Bank of England

Inflation Report Q&A
2 November 2017

Kamal Ahmed, BBC: Governor, for many millions of people today, their costs of living will go up. You've got real incomes falling, you've got the economy subdued. For people struggling to make ends meet, can you understand that they simply won't understand why you have decided to raise interest rates today? Sir David, if I could just briefly ask you why you disagree with the Governor.

Mark Carney: The first thing I'd say is that the rate of growth is slower than historic norms, but it's not subdued. I think we have to get used to an economy, after all, this is an economy that is operating with unemployment at a 42 year low, more people in work than ever before. This isn't a false read on the unemployment rate, people are in the labour market, they're working, and the degree of spare capacity in the economy is very limited. So the question about the speed limit of this economy going forward will be increasingly determined by the rate of productivity growth, which, as you know, has been very slow since the crisis, and is expected to be so going forward, even though we have some pick-up but to take a step back, look, what we're doing is easing our foot off the accelerator. This is a modest adjustment in interest rates. It will have an impact on borrowers over time, it will have a more immediate positive impact on savers, in terms of deposit rates. It leaves monetary policy in a position where it still is highly supportive of jobs and activity, and you can expect it to have, in fact, it is the policy that is providing a boost to the economy relative to headwinds from other policies, including fiscal policy, and the uncertainty associated with Brexit. In terms of households financial positions, they have been difficult, as you know, over the course of this year, with the real income squeeze. The worst of that real income squeeze is ending, and this is part of ensuring that it doesn't come back.

In other words, ensuring that inflation returns to that 2% target in a sustainable manner, in a way that supports the economy, in a way that supports keeping people in work and moving forward. In terms of Dave.

Dave Ramsden: Thank you, Governor. All of us are here, as is always the case, to explain the decision that the MPC has taken today. Reflecting our commitment to transparency, you'll see in the minutes that there's a paragraph setting out the high-level view of the two members of the MPC who didn't vote for an increase in Bank Rate. I'll have plenty of opportunities in the coming period to explain in more detail my position, but today is about the MPC's decision.

Phil Aldrick, The Times It's the first rate rise in a decade, but I think the last time there was a rate rise cycle was about fourteen years ago, and I just wondered if, all other things being equal, we don't get any, sort of, surprise negotiation outcomes of Brexit, is this, could we see this as the start of a rate rise cycle?

Mark Carney: Well, the first thing to say is that, as we've stressed in all our communications, in the forecast, I stressed in my opening remarks, our forecast is conditioned on a market curve which has two additional rate increases over the forecast horizon, and we, in fact, need those two additional rate increases in order to get that return of inflation to target. In fact, if you look closely at the forecast, inflation approaches the target, it doesn't quite get there, and the economy is likely to be in a position of excess demand, in other words, running a little hot at that point. So the judgment of the committee has been that that's the right way to balance the trade-off at this point. There's another way to illustrate the point which, I mean, you'd be familiar with Phil, that we release another forecast, which is just one that has a constant rate. Now the constant rate is at the half a percentage point, the rate at which we've just moved Bank Rate, and if you look at that out to two years, inflation is just below 2.5% in the economy, unemployment is less than 4%, the economy is running above its potential rate of growth. I would

remind, and that strikes as a trade-off beyond the tolerance of the MPC, to be clear, I would remind of one other thing, which is that our normal horizon to return inflation to target is 18 to 24 months.

Because we're in exceptional circumstances, because there are these headwinds to the economy because of the real income shock, and uncertainty in other factors, we have stretched out that horizon over which to return inflation to target. If there are limits to the degree that we can do that, and certainly, when the economy is in a position where more people are working than ever before, when there's a very limited spare capacity in companies, and when the speed limit, or the rate of potential growth, rate of productivity, different elements of the same thing, saying the same thing, is quite muted, it does require some recalibration of monetary policy. Last point, at the start, you said an important caveat, which is, 'subject to some major development on Brexit,' and as I said in my opening remarks, and we said in the MPS, if there is resolution of some of the big questions around Brexit, transition deal, deal on the end state, you would expect that to effect how the economy functions. You would expect that to change the economic outlook, and if you have those two components, you would expect some recalibration of monetary policy at that point. Monetary policy has the advantage of being the most nimble of the macro-economic levers. I would caution, though, that the consequences of resolution on Brexit are not, and this is something we've said since before the referendum, are not automatic for the path of inflation. It doesn't necessarily go in one direction.

Hugo Duncan, The Mail. Governor, what impact do you expect this rate hike to have on savings rates? Should banks, building societies and others be passing this on in full to savers?

Mark Carney: Yes, Hugo, we would, and actually, I'll ask Dave maybe to supplement a bit, we do expect it to be passed on. Banks did pass on the cuts to their depositors, and we expect competition to push it in the other direction, and obviously we will watch it closely. I would say, as well, that in terms of the short term dynamics, since there's a lot of fixed-rate debt, fixed-rate mortgage debt as you know, which isn't going to change in the short term because of the Bank Rate increase, and actually most consumer credit is relatively insensitive to the level of Bank Rate, because there is so much spread on top of it. I mean, if credit card fees are in the high teens percentage points, exactly where Bank Rate doesn't make a big difference to it, and of course student loans are unaffected by this, but on the savings side, we would expect to pass through, and Dave, I'll ask you to supplement.

Dave Ramsden: Already, we're seeing that, reflecting what's been happening in markets, that the average rate on fixed-rate saving products has been going up this year. So on one and two year fixed rate bonds, we've seen increases of point two and point four on the rates between January and September this year. So we're already seeing some anticipation.

Ed Conway, Sky News. One of the interesting points that you've talked about is the potential supply growth estimate being at 1.5%, you know, potentially quite a bit below where it would have been previously. Can you explain how much of that is down to long term secular trends, you know, UK productivity trends, and how much of that is a Brexit effect?

Marl Carney: Yes, I'll start and pass to Ben to flesh out. The first point is the big news has, this issue has accumulated since the crisis, as you recognise. A long period of lower investment, a long period of poor process investment, if I can put it that way, poor total factor productivity growth, and what we had, and it didn't really matter for the speed limit of the economy for a period of time because we had so much spare capacity in the labour market. There's a chart in the inflation report, I think at the start of chapter three, which shows that basically, all of the growth had been supported by an increase in labour supply. Well we're getting to that point, not surprising with the unemployment rate at 4.3, with

the participation rate very high, with a shift in a lower rate of net migration, all those factors means there's just much less labour supply come in. So these longer-term factors are starting to bite. Yes, Brexit has-, so that's the biggest part of the story, to be clear, the productivity puzzle is the biggest part of the story. It has been reinforced over the course of the last year by some of the Brexit effects, and they are two-fold. One is just less investment, and I think we've pointed this out in the past, but basically if you look at our May 2016 forecast for investment relative to our August forecast and this one which is broadly the same, it's about an eighteen or so percentage point difference in the level of investment at the terminal point of the forecast, the common terminal point in 2019.

Then the second thing is around total factor productivity, or process investment, and we talk a bit about that in the report. One of the challenges which is just starting to show up, and again, it very much depends on what type of final arrangement is negotiated, is the supply chain effect and some of the knock-on effects on total factor productivity. So we are seeing some of that. I would just reinforce that what we're saying is, I'm going to reinforce that this is reinforcing something that has been there, as opposed to, it's something that's totally new, that just started in last summer.

Ben Broadbent: I'll just flag again the graph that the Governor mentioned, it's on page 22, and it makes pretty clear, I think, how unusual this period is, how much of the growth, almost all of it, over the last decade, since the crisis at least, has come from increasing labour supply, a bit on average hours, mostly employment growth, not from productivity. There has been a period, a ten year period in the UK, when you hadn't had any productivity growth, but you have to go back to some time in the 1860s or 70s to see this. So it's a long-standing trend, it's not unique to the UK, although we've probably felt it more severely than others, right, so productivity growth has slowed in just about every advanced economy since the crisis, but we've had, you know, it's been more severe in this country than others. I think the committee has identified, on top of that, things, as the Governor said, since the referendum that are probably reinforcing that trend, and will continue to, over the next couple of years. One other thing I'll point out, we have not changed that view since August, right, but this is not a new development since August, it's not something we've suddenly done and for that reason decided to raise interest rates. What is clear is that the consequence of this is that unemployment has continued to edge down, and, you know, that is just one sign of the fact that slack in the economy has narrowed. You know, that blue bar in that chart doesn't have much room to contribute on the sort of scale it has done over the last few years.

Jason Douglas, The Wall Street Journal. This increase in Bank Rate is coming at a time when the federal reserve is also raising interest rates, and when the European Bank is signalling that it is going to begin paring back its stimulus in January. I suppose my question is, are we having a bit of a moment in central banks, sort of post-crisis, when people are beginning to move together to withdraw some of this stimulus, and do you feel part of that, or is this really just responding, very much, to the peculiar situation of the United Kingdom? Thank you.

Mark Carney: Well look, the global economy is firing on, I think, we say most cylinders, although I think we need a twelve-cylinder engine to say most cylinders. I mean, it's eleven out of twelve, the global economy is doing very well. I'd just draw your attention to a capital goods chart that is almost off the charts in the report. So it's not surprising that as growth is picking up in a number of jurisdictions, that the stance of policy is changing, and it's not surprising for those economies that are particularly open that it's having some influence. So all of that is there. It creates some possibility, and it's some possibilities of a movement upwards over time in equilibrium rates as well, I've made the point particularly the extent to which this is an investment led, or a heavy investment component to the global recovery. The UK is participating a little less in this global upswing. We are participating in it,

net exports make an important contribution to growth, investment is stronger and it's helped by that global growth. It's not as strong as it normally would be, and we are going through a period, in part caused by the fact that we picked up earlier than Europe, but, you know, I think in part caused by idiosyncratic issues here, it's a relatively unusual period of underperformance for the UK at a time when the global is, at least the G7, is doing as well as it is. So synchronised pick-up globally, it makes sense, everyone obviously bound by their own situations, and we have certain unique elements here that we're grappling with.

Simon Vigar, Five News. A lot of people watching this will be delighted, and maybe a bit surprised, that you think wage growth is going to pick up. Can you explain why you think it's going to?

Mark Carney: Sure. We think a couple of things, I'd make two points on the real income squeeze. So obviously there's two elements to that, one is that inflation coming down, and then the Europe question about wage growth picking up. Let me just be clear on the former, the first element of, we do see inflation going a little higher in October, but then as we get into the turn of the year, some of the base effects, sorry to use that terminology, I just lost your viewers, but we see it easing off in 2018. The question is finishing the job and bringing it back to that 2% target over the right horizon. In terms of wage growth, it starts with a labour market that is tightening. The unemployment point I've made, we do see that a variety of indicators that show greater tightness in the labour market. Vacancies are at elevated levels relative to post-crisis, the level of so-called churn in the job market has picked up quite sharply so people are taking risks, moving to new jobs, moving between firms. That's a healthy development, and in fact, if you adjust for self-employment, which has gone up, it's more-or-less back at pre-crisis averages, so that's a positive development. We see that wages for new hires are notably higher than existing wages, so there is that differentiation, but of course, as more people are moving between firms, it can fill out. There's quite strong survey evidence, and I would single out, particularly, our survey evidence, the survey of the Bank agents.

So a year ago when we were sitting here, the view of our agents, based on the company visits and the surveys that they do, was that wage growth was not going to pick up in 2017, and they were right. It's actually quite an effective survey, and in fact, it is now, the new survey is that wage growth will pick up in 2018. So there are a variety of factors that suggest it. One of the requirements, though, for wage growth picking up, which we shouldn't underestimate, is that productivity picks up as well. One of the reasons why wages have been weak is productivity has been weak, and we do expect some pick-up in productivity associated, not least, with a pick-up of investment and a, sort of, shift between labour and capital. Then the final point is the nature of the jobs that are being created. Part of what we've seen is so-called compositional effects, the nature of jobs have been lower-waged, lower-skilled jobs, or the people who have filled them haven't had the skills yet, and that's had a temporary, we think, a temporary effect on wages. So we do see a pick-up, Simon, it will take, it will gradually build through 2018 into 2019, and the only thing I don't want to mislead is that the rates of wage growth we see towards the end of the forecast are still below historic averages. So we're talking about three and a quarter type percentage point increases in wages, as opposed to north of 4%, which people would have been used to prior to the crisis. Do you want to?

Ben Broadbent: No, I only wanted to say, you know, obviously we've been disappointed by this before, we've said we'd have expected it to pick up in the past, and it hasn't. The main reason for that has been disappointments on productivity. What is true, the MPC still believes, and I think the evidence still clearly suggests, that there is a, kind of, Phillips Curve. You would expect, as the labour market tightens, for that to have some effect on wage growth, and we think we're seeing signs of that. One other point if I may, which comes back to a question of Kamal's, you should be careful about

looking at annual growth numbers, certainly, say, for wages, the latest data we have are what happened to wages between the summer of 2016 and the summer of this year, and then saying, 'Real incomes are still falling'. That's quite a backward looking thing. The worst part of that squeeze was actually in the early part of this year, and right now, if you look at what's happening right now, household incomes in real terms are roughly flat, maybe even edging up slightly, so we think we're past the worst already. Prospects for next year depend, critically, as the Governor said, on productivity again, but given that, we also think there's some effect of narrowing slack on the prospects for wage growth.

Ben Chu, The Independent. Governor, I want to raise the issue of policy mistakes. Ten years ago, when the Bank last raised rates, it had to cut them again within five months. In 2011, when the ECB raised rates, it had to cut them again in an equally short amount of time. If the Bank of England does end up reversing this rate hike over the coming year, how should we think about that? Should we think about that as a nimble response to an unforeseeable or low probability event, or would we be justified in calling what you've done today as a mistake?

Mark Carney: Let me reflect on that for a minute Ben. No, I vote for nimble response, I'll check with my colleagues. Look, I think the way to judge it, so let's talk about the most likely reason for an adjustment in policy in either direction, and I really want to stress that if you take one thing away in either direction, if there is some form of resolution around the big issues around Brexit, either having a transition deal or much greater clarity about the end state. You know, the parties are working hard at the negotiations to solve both of those issues, so when that becomes known, the answers to those questions, almost certainly that is going to have an impact on the way businesses and households think about the future and think about their investment plans, spending plans. It will have, certainly, an impact on a range of financial asset prices, notably the exchange rate, and we, as a committee, will have to step back and assess the new outlook and calibrate policy appropriately. If that's an acceleration in the pace of raising interest rates, because the balance of demand and supply and exchange effects warrant it, that is an appropriate response, nimble, appropriate response. If it requires some more support for the economy, again, because of the mixture of those exchange rates, supply and demand effects and our judgement, that again is a nimble, appropriate response.

That's adjusting to a change, and the way we would suggest to think about it is, we have laid out, as best we can, our framework for adjusting to living in these uncertain times, or these exceptional times, and adjusting policy. Since August of 2016, we have very, you know, clearly laid out how we think about the trade-off. Now there are a series of decisions around that, which started with the initial decision to provide stimulus in the wake of the referendum, including guidance on potential for additional stimulus if the forecast went in a certain direction, or if the out-turns went in a certain direction. Then a series of decisions to hold policy, including at times when the trade-off went in an adverse way, so that inflation had a bigger overshoot farther out, relative to what we were gaining in terms of jobs, and then the decision today about, in effect, the limits of that tolerance for the majority of the committee, which, again, is information about how we would react. Different people are going to have different views about the probability of an agreement, the impact of an agreement on the economy, but they have increasing information about how the MPC will view the trade-offs that are involved, and the calibration of policy accordingly.

Ben Broadbent: Something which, one other statistic worth remembering. We've come from this extraordinary period where we've been up against the lower bound, and so interest rates haven't changed. Go back before the crisis, interest rates used to change, on average, every four months, I think, and the average interval between the last move in one direction and the first in another was maybe seven. So you say in the next year, but, you know, in times before we were at these very lower

levels, these changes weren't uncommon nor were-, and one has to respond to events as they come along, in whichever direction.

Joumanna Bercetche, CNBC. I just wanted to ask whether you've had any discussion about the reinvestments of gilt proceeds. In the past you have alluded to 2% as being a rate where you would probably thing about stopping reinvesting the proceeds. Mr McCafferty has referred to 1% as being more appropriate, and obviously the Fed has started quantitative tightening at 1.25%. So has there been any discussion about this?

Mark Carney: Well I, for the purposes of today, I just leave at the guidance that the MPC gave a few years ago, which is a couple fold. One is that we want to use Bank Rate as the marginal instrument of policy, we would like to be in a position where we could go through, effectively, a conventional rate cycle, which implies Bank Rate being notably higher than where it is today, and that, you know, we've just taken a decision today. I don't want to inadvertently send a signal about something that would be much further down the track, given those first two requirements or principals, if you will, of the MPC's approach.

Larry Elliot, The Guardian. You started your remarks with three questions. Could I ask you a fourth question. Why now? The report doesn't really say there's been material change in the economy since the last one. A lot of the inflation we've seen over the last year has been caused by the one-off impact of sterling's devaluation, which will wash out of the system. As the MPC itself says, there's a lot of Brexit uncertainty affecting the economy in a negative way at the moment, and that uncertainty may well, dissipate over the coming months. So why does the MPC feel the need to do this right now, rather than wait to see what happens in the economy over the next few months? While acknowledging that at some point falling unemployment will actually lead to higher wage growth, you have been saying that for quite a long time and it hasn't really materialised.

Mark Carney: No, and it's, you know, Larry, a couple of things on that last point. One of the things you've seen, and it's detailed in the report, is that unit labour costs have picked up fairly steadily. So even though wages have picked up somewhat, and most of the pick-up is in the surveys, as opposed to in the pay-packet, I recognise that, but, unit labour costs are running just below target consistent levels, because non-wage costs have gone up a bit. Now short term, we think that's going to come off for a variety of reasons, and that's detailed in the report, it's flagged in the report, but you do see some build, and again, we can, I mean, Ben if he wants can go on a bit about that. Let's go to your, you know, the premise, one of the premises of your questions, which is things haven't really changed. First, we have, as a committee, and at slightly different speeds and slightly different degrees as the individuals, as you would expect, because people have a slightly different view of the economy, as a committee, have been moving towards the limits of our tolerance of the-, as the trade-off has diminished. I'll remind again, our job, effectively, is to get inflation to get back to target in an 18 to 24 month horizon, that's the normal horizon. We stretched it out to three years, and even then had an overshoot, because we didn't want to take a risk with jobs and activity at a time, under these exceptional circumstances, because a large part of that overshoot caused by sterling, and that was a fundamentally driven move in the currency.

Once that trade-off goes away, I mean, once it diminishes, and it's almost gone, the justification for an inflation targeting central bank to continue to overshoot, to continue to miss its target, three years out, disappears, unless you have a view of the economy that is going to re-emerge for some reason. The committee has flagged the limits to its tolerance. Some members started voting to raise interest rates a few meetings ago. We flagged again, in August, that we felt that the accumulated evidence about the

slower rate of potential growth, we flagged in September that if the economy continued to perform roughly like the August forecast that we felt it would be appropriate, given that the trade-off would have largely gone, that it would be appropriate to withdraw some stimulus. What's happened since August is the economy, if anything, has performed slightly better than our forecast in August. So it's not really a surprise, and on the waiting point, you can always wait, but you have to have the discipline, ultimately, of the target, and if you're deviating from the target, you have to get something for it, and we have stretched in order to get quite a bit for it. 325,000 jobs, supporting growth, supported by other factors, but to repeat myself, as you get to the end of that trade-off, you're not getting anything to it except for missing your target farther out, and I'll finish with this, which, as we go into Brexit, we want people to rely on two things out of the Bank of England.

One, 'I'm not going to have to worry about inflation, because it's going to be around that 2%,' and we will do what's necessary, and only what's necessary, to get it to 2% and support the economy while we do it and 'I can rely on the core of the financial system, the banks are going to be resilient and healthy,' which is the subject of a press conference here in about four weeks, when we release our stress test. They have lots of other things to think about, businesses have lots of other reorientation to do, there are opportunities, there's risks, all that. Households, you know, could be worried, but these two things, we've got to deliver, and waiting doesn't, in this case, in the judgement of the MPC, the best collective judgement of the MPC, doesn't deliver that.

Lucy Meakin, Bloomberg News. I just wondered, are you comfortable with the current market pricing for future rate hikes that you mentioned was part of the forecast?

Mark Carney: Well, it, so to repeat a bit of what I said earlier, which is that we condition our forecast on the average curve that went into the forecast, which had, effectively, two rate hikes, two additional rate hikes over the course of the next three years. Using that, and with all other factors, we see inflation approaching the target, staying a little above at three years, and I'll reference what I just said to Larry, in that regard, and the economy running a little above its potential rate of growth. So broad brush, it gets you roughly where you want to be, but there may be some difference of view on that in the fullness of time. Then the second thing, what clearly doesn't get us back to appropriate management of the trade-off is, arguably, illustrated by the constant rate forecast, which leaves inflation notably, or well materially above target, and the economy in excess demand.

Chris Giles, The Financial Times. Perhaps the biggest reason for the rate hike you've explained today is the very low supply capacity of the UK economy, the potential growth rate of 1.5%. This is really quite an outlier among independent forecasters. The independent forecasters are about 1.9%, the OBR is significantly higher. What do you have to say to people like Boris Johnson who say, 'You're just a pessimist, you're not being optimistic enough about the UK economy,' or Jacob Rees-Mogg, who would say, 'You're an enemy of Brexit, and you're doing this out of spite?'

Mark Carney: The first thing, let's not personalise it, okay? So I'm going to ignore the last bit of your question, so this is not a message to any specific individuals. The message to the people of the United Kingdom is that the Bank of England, the MPC, is doing its job, which is to bring inflation sustainably back to target while supporting jobs and activity in this time. So we recognise that people are going through a real income squeeze, it's starting to ease off, the worst of it is easing off and it's starting to turn, as Ben Broadbent mentioned a moment ago, and we don't want it coming back. So we don't want inflation, we want inflation coming back to that 2% target in a sustainable way, and that is going to help make Brexit a success, as is making sure, and again, it's a subject for another day, but as is making sure that the core of the financial system is resilient to any potential Brexit outcome. So both of those

things work in the direction of what people would expect, which is that we're working, we're focussed, on making Brexit, our contribution to making Brexit a success, whatever deal in terms of transition or end state is negotiated between the UK and the European Union. In terms of potential growth, I'll turn to Ben to go through the details, but the one thing, just on a high level, I know you know this Chris, is that the labour supply, we're running out of road on labour supply.

I mean, unemployment as, again, very low participation rate, very high net migration, less than previously, you know, notably less than previously. There's just less labour to come into the market. It all turns on productivity. I think you'll find that our productivity forecast is not that dissimilar from the OBR's in terms of, the OBR's new productivity forecast which came out, well, you'll know better than I, in the last month. We have that recovery in productivity over the forecast, albeit not to historic averages, but that's, in our judgements, quite prudent, having been persistently disappointed on productivity, number one. Number two, recognising lower investment that is happening in the economy relative to what would be needed to materially move it up. Number three, from company visits and surveys and other aspects, recognising that some of these challenges, in terms of the reorientation of activity from Europe to rest of world, the early stages of that are weighing a bit, but Ben.

Ben Broadbent: Can I just begin by saying, I don't think we should pick out one reason alone. What matters, in a very broad sense, is demand growth, relative to supply. So you could just as easily describe this as, you know, we've had some positive news over the last year, certainly, on consumer spending, investment has been weaker than it otherwise would have been without Brexit uncertainties, but has still grown. The rest of the world, perhaps most, you know, just as importantly, has seen a really marked pick-up in growth, certainly on a UK-weighted basis, it's very strong, and all that has helped the UK, relative to a position where we've got sluggish productivity growth, so it's a two-sided thing. Secondly, as the Governor emphasised earlier on, this is a longstanding trend in productivity growth, it's not new. Even our near-term forecasts on productivity have not changed in the last three months, they're pretty much identical to where they were in August. I don't know what others are forecasting, I haven't seen a quote, a consensus number on trend growth. It may be that some of the differences involve labour supply. Our forecasts on labour supply are pretty transparent, we take the population growth estimates and the migration growth forecasts from the ONS, and the consequences flow through for overall supply growth. Lastly, just to remember on those productivity growth forecasts, they do involve faster growth over the next two or three years than we have seen for many years in the recent past. So I don't think they're exaggeratedly low, and nor are they new.

Harry Daniels, LiveSquawk News. Is the MPC fundamentally split on its view about the future path for monetary policy, or is it just a matter of time before the MPC becomes one and decides to move as one as a group? Just with that in mind, you've had some arch doves come across to vote for a hike today, and therefore they obviously see something, you guys obviously see something that you see continuing into the new year. So is it just a matter of time before the whole committee just says, 'Okay, this is now the time to raise again?'

Mark Carney: Well it's an impossible question to answer because, you know, we just took a decision, and every member of the MPC weighed in on the merits. I would emphasise that, and it is noted in the minutes, that those who felt that now wasn't the time to raise interest rates started from a position where they shared the exact same framework as everyone else, as on the MPC. Not just, obviously, in terms of the 2% inflation target and the remit, but that the core issue is thinking about this trade-off and optimising this trade-off, given we're in exceptional circumstances. The differences in opinion which you would expect with nine individuals looking at a complex economy, are based on different views on

the economic outlook, and some of the relationships in those economies, and wanting, in some cases, more information in order to make those judgements. As Dave said earlier, they'll have opportunity to go into that in more detail, so I wouldn't want to predict. In the end, the framework is the same, and we're going to be in exceptional circumstances for, you know, a period of time, certainly until there's clear resolution of the future relationship, and even then, maybe longer than that, given the scale of some of the adjustments that may be required in the economy. What's important is that people understand what we're trying to achieve, the, sort of, collective limits of tolerance in terms of that trade-off for the committee.

Then different people will have different views on where the economy is going, the balance of supply, demand, exchange rate, and monetary policy decisions will flow from that. That way, people observing the bank and people who are sitting on the committee can make their decisions. I'll make one last point which just relates to the last thing that Ben said to Chris's question. Which is, and this is an important point, is that one of the things that we had expected and hadn't fully seen in the data, but we're seeing in discussions with companies and in surveys, was that there would be some rotation of the components of demand over the course of this year, away from consumption, and greater weight on net exports and investment particularly. That is now showing up in the hard data, it is corroborating what we had thought we had been seeing on the ground, and that is a very positive development, because it means the economy is operating, it's not operating on one engine, it's operating on multiple engines, and corporate balance sheets are in good shape. As long as we have access to markets, those, you know, the export performance can continue. So that also plays into, obviously, our outlook and the decision in reasons why we think the economy has momentum relative to its growth of potential.

Tim Wallace, The Daily Telegraph. Governor, can you tell us what needs to be done to boost the economy's productive capacity, and if there's any hints you've got for other policy makers on what they could do to help, what they could do to help smooth that, and push the economy onto the right path?

Mark Carney: Interesting. Shift that one over.

Ben Broadbent: Not easy to answer. If you go back, when I mentioned that period back in whenever it was, 1860s, 1870s, when we last had a decade of no productivity growth, I mean, even 150 years later, so far as I can see, economic historians are still squabbling about what caused that. So the idea that we can diagnose it and cure it in real time right now is maybe too much of an ask. As it happens, when people talk about that period, they talk about the, sort of, pause between two big technologies. It wasn't anything to do with government policy. We were moving away from steam to electricity. I only say that because it's not evident that policy makers, wherever they are, can flick a switch and change this. If you ask most economists, they'd talk about, you know, sensible tax regimes, openness to the rest of the world, healthy public sector investment, good education. All these things, presumably, will help, but that's not the same thing as saying there is some policy switch that we can flick and give us back, immediately, that, kind of, 2% growth rates of productivity we enjoyed for so many years before the crisis.

Mark Carney: At the last point on it, the last time we had a decade of negative real income growth was exactly that period, the 1860s, and so there is a corollary there, and I think Ben's point, which is implicit, which is that it does require, you know, sustained effort on a variety of fronts. All those issues, obviously, as you know, Tim, are away from the Bank. All we can do is, you know, price stability, financial stability, those are foundational, but the big issues are for others.

Richard Barley, The Wall Street Journal. Governor, you've mentioned exchange rate effects a few times. Could you talk a little bit about how the MPC is thinking about this, particularly in light of, as Jason mentioned, global shifts in monetary policy that appear to be affecting exchange rates, and the UK's large current account deficit? How much of an influence is Sterling having in your thinking?

Mark Carney: In our thinking of what?

Richard Barley: In terms of how you're responding in terms of interest rates. So if interest rates elsewhere are going up, is the UK, to an extent, going with the flow?

Mark Carney: No. The issue, the core, I don't want to get super drawn on exchange rates. The core issue which we've been addressing since the start of last year, of 2016, when the referendum, it became apparent that there was going to be a referendum, has been the depreciation of Sterling, which is the market's judgement of a real income shock. It's that fact, that it's a fundamentally driven move, by and large, you know, directionally, by a fundamentally driven move, which puts us in a position where we have been thinking about this trade-off and moving beyond.

Eric Albert, Le Monde. You've explained today's increase as a fairly straightforward decision related to your inflation remit. I was wondering, how much of a more long-term factor is there, also, in the fact that we've just been through ten years of incredibly low interest rates, it was necessary, obviously, but it had drawbacks as well, possibly asset bubbles, savers being, also, suffering from that. The question I have to you is, how much do you think the benefits of the low interest rate period is now slowly outweighed by the drawbacks of that?

Mark Carney: No, in aggregate of benefits of running appropriate policy clearly outweighing drawbacks, drawbacks can be addressed by other policy instruments, whether they are distributional. Although I would make a note here that actually, over the course of, since the crisis, for example, since quantitative easing was introduced in the United Kingdom, inequality, both on an income and wealth basis, has gone down in the United Kingdom, not up, on a quintile basis. On top of that, there's been 2.5 million more people put into work, which is, of course, the biggest contributor to improving distributions. There are issues, there certainly are issues that can emerge in the financial sector because of low interest rates, because of complacency around low interest rates. We have, at this institution, a range of other policies and powers to influence those. We are the regulator of the banks, we have macro-prudential tools, which we have deployed, and they are better targeted to some of the side effects. We need to be held to account, obviously, to those, but swinging interest rates to address those issues, and having an economy that's not operating at its potential, having more people out of work, having inflation too low over time, at a time when there are still relatively high debts in the economy, not only is just off mandate, off remit, but it's counter-productive.

Cat Contiguglia, Politico. I wanted to ask, so you've made it clear how, if something good happens with Brexit, like, we reach a transition deal or we understand what's going to be the next step, that would be taken into account by the Bank and possibly change the policy and outlook. How bad do things have to be for you to take that into account? In October, we didn't get sufficient progress, but as far as I understand, that didn't impact the bank's assumptions on Brexit, so if, by December, for example, we don't get anything, will that then be taken into account?

Mark Carney: Yes, well thanks for the question. What matters, whether it's good or bad, is ultimately how it effects what businesses and households in the UK, how they react to it. So in general, Brexit is, for UK businesses, in general, there is a substantial proportion of those businesses, it depends on your

survey, but let's call it something a little less than 50%. Something material, sort of, 40% to 50% of UK businesses are affected by Brexit, and about half of those feel that it's a material effect, so it's materially affecting their plans, and that shows up in the aggregate numbers now, as we had long expected. Those businesses, in general, they are anticipating, ultimately, an agreement. They are not managing to the absence of an agreement, they are anticipating some form of transition. They're not managing to the absence of transition, in general. There are exceptions, but in general, that is the case. So it's, I say that to, sort of, ground my answer, which is that what matters to us is what people thing is going to happen, and how they react to it. So a little more progress, or a little less progress, will matter for the economy to the extent to which people change their attitudes, and change their spending plans, both positively and negative, on supply and on demand. At some point, obviously, between now and the expiration of Article 50, there will be some form of agreement, or not, I suppose, but some form agreement on both transition and on end state.

At that point, it is likely to be a focal point for people to stop, reassess, recalibrate, move forward, ideally, with some plans that have been delayed or deferred, and then we would take that into account. So things changing on the margin, I mean, we obviously track it, but it's not us sitting there handicapping a deal, it's what agents, if I can use that term, businesses and households in the economy think, expect and how they react, and so our forecast has those reactions in there, as people are behaving today.

Adam Linton, RANsquawk. So my initial question was relatively similar to the one we've just had, but a lot of media focus, generally, kind of, focuses on X amount of thousand job losses we could see in the financial sector. So in terms of you giving yourself a framework for determining how you could adjust your policy, could it be argued that ultimately, the banking sector, they could eventually run out of patience at some point, and at that point, that could be the catalyst for you to possibly act?

Mark Carney: For us to act in what regard, sorry?

Adam Linton: In terms of, as in, pre-empt the fallouts of any potential economic shock from deterioration of Brexit scenarios.

Mark Carney: No, for it to have a material macro-effect, as important as the financial sector is, it would have to be more broadly across a range of sectors in order to, in my judgement, in order to have a big enough effect on the economic outlook that would influence policy because as important as the financial sector is, this is, we're talking about the European component of the business in the financial sector. I would add as well, if I may, just, so the detailed point of explanation, which is that that number, which is, you know, not a Bank number, it's a consultancy number, but it's, in our view, it's a plausible, possible number in the fullness of time, and very much in the fullness of time. It would require no future agreement with the European Union for financial services, and would require a series of supervisory decisions made both in the continent and here in order for that to take place. So something like that is fairly far off the horizon, certainly from a monetary policy perspective. It's not something we are sitting here, as the MPC, highly focussed on exactly what's happening, you know, quarter-by-quarter, week-by-week with banks' business plans. FPC, a little more so, but not the MPC.

Gareth Ramsay: That's all we have time for ladies and gentlemen, thank you very much.