

THE POST-PANDEMIC ECONOMY

PRESENTATION TO
THE SOUTH AUSTRALIAN CENTRE FOR ECONOMIC STUDIES

ADELAIDE, 13TH JULY 2021

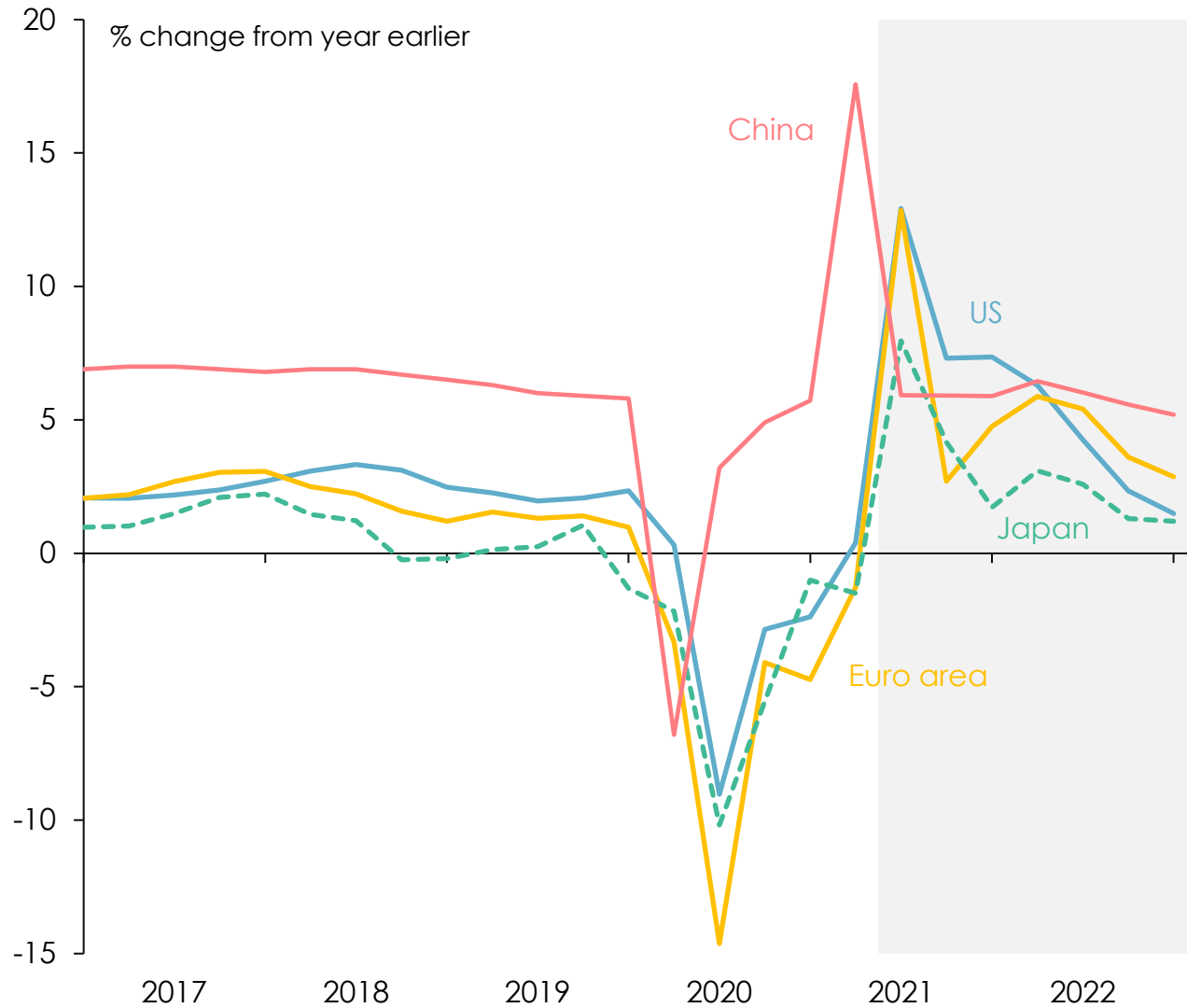
SAUL ESLAKE

CORINNA ECONOMIC ADVISORY

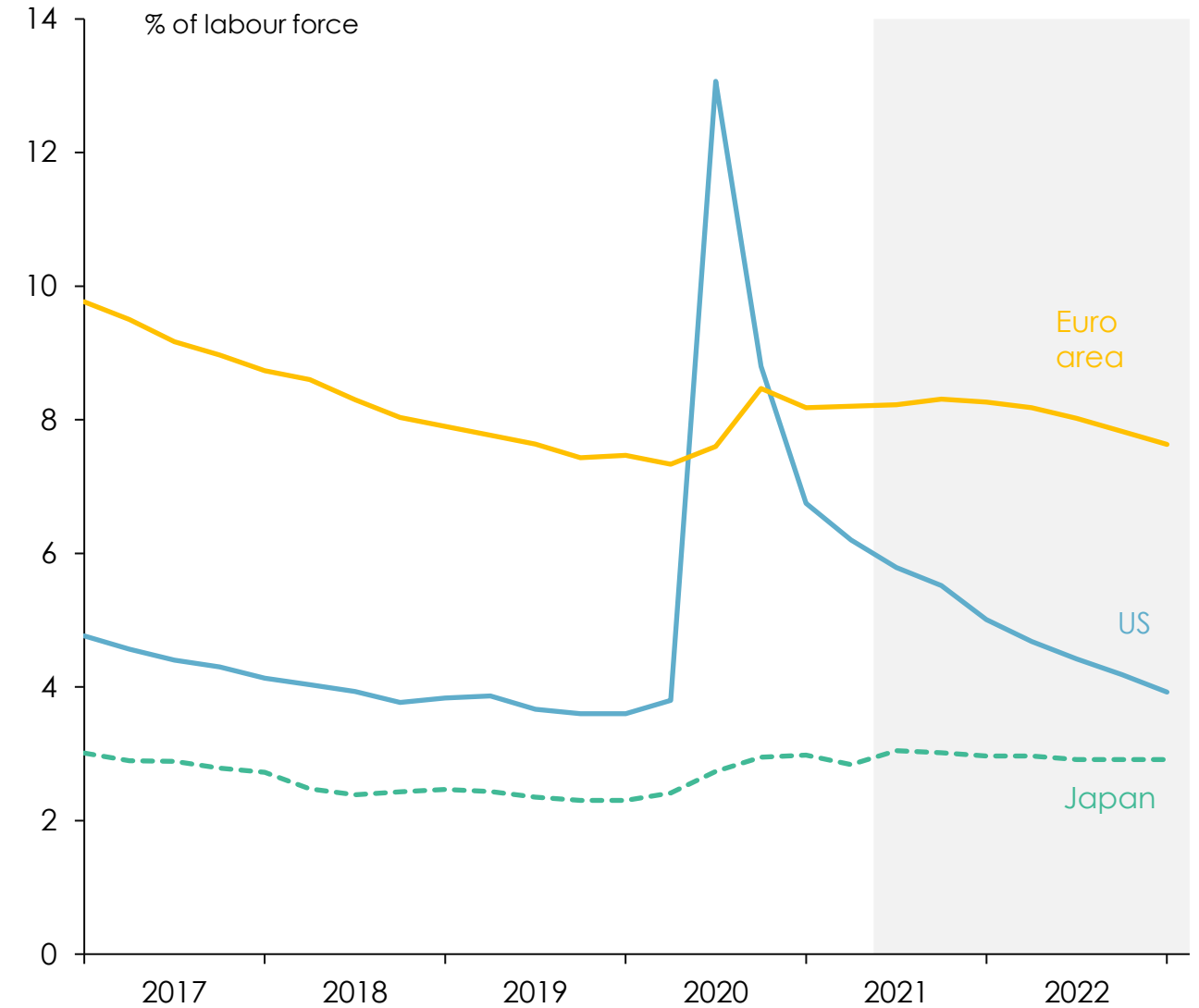
The world economy

Global economic growth seems likely to slow after this year's stimulus-induced 'bounce' ...

OECD real GDP growth forecasts



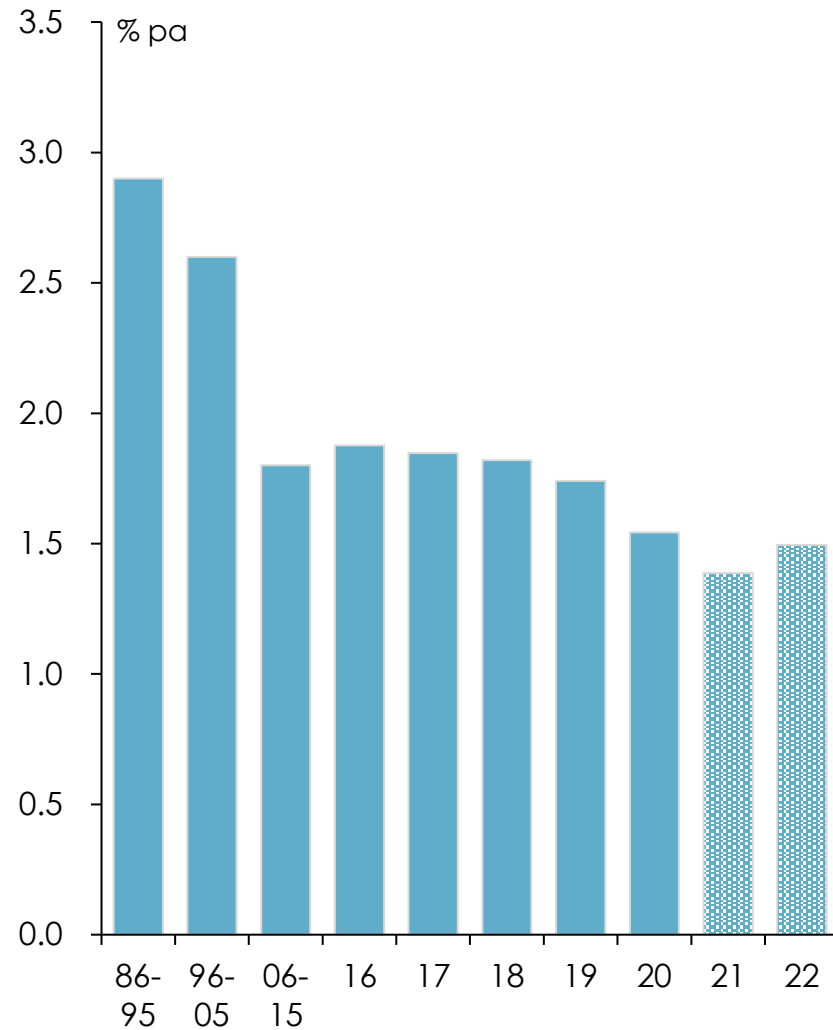
OECD unemployment rate forecasts



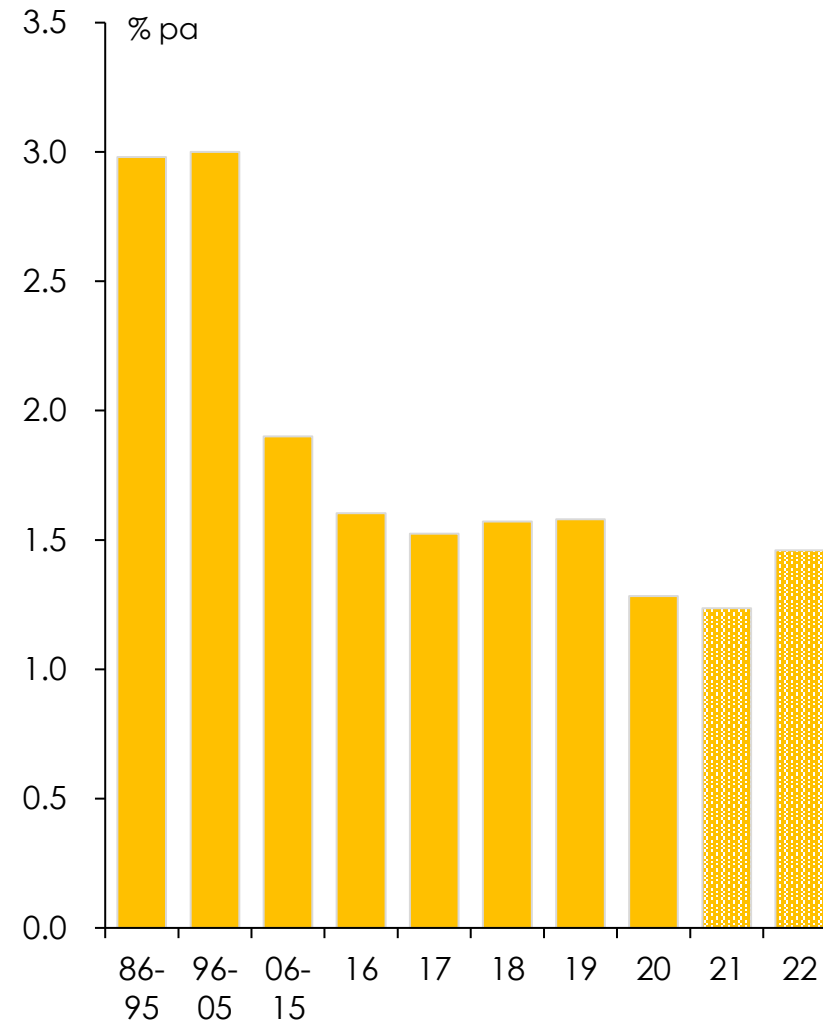
Sources: OECD, [Economic Outlook No. 109 - Statistical Annex](#), Volume 2021, No. 1, 31st May 2021; Corinna.

... because (with the partial exception of the US) nothing has been done (or will be) to tackle long-standing 'structural' headwinds to growth

OECD area potential GDP growth



Growth in the OECD area productive capital stock



OECD area labour productivity growth





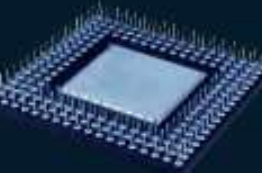





Sources: OECD, [Economic Outlook No. 109 - Statistical Annex](#), Volume 2021, No. 1, 31st May 2021; Corinna.

Technological change is likely to continue at a rapid pace – but it's not clear whether or how much this will boost overall productivity growth




Technology trends and underlying technologies

Industry-agnostic trends

 1 Next-level process automation... Industrial IoT ¹ Robots/cobots ² /RPA ³	 ... and process virtualization Digital twins 3-D/4-D printing	 2 Future of connectivity 5G and IoT connectivity	 3 Distributed infrastructure Cloud and edge computing
 4 Next-generation computing Quantum computing Neuromorphic chips (ASICs ⁴)	 5 Applied AI Computer vision, natural-language processing, and speech technology	 6 Future of programming Software 2.0	 7 Trust architecture Zero-trust security Blockchain

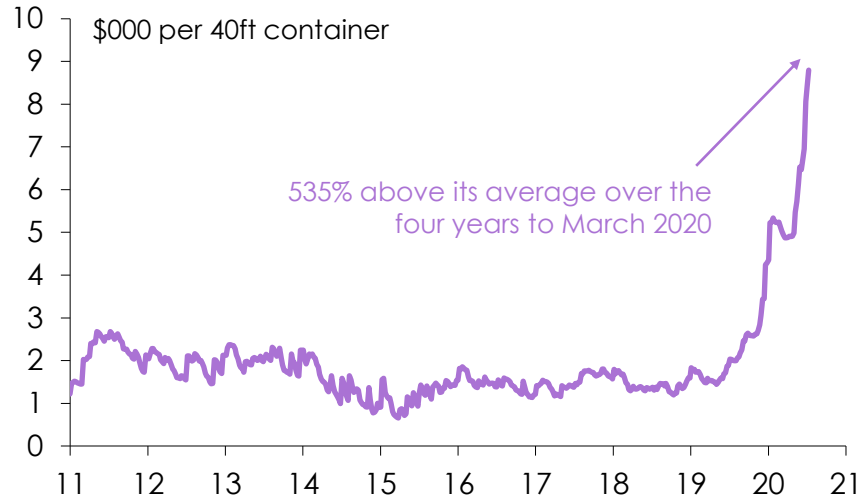
1. Internet of things. 2. Collaborative robots. 3. Robotic process automation. 4. Application-specific integrated circuits.

Industry-specific trends

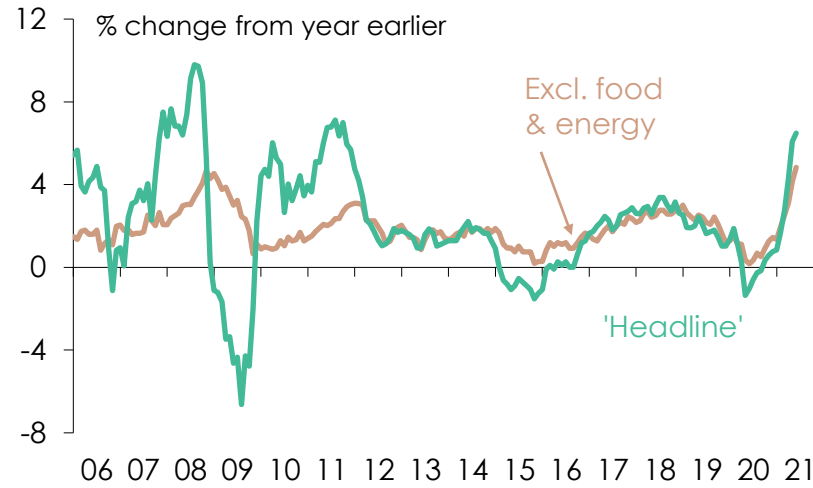
 8 Bio Revolution Biomolecules/"-omics"/ biosystems Biomachines/biocomputing/augmentation	 9 Next-generation materials Nanomaterials, graphene and 2-D materials, molybdenum disulfide nanoparticles	 10 Future of clean technologies Nuclear fusion Smart distribution/metering Battery/battery storage Carbon-neutral energy generation
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'Upstream' price pressures have intensified around the world: but only in the US have those pressures been reflected in 'core' CPI inflation

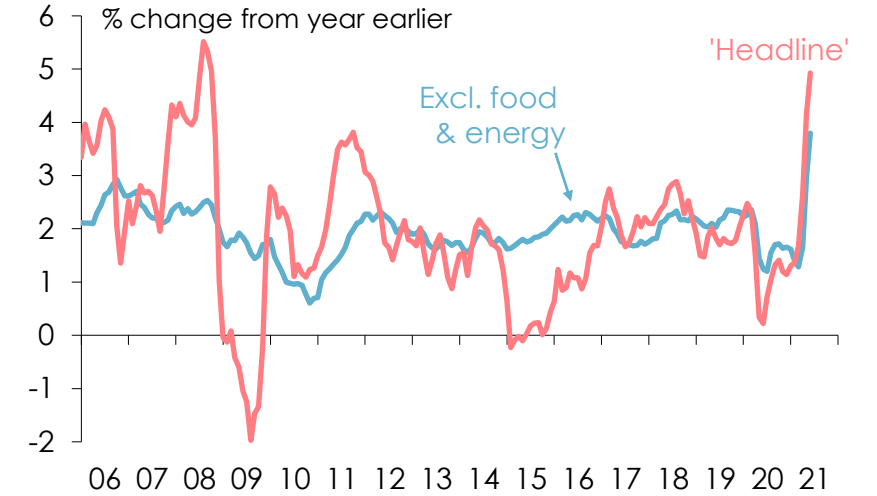
Container freight costs



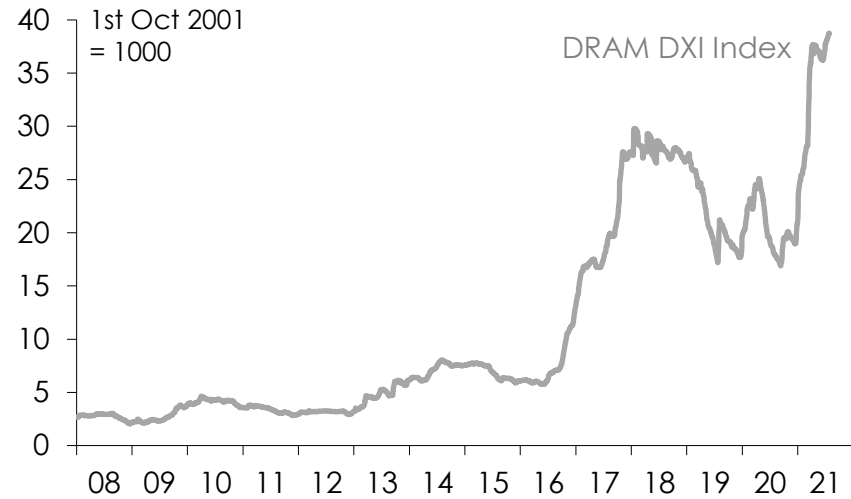
US producer price index (PPI)



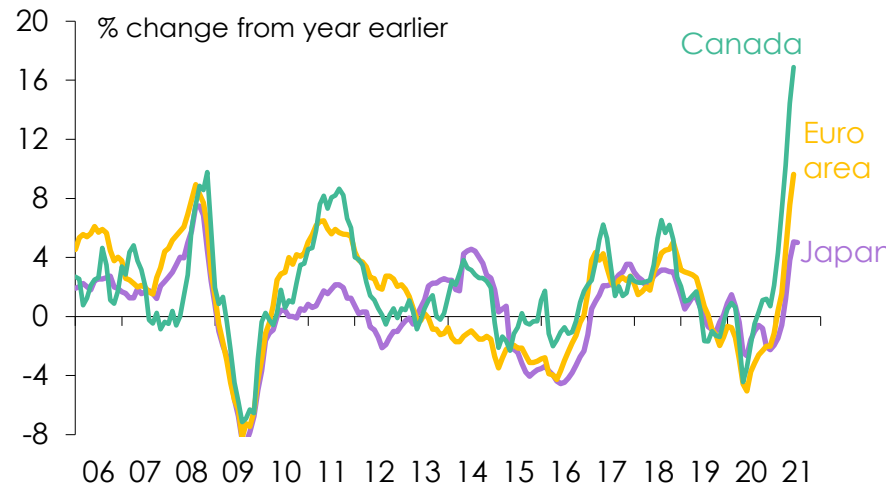
US consumer price index



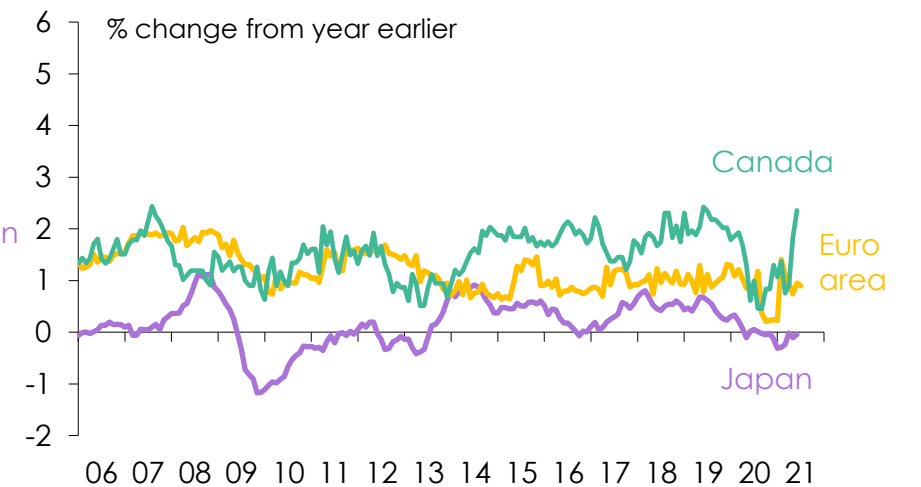
Semiconductor prices



Other countries' PPIs



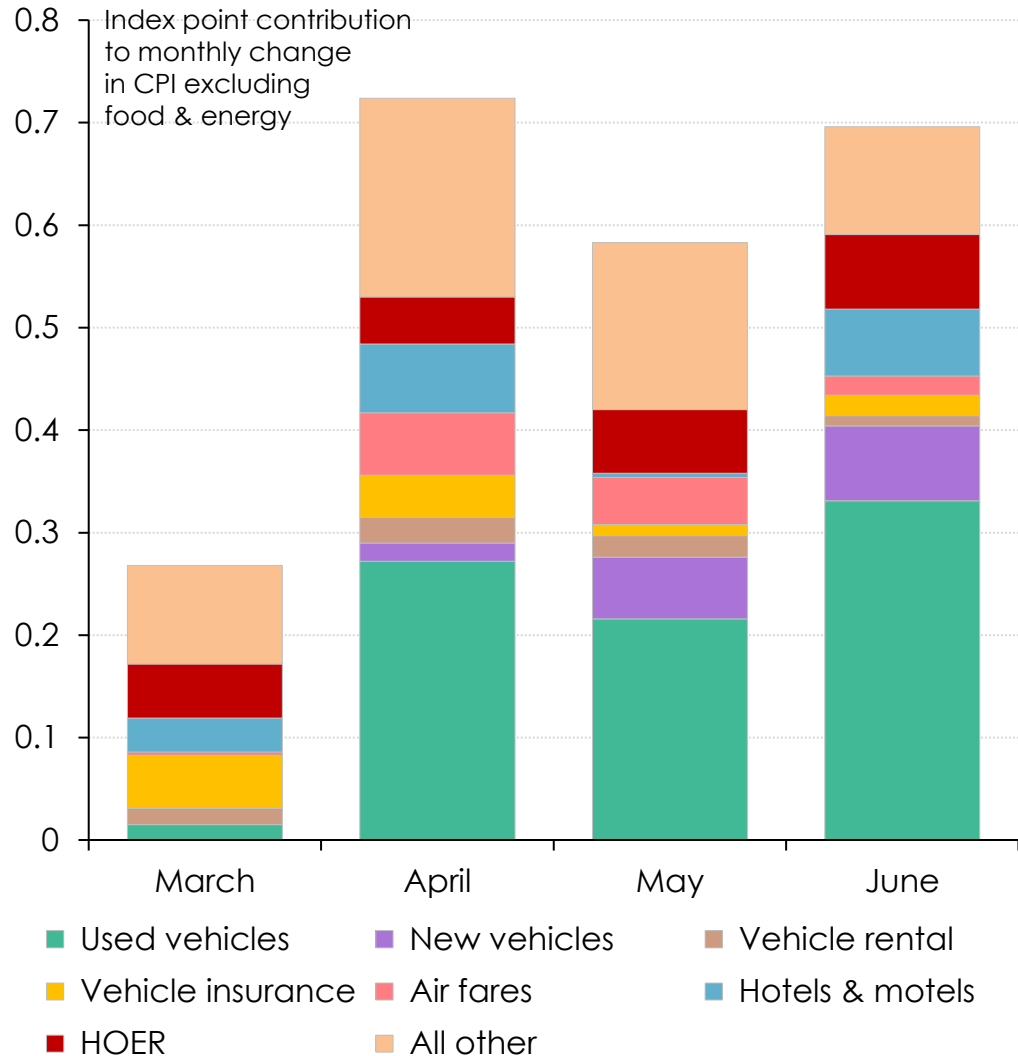
Other countries' 'core' CPIs



Sources: [Drewry Supply Chain Advisors](#); Refinitiv Datastream; [US Bureau of Labor Statistics](#); [Eurostat](#); [Bank of Japan](#); [Statistics Canada](#).

65% of the increase in the 'core' US CPI over the past three months has come from six items which represent 11½% of the 'core' CPI basket

Contributions to recent monthly changes in CPI excluding food and energy



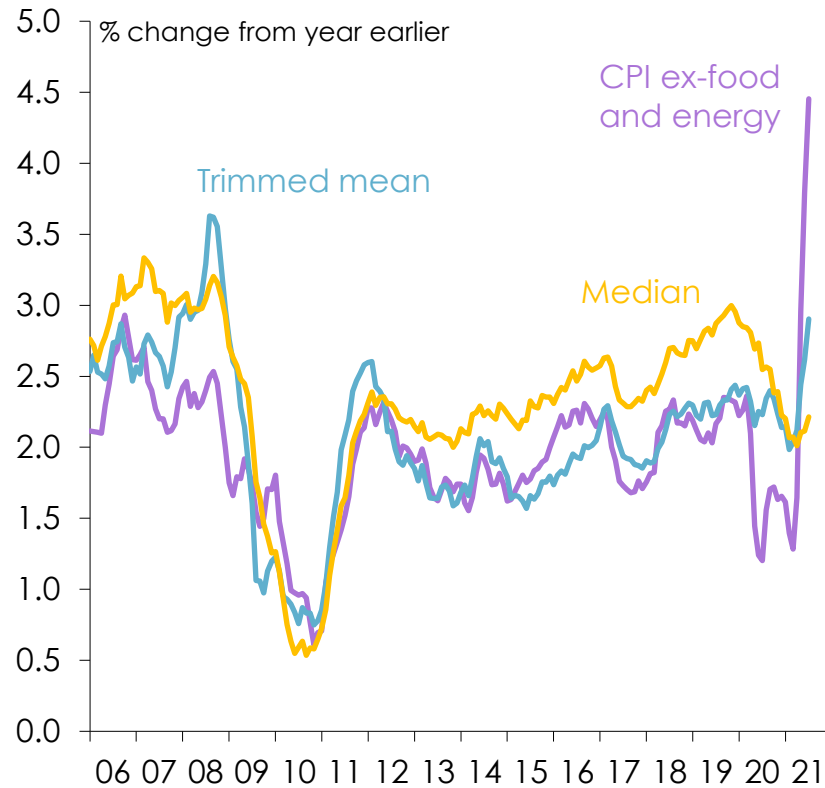
Price indices for items which have contributed most to recent monthly changes in the 'core' US CPI (rebased to December 2019 = 100)



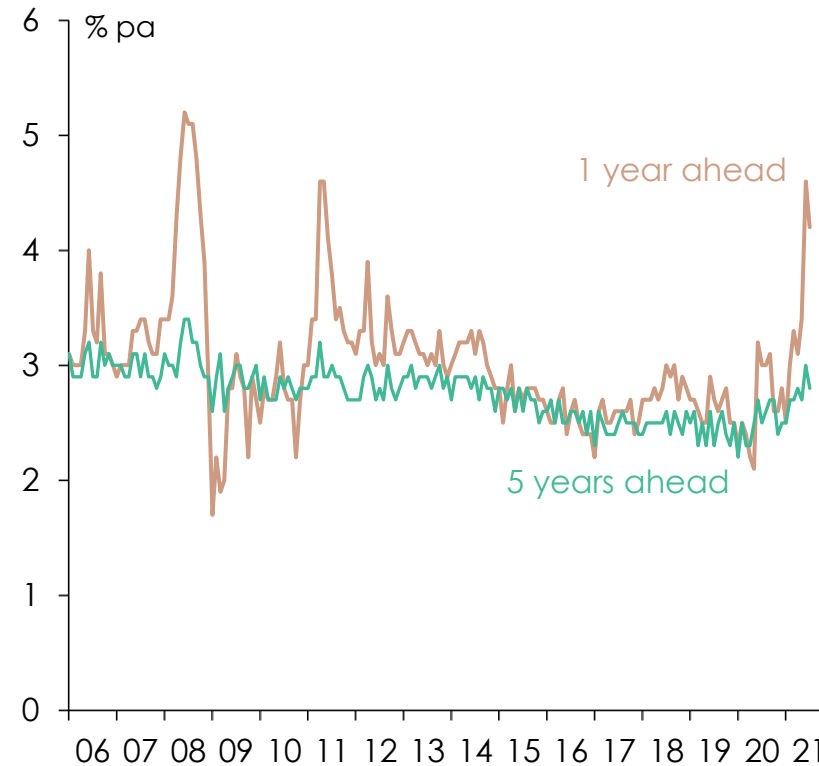
Note: 'HOER' = home-owners' equivalent rent (a measure of the 'imputed rent' notionally paid by owner-occupiers to themselves), and which accounts for 28½% of the CPI excluding food and energy. Source: US Bureau of Labor Statistics, Consumer Price Index Table 6; Corinna. [Return to "What's New"](#).

Hence the Fed insists that these increases in 'core' inflation are 'transitory' – and financial markets seem to be coming around to that view

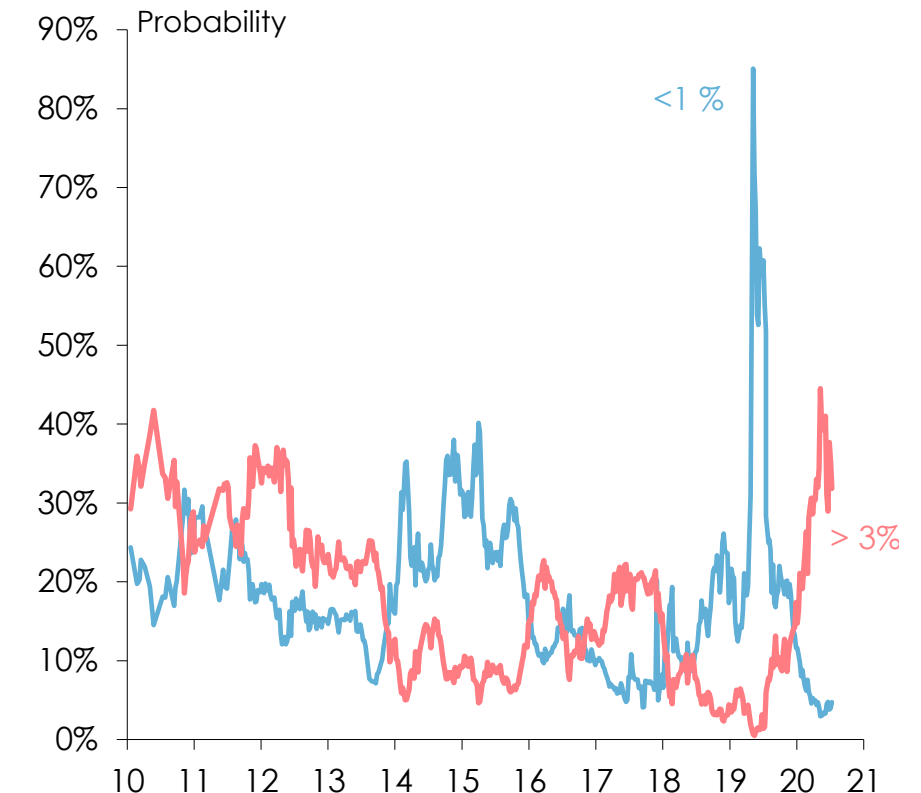
Statistical measures of annual 'core' inflation in the US



Household inflationary expectations



Market-implied probabilities of inflation in 5 years' time



- Statistical measures (similar to those used by the RBA) suggest that the rise in 'core' inflation is almost entirely due to 'outliers' (such as used cars, car rentals, air fares, and hotel charges)

- Household inflation expectations (which are important to the Fed) rose sharply between January and May but (importantly) eased back in June

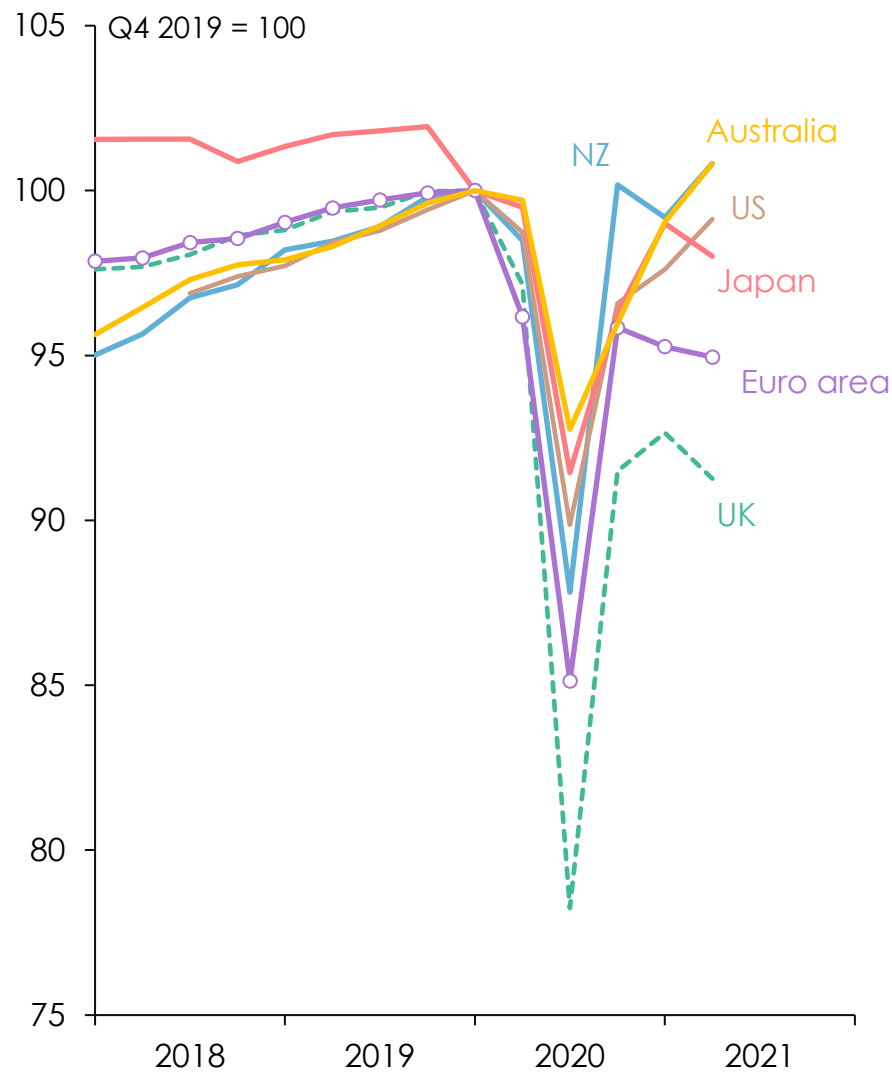
- As of early July options pricing imply markets are giving a 32% probability to inflation exceeding 3% in 5 years' time, down from a peak of 44% in early May

Note: The 'trimmed mean' CPI inflation rate excludes the components of the CPI whose weights fall in the top and bottom 8% of the distribution of price changes; the median is the component whose price change is in the middle of the distribution of price changes. 'Market-implied probabilities' of higher or lower inflation are derived from options pricing. Sources: US [Bureau of Economic Analysis](#); [Federal Reserve Bank of Cleveland](#); [Michigan University Survey Research Center](#); and [Federal Reserve Bank of Minneapolis](#).

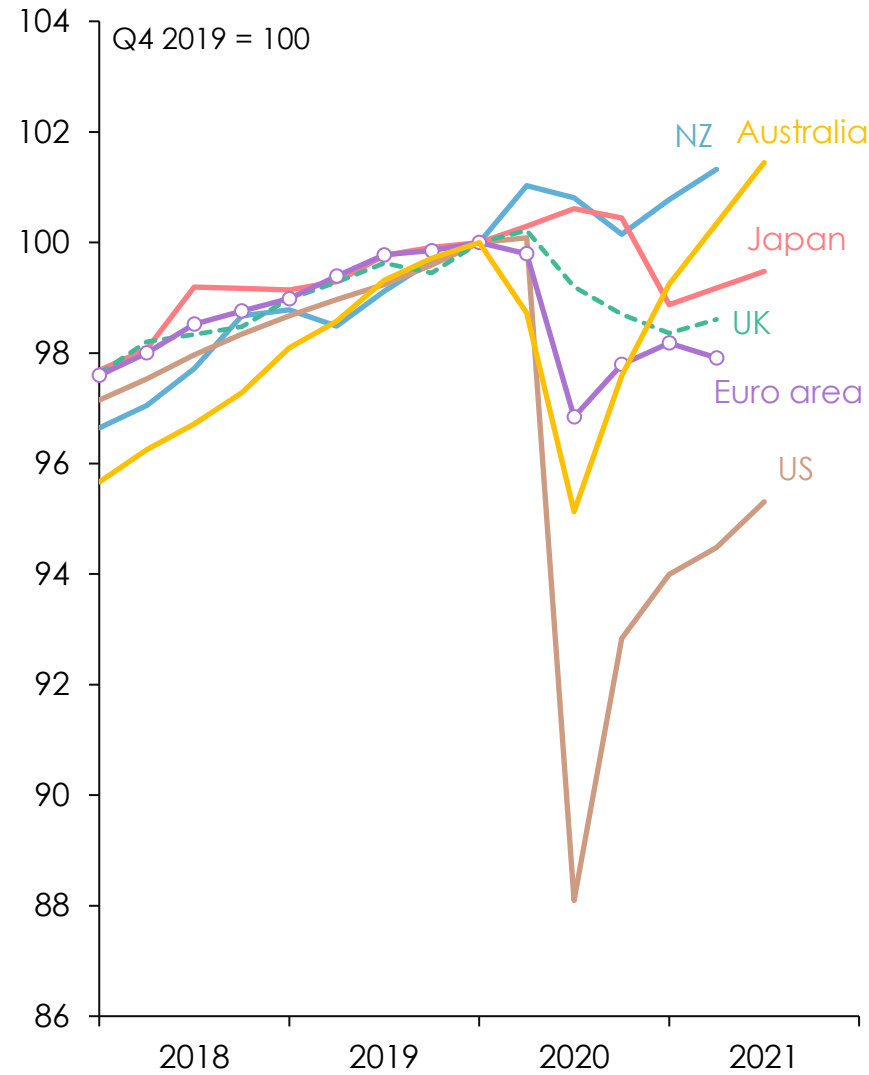
The Australian economy

Australia's recession hasn't been as severe as those experienced in most other comparable countries

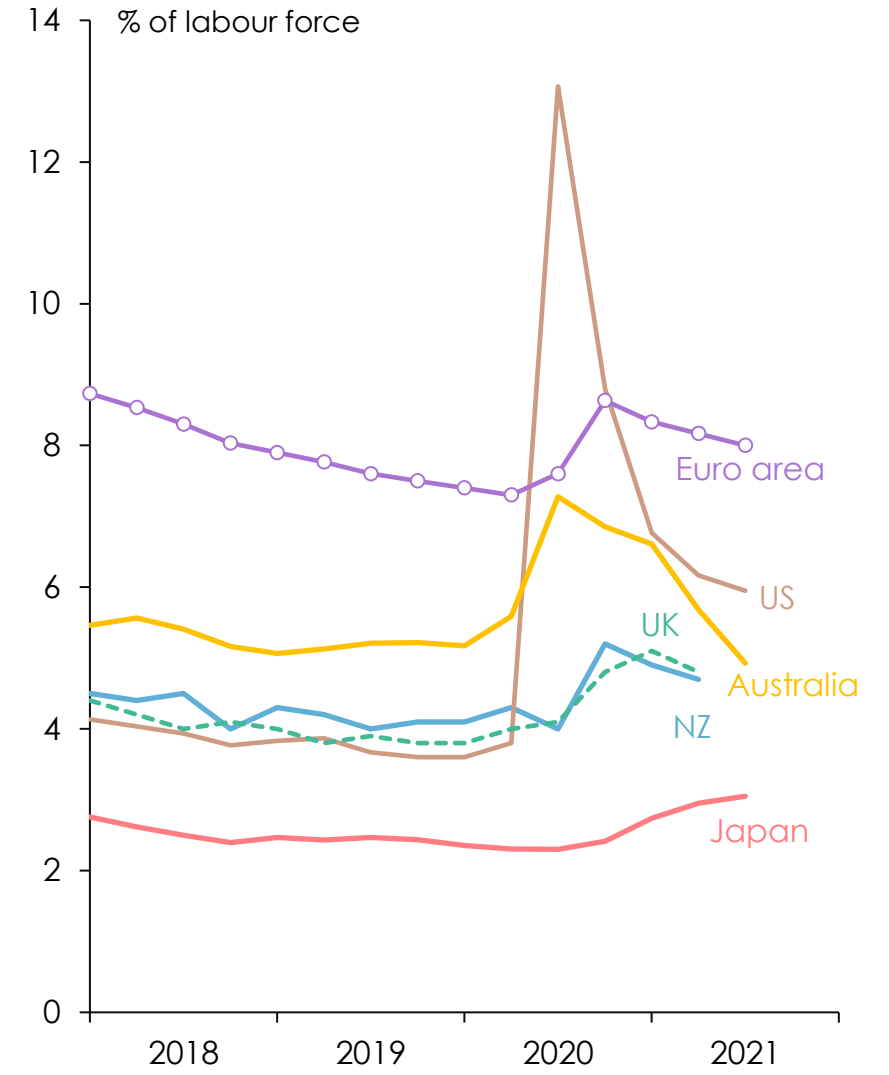
Level of real GDP



Employment



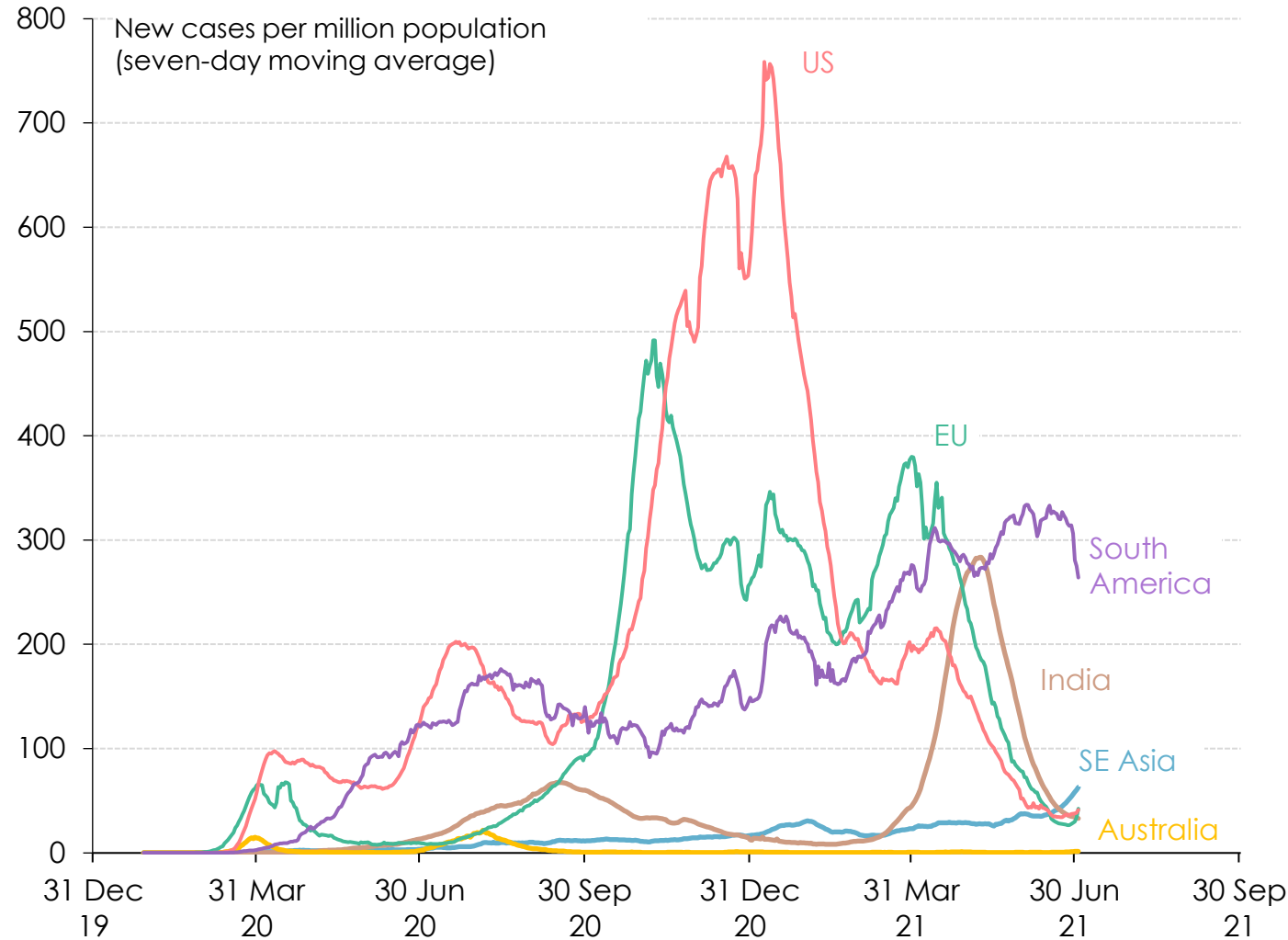
Unemployment



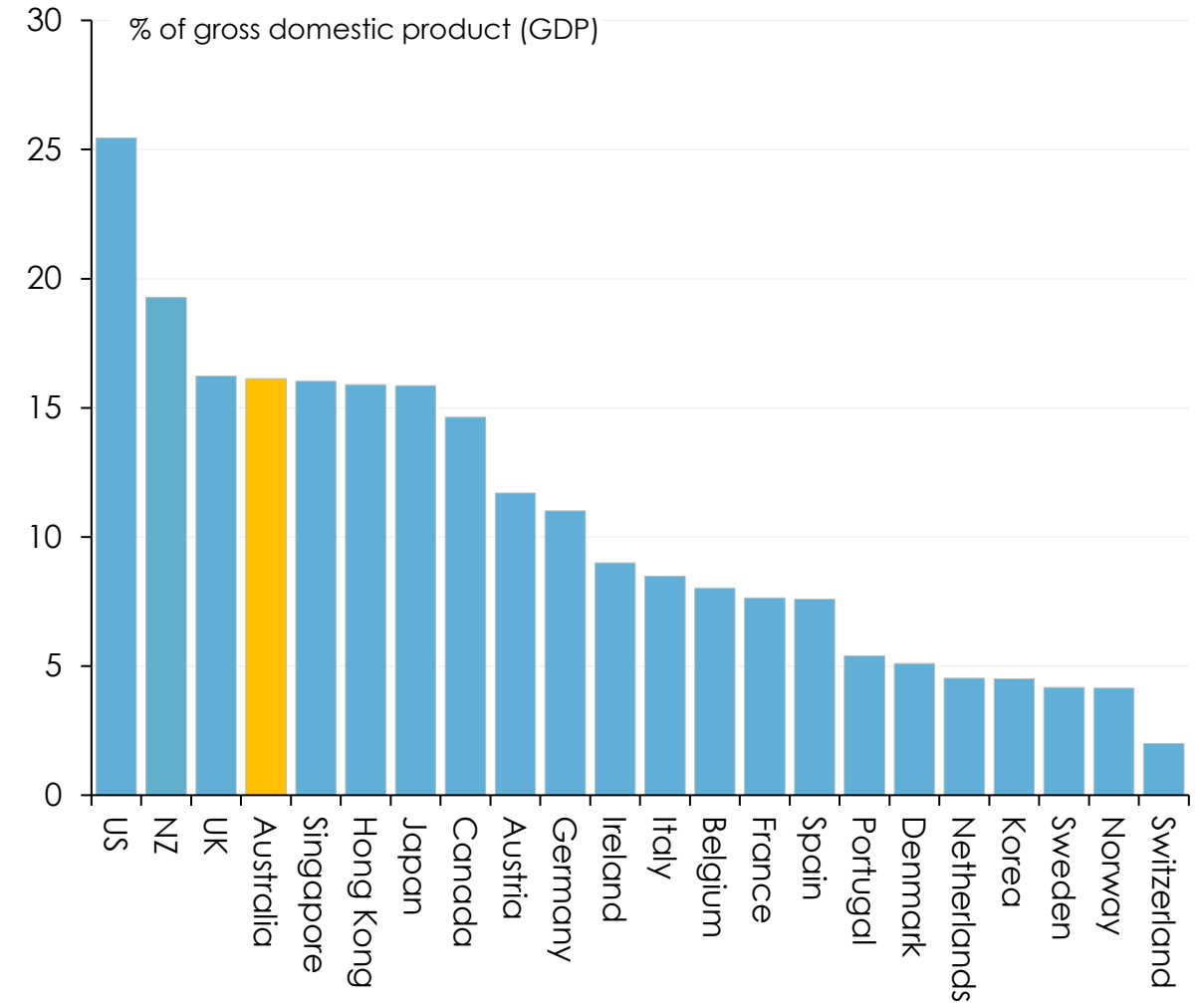
Sources: ABS; Statistics NZ; US Bureau of Economic Analysis; US Bureau of Labor Statistics; Japan Economic & Social Research Institute; Statistics Bureau of Japan; Eurostat; UK Office for National Statistics; Corinna.

That's because we've done a better job than most others of suppressing the virus – and because governments have provided more fiscal support

New covid-19 infections per million population, Australia compared with other countries and regions



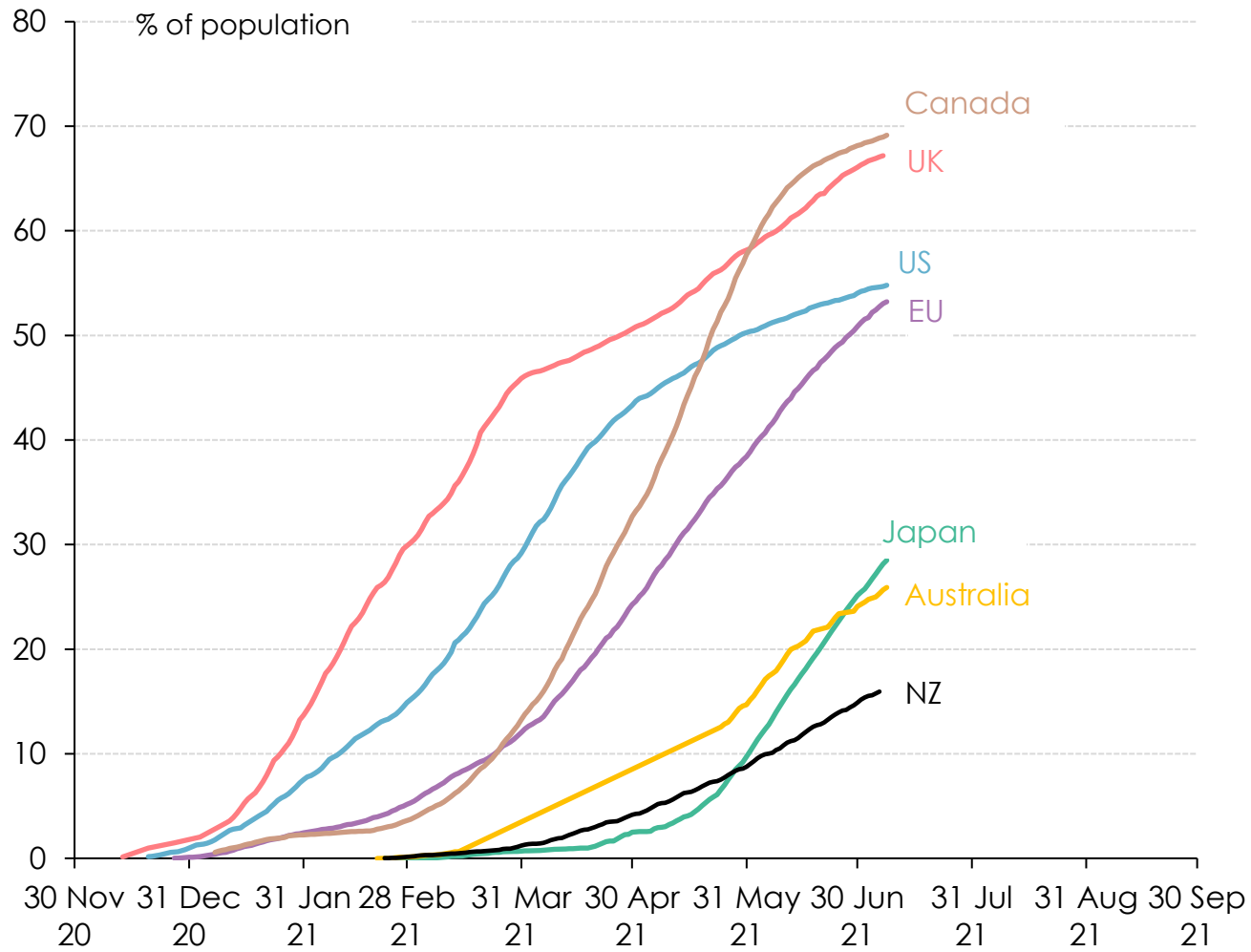
Fiscal policy responses to Covid-19 – selected 'advanced' economies



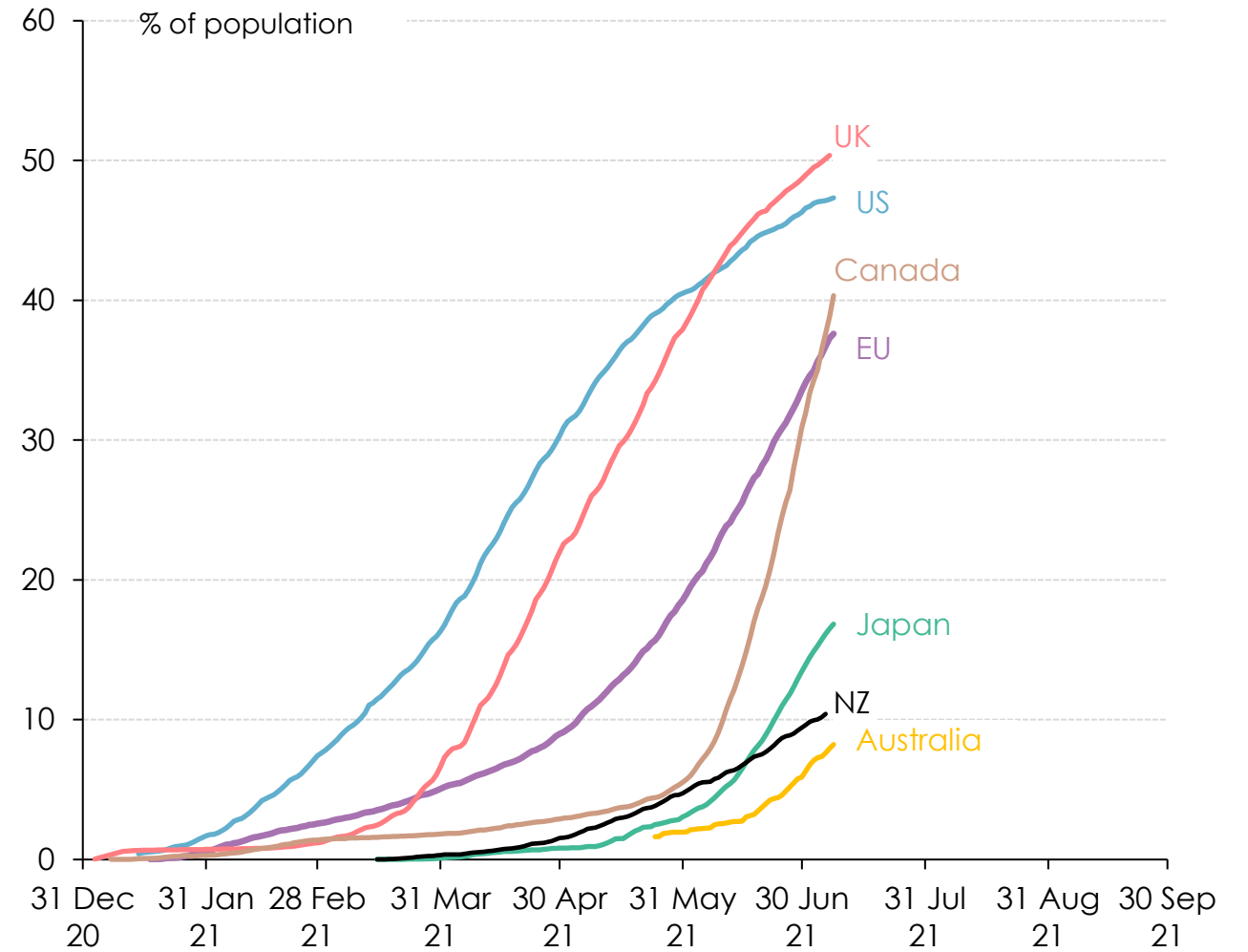
Sources: University of Oxford, [Our World in Data](#) (data up to 8th July); IMF, [Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic](#), April 2021 (includes measures announced up until 17th March 2021); Corinna.

However, there is now another (more sustainable) 'strategy' for managing Covid-19 – and Australia hasn't done nearly as well at it

Percentage of major 'advanced' economies' populations who have had one vaccine shot



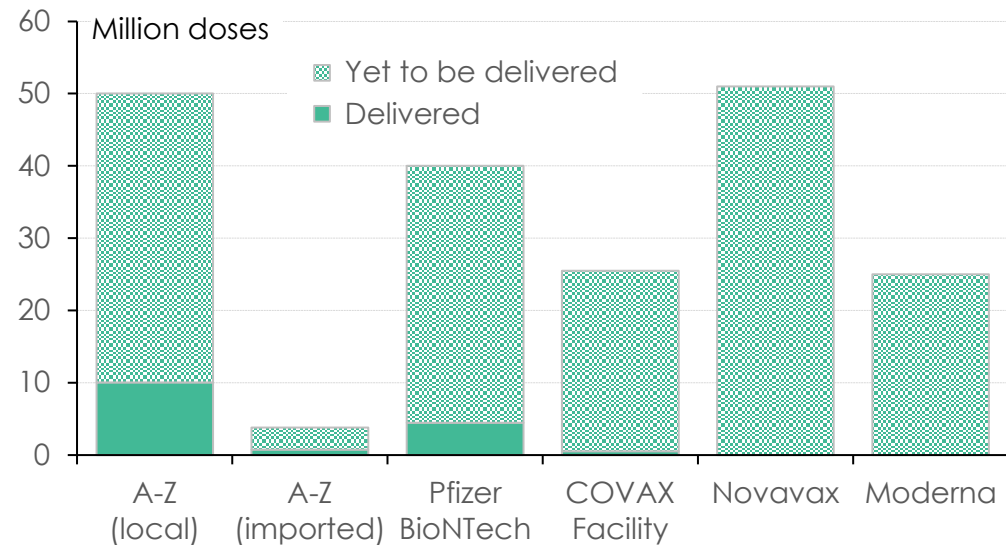
Percentage of major 'advanced' economies' populations who have had two vaccine shots



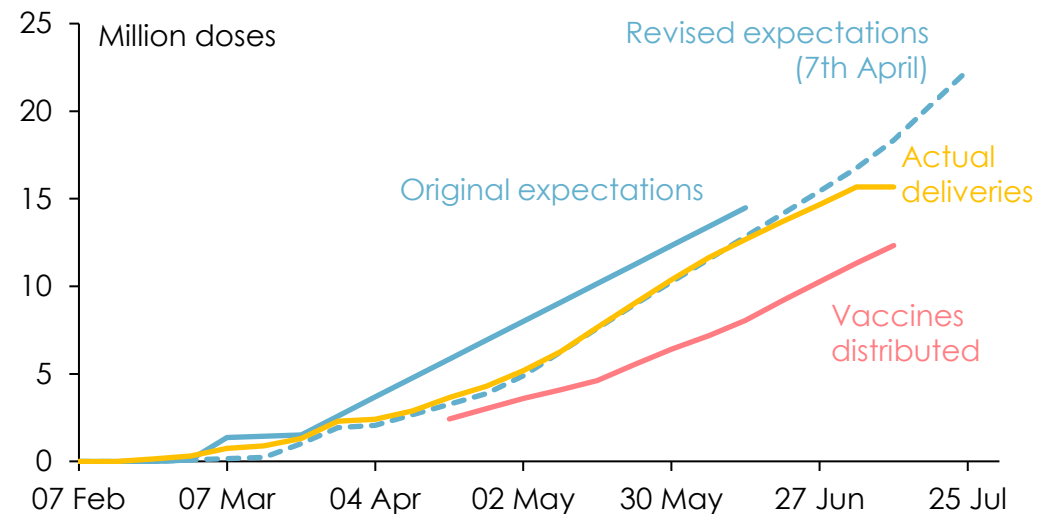
Note: Data up to 6th – 8th July. Source: [Our World in Data](#); [Coronavirus \(COVID-19\) Vaccinations](#).

What's gone wrong with Australia's vaccine roll-out?

Australia's vaccine supplies



Original & revised expectations vs supplies



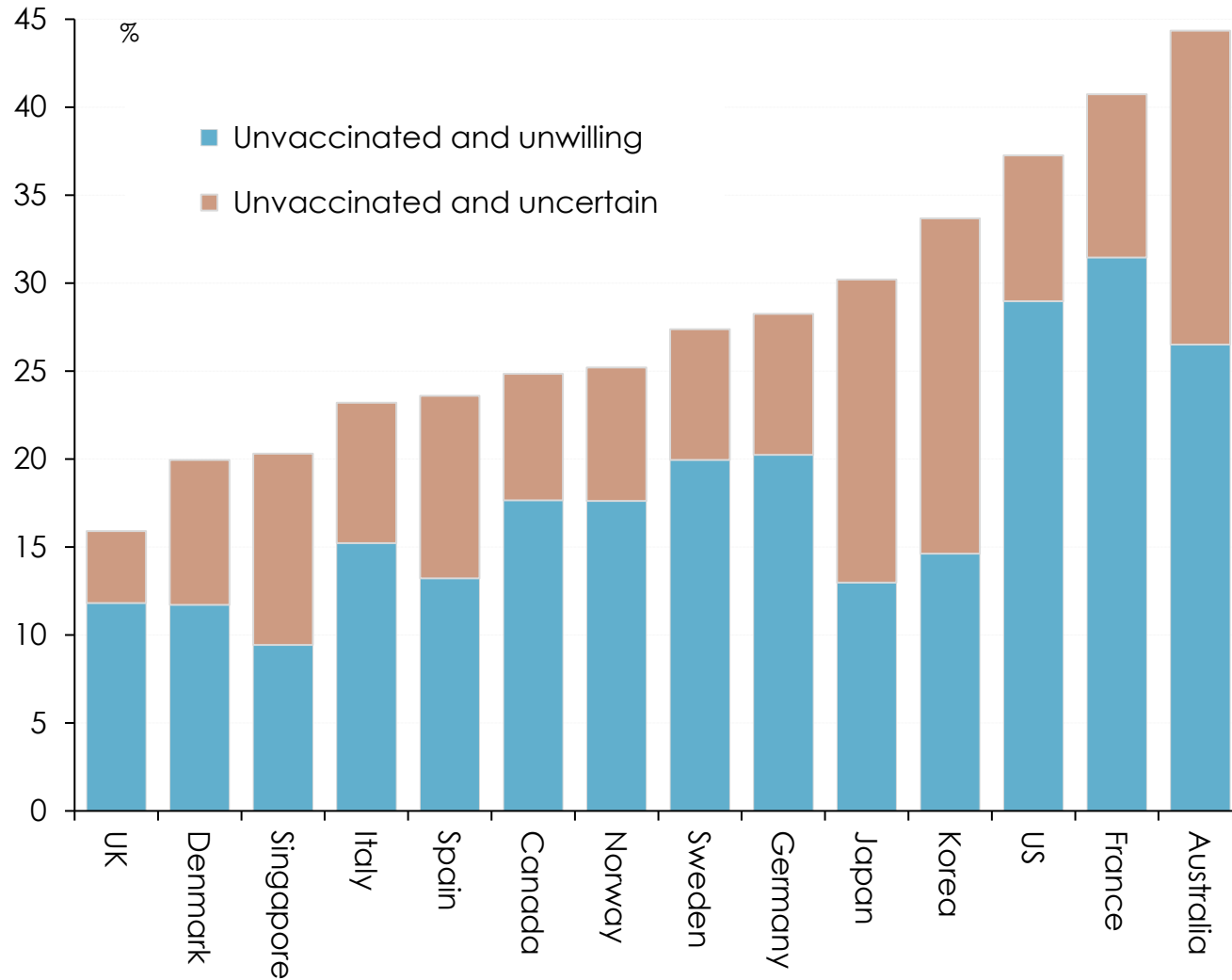
Note: Vaccine supplies are as at 10th July.

Source: <https://www.covid19data.com.au/vaccines>

- ❑ **Australia originally put too many of its vaccine 'eggs' in the Astra-Zeneca 'basket'**
 - partly because the Astra-Zeneca vaccine was easier to store, and considerably cheaper, than the Pfizer vaccine
 - and partly out of a (misplaced, with the benefit of hindsight) concern over 'sovereignty' (ie the Astra-Zeneca vaccine could be manufactured in Australia, whereas mRNA vaccines like Pfizer and Moderna can't be)
- ❑ **Deliveries of the Astra-Zeneca vaccine were slower than expected**
 - partly because the EU, at Italy's behest, blocked the delivery of up to 3.1mn doses to Australia (although the EU denies that)
 - local production of the Astra-Zeneca vaccine has taken longer to 'ramp up' than expected – as of early May, less than half the originally expected 3mn doses had been produced; as of this weekend, local production is still 1mn doses behind the 'revised' schedule
- ❑ **Australia's success in suppressing the virus probably bred complacency on the part of the population about getting vaccinated**
- ❑ **Concerns about the risk of potentially fatal blood-clots as a side-effect of the Astra-Zeneca vaccine prompted the Government's medical advisors to warn against giving A-Z to people under 60**
 - advice that was also (ironically) coloured by the much lower infection rates in Australia (which thus meant a different 'balance of risks' against side effects than in countries with much higher infection rates)
- ❑ **Concerns about A-Z side effects have played into Australia's surprisingly high rates of 'vaccine hesitancy'**

'Vaccine hesitancy' is a barrier to returning to 'normal' – and Australia has the highest vaccine hesitancy out of 14 'advanced' economies

Covid-19 vaccine hesitancy, selected 'advanced' economies, June 2021



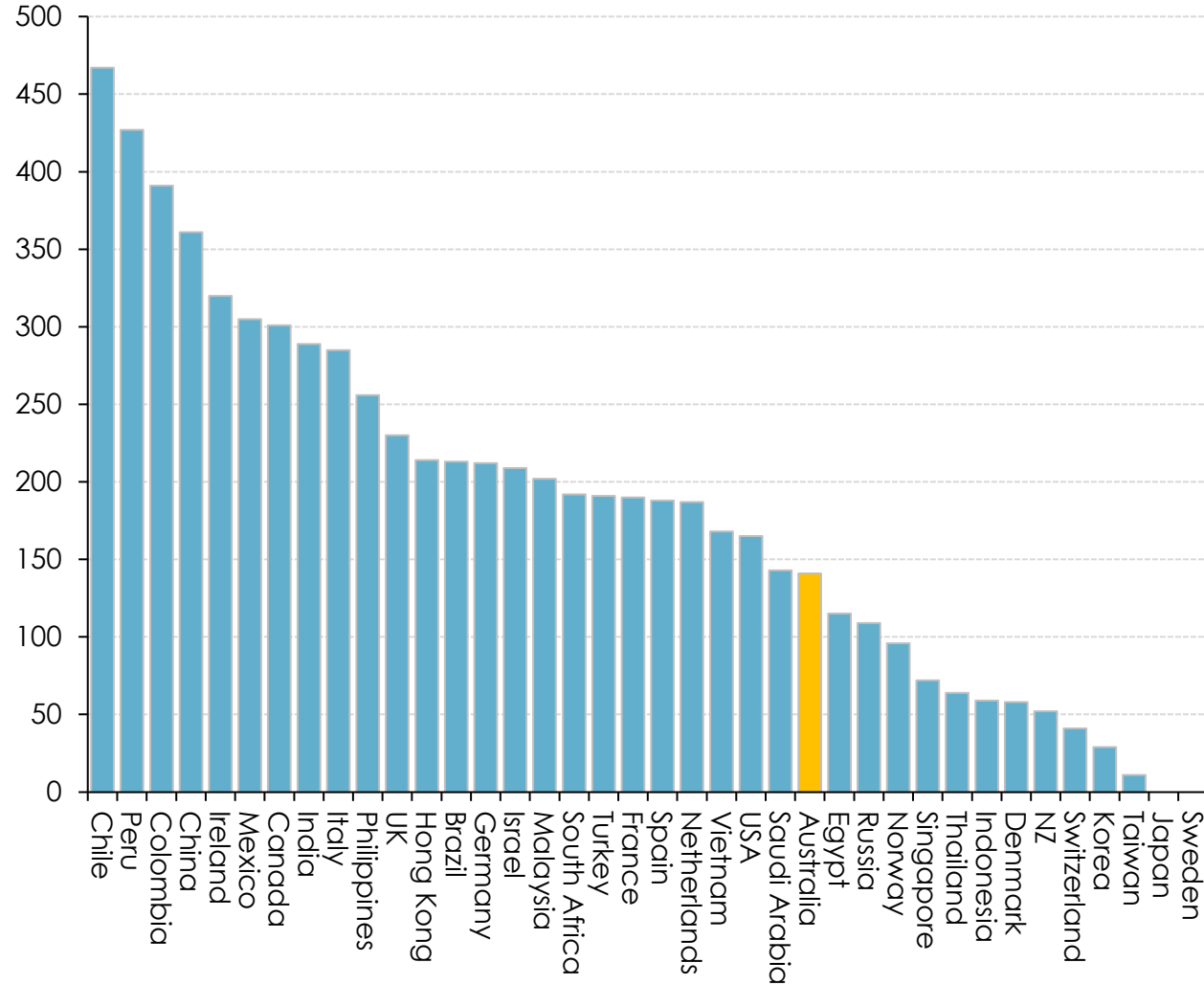
Australians 'strongly agreeing or agreeing' that they would get a vaccine when available



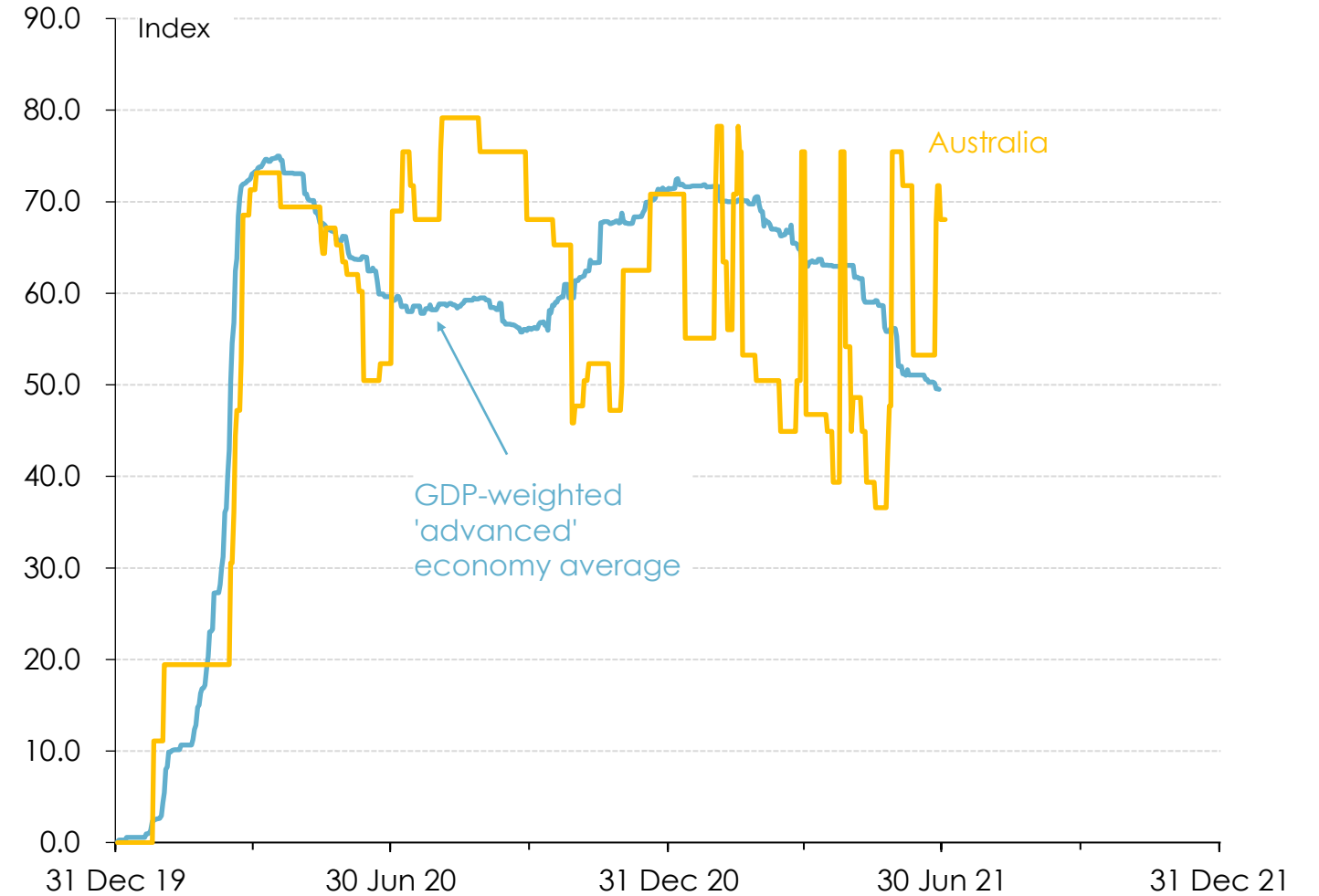
Note: Results for UK and Canada are for May. June results for Australian states will be released on Wednesday 14th July.
Sources: Imperial College London and YouGov, [Covid 19 Behaviour Tracker Data Hub](#); ABS, [Household Impacts of Covid-19 Survey](#), May 2021.

Australia's restrictions are now once again more stringent than the average of 'advanced' economies

Number of days for which the stringency of restrictions has been above 70 on the Oxford Index



Stringency of Australia's restrictions compared with an average of other 'advanced' economies



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 2nd - 7th July, except for Brazil, 21st June, South Africa, 24th June, and Indonesia, Malaysia and US, 28th June.

... but Australia's border measures have been stricter than almost any other country (and certainly any democracy)

- ❑ Article 12 of the United Nations [International Covenant on Civil and Political Rights](#) (which Australia signed in 1972, and which it ratified in 1980) says
 - “everyone shall be free to leave any country, including his [sic] own” and “no-one shall be arbitrarily deprived of the right to enter his [sic] own country”
- ❑ Australia is [the only democracy in the world](#) not to have enacted this Convention into domestic law
- ❑ The ICCPR does include a couple of ‘get out’ clauses
 - Article 4 provides that “In time of public emergency which threatens the life of the nation and the existence of which is officially proclaimed [parties to this Convention] may take measures derogating from their obligations under [it] to the extent strictly required by the exigencies of the situation”, and
 - Article 12 provides that the rights to leave a country (or to move within it) “shall not be subject to any restrictions except those which are provided by law, are necessary to protect national security, public order, public health or morals or the rights and freedoms of others” – although this exclusion doesn’t apply to the above-mentioned right to enter one’s own country
- ❑ No other democracy appears to have availed itself of these ‘get-out’ clauses to the extent that Australia has
 - The Federal Court [decided](#) in May this year that the Federal *BioSecurity Act* over-rode any “rights of entry” into Australia that the ‘common law’ may otherwise confer on Australian citizens
- ❑ The widely-cited Oxford University index of the stringency of government Covid-related restrictions does not include outward travel bans or restrictions on citizens returning
 - according to [Toby Phillips](#), the Executive Director of the Oxford Government Response Tracker project, “we assumed countries would always let their own citizens return” and “we even wrote this into our training for data collectors, telling them to only focus on restrictions for non-citizens”
- ❑ Despite being highly unusual, Australia’s travel bans have been highly popular with voters
 - a [Newspoll](#) survey taken just after the Budget found that 73% of respondents agreed that “international borders should remain largely closed until at least mid-2022”

Australia's strategy is starting to attract more critical attention

Fatal flaws in Australia's hermit nation strategy

Canberra squandered its early Covid victory with a glacial vaccine rollout

One day a rooster, the next a feather duster. That terse reminder that success can be fleeting has long been popular in Australia. For the leaders of the country's response to the coronavirus pandemic, it has become regrettably apt.

Until now, Australia has enjoyed a glow of global approval for adroitly weathering the crisis with a "Covid-zero" policy of ruthless virus suppression. Having rushed to shut its international [borders](#) to non-citizens and non-residents last year, a measure that could stay in place until mid-2022, it deployed an enviable test and tracing system that has helped to keep its total Covid-19 death toll [at 910](#). That is fewer than countries such as the UK have at times recorded in [one day](#). Yet while Australia's stadiums and restaurants stayed full, and theatregoers thronged to *Hamilton*, the UK was doing one thing Canberra was too slow to organise: a successful Covid vaccine rollout.

"It's not a race," prime minister Scott Morrison [insisted](#) in March, as concerns grew about what critics have called a vaccine "strollout". He was wrong. Having squandered its early victory over the virus, despite being one of the world's wealthiest countries, Australia now faces a costly round of restrictions as it struggles to protect a largely unimmunised population from outbreaks of the highly contagious Delta variant. Sydney, home to a fifth of the nation's 25m people, is entering its third week of a lockdown due to stay in place until July 16. Australia now stands as a warning to other nations, not least neighbouring New Zealand, that a fortress approach to the virus cannot succeed in the absence of an effective vaccine programme.

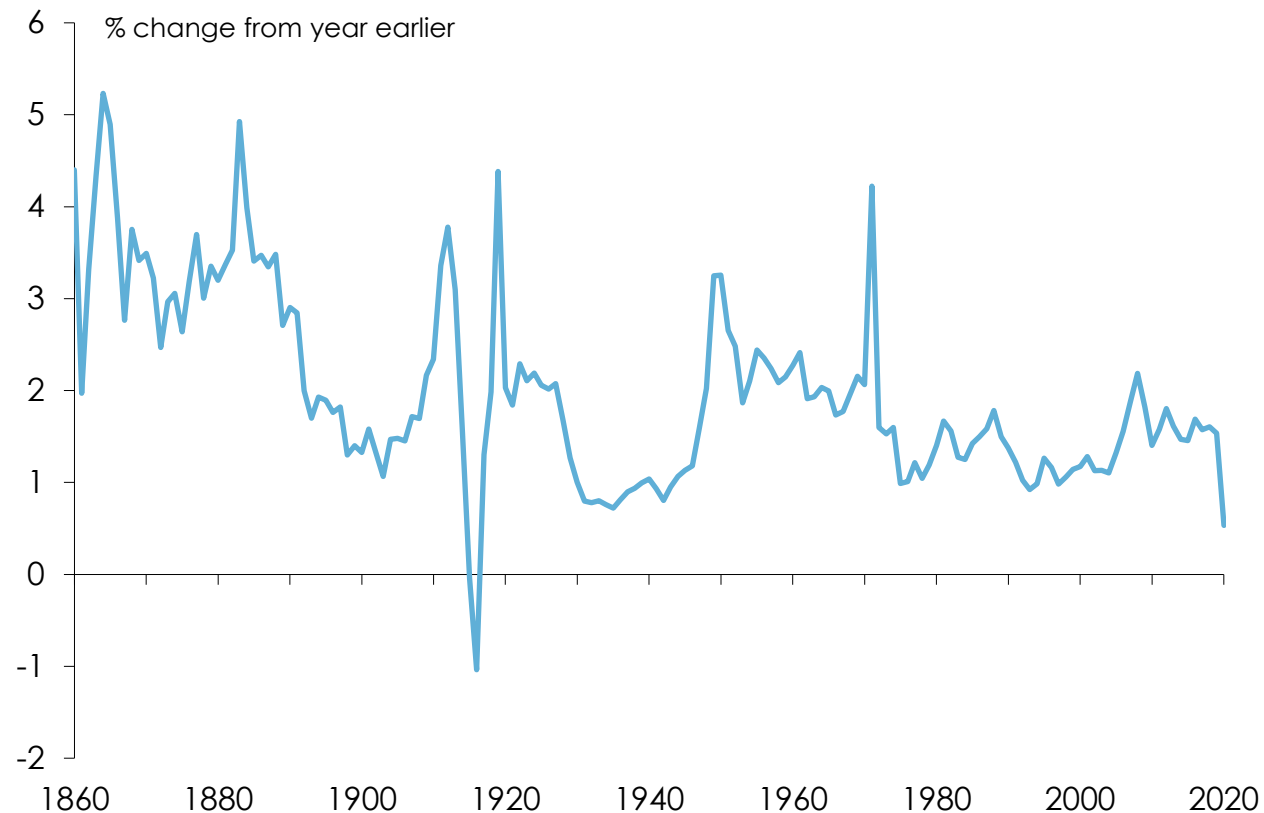
The contrast with Canberra's newly minted trading partners in the UK could scarcely be more stark. With roughly [50 per cent](#) of Britons fully vaccinated, Boris Johnson, UK prime minister, unveiled plans last week to lift almost all coronavirus restrictions from July 19 in England. Shortly before that in Australia, where just [8 per cent](#) are fully jabbed, Morrison announced the number of people allowed into the country from abroad would be halved to just [3,035 a week](#).

Johnson's move [was hasty](#). But Morrison's approach also has a high price. Estimates of the financial and economic cost vary but the human toll has also been considerable. Thousands of Australians have been stranded abroad since the pandemic began, unable to secure scarce, expensive seats on commercial flights that were limited even before the latest caps were announced. More government repatriation flights are planned to ease the impact of the latest arrival limits. But this will not help those affected by Australia's highly unusual [decision](#) to restrict its own citizens from leaving the country, a step designed to relieve pressure from returning travellers on its quarantine system. That system itself is another sign of complacency. Canberra only [belatedly backed](#) the construction of safer, purpose-built quarantine facilities, long after it was clear the [virus had spread](#) in hotels converted to house returned travellers.

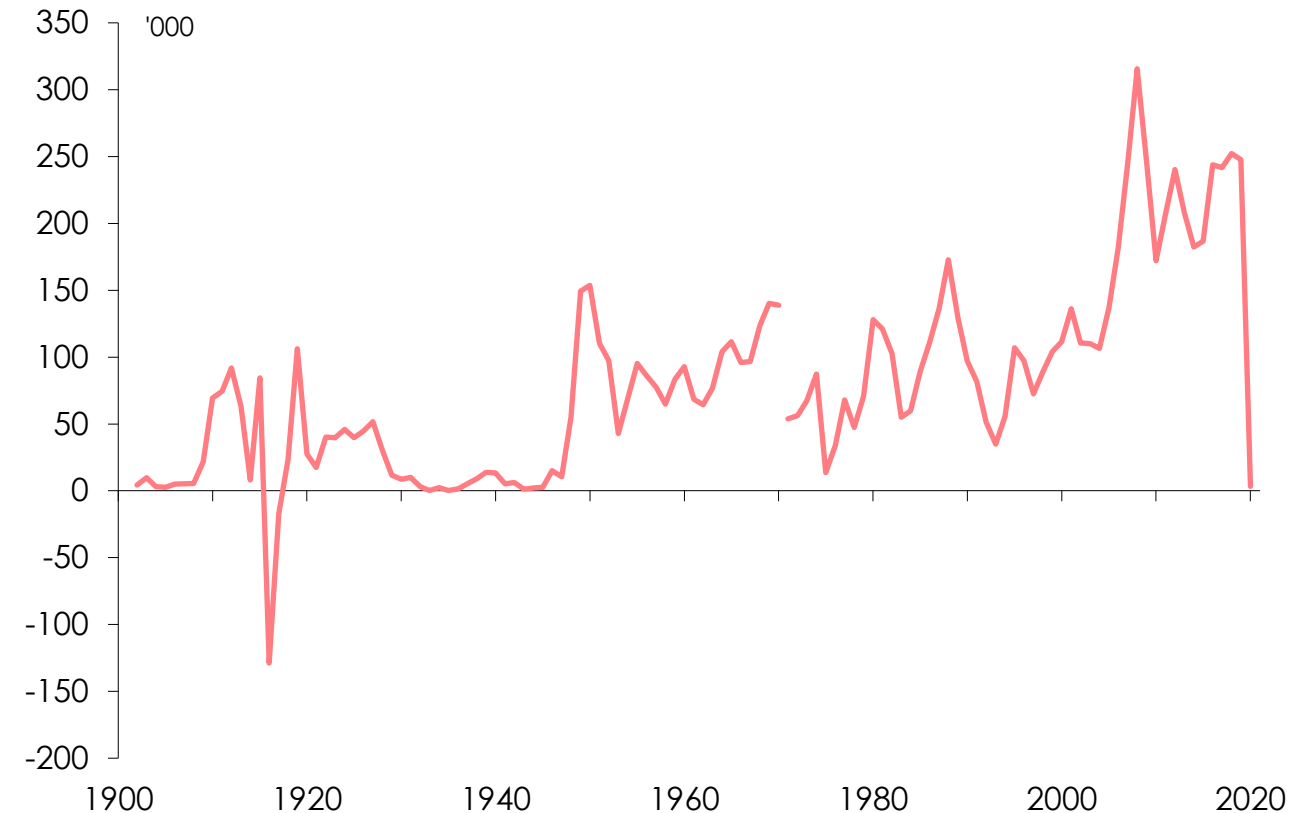
Australia's approach has been domestically popular until now. Polls show some three-quarters of the population have backed the border closures. Yet as a panel of experts wrote in a [recent report](#) on how the country could reopen, "Australia cannot continue to lock itself off from the world as a hermit nation indefinitely." The social and economic costs are too large, especially for younger people. The wider lesson for a world facing ever more virus variants, is that glacial vaccine rollouts spell disaster, no matter how rich or hermetically sealed a country may be.

The closure of Australia's international border since March last year has resulted in the slowest population growth in 104 years

Australia's population growth, 1860 -2020



Net migration to Australia, 1900-20

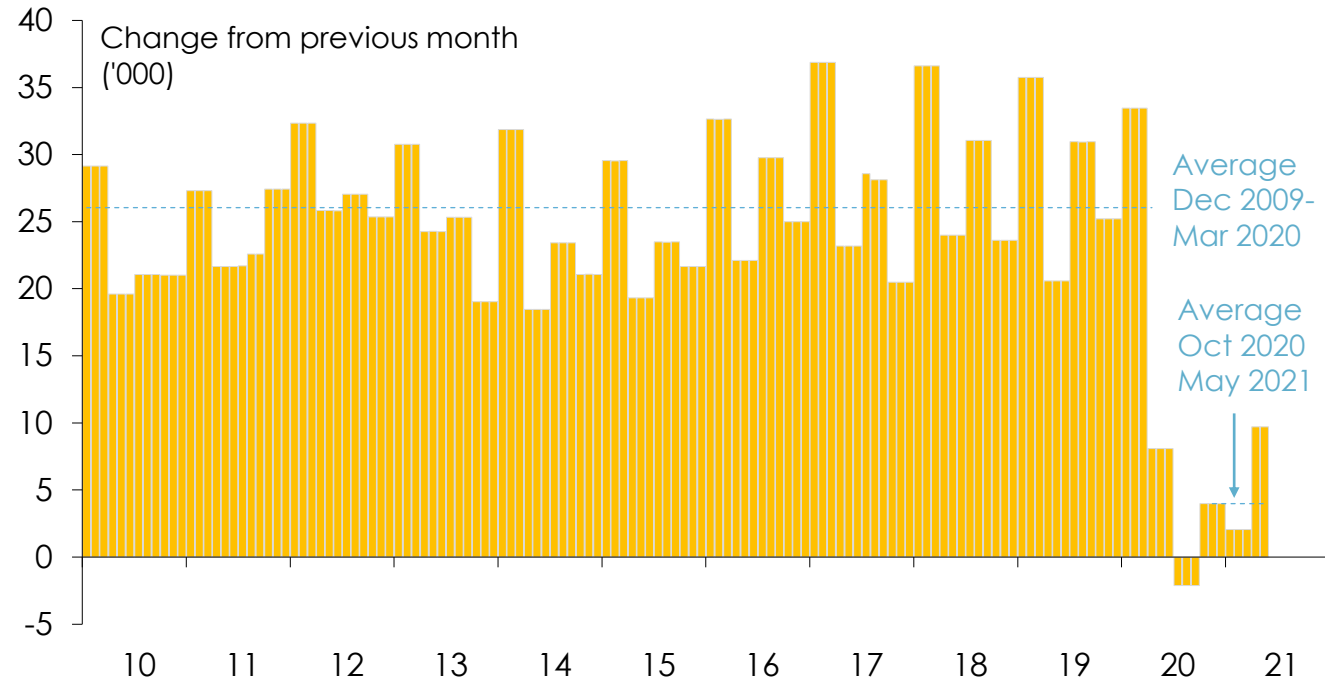


- ❑ Only 76K immigrants came to Australia in the last nine months of 2020, while 151K people departed permanently – implying a net outflow of almost 68,000 people
- ❑ As a result, Australia's population growth rate fell to just 0.5% over the year to Q4 2020, the slowest since 1916
- ❑ Slower growth in the working-age population does however mean that a given rate of employment growth results in faster reductions in the unemployment rate (all else being equal)

Note: The net migration data has a series break at 1971 due to definitional changes. Sources: ABS, [National, state and territory population](#), December 2020; [Historical Population](#), 2016; [Migration, Australia](#), 2019-20; [Demography Bulletin](#), 1923, 1940, 1950, 1960 and 1971; [Population and Vital Statistics Bulletin](#), 1912.

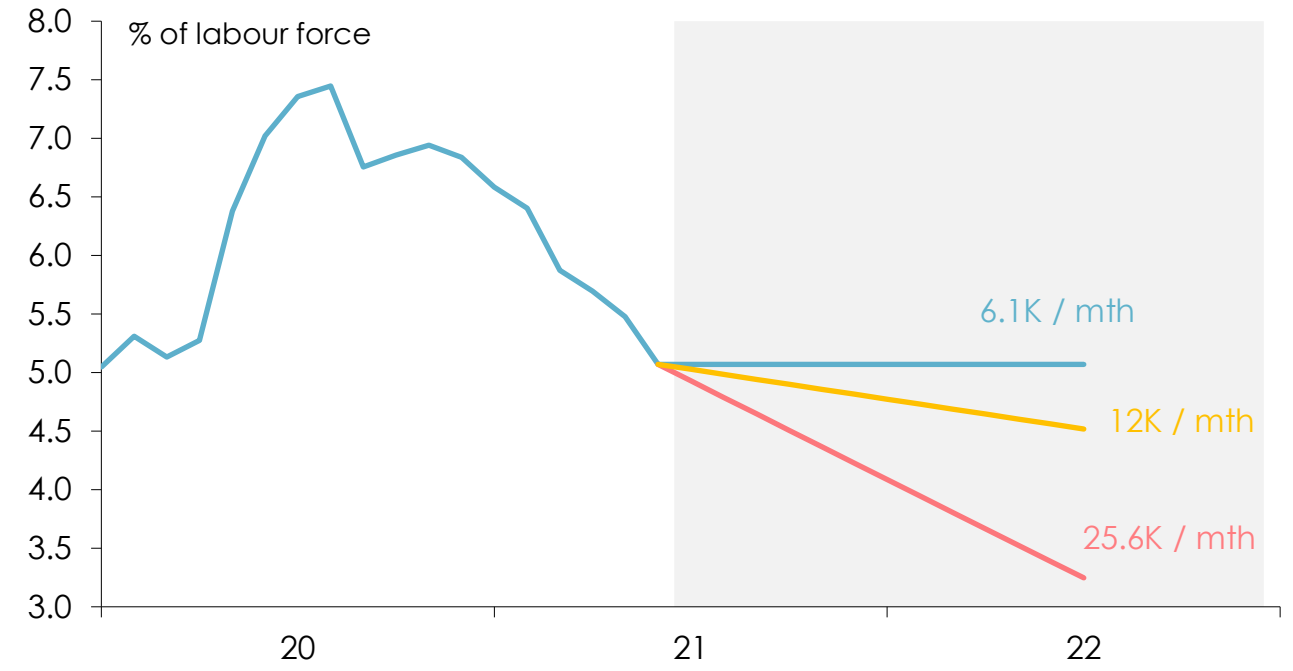
The closure of Australia's borders means that it's much easier to reduce unemployment for any given rate of jobs growth

Monthly growth in civilian working-age population



- Over the decade prior to the onset of Covid-19, the civilian working-age population (people aged 15 and over) grew by an average of 26K a month – meaning that 16½K new jobs a month, on average, were required to keep the unemployment rate constant (assuming an unchanged participation rate)
- But since last October, the working-age population has risen by an average of less than 5K a month – which means that anything more than 3K new jobs a month will result in a fall in the unemployment rate, all else being equal

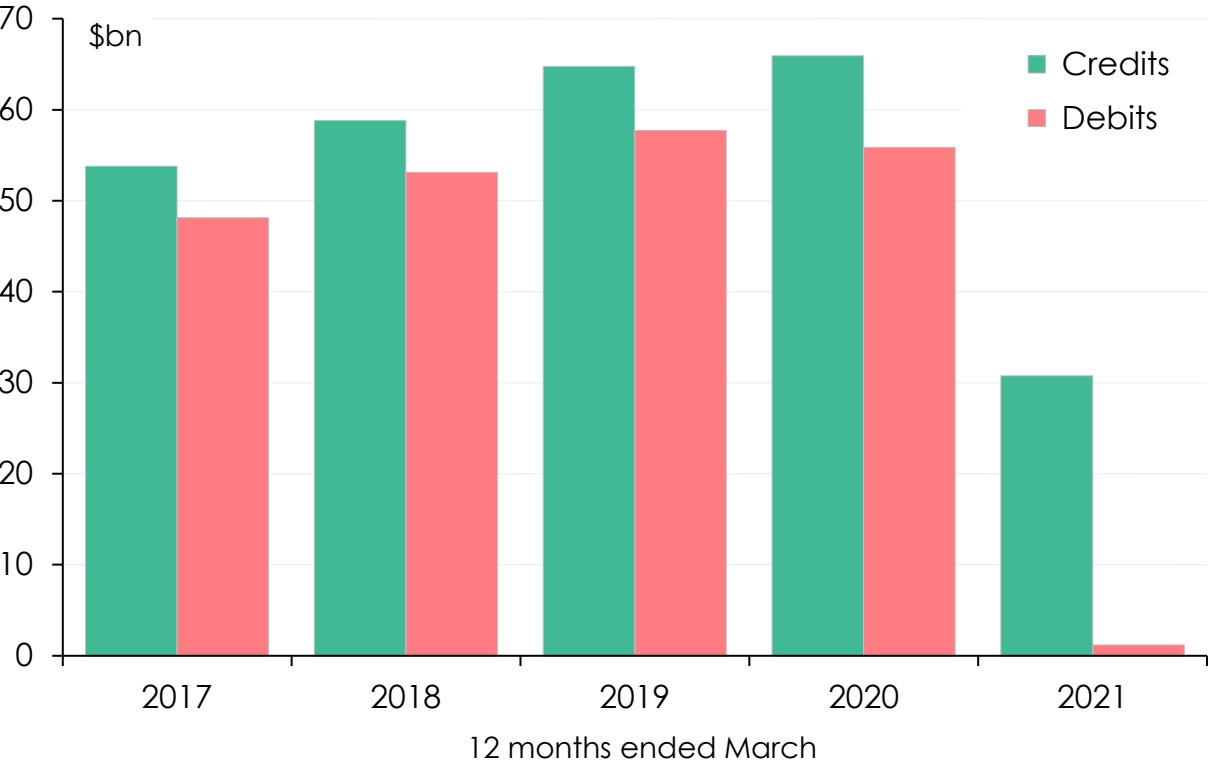
Unemployment rates for alternative rate of jobs growth



- Assuming the working-age population grows at the same rate as during the current quarter (ie 9.7K a month) and no change in the participation rate, employment growth of more than just 6.1K a month is sufficient to ensure further falls in the unemployment rate
- If employment continued to grow at half the pace so far this year unemployment would be down to 3¼% by June next year - 12K a month is all that's required to get to 4½% by next June

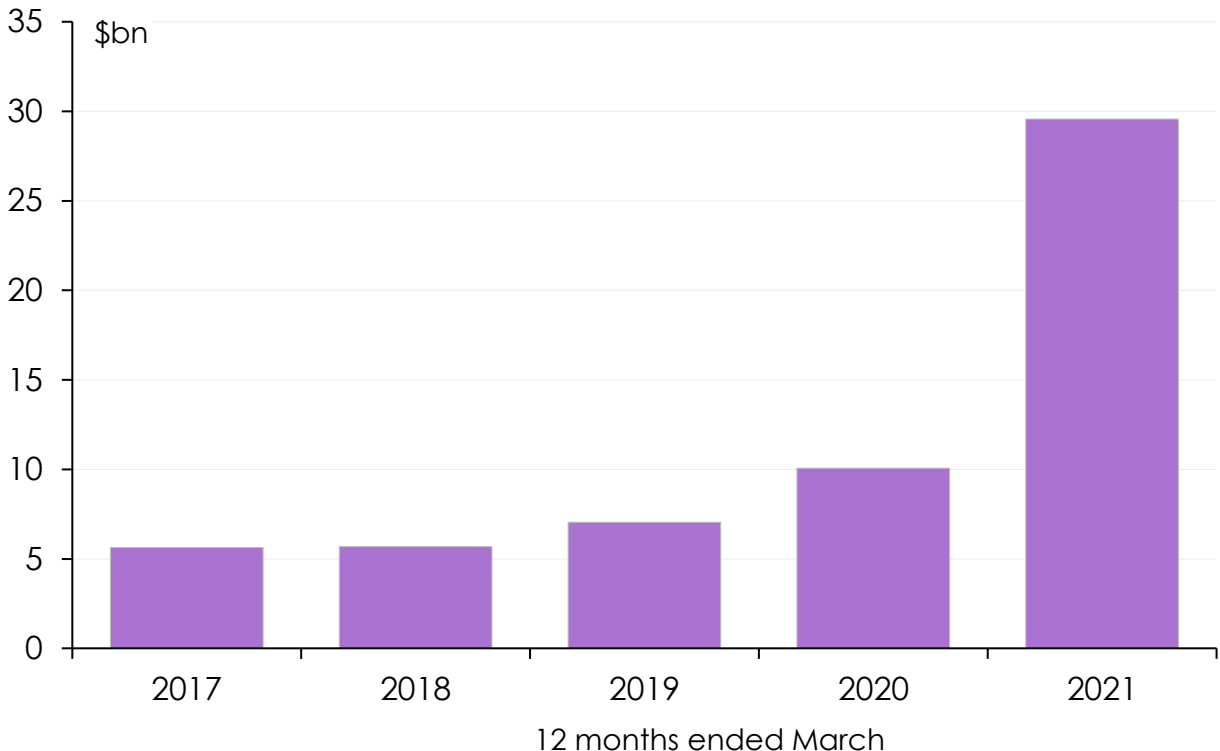
The ban on Australians (apart from Ministers & sportspeople) travelling abroad more than offsets the loss of spending by foreign tourists & students

Travel credits and debits



Over the four years to March 2020, Australians spent an average of \$54bn per annum on overseas travel – as against just \$1bn spend in that way over the 12 months to March 2021, ‘freeing up’ a large amount which appears to have been spent in other ways (electronics, household goods, clothes, cars etc.)

Net travel transactions

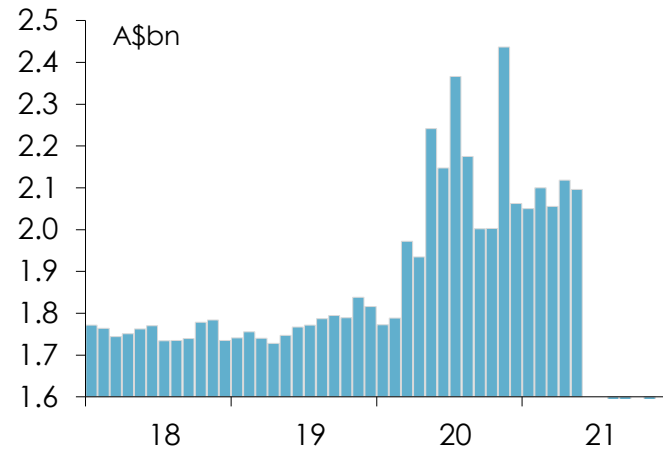


Despite restrictions, foreigners still spent \$31bn in Australia in the 12 months to March 2021 (cf. an average of \$61bn per annum over the previous four years) implying a net gain to Australia during 12 months to March this year of almost \$22½bn by comparison with the 2016-19 average – equivalent to about 1¼% of GDP

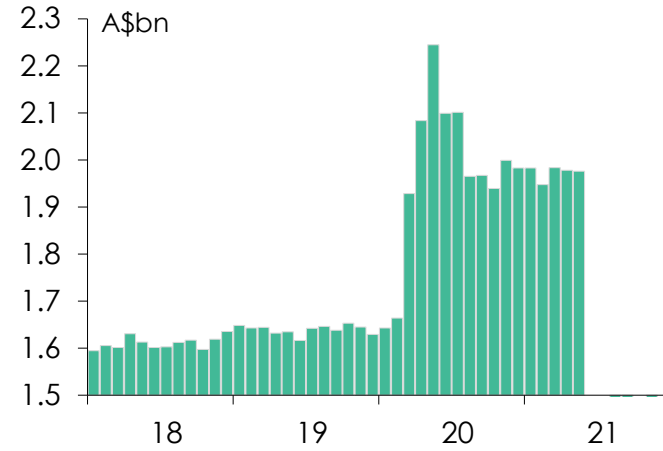
Source: ABS, [International Trade in Goods and Services, Australia](#), May 2021.

The >\$50bn per annum that Australians would have spent overseas if they'd been allowed to has instead been spent at home

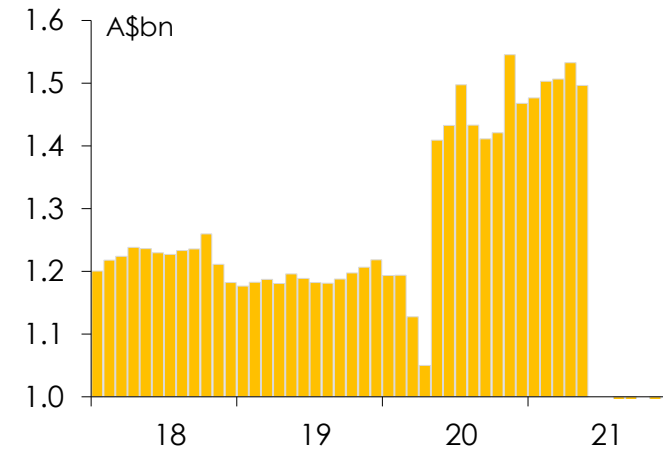
Electronic & electrical goods



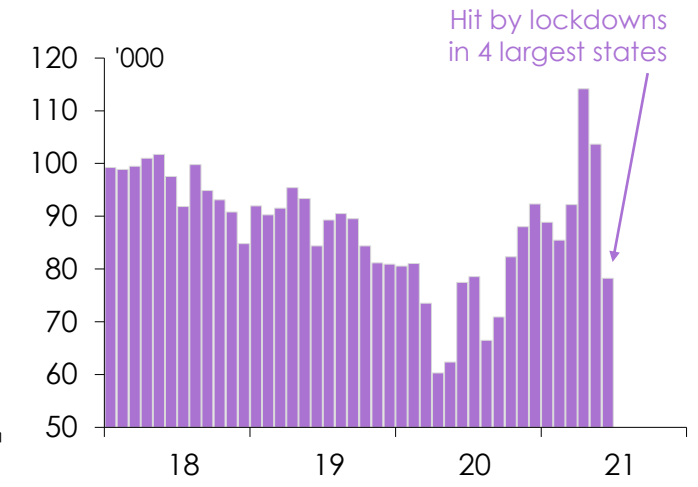
Hardware, building & garden supplies



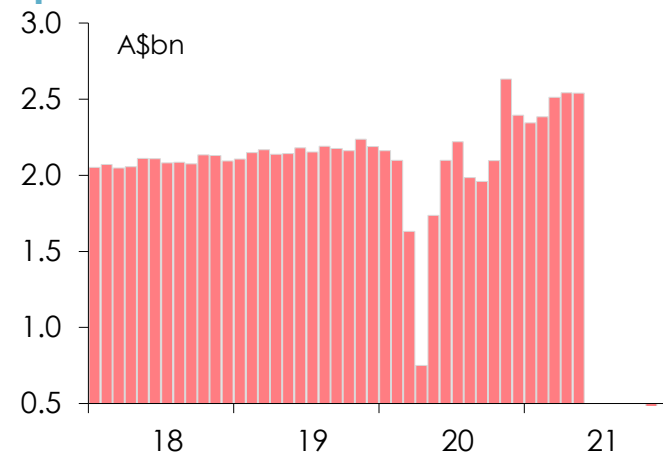
Floor coverings, furniture, housewares etc



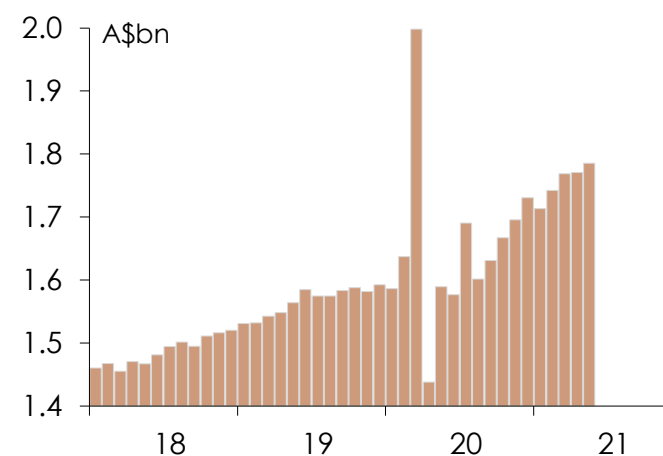
New motor vehicles



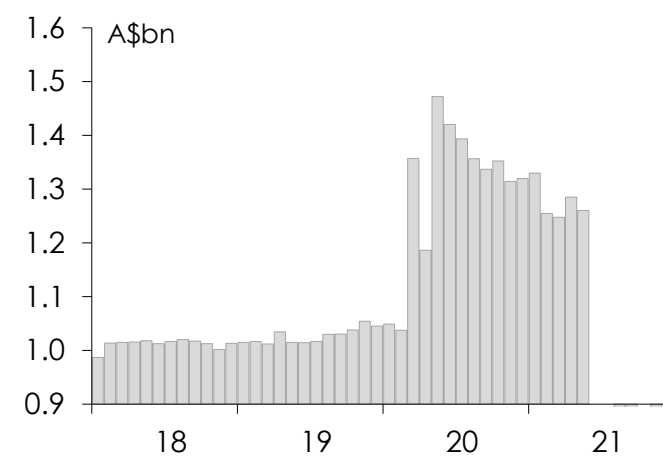
Clothing, footwear & personal accessories



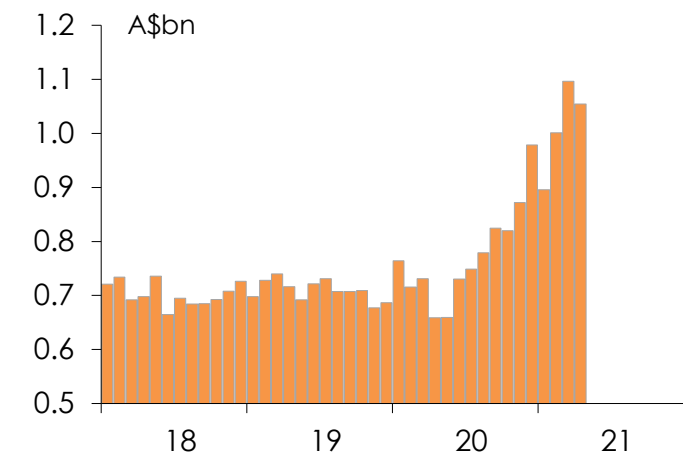
Pharmaceuticals, cosmetics & toiletries



Alcoholic beverages



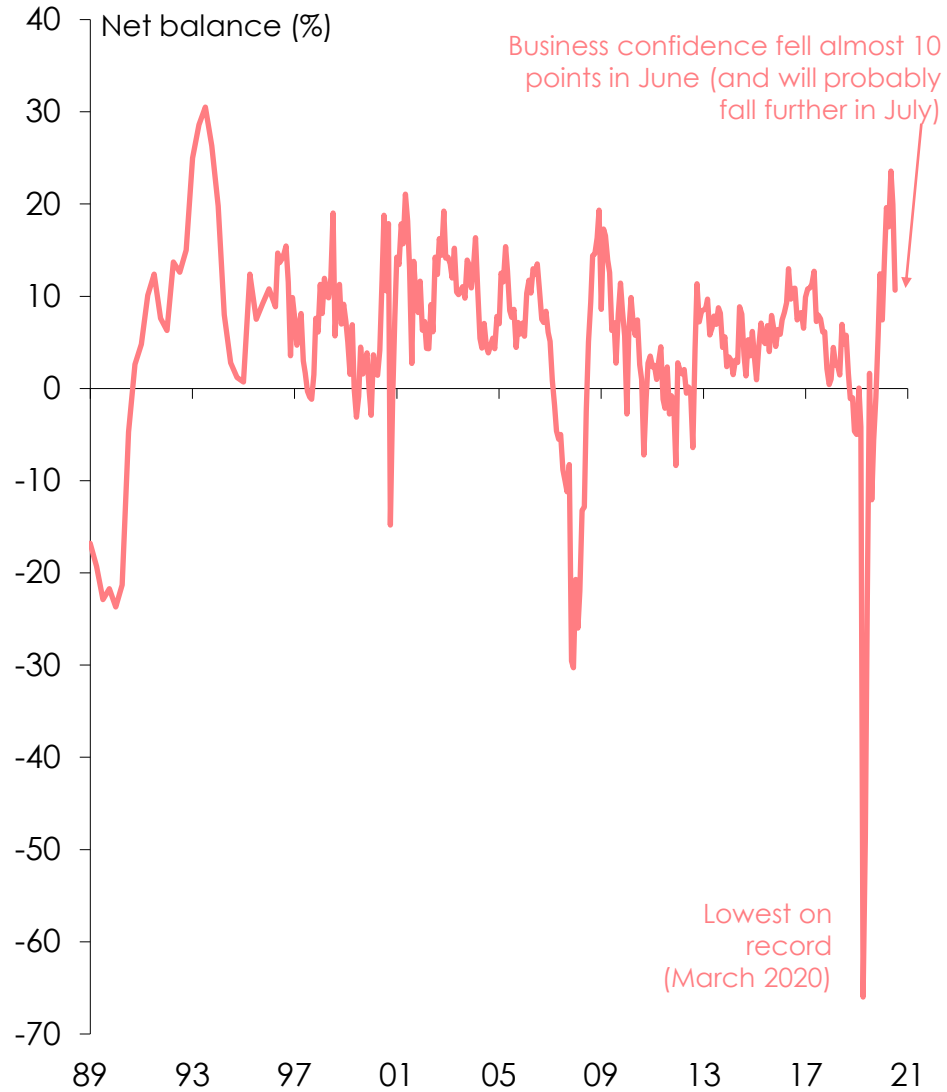
Renovations



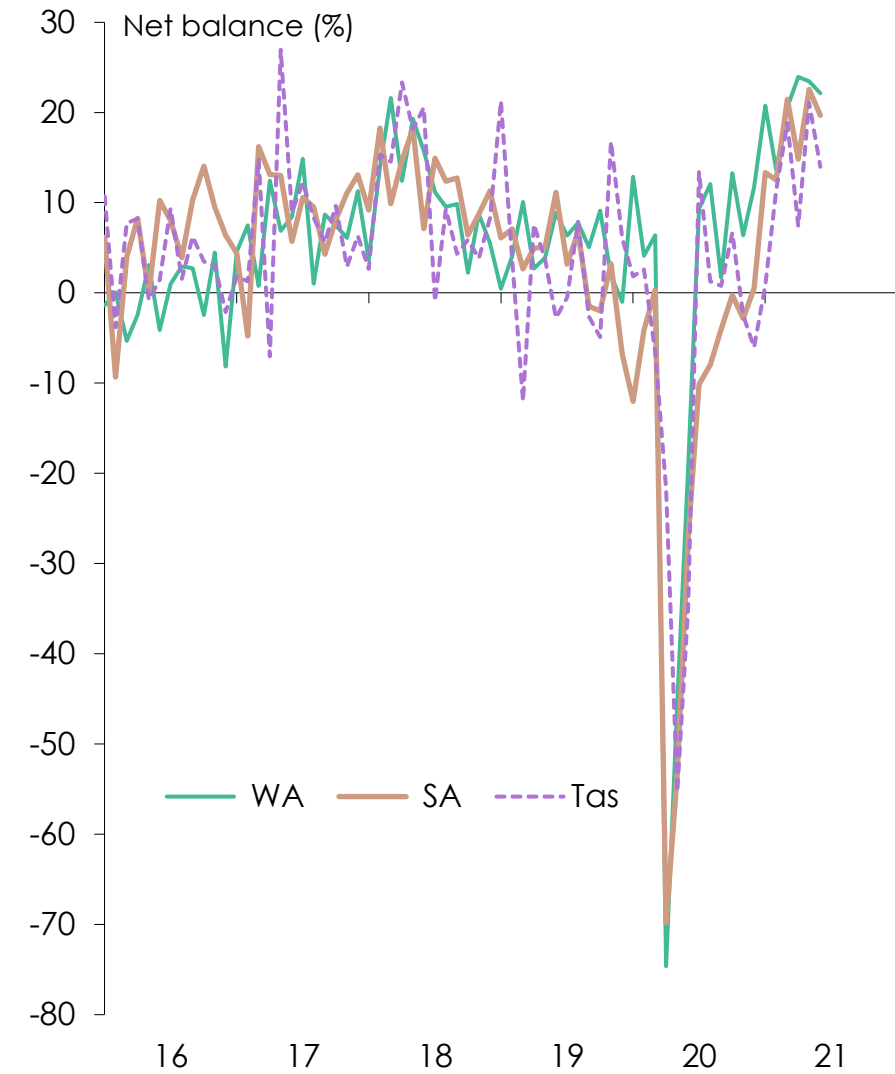
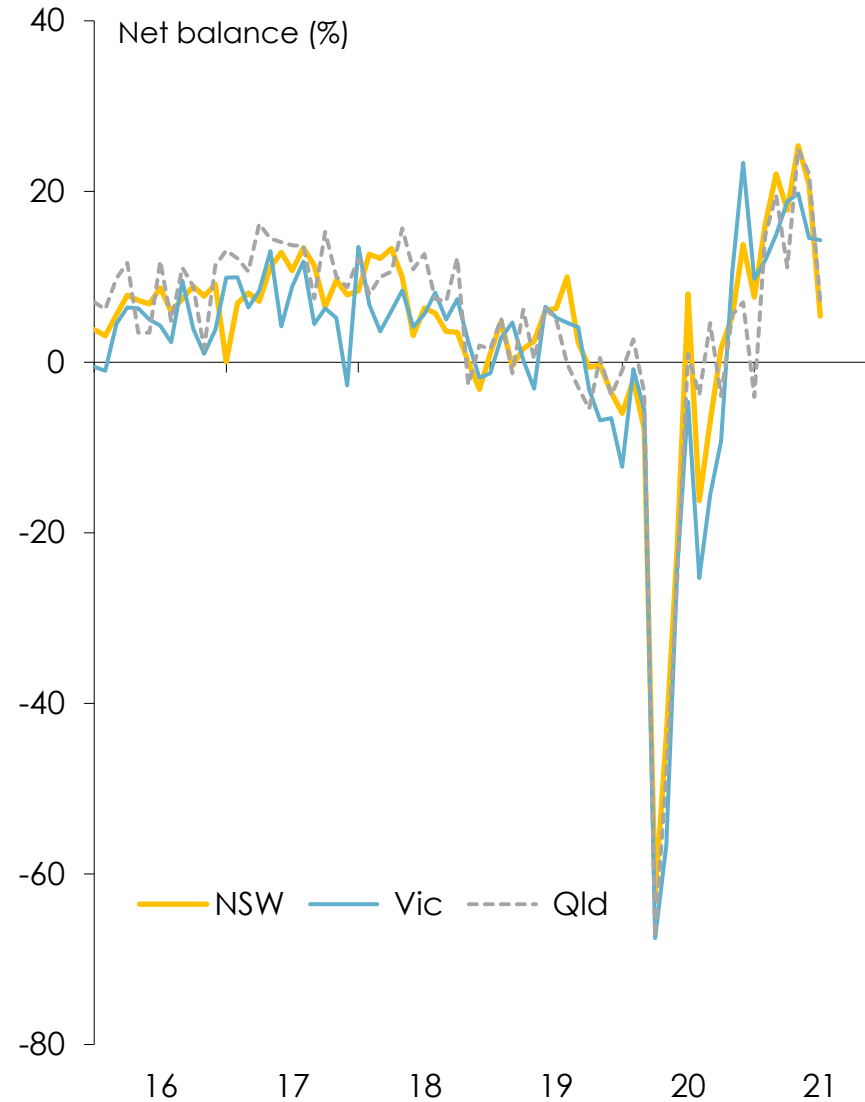
Note: First six charts (from left) are retail sales; new motor vehicles are numbers of vehicles sold; renovations are the value of alterations and additions to residential dwellings approved by local governments. Sources: ABS, [Retail Trade, Australia](#), May 2021; [Building Approvals, Australia](#), May 2021; Federal Chamber of Automotive Industries [VFACTS](#) (seasonal adjustment of Vfacts data by Corinna).

Business confidence was at a record high in May, but has fallen in the wake of lockdowns in four states during June

Business confidence

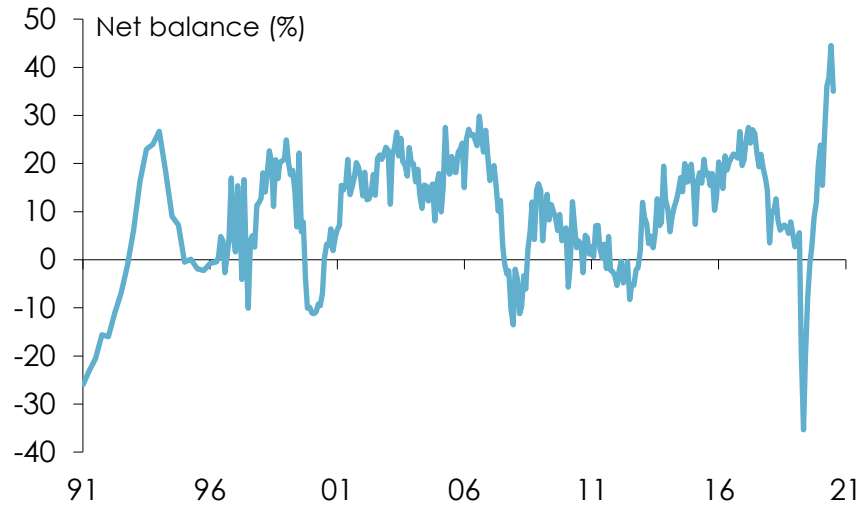


Business confidence, states and territories

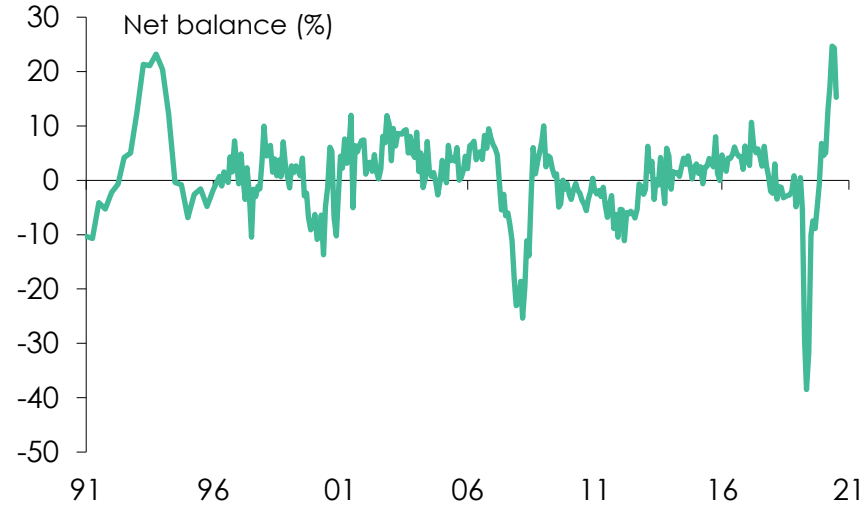


All of the components of 'business conditions' fell back in June although except for capex intentions they are all still close to historical highs

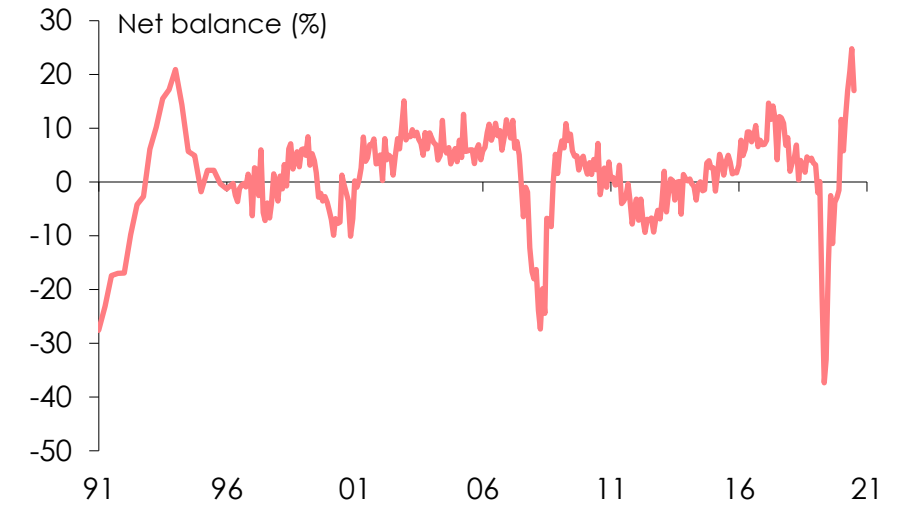
Trading conditions



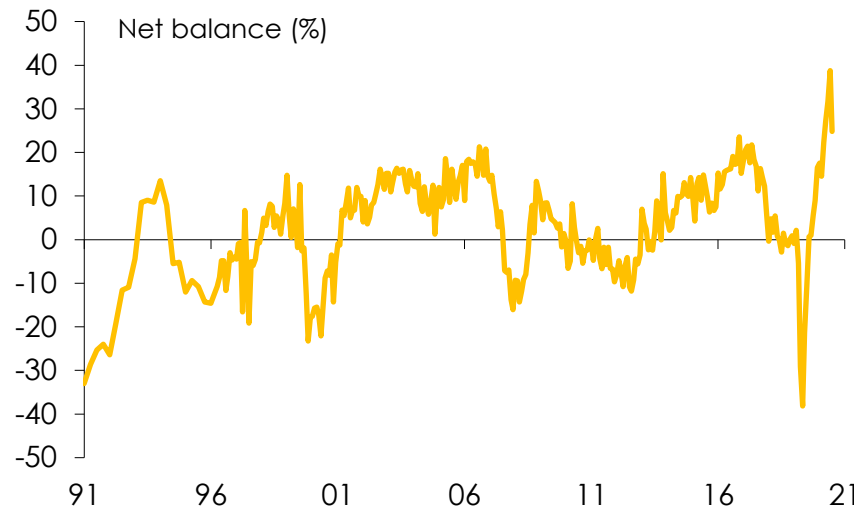
Forward orders



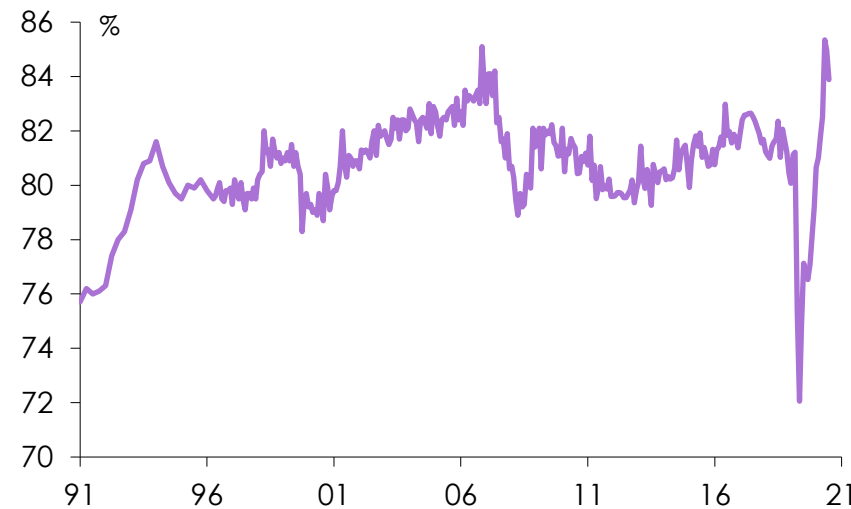
Employee hiring intentions



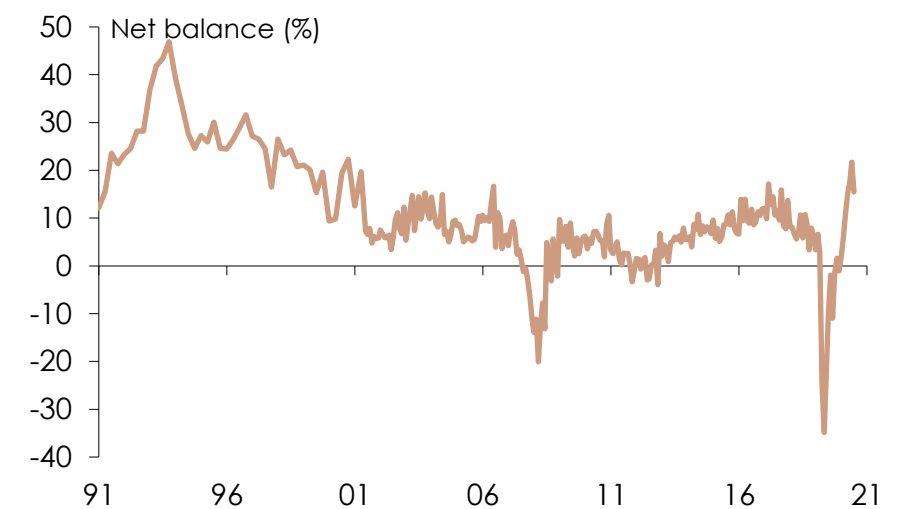
Profitability



Capacity utilization



Capital expenditure intentions

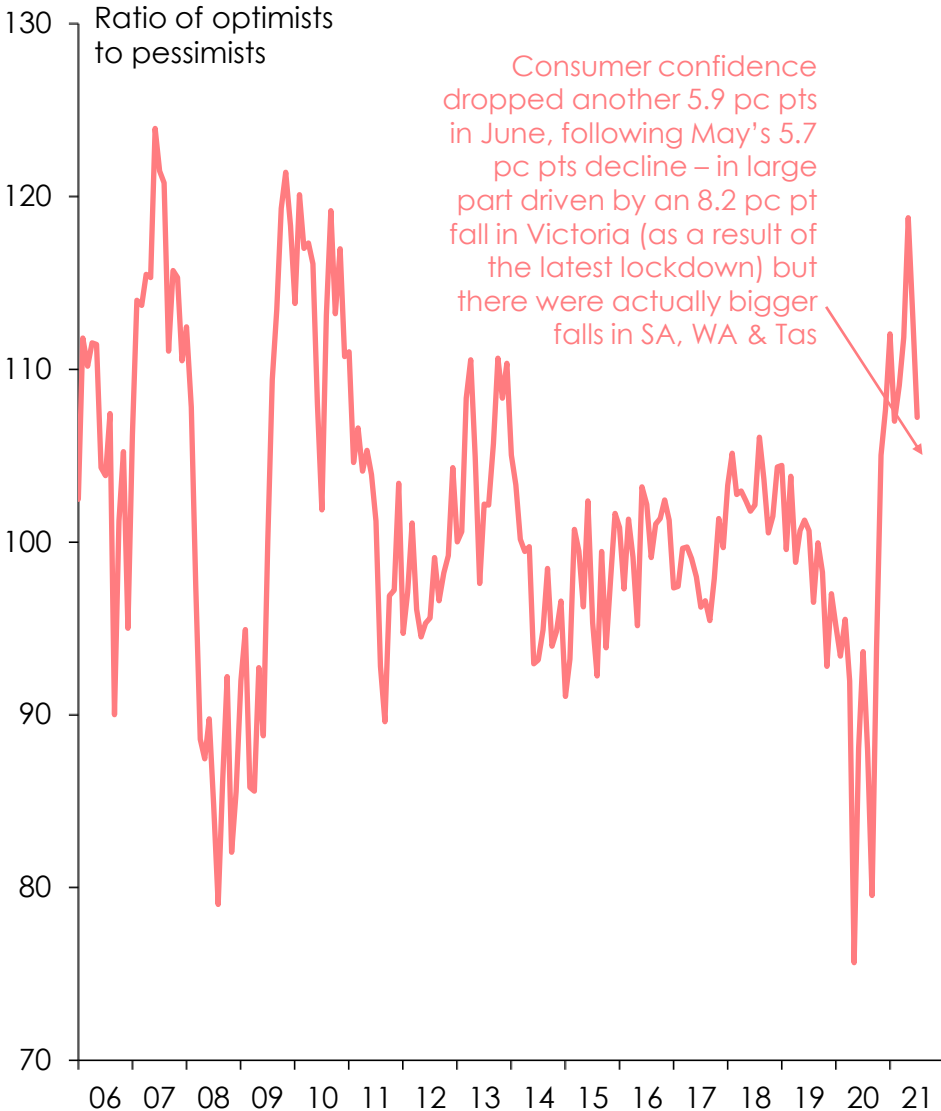


Note: Quarterly data up to March 1997 (May 2002 for capex intentions), monthly thereafter.

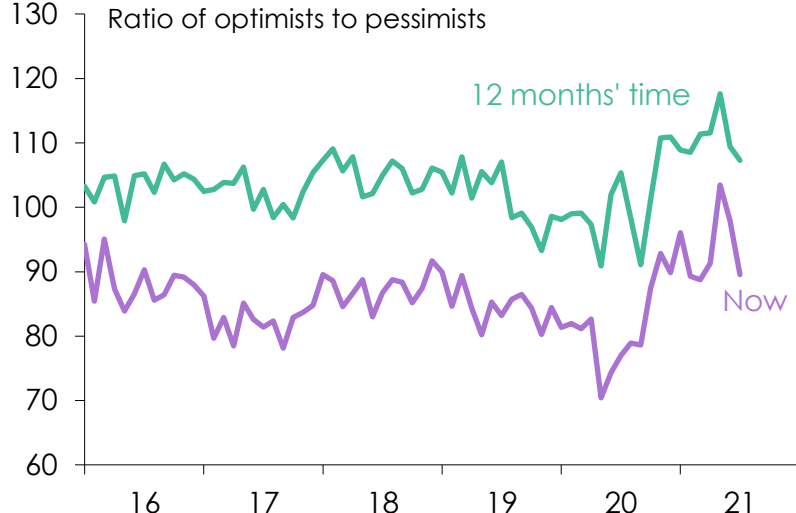
Source: National Australia Bank [Monthly Business Survey](#), June 2021; July survey results will be released on 10th August. [Return to "What's New"](#).

Consumer confidence has been affected by deteriorating housing affordability but in other respects the outlook for spending remains strong

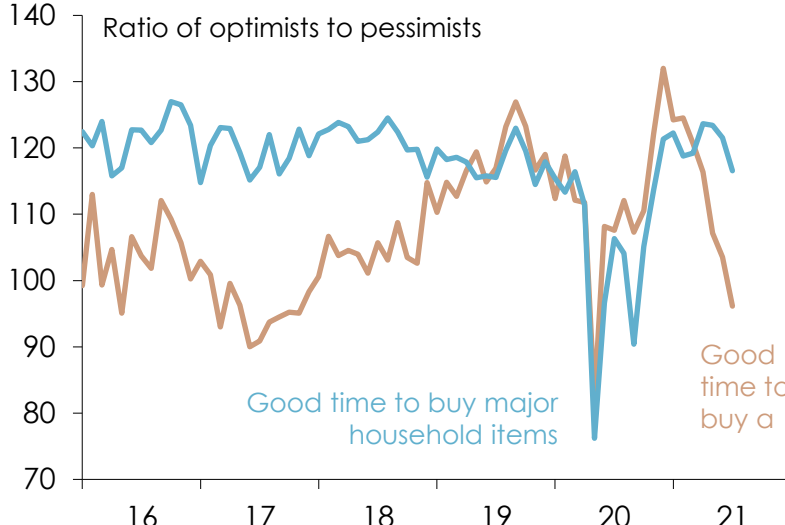
Consumer confidence index



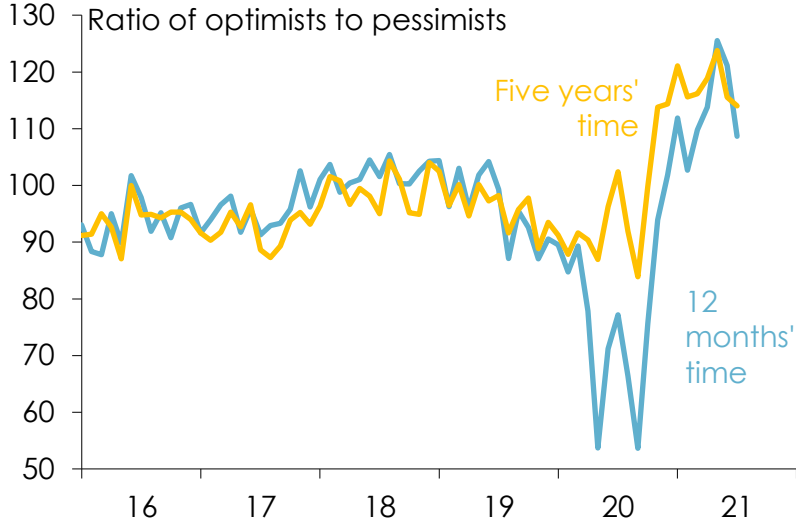
Household finances assessment



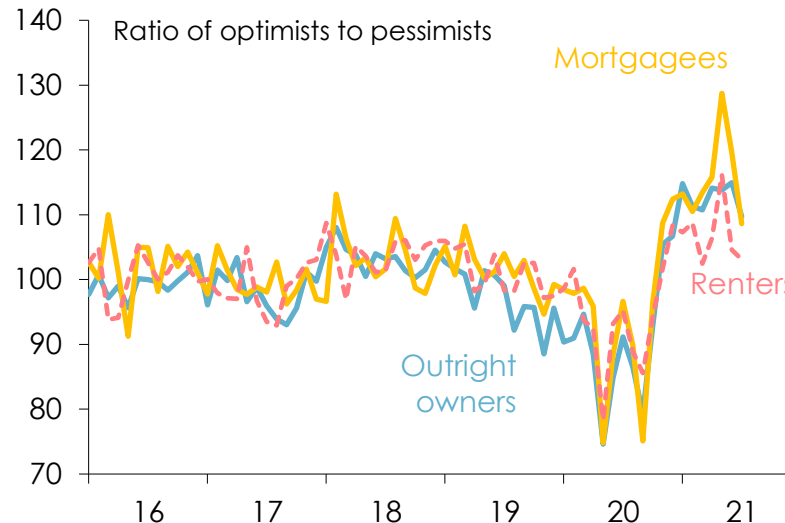
Buying conditions assessment



Economic conditions assessment

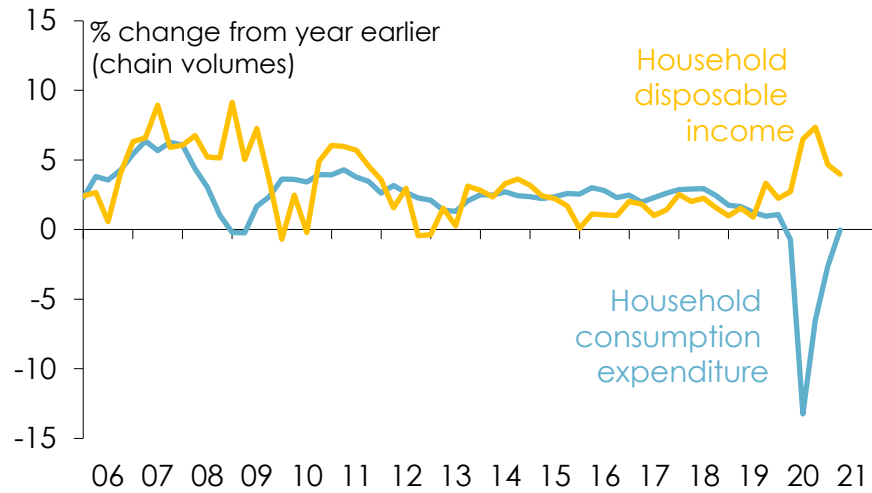


Confidence by housing tenure

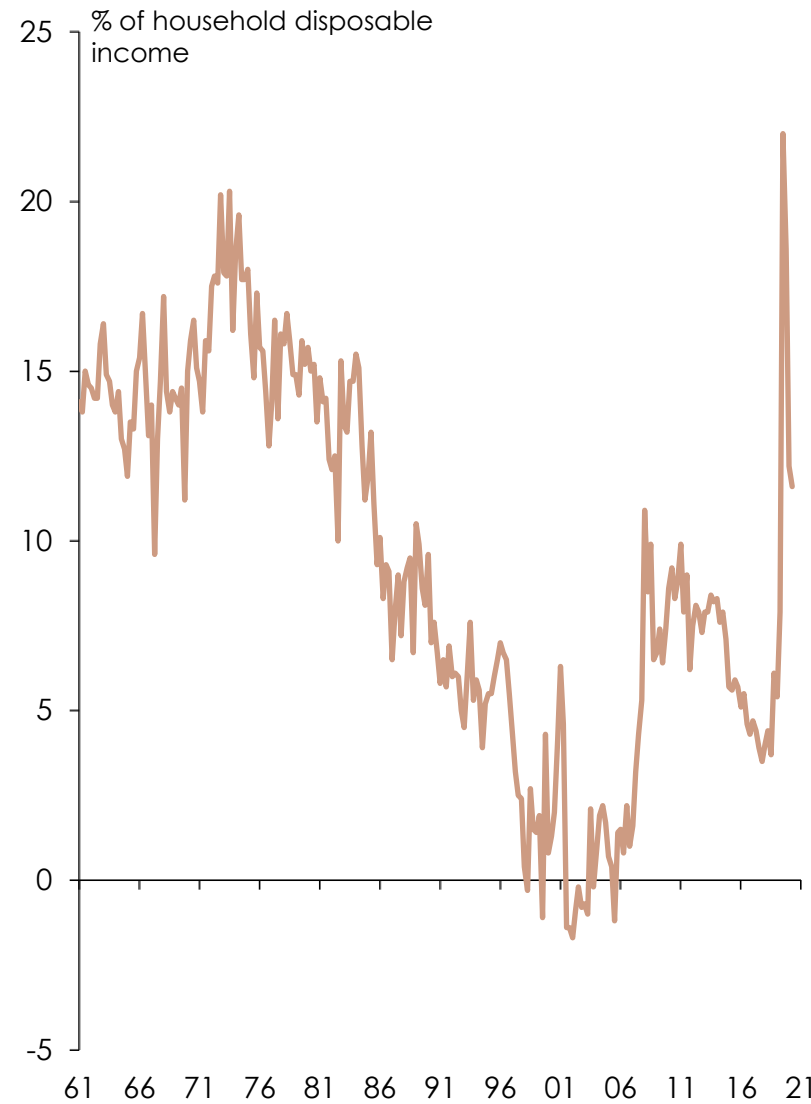


Household incomes have been supported by government payments, but spending has been curtailed, so households have lots of savings to spend

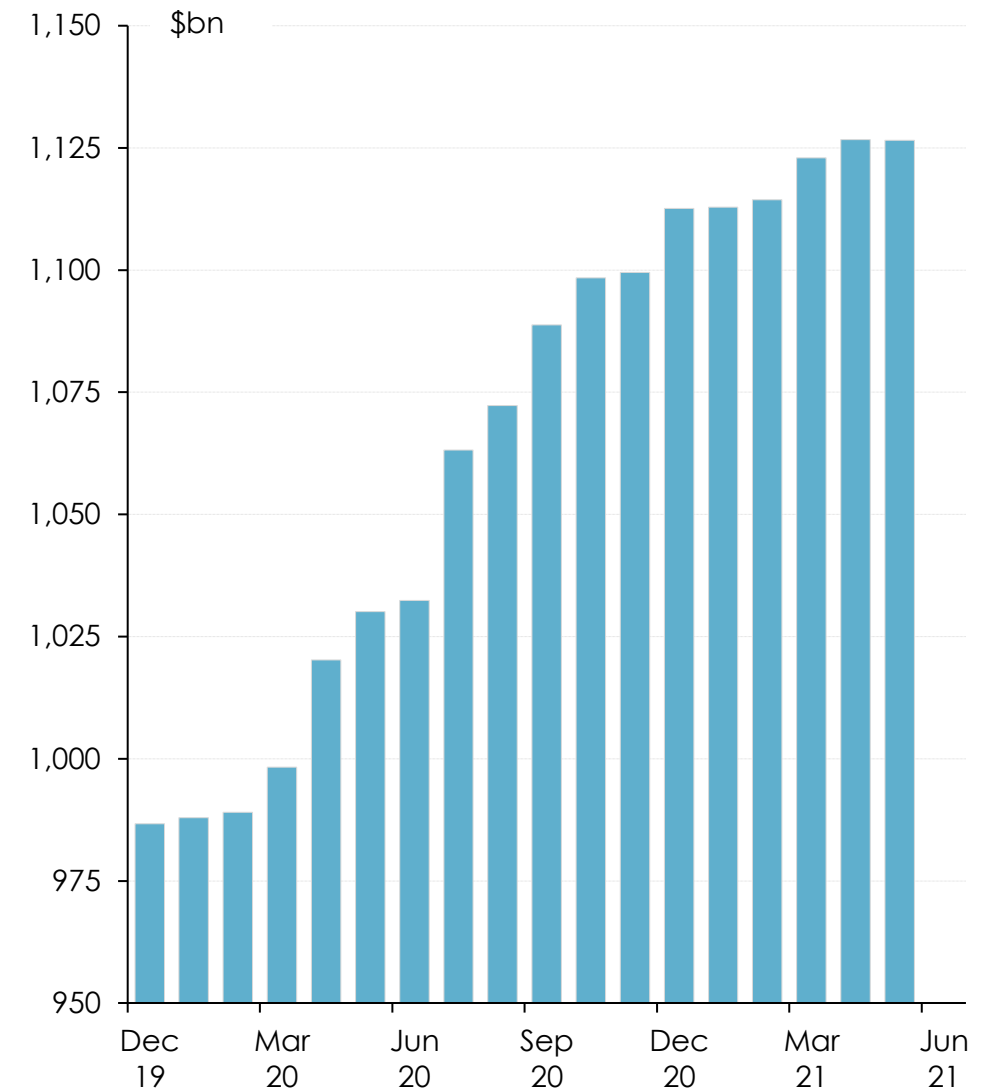
Household income and spending



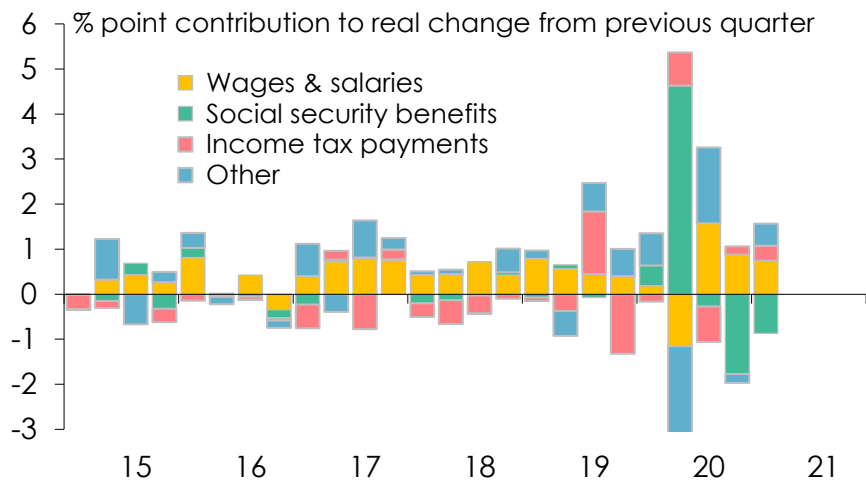
Household saving ratio



Household bank deposits

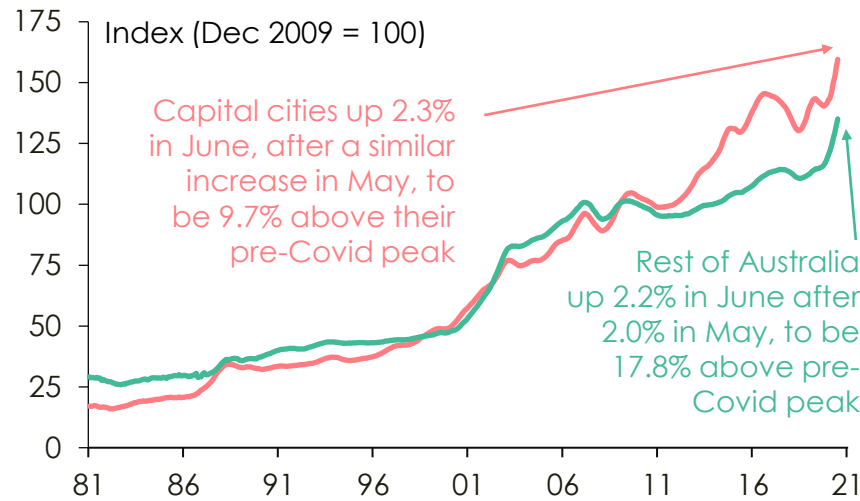


Sources of household income

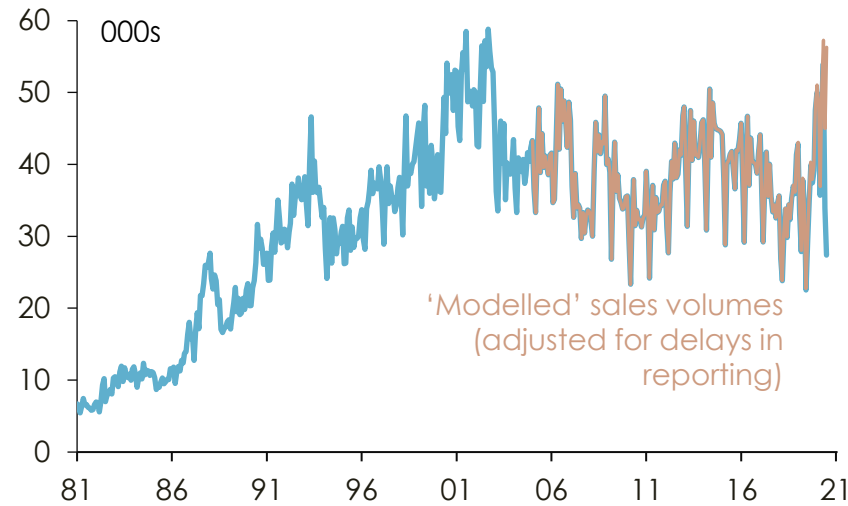


Forecasts this time last year of a crash in property prices turned out to be very wide of the mark – instead we are back on the house price escalator

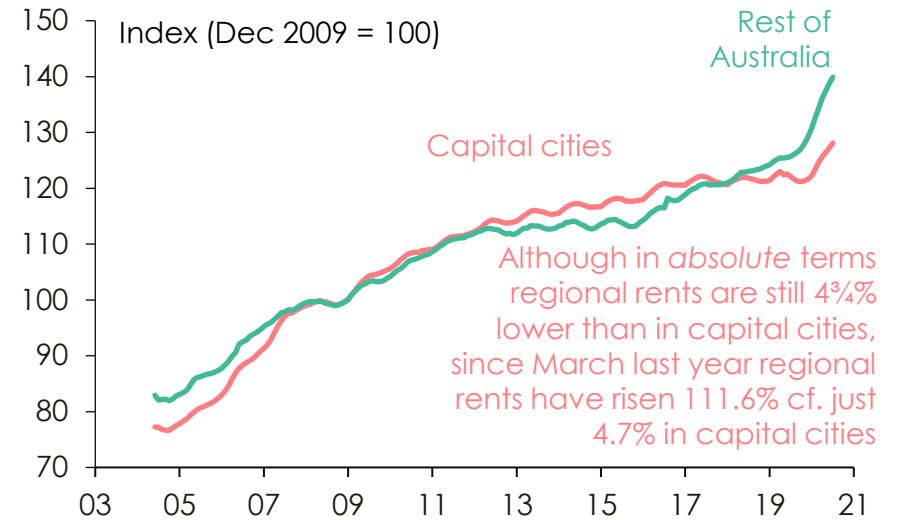
Residential property prices



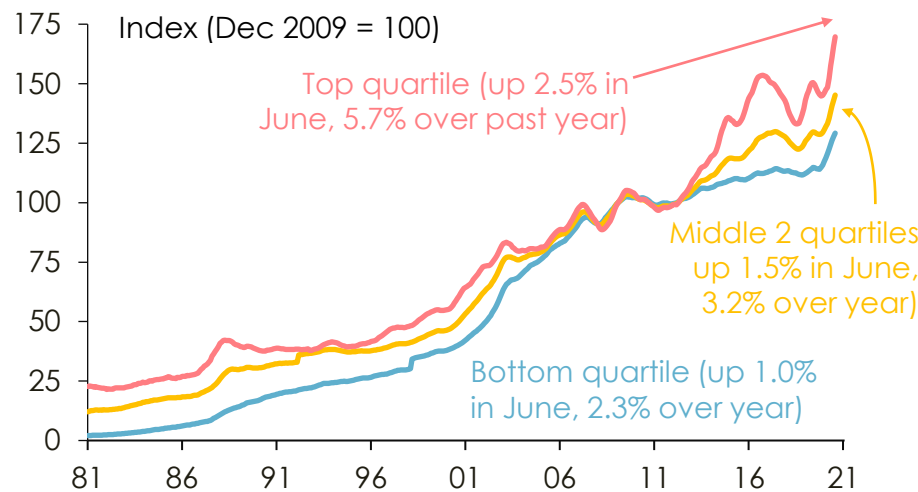
Residential property sales volumes



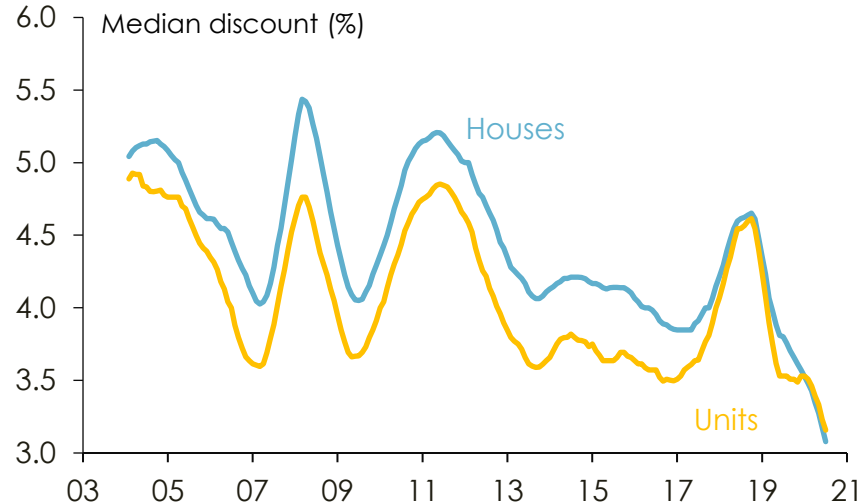
Residential rents



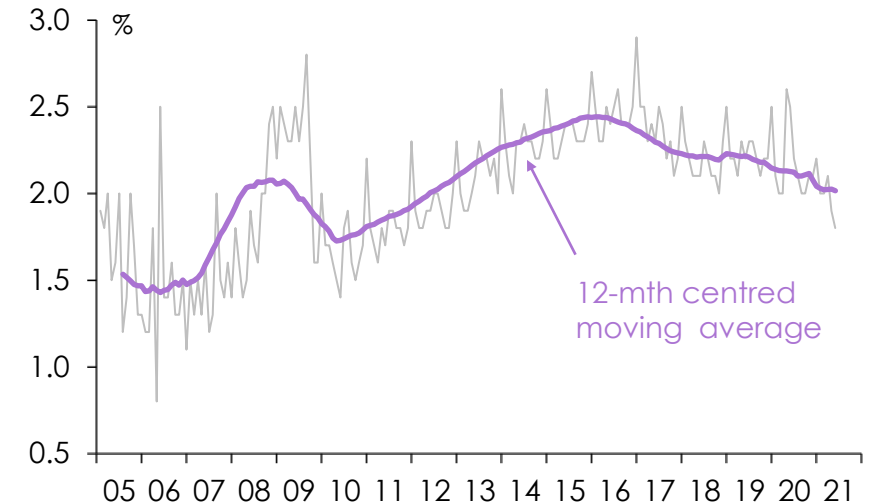
Property prices by tier



Vendor discounting



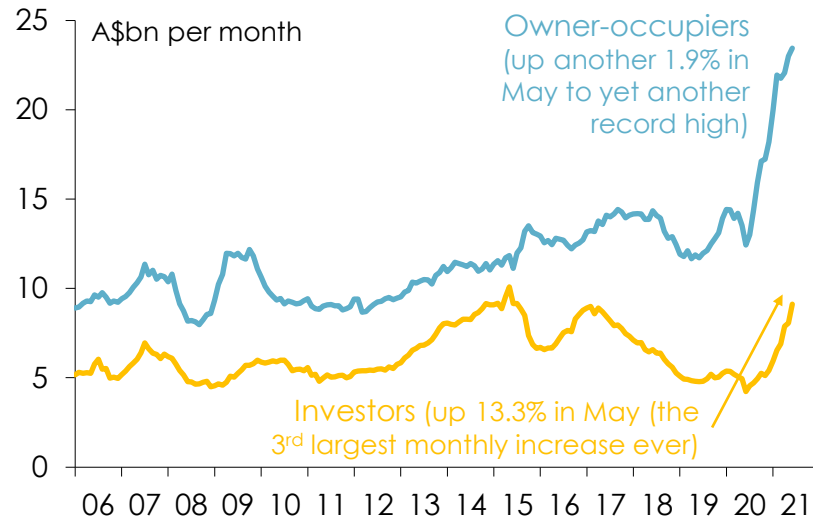
Capital city rental vacancy rates



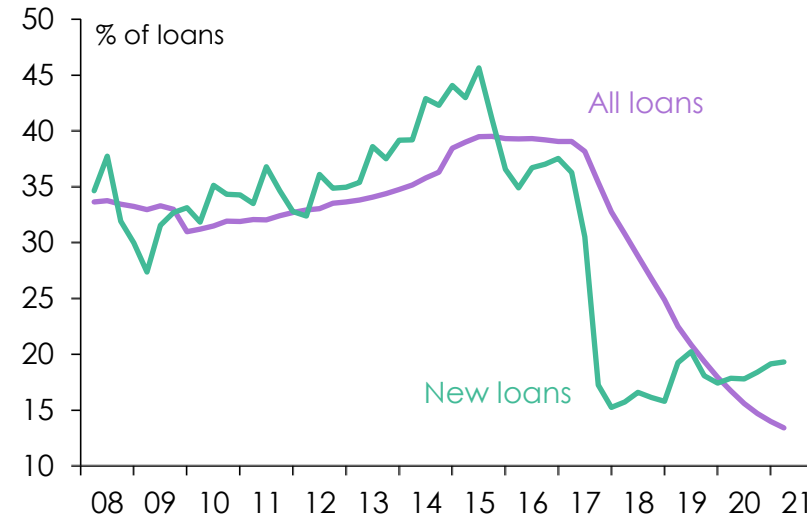
Note: The index of property prices measures the 'organic' change in underlying sales values by using a hedonic regression methodology that takes account of changes in the characteristics of properties being sold from month to month. Property price data are now seasonally adjusted. The index of residential rents uses a similar methodology to measure the 'organic' change in underlying rents. The 'modelled' sales volume estimates seek to account for delays in receiving information on transactions that have yet to settle (which can be more than six weeks after the contract date). Latest data are for June (except for vacancy rates which is May). Sources: [CoreLogic](#); [SQM Research](#).

After “five minutes of sunshine”, would-be first-home buyers are again at risk of being “squeezed out” by investors

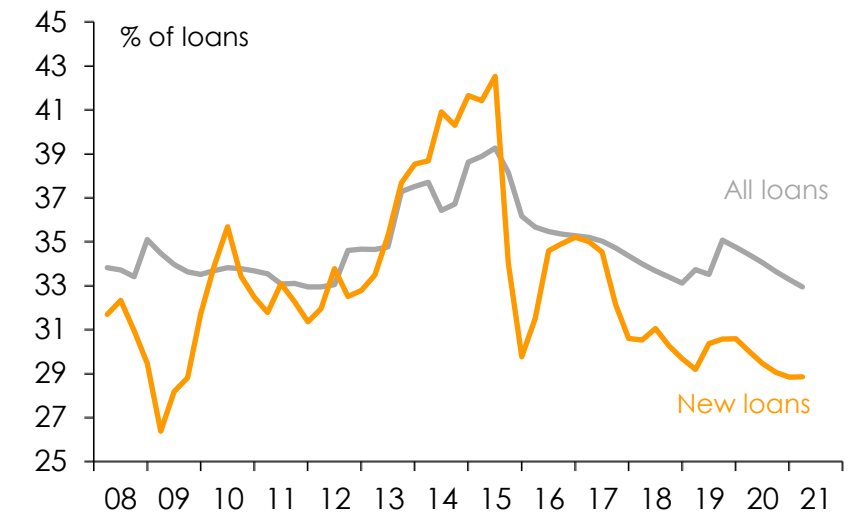
Housing finance commitments



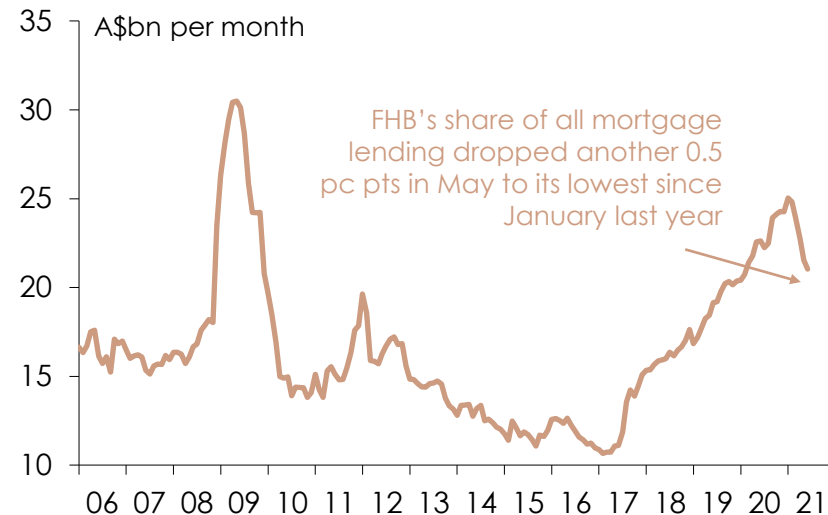
Interest-only loans as pc of total



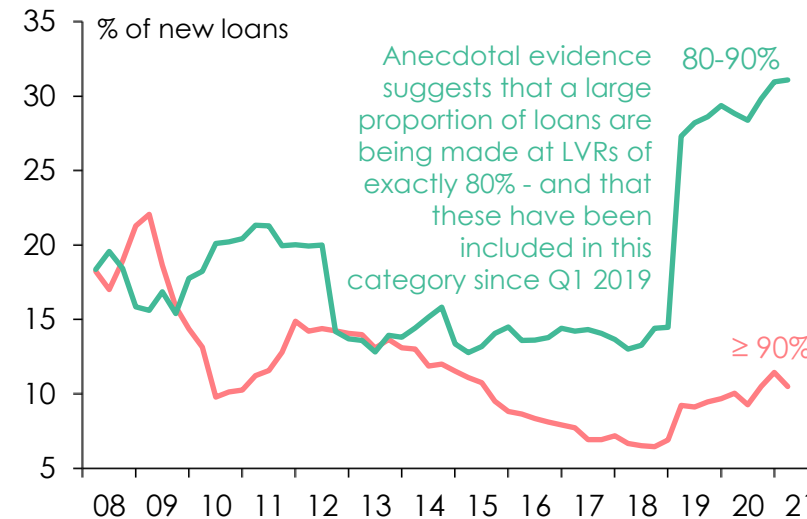
Loans to investors as a pc of total



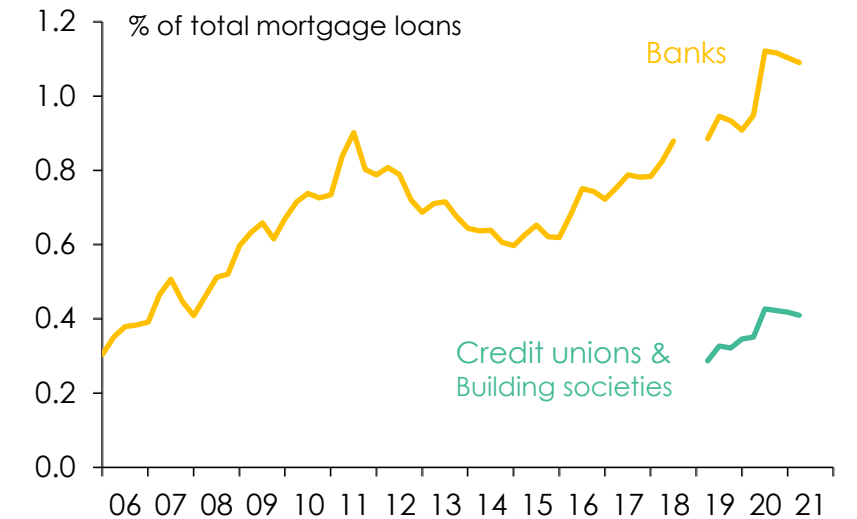
Lending to first home buyers



High LVR loans as a pc of total



Non-performing mortgage loans

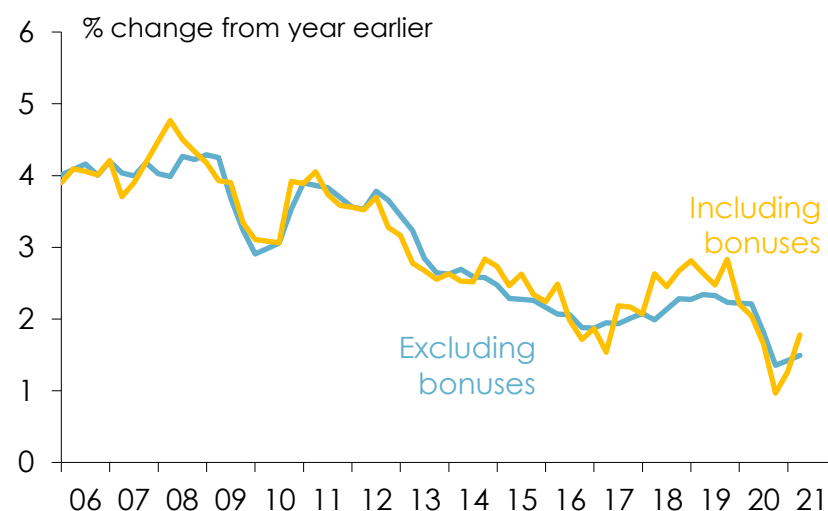


Stronger-than-expected economic growth and a tighter-than-expected labour market so far haven't resulted in faster growth in wages or prices

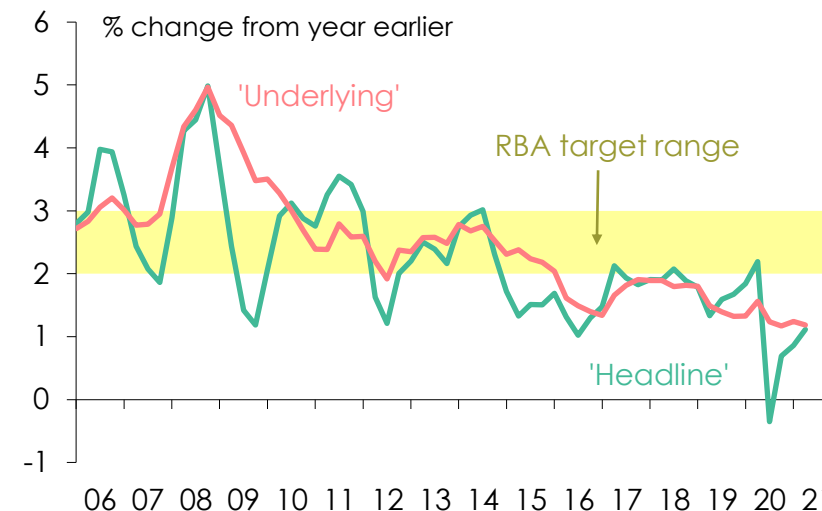
Unemployed per job vacancy



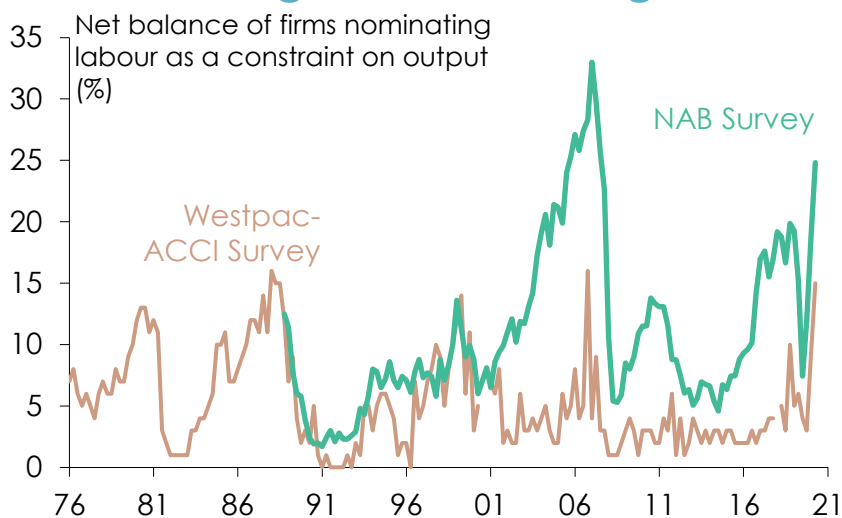
Wage price index – all sectors



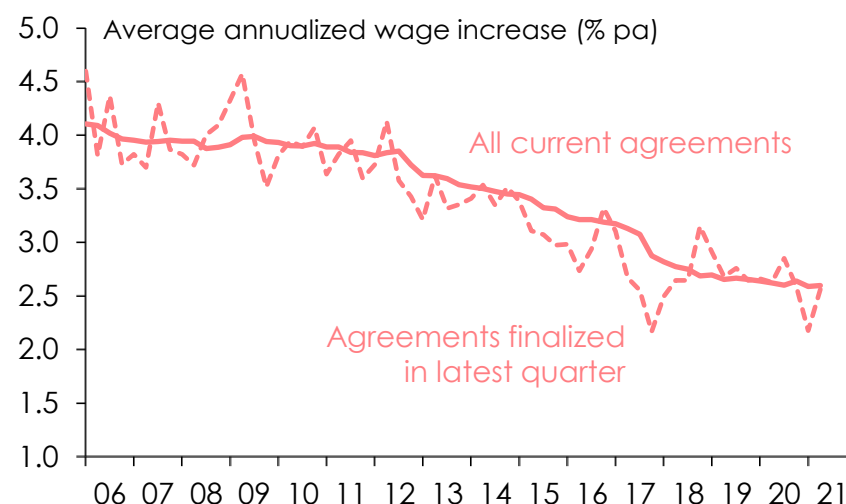
Consumer prices



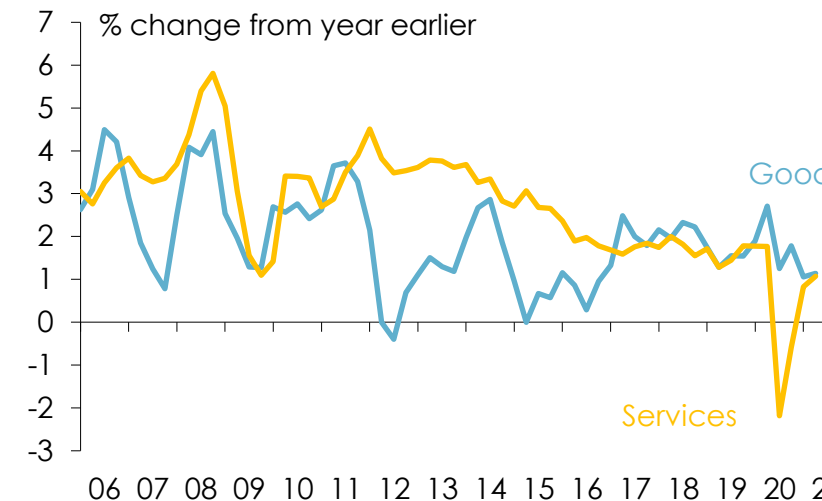
Firms facing labour shortages



Enterprise bargaining agreements



Goods vs services prices



What does all this mean for the Reserve Bank?

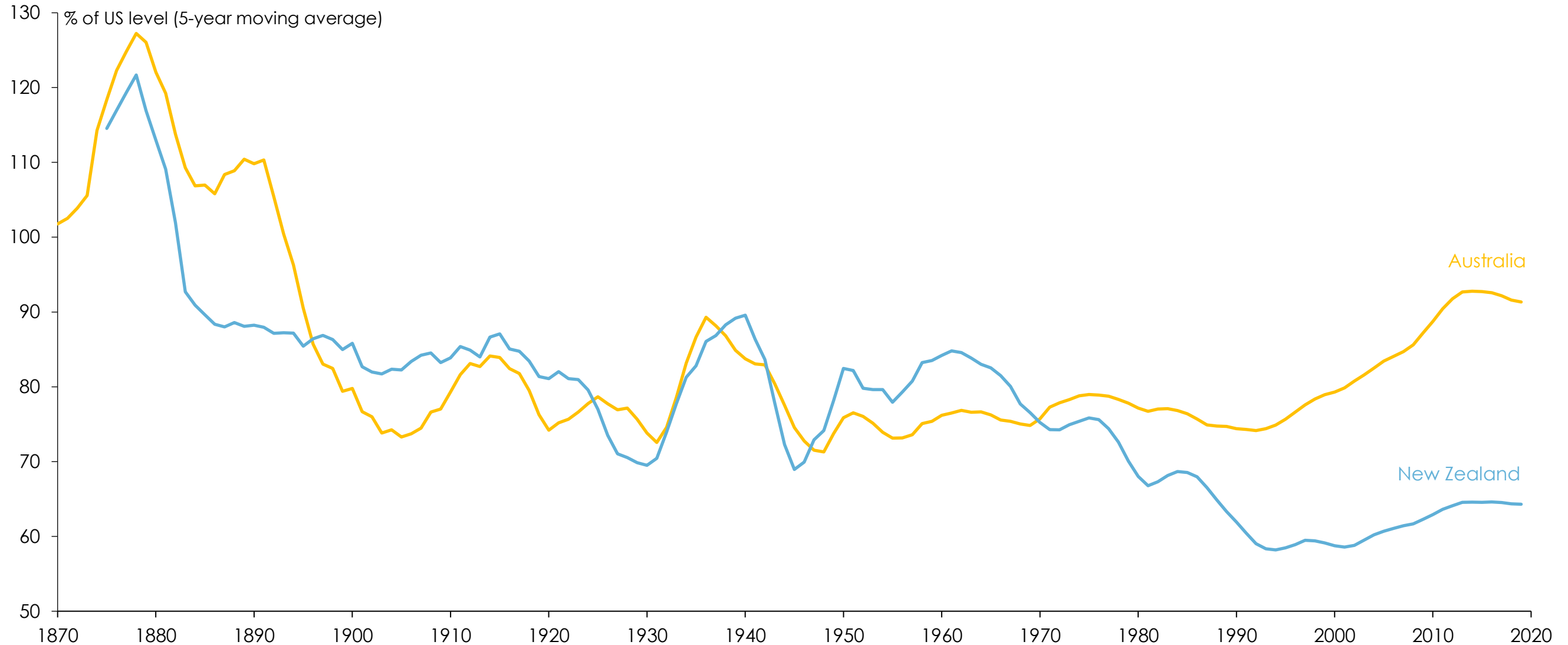
- ❑ The Reserve Bank has repeatedly stipulated that it will keep its official cash rate at 0.1% pa until
 - the labour market is sufficiently tight (ie, unemployment is sufficiently low)
 - ... to generate wages growth which is sufficiently strong
 - ... to push 'underlying' consumer price inflation sustainably into the 2-3% target range
- ❑ The RBA (like other central banks) has been quite open in acknowledging that it is no longer sure exactly how low unemployment needs to go before wages growth begins to accelerate to a pace sufficient to push inflation into the target range
 - hence it has indicated that its decision as to when to start lifting interest rates won't be based (as they have been in the past) on *staff forecasts* of inflation ...
 - ... but rather will be based on what happens to *actual* inflation (the 'lived experience' of inflation, as Deputy Governor Guy Debelle puts it)
- ❑ Given that inflation has 'undershot' RBA forecasts for more than five years, this is an absolutely reasonable position for the RBA to adopt – and it is similar to the stance taken by other central banks over the past year
- ❑ The RBA went further than most other central banks in putting a date ("2024 at the earliest") on when the conditions for beginning to 'normalize' monetary policy will be satisfied
 - but last week it appeared to 'walk back' a bit from that, describing 2024 as its 'central scenario' for the first step towards 'normalizing' monetary policy but implicitly acknowledging that it could be earlier than that
- ❑ Important to remember though, that inflation won't suddenly 'snap back' to 2-3% as soon as the unemployment rate gets down to whatever constitutes 'full employment' ...
- ❑ ... and also (when comparing the RBA's 'timetable' with that of other central banks) that the RBA's inflation target is higher than that of most other central banks
 - So Australia's inflation rate has been 'below target' by a bigger margin than in most other economies

Prolonged closure of Australia's international border increasingly looks like a new version of 'protectionism'

- ❑ The 'protectionism' which Australia practiced from the time of Federation until the early 1990s used tariffs and quotas to force Australians to spend money which they would have preferred to spend on foreign-made goods (if they were free to do so) on Australian-produced goods instead
 - in the belief that this created jobs (particularly in manufacturing industry), reduced Australia's dependence on agriculture and mining, and enhanced our 'resilience' to external shocks (including in particular, wartime interruptions to foreign supplies of 'strategic' goods)
 - other 'advanced' economies began winding back their barriers to trade in manufactured goods after World War II, but Australia (and New Zealand) persisted with them, because other 'advanced' economies wouldn't also reduce their barriers to trade in agricultural commodities
- ❑ The end-result of Australia's persistence with high levels of 'protection' for its manufacturing industries was that they, and the economy more broadly, became increasingly inefficient, as productivity growth lagged behind the rates achieved in other 'advanced' economies
 - Australia's per capita GDP (a crude but widely-used measure of material living standards) declined from being (along with NZ and Argentina) the highest in the world in 1900, to being 26th in the world by the early 1990s
- ❑ Australia's border closures during Covid – which have been more comprehensive, and in place for longer, than in any other democracy – have much in common with Australia's earlier forms of 'protectionism'
 - they are in effect forcing Australians to spend at home on goods, money which they would have preferred, if they were free to do so, to spend overseas
 - and they are reducing the competition which Australians looking for work face from 'foreigners' (immigrants)
- ❑ As with the older forms of Australian 'protectionism', the new variant provides a short-term 'sugar hit' to the economy
 - but the longer this new variant of 'protectionism' remains in force, the more its longer-term costs and consequences will resemble those of the old sort

During the 'old protectionist era', Australian living standards slipped from over 10% above those of the US to more than 25% below

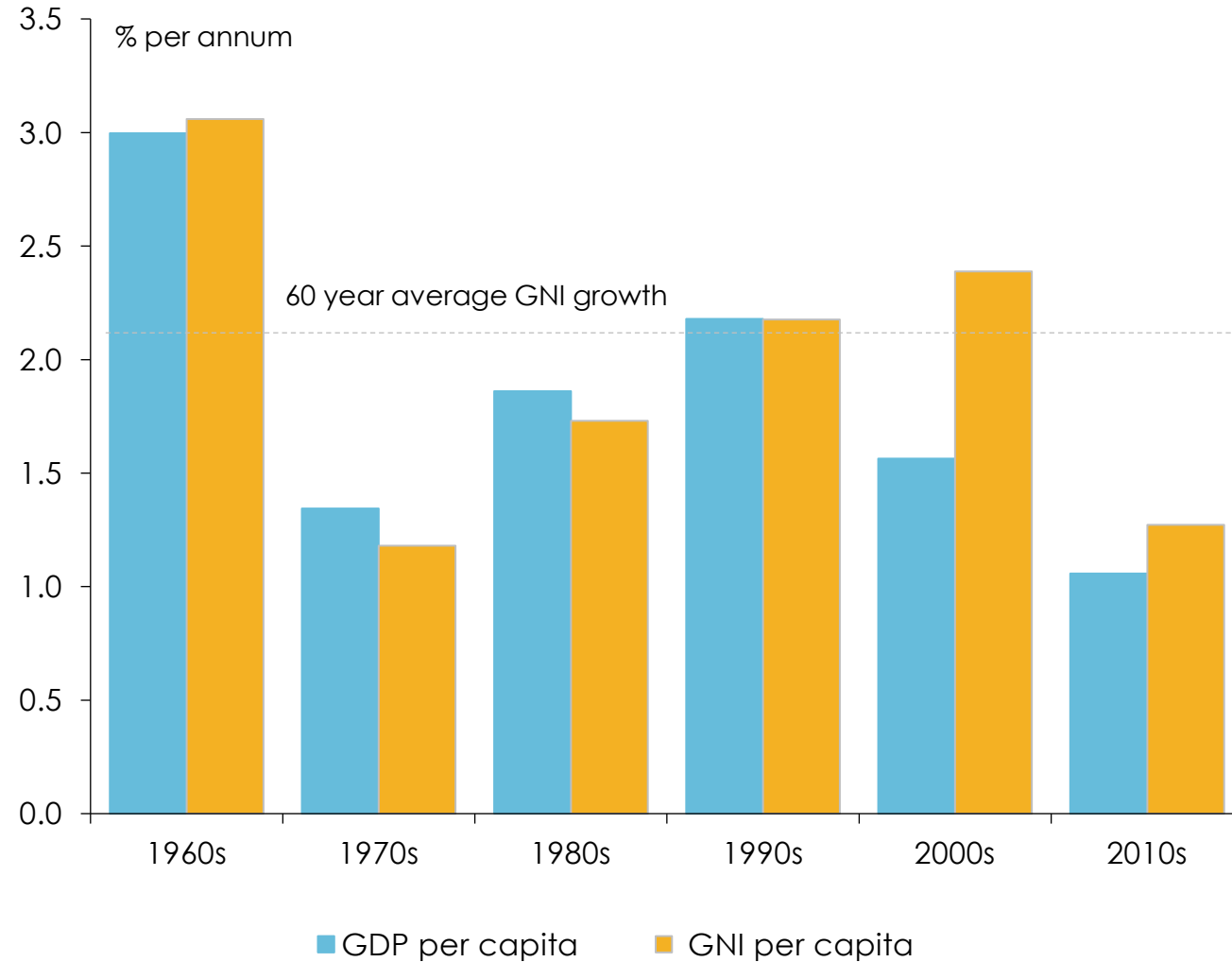
Australia and New Zealand per capita GDP as a percentage of the United States



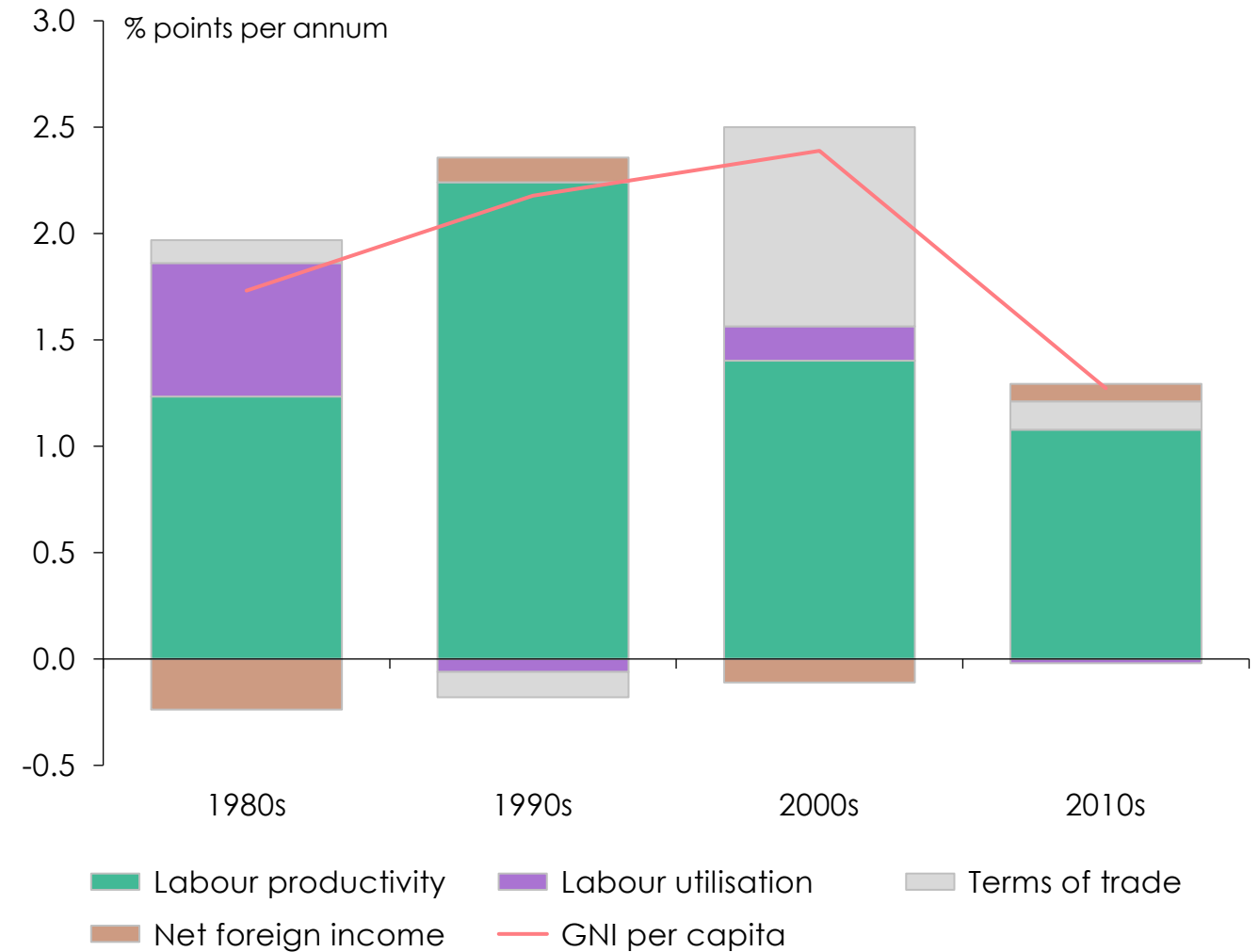
Source: Maddison Historical Statistics, Groningen Growth and Development Centre, University of Groningen, [Maddison Project Database 2020](#); Corinna.

The slowdown in per capita income growth over the past decade is mainly due to slower productivity growth and the absence of terms of trade gains

Growth in real per capita gross domestic product (GDP) and gross national income (GNI)



Contributors to growth in real per capita gross national income (GNI)

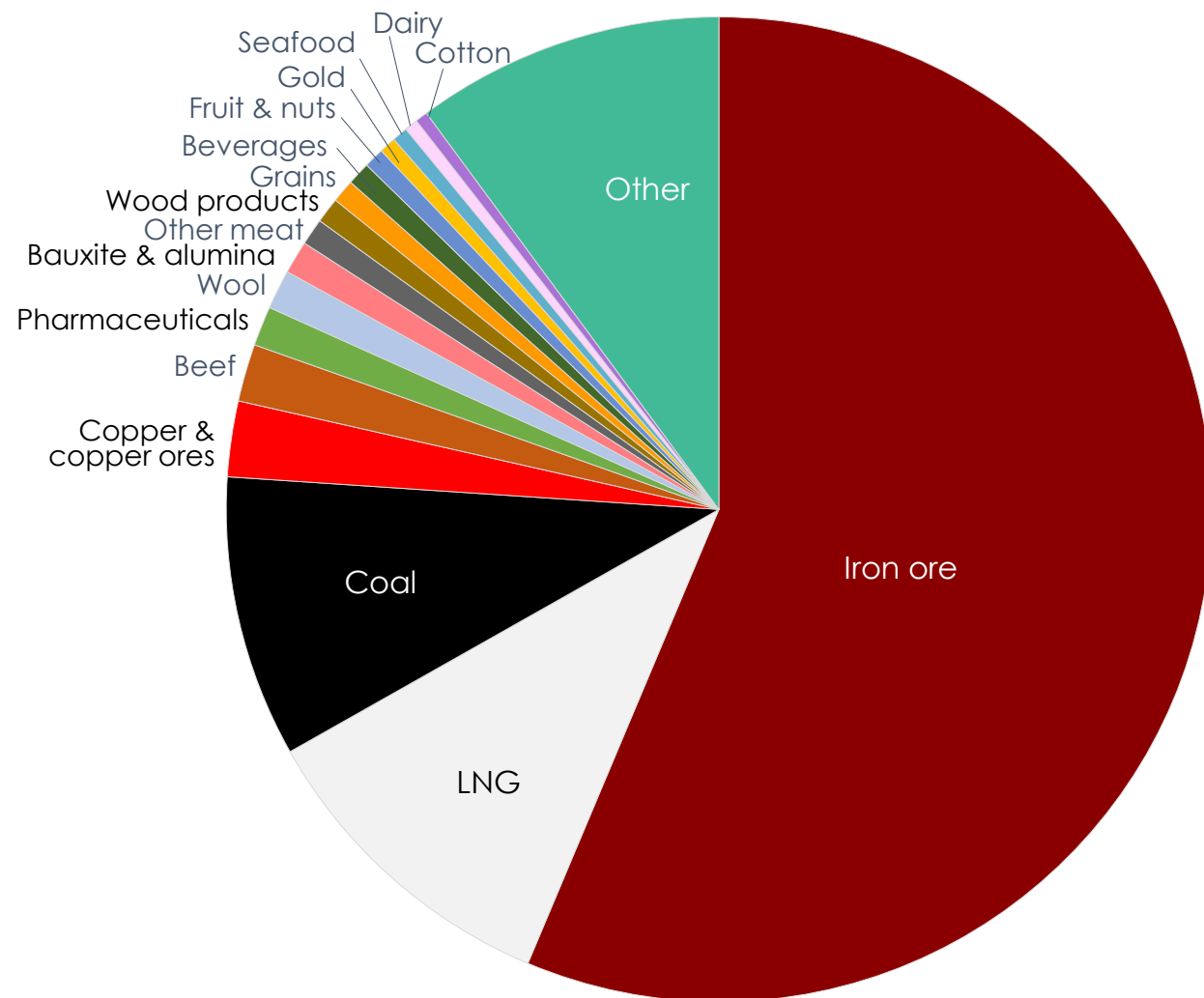


Note: "2010s" excludes 2019-20. Gross national income is GDP plus the income arising from changes in the 'Terms of trade' (the ratio of export to import prices) and from 'net foreign income' (the income from foreign assets owned by Australians less the income paid to foreign owners of assets in Australia).

Source: Productivity Commission, [Productivity Insights 2021](#), 17th June.

An ongoing 'headwind' for Australia's economy is likely to be the deterioration in bilateral relations with our largest export market

Australia's merchandise exports to China, 2019-20



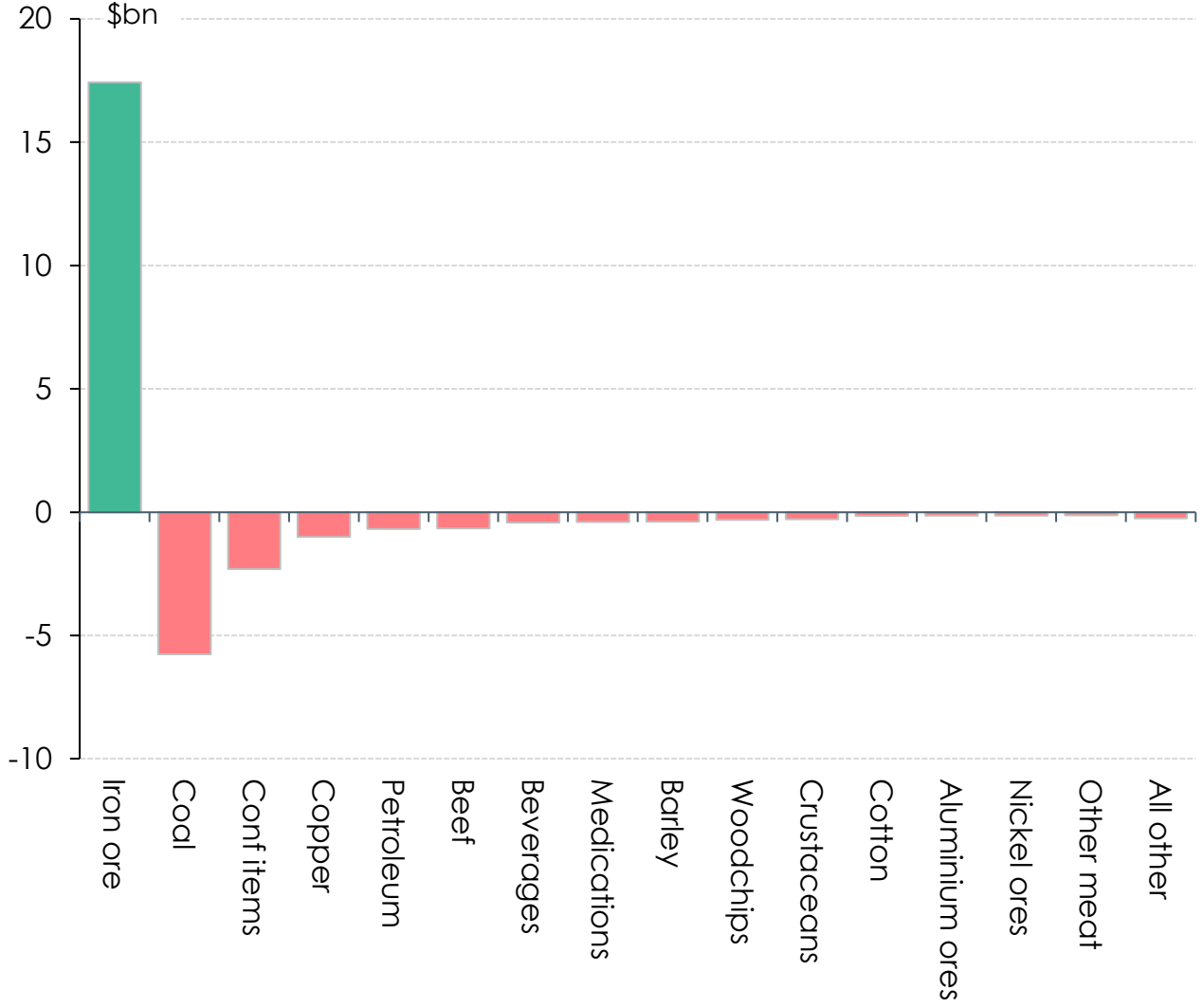
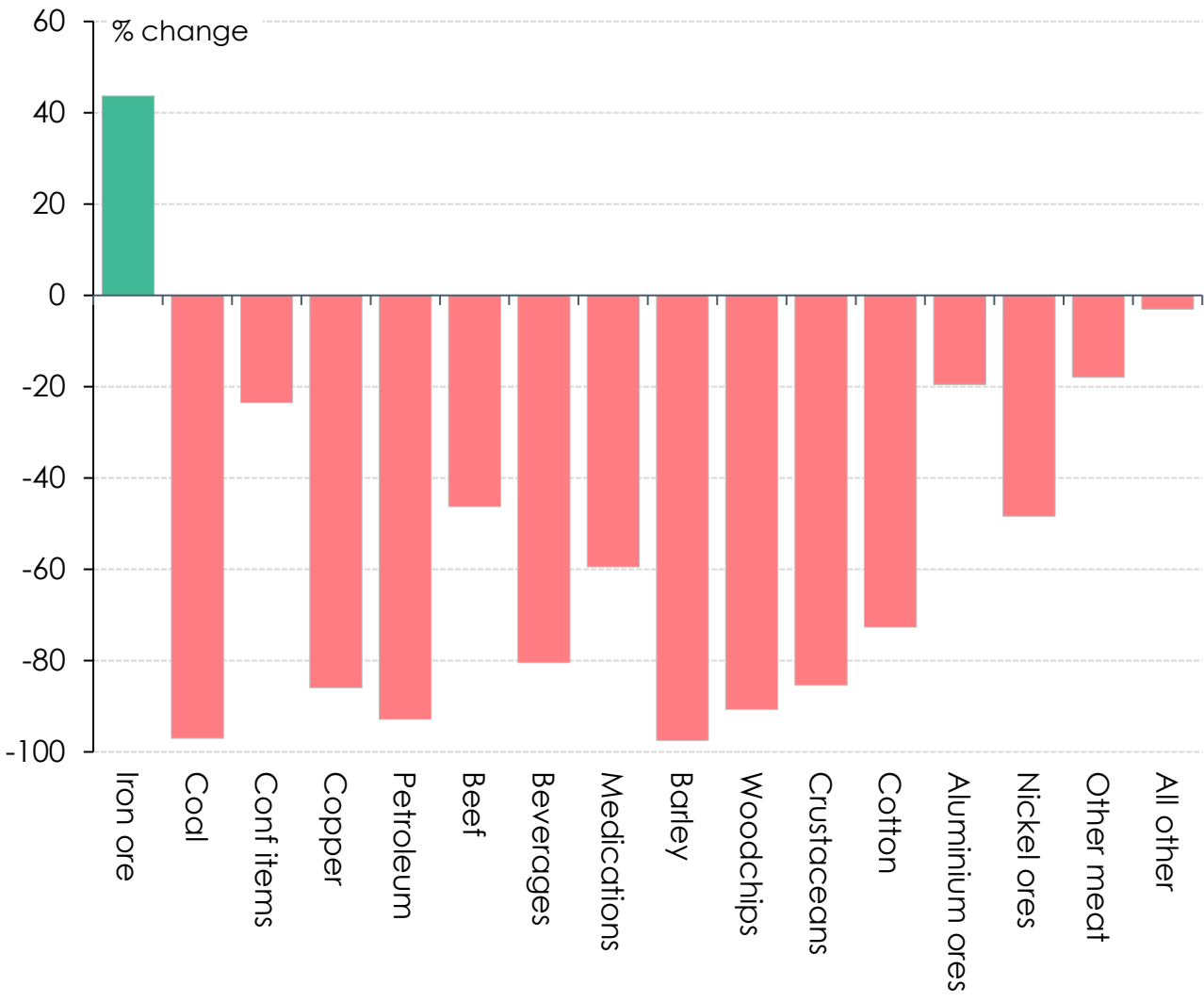
- ❑ China accounted for 39½% of Australia's merchandise exports in FY 2019-20 (the largest proportion any country has since the mid-1950s when 36% of Australia's exports went to the UK)
 - of which iron ore & concentrates accounts for 56%
- ❑ China also accounted for 19% of Australia's services exports in CY 2019 of which tourism & education accounted for over 90%)
- ❑ China has no real alternatives to Australian iron ore in the near term – but it has been progressively expanding the range of other Australian products subject to discriminatory tariffs, “customs inspections”, quarantine issues or outright bans – including wheat, wool, copper ores, sugar, lobsters, timber, wine and coal
 - Australia's exports of these products to China have dropped from about \$25bn in 2019 to an annualized rate of about \$5½bn since the sanctions were imposed – although in many cases Australian exporters have been able to find alternative markets (see next slide)
 - last month's Queensland Budget Papers show China's imports of coal from Queensland dropped from 28.6Mt in the six months to April 2020 to just 2.8Mt in the six months to April 2021 – but about two-thirds of this was offset by increased exports to India, Japan and Korea
- ❑ China now openly acknowledges that it has been seeking to ‘punish’ Australia for “groundlessly accusing and smearing China and undermining China's core interests based on ideology” and “acting as a cat's paw” for the United States

Note: 'Wood' includes wood products; 'dairy' includes milk, cream, butter & cheese; 'seafood' includes crustaceans, fish and processed seafood; 'other' includes confidential items.

Sources: Australian Department of Foreign Affairs & Trade, [Trade Statistical Pivot Tables](#); Corinna.

Australia's iron ore exports to China rose 44% over the year to the six months ended April – but all other exports dropped by 41%

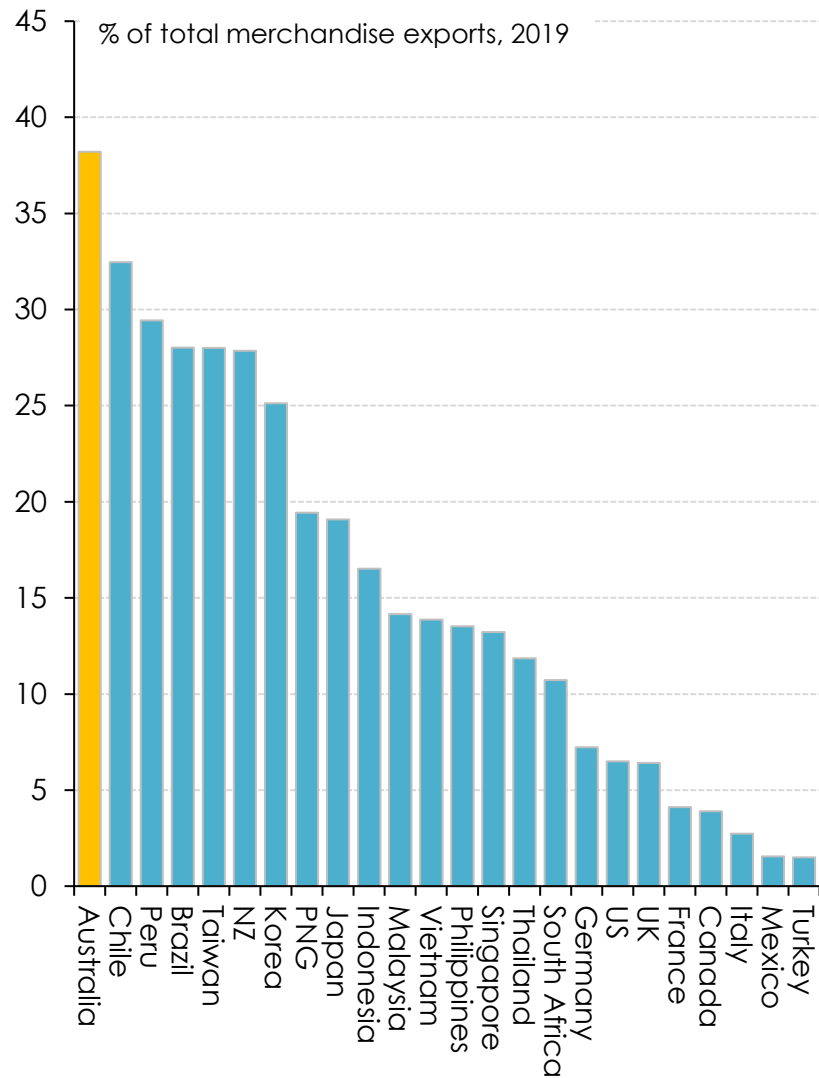
Change in Australian exports to China, six months to April 2021 compared with six months to April 2020



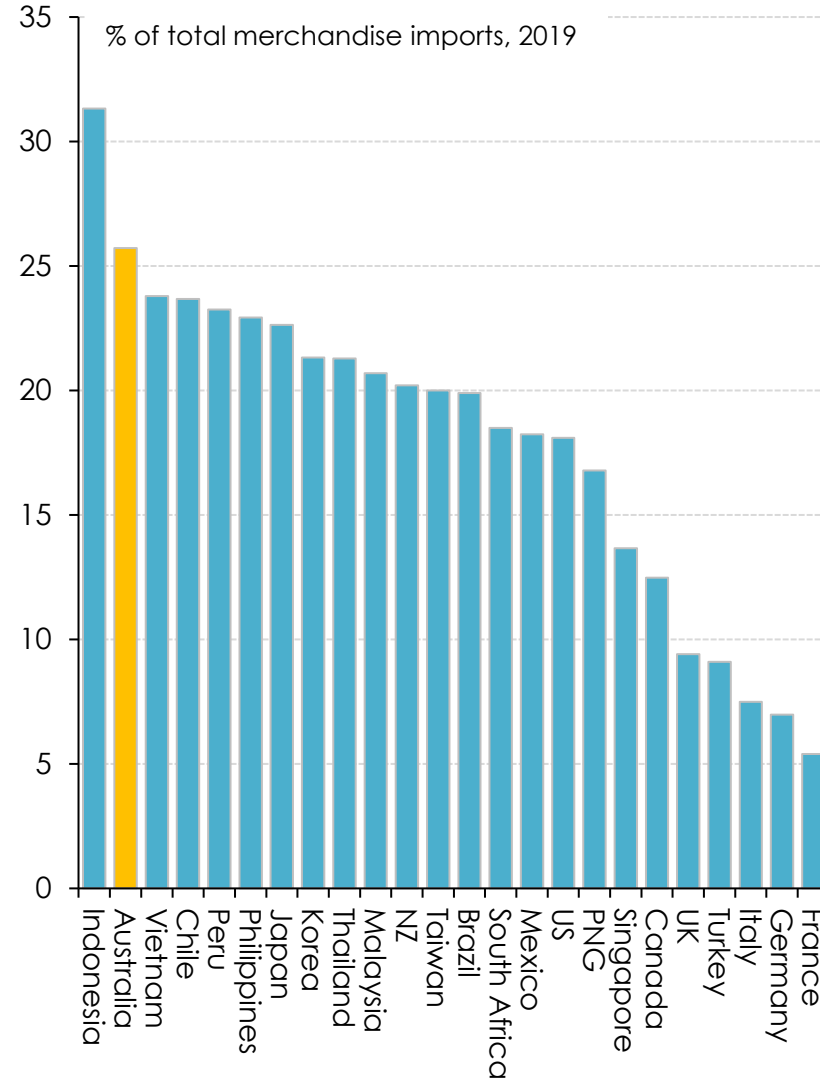
Source: Australian Department of Foreign Affairs and Trade, [Trade Statistical Pivot Tables - Country and commodity pivot table monthly](#); Corinna.

China can cause Australia economic pain because we're very dependent on it, and are one of the few countries with whom China runs a deficit

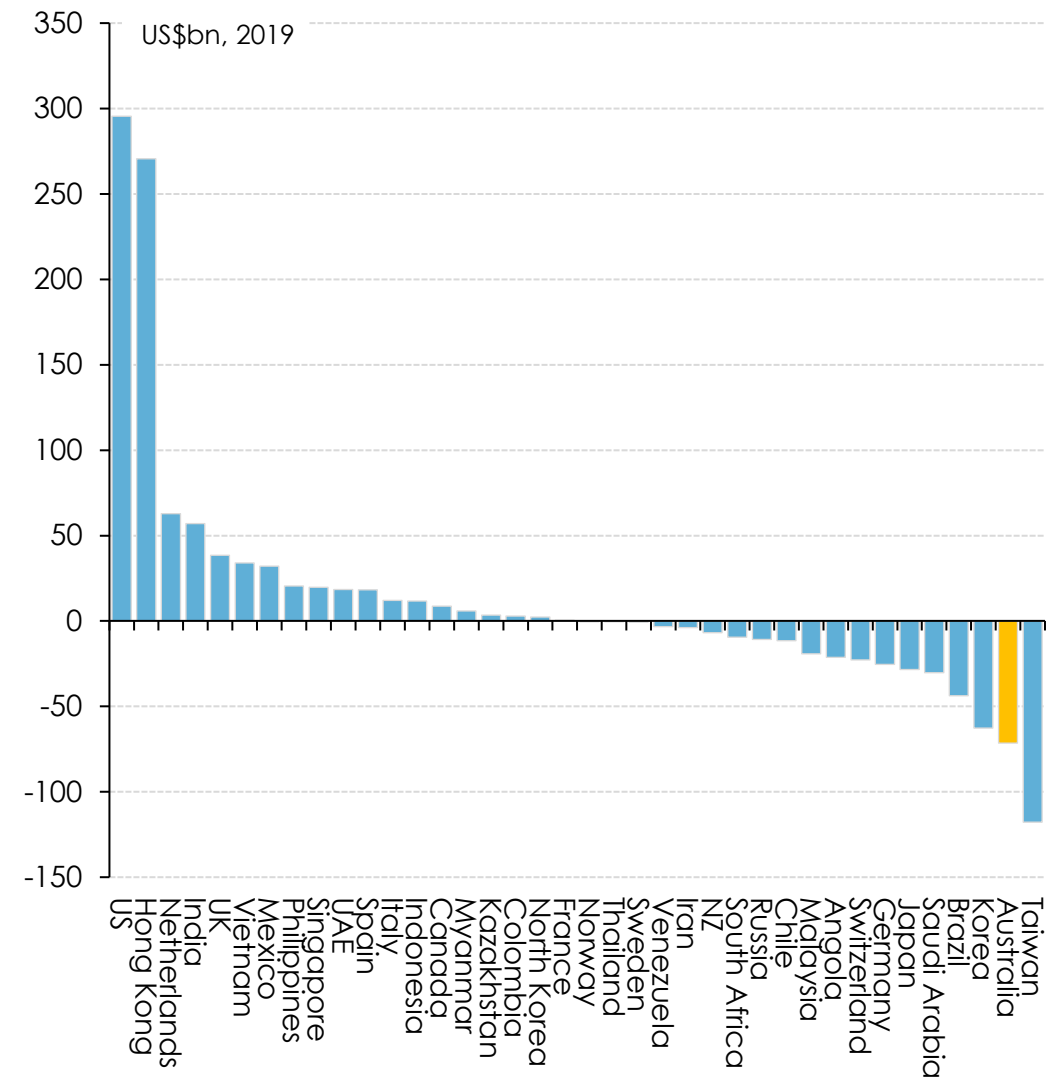
Merchandise exports to China as a pc of total



Merchandise imports from China as a pc of total



China's bilateral merchandise trade balances

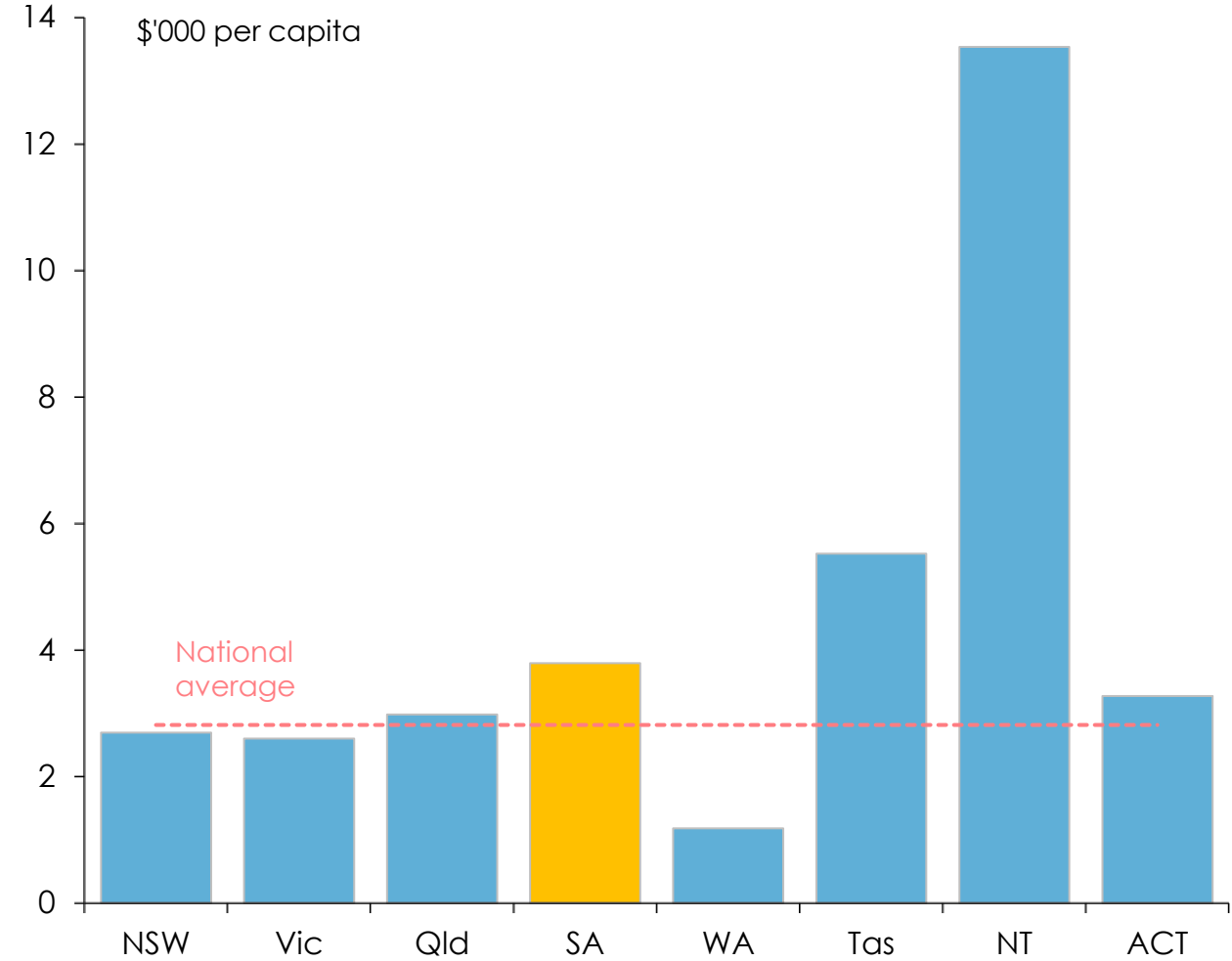


Sources: IMF, Direction of Trade Statistics; Taiwan Ministry of Economic Affairs, Bureau of Foreign Trade. [Return to "What's New"](#).

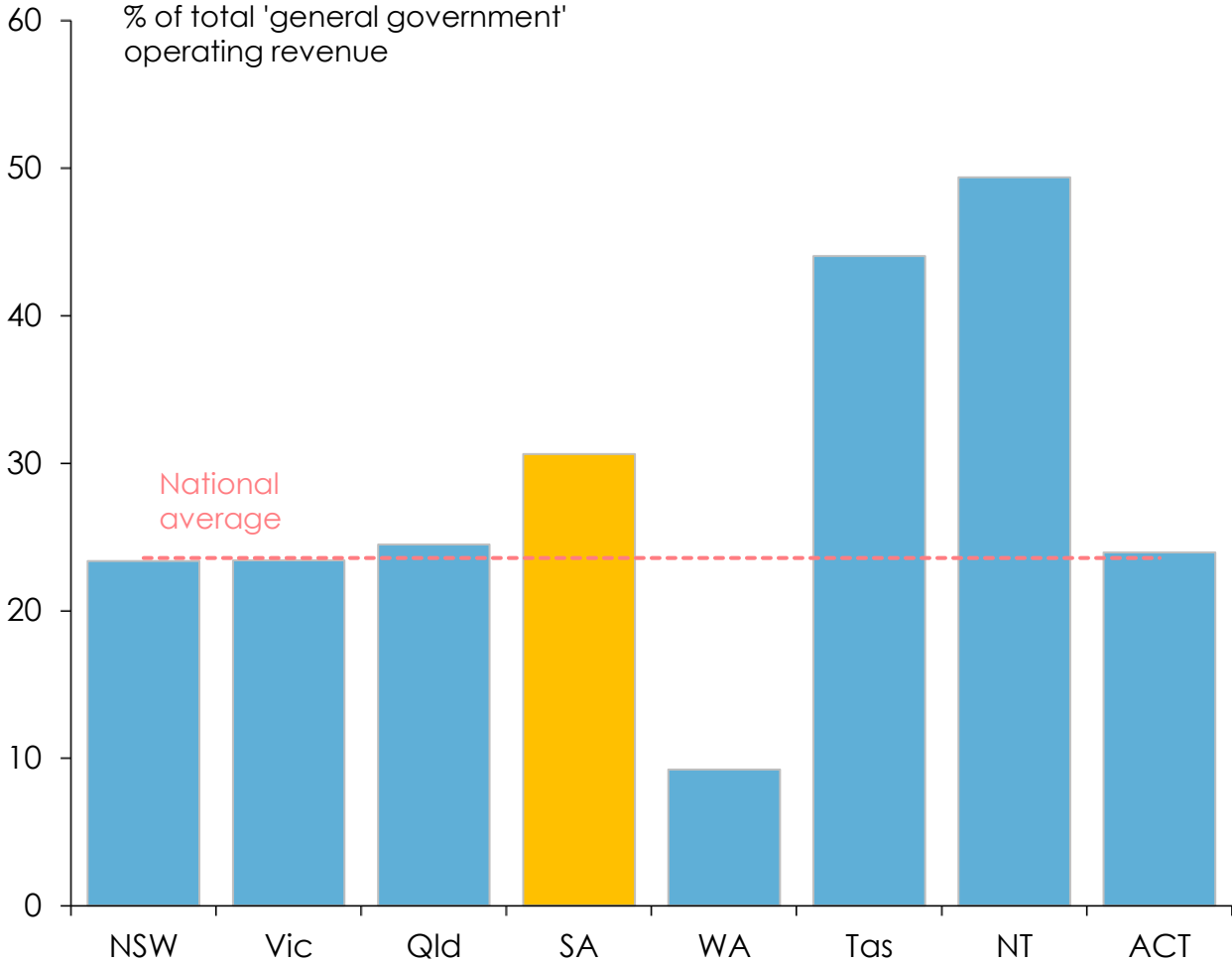
A matter of importance for South Australia
(but not *just* South Australia)

South Australia is more dependent on its share of GST revenues than any other jurisdiction except Tasmania and the Northern Territory

GST revenue shares per head of population, 2021-22



GST revenue shares as a percentage of total 'general government' operating revenue, 2021-22



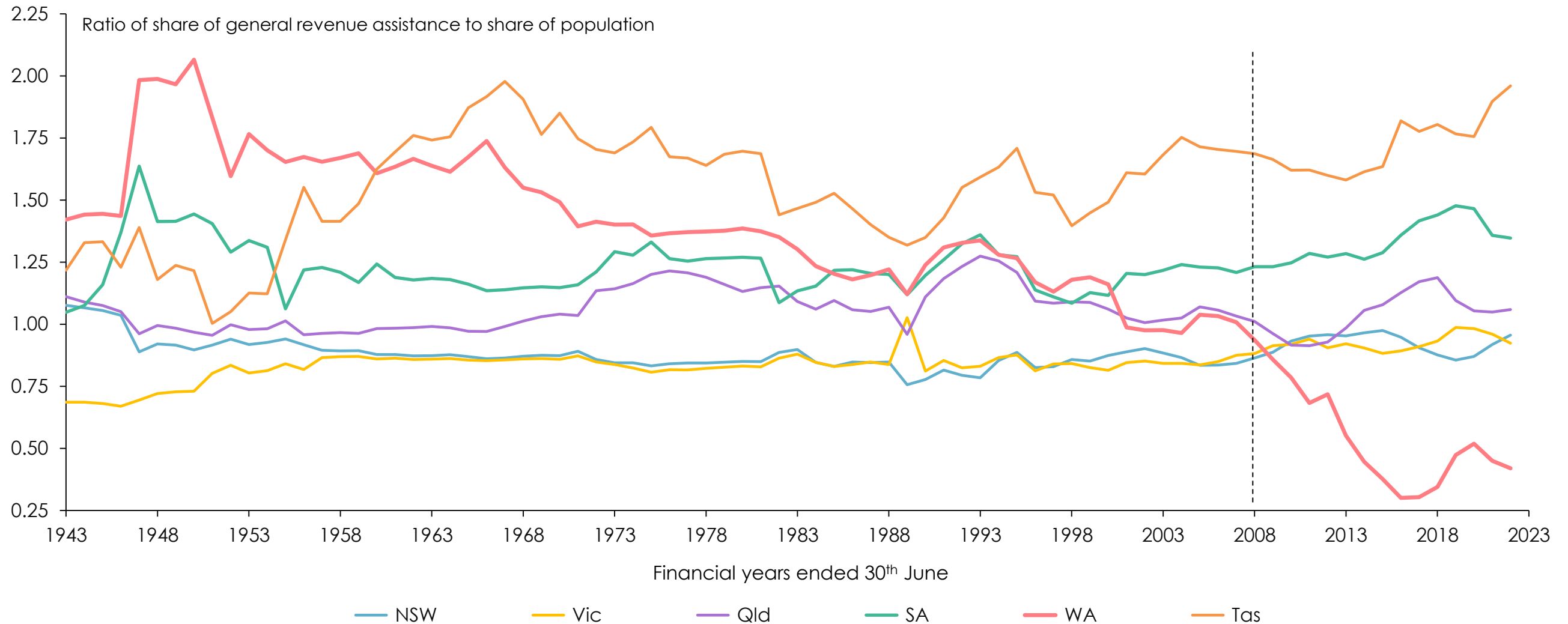
Sources: SA, NSW, Victoria, Queensland and NT Governments, 2021-22 Budget Papers; WA Government, Pre-Election Financial Projections Statement; Tasmanian Government, Pre-election Financial Outlook Report; ACT Government, 2020-21 Budget Outlook; Corinna.

In 2018, the Federal Government ‘changed the rules’ in response to a sustained campaign from successive Western Australian governments

- ❑ Although Western Australia had been a beneficiary for almost 70 years of ‘horizontal fiscal equalization’ (HFE) as administered by the Commonwealth Grants Commission, once the ‘resources boom’ had transformed its finances to the point where it became a (significant) contributor to the ‘pool’ from which HFE is funded (since 2000, GST revenue) rather than a ‘drawer’ from it, WA started agitating vociferously for changes to the ‘rules of the game’
- ❑ In particular, WA sought to have revenue from mineral royalties excluded from the Grants Commission’s assessment of states’ ‘fiscal capacity’, and for the inclusion of a binding minimum or ‘floor’ underneath the share of GST revenue which any state could receive as a proportion of its share of the national population
- ❑ After years of ‘batting away’ WA’s demands (assuaging them instead by making a series of ‘one-off’ grants to WA outside of the GST revenue-sharing process), and following an inquiry by the Productivity Commission, in 2018 the Federal Government ordained changes to HFE which largely met WA’s demands:
 - over the next five years, the ultimate objective of HFE will transition from lifting the ‘fiscal capacity’ of all states and territories to that of the ‘fiscally strongest state’ to lifting them to the stronger of NSW or Victoria; and
 - introduction from 2022-23 of a requirement that no state or territory receive less than 70% of what it would have obtained under an ‘equal per capita’ distribution of GST revenues, increasing to 75% in 2024-25 (even if this means that it is not possible to raise the fiscal capacity of weaker states or territories to the stronger of NSW or Victoria)
 - the changes were accompanied by a guarantee that up until 2026-27 no state or territory would be worse off than it would have been without these two changes (with the Federal Government providing the funding for any such guarantee if required)
- ❑ At the time these changes were made, it was widely assumed that the ‘resources boom’ was over, and that iron ore prices would average US\$55/t (fob) over the following four years
 - in which case, WA would have ceased to be the ‘fiscally strongest’ state (as it had been), and its share of GST revenues would have gradually returned to more than 70% of what it would have obtained under an equal per capita distribution
- ❑ But with iron ore prices much higher than assumed at that time, WA will get to keep a larger share of its windfall gains than it would have done under the old ‘rules’
 - this is now likely to cost the Federal Budget at least \$15bn – more than twice as much as originally forecast – and after 2026-27 this cost will be shouldered by the other states and territories

WA benefited from 'horizontal fiscal equalization' for 70 years – but when they became rich enough to be a 'donor' they want the rules changed

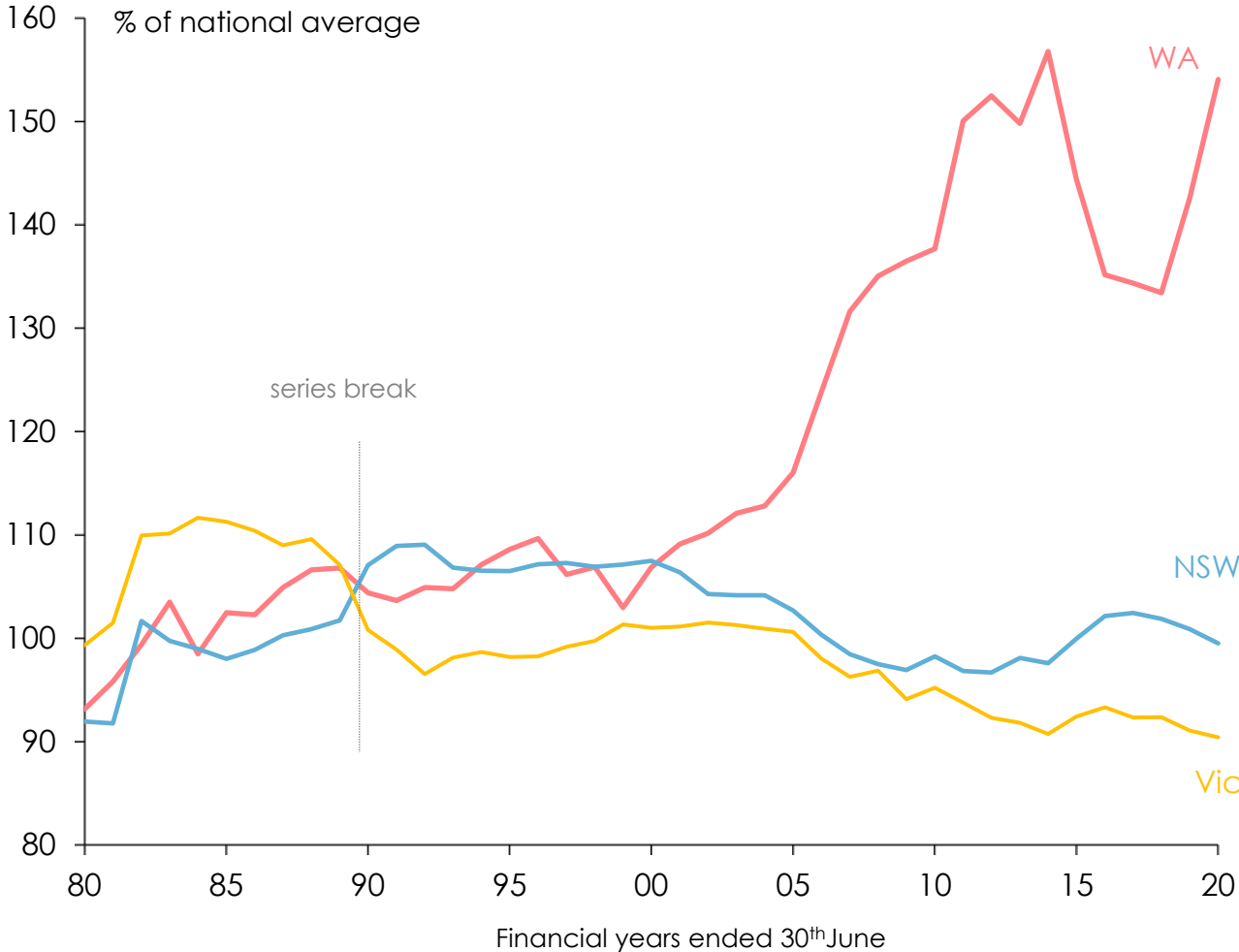
States' shares of total 'general revenue grants' from the Commonwealth relative to their population shares



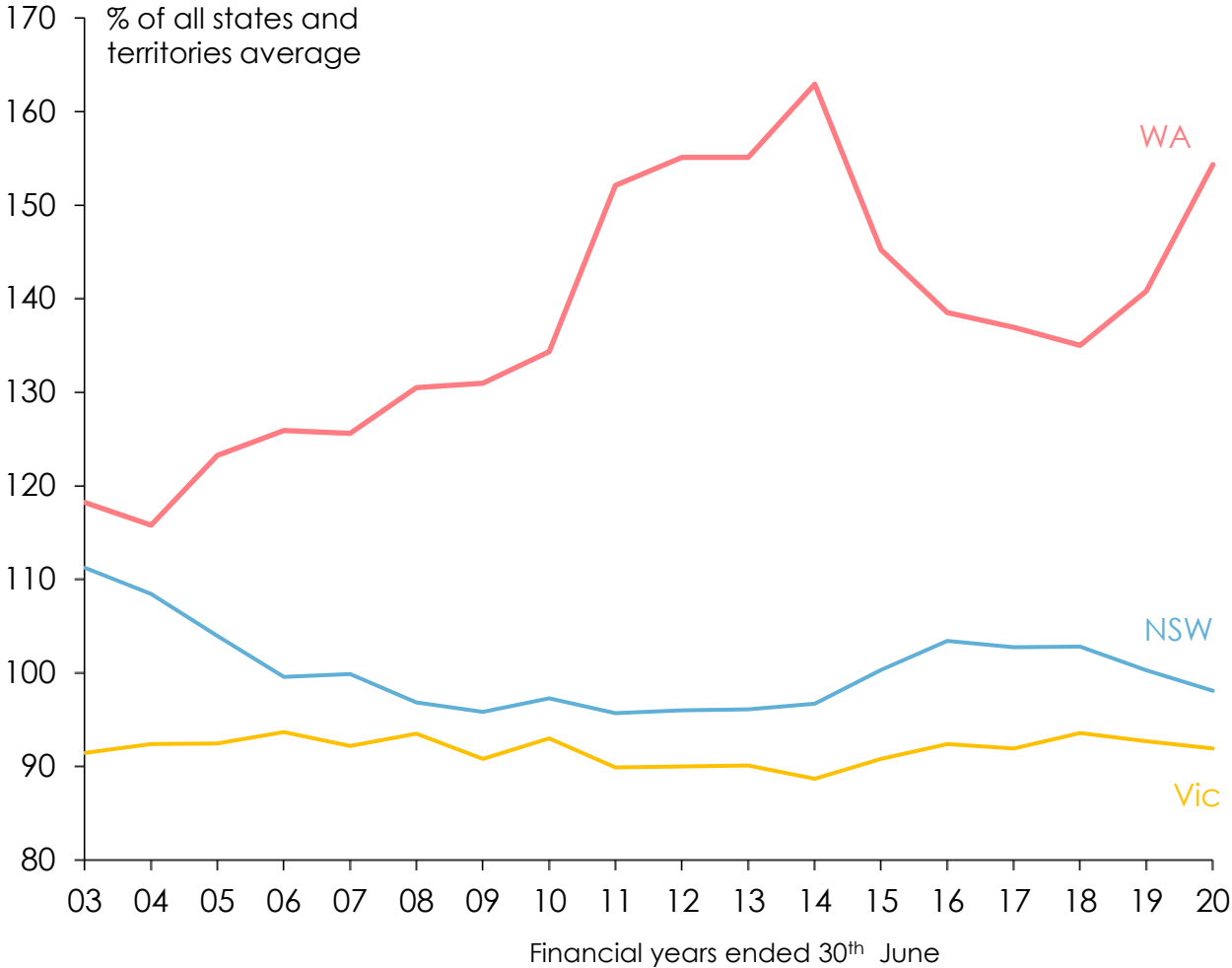
Note: 'General revenue grants' includes tax reimbursement grants, financial assistance grants, tax sharing grants, GST revenues, health care grants (from 1981-82 to 1987-88), special grants, special revenue assistance, identified road grants (from 1991-92 to 1996-97), national competition payments (from 1997-98 to 2007-08), grants in lieu of royalties and other general revenue assistance. Territories not shown. Figures for 2016/17 and 2017-18 are estimates. Sources: Commonwealth Grants Commission, [General revenue grants from 1910](#) and [Trends in horizontal fiscal equalization](#); ABS, [Historical population](#); Australian Government, [2021-22 Budget Paper No. 3 - Federal Financial Relations](#); Corinna.

NSW and Victoria were never as 'rich', or had the same capacity to raise revenue, by as big a margin as WA has been in the past decade

Gross state product per head relative to the national average



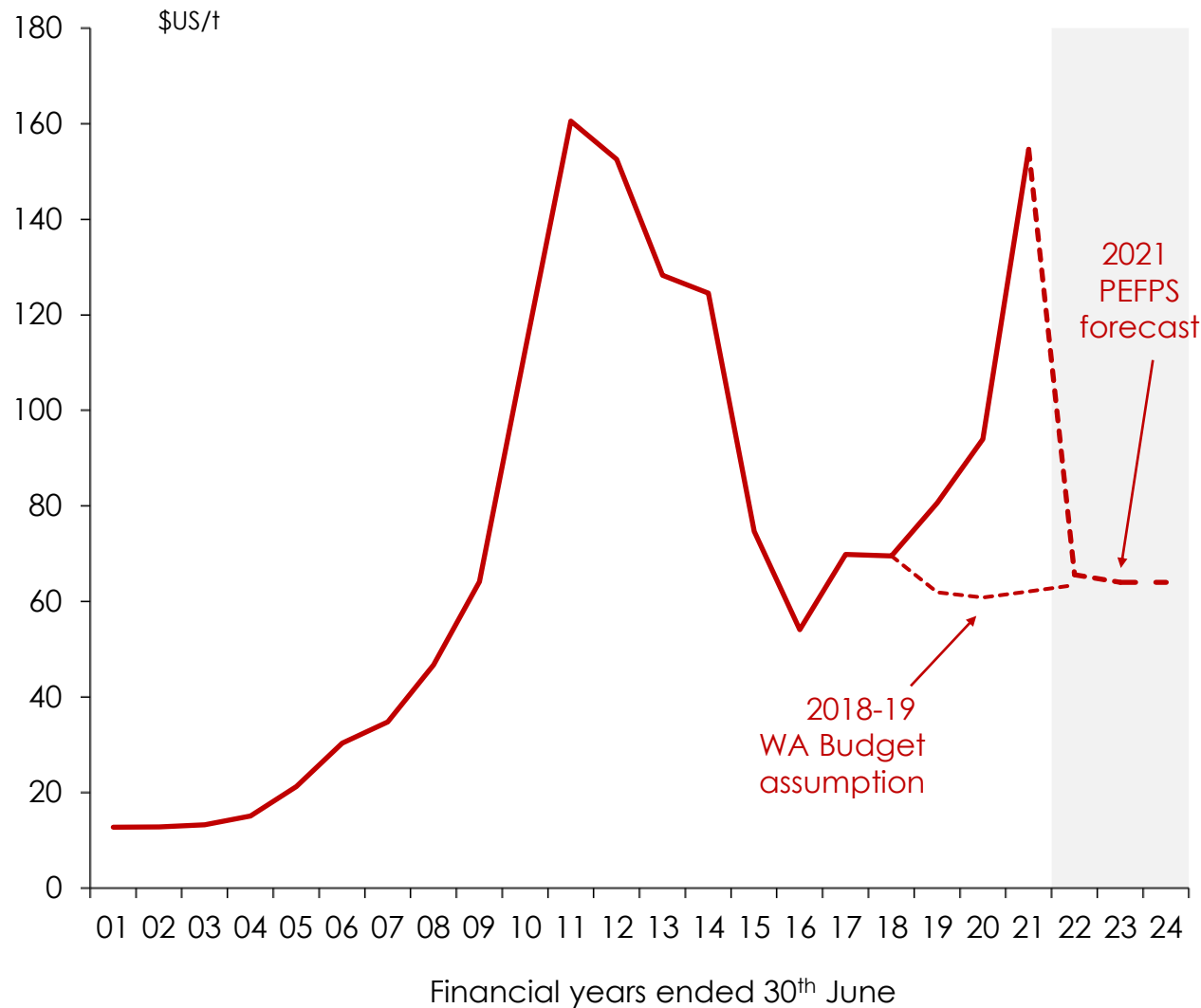
'Revenue-raising capacity' relative to the national average



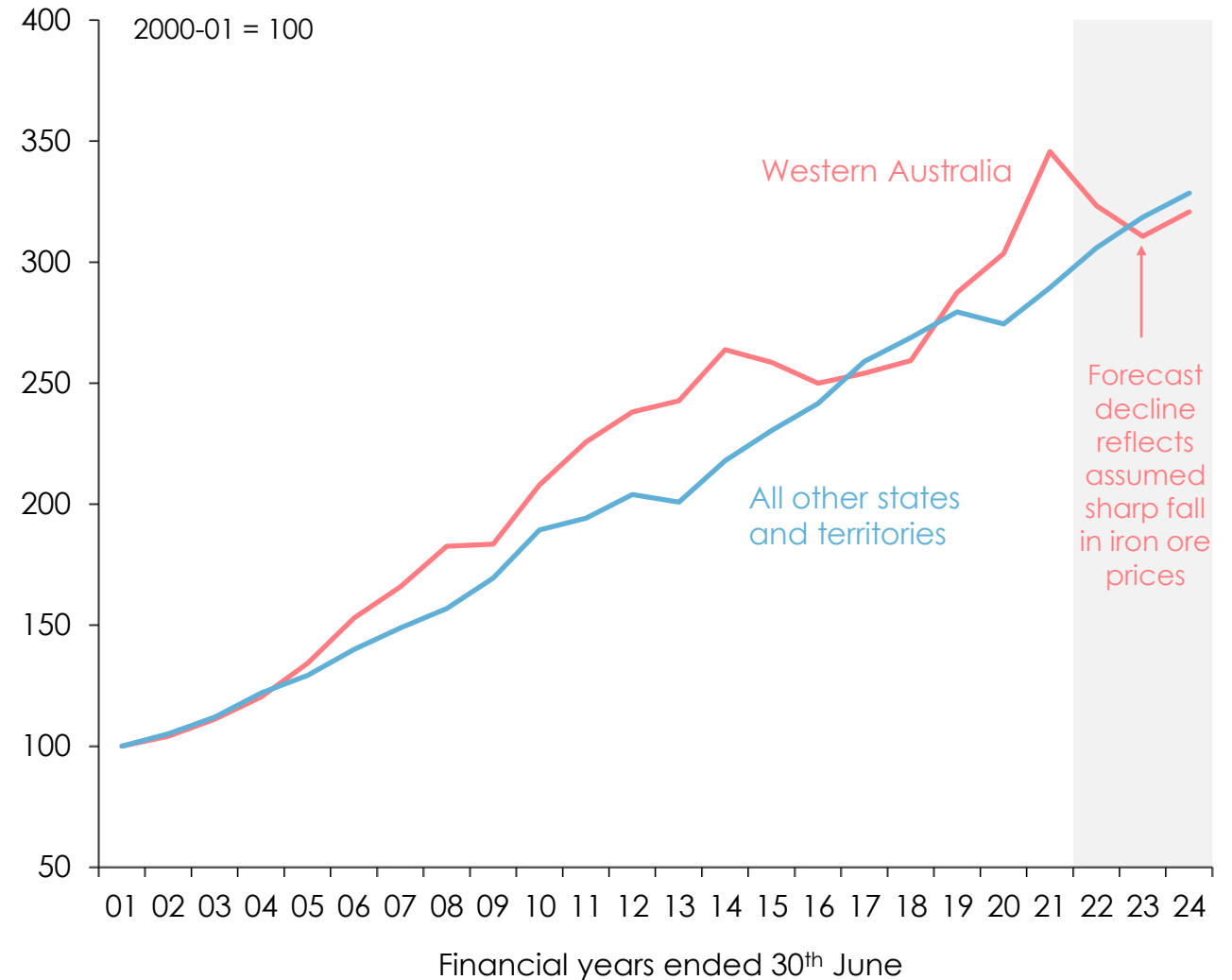
Sources: ABS, [Australian National Accounts: State Accounts](#), 2019-20; Commonwealth Grants Commission, [2021 Update: Revenue and Expense Ratios](#), and similar tables from previous years (although figures for years prior to 2015-16 are not always precisely comparable with other years); Corinna.

WA's mineral royalty revenues have again risen more strongly than those of other states thanks to the 'second wave' of sky-high iron ore prices

Iron ore prices – financial year averages



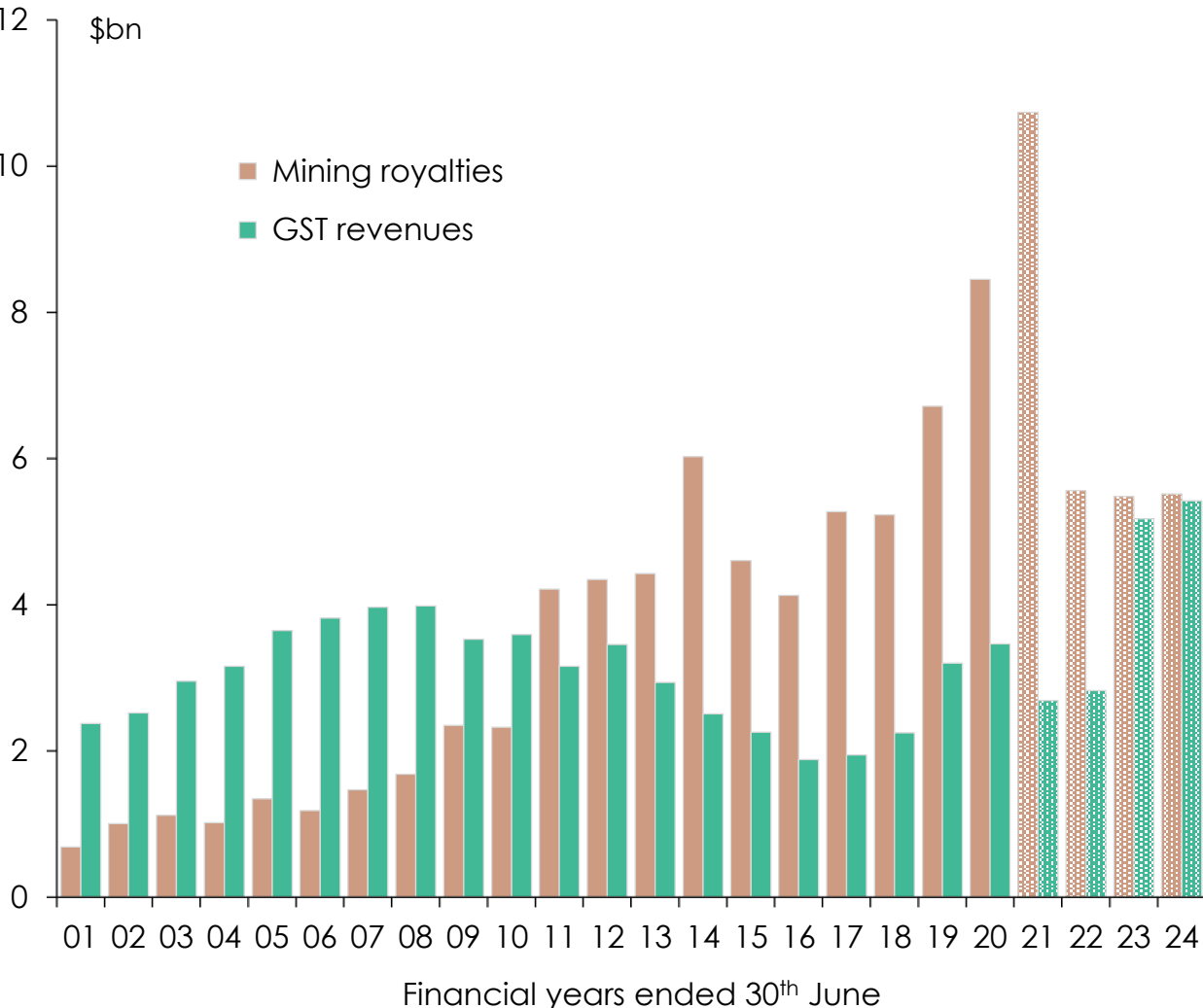
WA's total revenues compared with those of other states and territories



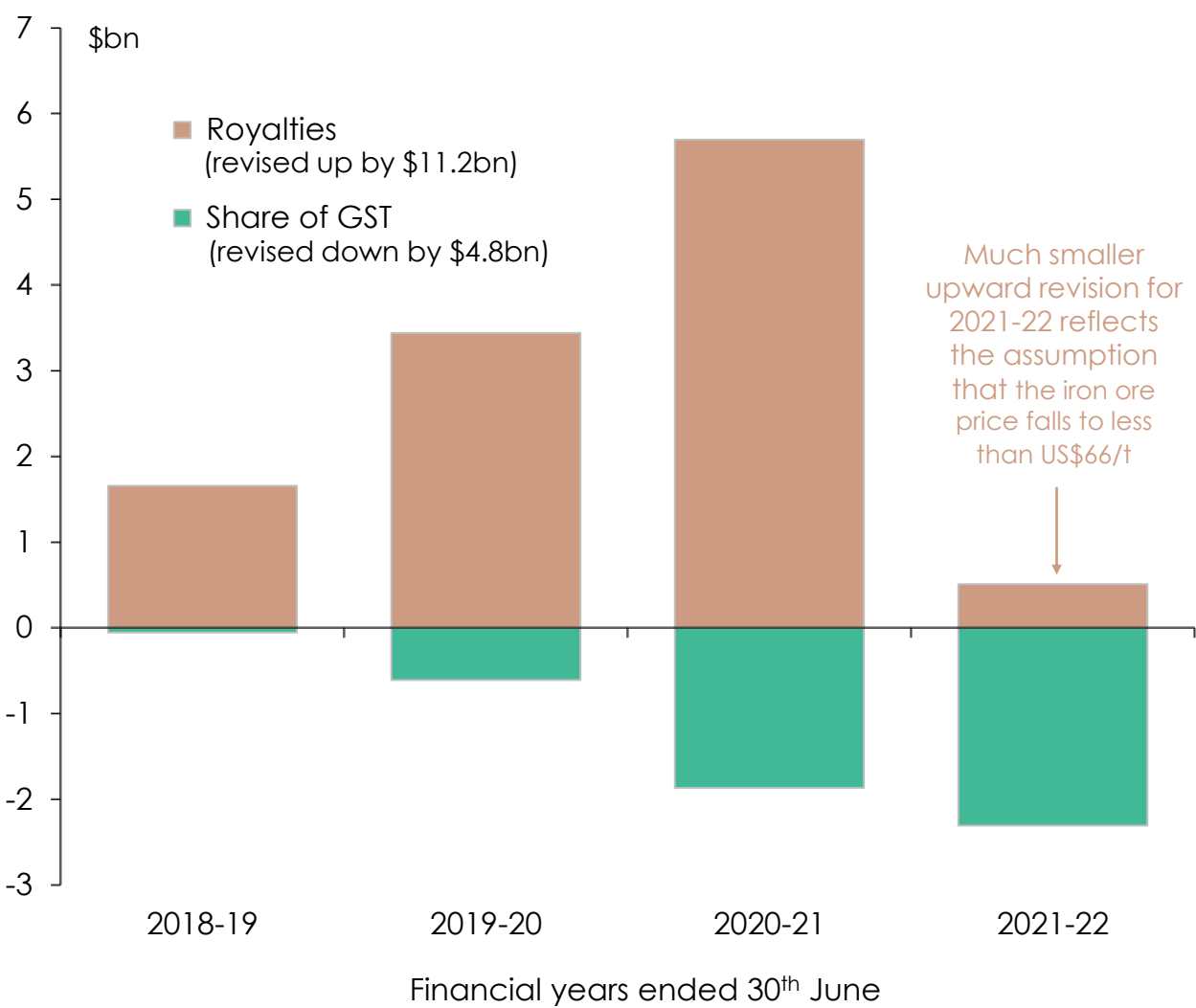
Note: Western Australia's iron ore price assumptions are expressed inclusive of cost and freight ('CFR'), which adds around US\$10/t to the 'free on board' (fob) price assumption used more commonly in markets and in Commonwealth Budget Papers. Sources: Refinitiv Datastream; Government of Western Australia, Budget Papers 2001-02 through 2020-21, and [Pre-Election Financial Projections Statement](#), 8th February 2021; other state and territory budget papers; Corinna.

WA's mineral royalty revenues have been revised upwards by more than twice as much as its revenues from GST have been revised upwards

WA's mineral and energy royalty revenues and share of GST revenues



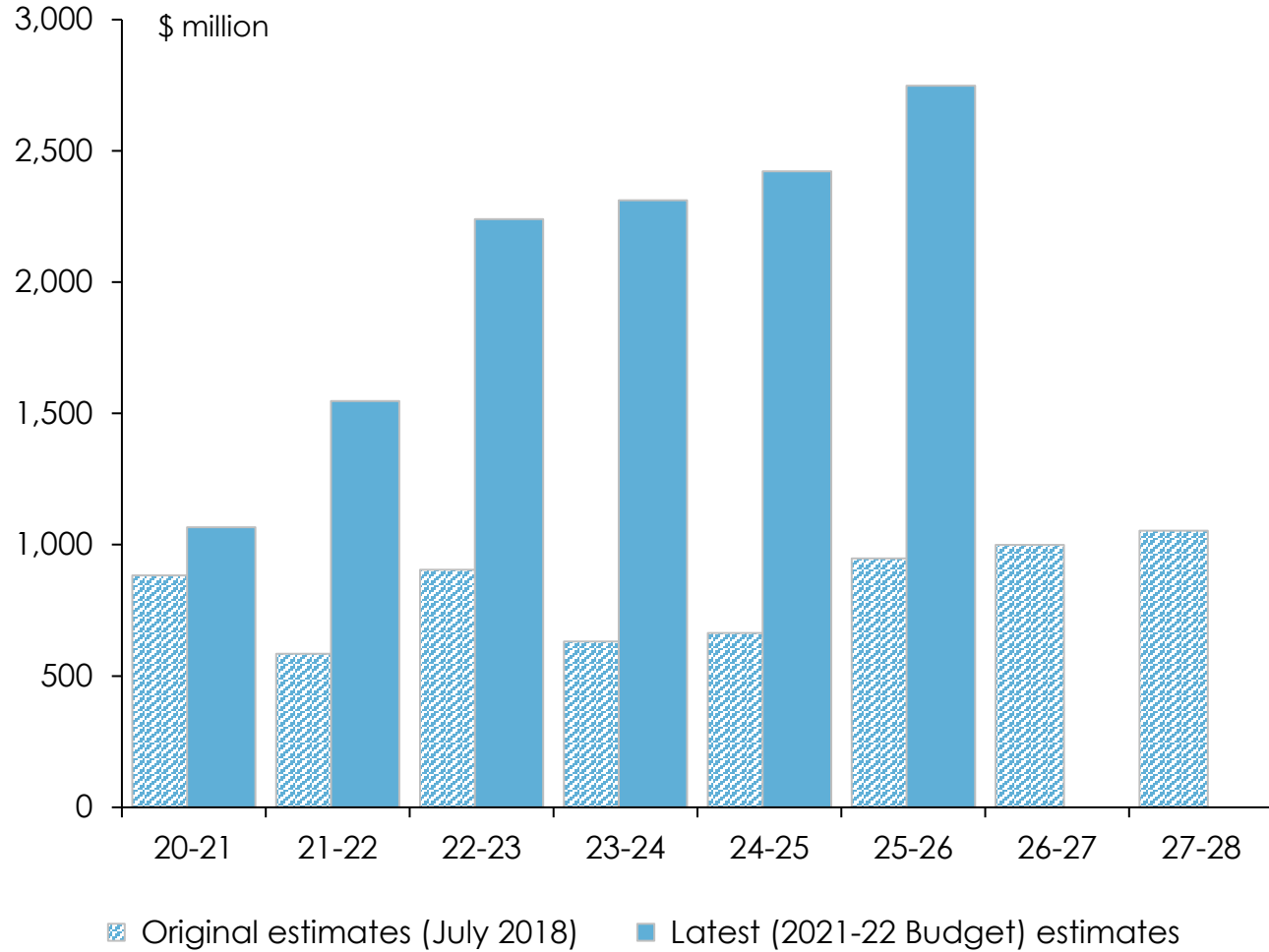
Revisions to WA's forecasts of its royalty revenues and share of GST revenues since its 2018-19 Budget



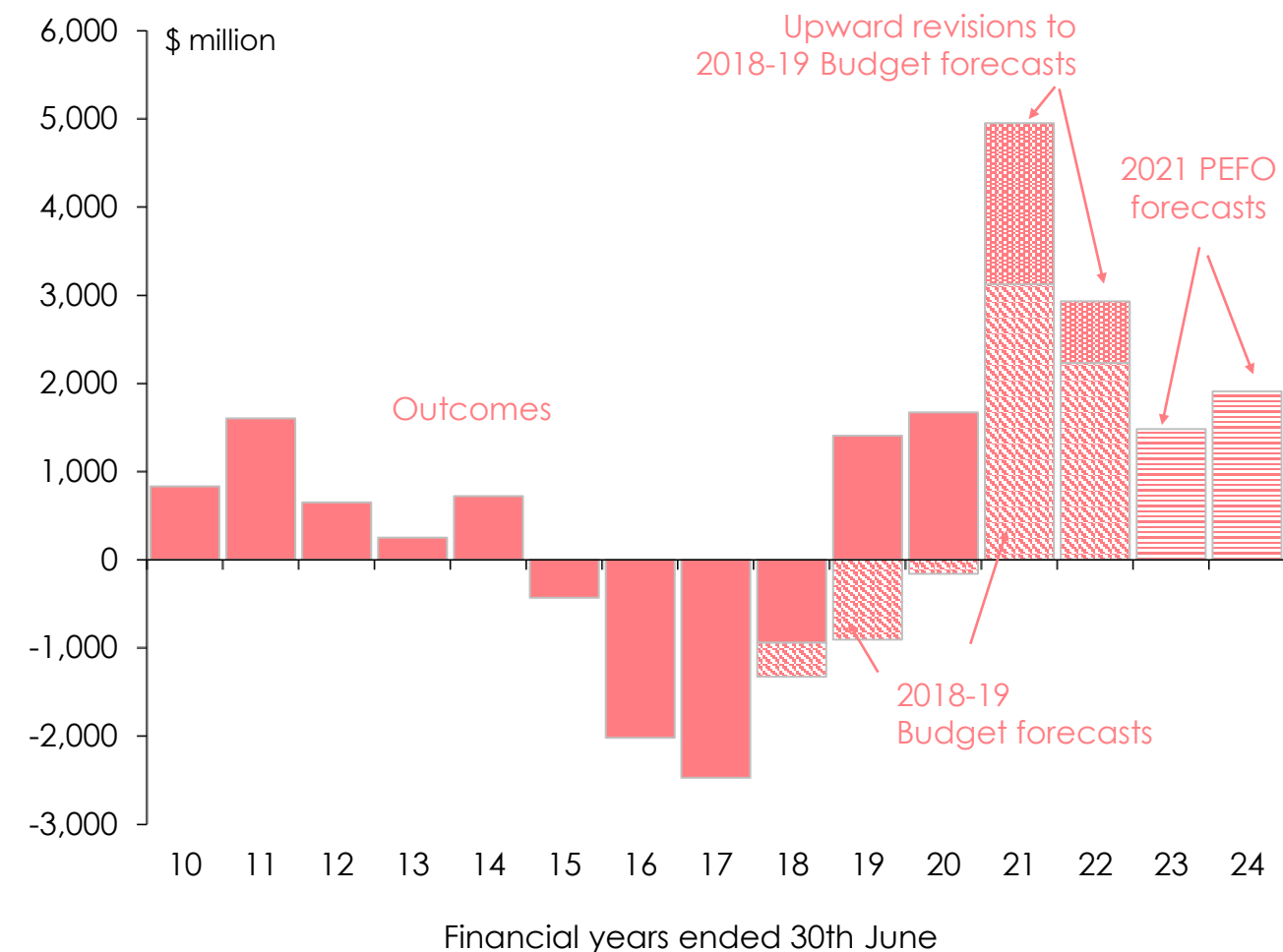
Sources: Government of Western Australia, Budget Papers 2001-02 through 2020-21, and [Pre-Election Financial Projections Statement](#), 8th February 2021; Corinna.

The cost of placating Western Australia has risen dramatically – even though WA’s budgetary position has improved substantially

Commonwealth Government ‘horizontal fiscal equalization (HFE) transition payments’



Western Australia’s ‘general government’ net operating surplus



Sources: Australian Treasury, [Government interim response to Productivity Commission inquiry into horizontal fiscal equalization](#), 5th July 2018, [Final Budget Outcome 2019-20](#), 30th September 2020, and [2021-22 Budget Paper No. 3 - Federal Financial Relations](#), 11th May 2021; Government of Western Australia, [State Budget 2018-19 Budget Paper No. 3: Economic and Fiscal Outlook](#), 10th May 2018; [Pre-Election Financial Projections Statement](#), 8th February 2021; Corinna.

South Australia will be a big loser from the 'deal' to placate WA when the 'transitional guarantee' expires in 2027-28

Victorian Treasury estimates of impact on state and territory budgets when the Commonwealth Government's 'transitional guarantee' that 'no state or territory will be worse off than it would have been under the 'old rules' expires in 2027-28

Scenario	NSW	Vic	Qld	WA	SA	Tas	ACT	NT
1: NSW and Vic stamp duty growth slows	-250	-196	-124	1,636	-17	2	-7	29
2: A decrease in WA's mining revenue	-105	-67	-6	1,185	18	14	1	35
3: Replicate mining boom scenario	-1,365	-1,178	-846	4,856	-258	-70	-70	6
4: Replicate 2011-12 relativities	-208	-193	-142	1,611	-21	1	-8	35
5: Replicate 2010-11 relativities	-332	-287	-224	1,955	-46	-7	-14	29
6: Relativities return to 10-year average	-1,198	-1,009	-744	4,360	-220	-58	-60	2

Note: Figures are in \$mn. Source: Victorian Department of Treasury and Finance

Yet by comparison with what other States have had to say about this in their Budget Papers, SA has been surprisingly circumspect

Victoria's 2021-22 Budget Papers

The potential cost of the new system to other States is significantly greater than originally anticipated as Western Australia's relativity is far lower than the original forecasts by the Productivity Commission, used by the Commonwealth to justify the new system in 2018 (Chart 4.11). According to the Commonwealth's 2021-22 Budget, the total cost of the new system will be over \$10 billion from 2019-20 to 2023-24, significantly greater than the \$3.7 billion originally estimated by the Commonwealth in 2018.

The modelling demonstrates that not continuing the no-worse-off guarantee after 2026-27 will put many states – including Victoria – at risk of significant financial losses. This impedes not only states' ability to invest in vital services for their citizens now, such as education, health, and mental health – but also their ability to plan effectively into the future.

Queensland's 2021-22 Budget Papers

Under the Australian Government's changes, Western Australia will benefit from heightened mining royalties without losing GST revenue. This will allow it to deliver more services, accrue less debt and implement lower taxes.

The Australian Government's payments under the 'no worse off' guarantee are estimated to total \$7.6 billion over the forward estimates. When the guarantee expires at the end of 2026–27, this cost will be borne by states unless the Australian Government responds appropriately.

In attempting to fix a perceived problem, the Australian Government's unilateral changes could result in a substantial distortion of HFE and create a funding issue that states will need to grapple with in the future.

New South Wales' 2021-22 Budget Papers

Commonwealth changes to how GST is distributed under horizontal fiscal equalisation (HFE) are inequitable and unsustainable

In the meantime, Western Australia is benefiting on two fronts – receiving a GST top-up payment of \$1.5 billion in 2021-22, while also enjoying record growth in iron ore royalty revenue. Directing GST revenue to Western Australia, at a time when it is running an average surplus of \$1.9 billion, is inequitable and unfair to other states.

Under the Commonwealth's changes, the cost of these payments is progressively transferred onto other states and territories through foregone GST revenue. Once fully implemented by 2026-27, GST will be distributed in a way that effectively subsidises the state with the greatest fiscal capacity. This means the Western Australian Government can provide greater access to potentially higher quality services and more infrastructure to its residents at a lower taxation burden.

The affordability of the changes is also a major concern. The cost of the changes is currently almost twice as much as originally anticipated. The 2021-22 Commonwealth Budget estimates the total cost of the new arrangements will be over \$10 billion from 2019-20 to 2023-24. This is significantly more than the \$3.7 billion originally estimated by the Commonwealth in 2018. This is contributing to the Commonwealth's own deficit at a time when these dollars could have been better spent on productivity-enhancing reforms that support the post-pandemic recovery.

South Australia's 2021-22 Budget Papers

The CGC estimates that the transition to the new GST distribution arrangements will redistribute a further \$629 million to Western Australia in 2021-22, at the expense of all other jurisdictions. Western Australia will also receive a separate payment from the Commonwealth Government in 2021-22 to top it up to an effective relativity of 0.70. This payment is estimated at \$2.1 billion based on the recommended relativities and current GST pool estimates. From 2022-23, the payment to Western Australia required to top it up to an effective relativity of 0.70 (0.75 from 2024-25) will be funded within the GST pool through redistributions of GST revenue from other jurisdictions.

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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