**Applied economic exercise**

**February 2021**

**Read the RBA Governor’s opening statement to the HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON ECONOMICS as well as responses to selected questions and ‘fill the gaps’. The link to the complete document is contained here:** <https://www.rba.gov.au/speeches/2021/sp-gov-2021-02-05.html>

**Opening statement**

**Mr Lowe:**

…Since we last met the outlook for the Australian economy has also improved. The **\_\_\_\_\_\_\_\_\_\_\_\_** in Australia was not as deep as we had feared, the recovery started earlier and it has been stronger than we were expecting. The outcomes for GDP and the **\_\_\_\_\_\_\_\_\_\_\_\_** market have been at least as good as the upside scenarios we published last year. Employment **\_\_\_\_\_\_\_\_\_\_\_\_**, retail sales and new house building have all been strong, and measures of consumer and **\_\_\_\_\_\_\_\_\_\_\_\_** confidence have also lifted. These outcomes reflect a combination of factors, including our success on the health front, the very significant fiscal and **\_\_\_\_\_\_\_\_\_\_\_\_** policy support that has been provided and the resilience of Australians, who've adapted, innovated and simply got on with things. The result is that Australia has done better than most other countries on both the health and the economic fronts and there are few places in the world you'd rather be.

This though does not disguise the fact that we still have a fair way to go. Despite the welcome progress in reducing **\_\_\_\_\_\_\_\_\_\_\_\_**, the rate is still higher today than it has been for almost two decades and many people still can't get the hours of work they want and the level of **\_\_\_\_\_\_\_\_\_\_\_\_** is still around four per cent below where we thought it would be when this committee met in February last year. Four per cent is a big gap and it represents a lot of lost output and a lot of lost national **\_\_\_\_\_\_\_\_\_\_\_\_**.

On the **\_\_\_\_\_\_\_\_\_\_\_\_** and prices front we also have a fair way to go to get back to the outcomes we're seeking. Wage growth is the lowest in decades and **\_\_\_\_\_\_\_\_\_\_\_\_** continues to run below our medium-term target of **\_\_\_** to **\_\_\_** per cent. The RBA is committed to making further progress in reducing unemployment and having inflation return to the target range. We recognise though that this progress is likely to be gradual. It's also dependent upon the path of the pandemic as well as on some of the structural and global factors that we've discussed at previous hearings of this committee.

In terms of the pandemic, the Reserve Bank continues to examine the economic consequences of a range of scenarios. Our central scenario is for the upswing in the Australian economy to continue, with above trend growth expected over the next couple of years. **\_\_\_** is expected to increase by 3½ per cent this year and next. Taking into account the recovery we've had so far, we're expecting the level of GDP to return to its end-2019 level by the middle of this year. That's six to 12 months earlier than we were expecting not so long ago.

In our central scenario the unemployment rate continues to decline, to reach six per cent by the end of this year and around 5¼ per cent by mid-2023. When the **\_\_\_\_\_\_\_\_\_\_\_\_** program finishes at the end of March we expect some additional job losses, but over time these are expected to be offset by the jobs created by the ongoing recovery of the economy. Job **\_\_\_\_\_\_\_\_\_\_\_\_**, job ads and business hiring intentions have all rebounded sharply, which suggests continuing solid employment growth over the months ahead.

**\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_**and inflation are both forecast to remain subdued. Wages growth is expected to pick up from its current low rate but to do so only very gradually and still be below two per cent at the end of next year. Inflation in underlying terms is also forecast to be stable at two per cent over the next couple of years. The central forecast is for underlying inflation in 2021 to be 1¼ per cent and next year to be just 1½ per cent.

…One issue that we're paying close attention to is how households respond to the tapering of fiscal and other support measures. The fiscal response has supported people's **\_\_\_\_\_\_\_\_**  and it has boosted household **\_\_\_\_\_\_\_\_**  , with the result that household balance sheets have strengthened considerably over the past year. We're expecting these stronger balance sheets to support **\_\_\_\_\_\_\_\_**  , but there are uncertainties here in both directions.

A related issue that we're watching closely is the housing **\_\_\_\_\_\_\_\_**  . There are many moving parts here at the moment. We have record low **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  , a shift in preferences towards houses and **\_\_\_\_\_\_\_\_**  locations, very large government incentives for **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  buyers, the slowest **\_\_\_\_\_\_\_\_**  growth in a century, very high rates of house building and a significant decline in apartment **\_\_\_\_\_\_\_\_**  in Sydney and Melbourne. So there are a lot of moving parts. In the face of all these moving parts, the housing market has been more resilient than we expected, and this has been helpful for the overall economy. The past year would have been even more complicated if there had been large, ongoing and widespread falls in housing prices. Housing prices are now rising across most of the country. Even so, the national housing price index is only around the level that it reached four years ago.

…I'll now turn to monetary policy. Given that our meeting earlier this week was the first for a new year, the board took stock of last year's monetary policy measures and it discussed the outlook for the year ahead. I'd like to share with you six points from those discussions we had on Tuesday. The first point is one that we covered at this committee hearing in December, and that is: the RBA's monetary policy package is working broadly as expected and it's helping to support jobs. Together, the bond purchases, the Term Funding Facility, the three-year yield target and the record low cash **\_\_\_\_\_\_\_\_**  have kept funding costs low for all borrowers and have helped ensure the banking system is able to provide the credit that's needed for the recovery. These measures have also resulted in a lower value of the Australian **\_\_\_\_\_\_\_\_**  than would otherwise have been the case. While the Australian dollar has appreciated in recent months, due to both a weaker **\_\_\_\_\_\_\_\_**  dollar and higher global **\_\_\_\_\_\_\_\_**  prices, a larger appreciation would have occurred in the absence of the RBA's measures.

The second point is that very significant monetary policy support will need to be maintained in Australia for some time to come. It will still be some years before inflation is sustainably consistent with the target and we reach **\_\_\_\_\_ \_\_\_\_\_\_\_\_** . It's therefore important that monetary policy support be maintained. The day will come when it is appropriate to provide less support, but today is not that day.

The third point is that, as part of the RBA's ongoing monetary support, we will continue to purchase government bonds issued by the Australian government and the states and territories at the completion of the current $100 billion program in mid-April. In considering this issue, the board took account of three factors: the effectiveness of the bond purchases to date, the decisions of other central banks and, most importantly, the outlook for **\_\_\_\_\_\_\_\_**  and jobs here in Australia.

In terms of effectiveness, the bond purchases have helped to lower **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  and mean that the **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  is lower than it would have otherwise been.

…In terms of what other central banks are doing, many have recently announced extensions to their bond purchase programs. This is relevant to us because we live in an interconnected world. If we were to cease purchasing bonds in April, it's likely that there would be unwelcome upward pressure on the **\_\_\_\_\_\_\_\_**  rate. This would further delay the already slow progress on jobs and inflation.

Given these considerations, and with the cash rate at its effective lower bound, the board judged that it was in the national interest for the bank to continue with its bond purchases. After the current program finishes in mid- April, the bank will buy a further $100 billion of government bonds at the same rate as currently: $5 billion a week. These purchases will continue to be in the secondary market through transparent and open auctions. The RBA does not and will not directly finance governments. The bonds we own will have to be repaid in the same way as if they were owned by others. We are lowering the cost of finance for government, as we are lowering the cost of finance for all borrowers, but we are not providing and will not provide direct finance. There remains a strong separation between monetary and fiscal policy in Australia.

The fourth point from the board's review this week is that the term funding facility will be maintained. Banks can draw on this facility up until the end of June this year, which means they will have the benefit of low-cost funding for a further three years. We expect that this benefit will continue to support the supply of **\_\_\_\_\_\_\_\_**  , particularly to small and medium-sized **\_\_\_\_\_\_\_\_**  , and it will lower the cost of that credit. The bank would consider extending this facility if there were a marked deterioration in funding and credit conditions in Australia.

…The fifth point is that the three-year yield target for Australian government bonds will be maintained. This target has helped anchor the Australian yield curve and has helped reinforce our forward guidance regarding the

cash rate. Later in the year, the board will need to consider whether to shift the focus of the yield target from the April 2024 bond to the November 2024 bond. In considering this issue, the board will be giving close attention to the flow of the economic data and the outlooks for inflation and jobs. We've made no decision on this issue yet.

The sixth and final point is that the cash rate will be maintained at 10 basis points for as long as is necessary. The board has no appetite to go into negative territory and has done as much as it reasonably can with **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  . Before increasing the cash rate, the board wants to see inflation sustainably within the two to three per cent range. Meeting this condition will require a **\_\_\_\_\_\_\_\_**  labour market and **\_\_\_\_\_\_\_\_**  wages growth than we're currently forecasting. It's difficult to determine exactly when this condition might be met but, based on the outlook I've discussed today, we do not expect it to be met before 2024, and it's possible it will be later than this. So **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  are going to be low for quite a while yet.

On that note I'll close my introductory remarks, and my colleagues and I are here to answer your questions.

Thank you.

**CHAIR:** Thank you very much, Governor, for that substantial opening statement. It's appreciated, particularly in covering some of the many issues that you have which are of concern to me and to other committee members. How sustainable are cheap money and low interest rates for the Australian economy?

**Mr Lowe:** How sustainable? Maybe I'll just go back to why we have such low interest rates. It reflects things that are happening globally. At the moment, there's an elevated appetite to **\_\_\_\_\_\_\_\_**  around the world—and we've seen that here in Australia—and there is a depressed appetite to **\_\_\_\_\_\_\_\_**  . As with most things—and here we're talking **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  —the price is mainly determined by **\_\_\_\_\_\_\_\_** and **\_\_\_\_\_\_\_\_**  . There's a big **\_\_\_\_\_\_\_\_**  of savings and not very much **\_\_\_\_\_\_\_\_**  for using those savings by firms wanting to invest. So, while ever that remains the case, we are going to have lower interest rates.

The solution, as we've talked about before, is to change those savings-investment dynamics, giving people the confidence to spend—that will reduce **\_\_\_\_\_\_\_\_**  —and, more importantly, giving firms the confidence and establishing the policies that encourage **\_\_\_\_\_\_\_\_**  so that we've got businesses around the world wanting to use the pool of global savings to invest, expand the **\_\_\_\_\_\_\_\_**  stock and push up the returns **\_\_\_\_\_\_\_\_**  get. So, I think it's a problem. But it's not just a problem because we've got lower interest rates. It's reflecting a deeper issue about global investment and, even here in Australian, investment being weaker than it's desirable for it to be. I think in our economies and our societies it would be better if we could encourage investment. That would allow interest rates to rise. I'm sure you would be happy, and I would be happy, and I think we'd see stronger **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  over time. So, it's going to be sustained while ever this balance between savings and investment is as it is.

**CHAIR**: In your speech this week to the National Press Club you made the observation that that was one area you were particularly concerned about—business investment and the activity around household behaviour versus business confidence—and that there was a discrepancy between the two, particularly in terms of forward investment. So, let's then get to: what is the policy setting you think we need to make to attract business investment to grow the economy?

Mr Lowe: Well, I wish I knew the answer and had the silver bullet here. There are probably a few—

CHAIR: Well, there are no silver bullets. Mr Lowe: No, there are no silver bullets. CHAIR: It's hard.

Mr Lowe: But there are a few things that can be done. One, the ongoing recovery from the pandemic will help. It's not surprising, is it, that over the past six to nine months firms didn't want to invest too much? There were huge amounts of uncertainty and a collapse in **\_\_\_\_\_\_\_\_**  . That's not the environment in which you want to **\_\_\_\_\_\_\_\_**  . If demand starts recovering, uncertainty is reduced and firms will want to invest again, and the cost of capital is as low as it's ever been. So, getting the economy moving again will encourage **\_\_\_\_\_\_\_\_**  .

You can also approach this from the perspective of: what are the areas of the economy that where we are likely to see more investment? There are a number of them, but there are three that I would highlight. One is investments in the digital **\_\_\_\_\_\_\_\_**  . I know this is a focus of the government. The second would be investments in **\_\_\_\_\_\_\_\_**  [such as the in the renewables sector]. There's clearly a big transformation going on globally in the way energy is produced and distributed, and Australia has tremendous opportunities there and a need for investment. A third area of investment over the coming years I think is going to be in health and **\_\_\_\_\_\_\_\_**  care. These are three areas where, if we can get the policy settings right, we'll see tremendous opportunities for Australia, and I hope in time we'll see more levels of investment.

And I think the third perspective on this is basically getting the underlying policy settings right. The things that drive investment over time are opportunity, and opportunity comes from technology and from investments in human **\_\_\_\_\_\_\_\_**  and creating a stable, predictable environment and making sure that **\_\_\_\_\_\_\_\_**  is no stricter than is necessary. So: get the economy going, focus on some areas where we know we have to make big investment and where the return will be high, and get the underlying policy settings right so that it encourages firms to invest in **\_\_\_\_\_\_\_\_**  equipment. I think that's the broad strategy. There's not an easy lever to pull here, but I think that should be the strategy.

**CHAIR**: In your opening statement you touched on the lowering of interest rates and the relationship it has to the value of the Australian dollar, and you've outlined that you see a trajectory around interest rates through to 2024. What do you see is the trajectory for our currency?

Mr Lowe: My answer here is the same as I've been giving for a long time. My best forecast is the current value, and there's a lot of economic and academic literature that supports that. …The academic research says that the value today is the best estimate of the value in the future. I can probably elaborate on that. The two things that really drive the value of the Australian dollar are **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  and relative **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  . At the moment the Australian dollar has not **\_\_\_\_\_\_\_\_**  by as much as we would have thought based on the historical relationships with commodity prices. Australia's commodity prices have gone up a lot. We're publishing updated forecasts for the **\_\_\_\_\_\_\_\_**  of trade today. They're much higher than they were previously. If you run that through our standard model, you would expect the Australian dollar to have gone up a reasonable amount more than it's actually gone up. The fact that it hasn't is linked to our monetary policy at least in part. The fact that we've been able to narrow the interest **\_\_\_\_\_\_\_\_**  with the rest of the **\_\_\_\_\_\_\_\_**  has meant that the currency has not gone up as much. The forecast for the future value of the currency is dependent upon what happens to **\_\_\_\_\_\_\_\_**  prices and relative **\_\_\_\_\_\_\_\_**  policies.

**CHAIR:** How much sovereign control do we have over our interest rates? We've had this discussion before where I raise the prospect that we're an interest rate-taker because of the behaviour, particularly of the US Fed as well as the European Central Bank. You've rejected that we're an interest rate-taker, yet we seem to follow almost perfectly because of the issues around currency.

Mr Lowe: We're an interest rate-taker in one sense, but we have choice in another. Let me try and pull that apart. There are times in history—and we're living through one at moment—where there are big shifts in the world equilibrium interest rate, driven by the **\_\_\_\_\_\_\_\_**  **/ \_\_\_\_\_\_\_\_**  dynamics that I talked about, and we don't have any choice but to participate in that. Let's say we said …the world interest rate has declined a lot but here in Australia we don't like that, so we're going to keep our interest rates much higher than the world interest rates. What do you think is going to happen? **\_\_\_\_\_\_\_\_**  [money] would pile into Australia, the **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  would go through the roof and people would lose **\_\_\_\_\_\_\_\_**  . I don't think you can reasonably do that. When the world equilibrium interest rate shifts for structural reasons, we have to follow that. Most of the time in our history the world equilibrium interest rate hasn't moved that much, and so we've moved our interest rates around for cyclical reasons and we still have complete freedom to do that. If the Australian economy continues to outperform and the rest of the world is **\_\_\_\_\_\_\_\_**  , you could expect over time the interest **\_\_\_\_\_\_\_\_**  to be in Australia's favour again. So we still have freedom in a **\_\_\_\_\_\_\_\_**  sense. We don't have freedom in the **\_\_\_\_\_\_\_\_**  sense, or if we tried to exercise the freedom the consequences would be dire. So we have freedom, but we don't. It's complicated.

**CHAIR:** It is complicated. But it does have a material impact on where we are now, as I think you've just accepted, particularly because we of course have collections of countries making these decisions, including to influence the value of their own currency. Do you see signs of currency manipulation from other central banks?

**Mr Lowe:** No, not at all. I meet every month—every six weeks—with the governors of the other central banks and we're all discussing the same basic problem we confront: our economies are underperforming. Even before the pandemic hit, **\_\_\_\_\_\_\_\_**  was a bit low, **\_\_\_\_\_\_\_\_**  growth was a bit low. We're all thinking how we deliver the monetary stimulus and we recognise that when one country delivers monetary stimulus and another doesn't there's an **\_\_\_\_\_\_\_\_**  rate response.

None of us are sitting here, and certainly we're not doing this either, targeting our exchange rates. We're not, at the Reserve Bank, saying: how do we get our exchange rate lower? We're saying: how do we get more people into **\_\_\_\_\_\_\_\_**  and how do we get **\_\_\_\_\_\_\_\_**  back to target? All my colleagues in the other central banks are saying the same thing. Part of the transmission mechanism is through the **\_\_\_\_\_\_\_\_**  rate, but the underlying thing we're dealing with is getting people into jobs, getting wages rising again and getting inflation up. So there's no sense of **\_\_\_\_\_\_\_\_**  wars or currency manipulation going on here. The concern is jobs and inflation everywhere.

**CHAIR**: Getting to jobs and inflation, you've already outlined the time frame of 2024 for current interest rates. Do you see a scenario where it is going to be pulled back and there could be changes or adjustments upwards before that time frame, or is that just a statement in order to give people confidence?

**Mr Lowe:** Certainly the central scenario is one where I can't see **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  being lifted before 2024. Even in the upside scenario, the **\_\_\_\_\_\_\_\_**  rate is around five-ish and inflation is only two at the end of 2023, so that will not meet the test for a lift in interest rates. If **\_\_\_\_\_\_\_\_**  is just getting back to two, that's not enough for us to lift interest rates. We want to make sure that inflation is sustained within two to three per cent. Could we do even better than our upside scenario? It's possible. We've done, over the past six months, at least as good as our upside scenario and in some areas we've done better than the upside scenario, particularly on the unemployment rate. It's possible that that will continue. If everything goes right on the vaccine front, confidence recovers very quickly, people decide to spend a lot of the extra **\_\_\_\_\_\_\_\_**  they have accumulated over the past year, the global economy recovers quickly, there's a big **\_\_\_\_\_\_\_\_**  [budgetary] response in the United States, some of the global **\_\_\_\_\_\_\_\_**  tensions dissipate: if all those things go right, it's possible—**\_\_\_\_\_\_\_\_**  growth in Australia picks up more quickly and we could be considering an adjustment in interest rates. But that's not the upside scenario; that's better than the upside scenario. It might happen—unlikely, I think.

**CHAIR**: So what chances do you give the RBA of hitting its inflation target through the remainder of your term?

**Mr Lowe:** Unfortunately, not high. The forecasts that we published today show we will not meet the inflation target; we will not be sustainable within two to three per cent towards the end of 2023, which is the end of my term. But what I am doing is everything I can to encourage the creation of **\_\_\_\_\_\_\_\_**  because I see this as the fundamental issue here. If we can create jobs, the **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  will tighten up. Firms will have to **\_\_\_\_\_\_\_\_**  more for workers, they'll have to pay higher **\_\_\_\_\_\_\_\_**  not only because the labour market's tight but because **\_\_\_\_\_\_\_\_**  is lifting, and that will gradually, over time, lift the **\_\_\_\_\_\_\_\_**  rate. We've got the pandemic and some global factors we talked about before which mean it's very hard to deliver 2½ per cent inflation at the moment. But I can tell you my board is doing everything it can to achieve it, and we saw the board's response earlier this week. We're doing everything we reasonably can.

**CHAIR**: Even pre pandemic, the board wasn't meeting the inflation target and, now, with a considerable amount of extra liquidity in the market, it's still not going to be able to do so. Does this raise questions about the judgement of the board prior to this crisis?

**Mr Lowe:** You can form your own judgement about that. My view is that, in the circumstances we've faced, we've operated effective and responsible monetary policy. We talked, I think, last year at this hearing about **inflation** being low, the economy disappointing in 2019, because of sluggish **\_\_\_\_\_\_\_\_**  growth and declining **\_\_\_\_\_\_\_\_**  prices, and that had meant many people had reduced their **\_\_\_\_\_\_\_\_**  . The other dynamic that we've talked about previously is the fact that wage growth everywhere around the world has been weak, reflecting **\_\_\_\_\_\_\_\_**  , technology, shifts in the bargaining power of **\_\_\_\_\_\_\_\_**  . We can't deliver 2½ per cent inflation if wages are growing at two. Are wages growing at two per cent because the Reserve Bank hasn't run very good monetary policy? You might argue that. My perspective is that it's largely **\_\_\_\_\_\_\_\_**  global factors that are delivering the low wages growth, and our strategy is to support the economy to have the labour market **\_\_\_\_\_\_\_\_**  so that firms have to compete again for workers. I'm confident that, over time, that will work, but it's going to take time and, unfortunately, it's not going to be before 2023.

**CHAIR:** … Continuing on the point of jobs, in Treasury's review of the JobKeeper program in June, they found:

… JobKeeper has a number of features that create adverse incentives which may become more pronounced over time as the economy recovers. It … dampens incentives to work, it hampers labour mobility and the reallocation of workers to more productive roles, and it keeps businesses afloat that would not be viable without ongoing support. You're familiar, of course, with those observations. In fact, you made some of them yourself—at least, in the international context following through to the domestic context. So is there a point at which JobKeeper and programs like that and the fiscal stimulus provided can actually hamper economic recovery? And do you agree with the Treasury's assessment?

**Mr Lowe:** I agree certainly analytically that those points are valid. For that reason, the government has wanted JobKeeper to be a temporary program. I think that's eminently understandable. It should be temporary. It's been incredibly important in supporting the economy. It's one of the things that's made a real difference to people's jobs and livelihoods. So we very much welcomed that program. We very much welcome the fact that it's temporary. There's a debate over when the end date should be, but I think it's understandable why the government would be looking to finish it up on the schedule. Partly for the reasons that were articulated in that Treasury report, we don't want to be in the world of providing these wage **\_\_\_\_\_\_\_\_**  for very long periods of time.

The other point I would make here is that this is just one element of the fiscal support the government's been providing. It's the current focus. But the government has also cut **\_\_\_\_\_\_\_\_**  . It's introduced **\_\_\_\_\_\_\_\_**  tax credits. The federal government and the state governments are engaging in a very substantial lift of **\_\_\_\_\_\_\_\_**  investment [e.g. government spending on infrastructure]. At the moment there's very large support for residential **\_\_\_\_\_\_\_\_**  building, which is as strong as it's been in a long period of time. The boost that JobKeeper and other support programs have delivered has increased the strength of household **\_\_\_\_\_\_\_\_**  sheets. People are going to be able to use that strength to support **\_\_\_\_\_\_\_\_**  .

So the JobKeeper program is incredibly important. It's important that it's temporary. When it's finished, there are a lot of other support measures on the fiscal side the government has delivered and which are going to keep delivering. This is one of the reasons why we think that, when JobKeeper finishes, while some firms will obviously have to cut **\_\_\_\_\_\_\_\_**  , there's enough ongoing strength in the economy that the **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  will trend down during the course of the year.

**CHAIR**: A number of people have drawn attention to the link between consequences of access to easy money and loose monetary policy and the current state of the share market. Can you understand why some people look at share prices and movements on not just domestic markets but global markets and question whether there's integrity in valuations?

**Mr Lowe:** It's good that people ask the question, isn't it? Whenever investing in an asset, you should ask: are the valuations fair? Sometimes I look at that analysis and ask, 'Why are people are so concerned?' because the current value of at least the Australian share market is lower than it was at the beginning of last year. So it still hasn't got back to that peak. It's only around the level it was 14 years ago. So certainly equity prices have recovered from the pandemic decline.

**CHAIR:** Following a substantial injection of cash into the economy.

**Mr Lowe:** Yes. They fell a long way and now they've recovered. It's possible they will increase further, but it's also possible they'll fall. At the moment, I don't have particular concerns about the valuation of assets. Those concerns could emerge over time. It's the same with housing. People often talk about **\_\_\_\_\_\_\_\_**  and **\_\_\_\_\_\_\_\_**  together. The national house price index is only where it was four years ago. There's a lot of dispersion in the market. Regional house prices are rising very quickly, but that's largely because of structural factors. I saw some data yesterday that said that in the past year we've had the biggest movement from our cities to regional Australia for many, many decades. People have moved out of our cities in the COVID period to regional Australia and it's pushing up **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  . So there are a lot of these structural factors going on as well. It's possible that these low interest rates will generate unsustainable increases in asset prices, but they haven't yet. It's possible, but not yet.

**CHAIR: So what's your benchmark, then, of when it becomes unsustainable? At what point does continuing to inject more cash into the economy amount to eating into the equity of the nation?**

**Mr Lowe:** I can't say at what value of the ASX 200 or the national house price index it will be too high.

**CHAIR:** But there'd be a point where you'd come into this forum and say, if you felt it was the case, that where we were positioned was unsustainable? You're saying it's currently sustainable.

**Mr Lowe:** As I said in the introductory remarks, the main issue here is the **\_\_\_\_\_\_\_\_**  . We can't control, and we shouldn't try to control, asset prices. That's not our mandate, and it's not sensible. I don't think it's even possible. What we can have an influence over is how much **\_\_\_\_\_\_\_\_**  occurs on the back of those asset prices. That was our focus a number of years ago. Remember, housing prices were rising very quickly and **\_\_\_\_\_\_\_\_**  were rushing into the market. They were borrowing on overly generous terms, and we thought those trends in debt were **\_\_\_\_\_\_\_\_**  . Through the Council of Financial Regulators, we worked with APRA and my colleagues at the bank, and we put in place some measures, and that would be our approach again. It's the debt that goes with the asset prices that would be the unsustainable element of it. At the moment, though, the level of asset prices, based on many metrics, does not seem too high, and the level of debt and the lending standards don't seem inappropriate. That could change, and when we come back here in three or six months time we might be having a different conversation, but right today we don't have particular concerns about what's happened now.

**Dr LEIGH:** Thank you, Governor and your colleagues, for appearing before us today. As you know, since I came onto the committee in 2019, I've been quite critical of the bank for being, in my view, too timid in focusing on getting inflation up into the target band, and I'm still concerned that it might be the case for the entirety of your term as governor that inflation sits below the target band, with the consequence that there are fewer jobs in Australia than there would otherwise be. If you had announced $200 billion of QE on Tuesday rather than $100 billion, would your forecasts for wages in 2022 be higher or lower?

**Mr Lowe:** I think any shift in those forecasts would have been marginal, because the channels that $200 billion, as opposed to $100 billion, would have worked through would be perhaps a slightly lower value of the Australian dollar and perhaps lower value of the bond **\_\_\_\_\_\_\_\_**  [i.e. the interest rate on bonds]. That would have had some marginal effects. That's true, yes.

**Dr LEIGH:** Some marginal effects in producing higher wages, right?

**Mr Lowe:** Analytically, that's certainly possible, but there are other structural factors that I've talked about working as well. We haven't ruled out further bond purchases after the current program. I think the best approach is to repeat what we've done so far, with effectively $100 billion of **\_\_\_\_\_\_\_\_**  bonds, including $80 billion of Australian government bonds. The $80 billion represents almost 10 per cent of the stock of government bonds. That's what we've bought over the past five months or are buying now, and we'll buy another 10 per cent of the stock, so that's 20 per cent of the stock over this bond purchase program. If we need to keep doing that, we will.

**…Dr LEIGH:** Jay Powell has recently said he'll tolerate, or maybe even induce, a period of above average inflation in order to ensure that average inflation is consistent with their target. Would you take a similar approach—tolerating a period of above three per cent inflation in order to offset the recent period of below two per cent inflation?

**Mr Lowe:** The truth is I haven't thought too much about that. Following the previous conversation, we are struggling just to get **\_\_\_\_\_\_\_\_**  back to two per cent. It would depend, I think, in the circumstances, whether the period of above three per cent inflation was temporary. A temporary period of inflation above three per cent may make sense. But we are talking about things that, on current forecasts, are five or six years away. I feel like it's premature to be speculating on how we respond when inflation is above three per cent.

**Dr LEIGH:** The risk is that if you have a 'let bygones be bygones' approach, you effectively move down the anchor for inflation expectations below the target band.

**Dr Debelle:** Admittedly, we may be experiencing a period of above three per cent inflation in six months time.

**Dr LEIGH**: If that were the case, would you tolerate that for an extended period?

**Dr Debelle:** We don't expect it to be extended at this point.

**Mr Lowe:** It's important that Australians understand that, over time, inflation in Australia is going to have an average rate of two per cent. It hasn't in the last five or six years. I accept that. It's regrettable, and it's a combination of a whole bunch of structural and other factors—you might argue that we haven't done a very good job. It hasn't recently, but Australia should have a reasonable degree of confidence that, over time, inflation will average two point something. That allows inflation to be above three per cent for a period of time—not forever. Just like we're not happy with inflation starting with a one for a long period of time, we wouldn't be happy with it at three for a long, long period of time. We want to see it return to the central tendency of two point something. I'm sure future governors will be able to answer that question better than I can, because they'll have to confront that issue. I'm not expecting to have to confront the issue by the end of my term.

**…Mr SIMMONDS**: Governor, I want to start with your recent statement and your Press Club address. You said your view was that your QE program is working. What are you basing that on? Specifically, what I'm trying to drill into is how you can clearly see the impact of that QE program separate from the government's stimulus efforts.

Mr Lowe: Well, we can see the impact most directly in bond yields and in the exchange rate. In terms of the bond yields, in my introductory remarks I said that our judgement is that they've lowered those by 30 basis points. We can see that because when we announced the program of bond purchases, and in the lead-up when we were talking about it publicly, you can see the bond yields fall. There was a period in August and September when our yields were 25 or 30 basis points above those in the US. Today they're broadly similar to those in the US, and that narrowing of the differential occurred at the same time we started talking about bond purchase. So, it's pretty strong evidence of that. And the **\_\_\_\_\_\_\_\_**  rate, as I said before, has not gone up by as much as it would normally do when **\_\_\_\_\_\_\_\_**  prices go up. Both our modelling and the analysis says that that's due to monetary policy. So, you can see the effect on bond yields and the exchange rate. The Term Funding Facility has also lowered the **\_\_\_\_\_\_\_\_**  of funding for banks, and that's helping to keep business **\_\_\_\_\_\_\_\_**  costs down. It's harder at the moment to translate those effects on financial prices into **\_\_\_\_\_\_\_\_**  and **\_\_\_\_\_\_\_\_**  . There tend to be long lags there. But all the analysis we've done in the past suggests that it actually works—lower bond yields and a lower **\_\_\_\_\_\_\_\_**  —and more funding availability in the end creates more **\_\_\_\_\_\_\_\_**  .

**…Mr SIMMONDS:** Governor, I want to turn to a different issue now. Do you have a view on lenders failing to reduce high interest rates on credit card products? Do you think it is a significant drag on consumer spending? Are you not frustrated that the benefit of the low cash rate isn't flowing through to interest rates on credit cards?

**Mr Lowe:** That's another good question. I have frustration that there are still credit cards in the Australian marketplace with **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  around 20 per cent. …People write to me all the time and say: 'This is a disgrace,' and 'How can this possibly be?' and I have to say I don't have a good response for them, other than: there are credit cards in the Australian marketplace with much, much lower interest rates—perhaps high single digits—and, as I say to people with mortgage **\_\_\_\_\_\_\_\_**  , shop around, because there are good products out there in the marketplace that offer people much better deals. So I say to people: if you've got a credit card with a high interest rate and you don't like it, go and find another one, because there are ones out there, and if, collectively, we, as Australians, do move to the better products, the banks will have to withdraw the bad ones—the bad, high-interest-rate ones. So it is an issue, but the way to solve this is through people shopping around, and I've been giving that advice to people with mortgages all the time—and that's actually been working, because we've seen the average mortgage rate paid by Australians decline over the past six months by quite a lot, even though some of the posted rates haven't changed, because people are moving to banks that offer them a better rate. So the same process can work with credit cards.

…Ms MURPHY: …Hello, Governor and everyone else. It's nice to see you. Governor, I want to start with a question arising out of your opening statement. As I understood it, when you talked about the strong rebounding global **\_\_\_\_\_\_\_\_**  in goods and a move, perhaps not surprisingly, from consumption of **\_\_\_\_\_\_\_\_**  to consumption of goods globally—and I assume that would apply in Australia as well—you noted that that was good news for Australia. What I want to ask you about, though, is the impact on one of our very significant **\_\_\_\_\_\_\_\_**  , which is education—not only the impact that that has had but the impact that you would expect it to have on the economy as we go forward.

**Mr Lowe:** Thank you. With goods, people have switched this **\_\_\_\_\_\_\_\_**  , haven't they? If you're selling home wears or electronics at the moment, you're doing very well. … This is not just in Australia; it's everywhere around the world. That's causing a recovery in **\_\_\_\_\_\_\_\_**  trade and industrial **\_\_\_\_\_\_\_\_**  . Because all those goods require commodities, the commodity **\_\_\_\_\_\_\_\_**  have lifted and China's doing well. You're seeing, through North Asia, strong demand for semiconductors. So that's helping the recovery in the global **\_\_\_\_\_\_\_\_**  . On the other hand, the demand for **\_\_\_\_\_\_\_\_**  is depressed, isn't it? We see this in Australia particularly with **\_\_\_\_\_\_\_\_**  services and **\_\_\_\_\_\_\_\_**  services. If you're involved in international **\_\_\_\_\_\_\_\_**  , it's still very difficult. In the education sector, it's problematic as well.

**Ms MURPHY:** In the Reserve Bank's modelling and predictions about the recovery—you talked about it being a lumpy, bumpy recovery last time you were here—I absolutely appreciate that it's very hard to know, of course, because who knows? We all hope the borders will be able to open and the vaccines will do what we want them to do, but it is certainly an unknown. As to the impact on our exports in, as you say, tourism and education, what's the significance in terms of the lumpiness and bumpiness of the economic recovery?

**Mr Lowe:** In terms of tourism, it largely nets out at the aggregate level, because we can't go **\_\_\_\_\_\_\_\_**  and spend money travelling around Europe or Asia. So that basically nets out. It doesn't net out at the individual level as well, of course, because there are some firms who are targeting and catering for international tourists, so there's not complete **\_\_\_\_\_\_\_\_**  with **\_\_\_\_\_\_\_\_**  tourism. But, at the aggregate level, it's pretty much washing out. It does not wash out in **\_\_\_\_\_\_\_\_**  , though, because a lot more foreign students come and study in Australia than Australian students go and study overseas. That is hurting the education sector. It is also hurting those businesses that rely on some of the foreign students to work for them. One of the attractive features of coming to Australia to study is that you not only get a great education but you are also allowed to work some hours. There are some businesses who rely on those students to work those hours. So they are finding it difficult. In the **\_\_\_\_\_\_\_\_**  sector, we hear throughout liaison program that firms are having trouble getting the workers they need to pick fruit or do the harvesting.

**Ms MURPHY:** So, in terms of that recovery and the hopefully positive trajectory of the GDP, the recovery of the education sector—and you mention things like agriculture—is going to be a big determinant?

**Mr Lowe:** Yes. It's going to be slow because the borders aren't open. Another consequence of the borders not being open is that it's weighing on **\_\_\_\_\_\_\_\_**  as well. I have heard a number of stories recently. When I have asked firms why they are not investing they say they can get the piece of **\_\_\_\_\_\_\_\_**  equipment into Australia, but often if you are buying a sophisticated piece of capital equipment you need a foreign specialist to come in and fine-tune it. …we see this in our note-printing works: You need machines from Germany. You can't just unpack them and plug them in. You need a technician from Germany to come.

A number of firms have been telling me recently that one reason why they are not investing at the moment is that the borders are closed. I'm not criticising the closure of the borders. It is what it is. We have to do it, for good reasons. But it does have consequences not just in **\_\_\_\_\_\_\_\_**  and **\_\_\_\_\_\_\_\_**  but increasingly in investment, where you need technical skills that are embedded in people who are overseas and you need the person here to actually do it. That is part of the adjustment we have to go through. It is obviously in everyone's interest for the borders to open as soon as we can do that safely.

…**Ms HAMMOND**: Governor, you've spoken a number of times about the impacts of the international borders on the economy and on how we are faring. Do you have any comments on the impacts of state borders and/or lockdown? So any observations or comments with respect to the impact on the economy, but also whether you've done any research or have any thoughts on the longer term impact on confidence and on investment of state borders shutdowns and lockdown caps?

…Mr Lowe: The closure of the borders has, I think, been important in delivering the good health outcomes that we've seen, and the good health outcomes have helped the economy, so, over time, that is a positive. But the closure of the borders at any particular point in time clearly imposes **\_\_\_\_\_\_\_\_**  costs. It imposes costs on people. They can't go and see their families and friends, and they cannot travel around. Like many people, I've felt those personal costs. But, in the end, to the extent that the border closures deliver better **\_\_\_\_\_\_\_\_**  outcomes, that's going to deliver a better economic outcome. I don't envy the premiers having to make these **\_\_\_\_\_\_** **-\_\_\_\_\_**  , because in the short term there are economic costs, in the longer term there are health benefits, which bring economic **\_\_\_\_\_\_\_\_**  , and there are very significant personal costs to individuals. They're difficult trade-offs, and it is very hard for any of us who do not have access to all the information the premiers have to comment on the merits of how they've judged those trade-offs.

**…Dr MULINO:** … have you undertaken any analysis on, for example, different types of households and what you expect their propensity to consume might be, out of buffers [i.e. additional savings over 2020-21]?

Dr Ellis: Sure. It's not just our modelling; the whole profession generally finds that people who have lower **\_\_\_\_\_\_\_\_**  generally have higher propensities to **\_\_\_\_\_\_\_\_**  out of an extra dollar than people who have higher incomes. So, in that respect, those flows have meant a great deal for people—and particularly for people whose income suddenly fell. We know that people want to try and maintain their **\_\_\_\_\_\_\_\_**  , to the extent they can, and so they were able to smooth through that period of income loss, and, indeed, for many people, the June and September quarters were a period where actually they had more income than they otherwise would. We've also seen survey data that suggests that lower income households' incomes actually went up, or lower income individuals' incomes actually went up, because those who were already on **\_\_\_\_\_\_\_\_**  received the coronavirus supplements and higher levels of JobSeeker. There was a segment of people who were actually earning more on **\_\_\_\_\_\_\_\_**  [i.e. the **\_\_\_\_\_\_\_\_**  subsidy] than their prior job had provided, at least up until September. There were certainly people at the upper end of the **\_\_\_\_\_\_\_\_**  distribution who had unambiguously lost income and people who lost their jobs who had unambiguously lost income.

What was quite remarkable was that people at the lower end of the income distribution were able to maintain their **\_\_\_\_\_\_\_\_**  in aggregate, whereas a lot of the reduction in consumption was because of restrictions. People at the upper end of the income distribution are more likely to go on overseas holidays. Going on overseas holidays has gone to zero, so you see more of a hole out of the consumption of higher income groups. Yes, we've done a lot of modelling in terms of the propensity to consume out of an extra dollar. We would see the pattern of the support that was provided over 2020 and into this year as, in some sense, almost being designed to support consumption through this period.

**…Dr MULINO**: I had a couple of questions around wages, which has already been touched on a fair bit. There's been a lot of discussion in this committee—and more broadly across economic policy and more broadly in Australia and elsewhere—around how to boost **\_\_\_\_\_\_\_\_**  growth, which is a very important topic. I think everybody would agree. I think there's another side to this—and it has been described variously—which is the fact that over the last 10, 20 years, depending on which economy you look at, productivity growth hasn't flowed through evenly to **\_\_\_\_\_\_\_\_**  . While we'd all want to see productivity growth rise, for me there's also an important discussion to be had about how it's shared. The Reserve Bank had a very interesting conference on wages recently where the decoupling of wages and productivity growth was examined in quite some detail. I think, Governor, you talked recently about the fact that—you talked about it this morning briefly—**\_\_\_\_\_\_\_\_**  , globalisation and the relative power of **\_\_\_\_\_\_\_\_**  and capital are all systemic contributors to that. I'm interested in your thoughts around this decoupling and how we should look at this in parallel with the discussion about rising productivity growth, which often dominates the discussion.

Mr Lowe: It's a vexed set of issues, isn't it? Before the pandemic, there had been, in many countries, a shift of national income towards the owners of capital and away from workers. So, to put it another way, the **\_\_\_\_\_\_\_\_**  share in many countries was very high. That's a structural and secular shift that's been with us for a number of years and in a number of countries. So it's not something unique to Australia; it's a global issue, which has global roots. We've talked about those: the globalisation of **\_\_\_\_\_\_\_\_**  chains and the changes in technology that have made many more jobs internationally contestable. I think I've talked to this committee before about a professional services firm that had the chief executive's PA sitting in Manila. Who would have thought—I certainly wouldn't have a decade ago—that the PA to a chief executive of an Australian firm would be an internationally traded **\_\_\_\_\_\_\_\_**  ? But it is, and that has meant that the competitive dynamics in the **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  have changed, because many, many people have realised that their job can be done somewhere else in the world, perhaps at a lower rate, and it actually affects wages.

How do we solve this problem? It's very hard. I think our strategy at the Reserve Bank is to do what we can to make sure that the labour market is as **\_\_\_\_\_\_\_\_**  as it can reasonably be so that firms decide they do have to pay higher **\_\_\_\_\_\_\_\_**  to attract the workers they need. That's what the Reserve Bank can do. Beyond that, these forces are global, so it's very hard to address. The other thing that, collectively, we can do in Australia is to make sure that the workforce is as **\_\_\_\_\_\_\_\_**  as it can possibly be, because then firms, in a tight labour market, will have the wherewithal to pay higher wages. You need the combination of the two things—you need productivity growth and a tight labour market—and we've struggled on both of those fronts.

**Dr MULINO**: I think productivity growth is a worthwhile thing, but the sharing of it seems to be systemically a problem, as you agree. I don't disagree with tight labour markets. My question, as follow-up, would be that we had decades-long low unemployment rates in the UK and the US, and in some Australian states we had very tight labour markets pre COVID, and yet we had very sluggish sustained wages growth for years leading up to COVID. It's not going to be enough on its own to see unemployment drop a bit, is it?

**Mr Lowe:** In the US, when the unemployment rate got down to 40- or 50-year lows, you did start to see some wage **\_\_\_\_\_\_\_\_**  building. The problem the US had, and we all had, is that COVID interrupted that. In New South Wales, I think the **\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  , just before COVID, had got down to where it had been in 1974, and we'd just started to see some **\_\_\_\_\_\_\_\_**  pressures. The lesson I take from this is that it can work. If you can get the labour market tight enough, wage pressures will start to emerge, but you've got to have the labour **\_\_\_\_\_\_\_\_**  quite tight for quite a long time. That's our challenge: to have a tight labour market and to sustain it for quite a long time. This is one reason we're talking about **\_\_\_\_\_\_\_\_**  rates and monetary support being there for a long time. We want to see a tight labour market, and we want to see it sustained, and what the Reserve Bank can do for that is to provide monetary support for a long time. If we can do that, I think wages growth will pick up.

…Mr FALINSKI: … if you look back over the last three decades—I think Piketty's book really demonstrates that **\_\_\_\_\_\_\_\_\_\_\_\_**  had a negative impact on **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  in semiskilled and unskilled workplaces in the developed world. But the one time that wasn't the case seems to have been in the years of the Clinton administration in the United States, 1992 to 2000, where you had **\_\_\_\_\_\_\_\_**  growth and productivity **\_\_\_\_\_\_\_\_**  but also reform to the tax transfer system, in the form of **\_\_\_\_\_\_\_\_**  , which also led to high participation in the workforce. Is that something we should be looking at?

**Mr Lowe:** In terms of participation, to our surprise, we have just reached a record high **\_\_\_\_\_\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  . One of the things we were worried about was that, in the pandemic, people would leave the labour force—which they did—but not come back, because they couldn't find a job or had chosen something other to do with their lives than work in paid **\_\_\_\_\_\_\_\_**  . But that has not happened. Participation has lifted. Even with the rising participation, the **\_\_\_\_\_\_\_\_\_\_**  rate has come down by itself. That has been quite a good story over the past six months. But you are right: over a longer period of time, the economic pie will be bigger if more people participate in the workforce. I'm not sure, though, whether higher participation will address the labour share issue.

**Mr FALINSKI:** …So, if we just focus on monetary policy, aren't we missing out on some very key aspects to driving wage growth?

…Mr Lowe: I have some tools and I'm fully deploying them, and I'm going to continue to deploy them until we generate a tight labour market and stronger wage growth and the inflation target. That's what I can do and that's what I'm accountable for. I agree 100 per cent with you about reforms that promote **\_\_\_\_\_\_\_\_**  , business **\_\_\_\_\_\_\_\_**  that promotes productivity—we talked about some of the things that could be used to promote business investment before—but in the end, that's a better solution. Lifting productivity, lifting the productive **\_\_\_\_\_\_\_\_**  stock is a better solution, because that will drive sustainable increases in **\_\_\_\_\_\_\_\_**  standards. Monetary policy cannot drive sustainable increases in our living standards. We can maybe get there a bit quicker with monetary policy. We can maybe avoid some of the downsides. But the Reserve Bank board can't drive sustainable increases in living standards. That comes from businesses and governments investing in the things that make us more productive over time. So, I agree I think 100 per cent with you. But that's the best solution—the solution that I have, the tool I have—and I'm going to use it too.

**Mr FALINSKI:** Part of the Reserve Bank's charter is full employment. That's right, isn't it? Or am I mis- stating?

**Mr Lowe:** Yes, that's right. There are three elements of the charter: **\_\_\_\_\_\_\_\_**  stability, **\_\_\_\_\_**  **\_\_\_\_\_\_\_\_\_\_\_**  and the economic **\_\_\_\_\_\_\_\_**  of the people of Australia. That's our charter.

**…Mr FALINSKI:** So, it sounds like we have a tightening labour market. We have record participation levels. We have job vacancies, job advertisements, above the long-term trend. Does that mean the RBA is expecting to see wages growth above trend?

**Dr Ellis:** Not at this stage. There are a couple of things going on. **\_\_\_\_\_\_\_\_\_\_\_**  is still very high, so that doesn't sound like a **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  market. In order to get a tight labour market we would probably need unemployment to be below where we were just before the pandemic. We didn't regard those levels of unemployment as being enough to put pressure on **\_\_\_\_\_\_\_\_**  . We were seeing very low wages **\_\_\_\_\_\_\_\_**  and a quite stagnant outlook for wages at that time, so that's not a tight labour market.

Participation is high, but we've got to disentangle two things. It has certainly recovered, but it's worth noting that we have far fewer **\_\_\_\_\_\_\_\_**  students here and they tend to have a lower **\_\_\_\_\_\_\_\_\_\_\_**  rate than other people of the same age. That's putting a little bit of upward pressure on the participation rate of people who are here, because a group who would otherwise have a low participation rate are not here. There are also longer-term trends, both for older workers, because of better health outcomes and rising pension age, and for women, who are increasingly participating in the **\_\_\_\_\_\_\_\_**  **\_\_\_\_\_\_\_\_**  throughout their whole lifetime. All of those are putting an upward trend. Is it a tight labour market just yet? No. Unemployment is still too high. But it does bode well for the future. As to our wages forecast, we did upgrade our forecast for private sector wages growth to allow for the better starting point in the labour force and to allow for the stronger growth outlook, but that was partially offset by a slower outlook for wages growth in the public sector because of various changes to policies by different levels of government.

**Mr FALINSKI:** We're getting reports that it is very difficult to find workers for critical issues in rural and regional areas. What do you put that down to?

**Dr Ellis:** There has been a really big reallocation of activity. We talked earlier about the allocation between **\_\_\_\_\_\_\_\_**  and **\_\_\_\_\_\_\_\_**  . The governor mentioned also the big shift in **\_\_\_\_\_\_\_\_**  away from the major cities to **\_\_\_\_\_\_\_\_**  areas, and there's bound to be some bumpiness as people adjust to that. There's been a huge shift in the way we do things, in the way that businesses operate, so it could take a little while to find the right person. It's also the case that, as labour markets tighten up, firms do tend to start complaining about how hard it is to find good workers long before wages growth starts rising. That's been a pattern in the past.