



Treasury Committee

Oral evidence: [Bank of England Inflation Report](#) [Hearing November 2014](#), HC 829

Tuesday 25 November 2014

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Members present: Mr Andrew Tyrie (Chair), Rushanara Ali, Steve Baker, Mark Garnier, Stewart Hosie, Mike Kane, Mr Andrew Love, John Mann, Mr David Ruffley, Alok Sharma, John Thurso

Questions 1 - 99

Witnesses: **Dr Mark Carney**, Governor of the Bank of England, **Sir Jon Cunliffe**, Deputy Governor, Financial Stability, **Ian McCafferty**, Monetary Policy Committee Member, and **Kristin Forbes**, Monetary Policy Committee Member, gave evidence.

Q1 Chair: Thank you very much for coming to give evidence to us this morning on the inflation outlook, the inflation report and the work of the MPC. We also have an important issue that we want to discuss with the Bank, which is the Grabiner report. The Committee has been involved in the design of that inquiry, directly and indirectly, and we are particularly interested in the output. There have been reports that there is further work still in train. I do not think this is something for this meeting and the Committee has decided that we will take that at a subsequent meeting dedicated to looking specifically at those issues.

Can I begin by asking everybody except the Governor what is meant in the minutes by the sentence, “There was a material spread of views on the balance of risks to the outlook”? Why do I not start with you, Mr McCafferty, and then we will see where we get to.

Ian McCafferty: I should point out that that paragraph refers to the majority of the committee, the seven of which I am not currently a member.

Q2 Chair: Sorry to interrupt already, but there is a spread of risks and then there is—
Ian McCafferty: Well, there is a spread of risks that we all have discussed. If you look at the structure of the minutes, it then breaks into a discussion about the majority, who are

continuing to vote for unchanged monetary policy in recent meetings, and the phrase that you quote, Chairman, describes the seven members in that group. I am a member, as you are well aware, of the minority in the committee: Martin Weale and myself have been voting for a rate rise. However, I think it is fair to say that, having looked at the risks around the forecast as a committee, there is a balance. The forecast itself no longer contains a skew in terms of the balance of risk, in terms of upside risk and downside risk, but within that, of course, as would be normal, individual committee members take different views as to the importance of individual risks as they see them.

Q3 Chair: Ms Forbes, are you a member of this majority on the committee who have identified these risks and the spread of risks or are you set apart?

Kristin Forbes: No, I am a member of the majority, as one can tell by my vote.

Q4 Chair: Why don't you describe the risks as you see them and then I will give Sir Jon a chance to give his view?

Kristin Forbes: Let me tell you exactly where I stand. I agree, as you can tell by my vote, with the current decision to keep bank rate at 0.5%. I don't know when my vote will change. It will depend on the data that comes out on the evolution of the economy. I also agree with the guidance given by the committee that whenever rates do increase we expect that any increases will be gradual and to a lower rate than previously. Again, that is an expectation. It will depend on how the data evolves and the economy evolves. In the minutes, there is a long list of different risks on the upside and on the downside, and I agree that all of those risks are things we should be cognisant of, we should be watching for and be aware of and monitoring.

Where my view is slightly different than the median view of the nine of us on the committee is that I put slightly more probability on the risk that the global economy could be somewhat stronger than in our baseline forecasts, especially the US economy. Recently some of the data has been stronger, so there could be less of a drag on our forecast from the external economy. I also put a slightly greater probability than the median of the nine of us that there could be somewhat smaller amounts of slack in the economy than we are currently estimating, so that output gap could close a bit faster, but I am also cognisant that these are probabilities. There is a tremendous amount of uncertainty about how the global economy will evolve and about the amount of slack in the economy today.

Q5 Chair: Within this spread, among the majority, you are at the hawkish end?

Kristin Forbes: I do not like to use those terms. I am very much in data-dependent mode. I see a spread of risks.

Q6 Chair: But you have identified data that you think should be considered very carefully with a view to the identification of risks that might require tightening?

Kristin Forbes: Those are risks I put a higher probability on coming through, but I do not know. I admit—

Chair: A higher probability than the average.

Kristin Forbes: Than the average but, again, I will be watching the data to know if those risks play out.

Q7 Chair: Sir Jon?

Sir Jon Cunliffe: Well, I am in this group. I voted for no change. The Committee, fortuitously, has my annual report, which I hope sets out quite clearly where I am. I am data dependent, as with Kristin.

Q8 Chair: I hope that all of you are data dependent. I do not think that phrase takes us very far.

Sir Jon Cunliffe: Within the committee's framework of guidance. I would say two other things. There is a long list of risks on the upside and downside. That is often the case. At the moment there are risks on the supply side and the demand side. I have been particularly focused on the risks around pay, productivity and employment and how those evolve. That goes to the extent of spare capacity, but there are also risks from the external environment now on the demand side. As I made clear in my report, with policy at the zero lower bounds, in order to take an even view of overshooting and undershooting the target, I am more concerned about the risks to inflation on the downside surprise at the moment. At the zero lower bound you have fewer ways of managing a downside surprise than an upside surprise.

Q9 Chair: Governor, what is your central estimate of spare capacity?

Dr Carney: Well, can I say I am data dependent as well, just to complete the set, but let me preface this with—

Chair: By the way, we take that as read.

Dr Carney: I thought so, but if I did not read it into the record—

Chair: What we would particularly like any member of the committee to do is to let us know the moment they feel they are not data dependent. Would they do that, and preferably in writing?

Dr Carney: Yes, exactly. Fair enough, Chairman.

Chair: Otherwise, do go ahead, Governor.

Dr Carney: In terms of the central estimate of spare capacity, I will preface this as well by saying that, as colleagues have emphasised, there is substantial uncertainty around the

degree of spare capacity in the economy. I do agree with the best collective judgment of the committee that spare capacity is concentrated in the labour market. There has been some marginal progress in reducing that spare capacity over the last three months, in other words between August and November—that is my reading of the data. We have made progress on unemployment, but participation has fallen back and average hours worked have not moved relative to desire. In other words, if we look at the increase in total hours over the course of the past three months as measured, they have increased less than we would have expected. So we have made less progress on spare capacity. Mapping together our estimates of equilibrium values, with which I agree; wage behaviour, which has been broadly consistent with our expectations in August; underlying productivity; unit labour cost growth, which is basically flat—once you adjust it, you have to adjust it up, by the way, to get it flat—I would say it is consistent with an estimate of spare capacity that is in the range of 1%.

Q10 Chair: You have a figure of 1% in the inflation report, which is the figure I was after.

Dr Carney: I believe we say slightly less than that.

Q11 Chair: The only reason I am raising this at all is to ask you, given the past history of estimates of spare capacity, whether you believe it.

Dr Carney: I think it is useful to provide a central estimate, but it is equally important to stress the wide range of outcomes around it. Let me put it this way, Chair. We are not mechanistically mapping policy to an estimate of spare capacity.

Q12 Chair: Could I take you to forward guidance briefly? You said words to the effect of, “This is a policy whose time has come,” when you first introduced it, or phrases that have that meaning. Is it not the other way around; that it was introduced at a time when its time had gone?

Dr Carney: Not surprisingly, I disagree with that characterisation. When I arrived, the committee had a split opinion. It was split around whether to provide additional stimulus at the start of a nascent recovery or to hold policy at its current level. In addition, the committee was managing policy in a way that, based on its forecasts at the time, would take up to three years for inflation to return back to target from above, after a period of almost five years of persistently above-target inflation. The committee was looking through a number of one-off factors, recognising that there was substantial slack in the economy and feeling that the discussion was around whether or not to provide additional stimulus or whether to hold policy.

The feeling, with which I agreed, was that in providing state-contingent forward guidance at the time—in other words that we would not be raising interest rates at least until the point where we saw unemployment fall to 7%—we would provide greater clarity not just to financial markets but, more importantly, to households and businesses across the

country that we were not going to take risks with this recovery. It was the very early stages of the recovery at the time. That message got across. You can see it in polling data, particularly of firms, and we all saw it as we went around the country and visited with thousands of businesses across the United Kingdom—businesses understood the message.

As the recovery was gathering momentum, as the labour market was picking up, the one thing they did not have to worry about was interest rates moving up. If you mapped historic MPC reaction function to the movement in purchasing managers' indices, SIP surveys and other things, historically the MPC would have raised rates at least two times over the course of the period between unemployment falling from 7.8% to 7%.

Q13 Chair: There are a lot of other moving parts to that.

Dr Carney: I will refer you to my colleague Dr Broadbent's speeches and Charlie Bean's speeches, which provide the evidence.

Chair: Yes, I have seen them.

Dr Carney: We provided that clarity. It was helpful. It helped provide greater certainty and it was one of the contributing factors to building confidence and securing the recovery. Once we got to the point where unemployment had fallen to the threshold of 7% we did exactly what we said we were going to do, which is take a step back, assess the outlook for inflation and decide where to set policy going forward. At that point we provided guidance on two aspects. First, somewhat technical but incredibly important guidance to financial markets about the asset purchase facility. When would we reinvest? When would we think about selling assets? What would be the preconditions for those? So we provided that clarity.

Secondly, as Professor Forbes just referenced, guidance about what we felt the medium-term path for policy was likely to be. It is an expectation, not a promise, but this expectation that once rates begin to increase and the very clear message from all of us—we have different views perhaps on the precise timing—is we are all in the camp of expecting rates to increase over the forecast horizon. Once rates begin to increase, that path of policy is likely to be limited—limited increases at a gradual pace. Colleagues can speak for themselves, but I have found that in talking to businesses across the country they understand that message and they understand the perspective it provides.

Guidance has a role, in my opinion and in the committee's opinion. It particularly has a role in managing the exit from exceptional policy. We are at the zero lower bound. We have 20% plus of GDP and assets that we have purchased. We have a host of unconventional facilities that we are gradually winding down and it provides context for the exit. It is absolutely the time for the policy, which is why we continue to pursue it.

Q14 Mr Ruffley: A question first for Sir Jon and then for Professor Forbes, same question. How likely do you think inflation is going to further undershoot?

Sir Jon Cunliffe: The forecast, to which I subscribe, has balanced risks around it. There are risks on the upside and there are risks on the downside, and I cannot put a probability on that. When we look at the way that inflation indices are constructed and the like, I think we said that as likely as not it would drop beneath the 1% in the near future, but then inflation is pushed back up to almost close to the target over a long period by a number of factors. One of those is not a very strong improvement but an improvement in the external environment. Some of that is the domestic economy picking up a bit, with consumption being driven primarily by household savings being lower in the early part and then by productivity in the later part of the period, and by business investment remaining at around current levels. That is the balance. You can see risks, particularly in the external environment, that could lead to lower than expected demand that will push down on inflation and you can also see risks on the supply side of the economy or with low inflation expectations if we do not get the increase in pay that we need to push it back up again.

Q15 Mr Ruffley: The possibility of deflation does not—

Sir Jon Cunliffe: I think there is a possibility of inflation being lower and surprising on the downside, but in the forecast we do not have a deflationary risk.

Q16 Mr Ruffley: Professor Forbes, the same question to you.

Kristin Forbes: I think it is useful to break inflation into two components: the component of inflation driven by external factors and that includes commodity prices, oil prices and movements in sterling, and then also to look at domestic pressures affecting inflation. When you look at the external factors feeding through into inflation you will have some severe drag on inflation over the next few months at least: the lagged effect of low oil prices, commodity prices and the effect of sterling's appreciation from March of 2013 to the middle of this year. Those effects are still building and will be felt through the end of this year and the beginning of next year. I think just those external factors should be powerful and continue to keep inflation low over the next few months.

The other important component of inflation is the domestic component and we track a number of measures of domestically generated inflation to understand that. Currently, those measures of domestically generated inflation are also low and so that should continue to keep inflation contained for now, but we do expect that, as wages increase, those domestically generated measures of inflation should pick up. I expect that inflation will stay low over the next few months, under our target of 2%, but then I do think it will start to increase and head back to our target over the medium term.

Q17 Mr Ruffley: Thank you. I do understand that the consensus is to look through the undershooting of the target and going below 1%, indeed. Just to persist on the possibility of further undershooting and deflation, I just wonder, Governor, have you done any work in

the Bank or have you had any formal discussions in the MPC about the tools you might utilise to loosen monetary policy?

Dr Carney: Let me say a couple of things, first on context. I think it is more likely than not that inflation is going to go below 1%. It is more likely than not that I will write a letter to the Chancellor in the near term. As Professor Forbes indicated, external factors are an important element of that, but domestically generated inflation is not particularly pronounced. We expect to see a pick-up over the forecast horizon but, as Sir Jon said, it will take some time and, in fact, embedded in our forecast those external factors—falling oil prices, sterling pass-through and so on—are basically dissipated by about 18 to 24 months out and we still do not get back to target on our forecast until the end of the forecast horizon, which gives you a sense of it.

Your question is around additional easing. I just want to be absolutely clear: the discussions we have been having as a committee, including our most recent discussions, have been about the pace, timing and degree of tightening of policy.

Mr Ruffley: Indeed.

Dr Carney: Just to be absolutely clear, I do not want to make any comment that suggests anything to the contrary. There is no change in orientation of the committee.

Mr Ruffley: That is why I asked the question.

Dr Carney: Yes. The second point I will make is that if we had had any formal discussions at the committee they would have been minuted and, as you will have noted, there were no discussions of additional options in the case that we needed to provide additional stimulus in the last minutes. I will state the obvious. Given the track record of the MPC, the MPC has considerable flexibility to provide additional stimulus, were it to become necessary, and a host of unconventional policies. I will say this, though, in terms of my personal view in terms of stance of policy at the zero lower bound. There is a difference between conventional and unconventional policy. It is not a smooth continuum. There are costs to unconventional policies that are not associated with conventional policies and, on the margin, one looks through these effects at the zero lower bound. In other words, the bias is not to provide additional marginal stimulus, unconventional stimulus, at the zero lower bound.

Again, I am going to repeat myself but I want to be clear. My expectation is that the next move in policy is going to be an increase in interest rates. What has happened in the three months since August is that the combination of a weaker global economy, some disinflationary pressures, largely from abroad but relevant, means that the cumulative tightening of policy over the forecast horizon is likely to be less than we would have thought, but it is still a tightening.

Q18 Mr Ruffley: Following on from that, what do you make of the ECB's introduction of negative real interest rates or negative interest rates across the ECB's—

Dr Carney: I think the ECB is an acknowledged difficult position. I will just simply refer to President Draghi's speech of this past Friday where persistent disinflationary forces do look likely to persist in the absence of significant policy response. They have outlined a range of policy responses, which include negative interest rates. In judging where the zero lower bound is and judging how low interest rates can go, there has to be an assessment of how domestic financial markets or financial markets work and domestic financial institutions function in that environment.

One of the major differences between Europe and the UK is the importance of the building society sector in the UK, for reasons to do with short-term collateral base markets, the function of the repo market, but also the potential impact on building society profitability and the knock-on effect on credit transmission, the judgment of the MPC has been that 50 basis points was the effective zero lower bound. That is why, as you know, asset purchases began there. If ever we were to be in a position that we had to revisit the provision of additional stimulus—and we are not in that position today, as you know—obviously we would revisit those assumptions as financial markets evolve and profitability of institutions adjusts.

Q19 John Mann: Mr McCafferty, you were here two years ago when the representatives of the committee were totally dismissive of any idea that there might be any move towards deflation or deflationary pressures and warned about inflation. Why did the committee get it so wrong?

Ian McCafferty: I do not think the committee did get it so wrong. We have always said that there are risks on both sides of the issue. What we have seen over the course of the past few months, which has been a large driver of the sharp fall in inflation that we have seen over the last year and the persistence of low inflation that Professor Forbes, the Governor and Sir Jon have mentioned this morning, is due to external factors: largely the sharp fall in commodity prices combined with the lagged impact of the rise in sterling that we saw earlier in the year. Inflation is a relatively volatile component when driven by such movements in international commodity prices. I would not suggest that we got it wrong. If we look at the forecast, inflation has come down rather faster than we had expected, but our forecast has been conditioned on forward curves for oil and the oil price has fallen rather faster than international markets had expected.

Q20 John Mann: I am only looking at the data. Would you not have—

Ian McCafferty: As am I. At the risk of offending the Chairman, I am data dependent, as is everybody else.

John Mann: I recall you were one who was particularly keen to warn of the dangers of wage inflation. In fact should you not have been encouraging a level of wage inflation, bigger pay increases?

Ian McCafferty: I do not think it is my job to encourage wage inflation and, as you will have seen from the minutes and from my voting record, I still am concerned by the

prospect of wage inflation over the course of 2015 and 2016 that may well bring into some risk our inflation mandate. From that point of view, we need to see some pick-up in wages over the course of the forecast to continue the sustainability of the recovery. So far a good deal of the recovery has been driven, at least from the consumer side, by a fall in the savings ratio rather than by real income growth, but I do think that there are risks that, over the course of the forecast, as slack comes down, as the labour market tightens, that we will see a pick-up in wages that is at least equivalent to that in the forecast. If left unchecked, that will bring into some risk, and it is a risk, our mandate.

Q21 John Mann: Professor Forbes, would you not welcome some wage inflation and some real pay going up significantly and people demanding and getting that in this country on an economic criterion?

Kristin Forbes: Certainly. Wage inflation has been surprisingly low, given the strength of the economy and the amount of people who have been entering the labour market. We have been expecting wage inflation to turn around. The most recent data suggests that we may have finally turned the corner and wages have started to pick up, but it is still from a very low base rate and it is very little recovery given how low wage growth has been for an extended period. Also, wage growth is a critical part to a sustained recovery. Recently the recovery has been balanced in the sense it has been driven largely by consumption and investment and it has been fairly balanced between consumption and investment driving the recovery, but that consumption has recently been driven more and more by consumers drawing down their savings and that is not sustainable. We would particularly like to see wages increase so that consumption can continue and be funded by individuals drawing on their incomes, not drawing on their savings.

Q22 John Mann: Professor, you are a relatively new member of the committee. What assessment have you made of the competence of the Bank and the committee when it comes to the forward guidance and household behaviour, which the Governor identified a few minutes ago? How good is the Bank at identifying the impact of the knowledge of forward guidance that households have? Have you been presented with any evidence that households have in fact gleaned that there is forward guidance available to them that they could follow and are following?

Kristin Forbes: Broadly, I have been very impressed with the knowledge and expertise of the Bank. The MPC meetings have been very candid, very forthright and very robust discussions. I have been impressed with how it is almost like an academic seminar at times. We discuss the issues, debate them, ask people questions and challenge them on their arguments and I think it is a very candid, forthright, honest, very intellectual discussion. I have been very impressed with the level of expertise of the committee so far.

Q23 John Mann: Sir Jon, in the academic seminar that you have been participating in, one of the issues raised repeatedly by a number of people, including myself but certainly others as well on this Committee, is about whether you have very accurate and effective data

about what is happening in the labour market, who comprises the labour market and what is going on. How much of a role are the Bank agents and their data now playing? They are noticeably absent in something like the inflation report in being upfront in what they are saying about what is going on.

Sir Jon Cunliffe: They play a pretty important role. I would say, to start with, we have a range of data sources. Some are good. Some of the statistics have a good record. They are robust and so on. Some we know are much more difficult. When you look at labour market data, for instance, you know that average weekly earnings is a series that is pretty accurately measured. There are other indicators we look at, survey indicators for example, that have good predictive history. At different points in the economic cycle, particularly turning points after long and wrenching recessions, some of those relationships may break down.

I am not sure I would characterise it as an academic discussion, but part of the vigorous discussion we have involves looking at the strength of the data sources and their robustness and the agents play a big role in that. At every pre-MPC, as well as reports on the data series, there are always reports from the agents. At the end of every MPC meeting, we take a view on what particular subjects we would like the agents to investigate. For the next meeting or the meeting after they construct surveys, it is a very structured process and we pay a lot of attention to it.

Q24 John Mann: Some people would suggest that the number of self-employed and the nature of self-employment has changed so rapidly that there is a hidden deflationary pressure because people who are becoming self-employed are hiding the real levels of income that they have, precisely because they are self-employed. At the same time, the TUC is suggesting that only one in every 40 new jobs is full-time and we have an incredibly flexible labour market, including people moving in and out of the country, which we have never had until the last five years or 10 years maximum. We have never had this level of flexible movement within the labour market.

Is there not a danger that we do not know what is going on within the labour market and, therefore, there is a danger that some of your data sources are rather outmoded and, in fact, just following flows and you lag behind the flows so that when things happen you say, “Well, here is what is now happening”, making your forward predictions rather irrelevant?

Sir Jon Cunliffe: There is always a danger that when you get structural change you pick it up later in data series—

Q25 John Mann: We have never had a structural change like this before. That is my point.

Sir Jon Cunliffe: The point I would make is that in August the committee reviewed its assessment of capacity in the labour market precisely to look, on the hours side, at surveys of whether people wanted to work more hours. That has changed the trend on average hours that we have seen. We have looked at participation and changing trends there. We try to get at those factors. That is about some of the uncertainty in the labour market. I

would also say we have had a positive labour supply shock from exactly some of these factors over the last year and that is one of the things that has kept spare capacity in the economy and has weighed down on pay, even though unemployment has fallen very quickly. The question you ask is whether we have as good data on some of these trends as we do in other areas. No, but we have to make the best judgments we can on the data we have.

Q26 John Mann: None of us know what is going on, do we?

Dr Carney: I disagree with that, Mr Mann. Let us take the TUC figures. I think what the TUC did is very helpful. Since 2008, your figure is correct in that the balance of employment has been dominated by self-employed because a very large number of full-time jobs have been lost. You can pinpoint the recovery given the most recent vintage of data as either 2010 or 2013. Since the recovery began, the proportion of self-employed jobs, still very high, has shrunk to about 50% and 53% of the total jobs created. In other words, a lot of the recent job creation has been full-time work. We comb through this data and the issues around the changing structure of the labour market, movement of work into self-employment. What does that mean for aggregate earnings?

Your point is exactly right because the extent to which you are self-employed, what you pay yourself as a wage is not necessarily what you earn as your business, and that is something we look into in terms of aggregate income that is available for consumption. The broader issue that we see in part in terms of job composition, we spend a lot of time looking at the composition of recent job growth. For example, lower-skilled jobs have grown in the last several quarters, which is partly what has caused or has contributed to low average weekly earnings growth.

We are trying to interpret the extent to which that is temporary or the extent to which it is structural. We do go down into great detail not just in our preparation for the meetings but, as Professor Forbes indicated, in the meetings going through exactly some of these issues. I think we have an obligation to formalise this, whether it is in speeches or analysis, but I would distinguish these broader trends in terms of job polarisation, which drive greater lower-skilled work, potentially greater self-employment, from cyclical trends, which are relevant for the inflation report.

One last point if I may. You mentioned flexibility in terms of net migration or net immigration as the case may be. If we look at the most recent vintage of data, net migration into the UK is 243,000 over the course of the last year. We think there is a variety of factors that drive it but, most importantly, relative weakness in Europe and relative strength in the UK. People are attracted to this economy. The participation of those workers is, again, something we look at. We look at exactly how many of these workers end up going into paid work as opposed to coming to the UK. It is the same participation in paid work in the UK as for the rest of the labour force. I would not want to leave you with the impression that we do not look at these very complex issues in great detail. Our job is to try to distinguish between structural trends and cyclical aspects and bring it all back to the one variable we are targeting, which is inflation.

Q27 Chair: These are very full and very interesting answers, but we will have to move on. I just want to pick you up on the role of the agents, which I think was one of the outstanding successes of the Bank's work over the last 20 years or so. Governor, it is crucial, is it not, that we make sure that they are asked the right questions and that the Bank thinks innovatively about how to use the information it collects?

Dr Carney: Yes.

Chair: With that in mind, I wonder whether you could give thought to supplying us with something on how systematically you are using the data at the moment and also give thought to whether there is scope for some of the qualitative judgments that might reasonably have been passed to you that give you a sense of direction about what is going on in the economy and publish those. In other words, supply a bit more of the information.

Dr Carney: Think systematically about how we could regularly publish the input we get from agents. That is your question?

Chair: Some of it. In a sense you do because it is fed in, in various ways, in the inflation report.

Dr Carney: If I may, Chair, there is a "beige book" element to that, to use the Fed analogue in terms of what is happening.

Chair: Yes, which is where the idea came from.

Dr Carney: Yes, and something I will say we did at the Bank of Canada, we did publish our agent report.

Chair: But just reflect on it, because I think it is worth—

Dr Carney: May I just make one point? As you know, we did a strategic planning exercise last year and one of the questions we looked at as part of resources was the importance of the agents and absolutely having a hard look reinforced that the agents are central to our decision-making process.

Q28 Alok Sharma: The Prime Minister recently wrote, "The red lights are once again flashing on the dashboard of the global economy." Governor, do you agree with that statement?

Dr Carney: Well, I leave the analogy to the Prime Minister. Certainly in recent months global economic conditions have deteriorated in two of the major economies, Europe and Japan. I agree with Professor Forbes that the situation in the United States is somewhat different. I would layer on top of that the geopolitical situation remains difficult and the combination of that suggests a heightened degree of external risk to the United Kingdom.

Q29 Alok Sharma: Professor Forbes, could I just ask you to elaborate a little bit more perhaps on what you see as key risks? We have talked about the eurozone, but are there any other key risks that you see for the British economy?

Kristin Forbes: The biggest risks I worry about today are external. I worry about continued stagnation or a sharp downturn in the eurozone. The eurozone is such an important trading partner: 40% of our exports. That will have significant effects on the UK. I worry about geopolitical risks that Governor Carney just mentioned. Those are things that I could—

Q30 Alok Sharma: On the eurozone, there is anaemic growth we have just seen. What is the likelihood of another recession in the eurozone? What percentage would you put on the likelihood of a recession in the eurozone in the next year?

Kristin Forbes: I put a strong possibility on growth just a bit above zero, so zero to 1%.

Q31 Alok Sharma: You do not believe that there is going to be a recession in the eurozone?

Kristin Forbes: I think the most likely path is not another recession. If you define a recession as two negative quarters of GDP growth, to take the standard definition, I would put that as lower probability than just slow, so stagnation. On the positive, though, I will say that I think there is less probability of a severe breakup with severe negative consequences on the UK as there were, say, two years ago.

Q32 Alok Sharma: Sir Jon, on this whole issue of sentiment, Peter Praet, who is the European Central Bank's chief economist, recently talked about growth pessimism undermining the eurozone's recovery and we have had Christine Lagarde talk about the new mediocre to describe persistently weak growth. Do you think there is a danger that we are going to talk ourselves down into some sort of recession as a result of feeling more and more pessimistic?

Sir Jon Cunliffe: Confidence and what drives it and where it comes from is one of the most difficult things to try to forecast and predict. You mentioned Peter Praet. For the eurozone, I think there is a high stock of debt in many eurozone countries. There is a high stock of unemployment in many eurozone countries. When growth disappoints, I do think confidence is affected and we have seen, if you look at the confidence indicators for eurozone countries—and I think we give some details in the inflation report—they have recovered since 2012-13, but they have dipped down again.

One other thing that may well be weighing on sentiment, particularly in Germany, is what is happening in Eastern Europe and Ukraine. I think that is quite a worrying prospect for many German businesses, given their investments to the east, and German consumer and business confidence has probably been damaged. You can clearly affect confidence by the messages that have come out, but there are things weighing down on eurozone growth that are real.

Q33 Alok Sharma: Mr McCafferty, we have talked about all the downside risk. Are there any upsides at all in the global economy over the next 12 months?

Ian McCafferty: Yes, there are some upsides in the world economy, which is why we have all said that the balance of risks around our forecast, even on the external side, are both up and down. I think we have already referred to the question of the United States where there is a possibility that the United States economy will strengthen over the course of the next two years. There are balanced risks around the eurozone. We have talked about the continued stagnation, but I think the chances of precipitate collapse in the eurozone, either in terms of growth or in terms of the currency union, are small. There are some suggestions that some of the weakness of growth, at least over the course of the last couple of quarters, may well have been caused by short-term or erratic factors and, therefore, may come out of the equation.

Perhaps the biggest upside risk is that the sharp fall in oil prices may well stimulate the world economy more than we are currently expecting. I think that is something we need to also consider.

Q34 Alok Sharma: Governor, in terms of the Bank of England's growth forecast for 2015, you recently downgraded them but they are still above the IMF's forecast, CBI's forecast and the Ernst & Young ITEM Club. Why are you more bullish than these other organisations?

Dr Carney: Just for context, since the spring of 2013 we have been consistently at the high end of expectations of external observers for growth in the UK. We have been directionally correct. In many cases we have been high, but not quite high enough in terms of the actual outturns. We see that there is a variety of factors that are sustaining this expansion in the near term. There are the risks that my colleagues have outlined, but let us talk about the near term. The first is that indicators of confidence in this economy, household and business confidence, remain quite high. Our financial system is increasingly well functioning. It is not getting to all the parts of the economy. There are still issues for small and medium-sized enterprises but, by and large, businesses and households have ready access to credit if they require it, so this is not a drag on the recovery.

We have balance in terms of the recovery between business investment and household spending. All those factors are continuing to contribute. In addition, while wages are only just starting to turn—and there are tentative signs there of the turn in wages, so we would not overplay it—households will be receiving an income boost from lower commodity prices, lower food prices, lower petrol prices and diesel prices are sharply lower as well. So real incomes start to be boosted, at least in the near term. For all those reasons, we see that momentum continuing, but this is still an economy that requires monetary stimulus both to grow above trend and to bring inflation back to target, which is why we have the stance we do.

Q35 Alok Sharma: Just one final question, Sir Jon. Clearly one of the drivers the Governor has talked about is credit, particularly credit for business. Would you describe the funding for lending scheme as a success?

Sir Jon Cunliffe: Yes, I would. The funding for lending scheme was initially designed to restore credit across the economy. We saw an easing of credit particularly for households. I think that had a lot to do with the recovery of the housing market and aided the return of consumer confidence probably around the beginning of 2013. As the scheme has evolved, it has been targeted more at directing credit to small and medium-sized businesses, which has been more difficult, but I think it has had an impact. I think it has also had an impact because banks may not have used it but they knew there was funding available, so it backstopped the funding markets. That is not so important now because bank funding has come back, but I think in the early days the scheme was quite important.

Dr Carney: I agree with that assessment and I would start with the funding backstop as being the contribution. It coincided with other developments in the market, notably steps by the ECB, but it was effective in changing funding markets. It has been tapered. I remind the Committee that we tapered off away from housing earlier this year, which made sense given the developments. As we get to the end of the year, I think the committee will look, alongside the Treasury, at whether additional tapering would be appropriate as we move on.

Q36 Stewart Hosie: Governor, the data revisions in the report seem to suggest that now a third of domestic demand growth since the depth of the recession has come from business investment, certainly recently. Would that indicate that the recovery now is more balanced than it was over the last three or four years?

Dr Carney: I would agree with that characterisation on the margin, that certainly the data revisions are consistent with a more balanced recovery. I would just draw attention to one thing. There are a few issues with the data revisions in terms of our going forward forecast. You are comparing apples to oranges. We have a slightly less robust business investment profile going forward than we did in August, even though it does not look like that when you look at the numbers.

Q37 Stewart Hosie: In that case, perhaps being subjective rather than objective, can that more balanced recovery be maintained going forward notwithstanding that apples and pears comparison?

Dr Carney: Yes, exactly. A balanced recovery between consumption and investment is consistent with our forecast. We do have investment growth, for example 10% investment growth over the course of the next year. It is slightly less robust further out, but a strong investment profile that is consistent with corporate balance sheets being in good shape, ready access to credit for most businesses, business confidence being relatively high and also a long period without investment and so investment needs. Now, we softened it a bit because of the external environment and the knock-on direct effects there. As Professor Forbes underscored, the consumption profile does draw down on savings of households

further; so the upside risk to the consumption profile may be somewhat less than it is to the investment profile.

Q38 Stewart Hosie: I am going to ask Professor Forbes about the savings and savings ratios and the drawdowns in a moment. You mentioned external factors—Japan back into recession, Italy back into recession, and German growth very low at 0.1%. Professor Forbes suggested her assessment is a likelihood of not going into recession. Is external recession, particularly in the eurozone, the main risk that would undermine continued relatively strong business investment?

Dr Carney: I think it is the main risk, yes. I would underscore that what we have done is we have lowered our forecast for the rest of the world and so that is incorporated to some extent, but it is possible that the downside risk could materialise, particularly in the eurozone. Let me underscore something for the eurozone. The outlook for the eurozone is in part conditioned on very considerable additional unconventional monetary policy stimulus by the ECB. It is not business as usual recovery.

Q39 Stewart Hosie: Indeed. In your opening remarks at the inflation press conference you described indicators across much of the advanced emerging world being moribund, “a spectre is now haunting Europe - the spectre of economic stagnation.” In response to the question from Ben Chu from *The Independent*, you said, “Well, in terms of developments in Europe, they are troubling, without question. I think that stagnation is right.” That was a pretty gloomy prognosis, was it not?

Dr Carney: I am afraid it is an accurate prognosis. Our forecast for the eurozone: less than 1% growth over the course of the next year given the scale of lost output since the crisis. That is stagnation by any other name, no material adjustment in unemployment, and there are downside risks to that forecast. For what it is worth, it is an assessment that would appear to be shared by the European Central Bank, given measures that they are contemplating.

Q40 Stewart Hosie: Professor Forbes, on the point the Governor made, and you have mentioned it twice already, about people eating into their savings in order to help sustain this recovery, how much longer can people do that?

Kristin Forbes: That is an excellent question. Right now it is particularly tricky to assess that because there have been these major changes in the economy and also, complicating that, the ONS has revised how they calculate the savings data. All the numbers have now bounced up based on these changes in calculations, so we do need a bit of time to recalibrate our models to this new way of measuring savings. The numbers are all different from the ones we have worked with in the past. At the current time I think consumers drawing down their savings is a sign of confidence in the recovery. They are willing to draw that down. They are more confident in their employment. However, they cannot keep drawing down savings at this rate or savings will fall too low. We do not know exactly where that level is, though.

Q41 Stewart Hosie: That point about confidence is in the inflation report. People feel more secure and so that makes sense, but, whether that is the case or not, at what point does consumption from growth from reduced savings store up a bigger economic problem for the future? Notwithstanding the figures are changing, if the savings ratio keeps coming down and stays down, at what point do we say, “Hold on, the problem is now a lack of savings rather than a lack of consumption”?

Kristin Forbes: That is something we are watching and evaluating. I do not think we know what that number is, but we are also confident that, as more people go back to work, that increases incomes. If wages are turning and wages increase that should help bolster incomes and then that should stabilise the savings rate.

Q42 Stewart Hosie: Just one final question then and it is basically the same question I asked the Governor. Is there a danger when you are giving albeit an accurate prognosis of Europe, and the potential trajectory for the UK economy, that we appear to be too gloomy on occasion? Is there a confidence issue in some of the messaging or is this the right message?

Kristin Forbes: My personal assessment is not quite as gloomy as some of the headlines. I do think we need to be careful. There has been some downside news for the global economy. Also, year after year, we have continually started each year more positive and then had to downgrade our forecast for the global economy; so you understand why people are hesitant to be too optimistic, but there also is some good news. Mr McCafferty mentioned the fall in oil prices, which should boost global demand. The recovery in the US looks as if it is stabilising. While there are certainly some downside risks, there are also upside risks. I agree with the general forecast that there are risks on both the upside and downside, and I think it is important we highlight that and not just focus on the downside risks.

Stewart Hosie: That is helpful. Thank you very much.

Q43 Rushanara Ali: Recent research by the Money Advice Trust found that over a quarter of borrowers expect financial difficulties when interest rates do finally increase and a fifth of them are likely to cut down on consumption of clothing and food. How confident is the MPC that, when these rates are increased, people are going to be prepared rather than becoming complacent given the decision not to increase interest rates? My question, to begin with, is for Mr McCafferty, given your position on interest rates.

Ian McCafferty: The work we have done suggests that consumers are not necessarily more sensitive to changes in interest rates than they have been in previous cycles at this stage. The other thing I can say is we are sending messages, as we have done for some time, that while the exact timing of interest rates is clearly uncertain and, at the risk of using the phrase again, data dependent, we have signalled that all consumers need to take account, when setting their budgets, when looking at their mortgages, and when taking out financial contracts, of the prospect of slightly higher interest rates over the course of the next couple of years or so.

The other issue, as has been mentioned by the Governor, is our strong belief and the message that we have been sending through our forward guidance that, as and when interest rates do have to rise, there are strong reasons to believe that such rises will be gradual and that they will take place over a long period. One of the reasons for that is for us to be able to see how consumers, as well as businesses, react to changes in interest rates after a long period in which they have been very stable at a very low level. I think that gradualism is particularly important in terms of minimising the disruption to both businesses and consumers of a gradual normalisation in monetary policy.

The second message that we have sent through the forward guidance message, which I think also provides some reassurance to consumers, is that there are very good reasons to believe that for the foreseeable future, and by that I mean the next several years, interest rates will be significantly lower than would have been the case were you to look at pre-crisis trends. We believe that, as and when normalisation occurs, the rate of increase will be gradual and the total amount of increase will be relatively limited. I think that is something we can offer as our best intention at least in terms of protecting those who are potentially exposed to higher interest rates.

Q44 Rushanara Ali: Are there any other points?

Dr Carney: It is a very important question you are asking and in fact in the report we provide some of the analysis that Mr McCafferty referred to. We conduct an annual survey, the so-called Bank NMG Survey, of thousands of households to assess these types of issues and we go into some detail in terms of the differential response of borrowers—the type of people you are referencing—and savers to rises in interest rates and then try to look through to what the aggregate impact would be. In terms of context, British households have paid down debt relative to income since the crisis. That said, there are important cohorts of households—the one quarter example that you gave—where they have not made progress on reducing their debts because either their incomes have not been increasing or for other factors such as ability to find work.

The relative sensitivity of those cohorts to rises in interest rates is a factor for our consideration. Now, when we bring it all together on the margin we think that it is a relatively modest impact just in terms of savers versus borrowers. That is a tentative conclusion. There is an impact. There is more of a drag, but that is a tentative conclusion because it partly depends on what banks will do with their deposit rates versus their mortgage rates. I will just draw your attention to the stress test results that will come out just before the holidays, which will be very informative about the relative moves that banks expect to do in a scenario where interest rates increase quite sharply. That will become part of the puzzle.

I conclude by echoing what Mr McCafferty said. This is something we are very sensitive to. It is something we are watching and something we are analysing. There are reasons to expect that there could be an impact here. It is something we can assess as we move gradually to increase interest rates and it is one of the key focuses that we have.

Q45 Rushanara Ali: Just one supplementary point on this. Do you feel confident that the group who are most likely to be affected will hear the messages? The forward survey that was mentioned, and other opinion polls, suggested that consumers are not as aware as they should be about it and those messages that are important about changes to interest rates in preparation.

Dr Carney: Again, it is an incredibly important point. We have to choose our words carefully when we describe the likely path of policy because we are communicating both to financial markets who hang on every word and, most importantly, to households and businesses. We try to simplify, in these extreme circumstances, our message. That is one of the reasons why we are providing guidance. It is one of the reasons why all members of the committee are more active in terms of media availability on a variety of outlets, local media as well as national media, and not just the financial press and the wire services. It is also one of the reasons that we are boring in our message. People ask us about our guidance. It is limited and gradual in terms of the likely path. It has not changed. It has not changed since February. It is boring because it is consistent but it has to be repeated in order for that message to get down.

Mr Ruffley asked a very useful series of questions about contingencies but the reason why I kept coming back to the likely path of policy is one does not want to mislead or misdirect in terms of that path of policy. Interest rates are likely to go up. It is a question of timing and degree as this recovery moves forward and we do want that message to get to households. I will finish here. There are some signs in terms of household behaviour, you see some of it in the housing market, that that message is being increasingly understood.

Q46 John Thurso: Can I turn to the productivity puzzle and perhaps come to you first, Governor, as—according to *The Wall Street Journal*—you have solved the productivity puzzle. I wondered if you would like to share the solution with us.

Dr Carney: Excellent. That is good. I will have to go through my back issues of the *Journal* and remind myself how I solved it.

John Thurso: It was on 10 September, I think.

Dr Carney: Well, that is excellent; so we do not need to cover any other aspects of that. If you look at productivity, the latest vintage of data suggests a shortfall of about 13 percentage points of productivity. We can explain a portion of that, let us call it 2 percentage points, on measurement error. There is a balance that reflects in part the realities of weak demand. Companies having to work harder for sales is just one example of the implication of weak demand. There is an important component, we think, that comes from the financial sector not having functioned as well as it could for a period of time. Capital was not being recycled and, as well, we have not seen births and deaths of companies move as rapidly.

There is also an important sectoral explanation for the productivity shortfall and Mr McCafferty has done some very good work and speeches on this as well. The most obvious example of this is North Sea oil, as you are well familiar. The decline rates there

have had an impact on measured productivity as well as in financial services. One can account, building up from those building blocks—

Q47 John Thurso: In your speech in Liverpool you came up with the labour shock and you pointed to the 1.5 million extra that had come into the work force and that people had adapted by working basically for less in order to retain employment. You made the point that it was cheaper or a better decision for firms to choose that cheaper labour over investment and that that was also a part of the explanation. To what extent do you see lack of investment linked to the productivity puzzle with that extra labour as the answer?

Dr Carney: It has been part of the more recent dynamic, albeit everything else that I said holds, but on the margin labour has been relatively cheap, relative to capital. Part of the reason why capital was expensive was because of difficulties in the financial sector, difficulties that are not totally but largely resolved. Part of the reason why labour is cheap, and it took us a while to determine this, is that there has been a substantial labour supply shock. More people have stayed in or entered the labour market than we would have expected a few years ago. That is one of the reasons why—

Q48 John Thurso: How much do you think that is a one-off and that it will self-correct as the economy improves and how much of that is a fluid situation and, therefore, part of a new dynamic to be looked at going forward?

Dr Carney: I think there is a limit to everything. There is a limit to labour in this country. Part of what we have seen is a very dramatic increase in the participation rate of cohorts aged 50 to 64, particularly among women, and we have adjusted accordingly our views of equilibrium participation in the economy. I do not think over the forecast horizon there is a significant prospect of further increases of our assessments of those equilibrium rates. I do also think, to go back to the macro, that what we are seeing in the economy is that this supply shock is being used up. We are reaching a point where we would see wage growth more consistent with employment growth. Early stages, but both on a survey basis in terms of our agents' discussions with companies and our own discussions with companies and very recently in the average weekly earnings data on a three-month basis we are seeing that turn.

Q49 John Thurso: Can I turn to you, Mr McCafferty? We had a very interesting discussion on the last occasion, particularly around the speech you made on sectoral productivity, which I found very interesting. Have you added to your thoughts in any way from that with this new data that comes in and particularly the recent data showing that the UK was some 17 percentage points on average below the G7 average? Do you think we have particular problems that other countries do not?

Ian McCafferty: I have not had a chance to update the research that I did on the basis of the new vintage of ONS data as yet and I am not sure that I would necessarily find that it would change the conclusions of that research that I gave in the speech dramatically. As I say, whether it is a best use of time is still an open question, but I will look into that in a

little more detail perhaps. To that extent, I still think that the conclusions I made hold, even on the previous data.

What I would add to the Governor's remarks, with which I agree, is that one of the stimuli in practice to productivity, is as the labour market starts to tighten in itself, as firms find it either more difficult or a little more expensive to hire new labour, then there is a greater incentive to look for internal productivity adjustment in order to adapt to that as demand increases. As we have started to see, marginal wages, that is the wages for those changing jobs, have started to pick up. It is rather earlier and slightly more marked than is the case for average wages at this stage. It is also the case that the skills shortages that are reported through the business survey data are suggesting that the labour market is tightening and that there are more skill shortages now than there were this time a year or 18 months ago. I think that a natural process of the tightening of the labour market is under way and, as a result, I would therefore expect to see some improvement in the search for internal productivity as that labour market tightens.

Now, that is not to explain the entire gap. As I said, there is a whole series of explanations behind the gap that we have and my own research suggested that probably just over half—I said 60% in the paper—of the productivity shortfall can be explained by special sectoral and other factors that are not specifically demand contingent. Even if we do see a search for internal productivity improvement as the labour market tightens, it is certainly not going to close the gap.

The latest data, as I understand it, looking at international comparisons—and there is some very interesting work currently going on at NIESR, the National Institute, as yet unpublished but they gave a seminar the other week to show their initial results—suggests that other countries are having some similar problems. There are productivity puzzles in the United States and in parts of the eurozone as well as here, so I do not think we are unique. It may be the case that, on the basis of measured productivity, the gap here is somewhat larger than either the United States or the eurozone at this stage, but again part of that is explained by the specific factors of North Sea oil and the financial services sector.

Q50 John Thurso: I do not know what they have not published obviously, but they have said recently that the puzzle of Britain's poor productivity among the Group of Seven rich nations remains unsolved and poses the biggest domestic risk. Is that hyperbole or is that accurate?

Ian McCafferty: I think it is a significant risk. We have had to downgrade our forecasts of productivity growth in the Inflation Report over the course of the last couple of years on the basis of the continued disappointments that have been contained in the data as they have been released. If we do not see a pick-up in productivity in this economy over the course of the expansion as it continues, then that expansion cannot be fully sustainable and the rate of growth will be lower as a result. I think it is a big risk. I think there are other equally big risks. We have discussed a whole series of risks, but it is something that we certainly need to pay a good deal of attention to.

Q51 John Thurso: Sir Jon, in your opening remarks you said that pay and productivity were two of the things that you worried most about. You have heard the discussion. Is there anything that you would like to add to that?

Sir Jon Cunliffe: The evolution of productivity and what it means for the UK going forward is the key to how fast we can grow without generating inflationary pressure. There is the labour market and, as the Governor said, at some point that comes to an end. At that point or around then it is a question of how much productivity can keep up. In the forecast we have, the initial household consumption is sustained by a rundown in savings, which we talked about, but then, from around the second year on, productivity drives pay increases, which then support household income, which then supports consumption.

It is quite important to the second part of the forecast that productivity starts to get back to its pre-crisis trend productivity growth of about 2% and it only just does it by the end of the forecast. I should say, nowhere in the forecast do we assume that any of the productivity growth relative to pre-crisis trend, the 13% that the Governor mentioned, is recovered. This is just getting back to trend. Clearly if that does not happen then it is more difficult for household consumption to support the economy because it is dependent on savings with an external sector that is a drag on the economy right throughout the forecast period. This return of productivity growth to relatively modest levels compared to pre-crisis trend is key, and that is what I meant.

Q52 John Thurso: In your view, to what extent is business investment a critical dial to watch for an indicator of productivity?

Sir Jon Cunliffe: I think a key component to the productivity puzzle is how much business investment did not happen. Of course, with the ONS revision, business investment was stronger at an earlier point.

John Thurso: Not by an awful lot.

Sir Jon Cunliffe: No, so there may be a bit more there, but it is a key point. I think there is also the point that Mr McCafferty made, that as pressure in the labour market increases companies will look harder for productivity.

Q53 John Thurso: For completeness, as I have asked everybody else the question, do you have anything to add to that on the productivity puzzle?

Kristin Forbes: No, I agree with everything they have said. Let me highlight one thing Sir Jon said. One of my former colleagues at MIT is Bob Solow, Nobel Prize winner in economics, and he has this great quote, "Once one starts to think about productivity you can't think about anything else as an economist." I think there is something to that. If you care about people's long-term standards of living there is nothing as important as productivity growth.

John Thurso: I am not an economist but I was a businessman and I tell you productivity was pretty high on my list.

Q54 Chair: What do you think the long-run growth rate of the economy is, Sir Jon?

Sir Jon Cunliffe: I do not think I have a point estimate for that. I think we have had a pretty deep and wrenching recession.

Q55 Chair: All right, I will ask Professor Forbes. What do you reckon the long-run growth rate is?

Kristin Forbes: I could not give you a point estimate. I could give you a very broad range.

Q56 Chair: Do either of the other two want to have a go, after all there are figures published out there?

Dr Carney: I am not giving you a long-run but I will give you a direction towards long-run.

Chair: It is a figure I am after. What do you reckon it is at the moment?

Dr Carney: Yes, I know. I am just giving you context, if I may. It is always important. You cannot just have figures without context, Chairman.

Chair: Why don't you start with a figure and then give us—

Dr Carney: I am working towards it. We have a view that the economy is going to grow around historic averages after this year, which is above trend.

Q57 Chair: Your historic average is, itself, a flexible concept. So it depends what constitutes the average. What are you writing in for that?

Dr Carney: In terms of trend growth in this economy, around 2.25%, which is lower than historic averages. We have, towards the end of the forecast—

Chair: You reckon that the long-run growth rate is 2.25%?

Dr Carney: Once you get into long run you have to layer in the demographic shift that will start to come. We had delayed—

Q58 Chair: What do you reckon it is on a five-year view?

Dr Carney: To go back to the academic on productivity, productivity is the only thing that matters for long-run growth in the end, given where demographic—

Chair: These are the same questions, just looking at them in the round.

Dr Carney: Yes. The structural question, the question for Parliament because a number of the decisions are Parliament-determinant on the—

Chair: I am trying to get on to that, Governor.

Dr Carney: —growth rate.

Chair: I am just trying to get to the figure. What is the figure for five years?

Dr Carney: I would have said it by now if you had not interrupted me. I think the question is whether productivity in this economy can be faster than 2%. That is the question, and then the extent to which there is greater labour-force participation from other measures, that provides some movement around there.

Q59 Chair: I did not think something so straightforward would be such hard pounding. Are you saying that you think that on a five-year view it is 2% or 2.25%?

Dr Carney: It is too refined. To conduct my job I need a view of what trend growth is from here to the end of the forecast horizon, which is three years. Towards the end of that forecast horizon, growth in the order of 2.25% would be consistent.

Q60 Chair: All right. Mr McCafferty, do you think that the Government have in place a range of supply-side measures that give a reasonable prospect of raising that growth rate?

Ian McCafferty: I think the medium-term growth rate is going to depend heavily on investment, and investment not only in the sense of fixed capital but also in terms of improving knowledge, and I think the supply side that I see on the part of this Government, which has been to talk about the importance of infrastructure investment in the economy as well as helping innovation through investment in sciences, is helpful to that.

Chair: Was the answer yes?

Ian McCafferty: The answer to that extent is yes. One can always do more but clearly we live in a fiscally constrained economy. One can always spend more on infrastructure and investment in sciences, but so far I would say that that and the flexibility in the labour market that is currently in place are all conducive to a recovery in productivity growth over the medium term.

Q61 Chair: That is built into this 2% to 2.25% figure that we have arrived at after a struggle. I am really asking whether the Government have in place policies that give a reasonable prospect that that number might rise.

Ian McCafferty: On balance I would have to say yes.

Q62 Chair Apart from investment, which is in a sense a given, it is the improvement in the quality of investment that I am really looking for an answer on—as being meant by supply-side measures. Do you think we have those in place at the moment?

Ian McCafferty: The one area I would say that this economy has struggled with for the last good number of years—so this is not in any sense a political point; it is a long-term reflection of the UK economy—is the question of our education. Are we providing enough entrants to the labour market with the right sorts of skills to provide the labour productivity that we need? I think that is still an open question. It is clear that some of the academic results have been improving in recent years, but when I talk to employers there are still issues about how well the labour market is performing.

Chair I get it every weekend in my constituency.

Ian McCafferty: I am sure.

Q63 Mark Garnier: I really want to talk about wage inflation but, Governor, I just wanted to ask you briefly about stressed households' debts. It is more to do with the tone of the answer you gave Rushanara Ali earlier. If you remember, when you first came before this Committee talking about the MPC I asked you exactly this question about household debt and your answer was very clear and, dare I say it, a little harsh. You made the point that monetary policy has to be done on the bulk of the economy and not on the tails of the standard deviation curve. I have noticed over the last few months that we have had this conversation about household debt and your tone has become very much more sympathetic to those households that may be struggling under household debt. I am curious to know whether you see this perhaps as a bigger problem than when you first arrived here or whether living in the UK has made you much softer and kinder.

Dr Carney: That is exactly what has happened. In terms of the setting of monetary policy we have to set it on aggregates: the aggregate response of households to movements in interest rates; aggregate unit labour costs across the economy and so on. So that perspective has not changed and would be consistent. Since I have been here obviously I have been exposed more and more to disaggregated information. One of the things we have had to do in order to conduct our responsibilities on the Financial Policy Committee, we have spent a tremendous amount of time focusing on—again I will use this impersonal word—cohorts of households, who are the highly indebted households and what their likely responses are to be. What are the risks to this economy that more and more British households will enter those highly indebted cohorts, storing up problems for the future beyond the monetary policy horizon, which is part of the reason why we as the FPC took some action earlier this year on the housing market.

So since I have been here we have done a lot more work on this and focused on the cohorts, and of course I am aware of the difficult situation a large number of households are in. When we pull it together in aggregate as we have tried to do in this inflation report—there is a quarterly bulletin article, I believe, that is coming out within the next few weeks that provides a bit more detail on this—and look at it in terms of the relative response, the aggregate responses to raises in interest rates, there is sensitivity but it is not

decisive in terms of those moves, and we will see, as Mr McCafferty said, as we move forward in a gradual fashion what actually happens in terms of the response.

Q64 Mark Garnier: That is the key to it, isn't it—baby steps and wait and see what effect it has on households, and then if it is okay move forward?

Dr Carney: It is one of the factors. Obviously we have to calibrate policy in order to achieve the inflation target but it is an important factor that there may be a bigger reaction to rate moves when they do come because there is a large proportion of households that are heavily indebted, have been heavily indebted for some time—it is floating-rate debt and that debt will be repriced immediately—and also, even though we are seeing increases in wages economy-wide, they may be concentrated in sectors where wage growth is less rapid so their actual debt burden goes up. Again, it has to be material enough to affect the broader outlook for growth and pressures on inflation.

Q65 Mark Garnier: That is very helpful. Thank you. You have very nicely come on to wage growth and I was wondering if you could give us a little bit of granularity as to where we are seeing wage growth, in what particular sectors, and also what particular skills. Are low-skilled workers missing out on any wage inflation?

Dr Carney: Yes. The short answer is that lower skilled workers are not seeing wage growth. The composition of job growth in recent quarters has been more heavily weighted towards lower skilled jobs. That is one of the things that has weighed on the average increase in earnings, just statistically, and we have not seen a pick-up in those wages. We have seen a pick-up in wages—it has been somewhat volatile—in construction, for example. We have seen a pick-up in fixed pay in financial services. We are drilling down on that because part of that may reflect the change in composition of pay in financial services because of bonus-cap rules and other factors that would have that mathematical—

Q66 Mark Garnier: On that particular point, which is quite interesting at the moment, are you suggesting that because of the bonus cap coming down we are seeing that the fixed pay is going up in the City?

Dr Carney: That is the logic of what would happen.

Mark Garnier: Which is the opposite of what—

Dr Carney: You do see a bigger move in measured financial services pay, in fixed pay, than you see in movements in profits in the financial services sector as a whole. So the data seems consistent with the expectation. There has been some pick-up in manufacturing as well, so there is a spread.

It is early stages, though, Mr Garnier, as you know. It is very early stages in terms of wage growth. On a three-month basis, the last two monthly reports if you annualise them, you see wage growth at around the 2.5% point on an annualised basis on average weekly earnings. There are some surveys and our agents' discussions are consistent with that, if

not slightly stronger than that. What we are seeing, which is an encouraging sign of confidence in the labour market, is that people are now switching firms for jobs, job-to-job churn is starting to pick back up and that also becomes consistent with a broadening of wage pick-up.

Q67 Mark Garnier: David Blanchflower, who is not somebody I necessarily always agree with, has come up with some quite interesting counter-arguments to this wage inflation. Could I try a few of these out on you? The Bank of England is suggesting that by 2016 we will see annual pay growth rising to about 4%. David Blanchflower is suggesting that is more a reversion to mean long-term growth rates. Is that a fair comment?

Dr Carney: Yes. It is a fair comment. An economy with roughly 2% productivity growth, 2% inflation, 4% nominal income growth, would be consistent with unit labour costs growing consistent with the inflation target—in other words at 2%. So that is consistent, yes.

Q68 Mark Garnier: The other thing he talks about is part of the reason why we still have relatively low wage growth. First, he talks about an internationalisation of the labour market, so if you see wages beginning to rise here you will see a bigger influx of eastern Europeans coming in and thereby suppressing wage growth. Similarly if businesses cannot afford to pay higher wages, you might start seeing an exporting of those jobs to other markets. Is the internationalisation of our economy—our wage economy and work force—leading to lower wage growth than you would normally expect?

Dr Carney: There are many aspects of internationalisation of labour and they are not restricted to net migration, but you reference net migration and we had a brief discussion about it earlier. We have seen an increase in net migration to the UK since the recovery has begun. Those workers are finding jobs at the same pace as people here and they are doing a couple of things. One is yes, it is additional labour so it comes into the supply-demand equation in the labour market. They are also—and we hear this constantly around the country—filling important skills gaps, skills bottlenecks, particularly in the manufacturing sector but more broadly than that, in IT and other areas. That is allowing companies to hire more people and invest more in the economy, so it in part goes back to the broader discussion of productivity. But that aspect of the internationalisation of the labour market is obviously very positive.

I would say that internationalisation obviously goes more broadly because of the ability to outsource a variety of processes. That has continually increased, particularly in the services sector. Then to go back to the secular trends that we discussed earlier with Mr Mann, the increase in automation of a series of formerly white collar tasks is quite important just given the growth in computing power, which has a consequence of adjusting the shift of jobs and also the types of jobs that certain people with certain skills and education can get, which if we are not careful and not focused on retraining and other aspects will mean that more people are competing for lower-skilled jobs, as opposed to moving up as a result of this.

Q69 Mark Garnier: He goes on to say that public sector pay freezes have the effect of keeping pay growth down in the private sector. Is that a fair comment?

Dr Carney: There is flow between the public and private sectors, and the public sector was a relatively attractive employer for a period of time, so those shifts are relevant. Directionally he is correct, yes.

Q70 Mark Garnier: He also says that the level of slack in the UK labour market remains pretty substantial, but that seems to be coming down.

Dr Carney: From report to report, we do not think the level of slack moved that much. That is the best collective judgment of the MPC: the range of views around that. But certainly, as the economy continues to grow and consistent with our forecast, we expect the degree of slack to come down over the forecast period and be largely eliminated by the end of the forecast period.

Q71 Mark Garnier: We have obviously seen over the last few months unemployment come down to 6.4%—

Dr Carney: It is 6%.

Mark Garnier: I hate to pin you down on formal guidance but do you have any sort of clue as to what level of unemployment would start to see wage inflation begin to pick up at a far greater pace?

Dr Carney: We are providing our perspective on that. We have been updating our views on the medium-term equilibrium rate of unemployment. If the economy was in balance and unemployment was at that level we would expect inflation to stay at 2%, so it is an equilibrium in that sense. If you look historically at the longer-term natural rate of unemployment, it was around 5%. It is difficult to estimate, but broadly speaking it has been around 5% prior to the crisis. We had the crisis; sharp increase in unemployment, as we all know; a large cohort of people who were unemployed for a long period of time. One of the judgments we have had to make is how quickly were those longer term unemployed, who unfortunately lost attachment with the labour market and probably lost some skills and so on, the real unemployment problem, will be reabsorbed into the labour market. That is central banker speak for how quickly will they find a job. We have been updating our view because that impacts where that medium-term equilibrium rate of unemployment is. We have been updating our view based on the experience of these individuals finding jobs and based on evidence of the extent to which them looking for jobs has also helped to keep downward pressure on wages. The long and short of it is we think that that medium-term equilibrium rate of unemployment has come down to around 5.5% at present. We are at 6% right now so there is an unemployment gap, if you will—there are more people who could be employed before we get there—and we expect further drift down. It is not an exact science but we do expect further drift down over the course of

the forecast horizon towards that natural rate, but we will see. We will see and we will update it.

I will just make a final point in terms of slack, if I may. What we have tried to do—it is obviously difficult, it is imprecise and there is a range of views around it—to the best of our ability is to focus where we think slack is in the labour market. How many people? What is the gap between the unemployment rate today and where that equilibrium is? What is the gap between the number of people who are participating in the labour market versus what we see the equilibrium participation rate is, and that is determined by a variety of factors: household debt; benefits; age cohorts and so on. Also, to go back to Professor Blanchflower, a similar analysis to look at what are the actual hours that people are working versus their desired hours. A lot of people still report that they would like to be working more but they cannot find the hours. All of those components make up elements of the slack in the labour market. We give our estimates for all of those, reasonable people can disagree about those equilibrium levels, but we have the data relative to them—bring them together and that is our central estimate of slack.

Q72 Mr Love: Can I follow on from that and from comments that John Mann made? He talked particularly about the self-employed, but we are also seeing other phenomena in the labour market: zero-hours contracts; a massive increase in part-time working; and the immigration factors. How permanent do you think these changes are to the labour market and is that something the MPC has discussed?

Dr Carney: We have discussed a wide variety of dynamics in the labour market including structural changes to the labour market occasioned by changes in benefits; changes in pension arrangements; changes in, for example, the use of zero-hours contracts and what that has meant for the flexibility of the labour market and the number of people participating in the labour market. All of that we try to bring together to assess where the labour market is today relative to its equilibrium levels. Our view is that there continues to be a notable amount of slack in that labour market.

Q73 Mr Love: Is there structural change going on? You mentioned changes in pension arrangements, benefits. Do you see this as mainly a structural phenomenon or is it simply cyclical and, when the economy picks up, part-time working will go back to the norm?

Dr Carney: My personal view is that there will be an increase in self-employment and part-time work relative to history, in part—I will not necessarily make comments on changes to benefits or other factors, but just the reality of technology—driven by an ability to disaggregate, if you will, the production of a good or a service, which creates a greater ability to have contractors for firms, which effectively are meaner, have fewer direct full-time employees and have other relationships with designers, accountants, engineers, salespeople and so on, and that ecosystem has developed. In the end, I think we will not go back to historic levels, but that is my personal assessment—there are some structural changes that are driven as much by technology as they are by any particular policy.

Q74 Mr Love: You touched on this when answering the question from Mark Garnier about Professor Blanchflower's work. He has tried to institutionalise the impact the level of underemployment will have as well as the level of unemployment. You say that you take that into account. But how formalised is it in your discussions of the rate of pay increases?

Dr Carney: It is about as formalised as I would say we could get. We do our own work, and we obviously look at his work and the work of others to assess where desired hours are, which is a form of underemployment, and then we do analysis in terms of the impact of that, the relationship of that with wages—whether there have been structural breaks in recent years, whether that relationship has changed—and then obviously make our own assessments about the importance of that slack in the labour market for prospective inflation. So it is pretty comprehensive. It is an important part of our analysis.

Q75 Mr Love: To what extent do you see the labour market as in effect two separate labour markets? Mr McCafferty mentioned earlier on skill shortages emerging at the upper end of the income scale, but we all know the problems that are happening at the lower end of the income scale. To what extent can you call that a single labour market and how do you differentiate between the two phenomena?

Dr Carney: If I may, I will start and then maybe I will ask Mr McCafferty to pick up. There is always segmentation in labour markets, whether it is by geography or by skill level or discipline. There is a broader phenomenon, to which I alluded earlier, that given the greater embedding of technology—computing power—into work, there is greater polarisation of the job market, and the relative supply-demand dynamics for higher-skilled jobs are increasingly attractive. Part of the reality of this is that it increases labour supply into lower skilled jobs, which makes that more challenging and keeps wage pressures down. That is a broader, secular trend. It is still probably early stages in that and it is a question of how much we are picking up in the data, but Mr McCafferty may have a separate take on that.

Q76 Mr Love: Mr McCafferty, would you characterise the lower end of the market as tightening? We understand that wages are going up at the higher end and skill shortages are emerging, but that does not appear to be happening at the lower end.

Ian McCafferty: Perhaps I can just correct something about what you have suggested. I said earlier. I did not suggest that skill shortages were only evident at the top end, if you like, of the labour market. I think there are skill shortages emerging in terms of certain very specific skills. Those are not always right at the high end of the market. There is also growing evidence, at least anecdotal evidence, from employers that they are finding that the labour market is tightening in terms of people that they wish to employ in terms of what you might call other levels of skilled jobs at the same time. So I do not think it is necessarily purely at this very high and, as it were, rarefied end of the labour market.

I would agree with the Governor that the labour market is always somewhat segmented. It is clear that there are some jobs that require very rare elements of skill and those elements

are rare for a number of reasons and they are not substitutable. But for the majority of the economy, we can look at a labour market in which there is good deal of flexibility, not only because people are able to train and retrain, but also because employers are able to redefine and redesign jobs in order to take on people who may have had a different level of skill to those that they originally needed for a similar job. From that point of view, we can see spill-overs in terms of the broad labour market as it tightens.

Q77 Mr Love: Let me ask you this, Governor. The average weekly earnings figures that you use from the ONS suggest that in the private sector over the last two years pay growth has been around 1.3%. The alternative labour force survey, which includes a deeper look at small business changes, is suggesting a minus figure for wage growth. Do you think that is an important issue for the Monetary Policy Committee to take on board and that they should look at what is happening to pay growth at the lower end?

Dr Carney: It is important that we look at all aspects of the labour market and certainly in terms of pay what is driving headline figures. I would say further that it is very early stages—I emphasise early—broadly consistent with our forecast nonetheless, but early stages of the recovery in pay growth. What is important is that this is sustained and what is important is the growth in pay relative to the growth in productivity. Unit labour costs are flat at present at best, suggesting that we have some way to run before we have pay growth, and ultimately unit labour cost growth, that is consistent with the inflation target.

Q78 Mr Love: To assess its earnings growth figures the Bank uses this ONS average weekly earnings figure, but that only consists of companies with a minimum of 20 employees. It does not include companies below that size where there is a completely different dynamic in operation. There is a labour force survey that does take this into account. How do you assess what is happening at the lower end and the impact that is having in terms of overall growth in pay?

Dr Carney: We do look at other measures, we do look at other surveys and we develop a comprehensive picture of pay developments in the economy, which is one of the many reasons why we have an assessment that there are only tentative signs of that pick-up, albeit tentative signs consistent with our forecast.

Q79 Mr Love: You mentioned earlier on to Mark Garnier—correct me if I am wrong—that your current estimate on medium-term unemployment rate is around 5.5%. Is it something that you look at regularly in terms of this polarisation in the labour market? Do you think over time that might have an impact on what the unemployment rate should be?

Dr Carney: The answer to the first part is yes. It is something we look at regularly and something we have to explain publicly if we make any adjustment in our assessment. That is what we do.

In terms of the effect of polarisation on medium-term unemployment, there are good and bad elements of that phenomenon. I will give my personal view. To the extent to which the

economy is creating lower skilled jobs, polarisation is not inconsistent with people finding those jobs, but it is potentially inconsistent with stronger wage growth over time, and ultimately goes back to the education point and productivity higher trend growth over the medium term.

Q80 Steve Baker: We have assertively restated that we are all data driven. Does that mean we are all model driven too?

Dr Carney: No. If we were all model driven, then you would not need an MPC.

Q81 Steve Baker: All right. But we do have plenty of models floating around.

Dr Carney: I presume you feel we do need an MPC, Mr Baker?

Steve Baker: I think you know I think we don't.

Dr Carney: I just thought we would get that read into the record.

Steve Baker: I want to turn to a criticism by Chris Giles in *The Financial Times* of the model for labour market slack, which called it a nonsense. If I may I will just share a couple of quotes with you. He said that, according to a chart in the inflation report, the average-hours gap hit a standard deviation of -6, and this is something we would expect to happen once in 254 million years. He also said that the Bank of England is again implying the recent recession, as far as labour market participation is concerned, was worse than any moment in 800 times the period in which homo sapiens have walked on the earth. How will the Bank reply to a criticism as strident as this one?

Dr Carney: Since you asked, let me reply objectively. Calculations such as that presume that there is a normal distribution around the equilibrium rate. Let me make it clear. First off, what is the point of the chart? The chart is to show a deviation relative to historic averages. It is an illustrative chart that serves the purpose of showing where the slack is relative to average equilibrium rates, just to give a sense of relative degrees of slack. That is the first point. The second point is that the calculation erroneously, perhaps on purpose to make the point but erroneously, assumes that there is a normal distribution around that equilibrium rate. So in other words to say that there is a normal distribution of unemployment outcomes around a medium-term equilibrium rate of 5.5%. So it is just as likely that something would be down in the twos as it would be up in the eights. Well, who really believes that? Certainly not the MPC and I suspect not the author of that article. It also ignores that the period of time was during the great moderation for all of these variables as well, so it is a relatively short period. These are not normal distributions. You would not expect them. You would expect a skew with quite a fat tail. So using normal calculations to extrapolate from a chart that is there for illustrative purposes is—I will not apply an adjective to it—misleading and I am not sure it is a productive use of our time.

Q82 Steve Baker: That is a fantastic answer. I am much encouraged by it, because it does seem to me it has been known for a long time that it is not reasonable to use normal distributions to model market events and yet so much mathematical economics is based on it.

Dr Carney: People do it because it is simple—it is the one thing they understand—and then they apply it without thinking, which is not what the MPC does.

Steve Baker: That is great. I can move on quickly. But I will just say congratulations to the Bank on deciding to commission anti-orthodox research because I think this is going to be critical to drilling into some of these problems.

Dr Carney: Thank you.

Q83 Chair: To be clear, the conclusion that we should draw from this is that we should look at all economic models with a very high degree of scepticism indeed.

Dr Carney: Absolutely.

Chair: Can I just add that it is an astonishing conclusion? I do not want to cut into Steve Baker's questions, but is that the right conclusion?

Dr Carney: Absolutely. Models are tools. You should use multiple ones. You have to have judgment, you have to understand how the models work and particularly, if I may underscore, dynamic stochastic general equilibrium forecasting models, which are the workhorse models of central banks. What they are useful for is looking at the dynamics around shocks in the short term. What they are not useful for is the dynamics further out where—

Chair: I am just thinking about all those economists out there whose jobs have been put at risk.

Dr Carney: No, we have enhanced their jobs to further improve DSG models.

Steve Baker: We are all Austrians now.

Dr Carney: I am not sure that there is—no.

Q84 Steve Baker: Sir Jon, before I move too much further down this path, can I ask you what would be the implications for financial stability and bank capital if risk modelling moved away from using normal distributions?

Sir Jon Cunliffe: Maybe I will answer the question another way. It is because of some of the risks around modelling, the risk-weighted approach within bank capital, that we brought forward our proposals on the leverage ratio. So you have to look at bank capital through a number of lenses. One way of doing it is to have a standardised risk model for everyone and there is a standardised approach and it works on, if you like, data for everybody that does not suit any particular institution and the bigger institutions run their own models, which tend to have these risks in them. Then you have a leverage ratio that is

not risk-weighted, and therefore takes no account of these models, and that forms a check. So with banks, the best way to look at their capital is through a number of different lenses.

Q85 Steve Baker: Thank you. That exchange is extremely helpful all round. Can I just move on to migration again and drill in a little deeper? To what extent are your models and forecasts dependent on the present trends of migration continuing?

Dr Carney: Our largest model would be consistent with historic levels of migration. In terms of an assessment of labour market pressures though, we have been and we will have to continue to take into account the relative strength, certainly of what is happening on the ground and, secondly, make judgments, given their relative strength, about the British and continental economies' expected trends of continued migration. Yes.

Q86 Steve Baker: So that assumes the free movement of labour, the political decision to have the free movement of labour.

Dr Carney: We would never make an assumption that was inconsistent with the status quo on any political decision.

Q87 Steve Baker: This is where I am going, then. We seem to be heading into a general election at which immigration will be a major issue and we have just had not one but two by-elections where it has been a major issue.

Perhaps I could ask you this, Professor Forbes. From your work within international economics in particular what do you think would be the impact on the UK economy of changing course on this political decision—to have the free movement of people in Europe?

Kristin Forbes: My work is not specifically focused on migration, so I do not have any tremendous personal insights, but the way I think about migration in the context of the work of the MPC is that, if there are any changes to policy, we will take those changes to policy and include them in our models and our forecasts. The biggest impact of changes in migration tends to be if there is more migration that will increase the labour supply, so that will increase the rate at which an economy can grow. But again we take any policies as given. We are not going to try to model those.

I will also say that academic literature as a whole on migration is a terrible muddle. Economists often disagree on most topics, but put two economists in a room and talk about the evidence on how migration affects different aspects of the economy and there will be even more disagreement than usual. So the academic literature is quite difficult.

Q88 Steve Baker: Mr McCafferty, you talked about the tightening of the market. If a different decision was taken about migration, would you not expect that the labour market would substantially tighten?

Ian McCafferty: I am not sure I would use the word “substantially” necessarily. I would want to see what the policy change was and what impact there was in terms of the flows. I would agree with what my colleague, Kristin, has said, that clearly at the first level a change in migration policy changes the relative supply of labour and we would need to take that into account. Exactly what the impacts would be, I think we would have to take account of as and when.

Q89 Steve Baker: When we talked about this secular trend to increase the number of lower skilled jobs, that has also fed into the conversation about who migrates and why and which jobs they take. Do you believe that these changes are having a material impact on people’s lives and that that therefore explains why it is a political issue?

Dr Carney: Which changes?

Steve Baker: The secular trend in the job market. You talked in particular, Governor, about IT being used. Is that secular trend so material in people’s lives now that it has made immigration a political issue?

Dr Carney: I am not well placed to judge people’s opinions on the priorities of issues. I will make the following point though. When we look at migration, we look at net migration as well. There is a substantial outward migration from the UK which nets out to that 240,000-odd figure for the course of last year. I would re-emphasise again that the evidence, in terms of labour market outcomes of migrants, is that they are participating in the labour force consistent with people in the United Kingdom.

Q90 Steve Baker: If I were to boil it down to a basic bottom line question: if we controlled our borders and had some sort of Australian-style system that has been mooted, would that make us better off or worse off?

Dr Carney: Isn’t that time up?

Chair: The time is up.

Dr Carney: Yes, time is up on that.

Steve Baker: All right. Thank you very much.

Chair: Yes, time is up on your having to think about it before you give us a reply.

Dr Carney: I will re-emphasise that these are intensely political issues and, as you rightly point out, the time of the election is coming nearer. We do not want to be in the middle of an election campaign in any way, shape or form.

Chair: Still, it is a reasonable question.

Dr Carney: Well, the question that is relevant for the MPC is if there were a different immigration policy that affected the flexibility of the labour market, would we take that into account in the setting of monetary policy and the answer is yes. We would adjust and

we would continue to set policy in a way that was consistent with achieving the 2% inflation target. Decisions on longer-term structural growth, long-term productivity, prosperity of the economy, political decisions, are decisions for Parliament.

Q91 Steve Baker: I have to put it to you. We are living in this time where nationalism seems to be on the rise in various parts of the United Kingdom and elsewhere in Europe. As you put it, we have had exceptionally stimulative monetary policy. That is being expanded in Japan. You do not need me to rehearse all of that. It is an extraordinary set of circumstances all round. Even in this Committee you have been asked questions that almost suggest that you are a comprehensive economic planning agency that should understand every detail of the wage market. I think it was even suggested that you should be recommending pay increases in order to deal with inflation. Do you worry that in the context of all this politics your remit is in danger of expanding, and that you cannot detach yourself from politics because you are now such powerful players in the economy?

Dr Carney: The way we ensure that we are detached from politics, Mr Baker, is to focus on our remits. So with respect to the MPC it is to achieve the inflation targets. We have to explain everything we are doing and why that is consistent with achieving the inflation target in a reasonable horizon. The FPC, exactly the same. What are we targeting with our measures? How is that contributing to a sustainable evolution of the UK economy and reduction of risk? At the PRA, how are we contributing to the safety and soundness of banks? If we were to deviate from that—if we are to bring ourselves into issues outside of those remits—then we become political, which is why I can understand why some questions are asked, and they are important questions, but they are only relevant to the extent they are relevant to the remit.

Q92 Steve Baker: With that in mind, what would you expect to be the effect on the British economy of the current oil price and its trajectory? Perhaps I could give you a rest, Governor, and ask Sir Jon.

Sir Jon Cunliffe: I think it would have a number of effects on the economy. As has been said earlier, if the price of oil goes down because there has been an increase in supply, not because there has been a reduction in demand—they are different; you have to distinguish why it has happened—that will be a lower import cost to the UK economy and to other economies, depending on the oil intensity of your economy, and it will bring down prices. It is already having that effect, which is putting more disposable income into people's pockets. That is one of the things driving inflation so we will track it through on prices and in our economic models—we will look at the output afterwards, not just take it—to see what that does to the global economy and the like. There are a number of different factors that you have to take into account.

Q93 Steve Baker: There was a time when the United States was accused of exporting inflation, through commodities markets I think it is fair to say. We have now seen

an end to United States QE and astonishingly the price of oil is now dropping. Is it conceivable that the United States is now exporting disinflation, or even deflation?

Dr Carney: I think the prospect for inflationary pressures, consistent with our forecast in the United States, is that they will pick up modestly. I will leave it there. Currency markets are also relevant.

Q94 Steve Baker: I must ask Professor Forbes, is the United States in danger of exporting disinflation through the commodities markets now that QE has ended in the USA?

Kristin Forbes: I think it is hard to make that case right now for a couple of reasons. First, inflation in the US is higher than in the UK and in many other countries. So it is hard to argue that it is exporting disinflation. Secondly, the recent appreciation of the dollar should increase the price of US exports, which would in turn increase inflationary pressures in some countries rather than decrease them. So for those two reasons I think it is hard to make that case.

Q95 Chair: Let us go back to the answers you gave to an earlier question and then I will put one quick follow-up. I am after a very straightforward answer. Has there been a change in policy on immigration yet?

Dr Carney: Has there been a change in the United Kingdom?

Chair: Yes.

Dr Carney: Not to my—no.

Chair: No change of policy? There have only been statements about it.

Dr Carney: There has not been a change in policy that has affected the outlook of the MPC, which is what we are here to discuss.

Q96 Chair: Well, I think you had better let us know when you think there has been one, right away, and we will hold you to that if we find subsequently you have not.

Mr McCafferty, you were talking about skills shortages earlier. Do you think that immigration acts as a safety valve on restraining growth?

Ian McCafferty: As the Governor said earlier, inward migration can provide elements of skill that are in short supply.

Q97 Chair: Do you think it has been doing that in the UK economy in recent years?

Ian McCafferty: Yes, on balance I think that is the case and that was the case before the crisis.

Q98 Chair: So if there was a reduction in immigration as a result of policy, there would therefore be an increase in skill shortages?

Ian McCafferty: We talk about immigration as if everyone is identical. We would need to look at the types of reduction in immigration, whether that was a reduction in inward migration on the part of those who would otherwise be joining the labour force and therefore providing skills to the labour force, or whether it is other forms of migration, in which case there would not be the same economic effect.

Dr Carney: Could I just read into the record that, as an immigrant to this country, I am grateful to the open policy that has allowed it.

Chair: We are glad to hear that.

Thank you very much for giving evidence to us. It was extremely interesting. We have ranged widely and we look forward to seeing you on 14 January with the Financial Policy Committee and, of course, we will be having a separate hearing sooner or later about the Grabiner report and other matters.