



Select Committee on Economic Affairs

Corrected oral evidence: The Governor of the Bank of England

Tuesday 25 October 2016

3.35 pm

[Watch the meeting](#)

Members present: Lord Hollick (The Chairman); Baroness Bowles of Berkhamsted; Lord Burns; Lord Forsyth of Drumlean; Lord Kerr of Kinlochard; Lord Lamont of Lerwick; Lord Layard; Lord Livermore; Lord Sharkey; Lord Turnbull; Baroness Wheatcroft.

Evidence Session No. 1

Heard in Public

Questions 1 - 13

Witness

[I](#): Dr Mark Carney, Governor, Bank of England.

Examination of witness

Dr Mark Carney.

Q1 The Chairman: Governor, good afternoon. Welcome to the House of Lords Economic Affairs Committee. Quite a lot has changed since we last met in April. We all want to explore those changes, your responses to them and your general view of the changed economic and financial circumstances we are in.

I will start by talking about the rising tide of commentary on the policies of the Bank. The Prime Minister made a statement at the Conservative Party conference highlighting the impact of super-low interest rates and quantitative easing on savers. That has been followed up by comments from Lord Hague and Mr Gove, both calling into question the independence of—or the case for preserving independence for—central banks and the Bank of England in particular. What is your response to this rising tide of commentary from the side-lines? How do you think it impacts on the way in which markets see the relationship between the Bank and the Government? How do you think they see it impacting generally on monetary policy?

Dr Mark Carney: Thank you, Chairman. At the outset, could I distinguish between the comments of the Prime Minister and the other comments that you referenced? I know that you were not giving an exhaustive list of other comments. There is always extensive commentary on the Bank.

I entirely agree with the spirit of the Prime Minister's comments. She was drawing attention, in the context of a broader speech, to a couple of issues. The first is that of rising degrees of inequality, of various forms, that have developed in the country—and in advanced economies more broadly—and the need to address some distributional consequences. That is rightly the role of government. She set out there—and has elsewhere—some initiatives that her Government intends to follow to address some of those distributional issues, to have a more inclusive model for growth. I think that the phrase is "a Britain that works for all".

The second is recognising that monetary policy cannot do it all. The policies of the Government are not monetary policies. They are structural policies, fiscal policies, incomes policies, social policies and a range of other policies, which rightfully address these broader issues. Monetary policy in most advanced economies, this one included, has for some time been the principal vehicle, if not the sole vehicle, for providing stimulus and support for adjustment—initially following the financial crisis and subsequently following other shocks to the economy. In the case of the UK, those have principally been negative shocks coming from the European Union. Monetary policy has been in many respects overburdened in providing support to the economy.

Again, the Government has signalled some resetting of the relative burden between monetary, fiscal and other policy. That is welcome. However, with respect to the conduct of those other policies, it is entirely

the decision of the Government, not the Bank of England. The Bank of England's job is to take the sum of both the Government's policies here and shocks from abroad and to conduct monetary policy in fulfilment of its remit.

I will now shift to the more general point: what can monetary policy do and what can it not do? With respect to what it cannot do, I intimated a bit of that at the start of my answer. It cannot deliver prosperity. It cannot change the path of the economy in the medium and long term. It will not make a fundamental difference to the level of productivity in a positive sense; it could in a negative sense if it were mismanaged. The big decisions that will impact on prosperity in the United Kingdom are, first, decisions of broader government and, ultimately, decisions of the private sector in response to the broader shape of policy.

What monetary policy can do, and what the Bank of England more broadly must do, is fulfil our remits. Our remits are for monetary and financial stability. Monetary stability is defined by Parliament. The price stability mandate was defined by Parliament in 1997 and has been reconfirmed in subsequent revisions of the Bank of England Act, including the most recent one, defining price stability, which was passed by the House of Lords and went to Royal Assent in the past year. On an annual basis, the Government, through a remit letter from the Chancellor, defines exactly what that means and provides more colour, if you will, around it. The current remit from the Chancellor is 2% CPI inflation, with a recognition that the timeframe over which the Bank would return inflation sustainably to 2% can be varied, depending on the shocks facing the economy. However, it is incumbent on the Bank to identify those trade-offs, the shocks, what measures it is taking to return inflation to target in a timely way and, in effect, to explain.

One of the great innovations in monetary policy has been an innovation of the United Kingdom in setting up this framework, where Parliament, which is sovereign, decides what the Bank should do—achieve price stability—the Government of the day defines what price stability is, in their eyes, including any flexibilities around that, and operational independence is given to an independent committee of, in the case of the Bank of England, nine individuals, individually accountable, to make the decisions on how to achieve that remit. That process has stood the test of time. It is the process that the Bank of England is following. If it were to be called into question, one would expect to see the emergence of a risk premium around a range of UK assets. It would be most prominent around the currency, in gilt markets and in inflation expectations, but we have no reason to expect that. Markets should have no reason to expect that. The framework is there, and there is no debate in Parliament about changing it. If the remit were ever changed—if the goal of the Bank of England were ever adjusted by legislative means—the Bank of England, specifically the Monetary Policy Committee, would discharge that remit.

The Chairman: You draw a quite important distinction between the remit, which is passed by Parliament, and comments that are made by

individual Members of Parliament. Do you feel that there is any consequence of the comments that have been made by parliamentarians about potential problems and concerns around the independence of the Bank of England? Has that fed through into any anxiety in markets?

Dr Mark Carney: Markets have taken note of some of the comments, but there is no consequence of those comments for what matters, which is how the individual members of the MPC will discharge their responsibilities. We are very clear on what our remit is. Unless it is changed by Parliament, we have an obligation to discharge it. We will conduct monetary policy to return inflation sustainably to the 2% target. I am sure that we will have an opportunity to discuss the specifics of the current situation in the United Kingdom, but we have a responsibility to do that, we will discharge it and we will use the instruments at our disposal in order to achieve that.

Q2 The Chairman: You acknowledge the Prime Minister's concerns about, shall we say, the regressive adverse impact of monetary policy and quantitative easing. Is there any monetary policy initiative that you could take to assist the Government in their objective of helping out those who have lost out over the last few years?

Dr Mark Carney: Let me begin by noting the following. Since quantitative easing was first introduced in this economy in 2009 by my predecessor and by predecessors on the MPC, 2.6 million jobs have been created, GDP is up by 16% and per capita income is up by 9%. That is following a trough in economy. All that is certainly not due to quantitative easing, but the stance of monetary policy has supported the UK economy during a difficult period of adjustment.

The second thing to say is that, as in any economic circumstance—whether it is a positive period of growth, as I have just described, or a more difficult period—different pockets of society and different groups of people will benefit in different ways. In general, it is fair to say that during the period that I have just described, 2009 to 2016, most in this economy have benefited. Some have benefited much more than others, but regressive—whether there has been regression—is a different concept. The employment performance here is without parallel in the major economies. Again, it is not just because of monetary policy, but monetary policy, in combination with financial reform and other policies, has supported this economy during a period when on average fiscal policy was subtracting around 1 percentage point per annum from growth. It is better to be in a job than not. It is better to have income than not. It is obviously better still to have assets that have increased in value. However, we recognise that those who have worked hard, have set aside money and rely on savings have seen much lower returns than they ever have previously, and for a much longer period.

The Chairman: Do you have sympathy with Andrew Sentance's view that there is a case for changing the Bank's inflation target to make life easier for savers and pensioners?

Dr Mark Carney: I am not familiar with the specifics of Mr Sentance's view on changing the inflation target. I would say that to target a specific group—a subset of the economy—is not consistent with the overall approach of supporting the greatest prosperity for the largest number of people, which is the contribution that monetary policy can make.

The other day, my colleague Ben Broadbent drew attention to the fact that there is not one group of people who are savers and another group of people who are asset holders. By the way, there is a very big group of people who have debts and no assets in this economy, partly as a legacy of the previous crisis. About 2% of people in this economy have savings of over £5,000 and do not have a home or other financial assets. That does not support the idea that there are these two groups against each other in contradiction.

Furthermore, we are in a position, and have been for some time, where in respect of the long-term returns to pensions—which ultimately are a claim on this economy, given where the vast, vast majority of their assets are held—monetary policy, supporting this economy through a period of adjustment, does contribute to pensioners. The bigger issue for pensions has been the relative underperformance of equity and other risky assets relative to the stance of longer-term interest rates. That, in turn, is a product of a lower expectation for productivity in this and other major economies that has been in place since the financial crisis.

Lord Lamont of Lerwick: Governor, it is good to hear you say that you sympathise with people who are saving. If you will forgive my saying so, perhaps you have to say that. However, it is a bit of a contrast with what some of the deputy governors have said. Andy Haldane said that people should buy a house, rather than have a pension. When Charlie Bean was the deputy governor, he said that people should spend, not save. That seems to be what the policy is aimed at. I do not know whether you would endorse those remarks.

Dr Mark Carney: No. If you want a yes/no answer, I do not endorse either remark. There is a role for pensions. As you know, the vast majority of people in this country do not have a defined benefit pension plan. They have to set aside money through ISAs or other mechanisms in order to save for themselves, or they become reliant on the hard assets that they have, such as a house. However, there is an absolutely vital and central role for pension savings for the individual and for society. We can talk more broadly about the societal benefits of that. There is a role and value to prudent personal financial management—the ability to save.

It is undoubtedly frustrating to be entering a decade when interest rates have been so very low. However, we have to step back and ask why they are so low. Is this a caprice of central banks? Have we just decided for fun to have interest rates low? Are we ignoring our mandate to achieve the 2% inflation target, or are there broader forces that have shifted the level of equilibrium interest rates—the level of interest rates at which, as you will know, the economy is at full employment and inflation is low, stable and predictably positive? All the evidence suggests that the level of

equilibrium interest rates has fallen quite sharply over decades—most notably over the past decade, post-financial crisis.

To loop back to where you started, yes, I absolutely have sympathy. Yes, I understand the frustration. To go back to Lord Hollick's initial question, our contribution is to focus on our remit—to try to get this economy in a position where inflation is where it needs to be—and then to move forward.

Baroness Wheatcroft: Can I take you back to the Prime Minister's comments? You said that you did not take issue with her desire to create a Britain that works for everyone. However, what she said was that monetary policy had been a very effective emergency measure. She went on to say, "A change has got to come". It is very hard to read that part of her speech without interpreting it to mean, "A change has got to come in monetary policy". Do you think that is what she meant?

Dr Mark Carney: No, I do not. As I recall, one of the tag lines in the speech was, "A change has got to come". That appeared in a variety of places across the speech.

How do we get out of this situation? Let me broaden the question, because it is relevant both to the speech—the Government's policy—and to what we are discussing more broadly. How do we get out of a situation where the right level of interest rates—the level of interest rates in order to achieve the 2% inflation target—is very low, either just positive or, once one takes quantitative easing and other policies into account, effectively negative interest rate? I am not saying that we would have a negative bank rate, but that is the effect of combining the bank rate and quantitative easing, at these levels.

We have to shift the balance, in effect, of savings and investment in this economy, first and foremost, but since we are one of the most open economies in the world we are also affected by broader forces, so that has to happen more broadly. There are big tectonic forces that are moving this, from the overhang of debt to demographics and, partly, distribution of income.

To my understanding, increasing investment in the United Kingdom—both public investment and other policies that would support private investment—is the policy of the Government. Reducing uncertainty, whether it is about our monetary institutions and our financial system, both of which are things we can talk about directly, or about our future trading relationships—all those factors—also boosts investment and reduces relative savings. Again, that would push up on interest rates, in a real sense. That is my point—real interest rates, not the Bank of England coming to work one day and deciding, "Let's try something different. We will just push up interest rates", because there is some parallel universe in which we can have higher interest rates, higher growth, higher incomes and lower unemployment, it will all come together and we will still be able to achieve our inflation target.

My point, Baroness Wheatcroft, is that I interpret the Prime Minister's commentary and the broader policies of the Government as being aimed at other things—as being aimed directly at people, businesses and the prosperity of the country but they have the potential consequence of shifting the balance of investment and savings and of raising interest rates—the interest rate at which this economy is in equilibrium. That means people in work, the economy growing and inflation at target. In that world, the appropriate level of bank rate, in a nominal sense, is higher.

Baroness Wheatcroft: That sounds like a very desirable world. How long do you think it will take us to get there, given the increased uncertainty, rather than the lack of it, that we are in now?

Dr Mark Carney: We have to take away the uncertainties that we can at this stage. It is useful to have this discussion on the monetary policy framework. In the end, unless Parliament changes its mind, the framework is the framework. It is there, it has worked, it is tried and true, the Government are committed to it, the MPC knows what it is supposed to do and we will do our job. We fully understand, if not necessarily welcome, criticism of how we are doing our job—how we are trying to get to that inflation target—as opposed to whether we should be doing it.

We can remove those uncertainties. We think that the Bank should have removed uncertainties about the financial system—whether it could withstand a shock such as a surprise result, which it did, and whether credit is available. We have reduced the countercyclical buffer, so we have raised more credit for the system. Again, we have reduced that uncertainty. With time, as the Government prosecutes its discussions with the EU, those uncertainties will reduce. Those are all the things under our collective control. In the broader global economy, unfortunately, there are broader forces—broader uncertainties—that may take longer to dissipate, but if we focus on what we can control it can make a difference.

The Chairman: One of the uncertainties is your own plans after 2018: will he stay or will he go? What are the factors that you will take into account as you come up to your decision at Christmas?

Dr Mark Carney: Thank you for asking. First, I want to find some time to reflect on it. To be absolutely clear, it is an entirely personal decision. No one should read anything into that decision as regards government policy—actual, imagined, potential, past, et cetera. It is an absolute privilege for me to have this role. I fully recognise that. Like everyone, I have personal circumstances that I have to manage. This is a role that requires total attention and devotion. I intend to give that for as long as I can. Those are the only factors.

The Chairman: Thank you for making that clear.

Q3 **Lord Forsyth of Drumlean:** Governor, when you came to our

Committee six months ago, in April, I asked you whether you agreed with the then Chancellor when he said that Brexit would result in higher mortgages. In your answer, you suggested that indeed bank rates might have to go up. In fact, you said that if we were in a scenario where we had “lower GDP and higher inflation—a combination of a variety of factors”, that would “have implications for the path of the bank rate—in other words, a higher bank rate”. We have voted for Brexit, but you have cut interest rates. What happened between April and now?

Dr Mark Carney: I recall the exchange and subsequent communication by the MPC, both prior and subsequent to the referendum, that laid out that the stance on monetary policy would be the product of three main forces: supply, demand and the exchange rate. They are obviously interrelated. The future path of supply of the economy can affect the path of the exchange rate. Demand is ultimately affected by the longer-term rate of growth of the economy—in other words, where supply is going. The balance of those three forces over the monetary policy horizon would affect the path of policy.

What we said as an MPC, in the spirit of the answer that I gave you, was that the monetary policy decision was not automatic. In other words, there were scenarios where movements in the exchange rate could have been large enough, and the balance of where demand and supply in the economy were going could have been tight enough, that the appropriate response would have been to tighten monetary policy, in order to be consistent with a sustainable return of inflation to target. A preferable dynamic is one that has transpired, where the initial movement in the exchange rate and the balance of expected supply and demand, in some period of adjustment while the new relationship with Europe and the rest of the world is put in place, is consistent with an ability of the Bank to provide some more stimulus, alongside the financial measures that we took around the countercyclical buffer and on top of the contingency planning measures that we took and put in place, so that the combination of those can provide support to the economy during a period of adjustment.

That stimulus has its limits. It is not without limit. The balance of supply and demand and the exchange rate can shift. We are not a targeter of the exchange rate—we are a targeter of inflation—but we are not indifferent to the level of the exchange rate. In recent weeks, we have seen a fairly substantial move in the exchange rate that to some extent appears to be related to an adjustment in market perceptions to that balance of supply and demand in the future. When I say “the future”, I do not mean the medium or longer term, I do not mean the ultimate level of productivity growth and prosperity in the United Kingdom—but over the monetary policy horizon. We have to take that into account as a committee. It underscores the point that we made as a committee prior to the referendum and is consistent with the exchange that you and I had—that monetary policy is not uniformly as accommodative in all scenarios following the referendum.

Lord Forsyth of Drumlean: I should declare an interest, as chairman of

a bank. You have cut interest rates. The expectation in the United States is that the path for interest rates will be upwards. Has that not had the effect of depressing the exchange rate of the pound versus the dollar? You made a speech the other day in which you talked about the impact of inflation and its effect on the poor, and suggested that you might overshoot your target—a target that you have consistently missed. You say that it is important to have this framework, with a target that is set by Parliament, but the Bank has consistently failed to meet it.

Dr Mark Carney: There are several points in there. With respect to the exchange rate, in early August, the Bank introduced a comprehensive package of easing measures. There were four elements to that package. On the day, sterling barely moved. The market had full information about what we did. We released all the transcripts and all the analysis. We had a press conference. The market fully understood. We surprised the market with the scale and breadth of what we did. The gilt curve rallies, but sterling barely moves.

When does sterling really start to move? It starts to move as the timing of the Article 50 triggering becomes clearer and because of the markets' perception—I really underscore that this is the markets' perception—of what the potential relationship between the United Kingdom and Europe will be. It is a bit early to make those determinations, because the Prime Minister has been very clear that we will pursue an orderly Brexit, that we will get the best deal possible, that there have been no negotiations thus far and that there is no running commentary on the specifics. It is a perception of the market, but it is a perception that it has made.

That perception, to go back to your previous question, influences a perception of where the supply potential of this economy will be in the next few years—in the immediate aftermath. As I have tried to make clear—I will be blunt about it—that perception may well be mistaken. What we have to address and to take into account as a committee is where sterling is and how persistent that is likely to be. These things are never exclusive, but I would suggest that the 6.5% move in the currency in the last few weeks—since, effectively, the series of speeches at the Conservative Party conference—has largely been driven by a market perception of a fundamental factor, not a shift in the stance of monetary policy. In fact, the market perception of the stance of monetary policy over that period has been to remove—again, in the market's view—the prospect of an additional rate cut by the Bank of England.

To come back to the US dollar, which you referenced—again, I am quoting the market back to itself, so there is no information in this for the market—there has been an increased perception in the market of the likelihood that the Fed will raise interest rates by the end of the year. The probability was 60% earlier this week. That has contributed to generalised dollar strength, so there is an element of that. However, if you look at the way in which sterling has performed, it is more about that perception of the really fundamental factor, which is necessarily going to move around as this process proceeds.

There are two other points that I would like to make. By the way, I did not give a speech. I was at a town hall meeting with people in Nottingham, and I responded to a question. My response was not new information. The inflation report of the Bank of England, published in August, had an overshoot of inflation in years 2 and 3, rising up to just under 2.5%.

Lord Forsyth of Drumlean: I was just making the general point that you have consistently failed to meet the 2% target.

Dr Mark Carney: It varied by quarter, but imported disinflation was always somewhere between two-thirds and four-fifths of the explanation for the undershoot of inflation we have been living with over the last 18 months. There have been huge moves in oil and commodity prices. Those moves are now starting to come out, which is why inflation is back at 1%.

I am trying to come to an important point, which is about the judgment that the MPC has to make. We see this rise in inflation, above the inflation target, in years 2 and 3. I am going back to the August forecast. In our judgment, all the overshoot will be the product of the depreciation in sterling in the first half of this year. Exchange rate pass-through takes time to work through this economy. All the overshoot is there. The judgment that the MPC has to make, following the remit letter from the Chancellor, is, "How quickly do we return inflation to target?" In other words, should we raise interest rates in August, in order to have inflation back at the magic 2% and then have it fall below 2% beyond that, because we are offsetting—not looking through—a rise in the exchange rate? Should we do that, at the cost of jobs and income for the economy and more difficult adjustment, or is it the wiser course of action to look through at least that exchange rate move and to provide stimulus to help the economy to adjust during a period of uncertainty? In the view of every single individually accountable member of the MPC, it was the right course of action to provide stimulus at that point.

Q4 **Lord Forsyth of Drumlean:** Can I ask you one more question, on a different subject? I am sure that you have seen the comments by the chief executive of the British Bankers' Association, Anthony Browne, which have been widely reported. Have you seen any evidence that banks' hands are "quivering over the relocate button"?

Dr Mark Carney: That is dramatic. As the host supervisor for all the major globally systemic banks, all of which are resident here, we are aware of the contingency plans that are in varying stages of readiness at these institutions. There are some institutions who would be in a position to adjust some activities over the course of the next year, if they saw fit.

Lord Forsyth of Drumlean: He said, "Many smaller banks plan to start relocations before Christmas; bigger banks are expected to start in the first quarter of next year". Do you think that is responsible commentary by the British Bankers' Association?

Dr Mark Carney: I will say this: there are varying degrees of uncertainty—genuine uncertainty about the future arrangements—among these institutions. This is taking place in an environment where profitability is challenged in many of those segments, particularly in wholesale banking. You will be familiar with that. Different institutions have different risk tolerances, so some may take decisions earlier than is warranted. These are decisions for the Government and, ultimately, decisions taken in the context of a much bigger set of arrangements with Europe. I would stress that there is a range of possible arrangements with Europe that would make the continuation of current activities here very sensible for a very wide range of institutions, so it would be precipitate to take those decisions.

The Chairman: Lord Turnbull, you want to come in briefly here.

Lord Turnbull: The next time you see Anthony Browne, you should tell him to be more careful with his use of words and to make the proper distinction between banks relocating and banks relocating some of their functions. He has given the impression that banks will move. I think that is an exaggeration.

Dr Mark Carney: Well—

Lord Forsyth of Drumlean: Say yes.

Lord Turnbull: In private.

Dr Mark Carney: Yes—why do I not keep private advice between myself and the chair of the BBA?

You are absolutely right. There is a range of functions, some of which will potentially be more affected than others. It entirely depends on the arrangements that are put in place and on any transition to those new arrangements. It is still early days. It is welcome that all the issues around passporting, equivalence, business models, ecosystems and the agglomeration effect are discussed, but discussed is different from deciding.

Lord Kerr of Kinlochard: You have talked about potential arrangements that might reduce these risks. Is the market perception of the likelihood of such arrangements greater or less following the Birmingham speeches and the Prime Minister's Statement this week, after the European Council, that "our laws" will be "made not in Brussels but here in this Parliament, and that the judges interpreting those laws will sit not in Luxembourg but in courts right here in Britain"? There is a certain amount of concrete being poured on feet, in ways that may make it more difficult to achieve the kinds of arrangements that you may have in mind.

Dr Mark Carney: Perhaps I could cite the Secretary of State for Exiting the European Union, who said last week—I believe it was in the House—that the Government will seek the best possible agreement for the financial services sector, and in a broader answer, which detailed the

importance of that sector not just in the City of London, as you know, but across the country, particularly in Scotland.

There are models that are entirely consistent with the repatriation of powers and judicial oversight. They are models that could rely on existing and prospective equivalence mechanisms in European legislation. Baroness Bowles will be familiar with all this in detail; you will be as well, obviously. In many respects, those equivalence mechanisms are untested. The most important, MiFID II, is not yet in force. In other respects, as others have commented, equivalence is something that is given and can also be taken away, unless other protections and mechanisms are put around it.

There are a number of reasons why it is reasonable to expect that this will be given serious consideration in the European Union. Those include the fact that, from the start, we are equivalent. We have exactly the same rules. The great repeal Bill will leave us with exactly the same rules. That is the first point. Secondly, they know us as supervisors. We are all in the same supervisory colleges. They know our actions. We—I am not including myself but the PRA and the FCA—have the greatest experience in the world of supervising large, complex financial institutions. We are the host to all the G-SIBs and most of the cross-border flows, so the expertise is here as well. In some respects, we are super-equivalent, if you will. We are certainly equivalent, to start.

On top of that—I am speaking about the evolution of the global financial system more broadly—for some time we have looked for this type of approach through the FSB and the G20. In other words, we are not going to come to an open, global and resilient financial system by having everyone applying exactly the same rules, in exactly the same way, with exactly the same supervisors. That is, we are not going to have a supranational treaty for the financial system. That has not been the evolution; it will not be the way it works. However, we are going through a series of processes to agree high global standards across a wide range of areas and then to apply those standards in a way that is a form of equivalence or substituted compliance, to use the American term. That is the way forward for the global financial system.

We have an opportunity that has a number of economic reasons behind it, for Europe as well as the United Kingdom—it would be in everyone's interests for us to come to this agreement—to put this in place. We start equivalent, we know each other as regulators and we have the sophistication here. We can work through an arrangement for wholesale financial services that draws on existing legislation, with which you are familiar. With respect to asset management, we would expect just to be treated the same as other third countries, particularly as regards portfolio delegation. That is the core of a potential model. It is part of a much bigger discussion and much bigger trade-offs that others have to make.

Lord Kerr of Kinlochard: I understand that, Governor. You are clearly correct when you say that one starts equivalent, but how does one maintain equivalence, over a dynamic analysis, if the Prime Minister is

clear that the rules will be made here—in this town—and nowhere else? How do you operate in a system if you are saying, “We do not respect the umpire. We will bring our own umpire”? Is that likely to cause your colleagues, the central bank governors, to advise the Finance Ministers that the desirable situation that you describe is viable? Are the Finance Ministers not likely to let political considerations intrude?

Dr Mark Carney: I will try to be brief. The first thing is that one looks to minimum international standards. There is a variety of ways in which those standards are peer-reviewed, including by the FSB, as well as the IMF. First off, you should have those minimum standards.

The second thing is an issue for broader discussion. Under any trade and investment agreement, there is some dispute resolution mechanism—some ultimate resolution mechanism that applies to the jurisdiction of both, but is outside the national and, in this case, the European jurisdiction. You know that better than I. It would not be appropriate in a trade agreement to have something that was unique to the United Kingdom or unique to the European Union making the final determination on that. However, I would start with the standards and the peer review.

My next point brings us back squarely to the remit of the Bank of England. One of the points that we made a year ago, when we did our report on the Bank and the European Union, was that because the UK system is what it is—the most complex, the biggest relative to the economy and the most important, by orders of magnitude, in Europe and, to some extent, the world—for the purposes of financial stability, we need the flexibility to go a bit further sometimes and to adjust regulations in a way that helps to protect the domestic economy from the scale of the financial sector. Ultimately, it is Parliament’s decision, but we would not want to have our hands tied and to import ad infinitum rules that were made elsewhere.

Q5 Lord Sharkey: I would like to ask a broader question about the City of London. Can anything be done to increase the chances that the City will remain the pre-eminent financial centre in Europe post-Brexit? When you last appeared before us, you appeared to think that that was not possible. Do you still think that?

Dr Mark Carney: I think I was asked specifically whether it would be the pre-eminent international financial centre.

Lord Sharkey: Or “a pre-eminent”.

Dr Mark Carney: I am not sure that one can be “a pre-eminent”.

Lord Sharkey: Precisely.

Dr Mark Carney: The question about Europe follows on well from the discussion that we have just had. We start from a position where it is far and away Europe’s financial centre. Four hundred thousand people work in London. The next largest, on a generous count, is Paris, with 150,000 in financial services. There is the infrastructure that is here, from

commercial real estate to derivatives and other infrastructure. There are the associated business services, which are almost of the same order of magnitude. There is the rule of law and the experience. All those factors stay. We start with all those advantages. The economics and geography are pretty strong.

Lord Sharkey: Can I press you on that? Are we entirely certain that it would stay? For example, Bloomberg reports that global investment banks in London expect France and Germany to prevail in the tussle over the clearing of \$570 billion of euro derivatives. The London Clearing House says that we stand to lose 100,000 jobs if that happens, as well as £17 billion in saved regulatory capital.

Dr Mark Carney: Without a doubt, one area of discussion will be the issues around central counterparties. There are huge economies of scale and scope in central clearing. There are points where one could see a bigger move of that activity. Whether all the associated derivatives activities and the financing associated with those derivatives will necessarily follow is a point to be debated. I know from personal experience, from my former role as Governor of the Bank of Canada, that one does not have to clear one's own currency in one's own jurisdiction. While I was governor, we made a positive decision for Canadian dollar clearing to migrate to London, because the economies of scale and scope of having it cleared through LCH—in interest rates, for example—were such that, ultimately, that was a net benefit to Canadian corporations.

Lord Sharkey: Are you suggesting that the rump of the European Union, after we have left, would make the same decision?

Dr Mark Carney: These are facts on the ground. The vast proportion of euro clearing is in London.

Lord Sharkey: Yes—now.

Dr Mark Carney: I absolutely understand. I am distressingly familiar with the issue; let us put it that way. It is an issue in a broader discussion. I understand that it has absolutely entered the political realm.

I will come back to your broader question—how do we retain its position? The first thing—again, from our perspective—is that we retain world-class regulation and supervision. That is an attribute. It helps to do our core job, which is to protect the real economy and to ensure that the entire UK economy gets the benefit of having the City of London, but it is also a competitive advantage. It is not a race for the bottom; it is about having the best world-class regulation and supervision appropriately applied.

The second, which is an issue for broader government but also the private sector, is to ensure that, to the extent possible, the flows of non-euro activity—for example, renminbi flows—continue to come through and to grow in London, because that adds to the economics of the business here and has a knock-on benefit in lowering financing costs and better execution for other parts, including in Europe.

The third is what Lord Kerr and I were just discussing—coming to some sort of arrangement, if that is appropriate within the trade-offs of a broader agreement. That is not our job at all, from the Bank of England's perspective. However, it should be technically possible—and is highly desirable, from a global financial stability and efficiency perspective—to come to a broader agreement for equivalence in certain aspects of wholesale finance. In my view, that is in the interests of all associated parties.

The facts on the ground matter a lot. Yes, some business would migrate. Reinforcing the economics of the business by continuing to grow London's cross-border activities elsewhere—which the City is going to do anyway, whether we get there or not—maintaining regulation and working on equivalence will be the building blocks.

Lord Lamont of Lerwick: Governor, can I come back to the question of QE? Everybody would agree that QE played a useful role in 2008. The question is, how long is this going to go on, and is it still very effective? Surely one has to balance the stimulus effect against the distortions, which are becoming larger and larger—in housing, in asset prices going up, in pension deficits and, above all, in the bond market. You have now extended into buying corporate bonds as well—high-yielding share dividends. We have also had the effect that some companies are now beginning to cut dividends in order to fund pension deficits—in other words, not only are distant liabilities being altered but ones in the present-day world, now. My concern is that the distortions are so great, particularly in the bond market, that this will only end in tears and in the long run is a threat to stability.

Dr Mark Carney: I do not share that view, I am afraid. Before I talk about QE in more detail, be clear that the package that the MPC put in place in August had four elements to it. Part of the reason was to provide stimulus through different channels but also to show that the Bank would not rely slavishly on QE if additional stimulus were required. In other words, we had a range of options.

What has generally been observed with quantitative easing programmes is that subsequent ones, after the launch of QE, have had less of an impact on asset prices and ultimately, through time, on activity. This announcement—in part, because it was part of a package—had as large an impact as any QE programme that the Bank of England has undertaken. In its impact and the stimulus that it is imparting to the economy, it is prospectively quite powerful—again, as part of a package—at a time when, in the judgment of the MPC, the economy can use that additional stimulus. For example, it is one of the reasons why fixed-rate mortgages have fallen, as well as floating-rate mortgages.

We are mindful of the side-effects of QE. We looked at and discussed with the Financial Policy Committee impacts on pension funds and on insurance companies. As you know, we are the regulator of insurance companies, so we have direct line of sight to that. We looked at the impact of our potential rate cut on the net interest margins, the

profitability and the business model of banks and particularly building societies—mortgage banks—in order to satisfy ourselves that in all those cases, individually and in total, the sum of the side-effects did not outweigh the positives. From our perspective, the case was very strong, in order to provide stimulus. That is why we have pursued it.

With respect to pension funds, the challenge that the defined benefit pension fund industry is facing is as much a product of the return of equities relative to discount rates—in other words, the fact that the equity performance has lagged where real yields have gone globally. It is part of a broader phenomenon.

Lord Lamont of Lerwick: A broader phenomenon that is influenced by QE, broadly.

Dr Mark Carney: It is a question of whether you think that QE is what is causing global interest rates to be as low as they are or whether you think that QE is responding to real factors in the global economy that have pushed down global equilibrium interest rates, and that in tandem those have meant underperformance in relative terms of equities and other real assets. The evidence points to the latter.

It is consistent with two things. This is not unique to the United Kingdom, but it is relevant to the United Kingdom. First, pessimism about future growth prospects relative to historical rates is quite high. Expectations of future growth have steadily come down, after serial disappointments. Secondly, concerns about risks—let us call them risks in the global economy—are quite elevated. The constellation of asset prices is consistent with a low-growth environment, with downside risks. That is true of the United States, it is true of Europe, and unfortunately for the moment it is true of the United Kingdom as well.

We have a very strong financial system, which has proven itself through a few shocks. We have a flexible economy. We have an ability to provide stimulus, which we have done. We have a series of structural reforms that will come into play, at a minimum, as a consequence of the negotiation of our new arrangement with Europe and the follow-on implications of that. With time, all those factors should support a reflation of the economy.

Lord Lamont of Lerwick: QE has been described by some people as a mixture of fiscal and monetary policy. People say that it is in a grey area, because the Government have to give a guarantee. Bill White, whom I am sure you know—I cannot remember whether he was at BIS or the OECD—has said that because of this, essentially, the independence of central banks has already gone. That may be truer of the Bank of Japan than of other central banks. At the Bank of Japan, it looks like the third arrow is carried out by the central bank. But if the Treasury has to approve each tranche of QE, surely independence is compromised, something of a fiction, something of a halfway house. I cannot believe that, when it approves each tranche, the Treasury does not take some view on whether or not the QE is appropriate.

Dr Mark Carney: First off, you are right. By the way, Bill White is ex-BIS, ex-Bank of Canada and now retired.

Lord Lamont of Lerwick: Yes. I know that he is “ex”.

Dr Mark Carney: The system here, because of the balance sheet of the Bank of England, is that the Treasury provides, if it so chooses, an indemnity to the Bank of England. However, the decision is made by the MPC, based on what it thinks is the appropriate stance of monetary policy. The Treasury makes a decision independently of that.

Obviously, on behalf of the MPC, I have to explain to the Chancellor the rationale behind the MPC’s thinking. Before the Chancellor puts the balance sheet of the country behind the purchase of part of the balance sheet of the country, if you will, he or she will want to be satisfied of that rationale. However, I cannot conceive of a circumstance where the MPC would choose to pursue additional QE if it were not in the best interests of achieving its remit—nor, in those circumstances, can I conceive of one where the Chancellor would not provide that indemnity. That is a decision of the Chancellor and the Government of the day, but I refer you to the comments that the current Chancellor made earlier this afternoon.

Lord Lamont of Lerwick: Why are you buying corporate bonds now? You have extended. You are exposing yourself to a risk and distorting the market. You could be affecting equity prices as well. If the company gets into trouble, you are exposed.

Dr Mark Carney: We are buying corporate bonds to provide a different channel of stimulus. In part, we are buying corporate bonds because it is a more powerful channel of stimulus, pound for pound, than QE. To be very clear, we are not distorting the market in respect of the allocation of credit. I am not saying that you suggested that, but I want to take the opportunity to be clear that we are buying neutrally across the non-financial issuance in the sterling corporate market of companies that make a material contribution to this economy.

Lord Lamont of Lerwick: McDonald’s.

Dr Mark Carney: There are a number of people employed by it. This is a serious point. McDonald’s funds restaurants that a number of people work at. There is a supply chain that is in the UK. This is the UK economy. That is what we are supporting.

In doing that, we have contributed to a tightening of spreads in the corporate market. That is a good thing, because ultimately it is passed on into the economy. We have also encouraged greater issuance in that corporate market—again, of companies that are active here. Issuance in sterling went up sixfold relative to past in August. September has been a similarly robust month. We are bringing issuance back into that market, which frees up the balance sheet of banks for lending to small and medium-sized enterprises and households in the UK. That is why we are doing it. It changes the spread and the all-in cost to corporates in that

market. It supports the asset prices for the asset holders of those corporate bonds, which include pension funds in this country and, importantly, insurance companies—something we took into account when making this determination.

It also provides stimulus. That is why we are doing it. If we did not think that we needed the stimulus, we would not do it. However, we let the market make the allocation decision about which utility, restaurant, business or widget maker can issue. They have to be able to issue in the market, as we buy only in the secondary market.

Q6 Lord Burns: Chairman, could I declare an interest? I am an adviser to Banco Santander. Governor, this morning I was at a conference to honour Charles Goodhart on the occasion of his 80th birthday. There were two issues that seemed to me to be quite prominent. One was the whole issue of macroprudential policy. The other was the issue of forward guidance.

On macroprudential policies, do you think there is any further scope to support the present situation? Presumably some of the things that you did in August, which you have mentioned once or twice today, might fall into that category. However, my impression is that, when people talk about macroprudential policy, most of it seems to be directed towards the occasions when there may be a bubble emerging, rather than the present situation, where we seem to be beleaguered in a low growth situation.

On forward guidance, do you feel that it has much to offer in the next phase, or have you come to the view that there is just too much uncertainty around to be able to use it? At the discussion I was involved in, there was quite a lot of scepticism about whether it might have any impact.

Dr Mark Carney: I wish I had been there; I would have learnt a lot. I always learn a lot when Charles is speaking.

Bill White is one of the fathers of macroprudential policy. As you can appreciate, it has to go both ways. It is no good just shutting down activity. It is targeted less at asset price bubbles, if I can be that precise, than at excessive build-up of leverage in certain sectors and across the macroeconomy and the follow-on consequences you have from all that. It has to be used in those circumstances, when there are concerns. As you know, the Financial Policy Committee of the Bank of England has done so with respect to housing, with the portfolio limits on mortgage lending, around loan-to-income ratios and on stressed interest rates.

The crudest instrument, if you will, of macroprudential policy is the countercyclical capital buffer. That has been put in place and is in legislation. We have to make a decision quarterly, as the FPC, on the optimal setting of the countercyclical buffer. Its purpose is to add a layer of resilience to the system when risks are building, which can then be drawn upon as risks either crystallise or fade.

I keep talking about equilibrium. In the world where this economy was in relative equilibrium, the FPC would expect the countercyclical buffer to be around 1%—an additional layer of capital. We were starting to build up to that level earlier this year. In the immediate aftermath of the referendum, we took the decision to remove it. To gross it up to the highest level, that provided around £150 billion of additional lending capacity from across the banking sector. For reference—I am sure you know this—net lending in the economy in 2015 was about £60 billion, so it is a considerable additional potential capacity to lend.

That should remove—and, I think, has removed—any uncertainty about whether we are having a rerun of 2008, 2009, 2010 and 2011, when the banking sector was constrained because it needed to build further capital. However, we have a responsibility with regard to how that lending capacity is used and will do our best to discharge it. We have a responsibility to ensure that it is not concentrated in certain sectors—in high and risky mortgage lending. We will adjust other macroprudential tools, if need be.

Lord Burns: What about forward guidance?

Dr Mark Carney: In my view, it is particularly useful in certain circumstances. It is useful in the exit from unconventional policy. We first put it in place in the United Kingdom at the time when the recovery was just starting. The pace of the recovery was such that, on the historical reaction function—if I can use that term with you—of the Bank of England, the MPC would have raised interest rates a few times in the first year of that recovery, given its strength. Our judgment was that it did not need to. We did not want the market to pull a rate rise forward unnecessarily or to have people thinking that; that is why we put in place state-contingent forward guidance. That proved right with respect to the underlying performance of inflation. There is always noise around that, but, with respect to where core inflation went, it proved the right call.

The second time that we put forward guidance in place was as that finished. We said something that now sounds incredibly banal but was very precise forward guidance about the overall level of interest rates and the pace of interest rate reductions if the recovery continued: that they would be limited, that they would be gradual and that they would proceed to a limited extent. We have now been banging on about this for three years. Our view was that real equilibrium interest rates were very low and were unlikely to rise very rapidly, globally or in the UK, so the level of interest rates that this economy could sustain would be low for quite some time. People can dispute a decision there, a word there or a phrase there, but we can see that the stance of monetary policy, given the path of inflation—most notably core inflation, if we strip out the ups and downs of the oil market and food prices—has been entirely consistent with that forward guidance, which is still in place.

We have also provided guidance on the unwind of QE, when that comes, and what agents can expect will happen there. The current circumstance does not fall into any of those situations.

Q7 Lord Turnbull: In 1992, my two colleagues on my left and I were on deck in the Treasury. We do not often remind ourselves of that. One of the key diagnoses at the time was that policy needed to be rebalanced—that monetary policy was too tight and fiscal policy was too loose. Over the subsequent months and in Budgets, action was taken. I believe that it was extremely successful as a piece of policy. The question that arises now is: are we really at the inverse of that, where monetary policy is currently too loose and fiscal policy is too tight, and should we be rebalancing in the other direction? The first question is: do you accept that premise?

Secondly, in 1992, both halves of this policy were still within the control of the Chancellor of the Exchequer. That is not the case now. If we wanted to make such a switch, how would you bring it about without infringing your independence?

Dr Mark Carney: Perhaps I will answer the second part first. As monetary authorities, we take fiscal policy as given. As you all know, it takes longer to adjust fiscal policy than to adjust monetary policy. Although we meet only eight times a year—in 1997, it was 12—we could make a decision tomorrow to adjust monetary policy, if the need presented itself. On a regularly scheduled basis, we can make it eight times a year.

As you know far better than I, the process of truly adjusting fiscal policy—not just proposing a Budget, but legislating and passing it—is much slower. It is the Stackelberg leader, if I can descend into economics; I can with this crowd. What fiscal policy does, monetary policy optimises around it. One would go about it by understanding the Government's fiscal stance, which we will understand quickly after the next Budget is put in place, taking it into account and adjusting policy accordingly.

Is it appropriate for any governor and any Chancellor in any major economy to have an ongoing conversation in private about how the economy is and the economy's relative stance, so that there is a common understanding of stances? Yes. In my view, that is part of our responsibility. That is not infringing on the independence of the MPC or dictating what fiscal policy should be; it is what senior policymakers should do, and do do, in the best circumstance. Then they go back and take their own decisions. The fiscal decisions will be entirely the province of the Government, and the MPC will respond accordingly.

Lord Turnbull: You can still have a view that you could manage monetary policy better if the fiscal policy were different.

Dr Mark Carney: In part, it goes back to the conversation that we had earlier and my answer to Baroness Wheatcroft. It is possible to have a better balance between monetary, fiscal and structural policy. We have to recognise, as you do, that we are going through a period of structural reform in this economy. The changing nature of the relationship with Europe and the follow-on implications of that for relationships abroad are

structural reforms. Policy has to take that into account. How will the reforms affect productivity and the supply potential of the economy? How will that affect uncertainty and demand today? Who can support demand through that period? What is the best balance between fiscal measures and monetary measures? Should it all be on one or the other? No, it should not. But, again, from an MPC and a Bank perspective, we are absolutely a taker in this discussion. These are the decisions of the Government.

Lord Turnbull: Part of the narrative that we have been fed over the last five years is that debt ultimately impoverishes us. At a time when the Government could borrow for decades at next to nothing and there are opportunities to invest that in assets, surely the Government can improve not just the debt-to-GDP ratio but the net balance sheet—which is the true measure—of the nation by taking advantage of ultra-low interest rates. The old narrative is possibly getting in the way.

Dr Mark Carney: In my previous life, I spent five years as a Second Permanent Secretary of the Canadian Treasury. In that time, I prepared just under 10 budgets. As you know, in fiscal policy one has to be careful about what is a temporary boost versus what gets baked into the system.

I agree in a broad macroeconomic sense with the calculation that you implicitly made: that given the interest rate, the relative return on the project does not have to be that high for the net return to the fisc to be positive, through ultimate tax revenue and other revenues. There is an asset alongside that, in your depiction. The challenge is turning that macro-observation into actual spending decisions and doing them in a way that is appropriately calibrated and not permanent. The nature of it, of course, is that sometimes it becomes permanent. To go back to where I started and where I would like safely to rest, that is why all these difficult decisions are decisions of the Chancellor, first, and then the Government. Then we optimise around that.

Lord Turnbull: This is the final question from me. We took some evidence—it was really a briefing session—on new technologies in the payment system. I know that people in the Bank have put a lot of effort into that. Looking quite a long way ahead, what difference do you think those technologies could make to the configuration of banking and its location?

Dr Mark Carney: We are looking at new payment technologies on several levels. We are looking at distributed ledger technology as a potential long-term—I underscore “long-term”—replacement for elements of large-value payments and potentially the system as a whole. Elements of security settlements or other aspects could have substantial efficiencies and capital savings as a consequence, because of derisking for that process. There could be capital savings for the bank, which gives a locational advantage of using the service.

I suspect that you are probably talking about retail, but I will start with wholesale. The consequence of doing that, if it were done properly, would

be to build some redundancy into the system, so it would meet our standards of resilience. As you can appreciate, for something like that there need to be 5-sigma levels of resilience. We are looking at that ourselves, with some in the private sector and with other major central banks. I would not say that anything on it is imminent, but it is potentially quite disruptive, in the true sense of the word, for the organisation of the back offices of a variety of institutions. The jury is still very much out on whether ultimately it will meet all the standards.

On retail payment technologies, what we are trying and intending to do, as we announced in June, is to make it easier for alternative payment providers to have access to the existing large-value payment system, so that in effect they are not reliant on another institution—another bank—to get that access and avoid the reseller problem, if I can make an analogy to telecom. From that point on, it becomes a question of what they do with that advantage to provide a different service to individuals. I find it a bit difficult to predict. For location, in its true sense—its regulatory and its accountability sense—of actual banking activity, I do not see that we would relax our location requirements for retail banking in the United Kingdom, to ensure that individuals have the protections that they would expect.

The Chairman: We must move on.

Q8 Baroness Bowles of Berkhamsted: We can now have a slight change of subject. A few moments ago, when you were talking about the countercyclical buffer, you said that you had let it out. I must congratulate you on that, because when we were negotiating it the lobby said that supervisors would never let anything out. I had better declare my interests as a director of the London Stock Exchange and a member of the group's regulatory advisory committee.

In part of your description of the countercyclical buffer, you said that it usefully gave a signal that now banks were not being constrained by having to raise lots of capital, as had been the case in the relatively recent past—that we had got over that hump, perhaps. However, we have some revisions—the so-called Basel IV—coming along. There is quite a lot of controversy about that in Europe. In the first instance, how is it likely to affect the capital position of UK banks?

Dr Mark Carney: First off, it is important—I know that you know this—that we look at these reforms as the last element of Basel III. I say and stress that because it is one of the reasons why we at the Bank of England have very strongly made the point, joined by others, that we should expect “no significant increase in capital requirements”—all those words are important—for the system as a whole. That does not mean that individual banks may not see increases in their capital, but the system as a whole should not.

The reason we say that—others can judge whether it is right—is that we decided the overall level of capital for the system when we set up Basel III as a whole. This is about fixing a very real problem, which is excessive

variance in the risk weights in internal models. In other words—you know this but just for clarity—banks can either use standardised models, where things are set, just as they stand, or have internal models that allow them to vary, in some cases, both the probability of default and the loss given default, based on their experience with certain types of borrowers, whether it is in real estate, sovereigns, large corporates or mortgages.

We have discovered that the system has been abused by some institutions. To give you a sense of it, there can be a difference of 13 times in the range of modelled outcome for sovereigns—it is about three times for large corporates—when there is no appreciable difference in the riskiness of those assets. There is obviously a difference in the riskiness of a certain sovereign versus another one, but there can be this huge variance in how banks model exactly the same sovereign.

The approach is to go in for a series of asset classes and say, “Okay, these are not suited to being modelled internally. There is too much abuse. We will make them standardised”. For other asset classes, where there is a true core competence of a bank—mortgage lending, for example, or small and medium-sized enterprise lending, where they can build experience and have different outcomes—and they can show that they can model these risks better than a standardised model, we should allow them to do it to a certain extent. Part of what we are negotiating is: to what extent? Is there a floor under that model? That process is proceeding.

I go back to the high level—the issue of “no significant capital increase”. You asked about UK banks specifically. In our view, the consultation paper that came out of the Basel committee at the start of the summer, which the banks will have reacted to, had some flaws in its approach. One of the core recommendations in the consultation paper had the effect of substantially increasing the capital for so-called operational risk. It used up many times over the capital budget that could have been used to fix this excessive variance problem on something else—operational risk. In effect, that is very difficult to model. In our view, it is best addressed as a supervisory add-on. In the UK, we have very significant supervisory add-ons for operational risk, such as conduct risk, under something called pillars 2A and 2B. We do not need a model coming out of Basel to tell us how to do it. In fact, if you have a model for something like that, it is very pro-cyclical.

We expect that element of the original package to be taken off the table, effectively, or—I should be clearer—it should be substantially reduced, so that the supervisory discretion is back with the home supervisor. In our view, that is the right outcome. However, the core of what will be in the final package will address the issue that motivated all this, which is excessive variance. It will take out the ability of banks to model certain things, where they do not have unique expertise, permit them to continue to do so in certain areas—most importantly, small and medium-sized enterprises, mortgages and elements of commercial real estate—where they have that expertise, and adjust the standardised models.

I will make one final point. The sum of these reforms, in my expectation and the institutions' expectations, is likely to be to reduce the gap between the risk that is modelled through an internal model—the bank's own model—and that which is used under a standardised approach. As most challenger banks, small banks and others use a standardised approach, from a competitive perspective, it will improve the competitive position of challenger banks.

Baroness Bowles of Berkhamsted: I understand what you are saying, but those using internal models are big and their capital is going up, whereas the smaller banks on standard models are smaller and theirs is staying the same. However, I am cheered by what you said about the pillar 2 requirements.

Moving on from that, there seems to be a much greater resistance in the EU to messing with the internal models, if I can put it in that way. It would not be the first time that the EU had decided to rebel against what Basel had done. Indeed, you helped me to do it on some occasions, with trade finance and CVA charges. However, as well as going against this stronger approach on internal models, the EU now seems to be concerned about the full implementation of the next stable funding ratio.

I will not go into all the details on that, but if it turns out to be the case that the EU is going light on these things, that will again leave us in a more super-equivalent position, which many accept, to some extent. If we fast-forward to Brexit, when we will be in a position where we are not constrained/protected by being in the EU, will we want to look again at how we deal with branches of banks in the UK? That question is triggered partly by a comment that you made to the Treasury Select Committee in September, when you said that the modelling of the economy was on the basis of us being less open. I wonder how you feel that might extend into financial services—or not.

Dr Mark Carney: Can I make two points? First, supervisors have been aware of these model adjustments and deficiencies for some time, which is why this exercise is under way. What we have done in the UK, which has been done to some extent and to varying degrees in other jurisdictions—I must say that there is nothing like Basel for clearing the room—is adjust in other capital add-ons in pillar 2A, because of some of these model deficiencies. We are hoping that as a consequence of this—we will do it only if we get it—the improvements to the system in the base calculation will be such that it will be much more transparent what capital the bank has. In other words, it will come out of pillar 2A and go into base capital, because the risk weights will be properly calculated. As a supervisor, we adjust for the improper calculations—

Baroness Bowles of Berkhamsted: So that the investors can see it, which is an important point.

Dr Mark Carney: Yes. They can see it more directly and ascribe it.

Part of why we want to have a global fix is that it is less transparent for investors, as well as for other supervisors. There is the level playing field issue. The relative comfort that one has regarding the appropriate capitalisation of institutions is also important. It will not surprise you that I do not want to give up on the Basel process. I think that we are making progress. We have made significant progress on this in the last six weeks. People are engaged at the right level, they know the issues and they recognise that, if we are having a global fix and had a problem with outlier institutions, some of those institutions would have to adjust. At this stage, I would not like to contemplate a scenario where it is either watered down too much or not properly implemented in the European Union, and, therefore, an adjustment to our broader policies.

What stands, at a higher level, is the discussion that Lord Kerr initiated on equivalence. We need to be satisfied that, at a minimum, global standards are being applied for the UK to grant equivalence. We are satisfied in the current environment. What holds for us also holds for the rest of Europe. We would want to ensure that that was put in place. This is not one of the reasons for them, but the peer reviews that the FSB does of the implementation of these major reforms, as it has for Basel—I think that you are familiar with the findings of that for Europe and for the US—and the peer reviews that come through the IMF FSAP could be increasingly useful, going forward, in buttressing that level of confidence across jurisdictions.

Lord Forsyth of Drumlean: I want to follow up on Baroness Bowles's points. I am much encouraged about what you say about trying to level the playing field for the challenger banks and the big banks, and the differentials that exist on treating capital between the internal model regime and the standardised model regime.

The Committee has just done a report on housebuilding. The latest Basel proposals classify lending to housebuilders as speculative, high-risk lending and apply 150% risk weight; it is currently at 100%. That would see lending to proven housebuilders have a risk weight twice as high as unsecured sub-prime lending and at the same level as defaulted debt. Surely this is absolutely flying in the face of what the Government say they want to see, which is a quarter of a million houses being built every year. Taking into account your point about meeting global standards, in the United States we do not have this. As we are leaving the EU, is there not scope, via the ICG—the individual capital guidance—to have the regulators load UK risk weights to reflect their assessment of banks' riskiness?

Finally, there is a competition problem. The effect of the current regime is that the smaller banks are competing at the riskiest end of the market, because, there, the differential that is applied to the capital weighting is less, and they are not able to compete in the broader area, where the Government say that they wish to see more competition. For example, if you look at the aggregate market share of the five biggest firms—the four banks plus Nationwide—it is now bigger than at the time of the

demise of Northern Rock and HBOS. Earlier you mentioned the buy-to-let market. One bank, Lloyds, holds a 42% market share in buy to let. Do we not have a risk weighting regime that is limiting competition and increasing risk, partly by making the smaller banks compete against one another in the riskiest sectors?

Dr Mark Carney: I would not load it all on to the risk weight regime. There are some elements that should be corrected for broader purposes and would have the complementary outcome that you have suggested in improving competition. However, I would make a broader point. This is not new policy for the Bank of England. Part of our submission earlier this year to Lord Hill's call for evidence on reform of financial regulation was to have a proportionate application of Basel III for domestically focused, non-cross-border firms—at that time, in the European Union—as in the United States. The Basel rules are not applied uniformly across the US banks; there is a size threshold. That is something that we felt should have been considered in Europe as a whole. Obviously, if we felt that it was sensible for Europe as a whole, we would think that it was sensible for the UK outside Europe.

Lord Forsyth of Drumlean: Are you planning to do something about that, once we have left the European Union?

Dr Mark Carney: Thank you. You have given me the opportunity to restate this. The rules are the rules, as long as we are in. That is important, for a variety of reasons—not least central clearing, which we talked about earlier, and other elements. The rules are the rules, and we apply the rules of the European Union up to the point at which we leave. We also have, obviously, very high standards; we exceed international standards, et cetera. That will continue to hold from then on. I do not want to bind the Bank of England two years hence. However, for situations like this, it would seem to me personally that there is tremendous logic in the suggestion.

Q9 **Lord Livermore:** I want to ask about the impact of the fall in sterling on inflation. Specifically, do you think that we are already seeing the effects of that? If you do not, when do you expect those effects to show? How significant do you expect them to be? Finally, how much tolerance will you have for currency-led inflation?

Dr Mark Carney: We see the uptick of annualised inflation to 1% in the recent inflation figures as the product of a few factors, but not, on net, of sterling. The most important development is with energy prices. It is not just a product of petrol prices going up a bit but the fact that there was a big fall in energy prices, including petrol prices, a year ago; so, a so-called base effect comes out of the calculation and that pushes up prices. Clothing and footwear prices were also a little stronger. Overall, in our view, the balance of the waning effects of a past appreciation of sterling and the early effects of the most recent depreciation effectively cancelled each other out.

Relatively quickly, we will see the effects of the depreciation that has happened over the last year and accelerated recently. By the spring, there will be annualised inflation rates in the order of 1.5% to 1.8%, with an important contribution from so-called exchange rate pass-through. That is the effect.

I will take this opportunity to underscore that one of the lessons from the experience post-crisis was that exchange rate pass-through in the United Kingdom is both higher and more prolonged than we at the Bank of England had previously thought. We used to think that it would come through quickly, so we could look through those moves immediately. Effectively—if I can oversimplify—if the impact of the exchange rate move all happens within a year, moving monetary policy around in order to try to counteract it just exacerbates the swings. That is one of the reasons why during that period—2009-10—when we had the big depreciation, the forecast of the MPC was that inflation would go back to 2% by the two or three-year horizon. To restate, that is because it thought that pass-through was significant, but it would be out of the way by the time we got back to the horizon.

We have learned the lesson of what happened there. We have also taken a similar lesson from the prolonged effect of the post-2013 appreciation that has flowed through to the numbers. It is one of the reasons why inflation has been below 1% and I have been writing letters to the Chancellors. Where we sit now we see, as we discussed earlier, that the past depreciation of sterling and the appreciation up to the most recent leg down were going to lead, in our judgment, to inflation of around 2.5% around years 2 and 3 of the forecast. We felt that we could look through that overshoot because, given the balance between inflation being over target and the economy operating at less than full potential, as regards both the overall potential of the economy and the labour market, the optimal trade-off and the right policy stance was to provide some stimulus to use up that spare capacity—not least because our view is that just off-stage, just after year 3, once the pass-through of the exchange rate has gone through, inflation will fall below target. That is assuming that nothing else happens, of course. Something will happen every day between now and then, and it will be lost in the sands of time.

You asked a question about tolerance. It is important to say that the judgment is a judgment about the optimal trade-off. It is a judgment that we have to make on the basis of the remit letter. There are limits to the MPC's willingness to look through an overshoot of inflation. To be absolutely clear, we do not have a target for the exchange rate. We believe in flexible exchange rates. That is absolutely part of the adjustment mechanism. The primary mover of the exchange rate would appear to be a market perception of a change in the circumstances of the real economy in a few years' time, so it is helping to adjust for that. However, it is a factor that influences the stance of monetary policy. Given the balance of supply and demand factors, the strength of the economy, relative to expectations, and the improvement in financial conditions, it is undoubtedly something that we will take into account

over the next week, as we sit down, update our forecast and make our policy decision.

Q10 Baroness Wheatcroft: Governor, could you say a little about what is concerning central bank governors generally at the moment? The world economy is weak. We hear about problems with Italian banks. Greece is quiet at the moment but will emerge as an issue again when the next debt payment comes up. The scale of debt in China causes a lot of concern. Other than the Brexit issue, if we can put that to one side for a moment, what do you think the big issues are?

Dr Mark Carney: The first issue is the question we have spent some time on, which is the balance of monetary, fiscal and structural policy. There is a feeling that, at a minimum, in aggregate, monetary policy has been overburdened, that a series of sustained efforts will be required—particularly in structural policy but potentially in some jurisdictions, also in fiscal—to rebalance, which in and of itself will help to increase the traction of monetary policy and help with reflation. I will not belabour it, but a fair bit of time is spent on issues around that.

The biggest external risk to the global economy is the third that you mentioned—China. China is undergoing a series of transitions: from external to internal demand; from manufacturing to services; and from principally—almost exclusively—bank-based lending to more market-based finance. There is also some transition to greater flexibility of the exchange rate and openness of the capital account. Any one of those transitions is very difficult. They are all happening simultaneously in the world's second-largest economy. The Chinese authorities have been doing an exemplary job of managing those situations, but it occupies a great deal of attention because of the scale of the challenges and their import, both for China and for the rest of the world.

Baroness Wheatcroft: If one of those turned out in a bad way, what do you think could happen to growth in China?

Dr Mark Carney: It would likely go down. That is a safe prediction.

Baroness Wheatcroft: How far?

Dr Mark Carney: The issue for China, but also for the rest of us, is recognising the gradual reduction in the sustainable level of growth in China. It can be argued that in some recent years the pace of growth has been faster than the speed limit. That has been a product of debt, effectively—both debt to state-owned enterprises and personal and household debt, through the shadow banking sector. The challenge is sustainably and safely to decelerate the rate of growth. Those transitions will do that in and of themselves and will provide a platform for a more sustainable level of growth.

There are many contributions that we can make. If I can loop back to earlier conversation, one of them has to do with the gradual opening of the Chinese capital markets and an ability to channel institutional capital into long-return Chinese assets, particularly on the energy and

infrastructure side. If I can link this up, part and parcel of the reforms that the Government there are undertaking to municipal finance, energy finance and all the off-balance-sheet vehicles is to bring them on balance sheet, to make them reinforce and to make them sustainable credits that would be best served by institutional capital. To link it back to another element that we have discussed, in a world where savings and investment are such that they are keeping global interest rates very low, the prospect of moving some of those advanced economy savings into a new opportunity that shifts the balance would shift global equilibrium interest rates, all things being equal, and provide the classic win-win situation for both China and the rest of the world. That is part of the puzzle.

Baroness Wheatcroft: Do you see that happening any time soon?

Dr Mark Carney: We see many encouraging signs in that regard, but I will list three. First, earlier this year there was a liberalisation of the so-called QFII rules—qualified foreign institutional investor rules—to open up exactly that. Secondly, part of the work that we have been doing with the People's Bank of China has been to develop what is called a green bond market. Effectively, what green bonds mean in China is things like conventional gas turbine-type energy infrastructure. Thirdly, there is the work that others have been doing in the private sector. We have supported the Treasury in the development of an international renminbi market, which would be part of the mechanism. The building blocks are coming into place.

Q11 Lord Kerr of Kinlochard: Governor, can I make a probably hopeless effort to get you to say something interesting about the exchange rate? I know that the main purpose of governors is to avoid saying anything interesting about exchange rates. I ought to declare an interest. Apart from being an investment trust director, I have some pounds in my pocket—and Harold Wilson was wrong.

You have twice described the Monetary Policy Committee discussion in August and how you weighed the balance, looking ahead—the risk of overshooting and so on. At that time, with the exchange rate down by 9% or 9.5%, did the committee have in mind the possibility that it might be down by another 6.5% after today and 7% by the end of October? If it had had that in mind, would it have taken a different decision? When it next meets, will it consider the question? Of course you do not target exchange rates. Of course you are thinking of the inflation effect. That is what we ask you to do. However, is there any level of depreciation when a necessary correction starts to turn into a bit of a crisis? For a governor to hint at the possibility of a crisis is out of the question, so I withdraw the word. I meant, "When it starts to become serious".

Dr Mark Carney: As I said, the committee will always take into account movements in the exchange rate and reasons behind those movements. It will balance the impact on inflation, which Lord Livermore just raised, relative to the other factors that impact on inflation.

In my view, the way in which we talked about this as a committee prior to the referendum, when we signalled the risks around it, from a monetary policy perspective, remains the most appropriate. We have to balance the supply, demand and exchange rate impacts of this adjustment. Those are the principal forces. The exchange rate effect that we have seen, not in the last few days or so, but since the timing of Article 50 became clearer, has been heavily influenced, I think, by market perceptions of not just the timing—the crystallisation of timeframe—but the potential degree of openness with the European Union and the rest of the world. It is a judgment on supply. All things being equal, if demand is the same, supply is less and the exchange rate is depreciated, inflation will be higher. We have to take that into account. In economics, all things are never equal, but it provides a starting point for analysing that impact.

Lord Kerr of Kinlochard: I have failed. You are not going to say anything interesting.

Dr Mark Carney: Others will judge whether it was interesting.

Q12 **Lord Layard:** I want to ask two unrelated questions. First, when you are very much concerned with sustaining demand, why are you opposed to negative interest rates? Secondly, if you look at bank balance sheets, do you feel comfortable with the size of their derivative components these days?

Dr Mark Carney: I will boil down to two the reasons why I have been uncomfortable with negative interest rates. The first is the impact on bank margins, profitability, capitalisation and willingness to lend. The flow-through of that chain can lead to what starts as stimulus being, at a minimum, tempered by reducing—and, in some cases—reversing profitability, marginal capitalisation and incentives to lend. In Switzerland—it is oft-cited, but it is relevant—the reduction of interest rates actually led to an increase in rates to households. That is obviously not a sensible policy. I should not say that. It would not be a sensible policy outcome. In the broader Swiss context, it may be sensible policy.

Lord Sharkey: Unless you are Swiss.

Dr Mark Carney: Yes. This is particularly relevant in the UK, as an important component of the financial sector, the building societies, does not have other recourse to capital, apart from retained earnings. We are their supervisor. We have direct line of sight into this issue and think that we have a very good perspective on the ability and willingness of banks to pass on rate reductions. The reason why we put in place the term funding scheme as part of the August package was to make sure that that which we gave with one hand passed through the system, made it to households and provided real stimulus. That is the overriding concern.

On top of that—I cannot quantify this, but it is my judgment—there is a confidence effect around negative interest rates. There is something unnatural to it, as perceived by many people. There is certainly a confidence effect of trying to provide stimulus with this hand, but finding

that when it gets to the end of the chain it is actually restrictive. That suggests that the central bank does not understand how the system works. If any central bank should understand how the financial system works and how the steps that it takes move through the chain, it is the Bank of England, which is also the supervisor and the macroprudential authority. Those are the reasons why.

On derivatives, some of the financial reforms that have been put in place have substantially reduced the risk of derivative positions at financial institutions—partly through a tripling, and then some, of capital requirements for those institutions for those trading positions. More importantly—this was touched on briefly—the encouragement, through capital margining and other incentives, for over-the-counter derivative transactions to be centrally cleared has substantially reduced the risk in the system. It has created systemic nodes, as the CCPs are themselves systemic. That is why it is a priority of regulators, including the Bank of England and the FSB as a whole, to fine-tune and complete the work on resolution and recovery plans for those CCPs over the next year.

Q13 The Chairman: Governor, when you came in in April, you described the current account deficit as “remarkably high for a large advanced” country. Your forecasts are that over the next three years it will come down to between 3% and 4%, which is still remarkably high.

Dr Mark Carney: It is less remarkable.

The Chairman: It is less remarkable. Nevertheless, the markets have reacted to that. Your strangers on whose kindness we depend are now pricing in a bit of a risk premium. The 10-year yield on government bonds has more than doubled since August. Is that not a warning sign, given all the other uncertainties around, that the price of funding the government debt will potentially increase further?

Dr Mark Carney: There are a couple of things in that. First, we expect the current account deficit to reduce, in large part because of the movement in sterling. If you are going to have a remarkably high current account deficit, this is the one that you want to have, because the liabilities are denominated in your own currency—in sterling—and the assets are offshore. The UK has a very large external balance sheet. A lot of the deterioration in the last few years has been because of lower earnings on foreign assets relative to domestic. That is changing, in exchange rate terms, and will reduce it.

We expect that there will be some export benefit and import compression because of the large movement in the currency. Directionally, we see it reducing quite substantially. That was with the August forecast; we will see the ultimate impact of recent moves.

The one caveat to all that is that where the sustainable level of the current account deficit is depends on the size of the external balance sheet, the exchange rate composition and two other factors. One is your access to other markets, and the terms under which you have access to

those markets—a subject of the next few years of discussions. The second is how attractive you are as an investment destination. Of course, one of the first things that people check as regards your attractiveness as a destination is whether you have a central bank with a clear mandate that it can discharge independently and faithfully and subject to rigorous accountability and scrutiny.

The Chairman: Governor, as is the custom these days, people send us questions during the witness session. One of the questions that we have had concerns a pensioner who wants to know what to invest their savings in. Would you like to provide them with some advice?

Dr Mark Carney: When I get the right to have people send me answers during the sessions, I will respond to any questions.

The Chairman: We will pass that on. Thank you.

Dr Mark Carney: Thank you very much.