

Inflation Report Press Conference transcript – Thursday 8 February 2018

Kamal Ahmed: Kamal Ahmed, from the BBC. Governor, this is a warning, isn't it, on interest rates, that they are likely to come earlier and then to rise more rapidly than you originally expected? Could I also ask for your response to the government's impact assessments on the economy in the future? That under any trading (TC: 00:10:00) scenario, once we have left the European Union, the economy will grow more slowly than it would have done if we had stayed in the European Union. Do you agree? I just wondered if you agreed with that.

Mark Carney: In terms of the first question, I'd clarify. What the committee has said is that we expect that in order to return inflation sustainably to target, recognising that we expect the economy to move into a situation of excess demand, and inflation still to be above target at the three-year horizon. That, in order to bring it back to target over a more conventional horizon, which means moving it in from that three-year horizon, that it will be necessary, likely to be necessary, to raise interest rates to a limited degree, in a gradual process, but somewhat earlier and to a somewhat greater extent than we had thought in November. That reflects the evolution of the forecast. Stronger world, slightly less supply, greater excess demand, change in the trade-off. The message is not more rapidly, I would caveat that, in terms of your-, it's somewhat sooner and to somewhat greater extent. You made a jump from the policy horizon to the long-term outlook under various Brexit scenarios. What I can say about those impact assessments is the following. First, we haven't seen them. We didn't participate in their development. We don't have a pass to the parliamentary library. We haven't seen them, so it's hard to comment on reports of reports about the underlying assessments. My understanding of those, based on reports, is that they are what I would call 'comparative statics'. In other words, they're looking at the long-term impact of various trading relationships.

Not just with the EU, but other countries, and they're best thought of as comparisons between each other, as opposed to-, they're not truly forecasts of where the economy would be, but they're best used, as I say, in terms of comparisons. If you think about the horizon over which those forces come into play, and if you think about where we are today, which is an agreement that has been struck amongst the UK and the EU 27, for a transition arrangement that will run, it is expected, until the end of 2020, or effectively just to the end of our forecast horizon, before there is a potential transition to those longer-term scenarios. Those dynamics are of interest to the MPC, to the extent to which they affect the expectations of businesses and households. What we are picking up in terms of households is that households are reacting to the current levels of real income, which, as we all know, have been squeezed, but not making an assessment of the longer-term path of income and wealth it could be affected by, whatever Brexit scenario there is. It's detailed in fairly extensive detail in the report. Businesses are reacting to the uncertainty about those various scenarios. It affects different businesses to varying degrees, but it is notable in terms of the effect on investment in the economy. In fact, based on our survey of more than 2,000 businesses across the country, our so called 'decision-maker panel', we're seeing 3% to 4% off the rate of growth of investment over the course of the last year. Investment has picked up, but not to the extent that one would have expected, given just how strong the global economy is, and just how culminative financial conditions are.

Joel Hills: Joel Hills, ITV News. Governor, we're left, sort of, in trying to interpret what 'somewhat earlier' and 'somewhat greater extent' actually means. Three months ago, you indicated that there

would perhaps be two quarter point base rises over the next three years. The market's now pricing in three. It thinks bank rate will be at 1.25% by the beginning of 2020. Is that appropriate or could it be even higher?

Mark Carney: We've given some relative guidance, so things relative to where things were in November. There was a market curve in November and an outlook for inflation, relative to that which we used in November, which was supplied by the market. We think things have moved along, not least because of the strength of the global economy, but we're not going to tie our hands to a specific path for rates going forward. We are reiterating, though, and I think, importantly for your viewers, that these are interest rate cycles unlike those that they would have experienced in the past. If you think about past rate cycles, on average since independence you would have about two increases, a little less than two on average, two increases per quarter of interest rates, and just less than 1½% of increases overall. The average rate of bank rate since independence of the NPC prior to the financial crisis was 5%. In fact, you can stretch it back to the average rate for bank rate and its equivalent, back to the founding of the Bank of England, 1694, it's also around 5%. We're not talking about going back to those levels. That's what 'limited' means, and we're not talking about going in that historic pace, that's what 'gradual' means, but beyond that general direction, I don't think it's sensible, nor do my colleagues on the committee think it's sensible to paint out a specific path of rates.

I think it's important that people understand that, where the economy is, we have unemployment at its lowest since the mid '70s. There's very little slack, so to speak, left in companies. The speed limit of our economy has gone down since the financial crisis. It's a little more than half of what it was prior to the financial crisis, and that means that, you know, what's relatively modest growth by historic standards means that we put ourselves in a situation where inflationary pressures build, and there may need to be adjustments. There needs to be adjustments to interest rates, but all within the context of what I said at the start.

Chris Giles: Chris Giles from the Financial Times. Governor, no one's trying to tie you down, but we just want to understand actually what your words mean. You gave a commitment at the start of this press conference that you're committed to explaining monetary policy transparently. Markets, and people in markets have taken the words in the statement today, saying it puts in place a rate rise as soon as May is in play. These are the phrases that are being used in the markets in the hour or so since the decision. Your words are the same as the words you used in September, when people said the same and they were correct. Are they correct or interpret your words like that today?

Mark Carney: Well, two things. Three things, actually. First, you are trying to tie me down, even though you said you weren't at the start, and then with the way you link it back in the end, but that's fair. It's a fair challenge. Secondly, the words are not the same as they were in September, and thirdly, part of the reason-, they're similar, but they're not the same. Similar, but not the same, but that's important. I mean, you're an aficionado of this, you can understand. My third point is part of the explanation of that, which is, one of the things that has changed, or one of the things that was present in the run up to September, is that the markets weren't really responding that much, or certainly not responding consistent to historic experience, to the underlying data. In fact, I think there's a bank underground piece on this that came out a few weeks ago, for what it's worth, but you can do your own analysis. Effectively, UK data was surprising on the upside, but market probabilities weren't moving, and it was understandable to the extent that, if people had formed an opinion, that it was impossible that rates would adjust during the negotiation, this period of negotiation during Brexit. What we had been stressing throughout, was that we are in exceptional circumstances. That means we manage the

trade-off. We detailed it again in the letter to the chancellor. That's managing the trade-off, that's not taking your hand off the steering wheel.

That's not stepping back. We still, ultimately, (TC: 00:20:00) are bound by the inflation target. That's our primary objective. We could stretch out the horizon over which we returned it to target, but not infinitely. As the trade-off diminished, as slack was used up, it became appropriate to adjust policy. What's happened since the fall is that the market has responded much more to the underlying data, and formed its own opinion about the relative probabilities. Those opinions are based more on an expectation of how the economy will evolve. What we don't want to do is then take away that natural formation of expectations, because the market understands, I think, better, the trade-off we're trying to manage. That, given the relatively limited amount of spare capacity, and the prospects for the economy, that some modest and limited adjustment, and gradual adjustment of interest rates is possible. The degree, the exact timing, will be determined by how the economy unfolds, and let me state something that's very, very obvious to everyone, lest people think we don't recognise it, is that of course this is a crucial year for the Brexit negotiations, and of course we will all be better informed, we hope, by, certainly this time next year, about the future trading relationship with the EU, and that will have an effect. It could be positive, could be negative, could be neutral, on businesses and households, and the outlook for the economy, and for inflation and therefore for the policy of the MPC.

Ben Chu: Ben Chu from The Independent. Governor, the bank has reduced its estimate of the long-term equilibrium and unemployment rate again to 4.25%, and a year ago, just before February in 2017 it was about 5%. Now, a cynic might say that you're effectively, simply reducing that estimate in line with the actual falling unemployment rate, and if in a year's time, the jobless rate is down to 4%, and wage pressure is still not building that you will reduce it again. What would you say to people of that cynical cast of mind, and wouldn't it be better, given the fundamental importance of this estimate, to put large bands of probability around it rather than giving a point estimate as you have done.

Mark Carney: Of course, there are uncertainties around it. I mean, yes, there are a range of views. There will be a range of views on the committee and there is an uncertainty around these. There's an uncertainty around the equilibrium level of unemployment, the equilibrium participation rate, equilibrium average hours, the output gap, virtually every aspect. Given the quality of the data in the country, there's uncertainty around the net trade figures, the investment figures, so, you know, that way lies madness in the end, if you decide everything's so uncertain you can't possibly make it-, I mean, our responsibility is to make an assessment, and as informed an assessment of possible, be transparent about those assessments. Where there are cynics, or sceptics, or objective, people can adjust the forecast relative to their own opinion of the key underlying variables, and think about what will happen to growth and inflation and therefore to the appropriate stance of policy. Two things, and then I'm going to turn to Ben on the specifics. We have moved to this approach, the so called 'supply stock take', which is that every February, we do an assessment of all the aspects of supply in the economy. All those aspects of the labour market and the underlying rate of structural productivity growth. The reason we do it is, it's a discipline.

These things are uncertain, but in the end, we find it quite helpful to gather as much information as possible, and to make a call on the underlying variables. The adjustment we've made for the equilibrium rate of unemployment, it's quite a modest adjustment but it's one that's informed by what's happened over the course of the last year. You look at the filters, you look at job destruction, you look at wage residuals, you look at a variety of things in order to refine that judgement. It's a modest refinement, though.

Ben Broadbent: I won't add much. If you look at page 22 of the report, there's a two-page box on how we came to the calculation. It would have been a lot easier, obviously, if we'd simply been tracking the actual rate of unemployment. As it is, we did quite a lot of work, and have done over several years in trying to think about what this rate is. I'll just say a couple of things. One, that when we did it last year, if you'd based that estimate purely on what would explain the pattern of wage growth, you actually came up with a number slightly below four and a half, and we flagged that in the same report this time last year. We moved it by slightly less than that, but that's what wage growth was telling you at the time. Second, there are some other structural factors in the labour market, including for example, a higher number of graduates who tend to search more intensively for jobs, that would help to explain why this rate has fallen. It certainly isn't simply tracking the actual rate of unemployment. Obviously, over time, the two will tend to move together. That's because demand and supply and the economy tend to move together, but it's not how, statistically, we arrive at the estimate.

Adam Parsons: I think, governor, to pick up on your opening comments, if I could pick up on some other universal truths. Household consumption has halved since the referendum, productivity is lousy, investment is low, Brexit has created nervousness, and as the MPC met around you, global markets were going into meltdown. Is this really the right time to be weaning the UK's consumers and businesses away from the era of cheap money?

Mark Carney: First off, some of these things are related, and you have to look at them in the round. Investment has been weak. It's one of the reasons why productivity growth hasn't recovered to the same extent. The fact that productivity growth is relatively modest, even though we think it's going to pick up, and we see some signs of that, it's picking up to modest levels, you know, less than half, as you said. I said less than half than historic averages. That means this economy cannot grow as fast as it used to be able to, without generating inflationary pressures, until that productivity puzzle is solved and unwound, and we have to deal with the consequences of that. It's very important to understand. I know it sounds colloquial, but we emphasise the speed limit of the economy. The speed limit of the economy has changed. It's lower, and we expect that the economy will grow a bit faster than that, and start to generate some of those domestic pressures on inflation. In terms of UK households, I think we should be very clear what's driving UK household spending. It is income. It's not debt. Contribution of debt, less than 2%, the change in debt in terms of household spending. They're spending out of real incomes. Yes, of course there is a passthrough of changes of interest rates to the price of mortgages, or the cost of mortgages.

Mortgages have moved quite substantially towards fixed rate. 60% of the stock is now fixed rate, so that dampens it a bit, but we're very conscious, and we have much better information and line of sight to those dynamics, in part because of the nature of the Bank of England now, that we're both the regulator and the monetary authority, than we would have had in previous rate cycles. We have been providing a significant amount of support to this economy during very difficult periods. That's one of the reasons why the economy is in a position where unemployment is at a 40-plus year low, why more people are in work than ever before. It's one of the reasons why we're in a position where some adjustment of policy is becoming necessary. It started in November. We see the prospect of some further limited and gradual increases in interest rates, but that's about continuing the economy on this path. The most important decisions, by orders of magnitude, that will be taken that will affect UK households and businesses, and collective prospects for the years to come, are not going to be taken in Threadneedle Street, but they'll be taken elsewhere as part of the negotiations this year.

Helia Ebrahimi: Helia Ebrahimi, Channel 4 News. Governor, in the report you talk a lot about wage growth. Do you have any sense of the impact of the gender pay gap in the UK? I know the Bank of

England has a 24% gender pay gap, but as governor, how important is it that big companies tackle this issue, and with reporting in April, do you expect to see a real impact, a real chance for women to see their salaries go up and possibly that to have a wider impact on the economy?

Mark Carney: Pardon me, I missed the last bit of your last sentence. You said, 'Something in April,' I didn't catch the one in April.

Helia Ebrahimi: The reporting, the company's reporting. Do you expect it to have an impact?

Mark Carney: My non-researched opinion on that last bit of your question is that, yes, I do think that this will have an effect over time, and one does see, in general, transparency does have an impact in terms of forcing organisations and individuals to stop and think about what's appropriate, and put in place plans to adjust over time. I do think it's supplemented by a much broader trend, and welcome trend towards recognising the value of greater diversity and inclusiveness in workplaces for fairness reasons but also for business reasons. If I could personalise it to the Bank of England, for policy reasons. You do get better judgements having diversity in all its senses, which is what we're learning. It's true, and this is not representative, but the institution has come a long way. It's got a long way to go but it's come a long way in the last few years.

Over the three-year horizon of monetary policy, do we have an adjustment for a movement in closing the gender pay gap? No, is the short answer, and I'm not sure, in that short term, see, the scale of these issues, which are partly structural, and I'll finish on this. There are two issues, as you can appreciate. One is equal pay for equal work, and equal work in its broadest sense. That can have a more immediate effect. The other is a gender pay gap which results from seniority and hierarchy issues. So, if you have more men in the upper echelons of an organisation, as the Bank of England has had, and you have legacy benefits that come with that, pension and other benefits, then that pushes up the gender pay gap. It takes longer to close that, because you're changing the structure or the actual diversity. This institution, I'll finish on this, of the top managers, has gone from 20% five years ago to 30% women. That's a big move. It's not enough. It doesn't close the gender pay gap, but it starts to move it significantly.

If I can bring it back to the topic of today, which is monetary policy, and therefore, where is the economy and where are wages over the next two or three years and inflationary pressures, I'm afraid it's not going to be a big mover in that horizon. Thanks.

Larry Elliott: Larry Elliott of The Guardian. Governor, you said just recently, just now actually, that the bank has been providing significant support to the economy through a difficult period. That's clearly true, it's been nine years since rates were cut to 0.5% and they've been there or lower ever since. You're now saying, effectively, aren't you, that the economy is growing at 1¾% a year. The supply-side constraint is for the economy to grow up 1.5% a year. Nearly all the slack has been used up. Effectively, is what you're saying that the bank is done here, that we are entering a different era where you've done all you can on the demand-side in terms of providing stimulus, and now you're actually looking more towards, you know, the old remit of the bank, which was to keep inflation low rather than to support the economy?

Mark Carney: Well, just to be clear, we're providing support in order to get inflation sustainably to target. In exceptional circumstances we've brought in that horizon, as you know, and now we think that that horizon's going to start to come in as we've used up the slack. I think we should remember that, even over this forecast, and even with some modest adjustment of policy, we are still likely to be

providing important support. After all, and I'll just simplify this down to, fiscal policy has been loosened relative, but that's just loosening of a tightening path. So over the course of the next several years, fiscal policy is still a drag on this economy, and monetary policy, you know, is leaning against that to provide a balance to support growth in the economy, and make sure that, obviously the point, as much as is possible, is to bring inflation back down to target while ensuring the economy stays around full employment and full capacity.

Ben Broadbent: Sorry, just another thing Larry, which is, I don't think it's right to paint such a discreet difference between what you call the 'old' remit and what we have now. It's true that the words were changed in 2013, more in the direction of making this potential trade-off, in exceptional circumstances, explicit, but it was always there. There was always a phrase about avoiding undue volatility in output. If you look, for example, at what the MPC was doing in 2010, '11, '12, it was effectively tolerating above target inflation, and indeed inflation at much higher level than we have currently. Precisely because there were also large amounts of spare capacity in the economy, 8% unemployment, and it was making that same judgement that we'd been making over the last year or so. There is no big difference, in that sense, and no inflation-targeting central bank is solely focused, all the time, on inflation. We're all flexible inflation targets in that sense.

Mark Carney: Yes, but if we can just have a seminar here for a second. One of the things that has evolved, is that we have to be much more explicit about that trade-off. If you look at today's letter, if you will, you know, that's the way we think about the trade-off. That's our best estimate of the trade-off that we've tried to strike. It would have been easy to some extent to have a forecast which says, 'Don't worry. We can have our cake and eat it too. We can get inflation back to 2% and we can have policy where it is.' But our best judgement has been that, 'Well, actually inflation is going to be a little higher than the target, and we've got to share that with you, and with the people of the United Kingdom and therefore make explicit that we're making these judgements.' It has the consequence, which I think is healthy, we think is healthy, which is that, as you get to the position we are in now, the trade-off is diminishing – in other words, you know, we're getting towards full employment, and using up the capacity that – therefore, the horizon moves in and the adjustment in policy becomes more obvious.

Jill Ward: Jill Ward, Bloomberg News. Governor, is there a chance that you're being too pessimistic on productivity, and by extension the need for tighter monetary policy, with recent figures having shown productivity has picked up more than expected? In other words, is there, kind of, a case for testing the supply side of the economy a bit more?

Mark Carney: Yes, there are two-sided risks on productivity, without question. You can make the case both for an accelerated pick up. In fact, we've been making the case for quite some time for an accelerated pick up. The economy just didn't cooperate with that. Given the track of investment, given the conversations we're having with businesses, given the global nature of the slowdown, the still marked pickup that we haven't – I mean, with productivity, you can never put too much weight on the most recent figures that are very likely to get revised – seems to strike the right balance. That said, if there's more supply in the economy, particularly because of productivity, of course it will have implications for the path of policy, but Ben, do you want ...

Ben Broadbent: No, I mean, I agree with all of that. One particular point about that last quarter. It was a slightly odd drop in the third quarter, in both participation in the labour market and employment, which we thought looked a bit spurious or at least a bit noisy. That flattered, necessarily, the productivity numbers for the third quarter. You must avoid, I think, looking at quarter-to-quarter movements. My guess is that output per capita will not have grown much in Q4, for example, because

we've seen participation and employment bounce back. Over a longer-term trend, yes, we've had very little productivity growth, say, in the year to Q3, just as we had in previous years, we remain hopeful, and I think there are reasons to expect it to accelerate, but I don't think it would be right to pencil in, as your central forecast, the sorts of numbers we had before the crisis.

Phil Aldrick: Phil Aldrick, The Times. Governor, I just wondered, if there is no transition policy in place by the end of March, which is the current, sort of, ambition, would that have a material impact on the policy outlook, you know, when we next see you at the inflation report?

Mark Carney: It's a fair question. The way we look at it is, if that transpired, what impact does it have on household confidence, consumer confidence? What impact does it have on business confidence and activity, and of course, you know, what actually is 'no transition agreement in March'? Is it that it's not in March, but it's going to happen in April, or is it that there's not going to be one? I guess there's no point speculating right now. As you know, this gives me a chance to remind that, our forecast is predicated on two assumptions around Brexit. One is that there is a smooth transition to a sort of average of potential outcomes. Over the course of this year, we're going to learn a lot about both of those assumptions. An agreement amongst the UK and the EU 27 on a transition arrangement that has to now be papered, has to now be turned into an actual agreement, is a pretty strong thing. At least, there's no reason to walk away from the first leg of that assumption, let's put it that way, in other words that there'll be a smooth transition, but we'll learn. In terms of the second aspect, we have no further information than anyone else has, in terms of what is the potential outcome of the negotiations. I'm pretty confident that we're all going to be a lot better informed by the end of this year, and that is very likely to have consequences for business activity and potentially for household confidence and therefore for the outlook. Recall, and you know this, that monetary policy is the most nimble of the macroeconomic policy levers, so we'll be able to adjust as appropriate if greater certainty comes into play.

Jason Douglas: Hi, Jason Douglas from the Wall Street Journal. Could I just ask you please, about what's been happening in financial markets over the past few days? Do you see this as, you know, a sort of, possibly welcome return to volatility, or do you detect in this anything that should worry central banks or the wider economy more generally? Thank you.

Mark Carney: Obviously, we don't want to give a running commentary on financial markets. We, as many others, and a colleague of mine was out last week, I think I had made comments the week before, and others on multiple occasions through the FSR and others, have observed that volatility in markets was extremely low, actual and implied. That this didn't seem consistent with, you know, even just the normal range of volatility around fundamentals and underlying economic outcomes, and that, at some point there would be an adjustment. It's hard to pinpoint when it would come. It certainly is healthier when markets have two-way risk around prices. You can have a trend, but a trend with two-way risk, and that holds for virtually any market, including markets in volatility. In that regard, it's, you know, one hesitates to say 'welcome', but it's not an entirely surprising development. Certainly, what's happened in volatility markets is not an entirely surprising development. I'll make one point, and then I'll just see if Dave wants to expand. I think what's incredibly important though, in this market circumstance, is to recognise that, I mean, we feel quite strongly that the core of the system is an entirely different place than it was, certainly prior to the crisis, but stretching back over, really, a quarter century, so that there is not the amplification, by the core of the system of the volatility of markets.

If anything, the core will help dampen it, so that, if markets need some time to find the right levels, and those levels include an appropriate level of volatility, that's a good thing because it's not being transmitted through the core, particularly to the real economy. Dave?

Dave Ramsden: I think, all I'd add to what the governor's said is that, you know, yes, we have seen some of those risks that we'd previously flagged, particularly volatility and equity markets playing out. Yes, some investors will have taken some significant losses from that, but overall, we've seen resilience in markets, and that we remain here at the bank, we'll be, you know, very focussed on further developments in markets. Whether there are further increases in volatility, I mean, the VIX has come in somewhat-, I mean, it's still at 30, down from its peak at 50, up from the incredibly low levels that the governor flagged.

Harry Daniels: Good afternoon, governor. Harry Daniels from LiveSquawk news. I'm just trying to get a better picture about the trigger mechanisms for the bank. There doesn't seem to be a great deal that's changed between November and this inflation report, you know, if you dig deep. I'm just trying to understand, you know, how much data will it take to confirm, say for example, a May hike for the bank? Does the bank look at the recent January data as a guide, the survey data that we've seen, and will then follow that up with, sort of, I guess, concrete data from the DNS, for example? I'm really just trying to find out what's changed to become this much more hawkish than I think the market probably expected, and we saw previously.

Mark Carney: Well, a couple of things. I'm not going to endorse all the elements of your question if you don't mind, Harry, but, you know, you say not much has changed. The forecast is slightly stronger, but it's a forecast that's conditioned on tighter monetary conditions. As you know, but I'll just remind everybody, that what we do is, we take the fifteen-day average of the implied path of bank rate, and the fifteen-day average of the trade-weighted sterling, and we use that as an assumption. Now, it happens to be that we take a fifteen-day average of about a week or so ago up to about a week or so ago, in terms of mechanically doing the forecast. The sum of those two, the stronger sterling was about 3% higher, I think, and the implied amount of interest rate increases were higher for the one that we've used to condition this forecast, versus the one we used in November. Just the fact that the forecast, even if it were exactly the same, that tells you something, that there is a change, that we see stronger momentum in the economy. I mean, we were on the upper end of global forecasts, but the world economy is that much stronger than even we had been expecting, and we're seeing that flow through on the trade side.

The sweet spot that Ben has talked about in the past is particularly so at the moment. What we have said, and now I am repeating myself, and repeating the committee, is that, you know, were the economy to evolve in line with this forecast, you could expect rates to increase somewhat earlier and to a somewhat greater extent than had been anticipated in November, which is about the extent to which we're going to go. It certainly is the extent to which I'm going to go, in terms of (TC: 00:50:00) the path of policy, and will want to see the extent to which the economy evolves in line with the forecast. Of course, things will happen. Things will happen around the world. Things will happen here. We'll get progress or not on the Brexit negotiations, other factors will come into play and we'll take those into account, but I think, in repeating relative to, I think my response to Chris Giles. What we are seeing in markets is that markets too are adjusting to those underlying changes and fundamentals, in terms of their thinking about what the bank might do. Again, linking back to Jason, that is a healthy development, that, yes it leads to a bit more volatility, but that's good volatility because nobody can predict with certainty what's going to happen in the future. What you want to do is update your views of what's likely to happen, given the information that comes to pass.

Hugo Duncan: Hugo Duncan at the Daily Mail. Governor, when the bank raised rates in November, you said you expected this rate rise to be passed onto savers. Now, a lot of savers have seen no change at all in their deposit rates. (a) are you surprised by this, and (b), do you believe that the banking industry should have passed the rate rise on, faster and to a greater extent than they have done?

Mark Carney: I'll start and then I'll have, I guess, Ben to expand, because we do talk about this, as you will have seen, in the report, and provide the information in terms of where the transmission has been. The headlines I'll give you is that, one, in broad terms there has been a similar degree of passthrough, if you will, of the bank rate change to savers and to borrows in the economy, relative to historic experience. The second point is important, which is that, as rates got very low, the relationship between what the bank rate was and what banks and building societies paid depositors, changed. In other words, normally they paid at a discount to bank rate, depositors. Think back to the days when it was 5%, and what's flipped, and there's a chart which shows this, is that they paid at a slight premium to bank rate when it got very, very low, and so one has to take that into account in terms of the adjustment, but Ben can go through that.

Ben Broadbent: No, I won't. There's a box on the passthrough of that rate rise on page eight of this. If you look at the graph that the governor referred to, which is on the right-hand side of it, one thing that comes across as well is that the gap between the overall rate of interest on mortgages, and what banks are paying on deposits, that margin is actually quite low, relative to history. These aren't the only bits of banks' balance sheets, but the same is true of net interest margins in aggregate. It's not the case that banks are, sort of, fleecing their customers, or at least not any more than they were on average over the past. Deposit rates have gone up a little bit. Mortgage rates, in total, have not actually gone up, you know, barely at all, which was something else we flagged when we made the rate rise, because a lot of mortgages are fixed, so there's nothing unusual that we've seen that we didn't expect as a result of this 25 basis-point rise in interest rates, which is, after all, relatively small.

Tim Wallace: Tim Wallace at the Daily Telegraph. Governor, the Term Funding Scheme comes to an end this month. Is that a significant moment as some of the emergency support from 2016 rolls off? Should we see it as a tightening by default, as one of these facilities that banks are still using after today comes to an end?

Mark Carney: Thanks for the question, because it allows to clarify, and I'll have Dave expand, but the short answer is, 'No.' When we announced the term funding scheme, let's recall the purpose. The purpose of the Term Funding Scheme was to make sure that the bank rate cut in August of 2016 was passed through, particularly to borrowers, and it worked. It helped ensure that, what was then a historic-, well, still is, a historic low for bank rate, was passed on to borrowers, and got maximum traction, and has helped support the economy over the course of these last several years. Now, the design of the funding scheme was that banks knew banks could borrow with certainty for four years, and the cost would just move with bank rate, so the stock of that borrowing is in place, and they will continue to benefit from it over that time.

Dave Ramsden: All I'd add to what the governor's said is that, you know, once the draw-down window itself has closed at the end of this month, the amount of drawings, you know, banks will continue to benefit from that for up to four years, depending on the term they took out. It's not a, kind of, discreet thing, in that sense. There's a continued benefit.

Mark Carney: There's not a stealth element to it. It was clear that this was going to be the horizon. They've got the stock. It does mean that the margin though, once they've used up that stock, that the

cost is what they paid depositors, to Hugo's question, and depositors will be shopping around, and what they have to borrow at in financial markets, which will help price.

Cat Contiguglia: Hi, governor. I had a question about whether you were concerned about the impact of Brexit on just the overall perception of economic forecasting. It requires making assumptions, and at this point in time, unfortunately, any assumption that you make tends to look somehow politically leaning.

Mark Carney: I think a couple of things. Part of the answer is in your question, which is, you have to be very clear about the assumptions you're making, and so, you know, in terms of the MPC, it's that smooth transition to an average of endstates. Obviously, it's unlikely we'll end up with an average of end states. We're going to have to choose. There'll be a negotiation, and we'll end up somewhere on that continuum, and we will have to adjust our forecast at that point, as the economy adjusts, as households and businesses adjust to that point. You've got to be transparent about those assumptions up front. If you're doing, to go back to Kamal's question earlier on, to reiterate that, you know, we haven't seen these forecasts, or, not forecasts, this comparative static work that's discussed. But if someone's looking at comparing the impact of different trading arrangements on the economy as a whole, or different sectors or different regions, it's much better to have that out, kind of, there, with the underlying assumptions, and the model so people can interrogate them, if I can put it that way. Think about, if you change the fundamental assumption, how would the results change? What are the sensitivities around those, so there's an as informed debate as possible around it.

I'll make one last point, which is to go back to where I started, which is that, I think this forecast thing, I mean, I do think some of it has been overplayed. Big picture, prior to the referendum, the MPC's view was, referendum went in a certain direction, exchange rate is going to go down, likely sharply, inflation is going to go up and growth is going to slow. That's exactly what happened. In terms of the orders of magnitude, yes, slightly off. Not on the exchange rate, not on inflation. Slightly off on growth to the degree, but not entirely uninfluenced by the MPC's response. I will go back to the point that, unlike weather forecasters, we help make the weather, and so, responding to the forecast is part of what we do. As I mentioned as well at the start, as we've moved forward during this period, broad brush, I think we and others, we're not alone in this, but in the forecasting profession, have got the contours of how the economy would respond to the Brexit uncertainty - the Brexit effects. Squeeze on real incomes, household consumption slowing, cut in half since the referendum. That's what's happened. Business investment, quite weak by historic standards, and weak relative to what's happening everywhere else in the world, also true. Supply not recovering to the same extent, you see it both on the labour supply side and on the productivity side, and in that context, we've been trying to manage this trade-off, use up as much slack in the economy - to put it more positively, get as many people into work - and then bring inflation to target.

Big picture, I think there is something in these forecasts that tell people about how the economy is going to respond. The challenge is going to be, at some point over the course of the next year, we're all going to be a lot better informed, and we're going to have to update those forecasts on the new relationship, or potential new relationship. The best way to do that, and in the spirit of the way the MPC operates is, we'll be as clear as we can. We'll be absolutely clear about what assumptions we're making, and what we see the drivers are. A lot of people might disagree with us, and shade the forecast this way or that, but it will provide at least a reference point for the outlook, and certainly will provide a reference point for the conduct of monetary policy, which obviously is hugely important.

Richard Barley: Richard Barley from the Wall Street Journal. Governor, you talked a fair bit about the strength of the global economy, and that it's better than the MPC expected. Particularly, you just mentioned global investment picking up. Could you talk a little bit about how you're thinking about underlying rates of interest in terms of that, and is there any sense that global monetary policy is now gaining too much traction?

Mark Carney: Certainly, one of the things that is possible over the course of the next few years, is that the underlying global equilibrium rate of interest could be increasing, and obviously the institution has done a lot of work on this, and we do think about it. That pickup in investment, if it's sustained, and there's a lot to make up in terms of investment, but if that pickup in investment is sustained, and the relative global savings diminish - and if you just look at the fiscal side, globally, fiscal policy has moved fairly substantially from quite tight to around neutral, to slightly culminative, and the US, a fairly large move as we're aware, as part of that - not surprisingly, supply, investment curves moving up, you know, you can see why, at least for those limited aspects of what determines global equilibrium rates, that the direction is likely to be up. That leads to your point, I think, which is that, if you stay still in that environment, then all things being equal, you're providing more stimulus. When you map from the global rate to the local equilibrium rate, you have to take into account the headwinds that you could have domestically, which include, in this economy for the moment, the stance of fiscal policy - I'm not making a comment, I'm just observing the stance of fiscal policy; uncertainty associated with business investment, which one layers on top because of Brexit; other factors which would necessitate an adjustment. But we, as a central bank, and an open global economy, have to be conscious of what these broader trends may be.

Gareth Ramsay: That's all we have time for. Thank you very much for coming, everybody.