HOUSE OF COMMONS

Treasury Committee

Oral evidence: Bank of England Inflation Report, November 2018, HC 596

Tuesday 20 November 2018

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Watch the meeting

Members present: Nicky Morgan (Chair); Rushanara Ali; Mr Simon Clarke; Charlie Elphicke; Stewart Hosie; Alison McGovern; Catherine McKinnell; Wes Streeting.

Questions 292 - 354

Witnesses

I: Dr Mark Carney, Governor of the Bank of England, Sir Jon Cunliffe, Deputy Governor for Financial Stability, Bank of England, Andy Haldane, Chief Economist and Executive Director, Monetary Analysis and Statistics, Bank of England, Michael Saunders, Member of the Monetary Policy Committee, Bank of England.

Written evidence from witnesses:

–Sir John Cunliffe and Michael Saunders

Examination of witnesses

Witnesses: Dr Mark Carney, Sir Jon Cunliffe, Andy Haldane and Michael Saunders.

Q292 **Chair:** Good morning and thank you very much to our panel of witnesses this morning. We are starting bang on time, because we are being beamed live on BBC Parliament this morning. I cannot think why they think this session might be of interest, but it is up to all of us, presumably, to provide that interest. I will ask you all to introduce yourselves before we start.

Dr Carney: Mark Carney.

Sir Jon Cunliffe: Jon Cunliffe.

Andy Haldane: Andy Haldane.

Michael Saunders: Michael Saunders.

Q293 **Chair:** Thank you all very much indeed, and thank you, Governor, for the announcement about the publication date of the *Financial Stability Report* as well. It will not surprise you that we are going to touch on that and that we look forward to seeing you again once that has been published, before the parliamentary vote. We have a lot to get through this morning and we will try to direct questions to particular witnesses, so I would be grateful for as short answers as possible, please. Governor, I will start with you about the draft withdrawal agreement and the assessment you have made so far about the impact of the agreement on the ability of the Bank to deliver statutory objectives.

Dr Carney: First, we have emphasised from the start the importance of having some transition between the current and the ultimate arrangements, so we welcome the transition arrangements at the heart of the withdrawal agreement and we also take note of the possibility of extending that transition period. We may get into that; I leave it to you.

On our ability to discharge our function, a couple of aspects of the withdrawal agreement are relevant. It improves our ability to discharge our function relative to having no deal. It addresses in a clear way, for the period covered by the withdrawal agreement, a series of transition issues that we have highlighted as the FPC. We can go into those specifically, if you want, but I will just leave it as the aggregate. It continues the supervisory and resolution co-operation arrangements that we currently have with European authorities, which is essential given the size and complexity of the UK financial system. We would expect—and this is something we will give a greater view on when we provide a response to your letter—that it would support economic outcomes. I would note that the forecast contained in the *Inflation Report* assumes not the specific withdrawal agreement, but a smooth transition to an average of outcomes. That gives some idea of the direction of the forecast, and obviously better economic performance helps the Bank discharge both its monetary and financial stability responsibilities. I will leave it there.

Q294 **Chair:** Thank you, and I am sure we will come back to this point about the transition period and some of the details. High level, on the steps of Downing Street last week the Prime Minister talked about three potential scenarios. She talked about the withdrawal agreement, leaving with no deal or no Brexit at all. In the analysis that you are going to provide to Parliament, are you going to look at those three different scenarios?

Dr Carney: We were not intending to provide additional analysis on the third scenario, which is no Brexit at all. Based on the communication from the TSC, we will look at the following. I would stress that a no-deal, no-transition Brexit is work that the FPC does. As Committee members know, the job of the FPC is not to look at how things could go well under that scenario, but what could go wrong. That will be a worst-case scenario of a no-deal, no-transition Brexit, because our job is to make sure that the financial system is able to withstand any shocks associated with it. There will be that analysis, and there will be commentary coming out as part of the *Financial Stability Report* and in our response to the TSC related to that specific issue.

Secondly, in response to your letter, we will look as the MPC at a scenario related to the withdrawal agreement. I say "scenario" as opposed to a full forecast because I think—I may be proven wrong—the political declaration, about which we are going to hear more relatively soon, will still have a range of potential outcomes, which are very important things that could be negotiated. It is not a point forecast, so we have to make some assumptions about how that could come out and I would expect a range of potential outcomes in that scenario. Again, forgive me if I am speaking in the conditional, because we as the MPC—and we are not all represented here today, as you know—are working through that right now on an accelerated timetable, and that is what we will provide. Then the Committee will be able to reference both of those blocks of work relative to our November forecast and a simple baseline, which is the forecast prior to the referendum, which is a trend of those forecasts.

Lastly, maybe I could use this opportunity to check something. In your letter to me, you referenced a scenario that was a transition to WTO, so our assumption has been that we should look at that. The work we are doing thus far suggests that the principal value of looking at that is it demonstrates the importance of some of the assumptions that have to be made. I will end with this, which will put a fine point on it. The question has to be whether in 20 months—and it is a question that, in some respects, Parliament and TSC are better informed on—we will be ready to have in place all the customs and other arrangements that are necessary for a WTO trading relationship with the European Union. That is the question. You have to make assumptions about that. Depending on the assumptions you make, the transition to WTO could look more like no deal, no transition or a seamless move to WTO, but we will expose all that so you can have a proper assessment of it.

Q295 **Chair:** Thank you. We will reflect on that further as well. You touched on the political declaration there, and I think you have probably answered this, but will you incorporate the political declaration as far as possible?

Dr Carney: Yes, as far as we can.

Q296 **Chair:** Mr Haldane, I will turn to you about the implications of the draft agreement for the existing economic forecast of the Bank and the committees. Is that still valid as an existing economic forecast?

Andy Haldane: Pending that further detail from the political declaration, our November forecasts remain our best guess of how the economy might evolve. You will have seen in our last *Inflation Report* that there are already some signs, over the past month of two, of uncertainties around a cliff edge and no deal beginning to have a more material impact on the investment plans of business. Our own agents' intelligence from companies around the country suggests that, as it got nearer to the point of withdrawal, it has had a more material adverse impact on some companies' investment plans than has been the case hitherto. Brexit uncertainty is the single largest headwind that they identified in our most recent survey, conducted during September and October.

Notwithstanding the fact that the details of the deal remain to be agreed, we are seeing a greater impact on the behaviour of companies in particular over the last month or two. That could make for a somewhat weaker fourth quarter than we saw in the third quarter, and certainly a more volatile path for output over the next few months.

Q297 **Chair:** This might not be something you are able to set out now; it might be something you will set out in your work back to us. Do you have a sense of what major judgments you need to take, to model the economic impact of the withdrawal agreement, and the assumptions that need to be made of things that still require a judgment, because they cannot be certain?

Andy Haldane: One of the two key elements of that is what the end state is. As the Governor mentioned, our current working assumption, which has served us pretty well hitherto, has been to take an average of an EEA free trade agreement and a WTO set of possible arrangements. The political declaration will enable us to focus more precisely on what that end state will be, which will be helpful. That will possibly reframe our forecast to some degree. The other key aspect is the path of transition to that end state, where our working assumption so far has been a rather gradual 15-year transition to that end state. It could be that is another aspect we need to look at ahead of producing our analysis for you on the 29th of this month.

Dr Carney: Can I pick up where Mr Haldane left off on a couple of points? First, the analysis we will give you is a forecast—sorry, it is not a forecast, a scenario—over a policy horizon, so three years, or we can stretch it out to five. It is not something that others would produce, for example the Treasury, which is a long-term, comparative analysis.

Chair: The Government analysis as well, yes.

Dr Carney: Yes, exactly. That is my first point. Secondly, what is relevant to the longer term and what we are transitioning to will include questions such as the level of services access, including non-financial services. How much autonomous equivalence is granted is another example. With respect to the nature of the trading arrangements for goods, is it pure free trade? Are there rules of origin requirements? What frictions are there? What third-country trade deals are put in place? Some of those things are relevant to long term. You will see less of them in our forecast because the impact happens more off stage, so it is something you are transitioning to, but we will expose those which are relevant, so you can take stock of the various effects.

Q298 **Chair:** I have two final questions. Governor, you said repeatedly, most recently in your press conference following the *Inflation Report*, that a no-deal Brexit is an unlikely tail scenario. Do you still hold that view and has the chance of no deal risen in your mind?

Dr Carney: We are going to find out relatively soon, and some of you may know already. No, we are going to find out relatively soon. The important thing is that, from a Financial Policy Committee perspective—not represented here today—we have always operated from the view that this might happen. It might be very unlikely, but it might happen, so get the system prepared for that. We have effectively been preparing for it since the day after the referendum and we are quietly confident that we have in place all the measures we could have in place. A few things are working their way through Parliament, and Parliament has acted with alacrity and responsibility on the most important statutory instruments, so this is moving through. There is one major issue with the Europeans, which is making progress but is not fully resolved. We can come to that if necessary but, next week in our report to you with the stress test, we will provide us much information as is needed to make judgments about the capital liquidity position at the core of the banking system. From a probability perspective, even if the FPC has operated on a very low probability, we have to get the system ready.

From an MPC perspective, the forecast in the November *Inflation Report* does not include a no-deal, no-transition scenario. It has always had a smooth transition to an average of end states. By the time we make our next full forecast, which is February, we will have to incorporate where we are headed.

Q299 **Chair:** Sir Jon, I want to ask you about the impact of the withdrawal agreement and the political declaration on the stability and continuity of financial services. Do you have a view on that? There are three paragraphs in the political declaration on financial services. What is your thinking on that at the moment?

Sir Jon Cunliffe: The first point is to re-emphasise what the Governor has said. The transition period is something the FPC has made clear early on would be valuable, because it reduces disruption and financial stability risk. As you know, we have been preparing for financial stability risk on the basis of no deal and no transition, but clearly, if there is a transition period, there is more time to deal with some of the issues that you are well aware of.

The other point I would make is this. Within those three paragraphs on financial services is a commitment to agree on equivalence arrangements by June 2020. Clearly the transition period is more effective in reducing disruption if people know the end state, so knowing the end state by June 2020, whatever it is, gives a certainty in what you are transitioning to, which at the moment we have not had and has been some of the cause of the risks we are trying to manage.

Q300 **Chair:** Is June 2020 a realistic time?

Sir Jon Cunliffe: It depends. The equivalence arrangements that exist within the European Union are being changed at the moment. I expect those changes to go through before March of this year in some areas like market infrastructure, but we start with the same arrangements in those areas, so in my view that should be possible. The question then is whether one can expand equivalence in the way that the Chequers White Paper suggested. That may take longer, but both parties have expressed an aspiration and a will to do it by June 2020.

Chair: If they want to do it, they can.

Sir Jon Cunliffe: Yes. The other thing I would mention from a financial stability point of view is that the political declaration also has within it the ambition to reach a decision on data adequacy by the end of 2020. That is another financial stability risk that we have been concerned about. Clearly, if there is a data adequacy decision by that point, it reduces the risks to banks and financial institutions here and within the EU on transfer of data, which is essential to their operations. More broadly on the type of equivalence, what it will look like and the extent to which it resembles the Chequers White Paper, it is too early to say. I can give you a view based on what is in the White Paper but, within the political declaration as we have it now, there are only three paragraphs.

Q301 **Charlie Elphicke:** Governor, I was looking at the movements in sterling last week as the Cabinet meeting went on, and sterling fell quite sharply. Then, when the Prime Minister came out and made her announcement, it rose very sharply. The Prime Minister announced Cabinet support for the draft withdrawal agreement. What was not known at that time is that the Brexit Secretary had told the Chief Whip about his intention to resign.

The Bank has considerable experience in handling the release of market-sensitive information. Do Bank procedures require the release of all relevant information on a market-sensitive matter at the same time? What is the impact on the integrity of financial markets of releasing market-sensitive information in a piecemeal way?

Dr Carney: I am not familiar with the minute-by-minute discussions that may have occurred in Cabinet and afterwards, to which you refer, and the extent to which those discussions were final. Are there personal issues, as sometimes people have intentions and those intentions are not followed through? There is in Government, as in central banking, always market-sensitive information. There are multiple elements of market-sensitive information, and the important thing is that they are released in as comprehensive a way as possible. I am not familiar with the specifics of the individual decisions, but I would view the pace with which they came out as totally understandable. I also think it is something that the foreign exchange market can and did handle.

If I can bring it up to the general, in terms of foreign exchange markets, as you know, implied volatility in sterling is very high right now, much higher than it is for other major currencies, for the obvious reasons of the stakes of the political discussions you are all involved in and the importance to the outlook for the economy in the short and medium term. The expectation of those who are active in those markets is that they are volatile and they will continue to be volatile for the next month at least. You can see that in the term structure of the volatility in those markets. There will be events that move sterling up and others that move sterling down, and they are likely to continue for the next little while.

Q302 **Charlie Elphicke:** What we know is that, if the chief executive of a company told the company secretary, "I am going to resign", and the chairman made a statement to the market that all was fine, it would be a serious matter. Could an announcement of the Cabinet's views of the draft agreement and all that sort of thing be better handled from the perspective of financial market integrity, particularly with the risk of further resignations of members of the Cabinet who apparently enjoy eating pizza?

Dr Carney: Many people enjoy eating pizza, Mr Elphicke. I watched the Prime Minister's remarks from Downing Street. I clocked the word "collective", as a number of observers did. Not everybody would have picked up on the important subtlety there, the collective decision of the Cabinet as opposed to the unanimous decision of the Cabinet. I had no information about the position of people going into the meeting or what transpired during the meeting, which finished just before she came out and made her statement, which was to my knowledge an accurate representation of what Cabinet had collectively decided. In that regard, it was perfectly appropriate. I also recall that, as you will appreciate, on an important point like that, the Prime Minister felt a duty and responsibility to speak directly to the nation, not just the markets but the nation, about what had transpired. From what I could see and my understanding of the timeline, she did so as quickly as she possibly could have after the completion of the meeting.

I will say one other thing. You made an analogy to an announcement by a company. It could be an announcement by a central bank or a press release by the TSC on something that could be market sensitive. A decision is taken; then you sit down and write a press release or representation. There is a lag between the decision and the event, and then the communication of it. One looks to shorten that, but what one also looks for is that those in possession of that material information and knowledge of that decision keep it to themselves and do not act on it. That is the key test.

Q303 **Charlie Elphicke:** Turning to wider Brexit issues, given the current state of knowledge, are you more likely to vote for stimulus or rate rises in the event of a no-deal Brexit?

Dr Carney: It depends. It is a very important question and something that we, as the Monetary Policy Committee, have addressed at various times, but fairly comprehensively in the *Inflation Report*. It is something that we will also address in the communication to you next week. It depends on the implications of no deal for supply, demand, the exchange rate and the balance of those. We may get into this in more detail, but you told us to keep our answers short. Since it is in the *Inflation Report*, I will make two points. First, this would be a very unusual situation. It is rare to see a large negative supply shock in an advanced economy. You have to stretch back, at least in our analysis, to the 1970s to find analogies. There is some information about what happened to New Zealand with the end of Commonwealth preferences, but only some information. There is some information from the oil shock of the early 1970s, but only some information, so it is an unusual situation.

Secondly, the initial conditions and the starting position of this economy are very different than they were at the referendum. We had inflation above target; then we had it barely above zero. We have the economy basically operating at full capacity, maybe in slight excess demand, when there was excess supply then. At the end, we have the primacy of the inflation target in our remit, so we can stretch the horizon over which we return inflation to target a bit, but in the end we are charged by Parliament with our statutory responsibility to bring inflation back to target.

Q304 **Charlie Elphicke:** Before the referendum results, the MPC emphasised that policy response could also be in either direction. A week after, you gave a speech in which you said monetary policy should ease. What was it you learned in that week that decided you on that?

Dr Carney: There were a couple of things. One was that sterling adjusted, but it did not adjust by the extent it might have. There was an apparently sharp hit to demand and confidence, and so the prospect of a much bigger gap between demand and supply in the economy increased.

Inflation expectations held as well, so all of that set up a situation where we had a trade-off. There was excess supply in the economy and the prospect of more of it if we had not adjusted policy. We had inflation below target, and so we made the adjustment. Sorry, inflation was below target at that point, but prospectively above target and that is what happened due, as we expected, to the pass-through of the exchange rate move. So it was a considered judgment, but again it provides a case study that says it could go either way because, in that case, the demand shock far outweighed any impact on supply over the course of the next few years. As I say, while the exchange rate adjusted, it held in, as did inflation expectations, which gave us the flexibility to provide stimulus. We think that was part of the reason that the economy grew as it did.

Q305 **Charlie Elphicke:** After the referendum, households such as those I represent in Dover and Deal were bullish and had increased confidence because they believed in Britain and our future as an independent nation, whereas financial markets and big business took the opposite viewpoint and that resulted in a fall in the value of sterling. If that gap in sentiment were to occur after a no-deal Brexit, what would the implications be for economic and price stability?

Dr Carney: I want to be a little careful in getting into a straight hypothetical but, if the economy moved further into excess demand, because the weight of spending either was maintained or accelerated; if we had the prospect of additional inflation because the judgment of financial markets was that future relative incomes would be lower and therefore you would need a change in the relative price of the exchange rate and some other assets; and if sterling were to depreciate so there would be more inflationary pressure in the economy, at a time when we had some expectation—and we can discuss this in more detail when we provide our coming testimony—of supply being reduced for a period of time, in that situation, I would expect monetary policy to be tightened.

Q306 **Charlie Elphicke:** In the event of a no-deal Brexit, should households and businesses be prepared for sharp interest rate rises on top of any fallout from Brexit itself?

Dr Carney: What households and businesses should expect is the following. They should expect that their financial system is there to serve them just as it is today, and we will make sure that that is the case. They should expect that we will manage monetary policy to achieve our 2% inflation target and, subject to that, provide as much support as we can to the economy to help it through a period of adjustment. That is what they should expect.

If I may, Mr Elphicke, on the issues around Brexit, particularly around a no-deal, no-transition Brexit, we have the two roles I just outlined, but the real action and the real issues are going to be in the real economy. They will be about how well the logistics system works, where business confidence is and what access, if any, there is in a true no-deal, no-transition Brexit. This is not the financial crisis round 2, where the Bank of England and other central banks are centre stage. This is a real economy shock and, therefore, central banks have a role, but we are more of a sideshow.

Q307 **Charlie Elphicke:** Let me just press you a little harder. Would interest rates be higher or lower?

Dr Carney: That depends on the balance of demand and supply, and the exchange rate, as the committee has made clear. We could see either scenario.

Charlie Elphicke: There could be more stimulus and lower rates.

Dr Carney: There are scenarios where that could happen but, to be clear, those are scenarios where the hit to demand for the level of activity is greater than the impact on the supply capacity of the economy. Both of those are going down, so it depends on your definition of net stimulus.

Q308 **Chair:** Can we ask for the view from other members of the committee? Mr Saunders, what is your view on Mr Elphicke's questions?

Michael Saunders: The framework of the MPC and how we would respond is the same as in 2016: supply, demand and exchange rate. As the Governor said, the conditions that we face now are different from 2016. Then there was spare capacity in the economy and now there is not. Then inflation started below target and now it is slightly above, so you cannot automatically assume that the policy response would be the same. The other key point is that an early move to WTO with no transition would be a major negative supply shock to the UK economy, and there is very little that monetary policy could do to offset that. If you have queues at Dover, the answer is not lower interest rates.

Sir Jon Cunliffe: I subscribe as a member of the MPC to the framework we have set out. I would only add one point. What is also important here is not just the outcome, but how it measures up against the expectations of households, businesses and the foreign exchange markets. Will households increase their spending in a certain outcome? Will they reduce it? We cannot know that. We can see some of the effects of Brexit in the economy now, but you cannot be precise about how particular Brexit outcomes and parts of those outcomes will measure up against people's expectations and their behaviour afterwards. It is an unprecedented situation and one the MPC will have to judge carefully at the time.

Andy Haldane: My colleagues have covered it off pretty comprehensively. The only point I would underscore is this. Michael and the Governor both mentioned the difference in initial conditions of the economy relative to the referendum. Another key difference is that, after the referendum, it was merely the expectation of some potential disruption to the supply side of the economy, and this will be the reality of some disruption to the supply side of the economy, whether it is at the ports or more broadly. That changes the monetary policy calculus in the way the Governor described. It means we would most likely see some immediate and possibly sizable hits to the supply side, in addition to the demand side, and that potentially makes for a different monetary policy recommendation.

Q309 **Rushanara Ali:** Good morning. I want to start with some questions about the EU withdrawal agreement. Chancellor, this has come up in the past—I am sorry, Governor.

Chair: We have given you a new job.

Rushanara Ali: Would you not agree that we are ultimately being left between a rock and a hard place under the EU withdrawal agreement or a potential no-deal scenario?

Dr Carney: I would not subscribe to that characterisation. I go back to my opening comments, which were that there is clearly value in transition. I reference the exchange that was just had. Of course, it matters what future economic partnership the country is transitioning to, which makes the political declaration that much more important, and not just what is on the page, but ultimately the intent of what is on the page and what could be negotiated.

Q310 **Rushanara Ali:** Given the events of last week, when the Prime Minister made her announcement about the collective agreement, for some of us that seemed like the calm before the storm. The storm came on Thursday and it became clear in the Commons that there is not a clear majority for the Prime Minister's EU withdrawal agreement and certainly not for a no-deal situation. In the event of that happening, what are the implications for the decisions the Bank of England makes, interest rates and inflation? Do you see that scenario leading to you pressing ahead to deal with a potential no-deal scenario? Would you end up having to do more preparation for that?

Dr Carney: Can I be clear on the scenario you are painting? Are you talking about a scenario where there is either no deal or no agreement?

Q311 **Rushanara Ali:** The political reality is that there is no majority in the House for the EU withdrawal agreement that the Prime Minister has presented, and it has been made clear in the House that the vast majority of Members do not want a no-deal situation. The Prime Minister has ruled out extending Article 50 and a public vote, so where that does that leave the country and your preparation in thinking about what we do? Given the constraints that have already been mentioned about the limited room for manoeuvre on interest rates and inflation, and some of the actions taken in 2016 that you may not have at your disposal to deploy in a similar way, what would you do in that situation?

Dr Carney: I will defer to you as a parliamentarian and ultimately to Parliament on the range of plausible scenarios for either the transition or the future relationship. I make no judgment on that. From the MPC's perspective, we will deal with the outcome of that process and how it affects the spending judgments of businesses and households, and the impact on financial market prices and what it means for inflation, then set policy appropriately. From an FPC perspective, all of these valid discussions of Parliament reinforce the importance of what we have been preparing for and the degree of preparation there.

One thing I will say is that our forecast embedded in the November *Inflation Report* is based on a range of outcomes. At the upper end of that range is something more akin, not exactly akin, to the status quo.

Sir Jon Cunliffe: Bluntly, there will be a Brexit outcome. It will be one of the outcomes you suggest and we will know within a few months which it is. There may be further uncertainties down the track, but we either will leave the European Union on 29 March next year or not. It is not for us to say which is the right outcome from the central bank's point of view, and Parliament and Government will decide how to take that forward. It is our job to be prepared for the worst, and we have gone into some detail about how we are doing that, and to provide for Parliament any information relative to our mandate that is useful, and we will do that.

The other thing that is important to stress, as the Governor said, is that, whatever the outcomes, people in the UK can have the assurance that they will not see a financial sector meltdown of the sort they saw in 2008. The Bank is there to deliver the inflation objective from an institutional point of view and they can have trust in the institution doing its job, but I defer to Parliament and Government on how the outcomes will play out and the choices.

Michael Saunders: My impression from talking to businesses, which is consistent with what we hear from the agents, is that most businesses are not prepared for a no-deal Brexit and do not really know how to prepare. We have seen over the last month or two, as that risk has become more visible, some weakness in business confidence and rising uncertainty among businesses.

Chair: Can you speak up a little bit? Just to finish that sentence off, you were saying that you have seen that.

Michael Saunders: As the risk of a no-deal Brexit has become more visible recently, we have seen business confidence weaken and rising uncertainty. That may have a negative effect on near-term economic activity.

Q312 **Rushanara Ali:** I am going to move on to the text of the agreement, which suggests that the transition period may be extended to "20XX". Does that concern you, Governor?

Dr Carney: It narrows it down. Does it concern me? No. What I would say about this option to extend the transition period is that I am sure it is there for a reason, since it is in there. It would appear wise to very carefully, objectively and transparently consider how long it is likely to take to negotiate all aspects of a new economic partnership, which are not entirely limited to the economic actually, but all aspects of that partnership, and to implement it. If I could give a reference point, on average for a trade deal from start to finish, it is something in the order of four years. The implementation period tends to be a little more than half of that time.

One other point is that, in a negotiation, it is always valuable to look at the constraints on the other side, and we all know that there are European Parliament elections in the spring. Sir Jon has much more, but my experience of dealing with the European Commission over the years has been that not much happens in the period of time in the run-up to the election and several months afterwards, as all the roles are restacked. That is square in the middle of the transition period, so there is a very limited window to negotiate. Again, the Government and others will have a better sense of how much progress has been made on that future economic partnership already and, therefore, how much more needs to be done.

My last point is on preparations. Mr Saunders just referenced businesses' preparation and I agree with his comments, but there is also the preparation of the Border Force and HMRC. There are extremely difficult, very complex and, in many respects, unprecedented jobs that they have been asked to do. The question again is whether our customs, excise and other procedures will be ready at the end of that period of time.

Q313 **Rushanara Ali:** From what you are saying, it is clear that the period of transition is likely to need to be extended and there will be a cost implication to that. It is already set at £39 billion. If we extend it further, what is your assessment of that? Is that something on which you can come back to us, because our constituents will want to know what they are getting in return? Whether you are on the leave or remain side of the argument, what are the costs and what are we getting in return? At the moment, they can see that we are going to be rule-takers. What we are being offered is much worse than what we have at the moment, so what is the cost of continuing to extend that period?

Dr Carney: The question for others to answer is whether it is realistic to negotiate that future partnership such that the economy moves to it at the start of January 2021, and to make an objective informed assessment of that.

Q314 **Rushanara Ali:** It is not, is it? That is what you are saying.

Dr Carney: I will say this. From the financial sector's perspective, there has been substantial preparation already. There has been substantial transition already. There is one area, which we can go into, on the uncleared derivatives side where we do not think the market itself can solve the issue, even over an additional 20-month period. Largely accepting that, we would say that, with the co-operation of the European authorities, the financial sector could be fully transitioned over the course of that 20-month period. It is not clear that that is true for all sectors. That is the first point. Secondly, there is a judgment about the ability to negotiate a proper, comprehensive trade deal in that horizon. I know some people think it is very easy, but you are making big decisions about trading off access in various areas, potentially unprecedented frameworks for access to services, and then there are the logistical challenges, which I know others can answer. I know you have the head of the HMRC coming in tomorrow.

Chair: We will ask him about that.

Q315 **Rushanara Ali:** I have a final question. In conclusion, it is going to cost significantly more than the £39 billion if we have to extend that period because, within that period, it is unlikely we will get a trading agreement. The Government could not do it in the last couple of years, which does not bode well. In terms of investment, in November you stated that business investment fell by 1% in the first six months of this year and they need clarity on the future trading relationship. Does the draft agreement provide that clarity?

Dr Carney: I have two points. On the cost, it is for others to answer. I just note that, if there is a cost to the extension, it is most properly weighed against the economic return derived from paying that cost.

Rushanara Ali: There will be a cost.

Dr Carney: It would appear that there will be, given the public comments. Again, it is truly for the Chancellor, so I will leave it to the Chancellor to answer that. On business investment, there has been a clear effect of uncertainty on business investment. For what it is worth, the most recent ONS numbers, for the third quarter, show another fall in business investment broadly consistent with our surveys, discussions with the agents, et cetera.

An agreement, particularly one with transition and which had some expectation of a deep economic partnership in the fullness of time, would provide greater clarity for business. One would expect that would support investment over time. Now, as per the request of the TSC, we are in the process of putting together a scenario that assumes that that is what happens, so we will give you a more precise order of magnitude for that next week.

Q316 **Wes Streeting:** Good morning. After your impression of the Chancellor, Governor, with cuts in taxes and spending more money, we should ask the Chancellor to do an impression of you next time he comes in front of the Committee to get his own back. We are here to discuss the *Inflation Report*, but you will forgive me, Governor and Sir Jon, if I ask you some questions around the financial stability risks and mitigations, given what is going on in Parliament and the state of the negotiations. The statement released by the FPC following its meeting last month escalated your appeals to EU authorities to take steps to mitigate risks to financial stability in the event of a no-deal Brexit. Since then, the Commission and ESMA have made announcements regarding temporary reprieves to interest rate, credit derivatives and access to UK clearing houses. I wonder if, in your view, this amounts to the "pressing" and "timely" action that the FPC called for. Governor, I will start with you.

Dr Carney: I will start and I am sure Sir Jon will add. We welcomed the announcements by the Commission and ESMA. They are definitely steps in the right direction. It is important to recognise up front that these decisions around cleared derivatives are, first and foremost, decisions taken by the private entities, the clearing houses themselves, which have to look after the risks to all their members of operating outside of the law. That goes to the next point. In our discussions with those clearing houses, it is clear to us, not surprisingly, that they are looking for a form of legal certainty. Now, we are on a path towards greater legal certainty, but they do not yet have clarity on the mechanism or precision around that, which would provide greater legal certainty that they could continue to operate and be recognised absent a deal. They do not have a sense of the scope of derivatives that would be covered or the specific timeframe, which was discussed as temporary.

Sir Jon Cunliffe: First, the movement by the European Union is welcome. Vice-President Dombrovskis said the technical work between the ECB and the Bank of England had enabled them to understand the issue more clearly, so the issue is now understood quite well. As the Governor says and I said to this Committee a few weeks ago, if you are on the board of a clearing house and you cannot be sure that a proportion of your members will be able to perform their obligations in what is a risk management and risk mutualisation business, and you are not sure whether you will be subject to civil or possibly criminal penalties, you look for sufficient certainty to enable you not to take the action you could take, which is to ask those members to leave. We are some way down that track.

As the Governor says, it is first and foremost for the clearing houses themselves and for their legal advisers, but they will want to know the scope, timescale, processes and conditions. The European Commission notice said there would be conditions on this temporary admission, so they will want to see the legislation, what it does and how they apply, and they will have to apply to ESMA for recognition. Certainly, recognition of the issue was welcome.

Q317 **Wes Streeting:** There is recognition of the issue, but are you reassured that these proposals will contain the financial stability risks that you have identified or do they need to go further?

Sir Jon Cunliffe: If the European Union grants a temporary equivalence decision under the current EMIR legislation, and if ESMA recognises the clearing houses so that they can continue to operate with European clients after 29 March, yes.

Q318 **Wes Streeting:** Turning to your discussions with your European counterparts, have you discussed the FPC's statement and the escalation of language that you have used around "no deal"? Is there agreement across the technical working group now, between the ECB and the Bank of England, on the actions needed to mitigate the risks arising from a no-deal Brexit?

Dr Carney: First, the FPC in its statement was fulfilling its statutory responsibility, first to Parliament and ultimately to the people, to identify the major risks to financial stability. We had adjusted the language as we get closer to the potential date of no deal and these financial stability risks crystallising. It was making clear the issue. As embedded in your question and as you know, Mr Streeting, we have direct channels with the European authorities, particularly with the ECB, as part of the technical working group that Sir Jon just referenced. That has been a very effective forum. We have had good evidence-based discussions, with evidence brought from both sides and evidence brought in from the industry. We provided an interim report to the Commission and to Her Majesty's Treasury on the issues.

As you would glean from the statement of the Commission last week and the analysis of the FPC, there is some difference of opinion between us and the European authorities on the potential financial stability risk. There is agreement around the risks for cleared derivatives—that is welcome and we are encouraged by the progress there—but a difference of opinion on the risks around uncleared derivatives, which are material in our judgment and will grow. This is one of those issues where everything is absolutely correlated. In other words, it is irrelevant if we have a deal or if there is a long transition. It becomes very relevant if we do not have a deal, because that is a financial stability event. It is an event where you have higher market volatility. It is an event where firms need to dynamically hedge or adjust their derivative positions rapidly. That is exactly the situation where many so-called lifecycle events—sorry for the jargon—in derivative contracts cannot be performed, and that knowledge creates risk.

This is one area that, as I referenced in my comments earlier, in our judgment and the industry's judgment—and we have a lot of experience with similar situations on a much smaller scale—would take years for the private sector to solve, in other words to close out or novate the contracts over to an entity that was more permanently authorised by European authorities. That is the biggest point where there is a difference of opinion that persists.

Q319 **Wes Streeting:** On the timing for resolving that marked difference of opinion in a particular area and trying to overcome that unhelpful difference, and also to get authorities in the right place to tackle the wider challenges around cross-border derivatives and data transfers, the FPC said, "The need for authorities to complete mitigating actions is now pressing". What were you thinking about the timescales to resolve some of these issues? How quickly do we need action?

Dr Carney: Sir Jon just referenced the issues around cleared derivatives. He referenced that in his previous testimony.

Sir Jon Cunliffe: It will have to be done by early to mid-December. There will have to be enough certainty about the form of the legal instrument.

Chair: If the agreement were to be approved by Parliament with the transition period, that would fall away.

Dr Carney: That falls away then, yes. The question becomes, under the future partnership, what forms of equivalence might be granted for which activities. If that were determined within that 20-month period, you would move forward from there.

Q320 **Wes Streeting:** That leads me to my final question. It is reassuring that the FPC is across this and engaged in discussions with your counterparts and relevant authorities to try to mitigate the financial stability risks, as well as the wider risks associated with a no-deal scenario. Some people might glean from your evidence and testimony that, therefore, no deal is a plausible and perfectly reasonable way forward. It is all okay because the Bank of England and the powers that be across the European Union will mitigate risks, and so it will be okay. To what extent do you think no-deal preparations are an adequate replacement for a full transition period? That is my first question.

Understand that we are not criticising the FPC for escalating the language around no deal, pointing to the risks and making sure that we are prepared, because it is quite right to prepare for the worst-case scenario, but can you envisage, not simply because of what Rushanara said about the lack of a parliamentary majority for a no-deal scenario, any responsible Government either on this side of the channel or across the EU 27 allowing a no-deal scenario to occur, knowing what it would mean for financial stability, for the wider economy in this country and the European Union and for our citizens? Would any responsible Government really allow no deal to take place?

Dr Carney: To your first question and that characterisation, the important thing, as Sir Jon alluded to earlier, is that our job is to put the financial sector in a position where it is resilient and can take a large shock. This would be a large negative shock to the economy: no deal, no transition. We should be in no doubt about that. The question is whether the financial sector is part of the problem or an element of the solution, whether it amplifies or somewhat dampens the shock. We think we have put it in a position, and we will elaborate more next week as the FPC, where it would dampen and be there for the real economy.

That is not the same as saying it will be all right. This is something we have not gotten into today, and I am sure we will in the future, but such an unprecedented supply shock has both temporary and more consistent components. For temporary components, think the trucks at Dover and the friction costs in the immediate short term. Others are better placed than we are to testify, although we have been spending a reasonable amount of time on these issues. The more permanent issues from a medium-term perspective are around lost access to a major market or to major suppliers. Therefore, how does a business reorient itself? That takes time. It means some of your capital and potentially some of your workers, unfortunately, may be stranded. That is a polite word, but it would not be a happy situation to be in. During that time, all things being equal, there is a reduction in the supply capacity of the economy. That means lost output, lost jobs, lower wages and higher inflation, all things being equal. Now, the financial sector is okay. Not making it worse is what we can influence most directly, but we should not downplay it.

Your last question is obviously a tricky one to answer. It is not in the interests of either party. There would be an economic shock in Europe as well, particularly in Ireland. It is not in the interest of any of the parties, but our job is not to make the political calculation. Mistakes happen sometimes. There are events. People run out of time and things can happen. We need to be in the position that, if we end up with no deal and no transition for whatever reason, either by choice or by accident, we can give the valid assurance that the financial system will be there.

Sir Jon Cunliffe: I will follow with a point on stress tests. We stress test the major banks every year against a severe but plausible event, in which they take very large losses and yet are still able to stay above their regulatory thresholds. They have enough capital to continue lending to the economy, rather than do what they did during the financial crisis, which was just to delever and drive the economy down, making everything worse. But they do take large losses in the stress case. When we publish the stress test results, you will be able to see the losses that banks take on different portfolios.

In order to be sure that the stress test encompassed a range of adverse Brexit outcomes, we constructed a severe adverse Brexit outcome, which will be in the papers we produce in the *FSR* and then for the Committee, to make sure that they can take those losses, continue to support the economy and not fall over in the way they did. They do not pass smoothly through; this is a test to see if they can take losses and then continue lending. On financial stability risk, I think we have done everything we can to mitigate the risk of no deal and no transition. There is a range of other issues that did not come to the financial stability level that we are monitoring as well, which we would have to deal with, but clearly avoiding the situation that one has to deal with must be beneficial for financial stability at least.

Dr Carney: Can I make one point to quickly bring it to financial markets? One of the things that we have seen when expectations of no deal have gone up in recent weeks is these movements in sterling that Mr Elphicke alluded to, but also movements in bank equity prices. What has happened in general has been fall in bank equity prices and their price-to-book ratio, but not a material increase in their borrowing spreads. There are two things. One is an expectation of the market that, in a no-deal scenario, there would be reduced profits or outright losses by those institutions, and therefore they are marking down those, but the solvency, health and resilience of those institutions would remain robust in a no-deal scenario. That is not something we saw. We saw both of them going in the wrong direction in the run-up to the financial crisis.

Q321 **Chair:** Can I pick up, Sir Jon, on your point about stress tests? The banks sustain large losses but carry on lending, but they do not have to carry on lending. One of the problems was that the banks might well be able to lend, or certainly in terms of recovery be able to lend, and yet businesses still report difficulty in getting money out of banks or that relationship of trust. You must pick this up in your agents' reports. Would you agree that, just because they can carry on lending, it does not mean they would do? If they do not, that is critical for the health of the economy.

Sir Jon Cunliffe: There is a progression of things here. The reason they did not lend during the crisis, first and foremost, was that they were going through a life-threatening experience, and if they did not get their balance sheet down, and they were not able to cut lending and the like, they would not have enough capital and they would fail. Some of them did fail. When you are in that extreme situation, the deleveraging is very sharp and very fast. The aim is to give them capital and liquidity buffers and to ensure their asset quality in such a way that they do not have to do that again.

There is then a separate issue about what the demand for lending would be. We assume and put in our stress test that borrowers' demand will go down, because if there is an economic hit people are not keen to invest, households are not so keen to borrow and their savings go up. The issue for us is to put them in a position where they can do that and where they can absorb these shocks without going into panic mode, which for me is the definition of the financial stability crisis that we saw.

Q322 **Catherine McKinnell:** I am going to continue along the theme of no deal and the warnings that have been coming out. I know that the Chair already touched on this, but earlier this year, Dr Carney, you suggested that the possibility of a no-deal Brexit was uncomfortably high. However, in the *Inflation Report* it says that a no-deal Brexit is an unlikely tail scenario. Which is it currently, or where is it on that spectrum?

Dr Carney: It is uncomfortably high.

Catherine McKinnell: Okay, that is helpful.

Dr Carney: To be clear, if I may, Ms McKinnell—

Chair: That was fine; we will move on.

Dr Carney: In the *Inflation Report* in our forecast we do not have a no-deal scenario as part of the conditioning assumptions.

Q323 **Catherine McKinnell:** The latest *Inflation Report* also has some quite severe warnings about a no-transition Brexit. There will be delays at the borders, disruption to supply chains, severe impairment of the productivity capacity of UK business and a large immediate drop in supply. This has been referred to in various answers. Can you clarify on what basis those forecasts are being made, just for clarity? Also, there has been a lot of focus today on the immediate short-term impact, but could you clarify what the longer-term impact of that would be as well?

Dr Carney: All those questions are bang on point and they are going to be very relevant for the scenario--again, I stress scenario as opposed to forecast—that we will provide this Committee next week as the MPC.

I will pick up on a couple of points. One is this issue of shorter-term disruption and longer-term adjustment to supply. By shorter-term disruption, I mean the lorries at Dover, people not being familiar with what they need to do to prove rules of origin, and uncertainty about whether product standards are going to be grandfathered in Europe, at the decision of the European authorities. In a no-deal scenario, those types of issues become relevant.

One of the challenges from a monetary policy perspective will be to distinguish between shorter-term disruptions to supply, longer-term effects of a new trading relationship and, for a period of time, as I said earlier, a need to reallocate capital and labour to different sectors that are competitive under new trading arrangements. Also, foreign direct investment, its adjustment to those trading arrangements and the impact of the new arrangements on the labour supply are all judgments we will need to make. Our intention is to expose those judgments and their relevant orders of magnitude.

One of the key questions in making a judgment about where the economy could go over the course of the next few years in a no-deal scenario, and even when you ultimately transition to a deal, is the speed with which the economy adjusts. I will make the point this way. This is for the medium-term adjustments to supply. We—the collective "we"—have a long experience with increased openness and integration, built up over the course of the last 40 to 50 years. One can look at case studies, one can do econometrics, one can see relationships between openness and the impact on trade, on foreign direct investment and implicitly on productivity, growth, wages, et cetera.

This will be, for a time, depending in the fullness of time on what new relationships are struck, a process of de-integration and reducing openness. The question is whether there is symmetry in those relationships. Does productivity slow at the same pace with de-integration as it grew with integration? Is the adjustment of labour markets as fast or as slow? Are things front loaded or do they happen over time? There are different economic implications for those.

How will we make those judgments, both in producing scenarios and in real time? You rely on some evidence. You acknowledge the shortcomings of that evidence, because it is all evidence from one direction, not from another. You rely on talking to businesses, which we do. We have very comprehensive business relationships and surveys. Others do as well.

With respect to shorter-term frictions, we are taking judgments of those at the front lines of HMRC, the Border Force, talking to broader Government, informed by judgments, including at the NAO. In terms of preparedness of businesses, which Mr Saunders referenced earlier, it is fair to say that in general most businesses have not activated contingency plans in the country. It is also fair to say that a substantial proportion of businesses do not have contingency plans at this present time for a no-deal Brexit.

Q324 **Catherine McKinnell:** I wanted to bring Andy in as well. There are a couple of questions, but also requests. You have stated that a report will be published with an analysis of the Brexit withdrawal deal. You referenced Dover. It is an issue that is often referred to, understandably, because it is an iconic port, but there are ports all around the country. From what I have heard, there does not appear to have been as much analysis, if any, done of the impact on ports, for example, in the north-east, where 60% of our goods are exported to the EU.

I would be interested to know if your report will focus not just on Dover and the more talked about visible economic impacts, but also the differentiating impacts on different parts of the country, not just short term but longer term as well. Has some assessment been done on that and are we to anticipate that within your report?

Chair: Is that for Mr Haldane?

Catherine McKinnell: Both.

Chair: Let Mr Haldane have a say. We will give the Governor a break for a moment.

Catherine McKinnell: It is about the anticipated shock, to the previous question I raised, but adding in an aspect of how that may impact upon certain parts of the country in different ways, and for a longer term than other parts of the country.

Andy Haldane: One distinguishing feature of the scenario we are going to play through is that this cannot be conducted from 30,000 feet. Some shocks to the economy can be thought about from 30,000 feet. This one cannot be. We are going through this in a degree of sectoral, granular detail to fully understand what the consequences might be, both shorter term and longer term, as the Governor set out.

I understand the focus on Dover. Charlie would know; it is his constituency. It accounts for more than half of all heavy goods travel, so I get why there has been a focus there. We will be taking intelligence on not just how it might affect Dover, but how it might affect other ports as well, when building up our own picture of how severe the choke points might be at all ports around the country.

We will be drawing very extensively on our regional agency network to do that. Our agents in the field have, as we speak, and have had for the past month, a survey of their company contacts, asking them to look at how their business model might be reshaped, how their outputs and jobs might be altered by a deal versus no deal. That intelligence will be a very important source, feeding into the report that you will get on the 29th of this month.

We will not look to break that down on a regional basis. That would be a step too far for our analysis. I am not sure our analysis would quite take the weight of that right now. To be clear, it will be built up from a combination of both qualitative and quantitative evidence at a very granular and sectoral level.

Dr Carney: Just to supplement that, we have these bigger relationships between openness, trade, productivity, foreign direct investment and all that. That can provide rigour to the overall impact on the economy and the macroeconomic variables, growth, unemployment and most importantly inflation, that are relevant to the Bank's responsibilities and relatedly to asset prices, such as house prices, which relate to the Financial Policy Committee's responsibilities. We provide that.

Then you have the set of information that Mr Haldane just referenced that provides a cross-check or perspective on those macro relationships. If I can underscore the point, I have spent plenty of time in the north-east and I appreciate its importance, but all our responsibilities are for the United Kingdom as a whole. The policy judgments are what, in the end, you care about from the Bank of England. Where are interest rates going for the country as a whole? How are we going to keep inflation to target for the country as a whole? How are we going to keep the financial system robust and resilient for the country as a whole? We have to bring it up to that level, so it will not be a set of regional assessments.

Sir Jon Cunliffe: The Committee has asked me this before, so I would like to repeat the answer that I gave.

Catherine McKinnell: We could just look it up.

Sir Jon Cunliffe: You could, but you might not find it. To understand for each sector how the economic relationships are disrupted on particular assumptions about no-deal Brexit goes further than the central bank can do. I am not trying to pass the buck here, but the sectoral analysis is for the Government, who have Departments of State that deal with pharmaceuticals, energy, agriculture, fisheries and the like. We can do, as the Governor says, the top down and, as Andy has said, cross-check on the bottom up, but, if you are looking for that detailed sectoral analysis that then feeds into a geographic, regional analysis, there are other organs of state to do that.

Chair: We have our Committee specialists looking at the Government's own model, so that is a very good point to feed in.

Q325 **Catherine McKinnell:** I recognise that is not your role, but it is ours and that feed-in to it is helpful. I have one final question. Rushanara asked whether we are between a rock and a hard place, which was quite a hard question to open with. Your analysis of the withdrawal agreement is going to be pretty key. I appreciate your position, that it is your role to highlight where difficulties arise. You have referenced the range in which you are predicting and that the higher ranges would reference the status quo, but would that be made clear within your analysis? The Treasury has been mandated now to reference its analysis of the withdrawal agreement and its economic impact against the Prime Minister's own stated political position that there are three potential scenarios ahead of us, which are no deal, the negotiated deal or to remain.

Presumably, therefore, it would be helpful for your own analysis to take the same framework, in order for it to be the most useful for parliamentarians and the public to be able to make an analysis of the economic impact of all these very important decisions that we are taking.

Chair: We touched on this earlier on. This is only to add to that. You did not know the answer earlier on. Catherine seems to think you are going to give a different answer.

Dr Carney: You would like a different answer. Let me try the same answer again. How does this sound? It is transparent.

Chair: We will ask you again when you come back before us next time.

Dr Carney: In May 2016, the MPC at the time had a forecast for the economy. We always condition on Government policy. Government policy was to remain, so we had a view at that time of what the potential growth of the economy would be and, effectively, one can extrapolate that potential growth as the reference point of a remain. It is a clear, straightforward, transparent reference point, and consistent over time, which does not mean it is necessarily right, for the various scenarios that would be presented.

Q326 **Chair:** We are going to move on to the broader economic outlook, but I have a couple of specific monetary policy questions we have not covered. Mr Saunders, I am going to pick on you to answer these questions and your colleagues can say if they have a difference of view. The first one was about the MPC's forecast that has inflation at target in three years' time, but with the economy still in excess demand. Does that imply the Bank thinks the rate will have to rise to a higher level than the 1.5% currently envisaged in the forecast?

Michael Saunders: That forecast has, as you said, the economy in excess demand two or three years out. The implication of that is that inflation pressures will probably continue to build over time, so you can imagine that off stage, if you like, inflation would be above target. If everything were to play out in line with that, it is likely that interest rates over time would need to rise further.

Q327 **Chair:** The second question was about the MPC minutes noting that you have yet to incorporate the impact of the latest Budget in your forecast, but we have had evidence on the Budget, particularly from the OBR, which said that the budget amounted to a "substantial fiscal loosening". In your next forecast, which will presumably include the Budget decisions, is that likely to affect the committee's view on inflation and interest rates?

Michael Saunders: It will feed through to the growth outlook, taken in the context of all other developments over that period, whatever the economy has done and whatever news we have on Brexit. In the previous Budget plans, if you take the cyclically adjusted primary balance, they had a tightening of 0.2% of GDP in 2019, and the new plans have a loosening of 0.3%, so a swing of half a percent of GDP in that year. The OBR's judgment is that that adds 0.3% to GDP growth in 2019. We have not yet done our full analysis on all this, but if you take that as a starting point the direction of the fiscal effect on growth is clear, even if I am going to be a little fuzzy on the exact scale of the impact.

Andy Haldane: We will look at that in December, in the round. Fiscal is not all that is happening. We have seen some pretty chunky moves in asset prices as well. Interest rate expectations three years hence are 25 basis points lower than they were in our conditioning assumptions in our last *Inflation Report*. All of that will be folded in when we update our forecasts.

Q328 **Stewart Hosie:** I am slightly conscious of time, so I will try to rattle through some of these. Governor, the MPC has been forecasting that economic growth would rotate away from household consumption to trade and investment, but the last minutes suggested demand is being supported to a greater extent by household consumption and less by business investment than had previously been expected. Does the UK remain overly reliant on consumption to drive growth and has this become more precarious as the household financial balance has turned negative?

Dr Carney: You are absolutely right, in that, over the course of the last year, business investment growth has been lower than we had expected. In fact, it has fallen over the course of the time. I will not detail it all, but there is substantial evidence that that is largely a Brexit effect. All the other conditions are in place for quite strong investment growth. I would say, in defence of businesses, it is entirely understandable with maximum uncertainty. They are going to get greater certainty in relatively short order and we expect investment to pick up, as we do have in the forecast.

It has meant that households have shouldered more of the load. I would say and the committee observes that in general households are consuming out of income. This is not a debt-fuelled consumption boom. We have seen that the pace of household credit growth has continued to slow. Consumer credit growth within that has slowed. Overall, household balance sheets, albeit starting from a difficult position several years ago, have continued to improve.

I will give you one data point on that. The percentage of people with debt service above 40%, which is a threshold for vulnerability, pre-crisis was 2.5%, it was 1.4% precisely a year ago and it is now 0.9% of households, so there has been this improvement. Yes, the consumer is taking more of the load, but I would not point to a fundamental imbalance out there.

Q329 **Stewart Hosie:** There is not a fundamental imbalance, but as you have said, and as the *Inflation Report* said, uncertainty around Brexit has probably reduced business investment. The other evidence we have received, not least from Rain Newton-Smith of the CBI, suggested that there was little in the way of pent-up investment that could be released if and when a withdrawal agreement is finalised. That would slightly contradict what you have said, in the sense that the CBI is not suggesting there is a huge pent-up demand or a huge pent-up ability to invest sitting there. Where is the balance?

Dr Carney: We think there is upside to investment if greater clarity is provided, as a first point. We are hoping to provide some colour to the Committee when we are next here, if we are invited back, on our agency network—Mr Haldane and I were dealing with this the other day—which is out in the field with a Brexit survey of businesses around precisely these questions. What will happen with no deal? What will happen with a deal, in terms of investment, what they expect for activity and for employment? The early returns on that indicate that it is asymmetric, not surprisingly. We see that there is upside.

In the November forecast, the level of investment in the economy is 14% higher at the end of the three years than it is today, so investment is important to the forecast. The forecast is conditioned on a smooth transition to the some form of arrangement.

Michael Saunders: It is clear that there has been a significant adverse effect on business investment over the last couple of years from the Brexit vote. If you take the period since Q2 of 2016 when we had the vote, business investment in the UK has risen by 1% in real terms. That is by far the weakest in the G7. The next weakest is Germany, which has had a gain of 6%. France, Italy and the US have all seen double-digit gains. The withdrawal agreement may give us back some of that, but I suspect that quite a lot of it is a permanent loss.

Q330 **Stewart Hosie:** That is the point I wanted to make. Governor, you spoke about what happens once there is greater clarity and when they see an improvement, but in so far as the MPC forecast already assumes a smooth transition is there really any scope for a "deal dividend" in terms of investment? If this is a smooth transition to something that is understood and understandable as opposed to disruptive or disorderly, I am struggling to see where the upside comes, although sadly I can see an awful lot of downside.

Dr Carney: You are right, and that is why I referenced the growth of investment over the three years, so the 14% pick-up in the level of investment over the three years is with the smooth. It is possible, depending on the nature of the future economic partnership, the degree of clarity around that and the expectations around the length of the transition period, that there is some upside from that, but there is more downside, in our judgment and my personal judgment, which is what we are seeing with companies. Mr Haldane can talk to this. There is more downside in terms of a no-deal Brexit than there is further upside from this forecast in terms of investment.

Andy Haldane: There is an asymmetry, as the Governor says. Equally, notwithstanding Brexit and the cloud it is creating, for a number of companies the investment fundamentals are pretty strong right now. On average, the return a company would get from investing is in low double digits and the cost of financing that investment is 2% to 3%. The jaws between the return on capex and the cost of capex could be double digits, and that is, by any historical metric, a very strong incentive to get out and invest. In our forecast we have some recovery in investment, to 5% or so, but given the scale of those jaws there is some upside there as well that we would be wrong to discount.

Q331 **Stewart Hosie:** In arithmetic terms, you are right; there is a gap, but if that investment is predicated on a market of 500 million people that is now in doubt it is rather less attractive than the 3%, 4% or 5% gross margin might imply.

Dr Carney: That is absolutely right, but this is all part and parcel, and it is relative as between a previous trend in the economy and a new trend, which perhaps we can explore in more detail.

Q332 **Stewart Hosie:** Mr Saunders, I have one final question for you. You said the risk of no deal has become more visible to businesses. Governor, you suggested that a few companies are making contingency plans. Where are we now in terms of no-deal contingency planning for business, and do businesses have enough time left to put in place plans that would be credible and able to move swiftly enough should we end up with a very disruptive Brexit next spring?

Michael Saunders: In the financial sector, as the Governor has said, there has been a lot of preparedness. In the non-financial sector, which is what I was referring to, I said that many firms have not yet prepared for a no-deal Brexit. What I find, talking to companies, is great uncertainty about this. Many of them are unsure as to how they should prepare and are unwilling to spend large amounts on things that may turn out to be the wrong preparation or not necessary. I am genuinely unsure as to how well prepared businesses could be for a no-deal Brexit. I doubt whether it could be done in time.

Q333 **Mr Clarke:** Gentlemen, I want to turn to the link between immigration and wages, which is the subject of considerable commentary in light of the news we got last week that the number of workers born in the EU fell by 132,000 while the number born outside the EU also declined. How far is that shift, Governor, likely to affect the relationship between pay and employment in the near and long term?

Dr Carney: Those are notable figures and we will look forward to the long-term ONS immigration figures on the flow; those are figures on the stock. Given the size of the move, one would expect deceleration in labour supply growth, which will have sectoral implications for wages.

We have expected for some time, and seen for some time, a gradual firming of wages in the economy, because the labour market as a whole is tightening, and we expect that to continue to happen. There is a fair bit of analysis, most recently referenced in our 2015 *Inflation Report*. I am thinking of Steve Nickell's work with Jumana Saleheen as an example. Your question was about the long term, but over the inflation target horizon, so not even the long term but the medium term, the aggregate impact of this on inflation, we have found in some quite rigorous studies, is very marginal, because the upward pressure on wages is accompanied by a reduction in aggregate demand as those workers move.

In the other direction, there is more supply in the economy as more workers come in and there is more demand. I will write back for completeness, to give you the references and the detail, but it is on the margin of 200,000 or 250,000. That is what I am hesitating on. It is around 0.1% on inflation, that sort of swing in migration. It is quite relevant to some sectors and some people's wages, but in the aggregate it is marginal.

Q334 **Mr Clarke:** Which sectors are particularly impacted, out of interest?

Dr Carney: Those sectors where we are seeing pressure include the hospitality sector, and there is an expectation in the agriculture sector as well. We are seeing some skills gaps building up in healthcare.

Q335 **Mr Clarke:** You would expect any increase in wages to be concentrated there.

Dr Carney: Yes, and food processing as well. You see it first, and then it propagates.

Q336 **Mr Clarke:** Based on what you were saying about the minimal impact on inflation, does that have a correspondingly minimal impact on likely changes to bank rate?

Dr Carney: That specific aspect does, yes.

Q337 **Mr Clarke:** Mr Haldane, the economic forecasting in the *Inflation Report* suggests that migration might fall more sharply than perhaps the ONS itself has been projecting. If that risk is borne out, how is the forecast and expected path of bank rate likely to be affected by that, if there is an acceleration above trend?

Andy Haldane: This is in rates of migration.

Mr Clarke: Yes.

Andy Haldane: Our conditioning assumption in the forecast is to take the ONS's projections of net migration. On their numbers currently, rates of net inward migration are running slightly north of those projects, but the recent numbers you mentioned from the Labour Force Survey, which are more timely, covering up to Q3 whereas the ONS numbers only cover to Q1, suggest some potential downside risks to those projections. When it comes to our next forecast round, we need to revisit our ONS projections in the light of the data that you mentioned.

Q338 **Mr Clarke:** That is really helpful. Sir Jon, to get your view on this, we now have a situation where the unemployment rate has seemingly levelled off in the region of 4%, and nominal growth in wages. We have finally, after years of real difficulty and in some cases no rises at all, gone above the 3% level. Is that a sign that what basic economics would tell us, that if labour availability tightens wages go up, is finally reasserting itself?

Sir Jon Cunliffe: One would hope so. We have had two readings now above 3%, but in the 16 or 17 months previously, on a shorter metric, three months on three months, it is also clear that pay has established itself above the 2.5% limit. We had periods at the end of 2014, the beginning of 2015 and again in 2016-17 when pay went above for a couple of months and then came down again. We have now had a longer reading that suggests that this is more established.

If you cross-check on other areas of the labour market, labour market tightness, job to job flows, quit rates and our agent surveys all suggest that there is a firming there. Our forecast has pay moving into the threes next year, so this is evidence that would support the forecast.

Mr Clarke: Mr Saunders, do you agree with that?

Michael Saunders: Yes, I do. Inward migration to the UK has been a major source of a boost of potential growth over the last few years. It adds to growth in the workforce and it has added to skills in the workforce. On average, a higher share of foreign workers in the UK have been to university or have tertiary education than the home-grown workforce, so a drop in inward migration, if that is indeed what we are seeing, would mean lower potential growth in the economy. It might also mean lower actual growth. Fewer workers would mean a blow for consumer spending. You can see that the worst-affected sectors might be consumer-facing sectors that rely on foreign workers in their staff.

That does not have any great implications either way for the inflation outlook, as you would reduce both supply and demand in the economy more or less equally. By extension, it does not have any great implication for monetary policy either.

Q339 **Mr Clarke:** On the narrow issue of wages, you would accept that there is almost certainly some kind of correlation.

Michael Saunders: The reason why pay growth is picking up is not because inward migration is lower. It is because the labour market is tight. The jobless rate is the lowest for more than 40 years. The number of vacancies is at a record high. Surveys suggest that recruitment difficulties are high and are widespread across all sectors. These trends were there a year ago. They have intensified since then.

Mr Clarke: That is really helpful.

Dr Carney: I would associate myself with everything Mr Saunders has just said. The general picture of firming wages is one we have expected for a while. We are seeing it. I personally would expect it to continue, conditional on the assumption of some sort of smooth transition to a relatively close partnership. I will just pick up on something Mr Haldane said about an hour ago, and the committee observed this in the minutes. We do expect some short-term volatility in economic data. There have been some big swings, with softness in retail sales and issues with investment. This is an unusual quarter and we will see what happens. We will see how the data comes out.

Q340 **Mr Clarke:** It feels more than just ephemeral, though.

Dr Carney: You started with basic economics.

Mr Clarke: That is the way I operate.

Dr Carney: At some point, the Phillips curve kicks in and we have a tight labour market. I would stress one other point if I could, which is that, in an economy where productivity growth is, as in our forecast, a little more than 1%, 3% to 3.5% wage growth is consistent with the inflation target. That has a bearing directly on the stance of policy.

Q341 **Mr Clarke:** Finally, Mr Haldane, you gave a speech last month and it was quite interesting because it has implications for responsible trade unionism. You highlighted the fact that lower unionisation and flexible working are reducing workers' pay power. Has that had an impact on the real wages of some or all workers, and perhaps by sector?

Andy Haldane: That was in the context of thinking about pay not just in the cyclical terms we have been describing for the last five minutes, but long-term structural factors bearing upon it, of which unionisation and collective bargaining are one. There were two others I mentioned. Automation in the workforce, actually and prospectively, could have a significant bearing on the bargaining power of workers too, as might the degree of concentration of the labour market, in other words if there were large employers exercising greater power over their workers.

In the UK's case, the second and third of those factors, automation and concentration, appear to have been less potent than in other countries. The first, where we have seen a secular fall in degrees of unionisation and collective bargaining over time, does appear to have had a greater bearing, but earlier on; I am talking 1970s and 1980s, rather than 1990s and 2000s. There is a factor there. It is slow moving. It has been significant, but that headwind currently is being more than counterbalanced by the cyclical tailwind we have been describing, and that is what is taking pay up. In some sectors, has it affected things? Yes, it probably has.

Q342 **Mr Clarke:** There is a chance there is a two-tier labour market developing, because you highlighted in your speech that people who do not switch jobs are not benefiting from wage improvement in the same way as those who do. Have we entered effectively a Compare the Market-style world where, unless you are really quite quick to move jobs, you can be at risk of significant wage stagnation?

Andy Haldane: I would make two points here, if I may. First, on those who move versus those who stay in post, a striking feature of the past few years is that, despite the tightening of the labour market, the pay of those who have stuck in work has not picked up as much as you might expect. Put differently, employers have not felt the need to pay up to retain workers. I would say, over the last six to 12 months, we have seen that picture altering. Such has been the tightness of the labour market, companies have felt the need to pay up those existing workers just to retain them, given skill shortages.

Mr Clarke: That is really helpful. That would help.

Andy Haldane: Can I make one last point? Your other point was about whether we have a two-tier, bifurcated labour market. There is some evidence of that being the case. I have not looked at it. If you think of there being two pools of companies, those with high productivity and those with low productivity, and two pools of workers, those with high skills and those with low skills, you find in the UK, to a greater extent than elsewhere, that the higher-skilled workers tend to swim in the high-productivity firm pool and vice versa at the lower end. That is important when we are thinking about longer-term productivity prospects, because people moving job from low to high-productivity firms and back again is one of the key mechanisms through which ideas diffuse and disseminate.

Dr Carney: That is exactly right and is one reason why, cyclically, this higher job-to-job movement having finally recovered is positive for productivity.

Chair: That moves us very well on to Alison, who is going to raise productivity.

Q343 **Alison McGovern:** I am, but before I do so I have one brief question, following up from what previous people had asked about the shock that might be caused by a withdrawal from the European Union without any sort of agreement. Governor, is this not a strange situation, in that, normally, much of the impact of economic shock will come from the fact that it is unexpected, therefore not planned for, so that people's expectations are confounded in some way by an event that had previously been unexpected? Is this idea we are all talking about not the most predicted, planned-for economic shock that we have seen? Will this be a shock or not?

Dr Carney: Ms Ali was questioning earlier about responsible Governments and whether this is possible. There has been an expectation since the referendum, and a revealed expectation of businesses and households up and down the country, that there will not be a shock, disorderly Brexit. I agree with one of my colleagues who said earlier that there are some contingencies that companies cannot plan around, if there are clogged ports or other issues, but the fact is that a substantial proportion of companies in a very wide range of sectors do not have contingency plans for a hard Brexit next spring. In that regard, it would be a shock. That is the first point.

Secondly, the behaviour of businesses directionally has been for some reduction, albeit at an uncertain level, of openness, which is part of the reason why investment has been lower. Financial markets, for what it is worth, and it is worth something, have been anticipating a shock and have been pricing some possibility of this shock, but not as the most likely scenario. It still has the potential, as is being realised, to be a shock.

Q344 **Alison McGovern:** To come back to productivity in that case, Andy, you started to get on to the question that a lot of people are wondering about in relation to productivity, which is where Britain's productivity problem is. There seems to be a bit of disagreement.

Chair: If you could just cover that in five minutes, it would be great. Thank you.

Alison McGovern: For a long time, we have had this narrative of the long tail, that we have quite a high number of low-productivity firms. I presume that is the low-skill, low-productivity bit of the bifurcation that you were just referring to. A recent Bank Underground blog, which we all read religiously on this Committee, says they cannot be to blame for the slowdown in growth. There seems to be some suggestion that the most productive firms ceasing to be as productive as they have been is to blame. Who is to blame for low productivity?

Andy Haldane: I would not be assigning blame, but I can give you a tempered explanation, if that helps, and a few facts. All countries have a long tail of firms, productivity-wise. It just so happens that the UK's is materially longer than most of our competitor countries. The gap between the best and the rest in the UK is 50% larger than it is in Germany or France, as a case in point. Secondly, that tail has become materially larger during the course of the crisis than it has in those same competitor countries.

Thirdly, how do you reconcile that with the blog that you mentioned? It is fantastic that you are an avid reader of Bank Underground. The answer lies in how you define the tail, because the truth is that the very frontier companies—let us call it the top 10%—have not suffered any productivity slowdown, flat-lining or puzzle at all. For them, the fourth industrial revolution is alive and kicking. They are growing in productivity terms as rapidly as at any point that I can find in history. Where the slowdown has come has been those just off the frontier. Let us call them the second decile companies, which are big and historically have been successful. The blog talks about how they have been the biggest single cause and casualty of the crisis in terms of their levels of productivity slowing down.

We have had the head of the pack pulling further away, and those just behind the head of the pack lagging further behind and, indeed, joining that long tail. When I talk about the long tail lengthening, that is what I mean. Those that would have been the dog have now joined the tail. I hope that reconciles my stuff, to mix my metaphors.

Chair: There will be all sorts of charities complaining about that.

Q345 **Alison McGovern:** I thought that was perfectly clear. I have a couple more detailed questions. Where does the size of the service sector play into this in the British story? In the areas where it is hardest to find productivity gains, for example social care and those firms that are operating in a world where there is not a lot to be gained from technological advance, what work has been undergone to unpick what is going on in those firms? Productivity gains are quite hard to find there, but they represent the everyday economy, whether it is social care or hospitality. Retail is a bit mixed. What work is going on to work out in that big chunk of the British economy whether it is even possible for there to be significant productivity gains?

Andy Haldane: That is a good question. Does the sectoral composition of the UK economy mean it is naturally inclined to be less amenable to productivity growth by dint of being more service sector oriented? We have looked at this in quite some detail, and that does not come close to explaining either the slowdown over the last 10 years or the gap between the UK and competitor countries. It might help a bit in explaining the second, the international gap, but it does not really explain the flat-lining over the last 10 years.

I will give a shout-out to my colleague, Silvana Tenreyro, who has looked at this and assigns half of the slowdown as being focused in manufacturing and financial services, which had been significant contributors to the growth in productivity pre the crisis. It helps on the gap with our international competitors, but it does not really help us in explaining the flat-lining over the last 10 years.

Q346 **Alison McGovern:** That is interesting and no doubt we will pick that up with her when she comes before us at some point in the future. Coming back briefly to wages, to be clear, my colleague Simon Clarke just now was driving at whether lower immigration was helping with the wage picture. We got a mixed answer, but could I just ask about second-order effects? What is in the forecast, as wage growth picks up, for the consequences in the overall labour market? What do we expect the impact of that to be on the broader labour market?

Dr Carney: I might invert it a bit, which is to say the tightening of the labour market we have in our forecast brings some small further reduction in unemployment. I would generally recognise what Mr Clarke said about the unemployment rate stabilising around this level, but for what it is worth in our forecast we have a small further tightening and further growth in hours worked. Given that tightening, with more limited labour supply growth for many reasons, and with a small pick-up in productivity, we see wage growth going from the low threes to around 3.5% on an average hourly basis by the end of the forecast.

Q347 **Alison McGovern:** You think there will be growth in hours worked.

Dr Carney: We do. Again, it is a point we were discussing earlier. Subject to the conditioning assumptions around this forecast, we have the economy continuing to move into excess demand, and so running a little higher than capacity, to say it in a different way. One of the consequences of that in the labour market is a further firming of wages and, as Mr Saunders said a while ago, prospectively, off stage, a pick-up of inflation above target beyond the forecast horizon.

Q348 **Alison McGovern:** Do you have an understanding of how that pick-up in hours worked is going to come? Is that going to be about everybody seeing an increase in hours worked or a particular group of people?

Dr Carney: We do not go down to that sectoral level.

Q349 **Alison McGovern:** A lot of the questions about the bifurcation of the labour market are essentially unanswered, because you might imagine that some of the people who are working part time because of caring responsibilities in low-skilled, low-productivity growth jobs are the sort of people who might also not see their hours increase as the pick-up happens, but you are saying the Bank does not really focus on that.

Michael Saunders: The trend we have seen over the last year is that overall job growth has slowed a little bit. It is at 1% year to year. In the last few months, self-employment is down, the number of part-time workers is down and the number of people in temporary work is down. The number of people who are full-time employees, which is the most stable form of work, is up 2.5% year to year. It is substantially stronger than the growth of overall employment. If your two-tier workforce is between part-timers, temps, self-employed and the rest, we are seeing a shift between those tiers into the more secure forms of work.

Q350 **Alison McGovern:** Finally, I just want one last question on the broader future. We have not talked that much about automation, but that is one of the big shifts that Mr Clarke asked about. Which problem is more pressing for the UK? Is it machines taking people's jobs or people stuck doing jobs that could be done more effectively by machines?

Dr Carney: This is an area where we have done a fair bit of analysis. I expect that we will continue to do so. Mr Haldane has talked about it. I have talked about it. We have looked at these transitions in history. Today it is around machine learning; previously it was other technological innovations. We have looked at how long they take, orders of magnitude and what can be done to speed them up, and then, associated, what that means for the overall level of interest rates and how much of that is relevant over the policy horizon.

As best as we can tell, the orders of magnitude of the fourth industrial revolution are similar to previous ones, so they are big but they are not insurmountable in terms of finding new forms of work. It is a question of whether we have the institutions to help with those transitions. Probably the biggest problem would be to lean against it unnecessarily. This is an area in many respects where the United Kingdom has real competitive advantages, and so the question is how we are going to upskill. Maybe I should end it here. I know time is short.

From the financial sector perspective, what are we doing through the general purpose financial infrastructure that is the responsibility of the Bank in terms of how we approach supervision, how we run our payments system and other things? What do we do to help unlock some of the financial innovation that would finance the companies, which would create new jobs, which would mean this transition is more effective and there would be more people, if I am following the two classes of worker theme here, in the first, productive class?

Q351 **Chair:** I have two more questions. First, in terms of creating new jobs, Mr Haldane, you have a new role. You are now chairing a new Industrial Strategy Council, related to assessing progress on the Industrial Strategy. I should ask whether you think there are any potential conflicts of interest with your role at the Bank or particularly being a member of the MPC. Perhaps the Governor could say what discussions there have been about that appointment to that role in order to safeguard the Bank's independence. Mr Haldane, do you want to go first?

Andy Haldane: I am very happy to and it is an important question to raise. It is one we took very seriously and discussed internally before that appointment was announced. This was Mark in discussion with the Bank's conflicts officer. We raised it with the MPC as a collective.

The key point here is that the Industry Strategy Council is not in the business of setting or, indeed, designing industrial strategy policy. Its role is very clearly to evaluate the impact of policies agreed by the Government. In that sense, there is no real conflict between the MPC's role in the setting of monetary policy and the Industrial Strategic Council's role in opining on the impact of, in this case, structural policies.

It is probably also worth mentioning in passing that this is a personal responsibility rather than a Bank of England one. That is true of all the members of the council. They are there not as the chairperson of Marks & Spencer, but as, in that case, someone with great experience in the corporate sector. This will not involve any resource from the Bank of England either. It is purely my role. Those are the considerations that went into the deliberation we had internally ahead of this big announcement, but Mark might want to say a bit more.

Dr Carney: With respect to process and internal review by our conflicts officer, we review as each of the committees whether any new role of a member of the committee could have a conflict, or an existing role evolves into having a conflict. We did this as the MPC and this was also reviewed by Court, so we went through the process. For the reasons of personal capacity, no Bank resources and advisory, so OBR-esque if you will, we viewed that there was no conflict, along with the vain hope that Mr Haldane's knowledge of productivity would further improve and there would be spill-over benefits to our understanding of this important issue in the economy.

Q352 **Chair:** As a follow-up question to that, members of the MPC are not going to endorse or criticise Government policy, whereas by the sounds of it the council is going to have to opine, which means saying something presumably about the success or otherwise of the overall industrial strategy. Do you feel you will be able to, as a member of the council, pass comment on the Industrial Strategy without getting into being a member of the MPC and endorsing or criticising Government policy?

Andy Haldane: Yes, I hope so and, yes, I think so. It is not just me; it is a whole council with a wide and diverse range of experiences and backgrounds, as you will have seen from the composition, which was a crucial thing for me in taking up the chairmanship, I should say. As I say, we are independent and arm's length from Government. That is crucially important. Our recommendations and our publications will be open to external scrutiny and we will need to be as objective and rigorous as possible. That puts clear blue water between the MPC's role and the role of the Council.

Q353 **Chair:** Thank you. I am sure you enjoyed your session here today and you have another one coming up in not a very long time, once we have seen your report next week, but quite a few of you have mentioned the work that the agents do on behalf of the Bank. I have been to one of the agents' meetings in Loughborough and I know how important they are. I presume you are going to mention some of the reports back from agents as part of the report you give to us as a Committee. Is there an opportunity perhaps for more transparency than there would normally be in relation to agents' reports? We will need to have more transparency in order to fully appreciate the basis on which the report is given to us, I suppose.

Dr Carney: First, when we reference agents' reports, for example in the *Inflation Report*, the agents' reports come out at the same time. They are in a different place on the website, but they are there and we can bring you to it.

In terms of the specific issues around Brexit preparedness and the potential impact, the survey was in the field for a subsequent policy round and it was not for these purposes. We will look at the possibility of having something. It is finishing on the day we are doing the report, but depending on the time that we were back here, if we can get it in a position that it is rigorous enough to be published, we would provide it to the Committee and publish it on the day that we appeared. If we can do it, we will do that, so you have the same transparency as you have with the agent references.

Q354 **Chair:** Thank you all very much indeed for your time this morning. I am very grateful for your evidence. As I say, we look forward to seeing you before the Committee soon. Thanks for that.