

GLOBAL AND AUSTRALIAN ECONOMIC ISSUES FOR INVESTORS

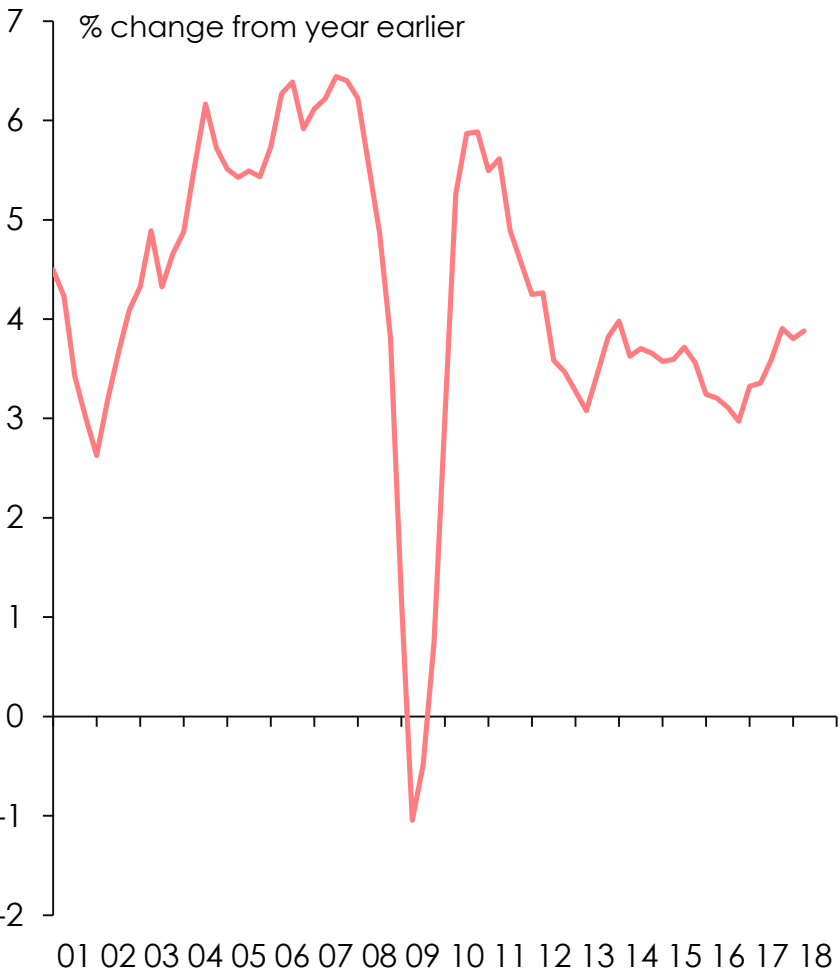
PRESENTATION TO THE
AIA NATIONAL INVESTORS' CONFERENCE

SURFERS PARADISE MARRIOTT RESORT, GOLD COAST
1ST

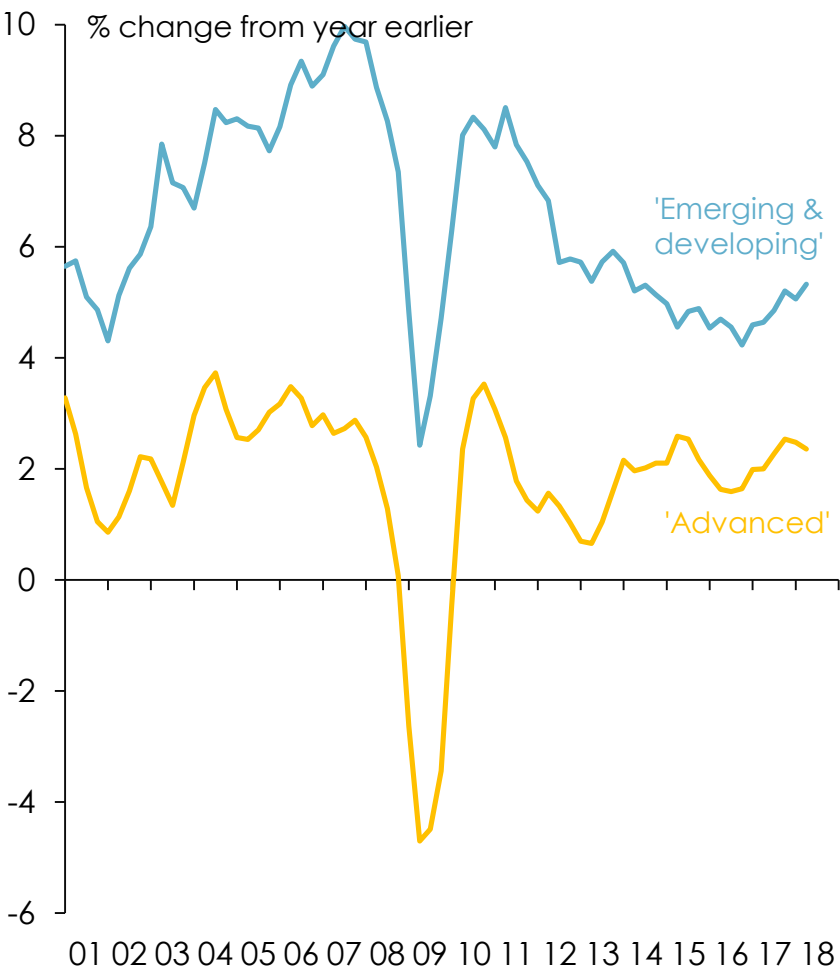
The global economy

The world economy has picked up since the beginning of last year, led by stronger investment in 'advanced' economies

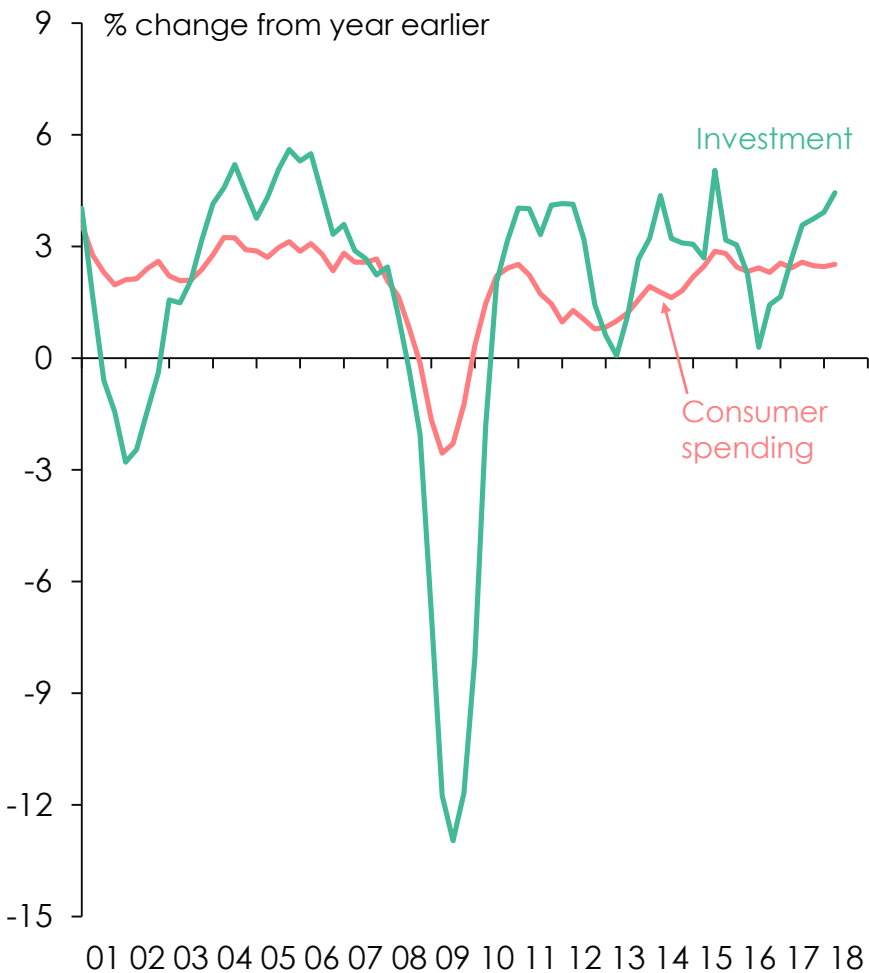
World economic growth



'Advanced' vs 'emerging and developing' economies



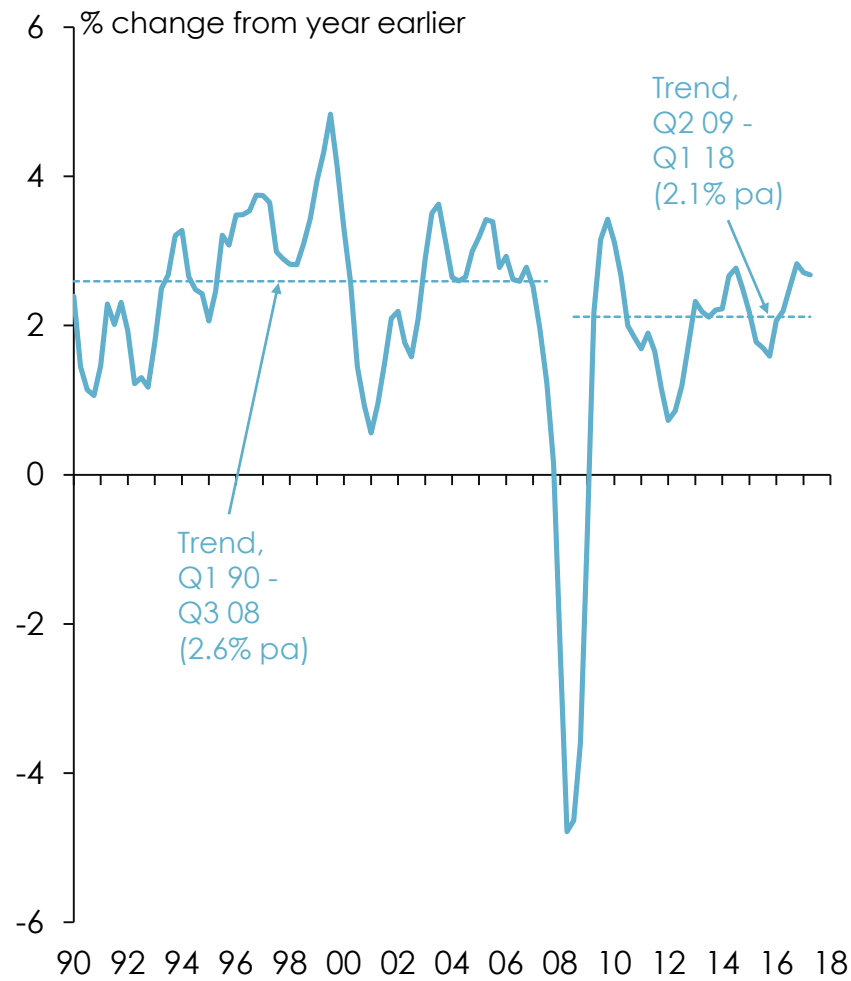
Major components of developed country growth



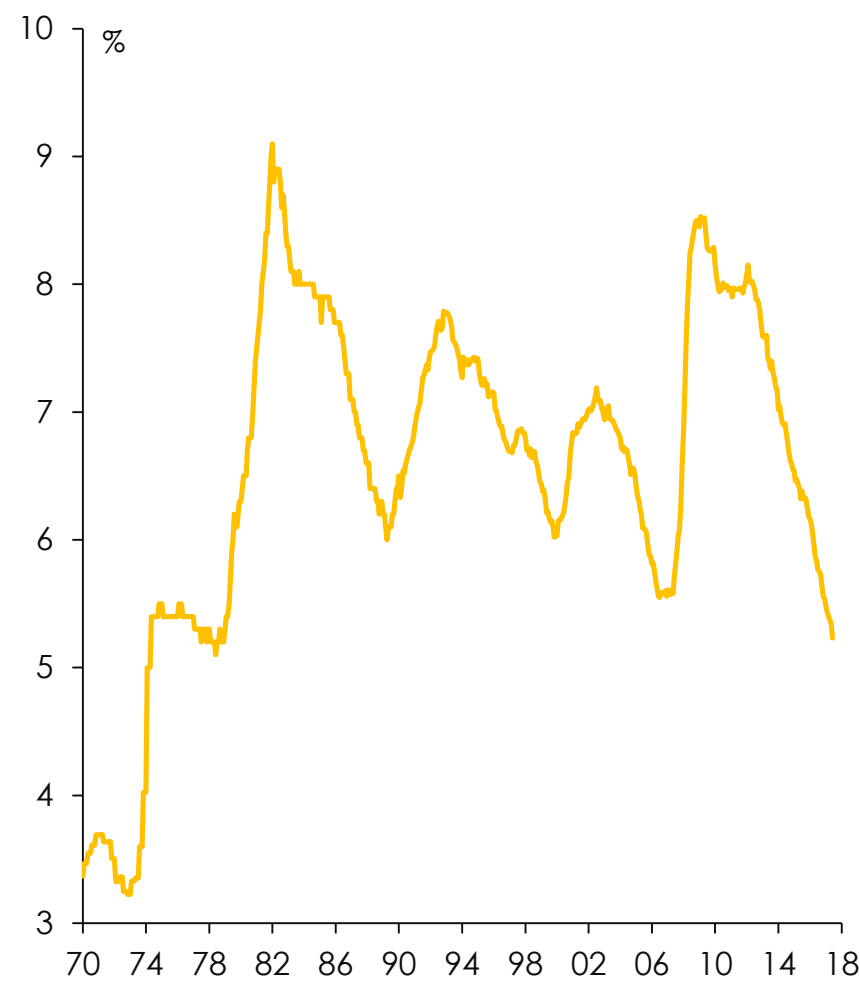
Sources: Thomson Reuters Datastream; IMF; OECD; Eurostat; other national statistical agencies; Corinna Economic Advisory.

Economic growth across 'advanced' economies has until recently been mostly 'below trend' – yet unemployment has fallen sharply

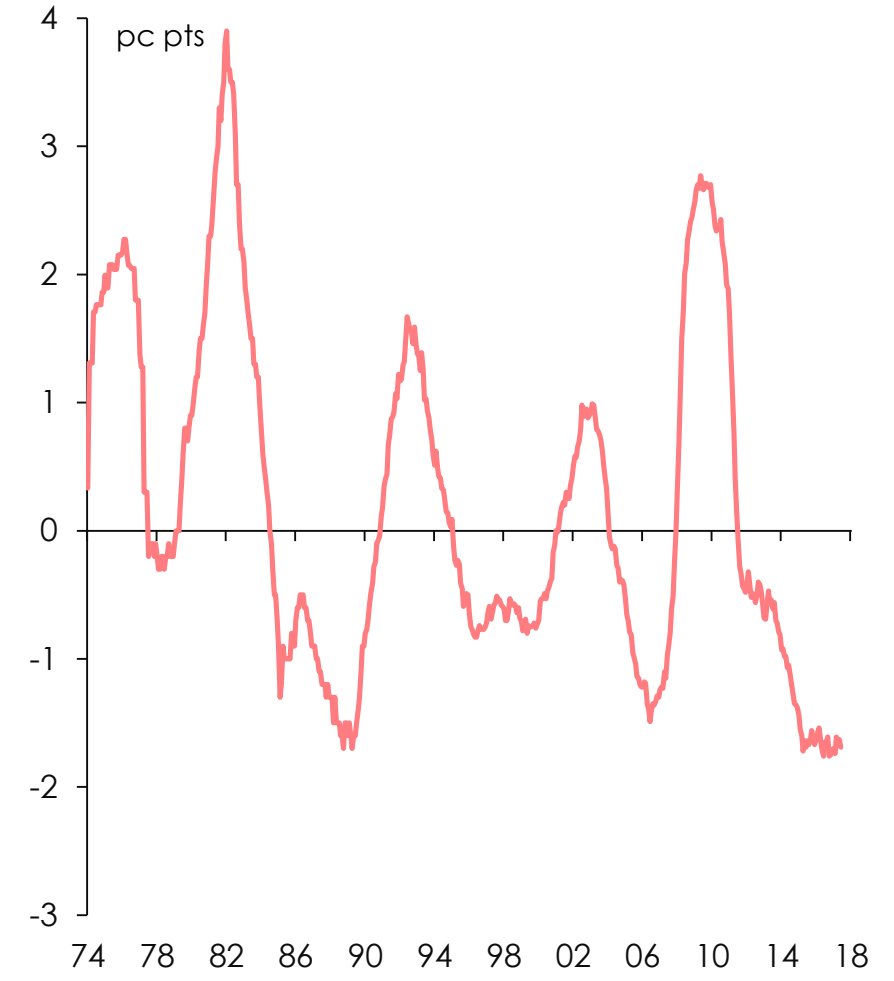
OECD area real GDP growth



OECD area unemployment rate



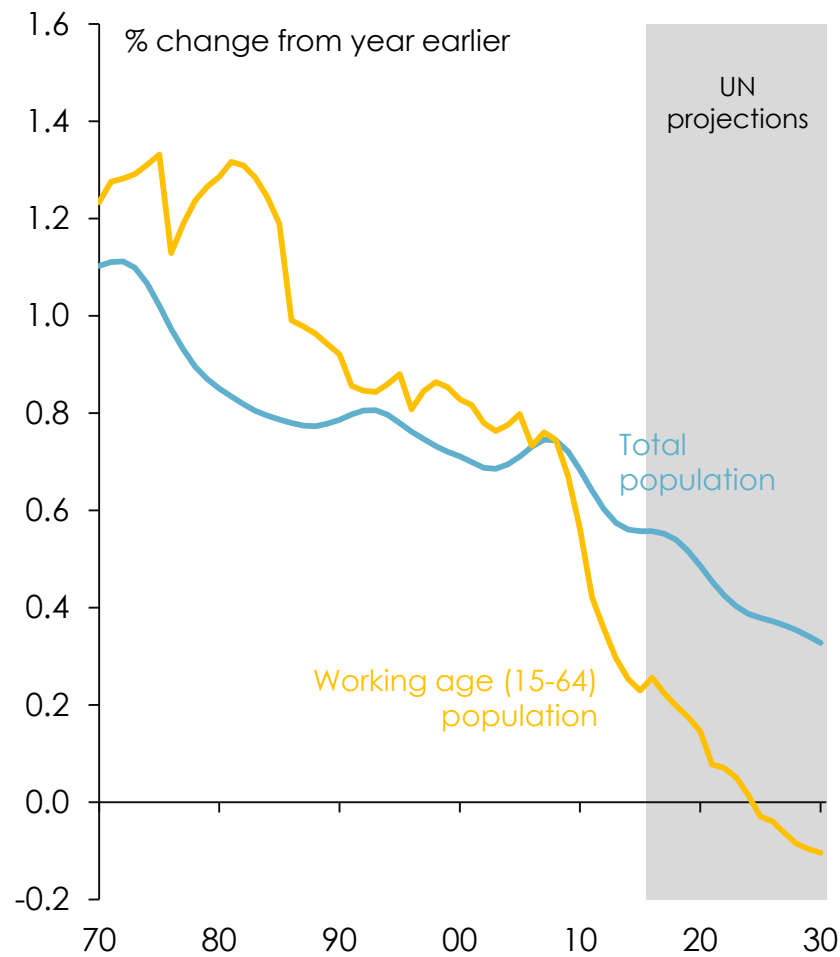
3-year change in OECD unemployment rate



Source: Organization for Economic Co-operation & Development (OECD). The OECD comprises 34 (mostly) 'advanced' economies in North America and Europe, plus Japan, Korea, Australia, New Zealand, Mexico, Chile, Turkey & Israel.

The scope for more rapid economic growth in 'advanced' economies is limited by demographic change and slower productivity growth

OECD area population growth



OECD area labour productivity growth



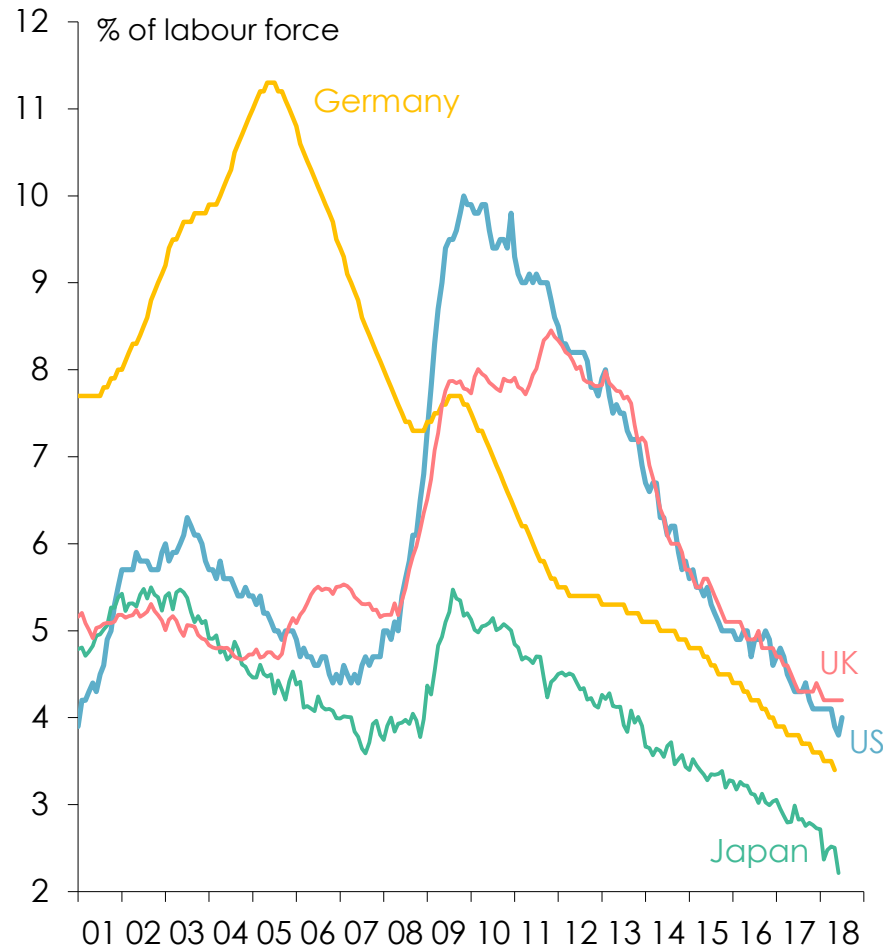
OECD area potential GDP growth



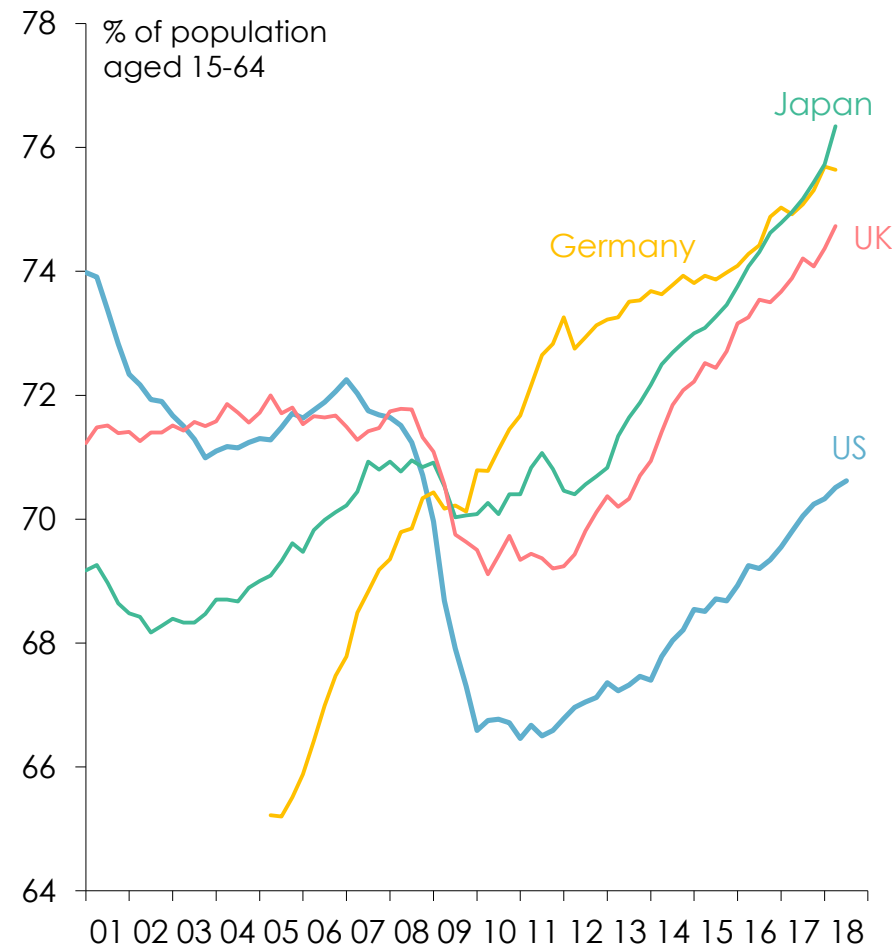
Sources: United Nations Economic & Social Affairs Division, Population Branch, *World Population Prospects – The 2017 Revision*; Organization for Economic Co-operation & Development (OECD), *Economic Outlook* database June 2017. 'Potential growth' means growth in the level of real GDP assuming full employment of the available labour force. Note that the OECD area includes some 'emerging' economies (Mexico, Turkey, Chile) and excludes some 'advanced' ones (Taiwan, Hong Kong and Singapore).

Labour markets are getting tighter – especially in the four largest ‘advanced’ economies

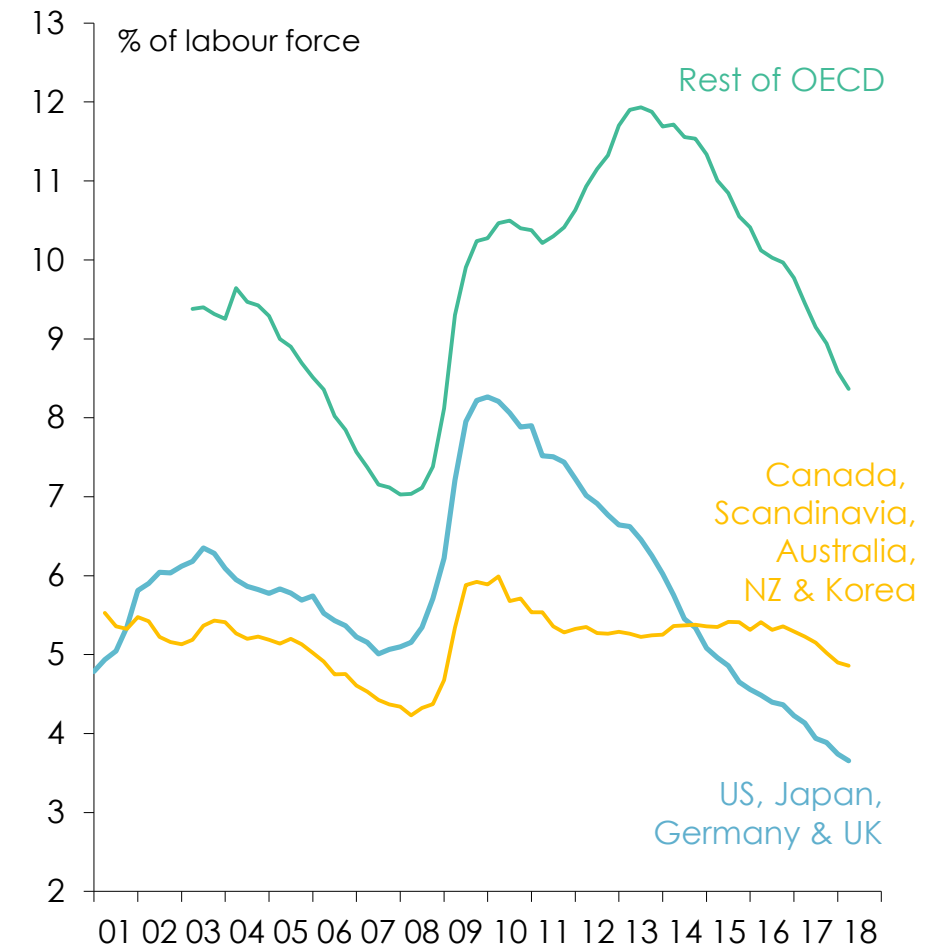
Unemployment – 4 largest ‘advanced’ economies



‘Employment rates’ – 4 largest ‘advanced’ economies



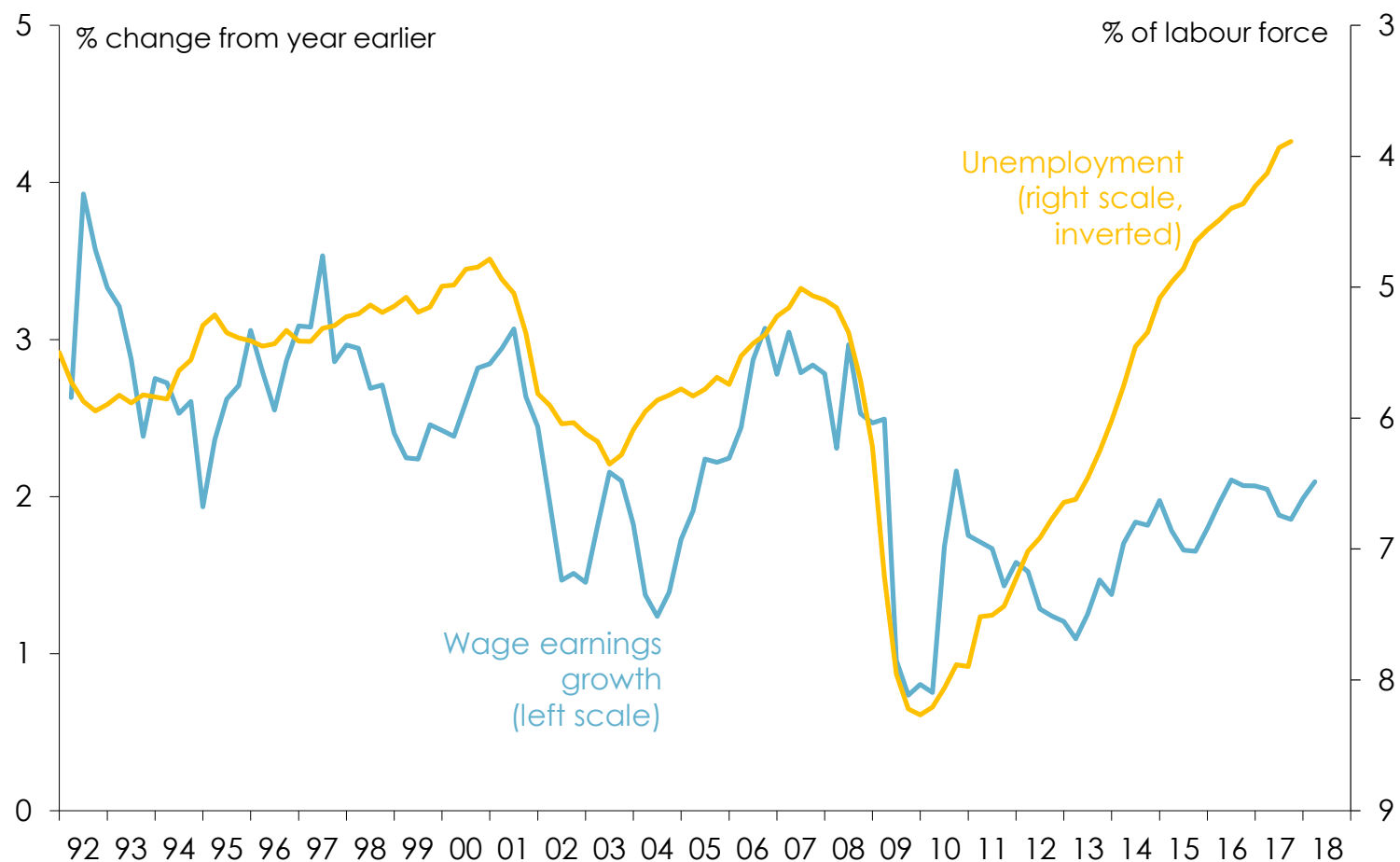
Unemployment rates – other OECD economies



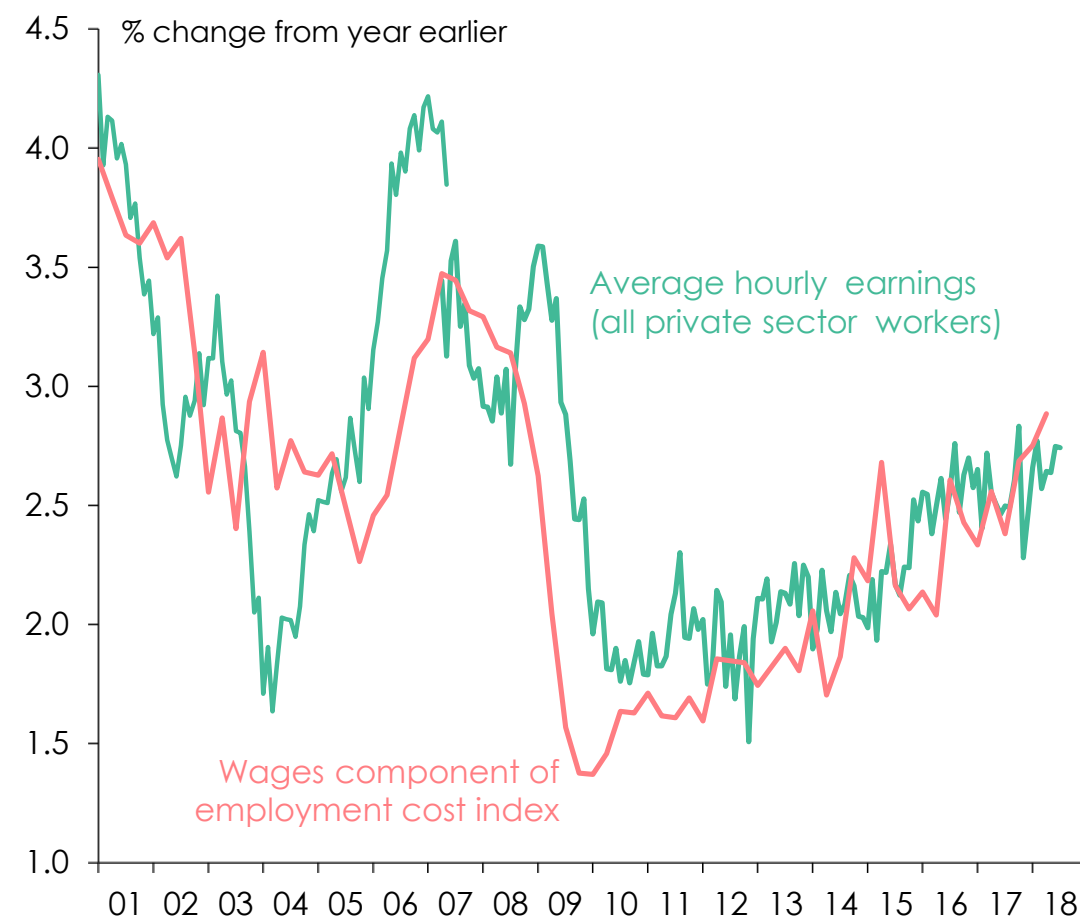
Sources: US Bureau of Labor Statistics; Eurostat; Japan Labour Ministry; Bundesagentur für Arbeit; UK Office of National Statistics; OECD Main Economic Indicators; Corinna Economic Advisory.

Wages are taking longer to respond to labour market tightening than they did pre-GFC – although wages growth seems to be creeping up in the US

Wages growth and unemployment in the four largest 'advanced' economies



US measures of wages growth

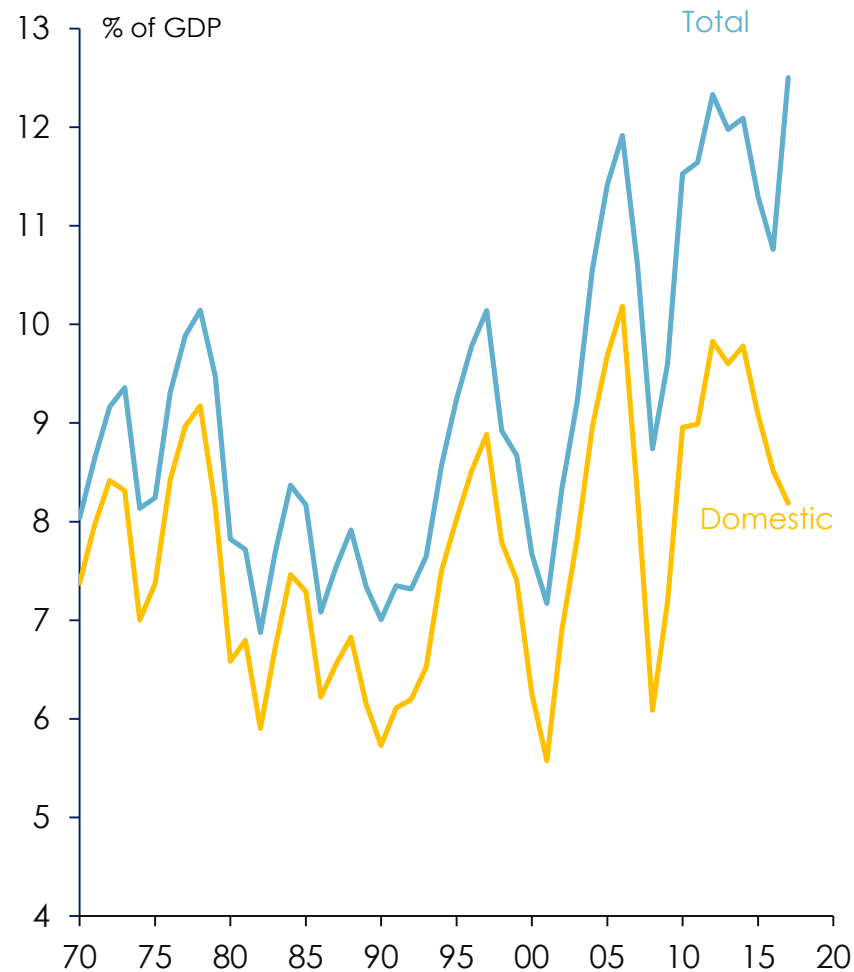


Note: Wages growth and unemployment are averages for the US, Japan, Germany and the UK, weighted by total employment.

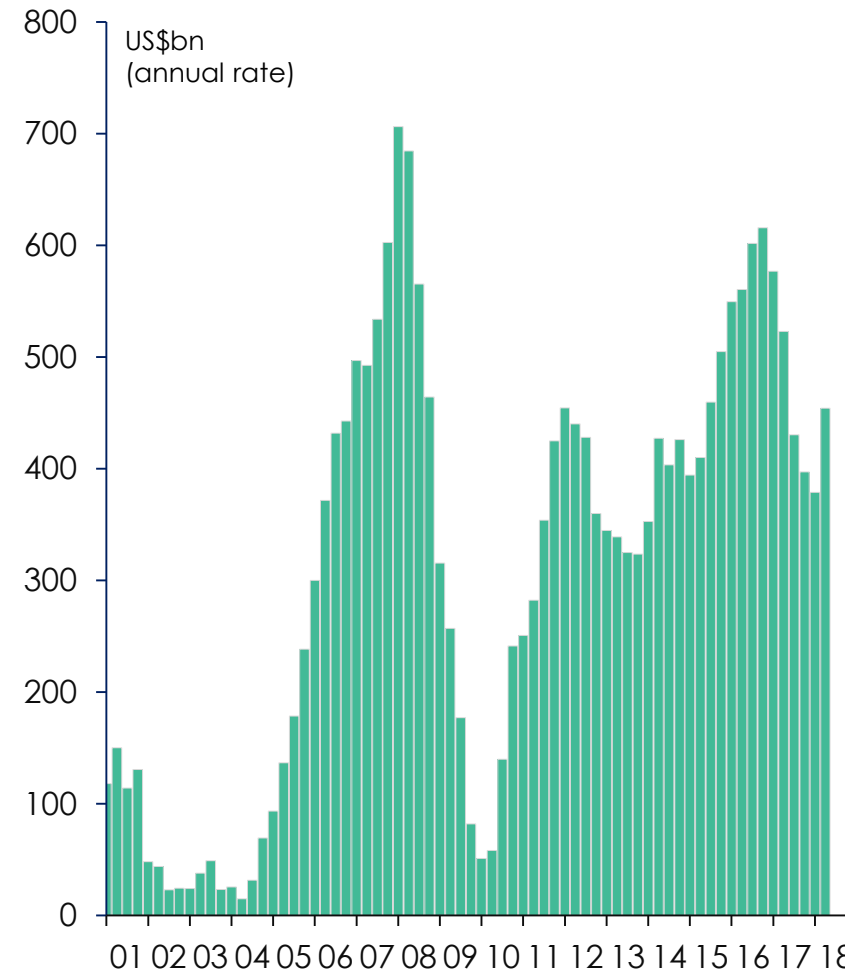
Sources: US Bureau of Labor Statistics; Eurostat; Japan Labour Ministry; Bundesagentur für Arbeit; UK Office of National Statistics; OED; Corinna Economic Advisory.

Sluggish wages growth has been one factor boosting corporate profits – which with buy-backs and record low bond yields has buoyed stocks

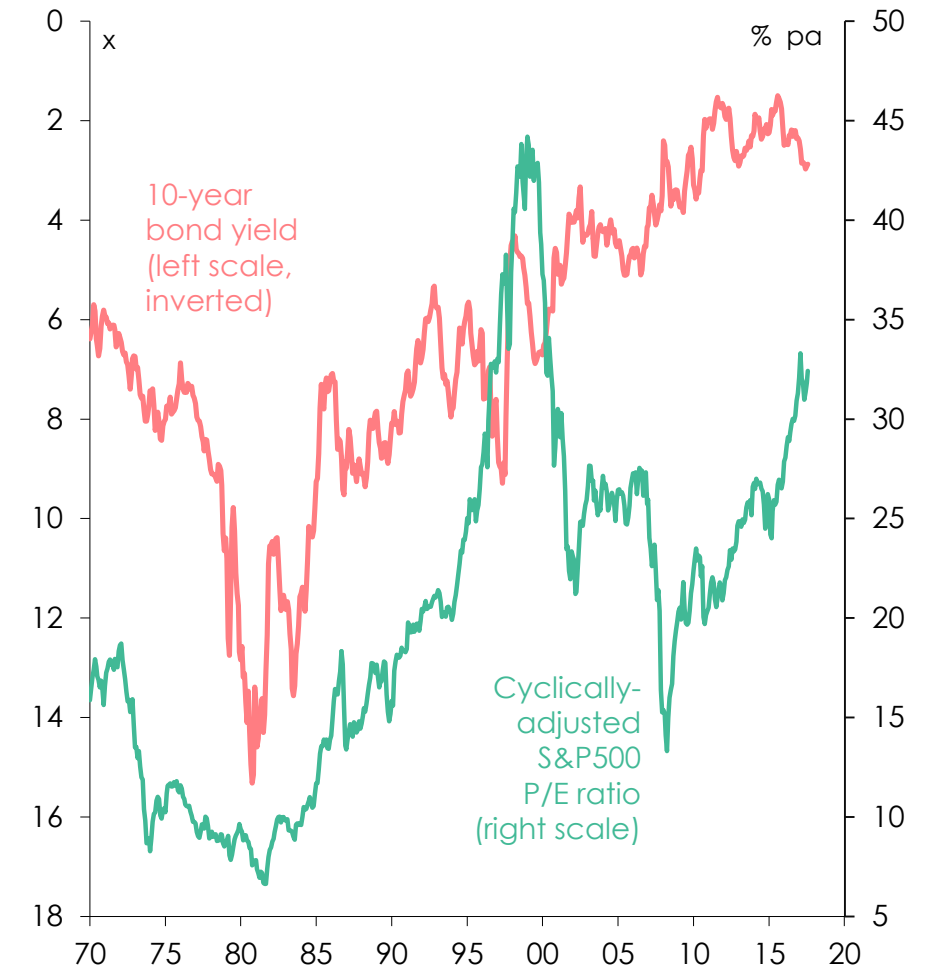
US pre-tax corporate profits as a pc of GDP



US share buybacks



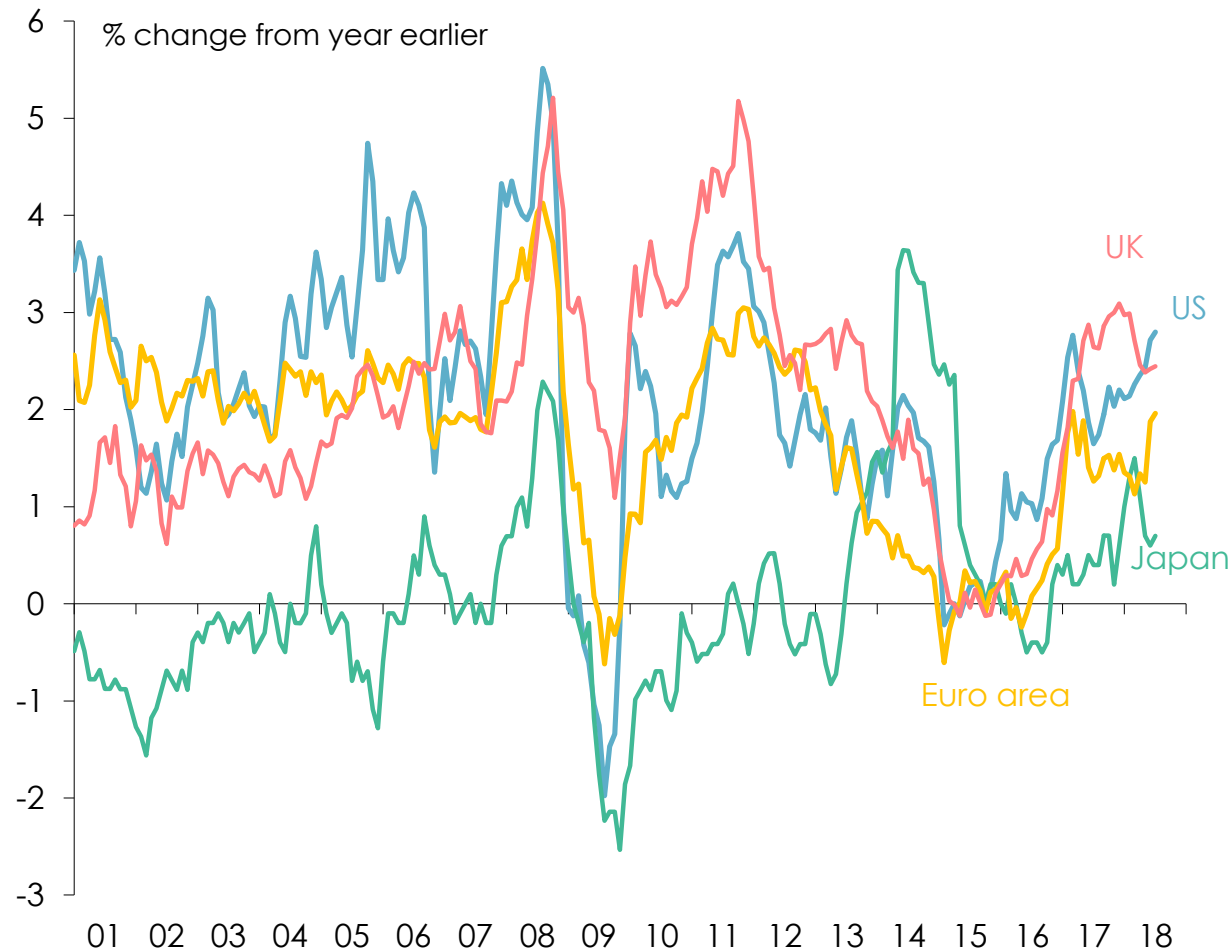
US bond yields and P/E ratio



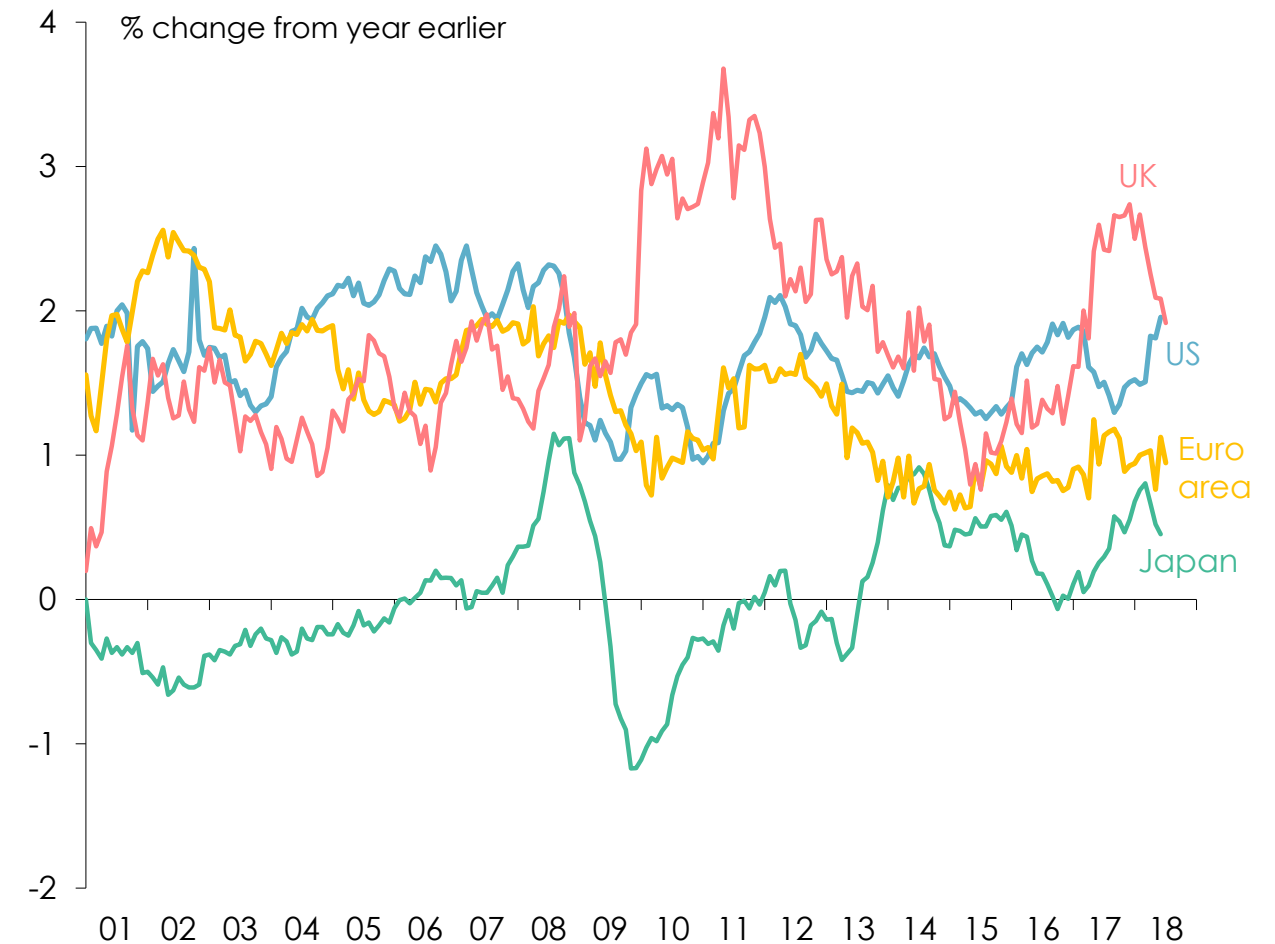
Sources: US Bureau of Economic Analysis; US Federal Reserve Board ; Robert Shiller; Thomson Reuters Datastream.

Inflation in the major 'advanced' economies is now more clearly heading to where central banks want it to be – although “we’re not there yet”

‘Headline’ consumer price inflation



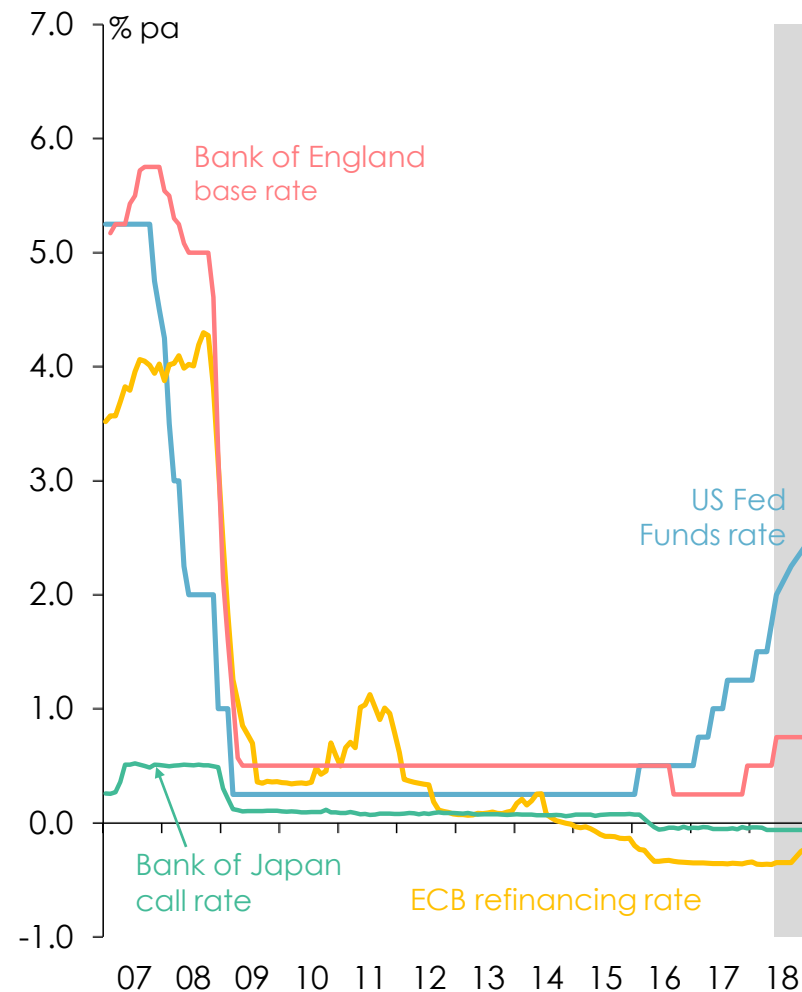
Central bank preferred measures of ‘core inflation’



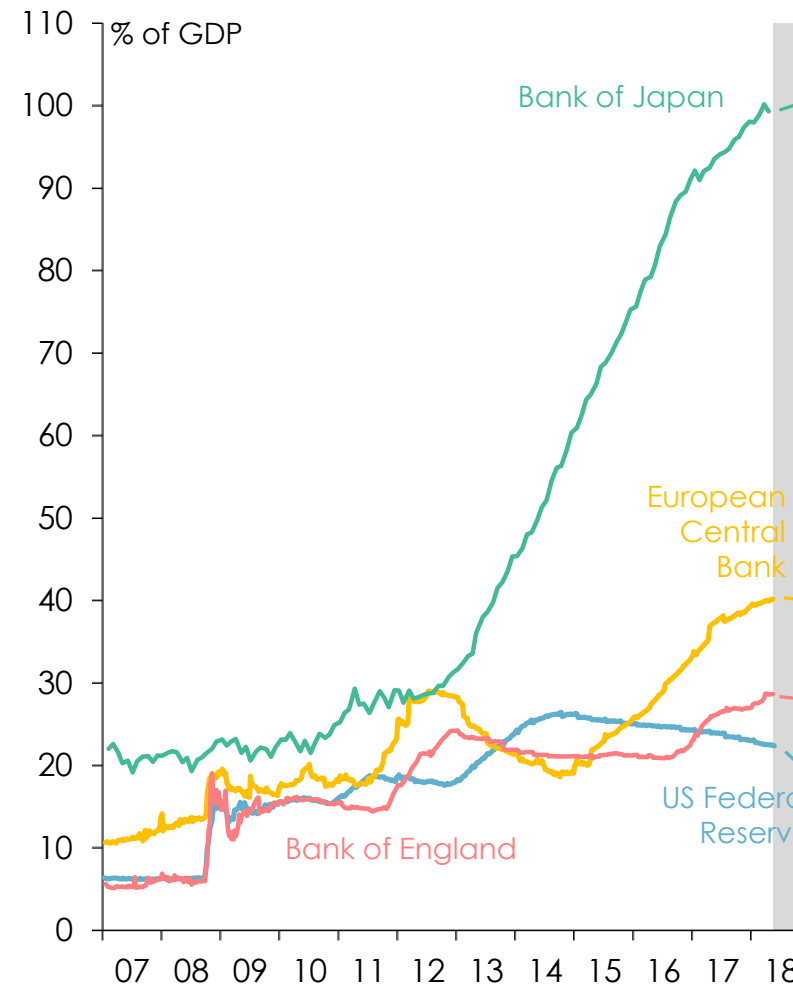
Sources: US Bureau of Labor Statistics and Bureau of Economic Analysis; Eurostat; Japan Statistics Bureau; Bank of Japan; UK Office of National Statistics.
Central bank preferred measure of 'core inflation' is private consumption expenditure deflator excluding food and energy in the US; CPI excluding food and energy in the euro area and UK; and 'trimmed mean' in Japan.

So the era of ultra-cheap money is coming to an end – as bond markets began to sense from the middle of last year

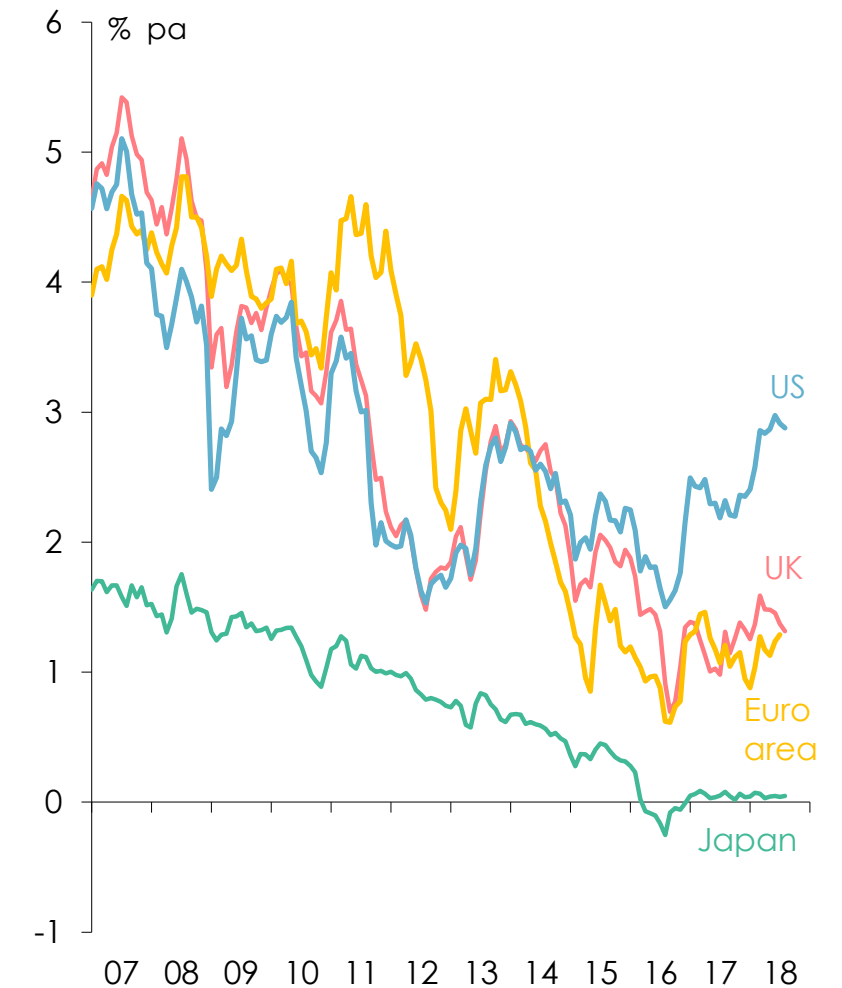
Major central bank policy interest rates



Major central bank balance sheets



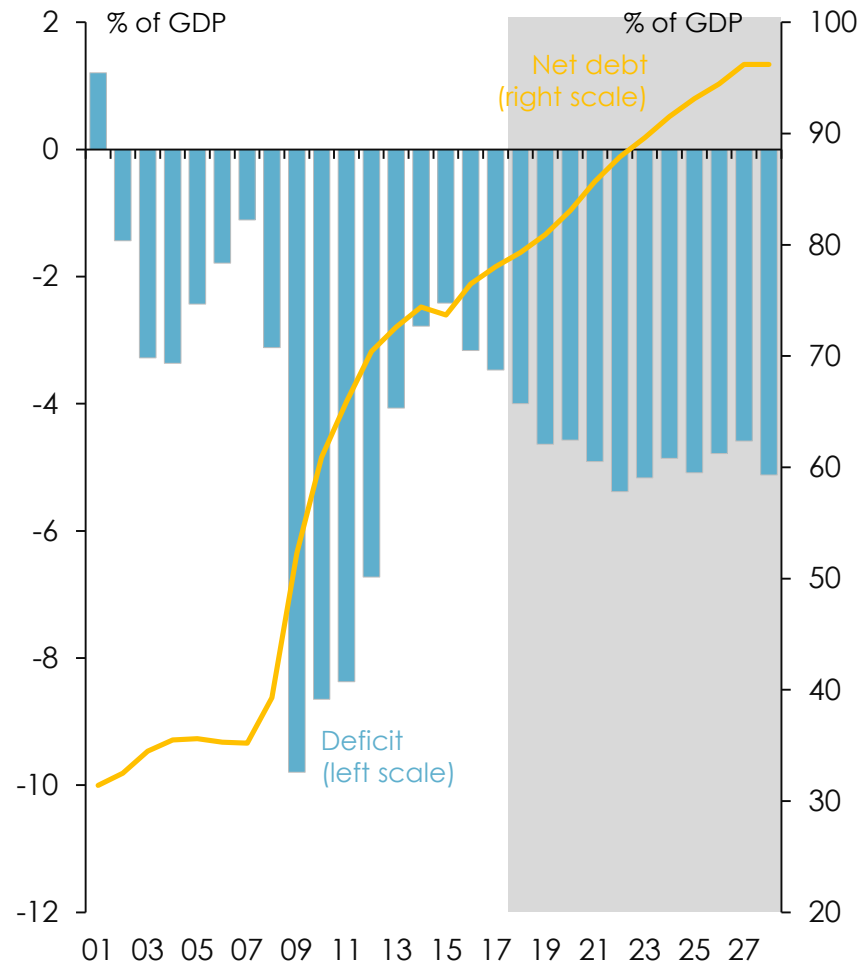
10-year bond yields



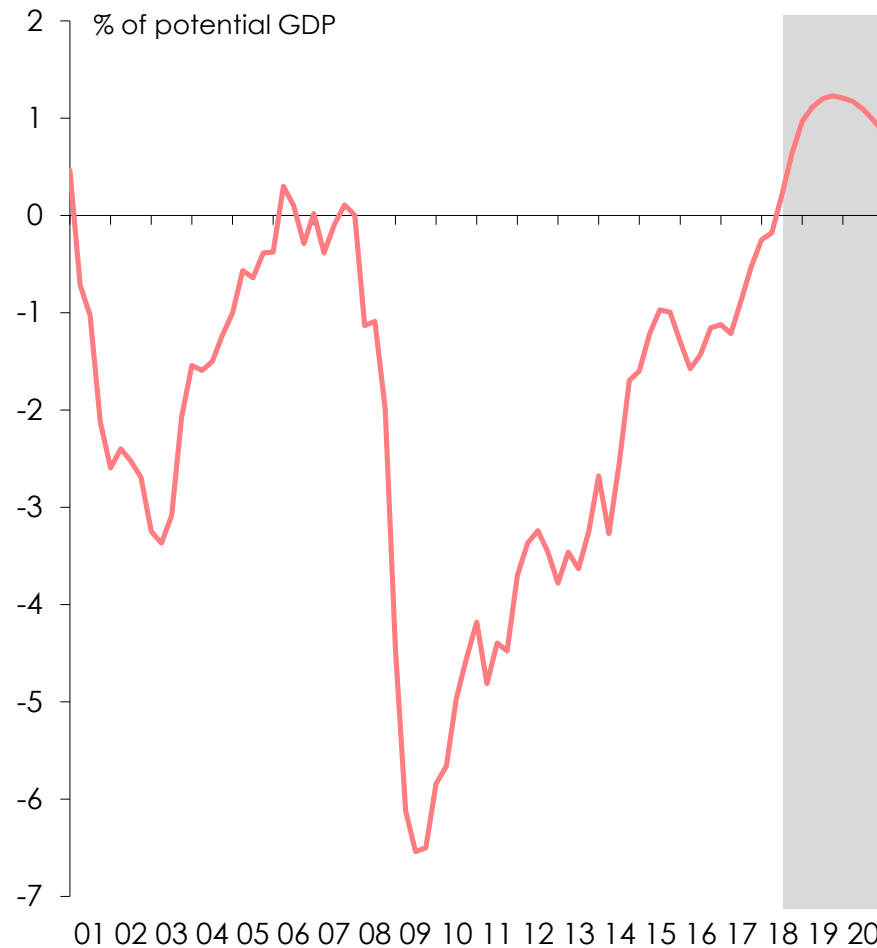
Source: Thomson Reuters Datastream; US Federal Reserve; European Central Bank; Bank of Japan.

US fiscal stimulus is spectacularly ill-timed from an economic management standpoint and will add to upward pressure on interest rates

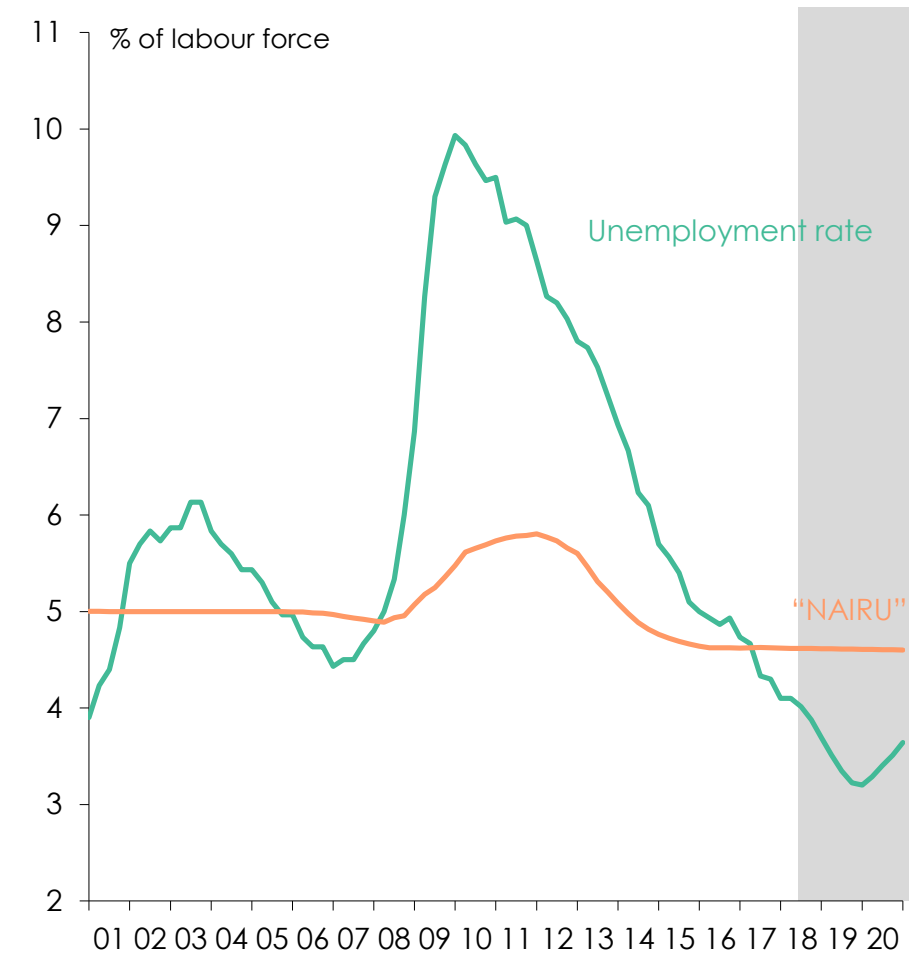
US Federal Government budget deficit and debt



US 'output gap'



US unemployment rate and 'NAIRU'

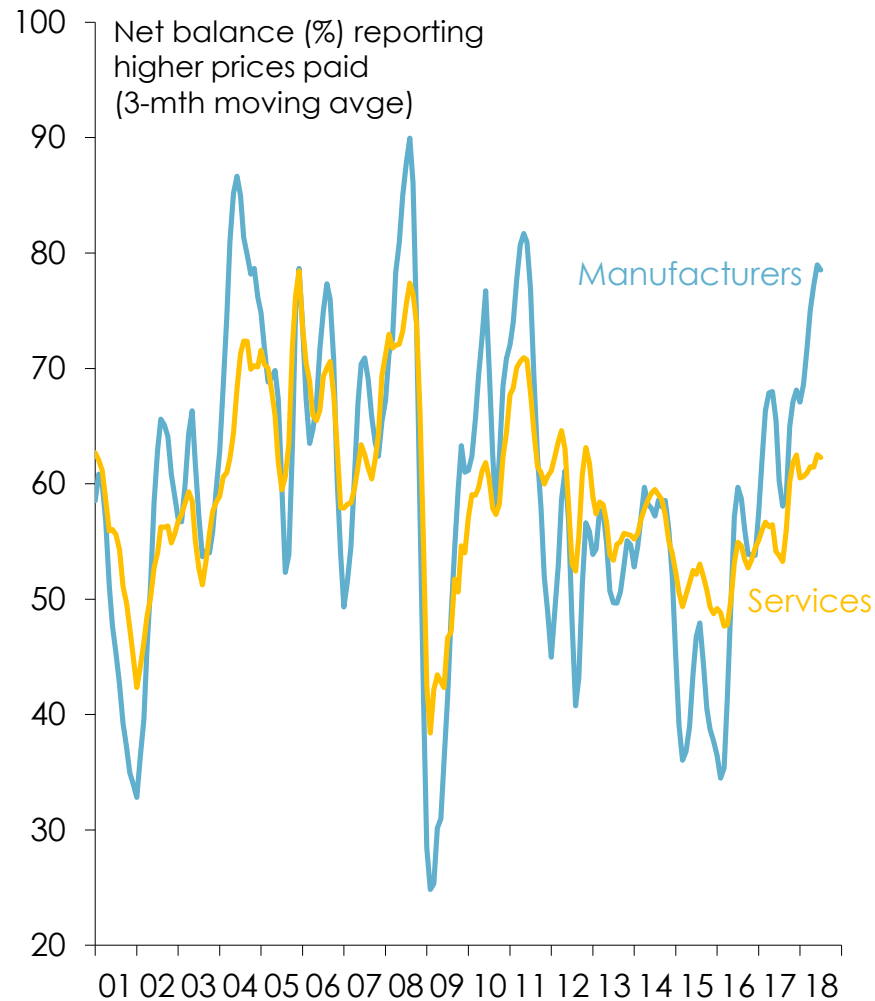


Note: 'Net debt' excludes debt held by the US Federal Reserve. The 'output gap' is the difference between actual and 'potential' GDP. The 'NAIRU' or non-accelerating inflation rate of unemployment is the lowest level of unemployment consistent with stable inflation.

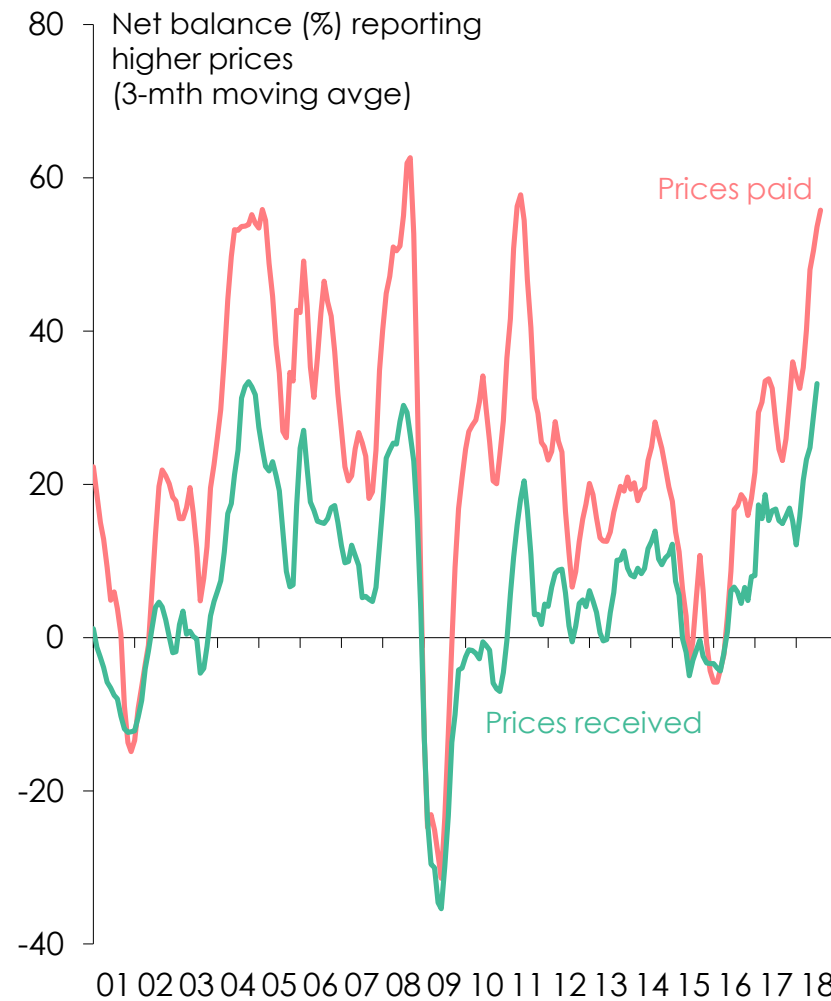
Source: US Congressional Budget Office, *The Budget and Economic Outlook: 2018 to 2028*.

US 'upstream' price pressures have increased noticeably – partly as a result of the Trump Administration's tariff measures

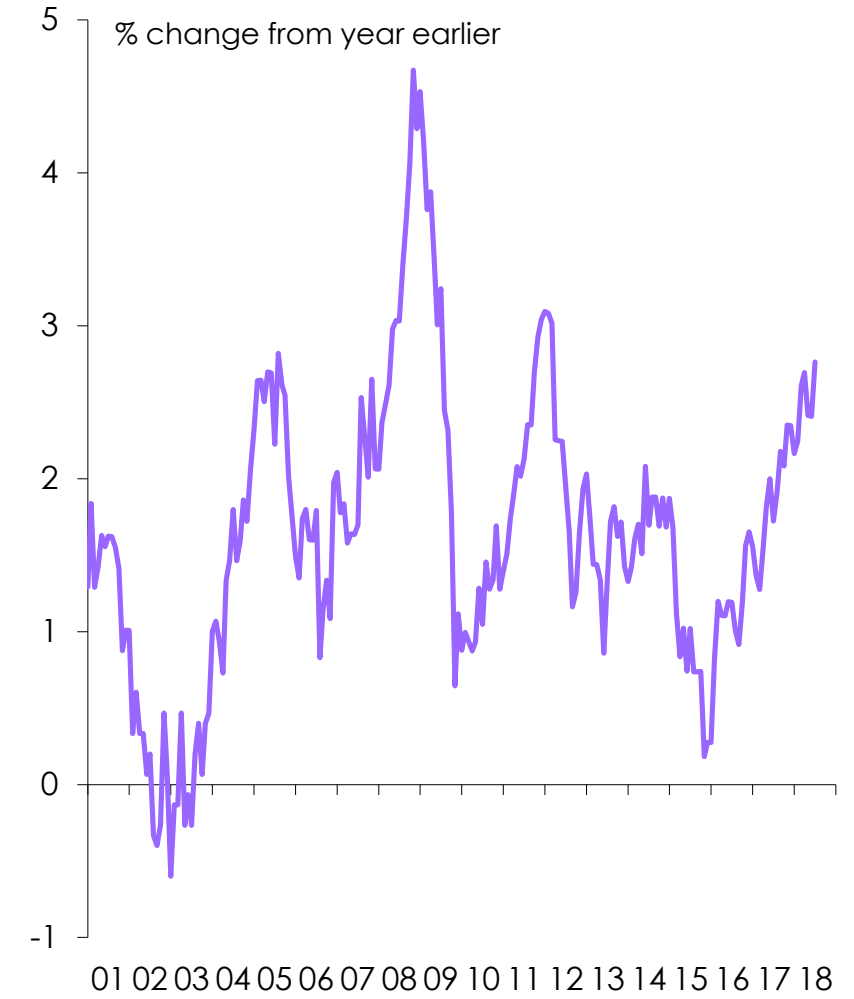
'Prices paid' – purchasing managers (ISM) surveys



'Prices paid and received' – Philadelphia Fed survey



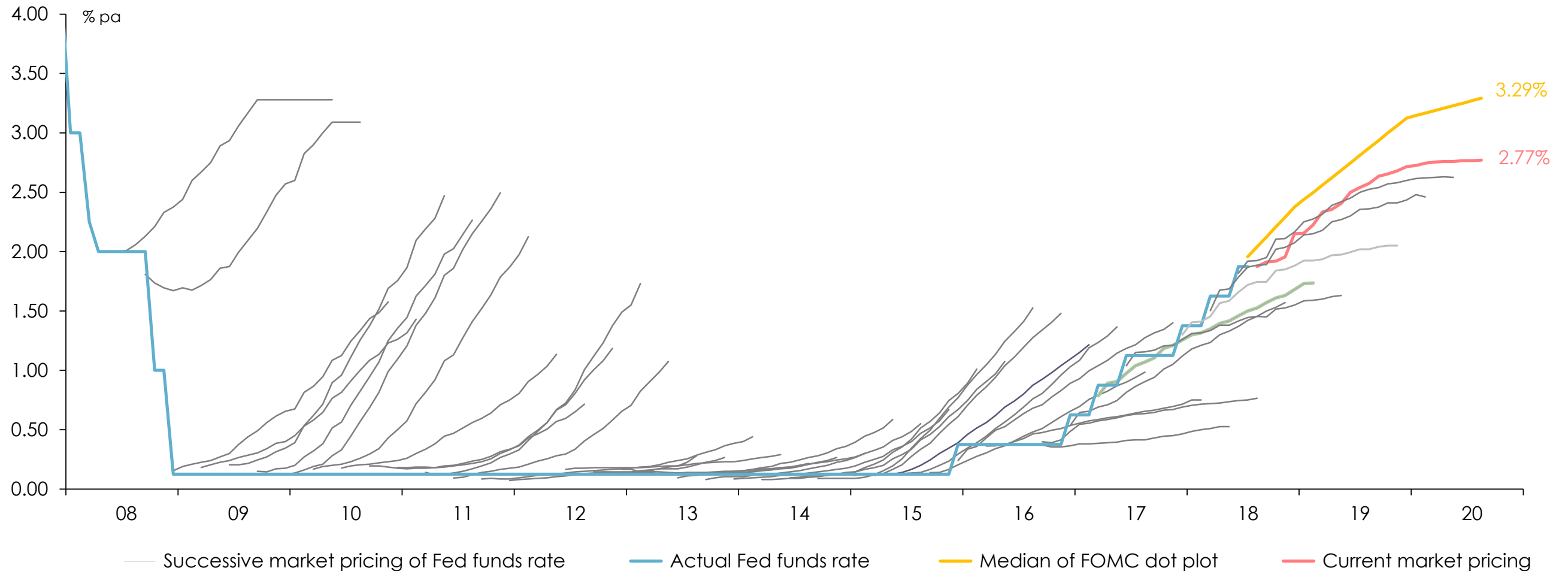
Producer price index – goods excluding food & energy



Sources: Institute of Supply Management (ISM) ; Federal Reserve Bank of Philadelphia; US Bureau of Labor Statistics.

Having consistently under-estimated how long the Fed would keep rates at zero, markets are now under-estimating how much the Fed will raise them

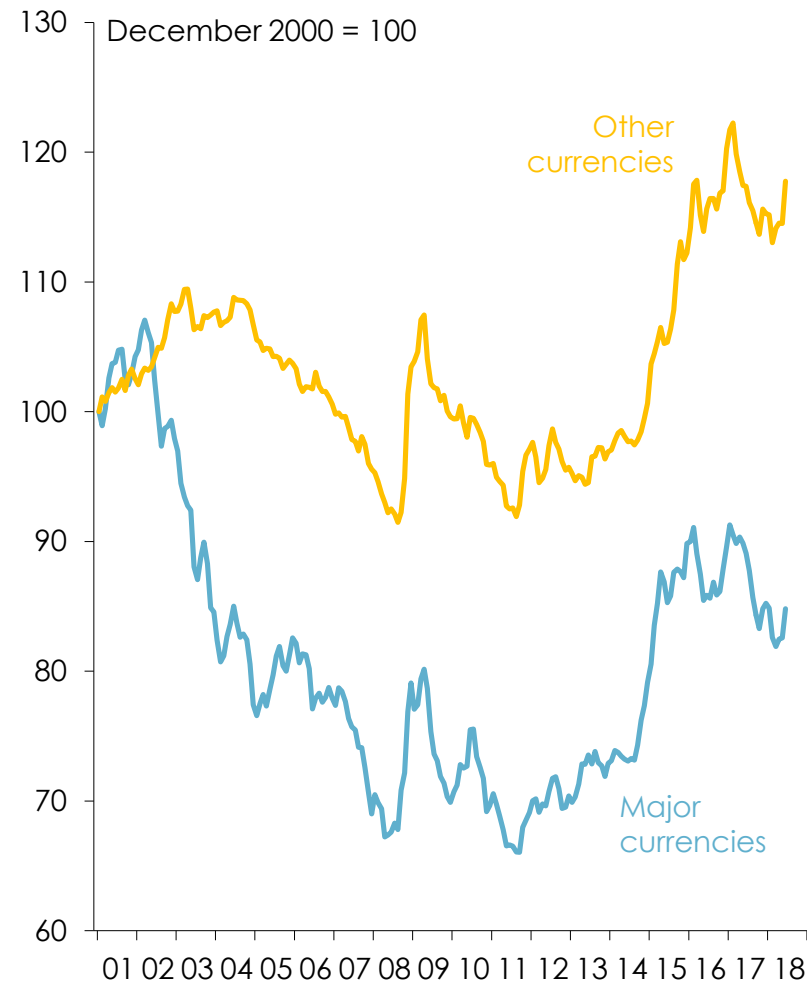
Market pricing of the US Fed funds rate vs actual and latest 'dot plot' of Federal Open Market Committee (FOMC) members' forecasts



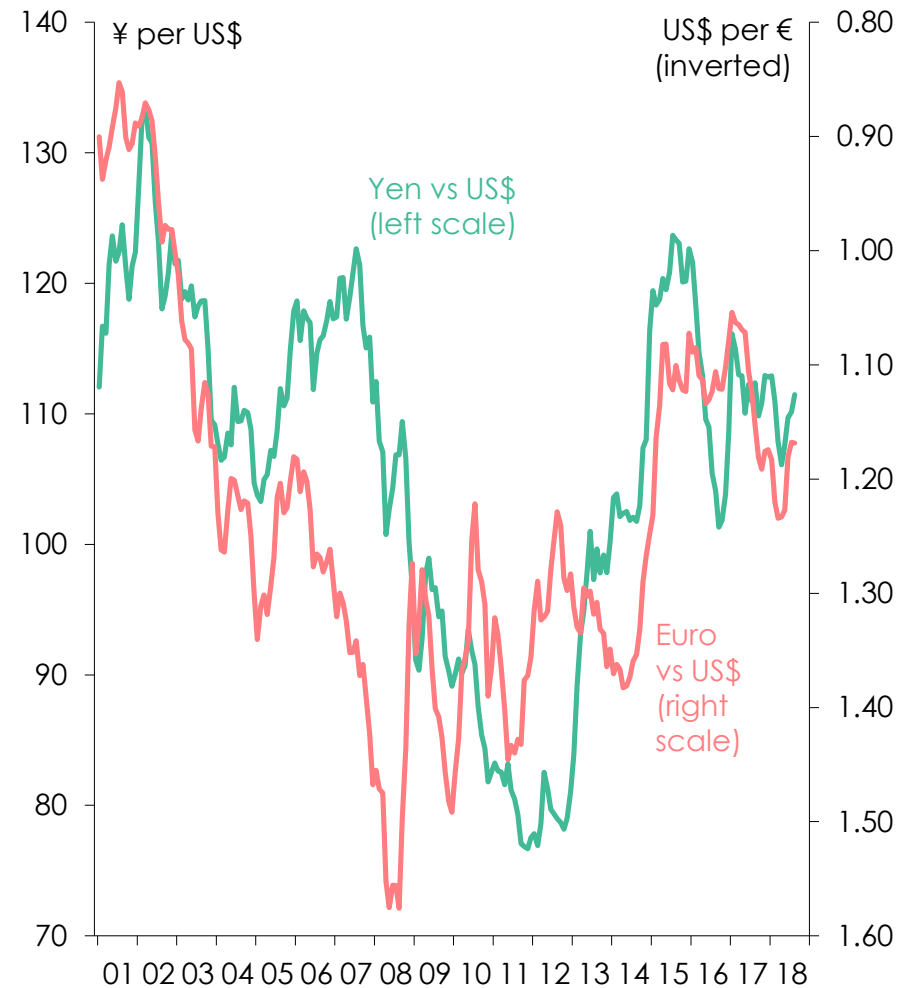
Sources: IFM Investors; Bloomberg.

Widening interest rate spreads between the US and other major economies should see the US\$ strengthen – which could mean trouble for some others

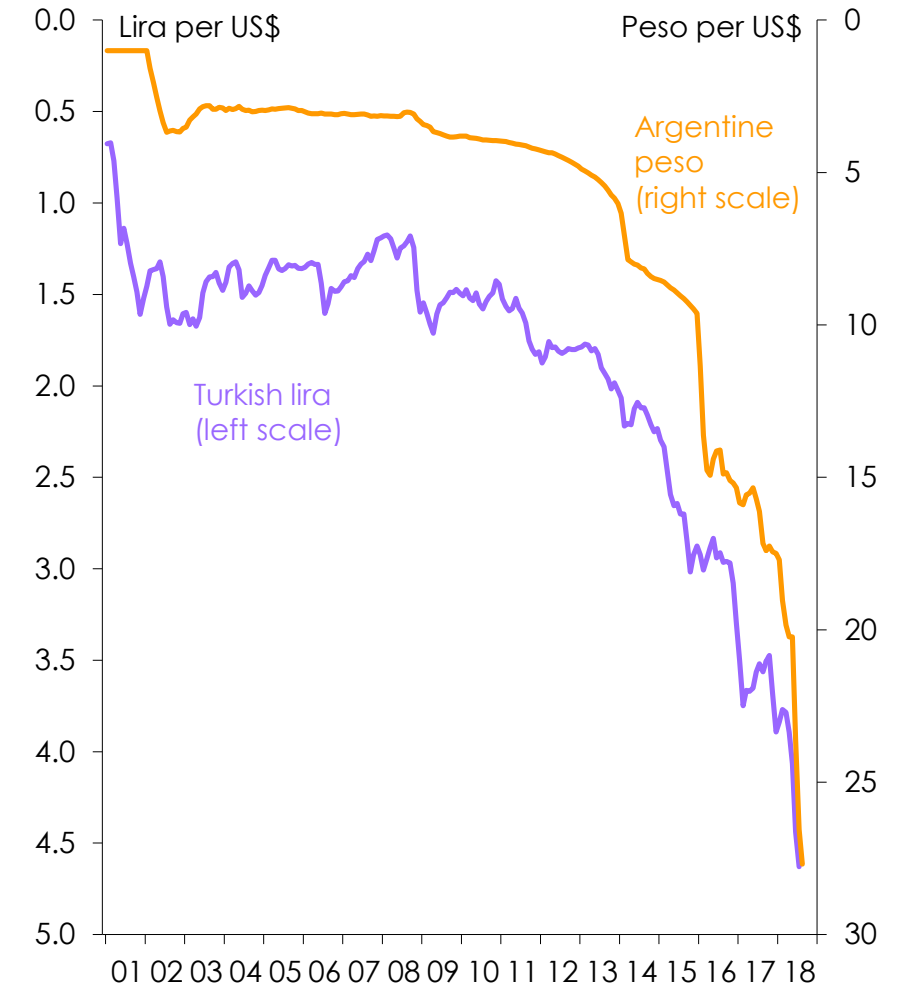
US dollar index vs major and other currencies



US dollar vs Japanese yen and euro



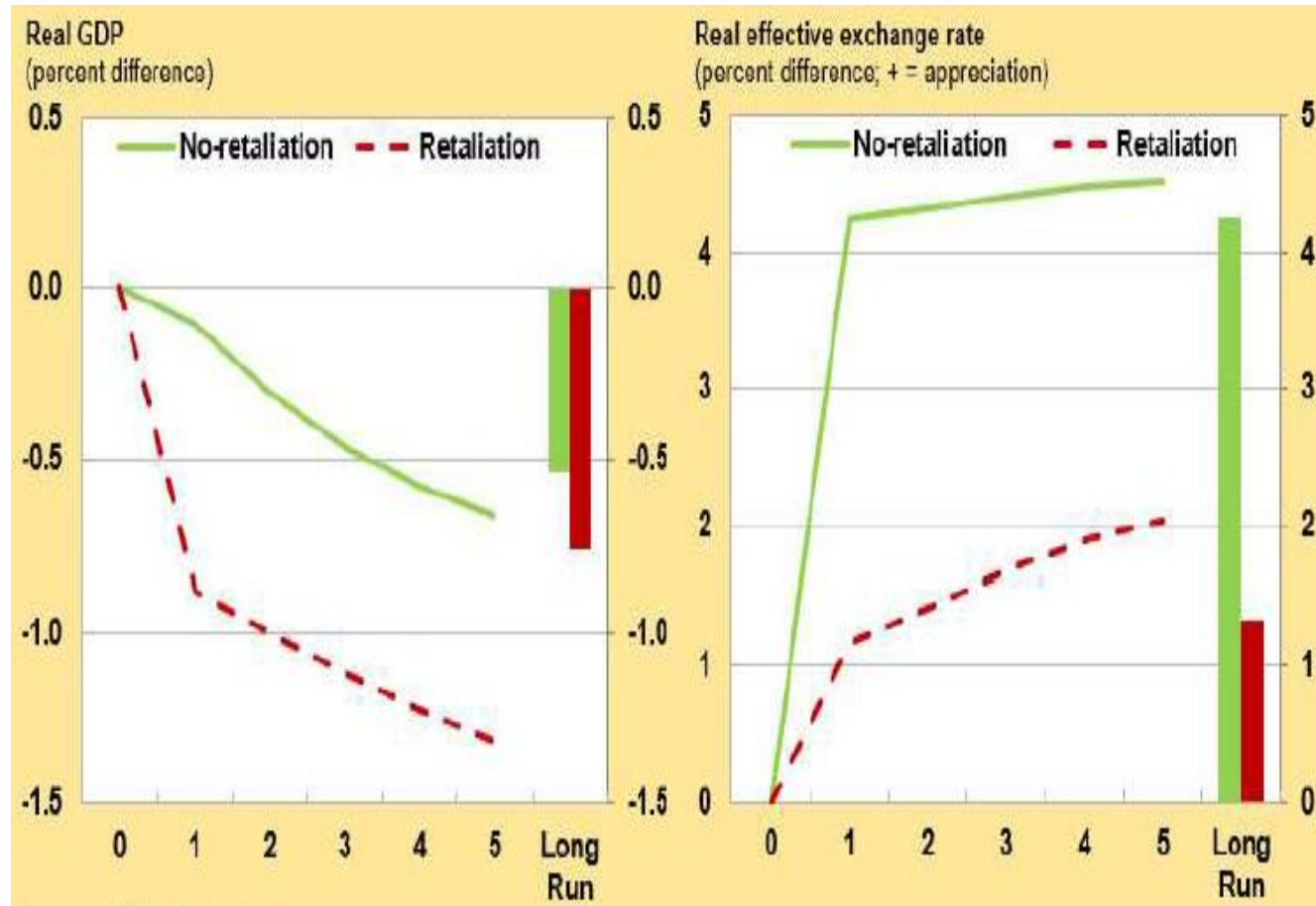
Turkish lira and Argentine peso vs US dollar



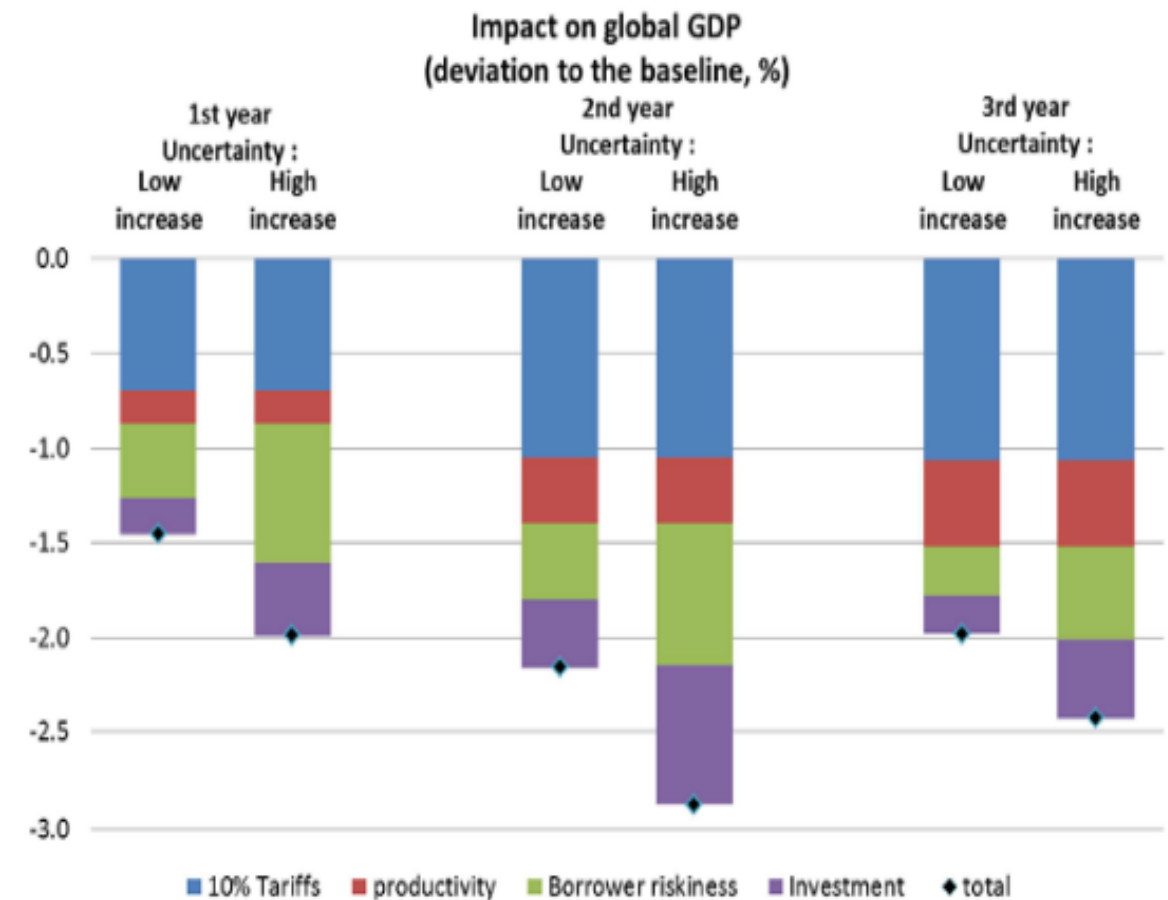
Source: Thomson Reuters Datastream.

Markets are right to be worried about the possible consequences of a 'trade war' – but could be under-estimating them

Possible impact of 20% US tariffs on imports from East Asia on US economy



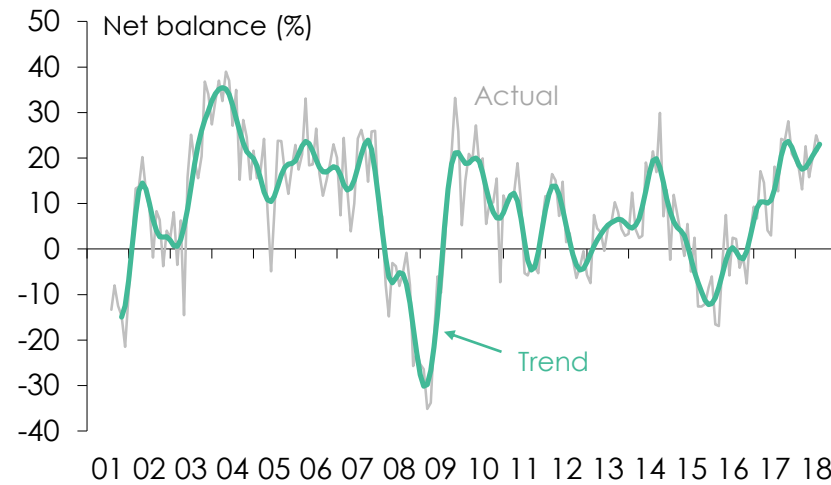
Possible impact of a 10pc pt increase in global tariffs on global GDP



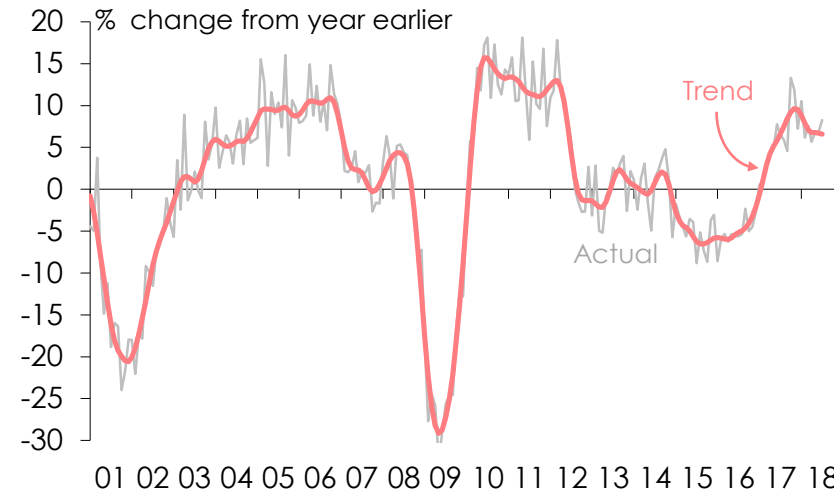
Sources: Maurice Obstfeld, *Tariffs do more harm than good at home*, IMF Blog, 8th September 2016;
Antoine Berthou et al, *Quantifying the losses from a global trade war*, Banque de France, 19th July 2018

The world economy is currently 'as good as it's going to get' – and many 'leading indicators' with good track records are looking 'peaky'

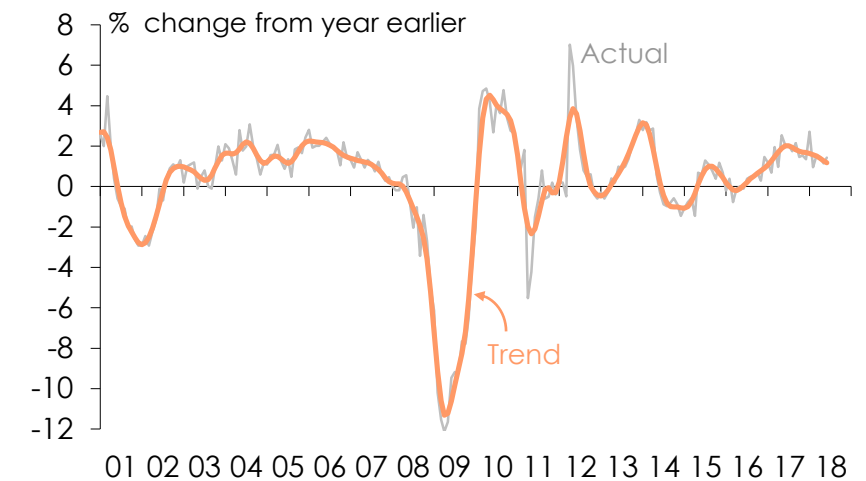
US – NY Fed 'Empire State' survey



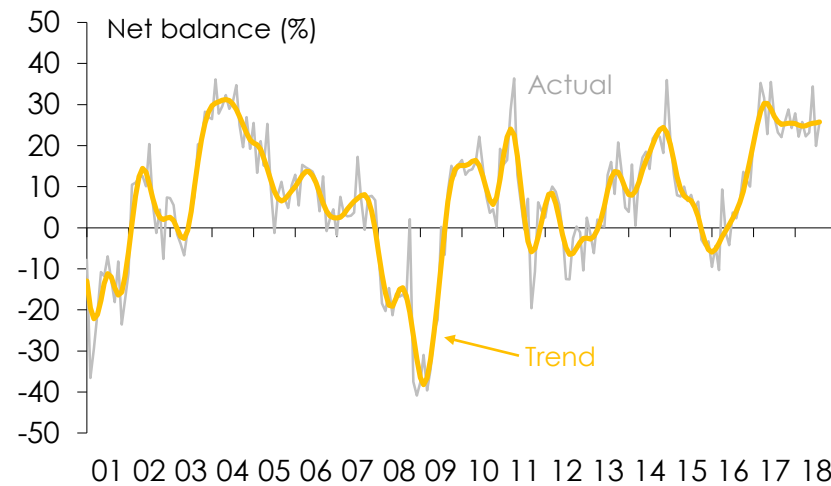
US – 'core' capital goods orders



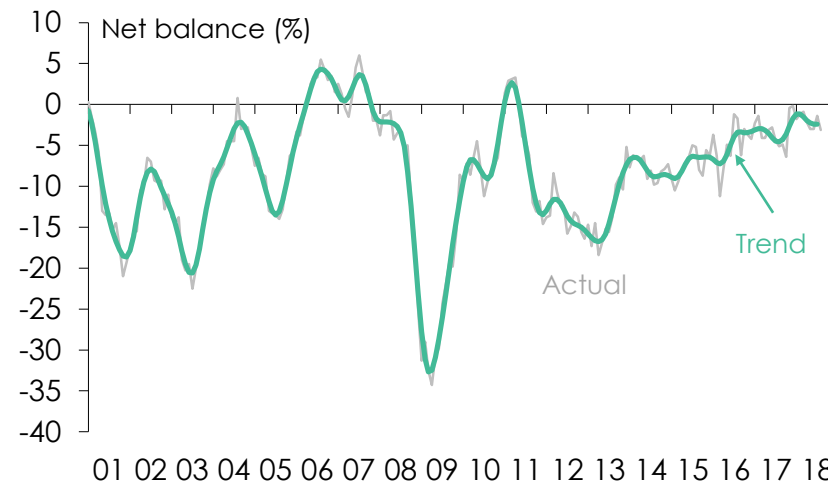
Japan – METI business activity index



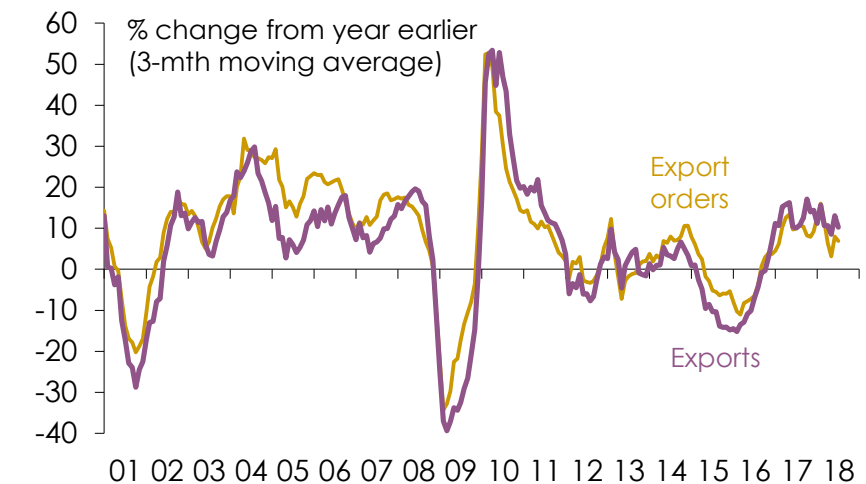
US – Philly Fed business survey



Euroland – BNB business survey

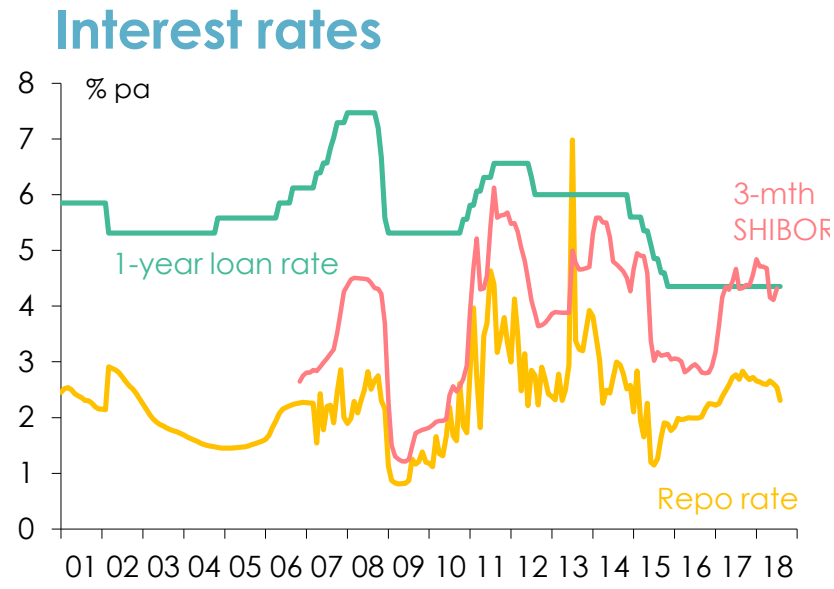
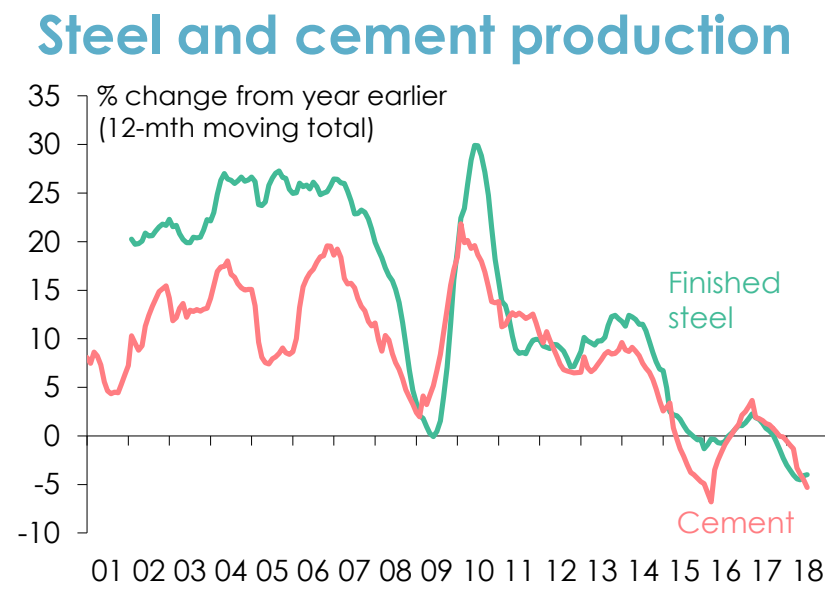
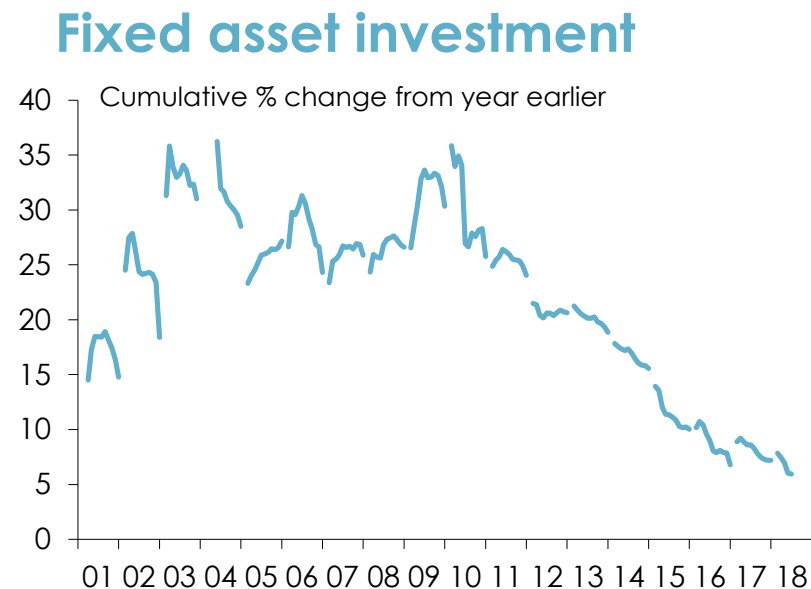
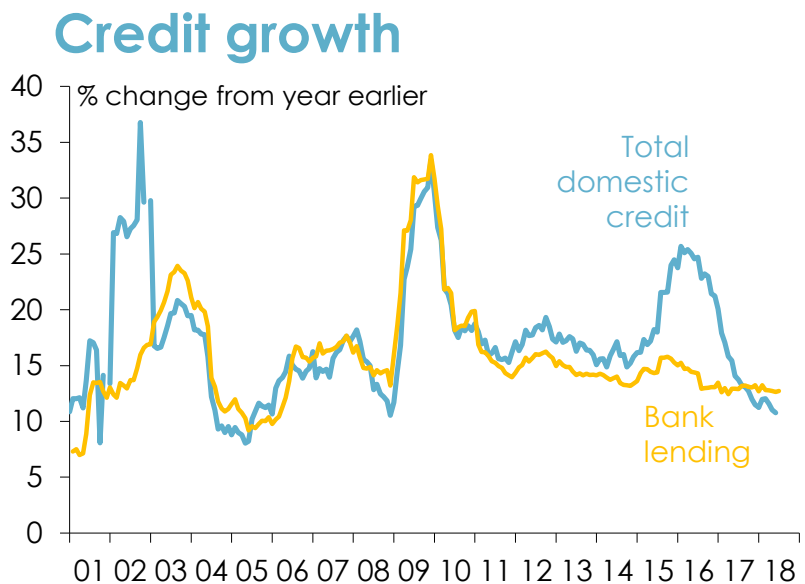
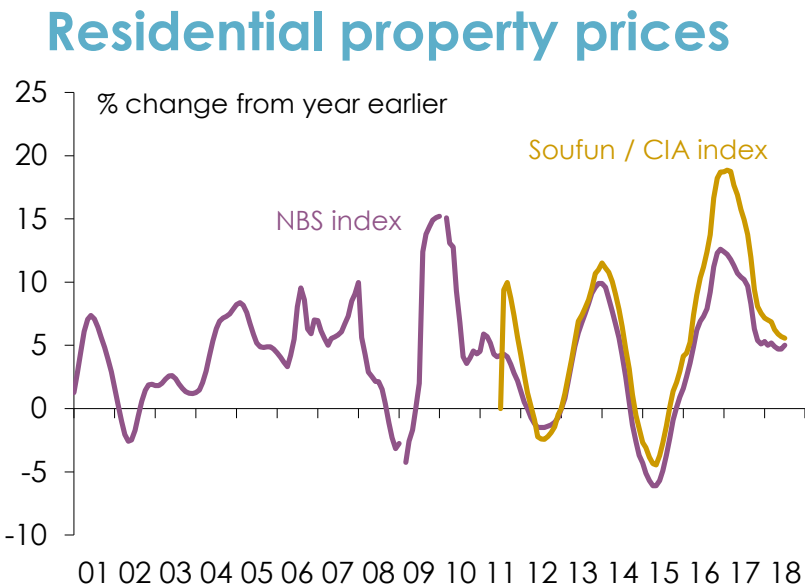
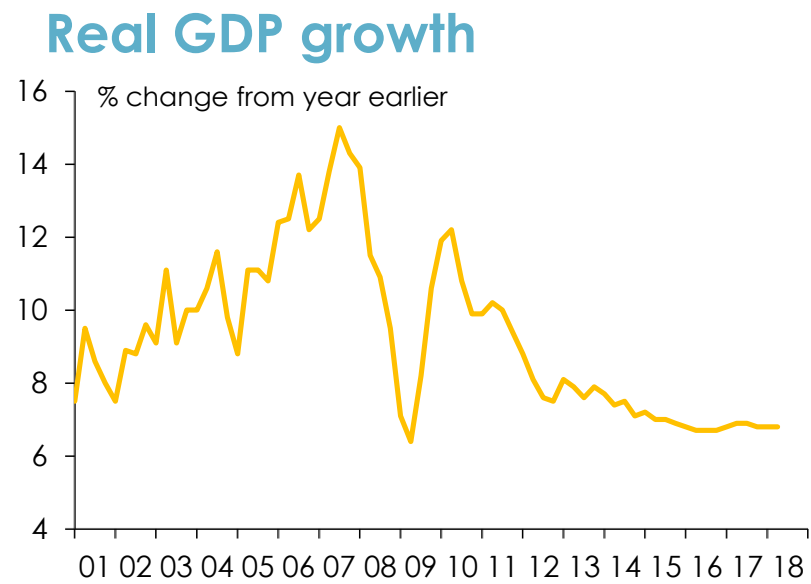


Taiwan – exports & export orders



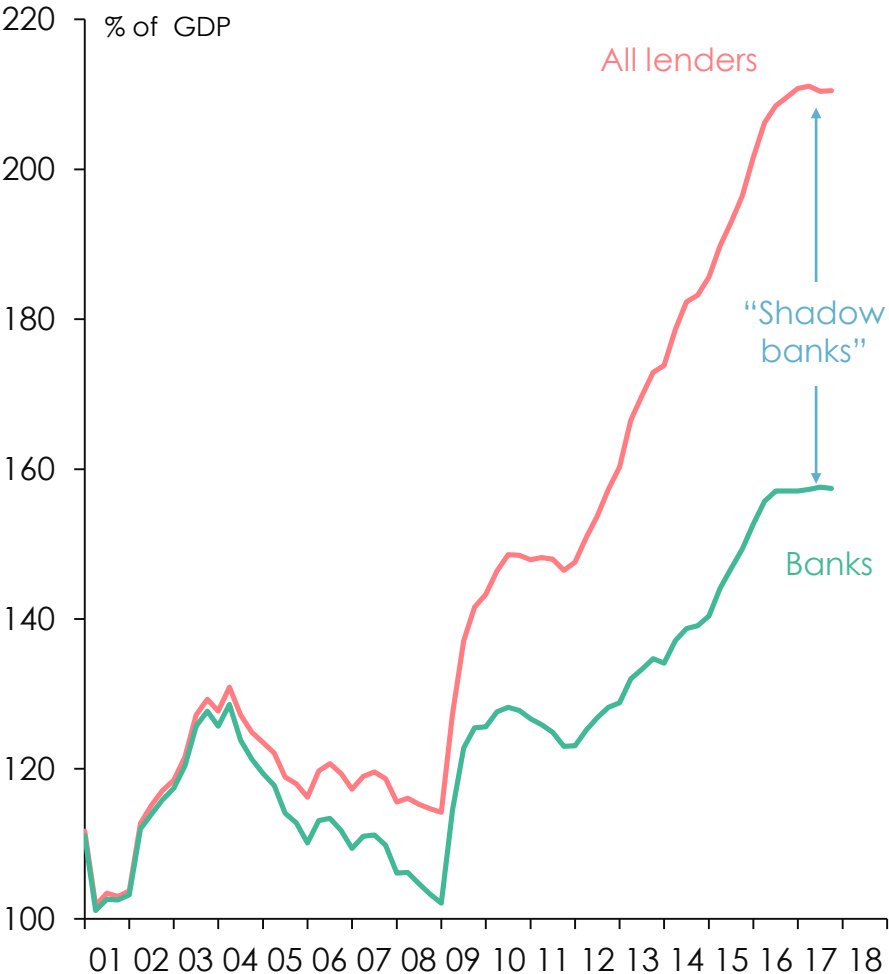
Note: US 'core' capital goods orders excludes defence equipment and aircraft. Sources: Federal Reserve Banks of New York and Philadelphia; US Commerce Department; Belgian National Bank; Japan Ministry of External Trade & Industry; Taiwan Statistical Bureau.

Amazingly steady Chinese GDP figures masking a slow-down in some of the more commodity-intensive sectors of the economy

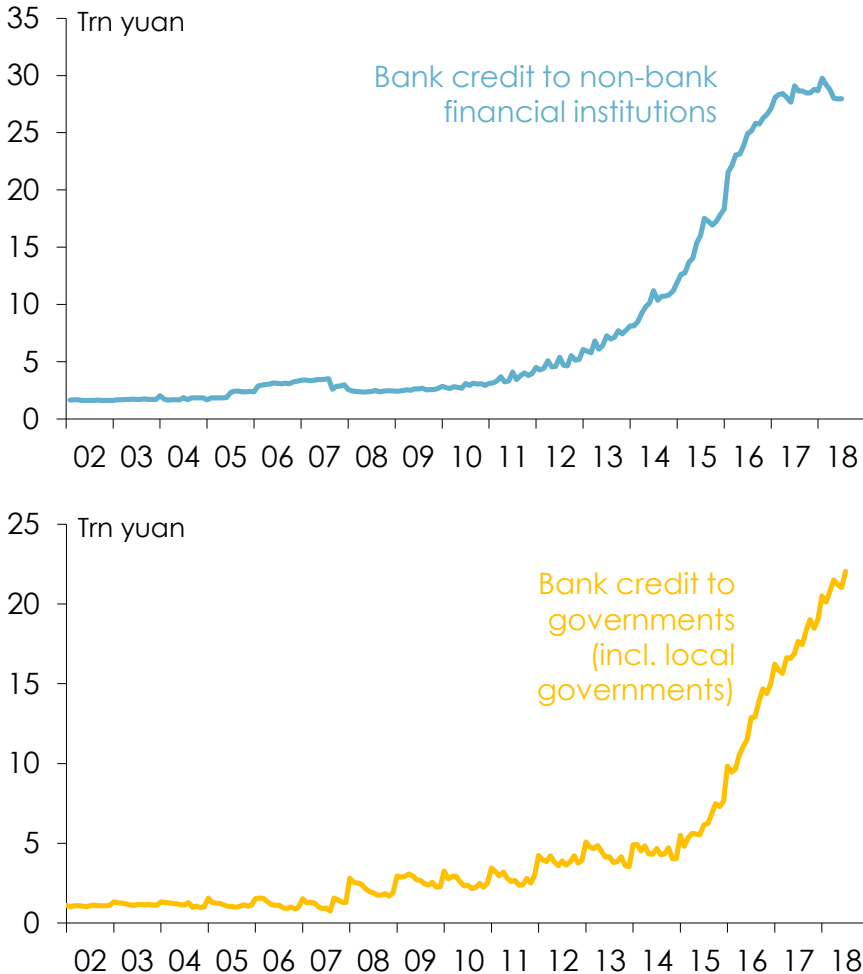


A particular area of concern is the rapid growth in ‘shadow bank’ lending – and shadow banks’ connections with the banking system

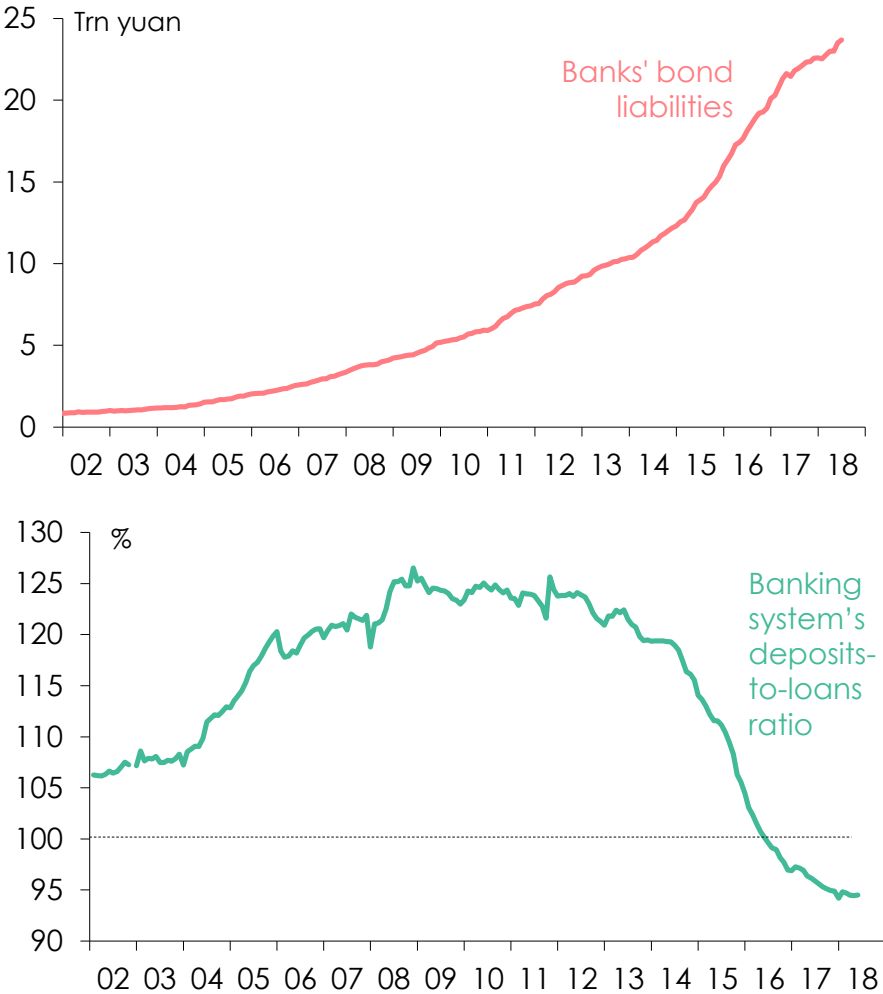
Credit to the private non-financial sector, by source



Bank lending to ‘shadow banks’ and governments



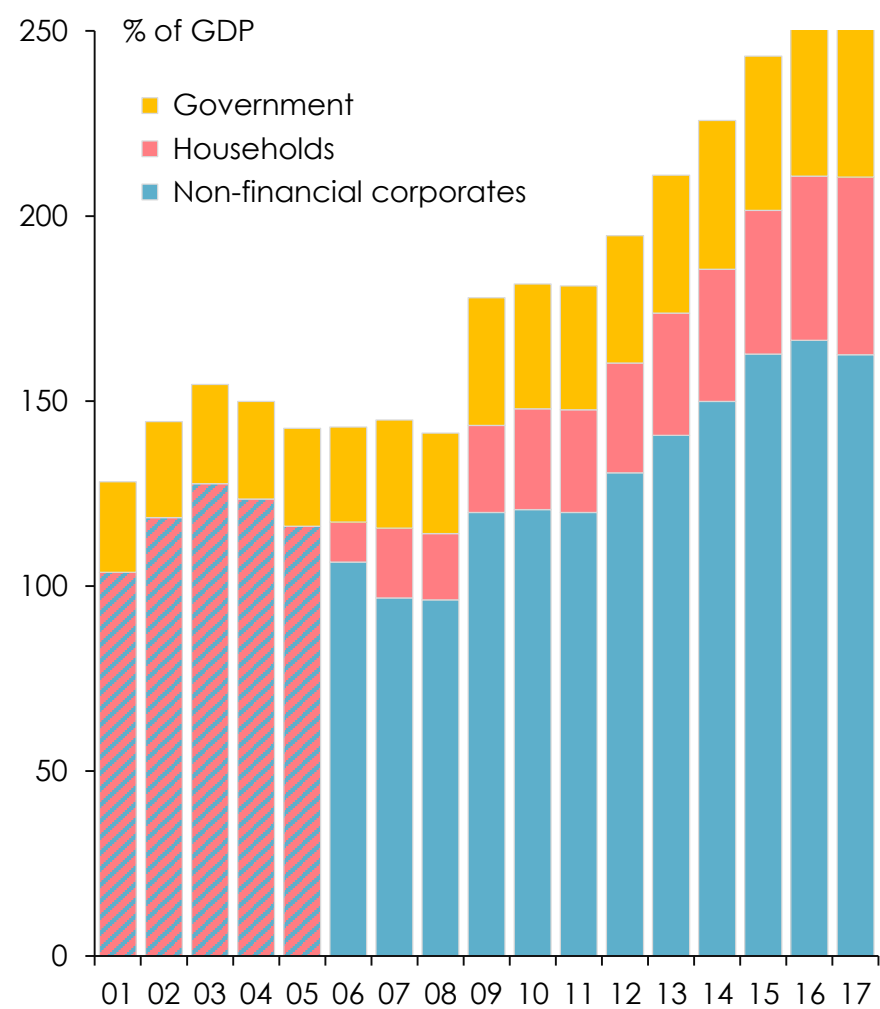
Bank liabilities



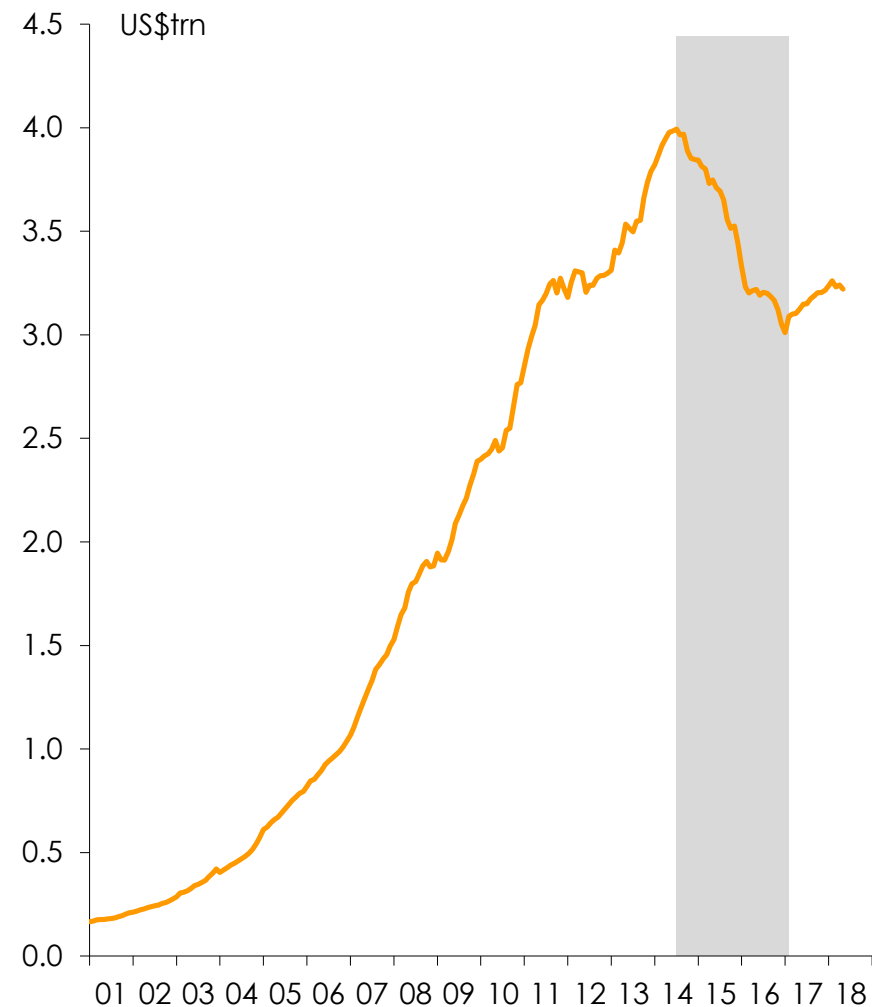
Sources: Bank for International Settlements; People’s Bank of China.

Most of China's debt is owed by state-owned enterprises to state-owned banks – but that may provide little comfort in a systemic financial crisis

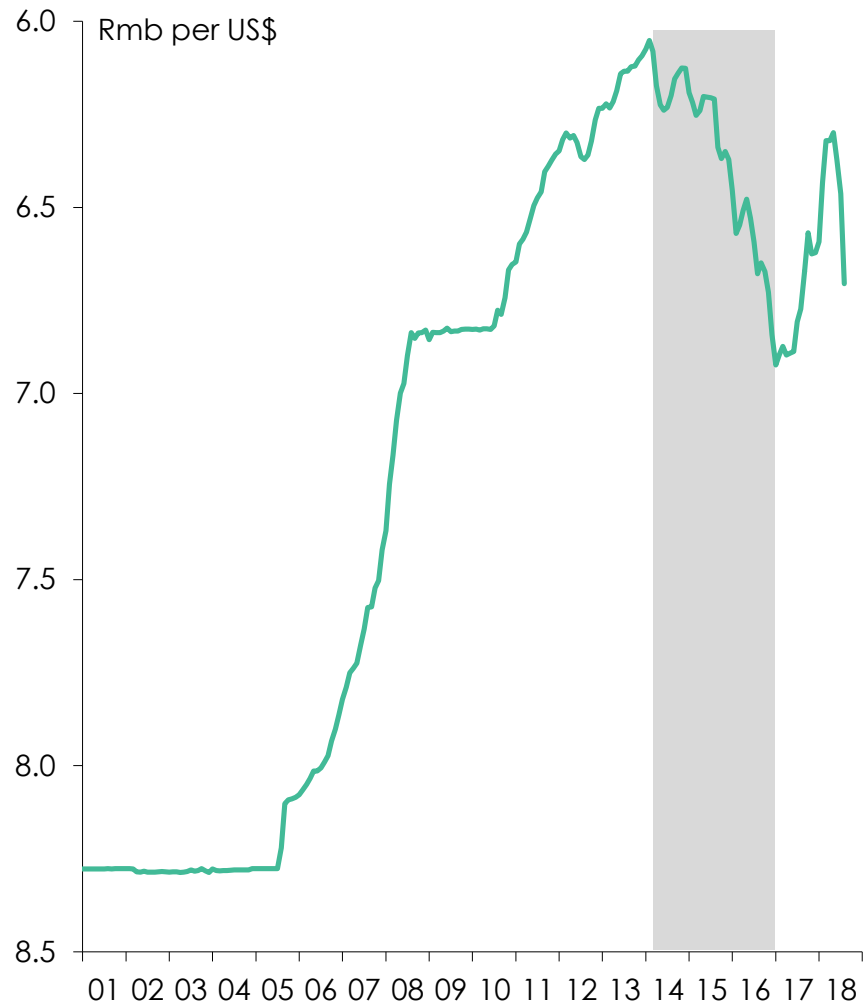
Credit by sector



China's FX reserves



Chinese yuan vs US dollar

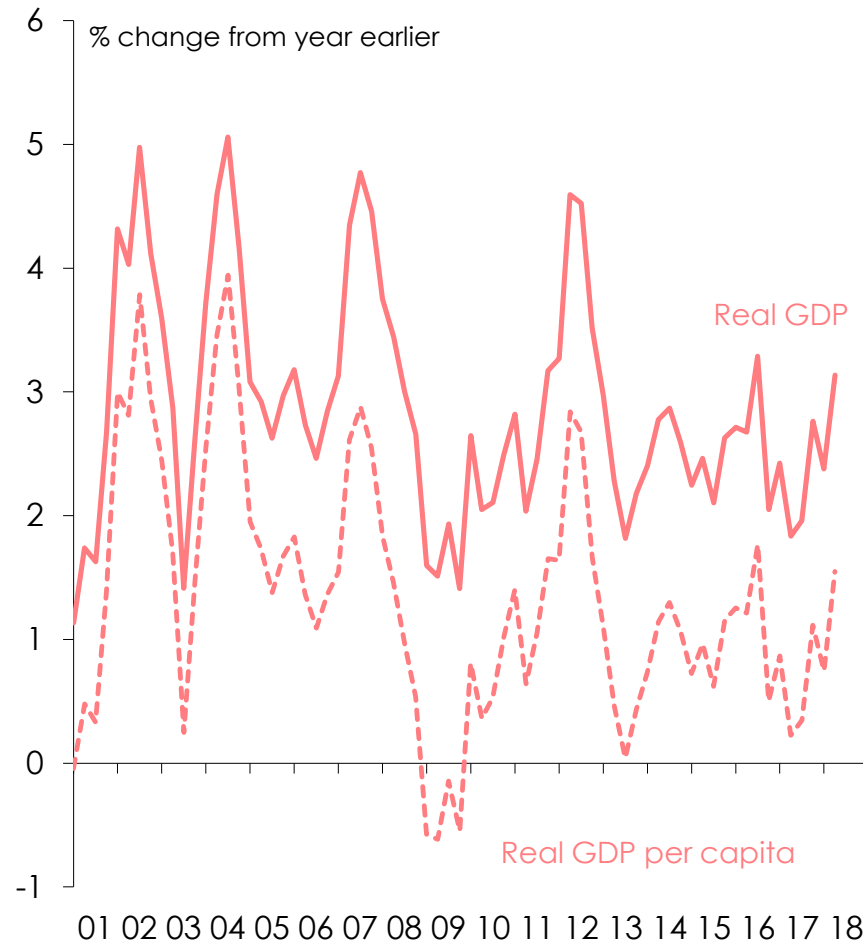


Sources: Bank for International Settlements; People's Bank of China.

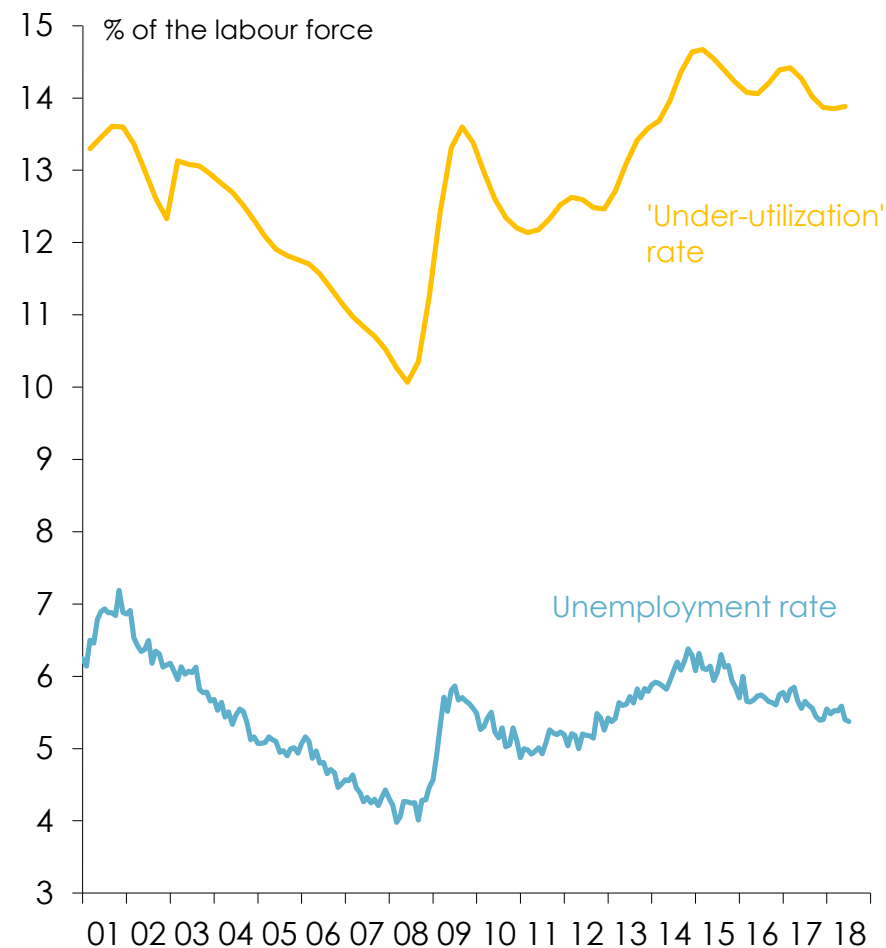
The Australian economy

Australian economic growth is still below trend, there is still a lot of spare capacity in the labour market and inflation is still (just) below-target

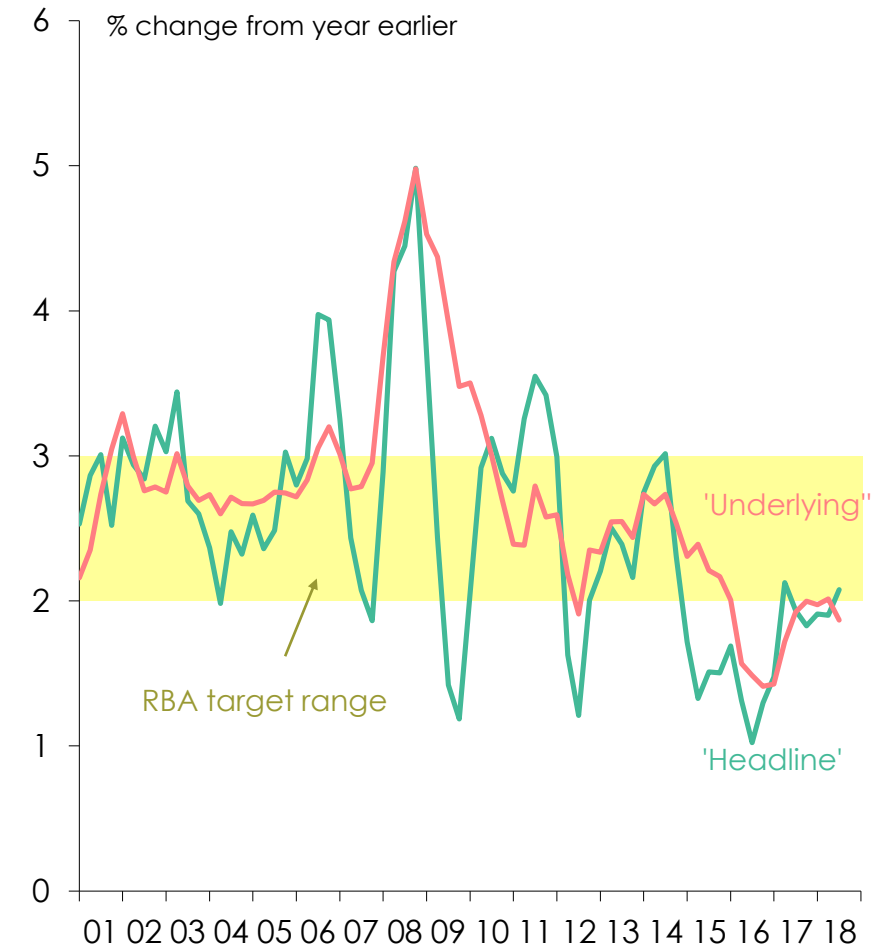
Economic growth



Unemployment and under-employment



Consumer prices



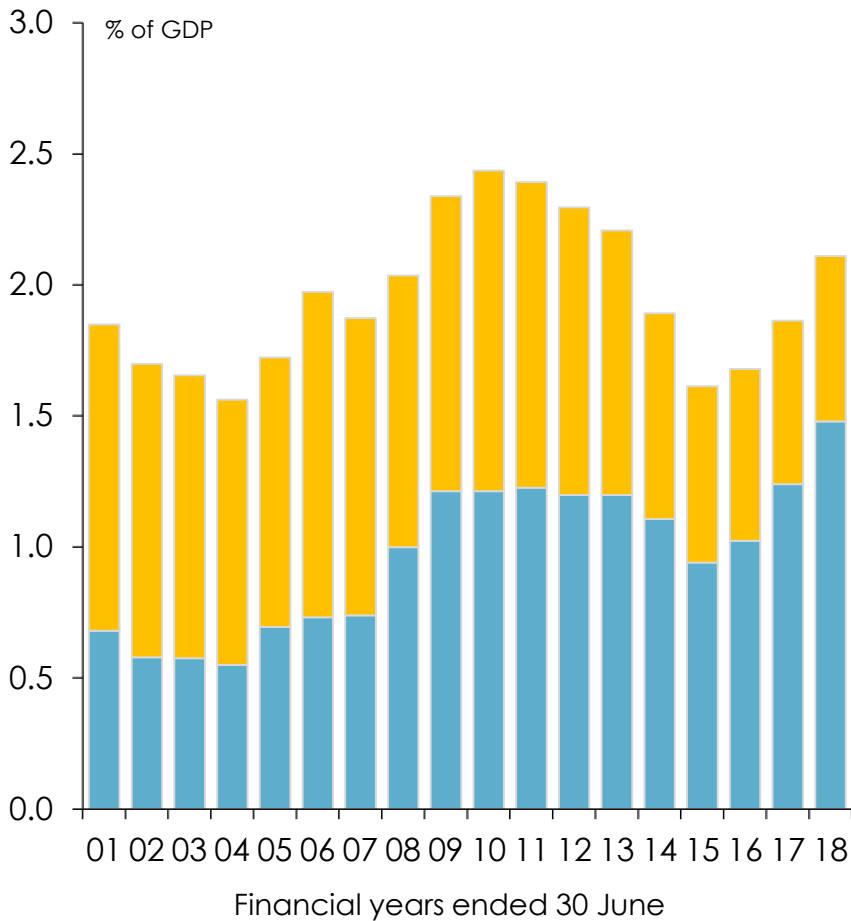
Note: The labour force 'under-utilization' rate includes people employed part-time who are willing and able to work longer hours (and weights them equally with people who are 'unemployed' in the conventional sense). 'Underlying' inflation abstracts from the impact of volatile items (typically items such as petrol, or fruit and vegetables) on the CPI.

Source: Australian Bureau of Statistics.

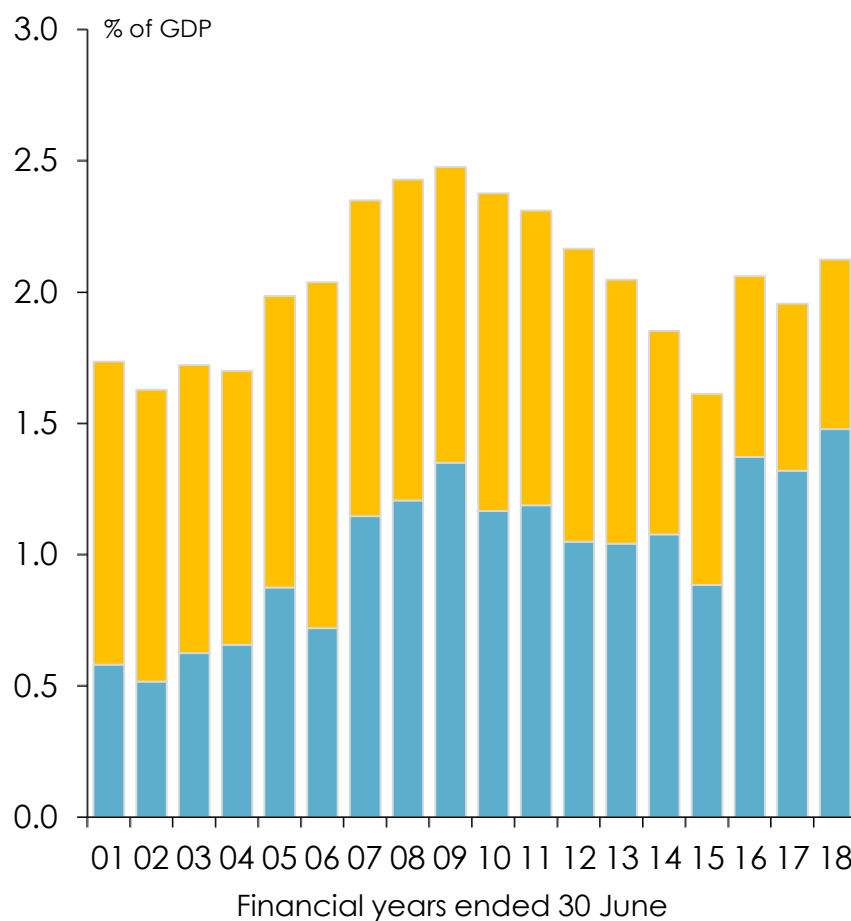
Higher levels of infrastructure investment spending are now beginning to provide some real impetus to economic growth

Indicators of engineering construction activity for the public sector

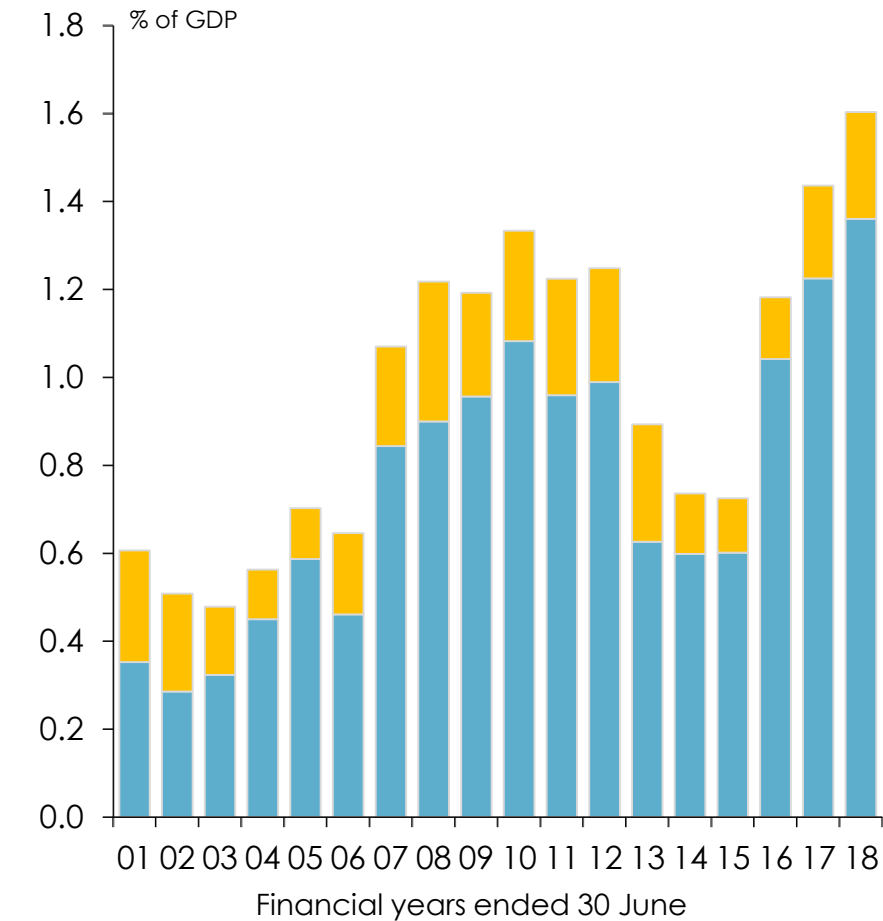
Value of work done



Commencements



Work yet to be done

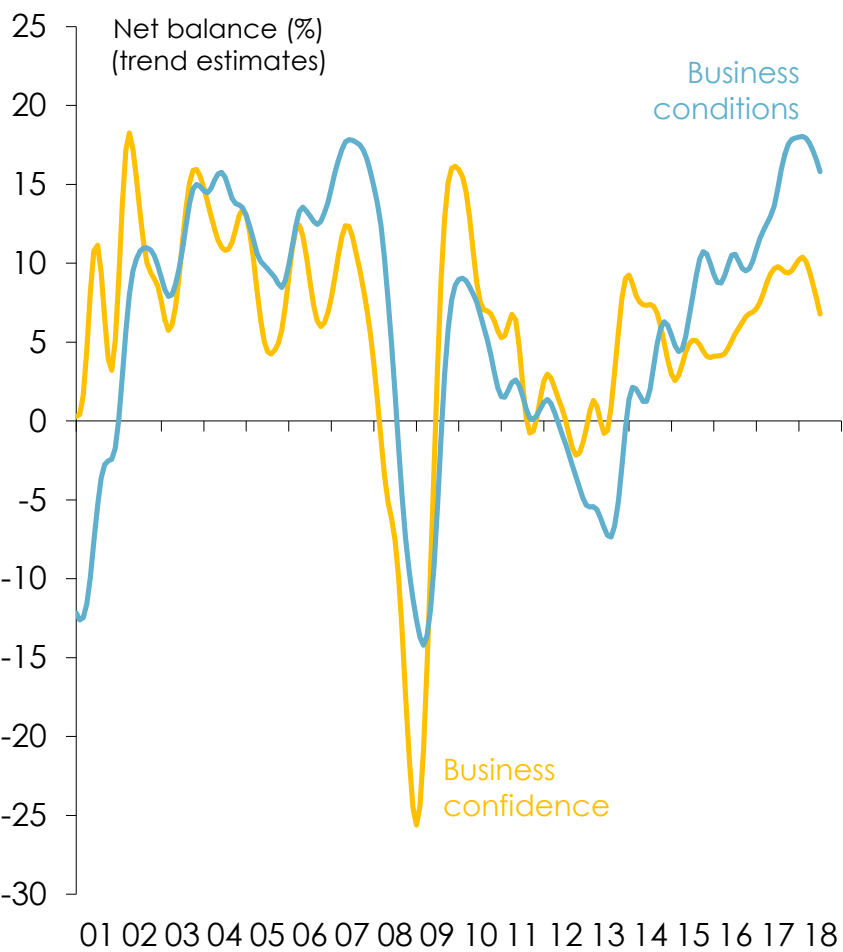


Work by the private sector for the public sector Work by the public sector for the public sector

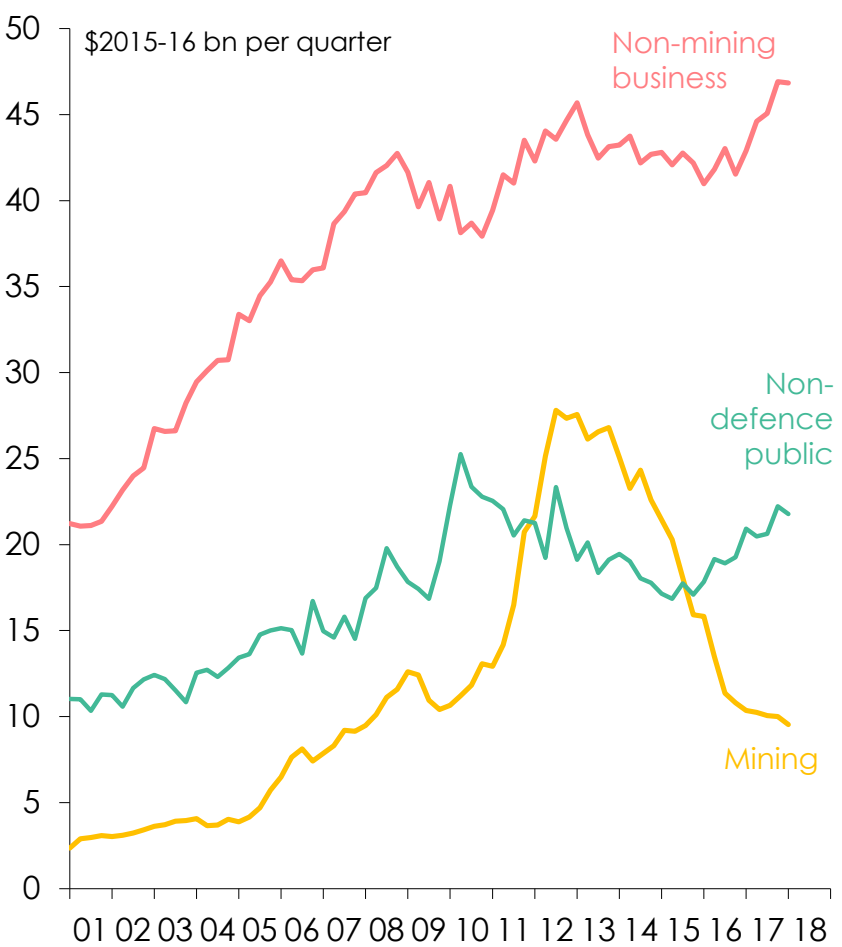
Note: data for year ended 30 June 2018 are for first three quarters (work done and commencements) and as at 31 March 2018 (for work yet to be done) Source: ABS.

Australian business conditions have improved significantly since 2016, but global uncertainties now seem to be weighing on confidence

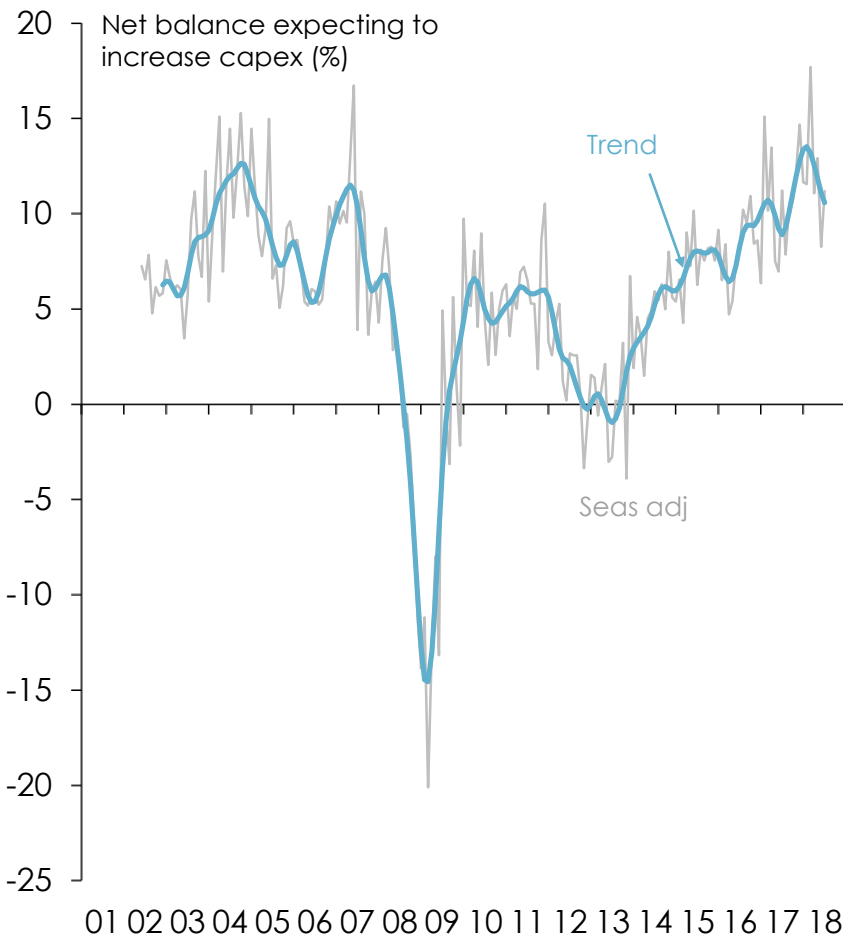
Business conditions and confidence



Non-residential investment – mining vs other sectors



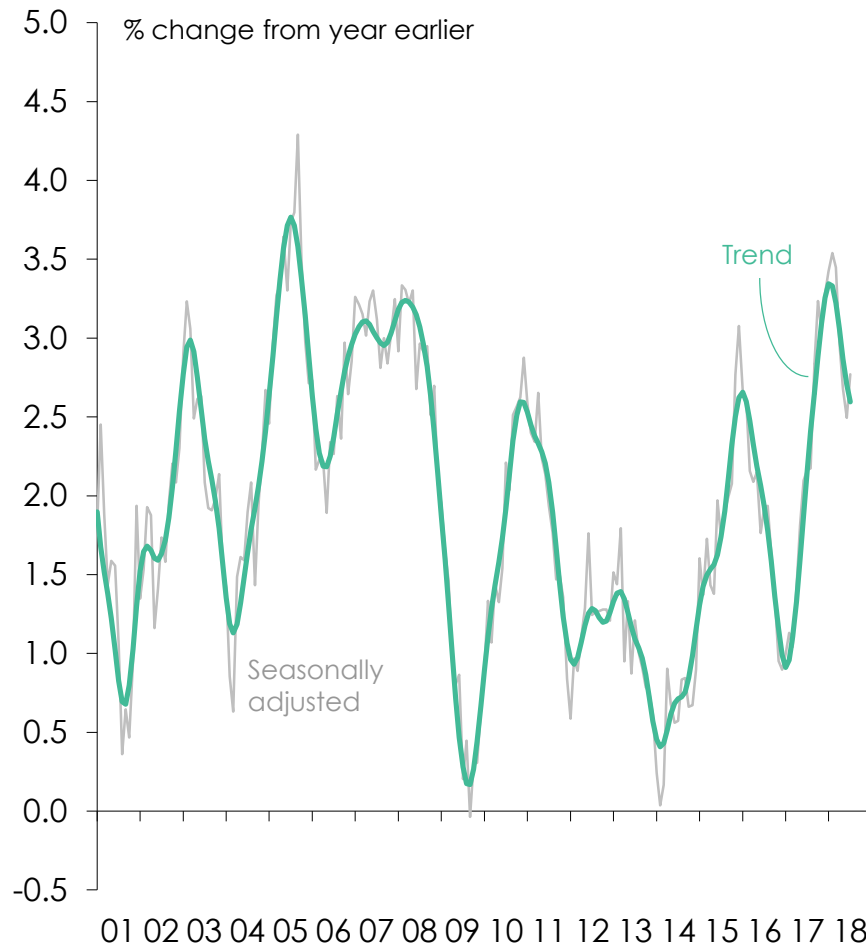
Business survey capital expenditure expectations



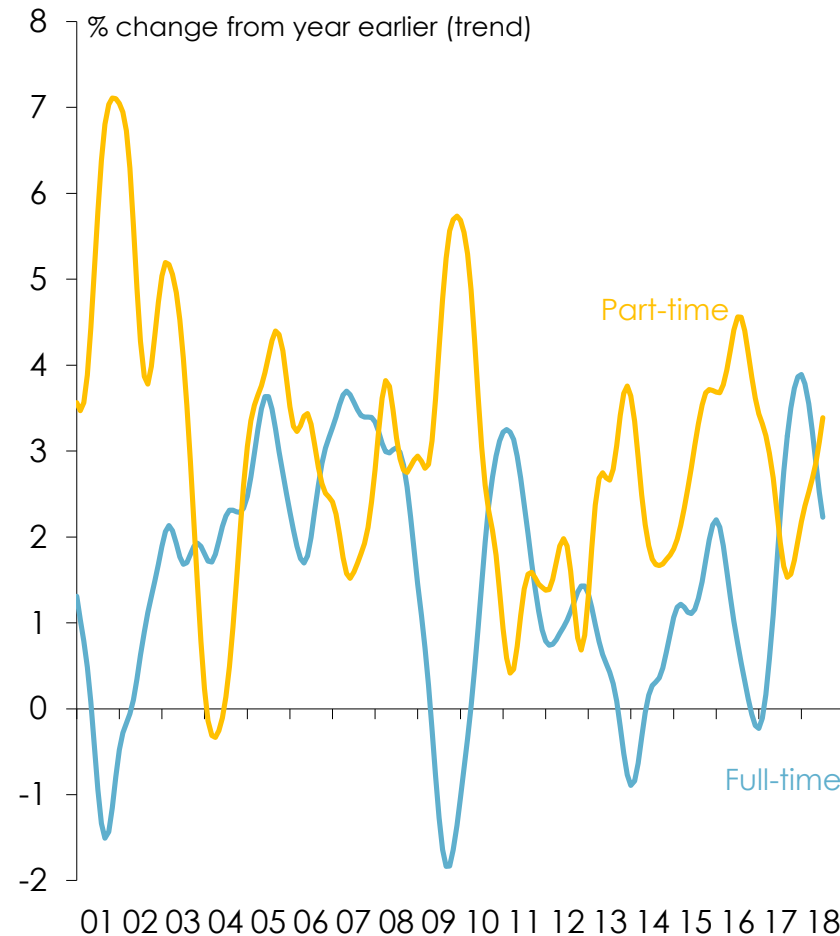
Sources: National Australia Bank; ABS.

Similarly, the strong pick-up in employment (and especially full-time employment) since late 2016 appears to have passed its peak

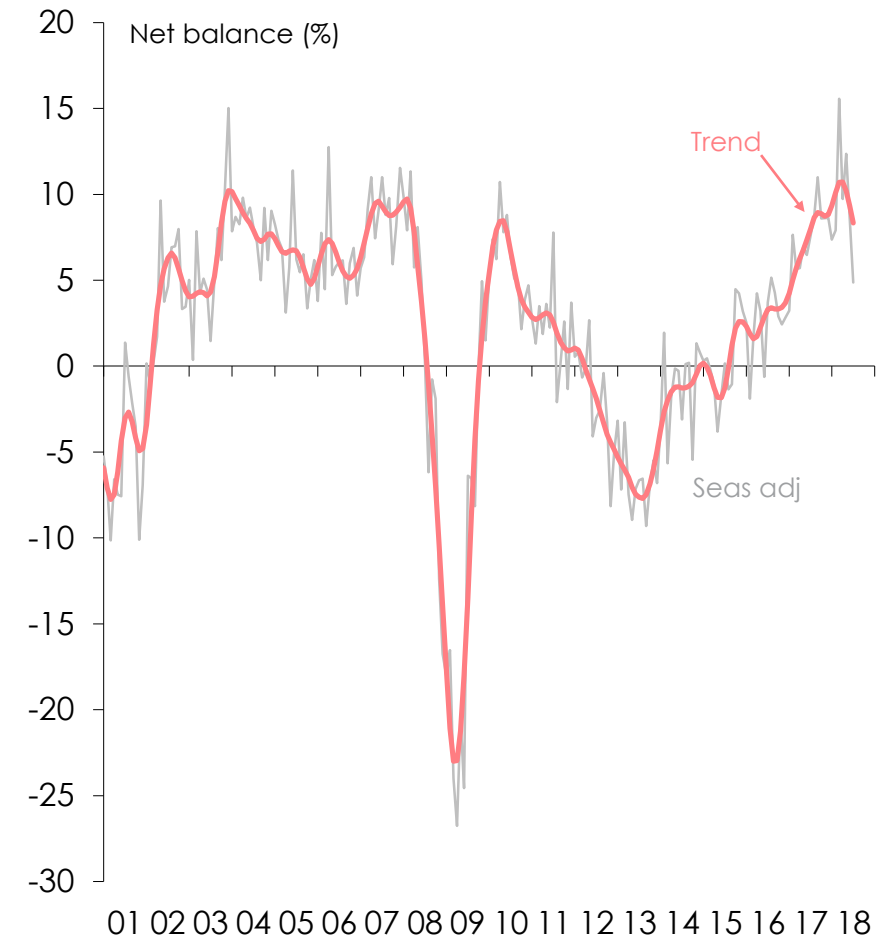
Employment growth



Full-time vs part-time employment



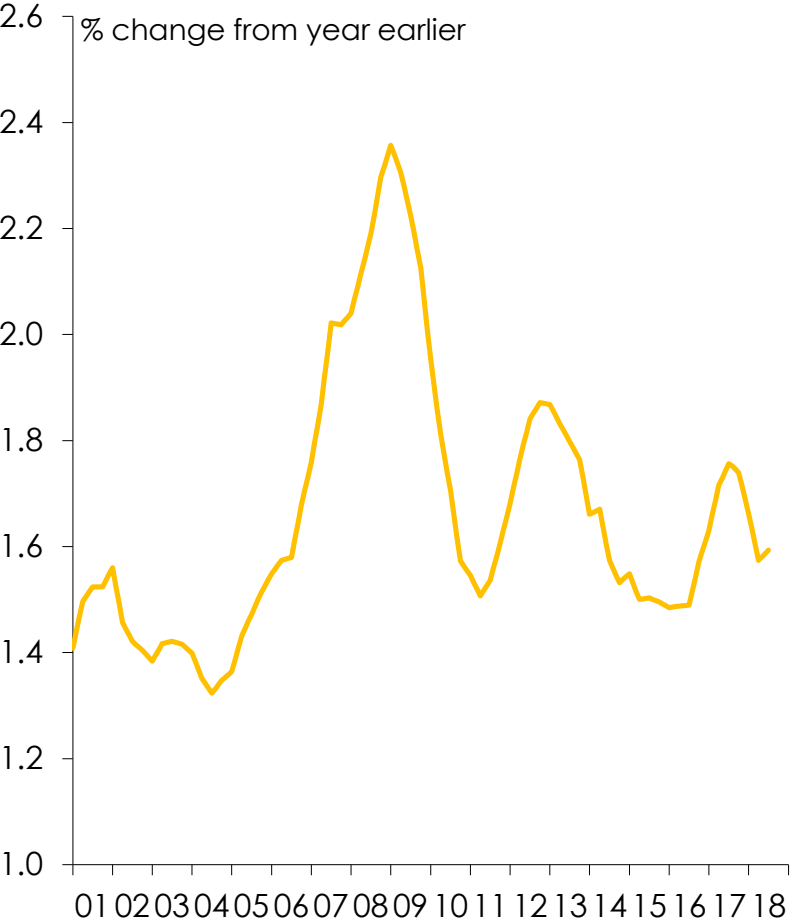
NAB business survey – employer hiring intentions



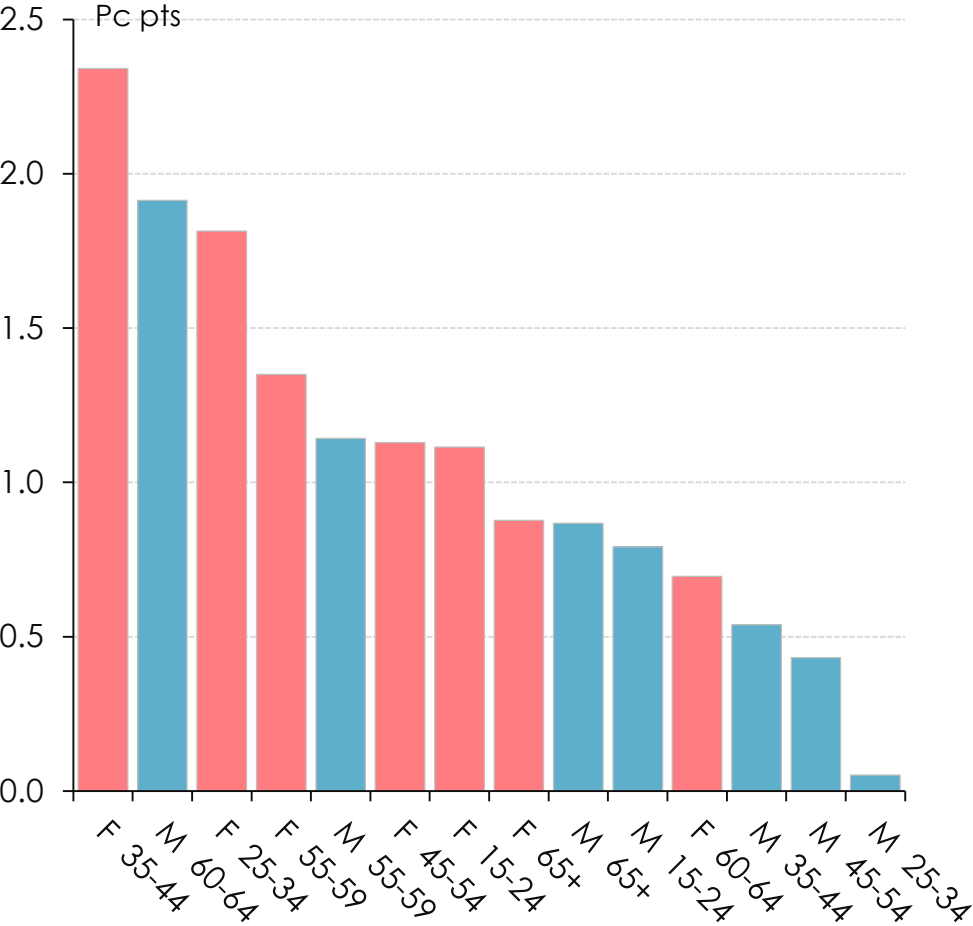
Sources: ABS; National Australia Bank.

A large share of this employment growth has been absorbed by faster population growth and rising labour force participation

Civilian working age population growth



Change in employment rates, Dec 2016 – Jun 2018



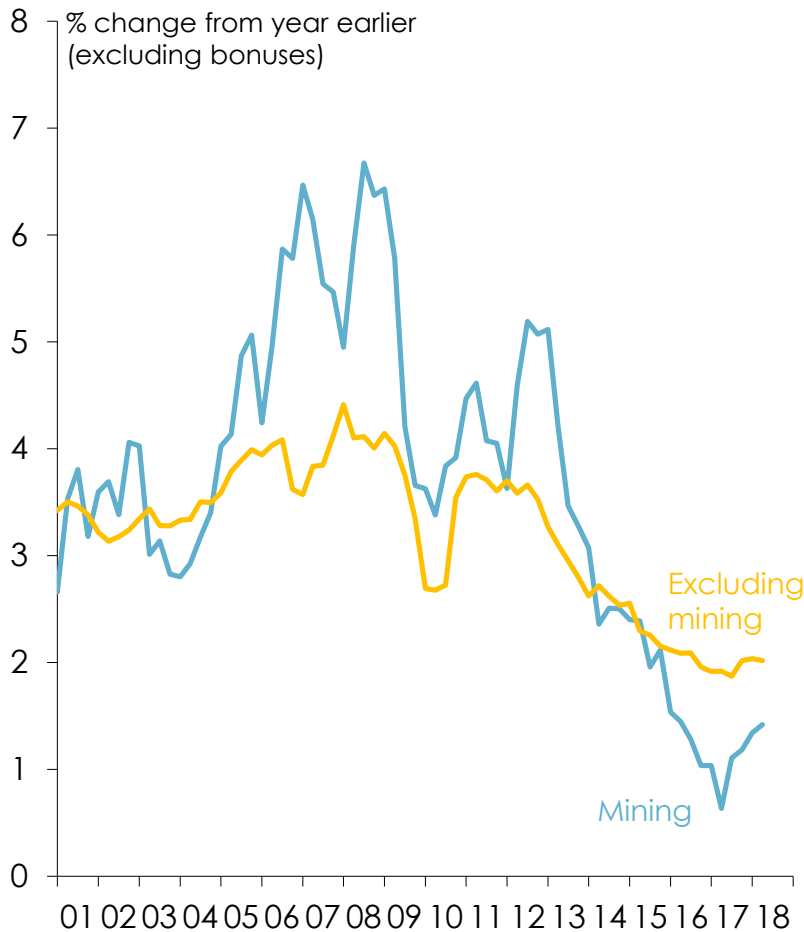
Unemployment rate



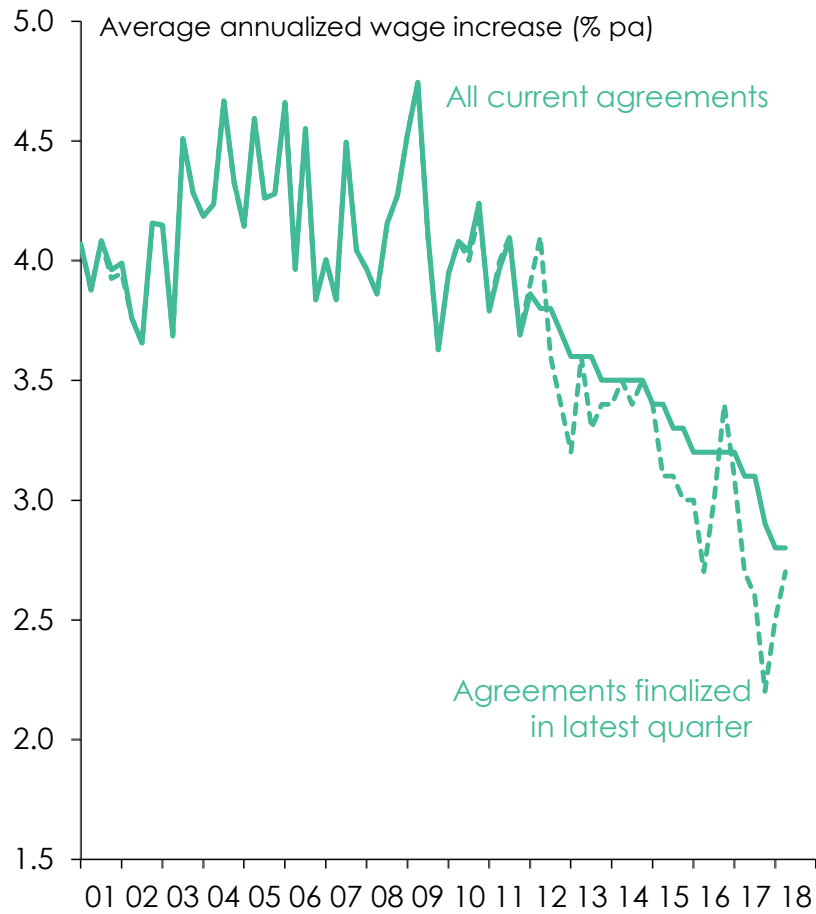
Note: Participation rates by age and gender in third chart are 12-month moving averages of original data.
Source: ABS.

As in other countries wages growth remains soft, although it may be bottoming – but skill shortages don't seem to be making much difference

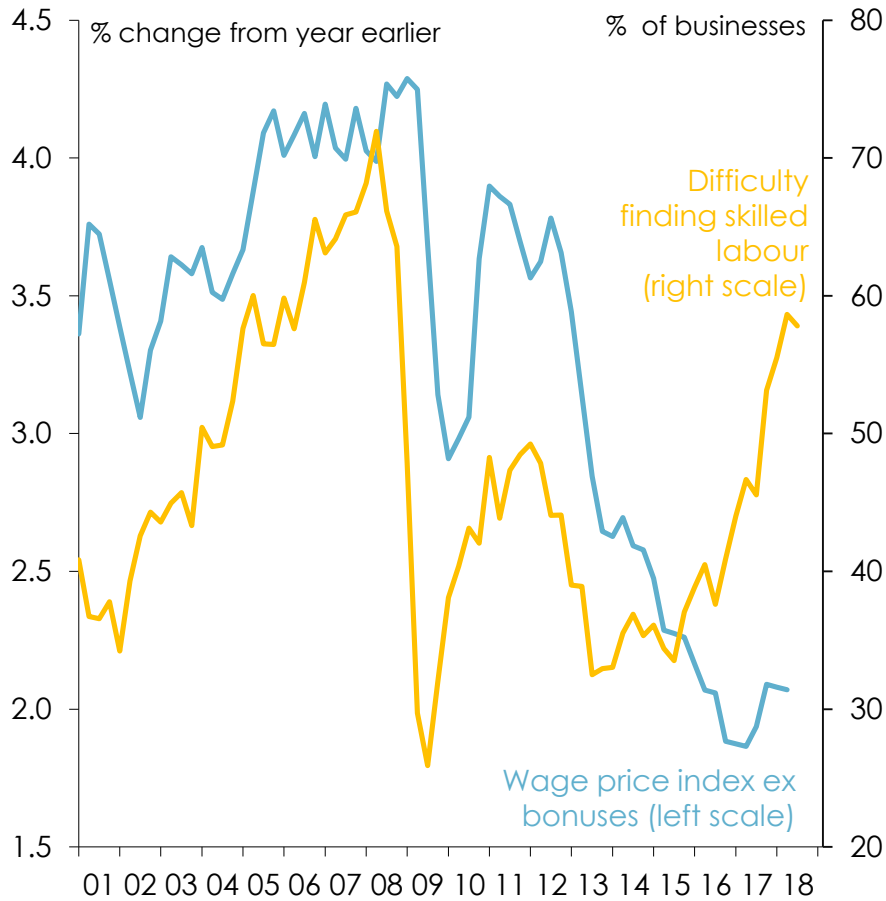
Wages growth



Enterprise agreements



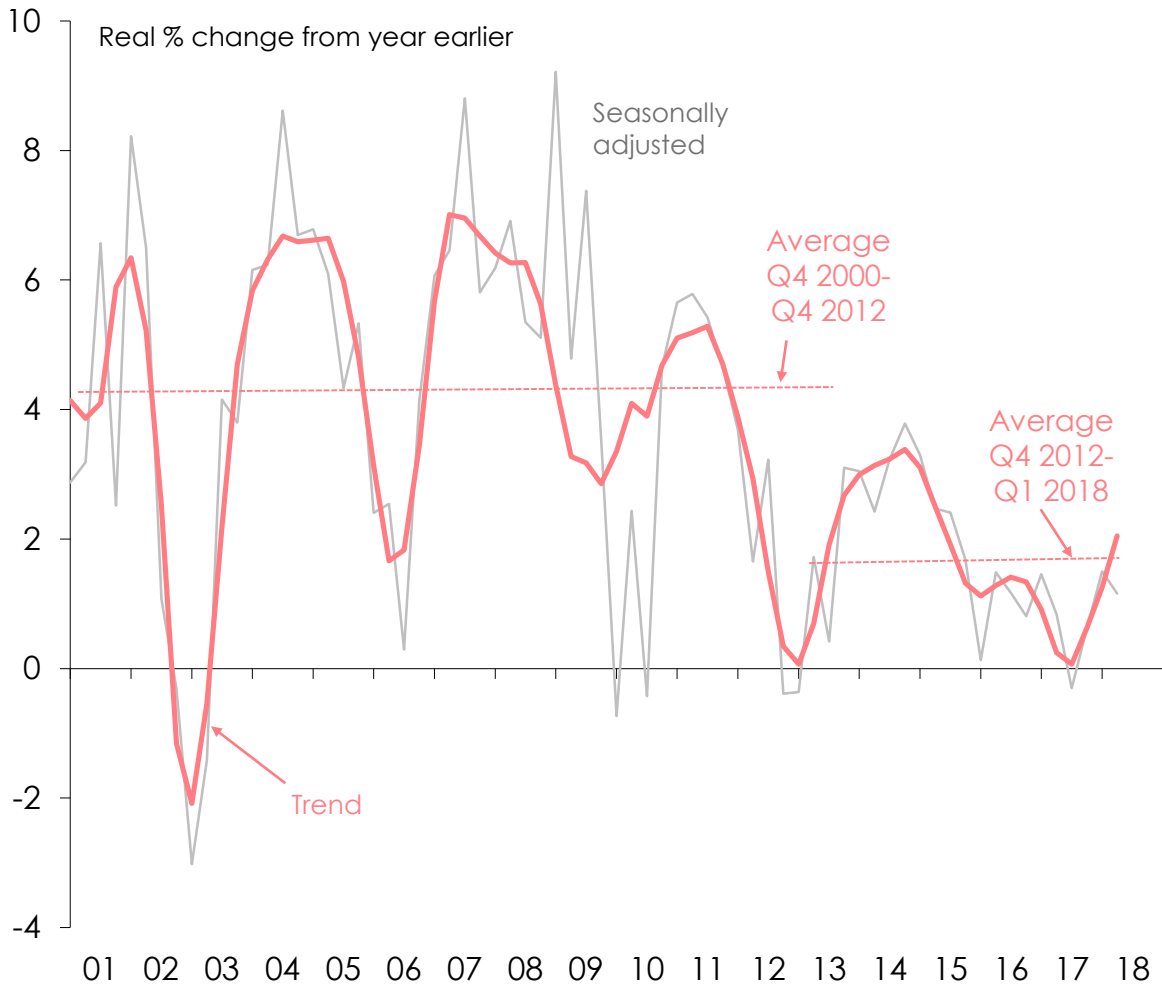
Labour shortages and wage increases



Sources: ABS ; Australian Government Department of Jobs and Small Business; National Australia Bank

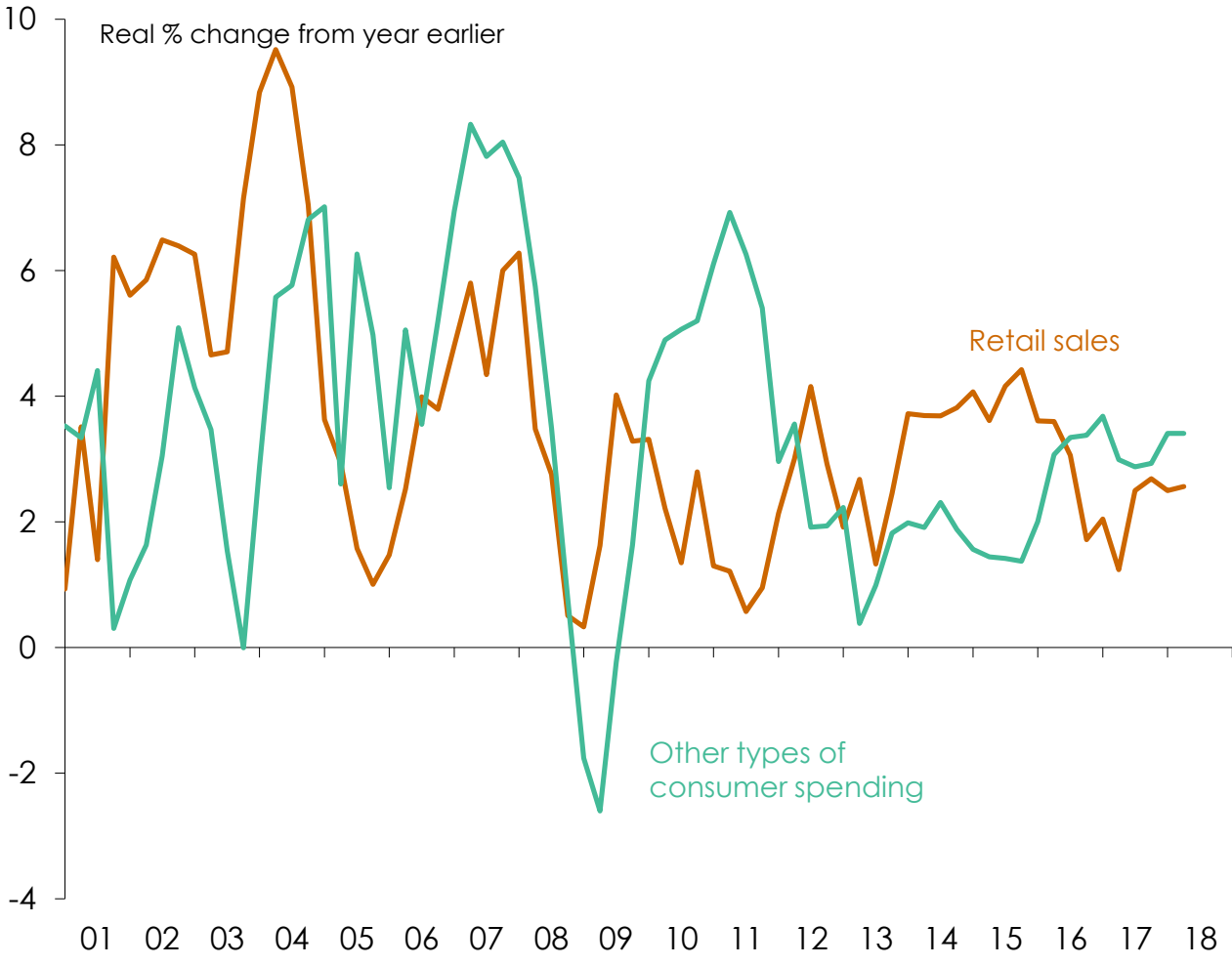
Persistently slow wages growth means weak growth in household income and hence in consumer spending

Household disposable income



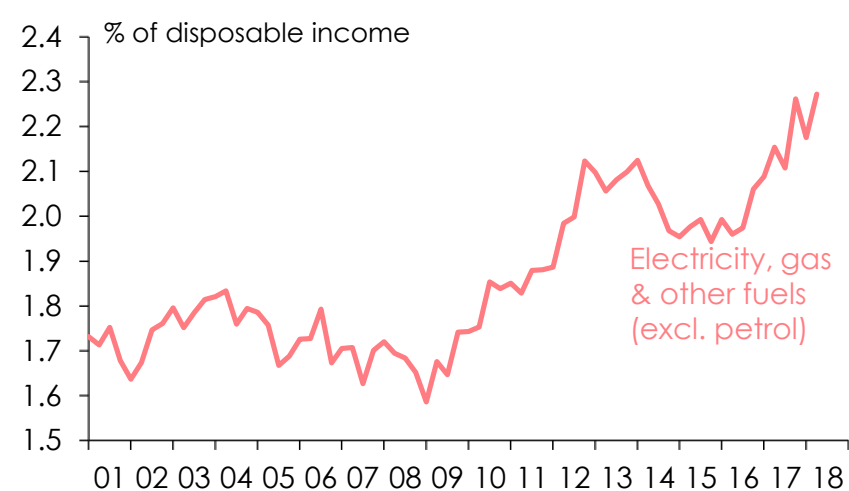
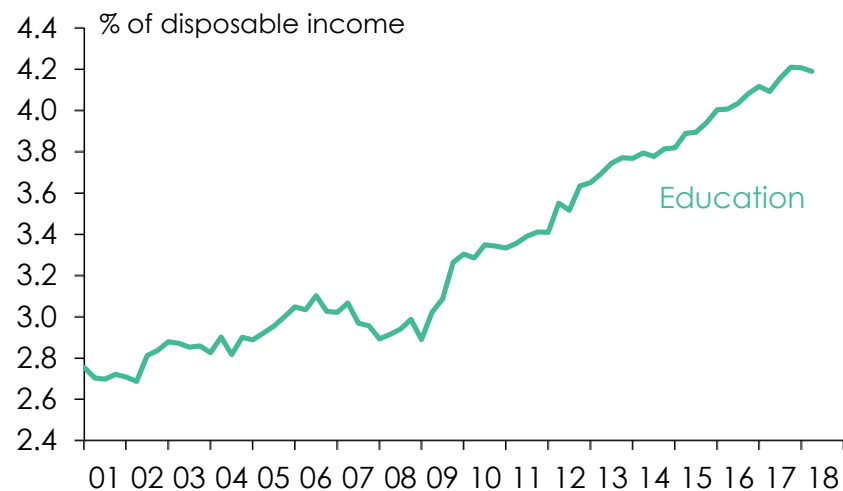
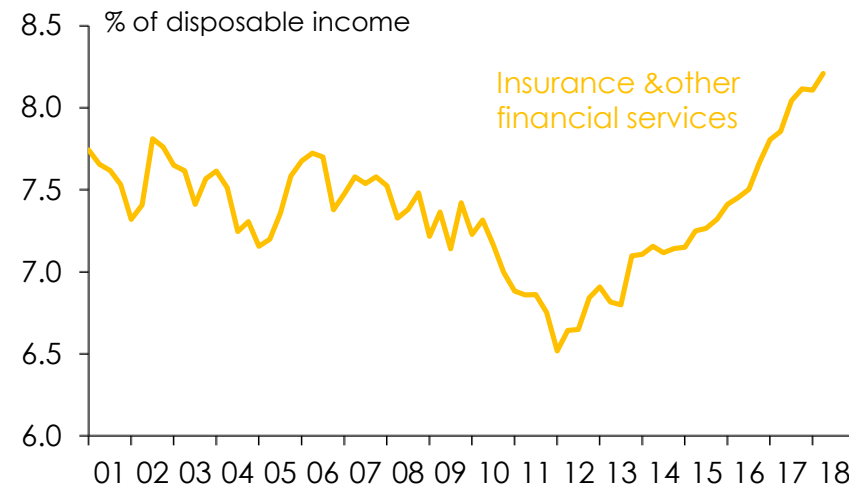
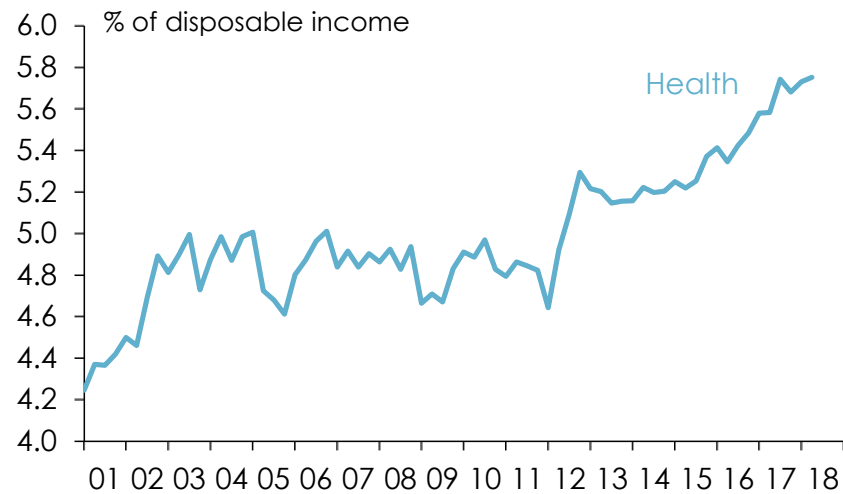
Source: ABS.

Household consumption expenditure

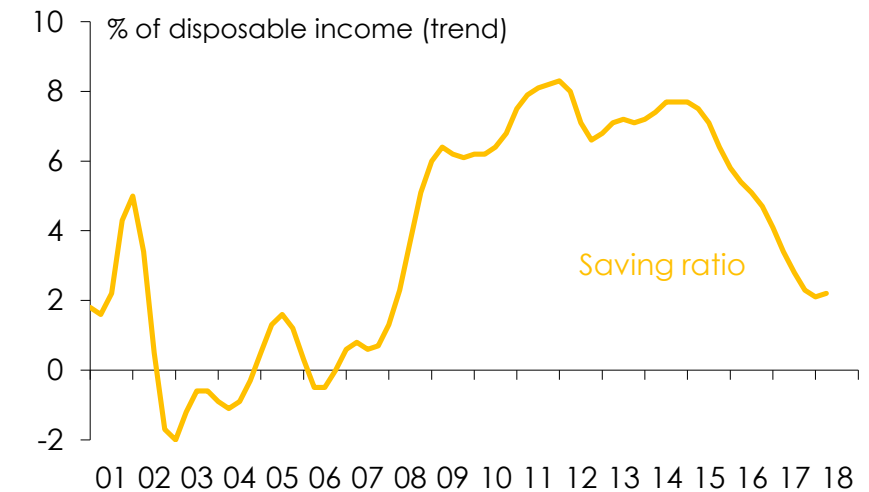
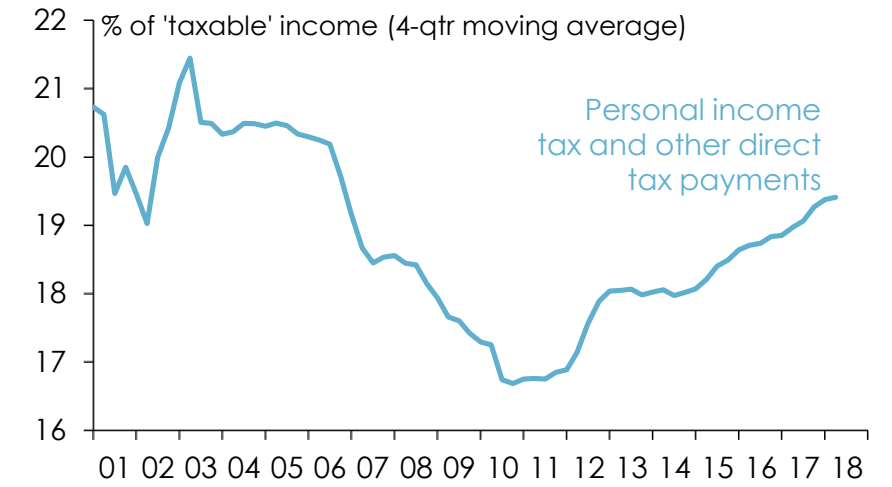


Household budgets are also being squeezed by rising costs of some 'non-discretionary' items, and higher income tax payments

Selected categories of household consumption expenditure as a pc of disposable income



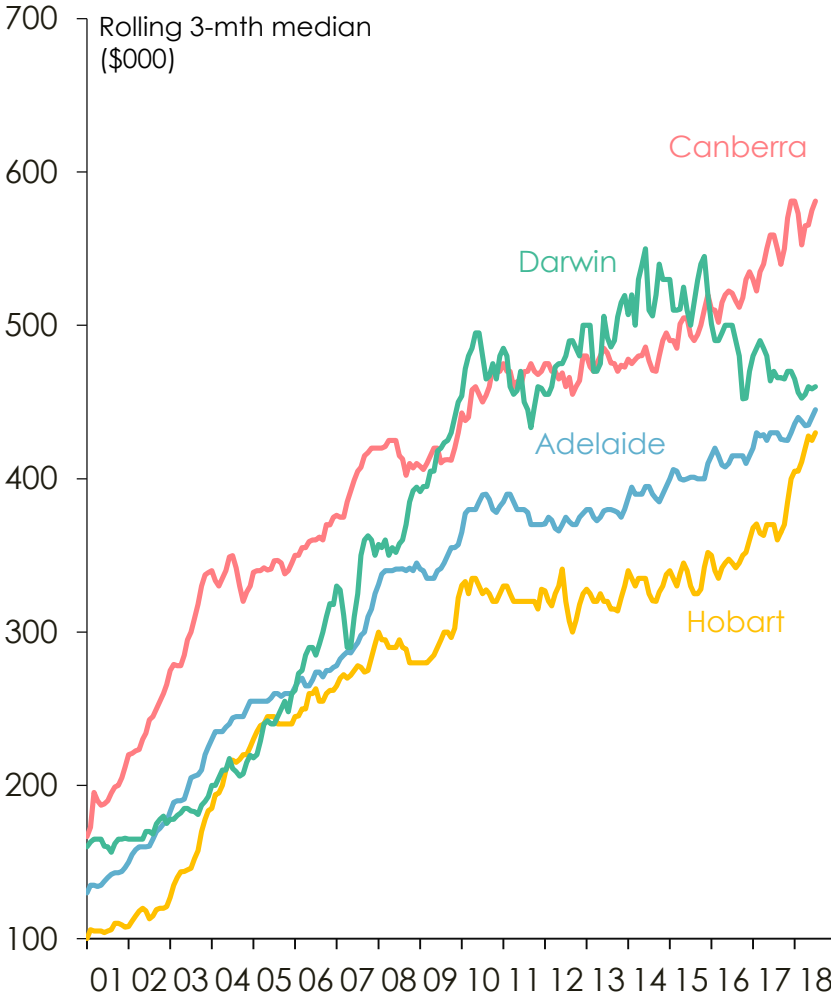
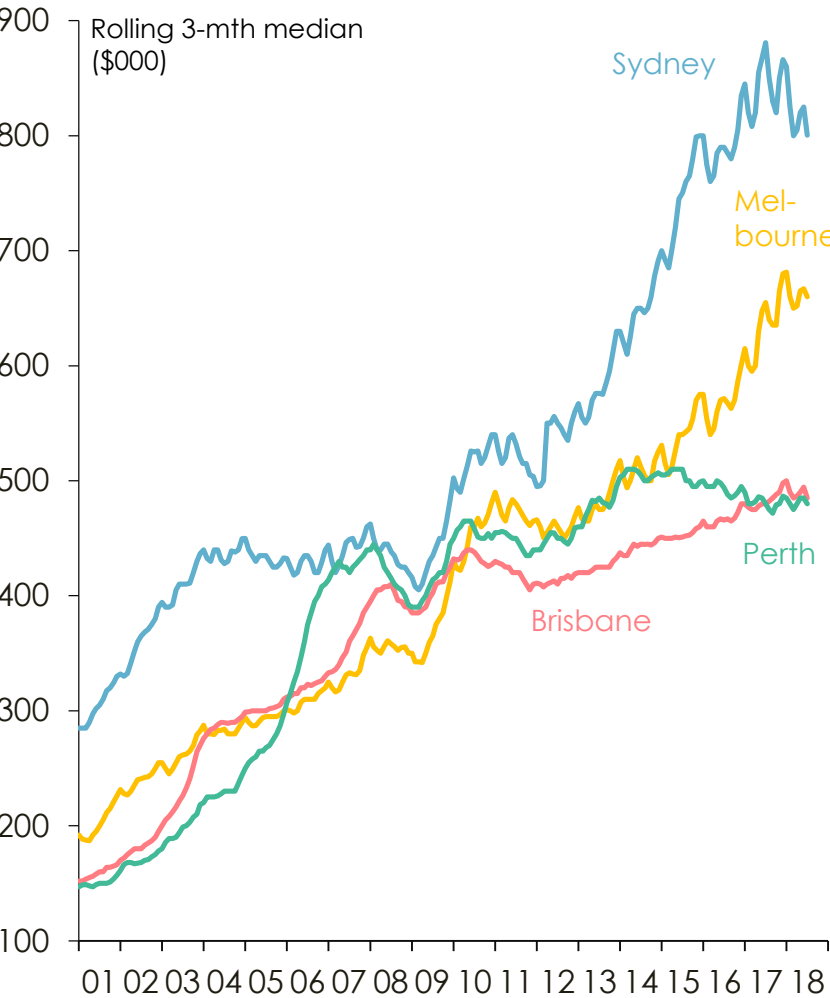
Household income tax and saving ratios



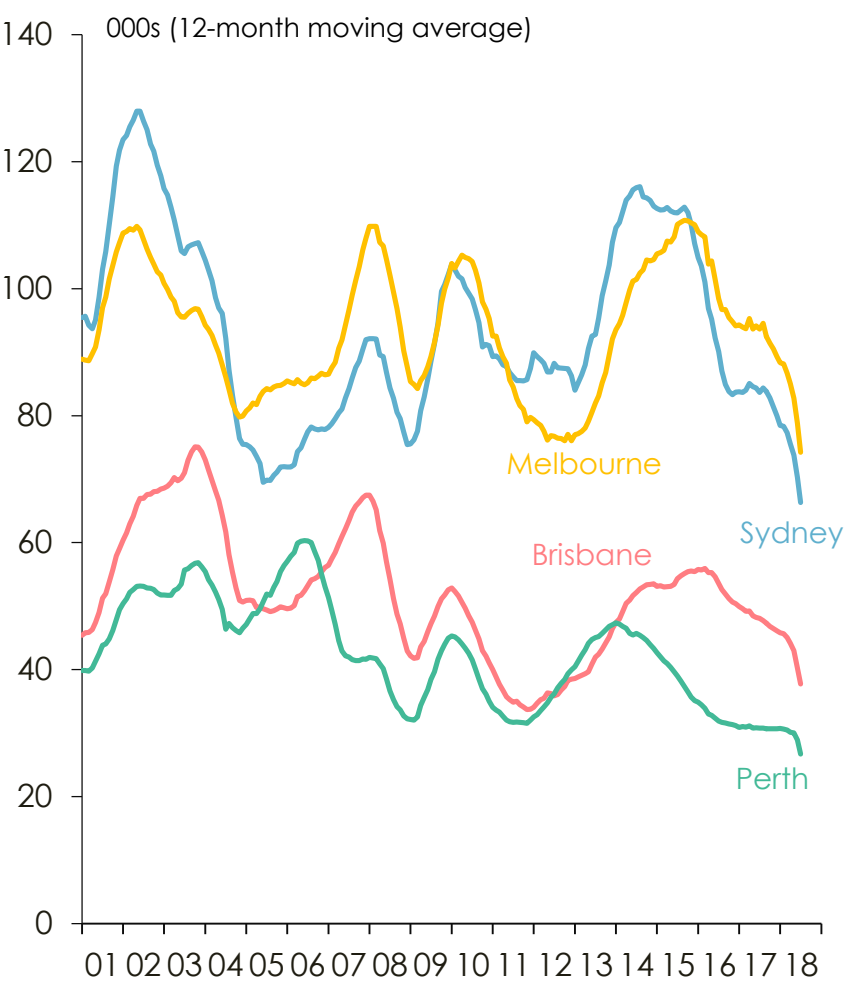
Source: ABS Note: 'taxable' income is gross household income excluding imputed items (dwelling rent, interest on superannuation and pension fund savings and workers' compensation premiums) and interest payments by unincorporated enterprises.

Capital city residential property markets appear in most cases to have peaked

Capital city median dwelling sale prices



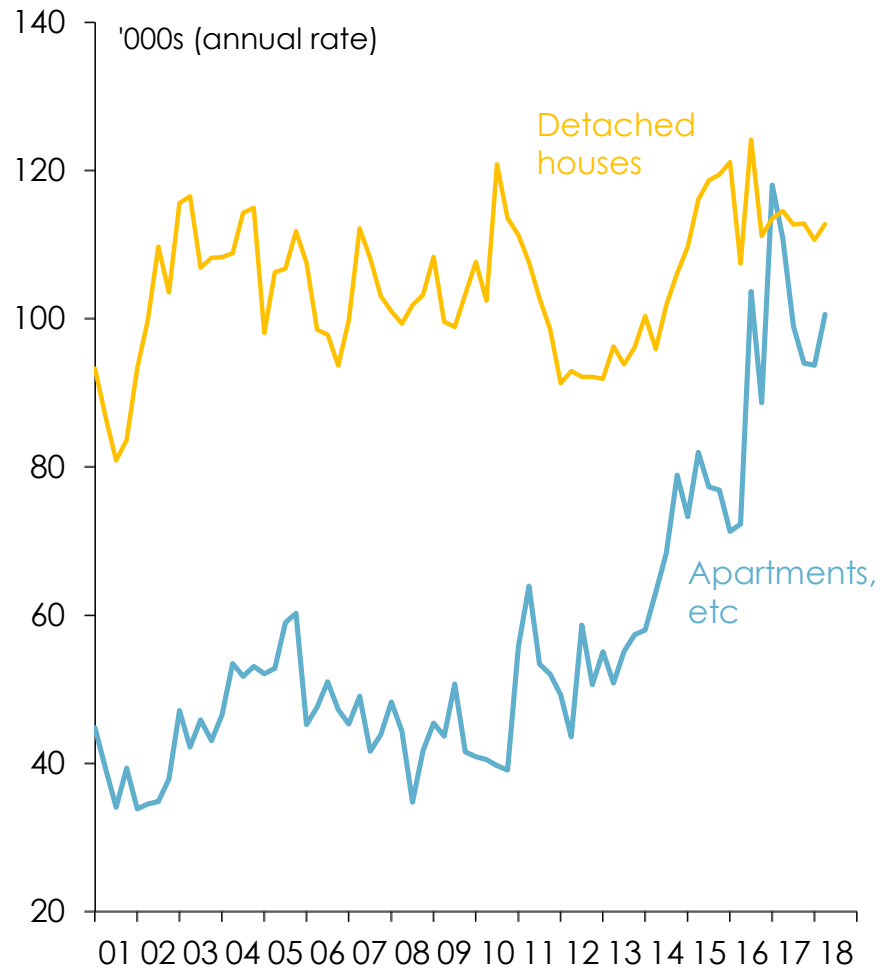
Sales volumes



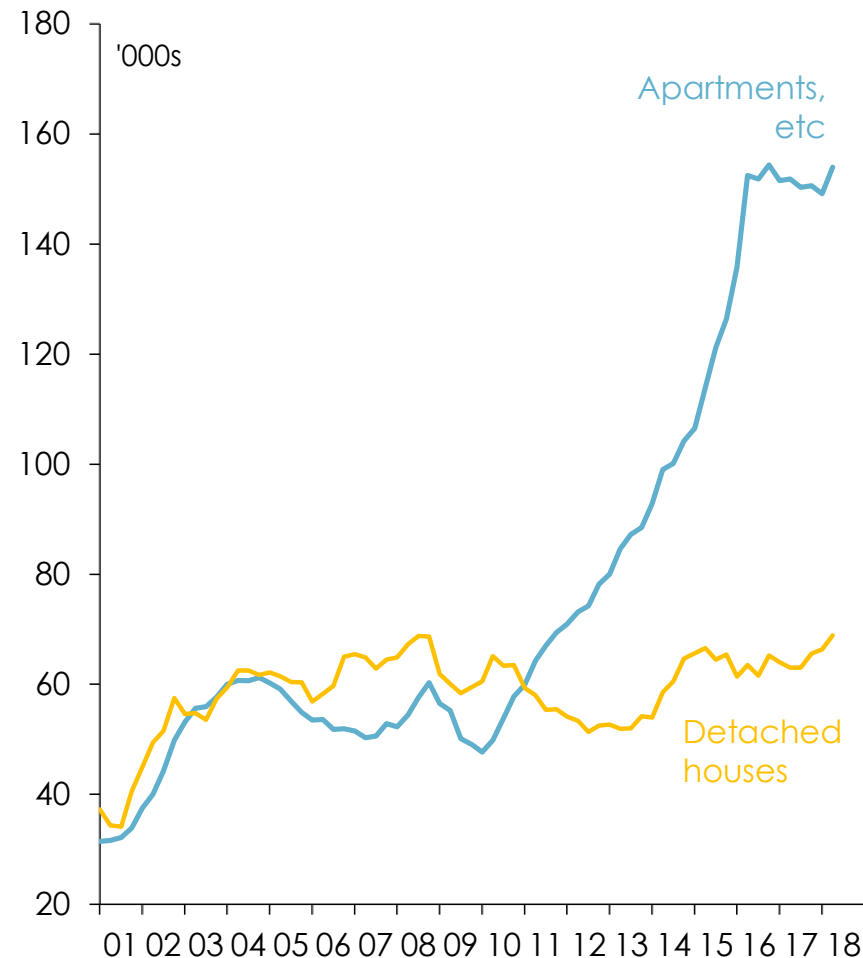
Source: CoreLogic.

Increased housing supply is confined to apartments – there has been no upsurge in supply of detached dwellings

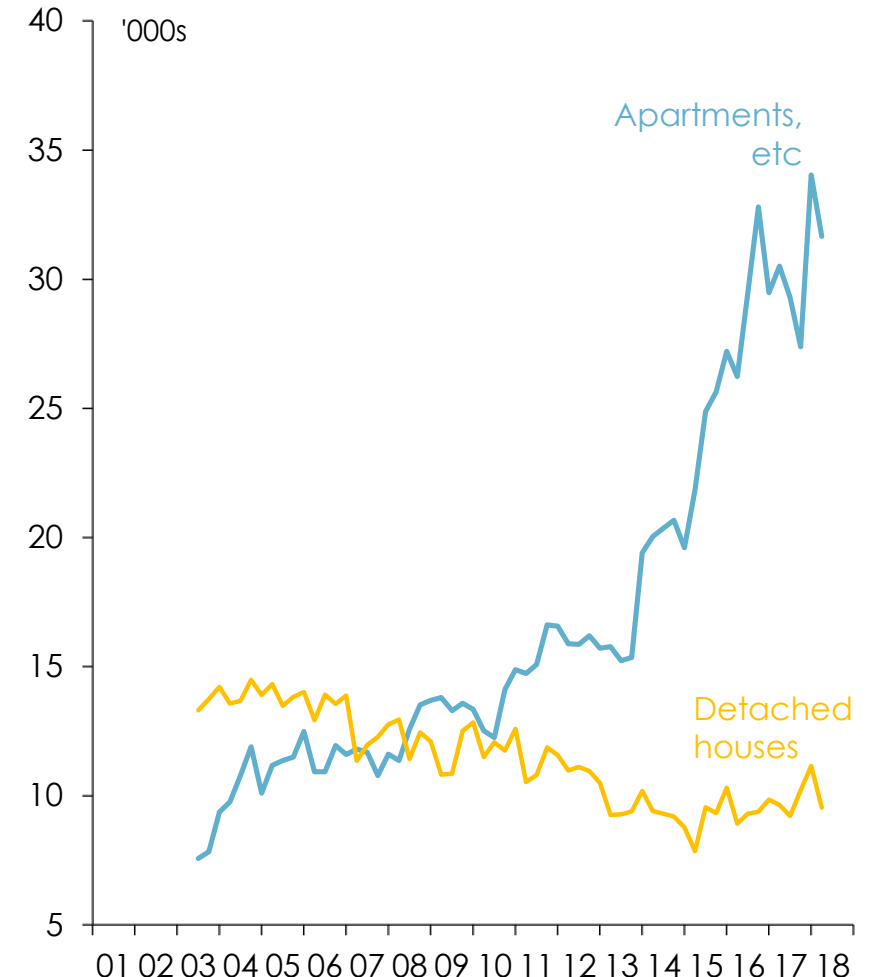
Housing completions



Housing commencements

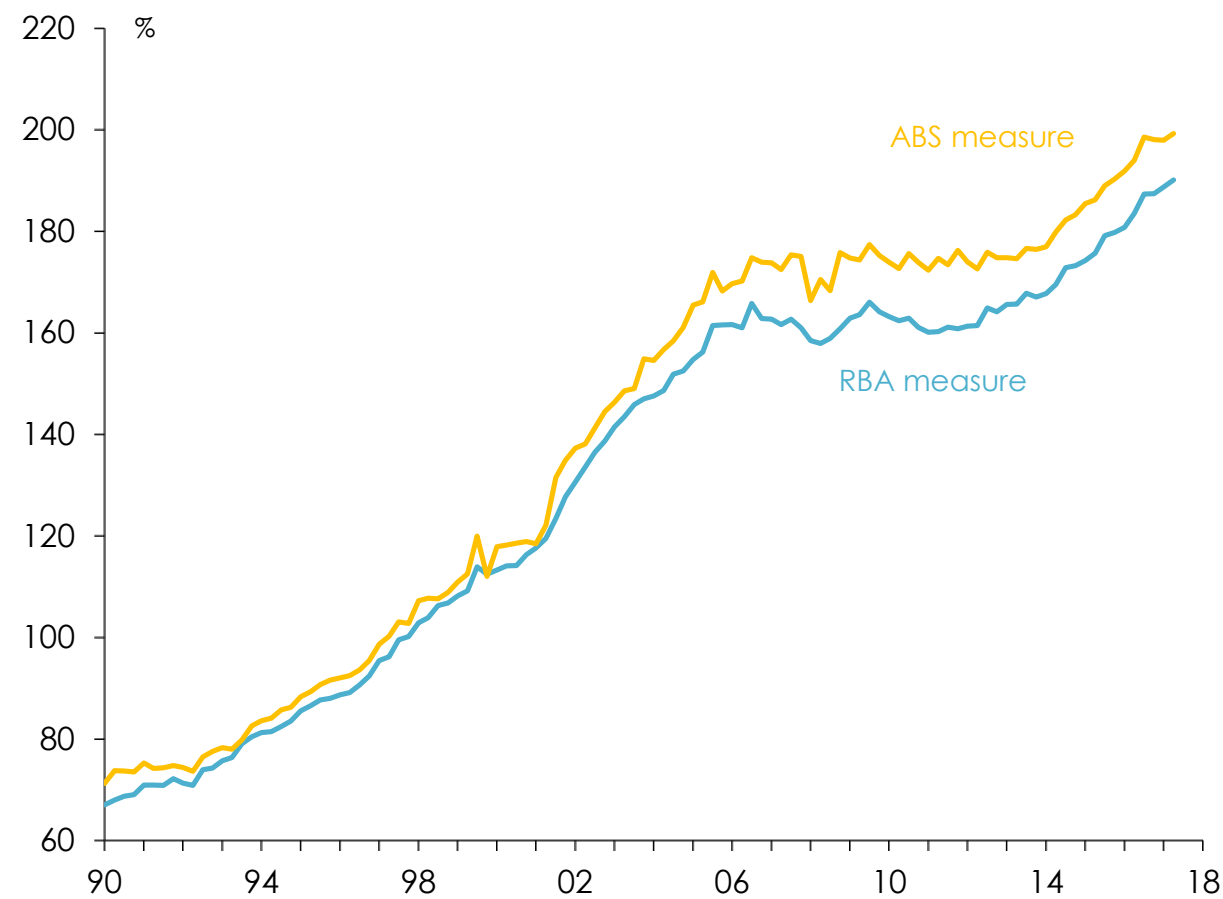


Housing approved but not yet commenced



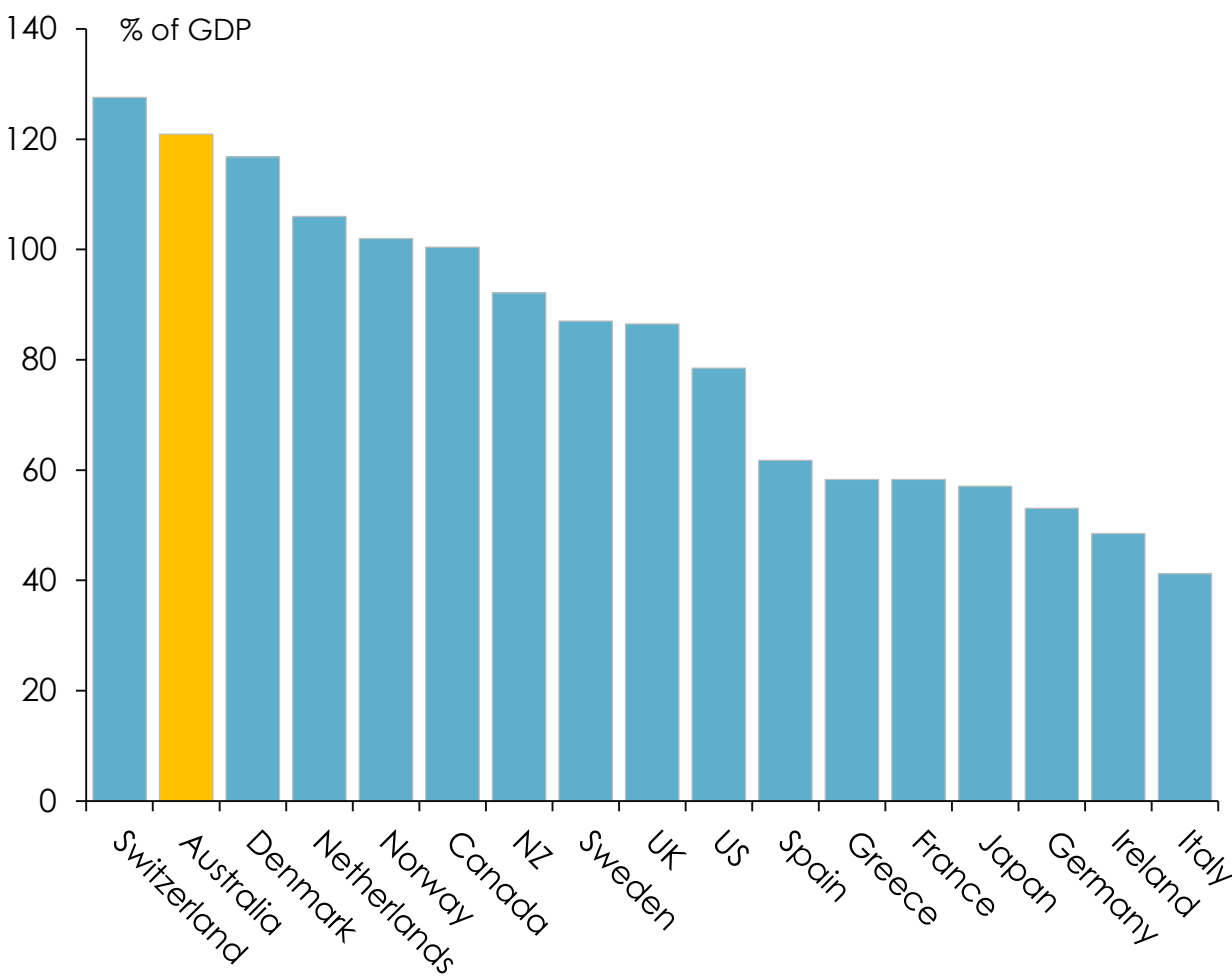
Australian households have a lot of debt, by both historical and international standards

Australian household debt-to-income ratio



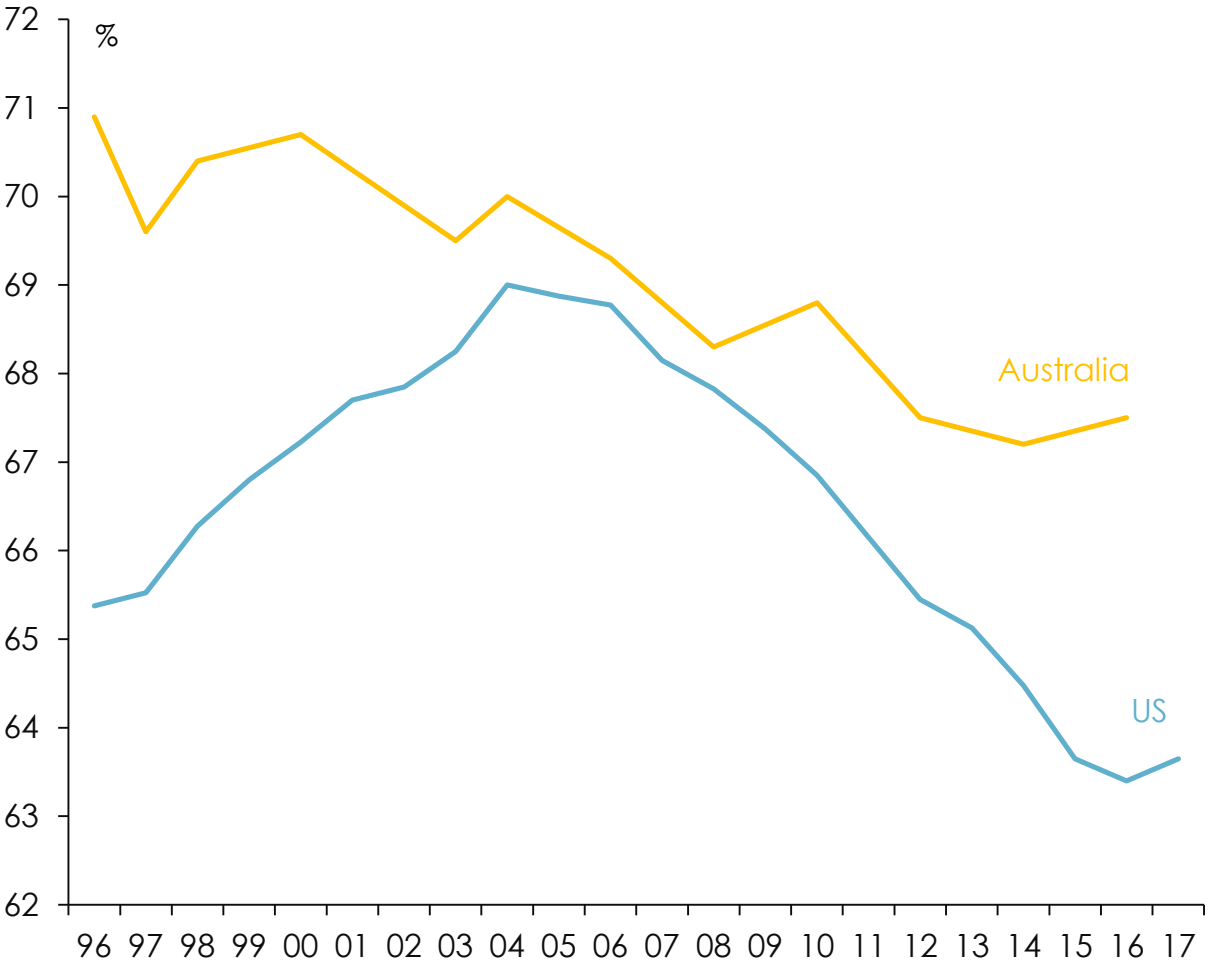
Note: RBA measure of debt-to-income ratio uses income before interest payments as the denominator. Sources: ABS; RBA; Bank for International Settlements.

Household debt-to-GDP ratios, September 2017

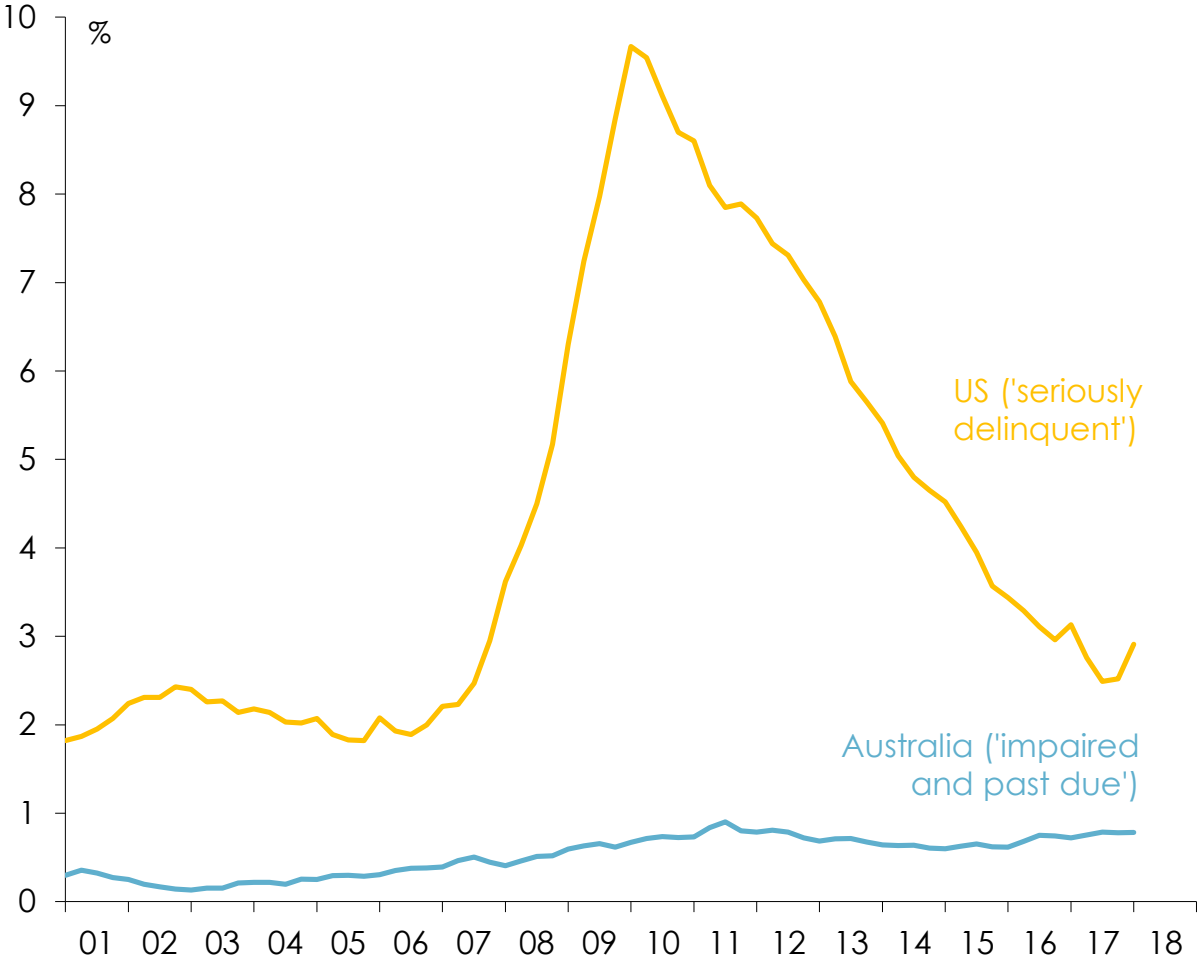


There's unlikely to be a lot of 'forced sellers' in Australia, as there were in the US a decade ago ...

Home ownership rates,
US and Australia



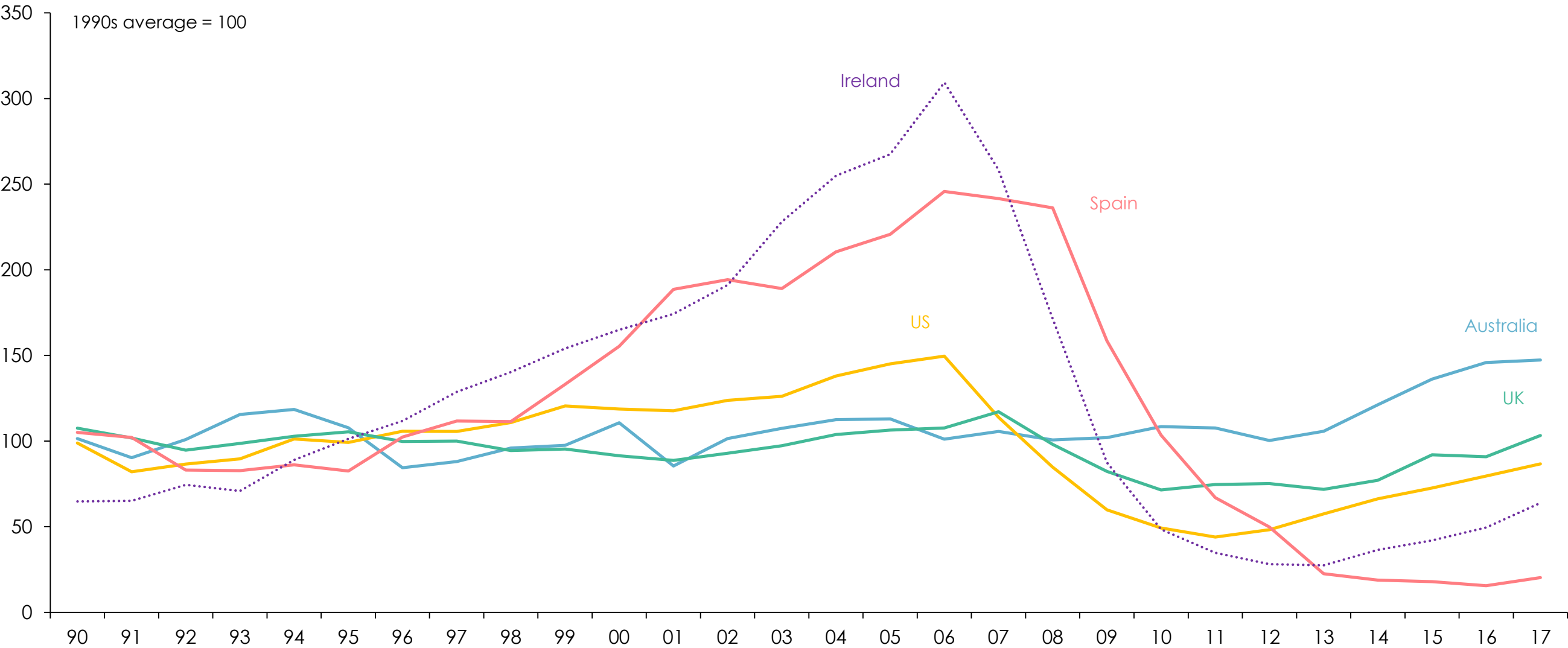
Mortgage delinquency rates,
US and Australia



Sources: ABS, US Department of Commerce; ; Reserve Bank of Australia; Mortgage Bankers' Association of America.

... and they're unlikely to be selling into an over-supplied market than in the US, Spain or Ireland a decade ago

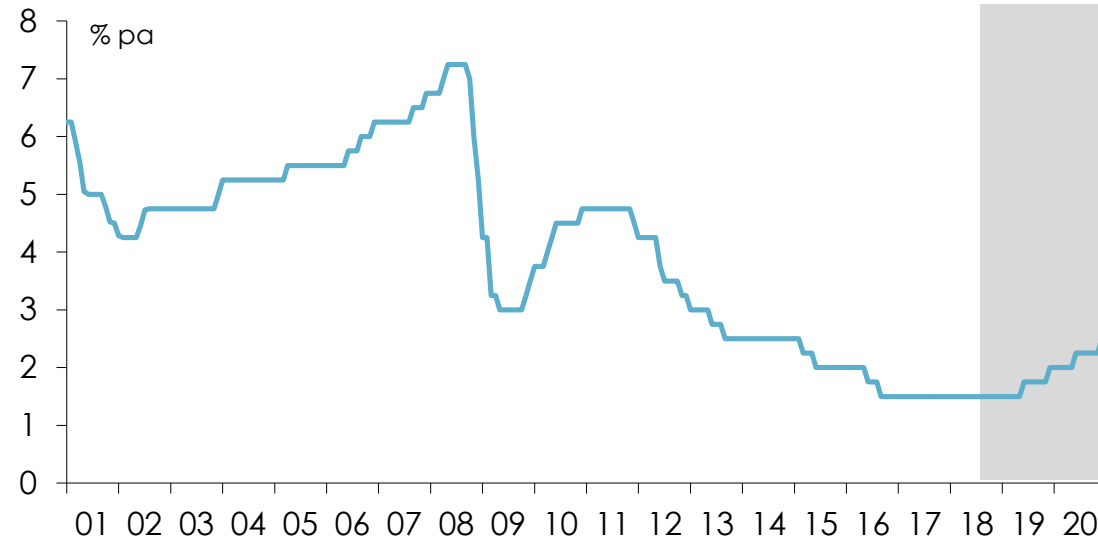
Dwelling completions – Australia and other ‘advanced’ economies



Sources: Australian Bureau of Statistics; US Commerce Department; UK Office of National Statistics; Instituto Nacional de Estadística d'España; Ireland Central Statistics Office.

The next movement in RBA rates will be upwards – but not in any hurry

RBA cash rate



RBA forecasts

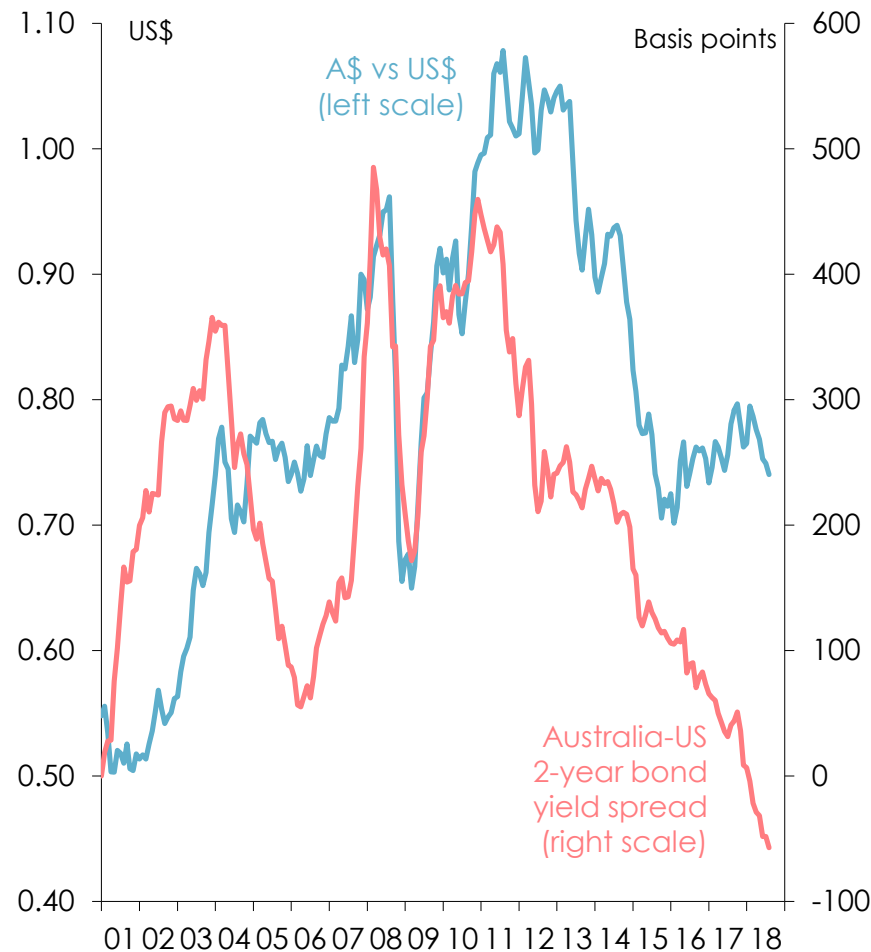
	Year-ended					
	Dec 2017	Jun 2018	Dec 2018	Jun 2019	Dec 2019	Jun 2020
GDP growth	2.4	2¾	3¼	3½	3¼	3
Unemployment rate ^(b)	5.5	5½	5½	5¼	5¼	5¼
CPI inflation	1.9	2	2¼	2¼	2¼	2¼
Underlying inflation	1¾	2	2	2	2	2¼

- ❑ The RBA expects economic growth to remain 'below trend' until the second half of 2018, 'spare capacity' in the labour market to persist until after 2019, and 'underlying' inflation to remain below its target band until mid-2019
- ❑ These are not the forecasts of a central bank that is on the cusp of tightening monetary policy
- ❑ Of course, the RBA need not keep interest rates at current record lows until all of the key economic variables are where they want them to be
- ❑ The RBA would be delighted to see [further] increases in foreign interest rates while it 'stands pat' reflected in a decline in the A\$
- ❑ First move now seems unlikely before May next year
- ❑ If major banks raise their loan interest rates in response to increased funding costs then the RBA will delay the first increase in its cash rate even further
- ❑ And of course in the event of an unexpected negative shock the RBA would be prepared to cut rates

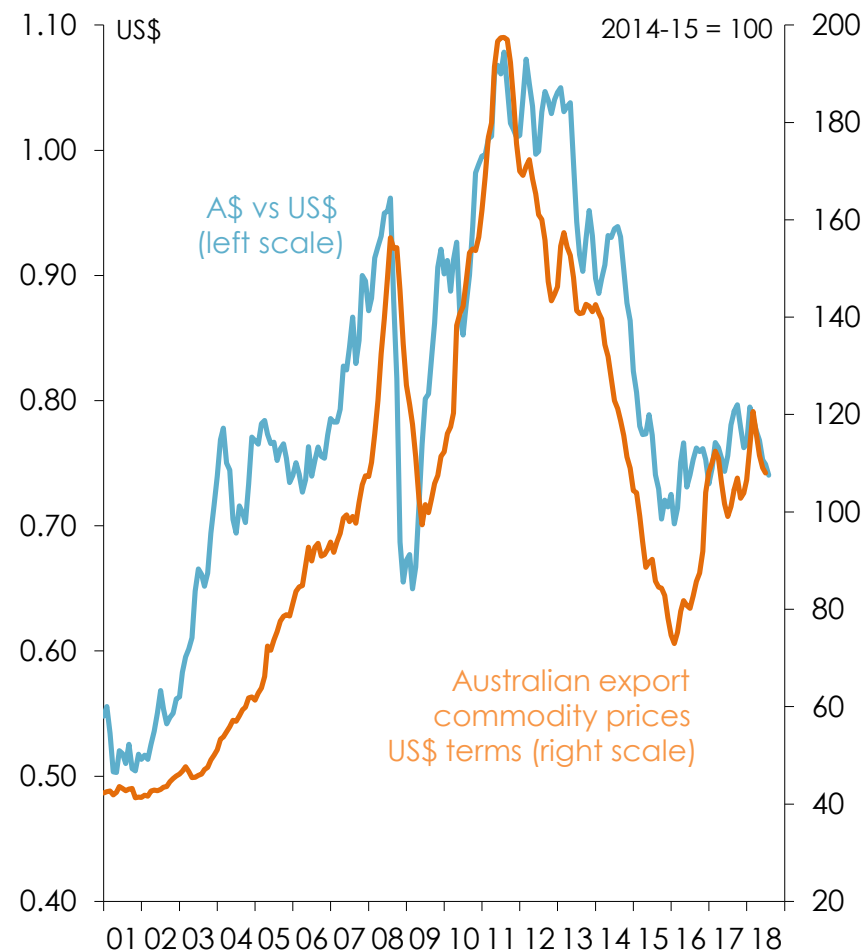
Source: RBA, *Statement on Monetary Policy*, May 2018.

Australian rates are now below US rates – but the effect of that on the A\$ has been offset by stronger commodity prices

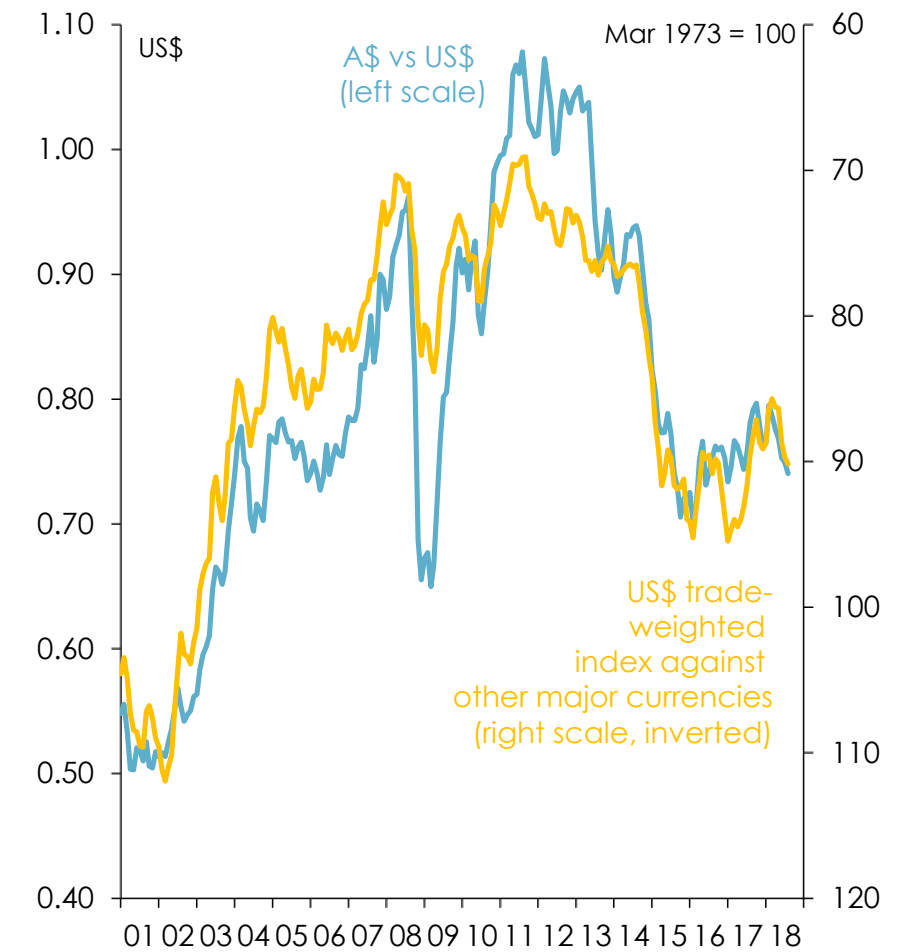
A\$-US\$ rate and Australia-US interest rate spreads



A\$-US\$ rate and commodity prices



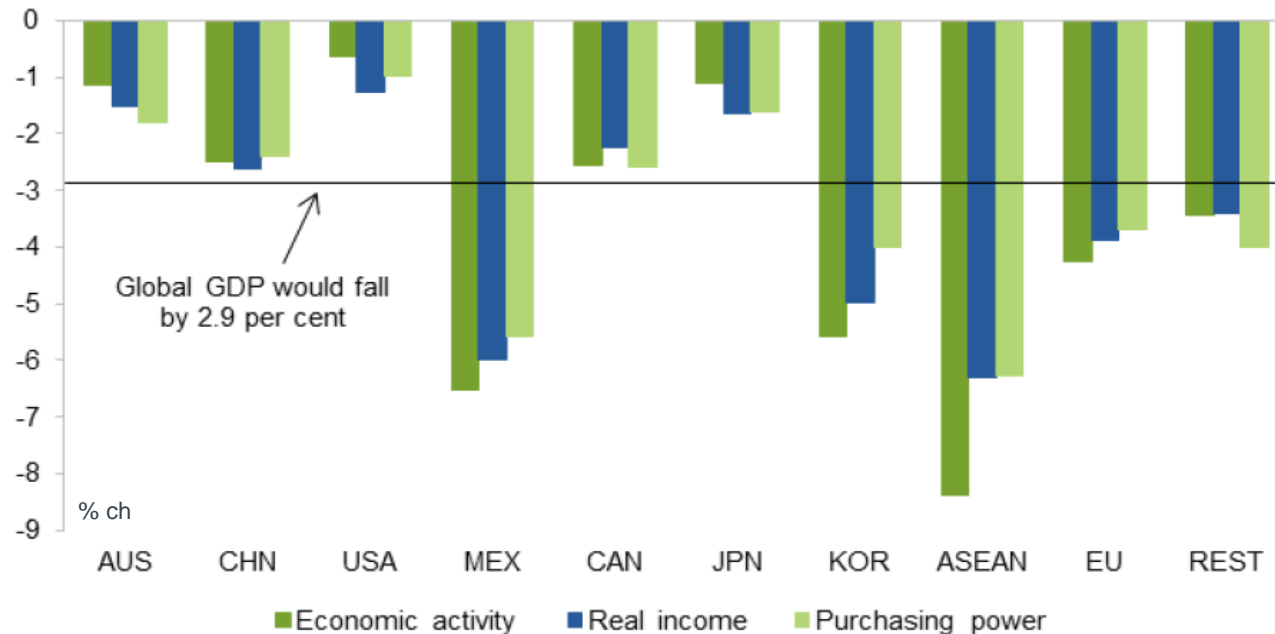
A\$-US\$ rate and US\$ vs other major currencies



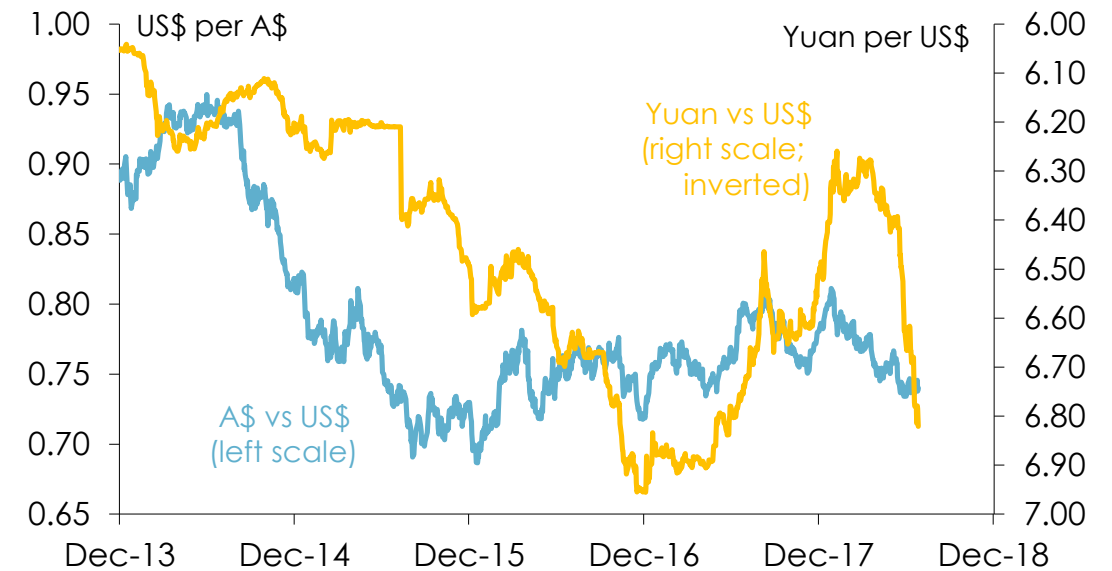
Sources: Thomson Reuters Datastream; Federal Reserve Board; RBA.

Australia would not be immune from the effects of a global 'trade war'

- ❑ Australia would be less affected by a global 'trade war' than many other countries – largely because trade accounts for a smaller share of Australia's GDP than most other economies (except for US, Japan and India)
- ❑ Nonetheless, Productivity Commission modelling suggests that a 15 pc point increase in tariffs world-wide would reduce Australia's exports by 15%, and Australia's GDP by 1% - costing the median household around \$1500 a year, and eliminating around 100,000 jobs



- ❑ Financial markets perceive that one of the ways in which Australia would be harmed by a 'trade war' is our close economic alignment with China



- ❑ Another potential source of risk to Australia's economy could stem from official Chinese 'displeasure' at Australian Government actions – affecting, eg, food and beverage exports, tourism and international students

Summary and conclusions for Australia

- ❑ **Economic growth is now running close to trend, but it's hard to see any significant acceleration in growth to an 'above-trend' pace from here**
 - which means that 'spare capacity' in the labour market is likely to persist for quite a long time yet
 - which in turn means that it's unlikely there will be any meaningful acceleration in wages growth any time soon
 - which implies that the RBA may be 'doing nothing' for quite a long time
- ❑ **The most obvious risks to Australia's economic prospects come from overseas**
 - in particular, the risk of a 'trade war' – from which there are *no winners* (despite what President Trump thinks)
 - but also from higher US interest rates, a stronger US dollar and the potential for political attacks on the Fed's independence
 - and a host of other 'geo-political' risks (Mueller inquiry and US mid-term elections, 'Brexit', North Korea, Iran)
 - although the risks of an abrupt slow-down in China seem to have receded for now, they could come back again in 2019 or 2020
- ❑ **The end of the housing boom reduces what had been seen as a major risk for Australia**
 - the decline in property prices now under way in most Australian cities has further to run, and will have some dampening impact on household spending – but it is not the precursor to a US-, Irish- or Spanish-style 'housing bust'
 - rather, it should be seen as reducing the risk of that kind of event happening later on, and as offering some prospect of an improvement in housing affordability
- ❑ **Australia is likely to experience on-going political uncertainty**
 - opinion polls suggest that there will be a change of government at the next election (due in Q2 2019) – and there is some risk of instability within the current government ahead of that time
 - a future Labor Government may find the Senate as difficult to deal with as the present Government has