WILL THE WORLD'S MEGA ECONOMIES CREATE THE MEGA DECADE?

PRESENTATION TO THE AUSTRALIAN INVESTORS ASSOCIATION 2022 NATIONAL CONFERENCE – "RIDING THE WAVE OF THE MEGATRENDS"

JW MARRIOTT RESORT, GOLD COAST
28TH MARCH 2022

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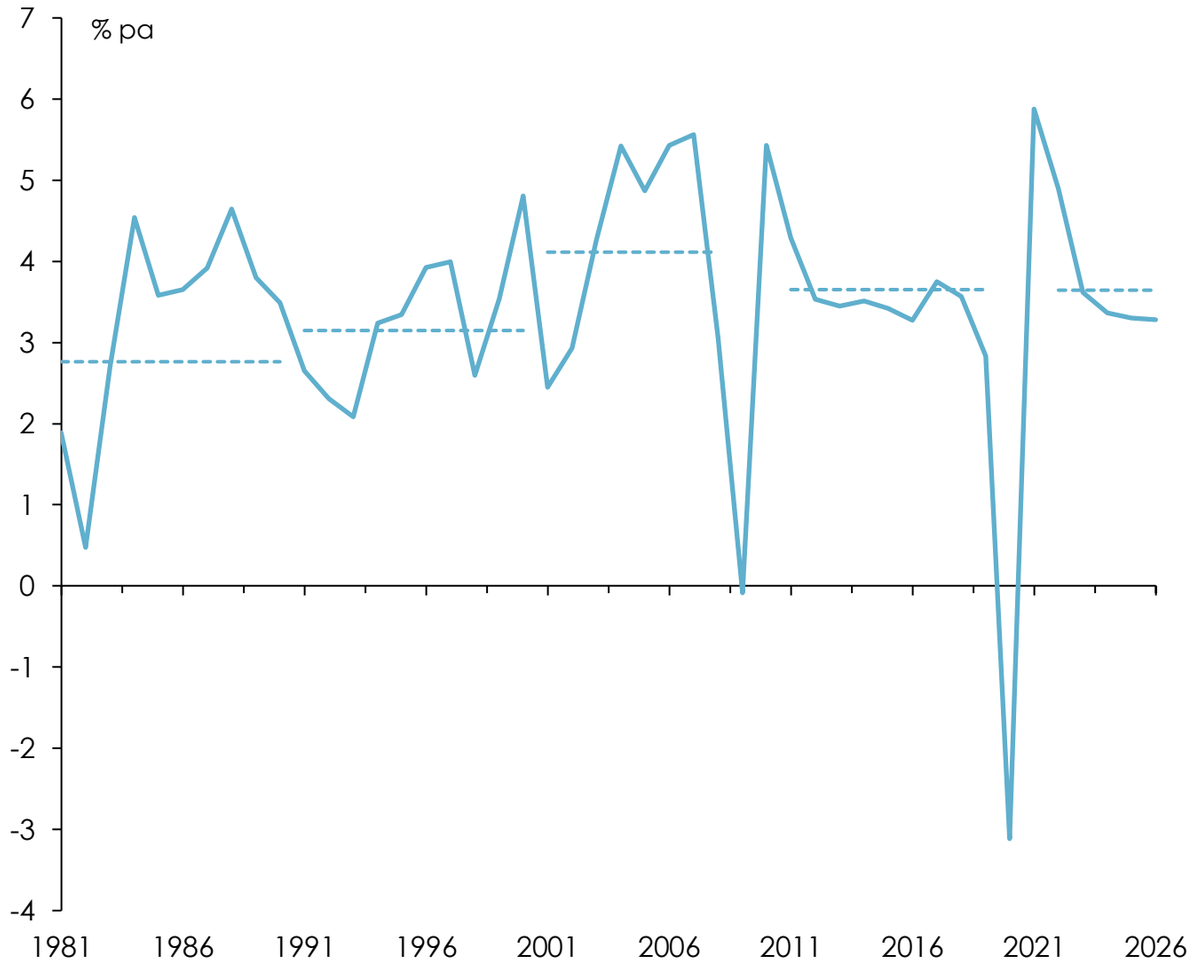
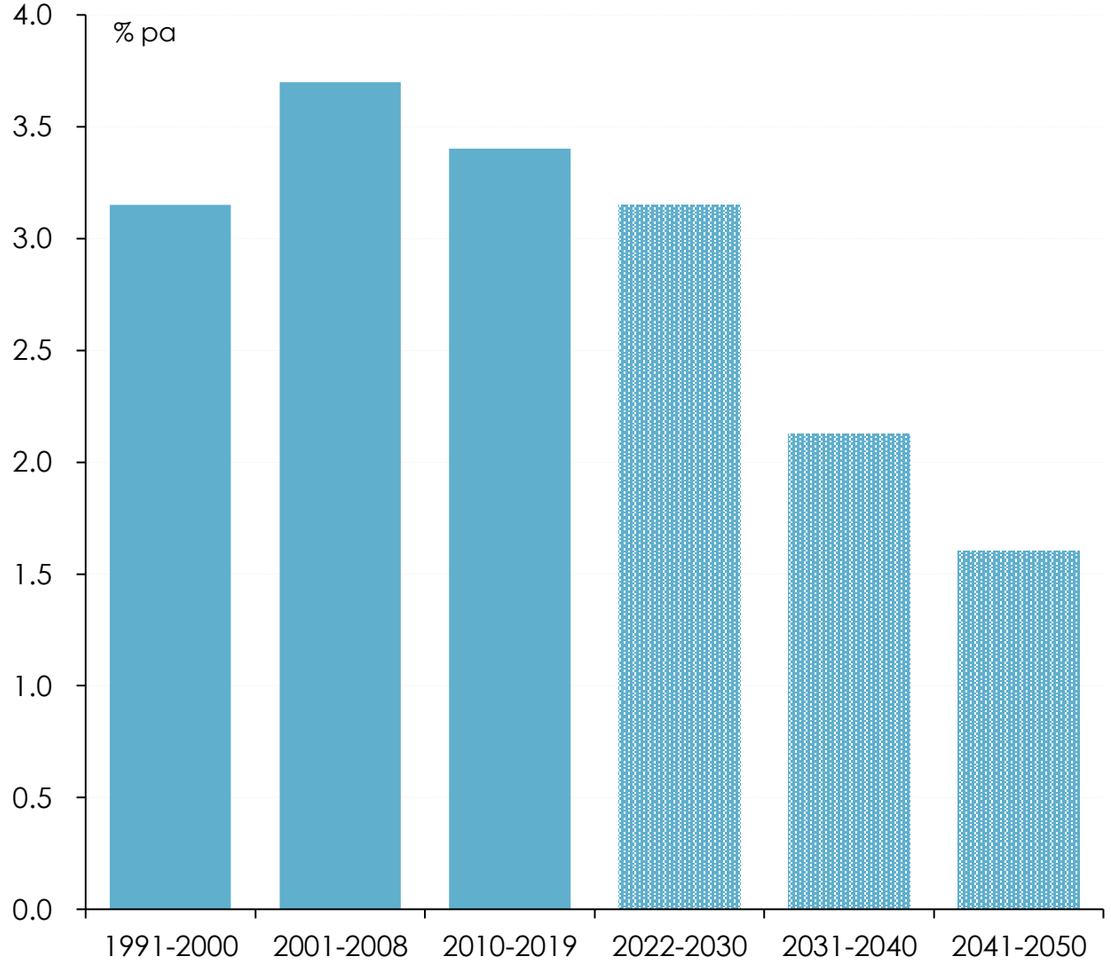
Warning: nothing you are going to see or hear in the next hour constitutes investment advice

The world economy is going to grow more slowly over the next two or three decades than it has done over the past three decades …

Historical and forecast world GDP growth - IMF



Historical and forecast world GDP growth - OECD



Sources: International Monetary Fund (IMF), World Economic Outlook database, October 2021; Organization for Economic Co-operation and Development (OECD), Economic Outlook No. 109 - Long-term baseline projections, October 2021.

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A useful way of thinking about the sources of long-run economic growth

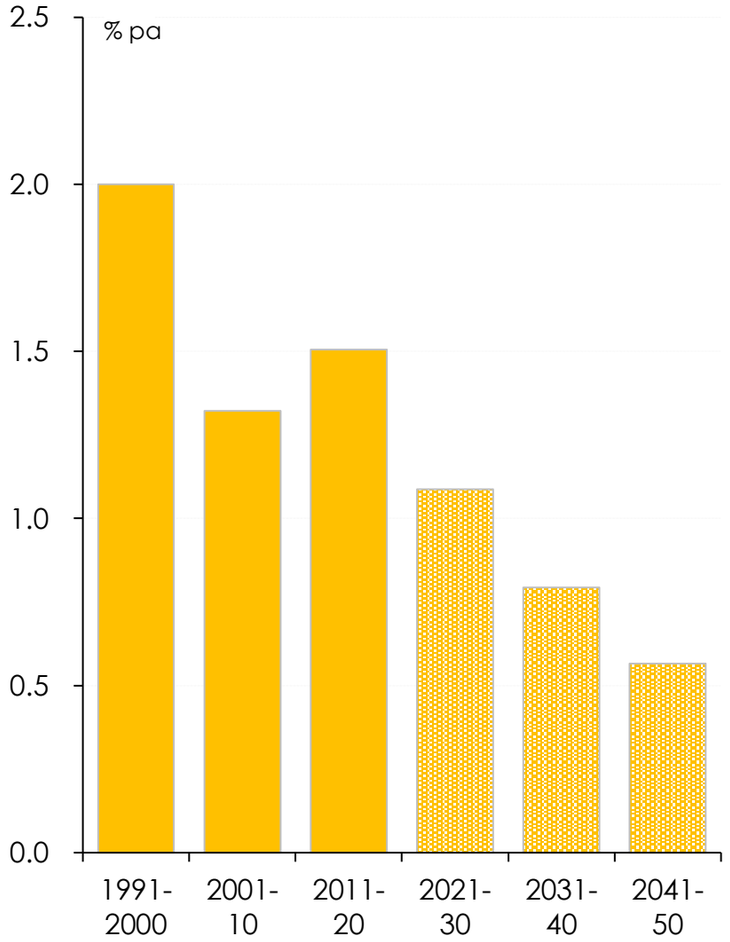
$$\text{GDP} = \text{population} \times \frac{\text{employment}}{\text{population}} \times \frac{\text{hours worked}}{\text{employment}} \times \frac{\text{GDP}}{\text{hours worked}}$$

$$= \text{population} \times \text{‘employment rate’} \times \text{average hours worked} \times \text{labour productivity}$$

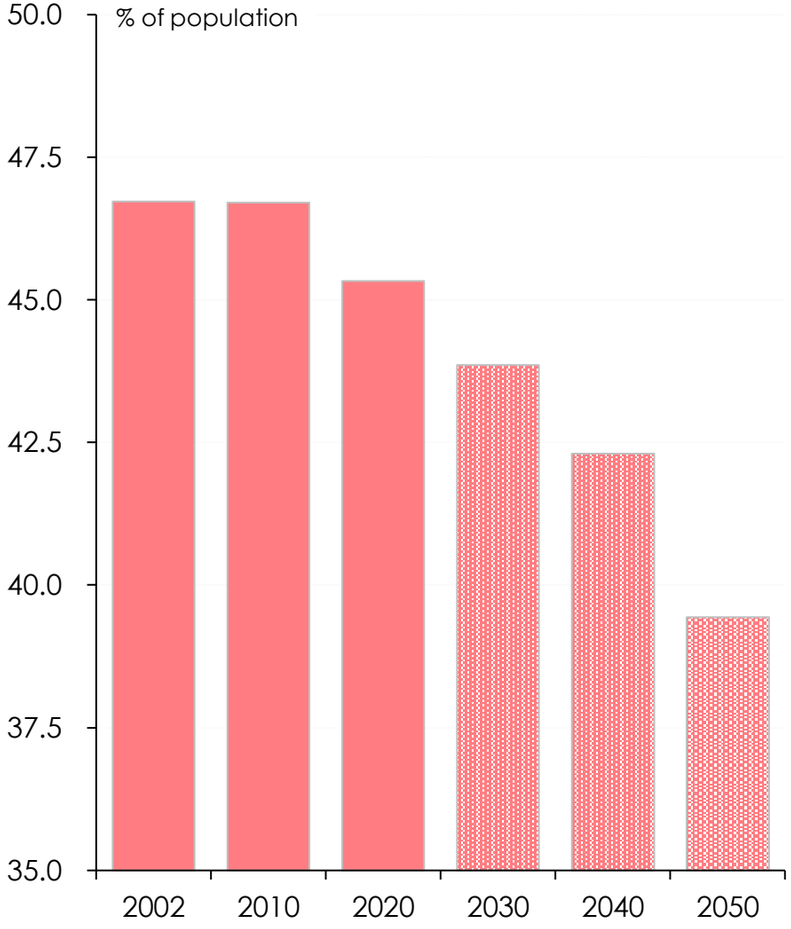
$$\Delta GDP = \Delta\ \textit{population} \times \Delta\ \textit{‘employment rate’} \times \Delta\ \textit{average hours worked} \times \Delta\ \textit{labour productivity}$$

Each of these three factors will be making smaller (or even negative) contributions to global economy growth in coming decades

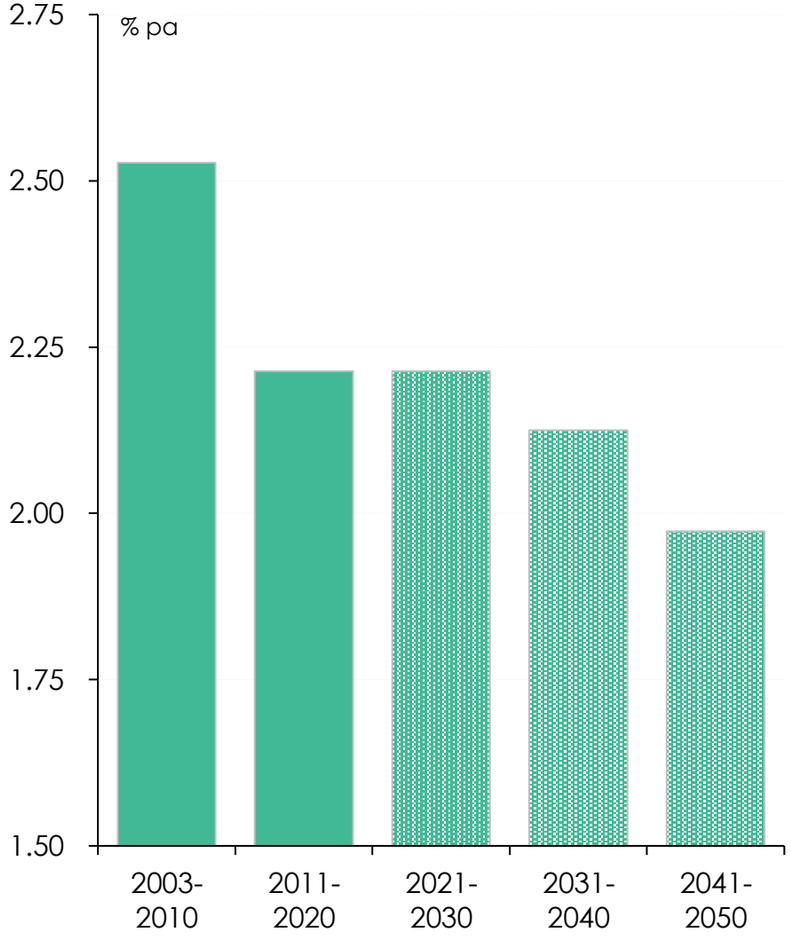
Population growth



Employment-population ratio



Labour productivity growth



Source: Organization for Economic Co-operation and Development (OECD), *Economic Outlook No. 109 - Long-term baseline projections*, October 2021.

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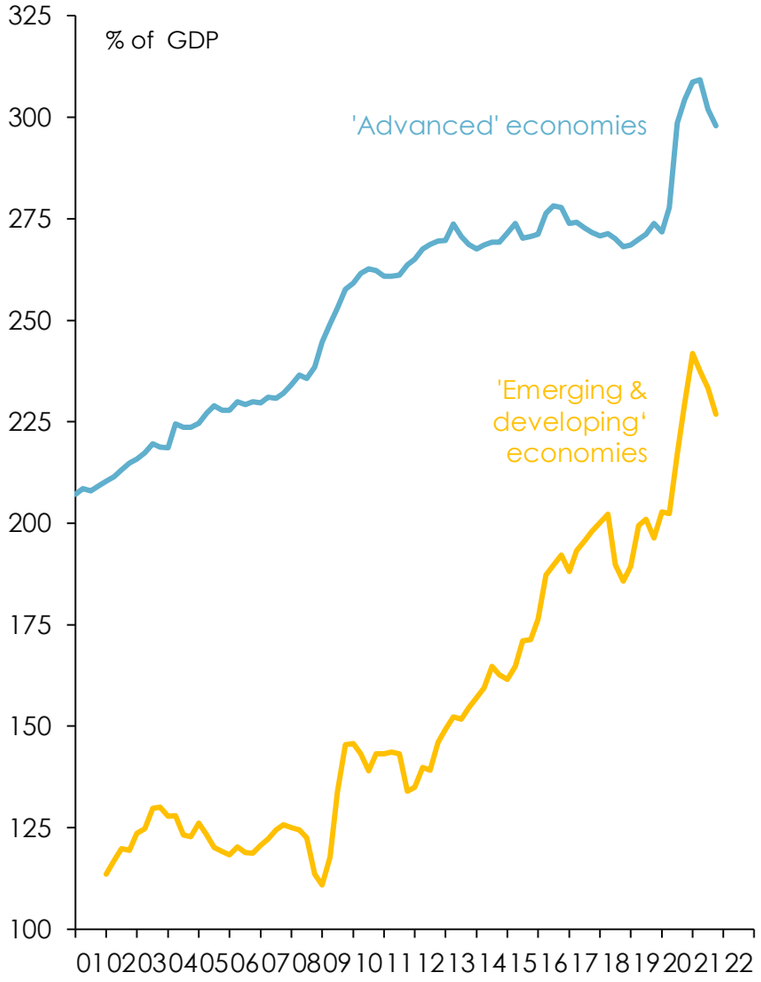
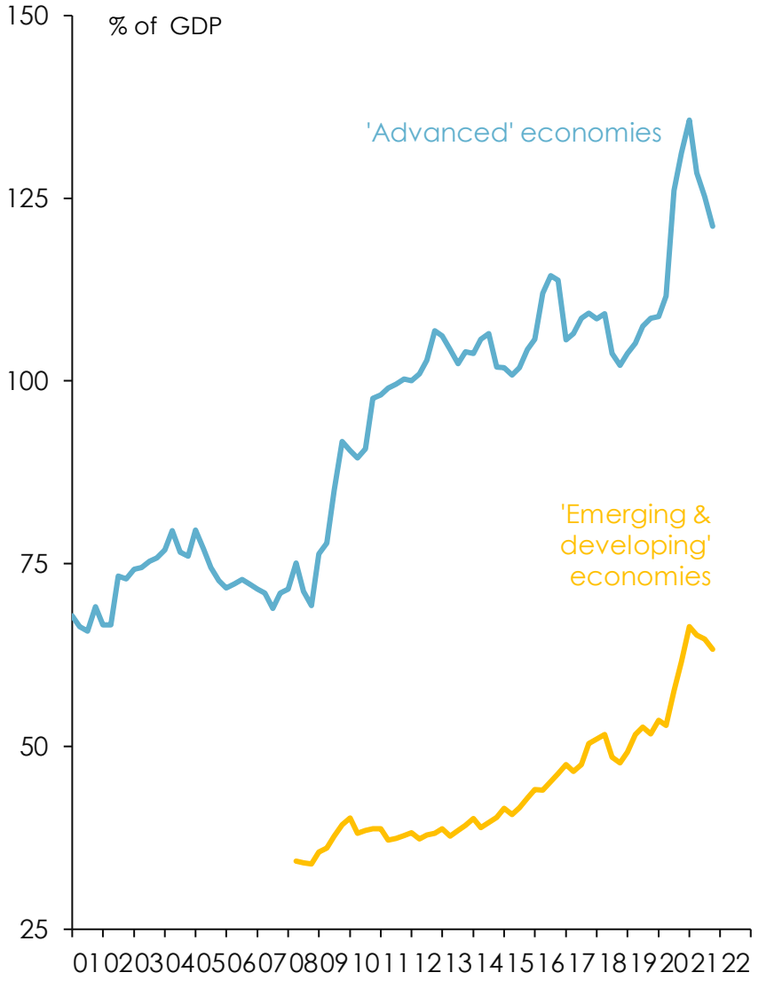
High levels of public and/or private sector debt will also be a drag on growth now that there's only one direction in which interest rates can go

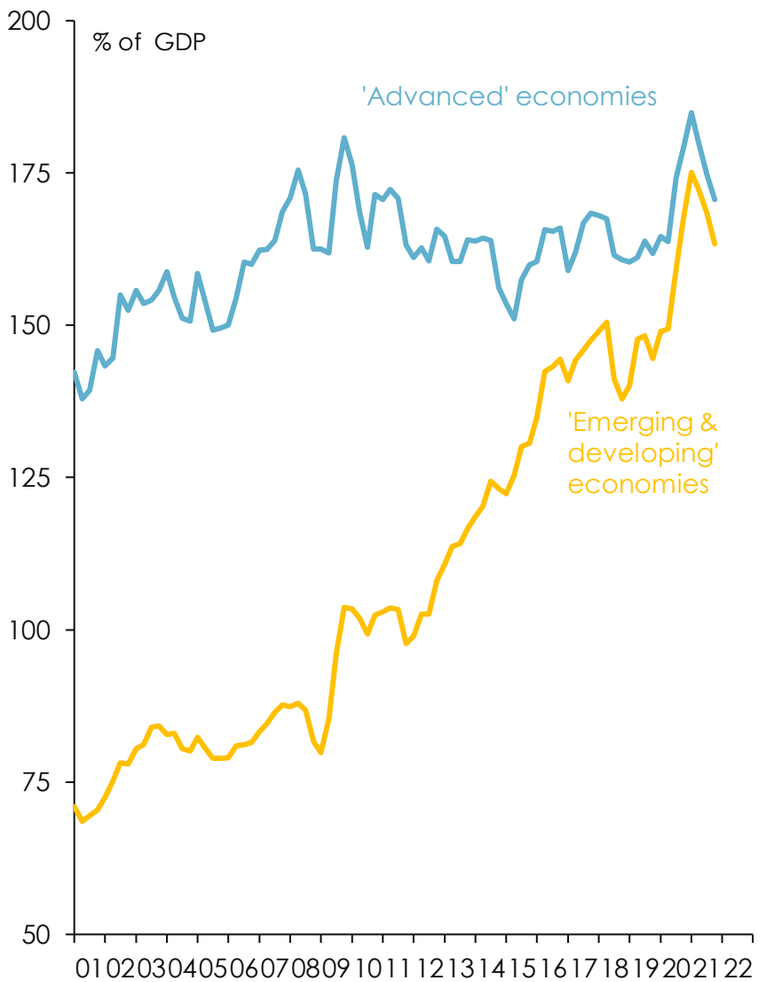
Total debt as a pc of GDP



Government debt



Private sector debt

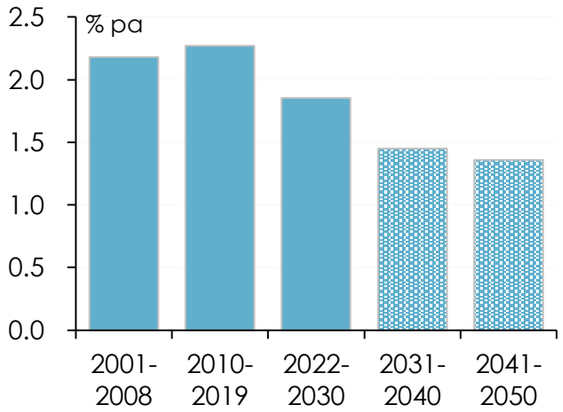


Source: Bank for International Settlements, *Credit Statistics*: latest data are for Q3 2021.

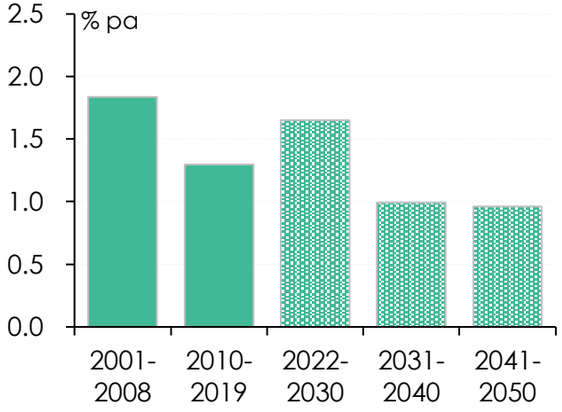
Almost all major economies will experience slower growth in the decades ahead – and none more so than China

Historical and forecast real GDP growth

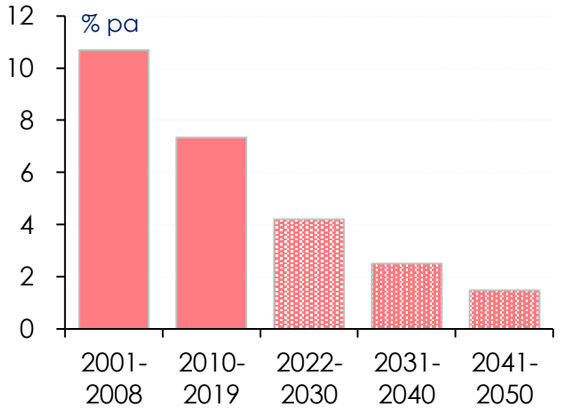
United States



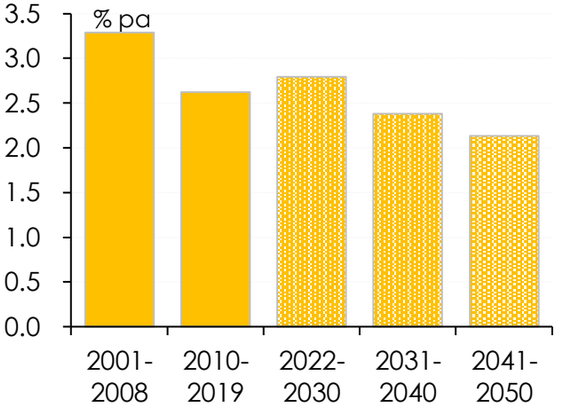
Euro area



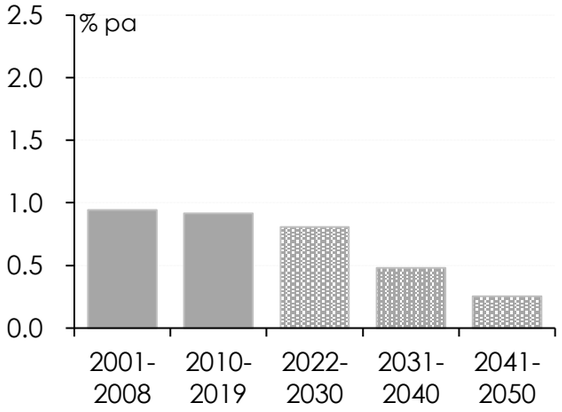
China



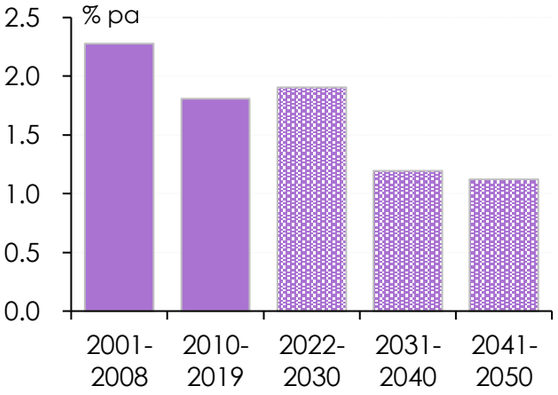
Australia



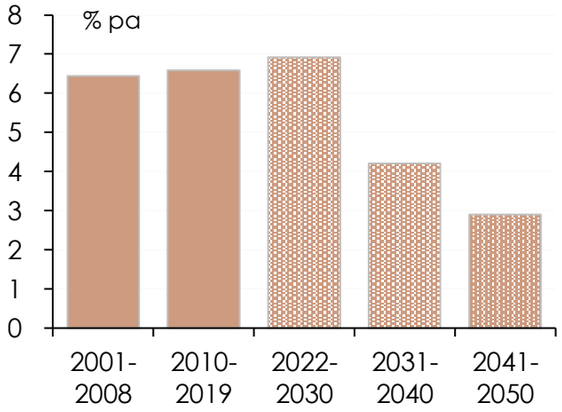
Japan



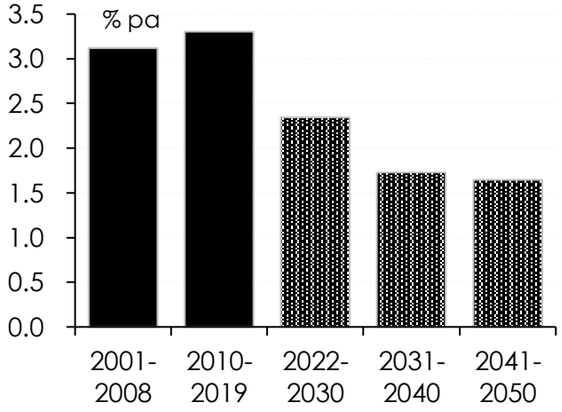
United Kingdom



India



New Zealand



Source: Organization for Economic Co-operation and Development (OECD), Economic Outlook No. 109 - Long-term baseline projections, October 2021.

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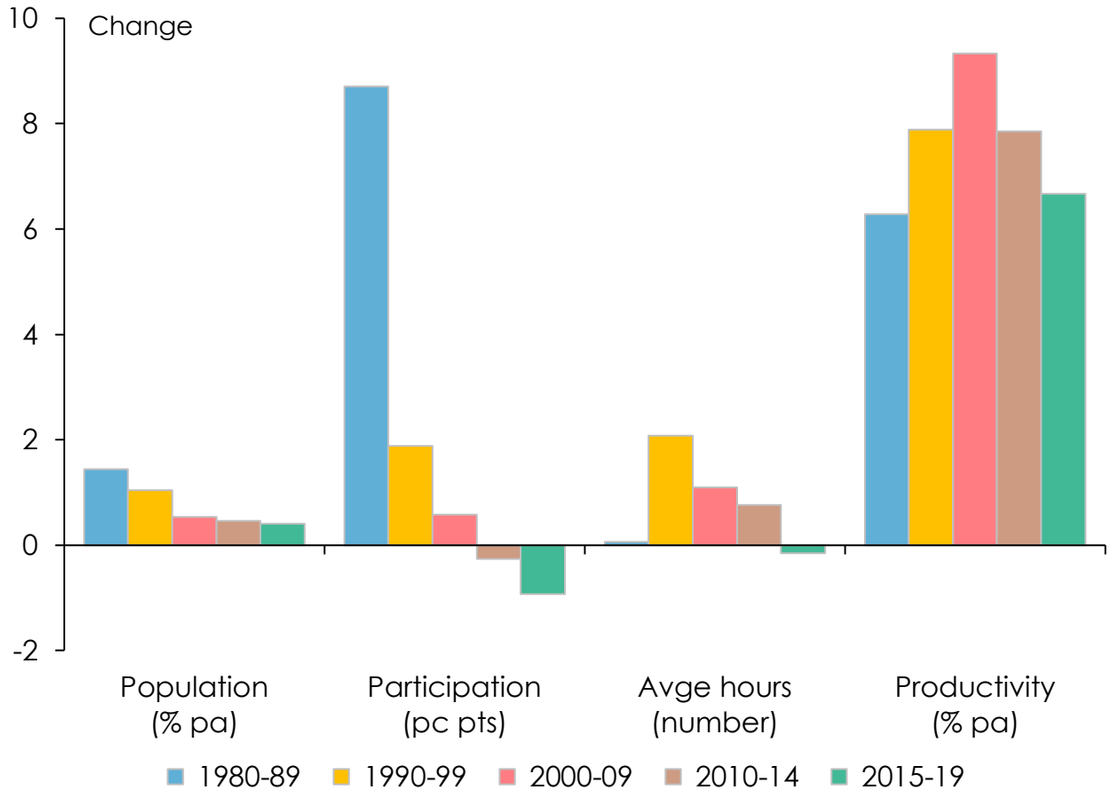
China's economic growth rate is likely to slow – and perhaps to slow quite sharply

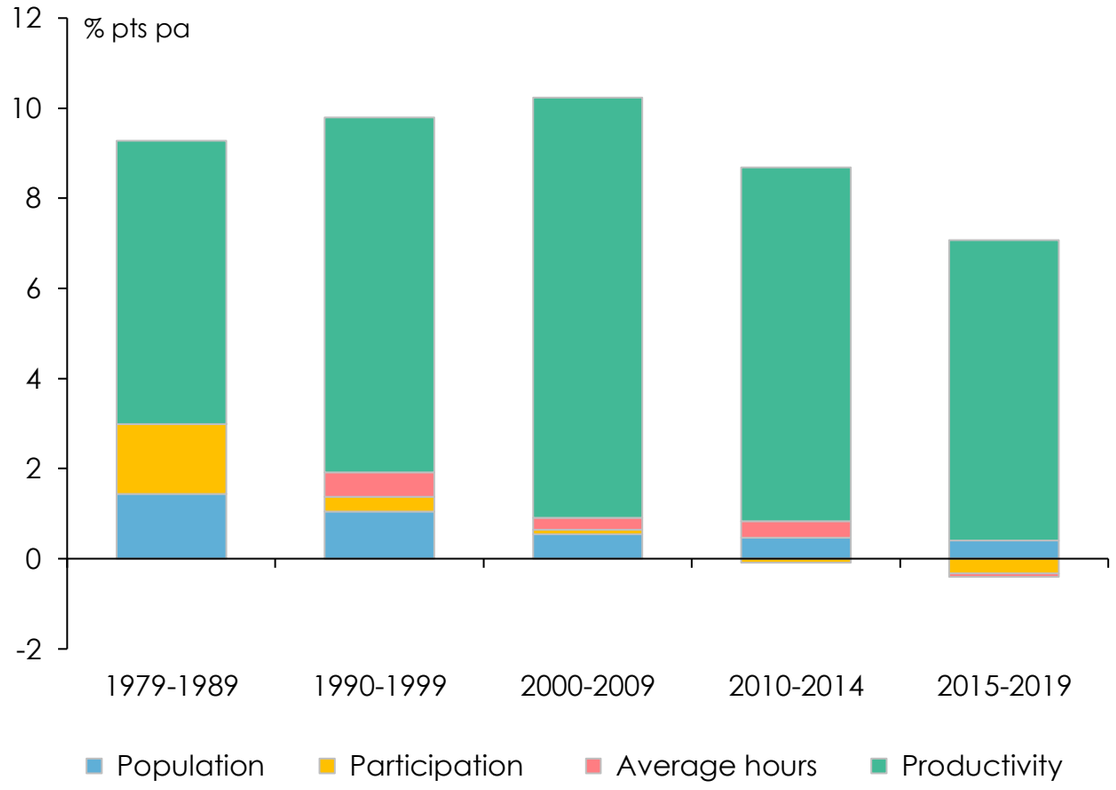
$$\Delta Y = (\Delta P) \times \Delta (N/P) \times \Delta (H/N) \times \Delta (Y/H)$$

Y = GDP ; P = population ; N = hours worked N/P = participation ; H/N = average hours ; Y/H = productivity

Sources of Chinese real GDP growth



Contributions to Chinese real GDP growth



Source: The Conference Board, *Total Economy Database*, 2021; Corinna.

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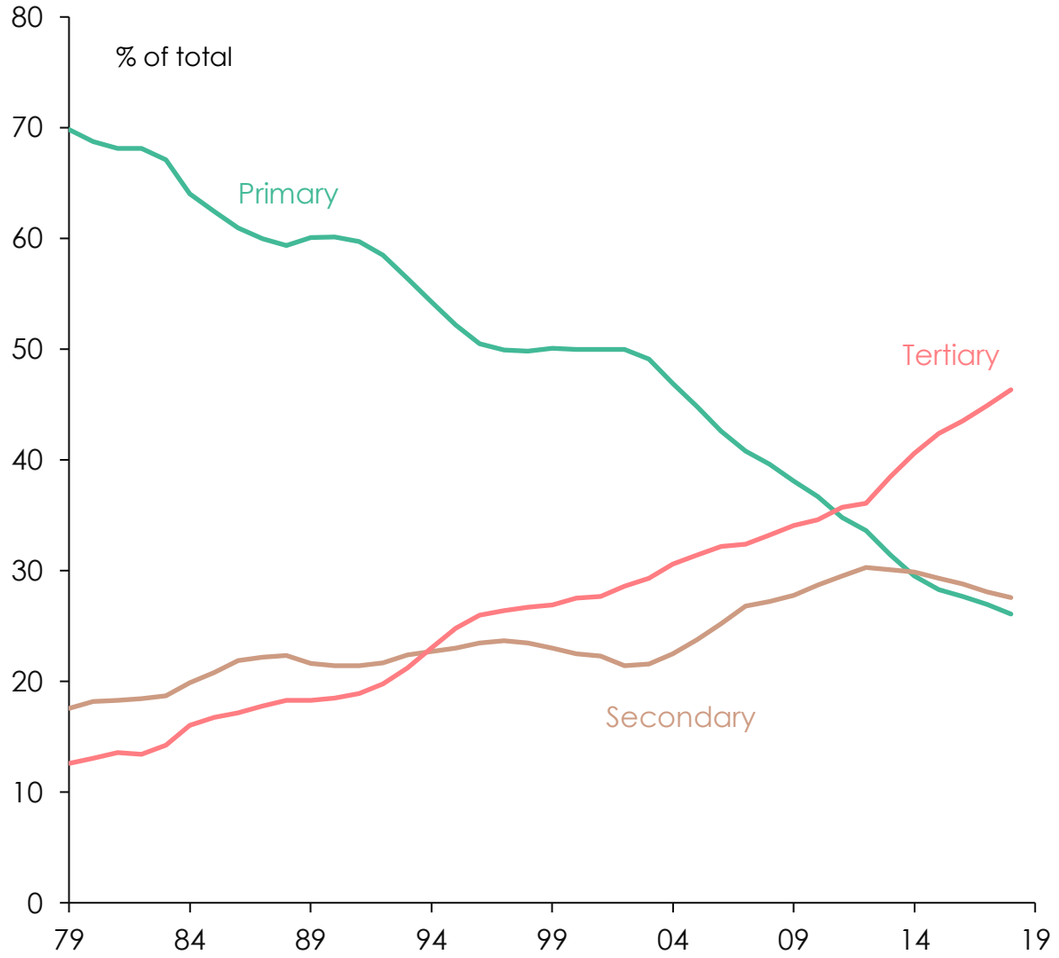
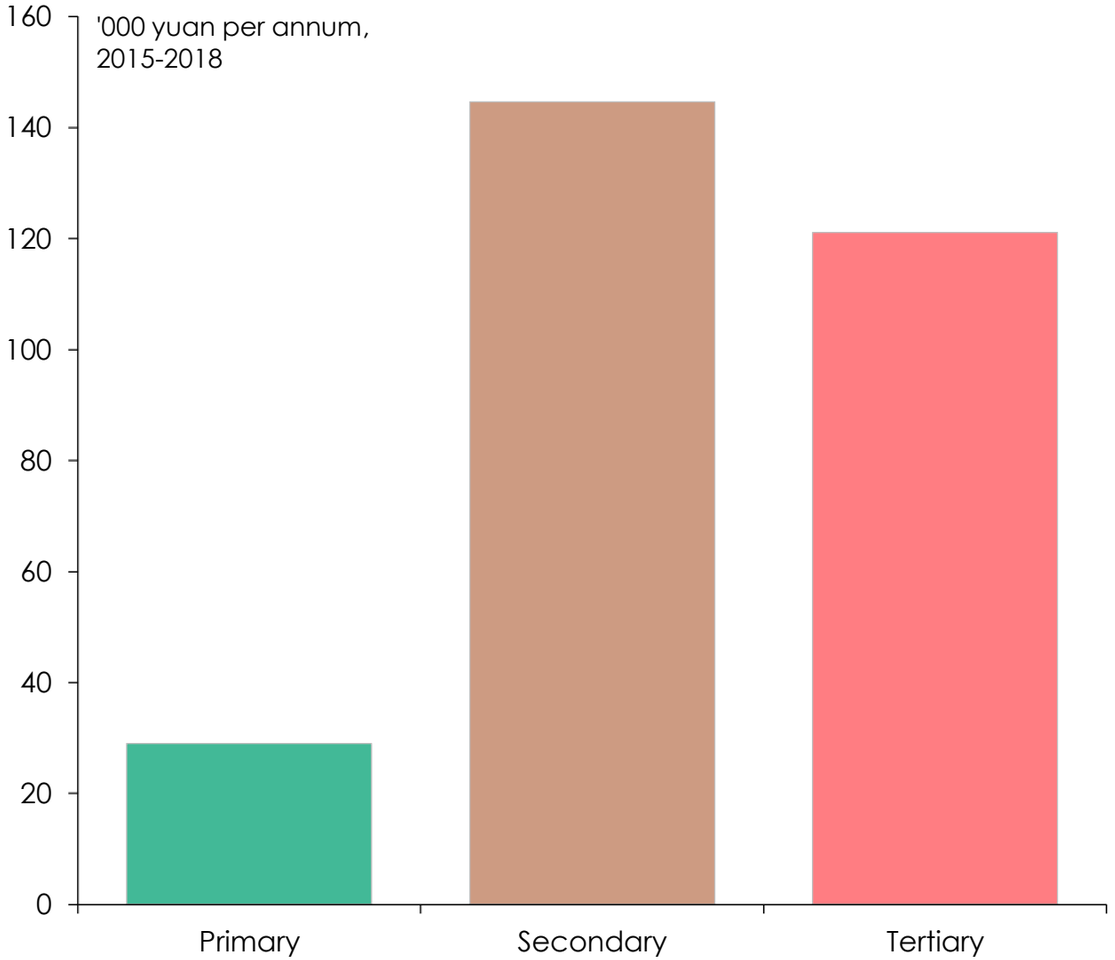
The scope for boosting productivity in China by moving 'factors of production' out of agriculture into manufacturing is just about exhausted

Share of total employment by sector



Output per person employed, by sector, 2015-2018



Source: China National Bureau of Statistics, *China Statistical Yearbook 2019*; Corinna.

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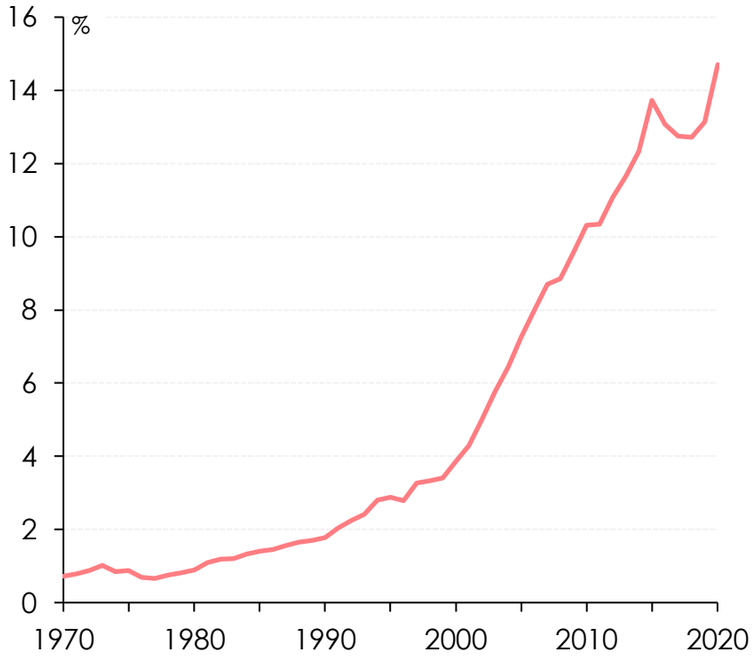
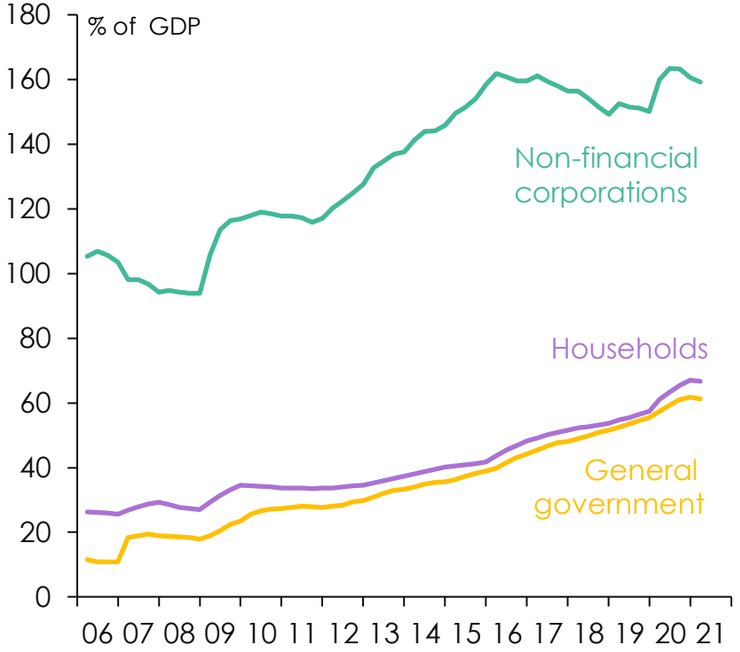
There are also other reasons for expecting Chinese economic growth to slow

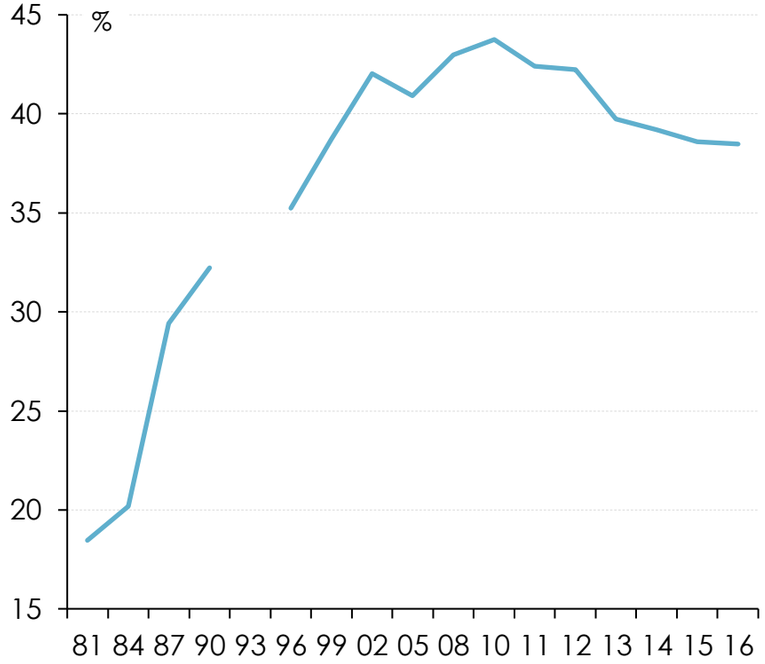
China's share of world merchandise exports



China's debt as a pc of GDP, by institutional sector



China's Gini co-efficient (a measure of income inequality)



- **The rest of the world can't (and won't) absorb growth in Chinese exports at the rate it did between 2000 and 2016**
  - **and China knows this – hence the 'dual circulation strategy' formally adopted as part of the 14th Five Year Plan last year**

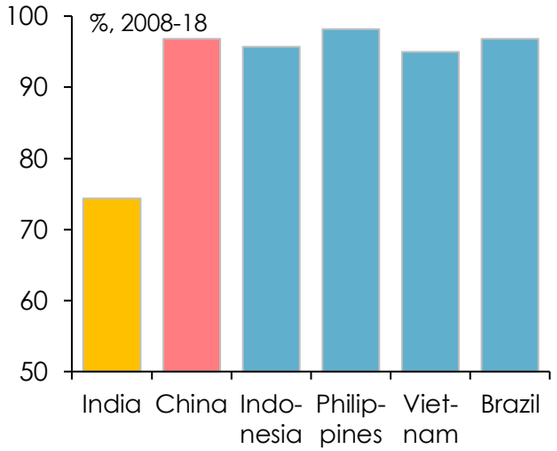
- **Chinese authorities have been focussing on 'financial stability' since its financial crisis in 2015-16**
  - **China has abandoned leverage as a driver of economic growth and regulatory constraints are starting to bite**

- **Xi Jinping's quest for 'common prosperity' is motivated by concern over rising inequality**
  - **and is a major factor driving the regulatory crackdown on 'big tech', private education etc**

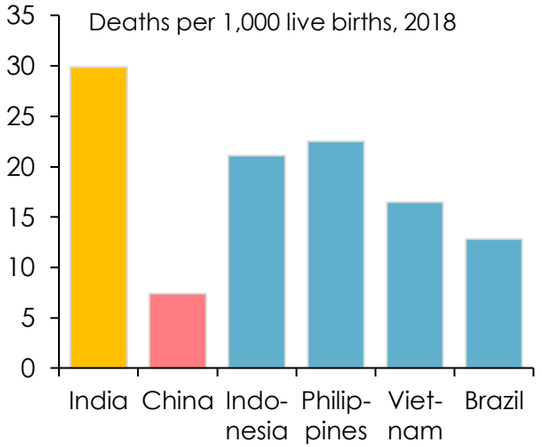
Sources: World Trade Organization, Data Portal; Bank for International Settlements, Credit statistics; The World Bank, PovcalNet.

India is unlikely ever to be 'the next China' (and doesn't appear to want to be)

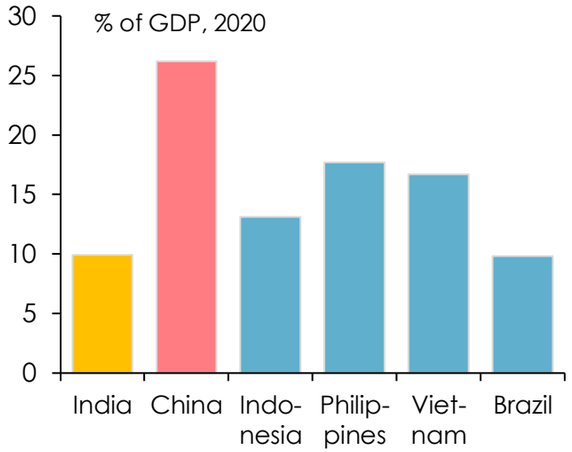
Adult literacy



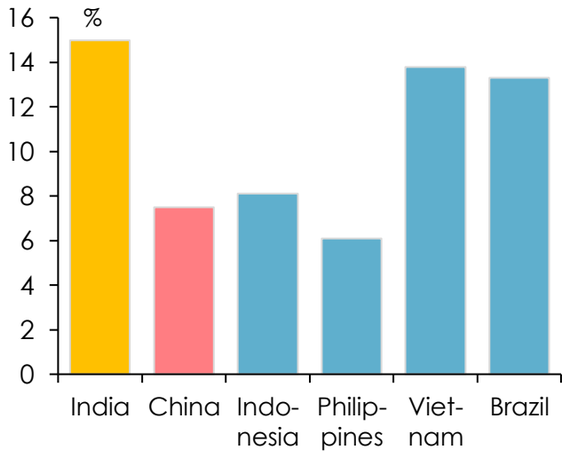
Infant mortality



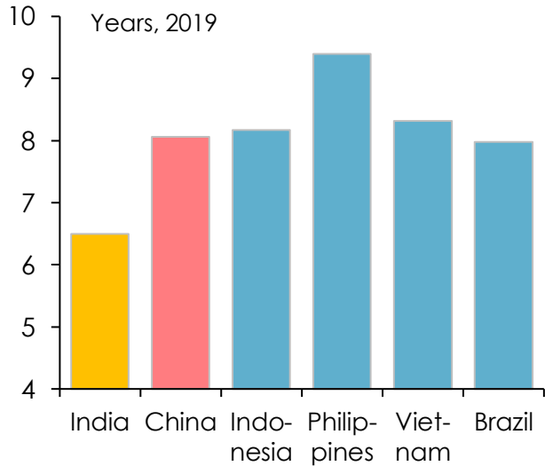
Manufacturing



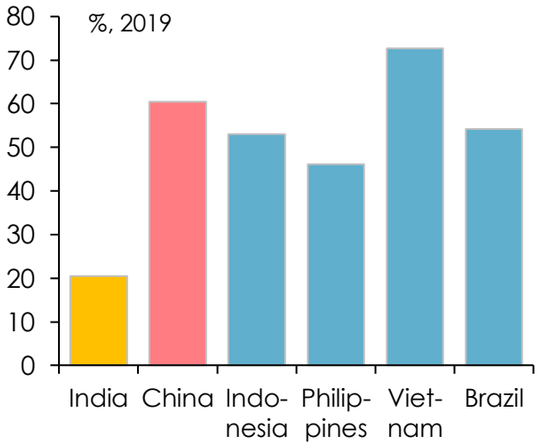
Average tariffs



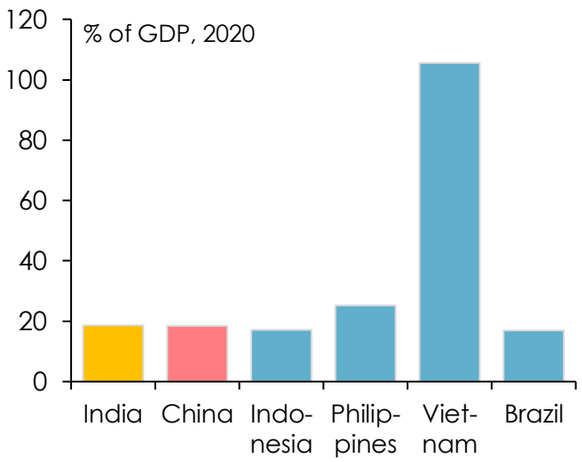
Mean years of schooling



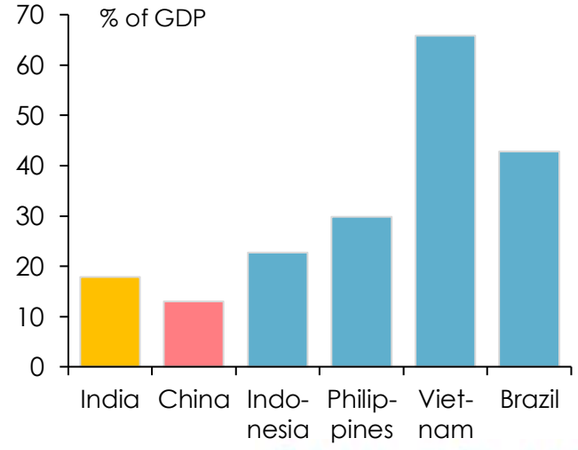
Female participation rate



Exports



Stock of foreign investment



Sources: United Nations Human Development Programme, Human Development Data Centre; The World Bank, World Development Indicators; World Trade Organization, WTO Stats; United Nations Conference on Trade and Development, UNCTADStat.

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What else could detract from economic growth in the coming decade? And what if anything could result in better outcomes ?

Things that could 'go wrong'

- **Persistent geo-political tensions between democracies and 'authoritarian regimes'**
  - resulting in an increased diversion of resources to 'security' and defence spending
  - with at least some risk that these tensions morph into serious military conflicts
- **Adverse political developments in democracies**
  - eg a return by Donald Trump in 2024
- **Recurring pandemics**
- **'Deglobalization'**
  - flowing from geo-political tensions, and pandemic-inspired concerns about supply chains - likely to result in efficiency losses and higher prices
- **Financial / housing crises**
  - if interest rates are raised 'too much' or 'too quickly' (both of which would only be apparent in hindsight) and/or if shrinking of central bank balance sheets has unforeseen consequences
- **Climate change**
  - more frequent and serious 'adverse weather events' and other as yet unforeseen impacts

Things that could 'go right'

- **A strong wave of business and public investment**
  - prompted by, eg, the 'fourth industrial revolution' (digitization, artificial intelligence etc) and a determined transition to 'zero emissions'
- **A greater sense of 'unity and purpose' among democracies in the wake of the conflict in Ukraine**
  - may provide a sustained boost to consumer and business confidence
- **An unexpected but sustained improvement in productivity growth, similar to what happened in the 1990s**
  - would probably require either a wave of new technologies (or new ways of applying existing technologies), or a concerted effort by governments and businesses to improve productivity through sustained structural reforms

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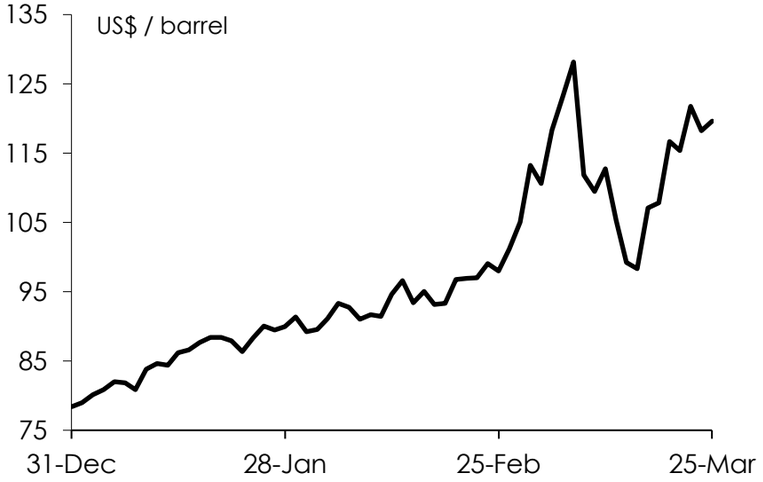
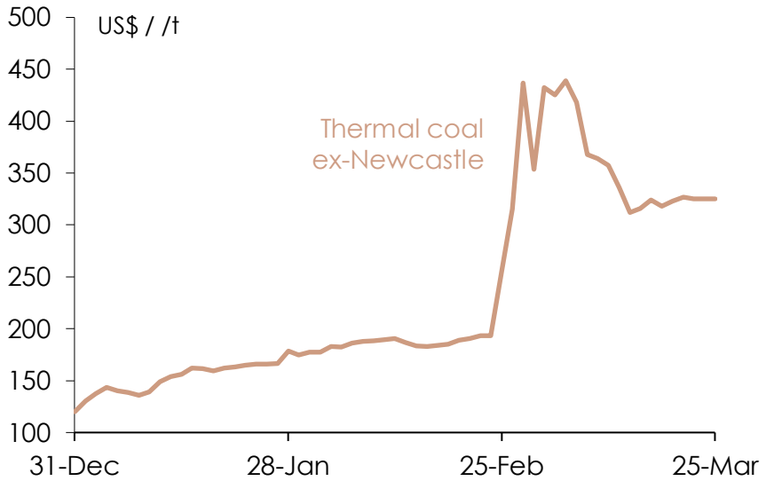
Energy, metal and grain prices have risen sharply following Russia's invasion of Ukraine, although some of the initial surges have receded

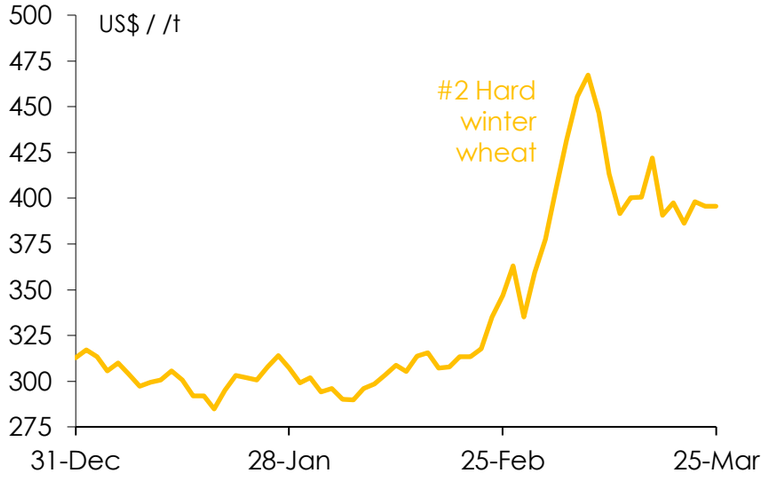
Brent crude oil price



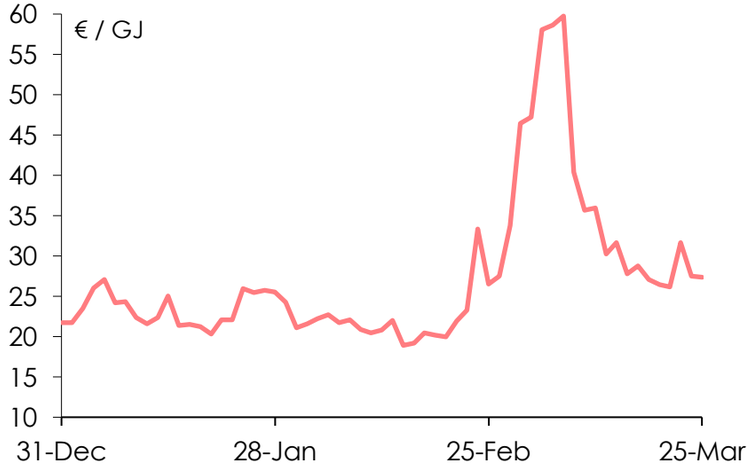
Thermal coal price



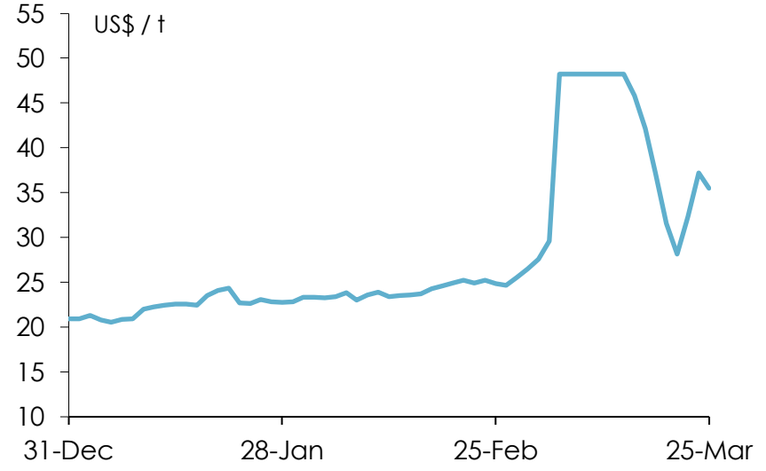
Wheat price



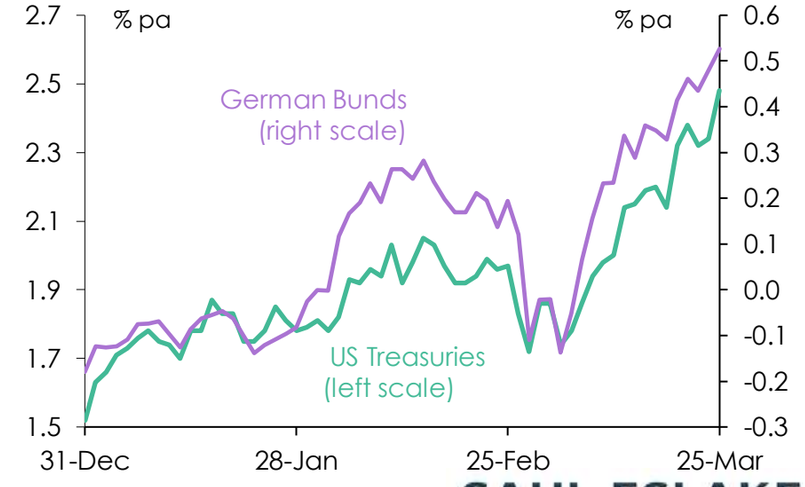
Euro area natural gas price



Nickel price



10-year government bond yields



Note: Data up to 25th March. *Source:* Refintiv Datastream.

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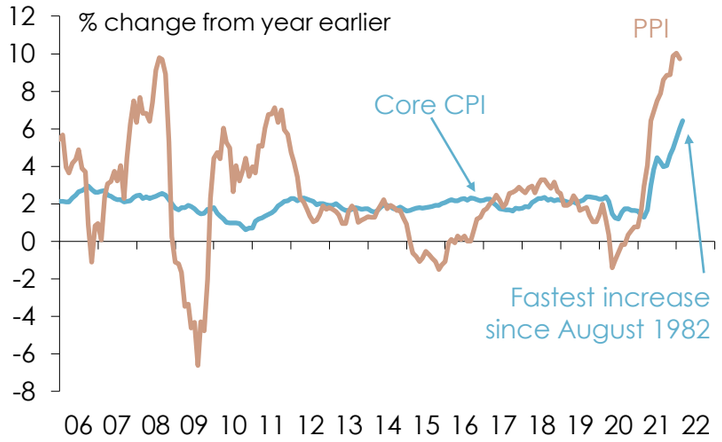
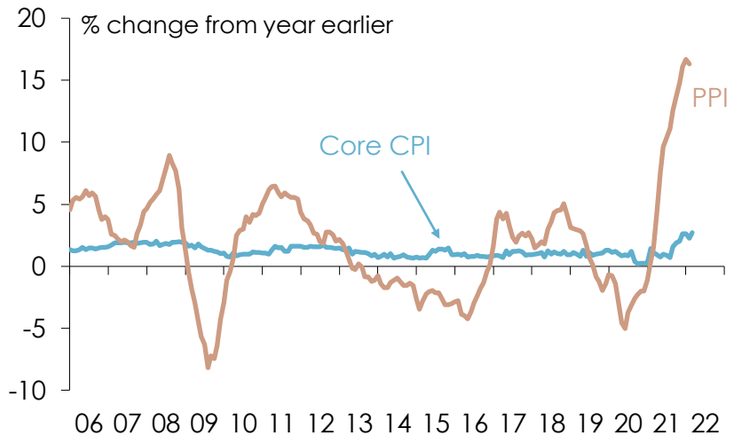
Higher energy and food prices will exacerbate the rise in inflation which was already occurring in 'advanced' economies

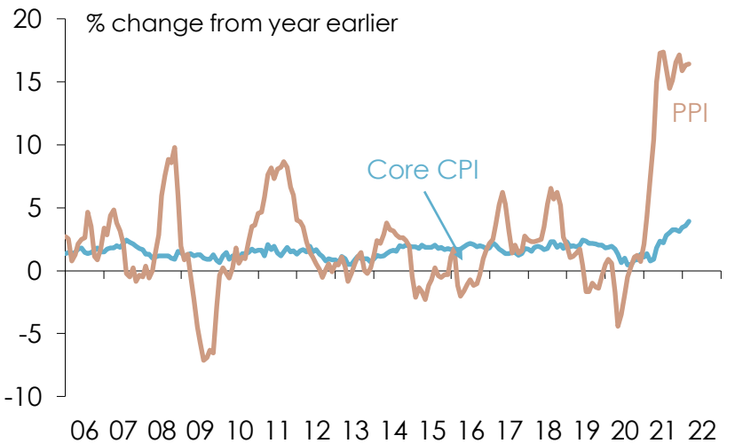
United States



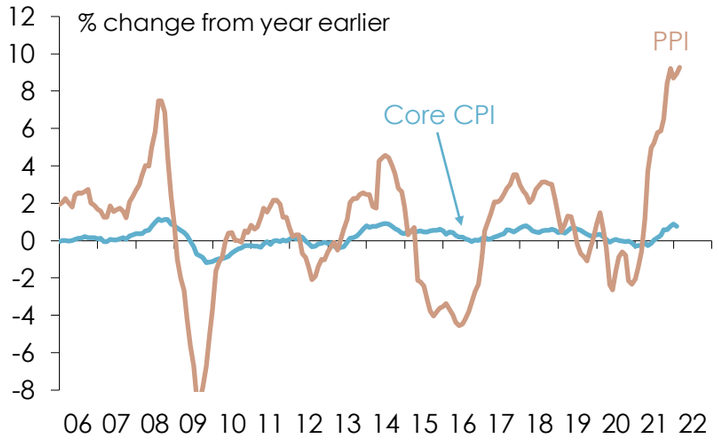
Euro area



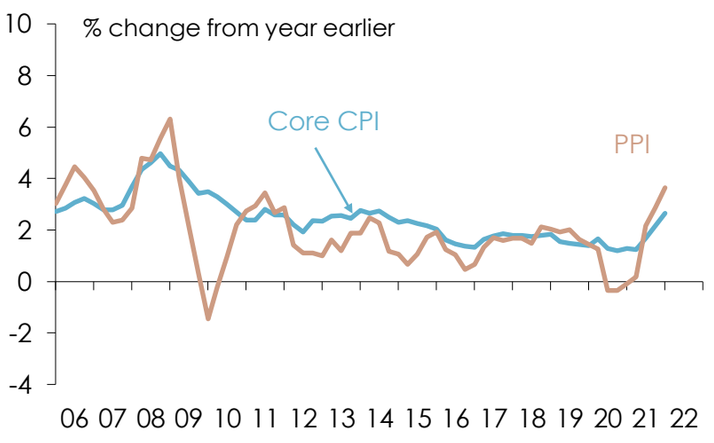
Canada



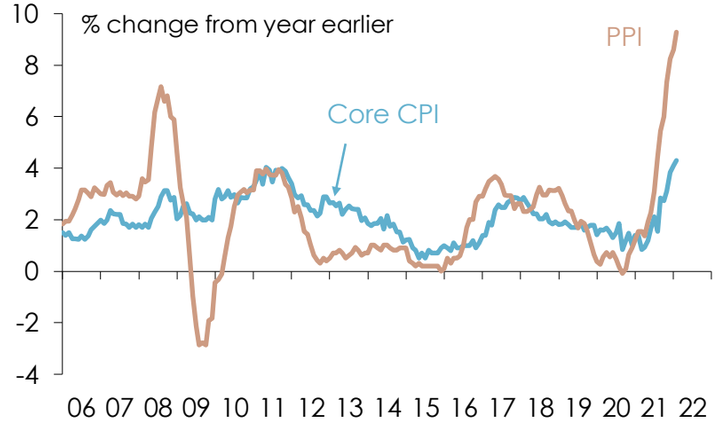
Japan



United Kingdom



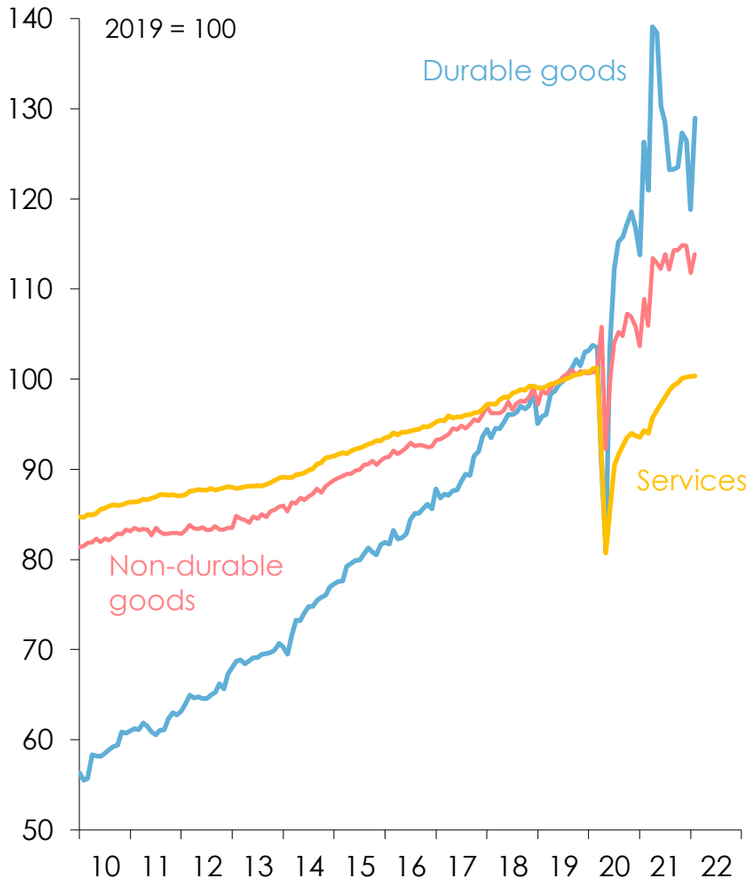
Australia



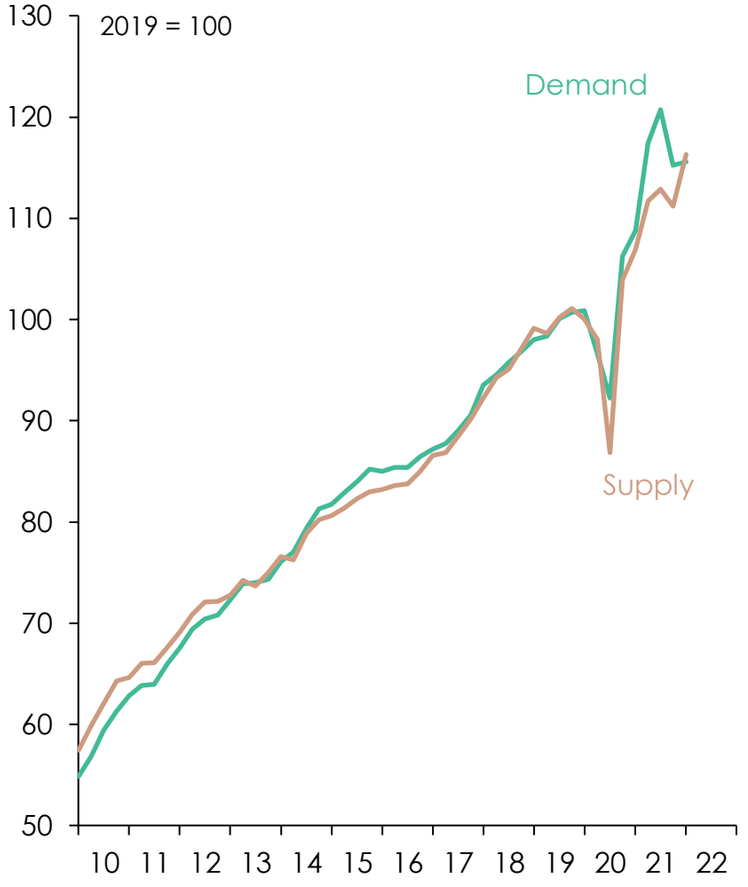
Note: 'PPIs' are producer price indexes, measuring prices of items produced by (in most cases) manufacturing firms. 'Core' CPI is the consumer price index excluding food and energy, except in Japan and Australia where it is the 'trimmed mean' (a statistical technique for excluding large increases or decreases in prices). *Sources:* US Bureau of Labor Statistics; Statistics Bureau of Japan and Bank of Japan; Eurostat; UK Office for National Statistics; Statistics Canada; Australian Bureau of Statistics.

The rise in inflation in the US also owes a lot to an unprecedented mis-match between the demand for and supply of consumer durable goods

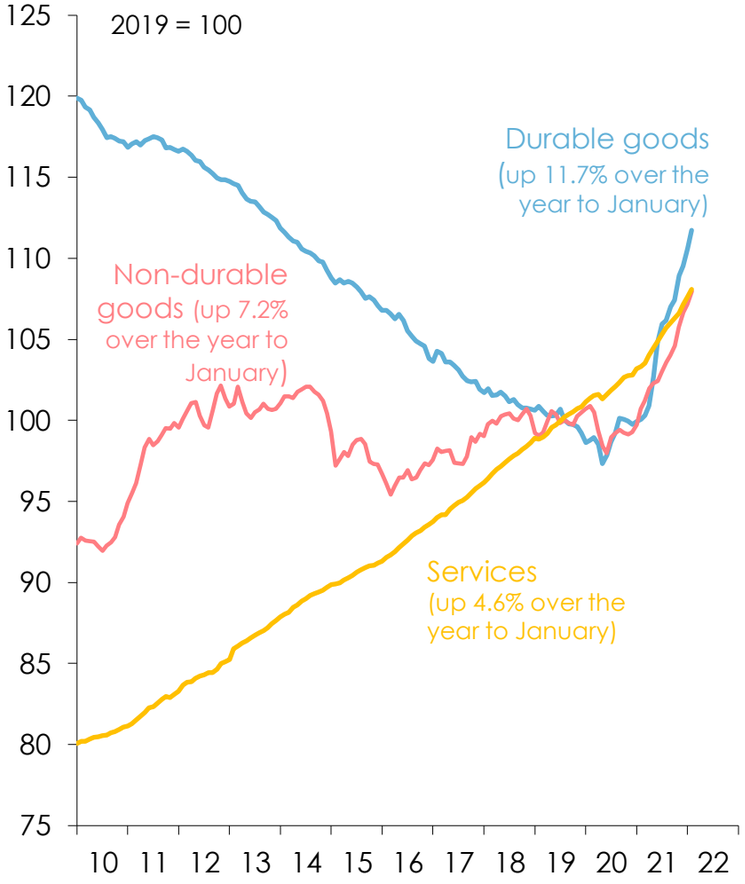
US consumer demand for goods and services



Aggregate demand for and supply of durable goods in the US



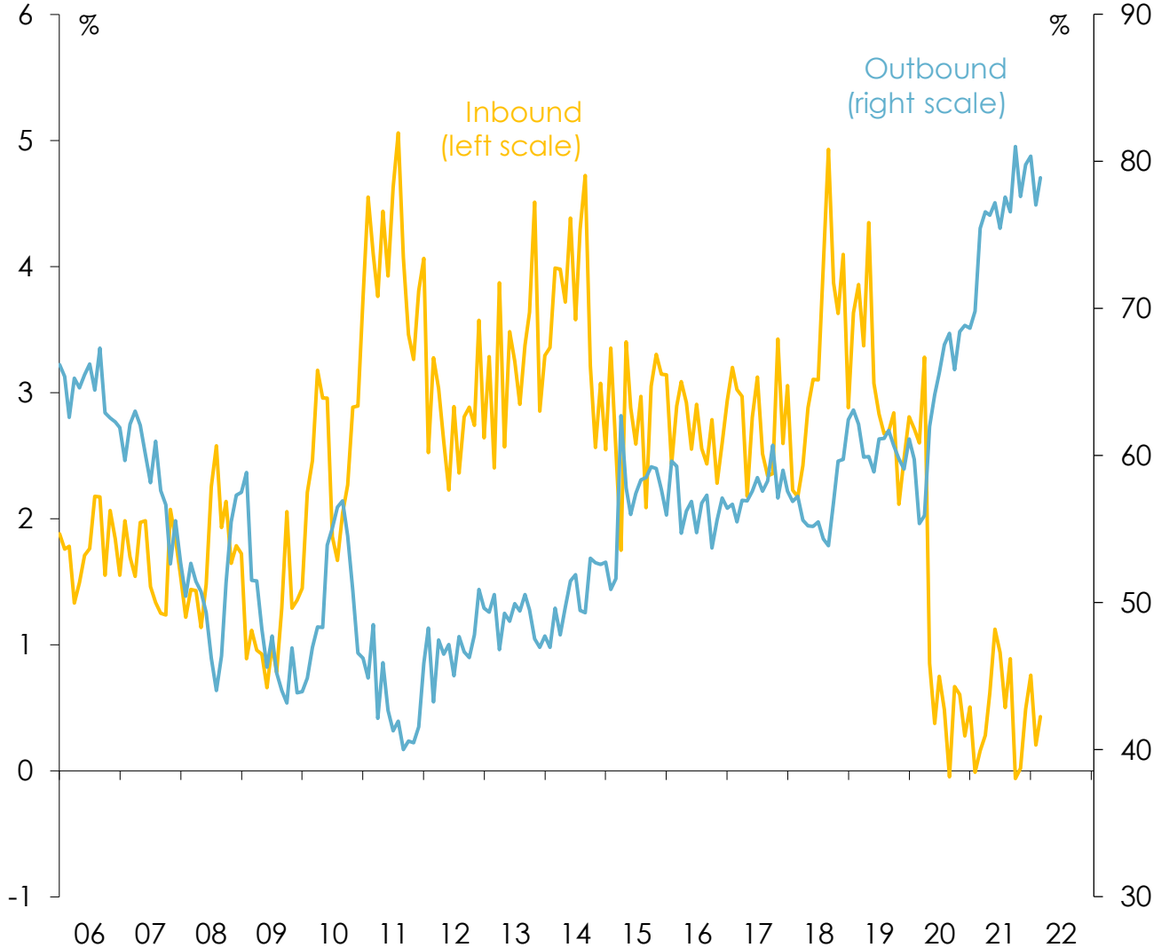
Consumer prices of goods and services in the US



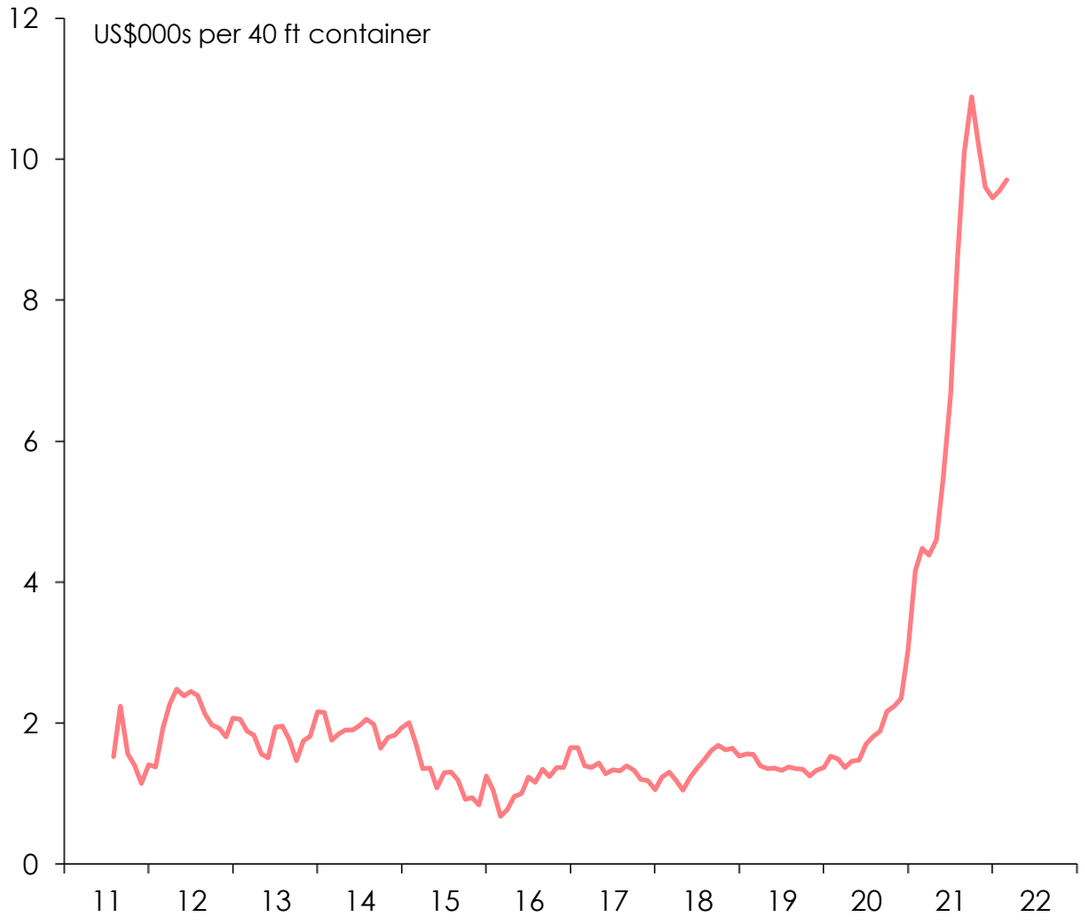
Note: 'Aggregate demand' for durable goods comprises personal consumption of durable goods (motor vehicles, household furniture & equipment, etc) plus business investment in equipment. 'Aggregate supply' of durable goods comprises gross domestic product (final sales plus change in inventories) plus net imports of durable goods. *Sources:* US Bureau of Economic Analysis, *National Income and Product Accounts*.

An unprecedently unbalanced pattern of global trade has caused massive dislocation to container shipping and huge increases in shipping costs

Empty containers passing through Port of Los Angeles



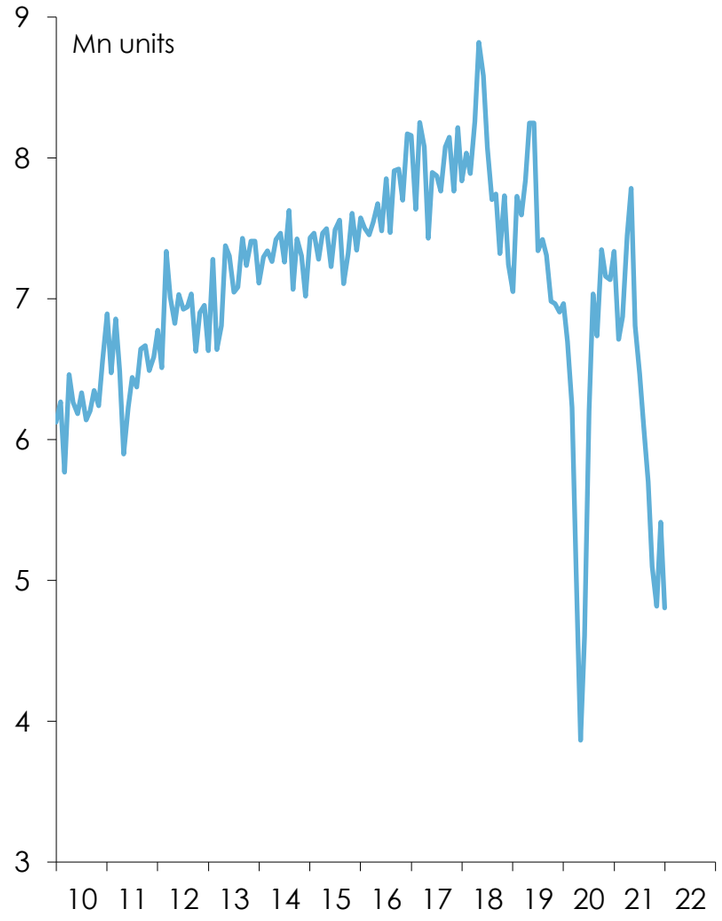
Global container shipping costs



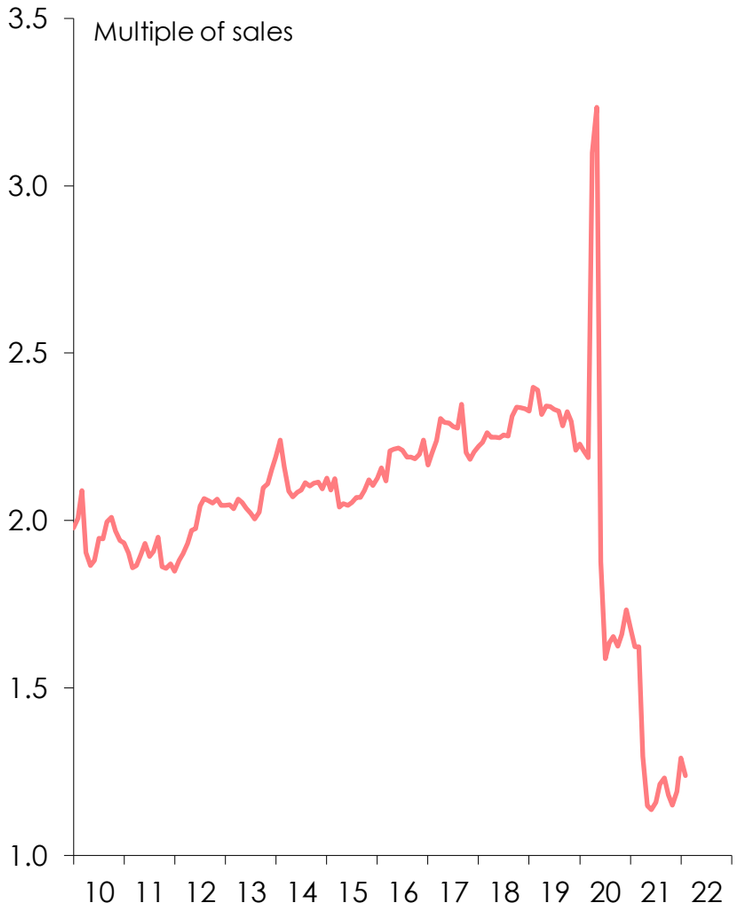
Sources: Port of Los Angeles, Container Statistics; Freightos, Global Container Freight Index; Drewry Supply Chain Advisors, World Container Index.

The starkest example of the link from supply chain disruptions to inflation is in the motor vehicle industry

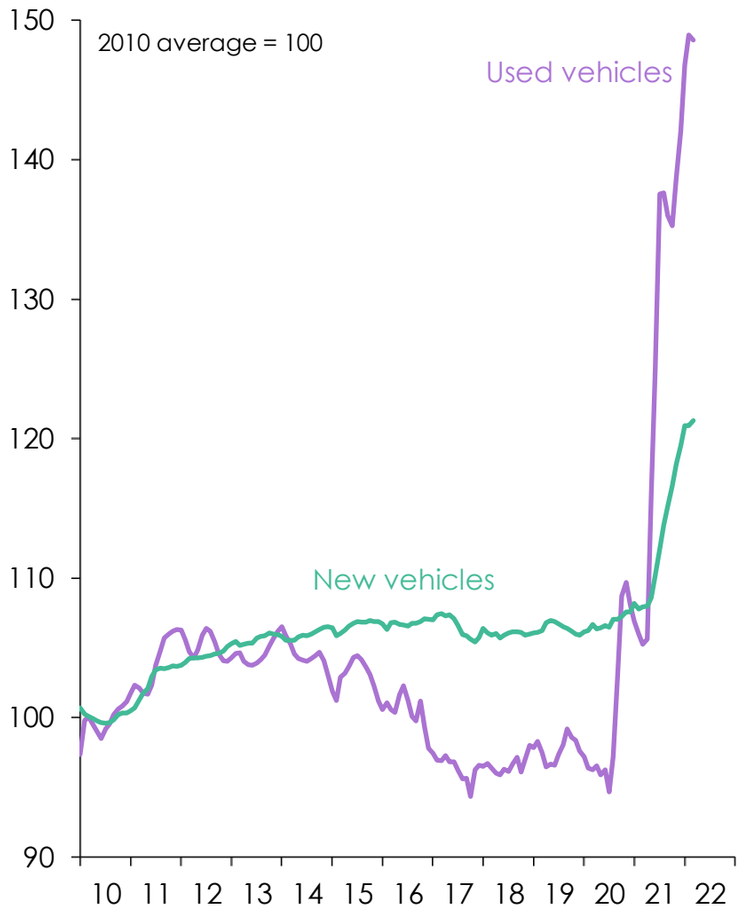
World motor vehicle production



US motor vehicle dealers' inventories-to-sales ratio



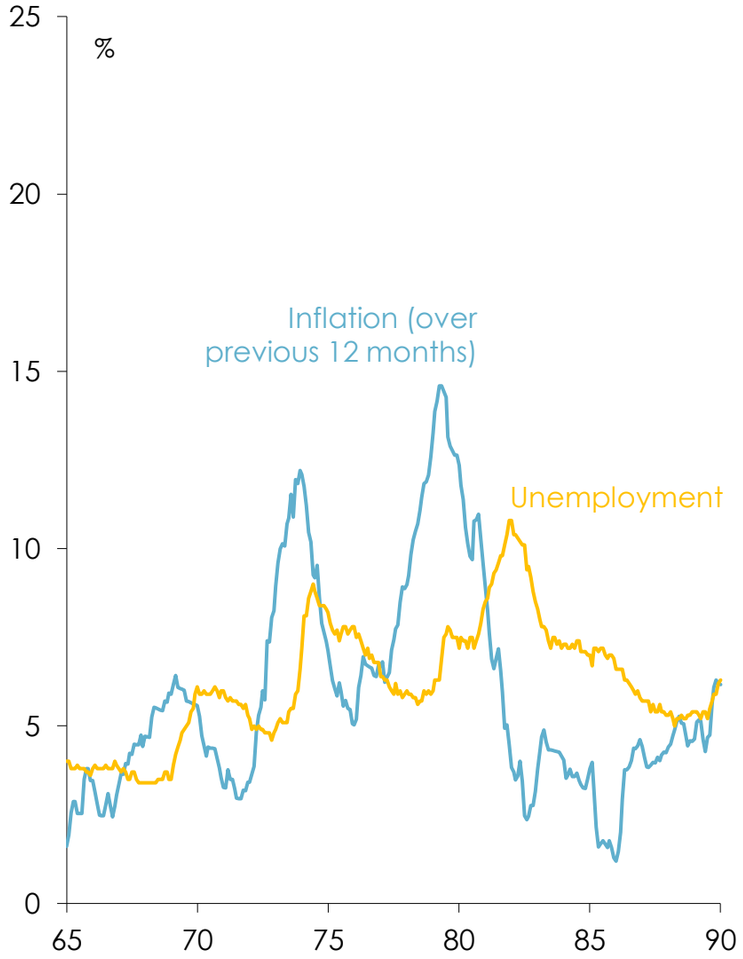
US motor vehicle prices



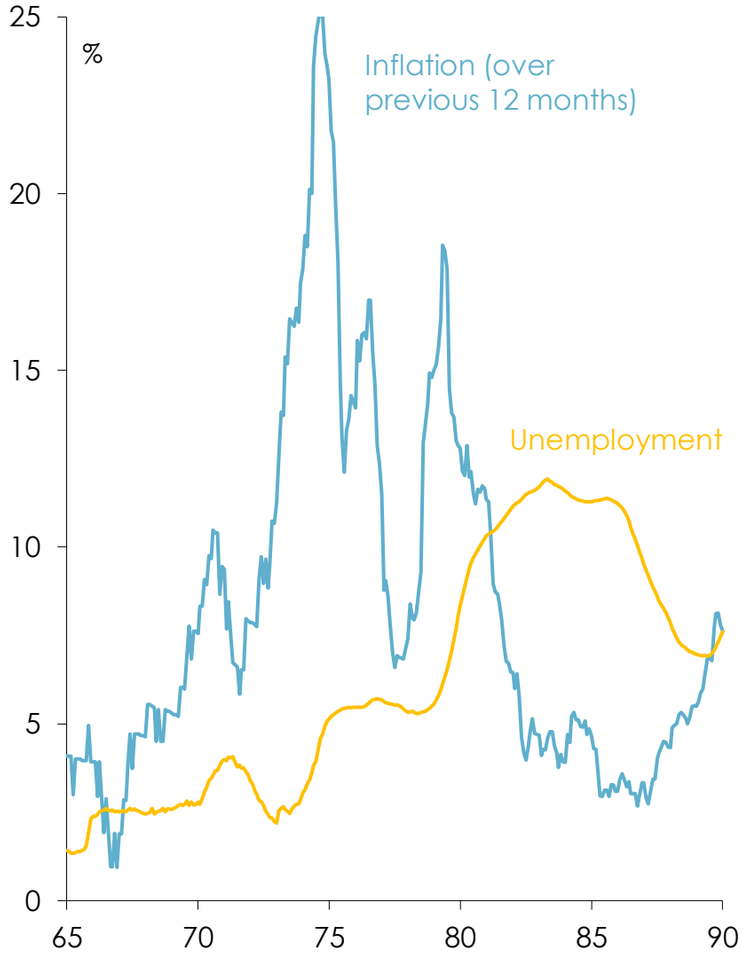
Sources: Wards Intelligence (data seasonally adjusted by Corinna); US Census Bureau, Monthly Retail Trade Report; US Bureau of Labor Statistics, Consumer Price Index.

Could all this lead to a replay of the ‘stagflation’ of the 1970s and 1980s?

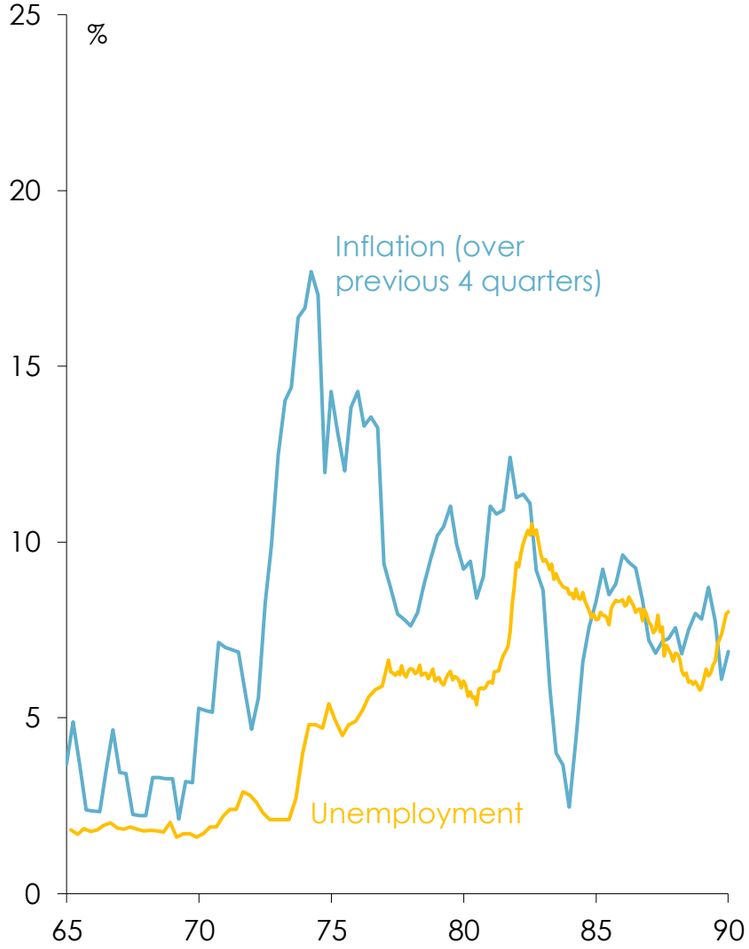
United States



United Kingdom



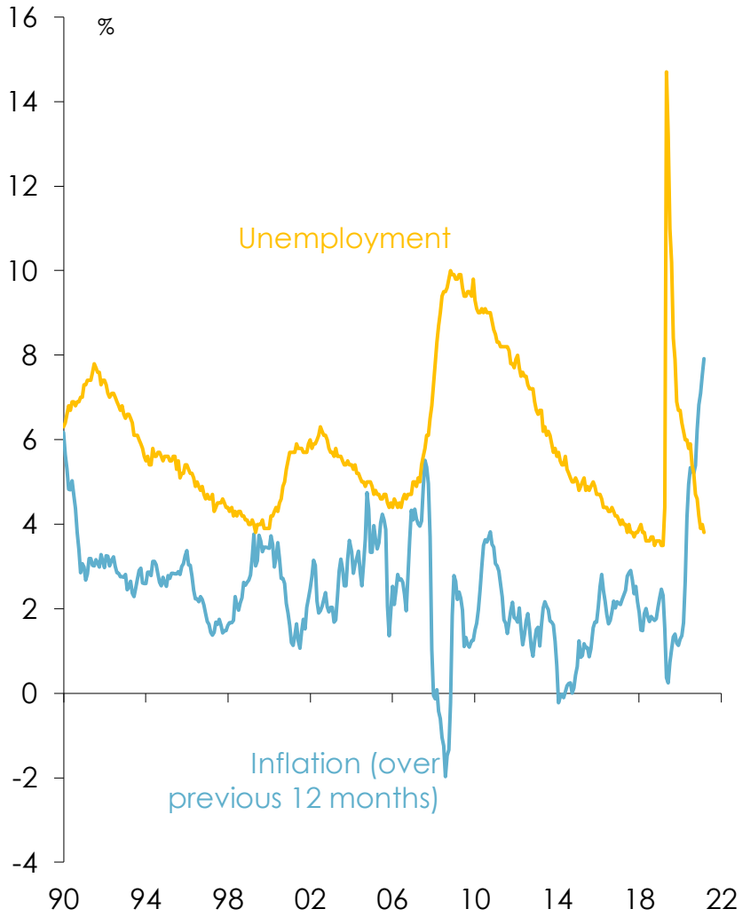
Australia



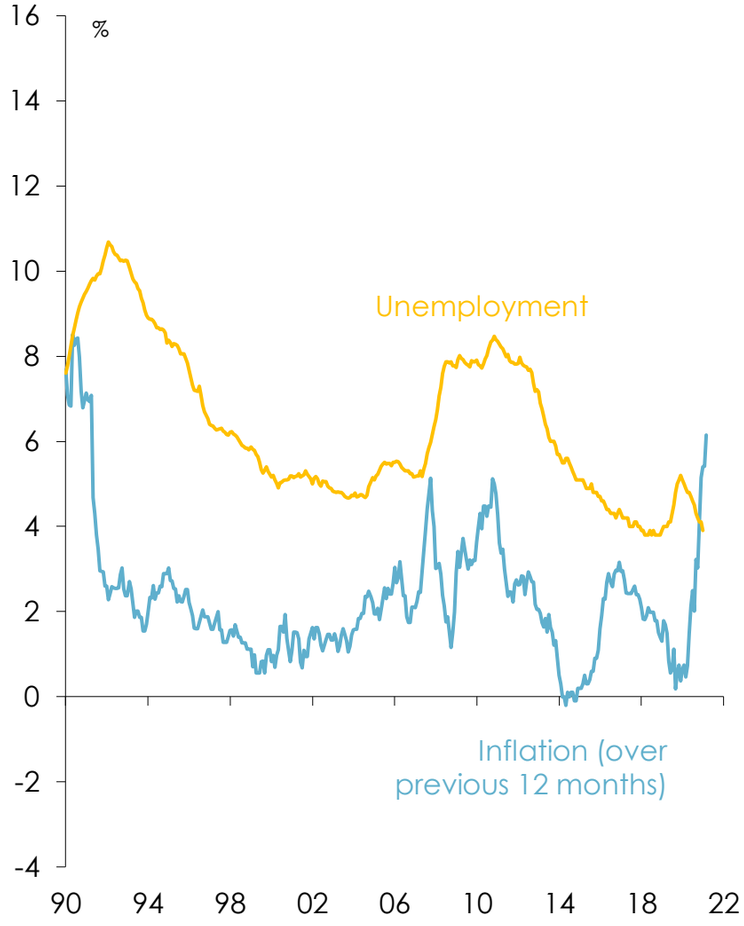
Sources: US Bureau of Labor Statistics; UK Office for National Statistics; and Australian Bureau of Statistics.

The present does look different – although inflation is rising almost everywhere, unemployment is at or close to multi-decade lows

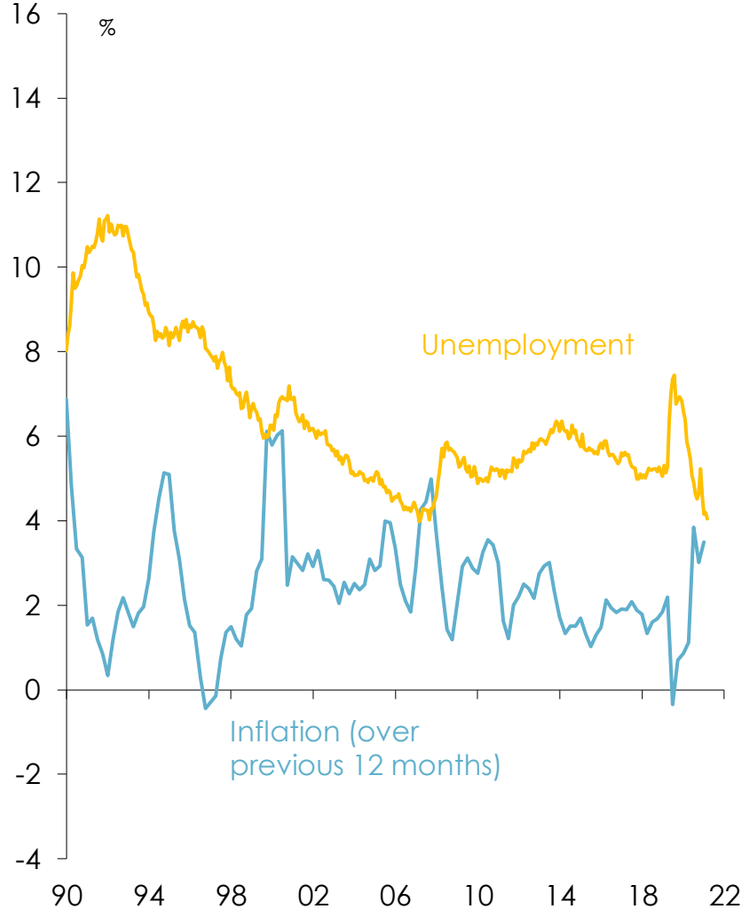
United States



United Kingdom



Australia



Sources: US Bureau of Labor Statistics; UK Office for National Statistics; and Australian Bureau of Statistics.

What is similar, and what's different, as between now (2020s) and then (1970s & 1980s)?

Some similarities

- **A commodity price shock**
  - oil and food prices rose sharply in the mid- and late-1970s and are rising sharply again now
  - and geo-political factors were partly responsible, then and now
- **Increased military spending combined with a reluctance to pay for it with higher taxes**
  - although the increase in military spending in the current episode is yet really to get under way
- **Widely-used existing technologies rendered uneconomic**
  - sustained higher energy prices in the 1970s made a good deal of the capital stock then in use in 'western' economies economically redundant, making the capital stock the 'limiting factor' on economic growth (something which wasn't realized at the time)
  - it could be that Covid-19 and/or climate change have had a similar impact on a large part of the capital stock currently in use in 'advanced' economies

Some differences

- **Demography**
  - the rise in unemployment in the second half of the 1970s owed a lot to the entry of the second half of the 'baby boom' generation into workforces, with much higher female participation than with the first half
- **Fewer 'feedback loops' between prices and wages**
  - Australian wages were formally indexed to the CPI until the late 1980s, and 'cost of living adjustment' clauses were common features of wage contracts in other economies
  - unions have much less 'bargaining power now than then
- **Independent central banks**
  - in the 1970s, and until the 1990s in most 'advanced' economies, politicians had the final say on changes to interest rates
- **'Well-anchored' inflation expectations**
  - in the 1970s and 1980s, workers, consumers and businesses expected inflation to remain high and so behaved in ways that made high inflation more likely

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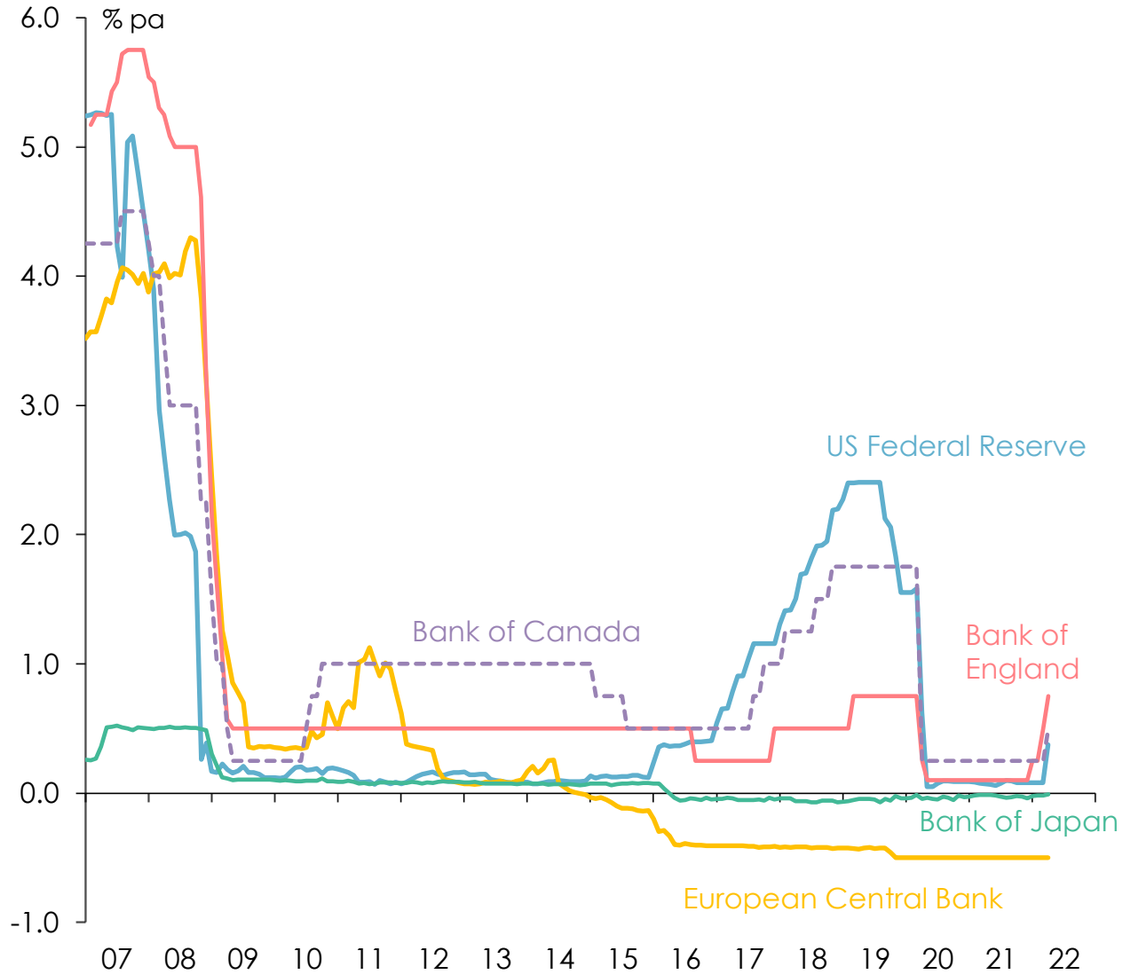
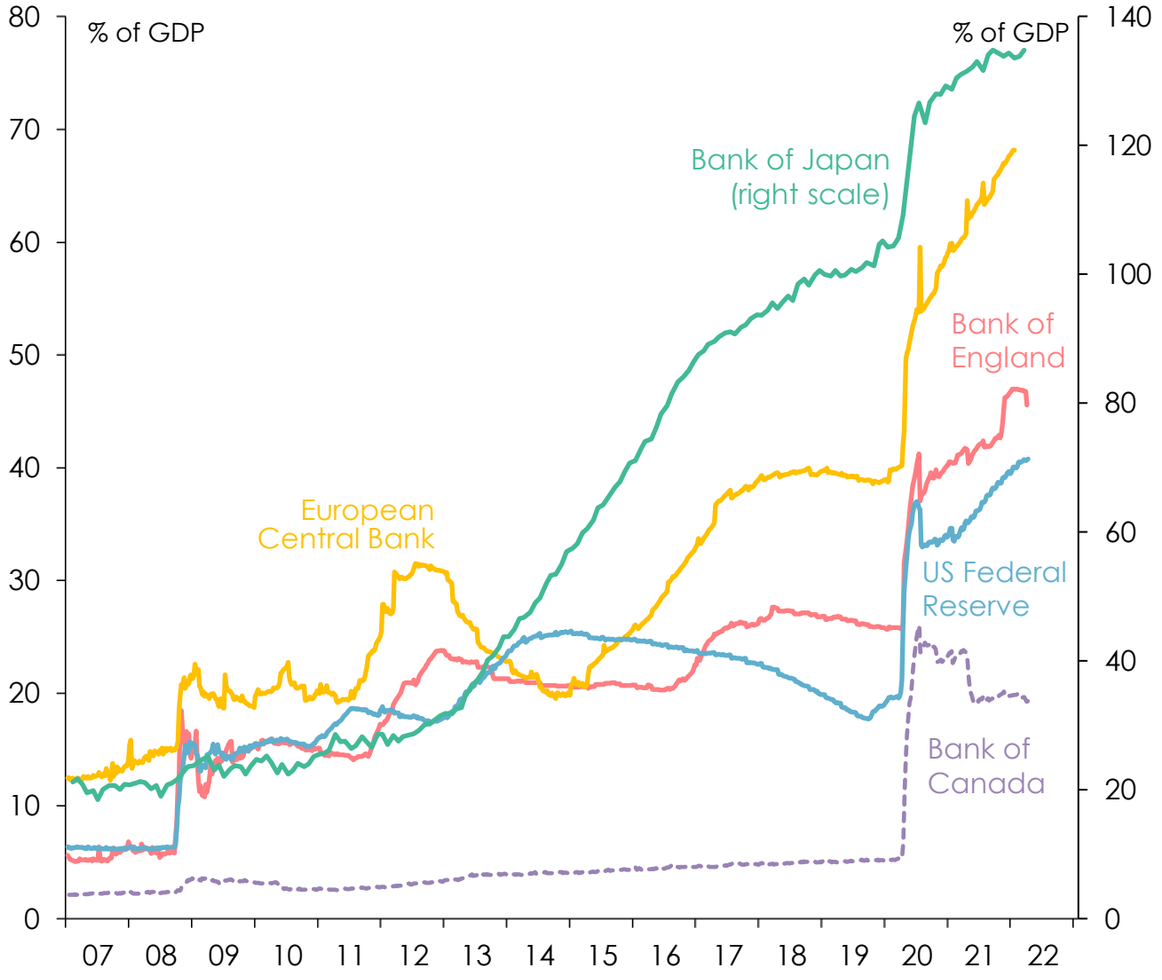
Central banks in all of the major 'advanced' economies except Japan will be raising interest rates and shrinking their balance sheets

Major central bank policy interest rates



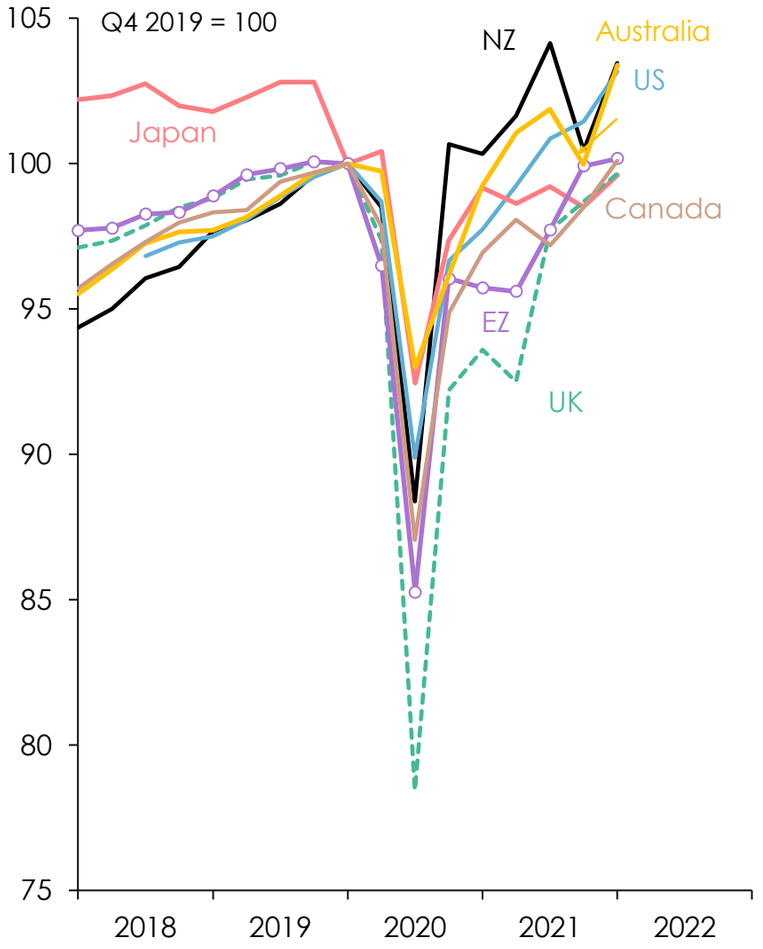
Major central bank balance sheets



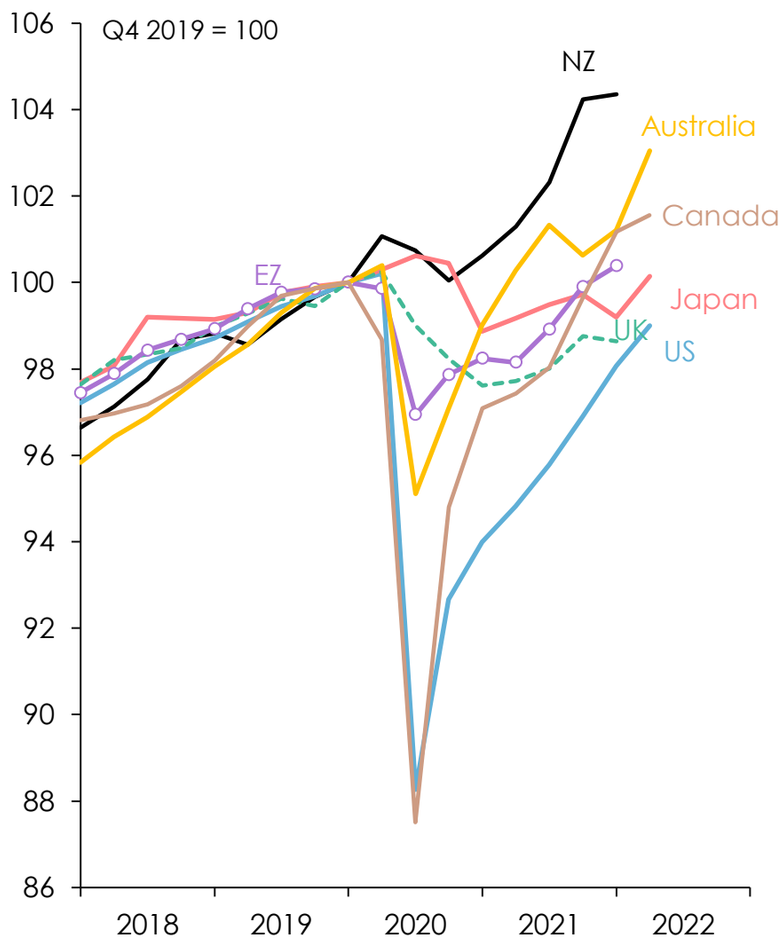
Sources: US Federal Reserve; European Central Bank; Bank of Japan; Bank of England; Bank of Canada; national statistical agencies; Corinna.

Australia's 'Covid' recession wasn't as severe as, and its recovery has been stronger than, most other 'advanced' economies

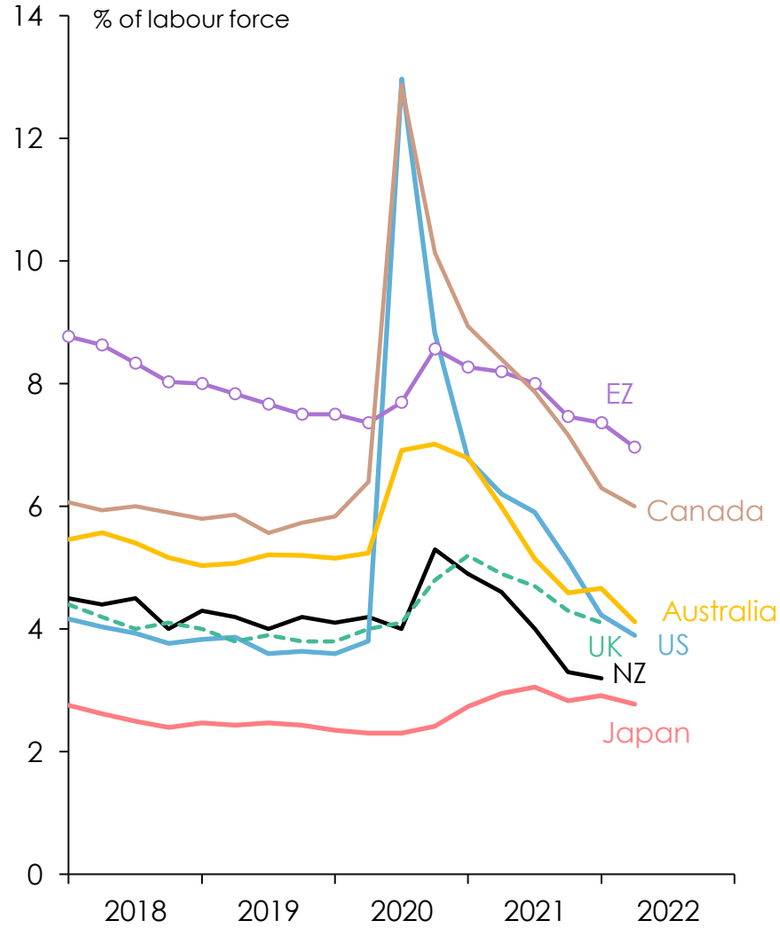
Level of real GDP



Employment



Unemployment

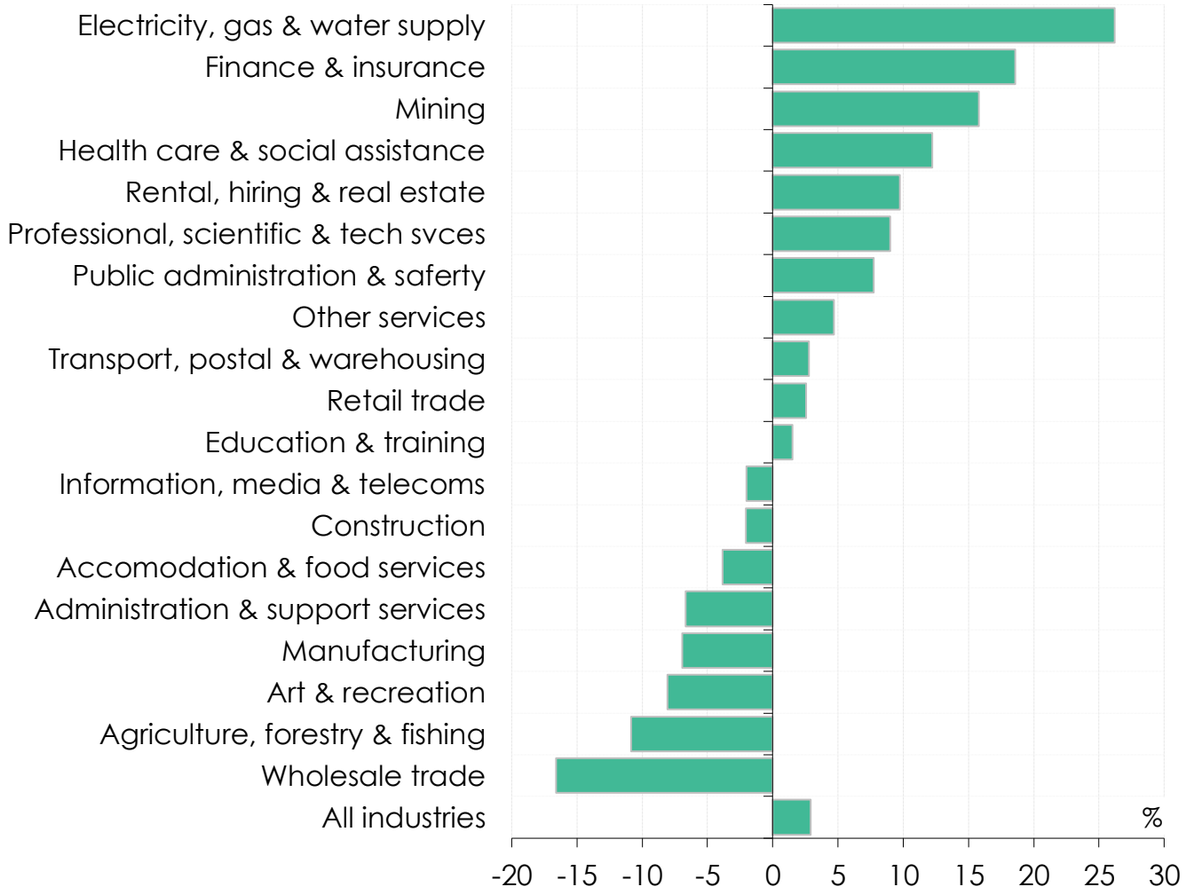


Sources: ABS ; Statistics NZ ; US Bureau of Economic Analysis and Bureau of Labor Statistics; Japan Cabinet Office and Statistics Bureau of Japan; Eurostat; UK Office for National Statistics; and Statistics Canada; Corinna.

Some sectors of the Australian economy remain considerably smaller than they were on the eve of the pandemic

Q4 2021 real gross value added by industry – change from pre-pandemic peak

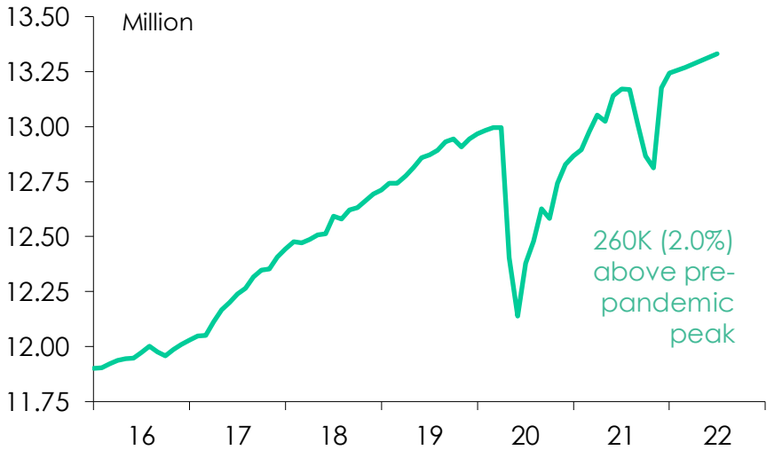
Q1 2022 employment by industry – change from pre-pandemic peak



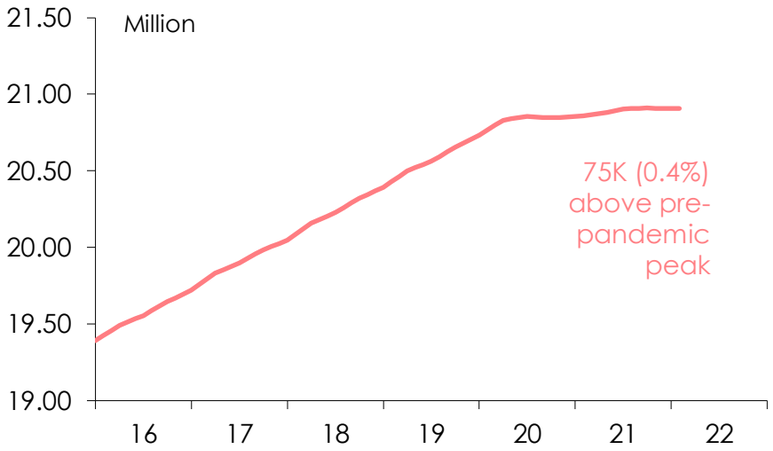
Sources: ABS, *Australian National Accounts: National Income, Expenditure and Product*, December quarter 2021; and *Labour Force, Australia, Detailed*, February 2022.

The Australian labour market has tightened more rapidly than expected

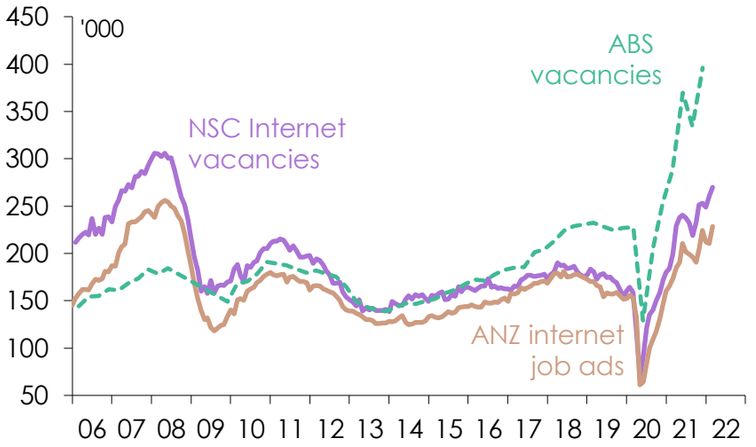
Employment



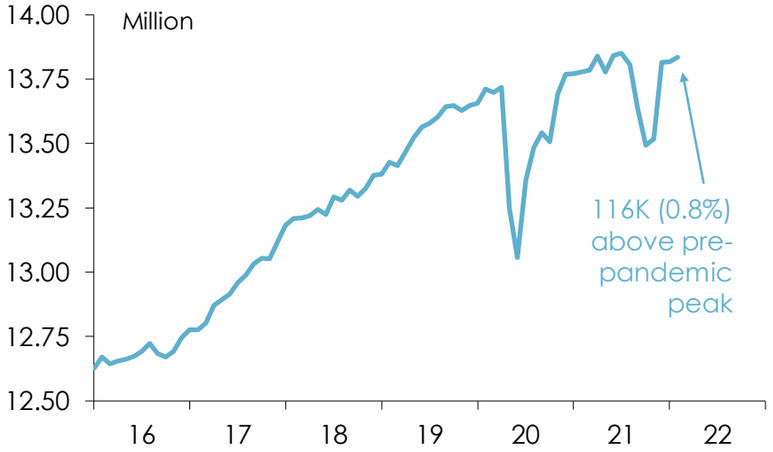
Civilian working-age population



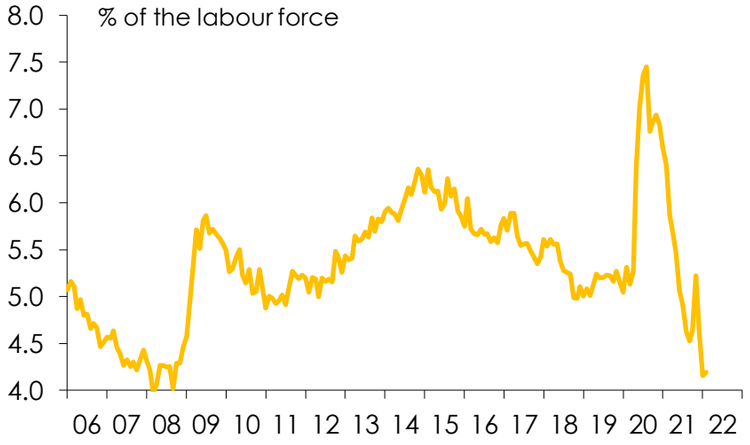
Job vacancies



Labour force



Unemployment rate



Unemployed people per vacancy

Source: ABS, *Labour Force, Australia,* January 2022; Australian Government, Labour Market Information Portal; ANZ Research; ABS, *Job Vacancies, Australia*.

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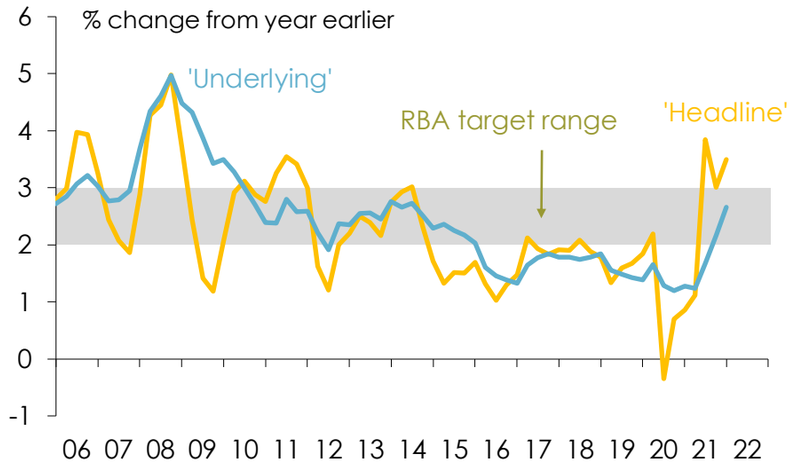
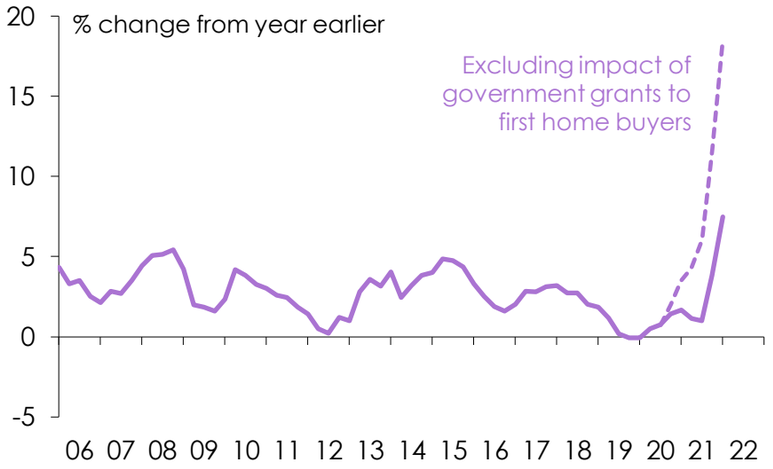
Australia's inflation rate has clearly picked up, but largely due to a small number of factors and the RBA is as yet unsure it's "sustainable"

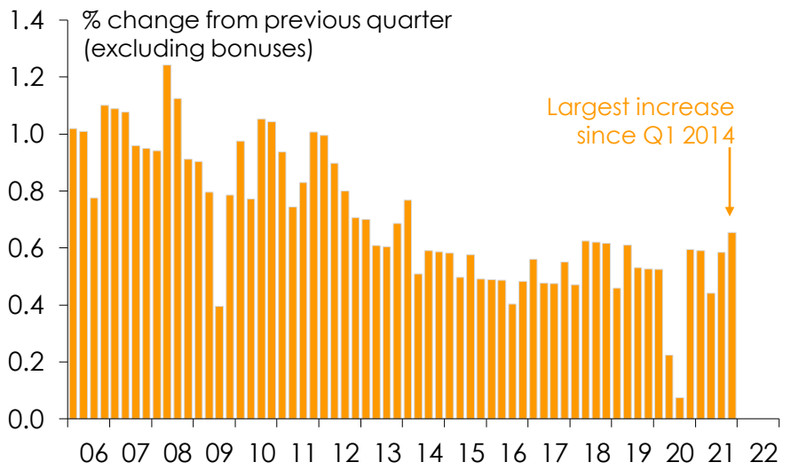
Consumer prices – annual change



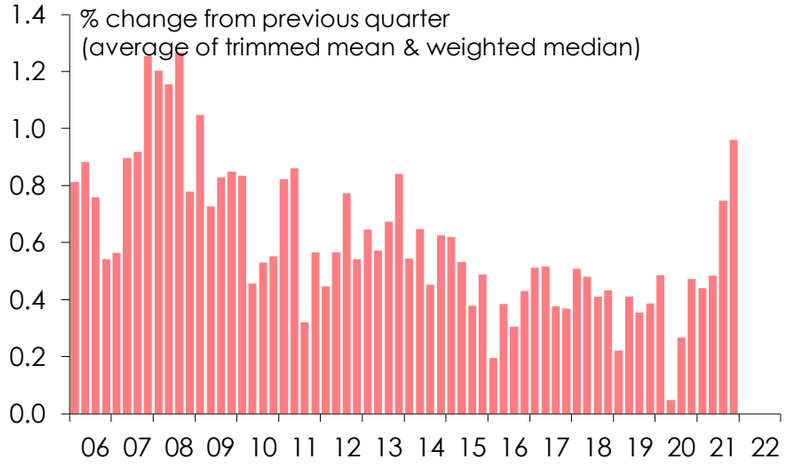
New dwelling purchase costs



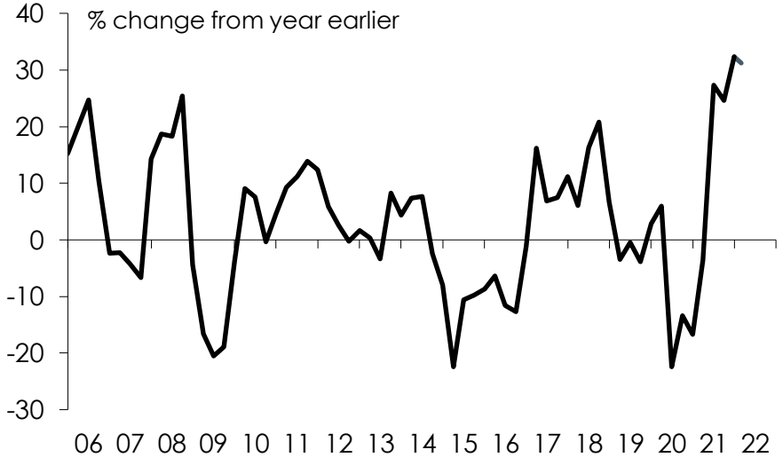
Quarterly wage price index



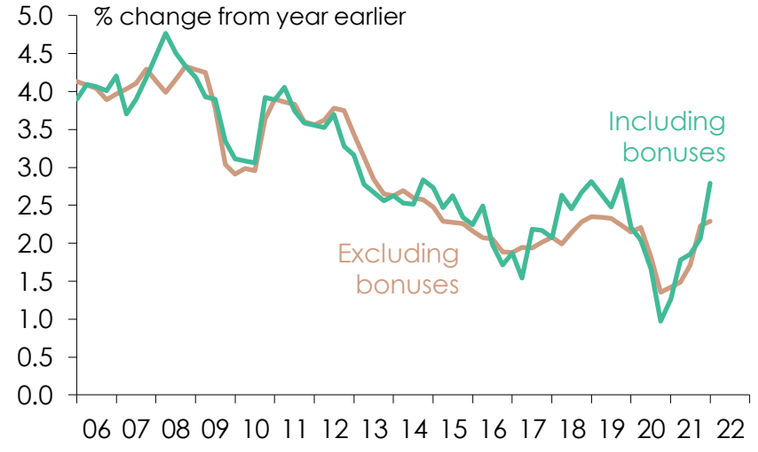
Quarterly 'underlying' inflation



Automotive fuel prices



Wage price index – annual change



Note: 'Underlying' inflation is the average of the weighted median and trimmed mean CPIs. *Source:* ABS, *Consumer Price Index, Australia*, December; *Wage Price Index, Australia*

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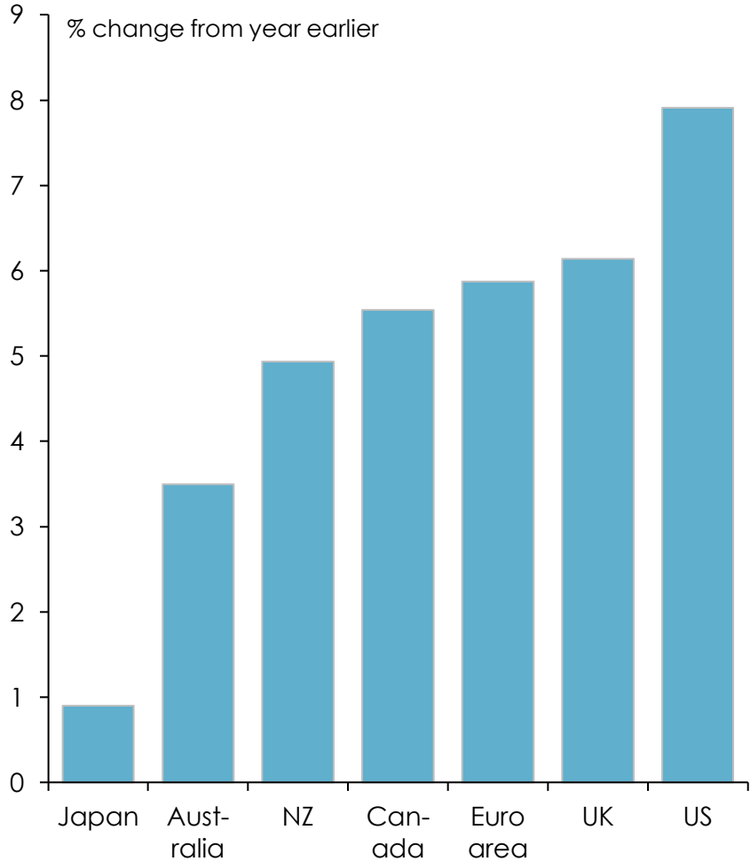
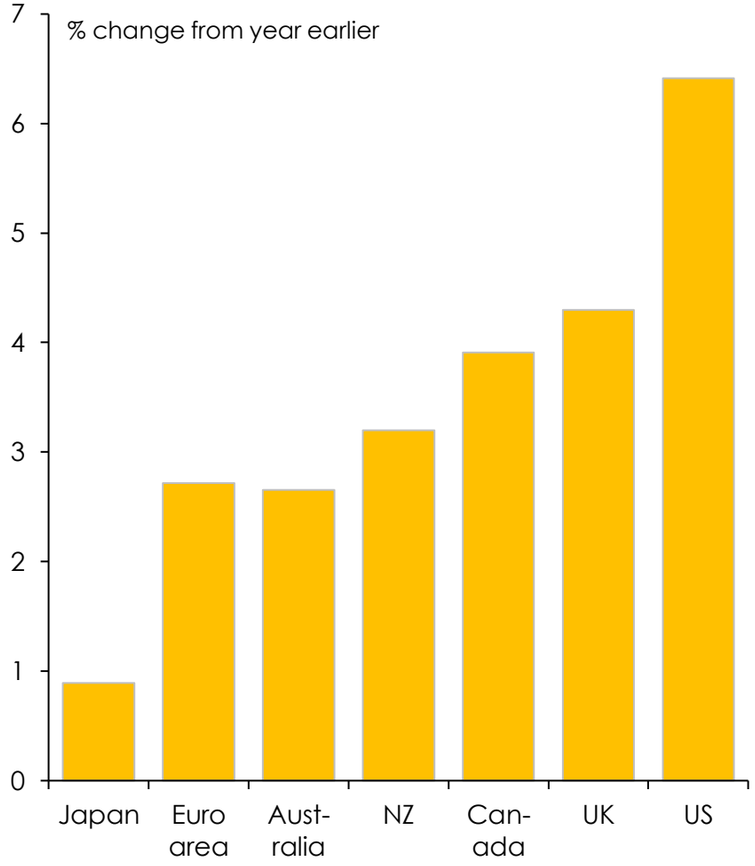
Neither wage nor price inflation in Australia has risen nearly as much as in the US, the UK, Canada or New Zealand

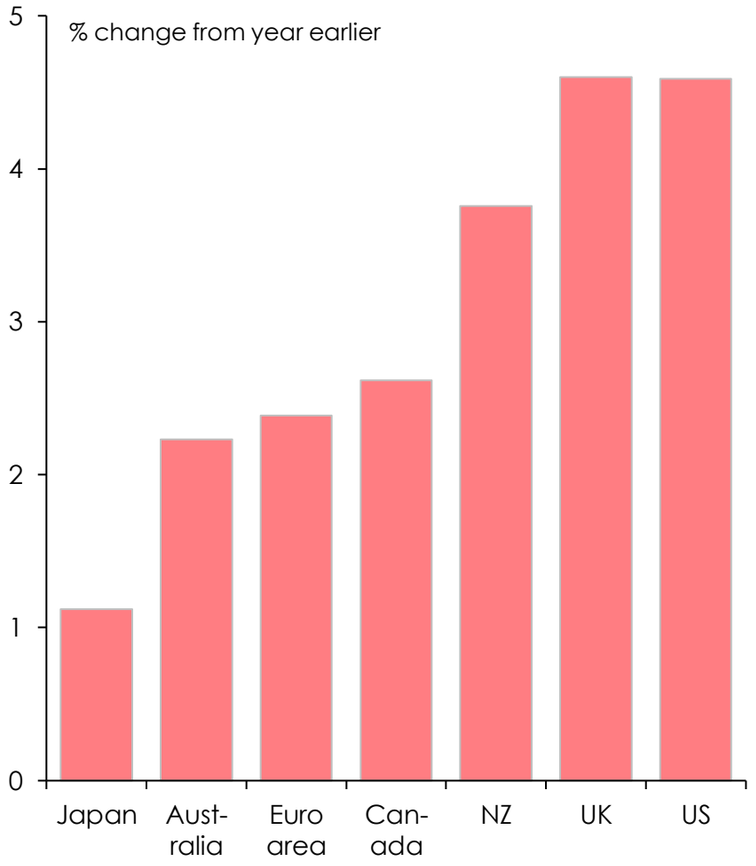
‘Headline’ consumer price inflation



‘Underlying’ or ‘core’ consumer price inflation



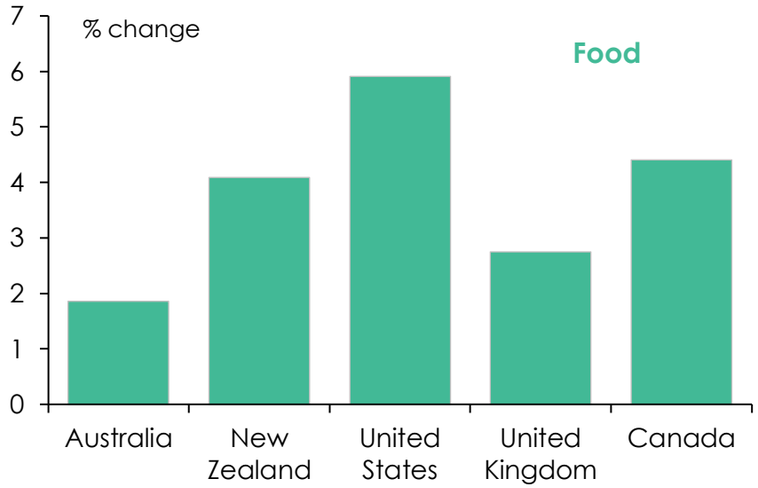
Wage inflation

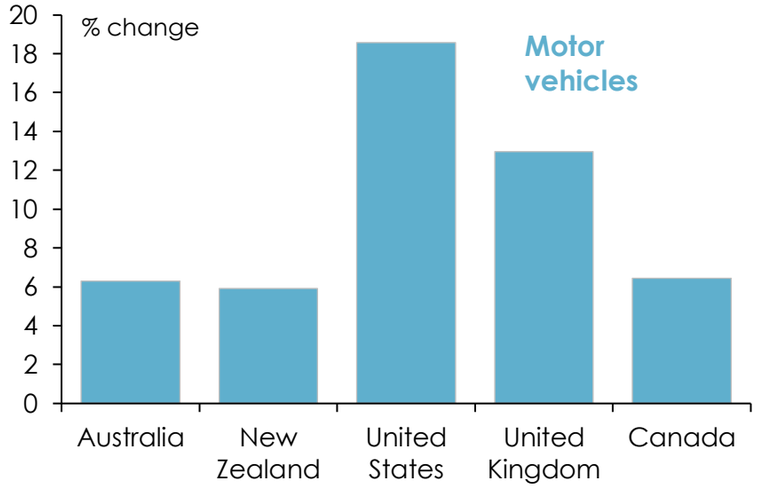


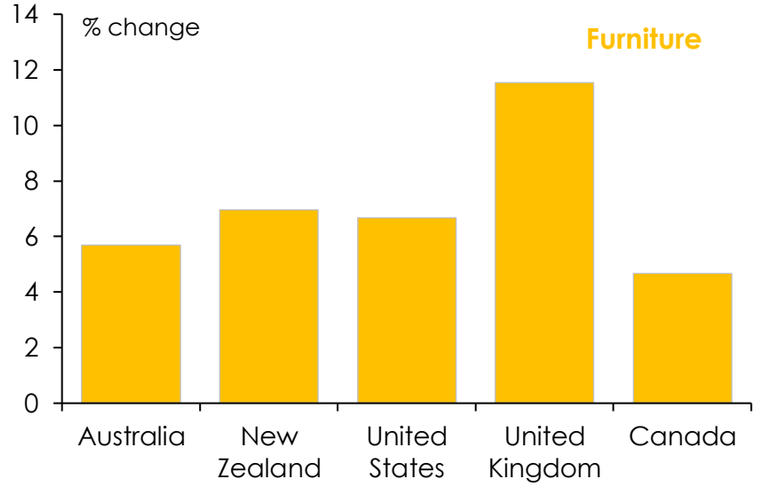
‘Core’ inflation is CPI excluding food & energy for the US, UK and Canada; trimmed mean for Japan and Australia; and ‘sectoral factor model’ for NZ. Wage inflation is average hourly earnings for Japan, the UK and Canada (and hence affected by changes in workforce composition), and wage price index or equivalent for the US, euro area and Australia. *Sources:* ABS; US Bureau of Labor Statistics; Eurostat; Statistics Bureau of Japan and Bank of Japan; UK Office for National Statistics; Statistics Canada; Statistics New Zealand and Reserve Bank of New Zealand.

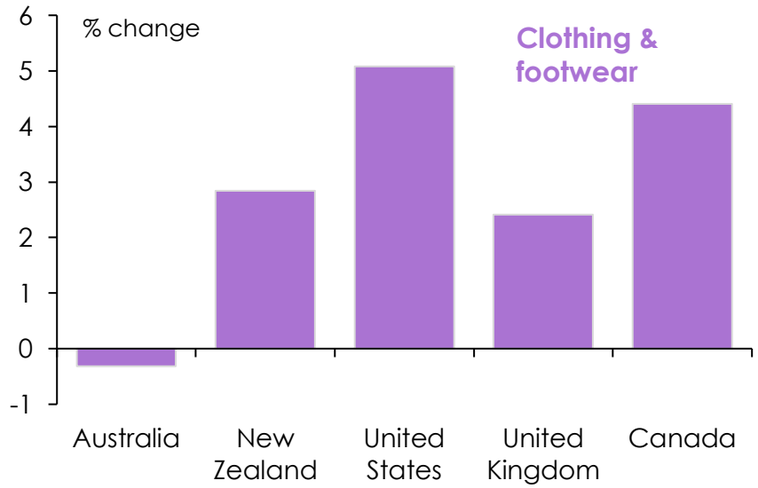
Many of the contributors to sharp rises in inflation in other countries haven't been experienced to the same extent (or at all) in Australia

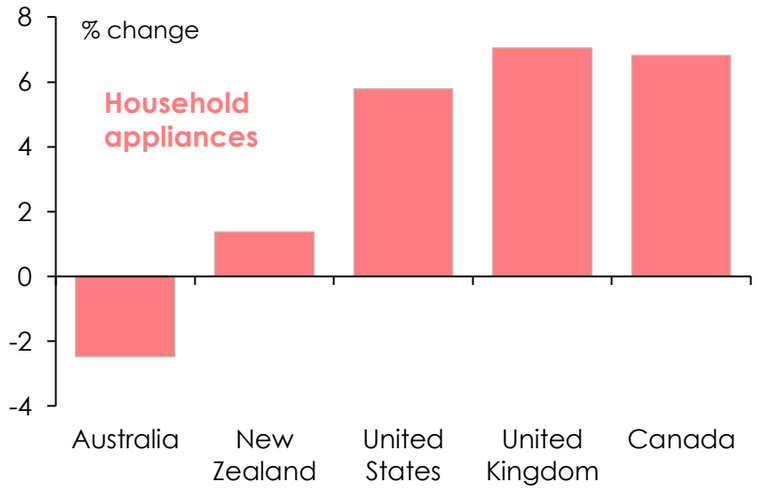
Changes in prices of selected items over the year to the December quarter 2021

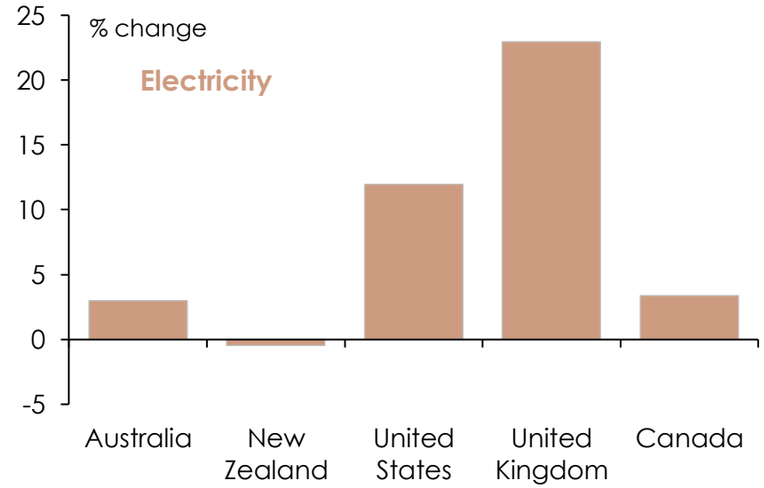








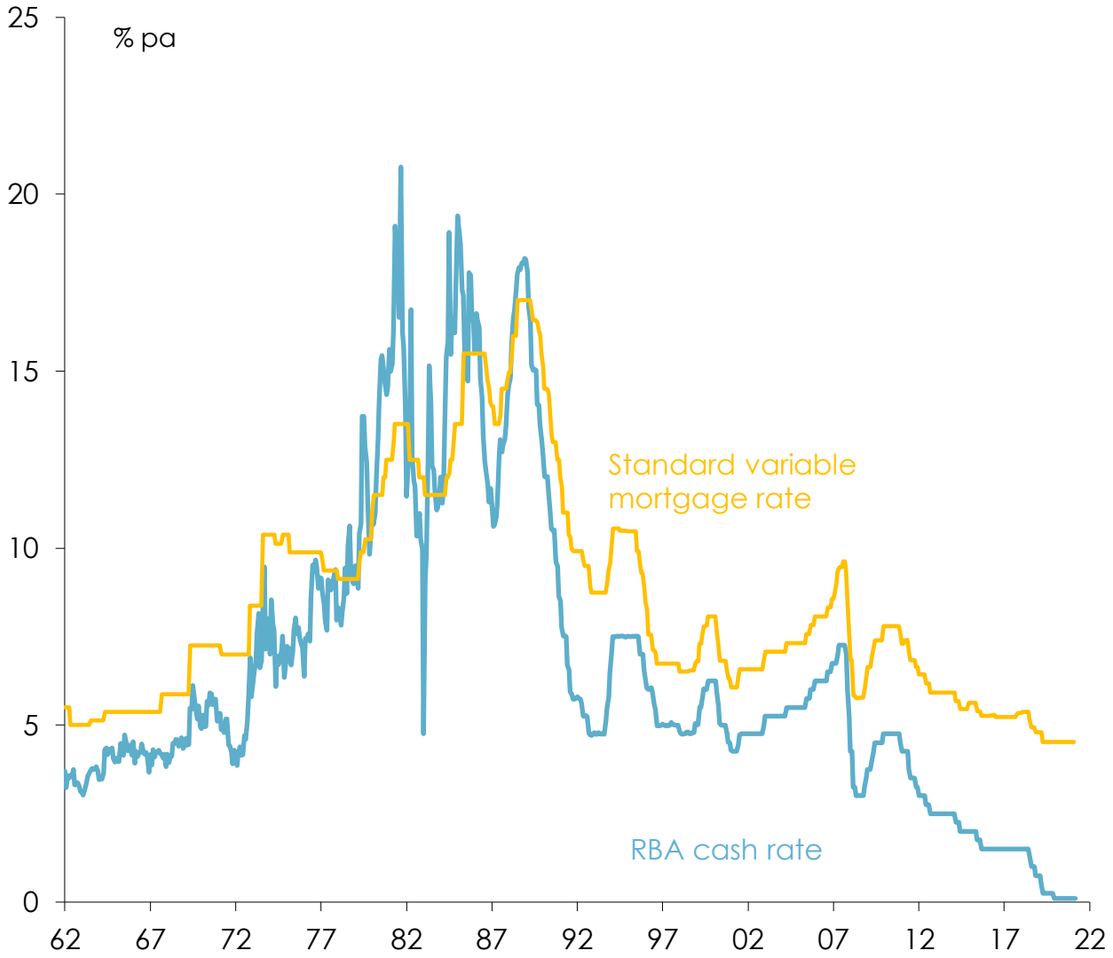




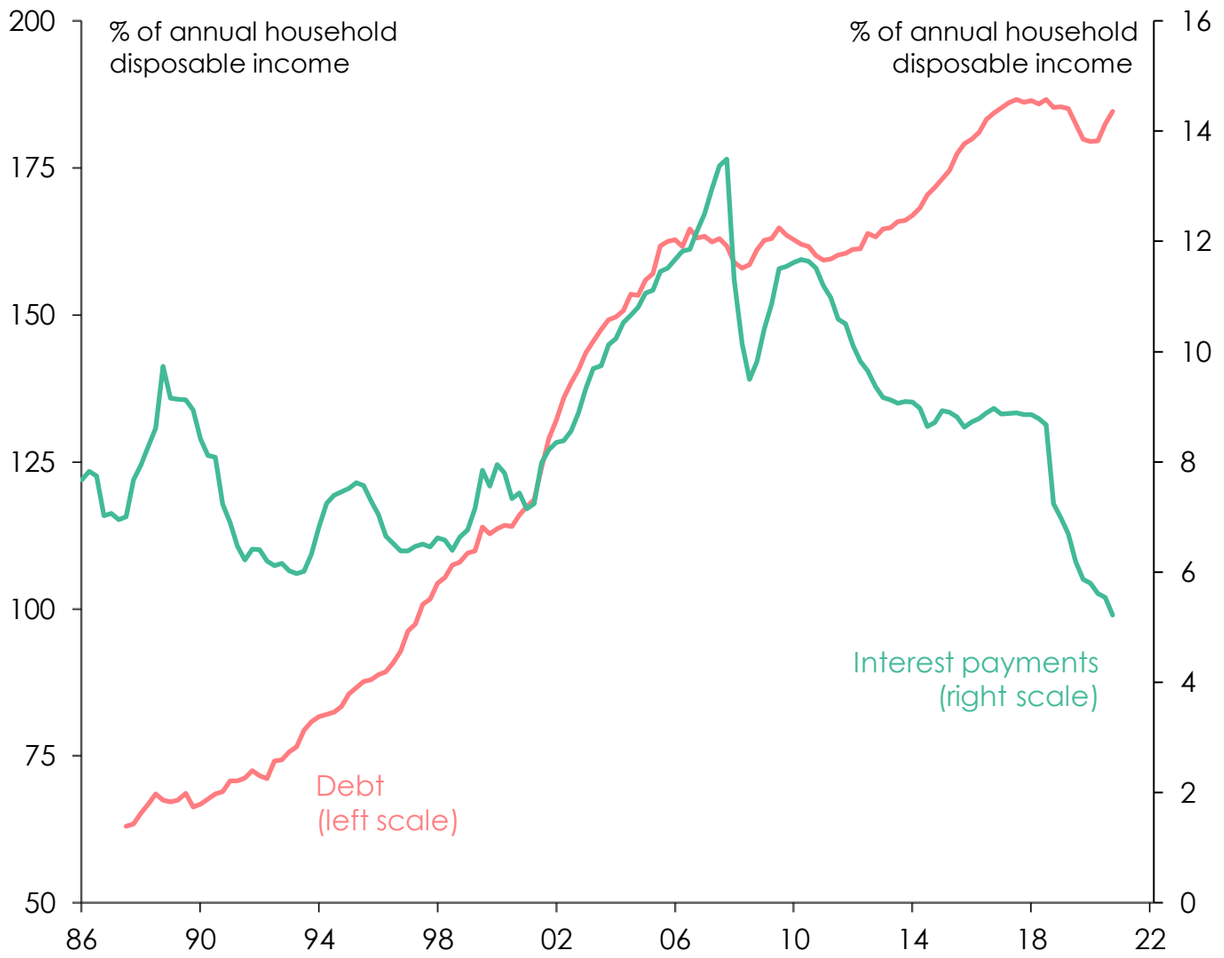
Sources: Australian Bureau of Statistics; Statistics New Zealand; US Bureau of Labor Statistics; UK Office for National Statistics; Statistics Canada.

The RBA will probably start raising rates in August – but it won't have to raise them much to have a noticeable impact on household spending

Australian interest rates



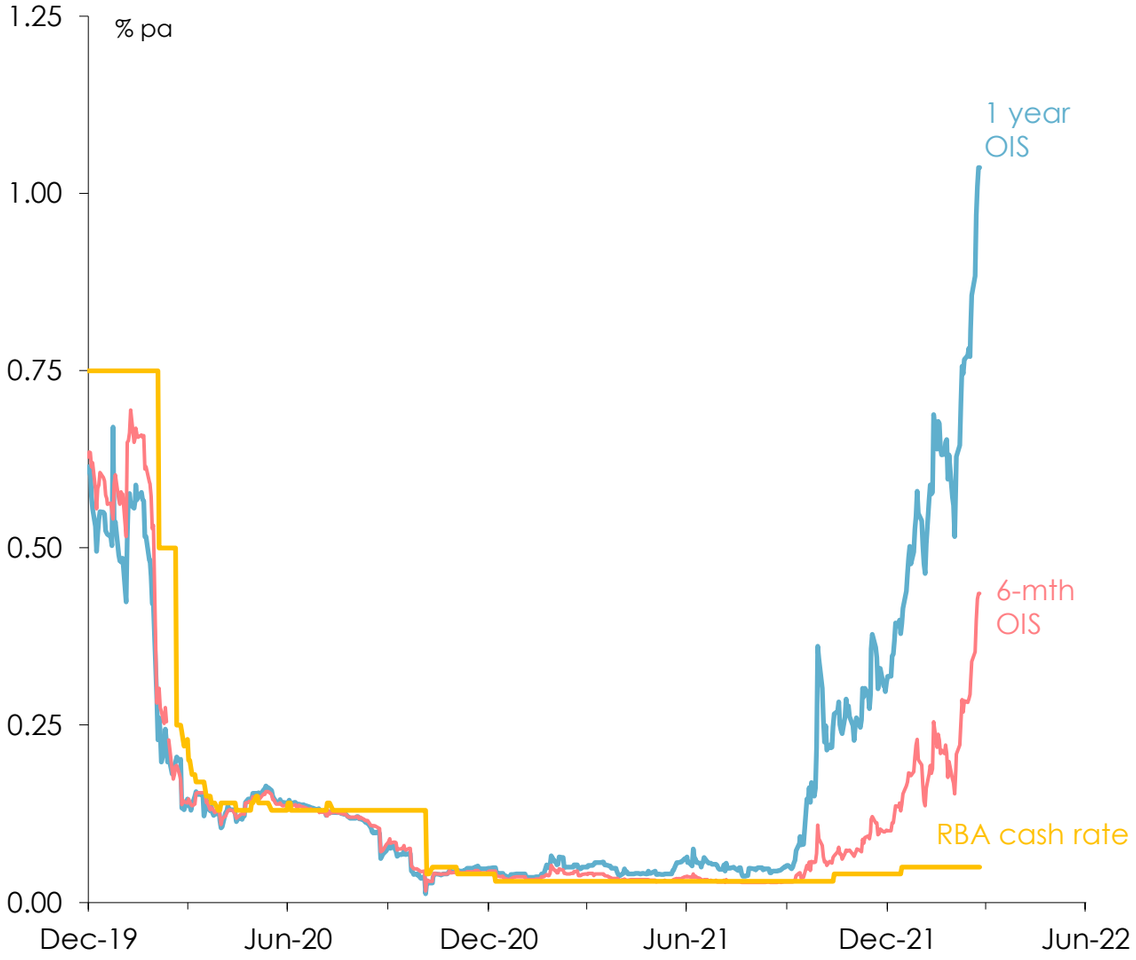
Australian household debt & interest payments



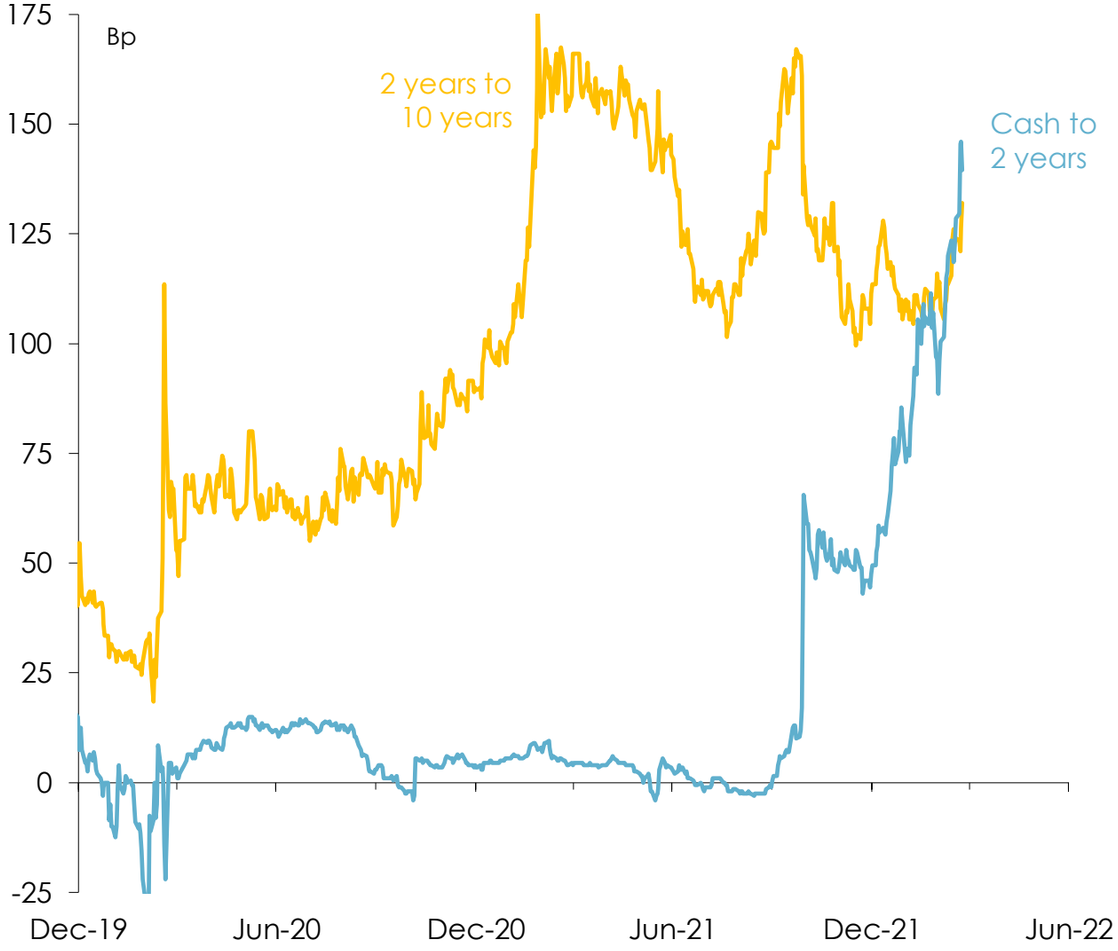
Sources: Reserve Bank of Australia, Statistical Tables F1.1, F6 and E2.

The RBA probably won't raise rates as soon, or by as much, as financial markets are currently pricing

Overnight index swap rates



Yield curves



Source: Reserve Bank of Australia; Refinitiv Datastream. Data up to 25th March. `

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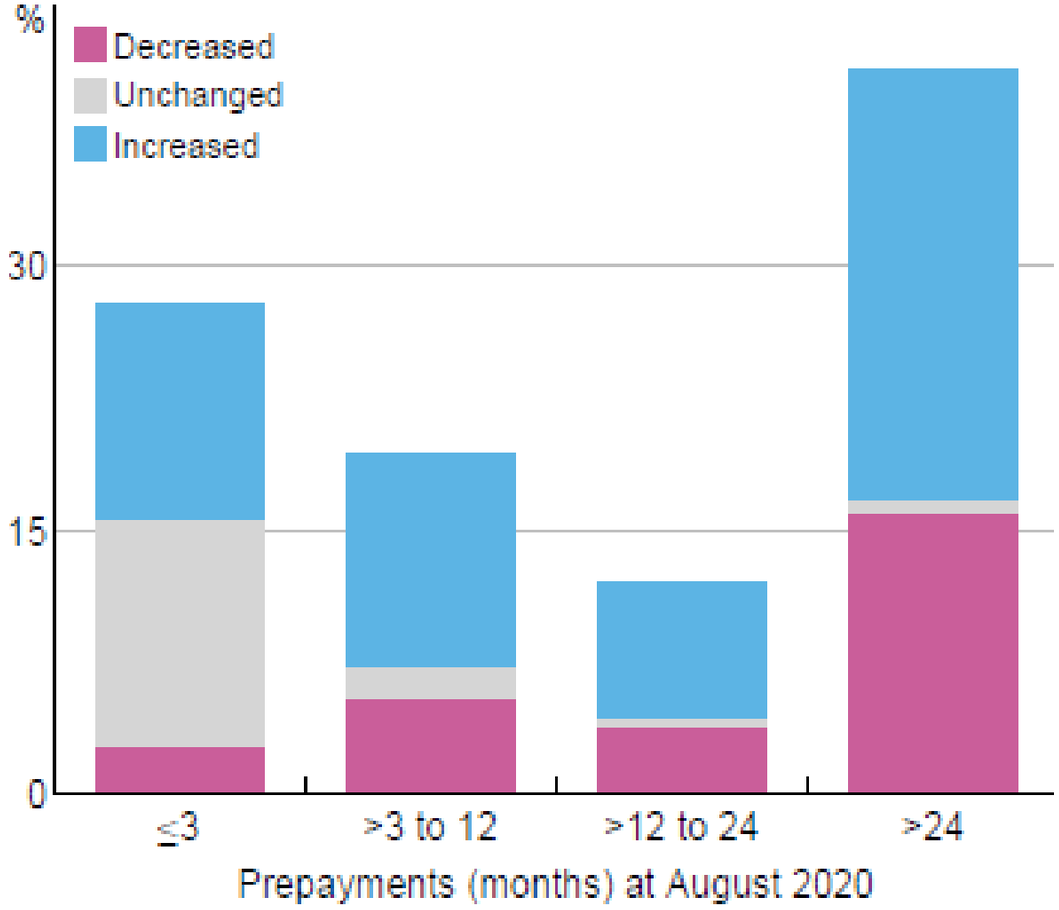
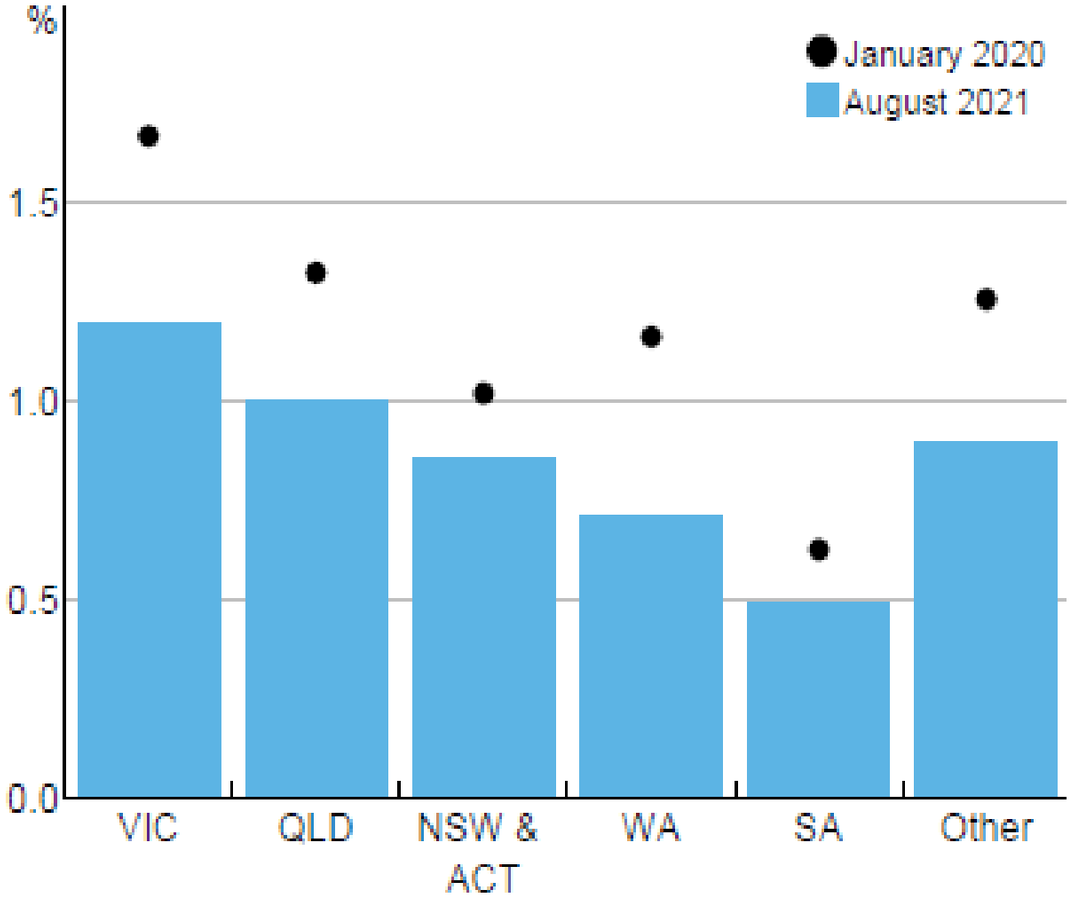
Most (though not all) mortgage borrowers will have some 'buffers' against increases in interest rates

Change in housing loan pre-payments over the twelve months to August 2021



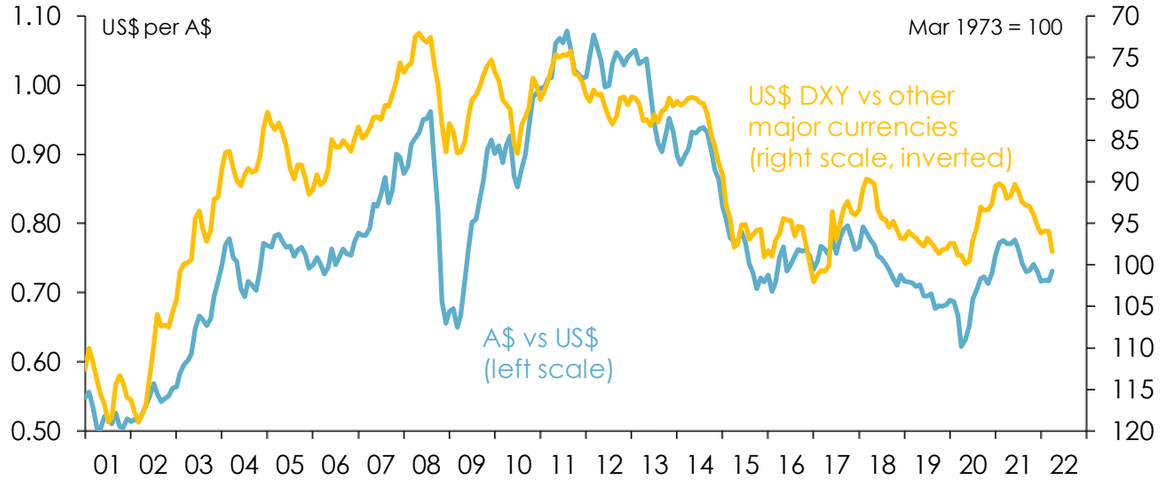
Owner-occupier mortgage borrowers with high DTI ratios and low pre-payment 'buffers'



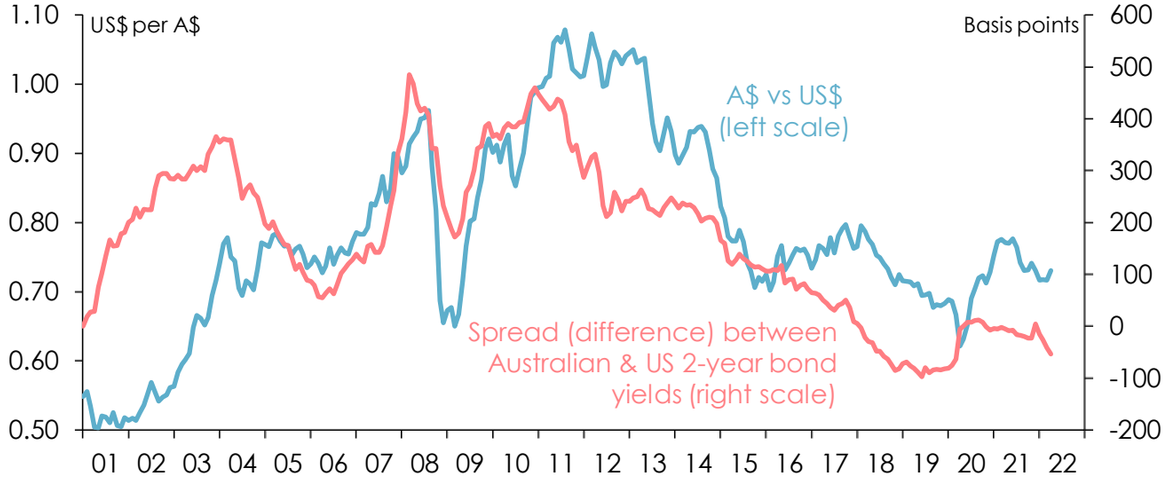
Note: Pre-payments are measured in months of repayments and expressed as a share of loans (excluding fixed-rate and investor loans. 'High debt and low buffer' households are those with a DTI > 6 and less than one month of pre-payments. *Source:* Reserve Bank of Australia, *Financial Stability Review*, 8th October 2021.

The A$ will likely drop below US70¢ later this year as the RBA lags other central banks in raising rates, and commodity prices fall back

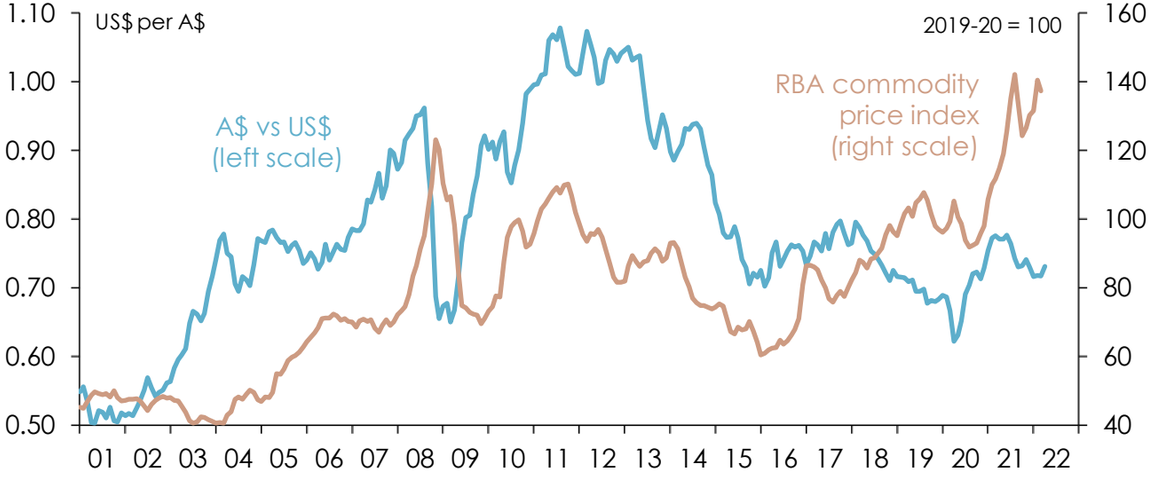
A$-US$ and US$ trade-weighted index



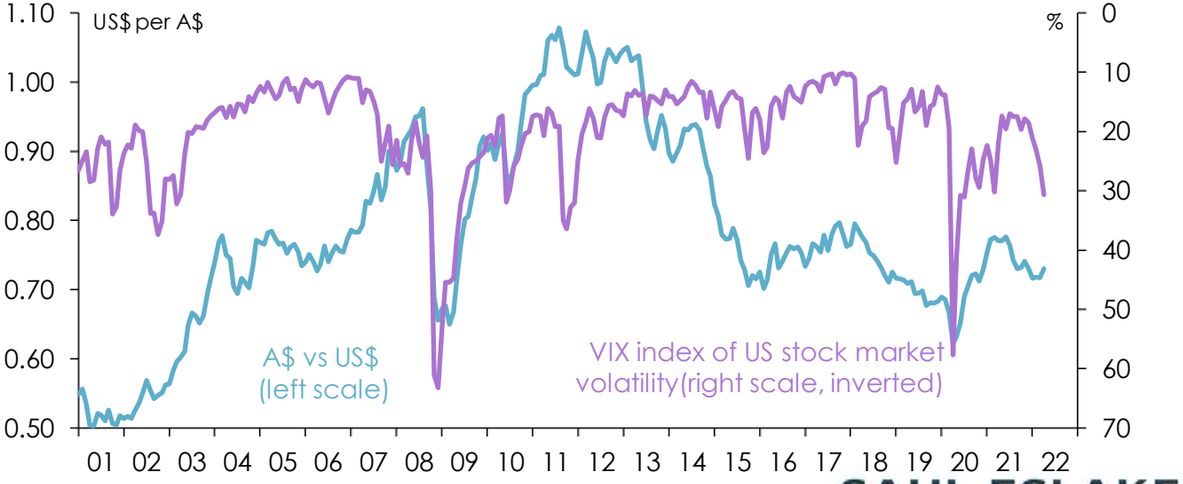
A$-US$ and Australia-US interest rate differentials



A$-US$ and Australian export commodity prices



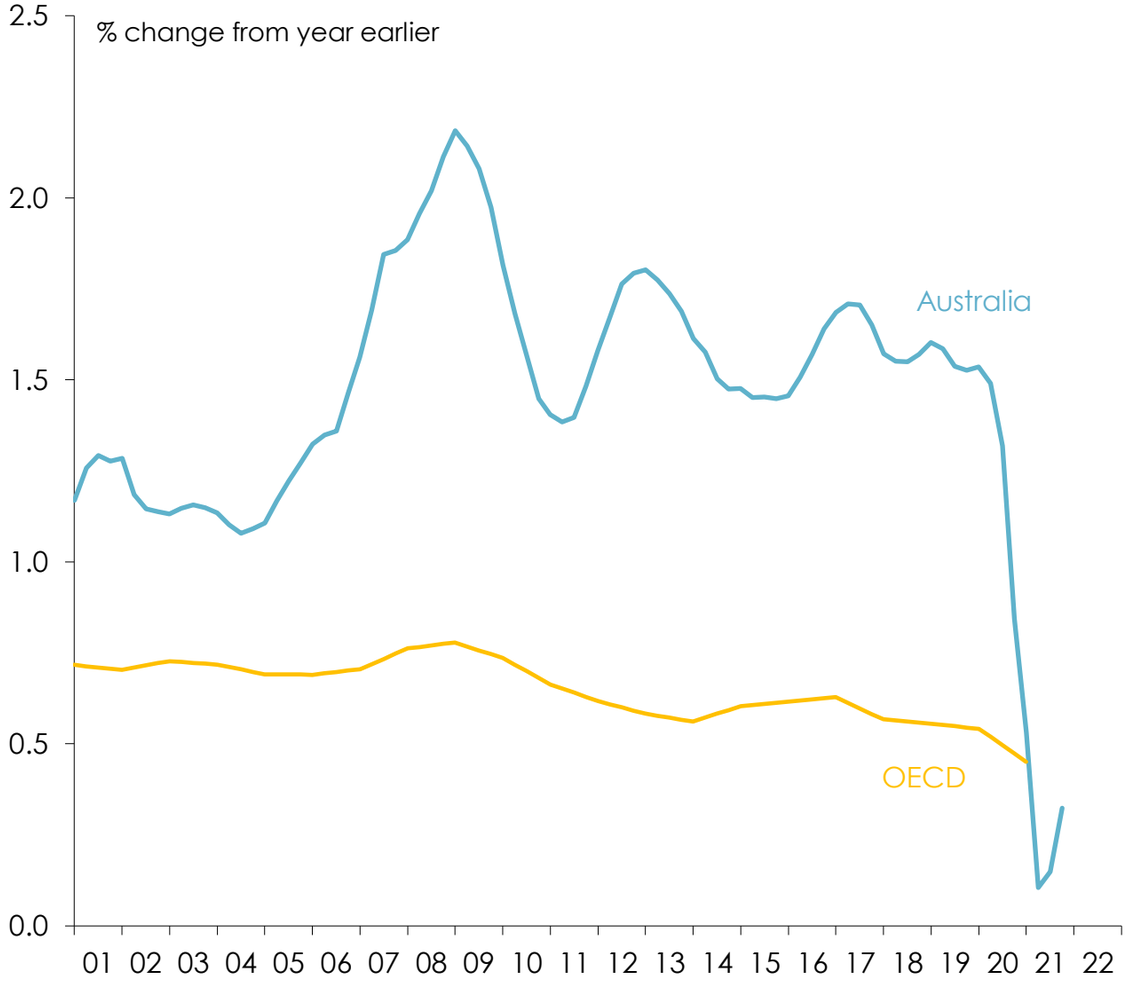
A$-US$ and US equity market volatility



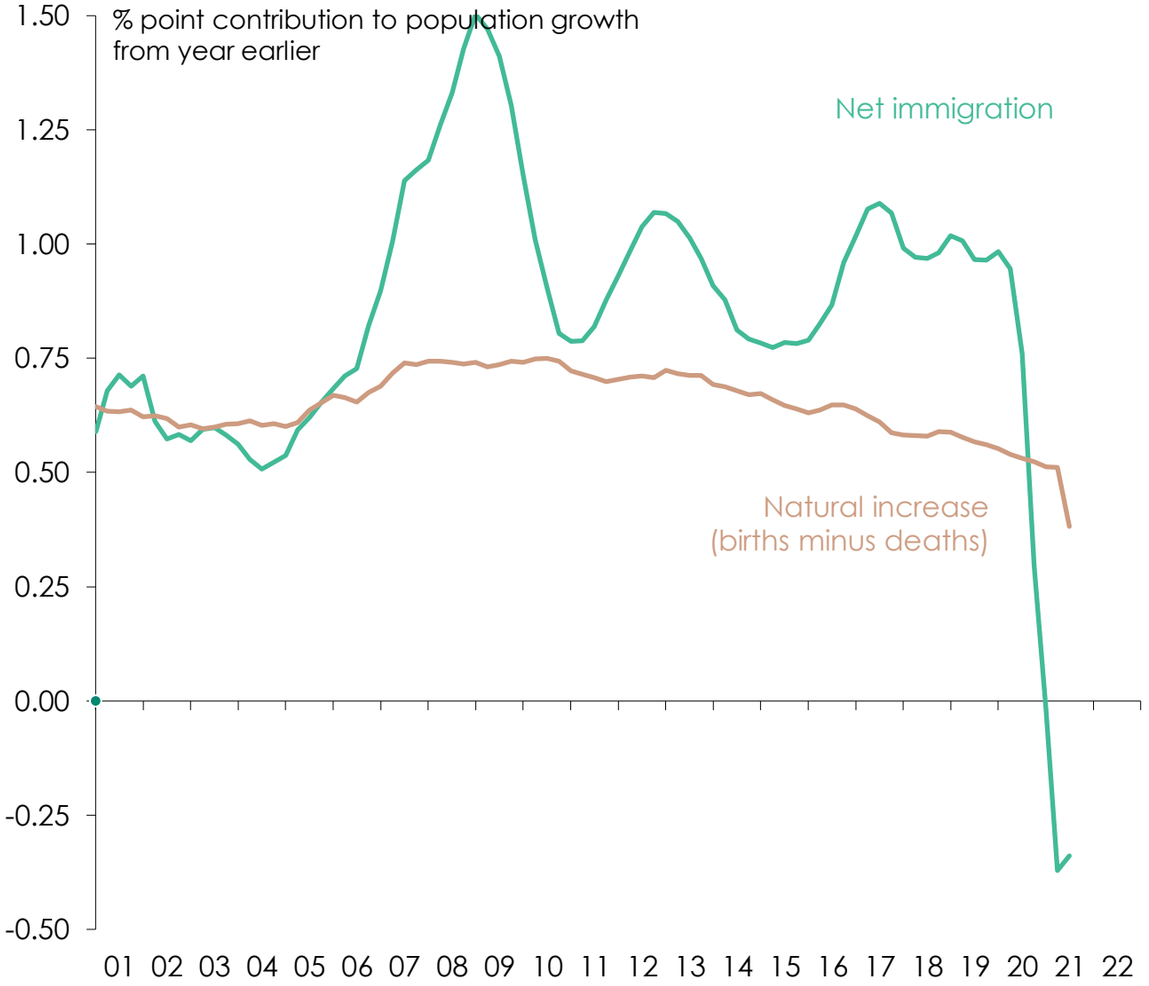
Note: The DXY is an index of the value of the US dollar against 6 other currencies (the euro, yen, pound, Canadian dollar, Swedish krona and Swiss franc). The VIX index is a measure of the implied volatility of S&P500 options and is widely interpreted as an indicator of investor risk appetite or aversion. *Source:* Refinitiv Datastream.

Australia's population growth probably won't return to as rapid a pace as experienced over the first two decades of this century

Australia and OECD population growth



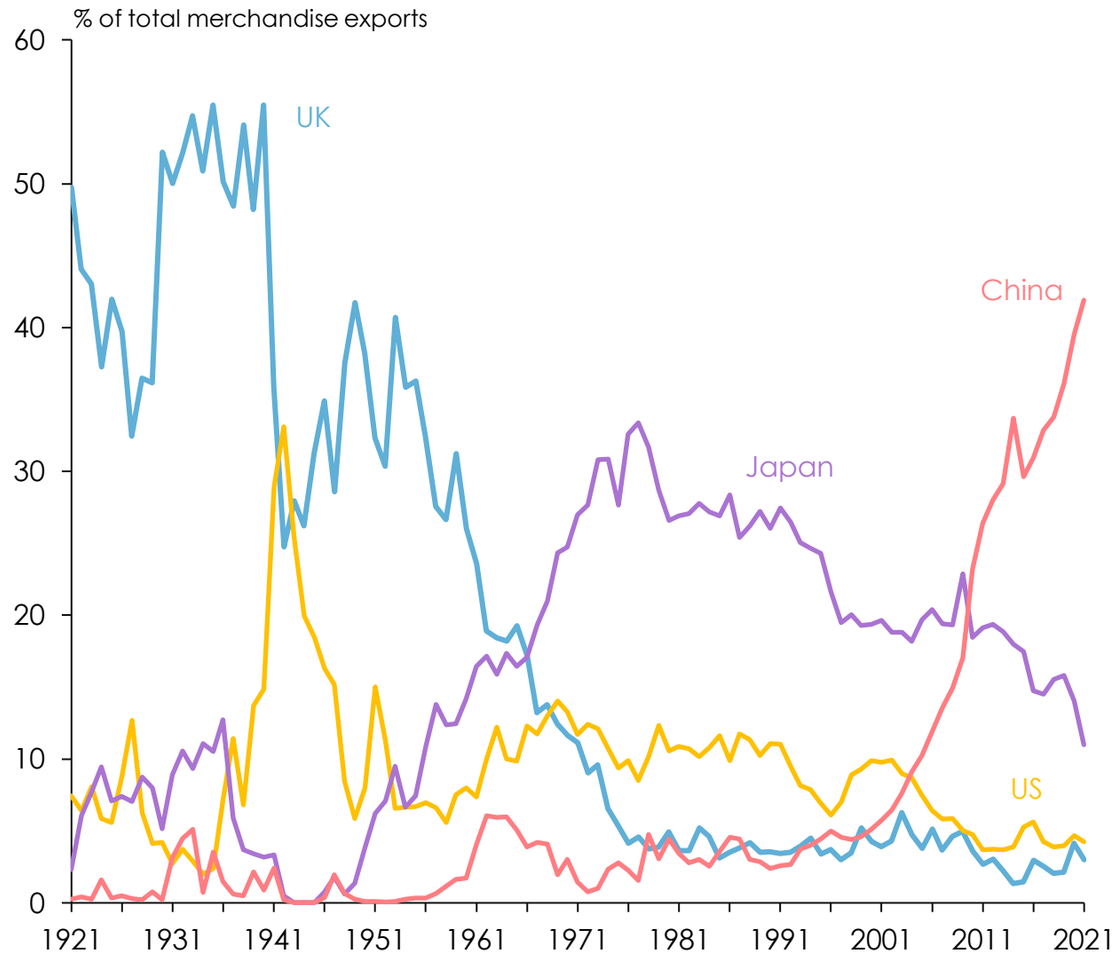
Sources of Australia's population growth



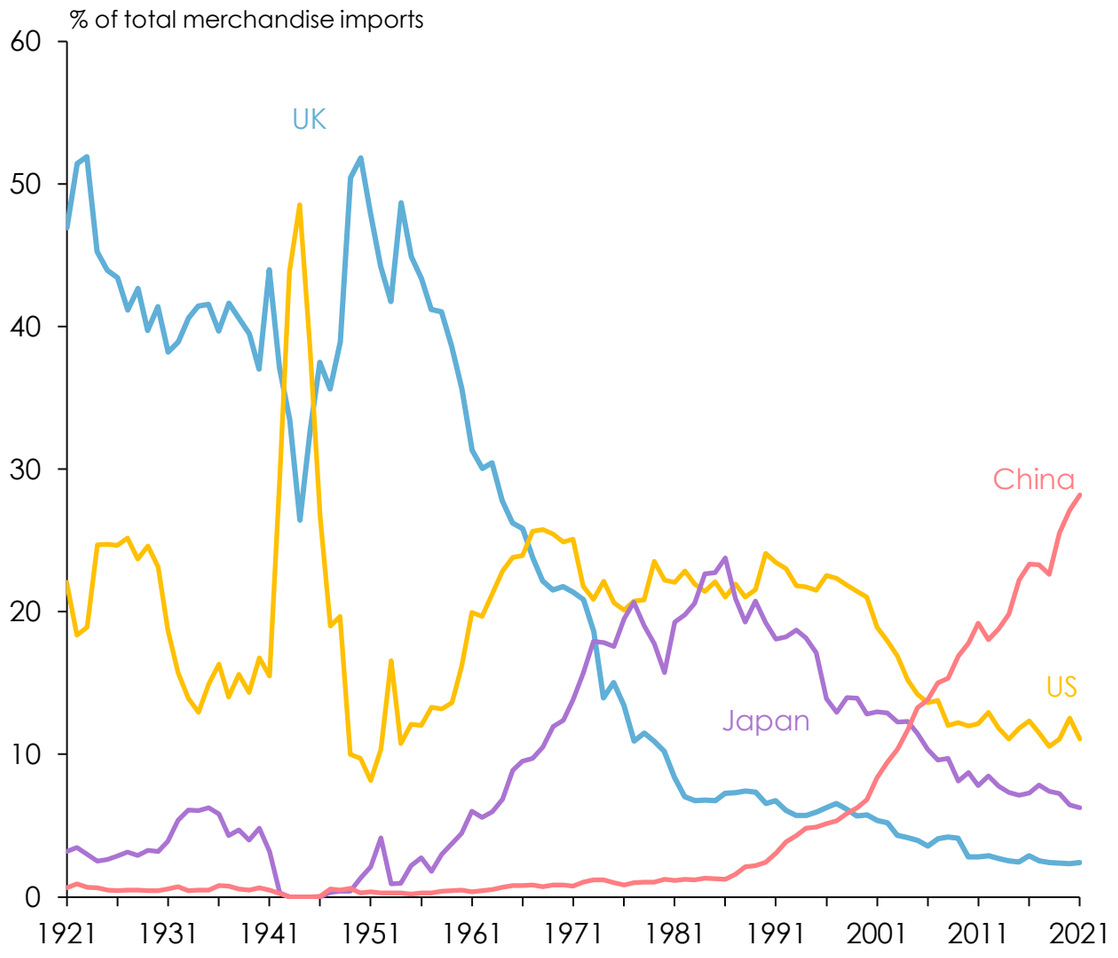
Sources: ABS, *Australian National Accounts: National Income, Expenditure and Product* and *National, state and territory population*; OECD, Main Economic Indicators.

Australia has gained enormous economic benefits from its relationship with China over the past two decades – but that's unlikely to be repeated

Australia's major export markets, 1921-2021



Australia's major import sources, 1921-2021

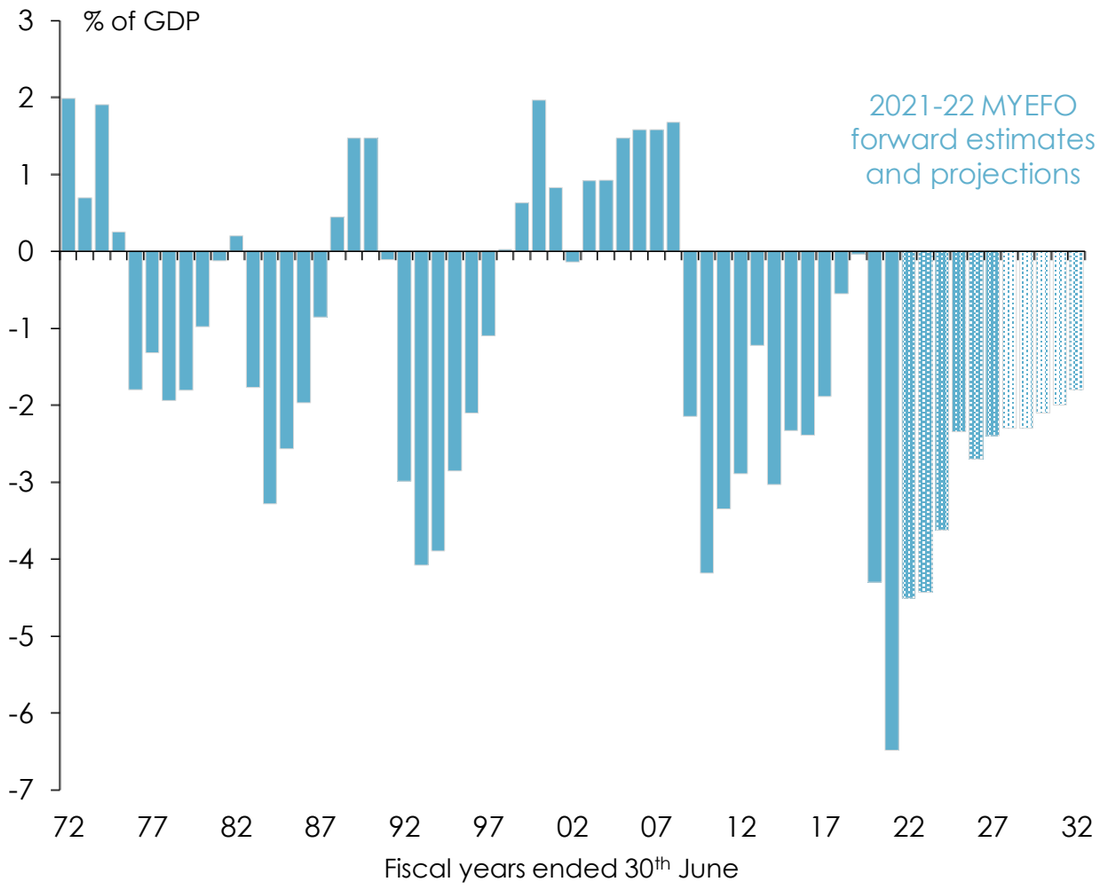


Sources: Australian Department of Foreign Affairs and Trade, *Trade time series data*; Australian Bureau of Statistics, *International Trade in Goods and Services*, September 2021.

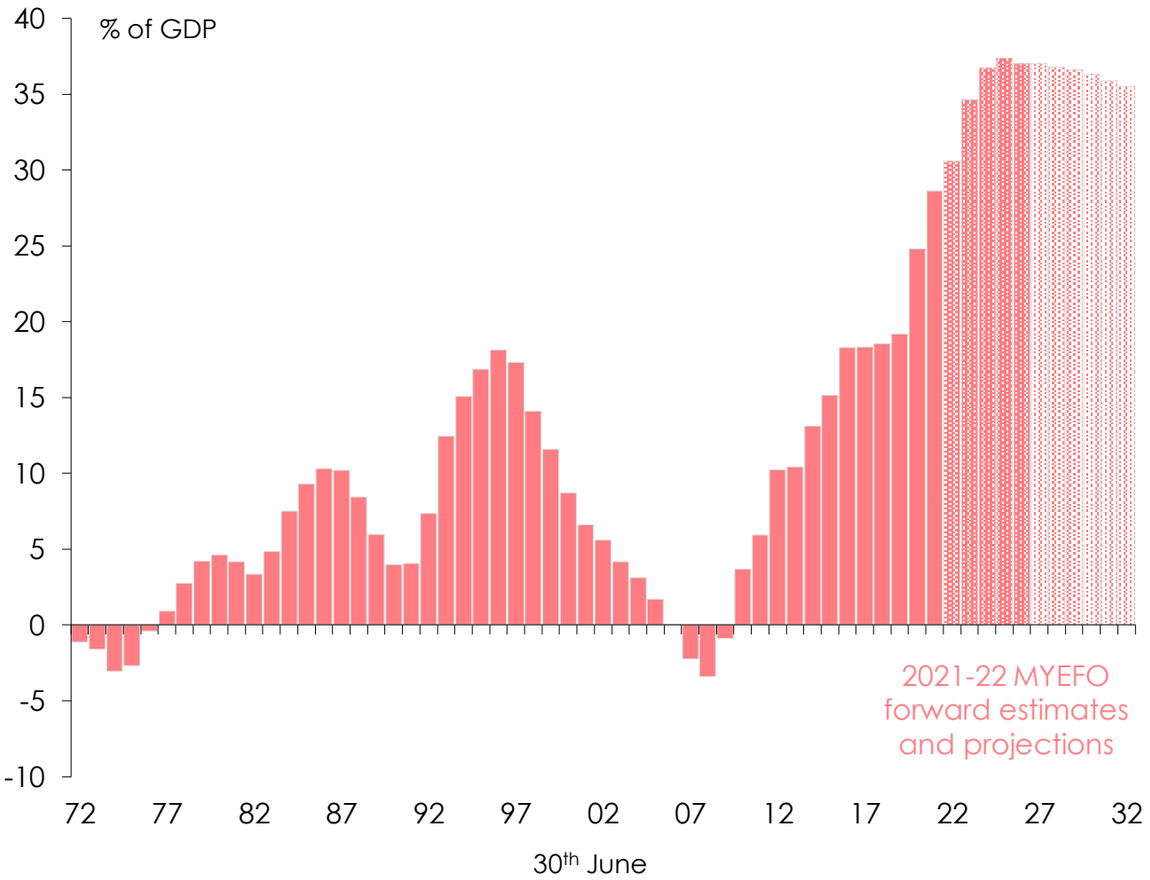
Whoever wins the Federal election due before 21st May this year will be under some pressure to reduce the budget deficit and public debt

'Medium-term' projections of the 'underlying cash balance' and net debt

'Underlying' cash balance



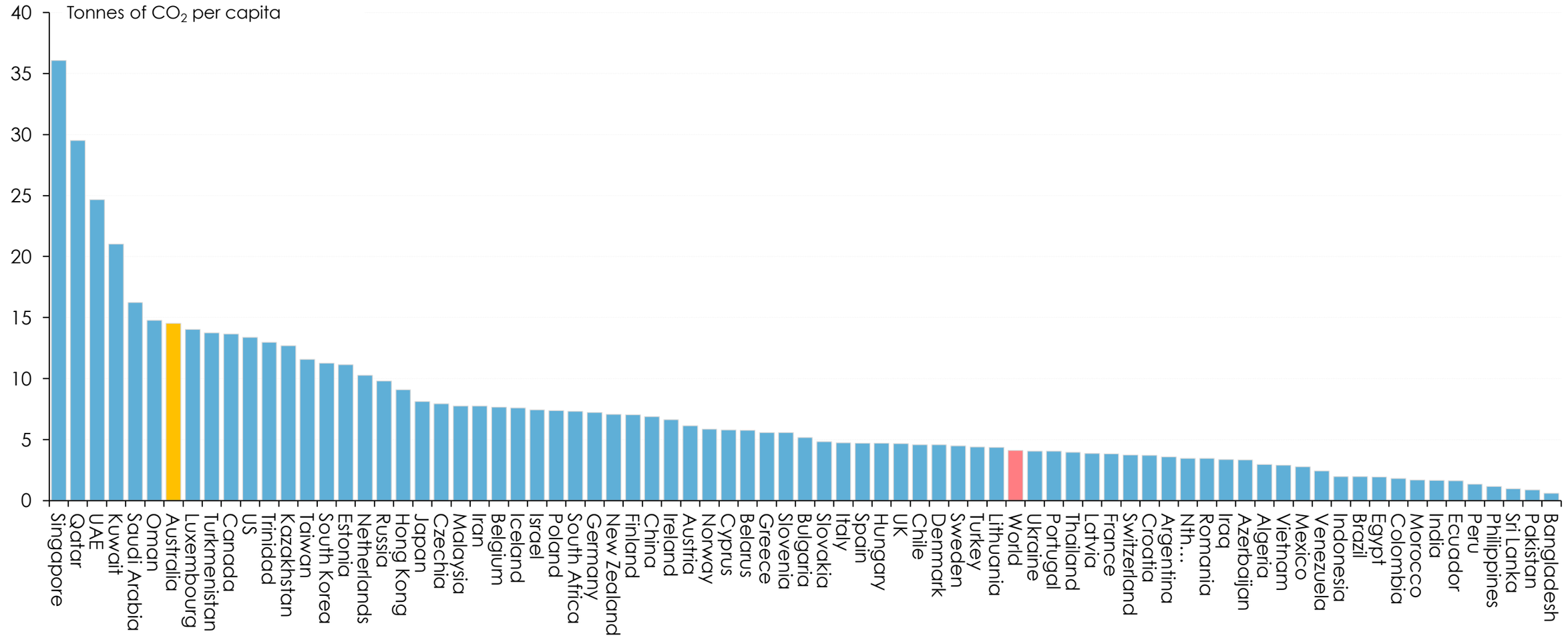
Net debt



Source: Australian Government, 2021-22 *Mid-Year Economic and Fiscal Outlook*, 16th December 2021. Forward estimates and projections will be updated in the 2022-23 Federal Budget to be presented on 29th March.

Australia risks being seen as a 'climate change pariah' with potentially adverse consequences for our trade

CO_2 emissions per capita, 2020



Source: BP, *Statistical Review of World Energy 2021*.

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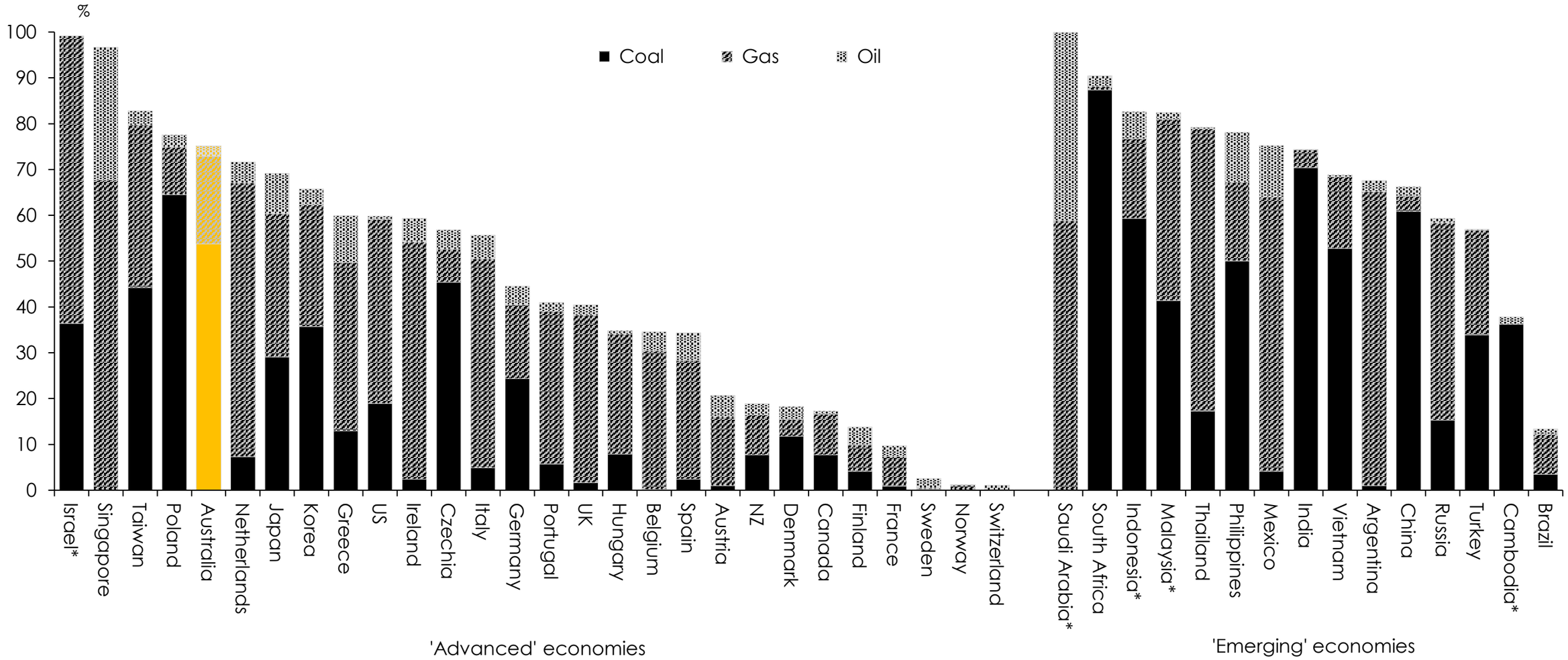
In any event Australia has a greater challenge than most 'advanced' economies in reducing its dependence on fossil fuels for energy generation

Source of electricity generation, by country, 2020



* 2019. *Source:* Ember, *Global Electricity Review 2021*.

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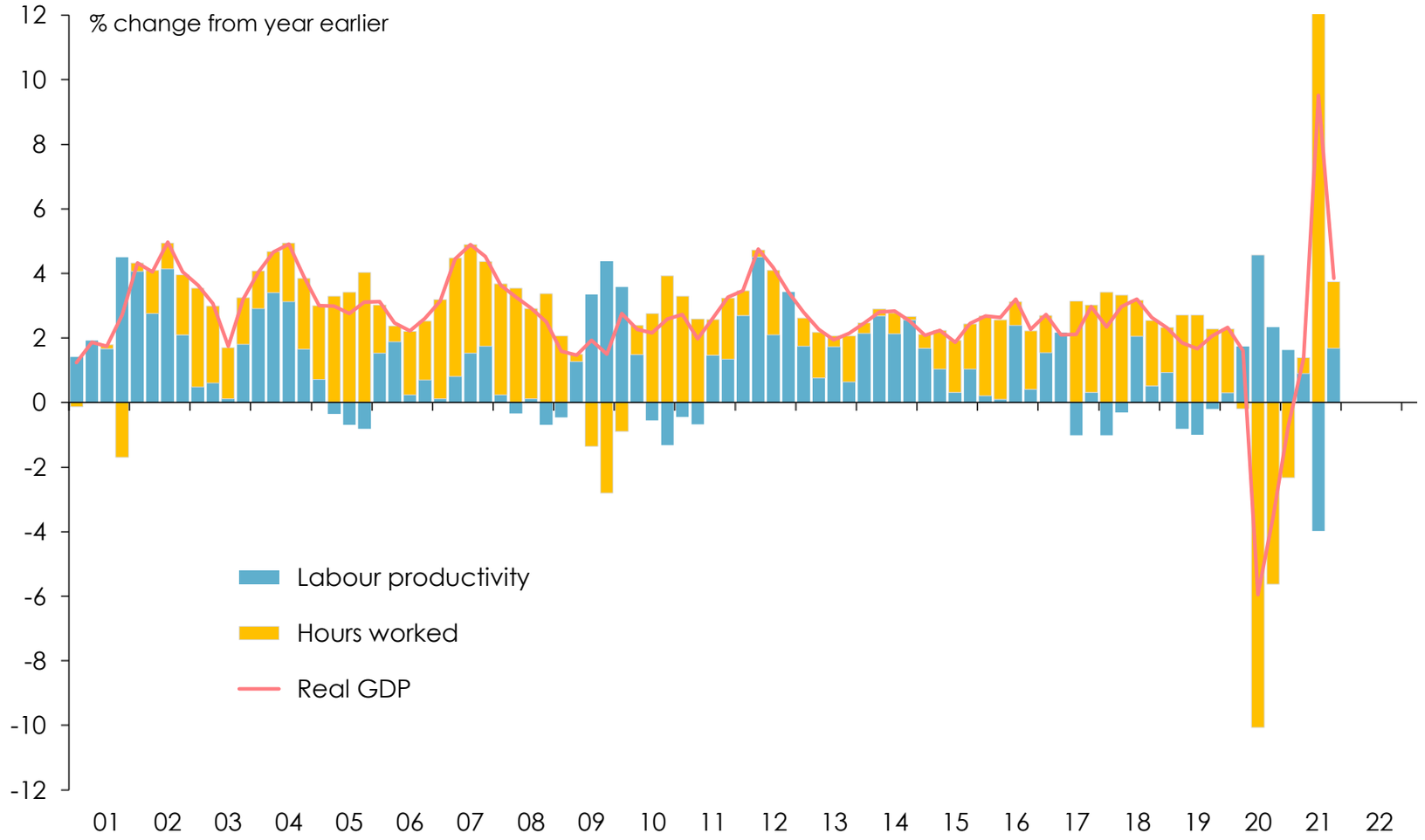
If Australia is to sustain the growth rates to which we'd become accustomed before Covid we'll need to lift our productivity performance

Labour input and labour productivity contributions to Australian real GDP growth



- 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
- By contrast, over the five years between the end of the 'mining boom' and the onset of the Covid-19 pandemic, 72% of Australia's real GDP growth came from increased labour input, and only 28% from labour productivity growth

Source: ABS, *Australian National Accounts: National Income, Expenditure and Product*.

So ….

- **Will the world's 'mega economies' create the 'mega decade'?**
  - sadly, no – if 'mega decade' means a discernible pick-up in global economic growth
  - mainly due to demographic factors (slower or negative population growth + ageing) and slower productivity growth
  - but also reflecting the interaction of high levels of debt with now rising (rather than falling) interest rates
  - and perhaps also other factors including climate change, 'de-globalization' and geo-politics
- **A return to 1970s-style 'stagflation' is a risk, but not the most likely scenario**
  - there are a lot of differences between the way economies functioned, and central banks (in particular) operated then, and now
- **But we can be pretty sure that the 30-40 year trend of declining interest rates has come to an end**
  - which absolutely doesn't mean that interest rates are headed back to the peaks they reached in the early or late 1980s
  - but for cycles in investment markets the direction of interest rates is almost as important as their levels
- **Australia is better placed than most other 'advanced' economies with regard to demographics**
  - but we haven't been doing very well with regard to productivity over the past 10-15 years, and there's no reason to think we're about to start doing any better
  - and we may not be able to cover that up in the coming decade as readily as we have done over the past 10-15 years

For more information including comprehensive chart packs visit https://www.sauleslake.info/

Important information

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.

Corinna Economic Advisory is a partner (with Llewellyn Consulting, of 1 St Andrews Hill, London EC4V 5BY, United Kingdom) in Independent Economics.

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