## **Inflation Report Press Conference**

## Thursday 2 May 2019

Mark Carney: With that, Dave, and Ben, and I, would be pleased to take your questions.

**Gareth Ramsay:** Okay, as always, please make sure you give us your name and the organisation you represent, and please stick to one question each for the first go round. Can we lead off with Dharshini, and then Joumanna to begin?

**Dharshini David, BBC News:** Thank you. Governor, given the forecast you've outlined today with a fair degree of excess demand by the end of the forecast period, inflation rising above target, in normal circumstances we might have expected a policy tightening today. Given that's not happening, assuming there's a smooth Brexit, what can we read into the pace of gradual and limited interest rate rises further down the road? Could you shed some light on what that might look like in practise?

**Mark Carney:** Well, I think the way we would put it, Dharshini, is that if something broadly like this forecast comes to pass. So, a period of time where the economy's growing, not quite at potential but growing, and the domestic inflationary pressures are continuing to build even though we're going through this period of uncertainty in the run up to some resolution around Brexit, but then that resolution is some form of arrangement with some form of relatively smooth transition to it. It will require interest rate increases over that period, and it will require more, and more frequent, interest rate increases than the market currently expects. Now I'll finish with this, which is that there are a lot of factors that affect sometimes yields in markets, and those include global developments and some risk premia that can be put in because of major structural events about which there is uncertainty, and of course, those are many words to refer to things like Brexit.

**Dharshini David, BBC News:** So, to be absolute crystal clear, we're talking about a faster pace than previously envisaged?

**Mark Carney:** What we're talking about is more withdrawal of monetary stimulus. In other words, accumulatively more hikes, but still a limited amount relative to history, and at a gradual pace.

Gareth Ramsay: Joumanna, at the back, and then Lucy.

**Joumanna Bercetche, CNBC:** Joumanna Bercetche from CNBC. Just to pick up on that point. So, in paragraph three of the minutes you say the MPC judges that there is a small margin of excess supply in the economy right now. So, putting the two together, and the question that was just asked, are you therefore guiding the market towards more back-loaded interest rate hikes and ruling out the possibility of doing something imminently?

**Mark Carney:** I think to the extent, Joumanna, that there is guidance, it's that there are insufficient hikes in the current market curve to be consistent with our remit. To be absolutely clear, our remit is 2% CPI inflation, as you know. We talk about moving or returning inflation to target over a conventional horizon. Conventionally, the horizon over which monetary policy has most traction is eighteen to 24 months. We have inflation above target at that point, and then rising further off, and continuing, I might add, off stage, if you will, beyond the forecast horizon. So, it will be appropriate, or would be appropriate, I'll put it in the conditional because it's conditional on something like the forecast transpiring, and there are some big conditioning assumptions in that. If the world unfolds

broadly as consistent with this forecast, then it will require a greater withdrawal of monetary stimulus than is currently implied. It just didn't require it at this meeting.

Gareth Ramsay: Okay, Lucy, and then Adam on the right.

**Lucy Meakin, Bloomberg:** Thanks, Lucy Meakin from Bloomberg. Could you explain the justification for keeping the conditioning assumptions as they are given, they potentially don't really acknowledge the reality of the Brexit process so far? I think a lot of people would look at the premise for smooth Brexit, and see a disconnect with what they're seeing in Parliament and the extension?

**Mark Carney:** Well, I'm not sure I'd fully agree. I think what we have seen is that Parliament has voted, and voted explicitly, against a no-deal Brexit. So, if you take no-deal Brexit as an example of something which is not a smooth transition to whatever form Brexit takes. So, Parliament has expressed a clear opinion on that, as have, including the United Kingdom, the 28 countries of the European Union, which is why there have been extensions to the process. So, everyone knows that the process is not concluded. That what remains to be agreed is both the nature of the withdrawal and the broad outlines of the end state. When decision makers, and the decision makers here are Parliament, and the leaders of the European Union, when those decision makers have had the option to make those decisions, they've consistently expressed a preference, and have taken decisions, that are consistent with a smooth transition. Now we don't know, you don't know, companies in the United Kingdom, and Europe, and around the world for that matter, investors don't know what that transition, exactly the form it will take, and where it's headed. When you bring that back to the impact that is having on the UK economy, it's principally expressed, quite starkly expressed, through business decisions, business investment decisions, it's a very unusual situation to be in expansion and have investment falling.

There have been quite substantial contingency plans put in place and moves consistent with that. The consequence of all of that is as we cautioned in February, and we're re-emphasising today, is that in the short-term we're going to have a fair bit of volatility both in the hard and soft data. Trying to look through that, see where the underlying economy is going, and based on that assumption, which is still the base case, smooth transition to some form of deal, what would be, where the economy would go, and therefore what consequences are false.

Gareth Ramsay: Yes, so Adam at the back, and then Alex.

Adam Parsons, Sky News: Governor, the trend of businesses, or UK businesses, cutting investment, but also spending their money on employing people seems like a familiar one. I think we heard that after the financial crisis, which in a lot of people's estimation led to lower productivity than our European rivals. Do you think we are on that path again, and could that trend exacerbate the productivity problem that we have in this country?

**Mark Carney:** Okay, well why don't I start, and then I'll hand to Ben. I'll say a couple of things. (1) Following the financial crisis, I agree with the high-level premise of your question, there are some similarities here, but there are also some differences. Following the financial crisis, one of the differences was a fairly substantial positive labour supply shock, if I can put it in economic jargon? I'll start on that, by which we mean that there were a series of factors which increased a proportion of the population that remained in the labour force or came into the labour force. Some of those factors were pretty difficult for households, overhang of debt, savings for retirement which had been hit by the financial crisis, so they just needed to stay longer. Other factors were changes to welfare and other policies, which kept people in other positive factors in terms of education, etc, but positive labour

supply shock, and that partly affected things post-the financial crisis, and particularly affected things in the early stages of the recovery and the expansion. What we're seeing now, and I want to pan to Ben with this, is that in our judgement is there is evidence that the uncertainty around Brexit is effectively raising the hurdle rate for business investment. So, the relative cost of investment versus hiring has shifted quite substantially in favour of hiring. The consequence of that is what's happened short-term to business investment, what's happened to the hiring, and it will have some implications, as you say, for productivity. Ben.

**Ben Broadbent:** Yes, I think that's exactly the point, and there is the parallel with after the financial crisis. Although, arguably the cause of the high cost of financing investment was different then. It was that the banks were starving firms of credit. Now it's not so much to do with finance, but to do with this uncertainty, but it has exactly the same effects on the investment, on the incentives to invest i.e. to depress them. For any given levels of activity, firms would prefer to employ people instead. Indeed, when things get really uncertain, even within employment, they prefer to employ temporary employees rather than permanent ones for similar reasons. When you look at the numbers, clearly it can have an effect on productivity. Equally, it's not going to give you a big contribution to the so-called productivity puzzle. It's not enough to explain why productivity growth here, and elsewhere for that matter, has been so much lower than before the crisis, but it's definitely a contributory factor, and you're right, directionally, that would be the effect if this continued for a long time.

Gareth Ramsay: Alex at the front, and then Joel.

Alex Brummer, Daily Mail: Alex Brummer, Daily Mail. Governor, you've painted a picture of two economies really. The first economy a, kind of, quite confident, or more confident consumer economy, where people actually are going out and spending, and running up bills on their credit cards, and so on, and doing all of that. On the second hand, a bunch of moaning Minnies in business who are refusing to invest in real things, invest in people rather than plant and machinery. Is there some way that the Bank, and the business groups who represent business, can encourage investment rather than just moaning about it, the lack of it?

**Mark Carney:** Yes. Okay, so just, if I may, make one comment on the household side, which is that households are not running up their credit card debt. This is not a debt fuelled consumption boom. What's happening to households is that in aggregate wage growth has been picking up. Something we've been expecting for some time. It's actually picked up a little more than we had expected, but broad brush, what we'd been expecting. Then employment has also been stronger. So, in aggregate real wage income, or real income, is stronger, and that's what's driving consumption. I think, as you've seen in the most recent credit numbers coming out, and credit condition survey coming out of the Bank, is that actual credit growth, the rate of credit growth has continued to decline. It's still growing, but it's continued to decline. In terms of businesses. I'm sure you do, but we do it, sort of, systematically up and down the country, and many businesses are faced with a very fundamental question of what type of market access they're going to have. In many cases, its access to suppliers for their products or services which are sold either here, in third countries, or it could be directly for export markets.

It's entirely understandable when there is a very wide range of potential deals, and potential transition periods to that. On average, they do expect something similar to our conditioning assumption, to go back to the question a moment ago, on average they expect that. They also expect, and there is increasing evidence through our decision maker panel, that they don't expect this to be resolved for

some time. More and more of them, I recall a substantial proportion, cross-referenced in the report, don't expect resolution by the end of this year. So, in that environment it is difficult to make those longer term investment decisions. If I were to characterise them, I wouldn't characterise them using the M-word that you used. I would characterise them as very eager to get on with investing and building their businesses.

Gareth Ramsay: Joel at the back, and then Chris.

**Joel Hills, ITV News:** Governor, most of the members of the Monetary Policy Committee are men. The Bank of England has diversity targets. It's not clear you're going to hit them. As of today, Britain has its first female Defence Minister. Should the Governor of the Bank of England, the next one, be a woman?

**Mark Carney:** So, what we as representatives of the senior management of the Bank can control is the mix, both in terms of gender, ethnic diversity, cognitive diversity, or socioeconomic diversity, those elements of diversity in the Bank of England. We have been taken very deliberate comprehensive steps over the course of the last five years to shift those. I don't agree with your characterisation in terms of our targets. Senior management, women senior management were 17% in 2013, 31% today. We're on track for a 35% objective. The pipeline is very strong. We're just under 50% below senior management, same in terms of our hiring. We're making big progress in the graduate intake, and others, and hiring intake in terms of BAME, and other characteristics. So, what we can influence we are, and we're making progress, and that is more than just who you bring in, but it's how you work, and how you act, and how you develop. So, we are shifting the dial on that without question. The decision of who is my successor, who's on the MPC, the FPC, the PRC, the Court of the Bank of England, those are decisions for the government. So, questions about who it will be, and the characteristics of who it will be for any of those roles, are really questions for the government.

**Chris Giles, Financial Times:** Chris Giles from the Financial Times. Governor, we've got a forecast here which has got a very large degree of excess demand by the end of the period, and yet inflation running at only 2.16% in your mode forecast, which is lower than the Bank of England has achieved over the past ten years on average. So, it's not a high rate of inflation. Does this mean that we should actually be a little bit more relaxed about the forecast, and maybe not worry so much about the excess demand that you have been predicting?

**Mark Carney:** No. It maybe won't surprise you that there is never really a time to characterise the MPC as relaxed, and now is not one of them. I'll admit that that's one of the job characteristics that one would look for, it's not being relaxed, maybe. There are a couple of things that are going on in this forecast that are important to see. One is that there is steadily building domestic inflationary pressures over the course of it. Secondly, that whether it's 2:1, or 2:2, and particularly when it's 2:1 at year two, and 2:2 at year three and rising off stage, that's not target consistent, or remit consistent inflation, particularly again when the economy is in a position of considerable excess demand. So, as you well know, we stretched the flexibility of our remit post-referendum because we felt there was substantial slack in the economy, and the issue was trading off jobs for inflation. It's a different world where you're moving to. On some measures the joint lowest unemployment rate on measured time, I think '73 it was the last time would have been at 3.5%, but not with an employment share that's similar to this. So, not consistent with the remit inflation building, but there are also reasons why inflation isn't even higher, and they are slightly situation specific. So, your question is very welcome, and I'm actually going to ask Ben, if I could, to, sort of, expand on some of those?

**Ben Broadbent:** Sure. So, one point to make with reference to what the Governor just said about off stage is that we don't actually move into balance and then excess demand for another year or so in this forecast. Given the lags between what happens to slack in the economy, and what happens to inflation, you know, you need to quote the figure of excess demand at the end forecast. That would be having its effect on inflation beyond the forecast period. The second point to make is this is still a forecast like we've had for the last two or three years when import price pass-through at least by the end is fading, and that's pulling down on inflation independently of what's happening to domestic cost pressure. Then the third point to make, and this is a little fiddly, but it matters. As you know, we base our forecasts on the market price for oil in the forward markets for oil, and that is downward sloping, unusually slow at the moment, whereas the forward price in the market is cheaper than the current spot price of oil, and that imparts a negative effect on petrol prices. More generally, look at energy prices overall, their contribution to inflation is close to 0.2% points lower than normal. So, there is a lot of other stuff going on that affects inflation other than just what's happened to excess demand. If you took those away, I think you'd see the impact of that excess demand on inflation more clearly, particularly if you moved beyond the three-year forecast.

Mark Carney: So, let me just pick up on that last point and reinforce it, which is you have an oil curve which is in backwardation. I just wanted to say that once. I just wanted to use the term 'backwardation'. It was there for you and you didn't use it. Yes, the oil curve which is downward sloping. So, we all know that oil prices have gone up quite substantially in the last several weeks. So, it's, kind of, curious that oil is dragging on inflation further out, but it's because, at least in the market's judgement, it's expected to fall off three years from now, and that has a material drag. So, think, just to translate what Ben just said, if inflation at year-three were 2:4 instead of 2:2, which is what would happen if the curve just stayed at the spot level. There's a bit of stuff in domestic energy prices as well, Ofgem cap issues as well. I'm happy to discuss it in more detail if you want. Now that of course may not transpire. We're not making a prediction about the price of oil. We just take the market curve and use it as an assumption. The one thing we know is that the oil price is going to move around, and that curve is going to move around between now and then. So, when we're looking at it, and future MPCs are looking at this if this forecast rolls forward, they'll be looking and concentrating not so much on where commodity prices are on a spot basis a year ahead, but where underlying, as you know, domestic inflationary pressures. They certainly are building in way at least we would expect them to build in way that's consistent with that excess demand pressure and it's that adjustment, and it's not, 'Be relaxed,' about that, if I can go back to where we started, that helps keep inflation on target.

Gareth Ramsay: Phil, and then Larry.

**Phil Aldrick, The Times:** Phil Aldrick at The Times. There's been a lot of talk about the customs arrangement in Brexit discussions lately, and I just wondered if you could tell us where a customs agreement or a customs arrangement would sit in relation to your central forecast for Brexit. Are there implications for growth and, also, does the bank, with your financial stability hat on, actually, would you welcome a customs arrangement because it would not impinge on your ability to be a rule maker in the city?

**Mark Carney:** Okay. So, two questions. First, in terms of customs union and, as you know, I think we all know that there are customs unions and customs unions, and these terms mean different things. Sometimes it could be a customs union and not even be called a customs union, or it could be a customs union, it could be less than something. So, to some extent, the devil is in the detail but, in the spirit of the question, just to be clear, as clear as we can be about our conditioning assumption which has been with all of us for some time is, we're using an average between WTO and an EEA-style deal.

So, a Norway-type deal, and that average sits somewhere between a free trade agreement and a form of customs union. What follows from that is a customs union that had common external tariffs and high a degree of alignment of product markets, would be slightly better in terms of the degree of integration. I'm not making a broader normative judgement about the desire but, in terms of the degree of integration, it would be a higher degree of integration than the base conditioning assumption here. Of course, if there were an agreement and there were a clarity on transition to it at that point, whatever agreement happens, certainly if no agreement happens the MPC at the time is going to have to roll up its sleeves and recast its forecast as a consequence. Broad brush, slightly more integration, which would imply, in the short-term, again this isn't a long-term judgment, in the short-term, slightly higher growth, slightly higher investment growth and likely inflationary pressures, although I'll leave that to the forecast at the time, decision at the time.

In terms of, to look at it from a financial stability perspective, and I'm going to broaden it slightly more which is to say, the government, ultimately parliament, have to make a series of very large trade-offs in crafting any arrangement with the EU 27. One of the considerations is the degree of financial services access and one of the considerations for that is the potential impact on financial stability of, to use the term you used, of being a rule-taker, if there was a form of equivalence which ended up being a rule-taker. So, that's one of many considerations that have to be taken into account. If you narrow it down to the specific consideration, is it better for UK financial stability that, not just the Bank of England but the FCA and the treasury have an ability to set rules in a way that's commensurate with the world's largest and most complex financial system, the answer is yes, but those are trade-offs that are made in a much bigger context. After all, trade-offs as well, that are made as part of a negotiation, so we wouldn't pretend, other than making that observation, we wouldn't pretend to give any advice on the overall landscape.

Gareth Ramsay: Larry and Tim next.

**Larry Elliot, The Guardian:** Larry Elliot of the Guardian. Climate change has been much in the news lately and you've added to that debate by warning companies about the risks of not changing their business models. I just wondered whether you think it's enough for climate change just to be dealt with by the bank's financial policy committee or whether, if climate change is as serious a threat as you say it is, it should also be a matter for the monetary policy committee, too, when it's going into its judgements?

Mark Carney: I didn't catch the last bit, sorry, to assess?

**Larry Elliot, The Guardian:** Whether the MPC should also be considering the impact of climate change when it's making its judgements about interest rates.

**Mark Carney:** Well, let's take the first bit in terms of what the FPC has done. I mean, take note that parliament declared a climate emergency yesterday, as did the Scottish Assembly a few weeks previous, and in many respects, that reinforces the approach that the FPC has taken. The issues, ultimately, for addressing climate change are questions of government policy, public policy, and the responsibility of the bank and of private financial institutions is to be ready for those, to have strategies that are resilient to, not just the physical risks of climate change, but at least over the course of the next several years. For most financial institutions, the bigger issues will be changes in the policy framework. So, to the extent to which climate change, or the policies to address climate change, are tightened, if I can use that terminology, those institutions should be, and the institutions they fund, should be disclosing their exposure to it, their strategies to it, how they manage those risks, how they're

going to seize the opportunities. Particularly for financial institutions and the one that we regulate, they should know how to manage those types of risk and that's why the bank concluded a supervisory statement for banks and insurers and released it two weeks ago. It's why we're looking at scenario analysis and stress testing and a variety of other issues. Okay. So, that's the bigger context and I would say that events of the last several weeks reinforce the importance of that flexibility and that being ready and being able to adjust and thinking about where policy is going as much as where the climate is going, obviously the climate is important but not everybody is exposed on the horizon they have. This issue of horizon brings me to monetary policy. So, for us, we spend a lot of time, and most of the next few years, and the climate issues are relevant from a monetary policy perspective to the extent they impact the forecast, the path of the economy and inflationary pressures over the course of the next few years.

This was a point I tried to make a few years ago and reinforce, which is the tragedy of the horizon is that, when it becomes relevant for monetary policy, it will be too late. That's not to detract at all from the steps that the bank, through the FPC and through the PRA is taking to make sure the system is not just ready to address these issues but is actively managing these issues. Now, I'll finish with this, actively managing means not just managing the risks but actually funding and seizing the opportunities associated with a transition to a low carbon economy. This is an area we spend a lot of time, understandably, talking about shorter-term issues around Brexit and adjustment, but this is an area where the UK really does lead and the city does lead and can extend that leadership and its impact globally.

Mark Carney: Okay. Tim, and the Francine.

**Tim Wallace, The Telegraph:** Tim Wallace of the Telegraph. Governor, there's an interesting box in the inflation report on the mortgage market, says it's a very competitive market so not all of the rises in base rate have been passed onto borrowers in recent years. Also, we know that lots of borrowers have got fixed-rate terms, so they're locked into their current price. As and when the time comes to tighten policy, will interest rates lack power to do what you hope to inflation, given not all of these rates will be passed on and they might be passed on more slowly than they were in the past?

**Mark Carney:** It's an important question. Let me start with the headline and then pass to Dave to talk a bit about what's going on in terms of the transmission of monetary policy. So, the headline is that, what we need to do as a committee is not rely on old models of historic relationships between bank rate and what happens to mortgage rates or other borrowing rates and therefore the economy, but what's happening in present. This is something that's not emphasised in the box, but I'll make it and then pass to Dave. One of the big things that shifted, as people will know, Is that this used to be almost exclusively a floating rate mortgage market, it's moved to predominantly a fixed-rate mortgage market. A lot of it, over the time I've been here. I didn't have anything to do with it, but that's what's happened. That in and of itself changes some of the transmission. You get less of an immediate impact on transition but, as you know, Tim, but I'd like Dave to expand for a bit is, what's highlighted in the box is the shift in funding patterns for the banks and the impact that's having on the transmission of policy because this is an important point, which is why we've tried to highlight it.

**Dave Ramsden:** Just to pick up from where the governor left it, what we've been really flagging, we did this in the February inflation report and we've come back to it here, is that wholesale funding is diminishing as a source of funding. Much more reliance on deposit funding, that share has been rising and, particularly, on site deposits. We're actually at the point where the value of banks' deposits now

exceeds their loans. We've had that cross over. So, there really has been a pretty significant change in funding patterns. You know, we were talking earlier about impact since the crisis. That's been playing out over time, but we've really been highlighting it but, in terms of the transmission mechanism for policy, that remains similar to where it has been in recent years. We don't think that there's been a very significant change in the potency of policy.

Gareth Ramsay: Okay. Francine? At the back, here, in the second row.

**Francine Lacqua, Bloomberg:** Thank you. Governor, the notice basically says, 'Short-term economic data may be providing less of a signal than usual about the medium-term growth outlook,' how should markets interpret it? Are you less data dependent than previously?

**Mark Carney:** Well, I think we, the market, has to look through the reasons for certain data and let me give you two examples. So, one of the experiences, post-referendum which seems to be repeating itself in the present circumstance, is, when we get into situations of extreme uncertainty or highly elevated uncertainty maybe is best, we can have more uncertainty than this but we're highly elevated uncertainty, we have these surveys, particularly the forward-looking surveys. So, if you think of the SIP surveys, other surveys, including some of our agent surveys, they tend to over predict, they have tended to be a bit too pessimistic. So, we have aimed off those surveys. For example, the surveys, Ben, help me out, in the first quarter, I think they would have predicted about .2 growth, we've got .5. current surveys are tracking no growth in the second quarter, we're at .2, and that .2 itself, which brings me to my second point, is influenced by another form of volatility. So, the first thing is around some of the usual relationships between the surveys and what actually happens in the economy, are less tight than they were previously, first thing. Second is that we had expected some volatility because of inventories of the stock building effect. We didn't anticipate, full disclosure here, what we thought was that we'd focus mainly on, the domestic stock building would largely be imported and, therefore, it was probably going to be more of awash for GDP.

We underestimated two things, one, candidly, just the scale of stock building in Europe on the other side, so we have a big export, a ten-year high in exports despite the fact that Europe was basically stagnating at the time and a lot of that appears to be built by stocks or reflect stock building there. Then, also, secondly, domestically, the distribution sector, you have to find a warehouse, you have to get the stocks in place. That seems to have had an effect as well. So, the reason we made the observation before is that we didn't think we would get it, this one, right. It's a pretty large move and it's a pretty unusual circumstance. We also didn't think that it really mattered in terms of the underlying forecast and monetary policy. So, we're signalling those two things in the short-term. Now, that said, for what it's worth, as we sit here today, aiming a bit off the survey, so a little stronger than the surveys, we're saying .2 for the second quarter, recognising that we think there's going to be a give back from stocks and, to be brutally technical, the thing about inventory builds or stock builds. It's the pace at which it builds that is the second derivative. So, even if it builds at the same rate, you don't get a contribution and if it builds at a slightly lower rate, it's a drag. It's a real drag if you actually run down those stocks.

So, anyways, so we think that there's going to be a give back there. If it were the case that the economy were notably stronger in the second quarter, that might be news. It's not that everything is irrelevant, it's just that you have to really look through the underlying data and make the judgements about that.

Gareth Ramsay: Okay, on the right, here, and then just behind.

**Gurpreet Narwan, The Times:** Gurpreet Narwan, the Times. Your business surveys indicated that the proportion of firms that have contingency plans for Brexit has risen but a quarter, nevertheless, said that they don't have any plans in place. Many of them small firms who may be reluctant to commit resources to preparing for scenarios that may or may not arise. Is it really the case that firms are as ready as they can be, or should they be taking advantage of the long extension to getting more ready?

**Mark Carney:** Well, there's a number of firms that have been in that position of being as ready as can be, you know, six months prior to March 29th and more, so they had time but there's limits to what they can do about the economics of an extreme outcome, a no deal, no transition Brexit. I mean, if you source your key components from Europe and you're not going to be able to do that because the trading relationship ends, you're as ready as you can be, but you think, and what the firms are telling us is, on average, they think that their output will go down by about 3.5%. Now, that's not true for every firm but, for some firms, it's quite a substantial factor. So, you are getting that. So, what I would say is, not just from the agent survey but supplemented from the conversations that we have when we go around the country, is that there are some firms that do feel that they've done everything, and they feel ready. There are some firms who are quite confident that they are unaffected and have thought about it, and then there are these other camps which are quite substantial. Some who are small who are, you know, don't have the resources or a sense of what they can do and are hoping for the best, and then others who have done everything they can but think it's going to hurt, and that's the spread. Now, business people will continue to look at this and try to get in a better position for contingencies.

The only other thing I would add, and this is relevant for the small firms, is that some of these preparations are quite expensive and they haven't got the financial space to do them and, even building the stocks that we saw in the first quarter is expensive. It eats up working capital. So, there are limits both to what they can do, but as the governor says, even having done everything they can, that doesn't insulate the firms or, indeed, the economy, from the more extreme Brexit outcomes.

**Tommy Wilkes, Thomson Reuters:** Governor, the financial markets have become a little complacent about the risks of a no deal Brexit? They're certainly pricing at a much lower chance at a no deal Brexit than they were a few months ago. Is there some complacency there, do you think?

**Mark Carney:** I mean, we know the preferences, the express preferences, of parliament as it stands, the express preferences, as I said earlier, of the EU 27, leaders in terms of the decisions that have been taken, express preferences of the government, for a deal, some form of deal. So, we know all of that, but we also know that no deal is the default outcome still on the legislation and we know that, at times, in the run up to March 29th, the probability of no deal was quite significant. The process is not yet concluded and, until it's concluded, there will be a chance of no deal. Now, markets are paid to make those assessments and they will, but it is still there, as I say, as the default option.

Gareth Ramsay: Okay, at the front here and then Philip behind.

**Hans Van Leeuwen, Australian Financial Review:** Hans van Leeuwen from the Australian Financial Review, the point that you've currently landed at on monetary policy, would you say it's broadly aligned or consistent with the place that the FED and the ECB are at now? Is there a consistency across the north Atlantic institutions?

**Mark Carney:** No. I would say we're in quite a different position. I mean, look, every economy, every central bank, every family, I guess, is unique, but we're in a unique position in the sense of there's this very large issue which we've spent most of the afternoon talking about, probably spent

most of the morning talking about as well. That is effecting the economy in quite a significant way. How it's resolved will have a material impact on the outlook and therefore a monetary policy and, maybe I'll just finish and make a reference which is that, two points, one is that there tends to be, historically, there has been a relatively tight correlation between the path of US interest rates, FED policy, and Bank of England policies. It's not lock step, but it's relatively high degree of correlation, .8, .9, depending, .85, probably, and that hasn't held in this cycle, and you can probably think of a pretty good reason why that has been the case. My second point of finish with this, which is to put it within a framework, consistent with the framework we put out last year on the neutral rate of interest, so-called R-STAR, is that we distinguish between medium-term R-STAR and the R-STAR, the neutral rate of interest that's relevant at that point in time and one of the adjustments one would make is a degree of risk premium or uncertainty. So, to be absolutely clear, we think the level consistent with the economy operating at potential inflation remaining at target is lower than it otherwise would be because of the degree of uncertainty. As that uncertainty goes away, if and as it goes away, that means that the neutral rate, the effective relevant neutral rate in this economy, in our judgement and it is the committees judgement, would go up and that would have consequences for policy. Now, that is not something that is facing, to my knowledge at least, either the FED or the ECB.

## Gareth Ramsay: Philip.

**Phillip Inman, The Guardian:** Hi, Phillip Inman from the Guardian. I was interested in your remarks earlier about consumer spending and the impact it's had. Could you tell us where your forecast would be without the rise in consumption above your previous forecast and would you also agree that, without tougher welfare rules forcing people into work and the still high levels of immigration, the economy would be pretty well flat?

**Mark Carney:** Ben, how would you like to take both of those? I mean, it's hard to do the first one because you're taking consumption away without adding anything but, what you could do, sorry, is-, I'll answer the first bit and you can do the difficult bit. What's given in the first bit, we do a forecast decomposition which is relevant to our February forecast. I think I said in my opening remarks, one of the things, I'm just going to repeat this because I'm enjoying this, our forecast was bang in line. GDP grew by as much as we expected in February 2018 to now, but the components were different, and it goes to your question. It was consumption, not consumption plus investment and trade that delivered that, and you can go back into that, I think it's about three quarters of a percentage point difference in terms of the degree of consumption. So, you can subtract that off, all things being equal in terms of the output gap and have lower inflation if consumers had not had the circumstances that they did have. Now, they didn't. they had more strengths.

**Ben Broadbent:** No, I was going to answer it in exactly that way, which is that you have to be very careful about these single things, taking them in isolation without thinking about what would happen over all, and if one particular bit of demand were weaker then it's likely that policy would have been different. We wouldn't have put up interest rates twice. So, we aim to keep the economy growing in line with its potential, pretty much done that over the last couple of years and if any particular bit of demand had been either stronger or weaker, then the path of interest rates over the past would have been weaker and we would still, one hopes, have succeeded in keeping the aggregate closed. So, you might have asked the question a couple of years ago, for example, or indeed last year. Well, 'Look, you forecast business investment's going to grow by 4%,' we know it didn't, it actually declined. We think we've identified the reason for that, and it would therefore have contributed quite a bit less to aggregate demand, but aggregate demand nonetheless grew in line with our forecasts and, if it had

done, if we had the same wage growth, then maybe interest rates would have been higher. Had business investment and consumption grown in line-, so, one has to be careful about plucking these things out and then assuming that nothing else changes.

Gareth Ramsay: Okay. At the front here and then, Adam, at the back.

**Shoga Akagawa, Nikkei:** Thank you. Shoga Akagawa, Japanese Nikkei. As you know, Japanese companies and financial institutions are very cautious about the outcome and development of Brexit because a lot of the Japanese companies have European headquarters here in London. So, what do you want to address in Japan, I mean, next week, in the coming G20 meeting that will be held in Japan, or what do you want to send a message there?

Mark Carney: Well, one of the-, I'm not sure which meeting is next week, G20. I know we're going next month. Yes, next month, thank you, yes. You know, one of the very important issues that the Japanese presidency has put on the table has been market fragmentation, particularly financial market fragmentation, but I think it holds for broader fragmentation of risks of fragmentation in the global economy. So, we have worked with that presidency and continued to work, also, in the G7 to address some of the issues that could cause that fragmentation. One of the most basic goes back to a question earlier from Phil Aldrick, which is about the level of financial market regulation. We have all worked very hard, the Japanese, ourselves, others, have worked hard to raise the standard of global financial market regulation through the G20 and now that we have achieved that standard. We need to observe and make sure others retain it but, also, it means that we can keep our markets open to each other, to the benefit of our citizens and do so in a responsible way. So, that's a big element of that. The second point that we have emphasised on a number of occasions, and it's a related point, which is that the issues around global trade imbalances are not going to be solved by new agreements on goods. They might be helpful to have agreements on good but, in terms of orders of magnitude, they will not materially move the needle on the scale of global trade imbalances because those countries with the largest deficits have a much stronger comparative advantage in the service sector than they do in the goods sector. The United States is the classic example of this, the United Kingdom falls into this camp as well and, so, what's particularly important, not just to reduce fragmentation but to grow global trade and have more inclusive growth, is to make progress on freer trade in services. Thank you.

Gareth Ramsay: Final question at the back.

Adam Linton, RANsquawk: Adam Linton, RANsquawk. Earlier, you did say that if forecasts are right then more heights could potentially be needed than are currently in the curve. Since the prime minister made an extension to the Brexit deadline until, potentially, October 31st, how would you square that comment with that deadline? Is there an opportunity, possibly, to hike, before that deadline and, if so, what green light would you potentially need to get the go ahead to deliver that hike? Or, would you rather wait until October 31st, hopefully have a deal and then proceed thereafter?

**Mark Carney:** I think the way to answer that is this, which is that, if the economy broadly grows consistent with this forecast, performs consistent with this forecast, then this ongoing withdrawal of monetary stimulus at a limited and gradual pace is required to bring inflation sustainably to target and keep it there. That's what 'sustainably' means. Part of the economy involving consistency with the forecast is development still being consistent with, not have to deliver, but being consistent with this core conditioning assumption of a smooth transition to a form of Brexit arrangement which is something around the average. I'll leave it at that. Thank you.

Gareth Ramsay: That concludes the press conference. Thank you very much for coming, everybody. Mark Carney: Thank you.