House of Commons

Treasury Committee

Oral evidence: Bank of England July Financial Stability Report and August Monetary Policy Report, HC 672

Wednesday 8 September 2021

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Watch the meeting

Members present: Mel Stride (Chair); Rushanara Ali; Harriett Baldwin; Anthony Browne; Felicity Buchan; Dame Angela Eagle; Emma Hardy; Julie Marson; Siobhain McDonagh.

Questions 1 - 87

Witnesses

I: Dr Andrew Bailey, Governor, Bank of England; Sir Dave Ramsden, Deputy Governor, Markets and Banking, Bank of England; Jonathan Hall, External Member, Financial Policy Committee, Bank of England; Professor Silvana Tenreyro, External Member, Monetary Policy Committee, Bank of England; Dr Ben Broadbent, Deputy Governor, Monetary Policy, Bank of England.

Written evidence from witnesses:

Professor Silvana Tenreyro: Report to the Treasury Committee

Dave Ramsden: Report to the Treasury Committee

Examination of witnesses

Witnesses: Dr Andrew Bailey, Sir Dave Ramsden, Jonathan Hall, Professor Silvana Tenreyro and Dr Ben Broadbent.

Q1 **Chair:** Good afternoon, everybody. Welcome to the Treasury Committee. This is our evidence session with the Bank of England on monetary policy and financial stability. Can I just at the outset say that it is really good to be back physically in person holding these Committee meetings? We have had a long period now where we have been operating remotely. Can I just thank the staff of this Committee—Kenneth and his team—for the fabulous work they have done in making sure that, despite the pandemic, we have continued our work of scrutiny?

We have five witnesses before us today. Two are here in person and three are attending remotely. Starting with our two physical witnesses, could I ask you to introduce yourselves to the Committee?

Dr Bailey: I am Andrew Bailey, Governor of the Bank of England.

Sir Dave Ramsden: I am Dave Ramsden, deputy governor for markets and banking at the Bank of England.

Dr Broadbent: I am Ben Broadbent, deputy governor for monetary policy.

Professor Tenreyro: I am Silvana Tenreyro, external member of the Monetary Policy Committee.

Jonathan Hall: I am Jonathan Hall. I am an external member of the Financial Policy Committee.

Q2 **Chair:** Welcome to all of you and thank you for attending today. I want to look at inflation. Perhaps, Andrew, I could start with you. In May, the Bank forecast inflation at 2.5% by the end of this year. As you know, now the forecast is 4%, which is a very significant uplift of 1.5%; I think it is the largest CPI uplift to a forecast that there has been, and almost half as large again as the second largest uplift. Are you concerned at all that this large forecasting error could undermine confidence in the Bank's ability to forecast inflation going forward?

Dr Bailey: We have to understand what lies behind it since May. I would draw on two things, both of which are global in origin but then have domestic elements to them. We have had two things going on globally. One is an increase in global demand, and particularly global demand for goods. That has led to upward pressure on commodity prices. We have had a further increase in oil prices, and upward pressure on both hard commodity prices, like metals, and some agricultural prices. You can see this because, in fact, if you look at the Federal Reserve and the European Central Bank, they both essentially have had exactly the same sort of experience. That is the first thing.

The second thing is on this imbalance of goods and services, which I will come back to because it has a Covid element to it. We have much stronger demand for goods relative to services, and have had, obviously, for over a year or so now. That is affecting world trade. It is affecting shipping; there are quite serious shipping bottlenecks. It is affecting supply bottlenecks around the world, with a number of bottlenecks in China. That is pushing up again on goods prices particularly.

Bringing that back to the UK, Covid is really the story here, because, with the persistence of Covid, we have not seen the rebalancing of demand between goods and services that we were expecting to see.

Q3 **Chair:** What are the implications of that on inflation and forecasting?

Dr Bailey: The implications are that there is much stronger demand for goods relative to the supply of goods. The supply of goods is disrupted by these bottlenecks and supply problems, quite a few of which are Covid-related in themselves in other parts of the world. That is then exacerbated by the continuing imbalance of goods and services demand, so that has been pushing up goods prices.

There are a few other things going on that are unrelated to Covid, which are one-offs. An obvious case in point is the world shortage of semiconductor chips. You see that around the world. You see that, of course, currently, for instance, in UK new car production, which is at its lowest level for a long time.

Coming back to inflation, you also see it in the very strong inflation in second-hand car prices. The last two months have been the highest for a long time in terms of the rate of inflation in second-hand cars, because the demand cannot be met with the new-car market and is pushing up second-hand car prices, as it is in the US.

There is this underlying story of imbalanced demand, which we thought would by now have been well on the way to correcting itself. What has caused that failure to have that correction? In good part, of course, it is the persistence of Covid. If you go back to forecasts we were doing a year ago, even up into the spring, we were expecting this to not persist and for that rebalancing to happen.

I will finish with a couple of points. That said, the overall economic impact of Covid in this country has attenuated over time—on economic activity, that is—but still within the context of this imbalance in demand for goods and services. At the moment, we are seeing some levelling off of the recovery. The short-term indicators are suggesting that. The attenuation is not quite so much in some other parts of the world, particularly if you take Asia, which again is relevant for these bottlenecks. Some of the resurgence or the appearance of the delta variant in Asia is affecting activity in Asia, and particularly, of course, in countries that are not vaccinated as much, where the response tends to be to shut activity down, which tends to accentuate these bottlenecks. Sorry, that is a rather long answer to your question.

Q4 **Chair:** It is a very interesting and good answer. I think Thailand is one of the countries that have been problematic to do with chips and things.

Dr Bailey: Yes, and Malaysia has with chips as well. A very large part of the semiconductor chip supply comes from a number of Asian countries. There has been a drought in Taiwan and a big plant destroyed by a fire in Japan. You might think these things are unrelated and random, but they have happened in rather close succession.

Q5 **Chair:** Andrew, you have outlined the case of the commodity price increases and bottlenecks, and so on. What are the chances that this persists longer than you imagine, and what is your thinking around that? It is an inexact science but what are you thinking?

Dr Bailey: As we said in the forecast, we think that this will not be persistent, for a couple of reasons, and then I will set out one concern, or one where it goes slightly in the other direction, which I am sure you will want to come back to.

Generally, in history, commodity prices do revert towards their mean levels. The other point to make is that, for commodity prices to continue to push up inflation, it is not just that they stay at a high level; they have to keep going up—arithmetically, that is. We think that is unlikely.

Q6 **Chair:** That is, to a large degree, whether it turns into a wage-price spiral.

Dr Bailey: That was the point I was going to come on to. The oil price at the moment is about 60% or 70% higher than it was a year ago. Some of that we always expected because of the base effects from the very low prices that we saw last year, but there has been some further increase this year, which was not expected.

We expect the bottlenecks to sort themselves out. Supply bottlenecks ought to sort themselves out, shipping ought to, and obviously supply can come on stream. It is interesting, again, just to reflect on semiconductors for a moment. I was looking at these data earlier. World sales of semiconductors have now increased quite markedly this year, which would suggest, other things equal, that the supply is coming back. Interestingly, the backlog in terms of the weeks that manufacturers are experiencing waiting for semiconductors is still going up. This may well be the goods versus services imbalance story again. Again, we think they should correct themselves. That is reasonable to assume.

The other element of this, looking forwards, is the labour market, as you were saying, and I am sure you will probably want to come on to it. We have talked before at hearings about the concerns about higher unemployment. In many ways, the concern is now getting jobs filled. We have a high level of vacancies in this country at the moment; it is in the news every day. Again, we think, as the furlough scheme comes to an end, this should cause a supply of labour to come on to the market, so we think it should correct itself. Others will speak for themselves, but I have a bit more concern about persistence in the labour market story.

Q7 **Chair:** I am very tempted to dive into that, but that will be dealt with later on in the session, so I will not queer the pitch for anybody else. Does Dave or anybody else want to share some observations on this? Are these issues going to persist?

Sir Dave Ramsden: I have a couple of things to add. There are many extraordinary features of this awful pandemic, but, in terms of its economic impact, the differential impact across sectors and between sectors means that you can get these imbalances between demand and supply at different times, depending on how the pandemic evolves. You can get these extraordinary figures for inflation in particular sectors or wage dispersion across the labour market. We will probably come back to that when we talk more about the labour market.

All central banks and all forecasters are grappling with how you forecast as the pandemic evolves. As Andrew was saying, we did a quick bit of analysis of how the Fed's, the ECB's and our forecast for 2021 Q4—we are now forecasting 4%—have evolved over the last year. Last December, the Fed was saying that it thought inflation was going to be 1.8% in Q4; it is now saying 3.4%. The ECB was saying 1.5%; it is now saying 2.6%. We were saying 2.1%. We went to 2.5%, and then we have gone to 4%. You see this common pattern of very significant forecast revisions. As Andrew says, that has been driven primarily by the way the pandemic is evolving.

Just on the labour market question, as I said in my latest report to you, although I am comfortable with the August MPR forecast for growth and inflation, there is still quite a broad range of outcomes, and I do see, at the margin, the potential for a more inflationary scenario. I also see the potential for a disinflationary scenario, but one of the key drivers of where a more inflationary scenario would come from would be the labour market. That is not the case at present, but, as we stressed in our supplementary guidance in the August minutes, we are going to be keeping a very close eye on those different measures, both the aggregate level of the labour market tightness but also some of the more detailed data that is leading the headlines, to see if those sectoral pictures could add up to a more worrying aggregate picture.

Q8 **Chair:** Andy Haldane, late of your parish, was quite concerned, relative to others, perhaps, at the Bank, about inflation. He was keen to stress the point about it being better to act now rather than trying to clear up a mess later on that is more painful. Are you sitting there feeling comfortable that you will have sight of a problem early enough to act? Particularly given that everything has been uncertain and moved in a direction that you did not foresee, are you concerned that you might end up being tripped up by all of this and we have an inflationary problem that the Bank acts upon a little bit too late in the day?

Dr Bailey: There are risks on both sides, as Dave said. The central forecast we had was that it comes back to target. We are targeting medium-term inflation here, so we look particularly at two to three years out, and it does come back to target in that sense, but there are risks on both sides of that, which of course we watch very carefully, and will do, as you can imagine.

We did say in the minutes of the last meeting that that projection that inflation would come back to target has within it broadly a view that there will be some increase in interest rates during that period. We do not follow the market slavishly but the market curve does suggest that, and we think it is reasonable, broadly, to think there will be some increase in interest rates during that period. As you say, we will be watching it very carefully to see how it evolves. One of the things we are having to deal with is that inflation is more volatile at the moment than it normally is.

Sir Dave Ramsden: We saw inflation fall back in June and then rise again in July. The thing I would add that gives me confidence is that inflation expectations remain well anchored. We really focused on inflation in the last monetary policy report. We had a whole "in focus" chapter on it, and in a section of that we covered inflation expectations. We might expect short-term inflation expectations to go up with headline inflation. That is typically the pattern, in terms of measures over one year.

When you look at longer-term inflation expectations, those have remained really stable through this period of very volatile inflation, and particularly a measure from financial markets, which is quite a long-term measure that would play into the kind of worry that Andy had: that somehow we might not be able to control inflation from the MPC—five-year inflation five years forward that you calculate from swap markets. That has risen a little bit compared with the start of the year, but in the last few months it has actually fallen back and has not gone up at all with the rise in inflation. That would suggest that financial markets certainly are confident that we will do our job depending on which risk emerges, whether it is an inflationary or disinflationary one.

Professor Tenreyro: Can I just make a quick correction? Inflation was 2% in July, so it fell to 2% in July.

Sir Dave Ramsden: That is right. We expect it to go up in August. Thanks, Silvana.

Chair: You are a month out, but we will not crucify you for that. That is fine. Thank you very much, and thanks for that correction.

Q9 **Harriett Baldwin:** On that specific point, I think you are referring to table 3.A about the financial markets' expectations five to 10 years ahead. If I am reading the table right, it says it is 3.7% that is priced in, which is almost double the target.

Dr Broadbent: That is RPI.

Chair: It is RPI, not CPI.

Sir Dave Ramsden: It is derived from RPI, because it is derived from index-linked gilts. It is a breakeven rate for RPI, so you always have to bear that in mind. It is not so much the level; it is the stability.

Q10 **Harriett Baldwin:** It is the change, and so it has been at 3.7% for quite a long time.

Sir Dave Ramsden: It has moved around a little, and it is slightly up compared with the beginning of the year, but in the last two or three months, if anything, it has fallen back a little.

Q11 **Harriett Baldwin:** We are getting on to wage pressures and you have mentioned them already, Governor. Government policy seems to have shifted over the last month, in that we have had a letter from the Business Secretary and a statement from the Prime Minister saying almost that they want to see low-paid jobs paid more and that that is one of their policy objectives now that we have left the European Union. That has been stated quite explicitly, and I wondered to what extent that shift has been factored in to your outlook for wage inflation.

Sir Dave Ramsden: We would focus on the data and what the data is suggesting, the balance between demand and supply domestically, and the global factors. We factor in Government policy where it is fiscal policy but we would not take account of more qualitative things.

Dr Bailey: If you do not mind, Ben or Silvana might want to come in on this, because they have been looking at it very closely. We are seeing a very sharp pickup in the dispersion of wage settlements. In other words, if you measure something like the standard deviation of wage settlements, you are seeing quite a big pickup. That means there are some low ones but there are higher ones going on. Interpreting the economics of that is interesting. Possibly the direction of what you were saying was that there is a structural shift in relative pay going on. We then have to balance that against whether this is going to persist. I know Ben and Silvana literally this week have been musing over this.

Dr Broadbent: I will begin by mentioning again something that the Governor said earlier, which is that we have this very high level of vacancies and therefore what appears to be a high level of demand for labour. What is striking about that is that it is happening at a time when employment itself is still well below the levels that prevailed before the pandemic. The way one squares the two of those things is by recognising that there have been big shifts not just in the demand final output for goods and services, which, as Andrew said, is something that has occurred globally, but, following that, in the demand for labour.

There are some sectors where vacancies are at record highs relative to the pool of people who work or last worked in those sectors. There are others where there seems to be plenty of space capacity and the level of vacancies is still quite low. As Dave has said, because of that you are seeing big differences in the rates of wage growth, either across sectors or, indeed, even geographically in different parts of the country.

When it comes, as Andrew said earlier, to that overall imbalance, if you want to call it that, or shift in demand from services to goods, or indeed the bottlenecks that have exacerbated that on the goods side, our assumption has been—I still think this is reasonable—that, because those things are caused by the pandemic, they will tend to dissipate as the pandemic itself fades away. If you condition a forecast, as we do, on the view that the pandemic will not continue forever, it is reasonable to expect those imbalances to narrow.

In the labour market, like Andrew, I suspect that they could be more persistent, but, as regards Government policy, we will follow what actually happens to wages and to wage costs. Wages are set in a labour market, ultimately, and determined by demand for and supply of that labour.

Professor Tenreyro: There are short-term shortages in many sectors. We have heard stories from across the board. As Ben said, the picture is very uneven. If you take the broad picture in the labour market, relative to February 2020, there are over 2 million more workers that are either unemployed, furloughed or inactive. This is obviously spare capacity in the labour market that is not being seized just yet. Overall, the picture is still one in which there is capacity in the labour market.

Q12 **Chair:** Yes, so there are fewer people in work, people who have voluntarily dropped out or are not looking for work—

Professor Tenreyro: Correct.

Chair: —plus the people who have gone back to the EU, presumably, on top of that.

Dr Bailey: There is a big question about when and how these 2 million people come back into the labour force.

Chair: We will come on to that.

Q13 **Felicity Buchan:** First of all, I just want to say how good it is to see you both in person, and it is great to have the other three joining and participating. I want to drill down to the decision made at the last meeting of the MPC. There was a majority decision to continue with quantitative easing. In the light of our previous discussion about inflation and also your forecast on turning into an excess demand situation within the next year, do you think that that is the right decision? I am also picking up on what Dave said: you said on the margin you think that there is more inflationary risk rather than less.

Dr Bailey: I do. Just to put it into perspective, the forecast has inflation returning to target in the forecast period. As I said earlier, it is that medium-term forecast horizon that we particularly focus on. That is obviously a very important issue and point in judging the policy decision.

Let us come back to quantitative easing in a moment. On its own, my judgment would be that that does not cause us to need to tighten policy now, although I would emphasise, as I have done every time I have spoken on the subject, that we have to be very vigilant. As this discussion has already showed, this is a point when we have to be extremely vigilant, because clearly it is more volatile and there are more shocks coming along.

Let me come on to quantitative easing, because it is a very good point that you raise. We do what I call fixed amounts of quantitative easing, so we announced it last November to run for quite a long period of time, through to pretty much the end of this year. That is different, for instance, to how the Federal Reserve does it. The Federal Reserve is doing open-ended quantitative easing, in the sense that it has not announced an amount.

That is relevant because the parallel point to the fixed amounts is that we think that the impact of quantitative easing comes more from the announcement of the stock, i.e. at day one, than it does from the progressive flow of the purchases that we make. Obviously those purchases have to be consistent with what we have announced, but we think that far more of the impact is on the stock on day one, whereas if you are doing open-ended quantitative easing by definition you are not saying what the stock is going to be.

I raise that because, if we stopped doing the quantitative easing, we would in effect be tightening policy. This might seem like a fine point, but if you are the Federal Reserve, say, and you are making a judgment on flow, in a sense you are making an "are we going to tighten or loosen?" point on the spot. That is not the case. It would be clearly tightening policy if we were to stop.

Going back to where I started, with a forecast that returns inflation to target, but with risks, we did not judge that it was appropriate to tighten policy at this point in time. That, for me, is the reason why we are scheduled to finish off the QE round. Again, the difference between us and an open-ended QE is that ours comes to an end. There will not be any more unless we decide to do it; by the way, I am not hinting that we are. Again, if you are doing open-ended QE you have to talk about what often gets called tapering, because otherwise you are going on for however long.

Q14 **Felicity Buchan:** If I understand you correctly, had you not announced in November last year the £150 billion—

Dr Bailey: We would have stopped.

Q15 **Felicity Buchan:** Yes. If you were making the decision, as of August you would not have continued.

Sir Dave Ramsden: That is a different point.

Q16 **Felicity Buchan:** If you had been making the decision afresh in August, you would not have—

Sir Dave Ramsden: That is not what Andrew was saying.

Felicity Buchan: I just want to clarify that.

Sir Dave Ramsden: People in the US context, or indeed for other countries that do open-ended, talk about tapering, whereas we have set out very clearly it is £150 billion to last throughout this year; the programme is schedule to finish in December. Were we to have voted to stop in August, we would have stopped at close to £100 billion, so we would not have done £50 billion. That would clearly have been a tightening of policy. The forecast is conditioned on the market curve, which, as Andrew says, has a modest tightening in policy already built into it over the forecast horizon. I do not think the first increase in the market expectations, at the time of the forecast, was until the middle of next year. That is sufficient to bring inflation back to target. Indeed, there is a little bit of spare capacity that opens up at the end of the forecast.

You were saying that we have excess demand at the moment, but by the end of the forecast that is worked through as supply comes back, whether that is these people re-entering the labour market or in other ways, but we have supply and demand coming back into balance and we have inflation at target, and that was why, although I see risks on two sides—as I said to you, at the margin I am slightly more worried about inflationary risks—I was comfortable voting to continue with the programme.

Q17 **Felicity Buchan:** A lot of the decision seems to be predicated on the forecast that, yes, inflation is likely to go to 4% but you are pretty confident that it is going to come off.

Dr Bailey: It is not just the forecast, because we use the forecast to guide the policy decision but we spend a lot of time talking about the economics that underlie it as well, and therefore the trajectory of the economy. Yes, that is the pattern we have.

Q18 **Felicity Buchan:** Can I ask you about the forward guidance? You decided to drop the forward guidance.

Dr Bailey: No.

Q19 **Felicity Buchan:** In the sense that you said that there was now a mixed view on the forward guidance.

Dr Bailey: Yes. Let me begin to outline that. I am sure colleagues will want to come in on that question. There were two views on this in the meeting, and they were pretty evenly balanced views. One was that the forward guidance was met but that the forward guidance was always a necessary but not sufficient condition for taking any action on policy. By the way, just to underline that, I would emphasise the words in the forward guidance, "at least"; those are the two key words in that piece of guidance.

There was one view that the guidance was met, but that that was a necessary condition for tightening policy but not sufficient, and the sufficiency had not been reached. The second view was that the guidance has not been met. The argument put forward there was that we are still some way off returning activity in the economy to where it was pre-Covid. Because of the "necessary but not sufficient" point, in a sense these two points come back together again.

By the way, that is not the voting decision. That is a step along the road to the voting decision. We do not vote on those things. In the minutes we try to be as transparent as we can be about the distribution of opinion, so that was why we set it out in the way that we did.

Q20 **Felicity Buchan:** Can I ask what the distribution of opinion was?

Dr Bailey: You can, and this will be a little bit of news. Let me condition this by the fact that it was an unusual meeting because there were only eight members of the committee. It was four-all.

Q21 **Felicity Buchan:** In terms of the fact, as you have mentioned, that you came out with the statement that the forward guidance was always necessary but not sufficient, do you think that takes value and weight away from the forward guidance?

Dr Bailey: No, not at all. I will speak personally. I am sure colleagues will want to come in on this. The reason we had that forward guidance in place, going back to when we put it in place last year, was that we always knew—it goes back to the Chair's original question—that the recovery was going to be bumpy and that we were going to go through periods where activity and inflation would be bumpy, because we knew we had base effects coming through; it was just that they got bigger.

I was slightly concerned that people would see bumps and start reading things into what we were going to do on policy, whereas we were treating those as transient bumps. The guidance was very clearly put there to say, "We are going to need to see something sustainable before we start responding," and it served its purpose in that sense.

Q22 **Harriett Baldwin:** I want to move on to this announcement in the August report about the quantitative tightening. The inflection point, as I understand it, has changed. Whereas previously you were at 1.5%, you are now saying 1%, are you?

Dr Bailey: It is actually 0.5%. There are two stepping stones. The verbs we used are important here. The 0.5% is where it would be our intention to cease reinvestment at that point. The reason that is important is that we have a portfolio of gilts, and there are gilts maturing.

Q23 **Harriett Baldwin:** Is that £875 billion?

Dr Bailey: That is the total portfolio, yes. Within that, we have three buckets: a bucket of short gilts, a bucket of medium gilts and a bucket of long gilts. They mature and we have to take reinvestment decisions. I will come back to the phrase "quantitative tightening" in a moment, but one way in which we can start to run this off is to decide not to reinvest. That is a slower process. It is very predictable, because people in the market know what we have. That is important, because when we start it people will know what we are going to be doing and the market will be able to discount that from the start. That is the 0.5%.

On the 1% decision, here we say the verbs are important, because we did not say that we "intend"; we said that, if the official rate got to 1%, we would consider active sales, which would obviously be a step up in the speed of selling, but that would be "consider", not "intend". One reason behind this is that the 1.5% trigger goes back to 2018. Today, the curve never gets to 1.5%. That is on today's curve; obviously the curve can change in the future, but on today's curve we would never get to the point where that trigger would happen, because the world has changed in that sense. Even in that sense, it was important to revisit it.

Q24 **Harriett Baldwin:** When do you think it will be triggered, Governor?

Dr Bailey: We do not have a view. I can tell you about the market. Is it 2023 when the market gets to 0.5%? That is not our view; the market curve will tell you that it gets to 0.5% in 2023. It does not really get to 1%.

Sir Dave Ramsden: It does not get to 1% at the moment.

Dr Bailey: But of course that can change; obviously that can change.

The next point I want to make is that you might ask, "What made you confident that you can start this process much lower?" One thing we have done in the meantime is to create the ability to use negative rates. That does not mean to say that we are going to do it—we have never had a discussion about actually doing it—but it is in the toolbox, and of course that potentially lowers the effective lower bound. Again, that gives us more headroom.

Q25 **Harriett Baldwin:** What is the lowest level of negative rates that you factored in as you looked at that issue?

Dr Bailey: We have not discussed that. It would be very contingent on the decision. What I can tell you is that the central banks that have used negative rates have not really gone below negative 1%. We have never had that. That is not a discussion we have had. There will be views on the committee, I am sure.

Can I make a point that is a monetary policy point and slightly a Bank of England point? It is very important, as a central bank, to take a view on how we manage the balance sheet. Do we manage the balance sheet in a countercyclical fashion? We have had two major shocks in the last 15 years. Our general view on equilibrium interest rates is that they are going to stay low. That puts up the probability of having to use quantitative easing as a tool again in the future. Our balance sheet is around about £1 trillion, so it is around about 40% of GDP. My view is that we have to take a countercyclical view on the balance sheet. In other words, we want it to come down in periods of time when it can come down. It did not come down between post the financial crisis and Covid, for various reasons, mainly to do with the UK economy. The Fed did some tapering of its balance sheet during that period. I would be much happier if we had a tool that allowed us to manage the balance sheet more countercyclically and bring it down when we can.

Q26 **Harriett Baldwin:** There is another point that is made about the fact that you think quantitative tightening is going to be less impactful than the equivalent amount of quantitative easing.

Dr Bailey: No, it is not quite that. We generally think that quantitative easing is state-contingent in terms of its impact. In other words, it has more impact in conditions of instability, an obvious case in point being March last year. That does not mean to say it has no effect now, and Silvana made a very good point in her submission to the Committee, which was that one of the reasons we are still using it is to give us insurance against upward pressure on rates and on the cost of borrowing for businesses and households when we do not want to see that happen. It has more effect in unstable conditions.

The point we made is that we would not do a reduction in the stock of gilts and therefore, as you put it, quantitative tightening in a condition of instability. That would be a foolish thing to do. Providing we assume, because we do not have any track record not to, that these state-contingent effects are symmetrical, we expect that we would do the quantitative tightening during stable and calm market conditions. If you followed through the state-contingent argument there, you would say that that will therefore have less effect in the rates market. Therefore, in a sense, we would expect that, first, the market would be able to discount what we were going to do and, secondly, it would have relatively little effect on the curve.

Then, as we said in what we put in the monetary policy report, we can use interest rates as the primary tool, which is always our preference because we understand the reaction function to interest rates much better.

Q27 **Harriett Baldwin:** I wondered whether you also made this shift in August in response to that very critical response from the House of Lords on the impact of quantitative easing. It has pushed up asset prices. I just wonder what you think quantitative tightening will feel like for households. Do you anticipate it having an impact on households?

Dr Bailey: Particularly with what I might call the autopilot, gradual reduction in the balance sheet through not doing reinvestments, I would hope that it would go on in the background. Janet Yellen once described it as watching paint dry. We would want it to have no impact, in that sense, that was perceptible.

Sir Dave Ramsden: It is interesting that, when we made the announcements in August, setting out these new two thresholds of 0.5% and 1% in the monetary report box, always dependent on economic conditions at the time, there was no perceptible market reaction.

The other thing I wanted to stress was that the MPC asked for this work to be done back in February, at the same time as we were preparing the contingency work on negative rates. We asked Bank staff to revisit the analysis that had gone into the previous threshold, so our work and our thinking on wanting to do this and wanting to update for where the effective lower bound might be for these other issues has been in train since February. In no sense is it a response or does it relate to the House of Lords report.

Q28 **Harriett Baldwin:** Dave, does the Bank accept that quantitative easing has had an impact on households by pushing up the value of assets? Are you saying that quantitative tightening is not going to have an impact on households?

Sir Dave Ramsden: Ben or Silvana might want to come in. We have put a lot of input into the House of Lords inquiry into this. Ben, Andrew and I appeared. We put a very long submission in to explain the channels through which we think quantitative easing works. The main way of thinking of it is that Bank rate deals with interest rates of shorter maturities. By buying Government bonds and corporate bonds, we can effect a much longer range of maturities out on the yield curve. That keeps borrowing costs for households and businesses down into the longer term. It has consequences for asset prices, but its objective is to achieve the inflation target, and our analysis is that it has done that.

What we are saying about quantitative tightening is that you can make a distinction. In the way that we will go about it, at the 0.5% threshold we will stop the Bank rate; we will stop reinvesting. The market knows and we know from our portfolio of £875 billion that £70 billion of assets—Government bonds—are going to mature in 2022 and 2023, and then something like £130 billion in 2024 and 2025. All of that is in the market; it is discounted. That is what Andrew means about gradual and predictable. It can be anticipated now, and we would only do that not reinvesting in conditions where there was market functioning and where the economic conditions justified it.

We think it is likely that that will have a less of an impact than the average of previous episodes of quantitative easing. One of the reasons, which Andrew said, is because of market functioning and the other is that quite often, when you are doing quantitative easing, you are deliberately trying to signal that interest rates are going to stay low along the curve. That does not apply in quantitative tightening.

Dr Bailey: Just to emphasise, we have to go on aiming to hit the inflation target so, from the point of view of your constituents, we are not going to change that at all. If we found it was having effects that we did not predict, we would obviously have to do something about it.

Sir Dave Ramsden: We have said we will review the whole approach after two years from when we start doing it, whenever that is.

Dr Broadbent: I will be very brief, because this is a significant and large topic on which we have communicated an enormous amount already. I am often puzzled by the claim about asset prices and QE. I am happy to write to the Committee and make these points in more detail. In real terms, UK equity prices are still a long, long way below their peaks of the 1990s; they have not been strong. House prices have gone up a lot over the last year, for reasons related to Covid, but before that had risen for 15 years basically in line with wages. The really rapid growth in house prices was before that; it was in the years around the millennium.

To my mind, the main effect of quantitative easing at the times that we have used it is to prevent what would otherwise have been a much worse downturn, and to prevent, therefore, what would otherwise have been a much sharper rise in unemployment. That is the main effect of QE as far as households are concerned. All of that has been done in service to meeting our objective on inflation, and that is what we will continue to do.

Q29 **Chair:** Ben, hearing you say that and thinking about the impact of QE on asset prices, where would you point to where you think current policy or recent policy on QE has led to asset prices increases?

Dr Broadbent: It is difficult, because you have to judge against a counterfactual. Any monetary policy easing, all else equal, may well raise asset prices. That is part of the way it is transmitted to the economy. That is what a reduction in bond yields is; it is a rise in the price of bonds. As Dave said, the best way of thinking about it, in many ways, is simply as an extension to longer maturities of what we do with short-term interest rates as standard policy. We are trying to prevent those from rising with an eye to meeting the inflation target.

It is not that at the margin I am saying that there has been no effect, although it is one that is rather hard to predict. It may well be that, without quantitative easing, for example, in 2009, 2010 and 2011 prices of equities and indeed of houses ultimately would have fallen a lot further than they did. There may well be an effect at the margin, but I am disputing the point that somehow we have lived in a world for the last 10 or 15 years of rapidly rising asset prices. As a basic empirical point, that is not true. What is definitely true is that, in meeting the inflation target and in responding specifically to a big negative hit to demand, any easing in monetary policy primarily will help to stabilise demand and employment, and prevent what would otherwise have been a much worse outcome in the labour market. That is the main effect of QE, just as it is in similar circumstances for what is sometimes called conventional easing in policy.

Q30 **Dame Angela Eagle:** I just want to ask some questions about the outlook for the economy. Governor, the latest retail sales and consumer borrowing data pointed to a slowdown in spending. Are you concerned that the recovery could be faltering, and do you think that might be because of the persistence of the delta variant?

Dr Bailey: We are seeing some flattening out of the rate of recovery across quite a broad range of indicators that we look at. You have quoted some. If you look at things like mobility data from Google and Apple, you see it is flattening somewhat. It may have picked up a bit this week post the schools thing, but it was flattening. Payments data is flattening as well. We are seeing some of that.

We do not have a precise story to tell, to be honest with you, to explain it. The delta variant numbers may have something to do with it. Certainly over the summer, when we got into the pinging period, that was quite possible. I would say, however, that one of the things we have observed over the course of the last 18 months is that the economic impact of Covid in terms of activity has attenuated a lot. If you go back to last spring, we were seeing huge effects in terms of activity. The lockdown period we had from the beginning of this year had a much reduced impact in terms of the level of those sorts of activity indicators.

Other parts of the world are a little different, and that will come back to the stories we were telling about inflation. You see difference in some of the Asian data, and that is related to the vaccination story. The economies that have a lower rate of vaccination and therefore resort to more of the lockdown procedures as their mitigation for the delta variant are seeing some further weakening of activity. That is an issue for us that we are going to have to watch very closely.

Q31 **Dame Angela Eagle:** We are an open economy, are we not?

Dr Bailey: Yes, exactly.

Q32 **Dame Angela Eagle:** What happens abroad, particularly in those areas, has a big effect.

Dr Bailey: Particularly if it is coming out of Asian economies, it will affect trade and supply again, so we do have to watch that carefully.

Q33 **Dame Angela Eagle:** Today there have been 191 Covid deaths and 38,975 more infections, yet your assumption, when you have done your assessment of the economic outlook, is that the impact of Covid continues to fade over time. Do you think that you may need to have another look at that, or is that assumption robust?

Dr Bailey: I would say two things. First of all, I would go back to the point I made a few moments ago about the attenuating economic impact of it.

The second thing is, as I have probably said before, that we are enormously grateful for the fact that we have a session with Chris Whitty as part of our forecasting process. I do not think he says anything to us that he does not say to others, but he did say to us that the delta variant was going to be very difficult to forecast and model in the short run. That is being borne out by the numbers. You quoted the latest number. It is behaving in a way that we have not seen over the last 18 months, where we had these very big ups and downs. It is rather more flatlining at the moment, at a higher level.

Q34 **Dame Angela Eagle:** It is at quite a high level, ahead of, potentially, a winter season.

Dr Bailey: Yes, we will see, but with less economic impact. I come back to this point about the attenuating economic impact of it.

Sir Dave Ramsden: Like you, we monitor those daily numbers, as we have all learnt to over the last year and a half. The other two numbers that, in addition, get published every day are the vaccination number, which Andrew has talked about, and the hospitalisation number. Those are also picking up, but I think it is something like 600 or so over the last week, and nearly 8,000 hospitalisations now; the peak in January was 40,000. In our thinking about what the impact on the economy will be and whether there will have to be control measures, as you say, we are assuming that there will not be further new lockdowns or additional controls. That is because that burden on the NHS is increasing at a much slower rate than, say, the number of cases did.

Q35 **Dame Angela Eagle:** If, for example, there was a decision on vaccine passports or some change in the way that the Government are handling the existence of infections out there and Covid’s persistence, that might have a sectoral impact. Are you looking at any of that?

Dr Bailey: We condition all of our forecasts on Government policy. We read that across from fiscal policy, so we condition it on Government health policy as well. If the Government change their policy, we will obviously take that into account.

Sir Dave Ramsden: And we would ask Chris Whitty.

Dame Angela Eagle: He is becoming the fount of all wisdom.

Dr Bailey: He is enormously valuable. I cannot say how valuable he is to us.

Sir Dave Ramsden: He is an expert and we are not.

Dr Bailey: We are obviously not experts in that field.

Q36 **Dame Angela Eagle:** Can you tell me whether the announcement of more tax rises yesterday has affected your calculations, particularly in terms of increasing taxation levels at a time earlier in the recovery than a lot of other economies have done?

Dr Bailey: I have to confess to you that we have not done any calculations since yesterday afternoon.

Dame Angela Eagle: I would be a bit sceptical of how thorough they were if you had done them within 24 hours.

Dr Bailey: As I said, we condition our view on announced Government policy, so now that it is announced we will take it into account. We have a round coming up that will not have a forecast in it, and then we will have a forecast for early November.

Dr Broadbent: That will be important, we will go through it and we will hope to include our analysis of these changes in the next forecast, which is in early November.

I will say only one thing, which is that my impression about this is that the rise in tax is matched by a rise in spending, so, as far as the big macro numbers are concerned, one should not ignore one half of that policy announcement, as far as the big numbers and their effects on the economy are concerned. This is not, on the face of it, a very significant tightening of fiscal policy or, all else equal, a reduction in the deficit. We will have to go through the numbers in more detail when we get to the forecast round.

Sir Dave Ramsden: You will remember this from your times in the Treasury. We got the announcement that the budget and the spending review is going to be on 27 October.

Q37 **Dame Angela Eagle:** We had a mini-budget yesterday. It is spreading out—

Sir Dave Ramsden: We also remember those from our times in the Treasury. If the timing works, we will be able to take account of that range of budget announcements. It is a bit tight on our November forecast round, but hopefully we will be able to factor that in. The overall fiscal stance is obviously a very important factor for us to take into account, because it is a source of demand.

Q38 **Dame Angela Eagle:** Can I ask, Governor, about business investment, which fell 7% in the first half of the year. Were you surprised or worried by that? Do you think it is going to recover? We had the super-deduction, which may help, but that will be temporary and will bring stuff forward rather than create anything new.

Dr Bailey: I do not want to make a comment about the precise number but I was not surprised with the direction of travel, because of the high level of uncertainty. There is a relationship between a direction of uncertainty and business investment. Unfortunately, I do not find that particularly surprising.

Within business investment, it is a slightly different picture for technology and small machinery versus investment in buildings particularly. Investment in buildings is very weak. It is not quite the same story for technology. That is probably linked to things like home-working and people investing in equipment and so on for different ways of working.

Sir Dave Ramsden: The other thing you always have to do with the business investment numbers is qualify any real-time assessment with the fact that the numbers do get revised very significantly. You can often get the sign changing completely. We will get some updated business investment numbers by the time of our next forecast.

Q39 **Dame Angela Eagle:** Finally, there has been much coverage of frictions at the border and quite substantial declines in cross-border trade in the aftermath of Brexit. How is that affecting your thoughts about the general economic outlook?

Dr Bailey: There are two things on that. Colleagues may want to come in. First of all, we cannot at the moment separate out any impact of Brexit from any impact of Covid. Both of them are obviously affecting border movement, of both goods and services, where relevant.

You may remember from previous hearings that we did take the view on the short-run effect of Brexit that there would be a short-run trade disruption effect, which would wear off through the first half of the year. The trade numbers suggest that that is not a bad place. We have not changed that assumption during the life of it, but it is very difficult to really attribute that, as I say, between the two big things that are going on.

Q40 **Chair:** Can I ask very quickly about your discussions with Chris Whitty? To what extent have you discussed and factored in the risk of another variant? Is that something that is a serious issue for you, potentially?

Dr Bailey: I am going to be careful, because we have these sessions and we allow Chris Whitty to say what he wants.

Chair: Do not divulge anything that is private.

Dr Bailey: He has obviously talked about the risk of variants to us. He talked about the risk of variants to us prior to the delta variant as well. He has also talked to us about the risk of the winter in terms of not Covid but flu-type effects, on the basis that he says last year was very benign because we were not mixing much. Again, I am way out of my depth here, but we do not necessarily have the same level of in-built resistance. These conversations are always cheerful.

Chair: That is an interesting way of putting it.

Q41 **Felicity Buchan:** I have a little follow-up question. On our discussion on forward guidance and whether the threshold had been met, you kindly gave us the information that it was four-four. Do the four of you who are here mind telling us where you stand?

Dr Bailey: We can do that. My view was that the guidance had been met.

Sir Dave Ramsden: I gave a speech in July where I flagged that I thought that the guidance was close to being met. By the time it got to the August round, my view also was that the guidance, which was significant progress on eliminating spare capacity and a sustainable return of inflation to target, had been met, but those were always necessary rather than sufficient conditions for tightening.

Dr Broadbent: I will let Silvana go first, just because I want to add something.

Professor Tenreyro: I also wanted to add something. I was on the other side of the argument. I did not think that the guidance conditions had been met. Let me stress that in the minutes we also stated that we all agreed that policy should focus on medium-term inflation prospects and not place undue weight on temporary capacity pressures. As we have discussed, there are currently temporary factors pushing down on supply relative to its medium-term potential—supply chain bottlenecks and even recoveries across sectors, and so on. With output and employment still some way below that medium-term potential, I did not think that the guidance conditions had been met.

For me, one of the benefits of the guidance was that it gave households and businesses confidence that we would not tighten policy until the recovery was secure. My view is that demand still has some way to go to recover to where it was heading before Covid. The recovery cannot be seen as complete just because there are temporary supply restrictions or slowdowns in supply. The risk is that, instead of encouraging demand to go back to its medium-term potential, we end up with scarring and supply ends up falling to adjust to that weaker demand. I always make clear that, in judging policy, I take a broader, medium-term view of capacity.

Dr Broadbent: I was on the side of thinking that these conditions had been met, but one of the points I was going to make was exactly the one that Silvana did. We had that phrase about concentrating on the medium term in both May and June as well; the only addition in August was that all members individually as well as collectively wanted to emphasise that.

It was helpful to have had this guidance, even if it was just a necessary condition. It would be very difficult to ask every individual member on the MPC to pre-commit to one simple trigger for saying, "Yes, I am definitely going to want to change policy if this single thing changes". Given that, it was always likely that, when it came to it, it would be a matter of judgment as to whether these conditions had been met.

Andrew emphasised the words "at least until". Let me just add what follows: "at least until there is clear evidence that significant progress is being made in eliminating spare capacity". That is a pretty difficult thing to judge. You cannot say definitively that there is a clear answer. What we mean by "sustainably", and what we all then said we meant to be concentrating on, is the medium term. Silvana has described that you might well think that some of these shocks are temporary. We said the same thing at the beginning of today's session about many of the traded goods prices. We have people on furlough to come back. It is pretty tricky, with any degree of precision, to say, "Here is what the news now means about what is going to be the case in two years," which is the point at which policy decisions now have material effect.

There is nothing particularly surprising in finding that different people have different views about this. The important point is what followed about the policy stance, and of course we will have to deal with changes in that 18-month or two-year forecast as they come along.

Finally, perhaps the most important thing was the vote for actual policy.

Sir Dave Ramsden: Can I just emphasise Silvana's point on minimising scarring? This has been a critical focus right from last March, when Andrew was doing his pre-appointment hearing and I was last here in person with Mark Carney. We always saw our role, alongside other authorities, given this extraordinary shock that we were then seeing coming and have now been dealing with for a year and a half, as bridging across this shock that has non-economic origins. By bridging across and supporting as much as possible, we saw our role as being to minimise scarring. This is uncertain, but our current estimate of the long-term impact of Covid is 1% of GDP. That has come down a little bit from a few months back. We will revisit that. We have a supply stocktake coming later this year.

That gives you a sense of what we have all been trying to achieve on the MPC: bridging across and minimising that scarring. As Silvana says, given that we know that there is medium-term spare capacity in the labour market, that means getting as many of those people back into productive work, not having them become discouraged, not participating or being unable to work through mismatch. We can only do a bit of that, but that has been a driving principle for the last 18 months.

Q42 **Rushanara Ali:** Good afternoon. That takes me neatly back on to the subject of the labour market and supply chains. Just on this point, you mentioned 1%, so the long-term impact of Covid is 1% and the long-term impact of Brexit is 4%, just to be clear.

Sir Dave Ramsden: We published our estimate in February this year. I think it was 3.25%.

Q43 **Rushanara Ali:** That is lower than what we thought last year. Previously 4% was being bandied about. It is still a big difference.

Sir Dave Ramsden: Our focus is on productivity. Some of the other estimates might include other effects. Both of those effects are comparable as productivity effects—Covid and Brexit.

Q44 **Rushanara Ali:** I have some questions on the labour market and also a couple on climate. I will rattle through them. Governor, earlier on you said that you had some concerns about the labour market, and then we moved on to other panellists. Could you talk through what they are? Is it to do with skills mismatch? Is it to do with the lack of labour supply, or soon-to-be lack of labour supply, in terms of the right area?

Dr Bailey: If it would help, let me give you the example of HGV drivers. I have been trying to gather up all of the candidate explanations for HGV drivers. I will give you seven. I am not qualified to give you the truth or otherwise of these, but these are the seven that I and our agents have heard, in no particular order.

One is age. That is relevant because the decline in participation in the labour market has two features that are relevant here: one is gender and the other is age. In terms of age, there are two groups for whom the decline in participation has been larger: the young and the over-50s. We think that the young are people who stayed in education; there are 500,000 more people who stayed in education. That is quite common in recessions. For the over-50s, there is a question mark about whether this is people who have decided to retire early and will not come back.

On gender, it is far more men than women who have dropped out of participating in the labour market. That is relevant because the Road Haulage Association says that the average age of an HGV driver is 55. I am not attributing direct causation here, but you can see that there is a story, potentially, there. That is one.

Secondly, there is the difficulty of training and doing driving tests.

Q45 **Rushanara Ali:** You are giving that as an example. I have lots of questions. We have HGV drivers, care workers, construction workers. There are a whole series of areas where there are gaps. Even as people come out of furlough, how much do we expect in terms of labour shortages? What is the impact of that on the economy?

Dr Bailey: I will not go through the other five.

Rushanara Ali: I will run out of my time.

Q46 **Chair:** Governor, could I press you just to do so very quickly, because it is quite interesting?

Dr Bailey: There is training and driving for new drivers. There is increased demand, which comes back to the goods and services point; lots of us are having lots of stuff delivered to our houses in boxes, not by

HGV but by drivers. The fourth one is Brexit and migration. The fifth one is Covid and migration. The sixth one is IR35, which is the change in tax for people who are contracted to one company. I am told quite a few HGV drivers are in this. I am not commenting on the rights and wrongs of IR35—that is not for me to do—but of course it will reduce post-tax earnings for those who are affected. The seventh one is much harder, but I have heard stories over the years about the decline in payments to drivers for things like overnight parking and so on, and that reduces the attractiveness of the job.

Those are the seven candidates. I cannot pretend to judge them myself. To your question, though, we hear about other occupations as well.

Rushanara Ali: Yes, and the overall impact on recovery.

Dr Bailey: It is very important that, where we can take practical steps to sort things out, we really must do that. An obvious one is driving tests. We understand what went wrong in terms of the impact of Covid, but that is clearly something where I would hope we could see real practical solutions that matter for the economy.

Q47 **Chair:** The Government have spoken about it. Are they doing enough?

Dr Bailey: We do talk, obviously, but I cannot tell you what is going on. I do not say that in the sense that nothing is going on, but I am not qualified to comment on what is going on. You had another part to your question.

Q48 **Rushanara Ali:** If you take those multiple challenges—you talk about HGV but there are other sectors—how are these labour shortage aspects going to impact on recovery? Is it going to be sizeable? You have alluded to what Government can do to rectify some of it, but it is not happening quickly enough.

Dr Bailey: I was not criticising them.

Q49 **Rushanara Ali:** You were not saying that; I am saying it could happen more quickly. What is the overall impact of all of this on recovery?

Dr Bailey: Let me come back to the number I gave earlier. If you add up three things—the number of people who are unemployed today relative to the number who were unemployed at the beginning of Covid, the number who are still on furlough and the decline in participation—you get to about 2 million people. That is about 6% of the labour force. Clearly, we need that 6% to come back as much as possible; we need a lot of them to come back, actually. The question, which goes to your very good question, is whether it is going to happen and how quickly it is going to happen.

Q50 **Rushanara Ali:** The question is how much we know about that labour force in terms of their ability to fill the professions where there are now gaps.

Dr Bailey: This is a slightly different answer. If you go to the age point, we can say with reasonable confidence that those who have stayed and decided to continue education will come into the labour force.

It is harder to know with the over-50s quite how many are going to say, "Right, I am going to come back into the labour force", or how many say, "I have had some benefit"—let us say in terms of saving rates—"and I will call it a day". The answer to that question is that we do not know.

Q51 **Rushanara Ali:** You have talked about the international dimension, and there is one mention of Brexit and its impact in the latest monetary policy report, but how much of the shortage is related to Brexit? There have recently been lots of stories about blood tests and concerns about supply chain disruption. How do we address that?

Dr Bailey: It is very hard to tell at the moment, because it is very hard to tell the difference between the impact of Covid on the labour force and the impact of Brexit on the labour force in terms of migration. Both of them are disrupting movement of people at the border. We cannot give you an answer to that question.

Q52 **Rushanara Ali:** Should we expect a fuller analysis of this? For the Government it is quite convenient to be able to not separate out Covid from Brexit impacts at the moment, but it would be helpful to understand the source of problems. Some of them are clearly, as you said at the beginning, to do with international supply chains and the impact of Covid, and some of them are not. We need targeted responses.

Dr Bailey: Yes, in time. We are not experts in migration but it is very hard at the moment to separate those two factors.

Q53 **Rushanara Ali:** Moving on to climate change and net zero, and the role of monetary policy, we have talked about it and your predecessor, who came here in the capacity of his new role, has a role to play in the Glasgow COP 26 summit. I want to focus in on the point around the world's biggest banks and their role in financing fossil fuel companies. We have seen apocalyptic scenes this summer in terms of fire and the added disruption to countries, in terms of tourism and so on. What do you hope will come out of the summit, or should come out of the summit, in terms of the role that banking systems can play? The Bank has a particular remit now. What should happen, given that time is running out? The report that came out in August again highlighted major concerns. Would you be able to shed some light?

Dr Bailey: There are two things I would focus on. We should really add two areas of interest in this. One is that we are currently underway with what we are calling an exploratory scenario test; it is not a stress test in that sense. It is an exploratory scenario test, using climate scenarios. We are going to run those with the major banks to assess and quantify the impact of these climate scenarios on the banks.

There are three scenarios: one is that the passage to net zero goes to plan; the second one is that it does not happen; and the third one is that it starts late and is therefore much more disruptive because it has to proceed in a faster and more disruptive way. We will use those, and the banks will use them, to start to quantify and focus on what you have to do to adjust for the impact of those scenarios on the banks. It is a way into doing a lot more work on the macroeconomic impact of climate change, which we all need to do, globally.

I should bring Dave in on the second area, because he is leading on this with colleagues in our markets area. We have a relatively small corporate bond portfolio. We issued a discussion paper early on about how we think we can use that to incentivise companies to move towards net zero. That is important.

We have had the Extinction Rebellion protests over the last two weeks. They have focused on why we do not sell these bonds. The reason we do not sell these bonds is that they would end up with people who were not interested in transition and wanted to just exploit the assets. We think that the better solution is to incentivise the companies to adopt paths to net zero and then to have to be financed to net zero, which is where we come back to the banks as well.

Sir Dave Ramsden: This is somewhere where we can actually act. We were talking earlier about the huge numbers on the Bank's balance sheet and in the asset purchase facility overall. Of the £895 billion, only £20 billion is corporate bonds. That is 6% or so of the UK corporate bond market. As a central bank, we are more influential, and we can use our thinking on this and, if you like, our voice to change and influence the wider sector, going back to your point, Rushanara.

That discussion paper we published in May set out principles for how we incentivise the companies we invest in through the corporate bond scheme in order to achieve net zero. It is quite practical, because it set out four tools that we can use: setting targets for them, with interim targets to make clear we want to invest in companies that are moving towards net zero; eligibility criteria; tilting our portfolio to give a further incentive; and then making clear we will ratchet up our approach to them if they do not change.

We have had really fantastic engagement from that discussion paper, not just nationally but internationally. Lots of other central banks are interested. We are going to be operationalising it before the end of the year, because our corporate bonds are below £20 billion; some have matured, so we are at £19.7 billion at the moment. We will have to reinvest, so that is not a large amount in itself, but the signal we will send with that £300 million—it will be a bit more when we come to do it before the end of the year—will have really powerful effects on the wider financial sector. Other central banks are also looking at how we are doing this. We are learning from each other, just as they are looking at how we do the stress test.

As Andrew says, we have had an engagement from XR over the last two weeks, emailing us about this. We are engaging with them through the discussion paper. People will be able to see how we are going to operationalise greening the corporate bond scheme as part of greening the financial system.

Q54 **Chair:** We are going to switch now from monetary policy to looking at financial stability, which will come as a relief to the very patient Jonathan, who has not been included so far; he is about to be included. Perhaps I can start, Governor, by looking at this issue of business indebtedness. What is your view of the picture as it stands at the moment? What is likely to occur going forward? What are the risks? In particular, within the financial stability report, which I quote from here, it says, "The FPC judges that UK corporate debt vulnerabilities in aggregate have so far increased modestly over the pandemic". Is there a risk that, by looking at the aggregate picture, you miss the fact that there are some sectors worst affected, including SMEs as a group as well?

Dr Bailey: I assure you that we do look under the surface. You are right: overall business indebtedness between the end of 2019 and 2020 rose by about 5%, which was a lot less, frankly, than we thought would be the case at various times last year. Within that, though, for larger firms it was about 2% and for SMEs it was a considerably bigger number. That is relevant, and it is also relevant that sectorally, depending on how Covid hit businesses, you see differences as well.

The interesting about SMEs is that, while their indebtedness rose, the cash balances that they hold with the banks also rose, so in aggregate the SMEs have become more liquid. The ratio of turnover to cash holdings at banks has gone up, so they have more cash on deposits at the banks. That is interesting. That fits with some of the anecdotes we have heard about the use to which the Government borrowing schemes have been put by firms. Some firms have obviously had to use them to meet outgoings. Some of them have used them to increase their liquidity buffers.

The other thing I would say is that the debt servicing costs of firms have gone up even less, and that is because some of the Government schemes have very low interest rates attached to them. If you look at it through that lens—and those rates apply to all firms, so it does not differ between sectors—the debt servicing costs have gone up a lot less.

I agree with you. We will produce our next assessment of this and we are going to produce a small report for our interim FPC round, which does not have an FSR attached to it, early next month. We will go back over these data again. I agree with you that we have to keep watch. You cannot just look at the aggregate, but there are some interesting features of it. We will want to unpick this SME story more.

Jonathan Hall: The second half of the sentence is that, although in aggregate it has not been large, it has been substantial in some sectors. As you say, that is particularly SMEs. The increase there was about 25%. As the Governor just said, the actual payments as a percentage of turnover have increased, so the serviceability is low, and therefore the way we are focusing on this is in terms of vulnerabilities.

There are two aspects to that. One is the tail of SMEs that are particularly exposed and vulnerable, potentially, to Covid-related sectors or the recovery. You can imagine that they will have trouble servicing this debt going forward. The other tail is the vulnerability if there was shock to the system, because those with large corporate indebtedness are less resilient with respect to that shock. That shock might be in terms of economic shock or financing costs. Those are the two aspects that we are looking at from the tail.

Q55 **Chair:** Andrew, what would you say to people that say that these SMEs seem to be very liquid, with a very low level of insolvencies at the moment? What are the risks to these businesses, in summary?

Dr Bailey: The main risk is that it is early days. It is not untypical—it is fairly typical—for the rate of insolvencies to be a lagging indicator of recessions. There are reasons with this one, because of the level of Government lending support, for that to be even more the case. By the way, just to avoid the headline, "Governor suggests there is going to be a massive pickup in insolvencies", I am not suggesting that. I am saying that it is too early to reach a settled conclusion on what the pattern of insolvencies is going to be. It is a lagging indicator in that sense.

With the cash balance, as I say, it is one-month turnover as related to cash holdings in the bank. It is interesting. It may well suggest that the repayment of these loans on average will not be as difficult as perhaps we might have thought it would be. I stress "on average", because clearly you are going to have a very big distribution of effects here. There are some sectors that are still very much in the middle of this; they are not out of it yet, as we hear regularly.

Q56 **Chair:** What are you hearing from banks about repayments on bounce-back loans, for example?

Dr Bailey: It is a cautious story. The story I hear from banks is that so far the rate of repayment is probably somewhat higher than they thought it would be. However, the terms have been set so that this is the less taxing period in terms of the repayment demand. Again, my view, as I say to the banks, is that you have to reserve judgment on this at the moment.

Sir Dave Ramsden: It comes to a more general point. Quite a lot of the policies that were introduced at the start of the pandemic, such as the furlough scheme, have had a fantastic impact on supporting the labour market. That is now tapering and will end. In this space, we have the temporary ban on winding-up petitions, which we flagged in the FSR. Certainly at the time of the FSR, that was due to end at the end of September. We said in the FSR that we did expect insolvencies to start picking up. As Andrew says, it is a lagging indicator, but also you are seeing some of those very pandemic-focused supports ending.

It goes back to the discussion we were having in the monetary policy section. Certainly from my perspective, I want to see how the tapering and the end of the furlough scheme ends up playing out, given what we have talked about in terms of the uncertainty still around the labour market, as we were discussing with Rushanara Ali. There are quite a lot of moving parts at the moment, and that also plays into this SME story, which is why we do remain very focused. We will be updating our analysis of what is going on. Surveys of SMEs are relatively encouraging, but again those are at the macro level and cannot allow for very striking differential impacts.

Q57 **Chair:** Do you think that there might become a case for Government to intervene again in any way in terms of the corporate debt that is out there at the smaller-company end of things?

Sir Dave Ramsden: The Government took huge interventions to bridge through. The fact is that insolvencies are running at less than they were pre-pandemic. Ultimately, the market comes back into play and support has to be taken off. It is not for us to say when that should be. The fact is that, at the macro level, we think that GDP is going to get back to the pre-Covid level in the last quarter of this year. In that sense, the bridging through will have completed.

Q58 **Emma Hardy:** It is great to see you both here, and everyone on the panel. This is a slight change in questioning. I want to ask you about something that is linked to something we were talking about earlier, associated with bank closures. It is about how banks are relying on cloud computing and the risk that has. The FPC has highlighted concern around this growing reliance in the banking sector on just a small handful of cloud service providers that host the payment and banking systems. How concentrated is the cloud computing market upon which banks rely, and how can policy mitigate this?

Dr Bailey: It is highly concentrated. By the way, that is not just for banks but for many things that many parts of the economy and society do. It is important to start by saying that, in this discussion, I am not in any sense calling into question the resilience delivered by the cloud providers. It is a high standard. We have been a customer.

Emma Hardy: We all are on here.

Dr Bailey: We are all customers. It is important to say that there are real benefits. There is obviously real benefit in concentration in expertise and in the investment that goes into the cloud. I want to make that point.

There are really two things: one is the concentration point, and the second one is that they have developed a model that, certainly in its earlier phases and I think still today, is relatively closed, for obvious reasons, in a way. You cannot go round to see them and say, "Look, explain to us how all of this works". There are elements of it that are closed. If you are a user, if you are a major bank, there is an expectation that, if you are going to outsource these key functions to a cloud service provider, you understand the risk that goes with it and you understand how they mitigate the risk. There are issues that need to be addressed there. The question of concentration, the question of resilience and what is known about it are all highly relevant.

When I say they are relatively closed, we do not want them posting on the internet how they all work—they would not do that—because I am afraid one of the other big problems we are dealing with is cybercrime.

Q59 **Emma Hardy:** Yes, absolutely. Is that concentration creating a problem in terms of competitiveness and how competitive they are, because you have only a few able to provide the service?

Dr Bailey: We are not really experts on that. We may be about to get more expert on it, but we are not competition regulators. By the way, this is also a highly global market. We know which firms provide this—the likes of Amazon and Microsoft. It is obviously an international market in that sense.

Q60 **Emma Hardy:** I am really pleased you mentioned cybercrime, because you have pre-empted my next question. I wonder about the regulatory framework that we have and how capable it is in mitigating the risk of cybercrime and cyberattacks on these cloud services. Do the regulators have the powers they need to prevent these attacks?

Dr Bailey: I will go broader on cyber because it is important, but in terms of critical infrastructures we had an FPC meeting this morning on the subject. We are looking at the question, with the Treasury, about what would be the sensible powers to have in terms of recognition of critical infrastructure suppliers, and then how those powers would be used, as well as, critically, what we expect the banks and others to do. We do not want them transferring the responsibility to us for managing their critical suppliers; ours is an oversight role, but we are doing that.

The work we do and publish in the FPC is very interesting. It has got a lot of pickup internationally, because there is a big interest in this and we are rather ahead.

I am sure you have seen this, but I have to say, sadly, that cyber is one of the biggest rising risks. We have seen some major ransomware incidents in the last six months to a year. We have not seen so much in the financial services sector but I do not take any comfort from that whatsoever. The financial services sector is probably investing more in it, but, if you asked me whether that solves the problem, no, because this risk is constantly evolving.

Q61 **Emma Hardy:** Do you think the greater risk is from the cyberattacks and deliberate attacks or from potential accidental downtime from cloud providers? Where is the bigger risk?

Dr Bailey: Unfortunately, downtime is an issue, as is stealing data. One of the best examples recently is that the Irish health service had all of its personal data, effectively, captured and cut off by a ransomware attack. If you talk to anybody in the Irish Government, they will tell you pretty scary stories about that, frankly. We see evidence of attempting either to steal data or to cut off access to data and then demand a ransom to return it.

Q62 **Emma Hardy:** Where do you think the attacks are coming from?

Dr Bailey: We are not the experts in this, to be frank, but we talk to them a lot. The experts would say that there are a number of countries around the world that are involved in state-sponsored activity, we think. There is organised crime involved in this. Increasingly, it is an activity that organised crime has moved into. Unfortunately, I have to say that crypto-assets are being used for payments in ransom attacks. A common theme, when you look into these ransomware attacks, is that the payment is demanded in crypto.

Sir Dave Ramsden: Although we are not the experts, we have a very substantial cyber operation within the Bank, as well as working very closely with the National Cyber Security Centre, which is an incredibly good partner on all of this.

One of the things I do in my other executive responsibilities is oversee the CHAPS high-value payment system as well as the real-time gross settlement, which are critical national infrastructure. We draw on the Bank's cyber expertise for ensuring that we can manage the risks around those. Any infrastructure is a particular target, because infrastructure is so foundational. We also have a lot of input from the real experts, whether within the Bank, from our cybersecurity experts, or from National Cyber Security Centre experts.

It does not impact too much into the monetary policy space. It is increasingly into the financial stability space, as we have discussed. It is not just about stopping it, because these things will happen. It is also about what you do to respond and to recover. Resilience is about identifying but then recovering as quickly as you can, to your point about limiting downtime.

Q63 **Anthony Browne:** I just want to press you on one point. You said that there are a number of state-sponsored actors who you suspect are responsible for cyberattacks against the financial services industry. Which states?

Dr Bailey: That is a question I find quite hard to answer. There is a degree of security around those answers.

Q64 **Chair:** Does it align with what the press and others suggest, i.e. Russia, Iran and—

Dr Bailey: I am sure, if you wrote down a list and I wrote down a list, they probably would not be very different. I am sorry.

Chair: That is fine. We do not want to press you on that further than you are comfortable. Thank you.

Q65 **Emma Hardy:** I will wrap this up and then I have one extra cheeky question. From a constituent's point of view, because I am sure they are all watching this right now, how reassured can they feel that, when they are using online banking, when they know that their banks are accessing cloud computing, their data and money is safe, and that the Bank of England and the regulators are doing everything they can to make sure that happens?

Dr Bailey: I will go back to the point that I made. I really want to emphasise that I do not have fundamental concerns about the safety of cloud computing. It is a robust model. In fact, it is in many ways more robust than the thing it is replacing. I can speak with experience: I have had datacentres blown up by contractors accidentally at times. The companies that run the cloud centres are very expert in this. I do not doubt that. Because of the concentration, though, it is becoming a much more critical infrastructure. We all face the question: it is great that we have these people running it, but how do we know and suitably control how they run it? Your constituents should not lose sleep over cloud computing in that sense, no.

Q66 **Emma Hardy:** Are you requesting greater powers or intervention?

Dr Bailey: Yes. Because of the criticality of this infrastructure, we are discussing with the Treasury in one of the Bills that will probably come to you at some point—it is probably not the next one but the one after—a power to designate critical infrastructures and then to have various powers around what follows from that in terms of oversight, including through the banks and insurers that we regulate as well.

Sir Dave Ramsden: That would not be just us. That would be the Financial Conduct Authority as well, which is a critical element in this.

Q67 **Emma Hardy:** I am going to completely change tack. Rushanara was talking about climate change, so I want to bang my drum. We have talked a lot about climate change but not about the risks and what is happening around biodiversity, which, according to some of the evidence we have seen, is as great a risk as climate change.

Dr Bailey: I have to be honest with you. We have to say that we are further back on that one. We have been involved in various conversations. The Dasgupta review was produced, but I have to be honest and hold my hand up: we are further back.

By the way, one of the ironies of the Lords report was that they think we should not get involved in any of this stuff, but there we are. We certainly are interested in biodiversity and are not going to neglect it, but I have to be honest with you: we are further back on that one.

Sir Dave Ramsden: It is covered by the change to our remit more broadly. We feel as if we are leading the way within the financial system in thinking about what we can do to green our portfolios for climate change. That should give us something we can then build on to look at these wider issues.

Watch this space for what we come out with on greening the corporate bond scheme, focusing on the climate change aspects, but we are very alive to the wider biodiversity demands.

Q68 **Harriett Baldwin:** I want to be very brief and give Jon the chance to say a bit more about the Bank's stress-testing process. We have had the most enormous stress thrown at the banking system over the last 18 months. Was there ever any point where there were any UK financial institutions that were seriously at risk?

Jonathan Hall: I joined the FPC in September 2020, a year ago, so after the depths of March. The answer, from a systemic financial institution perspective, is no; there was not. On the stress tests that we have gone through, there have been a series. There was 2019 and a couple in 2020, and then we have the interim stress test that we are going through in 2021. What is interesting with those is that, from a macroeconomic perspective, they are quite a lot more severe even than we saw in the depths of Covid. The 2021 stress test is on top of the stress that we saw. For example, banks took about a £20 billion hit from Covid, whereas we are stressing them for an extra £70 billion. The unemployment rate only went up to 5.2%, but in the interim stress test that is up to almost 12%, and house price stresses are down almost a third.

These are very significant stresses that we are putting them through, and our judgment is that the banks are resilient to those stresses, in terms of not only their capital, which at the moment is pretty high, above 16%, but also their ability to continue to lend and support the economy.

Q69 **Harriett Baldwin:** Are you stressing the other way, so stressing balance sheets against very sharp increases in inflation and interest rates, given that the Government showed themselves willing to come in and intervene very strongly in terms of those macroeconomic weaknesses? I just wondered whether perhaps the process is missing out on some of the stresses that the system could be prone to under different future scenarios.

Jonathan Hall: Every time we do a test, it is to a specific stress. In 2020, we did what we called a desk-based test, which was pretty much based on a significant downside version of the stress we were seeing, the Covid stress. In 2021, we have done another test. It is still interim at the moment, so it is still ongoing in terms of the disaggregated information. The scenario was one that was a quite similar downside scenario to Covid, as I just outlined—it was an exaggerated version of that—in order for us to check, as we had more time and as the banks had more time, and really get a sense of whether the work we did in 2020, and the conclusions and judgments we reached as part of that, were justified. For that reason, the 2021 stress test has been to the downside.

Of course, in the past we have conducted, and potentially in the future we will conduct, other scenarios that might involve higher interest rates and tighter financial conditions from that perspective, rather than a downturn in the economy.

Dr Bailey: In the history of our stress tests, there are two basic interest rate scenarios we run. One is the one you just said, which is that we have to raise interest rates very sharply in a recession, because that is the thing that gives you the real kick. The other one is what we call the "low for long" or "low for ever" scenario, where the banks have squeezed margins. There are stories around it, but those are the two basic interest rate variants that deliver stress.

Q70 **Harriett Baldwin:** You have run those recently.

Dr Bailey: Yes, we have run both of them. Because we do one a year, we tend to alternate them around, with some consideration of what is going on. Last year, as Jon was saying, we had to tailor them much more, because we were in a stress. The challenge we had last year was to answer the question of how you run a stress test when you are in a stress. Previously we had always run them when we were not in a stress.

Q71 **Anthony Browne:** My questions are primarily going to be about the housing market, but, just to warn you, I have one about MREL at the end. On the housing market, speaking to estate agents recently, they said they had never seen anything like it throughout their careers, in terms of the frenzy going on. In your financial stability report, you said that house price growth and housing market activity had been at their highest levels in over a decade, with 8% growth over the six months between October last year and March this year. I do not know whether you, Governor, or someone else is the best person to ask, but how much is it just simply that the market was frozen because of Brexit and the start of the pandemic, and it is a bounce-back; how much is it the stamp duty—SDLT—cut; and how much is it other factors?

Dr Bailey: It is more of an MPC question. Silvana or Ben, would you like to come in on this?

Dr Broadbent: Yes, and Silvana may add. It is hard to distinguish between all these effects going on at once. One thing I might point out, just to begin with, is that you have seen very similar things in other countries. That does not quite tell you that domestic policy has been irrelevant, because other countries have taken measures specifically to support the housing market as well, although none has done anything like a stamp duty cut, but it is suggestive, at least, that things other than policy matter. It is not just a bounce-back from a frozen market, although clearly that mattered. I am talking about prices here. It is possible that it is also a more general shift, also due to Covid, namely home-working. That fundamentally improves the value of owning space, of having a property.

We have seen marked rises in prices in lots of different countries around the world. We have seen a similar skew in those price rises. You have seen much weaker rises, or indeed, in some places, falls, in the middle of cities, and rises in prices in suburbs and in the countryside, reflecting that increased demand for space.

I do not know if one can say that the economic policies, including the stamp duty cut, in this country have been irrelevant. When it comes to turnover, the effects are very clear. We have one month of numbers since the scheme ended and, from extremely elevated levels in the spring, the activity, defined as the number of transactions in that month, more than halved. The effects there are clear.

The effect on prices is harder to discern. It is reasonably evidence from the evidence that it certainly would not be the only thing, even had policy affected prices, because you have seen similar things in countries with different policies. You have also seen big price rises in areas of this country where actually, relative to others, you would expect the effect of the stamp duty cut to be smaller, so there is clearly something else going on. It may well be that, because of home-working, space is now intrinsically more valuable than it was.

Anthony Browne: Silvana, do you want to add anything to that?

Professor Tenreyro: I fully agree with Ben. Research shows that even small changes in stamp duty can have outsized effects on the volume of transactions, so we have seen some of that. It is also clear that there has been a huge increase in the demand for housing space as we all work from home, and a demand for more rural and suburban properties, where perhaps supply was much more constrained. In some sense we are seeing these imbalances in the geographic dimension as well as in the sectoral dimension. This mismatch is feeding into higher prices in the housing market.

Dr Bailey: Our agents keep reminding us of this phrase, “the race for space”; I do not know if you have heard it from your estate agents. That is as distinct from the space race, which I am sadly old enough to remember.

Professor Tenreyro: The race for space and the doughnut economy.

Q72 **Anthony Browne:** Can I just turn it into more of an FPC question? With house prices rising so rapidly, is there a risk to financial stability? Is it a bubble, particularly with the prospect of interest rates rising? Affordability is extraordinary at the moment, but with interest rates rising is there a risk that prices might collapse?

Dr Bailey: There are two things on that. As Jon said earlier, in the stress test we test it to a one-third decline in house prices, so we do subject—

Q73 **Anthony Browne:** That is a scenario rather than a forecast. I was just wondering if there was a risk to financial stability if house prices are going down at all.

Dr Bailey: Do you mean from the point of view of the owners of the houses as opposed to the lenders?

Anthony Browne: I mean both. From the stress testing point of view, it is to the lenders.

Dr Bailey: On the other side of it, this is why we have the FPC's housing tools in place. We have two housing tools that have been in use since 2014: the loan-to-income limit and the affordability test, which we are reviewing at the moment; it is important we review those quite frequently because their impact can change over time. The role of those tests has been to limit excess indebtedness and particularly excess high indebtedness caused by the housing market.

It is probably easier to judge with the loan-to-income limit because it is easier to look at the data for that one. It certainly has had an effect. We have seen a much smaller impact in terms of the increase in high indebtedness because of the tool being in place. It is not a hard limit but it is working to restrain the growth of high indebtedness, and it is doing its job. It is always what we call a guardrail in that sense, and it is doing its job in that respect.

Q74 **Anthony Browne:** It sounds like you are more confident that, if there were a decline in house prices, it would not have an impact, not on financial stability but on general economic activity, as we have seen in the past.

Dr Bailey: Going back to 2014, a lot of our thinking when we put those tools in place was macroeconomic, in the sense that there is evidence from this country, and from other countries, that if you have a concentration of highly indebted households, and then you have a housing problem, they will naturally tend to want to retain their houses, so they will in a sense prioritise the servicing of housing debt, and that will have a negative effect on consumption in the economy. As well as a financial stability argument, there was a macroeconomic point underpinning that.

Jonathan Hall: I just want to emphasise the point there on the guardrail. The means by which a house price rise would lead to concerns about financial stability are twofold: first, if there is a sign of significant deterioration in lending standards, so, to some extent, the house price boom is being fuelled by lending. Potentially that did happen in the early 2000s, but we are really not seeing that at all. In fact, on the 4.5 LTI guardrail that the Governor just mentioned, that level is set at 15%, and we are only seeing about 10.5% of loans being done at that, so the banks themselves are significantly below that. It is not even biting. That is an important point: that there does not seem to be this build-up of debt that would be concerning and would be fuelling the rise.

The second thing is if the rise implies that there is going to be a significant fall later. As Ben and others were saying, there are structural reasons. There is a lot of uncertainty around this, but, if you think there are structural reasons around the race for space as to why increases in price may slow but they will not decline, you are less concerned about that. We set that aside and do a stress test, and that stress test looks okay at the moment; it looks like it is back to being resilient.

Q75 **Anthony Browne:** I want to ask about a separate issue about the housing market. In many parts of the country, including my constituency, there is concern about the pace of housebuilding. The Government have a target of 300,000 houses a year and are nearly reaching it. One of the arguments for that is that that scale of housebuilding will bring down house prices and put downward pressure; it is simple supply and demand.

There are quite a lot of academic papers, including one I have been reading recently by Ian Mulheirn, who I presume you know; he is the chief economist of the Tony Blair institute. He says that increase in supply has a very limited impact on pricing and that it is mainly about financing and access to credit, so all of this housebuilding will not do much to reduce house prices. I was just wondering whether you have a view on that. I see that Ben has his hand up, so you might be saved from trying to answer.

Dr Broadbent: I will read the thing you have just quoted, but my sense would be that it would be very difficult to distinguish the things over any short period of time because the stock of housing, which is what one means by supply in this context, is enormous.

Anthony Browne: The stock is so big—24 million houses.

Dr Broadbent: Yes, compared with the flow. I cannot remember the exact number for the stock. It is going to be close to 30 million.

Anthony Browne: It is 25 million or so.

Dr Broadbent: Yes, I think it is over 25 million. Even if you raise the number of houses built from 200,000 to 300,000 a year, that is an absolutely tiny number.

Q76 **Anthony Browne:** The estimate here cites a lot of other academic research and says that, if you built 300,000 a year for 20 years, it would only reduce prices by 10% or so, which is about the rise we have had over the last six months.

Dr Broadbent: That is a number. If I can put this in the context of the paper you quoted, several things might influence what is a reasonable value for the price of a house. We have just talked about one of those things, which is potentially this "race for space". That is not to deny that supply might be one of them.

Sir Dave Ramsden: If 10% is a structural increase in the level of prices, that is still significant and it is eating in. If you go back over many decades—I know it has been less true recently—I remember when I was doing the work on whether the UK should join the euro. We did stand out as a country to see real house price increases, which is not a feature of other advanced economy experiences. Yes, there are some space constraints, but the supply of housing has been historically low, and it is now picking up.

Q77 **Anthony Browne:** As I say, 10% is the growth we have had, roughly, in the last six months.

Sir Dave Ramsden: Growth over the last six months is going to be a combination of some of these race for space factors, which is a new structural factor, but also there will be some cyclical element in there. House prices move around.

Q78 **Anthony Browne:** I am running out of time. I just want to ask one last question on MREL. I do not know whether this is a question for you, Andrew. You have had a discussion paper on this—minimum required eligible liabilities—and a consultation paper out now. I know among a lot of the intermediate banks there is concern about the level of MREL coming in. You are talking about having it at £15 billion to £25 billion, rather than £50 billion; in Europe it is €100 billion and in America it is $250 billion. Their suggestion is that this would be very constraining on their ability to lend and would impact their competitiveness. I was just wondering whether you can elaborate more on your thinking about that level.

Dr Bailey: We are in active discussions.

Sir Dave Ramsden: I gave a speech about the UK's progress on resolvability back in February, in one of my non-monetary policy speeches. The Bank is the resolution authority for the UK. It is worth remembering that, because banks were not resolvable and because the problem of "too big to fail" was one of the biggest, most striking things to come out of the financial crisis, we ended up having to bail out the banks.

Q79 **Anthony Browne:** Not the smaller banks.

Sir Dave Ramsden: No, but it is very clear that we have to think about the appetite for the use of public funds. When I was in the Treasury and

Andrew was in the Bank of England, we used a lot of public funds to support banks. That has not happened in this crisis, and it is one of the great saving graces of this crisis that banks have been part of the solution, as we have been discussing, in terms of their lending, not the problem.

We work within the risk appetite for public funds that the Treasury gives us, and that is one of the key things that frame where we set the thresholds for where we ask financial institutions to raise MREL. Within that constraint, we are looking at ways, through the discussion paper, that challenger banks can grow into MREL. On the £15 billion to £25 billion threshold on balance sheet that you mentioned, we are looking at a stepped glide path as a bank grows its balance sheet, so that it is not hit with a cliff edge on MREL.

We are also looking for other challenges, where it is not so much the balance sheet constraint of MREL but it is more to do with the number of transactional accounts. Can we free up that requirement for MREL through technological solutions? Lots of people now have multiple bank accounts, so the disruption impact is less. We are, as Andrew says, in very active engagement with particularly the challenger bank sector to see if we can make this policy, within an unchanged risk appetite, work.

The key thing to say, just to end on this, is that ending "too big to fail", which we have a commitment to Parliament to do by next year—we are on track to do it—is the biggest thing we can do to support competition in the sector. The fact that we had to bail out banks was a massive subsidy.

Anthony Browne: It gave them an unfair advantage.

Sir Dave Ramsden: Ending that is a very important point in terms of competition. We are mindful of these considerations, but we have to work within the Treasury's risk appetite for use of public funds.

Q80 **Siobhain McDonagh:** I want to look quickly at the impact that you think there might be from the increase in employers' national insurance contributions and the dividend tax announced yesterday. With the furlough scheme ending next week, does the increase in employers' national insurance contributions come at the worst time for many businesses, and will it be, as Suren Thiru, the head of economics at the British Chambers of Commerce, claimed, a "drag anchor on job growth at an absolutely crucial time", with businesses carrying huge debt burdens.

Dr Bailey: Honestly, it is not really for us to reach a judgment on that. We will, as we said earlier—obviously we have not done it yet because it is only the day after—reach an assessment on the impact of it, particularly in the context of monetary policy. I cannot remember if it was Dave or Ben who said that there are two sides to that story in terms of both revenue raising and spending. We cannot give you a judgment on the precise question about the impact of it on businesses. That is not possible, from our point of view.

Q81 **Siobhain McDonagh:** While certainly the employers’ national insurance contribution increase had been anticipated for a couple of days, quite a few people were caught by surprise about the 1.25% tax increase on dividends. Kitty Ussher, late of this parish and now chief economist at the Institute of Directors, has said that the Government are yet again targeting directors of small companies, particularly as “incorporated sole traders and other owner-managers were the only group that were not supported by the Government during the pandemic. This is an extraordinary time to be adding additional burden to business”, and it is “at the expense of some of the most productive and entrepreneurial segments of the economy”.

Dr Bailey: Again, I am sorry to say this but, although I understand the point, we are not the people who can reach that judgment. What I would say—and it is for you to debate this, and are you debating it, probably as we speak—is that you have to set that off against the issue in terms of the demands of health and social care. We cannot give you that judgment, honestly.

Q82 **Siobhain McDonagh:** I will have another go now: 75% of the Institute of Directors’ members were already concerned or very concerned about higher tax employment costs, even before yesterday’s announcement. With the Government now raising the costs of employing someone, through higher employer national insurance, will the new tax be expected to increase inflationary pressures at a time when costs are already rising?

Dr Bailey: That is a judgment that we will come to, as we said, and we will do the analysis of it. I would, however, come back to the point that was made earlier: you have to look at both sides of the coin, if you like, on that one, in terms of both the revenue-raising and the spending.

Siobhain McDonagh: It was worth a try.

Chair: The Governor’s comments are probably quite reasonable under the circumstances, but your points are also very important. We will be looking into those kind of issues as a Committee.

Dr Bailey: They are important issues.

Q83 **Julie Marson:** It is good to see everyone, physically and virtually. I would like to turn to ESG investments. What assessment have you made of the risk, potentially, of bubbles emerging in that sector, whether it is individual equities, within funds or indeed sectors that cover that?

Dr Bailey: It is interesting. I have seen some commentary on this. When we have looked at the behaviour of ESG index prices, they do not look out of line with general asset prices. I have to be honest with you: we have not spent a lot of time on it. I am happy to take it away and we can certainly have a look at it; we can get our markets people to have a look at it. From what we have looked at, we could not see much of a story. I think there was an article in the *Economist.* You will get people saying, “There is this company and that company”, and I am sure there are, but of course that is true in quite a few walks of life; it is probably true in medical research at the moment, for instance, where you will see companies have very strong influences.

I am sorry; as you can probably tell, it is not something we spend a lot of time on, so I am happy to take it away and we could write back, if you would like us to.

Q84 **Julie Marson:** It would be interesting. You are right: the *Economist* has done some work on this, and indeed it identified an annual increase of quarterly global inflows from something like $38 billion to $178 billion.

Dr Bailey: That is not surprising.

Julie Marson: It is an extraordinary increase.

Dr Bailey: The inflows do not surprise me. We talk to the asset managers a lot, and it is very clear that there is a very big upturn in the demand for ESG assets. By the way, going back to Rushanara Ali's question, that is a good thing. If we are going to achieve the net zero target, we need investment in the economy; if we need investment in the economy, it has to be financed, so that is a good thing. I am happy to say we will have a look and see, and we are happy to write back and see what we can find.

Sir Dave Ramsden: Through the FPC's work in every round, we monitor very closely what is going on in financial markets. Back in July, in the FSR, we highlighted that there was increased evidence of risk-taking, and indeed of some quite inflated asset values in some risky assets, particularly, it is fair to say, more in some US markets. This is something that we keep under very close review, because of the risks if there were a correction and, as Jon was saying earlier, what that could mean in terms of playing back into the real economy.

Having had it flagged to us, we can certainly be looking at ESG in that kind of context, but, as Andrew said, we are in very close, regular touch with some of the leading asset managers, and they have just emphasised how much activity there is in the ESG space. It is very important that the "E" in ESG should be credible, so it is very important that there is not greenwashing and all of that, and it is very important to establish appropriate frameworks for investing, which is another thing we can do through our work. Although we have a relatively small corporate bond scheme, we can help set standards, and use the best data and the best framing, because that will then encourage others.

As I say, we can certainly add the ESG part to that, but in the most recent FSR we were more focused on some other markets where we could see risks that, from a financial stability point of view, could be damaging. They are tail risks but they would be damaging if they crystalised, so we warned against this, as Jon was highlighting.

Q85 **Julie Marson:** You mentioned greenwashing, which is one element. It has been described that fraud is pervasive in that sector, that market. I wondered if you had looked at that or could comment on that at all.

Sir Dave Ramsden: We can look further into it. The engagement we have with the asset management sector is very much emphasising just what a growth area this is on demand and supply, which comes back to Rushanara Ali's point. There has to be the supply of investments but there is real demand from investors for them.

Dr Bailey: By the way, that is why we have put a lot of emphasis, as has Mark Carney, on having robust disclosure standards. The Chancellor and I have both emphasised in our G7 presidency this year, leading up to the COP conference, that establishing a basis internationally for robust disclosure standards, which reduce the likelihood of greenwashing, as well as fraud, as you said, is critically important. I think we have the basis for it and international agreement for that. It is something we have worked on this year.

Q86 **Julie Marson:** If you flip that around, like you say, is there enough supply to meet the demand? Maybe it is the demand that is the concerning thing. Can you meet it?

Dr Bailey: There are two parts to that. Is there underlying supply? I would say yes. It goes back to the net zero challenge. Again, we need a lot of investment to achieve this. There is an intermediate step, which is about whether we have the means to turn the underlying demand into something that is financed.

Virtually at the moment—hopefully that will change soon—I go around the country talking to people, and I hear stories from people. I talked to a bunch of people in Orkney who said, "There is a huge amount of alternative energy in Orkney, from wave power, if only we could have a cable to the mainland, which would allow it to be delivered". To do that, it has to be financed.

Jonathan Hall: I would reiterate that the financing needs for the transition to net zero are absolutely huge. To some extent, it is not at all surprising that it is a structural theme. It will continue going forward. In general, as long as there are no bubbles, it is a good thing, first because these firms are getting financed with good ideas that hopefully will lead to a transition to net zero, but it is also an incentivisation structure via the market for other, more traditional companies to pivot in this direction.

There is, as you said, this issue with regards classification, which could lead to greenwashing if there is not such a thing. Of course, if there was a better gold standard for what ESG is, that would make it easier for us to answer your question as well, because it is quite difficult for us to say whether there is a bubble. We can look at individual stocks, but there is not a very clear categorisation of exactly what ESG is. Estimates are that probably only about 10% of the market at the moment is broadly construed as ESG. One would expect that to increase over time. We suggest the inflows into that are much greater, so that percentage is increasing, but it is still relatively low and probably still can increase further. It is definitely something to watch, and we will be monitoring this.

Just to reiterate what Dave said, we have highlighted a few other signs of increased risk-taking, such as risky asset prices. Particularly in corporate debt, for example, the market supply of corporate debt is pretty high. We have to look at it in the context of that. The outperformance last year was quite high but this year, if anything, ESG may have even marginally underperformed, so it has been a period of stabilisation after a big run-up last year.

Q87 **Julie Marson:** I have one final question. GameStop is probably the best known example of a meme stock; I thought it was only my teenage son who used the word "meme". Would you characterise those as one-off instances, or would you say that there is potentially, either now or in the future, a risk to financial stability from that kind of phenomenon?

Dr Bailey: They are not strictly a one-off, because there have been a few of them. They are not a risk to financial stability in the sense that we regard it. They do raise issues for market integrity at times, more in the US.

If you do not mind me expanding it slightly, over the course of the last year, the one that raises a lot more questions about how it happened and what the implications are in terms of risk management is Archegos; I have to confess I still do not really know how to pronounce that properly. If you are Greek, you know how to pronounce it; there is a Greek colleague who can do it, but I cannot. That is the one, because this is $10 billion of losses. Although, again, it did not raise a financial stability issue, it raises some big questions about risk management in major financial institutions. GameStop is important and, wearing my old hat, the FCA is clearly interested in it, but it is not particularly a financial stability issue.

Chair: Can I thank all our panellists? As always, it has been a fascinating, interesting and insightful set of discussions over a wide range of topics on monetary policy and financial stability. It has been a real delight for all of us to meet physically and to have two of our witnesses as verifiable human beings appearing before us. That is not to detract in any way from our three panellists and witnesses who joined us remotely. A huge thank you to all of you for joining us today. That concludes this session.