Inflation Report Press Conference

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Ed Conway: Thanks. Ed Conway from Sky News. Governor, in your last comments just then talking about the reaction function if there is indeed a no-deal Brexit, can we just be clear, are you saying that if there were to be a no-deal Brexit and if as many economists think there could be a recession, even then you can't rule out raising interest rates?

Mark Carney: First, let's be clear that a no-deal, no-transition Brexit is not the most likely scenario. So, we're talking about a less likely scenario, tail scenario. Now, we have to be prepared for that, and the committee has given the guidance it has to provide some context to that. Second point is, as the committee has emphasised, it matters what happens to all three factors, the main factors. The exchange rate, what happens to demand and what happens to supply. Thirdly, what is unusual about that situation if it were to come to pass, and it's not the most likely thing, is that there would be a hit to supply, potentially fairly large, and certainly more rapid than one is accustomed to in an advanced economy. The consequence of that, the committee would need to balance the inflationary consequences of that, the potential inflationary consequences of movements in the exchange rate and potentially tariffs. Obviously tariffs is a discrete decision for the government. Weigh that against an obvious desire to provide what support we could to the economy, to jobs and activity in the economy. So, there are scenarios where policy would need to be tightened in the event of a no-deal, no-transition, so-called disorderly Brexit, but I would stress that, you know, it's not the view of the committee that that is that most likely scenario.

Ed Conway: Yes. I mean, that will be the response a lot of people might say.

Mark Carney: No, look, the MPC has a clear remit. The remit is price stability. Subject to achieving price stability, you know, supporting the government's economic policy, supporting jobs and growth if I were to simplify it to that. It will be important that we take our responsibilities. We have some flexibility under our remit in terms of the horizon over which to return inflation to target. We have some ability to look through one-time effects, such potentially as tariffs, distinct from those broader forces, but I think what the committee thinks needs to be recognised is a couple of things. One, this would be an extremely unusual set of circumstances. An impact on supply, something that's immediate and material, not, as I said in my remarks, something that's distance and speculative, that would have inflationary consequences and we would have to balance our responsibilities. As we've said in the report, as we've said in the minutes, as I said in my opening remarks, this isn't pre-wired. There's no automatic response. You can't. We will have to look at the situation if it were to come to pass. We don't think it's the likely situation to come to pass, but we'll be guided, as we always should be, by our remit in taking those responsibilities.

Chris Giles: Chris Giles from the Financial Times. Just to follow on from Ed's question, in that scenario of a disorderly exit where you had to balance considerations of demand and supply, how on Earth would you know what was the demand effect and the supply effect? All you'd see is people hurting, people not being able to buy stuff in shops potentially, and queues on the roads. You wouldn't be able to know in real-time how to distinguish the two.

Mark Carney: Yes, so there would be a question, again, in this less likely scenario. I hope we'll spend a substantial proportion of this press conference on the more likely scenario, because it's more likely what your viewers and readers are going to be facing. In this less likely scenario, there would be

a need to distinguish between shorter-term effects on supply that were caused by logistical challenges, you know, very short and sharp transition challenges such as you referenced, versus more structural effects on the supply capacity of the economy. Which would be the product as you would recognise of losing access or losing substantial access to one market and the economy not yet having had time to reorient itself either to domestic production or production for third-country markets. Now, we're not totally uninformed on this, in that these are types of issues we have been thinking about since the referendum. It's part of the reason why we have an agent network. There are a variety of ways of looking at this, but it will be a challenge, without question. Part of the series of judgements we will have to make are exactly around what you're pointing to, Chris, which is what's temporary, what's more persistent, and then the relative balance of that versus what would be expected, for other related reasons, a hit to demand.

Joumanna Bercetche: Joumanna Bercetche from CNBC. To pick up on the more likely outcome, to use your phrasing, assuming we do get an EU withdrawal deal agreed and we do transition to an implementation period until the end of 2020, you cited that we may see a rebound in demand if that transition deal is agreed. You've also said we could see upsides on the wage-growth front. You've also said that we could see firming domestic inflationary pressures, and then finally we haven't actually incorporated any of the latest autumn budget spending plans into any of your forecasts. So, my question to you is, how much of a tailwind to the economy and to your GDP forecast would all of those issues combined together pose? Do you think it's time to start preparing the market for more than one rate hike a year over your forecast horizon?

Mark Carney: So, in the event of a deal, as you can appreciate and others can appreciate, it depends on what the deal is. We have a conditioning assumption, which is an average of a range of outcomes, so we and others would have to look at not just having a transition period but what the economy is transitioning to. We do expect a rebound in demand. Let me emphasise a couple of things. One is that one of the things we're seeing in the very short term-, we're seeing it in virtually all the surveys. I can even reference something which came out after we finalised the forecast, which is the manufacturing PMI this morning. We see it in our agent conversations, our agent surveys which are embedded in here, we hear it in conversation with businesses up and down the country, that business is taking a very cautious approach right now, because we're at the point of, if not maximum uncertainty, close to maximum uncertainty. There's not that much time left until there will be clarity, so waiting a bit of time is understandable. Because we see all that, we have some sense of what's being held back and what would be potentially unleashed with clarity about implementation period and a deal. So, you would have seen in the forecast that we do see a rebound, a notable rebound in investment, and would recall that investment, investment growth I should say, has fallen over the course of the last year. We see a fair pickup in the pace of investment growth over the forecast.

Level of investment ends at some 14% higher by the end of the forecast, for example. So, we would see that pickup. You're right in noting, and others may ask, but I'll do it here on the fiscal, we haven't incorporated the budget into the forecast. The budget came, you know, literally a few days ago, after we closed our forecast. We will have time to incorporate that and we'll speak to it our next meeting in December. What I'll just close with on the last bit of you question, the forecast is conditioned on an average market curve, a fifteen-day average. We closed that average a week ago, so it was a curve that was higher than the curve at present, something with roughly a bit less than three. One rate increase a year, or three over the forecast horizon. That curve leaves inflation a little above target at year two, which is normally how we would think about the policy horizon, so one can draw conclusions from that.

Joel Hills: Joel Hills from ITV News. This week, Governor, viewers will have seen the Chancellor deliver his budgets. Households and businesses have been told this week that austerity is over. Are you clear that in the event of an abrupt departure in a disorderly way from the European Union that austerity will return?

Mark Carney: Well, fiscal decisions, Joel, are for the Chancellor and for the government, not the Bank of England. Whatever decisions they take now or in the future, we then take those as given and we set monetary policy around them. So, you know, we can move monetary policy much more quickly than fiscal policy can be moved and we stay in our lane. We focus on our direct responsibilities, which are on the monetary side. With respect to this week's budget, as I said in my opening comments, there has been in a shift in the stance from more restrictive to more accommodative. You know, the judgement of the committee is that it has the potential to be significant for the outlook, but we need to do a proper analysis of it and assess how significant from our perspective that would be.

Andy Verity: Thank you. Andy Verity, BBC News. Governor, you've referred to, in the event of a disruptive withdrawal from the EU, that there will be an immediate and material hit to supply. Can you spell out in non-economist language what that might mean? Shortages, price hikes? What do you mean?

Mark Carney: Well, yes. I mean, Andy, I think we're all aware that in the event of a no-deal, no-transition Brexit, which is not the most likely scenario, but if that were to come to pass, at a minimum there will be-, and this is acknowledged by the government, it's acknowledged by the logistics industry, it's acknowledged by the EU and it would also affect the EU as well. There'll be a series of logistical challenges in terms of getting goods through the ports and the knock-on effects of those to the ability of a number of businesses, not all businesses but a number of businesses, to produce at full capacity that exist. One can make estimates of that.

Andy Verity: What would that mean for ordinary people? What would they see?

Mark Carney: Look, to draw it out to the shop or the shop floor, it will depend on the degree to which an individual business is able to prepare for that. So, it will be different for different individuals in terms of their jobs and for us as a whole for whatever product or service we're using that hitherto had relied on seamless access to the European market. So, in some cases goods and services will be affected, in others they won't. I would stress that in many respects, we would distinguish between issues which are short-term in nature, which is in other words the system becoming used to new restrictions, the ability of both sides to increase customs capacity and make adjustments to logistics, and more structural issues. Which mean that having less access to Europe or more costly access to European markets will mean for businesses either which use parts that come from Europe or which sell their end product into Europe, that they will take decisions to reorient their production to either the UK market or to other global markets. That will take a period of time.

Larry Elliott: Larry Elliott of the Guardian. You say that the chances of a no-deal Brexit are not that likely, but do you think they're more likely than they were the last time we had a press conference with you three months ago?

Mark Carney: Well, tough to say, and not probably that productive to speculate on the relative probabilities. I think that, you know, as we get closer to the deadlines, negotiating deadlines, it concentrates the mind, and it concentrates the minds of a number of businesses, that given that there is still uncertainty they're taking decisions, or, you know, a decision not to invest is a decision as well as

decision to invest. So, they're taking decisions to keep things to the side. Not all businesses, but, you know, a number of businesses are holding off for the moment until there's greater clarity, and they expect greater clarity and they will get greater clarity. So, that's why there is, in the most likely scenario, pent-up investment demand that one would expect, certainly we would expect to see unleashed. Really, direct commentary about the relative probabilities of a potential deal including a transition are for the government that is negotiating this.

Ben Chu: Ben Chu from the Independent. Governor, there are a group of pro-Brexit economists who say that no-deal is nothing to fear. What you've laid out today suggests the very opposite. There might be some people out there wondering why they should listen to you and the Bank of England rather than that other group. So, what are your views on that? Is it a better forecasting record, is it better models? What are your thoughts?

Mark Carney: Well, look, we're doing our job for a purpose, which is to keep inflation low, stable and predictable and to the extent we do that, subject to doing that, to support the economy. We had a set of expectations, for example, prior to the referendum. That we expected, and we're on record in this room saying that we expected, that the exchange rate would fall sharply, that inflation would rise and that growth would slow, and part of the reason why growth would slow is that real incomes would be squeezed. You know, that's what happened. There were others who had expectations that the economy would accelerate following the referendum. What we're basing our views on is a series of things, but it's grounded not just in macro models but in extensive consultations and regular consultations with businesses up and down the country. To supplement our usual agency network, which covers, you know, all regions in all home nations of the United Kingdom, we have put in place and have been using over the course of the last eighteen months a decision-maker panel. Which numbers over 5,000 businesses now, and gives a pretty clear view of the scale of reduction in investment growth, so, the holding off of investment, and the reasons for that. You supplement input/output analysis, big picture macro modelling with that kind of grounds-up data. It certainly gives a sense of the direction that the economy would head in.

It's difficult to estimate the precise magnitudes and the precise timing and we would draw on all those resources in the unlikely event that this were to come to pass in order to make the kind of judgements that Chris Giles was asking about a moment ago.

Phil Aldrick: Phil Aldrick at the Times. This is on Brexit. There are reports this morning that a financial services deal on Brexit could be imminent. I was just wondering if you felt confident that this will ensure that the bank does not become a rule-taker from Brussels? If there is a financial services deal imminent, you know, do you hope that there are particular areas where you hope to diverge from Europe in future?

Mark Carney: So, I saw the reports. It's not for us to comment on them in that, as you know, we're not part of the negotiations, as it's solely the responsibility, as it should be, of the government. From time to time provide them with some technical background advice, but we're not any part of the negotiations, nor will we be. I note that the government has not recognised, if you will, the report, words to that effect from DExEU, and stressed, as one would expect in a negotiation as large and as complex as this, that, I think the quote is, 'Nothing is agreed until everything's agreed,' or words to that effect, and similar comments were made by Commissioner Barnier. So, with that context, Phil, I hesitate to speculate on what the framework of a potential financial services arrangement would be. I think that, yes, I should probably leave it there.

Brian Swint: Hello. Brian Swint from Bloomberg news. Governor Carney, the MPC's forecasts are based on the average of a range of outcomes for Brexit, and yet you've discussed some other parts of the range in your remarks. I was wondering, how much stock we should put in these particular forecasts on the outlook for the economy and for interest rates, and how much relatively, you know, we should be paying attention to what you say? You know, how the bank would respond in different scenarios. Is it still the case that this average is the most likely outcome in your view, and can you give us a feel for how much the MPC is discussing other things than the average?

Mark Carney: Okay. So, I think the way we would look is this is the more likely scenario. Something like the average is the more likely scenario. So, it provides an anchor for whether it's financial market participants or businesses or households to give some sense of how the economy is likely to behave with a deal struck that has a smooth transition to some form of continued access to the European Union. Now, there are better or worse, or there are higher or lower levels of access relative to that average, and so if one's expectation is that there's going to be greater access, for example, one would expect, all things being equal, higher growth. You know, higher growth both of demand and supply. There would be an adjustment, one would expect, in asset prices in the UK that would be positive, and it would likely have implications for monetary policy as those balanced out. Same thing if it were slightly lower than the average. Then potentially, you know, change the signs, all things being equal. We do have to get a sense of how the main components go, so it provides, in our judgement at least, at this stage, as much as we can see, and we are deep into the fog of negotiation so it's difficult to be precise, the more likely outcome. There are clearly a range of outcomes, particularly around the final, so-called end-state relationship.

I think we all have to appreciate as well the amount of effort that's being expended on the withdrawal agreement, understandably, and therefore the implementation period, relative to the amount that has been spent on the final relationship. So, one can judge a bit from that in terms of whether we would get a high degree of clarity, obviously, about the withdrawal agreement and the implementation period at the end of the negotiations, and a degree of clarity about the final relationship, but perhaps not total clarity about that over the course of the next few months.

Tim Wallace: Tim Wallace at the Daily Telegraph. Governor, your forecasts show that pay growth seems to be coming back, but also that the household savings ratio is forecast to decline a little bit. Is this a sign that households are spending every extra penny rather than saving a bit more or paying down debt, and should we be worried about that?

Mark Carney: Well, I'll let Ben expand on it, but I would say the headline, as I said in my opening comments, is that households are resilient. You know, UK households are resilient. If I could just use one characterisation, then I'll pass, and you can see in this in the consumer confidence numbers, other surveys, in general they have concern about the general economic situation, but not about, or much less so about, their personal financial situation and personal outlook. The consequence of that is that, you know, consumer confidence is about average relative to history, and so spending is growing in line with real incomes, but Ben, on both wages and-,

Ben Broadbent: No, I've nothing to add, really, on saving. I would caution to recognise that the numbers on both saving rate and the household financial numbers get revised very heavily over time. Our forecast is essentially for a flat saving rate and that spending grows in line with income, and on income, as the Governor indicated, you know, and as you suggested as well, it's pretty clear now that wages have accelerated as we expected. We've seen, excluding the volatile bonus bit, the fastest rate of wage growth in almost a decade, and that will help real household incomes.

Jason Douglas: Thank you. Jason Douglas from the Wall Street Journal. I have a question unrelated to Brexit. I was going to ask about central bank independence, if I could.

Mark Carney: We're in favour of it.

Jason Douglas: Good. The President of the United States has made pretty clear he would like the Fed to pursue, perhaps, a different monetary policy. Mario Draghi's come under pressure from some in Europe to do various things, particularly in Italy, and the third example I can think of is in India, where the central bank there is under a bit of pressure from the Modi government. Do these kinds of things concern you, and how important is it to preserve central bank independence?

Mark Carney: Well, it has been shown that independence in the conduct of monetary policy-, and we should be clear about where independence is, its specific task, identifiable task. The best models have a remit or mandate given from the political authorities with a specific objective and then there is operational independence, as you know well. What we're talking about today is what's the right level of interest rates and asset purchases in order to achieve the mandate that has been given or the remit that has been given to the MPC, ultimately by Parliament through the Chancellor. One of the things we received with the budget, didn't get big news because it's effectively the same, was the latest remit letter from the Chancellor, which reinforces that, you know, our primary responsibility is to achieve that 2% inflation target. That it's symmetric, that it applies at all times, that we can in exceptional circumstances change the horizon over which we return inflation to target, but only in the event that we're managing to trade off with growth and activity, and only if that's clearly explained and within credible limits. That's very relevant to a situation such as we face here, where, you know, the nature of the questions, nature of the inflation report, nature of conversations with businesses in this country are that yes, there's a fair degree of uncertainty about the outcome of the negotiations. There's fairly wide range of potential outcomes. Some are much more likely than others, but it's not yet resolved.

What central bank independence and what this structure gives us in that situation, should give people in the country and businesses and financial markets, is that the confidence that MPC will do what's necessary and has the powers to do what's necessary in order to return inflation to target. Whatever happens, whatever course of Brexit we have, whatever shock to the short-term level of inflation is. It's that which holds longer-term inflation expectations steady and provides a measure of confidence, not just in financial markets, but very importantly to households up and down the country. If I can say one other thing, this is more unique to the UK, but where the independent Financial Policy Committee, the central bank comes into bear here is that that committee has the responsibility in the case of Brexit to ensure that our financial system, particularly our major banks are robust to whatever potential outcome could happen. That's its responsibility, and it has the powers and the ability and it is using those powers to do two things. One is to make sure that the banks have the capital and liquidity that they need for the worst-case scenario, however unlikely that is, which means that for that situation or any other situation they're going be there. It's also to come straight with people here and across the Channel in terms of where we see the biggest risks so that they can be addressed.

So, to bring the specific back to the general, I think it is at times like these where you have potentially quite large shocks, could be positive, could be negative, that you see the benefit of carefully-specified, publicly accountable, independent and-, as this press conference I hope, you know, is a small illustration of this last point, transparent and accountable framework, the value of that comes to the fore. That holds here, that holds in the United States and that holds, you know, throughout the other major economies.

Yvonne Esterházy: Yvonne Esterházy, German Business Week, WirtschaftsWoche. Actually, I was wondering, since Brexit is not that far away, if you would like to comment on the preparedness of the banks and the cities. You've mentioned in the past that the bigger institutions seem to be better prepared than the smaller ones, so what is your assessment of the current situation?

Mark Carney: I think we feel quietly confident in the preparations of the banks, the financial institutions in the United Kingdom. We've been focussed on this for the course of the last couple of years. We'll have a chance to talk about this in more detail those of you who want to come at the end of the month with the stress tests of the Financial Policy Committee, which will provide more substance to what I'm saying. Our view is that the banks are in a position, they have adequate capital, they have more than adequate liquidity, they have contingency plans, we have contingency plans that would buttress those contingency plans of the institutions. The outstanding issues for the financial sector are largely related to cross-border issues, so issues between the UK and the EU. For the last fifteen months we have published a checklist of those issues and the level of preparedness and some progress has been made. I welcome the comments of the Vice President of the European Commission this week, but we need to move from, you know, comments to actual legal certainty, and we look forward to that happening in due course.

Phillip Inman: Hello, Phillip Inman from the Guardian. I was going to try and tease out another answer on this question about why on Earth you would raise interest rates and tighten monetary policy in the event of a no-deal Brexit, but I think we've probably exhausted that subject. I was going to ask Ben and Dave in particular whether they're concerned that the banks, the commercial banks, are not passing on your interest rates? You say in your quarterly inflation report that the banks are tightening their margins and they're not really passing on, particularly in mortgage rates, so your efforts are being blunted at the moment in terms of policy.

Mark Carney: Dave, do you want to?

Dave Ramsden: I mean, I can certainly highlight what we've seen on the deposit rate side, where, you know, you never get full pass-through, and we're obviously coming out of a really unusual period where normally sight deposits are quite a long way below bank rate. Actually as bank rate came down to zero, sight deposits for a while were slightly above bank rate. As bank rate moves up, we're only expecting partial pass-through, and more generally, you know, both on the deposit side, on the lending side, through this period where we've put up bank rate twice over the last year, we've seen broadly what we would expect in terms of degree of pass-through. I mean, as you flag, there are various pressures on banks, on their net interest margins, and, you know, we're monitoring that closely, but the degree of pass-through we've seen has been broadly as we expected.

Ben Broadbent: On mortgages, I think you're right. I don't think it's necessarily, quotes, 'lower pass-through'. It's just that at the same time that we happen to have these two rate increases, there has been, you know, more aggressive competition in the mortgage market, and that has depressed some of these margins. I'd only say that monetary policy operates via many more channels than just the rate of interest on new mortgages.

Francesca Washtell: Francesca Washtell from the Daily Mail. I also wanted to ask about pass-through, but specifically when it comes to savers. Do you think that you've seen rates being passed on a positive way to savers, and also what message would you like to send to savers, particularly in potential uncertainty coming up?

Mark Carney: Yes. Well, Francesca, a couple of things just to supplement what was said. Just broader context, what happened since the crisis is obviously bank rate went from, you know, higher levels to as low as it could go, and the relationship between what the banks paid out to savers and bank rate changed. So, they used to pay out a little less than bank rate. Actually, they used to pay out about 2 percentage points less than bank rate, more than a little, and there's a chart in the report which shows that. As bank rate went down 0.5% and then to 0.25%, they were paying out more. So, to some extent, they're trying to make up some of that ground as bank rate rises, but it's not entirely their choice, because we have increasing competition in this market. It's been one of the focusses of this institution. We've authorised just under 40 banks over the course of the last three years. There have been some bigger new entrants, which are paying, you know, substantially higher rates than the traditional entrants, and they're seeing accumulating balances as a consequence. In general, there's a recognition that there are more options, you know, not just in the physical branches but certainly online for individuals who wish to shop around. So, there is first that dynamic, and I'm sure there are some frustrations, because it's taking longer. That competition comes through these frustrations because of that, but it is part of having a healthier system, greater competition

Then here's the point which is, I think, crucial to your second bit of your question, which is about if there are concerns of savers because of broader uncertainties, whether it's Brexit or broader uncertainties in the economy. This is what the Bank of England-, one of the key things we've been focussed on in the last several years and since the crisis, but increasingly in the last five years, to make sure the core of our system, to make sure whether they're banks or building societies that they're resilient. Particularly as we go into this period of uncertainty. Again, the most likely scenario, what the European Union wants and what the UK wants is, you know, some form of agreement, so the most likely scenario is that. Normally, when you have a negotiation and everyone wants, you know, certain basic things, you end up with them, but we'll see. In the event that there isn't an agreement, there might be challenges in other sectors, but we've been focussed on these issues for the last couple of years. We've been getting the banks ready for the worst-case scenarios for the last couple of years. We've been making sure they've been building up capital. We've been making sure they're building up liquidity. We've been making sure the largest ones ringfence the high street banks, the banks you and I and your readers deal with every day, so that they can withstand shocks whatever comes.

So, people, whether they're going for a mortgage, you know, next week or next year, their bank will be there, and if they're savers, that their money is safe in these institutions.

Ed Conway: Ed Conway again. Just a quick Brexit question. Sorry, another one. Your assumption for Brexit in terms of your forecast is an average of a range of outcomes, from very, very smooth to, kind of, WTO membership or something like at the end, or WTO terms at the bottom. If very, very close is one and WTO is ten, what would you say is Chequers, the whitepaper that the government has its plan in?

Mark Carney: Right. Two comments. One is our assumption is smooth to whatever situation, so the 'smooth' refers to the transition, because of course one can have a smooth transition to WTO or a disorderly jump to WTO, so our assumption when we use WTO is a smooth transition to WTO. On your scale, obviously, we're at five, right, or we're right in the middle, and, you know, Chequers is better than five. You know, you can't be precise. Is lower than five, if I'm following your thing. I won't be precise. I'm not totally dodging the question, I'm just slightly dodging the question. You know, full transparency, the thing about Chequers is it is government policy. It's a proposal as part of the negotiation, and in part because it's a proposal, there are certain things about which Chequers is very specific, and others about which it's more open-ended and more subject to negotiation. Those

components could have important implications for the economic outcome. They're subject to negotiation, and it wouldn't be, you know, prudent of me to sit here and say, 'Well, I know that Chequers means exactly this,' in terms of, for example, access for financial services, the question that Phil Aldrick asked earlier. It doesn't absolutely specify which components of financial services, how that access would be there. It talks in terms, but doesn't get into specifics, and the answers to all those questions could be material to where it falls on your spectrum, but more importantly the implications for the economic outlook.

Joumanna Bercetche: Another question. This time I want to ask you about exogenous risks to GDP. In paragraph six of the minutes, you talk about euro area GDP growth slowing down, and you said that for Q3 it came in 0.3 percentage points weaker than your expectations, but then there's also a line saying 'bank staff judge that quarterly growth would recover somewhat in the fourth quarter'. So, my question to you is how much of your Q4 GDP forecast is contingent on European economy recovering as well, and if momentum doesn't pick up, does that pose downside risk, especially in an environment of emerging market volatility and trade tensions, etc.? Are there exogenous risks?

Mark Carney: Yes. I'll let Ben expand on the euro area, but we have a slowing in Q4 in our forecast for the UK, and a slowing to below potential in Q4. Now, this is an opportunity to reemphasise something I said in my opening remarks, and the committee noted in the minutes, which is that we do expect some short-term volatility in the data. A lot of that is domestically oriented, and certainly in the reported data. So, any time you have potentially substantial swings in the level of investment, again, making the precise estimate of that and how that maps into the actual data could come there. Particularly because our predisposition is to look through that because of the unique circumstances the economy's operating in here. With that, kind of, bottom-line, if I may put it that way, context, so, we see some slowing, we expect some volatility, and we'll expect to look through. We'll obviously take great interest in how the euro area performs in the fourth quarter.

Ben Broadbent: No, I mean, in general, as an open economy, we are extremely influenced by what goes on, and obviously in our trading partners, most influenced by the biggest trading partners, who are in Europe. I think at initial glance, we suspect there may be some temporary factors behind the particularly low number, relative to recent figures that is, for euro-zone growth in the third quarter. So, we don't expect that to be sustained, but, you know, the euro zone does look as though it's growing more slowly than it did last year, and coming back down to trend, which is the same shape our whole global forecast has. That has some bearing on the forecast for UK output growth, although next to the Brexit questions I'd say they're relatively small.

Phil Aldrick: Okay. Phil Aldrick at the times. Just going back to this idea that interest rates may have to rise in a recession, potentially, depending on the supply shock. I just wanted to just calibrate how realistic this is. For the inflation to rise, the supply side of the economy would have to collapse deep into negative territory. It's around 1.5%, that's what you said potential growth is at the moment. So, we're looking at a big fall in supply. It would have to be more so than the fall in demand for you guys to raise rates, and is this realistic? How realistic is this idea?

Mark Carney: Well, first I'll pass to Ben, because I can tell he want to answer this. I can tell. You don't have to have negative. You don't have to have a fall in supply of supply, you have, you know, supply growth less than demand growth. In other words, excess demand continues to build. You have to take into account as well, we would have to take into account, where the exchange rate moves, which of course is making a judgement about relative future incomes. You know, in my opening remarks, I again referenced, as I have been doing for the course of the last couple of years, the upward

pressure on inflation because of the past depreciation of sterling. Okay? This economy has large and persistent exchange rate pass-through, and just before I pass to Ben, you know, the committee would reemphasise two things. One, monetary policy can go in either direction in the event of no-deal, no-transition, so it's not automatic and we're not saying that it's definitely one direction or the other, but also that, you know, the economy's at full capacity right now. Inflation's above target, and, you know, it is a different situation to actually start to get the impact on supply, actual as opposed to prospective, than to be speculating about it. You know, I said in my opening comments this is rare. It doesn't happen. You can look for examples. You can go back to the '70s. You know, we've got New Zealand in the '70s.

You can make a story around the oil shock in the early '70s, but you're hard-pressed to find other examples of a large negative supply shock in a major advance economy. Certainly a major advanced economy, let alone advanced economy. There has not been one during the inflation-targeting era. Ben?

Ben Broadbent: Yes. No, I mean, I haven't much to add to that. I'd first of all say, you know, we said nothing about recession one way or the other

Phil Aldrick: Some others have.

Ben Broadbent: Indeed, but not us, okay? So, we don't know how far supply would have to fall. Second, I'd reiterate two of the Governor's points. One about this is not just about supply and demand, it's about the exchange rate. If the exchange rate falls, which we saw after 2016, that can have significant effects on inflation for a number of years, and certainly at horizons at which monetary policy should have to take them into account. Third, just on the rareness again, I don't think we've drawn any of these parallels, but people have talked about interruptions to energy production in the 1970s. That had material effects on output, but it certainly wasn't a disinflationary event, and it wasn't something you'd normally expect to meet by lowering interest rates. Finally, I'd say with reference to supply generally, you know, people now recognise clearly that the slow growth we've had in many parts of the developed world since the crisis is a function of low productivity growth. Perhaps I can invert the point by saying this not something that central banks could cure, and I think people have grasped that. It's not to do with, you know, an absence of easier monetary policy that we've had weak productivity growth. There are disturbances to these growth rates, and the point we make in this box is that in certain extremely rare instances, and this may be one of them, those disturbances can be quite fast, and so we do have to, sort of, say it. We're certainly not saying interest rates will go up. Absolutely not. We're just saying we can't really know in advance.

Joel Hills: Yes. Just to go back to access to the EU post-Brexit, you were quoted in the FT, Governor, I think as saying that a Chequers-type deal would enable to UK to recover three-quarters of the growth that it had lost since the referendum. Was that comment correctly attributed to you? It was in the briefing that you gave to Cabinet, I think, in September.

Mark Carney: Well, first off, with respect to Cabinet, I mean, those are confidential discussions, as you know, so I can't comment on those. I'd refer back in terms of Chequers to my answer a moment ago. It would be better than the average, but exactly, I don't want to be drawn on how precisely, which is what you're trying to do. Maybe just to close is that, you know, it's understandable people have in their heads the financial crisis and the aftermath of the financial crisis and the series of measures that central banks did that regard, both for the financial system and also to support demand. In some respects, central banks were centre stage at that time, but in the event, in the unlikely event, that we

have this supply effect, just to reiterate what Ben just said, there's not really anything we can do about supply. To go back to my comment a moment ago about the financials, we pretty much have completed what we're going to do for the financial sector. I mean, again, this is really more of a conversation when the FPC is front of you in a month's time to draw that out, and we'll continue to work on that. So, there are things we will do and we'll continue to focus on achieving our remit, but we're not centre stage. I mean, you know, we're more of a sideshow in that environment, which, to close where I started, is still the less likely scenario. It's not what the negotiating parties are trying to achieve. It's not what they intend to achieve.

The more likely scenario is that there is some form of agreement and when you look at our forecast, the MPC's forecast, it provides an anchor for what that could look like. Of course the final agreement, whatever form it takes, won't be exactly like the forecast, which, when you combine both the fiscal and that, Brexit developments, means that, you know, we'll have some work to do to update that forecast once there's greater clarity and set a course to keep inflation on-track to hit its target. Thank you.

Gareth Ramsay: Thank you very much, everyone.