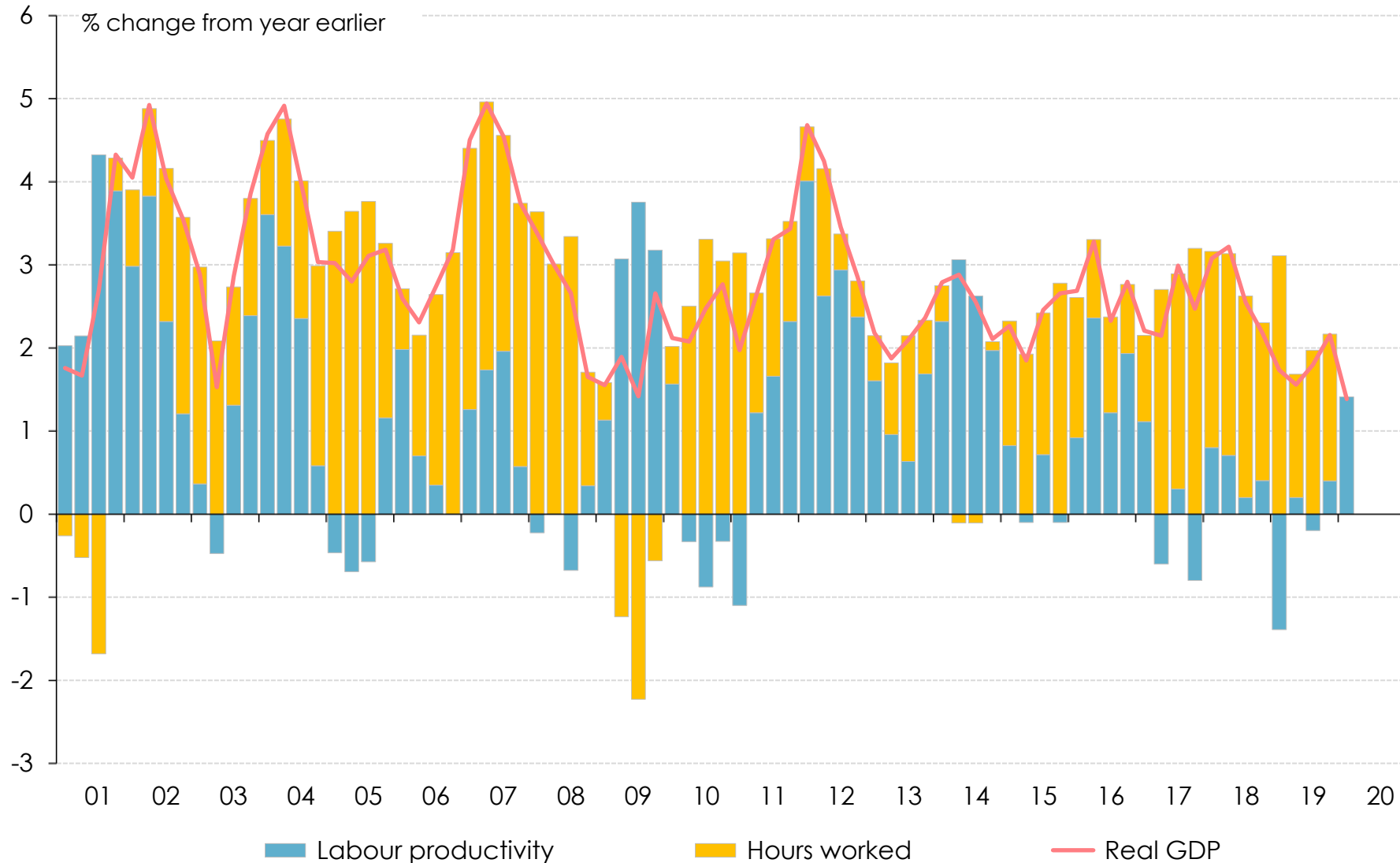
Real per capita GDP growth, 2010-2019



□ 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

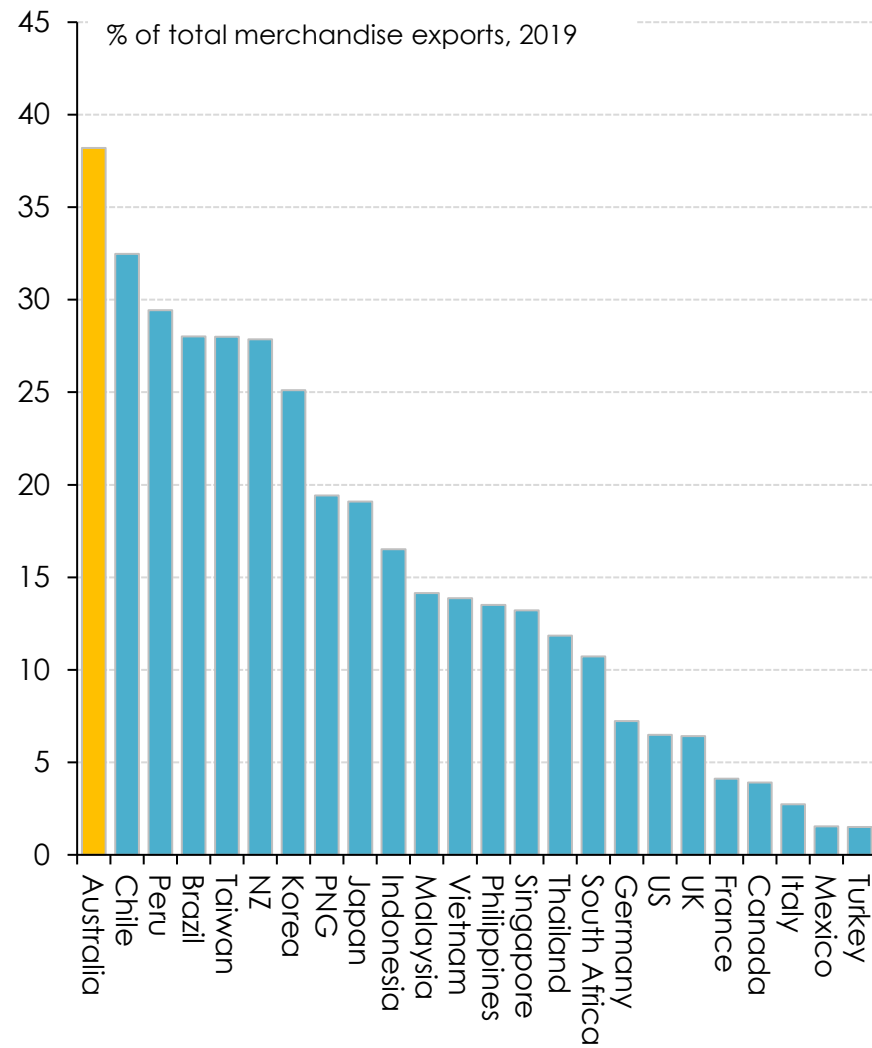
Labour input and labour productivity contributions to Australian real GDP growth



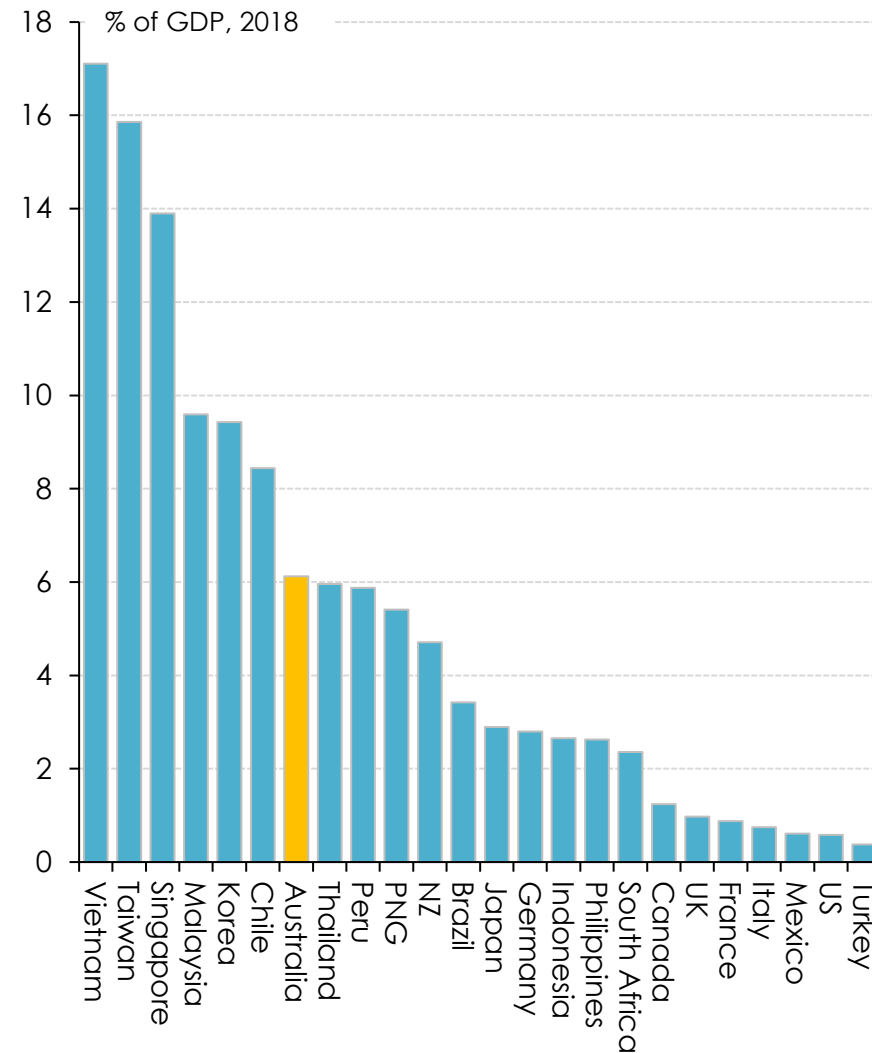
- ❑ Over the past five years, 72% of Australia's real GDP growth has come from increased labour input, and only 28% from labour productivity growth
- ❑ By contrast, between the end of the early 1990s recession and the onset of the global financial crisis, 46% of Australia's real GDP growth came from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

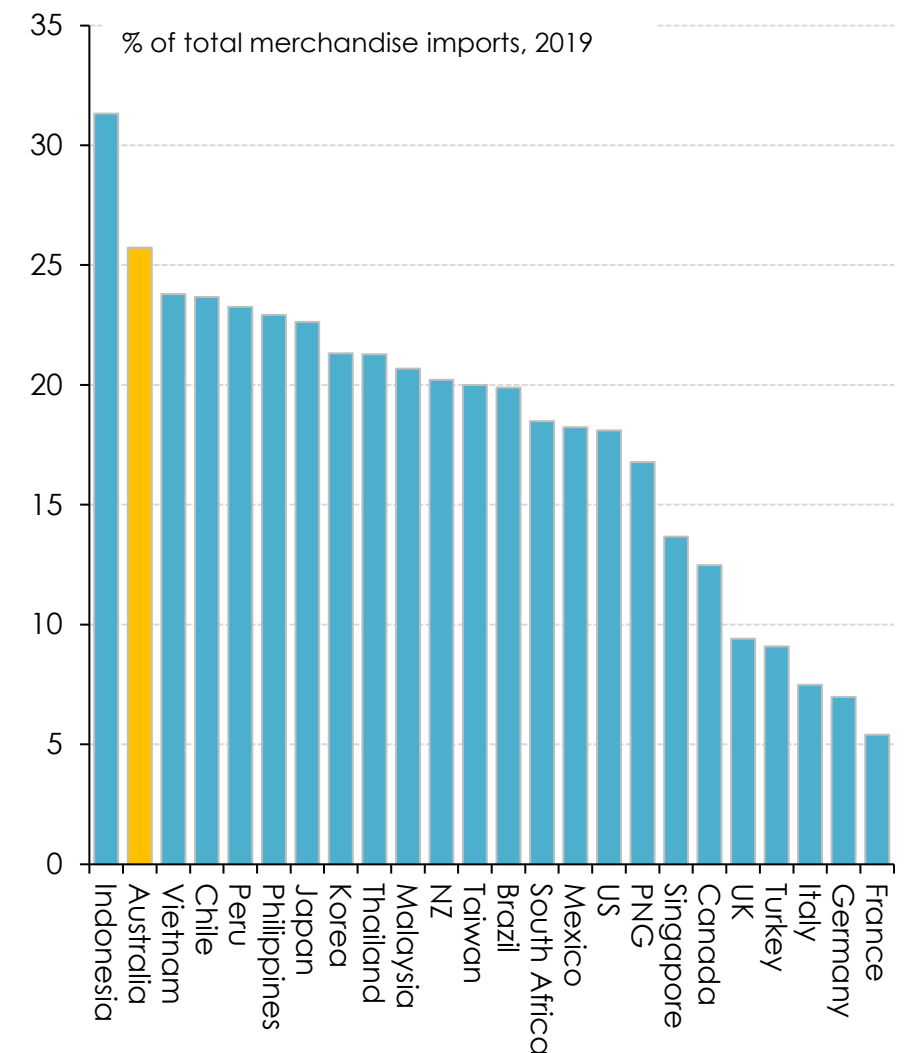
Merchandise exports to China as a pc of total



Merchandise exports to China as a pc of GDP



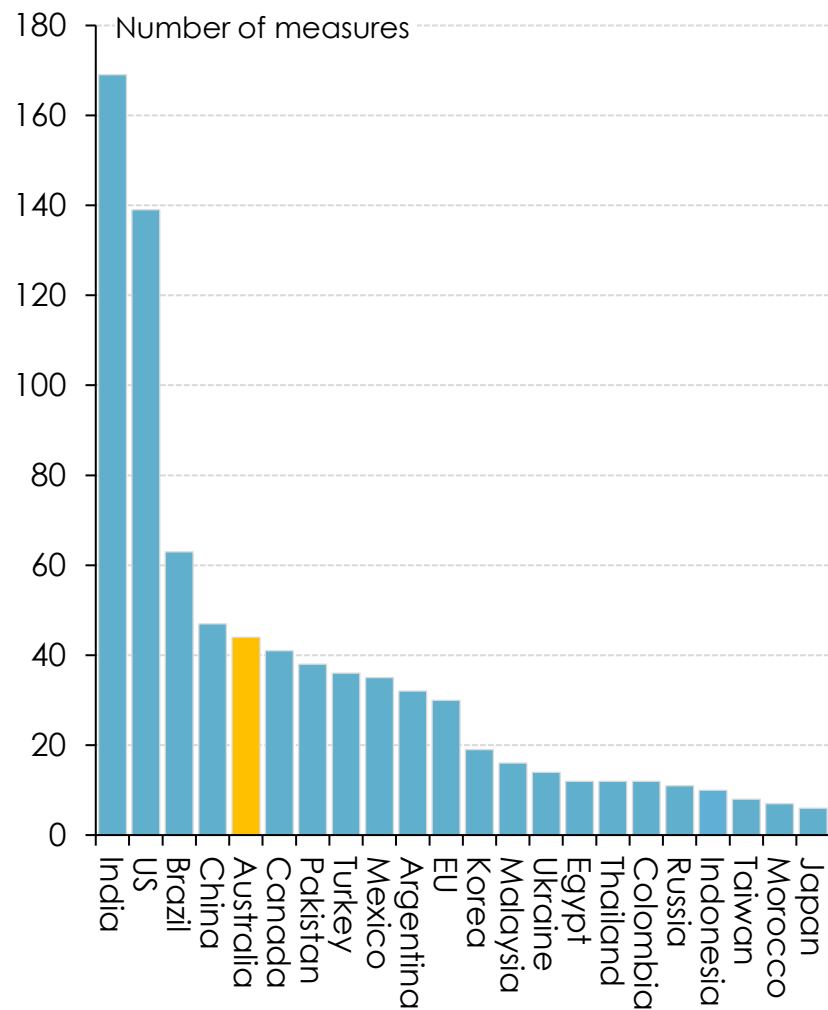
Merchandise imports from China as a pc of total



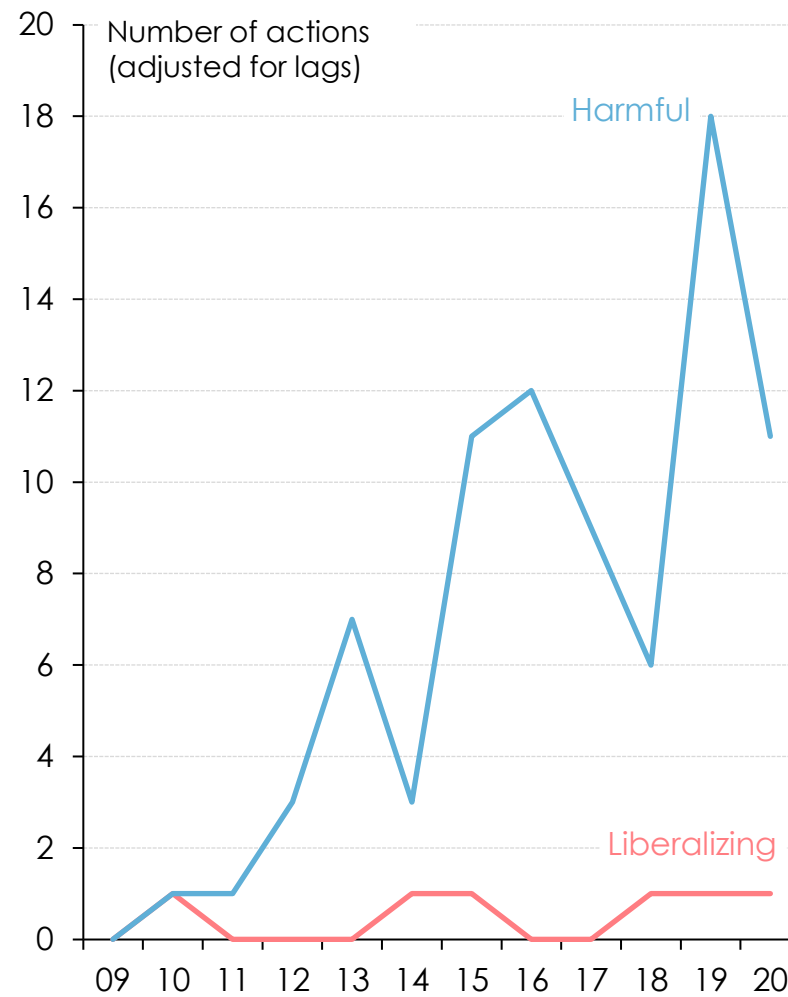
Sources: IMF, Direction of Trade Statistics; Taiwan Ministry of Economic Affairs, Bureau of Foreign Trade.

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

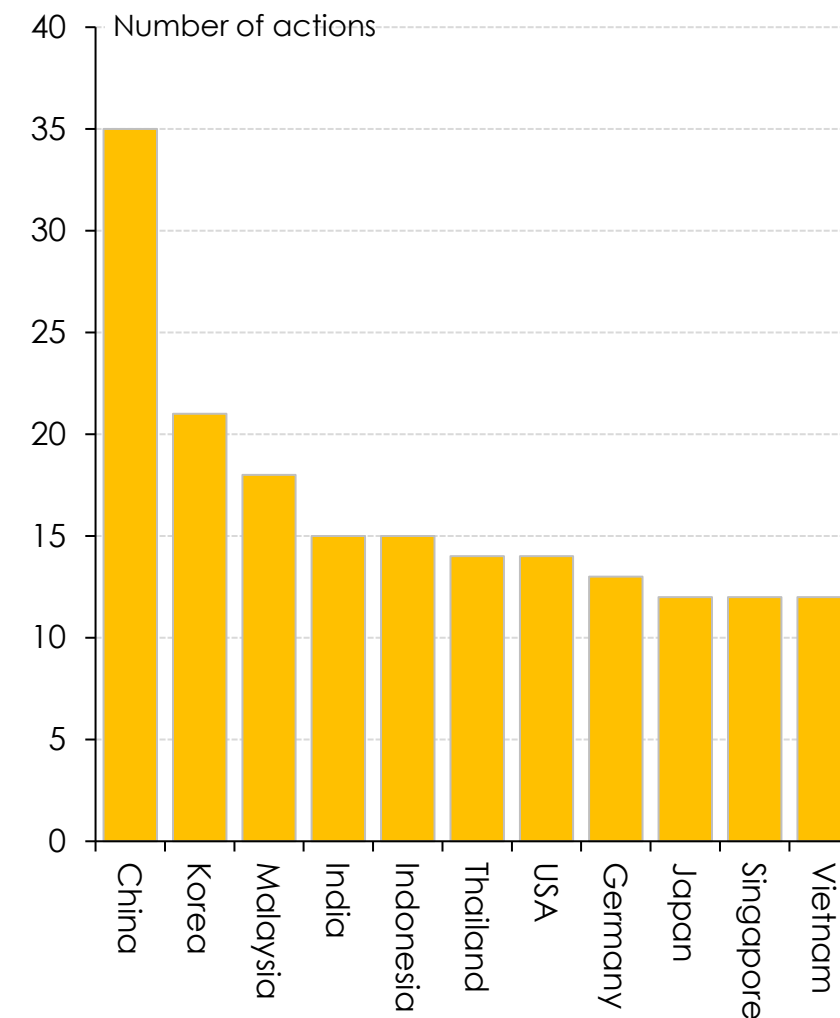
Number of anti-dumping measures imposed, 2015-19



Australian trade policy measures since 2009

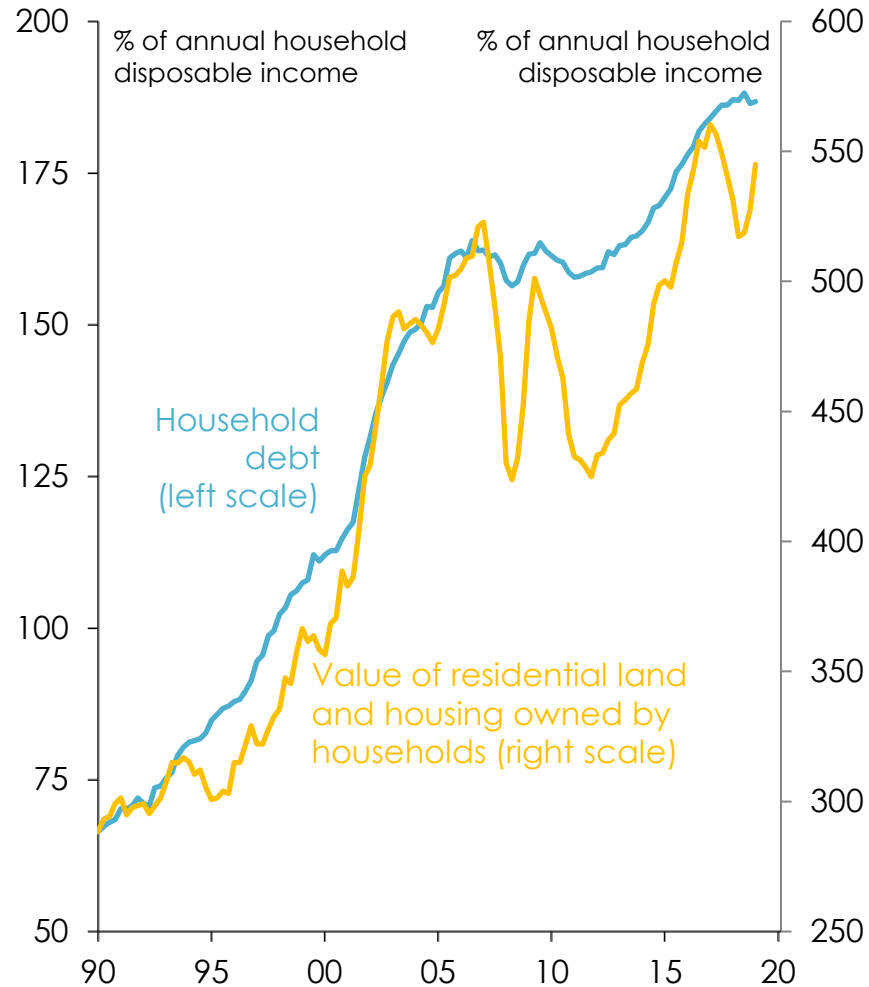


Countries adversely affected by 'harmful' Australian trade actions

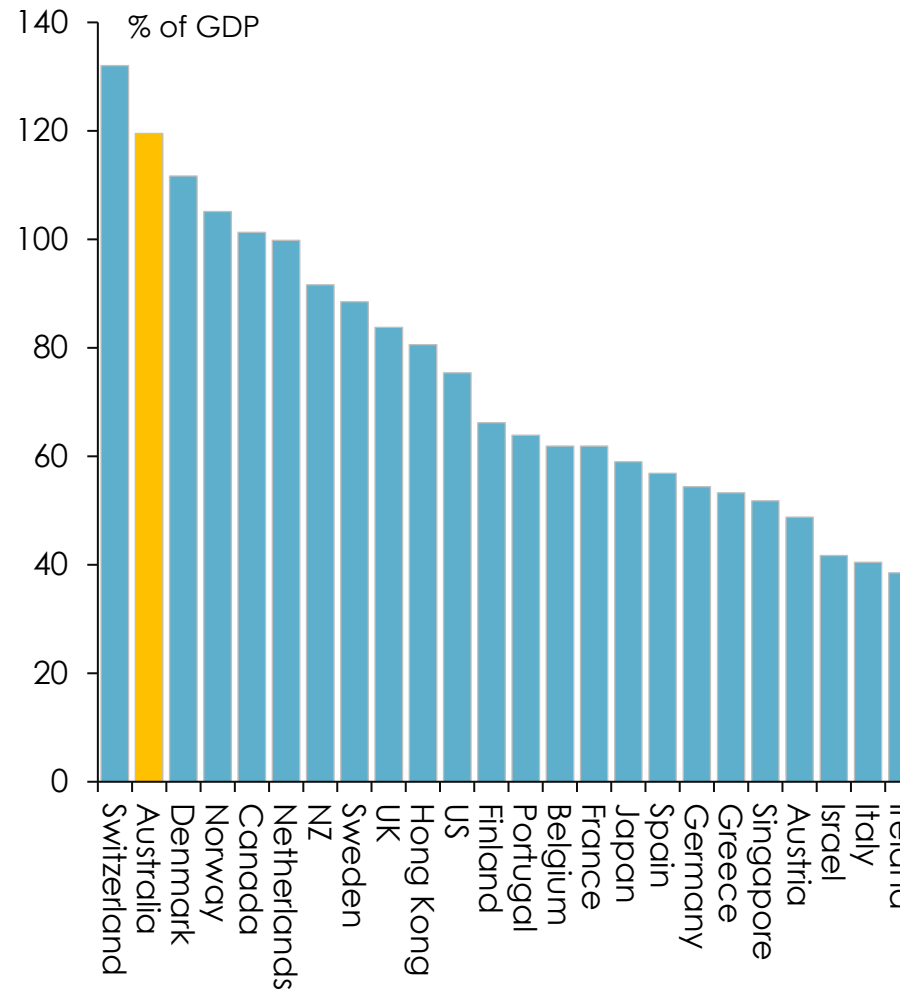


Rising property prices and household debt are unlikely to underpin Australian economic growth as they have done for most of the past 30 years

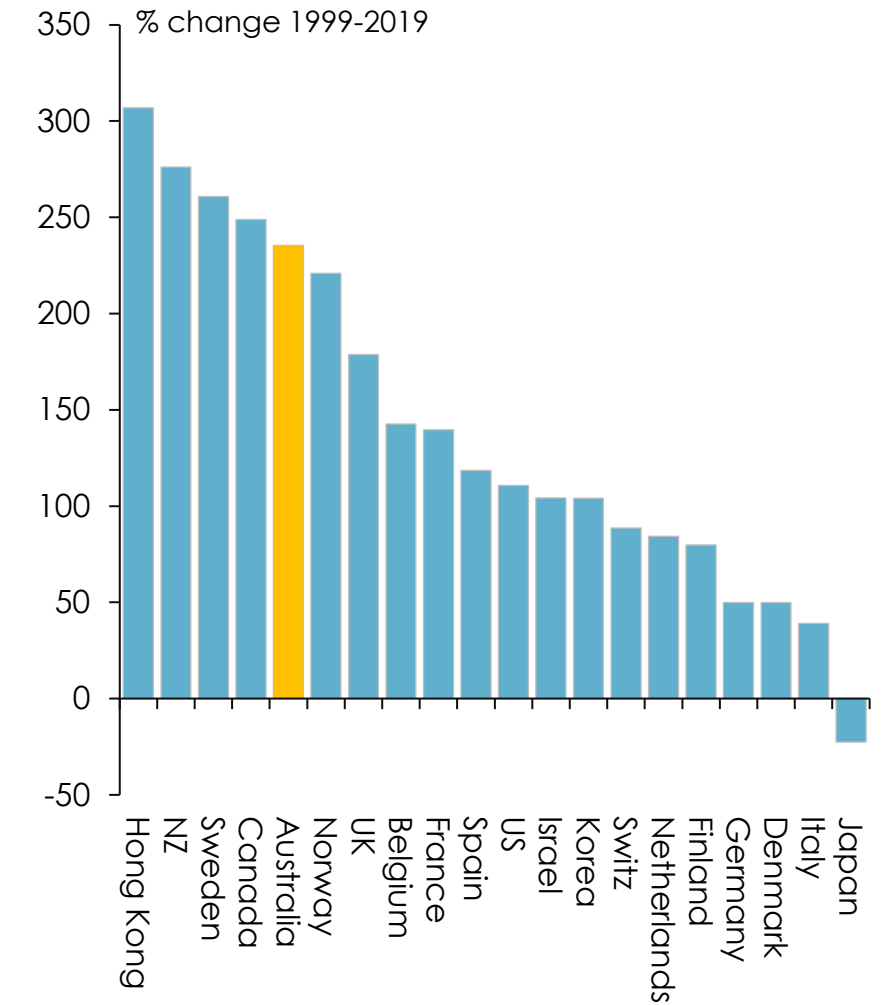
Australian housing wealth and household debt



Household debt as a pc of GDP, December 2019



Increase in residential property prices, 1999-2019

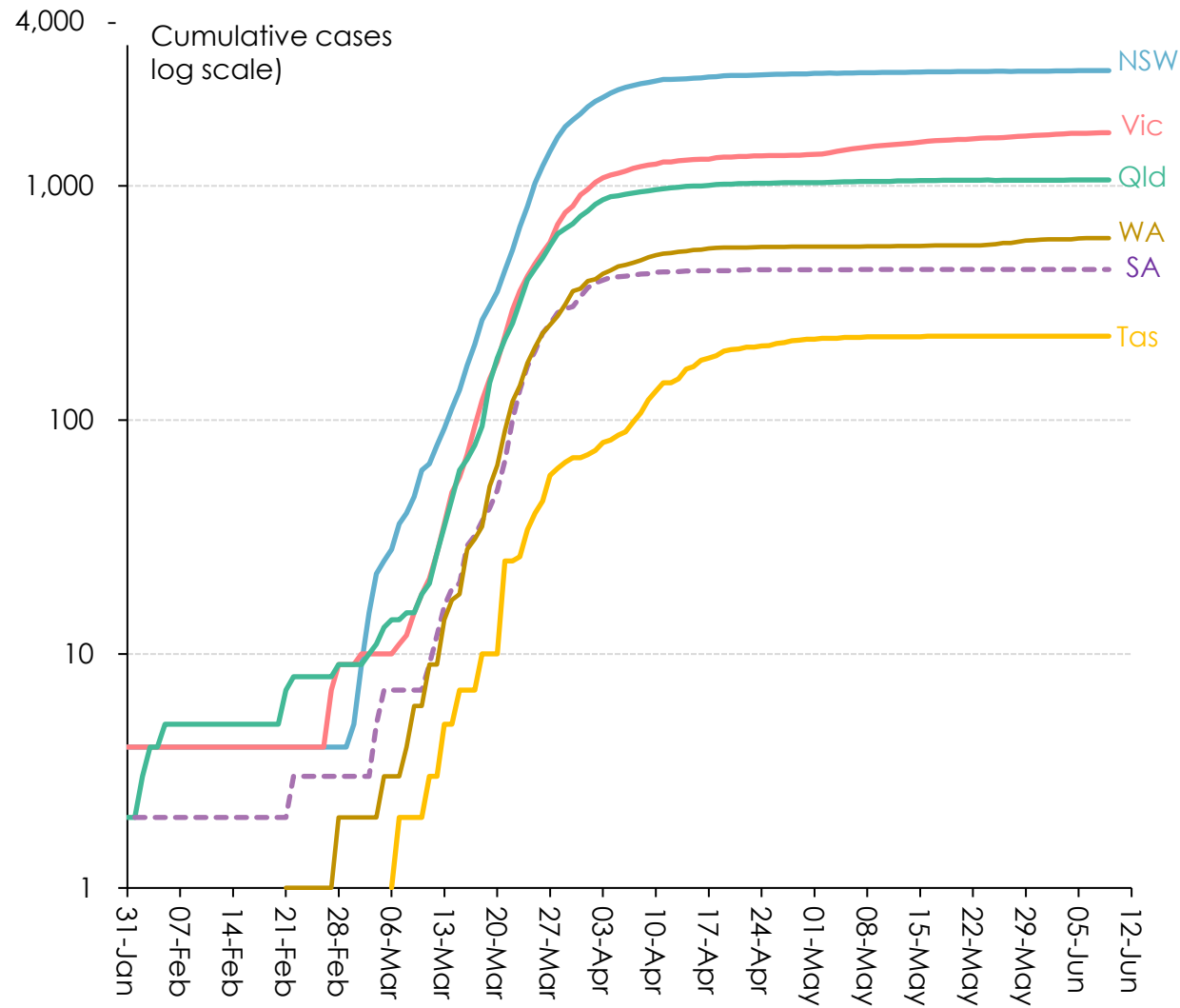


Sources: ABS; Bank for International Settlements.

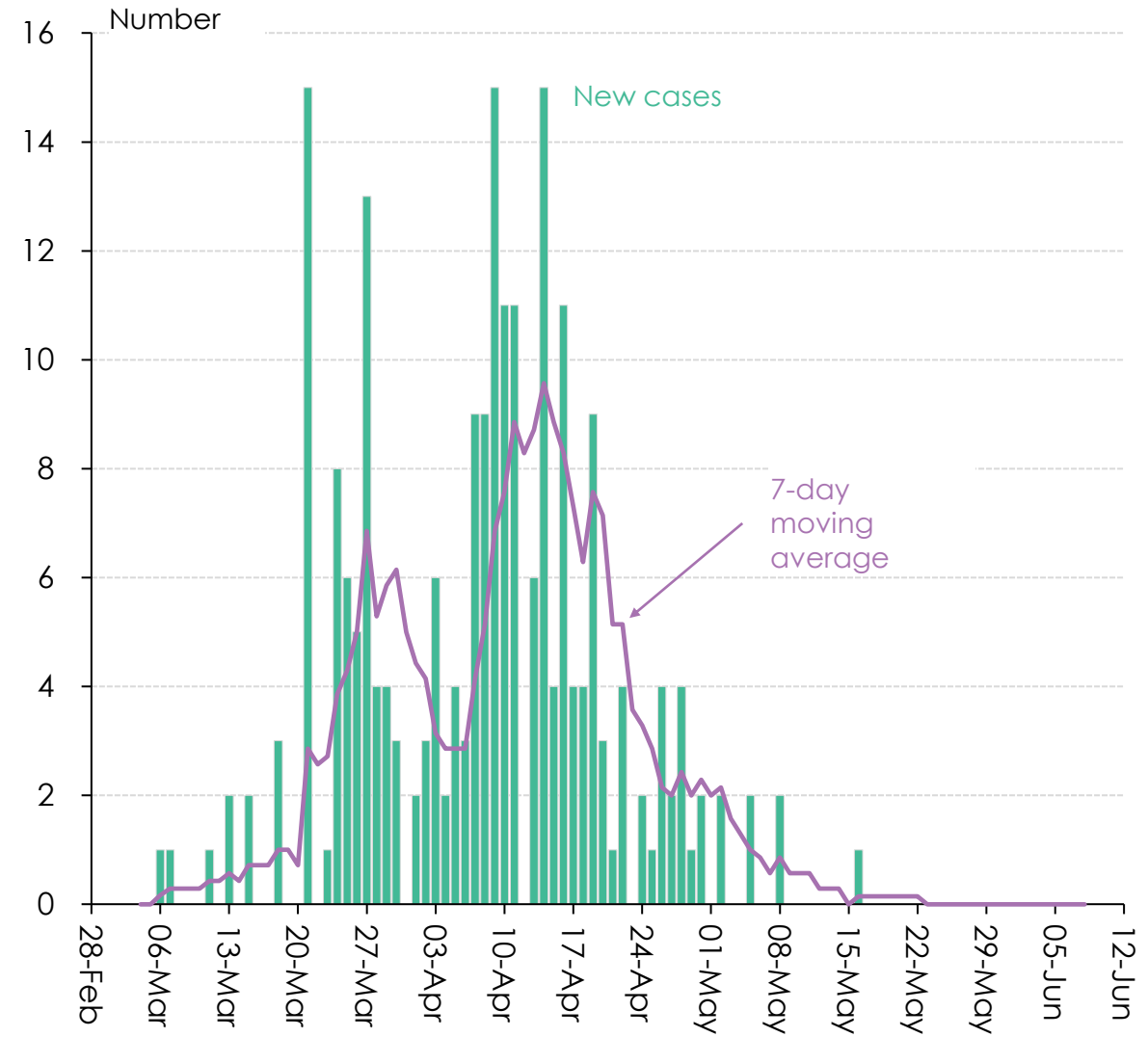
Tasmania

Tasmania, along with other states, seems now to have succeeded in stopping the spread of Covid-19 ...

Cumulative confirmed cases, by State



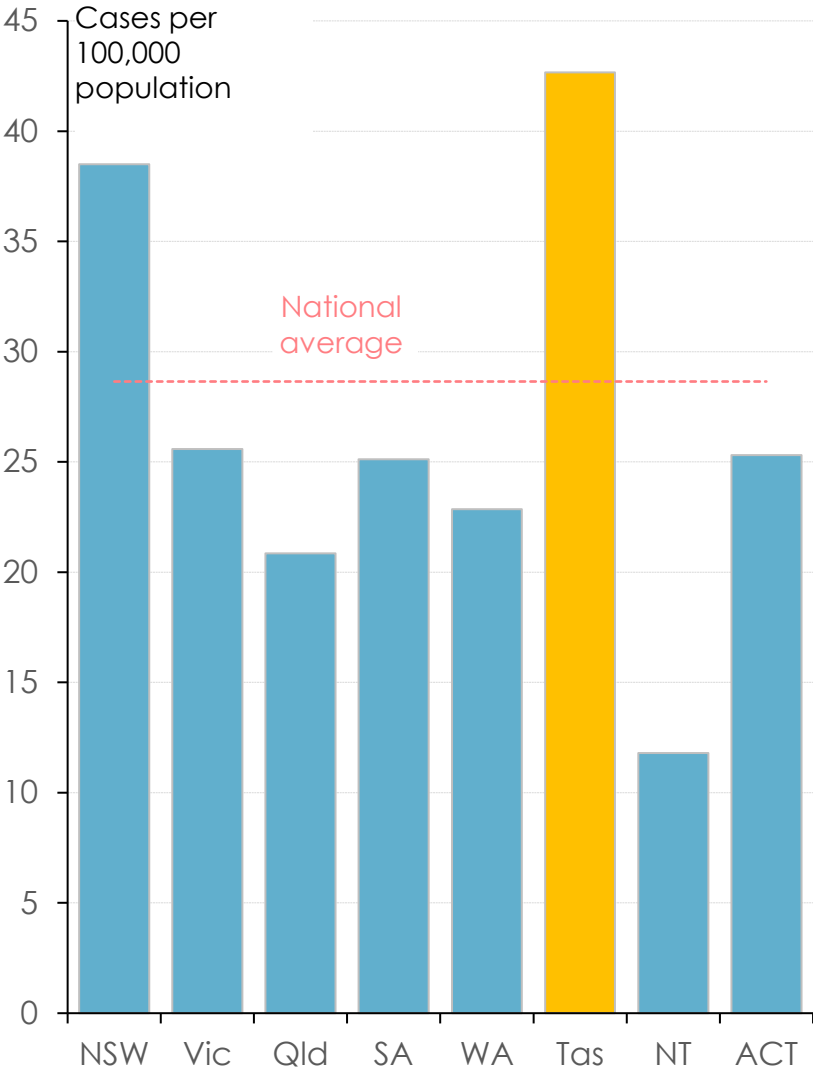
Daily new cases, Tasmania



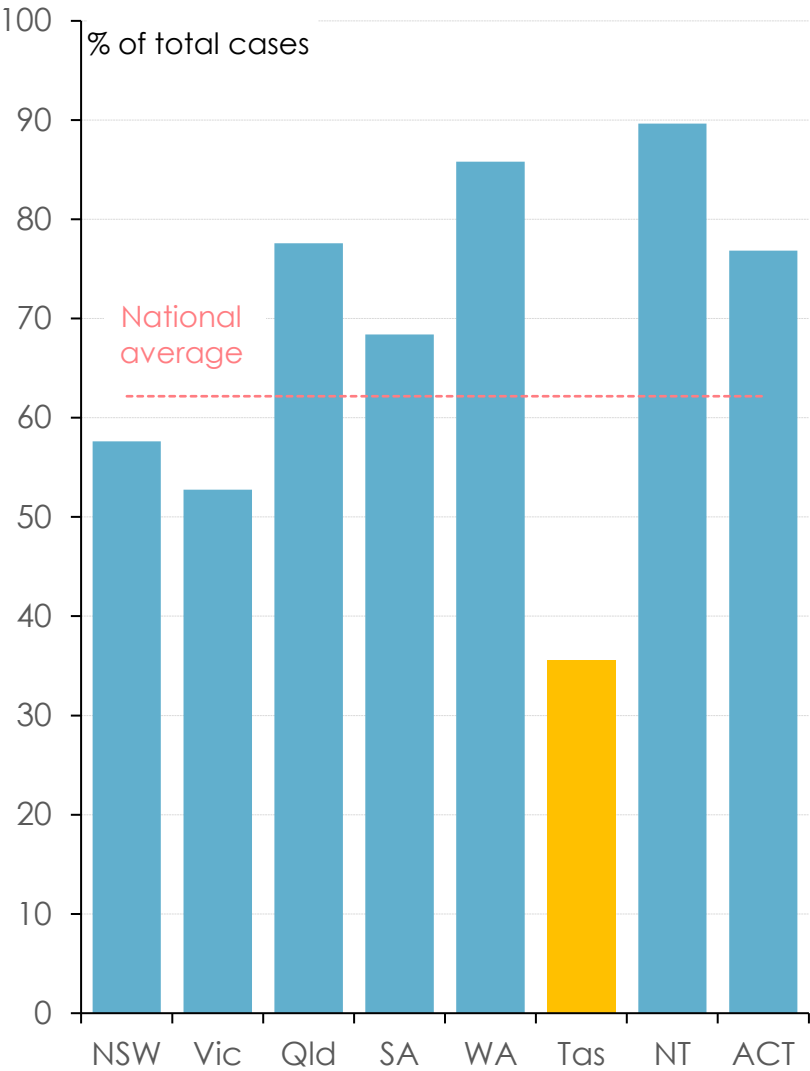
Note: Data up to 9th June. Source: covid19data.com.au.

... but our experience of Covid-19 has been tougher than that of other states and territories

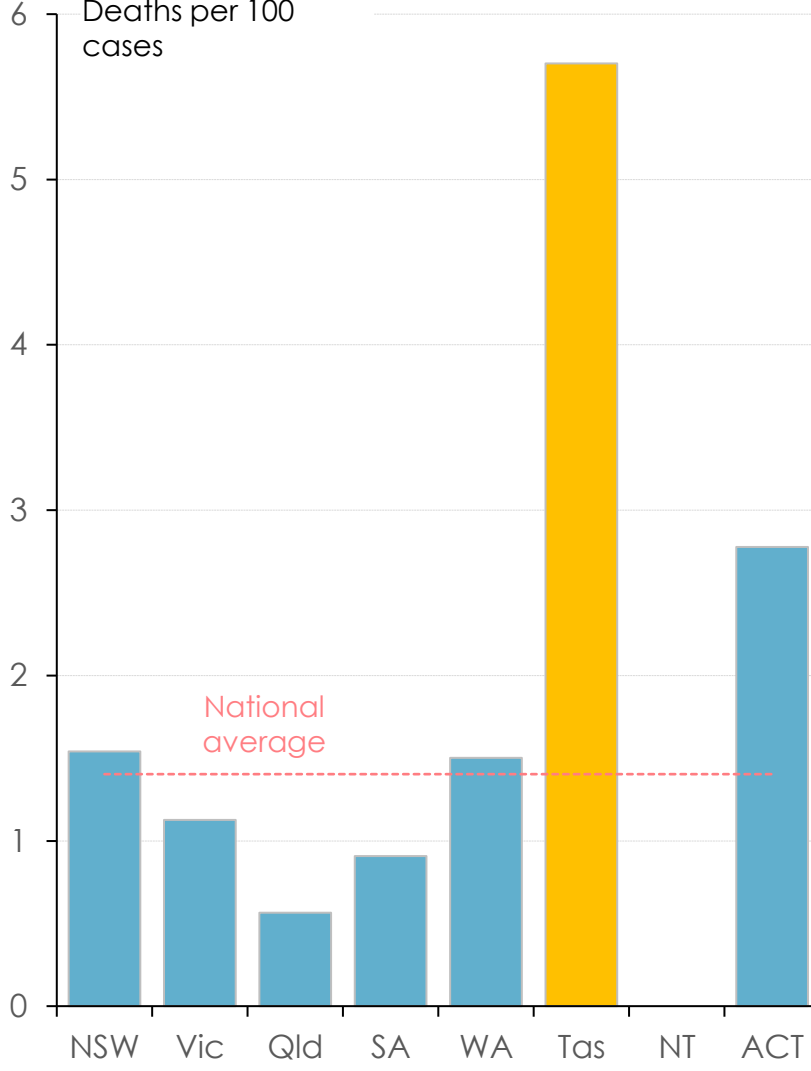
Cases per 100,000 population



Overseas transmissions



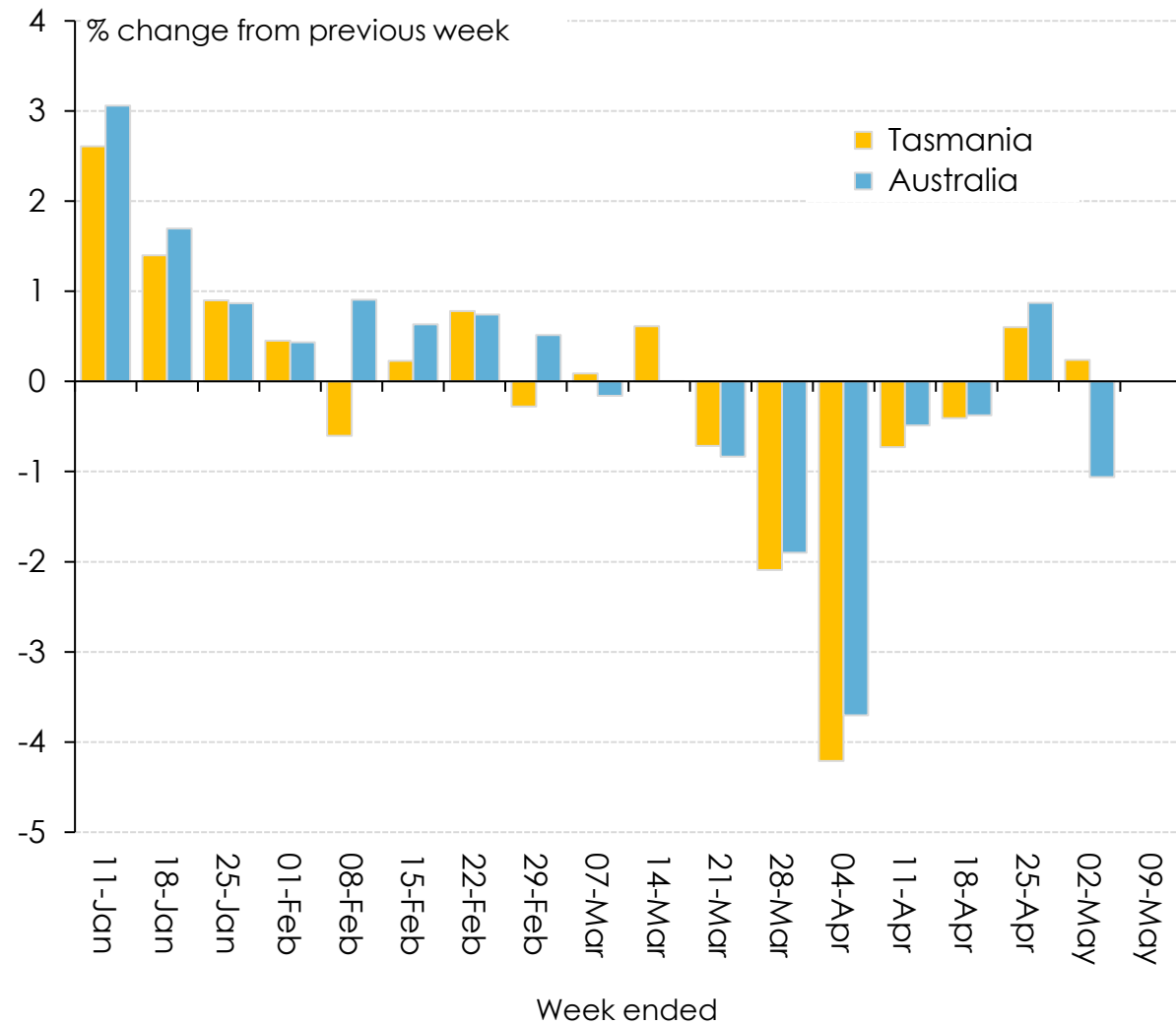
Death rate



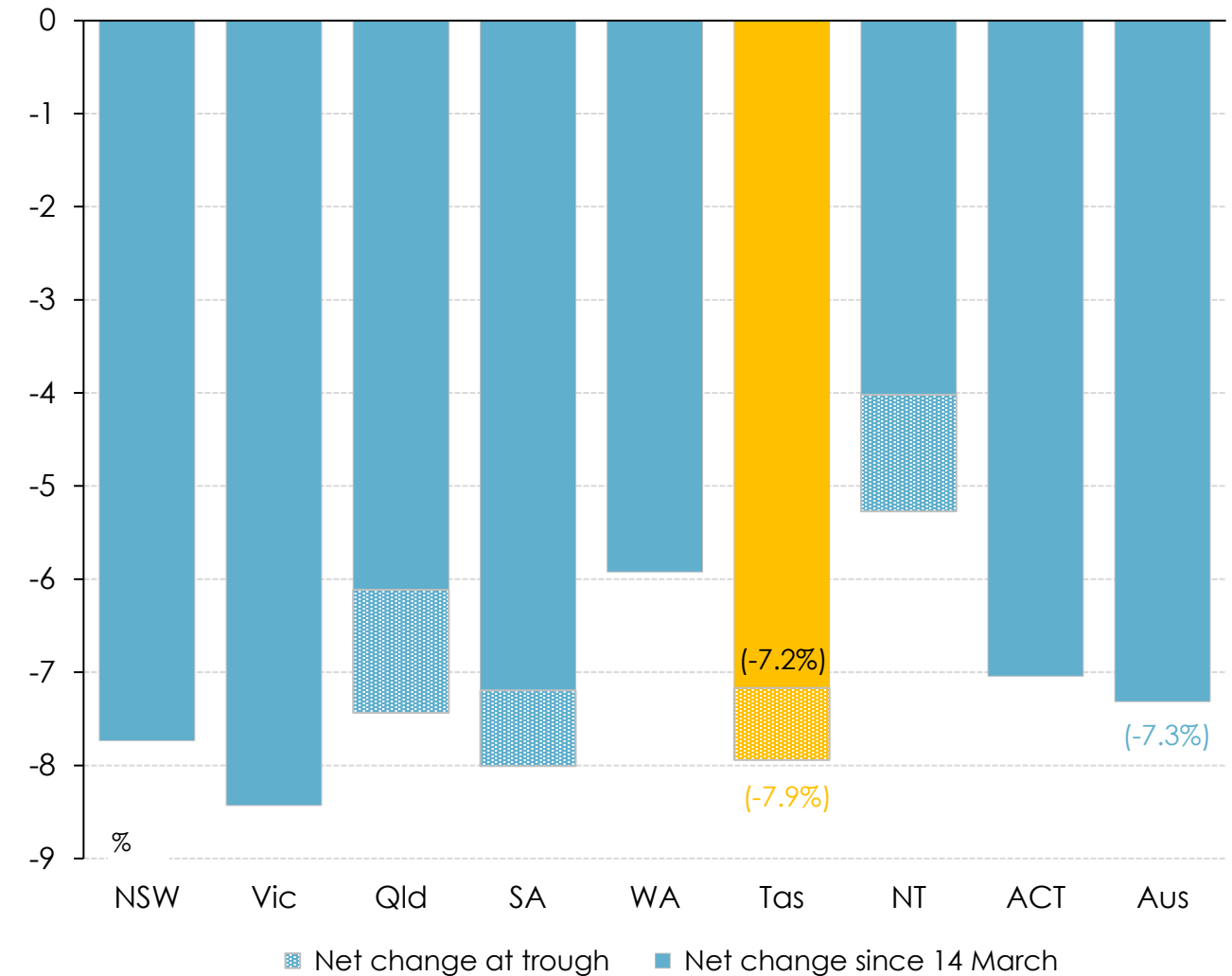
Source: covid19data.com.au. Data up to 9th June.

The ABS' weekly payroll jobs series suggests that employment has been picking up in Tasmania since late April

Weekly change in payroll jobs



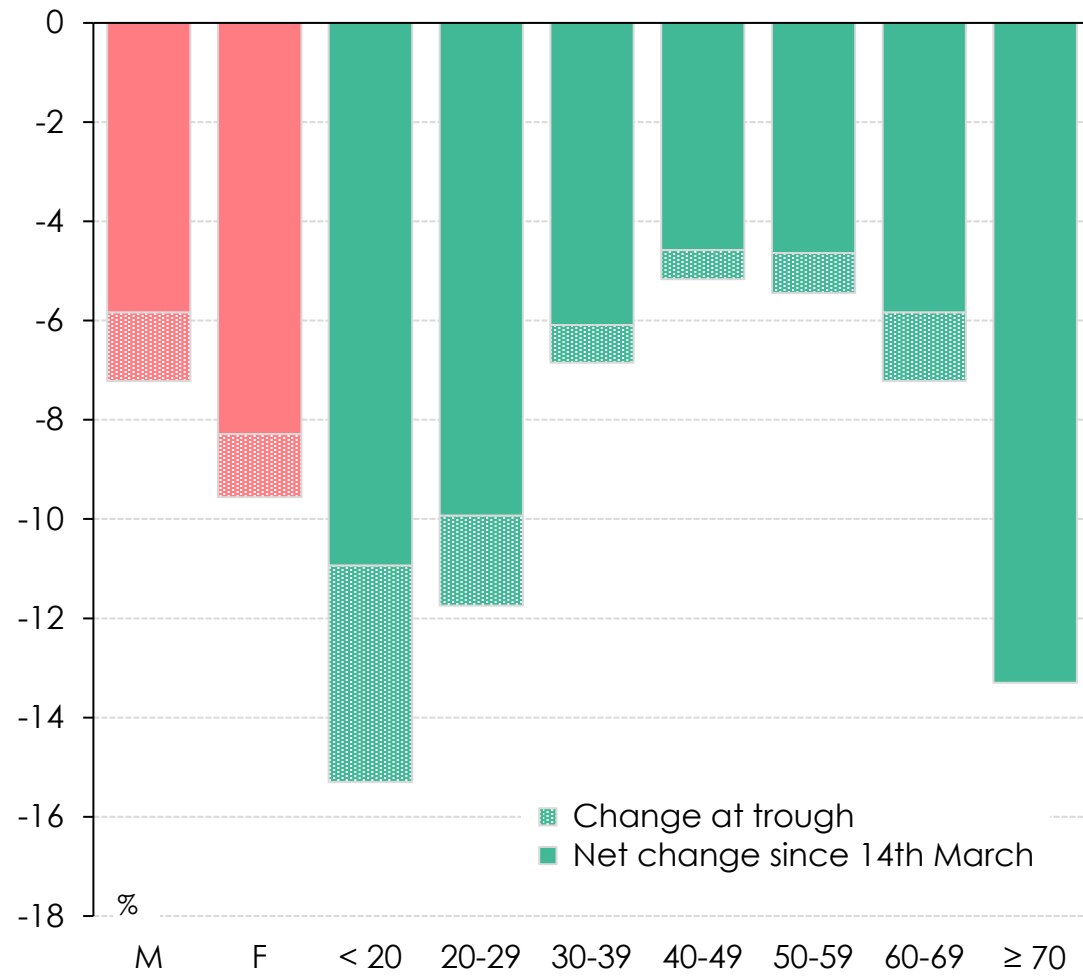
Change in payroll employment since 14th March



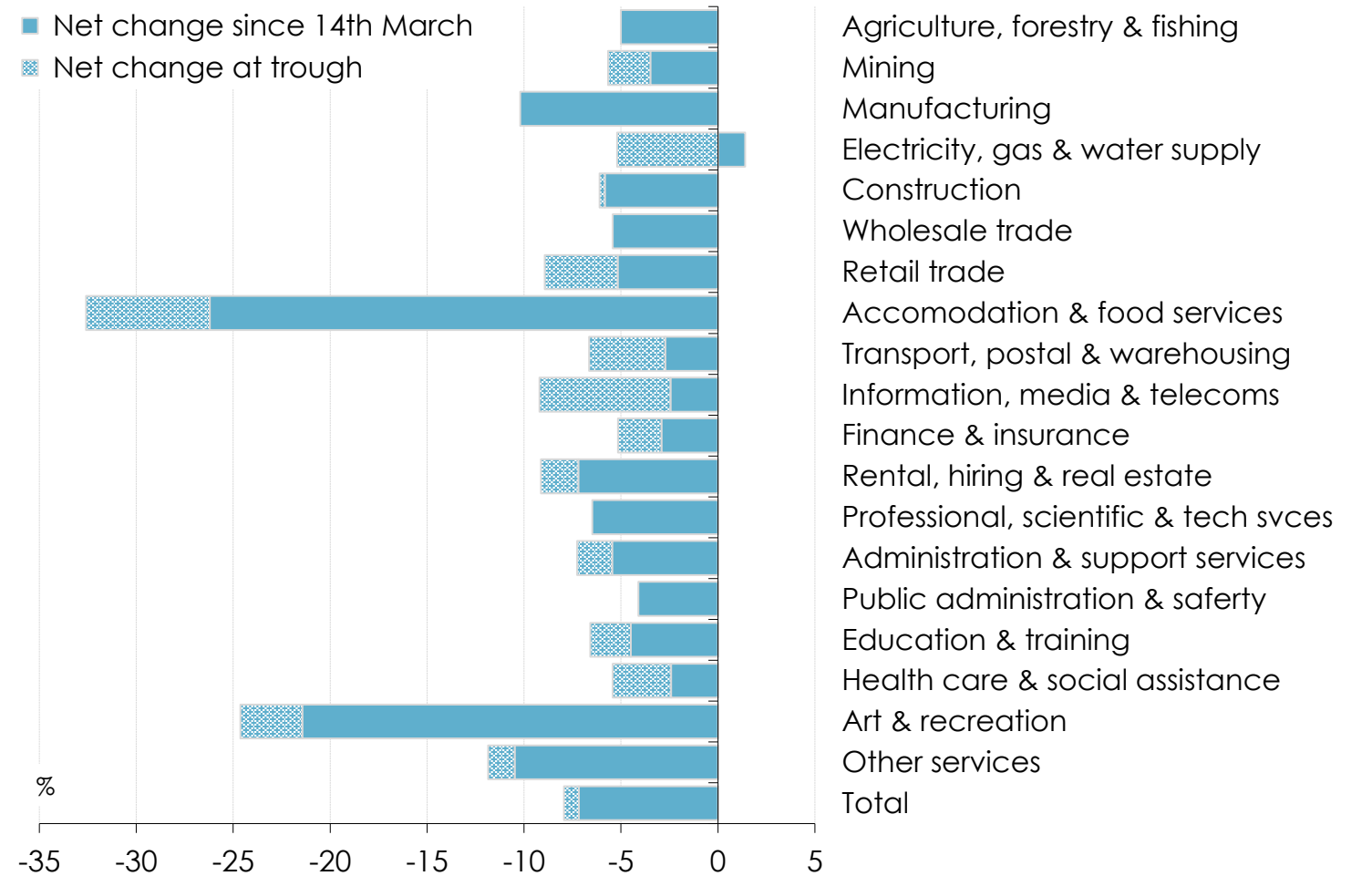
Note: data up to week ended 2nd May. 14th March was the date on which Australia recorded its 100th confirmed case of Covid-19. 'Trough' refers to the week in which employment reached its lowest level, which for Tasmania was the week ended 18th April. Source: ABS.

Job losses have been relatively greater for women and young people, largely reflecting their representation in the hardest-hit sectors

Change in payroll employment in Tasmania since 14th March, by gender and age group



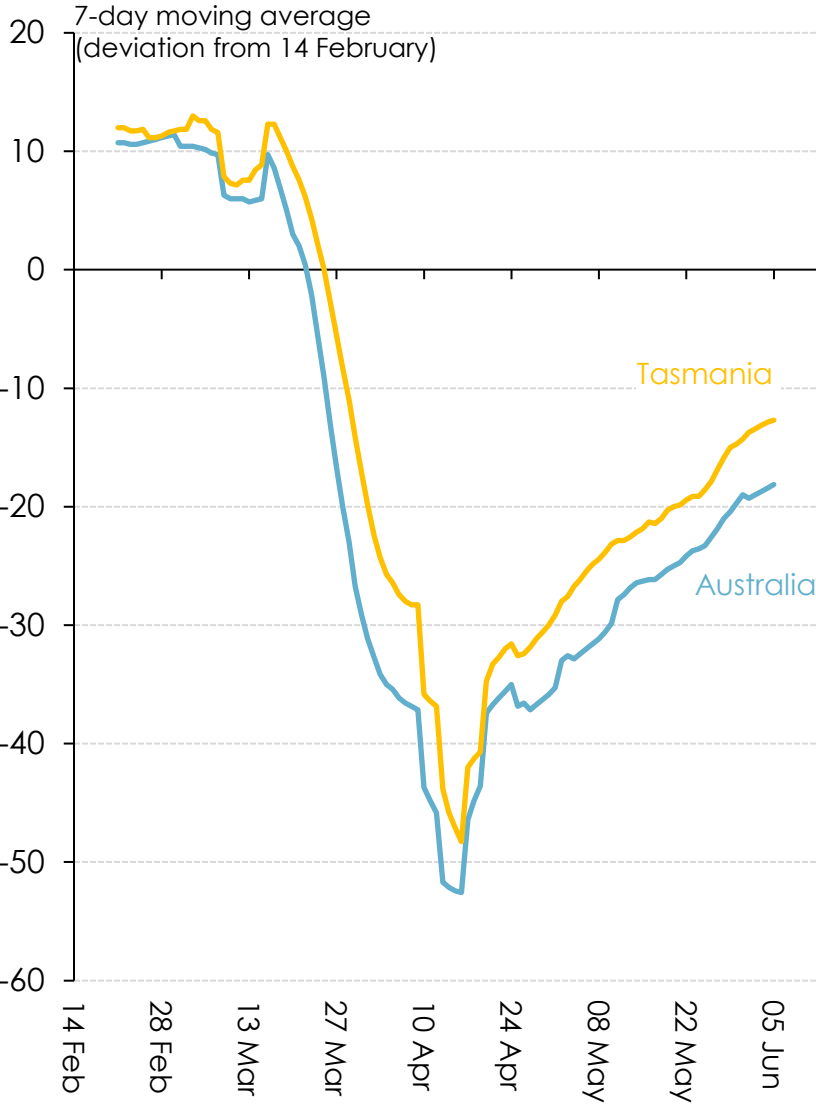
Change in payroll employment in Tasmania since 14th March, by industry



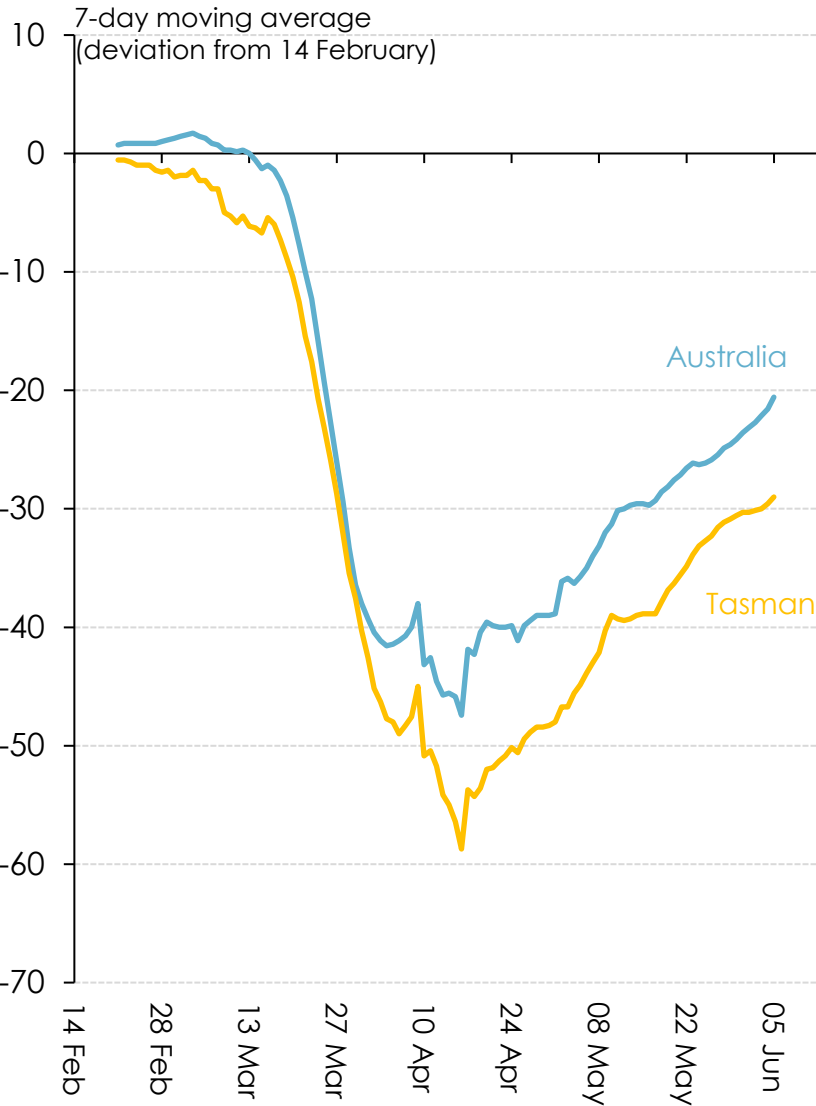
Note: data up to week ended 2nd May. 14th March was the date on which Australia recorded its 100th confirmed case of Covid-19. 'Trough' refers to the week in which employment reached its lowest level, which for Tasmania was the week ended 18th April. Source: ABS.

Mobility data suggest that Tasmanians have been returning to normal at about the same pace as other Australians

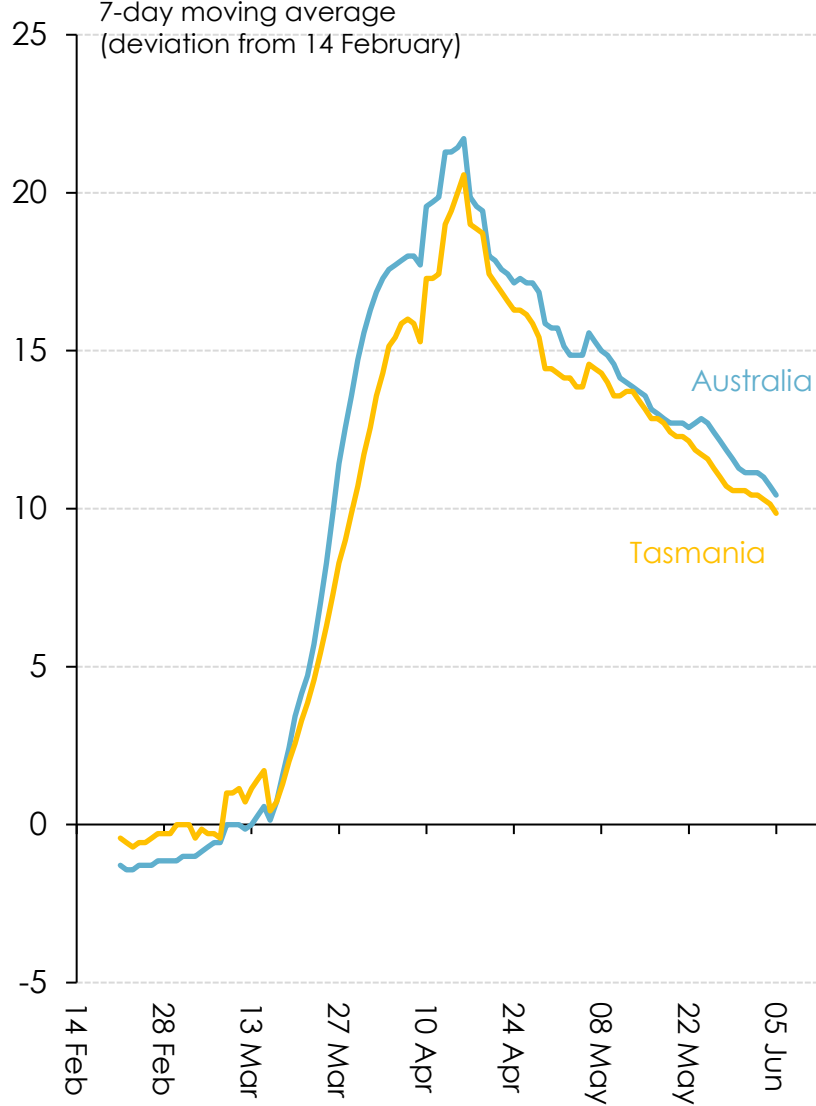
Time spent in work places



Time spent on retail & recreation



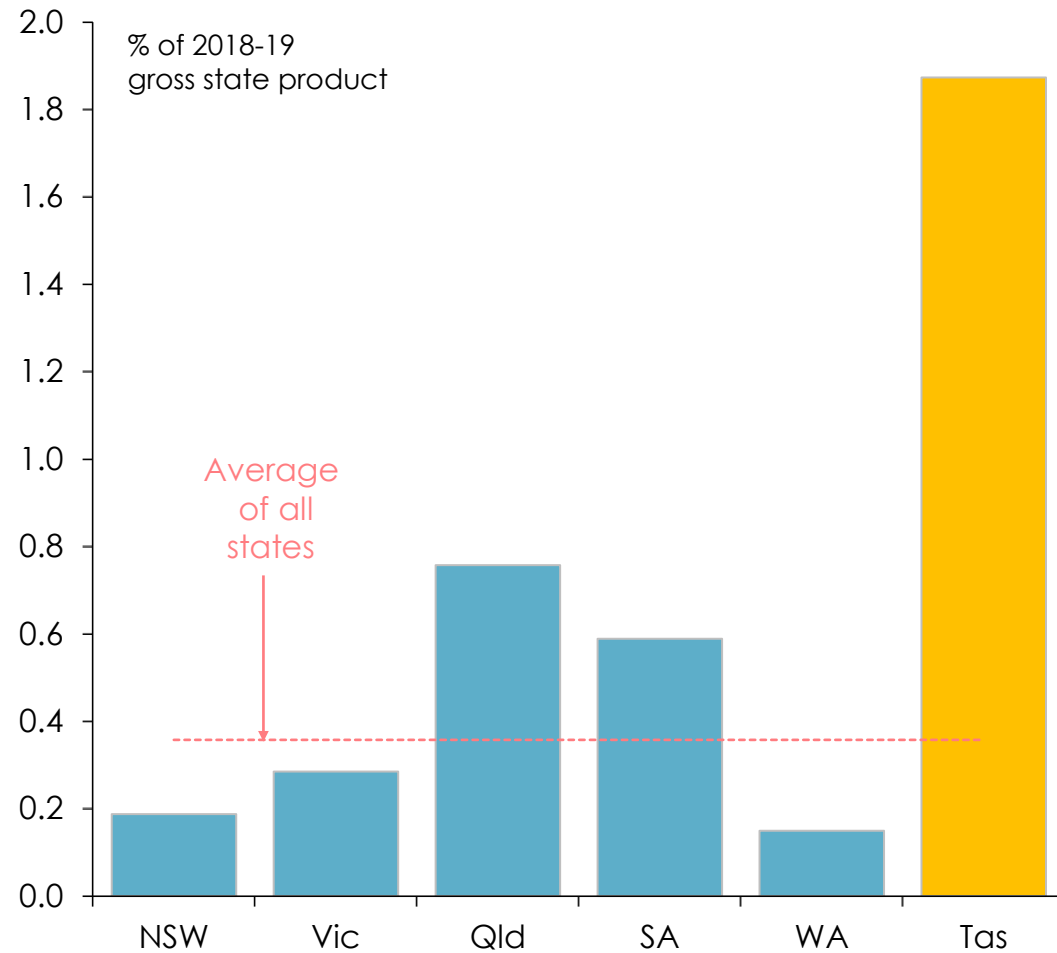
Time spent at home



Source: Google Covid-19 Community Mobility Reports (data up to 5th June).

The Tasmanian Government has been relatively more generous than other states and territories in supporting households and businesses

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



Selected Tasmanian Government economic and social support measures

- ❑ Rent relief for 11,500 social housing tenants (cost ~ \$7mn)
- ❑ Ban on private rent increases until 30th June and 90-day moratorium on evictions
- ❑ \$513K for additional services to youth at risk of homelessness
- ❑ Payments totalling \$221K to 652 temporary visa holders
- ❑ School levy relief to 11,300 eligible parents (cost \$9mn)
- ❑ An additional \$2.2mn for programs supporting victims of family and domestic violence
- ❑ Waiver of 3 months' electricity water bills for around 34,000 small businesses (cost ~ \$50mn)
- ❑ Payroll tax relief for small businesses and employers in the hospitality, tourism and seafood industries (cost \$11½mn to date)
- ❑ Land tax waiver or deferral for commercial property owners impacted by restrictions or experiencing financial hardship
- ❑ Grants and interest free loans to small businesses
- ❑ Loans to Councils for infrastructure projects and rate relief (over \$110mn in loans applied for)
- ❑ Taxi licence fees waived for 2020-21 (cost \$240K)
- ❑ Subsidized training for 150 Tasmanians who have lost jobs

No-one should be unduly alarmed by the increase in State Government debt, especially while interest rates remain at record lows

Tasmanian 'general government' net debt

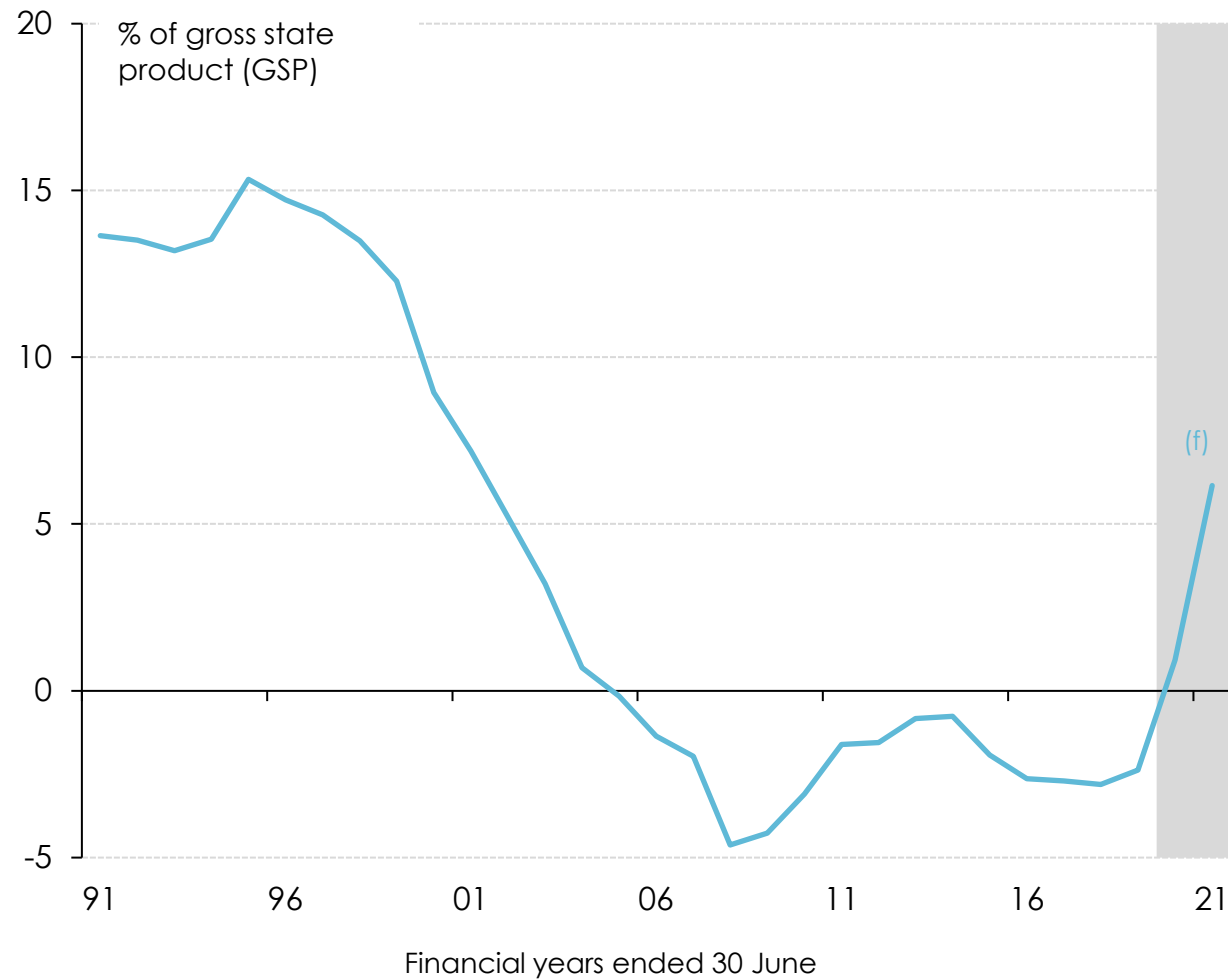
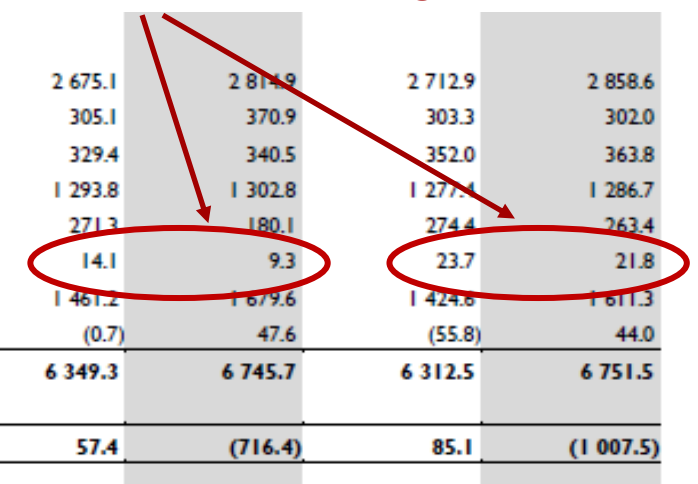


Table 4.2: General Government Income Statement

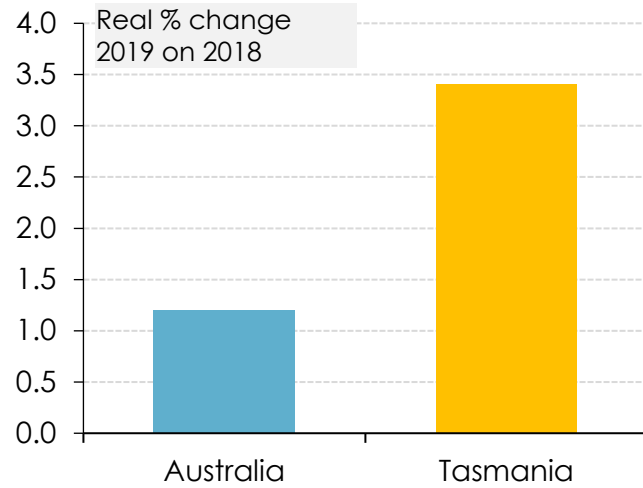
	Original 2019-20 Budget	2019-20 Estimated Outcome	Original 2020-21 Forward Estimate	Revised 2020-21 Forward Estimate
	\$m	\$m	\$m	\$m
Revenue from transactions				
Grants	3 973.3	3 686.9	4 075.4	3 846.5
Taxation	1 215.5	1 139.2	1 251.6	968.4
Sales of goods and services	416.0	404.6	421.3	423.0
Fines and regulatory fees	103.1	100.7	104.3	99.2
Interest income	16.8	18.7	16.6	16.2
Dividend, tax and rate equivalent income				
Other revenue				
Less Expenses from transactions				
Employee expenses	2 675.1	2 814.9	2 712.9	2 858.6
Superannuation	305.1	370.9	303.3	302.0
Depreciation	329.4	340.5	352.0	363.8
Supplies and consumables	1 293.8	1 302.8	1 277.4	1 286.7
Nominal superannuation interest expense	271.3	180.1	274.4	263.4
Borrowing costs	14.1	9.3	23.7	21.8
Grant and subsidy expenses	1 461.2	1 679.6	1 424.8	1 611.3
Other expenses	(0.7)	47.6	(55.8)	44.0
	6 349.3	6 745.7	6 312.5	6 751.5
Equals NET OPERATING BALANCE	57.4	(716.4)	85.1	(1 007.5)

Gov't expects to spend less on interest despite having more debt

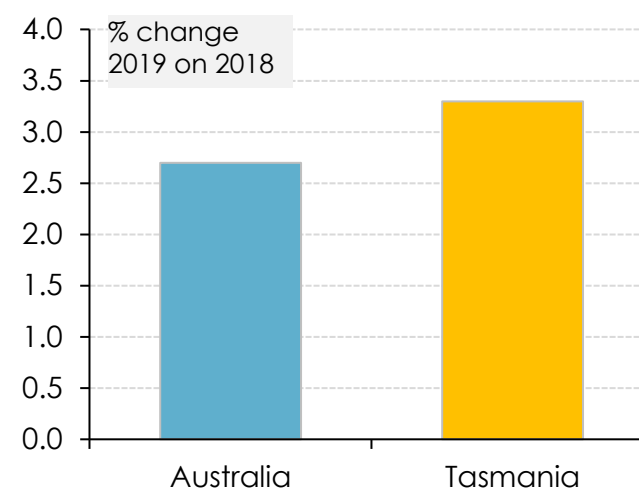


Tasmania's economy was doing well, by most measures, heading into this downturn – but that doesn't guarantee a more rapid recovery

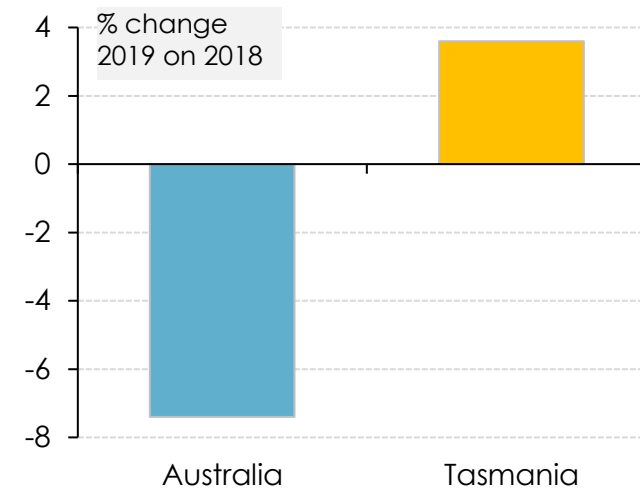
State final demand



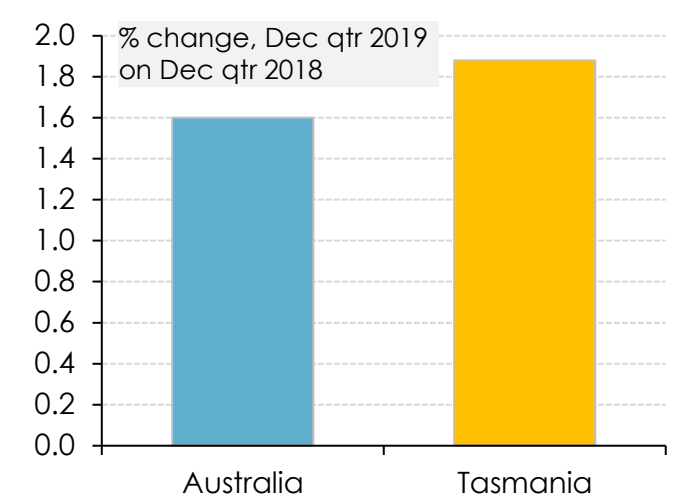
Retail sales



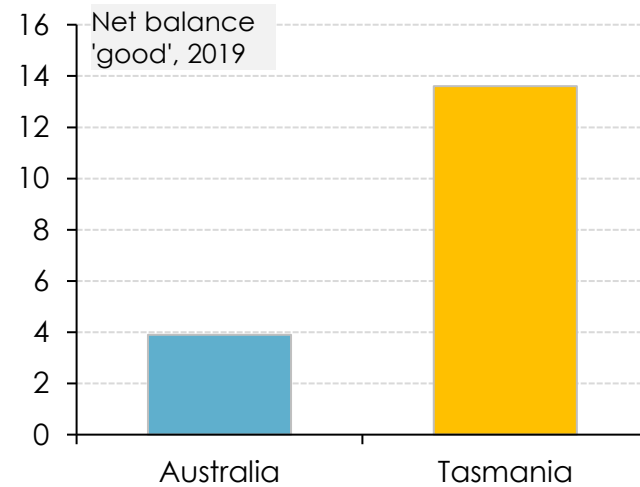
Dwelling approvals



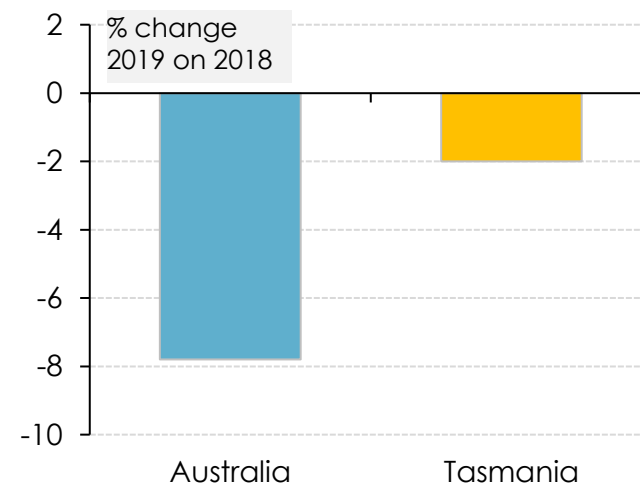
Employment



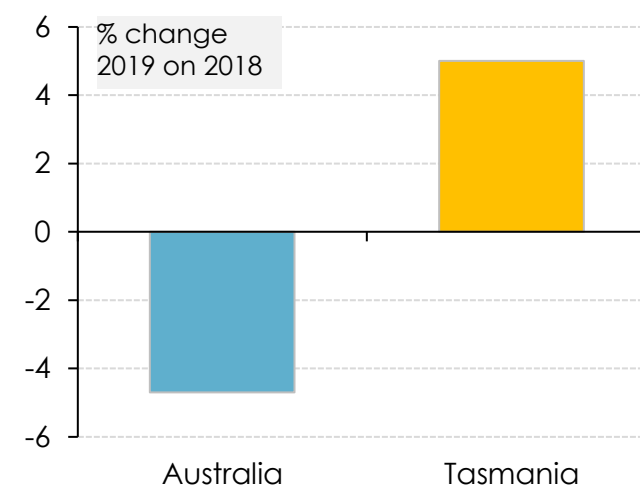
Business conditions



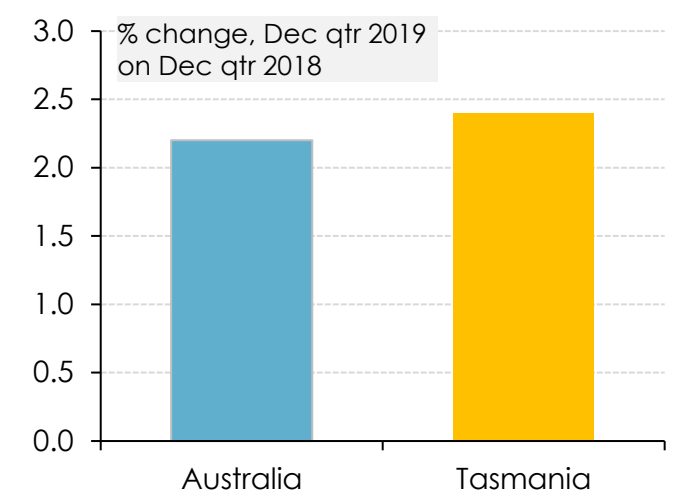
Car sales



House prices



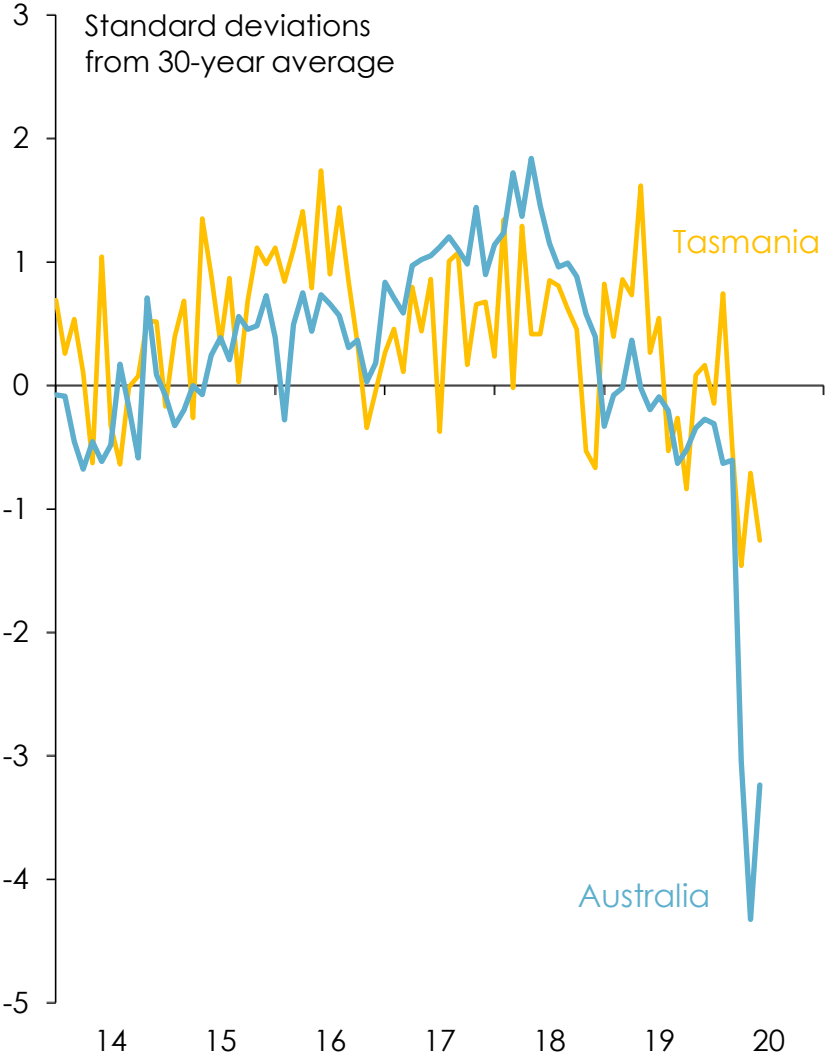
Wages



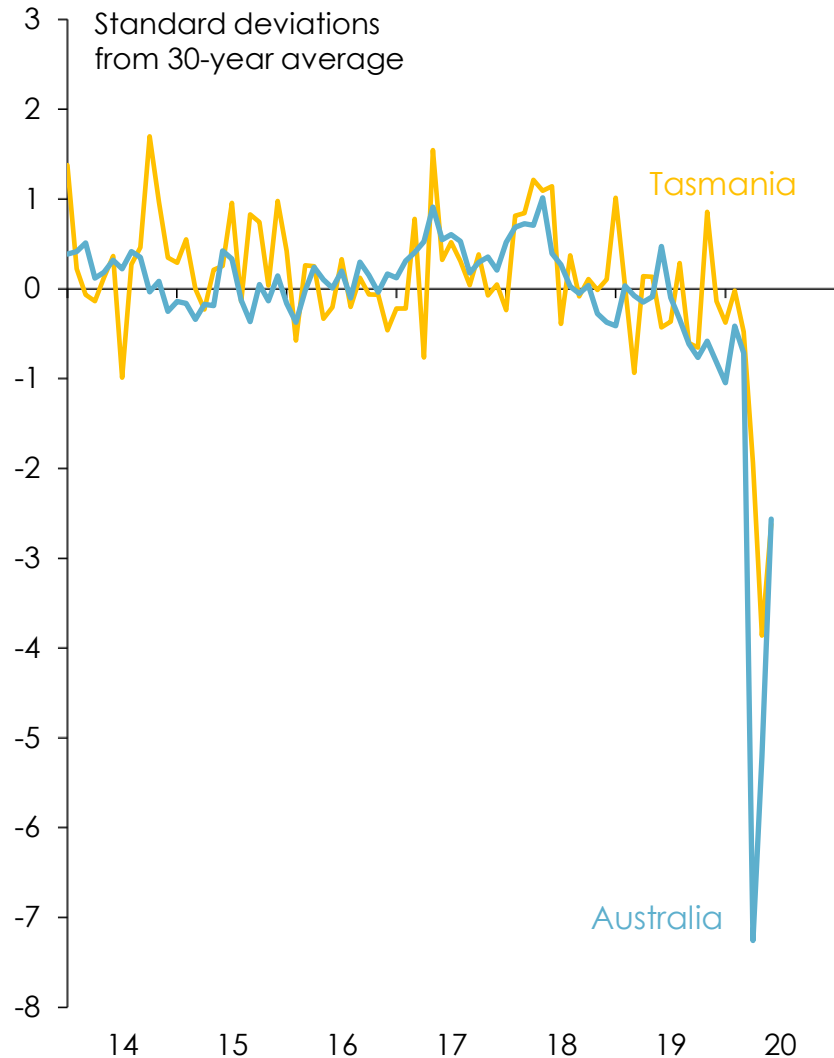
Note: 'State final demand' is the sum of spending by households, businesses and governments Sources: ABS; NAB; FCAI; CoreLogic.

Business and consumer confidence are no higher, relative to long-run averages, in Tasmania than they are for Australia as a whole

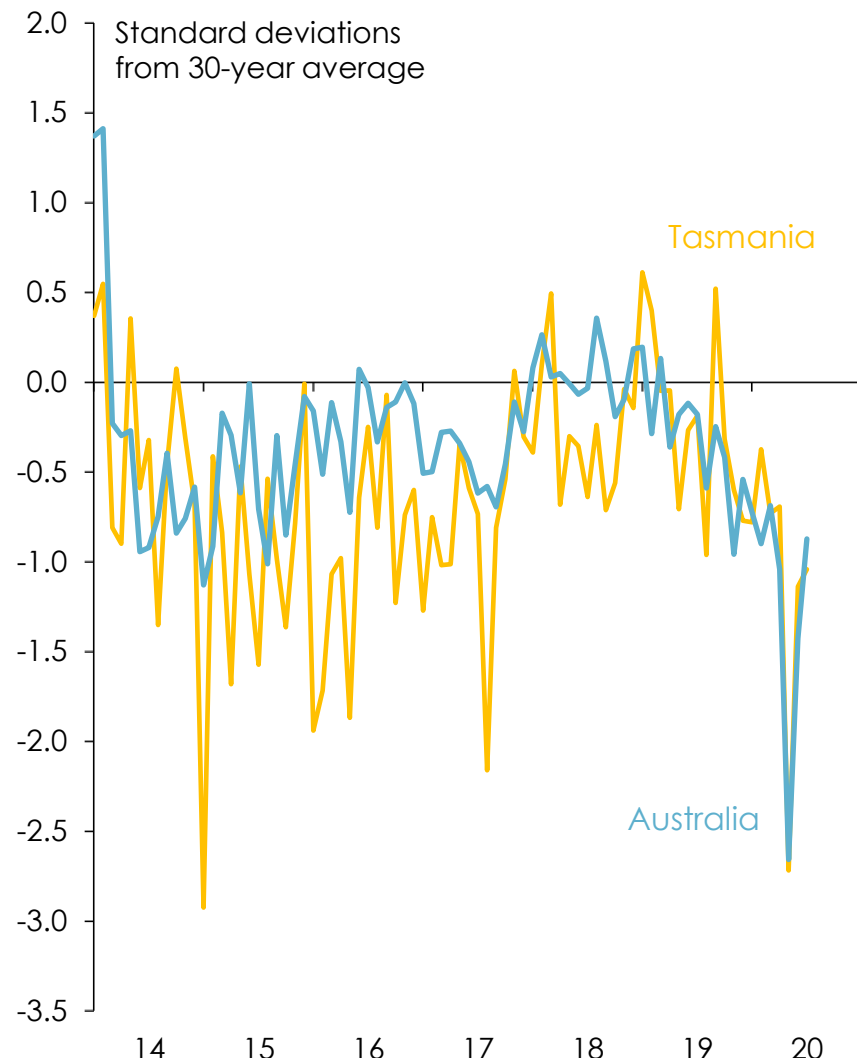
Business conditions



Business confidence



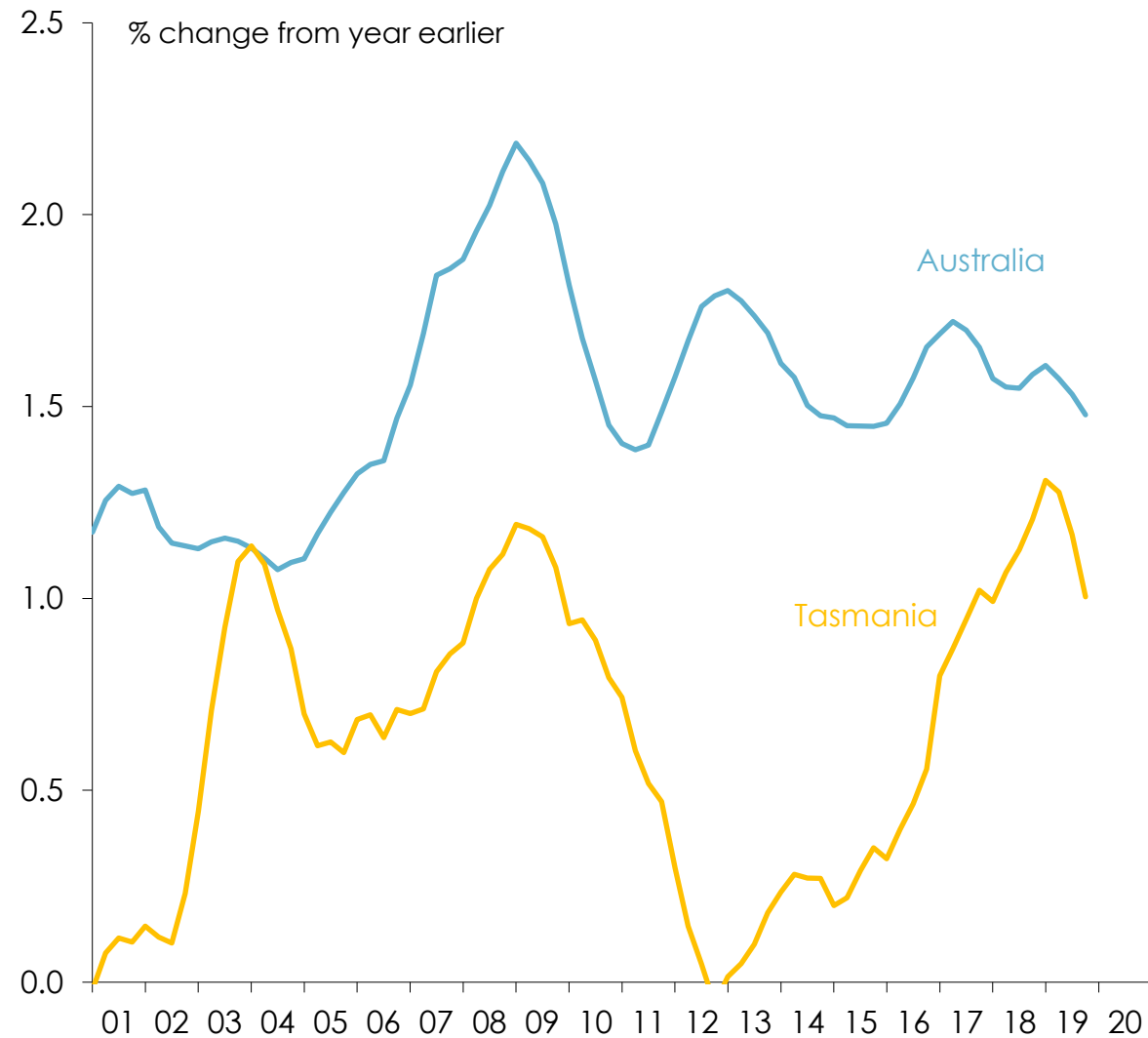
Consumer confidence



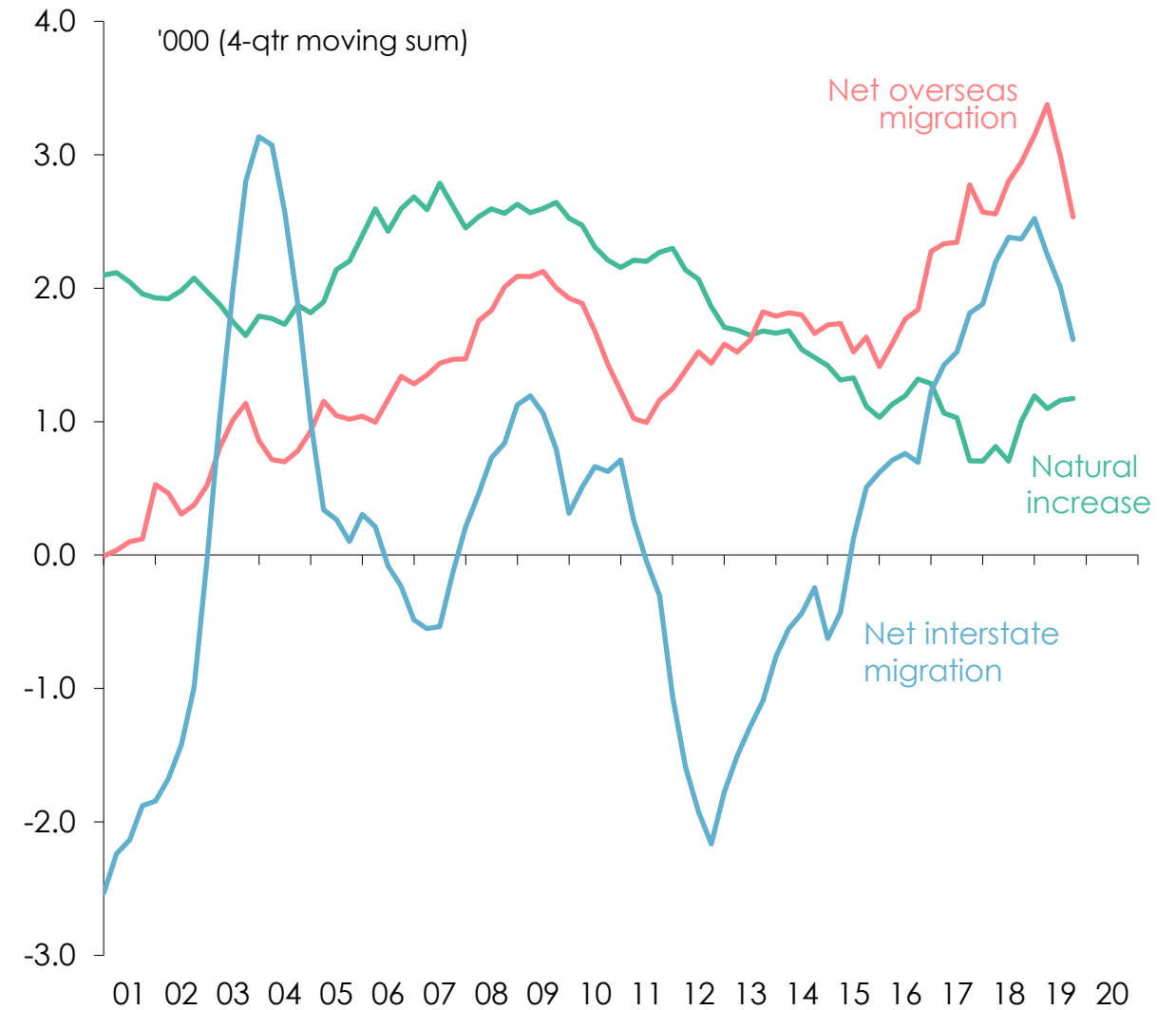
Sources: National Australia Bank; Westpac-Melbourne Institute. Data have been expressed as standard deviations from 30-year means in order to correct for the greater volatility of both surveys for Tasmania relative to national averages.

The improvement in Tasmania's economic performance in recent years owed a lot to the pick-up in migration – will that resume, and when?

Population growth, Tasmania and Australia



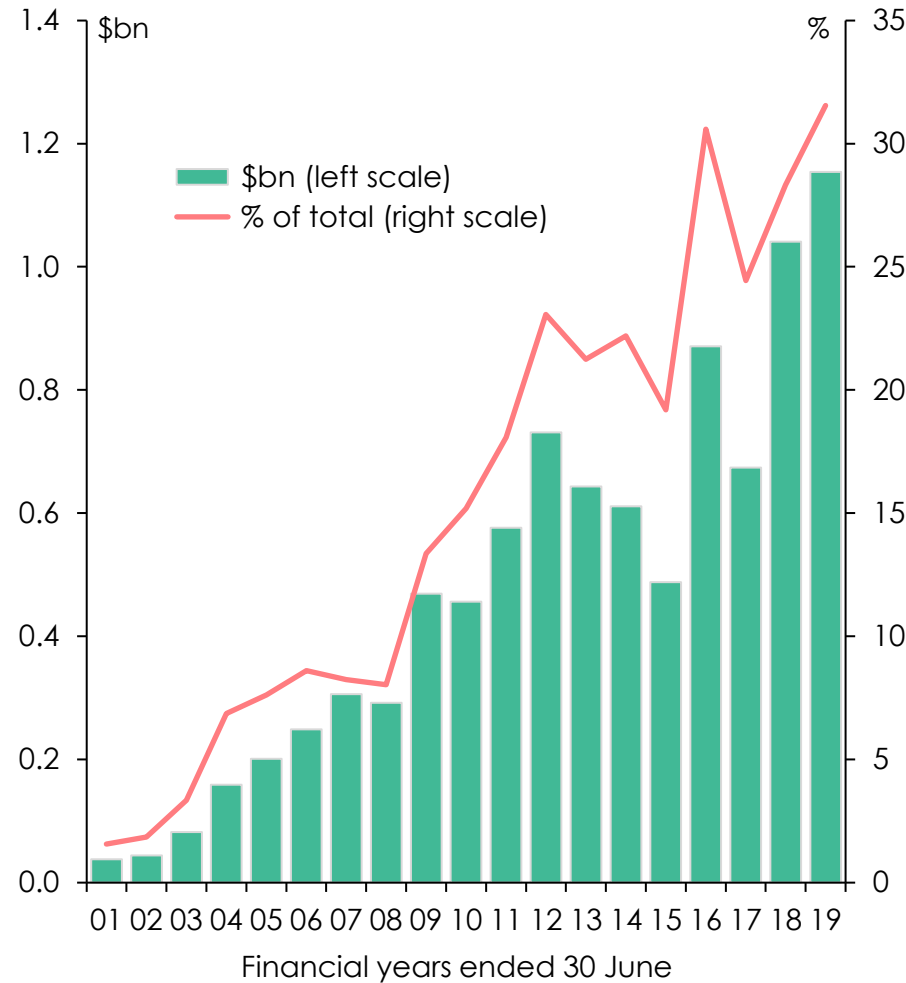
Sources of Tasmania's population growth



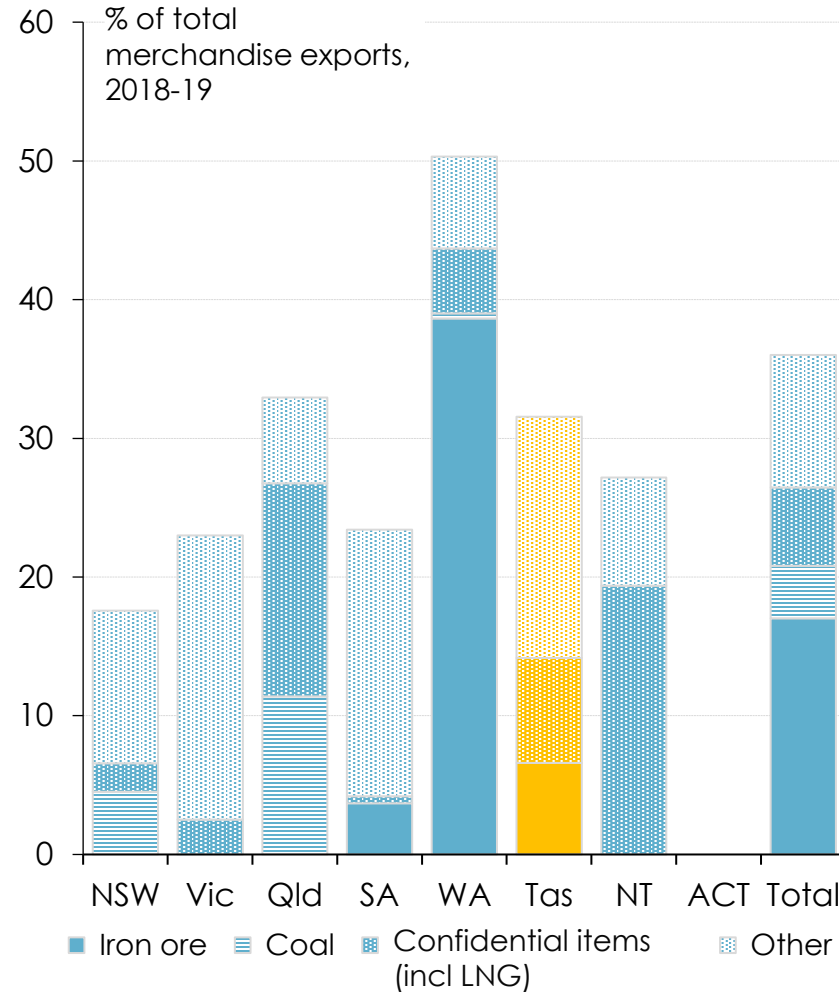
Note: The 'causality' between net migration to Tasmania (from overseas or interstate) and economic performance runs in both directions. Source: ABS.

China takes almost 30% of Tasmania's exports, although that still represents less than 5% of Tasmania's gross product

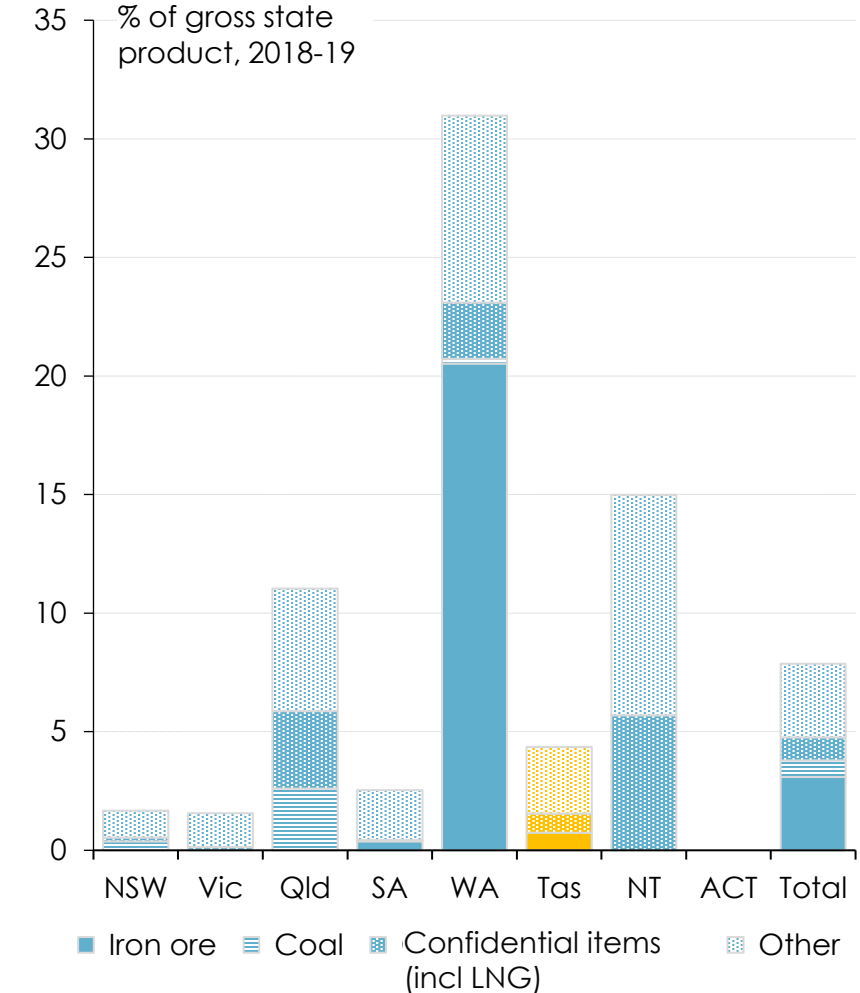
Tasmania's goods exports to China



Goods exports to China as a pc of exports of goods



Goods exports to China as a pc of gross state product



Sources: ABS; Department of Foreign Affairs & Trade.

Some of Tasmania's exports are heavily dependent on the Chinese market; others have very little exposure to China

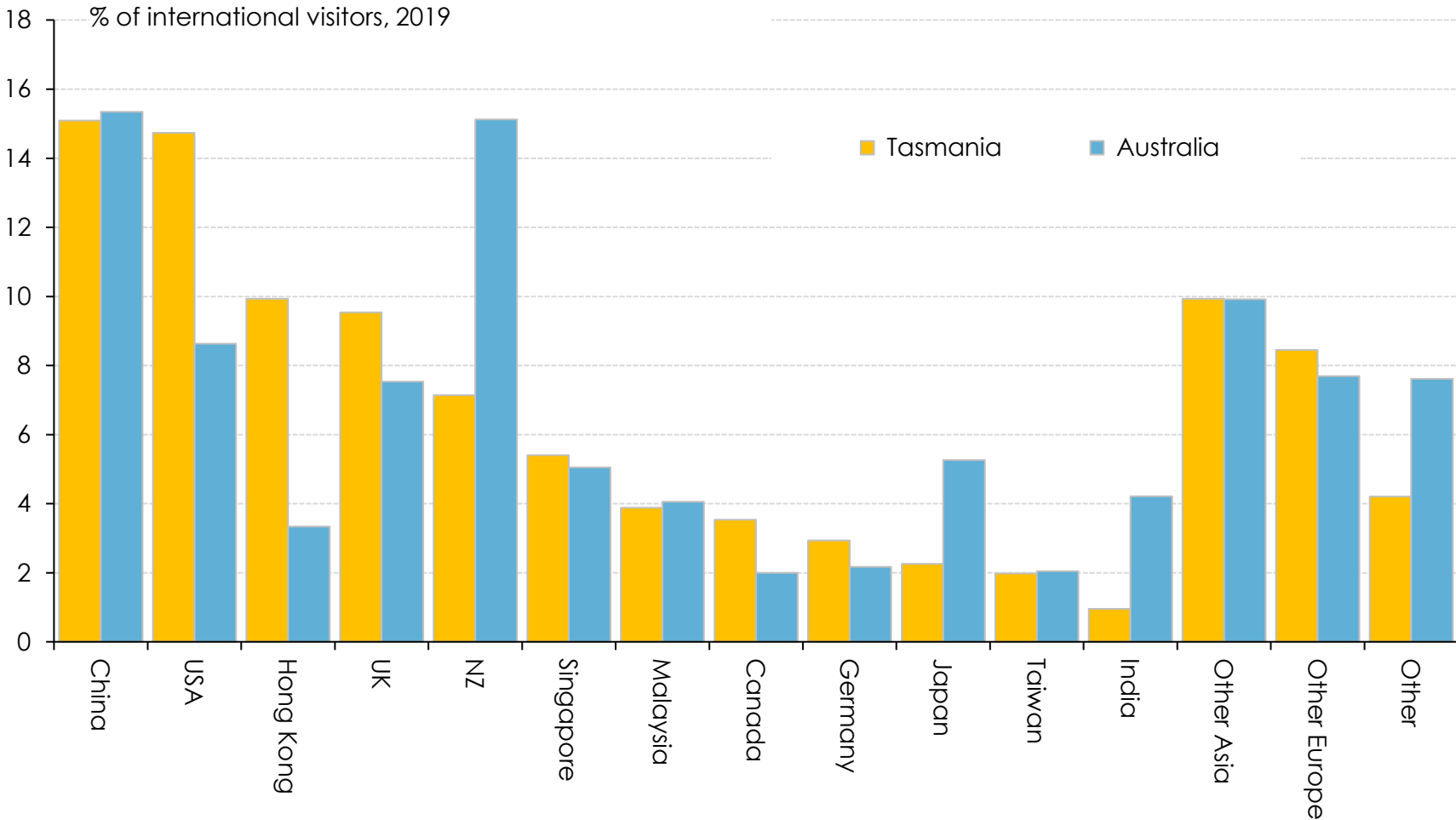
China's share of Tasmania's most important exports (of goods)

Item	Total exports		Exports to China		China as a % of total
	\$mn	%	\$mn	%	
Zinc	809.4	22.5	100.0	8.1	12.4
Aluminium	523.1	14.5	11.1	0.9	2.1
Confidential items	383.9	10.7	284.3	23.0	74.1
Iron ore	359.7	10.0	317.6	25.7	88.3
Seafood	239.3	6.7	182.7	14.8	76.3
Other ores	231.8	6.4	129.1	10.5	55.7
Beef	219.7	6.1	15.7	1.3	7.2
Dairy products	138.7	3.9	1.0	0.1	0.7
Rough wood	64.1	1.8	44.2	3.6	69.0
Precious metal ores	62.4	1.7	62.4	5.1	100.0
Paper & paperboard	58.0	1.6	16.3	1.3	28.1
Vegetables	47.9	1.3	0.1	0.0	0.2
Animal feed	41.3	1.1	0.2	0.0	0.4
Fruit & nuts	35.7	1.0	9.5	0.8	26.6
Other meat	32.4	0.9	0.3	0.0	1.0
Chocolate	24.8	0.7	0.0	0.0	0.0
Pharmaceutical products	24.5	0.7	2.2	0.2	9.0
Wool	18.4	0.5	14.7	1.2	80.0
Other	281.7	7.8	43.6	3.5	15.5
Total	3,597.1	100.0	1,235.0	100.0	34.3

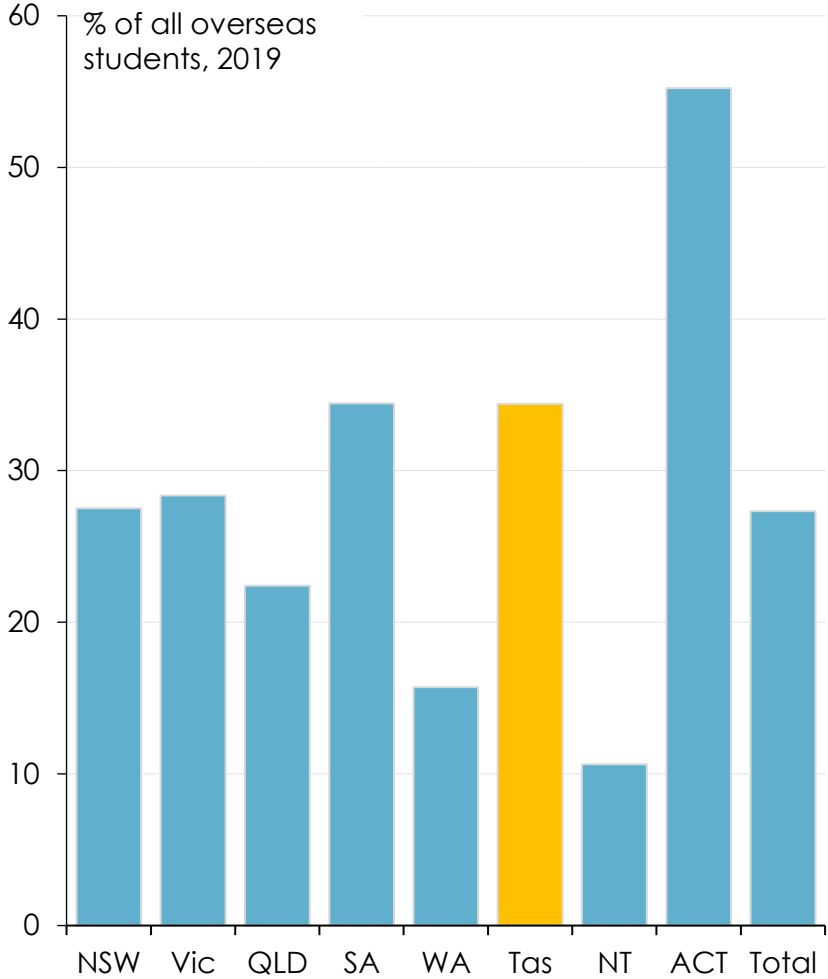
Note: Data does not include Tasmanian products that are processed in, or exported from, other parts of Australia.
Sources: Australian Department of Foreign Affairs & Trade, *Trade Statistical Pivot Tables*; Corinna.

Tasmania is no less dependent on China for overseas tourists than the national average, and more dependent on China for overseas students

Origin of international visitors, Tasmania and Australia, 2019



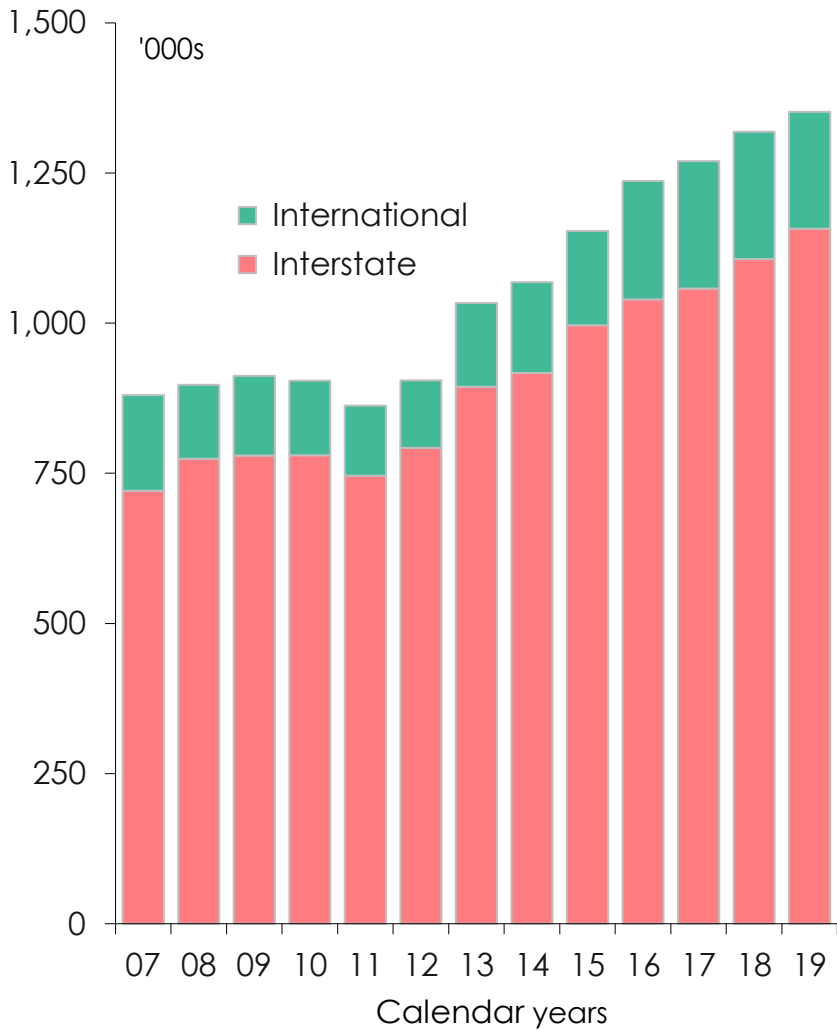
Chinese students as a pc of all overseas students, 2019



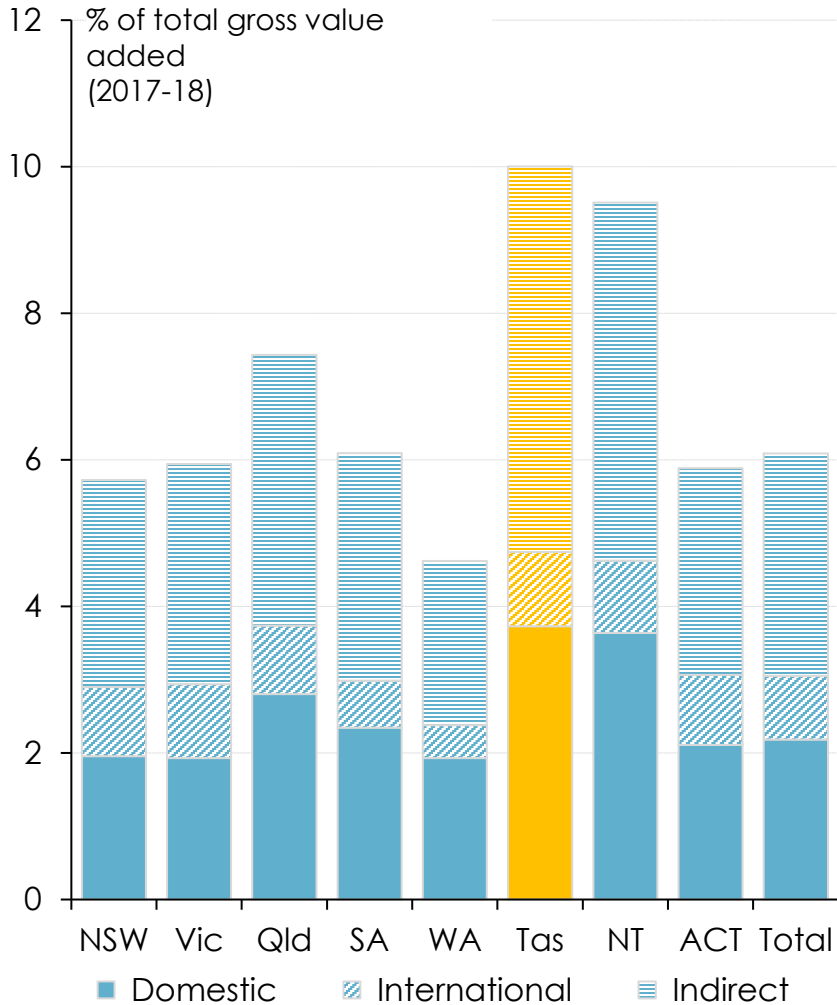
Note: 'Overseas students' includes higher education, VET, ELICOS (English Language Intensive Course of Study), school and non-award students. Sources: Tourism Tasmania, *Tourism Snapshot*, December 2019; ABS; (Australian) Department of Education.

Tourism is a big part of Tasmania's economy, and had slowed over the past two years – how long before it comes back?

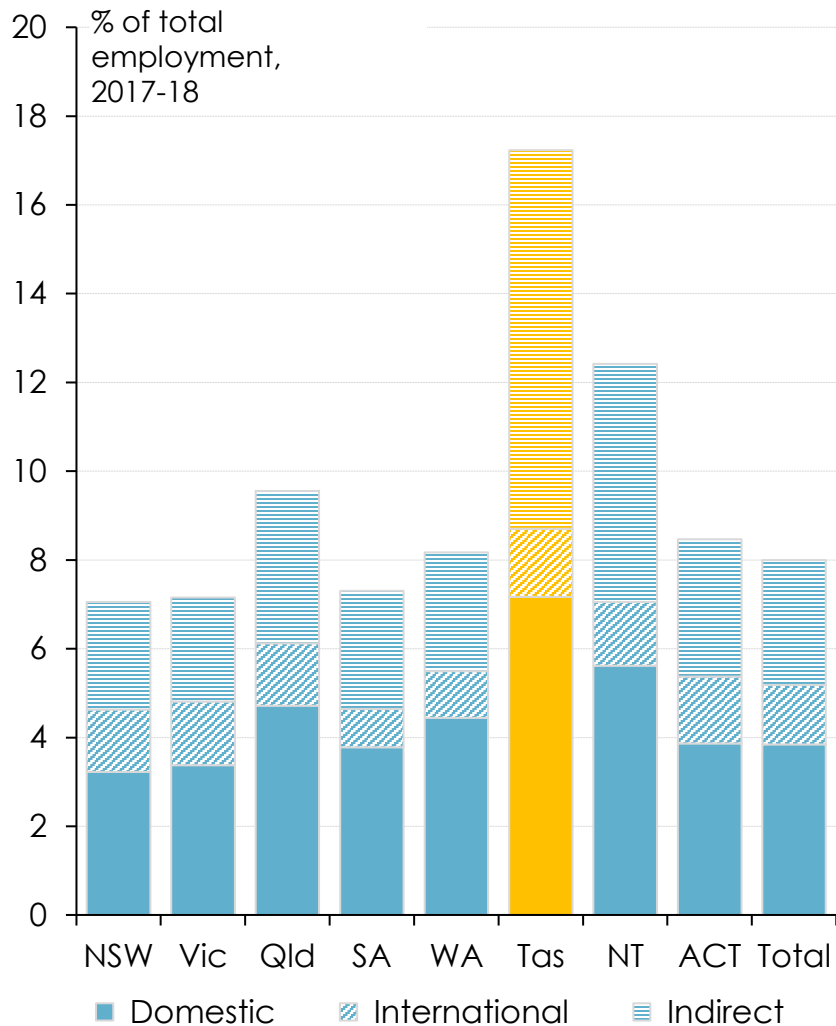
Visitors to Tasmania



Tourism gross value added



Tourism employment



Sources: Tourism Tasmania; Tourism Research Australia.

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.

This document has been prepared for the use of the party or parties named on the first page hereof, and is not to be further circulated or distributed without permission.

This document does not purport to constitute investment advice. It should not be used or interpreted as an invitation or offer to engage in any kind of financial or other transaction, nor relied upon in order to undertake, or in the course of undertaking, any such transaction.

The information herein has been obtained from, and any opinions herein are based upon, sources believed reliable. The views expressed in this document accurately reflect the author's personal views, including those about any and all financial instruments referred to herein. Neither Saul Eslake nor Corinna Economic Advisory Pty Ltd however makes any representation as to its accuracy or completeness and the information should not be relied upon as such. All opinions and estimates herein reflect the author's judgement on the date of this document and are subject to change without notice. The author and Corinna Economic Advisory Pty Ltd expressly disclaim any responsibility, and shall not be liable, for any loss, damage, claim, liability, proceedings, cost or expense ("Liability") arising directly or indirectly (and whether in tort (including negligence), contract, equity or otherwise) out of or in connection with the contents of and/or any omissions from this communication except where a Liability is made non-excludable by legislation.

Any opinions expressed herein should not be attributed to any other organization with which Saul Eslake is affiliated.

SAUL ESLAKE