BANK OF ENGLAND

MEETING OF THE MONETARY POLICY COMMITTEE
April 2015

A meeting of the Monetary Policy Committee was held on Thursday 9 April 2015. The following members of the Committee were present:

Mark Carney, Governor
Ben Broadbent, Deputy Governor, Monetary Policy
Jon Cunliffe, Deputy Governor, Financial Stability
Nemat Shafik, Deputy Governor, Markets and Banking
Kristin Forbes, External Member
Andrew Haldane, Chief Economist
Ian McCafferty, External Member
David Miles, External Member
Martin Weale, External Member

Dave Ramsden was present as the Treasury representative

Don Robert was present as an observer in his role as a member of the Oversight Committee of Court

The following members of staff were present:

Gareth Ramsay, Director, Monetary Analysis
James Bell, MPC Secretariat
Simon Hayes, MPC Secretariat
Fergal Shortall, MPC Secretariat
Melissa Davey, Editor of Inflation Report

Transcript of the Monetary Policy Committee Meeting on

Thursday 9 April 2015

Governor Carney. So good morning everyone. I have one piece of data and then I'll hand over to Andy to see if he has anything else – we can talk about cars in a moment – but IoP which is coming out tomorrow morning – IoP for February – is slightly stronger than staff expectations but slightly weaker than the market median for February and the news is in energy so to extent that's news – I mean, it's obviously volatile – so a question of energy falling less than had been expected. Specifically the outturn for February is 0.1 growth. We had expected it to fall by 0.1. Market median was an increase of 0.3. The miss is there specifically on the manufacturing side, we had expected growth of 0.5 in February, the outturn is 0.4. We had expected the energy sector to fall by 1.6; it's measured to have fallen by 0.6. So as I say, the quote 'news' in all of this: on a three month-three month basis we are bang on in terms of our in-house projection. In the three months to February falling 0.2 and that is growth in manufacturing outturn rising 0.1 and a fall in energy of 0.9. So that's IoP. Turning to Andy for what came out yesterday, when we were working hard.

Andrew Haldane. Yes there are two very small bits. So one internationally, we had some euro-area retail sales data which was on the weak side and then it fell in February. Looks to be fairly broadly based – Germany and Spain down a bit and Italy flat. But not enough to change the euro area nowcast, the staff tell me. Also as trailed yesterday car registrations data, which rose a bit in March but that too wasn't enough to change our Q1 nowcast. Looking across the quarter as a whole, car registrations fell: the first time that's happened since 2009 – the first quarter since 2009.

Governor Carney. Okay, great. Alright, if there are no questions on that then I'll go directly to Ben.

Ben Broadbent. Thank you Governor. My first task is to cover the main international events. Last month we took a degree of encouragement from two developments in Europe: material signs of progress towards a settlement for Greece and improving economic data. Since then the first has stalled, the second has continued. Regarding Greece, it's not that things have got evidently worse. The new Greek government and the old Troika continue to talk to each other; most still expect some sort of deal to be reached and there is little sign that, were things to go wrong, markets are priced for contagion effects elsewhere.

But there's a deadline here – and each month that passes without an agreement means less remaining time in which to reach one. Markets are significantly less confident than they were – the spread between Greek and German government 10-year bonds widened by 250 basis points since our last meeting; and, as the FPC suggested in its recent statement, markets may have under-priced contagion risk.

On the other hand, the activity data in the bulk of the euro area continue to improve. In Germany, the main Ifo index has risen for five months in a row and, like the composite PMI, is marginally above its 10-year average. The same is true in Italy, where business and particularly consumer confidence, in the Commission surveys, are at multi-year highs; the PMIs in Spain and Ireland are a long way above average, close to their pre-crisis highs. One notable exception seems to be France. But, overall, the euro area data have been consistently, if modestly, surprising on the upside for several months now, even as news of ECB QE has filtered through and, it would appear, depressed both asset yields and the euro exchange rate.

I say that recognising the inherent volatility of the exchange rate and the difficulty of explaining any particular move – but persuaded by the coincidence in timing between news about ECB intentions and the more significant moves in the euro, including against sterling. I'm persuaded too by the fact that, on average, positive surprises in Eurozone data would tend to raise, not depress, the euro exchange rate: if IS-type disturbances are behind the recent outperformance of Euro area data then perhaps there's something else depressing the value of the euro, and the natural candidate is an LM-type disturbance from what the ECB has done.

That outperformance has been accentuated by consistently softer data in the United States. We discussed yesterday the various factors that might have depressed US activity only temporarily, and

perhaps the foreign exchange markets have drawn comfort from these. But one can never be quite sure whether turns in growth are temporary; the signs of weaker US productivity have been around for a bit longer; and if one includes China and other pegging countries in the broader dollar zone, the relative strength of the euro-area data is that much more evident.

I also think the impact of ECB policy on the sterling exchange rate, such as it exists, is relevant for this question of 'global inflation' – something we touched on yesterday – and its transmission to our own inflation rate. There's always a risk that a convenient accounting breakdown, such as that between 'domestically generated inflation' and the 'contribution' of import prices gets misinterpreted as something structural. With a floating exchange rate there's no necessary link between inflation elsewhere and that in the UK. If, for example, the ECB suddenly and successfully raised its inflation target this would result, in any model with monetary neutrality, in an offsetting and ongoing decline in the value of the euro exchange rate. One can't simply hold exchange rates fixed and independently vary inflation in the rest of the world. On the other hand, there are things that would induce common movements [in inflation across countries][1]. One, and the dominant factor currently, is swings in the value of stuff that's tradable and whose nominal price is flexible – oil being the classic example. There might also be common developments in the real economy, perhaps including the labour market, something Jon mentioned yesterday. But another, at least in the short run, in which domestic prices are sticky and exchange rates can overshoot, is, indeed, monetary policy. If our largest trading partner eases policy, the impact on the exchange rate will be felt before, and initially to a greater degree than, the impact on euro inflation. This is precisely Dornbusch's insight. And it may help to explain why interest rates co-move more across countries than economic activity.

It may also explain why it is that core inflation in the UK has fallen further over the past year than our top-down estimates of "pass-through" effects would suggest. It is the import-intensive components of that "core" CPI index that have decelerated. If that means there is less pass-through to come then there may be upside risks to our current projections of pass-through over the future. The same would be true if the effects of a stronger dollar were either more important than implied by trade weights, or came through later than those of a weaker euro. Consistent with that, prices of finished consumer goods have risen in the past few months, something that might be expected to come through at the retail level during the first half of next year.

Whether than occurs remains to be seen. And even were it to, it should be set against what remain weak data on domestic wage growth. Whole economy average earnings growth fell to 1.8% in the three months to January, from 2.1% in the fourth quarter of last year. This was due mostly to a drop in the volatile bonus term. But the underlying level of wage growth – basic pay – has risen by 1.6% over the past year, 2.7% at an annualised rate over the past six months – is still well below what one would expect given the level of unemployment and the past relationship between the two. The degree of undershoot varies according to precisely which model one uses; and it's open to a variety of interpretations. We will no doubt continue to discuss those through the next forecast round, and during our supply stocktake. But in the data it's apparent.

However, I'm not persuaded by this that policy is too tight. For one thing I think one ought to take account of compositional effects before deciding there's necessarily more slack than we are assuming and as far as I can see in many cases in these models the one offsets the other. Secondly, it's possible that the undershoot represents not a flattening of the wage Phillips curve but a faster pass-through of weak productivity to real wages than in the past. If so the marginal effects of continuing declines in labour market slack will affect wages in much the same manner as they have in the past. And indeed wage growth does appear to have picked up over the past year. Third, labour market slack has indeed been narrowing: so policy has apparently been loose enough to allow for above-trend growth over the past year. Indeed after a softening in the latter part of 2014, evident in both official GDP estimates and activity surveys, the latter appears to pick up again this year, and are consistent with annualised GDP growth of more than 3%. It certainly isn't one way traffic: the housing market is moribund, our forecasts for residential investment will again have to be revised down and, depending partly on the outcome of the general election, the pace of fiscal tightening may pick up over the next year. But I'm happy to vote for no change in either Bank Rate or the stock of purchased assets.

[1] MPC Secretariat clarification: text in brackets has been inserted for clarity.

Governor Carney. Okay, great. Thank you Ben. I have Martin and then Minouche please.

Martin Weale. Thank you Governor. In the euro area the most recent survey data support the idea that the recovery is gaining momentum. DG ECFIN's economic sentiment indicator has risen since November and March saw a particularly sharp increase in consumer confidence in France, Germany, the Netherlands and Spain, probably as a response to the increase in real incomes that has come about as a consequence of falling prices of food, oil and other raw materials. In the United States there is evidence of weak activity in the first quarter, but it is not yet clear whether there is a significant message. The US may be coming to terms with its own productivity puzzle. There is also evidence of weakness in China, but this, taken with the terms of trade effects resulting from it probably leads to an increase in UK national income. At home, data for January have, despite the absence of proper winter, pointed to a pause in the pace of growth, with falls in the monthly indices for production, construction and services alike, while business surveys for March suggest a buoyant picture and the February IoP data do show some improvement.

In much of the euro area we have probably seen three phenomena in the last six months. First there has been the same sort of favourable supply shocks that have affected other oil and raw material importers from lower prices. Secondly, we have, in all probability seen a favourable demand shock in terms of an exogenous improvement in confidence. Thirdly, we have seen a monetary shock in terms of the ECB's QE policy. All of these probably have a positive impact on output in our most important group of trading partners, but it is not obvious how much is due to each these factors. Like you, Governor, I find it difficult to believe that even the monetary component has a neutral rather than a positive impact on the United Kingdom. Where this leaves exchange rates I am not sure; they are also subject to idiosyncratic shocks and I do not give weight to the regression analysis we have been shown; which does not include any constant term.

Annual inflation in the euro area has been below zero and it is likely to fall below zero here later in the year. Nevertheless, given the causes of below-zero inflation the risks of sustained deflation leading to generally unsupportable debt burdens seem to me sufficiently low not to merit further discussion at present. There is no immediate case for insurance in the terms of monetary easing.

I welcome the continuing work on the supply side. I would like to mention a few points not present in the work that I have seen so far. As to the labour market, one possible influence on labour supply of old people is the change to pension rules. If this results in people feeling more wealthy then we should expect some reduction in labour supply.

Secondly, I doubt that the case for weighting potential labour input by likely wage rates, as indicators of relative productivity goes away just because the net estimate of spare capacity in the labour market is small. In particular, the estimate of the hours gap is a net figure. My calculations last year suggested that people who wanted to cut back on their hours were appreciably better paid than those who wanted to increase their hours. This means that a net increase in desired hours may nevertheless translate into a net decrease in productivity-adjusted desired hours. More generally, of course, the effect may not always be small; we need a robust framework.

On productivity ONS figures show that output per hour worked fell by 1.4% between 2011 Q4 and 2014 Q4. I would find it very helpful to know how far we can account for that using conventional growth accounting augmented by whatever explanations we can give of the difference in TFP growth over this period compared with what we had regarded as normal.

All the current evidence suggests that the labour market continues to tighten. The LFS measure of unemployment did not fall between the periods ending in December and January. The claimant count, however, continued its steady decline of 0.1%[2] per month into February and experience suggests that this is a very good leading indicator of LFS unemployment trends. Meanwhile, as I've noted, we have had conflicting information on output in the first quarter. The movement of the services index for January may have been erratic. Nevertheless, the output of a forecasting model which down-weights fat-tail events, does point to growth appreciably slower than what we saw in the fourth quarter of last year. Taken with weak production growth and probably weak construction

[2] MPC Secretariat clarification: the claimant count rate declined by 0.1 percentage points.

output, that points to overall weakness in Q1; one has to rely on measures like the CIPS indicator to justify the staff nowcast for Q1. Of course if output growth is 0.6% or less while the increase in labour input continues broadly as it has done for some time, we may well have productivity growth close to zero in Q1 just as the ONS figures suggest for Q4 of last year.

The labour market tightness is not visible in AWE movements. Ben drew our attention to the greater wage pressures implied by the figures in the national accounts where ONS figures show growth in UWC[3] of over 2% over the year to Q4. The most recent data on AWE suggest that the three-month on three-month rates for both regular and total pay have fallen back. Staff analysis suggests that both AWE and productivity are depressed by labour market composition effects. If these end, AWE might be pushed up by around 1% with a slightly smaller effect on labour productivity, but little effect on unit wage costs. Nevertheless, adding back a composition effect of close to 1%[4] to both AWE growth and productivity does take the former appreciably closer to the value of around 4% per annum which, with plausible assumptions about future productivity, should deliver domestic cost growth broadly consistent with the inflation target.

Despite UWC, I do not think that current data on costs and prices justify a policy change this month. There remains a broader question raised by our discussion of domestically generated inflation. How far is it sensible to delay a policy change until clear evidence has emerged that domestically generated inflation is already consistent with the inflation target? I think the answer depends on how much confidence we have that the tightening labour market will lead to wage growth picking up to the extent required in 12 to 18 months' time. This month I do not feel sufficiently confident about that to vote for an immediate increase in Bank Rate although the decision remains finely balanced. So I am voting for no change to the stock of assets and no change to Bank Rate.

While on the subject of the relationship between current policy and future inflationary pressures, could I say that I welcome a review of the evidence on the lags between policy changes and subsequent inflation. Obviously we cannot deliver and should not promise any particular inflation rate at any particular date. It would nevertheless help with judging the timing of policy changes to have a view of the lags involved fully informed by the evidence that has built up since the MPC last considered the issue.

Governor Carney. Thank you Martin. So Minouche and then David please.

Nemat Shafik. Thank you. So last month I took the opportunity to take stock and give you my economic Theory of Everything inspired by the latest Oscar winner. To test a theory, of course, you have to expose it to evidence, of which we have had plenty in the supply stocktake, even though we have had relatively little news on the month.

So what evidence have we seen? For the UK, the numbers have continued to be very positive. Consumer confidence has continued to pick up. GDP growth has been revised up a little, and the staff's forecast for solid near-term growth seems to be on track. I also found the material that presented showing a continued gradual easing of credit conditions quite encouraging. And so, having been fairly confident last month, I remain fairly confident in the solid recovery for domestic demand that we have in our central case.

I also found the staff material on the supply side provided some slivers of hope that the economy's disappointing productivity performance since the crisis may be abating. We have suffered the kind of prolonged loss of output and productivity associated with balance sheet recessions. But some of the things that we think have held back resource reallocation seem to be coming to an end. Firm births and deaths are moving in the right direction, and the number of loss-making firms has fallen back. Conversely I find it hard to believe in the ultra-pessimistic arguments like the ones Bob Gordon makes about the end of innovation leading to supply side secular stagnation in perpetuity. To the extent that you can predict these things at all, it still seems reasonable to think that a sustained increase in productivity may well be finally about to take hold, as in our central forecast.

[3] MPC Secretariat clarification: UWC is unit wage costs.
[4] MPC Secretariat clarification: an effect of close to 1 percentage point on AWE and productivity growth.

The evidence on world demand is less clear cut. The euro area looks like it may be finally turning a corner, with policy surprising to the upside and some momentum apparently appearing in growth. But offsetting that, the US and China both look a little weaker than before. Nevertheless there isn't enough here yet to make me depart from my central view of the prospects for demand.

So in that case, why not start to tighten policy now? For me there are three good reasons.
The first reason for not moving now is the continued impact of global factors on UK CPI inflation. Most obviously, there's the ECB's QE programme, which we've talked about at great length already. And as showed us at pre-MPC, ECB policy has already pushed up significantly on sterling, and so all else equal we can expect a further drag from import prices over the next couple of years. And of course the impact of QE isn't all one way – a stronger euro area would imply stronger demand for our exports and greater investment income, while to the extent its effects have spilled over to UK rates, you might expect an extra boost to domestic demand as well.

I would also put the global risks I discussed last month into this global factors category. In a lot of ways I think we should think of these risks as being like meteorites. We can see them coming, and we don't know if they're going to hit us, but we can't quite be sure until they've actually arrived. All we can do is wait and see, and be prepared to react if one does strike.

The closest meteorite at the moment is a messy end for Greece, where this month looks like it could be critical; the list of potential flashpoints that showed us at pre-MPC was sobering. Even though Greek exit seems less dangerous now than it would have done a year or two ago, it remains a significant downside risk. Further out, there's the possibility of spillovers from US tightening, even if that now looks a little further away than before. And of course geopolitical risks and the outlook for oil remain uncertain. Closer to home, while we haven't seen any direct impact yet from the election, but option prices suggest the risks to sterling are real and to the downside.

My second reason for not moving now is the continued weakness of wages. Again I don't think there is much news here on the month: measures of domestically generated inflation don't look too weak, though the range of measures is wide. I remain worried about a downside risk from wages; for me the new surveys that we were shown added a bit of weight to the view that persistent wage weakness has become embedded in expectations.

That wage weakness remains something of a puzzle, with the staff's supply stocktake if anything suggesting slightly less slack than before. I was struck in this context by the international division's work on global disinflation, which suggested that puzzlingly weak wages are a global, not a domestic, phenomenon. And with inflation expectations also looking cool in other countries, that does make me worry that a persistent undershoot could be a more global phenomenon – something that Ben alluded to in his remarks. Nevertheless, I would stress that for me this remains a downside risk rather than my central view.

Finally, my third reason for not moving now is a strategic one. The risks to moving too early are greater than the risks of moving a bit later and we can afford to wait, while remaining true to our guidance of rates rising in a gradual and limited fashion. The yield curve currently expects rates to rise by about 3 or 4 basis points per quarter, which gives us plenty of room to manoeuvre under most realistic tightening scenarios. I wouldn't go as far as the Larry Summers view that says that the Fed should not raise rates until it sees "the whites of inflation's eyes." It is worth remembering that expression comes from the Battle of Bunker Hill in 1775 when Colonel William Prescott told his marksmen to reserve fire and aim low because gunpowder was scarce. In our case, we are aiming low, not because we have run out of ammunition – although the zero lower bound makes things a bit harder – but because we have not even seen the shadow of inflation, much less the whites of its eyes.

Bringing this all together: my views remain much the same as they were last month. In my central case, the UK grows at steady if unspectacular rate, driven by private domestic rather than external demand. The temporary factors pulling down current inflation will drop out within a year, and with the output gap closing, inflation will move toward target. Given that, and for the three reasons I just set out, I don't think there's a strong case for moving policy in either direction right now. So this month I vote for no change in Bank Rate and no change in the stock of purchased assets.

Governor Carney. Great. Thank you Minouche. So David and then Kristin.

David Miles. Thank you Mark. I will try to be brief, partly because I think the immediate policy decision for me today is pretty clear cut. But I do think there are some slightly less straightforward issues on the message we should be giving on policy and I will try to say something briefly about that.

So where do we start from? Well, like others, I think there's some pretty clear signs that over the last quarter, growth in activity has been a bit weaker – perhaps a bit weaker than we'd expected. But I think, very much like Minouche, that if you look at the forward-looking indicators – the surveys from companies and surveys from households –they remain pretty strong. I don't think there's any obvious reasons to shift the central view that we had at the time of the last Inflation Report that over the next few quarters, indeed over the next few years, the most likely outcome is growth either at, or probably slightly above, the longer-term average for the UK. And on slack – although I believe there is more slack than our central estimate, [which is][5] around half a per cent – I think it is very likely that it is on a downward trajectory. Jobs are clearly still being created and vacancies levels seem pretty significant and, in fact, quite probably growing.

Now, it's still very likely that the 12-month inflation rate- which is inherently backward looking- but that 12-month inflation rate is looking likely to dip negative over the next couple of months - probably [remaining] close to zero for much of this year. But I think it remains very likely that from about the end of this year the 12-month inflation rate starts a pretty steady climb back up toward the target level. The reason I say that is that I'm very struck by the chart we were shown at Pre-MPC where we had a lot of different measures of domestically generated inflation and the swath of those measures actually looked pretty similar to the average swath of those measures over the last 15 or 20 years. Where the current swath of DGI measures are looked about where it was between 1997 on average and about 2007. We also saw another measure of what you might call domestically generated inflation which was if I remember correctly core CPI inflation but with the weights inversed to the import weight of the components. And that's another rather useful way of trying to get at something you might call domestically generated inflation. And my recollection is that chart showed that the current reading was about 1.7/1.8%, a little above[6] the target but not ringing alarm bells about underlying deflationary pressures in the UK. I was also struck – taking a slightly more global view of inflation pressures – by a chart we were shown which was global PPP-weighted CPI inflation, and it is an extraordinarily boring chart. It is very unexciting and for the last three years it's a flat line at 2%.

Even if you thought that the global disinflation risks were about to become much more worrying, I think it is relevant that there seems to be very little - essentially zero - correlation of core inflation between countries that have floating exchange rates. And I do think that reflects something pretty fundamental which is that inflation within a country that sets its own monetary policy and has a floating exchange rate is over the medium term very much a reflection of its choices of monetary policy. In other words there is no inevitability at all about getting caught up in something labelled as 'global inflation' or 'global deflation'. I think that is the lesson of history, in many ways. In the 1970s Germany took different decisions on monetary policy than in the UK in the face of what in many ways were common global inflationary shocks. It had a dramatically different inflation rate. So the lesson I brought from that is not that one shouldn't worry about deflation risks, but that if you are worried about deflation risks the place to look for them, I think, is here in the UK. And not a bad place to start is inflation expectations. But I must say that the message I take from the many measures we have of inflation expectations is that embedded deflation risks in the UK do not seem to be very significant right now.

The message from the bond market on implied UK inflation remains a pretty benign one: the measures are about where we would expect them to be if people thought that inflation was going to get back to the target and stay there. What about household expectations? Well I was very struck by the fact that if you look not at household expectations over the next year or 18 months or two years but at what you might call medium-term inflation expectations (five years or so) – we've got

[5] MPC Secretariat clarification.
[6] MPC Secretariat clarification: David Miles misspoke "above the target", when he meant to say "below the target".

three measures – take the average of those three measures they are 3%. Not 0, not 1%, not 2% but 3%. Now, well, you might say well they have actually come down a bit. If you focused not at all on the level – give no significance to the level – just the rate of change you could convince yourself that there is something to worry about here. But I think to dismiss the level would be a major error. Now to be fair you might want to say, well of course on average in the past people have over-estimated the actual inflation rate so you need to do some adjustment to a 3% number. But boy does that have to be a hefty adjustment for you to read a 3% number as ringing alarm bells about embedded deflationary expectations. And whatever adjustment you do it needs to reflect, I think, the misperception about the current inflation rate and one thing I suspect right now is that misperception about the current inflation rate is probably lower than in the past. And you would have had to not look at a UK newspaper or listen to the radio to work out the actual inflation rate is zero. So I suspect that whatever mistake people make about the actual inflation rate is probably lower now than it was in the past.

Now I'm not suggesting for a minute that persistent deflation risks are minute, or infinitesimal – that would be foolish – but I am of the view that they remain low. And also that our February Inflation and GDP fan charts remain pretty reasonable. In the light of that I think the short end of the yield curve, and indeed the more general pattern of interest rates in the UK, is somewhat puzzling. We might go beyond saying "somewhat puzzling" and feel that it is somewhat uncomfortable. I do think it raises an issue about our communication and let me briefly say something about that.

Well what is that pattern? Well, taken at face value, the point at which market rates imply that we might begin the process of normalisation, I think, has moved out to something like September of next year. But I think more significant than that, more significant than the implied take-off date is just the whole path. And the path after that take-off day follows a trajectory that that is so shallow that it more or less looks flat. I think you would have to go out to something like 2018 before you are much above 1%. And as Andy pointed out yesterday – a telling point I thought – which was if you look at the modal implied path for Bank Rate then it is essentially flat, I think, out to 2020. And that is having implications for things like mortgage rates and corporate bond yields. Mortgage rates are obviously driven down by swap rates. Swap rates link to the short end of the gilt yield curve which implies that we take a long time to raise the Bank Rate and then we do it at a glacial pace. I do think that there is something of a disconnect between that pattern and what has been our collective view on, if you like, the fundamental inflation and growth [picture][7] in the UK. I do think this matters and I say that as someone who continues to believe there is rather more slack than our collective judgement. So I think we should ask a question as to whether we may be inadvertently giving misleading signals on policy. Now I very much do believe that we have been right to explain that, should we need to make monetary policy more expansionary, if inflation gets trapped close to zero, if it looks like it's going to take more than we expect for inflation to get back to target – I think we have been right to point out that, if that happens, we do have the scope to make policy more expansionary. I think there is a potential risk that that's being interpreted by some as a message that if inflation were to become negative – which is actually likely – that we are poised to cut rates. I think perhaps more likely is the view that people are feeling that we will not wish to start normalising policy until inflation is actually quite near the target partly because until then the ECB is naturally moving in the other direction, making policy more expansionary, and we are very concerned about the euro-sterling exchange rate.

Now of course this is all speculation about what is in the mind of people who operate in financial markets in generating those yield curves and clearly there isn't a single market view. But my own view is that I think we should emphasise two things perhaps a little more strongly than we have: First of all that monetary policy in the UK will be set in the light of the inflation outlook for the UK – and that means there is absolutely no automatic link to policy decisions being made in Frankfurt, Washington or, indeed, anywhere else about what we should do.

And secondly that there is a lot of evidence consistent with zero or mildly negative inflation being a temporary phenomenon: it does not reflect underlying domestically generated pressures in the UK which are much more consistent with the 2% target. And because of that a steady return back towards the inflation target over the next couple of years does remains very likely. But I think, like

[7] MPC Secretariat clarification.

Minouche, my own view is that there is no need to think seriously about moving policy today. So today I vote for no change in Bank Rate or in asset purchases.

Governor Carney. Thank you David. So I have Kristin and then Jon please.

Kristin Forbes. Most analysts believe this month's MPC event is a non-event. They argue that there is little pressure to tighten monetary policy with 0% inflation, and little pressure to loosen policy since low inflation is primarily driven by temporary factors. My view is that this is an oversimplification. Instead, the real and nominal data are currently presenting two different pictures of the UK economy – almost a tug-of-war between the real and nominal sides. Whichever side wins this tug-of-war will determine the appropriate path for monetary policy. In my comments today, rather than focus on recent data, which has generally confirmed my baseline scenario of a continued solid recovery, I'll focus on this big picture of this tug-of-war, discussing the two sides and implications for the MPC. Unfortunately it may be several months until a clear winner emerges.

The real economy is one team in this tug-of-war. The anchoring player—the strongest who gets positioned at the end of the rope—is the output gap. Although it is impossible to measure its level with any precision, a number of indicators suggest that the output gap has continued to decrease and could be closing in on zero. Equilibrium labour force participation is likely lower than in February's benchmark, so that even if partially balanced by increased migration and desired hours, there is a good chance the output gap is positive within a year. Since monetary policy takes even longer to be fully effective, this suggests that we should be tightening monetary policy today. If we wait until the largest effects of the recent falls in energy and food prices have retired from CPI calculations, prices will pick up quickly from this statistical effect at the same time that they pick up from output gap dynamics.

In addition to the output gap, there are several other important players on this 'real team' in the tug-of-war. GDP growth was revised up to 2.8% over 2014 and should continue at a solid pace—even if some of the downside risks to the forecast materialize, such as for investment. The improved outlook for the euro area, even if partially balanced by first quarter weakness in the US, should provide an additional boost to UK-weighted global demand and exports, with the euro-zone constituting about 40% of UK-weighted global demand compared to 18% for the US. Additional support to this real team is provided by the numerous indicators of labour market churn that show a labour market close to normalization—such as for vacancies, quit rates, and short-term unemployment. If a sports commentator just looked at the composition of this real team—he would predict a quick game. Data on the real economy, labour market, and estimated output gap all suggest rates should be going up. One could even make a case that the MPC should already have started this adjustment and further delay could risk our goal of raising rates at a gradual pace.

But the other team in this tug-of-war, 'Team Nominal', also has powerful players. Headline CPI inflation is zero and may turn negative in the next few months. Even if the primary explanation is recent falls in energy and food prices that drop out of the inflation calculation in a year, there could be second-round effects which drag down core inflation and make low inflation more persistent. If employers use today's low inflation as a reason to delay pay increases, this could act as an additional drag. It is unclear if these considerations played a role in slightly lower wage growth readings, with AWE regular wage growth falling from 1.8% to 1.6%. And even if none of these drags on inflation play out, the rebound in inflation when energy and food price declines drop out of the index will be starting from such a low level that there is likely to be some time before inflation recovers to our 2% target. This Team Nominal has a substantial head start in the tug-of-war; the flag indicating the centre of the rope is already deep in this side's territory.

There are also other important players on this Team Nominal. Sterling's appreciation from spring 2013 to summer 2014 is continuing to drag on inflation—even core inflation. This is evident in the greater stability in average measures of domestically generated inflation over the past 1½ years. My rough estimates suggest pass-through effects may continue to be substantial through the first half of 2015, and then fade, although they could still exert some drag on inflation for several months. If sterling appreciates after the election uncertainty is resolved, which historical data suggests is typical, this could exert further downward price pressure. Although I expect any additional pass-through effects will be smaller than from the past appreciation due to non-linearities and the continued strength of the US dollar, which is key to so many international prices.

So which team has the advantage? Should we put more weight on the team of real or nominal data? One might argue that since our primary mandate is inflation, we should favour Team Nominal — even give them a head start. But I disagree, because if we waited to adjust rates until the nominal indicators showed inflation had returned to target, we'd be well behind the curve. In theory, we should put more weight on the output gap, as it is an earlier indicator of where inflation will be in the time horizon relevant for setting monetary policy. But there is substantial uncertainty around the size of this gap—a concept which is difficult enough to measure in normal times, and more so during this period of structural change when we do not know what 'normal' is. Orphanides' academic work has clearly shown that overreliance on the output gap can cause costly monetary policy mistakes. Equally problematic, the relationship between the output gap and inflation may have weakened. BoE analysis showing a weak relationship between headline inflation and the output gap is not surprising given the role of exogenous shocks. But it is unclear why the relationship between wage inflation and the output gap has weakened. Could our estimates of the output gap be wrong—a fatal blow for the real team? Or could the severe recession have temporarily changed the relationship, such as making workers more hesitant to bargain for higher wages, which could soon provide a fatal blow for the nominal team as these temporary effects unwind?

Where does this leave us? If I was a betting person—which I am not—I would put my money on Team Real. My baseline case remains that the output gap is nearly closed, that this will exert more upward pressure on wages and then overall prices sooner rather than later, especially when combined with strength in the global economy and the diminishing drag from sterling's appreciation. But I can't entirely rule out a good fight and surprising stamina from Team Nominal, even if they lose eventually. Inflation at such low levels, especially when reflecting a broader global trend, could have more pervasive effects. And it will take even more work for the Team Real to get that rope over the 2% target when starting from a zero-inflation line. I want to wait to see more of the competition play out—especially as there may be no resolution for a few more months. So I vote for no change in interest rates and no change in asset holdings.

Governor Carney. Thank you Kristin. So Jon and then Ian please.

Jon Cunliffe. There were some interesting data developments over the month but – I'll start with the end – nothing that changes the big picture for me or my view on the appropriate stance of policy.

The big picture for me is that the economy, particularly the demand side, is evolving broadly as well as you can expect, in line with our February forecast, and if that continues and the big question is how strong domestically generated inflation pressure is likely to be in a year or so when the fall in oil prices washes out of inflation. And assuming that demand continues to evolve broadly as expected then the answer to that question lies predominantly on the supply-side of the economy. I hope to have a better view on that following the supply-side stocktake though I'm learning that you always hope to have a better view, and you're always disappointed.

I won't go through the news in detail. I'll restrict myself to one metaphor but I will focus on a handful of developments on the international outlook; domestic output; the labour market; and inflation expectations.

The outlook for the euro-area has improved a bit following the improvements we saw last month. Euro-area growth in Q4 2014 was 0.3%, 0.1%[8]higher than we had expected in the February Inflation Report. Staff have revised up the forecast for the euro area growth by 0.1%[9] in both Q1 and Q2 to 0.4% and 0.5% respectively. This partly reflects a strong PMI outturn in March matching the highest level in four years and also I think there is some weight to be put on the retail data – retail sales growth in Q4 and in January this year were particularly strong so while there's been a bit of pay back in the latest data, overall it's still strong for the euro area. All of this news makes me a little more confident about the euro area than I was, but I'm not getting carried away, it is early days and we have seen a lot of false dawns in the euro area.

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[8] MPC Secretariat clarification: growth was 0.1 percentage points higher than expected.
[9] MPC Secretariat clarification: the forecast was revised up by 0.1 percentage points.

Risks around Greece remain. Positions on both sides I think have hardened – and as I said yesterday, I think between now and June there will either have to be a political change in Greece or Greece's partners are going to have to accept a materially different path for the Greek economy. That said, my view is the risks on the Greece haven't really changed very much from where we were last month.

That brighter picture in the euro zone comes against some concerns on the downside in the US and China. On the US, the staff have revised down their forecast for US Q1 growth by two-thirds to 0.2% from 0.6%, largely due to weak consumption. There was also the marginal unexpected slowdown in the pace of employment growth, with non-farm payrolls rising by only 126,000, the smallest increase for over a year. We shouldn't overreact to these developments then panic, as Kristin said yesterday, we saw a similar pattern last year and there is a lot of erratics in this. But it is noteworthy that US consumers seem to be saving their oil dividends in a most un-American way, while euro area and UK consumers are spending theirs. And it is also noteworthy that the US productivity puzzle seems to be deepening as we go along.

On China, staff have revised down their forecast for growth in Q1 and Q2 to 1.6% due to a disappointing first quarter, and the Chinese authorities I think are reflecting concerns about a slower growth path, although they are prepared to take policy action to meet the new target of 7%.

Taking it all together, I don't think it's a material change. I'm a little more confident about the euro area: I'm a little less confident about the US.

Turning to UK output, I did have concerns at the beginning of this year about the composition and momentum of growth in the fourth quarter of last year. The revisions in the Quarterly National Accounts and the continued strength in surveys this year have eased those concerns for me. Q4 GDP growth was revised up by 0.1%[10] to 0.6%, in the revisions, with slightly larger contributions from consumption and net trade. And business investment growth was revised up in both Q3 to 0.3% from -1.2% and in Q4 to 0.9%[11] from -1.4% which means it's no longer showing consecutive falls over the last two quarters of 2014. I know the data in this area are particularly prone to revision, but nonetheless I take a little comfort from that. And stronger growth is I think also consistent with the straws in the wind from the tax side that Dave gave us yesterday that tax receipts appearing to be growing strongly.

So the staff nowcast remains at 0.6% for Q1 and the profile for growth broadly in line with the February IR and despite perhaps some signs of a little weakness I don't see any reason to change my view on that. The conditions for strong consumption growth remain in place, including lower oil prices, strong consumer confidence: the headline GfK consumer confidence increased further in March to its highest point since 2002, and easing credit conditions - bank funding costs have hit new post-crisis lows.

Turning to the labour market, I don't think the news here has given us any insights at all into the puzzles around labour supply, wages and productivity.

There wasn't much news in labour market quantities. Some developments on pay. Whole economy total pay 0.4 percentage points lower than we expected in the three months to January at 1.8%. That was driven in large part by weak bonuses. But whole-economy regular pay also came in, as ben said, 0.2 percentage points lower than we expected. And as a result, staff have cut their forecast for pay growth in Q1 and Q2 by 0.3 percentage points to 2% and 2.3% respectively. Unit labour costs rose by 0.8%, stronger than the 0.5% projected in the February IR, partly on account of weak productivity. But overall, even allowing for weak productivity growth, wages just still remain puzzlingly weak to me.

According to the ONS, UK labour productivity (output per hour) fell by 0.2% in the fourth quarter of 2014 compared to the previous quarter. Basically it was flat in 2014 as a whole, and slightly lower still than 2007. These are sobering statistics and I just say that since my time on the Committee

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[10] MPC Secretariat clarification: growth was revised up by 0.1 percentage points.

[11] MPC Secretariat clarification: Jon Cunliffe misspoke "0.9%" instead of "-0.9%".

productivity growth reminds me more and more of jam in Alice Through the Looking Glass in that we had it yesterday, we project to have it tomorrow, but we just never see that.

Governor Carney. That's your metaphor?

Jon Cunliffe. That's my one metaphor.

Ben Broadbent. You can't go for a month without one!

Jon Cunliffe. Sorry, these words are counting!

If productivity doesn't pick up then, all other things equal, inflationary pressures may come sooner than we are expecting or GDP growth will be weaker. I support the idea that we need to look harder at the period of weak productivity growth over the last couple of years when the economy has been growing stronger as distinct from looking at the post crisis period as a whole. And I should just note to pick up on someone else's metaphor that there are some players on Team Real that pull in the other direction, potentially. We shouldn't ignore the possibility that there have been changes in labour supply that are actually responsible for holding us down. I hope we can make progress on those key questions during the supply-side stocktake in May.

Finally, a quick word on inflation and inflation expectations. Inflation fell to 0% in February. Broadly in line with our short-term inflation forecast. Oil prices also seem to be evolving in line with the assumptions we made in the February Inflation Report, which were based on the futures curve at that point although as we discussed yesterday the risk to that are probably a bit to the downside. Staff forecast that inflation turns negative in April and stays near zero for around six months.

But all that said, I don't think there has been much news on inflation expectations. Household inflation expectations have ticked up a very little but the change is not material and overall the inflation heat map was little changed on the month. And if you stand back from the monthly data, measures of household inflation expectations are down on the pre-crisis period, which I think should be our reference point but on my reading I don't think they are at levels inconsistent with inflation at target.

So overall in the big picture, I don't think I see enough evidence of sustained inflationary pressure in the pipeline that's going to appear when the oil effect washes out, or material slippage in inflation expectations to makes me want to change my policy stance. So I vote for no change in Bank Rate and no change in the stock of purchased assets.

Governor Carney. Thank you Jon. So Ian and then Andy.

Ian McCafferty. Thank you, good morning Governor. For me, as for Jon, the recent data news has not been sufficient to alter the narrative that we started to develop at the start of the year as oil prices fell sharply. That narrative remains on track, although the different strands contained within it continue for me to complicate the immediate policy decision.

On the one hand, we have growing evidence of the boost to global and UK real demand from the mixture of low oil prices and stimulatory policy. If anything, some of the upside risk that I and others have previously signalled, in terms of the quantum of that stimulus, may now be becoming apparent. The news on the euro zone, the tensions around Greece notwithstanding, makes for pleasant reading this month and suggests that the positive impact on the euro zone of low oil prices and ECB quantitative easing may well prove to be somewhat greater than the relatively conservative estimate contained in the February IR. This is not only because the impact on yield curves across the euro zone has been greater than expected, but also because the combination of determined ECB action and the boost to real incomes from lower oil prices is generating a serious boost to business and consumer confidence and an easing of credit conditions – the 'IS' shift that Ben alluded to earlier, which is similar to that which kick-started the recovery in the UK back in 2013.

Of course, as the euro zone improves, along comes data that casts doubt on the growth momentum in the United States, but I find it hard to find a rationale for the recent weak patch other than the

temporary factors listed by Kristen yesterday, while the fundamentals of consumer confidence and real income growth should generate stronger momentum through the rest of this year.

Moreover, I continue to believe that the boost to real incomes and demand in both the US and Europe from low oil prices will be the gift that keeps on giving. In spite of the softening of the oil price this month, the current contango is still not sufficiently steep to make offshore storage economic, as onshore storage capacity diminishes. Stock levels in the US are already at unprecedented levels for the first quarter of the year, and the problem is starting to intensify as the traditional second quarter stockbuild gets underway. Stocks rose last week in the US by a striking 10.9 million barrels. Global production is still rising, and is unlikely to peak until June at the earliest. So softer oil prices are likely to be a feature for some time yet, particularly if sanctions are also removed on Iran. I was struck by the IEA estimate recently which suggested that the Iranian sanctions have been worth around $15 a barrel over the course of the last couple of years in terms of the crude price.

As ever in the global outlook, downside risks persist, as the Greek negotiations get closer to the wire and slower growth in China becomes a reality, but overall, the balance of the international news this month appears slightly positive. I also find it hard to believe that the impact on UK growth of this potentially more beneficial global backdrop will be negated by the recent appreciation of the exchange rate. In terms of total monetary conditions, sterling appreciation is being offset by the impact on UK yields of the spillover from quantitative easing from the ECB, and while the Agents have reported more mention of the impact of sterling appreciation recently, this still appears to be on export margins rather than on volumes of exports themselves.

Helped by that more supportive global background, and by solid UK business and consumer confidence in the face of political uncertainty, the outlook for UK GDP for 2015 contained in the February Inflation Report still looks achievable, in spite of the slightly weaker outlook for construction. In terms of GDP, there may have been a modest loss of momentum late last year, although the pattern of revisions has recently been such that the most recent quarter tends to look initially somewhat weaker than earlier data, until the revisions catch up. But the continued strength of the business surveys and the evidence that consumers are proving willing to spend a good proportion of their real income gain suggests that quarterly GDP growth can continue to grow at close to 0.7% per quarter through much of this year. This is of course in line with, or probably slightly exceeds potential, and will continue to erode the remaining elements of slack.

Exactly how much slack remains, and exactly when it is exhausted, is an issue we will return to in the May forecast round, but unless we discover a new source of unused capacity during our supply stocktake, it remains the case that we are now closing on full employment, so that, regardless of the exact position or slope of the Phillips curve, wage growth should accelerate by 2016. Unit wage growth is now rising at 1.8% a year, although total unit labour costs, as Ben pointed out yesterday, are rising more slowly as a result of the weakness of non-wage costs. However, with pension deficits rising as a result of plunging bond yields, non-wage costs are likely to accelerate over the course of the next 12 to 18 months, bringing ULCs probably more into line with UWCs. And as such, we are becoming increasingly dependent on an imminent productivity revival to prevent unit labour cost growth accelerating to a rate at least in line with the inflation target before the end of the forecast period.

For now, the inflation environment remains very subdued, and the $64,000 question, about how far the existence of ultra-low inflation will affect price and wage setting, remains unanswered. The latest STIF suggests that we may have to wait a little longer before being able to answer this question; the months in which inflation is most likely to turn negative and create newspaper headlines are now April and June, slightly later than previously thought. So we may need to wait until the summer before we can clearly conclude whether there has been any impact on wages and expectations, although against a background of a tightening labour market, I suspect any impact is likely to prove slight.

Turning to policy issues, I thought Ben's analysis yesterday of the conditions that are most likely to encourage a persistent deflationary state very helpful. His examples of previous deflationary episodes prompted me to wonder whether, in the absence of a credible inflation anchor, dramatic falls in equity and land values, as in the US in 1929, and Japan in 1990, may act as an additional

causative factor, beyond fixed exchange rates, through the mechanism of destabilising expectations. Reassuringly though, his analysis led me to conclude that a truly deflationary episode in the UK is even less likely than I had believed last month.

So, at the risk of using a phrase that is in danger of becoming a little cliché, the immediate policy decision, for me, remains finely balanced. A thorough look at supply as part of the forecast round may help clarify some of the conflicting tensions between continued above-trend growth and the level of near-term inflationary pressure - Kristin's Team Real and Team Nominal - but for today I vote for no change in Bank Rate and no change in asset purchases.

Governor Carney. Thank you very much Ian. Andy please.

Andrew Haldane. Thank you Governor. Today I shall not be using any metaphors.

Macroeconomic surprises tend to be serially correlated and this month's have been no exception.

In the euro area, activity surprises have continued to the upside. As Minouche said, cumulative euro-area surprises during this year are now large. By contrast, in the US, China and a number of emerging markets, activity surprises have been to the downside. They too cumulatively have been pretty big during the course of this year. Although significant for each regional bloc, taken together this news is broadly offsetting for UK trade-weighted world growth. At 2.4% in 2015, Staff estimate this to be little different than in the February Inflation Report.

A key question is the likely persistence of these regional trends. How much of the US weakness in Q1 will prove temporary? I suspect some, but judging from its breadth, probably not all.

For China and emerging markets, where the slowdown is probably more structural or supply-side driven, recent weakness is I think more likely to persist. But perhaps the biggest persistence question of all is in the euro area. Will the combined effects of lower oil, looser credit conditions and a weaker euro be sufficient to support euro-area growth on a sustained basis? Higher confidence and rising non-durables spending, together with falling safe rates and credit spreads, were necessary conditions for a resumption of euro area growth. And these ingredients, reassuringly, are in place well ahead of schedule. But they are plainly not sufficient conditions for sustained growth. That would require those improved conditions to generate a pickup in durables and investment spending. In most other countries during the recovery, it is the link from easier credit conditions to higher investment which has been the weak one. It is simply too early to tell whether the euro area will follow, or buck, that trend. As with the world, activity in the UK also does appear not to be greatly out of line with February Inflation Report projections. And as in the euro area, consumer confidence and non-durables spending are leading the way, as we might expect following a temporary income windfall whose origin is falling prices for non-durable goods.

The picture for more durable forms of spending is, at present, less clear. For example, UK car registrations actually fell a bit over the course of the first quarter and UK housing demand appears to be essentially flat. For business investment, the official and survey data are telling rather different stories. But the weakness of official data, alongside the strength of our investment projections, probably puts the balance of risks a little to the downside. The Staff have lowered a touch their near-term projections for consumption and investment and my sense is that's the right direction of travel based on the data so far. A serially-correlated pattern of surprises has also played out on the nominal side.

Our inflation forecast hinges on a pickup in wage growth, and despite a mini-rally a few months ago, there is not a great deal to report so far. Stripping out volatile bonus effects, regular whole economy wage growth once again slightly undershot expectations in January. That means regular pay growth has undershot one-step-ahead expectations in 13 of the last 18 months. And even taking account of lower productivity and upwards revisions to slack, there has, as we heard yesterday, been a persistent run of negative wage residuals across all of our suite of models. Cumulatively, this gives an undershoot in the level of wages of over 2%. This is big. If you translated that into an 'output gap equivalent', it would amount to anywhere between 2 and 4 percentage points of GDP. And that is before we take any further adjustments to the supply-side. If we took Staff analysis at face value, that would shrink a touch measures of slack, and thereby add a little to that wage puzzle. What this

underlines for me is the importance of the forthcoming forecast round taking time to evaluate a wider set of candidate explanations for the weak wage puzzle – evaluations that go beyond assuming ever-longer lags.

Those explanations would include the possibility of greater slack – for example, among companies or through a lower long-run NAIRU; a shallower Phillips curve – for example, as a result of migration increasing labour supply elasticities or perhaps technology causing a shrinking of the labour share of income, as we have seen in the US; and perhaps lower inflation expectations, which a number of surveys now suggest are having some influence wage and price-setting.

The risks around wages are plainly two-sided. But, to my mind, our treatment to date may have over-weighted mean-reversion and longer lags, and under-weighted more structural explanations for weak wages, the like of which appear to be affecting not just the UK but a number of other countries too. Recognised more fully those alternative explanations could reshape our inflation forecast, adding greater persistence into the deviation of inflation from target. It is persistent undershoots of the target, rather than deflation risks per se, which I think are the highest probability policy risk facing the Committee right now, even if, perhaps, they do not have the largest impact.

And, of course, to the extent persistent undershoots increase the risk of a nasty shock which could take you into deflationary territory, the two risks are anyway linked.

The policy framework within which we are operating – the '2 + 2 framework' - places constraints on our room for manoeuvre, requiring us in expectation to hit the 2% target within two years.

So what can be said about those 2-year ahead inflation projections? Well, the May forecast round is the right forum for discussing those, but let me offer three points by way of context.

First, our inflation forecasting performance at this horizon is not especially encouraging. At l east since the crisis, it has been poor not just absolutely, which is understandable, but relative to outside forecasters, which is a bit less understandable. Perhaps more relevant, though, our forecast errors at the two-year horizon have also been persistent. Like other forecasters, we have systematically under-estimated the persistence in inflation dynamics and/or in the shocks driving it.

Second, the Bank's two-year-ahead projections have, over the past year, been moving in the opposite direction to everyone else's. For companies and households, two-year ahead forecasts have fallen by 50 basis points; for financial markets and so-called professional forecasters they have fallen by around 20 basis points. Over the same period, the Bank has raised its inflation forecast at the two-year horizon by 10 basis points. And over the past six months the Bank has raised its inflation forecast by 20 basis points, while others have cut theirs by the same amount or in many cases more. This at least begs a question about what we know that everyone else outside does not.

Third, some outside forecasters have inflation at the two-year horizon at lower, consistent with a longer, more persistent undershoot of the target. It is hard to get like-for-like CPI comparisons. But the OBR forecast for CPI inflation two years ahead is now 1.5%. For companies, it is around 1.75%. For households, it is 1.1%. For economic forecasters it was just below 2% on average in February, but among the seven banks who update their forecasts most frequently it is now around 1.7%.

If you imagined an alternative fan chart which simply weighted together these forecasts – a sort of ensemble forecast, the type of which weather forecasters use when faced with uncertainty. That would give a distribution with a somewhat lower mean than the Bank's February forecast and a significant downside skew. And that would not be the worst description of my own subjective distribution right now. And that is why I have a neutral bias on the next direction of change in monetary policy. But for today my decision is to leave Bank Rate unchanged at 0.5% and the stock of purchased assets at £375 billion. Thank you.

Governor Carney. Great. Thank you Andy and thank you all.

I think, as others have noted, our narrative in the February Report, which was one of continued domestic expansion and falling global commodity prices, modest global growth and further monetary stimulus,

particularly in the euro area, that narrative has broadly played out, in fact it has played out with a slight positive tinge. The open letter that accompanied that Report emphasised the strategic implications of particularly our intention to return inflation to target within two years as Andy has just noted, and that was given the shocks that were hitting the economy at the time, and while noting that we could cut Bank Rate if necessary given the outlook our collective judgement was that the next move in rates would likely be up. So given the marginally positive outturn since, the question is what are implications for strategy.

Let me start with global inflation and strong sterling that is potentially self-reinforcing. A number of insightful comments this morning and yesterday about domestically generated inflation. My only caution there is we shouldn't over-emphasis domestically generated inflation. We are not mandated to deliver DGI, we are mandated to deliver total CPI. And if we have the prospect of being faced with persistent disinflation from abroad, whether it is because of price dynamics abroad, as we saw in the early 2000s with China and the integration of supply chains, or other dynamics in terms of large output gaps abroad and because of the exchange rate dynamics of pass-through, we have to take that into account and I know we all recognise that but I would like to at least read that into the record before we decide that we are targeting DGI.

In terms of Europe - outlook has definitely improved. There has been a notably bigger impact on asset prices of QE including of UK asset prices. There has been a firming in recovery, both in the hard data and in the surveys, and that is across the euro zone – a notable reinforcement in consumer confidence in the core. Greece, I will just associate myself with Jon's comments in terms of the prospects there. This is firmly in the political sphere now and there would have to be a material shift in order for there to be a deal by the summer.

Like Martin, in my view, it's only a question of degree the net impact of QE in Europe has to be positive for the UK, it's a question of the degree of it, I don't see it as a neutral effect. The positives of stronger demand, better UK financial conditions and reduced tail-risk surely outweigh way the drag from slightly stronger sterling. Like others, I'm going to reserve judgement on US developments given the idiosyncrasies of the period and while the March job report was weaker, the three month moving average is just below 200,000 and still tracking well above natural labour force growth. It does appear though given that core PCE has only ticked up to 1.4%, you don't have to be Larry Summers to think that it is likely too soon for the Fed to be reasonably confident that inflation is going to return towards its 2% target in the medium term.

The major risks, I will associate myself with Andy here in terms of major risks in the world economy are shifting more from the advanced economies towards the major emerging markets. China is consistently – talk about serially correlated – China is consistently disappointing, depending on your perspective, and the risks there are material without question. Brazil and Russia are both firmly tipping into recession as well. From China though the caveat here is we obviously get second-order impact via supply chains and I would expect a steady disappointment rather than any sort of big bang shock that should certainly limit any financial contagion.

Global 'lowflation' dynamics have not deepened over the course of the last couple of months, although wages remain weak and I think we should take stock of possible explanations for that and the varying degree of relevance for the UK, so certainly there is a possibility that there is greater hidden slack given that wage growth has lagged relatively smaller employment gaps in both the US and the UK. As Andy referenced, I think you were referencing, the possibility of intensifying job polarisation, or even just further factor pricing equalisation in dynamics that are affecting advanced economies. These would reinforce the compositional effects of migration on the UK, the type of dynamics that Ben touched on yesterday. We should give some consideration to that.

While inflation expectations have cooled over the past year I would suggest that it would appear too soon for this to be a core explanation of longer term dynamics. With respect to pent-up wage deflation, something that Janet Yellen has emphasised, this is more likely to exist in the US than the UK since it implies a higher Okun coefficient for a given demand shock - we had surprisingly high employment whereas the US had surprisingly high unemployment so I don't think that's relevant here.

So then finally, and perhaps most importantly, weak productivity can largely be captured in regressions but weak productivity and job insecurity could also have reduced the bargaining power of labour beyond past relationships – something we'll have to give consideration to.

As Jon mentioned, and others implied, weak productivity growth points to upside risk to global inflation in the medium term. There has been a continued steady accretion of evidence of a persistent hit to global potential growth – so not just that one off drop that you see close to a financial crisis but actually global trend. Potential going down. And it's notable that despite wage weakness OECD unit labour costs are back around their pre-crisis averages – just below their pre-crisis averages at the moment.

In terms of the UK supply stocktake I thought we had a good discussion yesterday. The adjustments that staff have made to components of labour market slack are directionally understandable. But I think we should take a step back and consider the starting point with more top-down approaches that infer gap concepts from movements in data. We should also look at this question of excess capacity in firms. The crucial question going forward is whether we can shift our expansion from using resources – or employing unused resources, rather – to employing those resources more efficiently, in other words: growing productivity. There is lots of evidence for long-run optimism and simple catch-up models would suggest some medium-term upside risk, but I think we might have to be optimistic to assume that any of us will be here long enough to see this materialise. We have been serially disappointed and it is important we adopt a strategy that is robust to any further delay of a productivity growth pick up as slack becomes fully eliminated.

Now our relatively modest productivity profile in the February Inflation Report I think goes some way towards that. Just recall that we see productivity growth at three quarters of a percentage point this year, 1.5% next year and then a slight pickup from there but we should be looking hard at that as part of the supply stocktake. In the spirit of looking more closely at that, as Martin suggested and Jon endorsed, we should examine the potential reasons for the shortfall over the course of the last few years as growth has picked up. And as we discussed yesterday, the possible causes include less capital deepening than has been expected, slower reallocation of resources or compositional effects of the type that Ben described. This would suggest – and this is hardly exhaustive or necessarily accurate – some of the potential leading and coincident indicators of productivity pickup, which would include, obviously, investment, the rates of company deaths and births, credit supply, greater job churn, or shifts in the composition of work and/or immigration as a coincident indicator. My overall sense is that slack in the economy is not yet exhausted but equally that the economy is going to continue to grow above trend and therefore slack will tighten and inflationary pressures are going to begin to pick up. The surveys are robust. Business investment intentions remain buoyant. There is no evidence yet of an election impact, I should say with the exception of in the actual hard data but we are, I think, rightly discounting that heavily. There is still strength, decade-high strength actually in measured consumer confidence and retail sales are, and I take your point Andy on the composition of those sales, but it's still decade-high strength and also our expectations for decade-high growth of real incomes and the cash data that Dave went through yesterday is positive and we obviously do have the outliers of both the near-term slowdown in housing and likely in net trade we may be optimistic.

On inflation there is no evidence of broadening deflation. I would suggest that inflation expectations appear to have arrested their decline but in any event I felt they appeared well anchored to begin with. On the other side I'm not yet picking up evidence of a danger of rapid acceleration of inflationary pressures. And just one more word on these DGI measures which goes to what's happening abroad is that in virtually every case they are materially below their pre-crisis average as a whole. We've seen them averaging them just below 2%, I recall they averaged around 3% prior to the crisis. Now, that's because we had persistent reported deflation but it is not unrealistic to expect persistent imported disinflation for a period of time and we have to manage accordingly.

From a strategy perspective, given the uncertainties about supply, as I said a moment ago we should want a strategy that is robust to continue disappointment on productivity while respecting proximity to the zero lower bound, and I choose that word carefully. I think we are in the right zone given our productivity forecast and our increased room relative to the effective lower bound, something we made clear in February but we can stress again. Given debt stocks, risks to asset prices which are firmly valued around globe, proximity to an effective lower bound globally, low to negative equilibrium interest rates, prolonged low inflation remains a risk across the advanced world. The degree to which varies and is increasingly reflected in divergent monetary policy stances. That said, those pressures have eased mildly recently and risks to UK deflation have also fallen – I though yesterday's discussion was quite constructive on this. As I said there is no evidence of a broader weakening of price pressures in the UK. Inflation expectations are well anchored. There has been material private deleveraging in this economy. Growth is above potential. Our zero lower bound constraint has eased. We have more policy room than we previously thought we had. I would argue that our neutral rate has likely risen, we see that given the outturns monetary policy appears accommodative. It's not just from a perception perspective that it appears accommodative. And global factors have reinforced

that by further improving financial conditions. Certainly this means there is less reason today to take out any insurance either by signalling an easing bias or easing policy outright. The next move in interest rates is likely up. We will want to use the supply stocktake to think through some of the necessary conditions to give us reasonable confidence to initiate that process. Today is not the day to do so from my prospective so I join others in voting for no change, no change.

So let me confirm the vote with that, which is 9-0 for no change, no change, and voting that there is a recognition that some members knew that decision is finely balanced and if that's a decent summary.

I just want to take advantage before we close the minuted bit of the discussion on David's point on communications and how we are getting across. I think the – and I should emphasise that we will have the opportunity obviously with the Inflation Report and the associated letter to reinforce some of these points and sharpen some of these points as a Committee – one of the issues in terms of the path, and I didn't pick up from anybody in their comments, I picked up some puzzlement but not a desire to actively try to shift the curve, but I would suggest tactically that it is wise because if we try to do something like that you want to succeed and the forces that are moving against us at the moment given QE and global bond dynamics are probably too great to really move it without policy actions – to move it with just words. That said in the Inflation Report and associated letter we could take the opportunity to re-emphasise what gradual means in our original construct. Gradual was gradual relative to the historic pace of tightening: gradual is not an ever reinforcing prospect. In other words a historic pace of tightening – I will be reminded – but I think it will be something in the order of magnitude of 37 to 40 basis points a quarter – it's not two full hikes per quarter but it's something like that. That's a pretty low bar to meet relative to 3 basis points a quarter, but at least providing some offset to what has become an extremely soft set of expectations after lift-off. Obviously the other points that David made in terms of reemphasising the one-off nature of some of the inflation moves, the commodity element of that, makes sense. David I forget your other element there. I would welcome a few reflections – more to feed into the Inflation Report as opposed to the specific communications around this meeting – on how to refine and rebalance the communications a bit. I think tone around the pace of the recovery and the supply stocktake will go some way to reinforcing that. But, to the extent members feel that there has been some misinterpretation of our reaction function, I'm certainly open to re-centring it.

> **Jon Cunliffe.** Just to observe, I think, the productivity point and what the evolution of productivity means for tightening – I think needs to get out there a bit more. People see the productivity puzzle in a long-term sense but they don't relate it to the decision that we have to take.

Governor Carney. We can leave it as a question for reflection; we've got plenty of time to mull it over.

Good. So we should take a quick look at our statement related to this, which is going to be pretty straightforward: totally straightforward, in fact. And then we have to go to the forecast. I think we'll go through the statement and then we'll close off the transcript and talk about some housekeeping things.

Okay.