



**BANK OF ENGLAND**

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**MEETINGS OF THE MONETARY POLICY COMMITTEE**

**12 and 14 December 2016**

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A meeting of the Monetary Policy Committee was held on Monday 12 December 2016. 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  
Michael Saunders, External Member  
Gertjan Vlieghe, 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  
Fergal Shortall, MPC Secretariat  
James Talbot, MPC Secretariat  
Melissa Davey, Editor of Inflation Report

Transcript of the Monetary Policy Committee Meeting on

Monday 12 December 2016

**Governor Carney.** Good morning everyone. So I literally was just handed the November CPI data which is an outturn for November of 1.2%, which is obviously up from 0.9% in October, making our letter seem slightly superfluous, but we will diligently work on that! This was slightly stronger than market expectations, which were 1.1% and the STIF which was 1.0%. Upside news concentrated in clothing and footwear, rec[reation] and culture, particularly IT equipment, that the ONS note may be related to exchange rate pass-through.

Anyway, I just pass that on since that will be there. So the result of that since its clothing and footwear, rec and culture there is 0.2 percentage points of news in the ONS's measure of core which has risen to 1.4% in November from 1.2% in October; the market median was 1.3 and staff 1.2. And the PPI, we don't have that yet, so ok. Alright, so that's that. And that comes out tomorrow. Andy, do you want to do a quick data review?

**Andrew Haldane.** Very quick. I think there is only one piece of news I was going to mention which is domestic, which is we had a construction output for October which was off 0.6, down 0.6, which was lower than expectations. However there was a sequence of back revisions to the data, as there often are, which I think overall means the picture is if anything a touch stronger than we'd thought, although with construction output still seeming to be falling. But you know, let's wait and see.

**Governor Carney.** Excellent. Alright so now let's turn to our indicative voting intentions and I'll start with Ben please.

**Ben Broadbent.**

At the margin, looser US fiscal policy could also raise the global level of  $r^*$ , by lowering global saving. The effects aren't that big. If it directly adds 1% to US GDP, this is the amount that China adds to world demand every seven weeks or so, at least at current growth rates. As Minouche explained, the rise in forward US interest rates will temper at least some of that demand; it will do the same in countries with significant dollar liabilities or who seek to maintain dollar pegs. Nevertheless, it's interesting against this backdrop that one of only two currencies actually to have risen against the dollar in the past month is sterling (I'll give you about five minutes to guess which is the other).

I'll come back to our own exchange rate shortly. Let me first go through some of the main economic data across the world. That strengthening of the dollar may in part be due to relatively strong US data. GDP growth in the third quarter was revised up to 0.8%, on the back of stronger consumption numbers. The latest payrolls release shows that employment continues to outpace the workforce, implying either lower unemployment, higher participation or both. In November the counterpart was lower unemployment, although wage growth too was slightly weaker than expected. We have maintained our estimate for Q4 GDP growth at 0.6%. The market fully prices another 25 basis point rise in the Fed funds rate this coming Wednesday and a further two hikes next year.

In the euro area the ECB reduced slightly the pace of its asset purchases but, as expected, lengthened their duration. The programme will now continue for another year at least. To facilitate this it also relaxed the eligibility requirements for the programme, lowering both the minimum interest rate on qualifying bonds and the minimum maturity. In the meantime, the euro area economic data, if hardly spectacular, continue to look reasonable. GDP grew by 0.3% in the third quarter and we expect 0.4% in the fourth. This pace is sufficient to ensure further declines in unemployment.

The weakness of Europe's banks remains a concern, not least in Italy, where Renzi's failure in the referendum has delayed a recapitalisation of MPS

If poor credit supply has prevented a faster recovery in Europe, and any sort of recovery in Italy, that is not a problem faced by China.

Growth rates and levels of private-sector debt in China are at alarming levels; as we were shown at Pre-MPC, the same now goes for house price inflation in large cities. As Andy pointed out last week, what was once a medium-term to long-run risk, of a very abrupt correction in China, may now be a shorter-term concern, something that's conceivable within the period of our forecast. It goes without saying that much weaker domestic demand growth in China wouldn't do much to weaken either the dollar or any protectionist sentiment in the incoming US administration.

As I said earlier, the past month has seen a near-universal rise in the value of the dollar. Two currencies have bucked the trend - the pound and the rouble. That, one imagines, is because of the rise in oil prices. As for the pound it's worth asking at last why our own currency has managed to rise.

So in principle, renewed worries about strains in the euro area would tend to push up sterling. But they wouldn't have pushed it up against the dollar as well as the euro, nor have they been strong enough to prevent euro area bond yields from rising.

It's also worth pointing out that if looser fiscal policy in our trading partners depresses our own exchange rate, looser monetary policy abroad - by which I mean a rise in forward inflation - should do the opposite. It should push up sterling. In dollar and euro markets, quite a bit of the rise in bond yields reflects wider breakeven rates. That's not true of sterling bond yields. I haven't done the calculation, but it must be the case that the appreciation in sterling's forward exchange rate is smaller in real than in nominal terms.

So events abroad may, at the margin, have contributed to sterling's strength, but most of it, it seems, is probably domestically generated. If the fall in October was due to rising expectations of a hard Brexit, perhaps those expectations have since softened. Now whether that's reasonable is something we'll have to address in the next Inflation Report.

In what is a very open economy, there is only so much control one can take back. Dani Rodrik's trilemma - he's long argued that unfettered openness, democracy and national sovereignty are mutually incompatible - exists for countries outside as well as inside the EU.

In the meantime, the direct effect of sterling's rebound is to lower the two-year inflation projection by around a quarter of a percentage point. Taking into account as well the rise in the forward interest rate - our updated forecast has it down by 0.4 percentage points. That of course takes as given the other judgements we made in November - including the headwinds to financial services trade, the sharp deceleration in real household income in 2017 and the accompanying fall in consumption growth.

A key issue, therefore, is whether the labour market will absorb the rise in inflation, without any significant increase in wage growth, as easily as it did in 2010 and 2011 when the rate of unemployment was higher than it is today. There is nothing in surveys yet, or the Agents' reports, to suggest anything faster than the relatively moderate acceleration in pay, of around ½ percentage point, that's factored into our November forecasts. And if anything, the consensus is for slightly lower wage growth than we have.

Anyhow, all that is for the next forecast round and the updated supply stocktake. The decision this month feels more straightforward to me. I am comforted by the stability of UK inflation expectations over the past month, as expressed in financial markets. The near-term activity forecast has also been relatively stable - the nowcast for Q4 and the survey indicators for Q1 are in line with the projections in the last Inflation Report. And I therefore expect to vote for no change in either Bank Rate or the stock of purchased assets.

**Governor Carney.** OK, thank you Ben. I have Jan and then Minouche please.

**Gertjan Vlieghe.** I think what best sums up the news since our previous meeting is that, in the UK, the outlook is little changed and every bit as fragile as before. In the rest of the world, the outlook is quite a bit stronger, as well as quite a bit more fragile. The biggest news outside the UK has been the Trump election and the improving global economic data.

In general, fiscal stimulus near the zero lower bound is a good thing. Given the already improving US outlook, with relative little slack, the US fiscal expansion looks like overkill. A higher path of interest rates and a stronger dollar will offset the economic impact, to some extent.

I do not think that the new US fiscal measures change the low  $r^*$  or low trend real rate story. Fiscal stimulus does not have permanent effects. Instead, the stimulus should trigger a quicker path of Fed hikes and a reduction in deflation risk. And that is how I interpret the US bond market moves. The rise in US 10-year yields was approximately half and half real and inflation. The inflation component brings forward break-evens closer to normal levels from depressed levels, a re-anchoring of medium-term inflation expectations. I note that US forward break-evens have only returned part of the way to normal levels.

Still, US fiscal expansion is good for the world in the next couple of years, at least for those countries that are not themselves vulnerable to higher US rates and a stronger dollar. I would expect the US fiscal expansion to benefit the Eurozone and Japan, and the UK. That is consistent with the reduction in deflation risks - as measured by a partial re-anchoring of forward inflation expectations - in the Eurozone and Japan, and a slight move up in real rates in UK, where deflationary risks had already been priced out between Aug and October.

But let's not forget that Trump is about a lot more than fiscal stimulus. That's just the bit the market has focused on so far. The trade and foreign policy risks that everyone worried about before the election have not gone away.

Both the strong dollar aspect and the trade and foreign policy aspect of the US elections are not obviously good news for China. They already had rising currency outflow pressures in past few months, which is now visibly getting worse. We can see it in the reserves data directly, in high frequency indicators thought to be correlated with RMB flows, and we can infer it from the authorities' further attempts to put up barriers to outflows. So far, Chinese economic growth is continuing apace, there are no signs of imminent slowing. The authorities have strong political incentives to keep massive stimulus in place to sustain these growth rates into next year as well, ahead of political transition. All we can say is that, both the stimulus-driven debt build-up and the renewed outflow pressures make this a very fragile situation indeed.

In the eurozone, political and financial risk is once again elevated. Italy's political transition is complicating the plans for recapitalising Italian banks, for whom it sees time is running out, even more so given the ECB's refusal to extend deadlines until January. Political risks related to elections will be a feature in several important eurozone countries in 2017.

Turning to domestic developments, the data have been consistent with a Q4 GDP print of 0.4%, so no surprise there relative to our November forecast. The fact that this number is being dragged down by the volatile extraction component, and that business surveys of current activity are stronger, suggests that perhaps the underlying pace is slightly better than 0.4%. Consumption and housing related indicators remain robust and show no sign of slowing yet. But I am not ready to give up on our forecast of slowing growth in the coming quarters, for several reasons.

The slowing in household real income growth still looks set to take place: there is no sign of improving nominal wage growth, and employment growth is only modest. The currency, which is up from the lows, is still at levels that imply a meaningful pickup in inflation from the current rate. It is possible that households keep up spending growth by lowering the savings rate, and the longer consumption and housing related indicators remain strong, the more seriously I will take that risk. But for now, an income-driven consumption slowdown remains my central scenario.

In the business sector, all is not well when you look under the hood. It is true that current activity remains strong, the pace has even picked up a little according to the weighted PMI, though that has been a poor guide to GDP data this year. But there are plenty of signs of fragility: expectations components of the activity surveys are noticeably weaker than current components; and forward-looking surveys on employment intentions and investment intentions have continued to ease since the referendum. The tension between "business as usual" current activity, but worries about next year, is also what businesses themselves tell me very consistently in regional visits. There is a risk that when the future becomes the present, the worries fade and "business as usual" spending continues. But it is not my central case.

Moreover, as I have said before, I think if both households and businesses keep spending at the current pace, the currency will continue to rise, and reduce the extent of the policy trade-off we currently face.

A global and domestic pace of activity growth that is pretty good, but very fragile, leaves us with a question of what concrete triggers there might be on the horizon to cause the downside risks to materialise.

US trade and foreign policy risks could materialise at any time. For the moment I do not see why it would be more likely in one year rather than the next. So this is in the category of "we will have to deal with it when it happens", rather than trying to set policy on the basis of a distribution of these risks.

China risks are more imminent, I think. Given the sheer pace of credit expansion, combined with the strong dollar that is putting more pressure on outflows, the risk of an accident is rising over time, and has risen a little faster after the US elections. Reserves-related indicators and housing-related indicators will be key.

Eurozone risks are similarly imminent: Italian banks are a story of the coming days, weeks and months, and wider political risks in other countries related to elections will be a theme throughout 2017.

As for UK triggers, I think there are two.

First is the exchange rate-related upward move in inflation itself. We are only at 0.9% CPI but consumers seem to have started to pay attention, as evidenced by the spike in the GfK survey for example. I have no doubt there will be a lot more public concern about inflation as we head towards 2% in the middle of next year, and higher thereafter. How consumers respond to that will be crucial.

The second trigger is article 50. It is not the event itself, which by now has been well telegraphed. It is the fact that it will signal the start of proper negotiations, with an obvious risk that there will be a lot more talk from the continent about what the UK cannot have, especially against a background of several national elections. How UK businesses respond to that will, in turn, be crucial.

Keeping monetary policy unchanged at the moment is easily justified by the increased fragility of the outlook. It is a situation that cannot go on forever. But I am comfortable with the current stance, and think the pressure to move due to an absence of downside risks materialising, is still quite far off. And if the downside risks do materialise, there is still the very real possibility we might have to ease further.

**Governor Carney.** OK, thank you Jan. So, Minouche and then Ian please.

[REDACTED]

**Nemat Shafik.** It would be tempting to think that 2016 will be forever known as a year of change. The UK voted to leave the European Union; Donald Trump was elected president of the United States; and Channel 4 bought the rights to the Great British Bake Off. But the reality is that although these events were all surprising, the change they embody is yet to come into force. Britain remains a member of the EU, Barack Obama is still the president of the United States, and the BBC will remain the official home of Paul Hollywood until the Bake Off Christmas Special has been aired later this month.

Consistent with this, households have yet to feel any real impact of the referendum result. Wage growth has remained around its long run average, unemployment has actually continued to decline, and although the import price deflator has risen, this has only slowly been passed through to the high street. Indeed, consumers seem to have adopted the position that so long as the music is playing, they will keep dancing. Consumption grew by 0.7% in the third quarter, mortgage approvals and house prices have turned out higher than expected, and consumer credit growth returned to double digits thanks to a pick-up in personal and credit card loans.

Even the foreign exchange market seems to be behaving in defiance of the reality of what lies ahead. The impending change in our trading arrangements and the prospective reduction in return on capital flowing into the UK mean that the sustainable level of sterling is in all likelihood below its current level, possibly materially so. But this is a long run issue, and as we know, currencies can deviate from their equilibrium values for sustained periods of time. In the meantime, foreign exchange traders seem more inclined to focus on Trump's planned fiscal stimulus strengthening the dollar and potential for political risk to impact the euro, making the UK's concerns seem less pressing by comparison.

The behaviour of consumption and the exchange rate actually make our immediate policy decision a little easier, albeit in different ways. The resilience of consumers thus far means the case for a further easing of monetary policy to support activity is less pressing, or a sign that the stimulus we have already injected is having an effect more quickly than we had expected. And the appreciation of the exchange rate since we last met lessens the inflation overshoot in our forecast, thus reducing the case for proactively tightening in order to bolster our inflation fighting credentials.

But this is probably a temporary reprieve in the trade-off that we face. I expect reality to bite in 2017, in three important ways.

First, there can be no avoiding the fact that real incomes will have to adjust. The recent pickup of inflation means this has likely already begun, it will gather pace as currency hedges expire and higher import prices get passed through. And the recent recovery in the oil price means that particular tailwind looks set to turn into a small headwind. By 2017, real income growth over the previous four quarters will be the lowest in over three years, and at that point I think we can expect consumers to take notice and adjust their behaviour accordingly.

Second, it will be clear that the triggering of Article 50 is only the first (or second) step on a long and winding path to exit.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

And we may once again see sterling move down toward the centre of the range of estimates consistent with its equilibrium value.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

On top of all this there are a range of other issues which are bubbling in the background, some of which Ben mentioned, and have the potential to make our lives difficult.

In China, vulnerabilities seem to be increasing rather than decreasing. The authorities are prioritising near term growth over the reduction of medium-term risks, and as a result credit is growing twice as quickly as GDP. And at the same time, capital outflows have resumed, putting further downward pressure on the RMB. We have seen before how this mix can create the conditions for sudden bouts of volatility.

And in Europe, populist parties are in the ascent.

Closer to home, we will continue to face questions about whether the benefits of monetary policy outweigh the distributional side effects. We have collectively done our utmost to put the positive case forward, but it has been difficult against a backdrop in which post-truth was named the Oxford Dictionary word of the year. I suspect that as real incomes are perceived to be eroded by higher inflation over the course of 2017, monetary policy will remain under scrutiny.

All of this leads me to conclude that while this month's decision is relatively straightforward – I intend to vote for no changes - monetary policy strategy will once again become more challenging in the New Year.

**Governor Carney.** OK thank you Minouche. So Ian and then Jon please.

**Ian McCafferty.** Thank you and good morning everyone. As we were discussing the news and the issues last week, it occurred to me that a lot seemed to have happened, but for us little had actually changed.

From the early evidence of activity and demand in the fourth quarter, it appears that growth in the UK economy remains solid. As a long-standing advocate of the “slow motion slowdown” hypothesis, this does not surprise me, and I do not expect to see much of a slowdown in the quarterly rate of GDP growth until the second quarter of next year, which of course means that we will not see the data until June or July.

For now, both main components of private domestic demand appear to be holding up at least as well as expected in November.

On the consumer side, Ben set out several competing explanations for the continued strength of consumer spending. I am not sure we have to look much further than the facts that consumers are heavily adaptive, rather than rational, in their behaviour; that they have a high discount rate for utility from spending, favouring immediate consumption when income permits; and that more consumers than we sometimes realise are in one sense “income-constrained” – that is they spend all the income they receive. An analysis of the distribution of savings by income cohort using the ONS Living Costs and Food Survey (for which the latest data I'm afraid are only for 2014) shows that, of those in the bottom half of the income distribution, between 30 and 50% had a savings rate of zero or lower.

So I would argue that the pace of consumption growth will continue to be determined closely by changes in real incomes, with any slowdown taking place only over the first half of next year, once the real income squeeze becomes apparent. For consumers, Brexit uncertainties are unlikely to play a major role until they crystallise in terms of job insecurity, which is also likely to take a little time to materialise, so I have sympathy with Kristin's point that we should be careful not to allow the uncertainty variable to play too great a role in our forecasting.

But if consumers seem to live very much in the present, they are not unaware of the future. Word searches seem to have become our analytical tool of choice recently, so I thought I would try one to test public awareness of inflation. The outlook for inflation is clearly becoming a hot topic – in November the number of press articles citing inflation was 2093, the highest monthly total since the

series began in 2007. So that might explain the rise in inflation expectations seen in some of the household surveys last month.

In terms of business investment, I am reluctant to read too much into the pick-up in Q3; as we have seen in recent years, these data are subject to significant revision, and I suspect that as the data mature, some of the volatility between the first half and Q3 might be smoothed away. Looking forward, I don't think we can expect conclusive evidence of weaker investment beyond that contained in the surveys until next spring, for two reasons. First, the inevitable lag between business decision-making and actual investment spending means that any post-referendum decisions will take 2 to 3 quarters to become apparent. Second, on recent regional visits, I have found a rather perverse reaction to the current uncertainty; for many SMEs, the level of uncertainty is so elevated that they have little option other than to "carry on as normal" - at least for now.

So, I have sympathy with the picture painted by both the Governor and Ben at our deliberation meeting, in which, in key respects, 2017 might prove somewhat stronger and 2018 somewhat weaker than we currently project, posing some interesting policy questions next year.

In terms of the other side of our policy trade-off, I took little comfort from the fact that the October CPI data came in slightly below expectations, especially given the advance release of November we've just heard this morning. Given what we discussed at Pre-MPC about hedging strategies in the food sector, combined with the fact that no retailer is likely to push up prices in the run-up to Christmas, it is likely that pass-through is delayed rather than diminished, and we will see some sharper monthly increases in the annual inflation rate into early next year.

Quite how the pick-up in inflation will influence the pace of wage settlements in 2017 is as yet unclear. I am not convinced that the pick-up in inflation will come too late to be a material determinant, but as yet I get no clear signal from discussions with individual companies about the tone of the forthcoming negotiations. About a third of those I speak to are already anticipating the need for a higher settlement, another third believe that a settlement close to that of 2016 can be achieved, and a third as yet unsure. Overall, I see little likelihood that wage costs will rise more slowly than in the November forecast, and some possible upside risk if further press coverage of the spectre of higher inflation continues to push up inflation expectations amongst households.

Probably the bigger news since our last meeting relates to the policy background, with the combination of the Autumn Statement, the likelihood of a positive fiscal shock in the US and the hints of the possibility of a somewhat "softer" Brexit plan, causing the sterling ERI to rise by some 6% since our last meeting.

But, in terms of our forecast these just about cancel each other out – the Pre-MPC update of slightly slower growth and lower inflation than in the November forecast did not include a Trump fiscal stimulus, so I would estimate that if a plausible fiscal stimulus in the US were added in, little would have changed overall.

Moreover, it seems to me that the sharp movement in the exchange rate is based as yet on only limited evidence of any substantive shift in the government's attitude to Brexit. In mineralogy, relative hardness is calibrated on the Mohs scale (where diamond is 10 and talc is 1). This month the foreign exchange market may have recalibrated the hardness of Brexit from a 9 to a 7, (that is, from corundum to quartz), but this debate still has a long way to run, and the exchange rate will be a highly volatile input to our forecast updates throughout. Given the sensitivity of those forecasts to movements in the exchange rate, I think we need to set a high bar for any change in terms of our policy setting and guidance.

So for this month, I see little to change my policy judgement of last month. Relative to both the November forecast and the mechanical update, I believe that growth is likely to be a little higher for longer, giving some upside risk to inflation. At the same time, though, some of the global risks that we have lived with for some time may have become slightly more acute this month, with the credit boom in China spreading to the consumer sector and political risks to the eurozone heightened following the Italian referendum. The economic outlook remains highly uncertain, and our policy stance highly iterative. As we stated last month, the next move in Bank Rate could be in either



direction, and I would advocate that our neutral guidance position be maintained. For this month I expect to vote for no change to Bank Rate. I also continue to believe that halting the asset purchase programme currently underway would be disruptive to the market, so I expect to vote to maintain the target stock at £435 billion and to continue the purchase programme for corporate bonds.

**Governor Carney.** Thank you very much Ian. Jon and then Michael please.

**Jon Cunliffe.** For me the news on the month is first that the economy has continued to show underlying economic resilience and, if anything, a little more than we forecast in November. And, second, recent moves in the exchange rate and the yield curve have altered the paths for inflation and activity and affected the policy trade off we faced in November.

On economic resilience the economy seems to be displaying quite a degree of resilience. The labour market has been fairly robust - there was an increase in vacancies in the three months to October as measured by the ONS. They are above pre-referendum levels and near record highs. Employment growth was, however, weaker than expected in the latest data.

Consumer confidence fell last month but remains above its 30-year average and around its average just before the crisis.

I would have expected the business investment story to show up a little in the Q3 numbers but it didn't. Business investment growth was positive (+0.9%) versus our expectation in the November Inflation Report of -0.6%. Obvious caveats about revisions to business investment data obviously apply.

The housing market also held up better than expected. Mortgage approvals for house purchase and house price growth have been stronger than expected in the forecast and the latest RICS indicators point to continued robustness in the housing market.

Q3 output was confirmed at the solid 0.5% we were expecting in the second ONS release. Output surveys since the November Inflation Report have also been strong overall. The Markit/CIPS PMI output composite picked up in November to its highest level since January. And the business contacts I spoke to on an agency visit to Devon and Cornwall last week were evenly split as to whether the economy would or would not slow next year. There was certainly no sense of gloom.

And finally the outlook for global growth has probably firmed in the light of the election of Trump although risks have increased as well.

So economic weakness has not come through in official data and a number of other economic indicators remain firm. In addition, our August stimulus is still working through the economy.

However, looking ahead, our forecast narrative of an uncertainty-driven slowdown starting in private investment and moving onto consumption, added to a squeeze in real incomes, remains for me the most plausible outcome.

On business investment, weakness is as I have noted yet to show up in actual investment, but in official data terms it's still early days. Investment intentions surveys remain weak on the whole and, more broadly, the Markit/CIPS PMI expectations composite fell in November to its lowest level since July this year, or, excluding the post-referendum dip, to its lowest level since February 2013.

The outlook for consumption is key. Consumption growth has been strong of late, running at annualised rates of 3% this year. There are a number of possible explanations for this strength, including forestalling ahead of an expected pickup in inflation, strong income expectations, an expected continuation of recent positive trends or just a generally more positive economic outlook than we forecast. I put most weight on the last two explanations.

Whatever the explanation, the forecast depends on it becoming less powerful. We have got a halving in calendar year consumption growth between 2016 and 2017 and quarterly growth of around zero in the middle of 2017 - a very sharp slowdown from current growth rates.

And a key issue will be how households react to the real disposable income squeeze. They could try to offset the squeeze by demanding higher pay. The experience of the last few years suggests to me at least that workers do not feel confident in their pricing power. They could instead cut consumption which I expect is likely to be the main reaction. Or they could try to maintain consumption by running down savings or borrowing more. Clearly, policy would need to react in different ways to each of these three possibilities. An increase in debt-financed consumption might engage the FPC's objectives if it looked likely to affect significantly household indebtedness or financial sector risk.

Turning to the policy trade-off, we said in November that there were limits on the extent to which we would tolerate an inflation overshoot and that those limits depended on the cause of the overshoot, the output gap, inflation expectations and domestic price pressures.

The cause of the inflation overshoot remains the same: a fall in the exchange rate driven by concerns about future supply, alongside a modest projected shortfall in activity.

The expected output gap and inflation have been affected this month by significant moves in the exchange rate – up by around 6% relative to the November Inflation Report - and to the yield curve - up around 30 basis points over the forecast horizon, and by measures announced in the Autumn Statement. In a mechanical update of the forecast by staff, which includes these and other developments, the output gap is now projected to be 0.1%<sup>1</sup> wider at the end of the forecast at 0.7% due to weaker demand and inflation peaks at 2.6% and ends at 2.2%, 0.3%<sup>2</sup> below the endpoint in the November Inflation Report.

There has been less news on the month on the potential second round effects of expected inflation exceeding the target.

Measures of short and medium-term inflation expectations have increased and the heat map has turned a little reddish in places as a result. But measures of longer-term inflation expectations, which are arguably a better indicator of monetary policy credibility, have generally increased over the past few months to around their historical average overall.

On domestic costs, the latest pay numbers were broadly in line with the Inflation Report forecast and the swathe of survey measures of pay remains subdued.

And risks are also relevant to the trade-off. External risks have probably increased following the US election. Markets seem to be adjusting relatively smoothly and EMEs to be coping with the pressure. China, however, looks particularly vulnerable to me. And broader political risks are elevated in the euro-area. The Italian referendum has brought Italian banks into focus though I expect Italy to muddle through the MPS saga.

Putting all that together, the policy trade-off appears to have eased somewhat. Arguably, this could tilt the balance a little more towards supporting the economy if necessary.

Overall, my central expectation is that the economy will slow as we have forecast, as Brexit works through. My downside risk remains a sharp break in confidence and an overshoot in an adverse economic reaction. That could come anytime between now and the endpoint of the negotiations becoming clearer over the next few years.

I don't take great comfort from the small improvement in the trade-off we face relative to November which is suggested by a mechanical processing of the exchange rate and yield curve news. It does suggest a smaller inflation overshoot and a slightly larger output gap which arguably makes the decision to keep policy unchanged easier. However, inflation still peaks at 2.6% and an overshoot persists after the end of the forecast period. And, perhaps more importantly, markets even more than usual are reacting to any political news both in the UK and elsewhere and future political developments could quite easily reverse the exchange rate appreciation and move the yield curve in either direction.

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<sup>1</sup> MPC Secretariat clarification: speaker meant 'percentage point' not per cent.

<sup>2</sup> MPC Secretariat clarification: speaker meant 'percentage points' not per cent.

So I want to look through the news this month and keep my focus on the underlying picture. I want to see how consumption reacts to higher inflation and a weaker economic environment. I want to see the extent of any actual slowdown in investment and how pay evolves. Against that background, I provisionally vote to leave Bank Rate and our asset purchase programme unchanged.

**Governor Carney.** Thank you. So Michael and then Kristin please.

**Michael Saunders.** Thank you. I am inclined to vote for unchanged policy this month. I broadly share the Committee's view of slower growth and higher inflation in the next year or two. But I would like to return to two themes that I have highlighted in recent months. First, I doubt that the economy will slow materially below trend in the next few quarters and expect little or no rise in the jobless rate in that period. Second, although the jobless rate which is now at 4.8% is within a whisker of the low of the last 40 years which is 4.7% and slightly below the Bank's estimate of the natural rate which is at about 5%, I suspect that slack in the labour market and the overall economy is not yet exhausted. I think we probably do not need a period of sub-trend growth and rising unemployment to achieve the inflation target over time.

Short term data can always be erratic, but real GDP growth in the second half of 2016 probably has been 0.4 to 0.5% quarter to quarter which is similar to the average of the previous six quarters, that is the period from the start of 2015 up to mid-2016, the average for that period was 0.47% quarter on quarter. And this pace probably is slightly above potential, given the gradual decline in the jobless rate that we've seen from 5.7% at end-2014 to 4.8% now a drop of roughly 0.1 percentage point per quarter. So it follows that, unless productivity growth picks up near term, growth probably has to slow a little below that recent pace just to stabilise the jobless rate, and probably has to slow more substantially to produce rising unemployment.

To be sure, there are grounds for the economy to slow a bit, given Brexit-related drags and the erosion of real incomes from the prospective currency-induced rise in inflation. But sterling's depreciation probably will also support exports, and business surveys suggest that export growth may well outpace our forecasts.

I am not terribly worried by the weakness in the latest industrial production data, which was exacerbated by declines in the output of energy and pharmaceuticals - these are two components which are notoriously volatile in the official data. Business surveys suggest the economy will grow at a steady pace near term, and the readings on manufacturing in particular are above average. Money and credit remain buoyant, while the cost and availability of credit remain favourable.

So my base case is that the jobless rate in the next few quarters will on average probably remain around current levels, without clear evidence that slack is rising. Of course this may not tell us much either way about the long run effects of Brexit.

At the same time, as we discussed last week, I suspect that pay growth and domestic cost growth will pick up less sharply than the IR base case, especially in the second and third years of the forecast and especially if the jobless rate does rise in line with the Bank's forecast.

Average earnings growth has undershot the MPC's, sorry, the Bank's forecasts made eight quarters earlier for 21 consecutive quarters and indeed in 53 of the last 60 quarters. The average undershoot since the start of 2012 is 1.7 percentage points on the annual rate. And the recent undershoots have come against a background in which the jobless rate also has repeatedly come in lower than expected.

The Bank's forecasts have repeatedly looked for the relationship between nominal wage growth and the jobless rate - in other words the wage Phillips curve - to return to something like the pre-crisis norm, whereas in practice it has repeatedly tracked below its old path.

The Bank has not been alone: there have also been large and repeated undershoots in pay growth compared to consensus and OECD forecasts in recent years.

Some of the weakness in pay growth may reflect lower-than-expected productivity growth, but I doubt this is the full story. Compared to the Bank's forecasts made eight quarters earlier, unit labour cost growth also has undershot repeatedly in the last three years, with the year on year rate roughly 1.0 percentage point lower than expected on average. By contrast, a surprise shortfall in productivity growth probably would produce upside surprises in unit labour cost growth because pay would probably not immediately respond one-for-one with a margin squeeze at the same time.

I suspect that the shift in the relation between the jobless rate and pay growth reflects a mix of factors including under-employment, the drift to less secure forms of work, rising participation rates with a sizeable flow from inactivity to employment, improved educational attainment across the population, reforms to the tax and benefit system, lower long-term inflation expectations and inward migration.

Moreover, even among those that are not working in the gig economy, job insecurity may count for more than it used to, because there are signs that wage scarring - that is, the wage loss suffered by those who experience a spell of unemployment - is greater than in the 2000 to 07 period. In these circumstances, keeping a job is likely to be more important than previously for many people and resistance to real wage weakness is likely to remain lower. All of this is likely to be reinforced by Brexit-related anxieties.

So I have a hunch that the equilibrium jobless rate - that is, the rate that generates wage growth and unit labour cost growth consistent with the inflation target over time - currently is lower than it used to be.

The Bank's existing Beveridge curve labour market matching models come with a sizeable margin of error and probably are slow to reflect structural changes. I am reluctant to rely on them too much given their forecast record in recent years.

In terms of monetary policy, these two themes roughly balance out for now. I currently do not expect slack to rise in a meaningful way in the next few quarters, but I do remain worried about the possibility of greater Brexit-related weakness further out. At the same time, given the persistent modest pace of wage growth, I do not believe that we need higher slack to achieve the inflation target over time.

Against the backdrop, I favour no change in Bank Rate at this meeting and a continued neutral bias. We should emphasise that the next move in policy could be in either direction, and that we have substantial scope to act if needed to help stabilise the economy and achieve the inflation target over time. And, with the drop in neutral rates, the policy rate is likely to stay relatively low by historic norms in coming years.

As last month, I reluctantly vote to continue the existing QE program on the grounds that there would be a sizeable reputation cost to stopping it partway, and its continuation does not seem, so far, to be eroding our anti-inflation credibility. In any case, it only has a short time to run.

**Governor Carney.** Thank you Michael. So Kristin and then Andy please.

**Kristin Forbes.** Lucas's famous quote about growth rates: "once one starts to think about them, it is hard to think about anything else" could recently be rephrased for the MPC as "once one starts to think about Brexit...." or, "once one starts to think about sterling...". Thursday was useful to spend time on other topics - but it is impossible to discuss monetary policy without discussing Brexit and sterling. Developments in these spheres will continue to dominate the outlook. Therefore, my comments will focus on sterling and one aspect of Brexit - uncertainty - but begin with quick overviews of the global and UK outlook.

The news on the global economy is moderately positive. The US recovery has solidified, although Q4 growth will fall back from Q3, and will be strengthened if some of Trump's tax cuts and infrastructure spending materializes. With unemployment at 4.6% and discouraged workers not re-joining the labour force, there is minimal, if any, slack. Barring major surprises, the Fed will continue gradually raising interest rates. This has contributed to higher yields globally and a contraction in capital flows to emerging markets. This has been a trigger for financial crises in the past, and we

should be alert to these risks. But we should not overstate them. Capital flows have fallen, but from high levels earlier in the year. According to the IIF, net non-resident portfolio flows to emerging markets averaged \$7 billion per month in 2016 through October, well above the \$4 billion in 2015. Most important, if higher US rates correspond to stronger demand, the net benefits for emerging markets should be positive.

Turning to the UK, most data suggests a similar story of solid growth and minimal slack, albeit less momentum in some forward looking indicators. The vacancy-unemployment ratio is now at a record high since the series began in 2001; higher quits and separation rates indicate continued worker confidence. There are a few softer data points, but other than the 1.3% fall in industrial production output, the weaker indicators are largely a softening in intentions or expectations - not in actual performance.

This is largely what we have been saying since July. A weaker economy in prospect, but not here yet. But we are now over five months post-referendum. If we do not start to see more weakness in the hard data soon, especially as the bite of higher inflation hits real incomes, we should recalibrate our expectations for this transition period.

Now, the topic you have all been looking forward to - sterling. As evidence that my frequent focus on exchange rates is not just my own eccentricity - and at least shared by MPC members - I did a word count, and Ian and I did not collaborate on this, for how often the words "exchange rate", "foreign exchange" or "sterling" appeared in the Minutes since 1998. These terms have appeared, on average, in 7% of the paragraphs in the Minutes, and recently popped to a record high of 20% in the six months to August. More striking, these sterling terms are used more than others at the heart of monetary policy, including terms such as "interest rate", "wage", "wages", "oil", and various forms of "employment" or "unemployment". The only single economic term that I searched for cited more often was inflation, at 18% - albeit this also includes references to Inflation Reports. These word counts are sensitive to how the search is constructed, but they highlight how the exchange rate is central to MPC discussions.

Recent movements in sterling have confirmed why. In our last forecast, we were in the extremely uncomfortable position of predicting a large inflation overshoot that would persist past three years. Since its trough in mid-October, sterling has appreciated about 6%, largely erasing the post-August depreciation which drove much of the spike in our inflation forecasts between August and November. Holding everything else constant, and using our standard pass-through assumptions, this recent appreciation would reduce inflation from 2.7% to 2.4% in 2 years. This shows how sensitive our forecasts and trade-off is to gyrations in sterling, which could well continue. We do not want to overreact to what could be temporary movements.

Moreover, rough decompositions suggest that a positive supply shock was an important factor behind sterling's recent appreciation. This is consistent with recent expectations Brexit might be "softer" than believed in October. Since exchange rate movements driven more by supply shocks also correspond to greater pass-through, this would imply more moderation to the inflationary pressure in the pipeline. How this balances out with earlier sterling depreciation will be a challenge to sort out. But this strengthens the case that the inflation overshoot will be somewhat less uncomfortable than predicted in November - at least for now.

Finally, uncertainty. Heightened uncertainty is negative for investment, and probably over time for consumption, real estate, and productivity. But how negative? After working intensively on uncertainty over the past few months, I am more concerned about the weight on this in our forecast. On a positive note, the BoE principal component measuring uncertainty is better at capturing its multifaceted aspects than other popular measures. But, there is room for improvement. Of the eight variables used to form the principal component, the two that have the weakest correlations with key economic variables - media citations based on four broadsheets and the dispersion of GDP growth forecasts - have been driving much of the recent spike in uncertainty.

Therefore, I calculated a narrower principal component using the BoE methodology, but based on the six more informative measures of uncertainty. Using my uncertainty measure in our models would have forecast a significantly smaller drag on growth in Q2 and especially Q3, and significantly

reduced our forecast errors. The improvement is large - my narrower uncertainty measure reduces the forecasted drag on GDP from uncertainty in Q3 by about half.

Another concern, in most work as well as our forecast, is that the estimated effects of heightened uncertainty do not isolate the effects of tighter credit markets that usually occur simultaneously. The UK today, however, is one of the few episodes when increased uncertainty did not simultaneously correspond to a sharp tightening in credit markets, due partly to the Bank's response. New academic research and simulations I recently did for the UK suggest that the impact of heightened uncertainty is substantially reduced if it does not occur simultaneously with a credit shock. Moreover, my estimates suggest this attenuation is large; if credit spreads do not simultaneously tighten, the impact of heightened uncertainty on investment falls by about half, and on consumption by about 40%.

Sorting this out is urgent as our current measure of uncertainty has just increased again, primarily due to increased media citations in broadsheets. Credit conditions also remain fairly supportive - even after shifts in global yield curves. A large uncertainty drag is already incorporated in our forecast over the next three quarters - but we could be overstating its impact.

What does all of this mean for monetary policy? The labour market is close to full employment, growth around trend, most data has been solid, less headwind from the global economy, sterling's depreciation over the last year will push inflation above target, and our forecast is likely overstating the drag from uncertainty. This all suggests tighter monetary policy. But counteracting that, the upward momentum in wages and broader domestic costs have not yet pushed them to levels consistent with inflation stabilising around 2% - although this may change soon as headline inflation picks up. Growth could slow as higher inflation reduces real incomes and developments in Brexit negotiations will continue to drive sentiment and sterling. And even if uncertainty has less impact than currently forecast, it will generate some drag over time - especially if uncertainty increases in forms that have more impact on consumers and the real economy.

This balance of risks puts me "on hold". I plan to vote for no change in monetary policy, including no change to our previous commitments to purchase gilts and corporate bonds.

**Governor Carney.** Thank you Kristin. OK and finishing with Andy please.

**Andrew Haldane.** Thank you Governor. It being December, this seemed like a good time to take stock on the past year and reflect on the year ahead.

2016 is likely to be long remembered for its political shocks, from the UK referendum, to the US election to, most recently, the Italian referendum. Each has brought heightened policy and, in particular, political uncertainty. Indices of global policy uncertainty, constructed using media references, God bless them, are currently at their highest levels since at least 1997. And measures of geopolitical risk, constructed in a similar fashion, are also at elevated levels.

According to these indices, this has been a year of tumultuous change. If so, no one appears to have told the economy or financial markets. Because, given the political backdrop, it is striking just how stable economic growth and financial markets have been over the past year.

A year ago, we were forecasting world growth of around 3.3% for this year. Actual world growth is likely to come in around 3%. This is a small miss, given that the root mean square error on world growth forecasts has been around 1.0% since 2010.

A year ago, we were forecasting UK growth of 2.5% for this year. Actual growth is likely to come in around 2.2%. And this, too, is a small miss relative to the historical root mean square error of about 0.7%.

Within-year movements in UK activity have been similarly stable, with quarterly growth rates tightly bunched around a 0.5% average and relatively few signs of activity slowing either in the run-up to, or aftermath of, the EU referendum. Of course, economic activity is slow-moving and the data we have on them are backward-looking.

Perhaps faster, forward-looking financial markets tell a different story? No. The VIX today is 6 percentage points lower than it was a year ago and 7 percentage points below its historical average.

G7 10-year bond yields are within 10 basis points of their level a year ago.

US and UK equity prices are around 10% higher, and investment grade corporate bond spreads around 30 to 50 basis points lower, than a year ago. The global equity risk premium, weighted by market capitalisation, is around 20 basis points lower than a year ago.

Of course, there has been action in foreign exchange markets, with sterling, the Mexican peso and the Brazilian real all down around 15% against the dollar.

But the overall financial market picture, like economic activity in most advanced economies, has been a relative oasis of calm.

So what is going on? And what implications might it have for growth next year?

Well the first thing to say is that the correlation between measures of policy and, in particular, political uncertainty and economic activity and asset prices has not been especially strong or robust, historically. That is particularly true when it comes to spending by consumers. And, of course, around a half of those same consumers did vote for the political changes we have seen during the course of the year.

Second, it's still of course early days. Brexit negotiations are yet to begin in earnest, President-elect Trump is yet to take office and the precise shape of a future Italian government, much less a future French or German one, is as yet unknown.

Nonetheless it is clear that, when assessing the future fortunes of the economy, much will hinge on the fate of consumers.

Our UK forecast sees consumers starting to feel the pinch around now and this continuing through 2017. Next calendar year, we forecast that consumption growth will slow materially from 2¾% this year to around 1¾% next, most of which is the result of the squeeze on real incomes from higher import prices. That still strikes me as a reasonable central case. But what are the risks around this scenario? And what might that mean for policy?

Let me consider three scenarios. Scenario one sees import prices passed through to consumer prices, as in our forecast. But rather than holding flat, imagine nominal wage growth picks up to compensate, leaving households' purchasing power largely unaffected.

In that event, real consumer spending growth is unlikely to fall materially, with nominal spending picking up as Ben said to perhaps 5% or higher. With the labour market tight and with rising prices occurring at a time when many wage settlements are being struck, this scenario is certainly possible.

That said, in my personal view, it is not especially likely. As Ben noted last week, there has been a remarkable degree of placidity in nominal wage growth over recent years, despite sharp swings in prices and a rapidly tightening labour market.

I suspect the explanation may lie in a structurally flatter Phillips curve and/or a structurally lower NAIRU.

Moreover, even if this scenario were to come to pass, I think the policy response to it would be relatively straightforward - an earlier, and possibly larger, than expected monetary tightening.

Scenario two is rather different. Imagine that the rise in import and consumer prices is not matched by wages and, when it comes, this squeeze on households' pay causes them to reappraise their future income prospects, causing a rise in precautionary savings.

The result might be a Wile E Coyote moment for consumers, whose spending suddenly falls more rapidly than expected.

What gives this scenario some plausibility in my mind is that the effects of higher prices and lower real incomes will roughly coincide with the effects of cuts to benefits and tax credits beginning to take effect.

More broadly, I think it is important to remember that, despite the loosening measures announced in the Autumn Statement, there will still be a significant net fiscal headwind to growth next year and indeed beyond.

If this were to hit the consumer hard, then dealing with such a shock, policy-wise, may not be straightforward. The effects of a further cut in interest rates in boosting consumer spending are probably more uncertain, and plausibly less powerful, than in the past.

For example, the latest NMG survey suggested that the income effects of a cut in rates for household spending could even be negative. And nor do I think consumers would be much in the mood for pulling forward consumption from tomorrow to today - the inter-temporal substitution effect - in an environment of concern about future incomes. More of the burden policy wise in this scenario might I think fall on fiscal policy.

The third scenario is one in which consumer prices do not rise as far or as fast as we might expect, or if consumers maintain spending by running down their savings. The former might occur either because pass-through is slower or because sterling continues its recent appreciation.

There are already some signs, at least in food and drink prices, of slower pass-through than we might have expected. And, with concerns shifting to the euro-area, the sterling exchange rate could plausibly appreciate further. In either event, real spending might be maintained at its current, robust, rates, at least for a longer period.

This scenario is one which could also be difficult to deal with, policy-wise. If there is still a reasonable chance the consumer might fall to earth, but with the economy still motoring along in the early part of next year, do we tighten policy and risk generating a more rapid fall to earth in consumer spending? Or wait to see and risk a longer period of above-target growth in nominal activity if spending proves to be resilient?

This would be a difficult tight-rope to walk. Fortunately, we do not need to walk that tight-rope today. And while I'm not naïve enough to think the economic picture will be lot clearer come the early part of next year. I do think we will then be better placed to assess which, if any, of these risk scenarios, or others besides, is more likely to come to pass.

For me, for now, it is a case of watching and waiting which is why I am minded this month to vote to leave unchanged Bank Rate and asset purchases.

**Governor Carney.** OK, great. Thank you Andy. Thank you all. So back in November our policy bias was neutral, reflecting the uncertainties, amongst other things, reflecting the uncertainties about how current consumer strength and future supply weakness that was implied by markets would be resolved. All concentrated on what we've learned about that resolution in the last few weeks, with particular emphasis on the labour market, picking up on the discussion we had at our deliberations meeting. To me, the balance of indicators suggest recent momentum in households spending is likely to continue, although the BRC retail sales monitor was weaker at 1.3% in November, annual retail sales growth was still over 5% in October year-on-year on the ONS data. The RICS survey suggests continued solid house price inflation and a further recovery in activity. And even though consumer confidence fell back towards its historic average, consumer credit has continued to grow strongly at around 10%, the fastest rate for over a decade.

That recent acceleration in consumer credit growth largely reflects credit card and other debt, so we're now in a situation where total household debt is now growing again relative to income. Of course, low interest rates keep that debt serviceable. The average household DSR is 8% or the same as it was in 2000, and the proportion of households with mortgage DSRs exceeding 40%, or the vulnerability threshold is only 1%



compared to a local peak of 2½% just prior to the crisis. Of course serviceability depends not just on where rates are but where incomes are going, and as we discussed last week there's great uncertainty over that. Currently wages are growing at around the same modest rate as the start of the year. With unemployment continuing to fall we were asking ourselves why, or whether the wage Phillips curve has broken down; whether it's mis-specified; or whether the combination of lagged inflation and then uncertainty about the future is bolstering the bargaining hands of employers, and I have some sympathy for that. And the question which we discussed, and I think eluded to today, is whether that timing of the actual inflation pass-through will help us answer that question or will be unfortunately delayed, at least from that data source given the cycle of wage bargaining around the turn of the year.

But if the referendum hadn't happened there would essentially be two stories to explain: solid demand growth, falling unemployment but no pick up in wages. The first relies on very low  $U^*$ , as Michael has emphasised, in other words more slack. And the second variant suggests that unemployment has fallen rapidly because productivity growth has been weak. The challenge with the first is that you can only infer - well there's ways to infer it - but one of the best is to infer it from the behaviour of wages and the problem with the second is that weak productivity should also mean all else equal weak growth. So constructing a simple VAR containing output, unemployment and wages to help shed a small amount of light on this, in this simple world productivity shocks are the only ones that move up output and unemployment in the same direction. In other words higher output means fewer workers. Shocks to the natural rate are the only ones that drive output and wages in the opposite direction, firms can produce more while paying lower wages. And demand shocks raise output and wages and lower unemployment as expected.


This approach points to a mix of explanations. On balance it explains rather more recent wage weakness with slow productivity growth. Over the past year that drag is estimated to be around half a percentage point, a slight reduction from in 2014/2015 when the drag was around three quarters of a percentage point. The approach also suggests that  $U^*$  has fallen since the start of the crisis from around 7% then to around 4½% now. Now obviously there are very wide error bands around this, of course, which comfortably include the value of 5.1% used for  $U^*$  in the November IR and obviously we will be refining this as part of our supply stocktake for February.

Nonetheless marrying the VARs falling path for  $U^*$  with wage growth suggesting most of the wage drag from this source basically suggests that most of the drag from low  $U^*$  has already occurred predominantly in 2013/2014. In other words falling  $U^*$  over that period which would be consistent as well with some of the structural changes in the labour market.

If weak productivity is the culprit then aggregate gains in labour income due to higher employment will ultimately run out of steam as we reach full employment, unless of course labour is better deployed. Consumption growth will then be likely to decelerate as in our November forecast unless the saving ratio drops further or borrowing surges. As households are slow to respond to lower current and future income, stronger for longer consumption will mean a super slow-motion slowdown, also known as sustained momentum, and rising domestic inflationary pressures. The combination of this possibility and the somewhat slower pace of fiscal tightening, which was included in Gareth's forecast update, and the prospects of stronger world growth, which wasn't, creates an upside risk to inflation at the margin. It seems a bit odd not to be revising up growth given where markets have gone, global growth I should say, given where markets have gone - yields up 30 basis points on average over our forecast, 10 year yields up 40 basis points, and sterling up 5½%. And with UK cyclical equities out-performing defensives by 6% since the US election.

On the other side of the ledger surveys continue to suggest business investment, a business investment slowing is still on track. And as I pointed out last week, the UK expansion is increasingly consumption-led. Evidence from the past quarter century across a range of countries including the UK, suggest episodes of consumption-led growth tend to be both slower and less durable. It's because consumption growth eventually outpaces earning growth increasing debt and making demand more sensitive to changes in employment and income.


If they are actually borne out, and this is a big if, perhaps the most notable developments in the outlook for productivity and inflation are those suggested by the move in sterling since November. The 5½% appreciation would be consistent with a somewhat softer Brexit, which if you are anyone but the OBR, would lead to a smaller hit to openness and productivity, although the appreciation also likely reflects weakness on the Continent as well.



The exchange rate is now more consistent with the staff's fundamental equilibrium exchange rate analysis for an EEA-like outcome, suggesting at the margin somewhat stronger supply growth than in November. Our passporting assumption aside, that merits sticking to an average of outcomes as in our November forecast. Of course the most material effects of sterling's rise on inflation are the direct ones as the forecast updates show. Although still down 10% compared to June 23, the sterling ERI is now back to its mid-September level or prior to the Conservative Party conference. If it holds there this will notably reduce the scale of the inflation overshoot, not enough for Jon, but notably reduce it, which is expected to peak at 2½% at the end of 2017 before dropping to 2.2% at the end of our forecast period. For what it's worth I will observe, given what I know which is far from complete, it's not clear to me why the exchange rate market has taken a view that there will be a softer Brexit. It may be other, it may be more likely other factors are dragging the exchange rate - since it's a relative price so weakness abroad, particularly the Continent, because if anything developments have continued to harden the likely outcome from my perspective. But nonetheless it is where it is and if it persists there it has an impact. But all these considerations to me continue to suggest that the risk to rates are two-sided and roughly balanced as the year closes.

So would like to join others who've indicated they would like to maintain the neutral bias and it's why I'm minded to vote to no changes to Bank Rate or to the programme of asset purchases later this week.

Alright so that is that. We meet again on Wednesday to vote and minute said votes.



A meeting of the Monetary Policy Committee was held on Wednesday 14 December 2016. 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  
Michael Saunders, External Member  
Gertjan Vlieghe, 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  
Fergal Shortall, MPC Secretariat  
James Talbot, MPC Secretariat  
Melissa Davey, Editor of Inflation Report

## Transcript of the Monetary Policy Committee Meeting on

**Wednesday 14 December 2016**

**Governor Carney.** OK good morning everyone. This is our decision meeting for the December MPC. We are going to start with market developments from Minouche.

**Nemat Shafik.** Well since Pre-MPC we've had the ECB decision last week, the news that non-OPEC oil producers are to participate in production cuts, and the quick formation of a new government in Italy. These events have contributed to a further steepening in international yield curves, a rise in the price of oil by 2.4% and an improvement in risk appetite. The ECB announcement that it would produce the pace of purchases from 80 billion to 60 billion per month and extend the programme to December received a mixed response from commentators. The market reaction was a material steepening in the yield curve, a fall in the euro and a rise in equities led by bank stocks. Compared to the data we were shown last week, short and long-term UK interest rates have risen a little further. The sterling ERI is broadly flat and UK risky asset prices have risen. Market-based measures of UK inflation compensation now have risen since Pre-MPC by around 7 to 9 basis points at the five-year five-year forward point. This leaves five-year five-year break evens at around 13 basis points higher compared to the time of our November decision meeting although inflation swap rates at this tenor are close to unchanged.

Looking ahead the Fed is going to announce its policy decision this evening, with the 25 basis point increase in rates fully priced in. That's it.

**Governor Carney.** Thank you. Andy please.

**Andrew Haldane.** Little from me, just a couple of house price indices which we've seen since we last met. We had the ONS house price index up until October. The pattern there is of a continuing slowing in the three-month on three-month rate. The more timely Rightmove measure, which is up to December, three-month on three-month there picking up somewhat, activity reasonably strong. I think the overall pattern there are the data are noisy is of a still slowing trend in rates of house price inflation, but with perhaps some signs of greater strength than we'd expected.

**Governor Carney.** OK. Alright so I will propose the following propositions, which may sound familiar, that Bank Rate be maintained at 0.25%. That we continue the programme of sterling non-financial investment grade corporate bond purchases to the amount of £10 billion, financed by the issuance of central bank reserves, and thirdly that the Bank continue with its programme of £60 billion of UK government bond purchases to take the total stock of these purchases to £435 billion, again financed by the issuance of central bank reserves. And I will go in the same order as on Monday starting with you, Ben.

**Ben Broadbent.** Thank you Governor. I vote for all three propositions.

**Governor Carney.** Jan.

**Gertjan Vlieghe.** I vote for all three propositions.

**Governor Carney.** Minouche.


**Nemat Shafik.** I agree with all three propositions.

**Governor Carney.** Ian.

**Ian McCafferty.** I vote for all three propositions.

**Governor Carney.** Jon.

**Jon Cunliffe.** I vote for all three propositions.



**Governor Carney.** Just under the wire there before you expire. Good. Michael.

**Michael Saunders.** I vote for all three propositions.

**Governor Carney.** Kristin.

**Kristin Forbes.** I vote for all three propositions.

**Governor Carney.** Thank you. Andy.

**Andrew Haldane.** I vote for all three propositions.

**Governor Carney.** And I vote for all three propositions as well, and note the comments that some colleagues made about the asset purchases in the last meeting when we turn to the minutes, I think consistent with last time, the language there. OK?

**Kristin Forbes.** Agreed. They will stand as long as....

**Governor Carney.** And as long as.....

**Kristin Forbes.** But I will not repeat them every month.

**Governor Carney.** Exactly, well you know it's important we get it....

**Nemat Shafik.** We'll be done soon, actually.

**Governor Carney.** Good, so I would summarise that it is nine votes in favour of all three of the propositions, no votes against. OK very good, thank you all.