BANK OF ENGLAND

MEETINGS OF THE MONETARY POLICY COMMITTEE
August 2015

A meeting of the Monetary Policy Committee was held on Monday 3 August 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

Anthony Habgood 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
Garry Young, MPC Secretariat
Melissa Davey, Editor of Inflation Report

Transcript of the Monetary Policy Committee Meeting on

Monday 3 August 2015

Governor Carney. Good morning everyone. End of an era; we'll come to that later. I do not have any new data but Andy do you want to just capture …

> **Andy Haldane.** The note that went round on Friday I think summarises some of the data we've had since Pre-MPC. There are some bits and bobs. Internationally, on Friday we had some significant US data with the Q2 GDP release up 0.6, and also, perhaps in some ways more significant still, was the employment cost index which was a weak number. And I think that puts a lot of onus on Friday's payrolls data in the US. This morning we have had some manufacturing PMIs for China, the euro area and Japan. In China they're a touch weaker. For the euro area they are a touch stronger on the month but within that the Greek number for the manufacturing PMI was considerably weaker. And then turning domestically, last week we had the GfK consumer confidence index. That was a tiny bit weaker in July but still above its average levels. We had the REC survey where employment was weaker and salaries a touch less strong, although still at the top of our swathe. And this morning we've had the Nationwide House Price index which rose 0.4 in July. That's off the back of a negative number for June, but still leaves the annual growth rate north of 3%. I think that was it. Thank you Governor.

Governor Carney. Thanks Andy. OK Ben.

> **Ben Broadbent**. Thank you, Governor. Let me begin with a recap of the main international news. I can be brief. One suspects the Greek crisis is dormant rather than dead but, save a large – and largely foreseeable – decline in the Greek equity market, which re-opened this morning, we've not had any material information on that front. Otherwise, the mix of steady growth in the advanced world and weaker signals in emerging economies has continued. US growth in the first half of the year was as expected, even if the mix across the two quarters was slightly different. In the euro area, we have second quarter estimates only for Spain, where growth came in at a bumper 1%. Other economies won't be as strong, but we still expect reasonable growth of 0.4%, unchanged from Q1, for the monetary union as a whole. Chinese growth, on official estimates, was also unchanged, at 1.7%, although amidst weaker signals from proxies of growth, perhaps including the prices of some commodities, there remains scepticism about how accurate this estimate really is. The volatile equity market, while roughly stabilised for now, is a reminder of some of the challenges faced by Chinese policy makers. Growth in commodity producers, above all Russia and Brazil, continues to weaken.
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> Turning to the UK, many of our debates in recent months have focused on the natural rate of interest so-called, the level of Bank Rate consistent with trend growth and inflation. This is an old concept, one that goes back to Wicksell in the late 19th century. Scepticism about its practical value goes back almost as far. The Harvard economist John Williams, who was a Welshman by the way, said in 1931, "The natural rate is an abstraction; like faith, it is seen by its works. One can only say that if the bank policy succeeds in stabilizing prices, the bank rate must have been brought in line with the natural rate, but if it does not, it must not have been". In other words, it becomes apparent only after the event, by which time it's irrelevant.
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> There's no doubt that the capacity of the natural rate to vary over time complicates the lives of monetary policy makers. It means an interest rate that might have been expansionary at one time is contractionary at another, and vice-versa.
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> In the very long run, real interest rates do seem to have a mean, towards which they revert. That is clearly north of where we are today. In particular, the average short-run real interest rate, ex post, has been positive. Assuming inflation surprises have more often been positive than negative, the average ex ante real rate has been that much more positive, perhaps as high as 2%. It seems very likely, therefore, that interest rates are likely to have to rise over time.
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> And yet forward yields in the indexed bond market, in principle beyond the influence of monetary policy, are also a long way below average. And the fact is that, in spite of low rates, neither economic growth nor inflation has matched pre-crisis averages. Accepting John Williams's advice,

we can certainly say that the neutral rate has been extremely low and indeed negative in recent years.

Yet perhaps we needn't be quite so cautious as he was in inferring changes. If, in particular, we see significant moves in risk and credit premia, these presumably have something like one-for-one, and opposite, effects on the natural risk-free rate. These have declined materially over the past three years, from their peak in mid-2012. The drop in the second half of that year soon resulted in renewed growth in investment, first residential and then by other businesses. The decline in banks' funding costs in particular has been reflected in a material easing in the cost of credit at the retail level. Even in the past year, mortgage interest rates have fallen by 70 basis points. And all this has, with an unchanged Bank Rate, resulted in renewed economic growth and, over the past year at least, some acceleration in wages. Basic pay in the private sector has been growing at 3½% throughout the past year.

All of that, of course, will tend to push up the natural rate of interest. Yet three things give me pause as regards the current decision.

First, we know that the pace of fiscal tightening is due to pick up. Having been roughly flat over the past three years, the cyclically adjusted primary balance is set to rise by around 1% of GDP a year over the next three. That's in our forecasts and, in principle, in an open economy, should in any case be absorbed partly by other countries, although that normally requires a weaker exchange rate.

Second, the acceleration in pay has been met largely by higher productivity growth. Measured productivity can rise either because of fundamental factors or because firms are using capacity more intensively. To the extent the second is responsible, it's not clear the productivity improvement either improves firms' unit costs or, as Gareth reminded us last week, that it will endure. That's why we were right in the August forecast to unwind some of the improvement in Q2. Yet I think there has also been a more fundamental improvement, perhaps connected with the unwinding of compositional effects. And while those effects too are unlikely to endure – whether positive or negative – they do represent an improvement in unit costs, all else equal.

Third, and most importantly, the exchange rate has appreciated significantly. Some of this is both explained and justified by the earlier recovery in the domestic economy, domestic demand in particular, than in our trading partners, above all the euro area. If you want to see it in this way, the earlier rise in our natural rate of interest might have been expected to push up the value of sterling.

Yet, while I can certainly understand the first half of sterling's appreciation by those means – the 9% rise from mid-2012 through to last summer – I find it harder to justify the further 8% increase we've had since then. It was at that time, roughly a year ago, that the first signs of life started to appear in the euro-area economy. During the first half of this year economic growth in those countries has been no lower than in the UK, once one takes into account the lower trend growth in the workforce. Indeed it's probably been higher than trend. So my inclination instead is to blame the ECB's monetary easing. This is consistent with the timing of the larger moves in sterling in the latter part of last year, many of which coincided with news about the ECB's QE programme, and, to that extent, the rise in sterling acts as an exogenous break on UK activity, even if the easing itself in time encourages better growth in Europe.

Since the May Inflation Report we've had three areas of news. The price of oil has fallen by around 10%; the labour market has shown signs of faster wage growth but weaker employment growth; the exchange rate has risen by a further 3½%. It is the last of these that concerns one the most, me at least. The drop in the oil may extend the letter writing period, perhaps even beyond the time of the first rise in Bank Rate. But we've eased policy when writing letters to explain high inflation, so I'm not sure that's a problem in and of itself. In the labour market, annual pay growth has picked up, although to some extent this is a base effect: over the past three months basic pay in the private sector has risen at exactly the same annualised pace, 3½%, that it did over the previous six. We've seen much weaker growth in official estimates of employment but a smaller dip in survey measures.

And meanwhile, as I said, the exchange rate has pushed its way up to levels not seen since early fiscal policy to come. There are strong forces in the other direction, not least easier credit conditions. In two years, perhaps we'll be able to tell which of all these things has won and, to some

extent, what was the prevailing natural rate of interest in mid-2015. Hindsight is a wonderful thing. Not having it, I vote for no change in either Bank Rate or the stock of purchased assets.

Governor Carney. Thank you, Ben. Sheer poetry. OK, I have Jon and then Ian please.

Jon Cunliffe. Thank you. To start with my overall judgment, I think our big picture is still on track: solid growth driven by consumption and business investment for the forecast period with first an increase in pay growth and then a modest and slow recovery of productivity growth to push up unit wage costs and push inflation back to target.

But some of the data this month are puzzling, and overall there is just a touch less support for the big and in the judgments we need to make to get inflation back to target at the two year horizon.

Starting with the international picture, there is some rotation of risk but no very marked change in the overall picture. There was further downside news in China. Although GDP in Q2 was 0.1 percentage point higher than we'd expected, staff expect that to be a blip due to temporary strength in financial services sector. And we have marked down growth in China in the forecast by a touch. More significantly, turbulence in the equity markets continued, including a fall of nearly 10% on 27 July. The risk here is not so much the direct impact of equity price falls on the Chinese economy. Rather, it's the risk that the falls dent investors' confidence in the ability of the authorities to manage the transition to open markets and indeed in the authorities' ability to manage the transition to a more balanced economy.

In addition, the risk of tighter US monetary policy interacting with and exacerbating slower growth in emerging market economies is in my view a bit higher. A sharper than expected tightening of US monetary policy could lead to a rise in global risk aversion, which could spill over to emerging market, economies that hold high levels of dollar-denominated debts. I'm not saying this is going to happen or even that it is a high probability. But at best the risk is no lower than last month, and at worst I think it is a bit higher.

There was better news in the euro zone. Greece has walked a couple of yards further back from the cliff edge than they were standing in last month. And this is clearly still a fluid situation. But in my view the long-term prospect of a Greek exit from the euro remains high. But it has stabilised this month, for the time being at least.

Overall, these developments I think roughly offset each other in terms of the impact on global prospects, which continue to be skewed to the downside.

Turning to the UK, on the demand side the big picture story we've been working with – solid growth driven by domestic demand – is holding up. Household confidence as measured by the GfK survey has come off a bit, but it is still at elevated level. Retails sales remain a little weak in the official data. The retail sales balance in the CBI Distributive Trades Survey fell for a second consecutive month in July, and the expected sales balance has fallen to its weakest in almost two years. But retail sales as we know account for only 35% of consumption. Business investment intentions remain above average. And for both consumption and to a lesser extent business investment, extremely favourable borrowing conditions may represent an upside risk to our forecast. Household consumption is likely to continue to be supported in the near term by increasing real incomes from lower oil and energy prices and further out by higher wages. Indeed there could well be a bit of an additional boost from the recent drop in oil prices: the curve is now around 10% lower than at our last meeting.

It's the supply-side that continues to throw up challenges, and there are two big questions here for me.

First, on labour market quantities, these have been much weaker than expected. Total hours were 0.5% lower than forecast; the unemployment rate was 0.1%[1] higher than expected at 5.6%; and average hours were 0.2% lower than expected and inactivity 0.1% higher. These monthly developments add to previous weaker-than-expected data such that the total hours forecast for Q2 is now 0.9% lower than expected at the time of the May Inflation Report.

[1] MPC Secretariat clarification: 0.1 percentage point higher than expected.

It is possible to tell a gloomy story with this news. The drop in hours, employment and vacancies, the first quarterly drop for three years, may indicate weaker demand for labour and a reopening of slack.

But other labour market indicators point to a different story. The vacancy to unemployment ratio remains high having retraced almost all of its fall since the crisis; surveys of recruitment difficulties remain high; and job churn has continued to pick up and is now within touching distance of the pre-crisis average. So recent data could just reflect bumpiness as the labour market moves towards its natural state and companies find it harder to fill vacancies. I do find it harder to tell a story about the labour market hitting the stocks and rebounding, rather than the rate of improvement simply slowing down, but Jamie's note after our last meeting explains why this could occur.

So I am not prepared at the moment to put much weight on these data and to come down on the side of one explanation versus another. There is a chance that the data are erratic, though I accept it would have to be highly erratic to explain the movements. It is too big a call to make on the high frequency data. And so I will wait for more data, including from the new cohorts in the LFS survey and on the evolution of wages, to provide a clearer picture before deciding how strong a signal to take from these developments in the labour market.

The second question for me is around productivity growth which has picked up. In the four quarters to 2015 Q1 it was 0.8% and is expected to have been 1.5% in Q2. Jamie showed us a chart at Pre-MPC of surprises in annual productivity growth relative to our forecast in the previous round. The latest reading for Q2 showed a large upside surprise of 1.2%. This is similar in magnitude to a number of the surprises we've seen since the crisis, but the difference of course is the sign of the surprise has changed. We are now being surprised on the upside.

Should we worry about this? Our previously over-optimistic forecasts for productivity growth were luckily offset by under-estimates of labour market supply. So in terms of policy, it was very useful that we made two offsetting mistakes.

Given the sharp increases in labour supply and the fall in slack the scope for further mistakes on the labour market is lower. It is, of course, possible that there is still more slack out there, you might place weight on the Bell-Blanchflower index which shows a greater amount of slack in the labour market. But I for one think that uncertainty is now much more narrowly concentrated on developments in productivity.

And if we underestimate productivity growth and have no offsetting labour market supply news there may be a temptation to tighten policy too early. In my view, it's now at least conceivable that the risks on productivity lie on the upside. It will be informative to see how much, if any, of the bounce back in productivity was driven by the unwind of compositional effects.

In this I am mindful of Dornbusch's law that things take much, much longer to come through than you think and then they happen much faster than you would have thought. So you have the chance to be wrong twice. Having been persistently over optimistic about productivity growth I don't think we now want to be persistently over pessimistic – especially as the possibility of an offsetting error on the labour market side looks less likely.

Finally, on inflation, the oil price news and the exchange rate push down on our forecast. But on deflationary risks, I have drawn further comfort from the tick up in household inflation expectations over the month. For example, using the Citigroup survey, the one year measure increased by 0.2%[2] to 1.6% and expectations five to ten years ahead increased from 2.7% to 2.8%.

So where does all that leave me? Overall, I don't rule out that the labour market data is providing a signal. But before I decide on whether it does – and whether the signal is red or green – I want to see further rounds of data. I think that the risks on productivity may lie on the upside though that's

[2] MPC Secretariat clarification: increased by 0.2 percentage points.

highly uncertain. And our forecast for demand remains broadly on track though there are downside risks from abroad.

With that, I provisionally vote for no change in Bank Rate and no change in the stock of assets purchased. Thank you.

Governor Carney. Thank you, Jon. Ian and then Martin please.

Ian McCafferty. Thank you. Good morning. With a good set of discussions around the forecast and some interesting news, there's much to weigh up this month. And I'm starting to hanker for those halcyon days that Ben described in our Deliberation meeting, when our predecessors simply judged whether demand growth was becoming excessive before changing policy. Would that things were so simple now.

Internationally things seem to me to be unfolding roughly in line with our previous expectations. The US economy looks back on track, while our concerns about the stability of the Chinese economy persist. I take some reassurance from staff analysis that the stock market upheavals are unlikely to have a material impact on immediate growth prospects, although if the policy credibility of the authorities were to be tarnished, there could be some medium term implications. A Greek meltdown has been contained, at least for now, with, as far as we can see from the surveys conducted following the July deal, only a very limited impact on confidence and activity elsewhere in the euro zone.

Jon raised the question about whether the data for the first half hinted at a more meaningful slowdown in world growth; I too had wondered about this, but am not convinced that it is yet more than a combination of inevitable ebbs and flows in global activity, combined with the impact of the timing of the adjustment to the big shift in relative purchasing power from the falls in oil and commodities prices. Meanwhile, the further weakness in crude prices continues to provide a net stimulus to the world economy. Nevertheless, the risks to the UK from the international economy remain skewed to the downside over the next year or so, and I think this is well reflected in the forecast.

We have already discussed the interpretation of the UK news in some depth, and on our best collective judgement basis I am broadly content with the resulting forecast. Nevertheless, I do want to make a couple of comments, where my interpretation of the data strongly influences my assessment of the balance of risks around the forecast central view, and is of particular relevance to my policy judgement.

On the demand side, our central forecast looks reasonable, but I am less of the view that the risks are primarily on the downside. Those downside risks are not negligible, but I also believe that the combination of strong consumer confidence, strengthening incomes and easier credit conditions provide an upside risk too. In spite of everyone's best efforts, we are yet unable to answer David's fundamental question of where r* might move to over the forecast horizon, and I was struck by the analysis suggesting that the difference between the US market curve and the Fed dot plots was an reflection of how r* might increase as the US economy normalises. If this were also true for the UK, the current market-implied policy path would end up providing more stimulus than expected.

In terms of supply trends, I am not convinced that this month's labour market data are as weak as at first glance. I support our forecasting convention of not altering our fundamental star variables every time, such that mechanically the data cause our estimate of remaining slack to rise. But the signals from the data were complicated by the changing cohort effect, and each could equally plausibly be the result of a tightening labour market, with the news on unemployment the result of increasing frictional effects, and the decline in participation and average hours the result of fewer second earners offering their labour as real incomes improve, a feature I have referred to in previous meetings. Survey evidence suggests that demand for labour remains robust, albeit slightly less so than late last year, and that recruitment difficulties are becoming more acute, particularly according to the Agents. As such, I continue to believe that effective slack is close to being exhausted, with implications for wage pressures in 2016 and 2017.

On the wages front, I am reluctant to discount bonuses as a sign of impending wage cost pressures – in the ONS, all sorts of compensation is included in the bonus category, many of which, certainly outside the City, are likely to be embedded in basic pay over time. Wage trends have been running consistently ahead of what we expected at the start of the year, and private sector pay including bonuses is already growing by over 3.5% annually. Some of that has been offset by the upside to the productivity news, but private sector unit wage cost growth is already growing also at 2%.

With slack minimal and recruitment difficulties rising, and core inflation expected to rise sharply into 2016, I do worry that the pick-up in wage costs next year and into 2017 is likely to be more marked than in our central forecast.

On inflation, the forecast suggests that we may only just reach 2% within two years. But the inflation profile contains what is to me an uncomfortable combination – inflation at target, but only because of a strong drag from import prices, while growth in domestic unit labour costs is above average.

But recent import pass through effects have been lower than our assumptions, suggesting that, as demand has strengthened, some of the benefit of exchange rate moves is being used to bolster margins, and I see good arguments as to why this might persist, such that total pass through might remain lower than we currently expect.

And together, these concerns about the strength of wage costs and the size of the drag from import pass-through present to me significant upside inflation risks towards the second half of our forecast.

On this assessment, the arguments in favour of raising Bank Rate by 25 basis points are very compelling. I find myself asking, do I need to wait just a little longer, and why?

And I think here, Ben's arguments about policy uncertainty provide at least a useful check.

In terms of "Evans-type" uncertainty, I find the "lower for longer, followed by sharper tightening" approach unconvincing, not only on the arguments that David put forward in our Deliberation meeting, but also because such an approach conflicts with our stated objective of gradualism, which to me is critical.

"Brainard-type" uncertainties offer a better justification for caution, but such arguments tend always to be true, and provide little guidance as to very specific timing, unless one believes that the uncertainties will diminish over a reasonable horizon.

The justification for changing my vote last January – the risk that a shift in expectations would prolong the inflation undershoot beyond that caused by one-off price level factors – is falling away. Inflation expectations remain well anchored. And since I originally started voting for a rate rise, it has become clear that labour supply has been greater than thought, but nine months on, even this higher level of labour supply now looks close to being exhausted.

So with slack now close, in my view, to being exhausted, I find myself returning to the rules about timing that Charlie Bean used to deploy.

And not for very much longer will the sign of the output gap match that of the inflation divergence, making the policy stance easier through lack of trade-off. To the extent that the zero lower bound acts as a constraint, there is an argument that Charlie's rule – that tightening should start some time before the output gap is finally closed – should be more flexible, and tightening deferred. But given the policy lags, this argument can only be taken so far. Even on our central forecast we close the output gap within a year, and in effect, I think we are somewhat closer than that.

So, in my view, we are treading a fine line – tightening a little too early may result in not quite hitting the inflation target on the two year mark; tightening a little late may well lead to an overshoot thereafter. To me, the importance of remaining gradual throughout the cycle makes the latter risk a little greater than the former.

It is by no means an easy decision therefore this month, after several months in which I've said that the decision has become ever more finely balanced. And I am quite keen to hear and reflect on the arguments put forward around the table today before finally making a decision. But for the moment I

am minded to vote for an increase of 25 basis points in Bank Rate, and no change in asset purchases.

Governor Carney. Thank you, Ian. Martin and then Andy please.

Martin Weale. Thank you, Governor. The international picture has seen an improvement with respect to Greece, in that it seems clearer now than a month ago that there remains, at least for the time being, a will to address Greece's problems without a disruptive default. The survey measures of output do not suggest that activity in the euro area has been much affected. Consumer confidence measures have weakened markedly but are generally still higher than six months ago. August measures will tell us whether this effect fades in the light of the improved situation, while the Q2 GDP figures will tell us whether the impact on activity was material. One longer term issue which may limit the extent of recovery in the euro area is that, at least in some countries, returns on capital seem to be unusually low.

United States GDP, growing by 0.6% in Q2, was appreciably weaker than the 0.9% we had expected, after a revised estimate of 0.2 for Q1, and more general downward revision to data for 2012 and 2013, pointing also to weaker productivity growth. The weak wage data for the second quarter are also something of a surprise. The US data add to the slight sense of weakness internationally, and, excluding the effects of energy output, also present in our own data this year.

Domestically, we may have a new productivity puzzle shaping up – the sharp growth in productivity likely to show in the figures for the second quarter. There has also been a wage acceleration, compared with the May forecast, if not compared with last month. Nevertheless, this has been offset by higher productivity. We have made the judgement that about half of the improvement in productivity is a consequence of increased factor utilisation rather than an underlying improvement in productivity with the consequence that underlying unit wage cost growth is correspondingly stronger than our figures imply.

Overall, I think the best sense of pay pressures can be gained by looking at wage movements in the context of our suite of wage equations. The increase in pay growth means that we now have little unexplained weakness in pay. I will not be surprised if we find little corresponding shrinkage in the composition effect. AWE is a different data source from LFS and the latter probably does not measure quarterly wages very well. Importantly, however, the small amount of unexplained weakness does remain even after the downward adjustment we made to U* a year ago. Given what we know about wages, it seems to me most unlikely therefore that the recent rise in unemployment is a consequence of U* now being higher than we had thought. It's striking that the number of people unemployed for up to six months rose by 51,000, while the number unemployed for twelve months or more fell by 53,000. So, abstracting from possible sampling issues, long-term unemployment, perhaps a better indicator of underlying conditions, has continued to fall.

Should we focus on pay including or excluding bonuses? From 2000 to 2013 the finance sector accounted for 7% of the pay bill but 39% of the total bonus bill. The share of bonuses in total pay rose from about 5½% 2000 to over 7% in 2008. It fell during the crisis and has then been relatively stable at around 6%. Much of how we see the importance of bonuses must depend on how we see costs of revenue-sharing firms in the financial sector as an eventual influence on inflation. But ahead of any further research on the topic, which I hope will extend beyond the predictive power of bonuses, it seems to me sensible to continue to use total wages as our indicator of labour costs.

A concern I have raised in the past is that we understate the labour market impact of GDP growth in our forecast, and given the increasing labour market tightness this becomes all the more material. That might point to even faster domestic cost growth than we project; as it is unit costs are rising at 2 ½ to 3% per annum in the second year of the forecast with inflation held in check by import price effects and declining margins.

Over the past year my concerns such as that have been about supply. The work on the financial conditions index made me think that there is an upside risk to demand. If demand is more buoyant then inflationary pressures are also likely to be stronger. Separately, of course, if in three years' time the interest rate needs to be higher than the yield curve currently shows, in order to keep inflation close to target, gradualism implies that the adjustment should not be left to the last minute.

These, overall, seem good arguments for tightening given the actual state of the economy. What about the arguments for doing nothing this month? Ben pointed out that before the crisis the Committee sometimes used to anticipate movements in inflation, and also that greater uncertainty about supply conditions is a good reason for being less keen to do so. For me a very material issue is whether one thinks that what has been described as a policy reversal damages the effectiveness of policy. Move early with a significant risk of reversal or move late and put gradualism at risk. When we discussed the issue, I was not persuaded that there were real costs associated with that sort of reversal.

A second argument is that, if the most recent improvement in productivity does not have a large cyclical component, at least in the short term cost growth is likely to be weaker than we have assumed. Some weight has to be given to that. If more normal productivity growth has come earlier than expected, then as Ben said, it seems to me also likely that r* will be higher than currently assumed. If the economy looks more normal, people will respond more normally to very low interest rates. But, all told, the recent data mean that I give more weight to the possibility that better productivity figures will ease cost growth over the horizon of concern to us.

A third argument comes from the downward adjustment we made to the inflation forecast for Q4 and Q1. I do not see inflation below 1% as an obstacle to an interest rate change on its own; indeed in the past we voted to ease policy even while inflation was more than one point above target. My own work suggested that inflation was likely to stay low for longer than our collective analysis of the impact of an oil price fall had suggested. But there is starting to be a whiff of the persistence we saw 4½ years ago, only with the sign changed.

This is all a fine balance. It would be wrong to make too much of these arguments, but, even if the factors behind recent developments do not become any clearer in the autumn, I think they do extend, at least slightly, the breathing space that lower oil prices have given us. This month I expect to vote for no change to Bank Rate and to buy the gilts we need to bring the stock of gilts we own up to £375 billion.

Governor Carney. Can I just ask a factual clarification on one thing you said, let's make sure I understood, you referenced total wages in your discussion, did you mean total compensation or …

Martin Weale. No I mean total wages rather than regular pay.

Governor Carney. Rather than regular pay. Thank you. So I have Andy and then Minouche.

Andrew Haldane. Thank you, Governor. Starting with the external environment, the key news over the past few months, Greece notwithstanding, has been I think among emerging markets, especially China, and in commodity markets.

Since the May Inflation Report, EME equity prices have fallen by 9%. And Chinese equities have fallen by 10% and by almost 30% from their peak. Over the same period the price of oil has fallen by 18%, metals by 16% and agricultural products by 3%.

These have not been independent events. The correlation between EME equity prices and commodities prices has been around 0.85. This relationship is also likely to have been two-directional. For example, weaker demand in China and other EMEs will have lowered demand for commodities and hence their price. But even where weaker commodity prices have been the result of improved supply conditions, this will still have generated an income transfer away from commodity exporters, lowering demand prospects in these countries with potential ripple effects globally through trade channels.

According to the staff's preliminary analysis, roughly two-thirds of the fall in oil prices since May has been demand-related – a bit more than we attributed to the fall last year. And around one third of the fall in other commodity prices appears to be demand-related, although that analysis is somewhat more tentative. That suggests lower global demand has played a significant role in driving recent developments in EMEs and in commodity markets, broadly consistent with weaker global PMIs and the surprising fall in global trade volumes through this year that Jon mentioned, which is especially pronounced among EMEs.

Of the movement in commodity prices which is supply-related, the income transfer from commodity exporters to importers is typically believed to be net positive for global activity because the spending propensities of commodity producers is lower than that of commodity consumers. But it might also be worth challenging those assumptions in the current environment.

For example, there must be a question about China's willingness to spend its windfall, given the challenges it faces. Meanwhile, given the problems facing some of the largest commodity exporters – not just declining export revenues, but a sharp reversal of capital flows, a prospective rise in US interest rates and, in a number of cases, political instabilities – we could see a disproportionately large contraction in aggregate demand there; if not, as Minouche said, a number of fully-blown crises.

For these reasons, the skew we have placed on global activity in our forecast strikes me, as Ian said, as fully-warranted. Indeed, I think it could understate the likely downdraught from EMEs who, after all, have accounted for over three-quarters of global growth since 2010.

Turning to the domestic picture, there was little demand news over the month, including from the second quarter GDP release, that came as a particular surprise relative to our August, or indeed our May, forecasts. The recovery continues to be pretty solid, if perhaps at a somewhat slower pace than last year – for example, if we strip out the effects of energy.

On the supply side, however, the news has been more significant, sharpening the already pretty pointed trade-off between strengthening domestic cost pressures on the one hand, and weak external ones on the other.

On domestic costs, as others have said, the latest quantities data from the labour market significantly surprised to the downside. As discussed in the forecast round, this has posed some fairly fundamental challenges to our estimates of slack. Was this evidence of weaker employment demand and hence higher slack? Or of the economy bumping up against its NAIRU and lower slack?

Suffice to say these data have caused me to question my own assumptions about how the labour market might be functioning. My working assumption to date has been that we have been operating in a lower-NAIRU world than our models assume. And the fall in net employment on the month together with statistical noise might well be consistent with that.

The evidence on weaker employment demand, however, is pretty thin. And that means I need to take seriously the possibility of labour supply conditions having tightened more significantly than I had assumed – a somewhat higher NAIRU or a sharper Phillips curve kink. Rising reported recruitment difficulties, and evidence that bonuses may be being used as a retention tool, are grist to this particular mill.

So while I feel it is too early to be reaching a decisive view, especially with wages having surprised a touch to the downside over the month, this is an area where my thinking has become more fluid over the month.

Working in the other direction to these domestic forces have been two potent external ones, notably the stronger exchange rate and weaker oil prices. The lower oil price, if maintained, will result in inflation remaining below 1% for an extra quarter, perhaps two, into 2016. It may also hold down inflation expectations among wage and price-setters, already at well-below average levels, for somewhat longer.

The exchange rate will have more persistent and significant effects. Without the adjustments we have made to our pass-through assumptions, we would be publishing an inflation forecast this week of 1.8% at the two-year horizon. We will return to those assumptions in November, but I think the longer and larger the appreciation, the greater the likelihood of threshold effects delivering stronger pass-through than we have seen so far. These exchange rate movements would be less a cause for concern had they reflected news about relative demand. But as a background note from staff makes clear, and as Ben mentioned, demand and interest rate news does not come close to accounting for the scale of sterling's rise over recent months. Indeed, it may not even be able to account for the sign of those movements.

What is true of exchange rates is also true, to a lesser extent, of interest rates. They have risen by 30 basis points at the three-year horizon since the May Inflation Report. Over the same period, macro news for the UK – at least as measured by surprise indices – has been flat, if not slightly negative. Taken together, this means we have seen a pretty significant monetary tightening over the past few months, even once account is taken of news about the economy.

The loosening of credit conditions over the same period, with lending rates down a further 10 basis points since May, will have offset that to some degree, if not fully. I think this significant conditional monetary tightening perhaps helps explain why it was a struggle to get inflation to 2% at the two year horizon during the forecast round.

I also found staff work on core inflation informative about prospective inflationary trends. None of our measures of core inflation do a fantastic job of predicting inflation, especially at the two year horizon. And given those wide confidence intervals, current levels of core inflation are not inconsistent – as the statisticians love to say – with inflation hitting 2% in two years.

Nonetheless, if you asked what probability a core inflationary model would place on CPI being 2% or above in two years' time, the answer is a rather depressing 15%. That is lower even than the probability assigned by companies and consumers. And all of them are some distance from our own 50% probability.

Against that background, I am minded this month to leave Bank Rate and the stock of asset purchases unchanged. Thank you.

Governor Carney. Thank you, Andy. So, Minouche and then Kristin please.

Nemat Shafik. Last month I used my policy statement to outline the data I would be watching to inform my decision on when to increase Bank Rate and perhaps unsurprisingly they were wages, productivity, the exchange rate and headline inflation. But considerations of monetary strategy will be as important as the data, and so over the intervening month I have devoted some time to considering them, and that's where I would like to focus today.

One of the reasons that we need to consider monetary strategy at all – as opposed to simply following a rule – is that we are uncertain about the current state of the economy and how it will respond to changes in our policy rate. Just by way of example, recall that three months ago the latest data suggested that GDP growth was going to be 2.4% in Q1, and a judgement free analysis of the output gap in Q2 suggested it was 0.3% of potential GDP. Three months on and the equivalent numbers have been revised in opposite directions – growth is now thought to have been 2.9% in Q1, and a judgement free analysis of the output gap in Q2 would suggest it was 1.2%.

The literature tells us that the noisier the data – or, in the case of Brainard uncertainty, the less certain we are about how the economy works - the less aggressive should be the policy response. As we discussed last week, Charles Evans at the Chicago Fed has considered uncertainty from the point of view of how it interacts with the zero lower bound. His line of argument goes that because monetary policy can more easily deal with inflation overshoots by raising rates, policymakers should adopt a looser stance for longer.

However, as we also discussed, such a strategy is not without risks. As Orphanides has pointed out, it depends crucially on the assumption that the policymaker doesn't fall behind the curve, and can atone for mistakes before credibility is lost. Against that has to be weighed the risks to credibility from raising rates too early and having to reverse course thereafter. So is it appropriate for us to follow a cautious strategy at the moment, or is the risk of falling behind the curve too great? Making that assessment will depend on the interaction of several different lags. First, the lags with which shocks to activity get passed through to headline inflation; second the lags from which shocks to import and energy prices get passed through to inflation; and third the lags with which monetary policy affects the economy. Let me say something about each of those in turn.

The lagged effect of the big shock to domestic activity – the financial crisis – has been very long indeed. It's now been eight years since BNP Paribas suspended redemption on two ABS funds, which some thought was the moment the financial crisis broke. And the subsequent reassessment

of long term sustainable growth prospects around the world has had so persistent an effect that we still believe the slack it generated is pulling down on headline inflation by around half a percent.

But that slack is clearly being used up. Wage growth is now in line with its determinants, suggesting that we can have greater confidence in our central forecast that slack will cease to be a significant drag on inflation a year from now.

By contrast, the downward impetus from new shocks to import and energy prices just seem to keep on coming. This quarter has seen a continuation of the persistent appreciation of sterling, and a renewed move lower in commodity prices. Although these disturbances won't take as long as eight years to work through, the fact that they are more recent means that they will likely continue to pull down on inflation to a significant degree for the next two years.

So over our forecast horizon, the lagged effect of shocks to import and energy prices looks set to dominate the reduced drag from slack in the domestic economy. But I would add a word of caution to place too much store on this of course, input prices determined on financial markets can be fast and fickle.

Finally there is the question about lags in monetary policy. The standard policy multipliers would see most of the impact on inflation within five to six quarters. I believe the staff are in the middle of a "deep dive" into time varying transmission lags, prompted by a question from Martin. So I will reserve judgement until we see the results from that work. However, I would be surprised if we were to conclude that the lags in the transmission mechanism are vastly different than past estimates, because the risks seem to be evenly balanced. If you look at households, the share of mortgages on variable rates is actually similar to its pre-crisis level, and although household debt to income remains above its 1997 to 2007 average, so too does the stock of deposits.

And while the share of variable rate borrowing by corporates has declined, one suspects the dampening effect of that on the transmission mechanism is balanced out by the reported tail of vulnerable firms who only survive on the basis of ultra-low interest rates. Ben's zombie firms, as we call them.

In addition, there are several reasons to think that the move in asset prices following the first move in Bank Rate could be larger than historical experience, thus accentuating the impact of our initial changes in policy. For one thing, tightening monetary policy would put us in a very small club of central banks who are doing so, increasing the attractiveness of sterling to those oft-discussed carry traders. For another, we can expect term premia in bond markets to unwind from their extremely compressed levels, as thoughts turn to how we will reduce our stock of assets.

So let me pull it all together. At times of uncertainty, there is a case for moving policy cautiously. The risk of doing so is getting behind the curve. Whether or not that risk is worth taking will depend on the balance of other factors affecting the outlook for inflation, conditional on the assumption that the transmission mechanism will be sufficiently quick to correct mistakes before credibility is lost.

Several developments on the month mean that for the moment I judge the balance to be tipped in favour of caution. In particular I would highlight the following:

- Wage growth came in slightly weaker than we had expected. When added to the welcome pick up in productivity growth, this means that unit labour costs are actually turning out a little lower than we had expected at the time of the May Inflation Report.

- The exchange rate is up a little on the month. But perhaps more importantly, commodity prices have moved lower once again.

- As such, the pick-up in headline inflation that we have been anticipating has been pushed out further, such that it is now very unlikely to get above 1% until the first quarter of next year.

So, against the backdrop of uncertainty I mentioned at the start, I judge that the downward drag on inflation expected to be imparted from energy and import prices currently gives us the leeway to act

cautiously. So this month I intend to vote for no change in Bank Rate and no change in the stock of purchased assets.

Governor Carney. Thank you, Minouche. Kristin then David.

Kristin Forbes. In May I described the economy as being in a tug-of-war between real indicators supporting growth and nominal indicators dragging down inflation. The last few months have confirmed this tug-of-war, but the battle will last longer than I thought. These opposing forces continue to encapsulate what I see as the main issues for monetary policy today. My comments will update my views on these two sides and implications for when we can confidently "place a bet" on the outcome by raising rates. Also, in honour of David's last MPC, I have incorporated some of his legacies — his creative terms not usually exploited by economists but that succinctly describe economics.

One team in this tug-of-war I described several months ago was the "real economy"— with players such as GDP growth, domestic demand, employment, and the output gap. GDP growth was a solid 0.7% in Q2, above our expectation. Although we heard reasons at Pre-MPC why we should not take a positive signal from this and why our growth forecast may be optimistic, I don't think we should discount the headline number. As David said, "…hold your nerve and not to get panicked." Growth has been 0.7% or higher for five of the last six quarters. Solid consumption, additional oil price declines, and easy borrowing conditions could support our forecast that growth will continue at 0.7% for five more quarters. Trend growth is likely below 0.7%, so if there is any remaining slack in the economy, it should be absorbed quickly.

Granted, the headline employment data were weaker than expected—the unemployment rate increased; employment, participation and average hours all fell over the last three months. This may reflect a weakening in the real economy. But there is also a good chance that this instead indicates that we are close to full employment and the congestion effects Ben previously discussed are beginning to come through.

The discussion about "congestion effects" at Pre-MPC prodded me to review the related academic literature. Or maybe it was David's recent exhortation in a speech: "Don't just do something, stand there … (and think)." A 2012 AER paper by Michaillat is highly relevant. It develops an intuitive framework showing why labour-market frictions only bind as an economy nears full employment. This could explain why measures of labour-market churn do not explain wage growth well in models that include the full business cycle, but these measures provide useful information about labour-market tightness and wage growth at certain points in a recovery.

This could explain what we are seeing now, and why the recent employment data may not indicate weakness. Many measures of labour market churn have recently reached levels that were previously consistent with full employment and solid wage growth—just as wage growth had picked up and the short-term unemployment rate stopped falling. The swathe of varied indicators we saw at Pre-MPC was noteworthy. Many measures indicated a tighter labour market than 2006. The increase and high level of recruitment difficulties recorded by the Agents was also noteworthy.

Pulling against this strength in the real economy is, of course, the nominal data. Headline CPI inflation has been around zero for five months. Our forecast expects that the most recent fall in oil prices and strengthening of sterling could keep inflation below 1% through year-end. Key risks around such low levels of inflation have not materialized—such as David's foresight that UK consumers will not stop spending just because items cost about the same next year.

But core inflation has also fallen sharply, with most measures now below 1%. To better understand what signals I should take from this, I estimated a basic New Keynesian Open-Economy Phillips curve model of what drives core inflation. I found that lower oil prices significantly reduce core inflation, although the dampening effect is about one-third that for headline inflation. Core inflation is not immune from changes in energy prices. Exchange rate movements also affect core inflation, with my estimates suggesting an effect about half as large as for headline inflation. This suggests that we should not be surprised by recent falls in core inflation; the factors pushing down on headline inflation are also pushing down on core by magnitudes comparable to what occurred historically. More worrisome, however, my estimates also show that core inflation is significantly affected by lags of core inflation, suggesting that there may be some persistence.

Where does this leave us? When I last discussed this "tug of war" between the real and nominal indicators, I stated that the "Nominal Team" had a substantial head start; the flag indicating the centre of the rope was already deep in their territory of low inflation. But by the end of the year, I expected the "real team" would be dominating and headline inflation quickly picking up. These nominal indicators have recently added more bulk to their team, however, through additional oil price declines and sterling appreciation. Their advantage will continue even longer. As David said, "Mensch tracht, und Gott lacht", ie, "men plan and God laughs", or his related point from Mike Tyson, "Everyone has a plan until they get punched in the mouth".

This leads to the critical question for monetary policy. When do we have enough confidence that the real factors have enough momentum to dominate? When is inflation comfortably on track to target so we are not "punched in the mouth"?

I currently see no signs that our underlying narrative has become derailed. If anything, as more data comes in, I am increasingly comfortable with our narrative that low inflation today can mostly be explained by movements in the prices of energy, food, and sterling, so inflation should be around target in two years. The resilience of inflation expectations and wage growth to low inflation, and the recent more limited pass-through to import prices, are critically important. Therefore, I continue to believe that monetary policy will need to be tightened soon, and sooner than consensus forecasts.

But, given the recent movements in energy prices and sterling, we also have a slightly longer window before it is prudent to start this adjustment. Even if there is less slack than in our forecast, and wage growth picks up more sharply, it is unlikely that inflation will pop so quickly that inflation breaks above 2% soon. Waiting a bit should also provide information on labour supply, including whether the recent productivity improvement is a blip, or the start of a faster turnaround than forecast, which could counteract pressure on unit labour costs from wage growth.

A bit more time would also allow us to better understand recent global economic data. Even though risks from Greece leaving the euro have abated, for now, the synchronized slowdown in many emerging markets raises some concern. Although the US economy rebounded in Q2, some recent data suggests downside risks over the next months. China continues as a great unknown. Of course, there are also upside risks from the euro zone, where even slightly stronger growth could counterbalance broader weakness elsewhere. And it is important to remember there will never be a perfect time to adjust interest rates. Using moderate global uncertainties to delay the appropriate UK monetary policy is (using my favourite David quote) "a geyser of pish-posh".

To conclude, I will vote to maintain the current Bank Rate. But a final David quote is relevant; as he said in 2010, I view this as finely balanced. We will miss his linguistic skills as we transition from these loaded terms!

Governor Carney. Excellent. Well the random allocation of voters perfectly sets up the story of the day. Let me just add my own tribute, David, before you speak. You're well into your sixth year, well beyond your sixth year in fact. Appointed 1 June 2009, reappointed in 2012 and obviously extended through the election, thank you for agreeing to do that big service to this Committee and to the country. 75 MPC meetings as a consequence, including this month, which is near record. You have given 24 on the record speeches, sat through 25 forecast rounds, and I'm trying to think of how many, I don't have in front of me how many pleasurable experiences you've had at the TSC, although there's probably zero in terms of pleasurable experiences.

David Miles. The tape's on.

Governor Carney. The tape's on, you enjoyed them, you enjoyed them! The star of the Governor's XI cricket team. And I would say that you provided during your time on this Committee, and I noticed this first from afar and then when I was here, insights well beyond monetary policy with some of your academic work that's built directly into policy that came out over the course of the last six years. I think about issues around housing, consequential insights around housing, not just the formal reporting but our discussions at MPC/FPC. Insights around bank capital which helped spur maybe not moves quite of the extent that the analysis suggested but certainly reinforced the direction very importantly at a crucial time for that and others who were here can attest to that. You've been a huge asset to this Committee, to UK monetary policy as a whole but obviously to UK macro and global-macro policy and this might be your last, well your second last because we have a few more meetings, but one of your last contributions to this Committee but certainly far

from your last contribution to macro or I would hope to the Bank of England. So with that that, David, I give you the floor. Tell us what to do!

David Miles. Thank you Mark, those were very kind remarks. Also it is the privilege of the soon-to-be disenfranchised to get to listen to most other people before speaking for the last time. So that is the plus of being close to one's last meeting. I think the big minus is that when it's your last meeting you don't have the luxury of saying that while you think you are getting closer to the time at which you start gradual normalisation, you can wait another few months and see how things look before you vote for it. So that means that it is actually quite a tricky meeting for me. Because, like others, I have for some time now thought that we are getting close to the point at which we can begin normalising monetary policy.

In a nutshell, I think the reasons are this. It seems to me there are more and more parts of the British economy as you look at them that are now operating either normally, or based on our forecast, soon to be operating normally. I think you see it in many aspects of the labour market, so unemployment is now close to 5.5%, and on our forecasts sort of moving down fairly gradually towards our own estimate of U* quite quickly. And as others noted this morning, Ben I think you pointed this out a few days back, the vacancy to unemployment rate now is actually back pretty much where it was pre-crisis; profit margins – we were shown a chart just the other day that profit margins are rather smoothly approaching an estimate of what we might think might be normal. Capacity or slack is still not back to zero, and to my mind our estimate is probably a little bit lower for the degree of slack that I think it might be. But even so I think the amount of slack in the economy pretty much is small and the relation between the real product wage and productivity also looks like it's on a path back to our estimates of what an equilibrium is. And of course we've had several quarters now of growth that averages around about 0.7% a quarter, and I don't think there are any obvious reasons to disagree with what our own Inflation Report is likely to show which is that on average it's 0.7 and 0.6 really as far ahead as you look here, at least as a central forecast.

So it does appear that in terms of some of these key ratios and rates of growth, things look increasingly normal. Of course the levels of GDP and of productivity and the levels of real wages are all dramatically lower than they would have been if we had stayed on the pre-crisis trend. But I have long abandoned the idea that those old trend levels were a guide to where we might get back to. I was slower than most people on this committee to abandon that idea; but it now looks hopelessly optimistic – the folly of youth when I was still under 50 years of age, in my early days, when I was a green member of the Monetary Policy Committee, thinking that the pre-crisis trend is somewhere you might get back to. Yes, a folly of youth that was.

So when I look at our forecast, which seems to me a reasonable place we've got to on all that, I think I see a lot of these measures – what you might call key ratios, key rates of growth – already fairly close to, and fairly soon moving back pretty much all the way to, what you might think of as normal levels. I think that's why I felt it is relevant to ask the question of what might the level of the policy rate be towards the end of our forecast horizon when we've got capacity normal, inflation roughly at target, credit spreads are steady, unemployment's close to our estimate of U*. So what's r* in mid-2018? And for what it's worth – and it may not be worth a whole lot, given the uncertainty here – I think that number is probably somewhere in the range from 2.5% to maybe a little bit above 3%. I would be surprised if it was under 2%, and I doubt that it is as high as 4%.

Now, of course, the conditioning path we use in the Inflation Report for Bank Rate is about 1.7%, this is by mid-2018. Now, of course, you could believe that the appropriate level of Bank Rate by 2018, middle 2018, might be 2.5% to 3% range and still feel very comfortable postponing the start of the journey back toward that kind of level for Bank Rate. It seems to be perfectly consistent with a gradual path that you do not have to start this journey right now. So 25 basis points a quarter – a somewhat arbitrary definition of what is gradual but it seems to me certainly within the class of gradual processes – you could go at that rate, not start the journey until right at the end of this year, and still be at 3% by mid-2018.

So what's the rush? And that is a very good question. It's a question that Ian has posed and several others this morning. What's the rush? And that's a particularly good question when you have inflation at zero. Of course you can switch the question round the other way and say, well what's the reason not to start this journey if you fully expect to start it at some point, maybe quite soon. And there is some cost, I do feel, that there is some cost, for saying that you are about to start a journey

but it's just not quite the right time to start it yet. And I do think – some people have mentioned already this morning – I do think that some of the arguments for delaying are actually pretty flimsy. Others have said already this morning, the argument that while we're at the zero lower bound we have to wait until inflation is really well on its way back up, safe in the knowledge that you could sort of catch up again later by accelerating it, I don't think really stands up, for a bunch of different reasons. One is that we are not actually at the zero lower bound and we've got some other tools we could use. But the main one is that it's a bit too blasé about the catching up later strategy, which for the UK I think is a pretty dangerous route to go down. I'm also wary of the argument that there are a few big risks right now in the world and it's particularly uncertain where we are right now and if we just wait a little while we could see how these play out. Because I can pretty much guarantee that there's going to be some new big risks coming along. I think the stock of uncertainty is constantly replenished, and so waiting on the grounds of just a little bit more is not a very persuasive argument.

There is one factor; a couple of other people have mentioned it this morning, that actually really did strike my attention at pre MPC. It is a picture that Garry had showed us which is a sort of index of the cost and availability of credit. And that's been on a downward trend for several months. I don't think that was a great surprise. I think what struck me was the fact that this index, imperfect as it is, is now pretty close to where it was before the financial crash, at least before where it was in October 2008.

Now Mark, as you pointed out – and I completely agree with you – whatever you think of that index, one thing it is absolutely not doing is generating a boom in lending. And I don't for one moment think that we need to raise rates to quell a borrowing frenzy triggered by this fall in overall credit conditions and a rise in availability. I think it's more that the cost and availability of credit is a key part of the overall monetary stance and it is one that is pretty steadily loosening for much of the last year now. And I do think that if that turns out to be persistent – and I suspect it will be persistent – a persistent shift in the cost and availability of credit at a particular level of Bank Rate is in itself a persistent shift in the stance of monetary policy. And I think the effect of that is fundamentally different from a shift in the level of the nominal exchange rate; even if that shift in nominal exchange rate is persistent, it is a different kind of animal from a shift in the availability and cost of credit at a given level of the policy rate.

And I don't think our credit spread adjustment quite gets all the story in the forecast there. One of the other things I was struck by the chart that Garry showed us was that the fall in this index of overall credit conditions was actually rather stronger than the fall in credit spreads. But even just focusing on the credit spreads part of the story is pretty powerful, because I think that mortgage rates have fallen over the last year really to a level such that even if Bank Rate was to go up 75 to 100 basis points over the next year it might only take the level of mortgage rates back to the level they were at in mid-2014.

So I do think that there is a serious argument for taking what you might call a small first step now on the road to what you might call a more normal monetary policy, particularly if you think it should be a gradual journey. And in many ways it would be a sign that the patient looks a lot healthier than we might have hoped a year or so ago. So it would be a decision taken for positive reasons rather than negative reasons. But is it a decision that's the right one to make today? And there I think it's very much not clear. And in judging that decision I think for me what I absolutely have to do is put to one side that it's my last vote and think just about the merits of starting this journey right now at this meeting rather than reconsidering that decision in a few months' time. And I think viewed in that light the merits to my mind are not compelling. It is finely balanced, but if I am honest with myself I am pretty clear that were this not my last meeting I should be fairly content to stick with a policy that we've got for a bit longer. And once I ask myself that question that really answers the question. Because I think to vote for anything else would, for me, have an element of the sort of gimmick about it – an element of trying to use your last vote to put out a certain message, to get a certain kind of coverage in the press. And one of the things that really has made me proud to be on this Committee is that people overwhelmingly have voted for what they think is the right policy – not what they think will put them in a favourable light in the press, or get them coverage and get some attention. So with that in mind my intention, my provisional intention, today is to vote – for the last time – for no change in policy.

And if I was trying to find some sort of profound way of putting this for the tape, I might say that I have seen the journey to the very gates of the promised land of a more normal monetary policy, but

it is for others to go forward into that promised land. But that's feeble, and so I'm not going to make any attempt to say something profound at the end and I'll just say, for the last time, that today I favour no change in Bank Rate and no change in the stock of asset purchases.

Governor Carney. Excellent, that was as close to a monetary Martin Luther King as we're going to get on this Committee so a combination of Kristin's quotes and that does the trick and leaves us all with a lot to think about. OK, let me turn to my perspective on this. We have an economy that is continuing, as many have mentioned, to track above trend as expected, and we are finally seeing the end of the wage residuals but at the same time we have core inflation falling, unit labour costs below our expectations in May, slightly below those expectations, a global economy that is limping along and sterling that continues to strengthen. I'm going to go through the reasoning but I'll give you the bottom line. In my view there is not the justification to surprise the market and pull forward the first rate increase. I do think that developments since May, and developments over the course of the last year, and the still relatively shallow slope of the curve suggest that the decision will become more interesting as the year progresses. And I say all of that in the context of our stated objective to return inflation to target within the next two years, given the nature of the shocks that are hitting the economy.

With respect to economic momentum, I just want to mention, I'm perfectly comfortable with the forecast of slightly above trend growth. I just want to flag two downside risks. The first is our baseline treatment of fiscal drag. I find it somewhat remarkable that despite annual reductions in the structural deficit that are three times the annual average of a reduction of structural deficit in the last three years, despite that, the fiscal drag is smaller in our forecast than what was previously. I also find, I mean it is product of using multipliers 0.6 at their peak, that are all-else-equal multipliers that we've stripped out exchange rate effects and monetary policy responses, and we've used these lower multipliers, somewhat justified but not fully justified, in my view, particularly because we are close to the zero lower bound and crowding out issues, in fact where real rates are not expected to be constant but which should actually rise with tightening fiscal policy which should push down on inflation.

Secondly, as others have noted, and as we have in the forecast, we do have downside risks to global growth. Emerging Asia is slowing further. World industrial production ticked down further recently and is now near its trough of early 2013. Global manufacturing PMIs continue to trend down. The OECD composite leading indicator indicates a slowing in the global economy in the second quarter. And while there are some idiosyncrasies, most notably the Iran deal in the oil market, broad-based falls in commodity prices are more likely to have been caused by weaker demand than surges in supply. I think the best that can be said for Europe and the US is that neither is surprising on the upside. I don't see dramatic moves to the other side but there is not upside news.

So we're in a world where global growth remains solid, not spectacular, consistent with our forecast but I would say with a downside tinge. As others have noted, domestic costs are broadly in line with our expectations in May, with the big news being productivity. Unit labour cost measures are growing at 1.5%, well short of what's needed given the head winds from import prices. And there are three uncertainties that others have touched on, or two of the three that people have touched on, in analysing recent developments in labour markets. The first, as Martin flagged, we don't know the extent to which compositional effects are fading and I think Ben flagged that as well in his remarks last time. If they are, there's more upside news in costs and we'll only find out with time, but that certainly is a possibility.

With respect to congestion effects, I wouldn't necessarily overplay it just because something is possible I don't think it is necessarily likely. Taking a weak labour market report – and it was a weak labour market report – alongside rising wages suggests that productivity increases are more likely to be the cause, and my interpretation of the latest REC survey would be consistent with that. The third uncertainty is just how we treat higher productivity in our forecasting here. Basically it moves quickly into higher demand. Now, if you have a fresh water economics text book, this happens instantaneously. I'm sceptical that Say's Law operates in real time in Britain. The conventional view of this relationship, outside the real business cycle world, is that output is demand-determined in the short run and that the short run extends to the policy horizon. In fact, that's why it's call the policy horizon. That reflects the slow adjustment of prices and wages. So when supply falls demand will only fall in the short run to the extent that monetary policy successfully raises real interest rates, or that agents anticipate lower future earnings and adjust their spending accordingly. A passing acquaintance with the real world suggests that such learnings actually do take time.

So the present dilemma is how to treat potential improvements in supply. All else equal, monetary policy should loosen, and that's a shock minus control point, in other words it should tighten less than it would otherwise have to deliver the demand necessary to return inflation to target. And I say all of this because I'm slightly troubled that we have an unemployment forecast which touches 4.7% and I think it needs to be seen in this context. I think we were reluctant to raise productivity to the modest rates of growth we had seen in May, in other words we did take some on the level but we didn't take news in terms of sustained increase in growth, because it was difficult to stomach either boosting overall growth to keep the gap closed, or lowering inflation consistent with a bigger gap. This all has to be put in the context of Ben's cautions on managing policy when there's supply uncertainty.

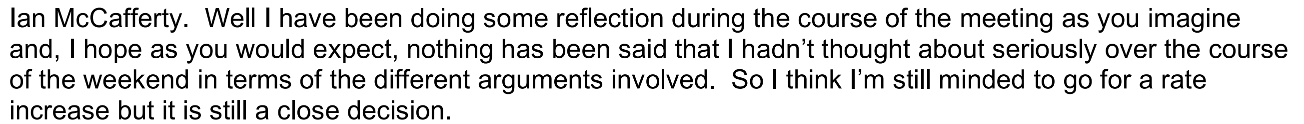
So in this fog, I would and do put more weight on the contemporaneous behaviour of nominal indicators, and that's why it's notable to me that core inflation ticked down this month, against our expectations in May, to less than 1%, and my read of core, and it's not perfect, but it has some way to go before it's consistent with inflation returning to target over the policy horizon. Current levels of core, below 1%, suggest headline around the same level in one year's time. That's the staff analysis, and rising slowly from there using the simple model in the staff's note. The BVAR model also predicts a slower pick up in core than in our inflation rate forecast. Now, the good news is we have a near-term STIF – we have two cross-checks, we have the STIF and we have the actual data that comes out – and the STIF projects CPIX to pick up to 1.2% in September – that's a number we'll get before the November Report I believe, and 1.5% in December. And moves of this magnitude would go some way to confirming that we're on track to meet our 2% total CPI objective. I think we'll spend more time – Kristin, if I may parenthetically think we should pick up on some of the work you've done, and the staff as well, in terms of the impact of commodity prices and oil specifically on core – my suspicion is some of this is, this was the case in Canada, is a TFP effect, it's a supply effect as opposed to, because core properly measured takes the direct effects out but it is something that can be drilled down on and I think it will be time well spent.

I, like others, I take the new treatment of exchange rate pass through in the forecast. I would note, though, that it comes on top of our May decision to raise the inflation profile by 0.1 percentage point, which we did to send a message and which we've kept in. I was looking at SEAD's decomposition of our inflation forecast – so this isn't the accounting decomposition of commodity prices and import prices and domestic costs but the drivers, the structural drivers of inflation, so how much is from import prices, for example, how much is from slack, how much is from productivity, and how much is unaccounted for? Well, currently 0.7 percentage point is unaccounted for. And that swings, so it's dragging down inflation by 0.7 percentage points. That swings 2.3 percentage points unaccounted for increase, so we have a 1 percentage point swing, half of the move from zero to one, or zero to two is unaccounted for in our structural models. Now that's not entirely, these things happen, some of it could be less shifts in slack, some of it could be around import prices but it is something we should drill down and I think we should be aware of the orders of magnitude here. So to me that underscores the downside risks to our inflation forecast from productivity, exchange rate pass through, CPIX, unit labour costs, fiscal drag and global growth. And it's why I'd like to see further confirmation that the economy is proceeding in line with our forecast.

So just to move to conclusion, the reason I agree with the shape of our projection is similar to where one element of what David is saying, which is that I still see the pace of tightening in the curve to be relatively slow, and, like others, I'm making a strong implicit judgement about something that's very hard to be definitive about but where r* is. So policy isn't in my view particularly stimulatory at present, we're buying 0.1 above trend with very little nominal pressure. But given improving household balance sheet, given better financial conditions, I expect r* to continue to rise and perhaps to around levels half of historic averages, and different people can come to different numbers, I tend to take the historic average back to 1718 which gives me 4.5% for r* and roughly half of that to be in the low twos, but let's say it's 2.5% for the sake of argument meet David in the middle. In my way of thinking that's about 2 percentage points of tightening over the course of the next three years. You need two years if you do it 25 basis points a quarter, that buys some room to remain gradual and adjust accordingly.

So, my bottom line is I would like to see cost pressures building from their very low bases, as they will if our forecast is correct. I do think the decision is going to be more challenging for me in the course of the coming months if the outcomes are consistent with that. So I vote for no change to Bank Rate and no change to asset purchases.

So, now Ian, I just wanted to check what your reference in terms of your reflection on what others had said. Did you want to reflect now or do you want to….



Ian McCafferty. Well I have been doing some reflection during the course of the meeting as you imagine and, I hope as you would expect, nothing has been said that I hadn't thought about seriously over the course of the weekend in terms of the different arguments involved. So I think I'm still minded to go for a rate increase but it is still a close decision.

Governor Carney. Thank you. What I heard, I'll try to get this right for once. Nine votes for no change to our asset purchase programme, which means the reinvestment. And eight votes for no change to Bank Rate, Ian voting to increase Bank Rate by 25 basis points with and all of these are indicative subject to, we have intervening data, and final confirmation on Wednesday afternoon. And we'll get the nuances in terms of "finely balances" and things like that.

Martin Weale. Governor can I raise one question? In the past when we've made reinvestments I think we've voted explicitly to make purchases and not just voted to keep the stock constant. That might be something to look into before Wednesday.

Governor Carney. OK so, yes we can, I thought no change to stock of asset purchases programme but I'll get that right.

David Miles. I think it's implied by no change in stock of asset purchases.

Martin Weale. OK I just remembered from a previous occasion.

Ben Broadbent. Let's have a look Martin but as necessary we'll do it on Wednesday.

Martin Weale. Yes, that's good. OK.

Governor Carney. OK, so we have some important things to do now, including ending the formal part of the meeting and then we have some important housekeeping to do on the forecast before we meet this afternoon on the Inflation Report.

A meeting of the Monetary Policy Committee was held on Wednesday 5 August 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

The following members of staff were present:

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

Transcript of the Monetary Policy Committee Meeting on

Wednesday 5 August 2015

Governor Carney. Welcome to the decision meeting of the MPC. We've had a bit of data, and I'm just going to ask Andy to update us on that, and then I have the IoP numbers which will come out tomorrow morning which I'll take the Committee on.

> **Andrew Haldane**. Thank you, Governor. There have been a range of international data. I'll not summarise all of those, they're in the note that went round for this meeting. I think overall they don't fundamentally change the picture from the forecast we're about to publish for the world. Domestically we had some further house price data, which relative to our August forecast were on the low side. So the picture there looks a little weaker than we're just about to publish. We have had some revisions to GDP in the past which you'll have seen; again a note has gone round on that. The most interesting is probably the upwards growth revisions over the period from 2011 to 2013, which I think average around 0.1 percentage point per quarter so totalled up is non-trivial. Less so over the most recent period 2014 onwards. And finally, just to mention that maybe the most significant piece of news since our deliberation meeting is probably in oil prices which have fallen a bit further, 6 or 7% further actually, which shades down by 0.1 percentage point our inflation forecast for the end of the year. I think those have been the main points. Thank you.

Governor Carney. OK, good. Thank you Andy. So the index of production for June, which will come out tomorrow morning, is slight downside news. The outcome for June – our in-house projection consistent with our Q2 forecast was a fall of 0.2 for the month. The actual outturn is a fall of 0.4, and that is explained pretty much by the energy sector. So we have this energy volatility which we've seen in the quarter. We had expected energy to fall by 0.7 and it's fallen by 1.8% for June. Manufacturing slightly stronger than we had expected: we had expected 0.1 but it's come out at 0.2. For what it's worth, it'll be a bigger miss for the market. They had expected IoP to rise by 0.1 in June and as I say it's fallen by 0.4. I suspect, on the margin, that may just shade – we are 0.65 for Q2. We are low 0.7 so it's a slight possibility that will be revised, but I don't think that that affects our backcast if you will. Anyways, it's on the margin, it's energy, we knew we had noise, I shouldn't say noise, but we had some surprises around energy in Q2 and some of that's potentially been taken back through IOP.

> **Dave Ramsden**. There weren't any revisions to previous…

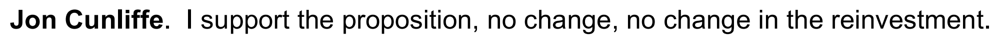
Governor Carney. There were small downward revisions concentrated in energy. So I should say, overall for Q2 as a whole our in house of three-month three-month to June our projection had been 0.9 and the outturn will be 0.7. Manufacturing we're bang on, we expected it to fall by 0.3 and that's what the outturn is, and energy we'd expected to grow 4.2 and it's grown at 3.1. Good. Alright, so let's turn to the decision and I will put the proposition to the Committee that Bank Rate be maintained at 0.5% and that we maintain the stock of asset purchases financed by the issuance of Central Bank reserves at £374 billion. The implication of that would be that we would make this reinvestment of £16.9 billion reinvestment that, what's the exact date?

> **Nemat Shafik**. September 7th.

Governor Carney. September 7th. So that is the implication of voting on that, a pure vote on maintaining the stock of assets at £374 billion. With that as a proposal, assuming there's no questions about data and other developments, let's go in the same order that we did, which means starting with Ben.

Ben Broadbent. I support the proposition and maintain my vote for no change in either stock purchased assets or Bank Rate.

Governor Carney. OK, thank you. Jon Cunliffe please.



Jon Cunliffe. I support the proposition, no change, no change in the reinvestment.

Governor Carney. Ian.

Ian McCafferty. I vote against the first proposition, preferring a 25 basis point rise in Bank Rate, but vote for the second proposition, no change in asset purchases.

Governor Carney. Martin please.

Martin Weale. I vote to keep Bank Rate no change, and for no change in the stock of assets purchased.

Governor Carney. Andy.

Andrew Haldane. I vote to support both propositions, thank you.

Governor Carney. Both propositions, ok. Minouche.

Nemat Shafik. Support both propositions.

Governor Carney. Kristin.

Kristin Forbes. I support both propositions, no change, no change.

Governor Carney. No change, no change, ok. David.

David Miles. I support both propositions, no change, no change.

Governor Carney. And then I also support both propositions, so no change, no change. So just to confirm, my calculation that all of the Committee – unanimous – supports no change to the asset purchase programme which means the reinvestment will proceed. Eight of us support no change to Bank Rate and Ian supports a 25 basis point increase. Good. Alright. So, that is the end of the formal business unless members have any issues to raise on that.