



RESERVE BANK OF AUSTRALIA

Speech

## Recent Trends in Inflation

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Governor

**Address to the Australian Business Economists (ABE)**

Online and Sydney – 16 November 2021



Thank you for the invitation to speak to the Australian Business Economists again. I am glad to have this opportunity to gather together with some of you in person, rather than just speak to my computer camera.

Today, I would like to focus on recent trends in inflation – both here and overseas. I will then discuss the implications for the RBA's monetary policy.

Over recent months, concerns about inflation have moved to the centre of many people's radar screens, after years of being at the periphery. This has coincided with headline inflation rates in some countries rising to their highest rates in a long time. Understanding the reasons for this higher inflation and how persistent it is likely to be are important issues for households, investors and central banks.

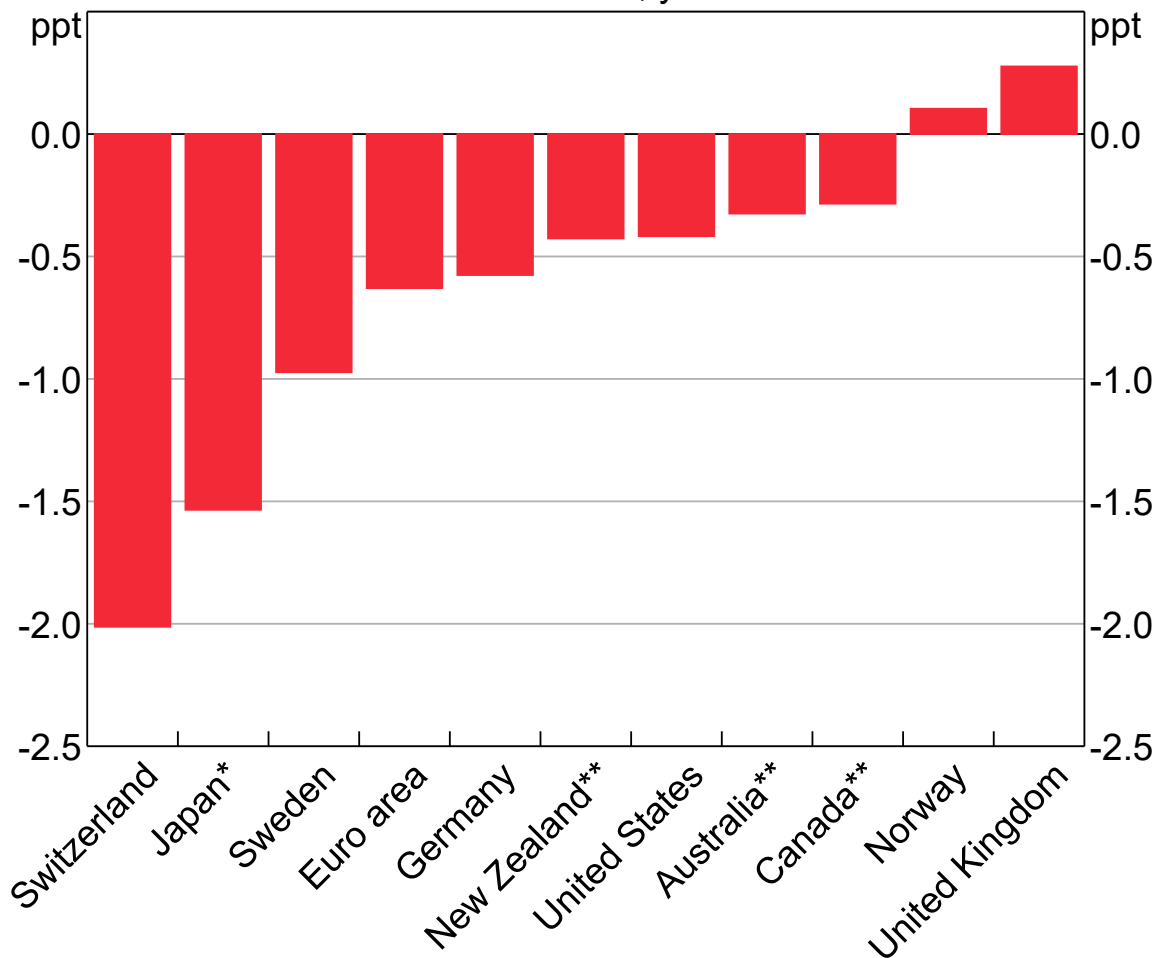
### Some background

The recent concerns about inflation have come after many years of inflation being below central banks' targets. This first graph shows the gap between the average inflation rate over the 10 years to the end of 2019 and the target rate (Graph 1). The picture is pretty clear: the undershooting of inflation targets has been a common, though not universal, experience. The reasons for this are complex but include increasing globalisation, advances in technology and changes in the way labour markets work.

Graph 1

## Average Deviation from Inflation Target

From 2010 to 2019, year-ended



\* Japan introduced an inflation target of 2 per cent in January 2013

\*\* Inflation targets for Australia, Canada and New Zealand are ranges; height of bar corresponds to deviation from midpoint of range

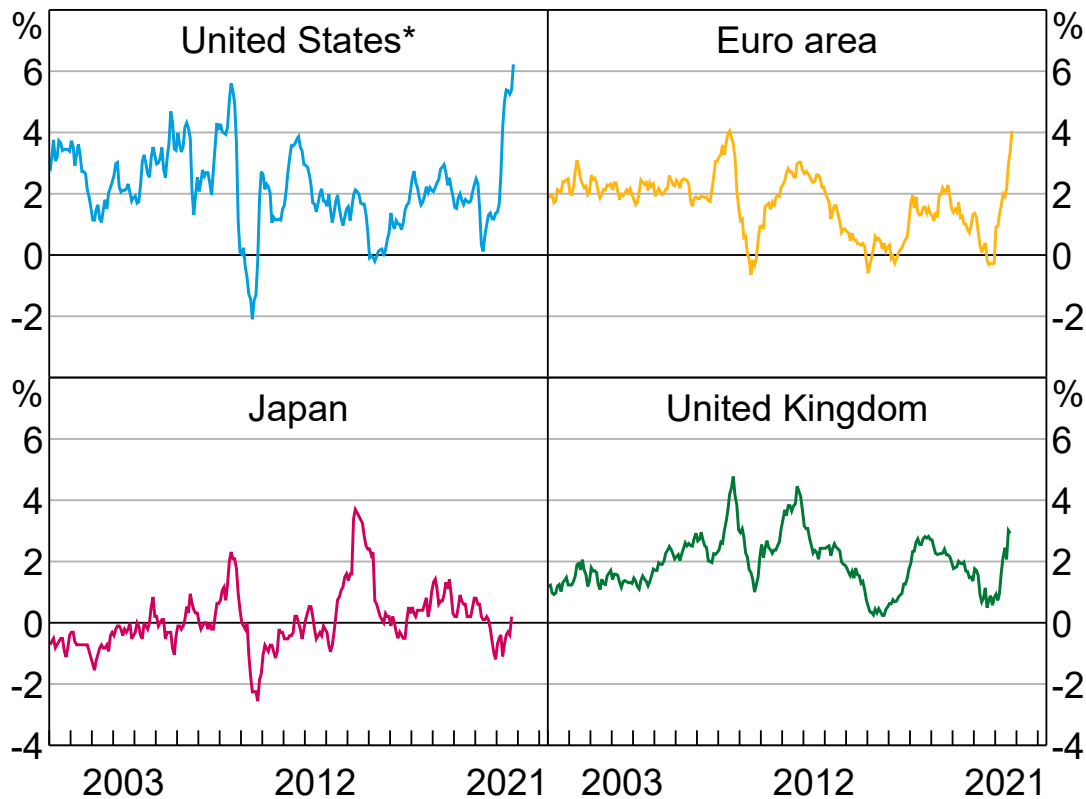
Sources: RBA; Refinitiv

Now in 2021, the common experience is higher inflation. CPI inflation has increased in most advanced economies, with a number now experiencing headline inflation rates above 4 per cent (Graph 2). Asia is an exception, though, with inflation rising by only a small amount in Japan and China. So not every country is in the same position.

## Graph 2

# Headline Inflation

Year-ended



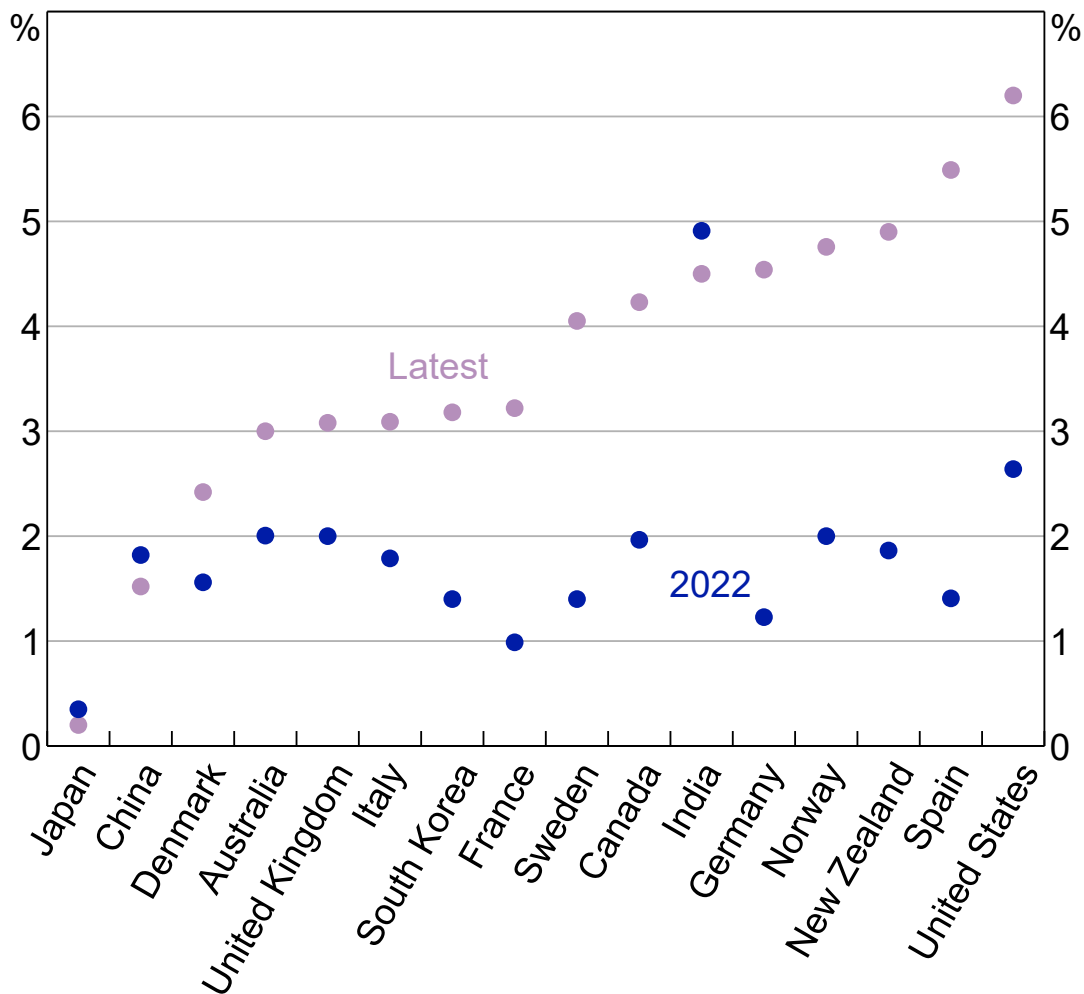
\* Measure shown is CPI inflation; the US Federal Reserve's target is set in terms of personal consumption expenditures inflation

Source: Refinitiv

In those countries experiencing higher inflation, central banks and investors are asking themselves how persistent this increase will be. Is it just a temporary development associated with the pandemic? Or is it the start of a more persistent change in inflation dynamics in our economies?

Most central banks and international organisations have concluded that the increase in inflation is likely to be only temporary. This is evident in the next graph, which shows the latest inflation data for a range of countries, together with the IMF's forecast for inflation in 2022 (Graph 3). In most economies, inflation is expected to be much lower next year, with inflation rates generally clustered around 2 per cent.

Graph 3  
**IMF Inflation Forecasts**  
 Year-ended

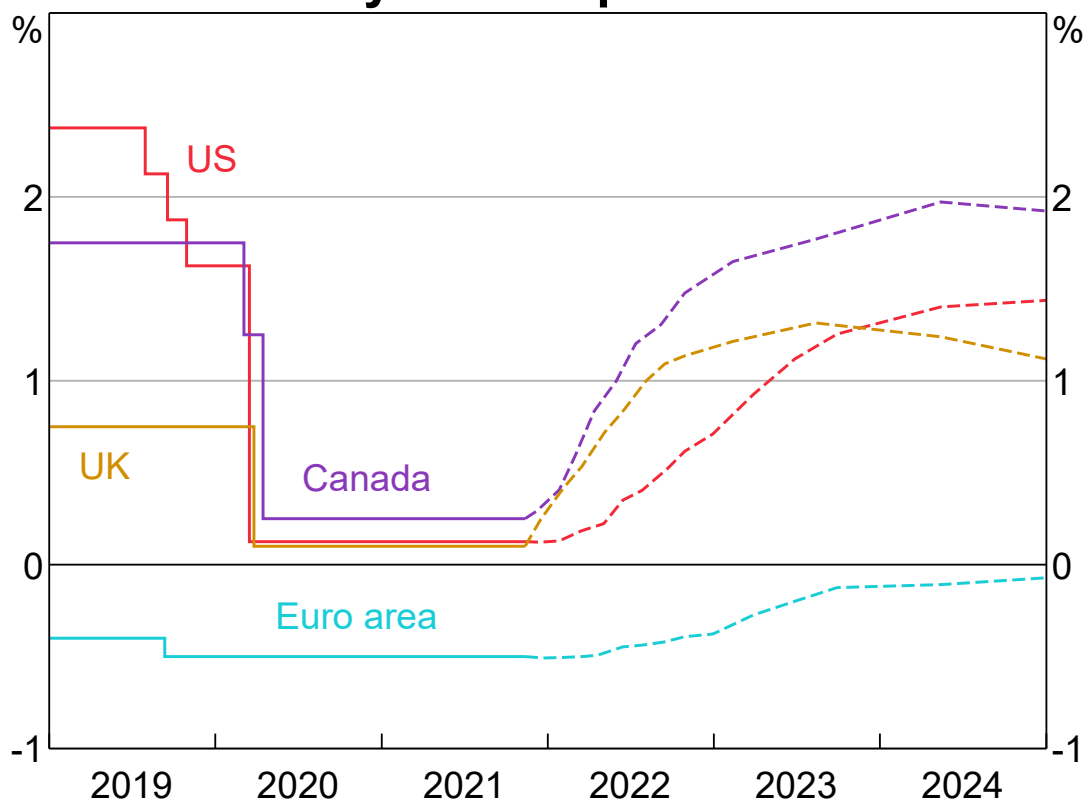


Sources: ABS; IMF; Refinitiv

A related question is to what extent policy interest rates will have to increase to achieve and sustain the forecast reduction in inflation rates? Current market pricing suggests that investors expect that most central banks in advanced economies will increase their policy interest rates by the end of 2022, with some – including New Zealand, Norway and South Korea – already having done so (Graph 4). It is noteworthy that only a modest increase in policy interest rates is anticipated, with rates expected to plateau at what would still be historically low levels. This is consistent with the view that the current increase in inflation is only transitory and that a period of contractionary monetary policy will not be required to return inflation to target.

Graph 4

## Policy Rate Expectations



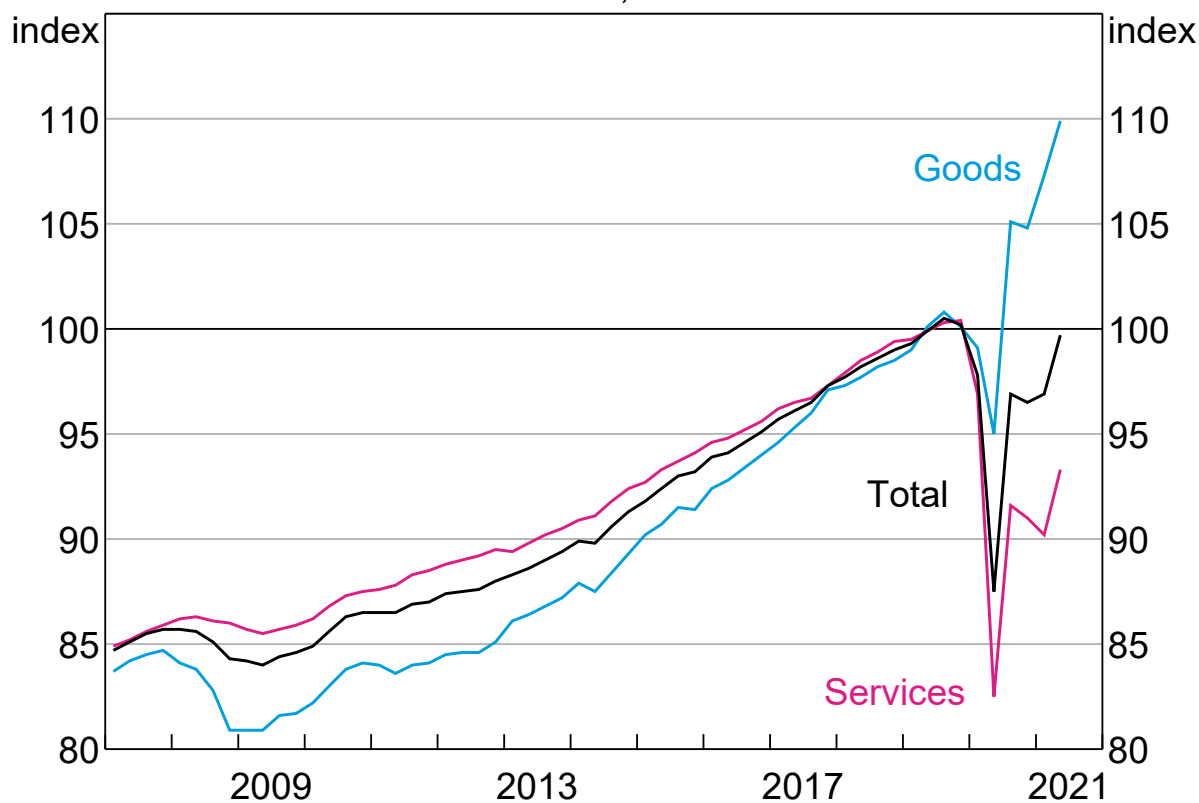
Sources: Bloomberg; RBA

## Some explanations

With that background, I would like to discuss some of the reasons why inflation has risen recently. While there are a range of idiosyncratic factors at work, many of the explanations boil down to a simple one – that is, a shift in the balance of demand and supply as a result of the pandemic.

The best place to start is the very large shift in household spending patterns over the past year and a half. When households were locked down, they had difficulty spending on many household services and switched their spending to goods (Graph 5). Rather than taking a trip, going to the gym or eating out, people purchased goods for their homes, including fitting out their home offices and purchasing home exercise equipment. The result was an unprecedented switch in consumption patterns and the effect of this has reverberated throughout the global economy.

Graph 5  
**Household Consumption**  
 G7 economies, 2019 = 100

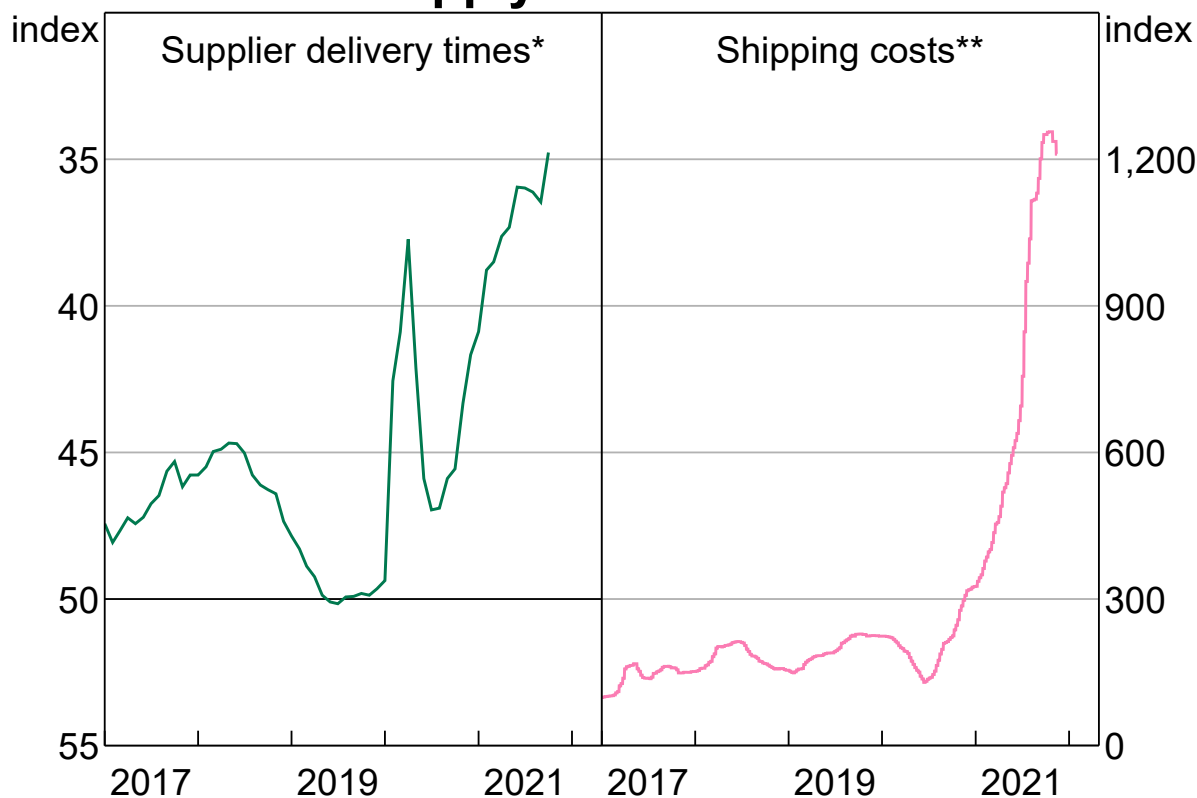


Sources: RBA; Refinitiv

This surge in demand for goods quickly ran up against a supply side that was not flexible enough. Modern supply chains are calibrated to operate on a 'just-in-time' basis. This reduces the cost of holding inventories, but it means that the global production system is not well suited to a sudden and large shift in demand. And there was the added complication that at the same time demand surged, supply was temporarily constrained as governments and firms took steps to contain the virus. The COVID-19 containment measures also affected the logistics industry. And so, once bottlenecks started to emerge, the problems in supply chains and in logistics fed off one another and compounded.

So there was a perfect storm of sorts: very strong demand for goods combined with a hit to productive capacity. The result was a sharp increase in shipping costs around the world, a fall in inventories, increased delivery times and large rises in the prices of many goods (Graph 6).

Graph 6  
**Supply Constraints**



\* Purchasing Managers' Index; manufacturing firms; inverted scale

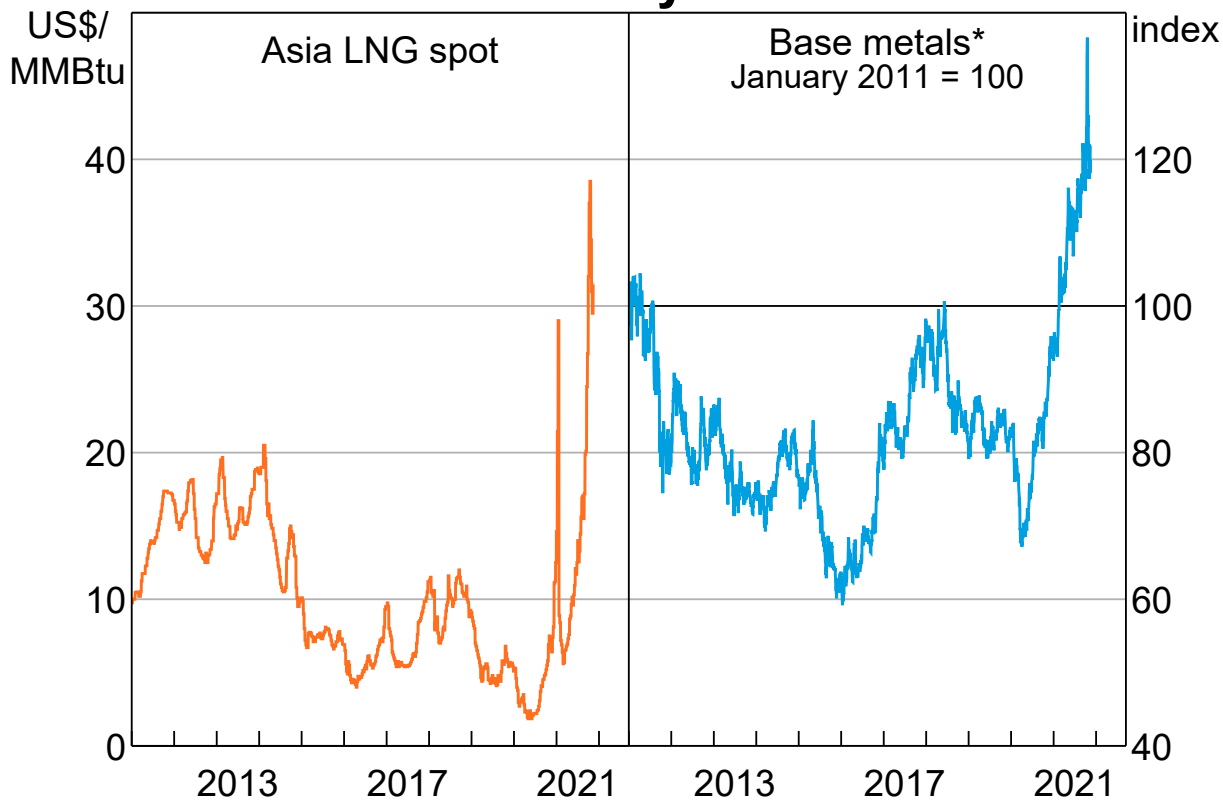
\*\* January 2017 average = 100

Sources: IHS Markit; RBA; Refinitiv

As time has passed, the hit to the supply side because of COVID-19 has been largely overcome, although there are ongoing supply problems in some areas. Today, the main issue is not a reduced ability of global producers to produce goods, but rather an inability to respond quickly enough to strong global demand. For many goods, producers are operating at an inelastic part of the global supply curve.

A similar story has played out in many commodity and energy markets. Even before the pandemic, a number of these markets were operating at a point where the short-run supply curve was quite steep. As a result, even modest shifts in demand moved prices significantly. This is evident in the large increases in the prices of gas and many base metals recently (Graph 7). The situation has been compounded, especially in Europe and China, by adverse weather events that have directly reduced supply in some energy markets.

## Graph 7 Commodity Prices



\* Base metals subindex of the RBA Index of Commodity Prices

Sources: Bloomberg; RBA; Refinitiv

The other side of this shift in consumption patterns has been reduced demand for services. This had seen services price inflation slow a bit, but not enough to offset the increase in goods price inflation. More recently, global services price inflation has picked up to be around its pre-pandemic level.

Looking ahead, an important question is whether consumption patterns will normalise over time, and if so what effect will this have on prices. There is genuine uncertainty here. It is likely, though, that consumption patterns will return to something more normal. This is not only because we can once again consume many services, but also because households are unlikely to make repeat purchases of durable goods.

A return to a more normal pattern would be associated with softer growth in the demand for goods and stronger growth in the demand for services. It is possible that this could coincide with a resolution of some of the lingering supply disruptions and an increase in global supply of goods as firms respond to higher prices. If so, the balance between demand and supply for goods could be quite different from what we have seen recently. This is one basis for thinking that the current elevated rates of inflation are temporary: a period of strong demand saw prices rise, which was recorded as higher inflation, but prices aren't likely to keep rising at current rates as conditions normalise, and some prices may even decline.

More fundamentally, a critical issue is how the labour market responds. It is unusual to have persistently higher inflation without persistently higher wages growth (unless there is a shift lower in labour productivity growth). The two generally go together. There have been historical exceptions to



this, and other factors that affect firms' costs and mark-ups can have persistent effects. But at the current juncture, the labour market is the key.

From my perspective, there are a couple of issues to watch here.

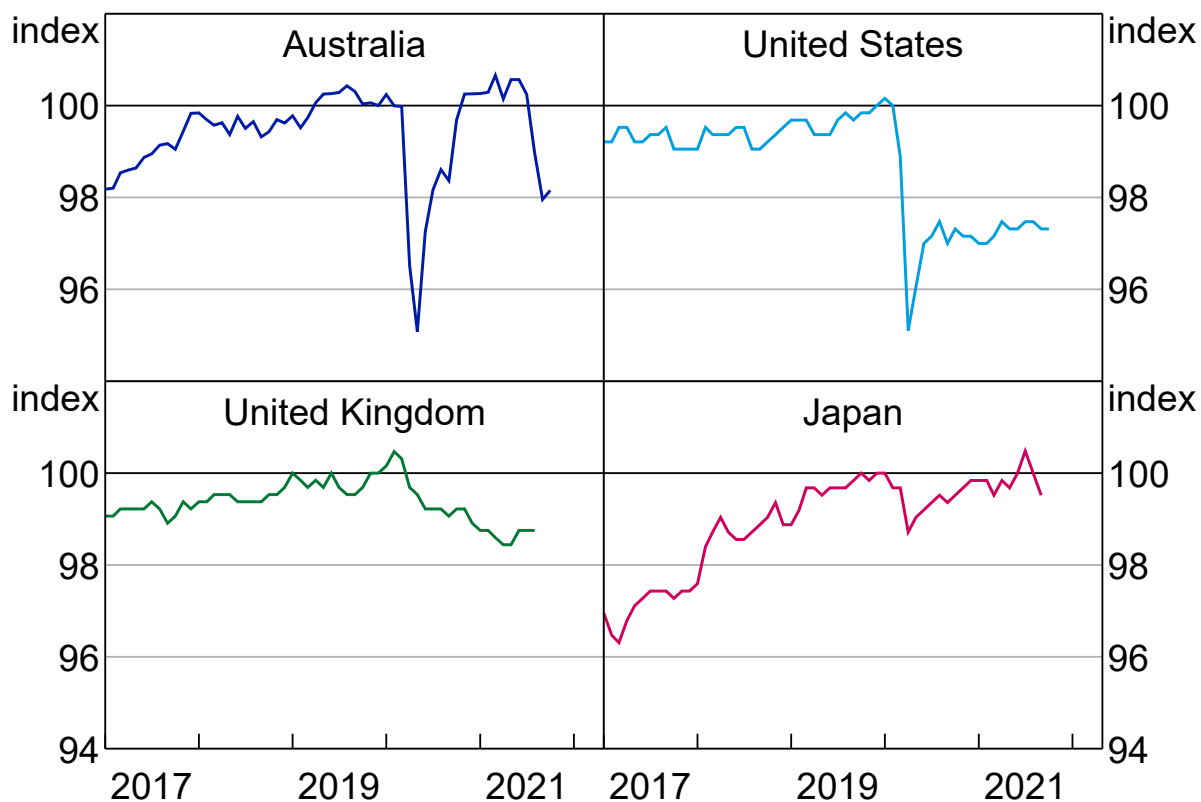
The first is how the higher inflation feeds through to inflation expectations and wage norms. It is possible that higher inflation leads workers to seek larger wage increases to compensate them for a loss of purchasing power. This is especially so if workers believe the higher inflation is here to stay. If a period of higher wages growth were to reset wage growth norms, this would have a persistent effect on overall inflation.

The second issue is how the balance of supply and demand in the labour market shifts as economies open up and the demand for labour-intensive services increases. Among other things, this will depend upon how labour force participation evolves.

Here, the experience has been quite different across countries. In the United States, labour force participation has not yet recovered and is still around 2 percentage points below its pre-pandemic level (Graph 8). In contrast, in Australia we were hitting record highs for participation just before the Delta outbreak and are expected to return to these highs in the coming months. This has also been the experience in several countries in Asia, including Japan, where workers remained attached to their employers throughout the pandemic and where labour force participation rates remained close to record highs.

Graph 8  
**Labour Force Participation Rates**

December 2019 = 100



Sources: RBA; Refinitiv

In the United States, the high incidence of COVID-19 infections resulted in a significant reduction in labour supply as people prioritised looking after their own health and that of their families. The closure of schools also had an effect. Further, the income-support arrangements were less successful than Australia's JobKeeper program in maintaining the attachment between businesses and employees. The result has been a significant shock to labour supply in the United States. This has not been the case in Australia.

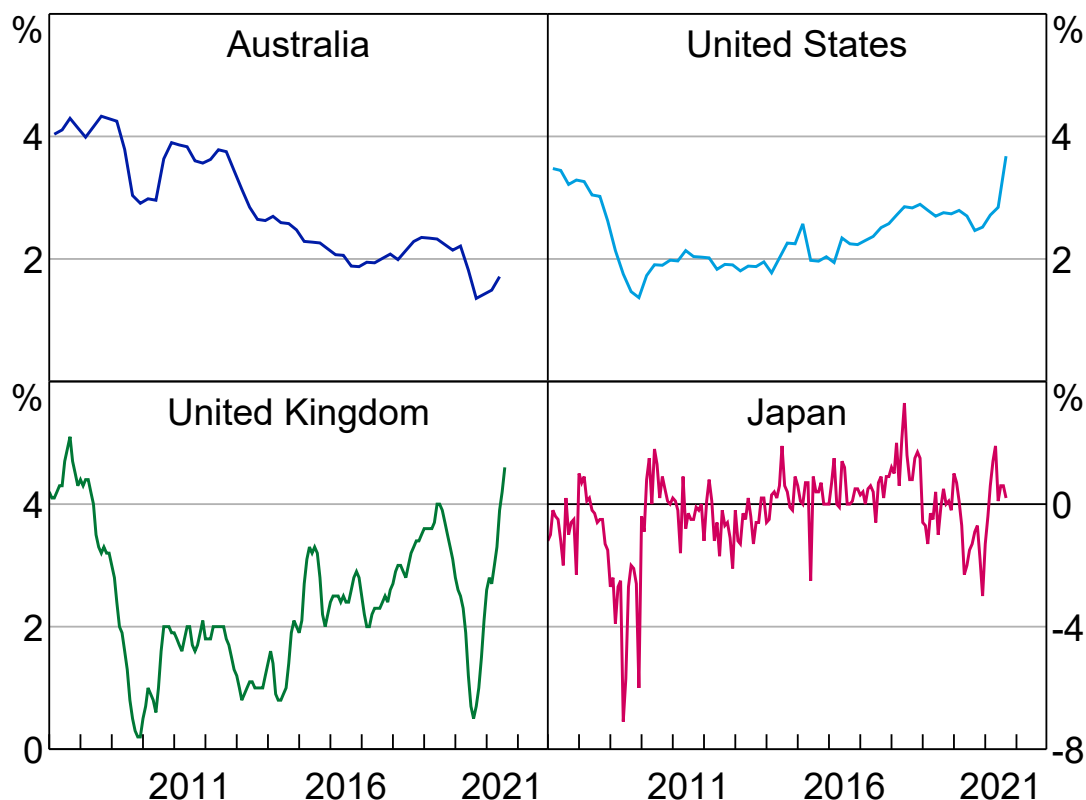
These developments are relevant because strong growth in the demand for services will require a sharp increase in hours worked. In countries where participation has fallen and fewer employee–employer relationships were preserved, one might expect more friction in the labour market. In these countries, labour market matching might be harder to achieve and there could be more upward pressure on wages and inflation. The high incidence of COVID-19 infections in some countries may also mean that some people are reluctant to take or return to customer-facing jobs. So these are issues to watch.

We are already seeing some of these dynamics play out and they help explain differential wage outcomes across countries. In the United States and the United Kingdom there has been a sharp increase in wages growth (Graph 9). In contrast, this has not been the case in Australia or Japan, where there has been less of an effect on labour supply.

## Graph 9

# Wage Cost Growth\*

Year-ended



\* Labour cost indices (Wage Price Index and Employment Cost Index) used for Australia and the United States; measure for the United Kingdom is Bank of England's compositionally adjusted average earnings; measure for Japan is average monthly cash earnings

Sources: BoE; RBA; Refinitiv

To summarise, inflation in many countries rose as increased demand for goods quickly ran up against a supply side that was not flexible enough. In some countries, developments in energy markets, partly due to adverse weather events, have added to the upward pressure in inflation. Although there is some uncertainty, it is likely that inflation from these sources will moderate over the next 18 months as demand rebalances towards services and the supply of goods adjusts. Now, the critical issue for inflation is how the labour market responds, particularly as demand for services picks up.

## Inflation in Australia

I would now like to turn to Australia.

Many of the factors that have caused inflation to rise elsewhere are also at play in Australia, though most of these are more muted here. There are also significant differences as well, which I will discuss in a moment.

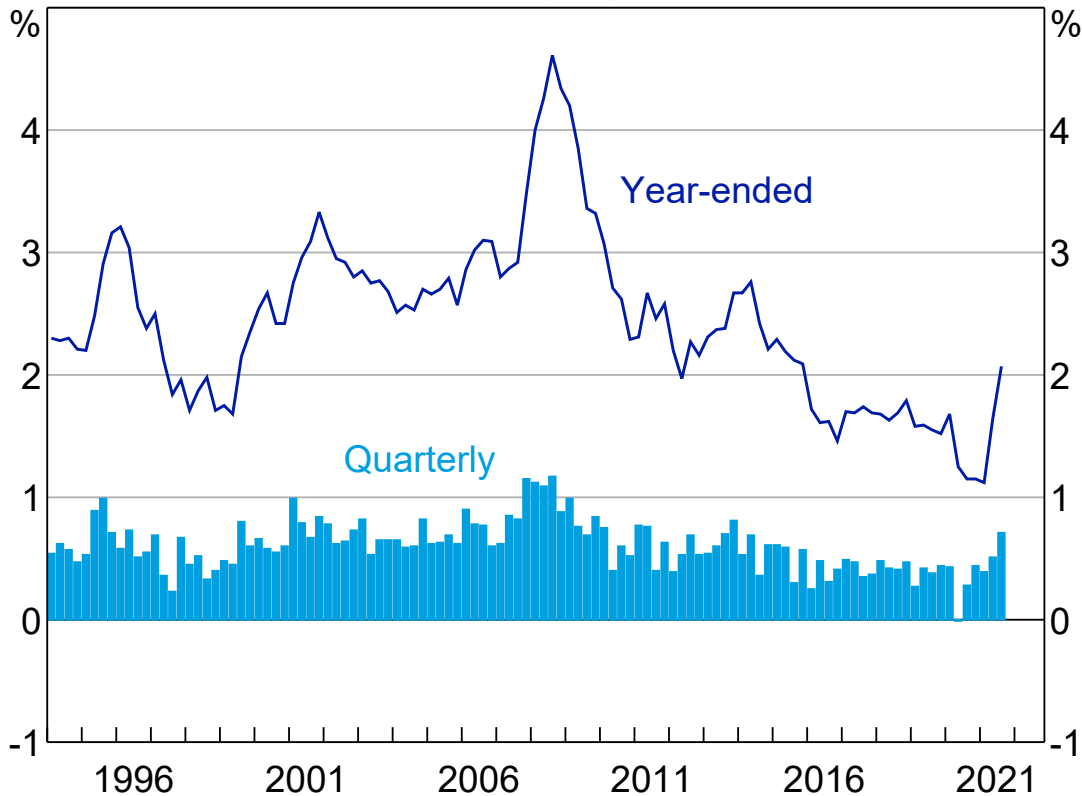
As in the rest of the world, Australia has experienced a lift in inflation, although it is less pronounced than in many other countries. In underlying terms, inflation was 0.7 per cent in the September quarter and 2.1 per cent over the year to the September quarter (Graph 10). While this outcome was higher than expected, it is important to remember that at 2.1 per cent, underlying inflation is only

just above the bottom of the 2 to 3 per cent target band and remains lower than the average for the past three decades.

Graph 10

## Trimmed Mean Inflation\*

Seasonally adjusted

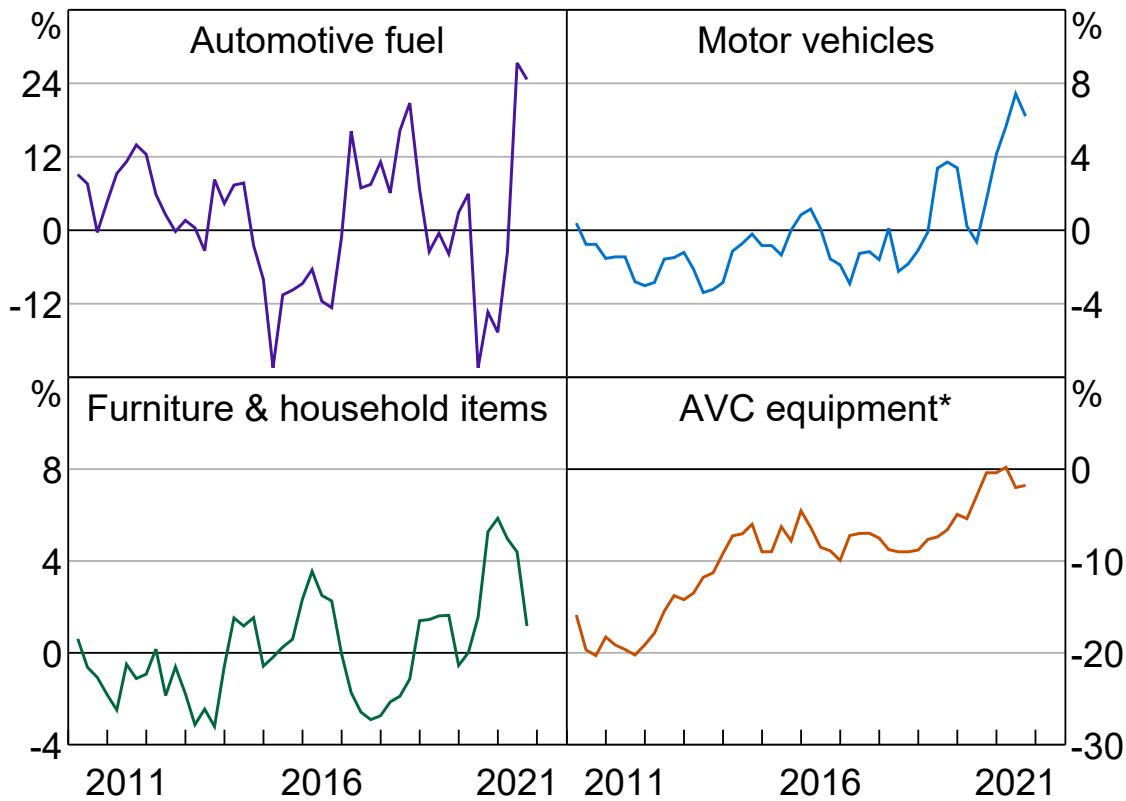


\* Excludes interest charges prior to the September quarter 1996 and deposit & loan facilities; adjusted for the tax changes of 1999–2000

Sources: ABS; RBA

The higher price of oil in global markets has also affected the headline inflation rate in Australia, with petrol prices up by 24 per cent over the past year (Graph 11). The effects of the shift in consumption patterns are also evident. Some imported goods prices have increased because global goods prices have increased and domestic retailers are discounting by less in response to strong domestic demand. For example, new car prices have increased at the fastest rate since 2001 and the prices of electronics and computing equipment have fallen at the slowest rate for many years. The prices of some other consumer durables, including household furnishings (but not clothing), have also been increasing a little more strongly than in recent years.

Graph 11  
**Fuel and Consumer Durables Inflation**  
 Year-ended



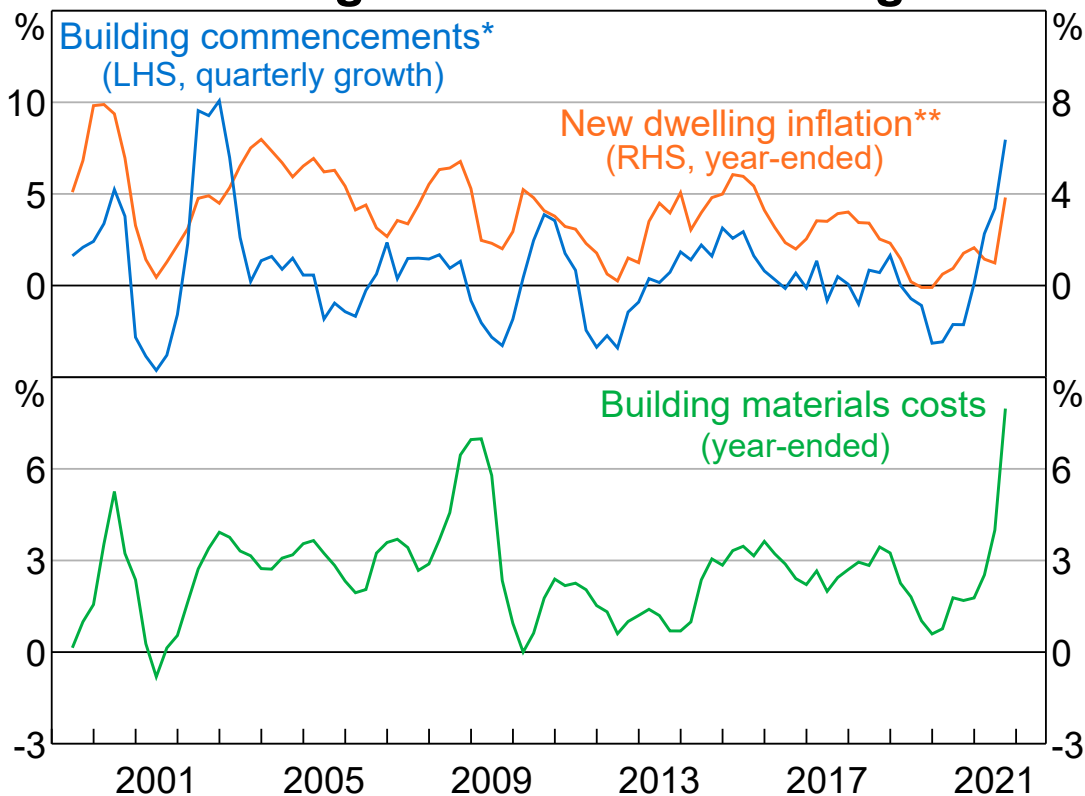
\* Audio, visual & computing equipment

Sources: ABS; RBA

The shifting demand–supply balance is also evident in the higher cost of building a new home. Again, this is the result of a combination of global price rises for many building materials – including timber and steel – and a domestic price response to strong demand for new homes and renovations (Graph 12). The price of constructing a new dwelling – which has a weight of 8½ per cent in the CPI basket – increased by 3.3 per cent in the September quarter and further increases are expected.

Graph 12

### New Dwelling Inflation and Building Costs



\* Six-quarter average lagged by one quarter; detached only before 2017

\*\* Adjusted for the tax changes of 1999–2000

Sources: ABS; RBA

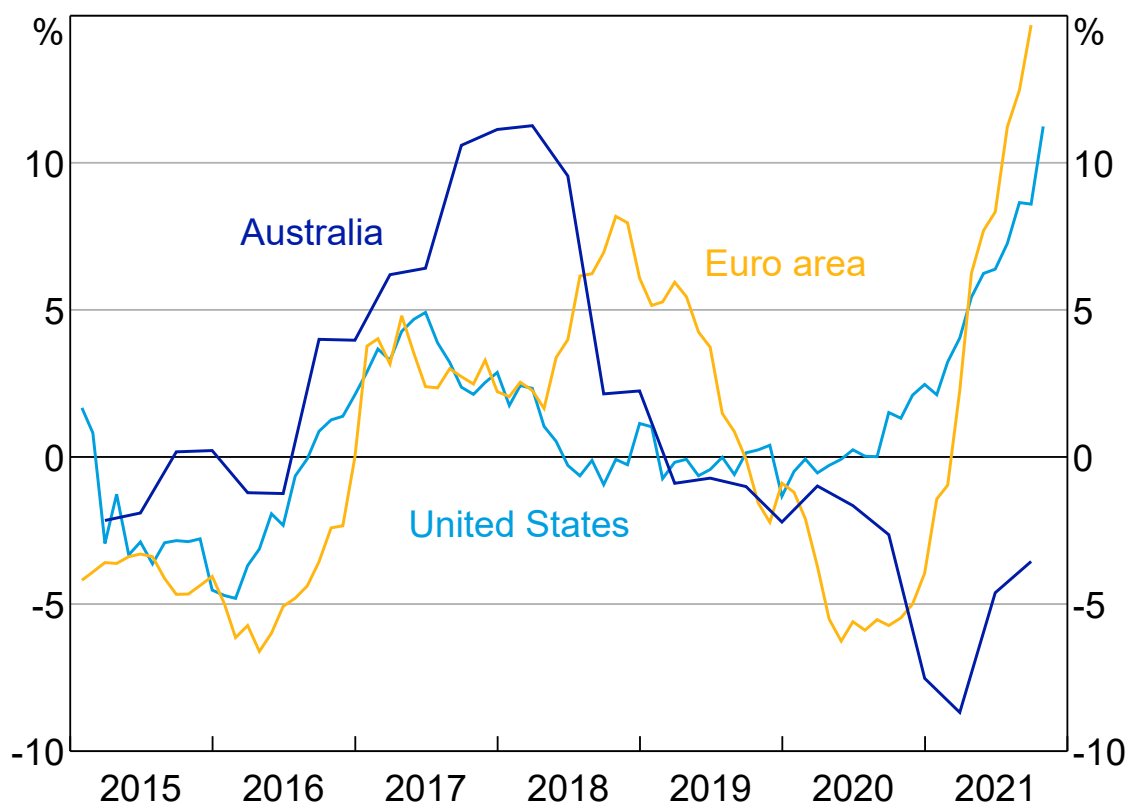
So there are similarities with other countries. I would now like to turn to two important differences.

The first of these is energy prices. Energy prices in Australia have been trending lower for a number of years, after earlier large price increases (Graph 13). This recent experience has mainly reflected lower wholesale electricity prices, which is in part a result of increased capacity from wind and solar generators. In contrast, a number of other advanced economies have experienced very large increases in electricity prices as their power systems struggle to meet demand.

Graph 13

## Household Energy Price Inflation

Year-ended



Sources: ABS; RBA; Refinitiv

The second and more important difference is what has been happening in the labour market.

Labour force participation in Australia remains high and the wage-setting processes – including multi-year enterprise agreements and the annual minimum wage case – impart a degree of inertia into aggregate wage outcomes. Wages growth is expected to pick up, but to do so only gradually. Our business liaison suggests that most businesses retain a strong cost control mindset and are seeking to use measures other than raising base wages to attract and retain staff. There are some jobs that are in very high demand where wages have increased, but we are yet to see a broad-based pick-up in wages growth. In contrast, as I discussed earlier, wages growth has already picked up markedly in some other countries.

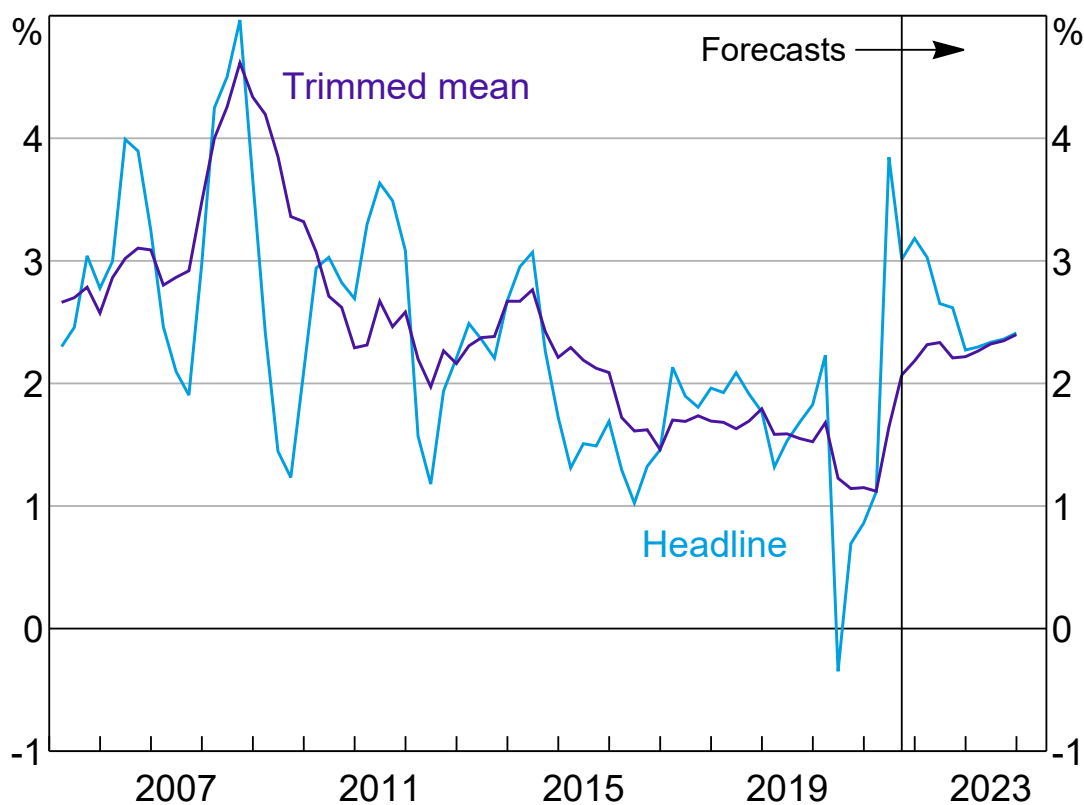
Turning to the outlook, we expect underlying inflation to pick up further, but to do so only gradually. On the one hand, some normalisation in consumption patterns here and around the world should partly alleviate the current upward pressure on inflation. But on the other hand, we are expecting a gradual pick-up in wages growth as the labour market tightens.

In terms of the specifics, our central forecast is for the Wage Price Index to increase by 2½ per cent over 2022 and 3 per cent over 2023 (although overall labour costs are expected to increase somewhat faster than this). Underlying inflation is expected to be 2¼ per cent over 2022 and 2½ per cent over 2023 (Graph 14).

Graph 14

**Inflation Forecasts**

Year-ended



Sources: ABS; RBA

**Monetary policy**

I would now like to turn to the implications of all this for monetary policy in Australia.

The recent inflation data indicate that we are making better-than-expected progress towards our inflation objective. This is welcome news. But we still have a way to go. Underlying inflation has only just returned to the target range for the first time in six years and is only just above the bottom of that target range.

In terms of the real economy, the recovery is back on track following the interruption caused by the Delta outbreak. This recovery is being underpinned by high rates of vaccination and expansionary policy settings. We are expecting the recovery to continue and the unemployment rate to trend lower, reaching 4 per cent by the end of 2023. The last time the unemployment rate was lower than this was in the early 1970s.

Over the past 50 years, an inflation rate in the twos and an unemployment rate in the fours would have been considered very good outcomes. We need to remember, though, that we are in this place only because of extraordinary policy support. Over time, as a country we will need to refocus on the underlying drivers of growth in the economy and jobs.

In terms of the cash rate, the Reserve Bank Board has said that it will not increase the cash rate until inflation is sustainably in the target range. It is hard to precisely define what 'sustainably in the



target range' means. But we want to see underlying inflation well within the 2–3 per cent range and have a reasonable degree of confidence that it will not fall back again. The trajectory for inflation is also important, with a slow drift up in underlying inflation having different policy implications to a sharp rise. Another important consideration will be developments in the labour market.

Unless labour productivity growth is very weak, it is likely that wages will need to be growing at 3 point something per cent to sustain inflation around the middle of the target band. This doesn't mean that we have a target for wages growth or that wages growth is the only determinant of inflation. Rather, we are using wages growth as one of the guideposts in assessing progress towards our goal and whether inflation is sustainably in the target range. As we get closer to that goal, you could expect us to provide further guidance, including our projections for inflation.

Given the global and domestic forces I have discussed, the inflation outlook is more uncertain than it has been for some time. But our central scenario is that underlying inflation reaches the middle of the target by the end of 2023. If this comes to pass, it would be the first time in nearly seven years that we will be at the mid-point. This, by itself, does not warrant an increase in the cash rate. As I have said, much will depend upon the trajectory of the economy and inflation at the time. It is still plausible that the first increase in the cash rate will not be before 2024.

There are, of course, other possibilities. It is possible that the global inflation shock is more persistent and that the rebalancing of consumption patterns does not result in an easing of inflation pressures. In addition, we have little historical experience as to how the Australian labour market works at an unemployment rate of 4 per cent. There is also the question of the effect on labour supply of the reopening of the international border. It is therefore possible that faster-than-expected progress continues to be made towards achieving the inflation target. If so, there would be a case to lift the cash rate before 2024. It is also possible that progress will be slower than expected, which would result in the cash rate staying at current levels for longer.

Finally, I would like to repeat a point I made a couple of weeks ago – that is, the latest data and forecasts do not warrant an increase in the cash rate in 2022. The economy and inflation would have to turn out very differently from our central scenario for the Board to consider an increase in interest rates next year. It is likely to take time to meet the condition we have set for an increase in the cash rate and the Board is prepared to be patient.

Thank you for listening.

I look forward to answering your questions.

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## Endnote

[\*] I would like to thank Penny Smith for assistance in preparing this talk.

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