



BANK OF ENGLAND

# Speech

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## **The UK economy: where now? Our emerging understanding of the impact of the referendum on the economic outlook**

Based on remarks given by

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It is much overused, but the alleged old Chinese curse is very appropriate today, for we are certainly living in interesting times. Back in the spring, we on the Monetary Policy Committee (MPC) were of the view that the UK economy was slowly normalising after a long period of adjustment following the global financial crisis, in that the economy was returning to full employment and looked set to grow at around its potential rate over the next couple of years, slowly bringing the period of very low consumer price inflation to an end. That is not to ignore a number of troubling issues - at home, the continuing puzzle of weak productivity growth; abroad, subdued growth in our trading partners, reflecting structural as well as cyclical factors - and a series of worrying risks. But on balance the economy looked set fair to continue the improvement seen since 2014.

Events have certainly taken an unexpected turn. We now face a series of unique challenges, stemming from the prospect of leaving the European Union (EU) and the impact of this on the UK economy over the coming years. How this is influencing the outlook over the next 2-3 years is dominating our thinking at present, and regional visits such as this are invaluable in assessing the reactions of business to such challenges, allowing us to take the temperature of the economy across the country by speaking to a broad cross-section of businesses, trade representative bodies, trades unions and educational institutions.

Today, I want to set out our emerging understanding of the reactions to recent events, as well as our latest assessment of the economic outlook for the next couple of years, as laid out in the November *Inflation Report*. I will conclude by sharing my views on the implications for monetary policy.

### **Performance of the economy going into the referendum...**

Given the nature of the data, with the inevitable lags and revisions that occur, it is only now that we are getting a fuller picture of the performance of the UK economy in the run-up to the referendum. Following a slowdown at the start of 2015 followed by a pickup throughout the year (**Chart 1**), sustained by strong consumer spending, quarterly GDP growth dipped in the first quarter of 2016, to 0.4%. Following the news in November 2015 that a referendum on whether to stay in the EU was to take place, with the announcement of the date in February, understandable concerns arose about the impact of an increase in uncertainty – how much might consumers and businesses be holding back spending and investment plans ahead of the vote?

Initially, most economic commentators thought that this impact might be quite material, leading to expectations of markedly slower growth through the first half of the year. But as official data have come in, it has become apparent that following the slower outturn in Q1, growth actually picked up in Q2. GDP is now estimated to have grown by 0.7% in the second quarter, supported by strong consumer spending and a continued decline in the savings ratio, suggesting that, for the consumer at least, referendum uncertainties had little impact. Business investment appears to have been more affected, with the initial data suggesting a modest increase in Q2 following declines in each of the previous two quarters (though it needs to be said that these data will be subject to potentially sizeable revisions for some time). Construction output too had a weak start to the year, with a fall in housing investment in the second quarter, and a marked slowdown in

private commercial property activity. How much of that weakness was due to referendum uncertainty, and how much to cyclical factors already in train is not clear. But overall, it is now evident that uncertainty was less of a drag than we built into our May *Inflation Report* forecast, and that the economy had more momentum going into the referendum. Nevertheless, the referendum result is potentially a significant shock to the economy, particularly as the result was not expected, judging by the signals from financial markets, bookmakers and opinion polls. So what are we now learning about how the economy has performed through the autumn?

### ... and in the aftermath

The most immediate reaction to the referendum result came from financial markets, with sharp movements in sterling asset prices. Sterling itself depreciated markedly, falling by about 10% in effective terms (**Chart 2**), reflecting a rise in the risk premium required by investors to hold UK assets, as compensation for the greater uncertainty related to the impact of the UK's future trading arrangements on growth. Overall, in the period between the announcement of the referendum in November 2015 and the low reached in mid-October, the sterling ERI depreciated by 21%, the most marked move in the currency since the global financial crisis. Long-dated gilt yields also saw sharp falls (**Chart 3**), reflecting in part the fall of short-dated interest rates, but also the combination of increased perceptions that the economy would grow more slowly in future years and that the MPC might resume asset purchases. Corporate capital markets also experienced sizeable movements. Spreads on sterling-denominated high-yield, and, to a lesser extent, investment-grade, corporate bonds rose in the aftermath of the referendum result. And following a 7% fall in the two trading days that followed the referendum, equity prices rapidly bounced back, more than recovering their initial losses and settling above their pre-referendum levels. But the pickup in equity prices was flattered by valuation effects – a consequence of the preponderance of firms in the FTSE All-Share index with large foreign-currency earnings, which were boosted by the decline of sterling. By contrast, the share prices of UK domestically focused firms failed to recover to pre-referendum levels, and there were particularly sharp falls in the construction and consumer services sectors, which derive a large proportion of their revenue from UK activity, and are therefore more sensitive to UK demand growth prospects.

On the real side of the economy, immediate reactions were also decidedly negative. The early survey evidence portrayed a sharp loss of confidence, and pointed to a pronounced hit to activity in the second half of the year. **Chart 4** shows that survey measures of expected activity fell dramatically in the immediate aftermath of the referendum, as did measures of consumer confidence (**Chart 5**).

This precipitous fall in sentiment, and the resulting prospect of a sharp decline in real activity as firms and consumers cut spending, was a key factor behind the majority decision at the August MPC meeting to lower Bank Rate for the first time since March 2009, and to resume gilts purchases under the Asset Purchase Facility (APF) for the first time since February 2012. In addition, two innovations were added to the policy toolkit: the Term Funding Scheme (TFS), designed to reinforce the transmission of Bank Rate cuts to banks'

lending rates, and the expansion of the APF to include corporate bonds, so as to reduce spreads between gilt and corporate bond yields, and thus provide support to the corporate sector more directly.

My position in the minority, supporting the cut in Bank Rate but opposing the increase in gilt purchases in order to impart a lesser degree of stimulus, at least initially, was based on the judgement that there was a non-negligible risk that, in the immediate aftermath of the referendum surprise, the surveys might be providing a false signal. While business surveys mostly provide good early signals of the path of the economy, they have been known, at times of unusual shock such as Black Monday, the Asian crisis and 9/11, initially to exaggerate the impact, as the understandable hit to sentiment also affected the way in which respondents answered questions about output prospects. On each of the previous three occasions, the initial signals turned out to overstate the short-term impact on demand.

Through the autumn, financial markets continued to take a gloomy view of economic prospects following the decision to leave, in contrast with the gradually emerging news about the performance of the real economy, at least in the very short term.

In terms of the real economy, the initial large falls seen in the activity and confidence indicators during the summer have for the most part now reversed (**Charts 4 and 5**). This was reflected in the data for third-quarter GDP growth. At 0.5%, it came out above our and others' expectations, painting a much more sanguine picture of the economy than the sharp collapse predicted only just a few months ago. And the further uptick seen in the Markit/CIPS output composite index for October and November points to a solid start to the fourth quarter.

Does this mean that we have ducked the expected post-referendum slowdown? Unfortunately, probably not. While it is true that the initial fears of a sharp immediate downturn have not materialised, a closer examination of the high-frequency indicators is consistent with what I will refer to as a "slow-motion slowdown", the dynamics of which will be shaped by the spending behaviour of so-far resilient consumers and already-cautious businesses.

Echoing the strength of service-sector growth in the Q3 GDP data, the expenditure breakdown revealed that consumption rose by a healthy 0.6% on the quarter. And strong growth in retail sales in October suggests that household spending remains solid, supported by a healthy labour market, with unemployment at 4.8%, and strong demand for labour, as evidenced by the historically high vacancy-unemployment ratio. The housing market has also performed better than originally anticipated, consistent with the fact that common factors, such as income and uncertainty, underpin both consumption and house prices and activity.<sup>1</sup>

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<sup>1</sup> See November 2016 *Inflation Report*, box on pages 18 and 19.

By contrast, business spending appears to be more fragile. Although business sentiment has recovered since the summer, it remains weaker than in the second quarter. This is consistent with weakening surveys of investment intentions (**Chart 6**), and more caution about future hiring. That said, business investment is estimated to have held up following the referendum result, growing by 0.9% in the third quarter, although the quarterly data are very volatile and prone to revision. And weak demand in the commercial real estate (CRE) sector has continued into Q3, with prices falling and the volume of transactions at its lowest since 2012 Q4.

### A “slow-motion slowdown”

This short-term mix of resilient consumer spending and somewhat softer business sentiment is unlikely to be sustained, and over the course of 2017, we are likely to see a gradual erosion of the rate of growth.

There are two important channels through which the decision to leave the EU is likely to affect spending – a response to the uncertainty about future trade and investment relationships, and the impact on real incomes from the rise in inflation that will result from the fall in sterling.

The uncertainty measures monitored by the Bank remain relatively elevated (**Chart 7**), although they have come down since the summer, when they reached levels as high as during the Eurozone crisis of 2010-12.<sup>2</sup> As Mark Carney has pointed out, trade negotiations traditionally are not normally concluded until “one second before midnight”,<sup>3</sup> and the exit negotiations with the rest of the EU are unlikely to be much different. As a result, the wide range of possible outcomes means that levels of uncertainty are likely to remain elevated for a considerable period.

Analysis of the impact of heightened uncertainty strongly suggests that it is bad for the economy. In particular, it tends to hold back spending by firms as they delay decisions and refrain from embarking on longer-term projects. The Bank Agents’ survey on investment intentions contained in their November 2016 Update of business conditions shows that uncertainty about the demand outlook was the biggest drag on investment plans, particularly in manufacturing and construction, while uncertainty about the future trading arrangements was the second main negative factor, especially for manufacturers (**Chart 8**).

This is also true for the real estate sector. The sharp retrenchment of CRE transactions and valuations following the referendum encapsulates the harmful effects of uncertainty on business behaviour. This can in turn aggravate a slowdown in business investment, as depressed property values make it harder for (small) businesses to borrow to finance projects.<sup>4</sup>

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<sup>2</sup> The Bank tracks a measure of uncertainty that is a principal component drawn from six measures of uncertainty. These are household survey responses about their personal financial situation and unemployment expectations, the number of media citations of phrases related to uncertainty, financial market measures such as implied volatility for the sterling ERI and the FTSE 100. See the Box ‘Uncertainty and GDP growth’ on page 14 of the May 2016 *Inflation Report*.

<sup>3</sup> See the [transcript](#) of the Treasury Select Committee Hearing for the November *Inflation Report* held on 15 November 2016.

<sup>4</sup> In the household sector, such a collateral channel, preventing homeowners from funding additional spending by borrowing against the value of their home, is estimated to be rather small – see November 2016 *Inflation Report*, box on pages 18 and 19.

Heightened uncertainty also affects firms' hiring decisions. The Agents report that employment intentions are consistent with stable private-sector employment over the coming six months. Put differently, businesses are not concerned about the need to reduce headcount, but, at the same time, they are not committed to employing more. This is consistent with the slowing of employment intentions surveys (**Chart 9**) that has been under way for some time.

Offsetting that "textbook" analysis of the impact of heightened uncertainty is the reaction I have frequently experienced in talking to firms themselves in recent weeks. We are currently seeing what might be termed a "perverse" reaction to heightened uncertainty, at least for smaller businesses, for which uncertainty about the future is currently so elevated that their only sensible response is to continue with "business as usual", at least until things become a little clearer.

That business reaction – as regards investment and hiring – will be an important influence on the medium-term outlook for consumer spending. In that regard it is encouraging that the GfK survey measure of households' fear of unemployment over the next 12 months fell throughout the summer, although last month it edged back up towards the levels seen in the immediate run-up and aftermath of the referendum result. Consumers would likely rein in their spending quickly were job security and prospects to deteriorate markedly.

But of more relevance in the near-term will be consumers' reaction to changes in their real take-home pay as inflation picks up. At present consumers are still benefitting from a boost to their real incomes from the period of unusually low inflation of the past couple of years. But as the depreciation of sterling feeds through to consumer prices and inflation picks up over the next 18 months, the real income squeeze that will result unless wages pick up equally rapidly is very likely to depress consumer spending. There are signs already that the expected rise of inflation is started to weigh on some measures of consumer confidence, even though it has yet to affect spending.

The depreciation of sterling is not all bad news for economic activity. A weaker currency can be expected to benefit UK exporters by stimulating foreign demand for our cheaper goods and services, cushioning the loss of purchasing power by importers and consumers. The Bank's Agents are reporting that sterling's depreciation has helped exporters, lifting manufacturing output growth for export markets, consistent with increases in survey measures of growth in goods export orders. But exporters are also hurt by rising import prices, so it remains to be seen how willing or able they will be to tolerate a compression of their margins in order to preserve their new-found competitiveness. Of course, the rise in import prices should also encourage producers to substitute domestic production for imports, but the integration of UK producers into global supply chains, combined with the high degree of specialisation in UK productive capacity, suggests that such import substitution is likely to be limited, at least for some time. And it remains the case that, as a negative terms-of-trade shock, the sharp depreciation of sterling reduces export earnings in terms of the imports those earnings can buy.

Nevertheless, the broader picture from the monthly indicators and surveys supports the MPC's narrative of an economy in which the prospect of leaving the EU gradually erodes demand growth over the course of 2017 and 2018. As such we can expect 2017 to be a more difficult year.

### **Longer-term impact on supply**

A further impact from the vote to leave the EU is likely to fall on the supply side of the economy. This impact is probably less immediate, and certainly less visible, but will involve a reduction, at least temporarily, in the rate of productivity growth and hence potential growth, reflecting the likely changes in trade, investment and labour flows.

Openness to trade, investment and the movement of the factors of production all increase the dynamism of an economy. This dynamism helps an economy become more resistant to shocks; it allows it to grow more rapidly without creating inflationary pressure; and makes competition more effective. To the extent that withdrawal from the EU – both the biggest single trading and cross-border investment entity in the world, and the UK's biggest single trading and investment partner – might reduce that openness, through reduced market access, that economic dynamism is likely to be reduced.

But even if withdrawal from the EU does not reduce such openness (if, for example, the openness of the EU single market were to be replaced with more open trading relationships with other parts of the world), a temporary hit to the supply side of the economy is still likely, as a result of the necessary period of structural adjustment that will be required as the economy adapts to the changes in trading relationships, both geographically and sectorally. The changing nature and destination of our exports will require a reallocation of both capital and labour resources across the economy, which is likely to reduce productivity growth until the new trading and production patterns have been achieved.

The timing and overall magnitude of such supply-side effects are difficult to predict. One can envision different scenarios, which could prevail in different sectors of the economy. For many businesses, clarity about the UK's future trading arrangements will take some time to emerge, such that they will not start to adjust until negotiations are close to completion. Under this scenario, the supply-side impact is therefore at least a couple of years away. But other businesses may well wish to anticipate the regime change, and adjust their workforce, investment plans or the location of their production, well in advance. Intelligence collected by the Bank's network of Agents suggests that some firms – multinationals in particular – are already mapping out different scenarios and drawing up contingency plans. But I have been struck by how my – and the Agents' – conversations with some smaller firms suggest that they are adopting a more "wait and see" attitude.

As the UK economy transitions to a new trading regime, any reduction in the potential rate of growth would have a direct bearing on the economy's ability to sustain inflationary pressure. As such, it will be of critical importance to the conduct of monetary policy in future years.

### Prospects for inflation

At present, the annual inflation rate remains low, at 1.2% in November (**Chart 10**). But the period of ultra-low inflation is now coming to an end, as the base effects associated with the low oil prices of the past few years start to drop out of the annual comparison. Over the coming year, this pickup in inflation will be magnified by the depreciation of sterling. Bank staff estimate that, on average, some 60% of changes in foreign export prices in sterling terms feed into UK import prices within one year. In turn, they estimate that changes in import prices are eventually passed through to consumer prices in full, allowing companies to restore their margins over time.<sup>5</sup> But how fast that pass-through occurs will be critical in assessing the shape of the inflation profile over the forecast. Faster pass-through would yield a sharper increase in inflation in 2017, but an earlier fall-back as the effects of the exchange rate move diminish. Slower pass-through limits the pace of the rise in inflation in 2017, but pushes the overshoot further out into the medium term, as the full impact of the exchange rate move takes longer to feed through.

Consistent with the sharp rise of the CIPS survey measure of manufacturing input and output prices (**Chart 11**), evidence from the Agents' November Update suggests that price pressures are building along the supply chain, but are not yet reaching consumers, partly reflecting strong competition between retailers. There is also anecdotal evidence of businesses "negotiating away" some of the cost increases, exploring options for import substitution, seeking to cut costs elsewhere or having margins eroded.

Since the referendum result, the level of sterling has been predominantly determined by shifts in financial markets' assessment of the nature of the likely changes in trade and investment relationships (usually described as the relative "hardness" or "softness" of Brexit). The falls in sterling until early November were consistent with what would be required of the exchange rate to deliver a sustainable external position under conditions of a relatively hard Brexit. More recently, the rise in the currency suggests that markets have adjusted their expectations somewhat. But unless sterling appreciates significantly further, the depreciation so far is sufficient to drive inflation above the target over the next 12 months, and to keep it above the target until right at the end of the forecast horizon.

As well as the movement in the sterling exchange rate, the absolute size of the inflation overshoot will depend crucially on two other factors. Internationally, movements in global commodity prices – not just oil and gas, but food and other primary products – are likely to be important. For many such commodities, the

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<sup>5</sup> See November 2015 *Inflation Report*, box on pages 28 and 29.

global cycle that delivered a prolonged period of price weakness now appears to be on the turn, such that rising commodity prices could add to inflationary pressures over the next couple of years.

More important, though, will be the behaviour of the labour market and of wages here at home. To the extent that the economy is expected to slow over the course of the forecast, some degree of slack is expected to persist, which might provide a sea-anchor to any acceleration in wages. But more critical will be the response of UK wage-earners to rising inflation. Near-zero inflation appears to have constrained nominal wage growth over the past eighteen months, but whether this means that a new, lower norm for wage settlements has been established, or that higher inflation will quickly lead to rising nominal wage growth, will only become clear as the 2017 wage round unfolds (some 75% of wage bargains take place between January and June).

And as inflation rises, and depending on the extent to which real incomes get squeezed, an important question is how consumers will adjust their spending and savings behaviour. In the November *IR*, we expect that growth in consumer spending will slow in line with real incomes, such that the saving ratio remains largely constant throughout the forecast.

### **The changing policy judgement**

This confluence of trends – rising inflation, initial demand resilience but a slowdown in growth in prospect and a likely hit to supply over the longer term – provides a challenging background for policy setting. And as we have learned more of the post-referendum reaction of businesses and consumers, our policy judgement has had to evolve.

Our immediate policy reaction following the referendum result, in response to the initial loss of confidence and the prospect of an immediate sharp slowdown, was to ease monetary policy at the August meeting, with the provision of guidance that if the economy evolved in line with our *August Inflation Report* forecast, further easing was likely to be justified, at least for a majority of the Committee.

Since the referendum, the MPC has been faced with a difficult trade-off in terms of its policy setting. Over the policy horizon, inflation is expected to rise quite sharply, and to remain above the target beyond 2019. Other things equal, this would suggest that we should consider raising interest rates in order to bring inflation back to target within our normal two-year horizon. But at the same time, we also expect the economy to weaken over the period, pushing up on unemployment and widening the output gap, and hence increasing the likelihood of below-target inflation beyond the forecast horizon. Our mandate requires us to make a judgement about the cost to the economy of undesirable output volatility and trade that off against the length of time that inflation remains away from our target. Put simply, we have to ask ourselves the question: how far are we willing to tolerate above-target inflation in order to support growth, or, to cast the trade-off in a different light, how far are we prepared to see unemployment rise to prevent the inflation overshoot from becoming entrenched?

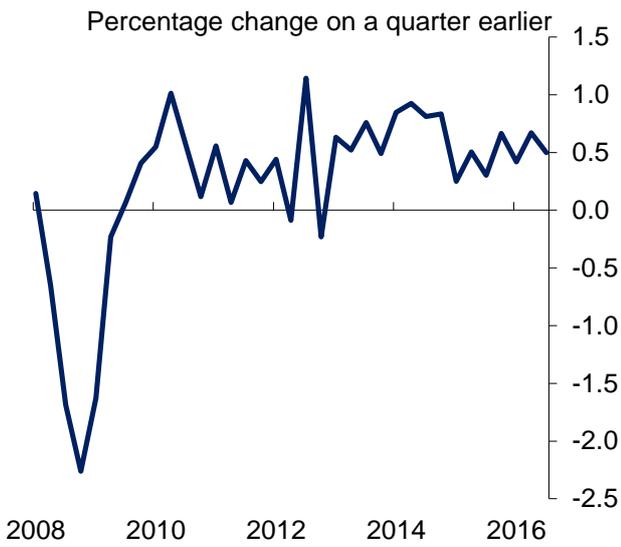
It is the collective answer to that question that led us, through the autumn to a policy stance that allows inflation to remain above target for somewhat longer than our normal two-year horizon.

But as we have learned more about the response of the economy to the decision to leave, the precise parameters of that trade-off judgement have shifted. In our November forecast, the inflation overshoot was greater, and growth in the economy more resilient, than initially thought. As such, the earlier bias in the Committee's guidance, in favour of further easing, has expired. Moreover, notwithstanding the costs of a slowdown, there are limits to how much of an overshoot to inflation we can tolerate, particularly if it were to affect psychology and behaviour domestically – if expectations of above-target inflation were to lead firms to be more aggressive in pushing through price rises, or wage-earners to demand, and receive, significantly higher wages, which would prolong the period of above-target inflation.

So our collective assessment of the trade-off, and our policy judgement that results, will remain critically dependent on the path of the economy over the coming year or so – in particular in those respects I have highlighted today. How “slow motion” will the coming slowdown be? How far will wages rise in response to inflation? How will the exchange rate move and how will that pass through into the price level? As of our November meeting, and again in December, we felt that, on the basis of our current understanding of the economy, the balance of risks around the outlook was two-sided, such that from the current level, any further changes in our policy stance in the near future were as likely to be upward as downward.

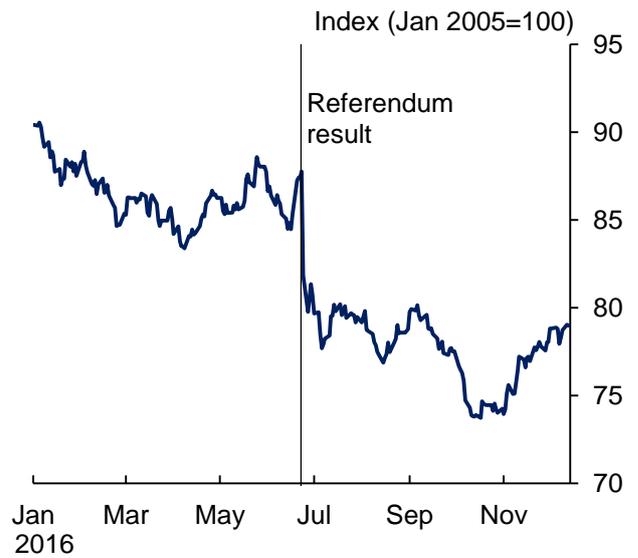
As a Committee, we are always data-driven, but the uncertainties about the future path of the economy following the referendum are such that we will be following the emerging data even more closely than normal. Quite where policy will go next will depend crucially on how the different cogs and wheels in the economy behave over the coming year or two. In terms of that old Chinese curse, 2016 proved to be very interesting, and 2017 promises to be no less so.

**Chart 1: UK real GDP**



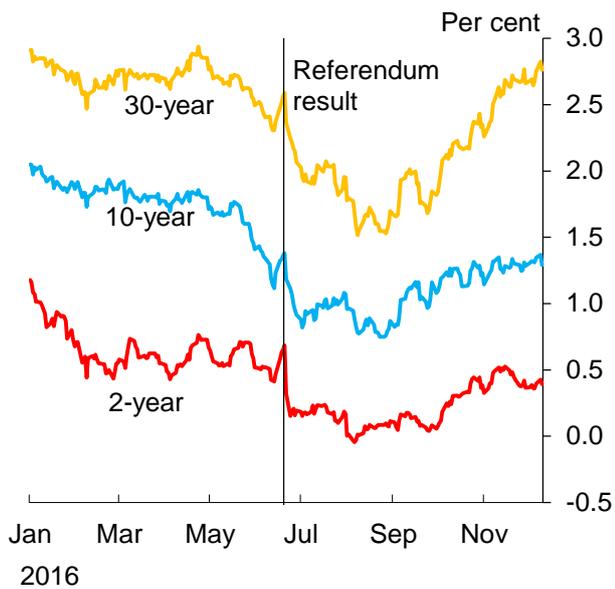
Source: ONS

**Chart 2: Sterling Exchange Rate Index**



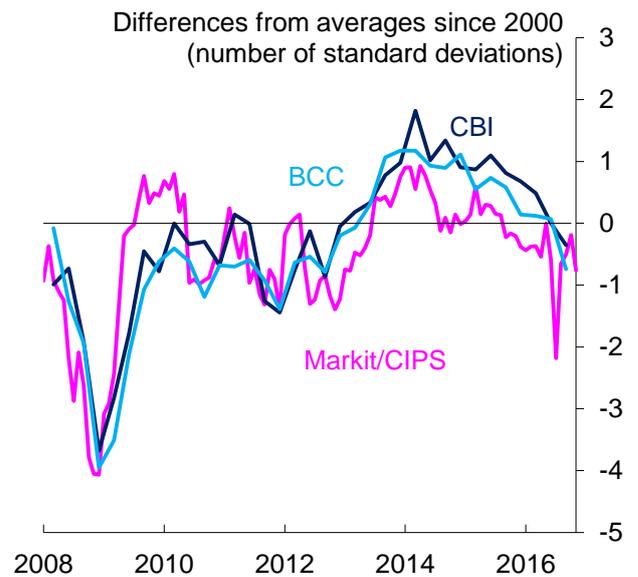
Source: Bank of England

**Chart 3: Sterling spot yields on UK gilts**



Sources: Bloomberg and Bank calculations.

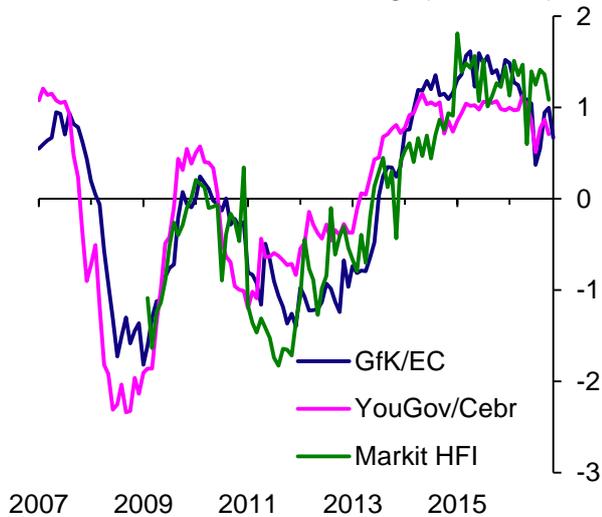
**Chart 4: Survey indicators of expected output growth**



Sources: BCC, CBI, IHS Markit and Bank calculations. See Chart 2.3 of the November *Inflation Report*.

**Chart 5: Consumer confidence**

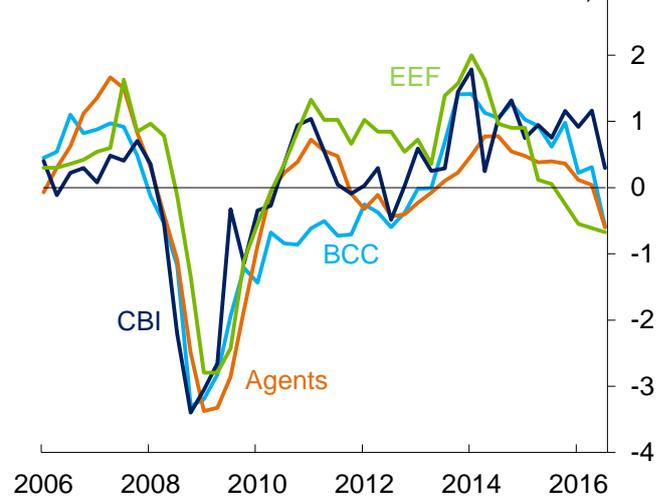
Standard deviations from average (2007-2016)



Sources: GfK, YouGov and IHS Markit.

**Chart 6: Survey measures of investment intentions**

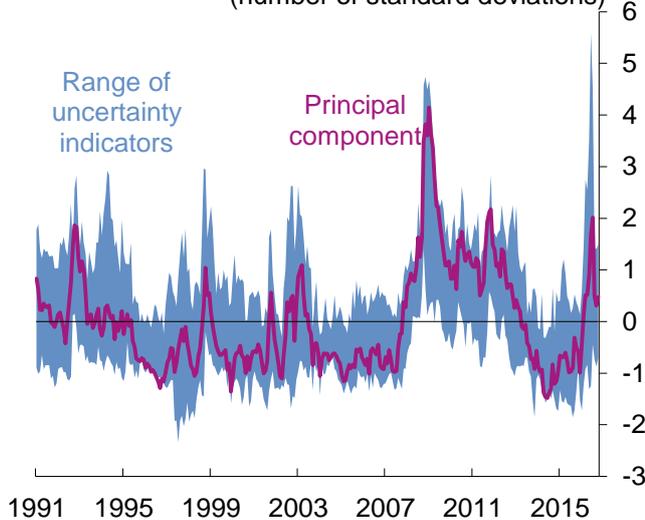
Differences from averages since 2000 (number of standard deviations)



Sources: Bank of England, BCC, CBI/PwC, EEF and Bank calculations.

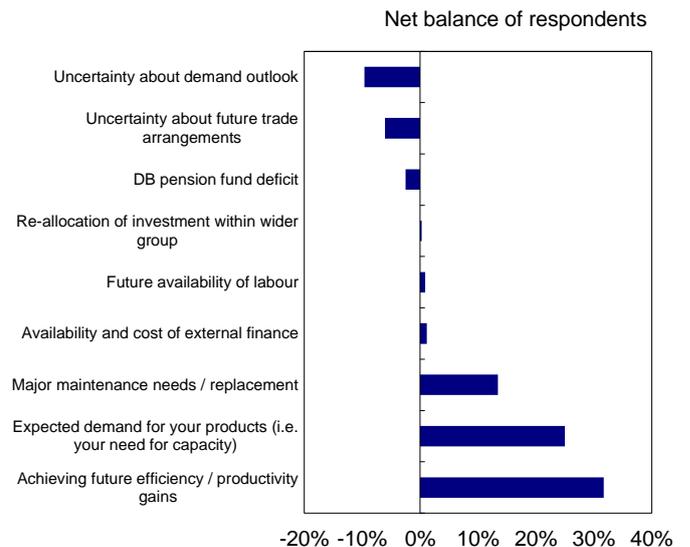
**Chart 7: Range of uncertainty measures**

Differences from averages since 1991 (number of standard deviations)



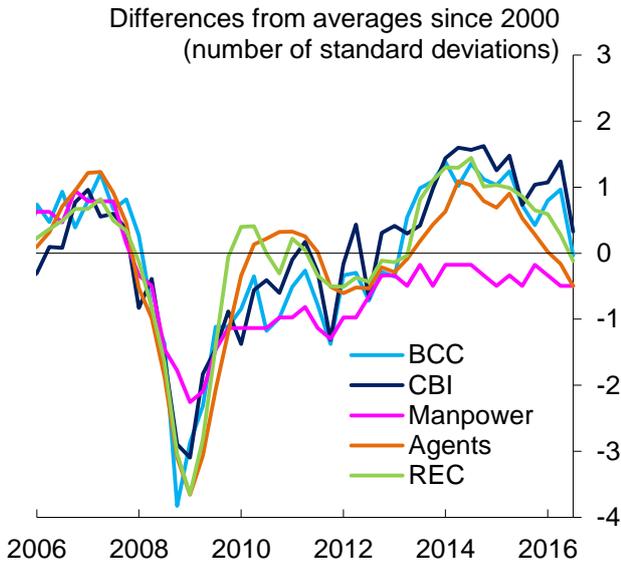
Sources: Bloomberg, CBI, Consensus Economics, Dow Jones Factiva, GfK (research on behalf of the European Commission), Thomson Reuters Datastream and Bank calculations. See Chart 2.4 of the November *Inflation Report*.

**Chart 8: Factors affecting investment in the next twelve months**



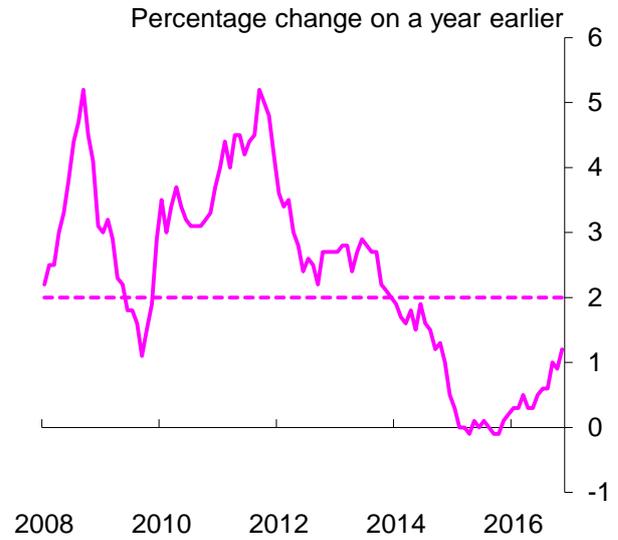
Source: Agents' Summary of Business Conditions, November 2016 Update, Chart C.

**Chart 9: Survey indicators of employment intentions**



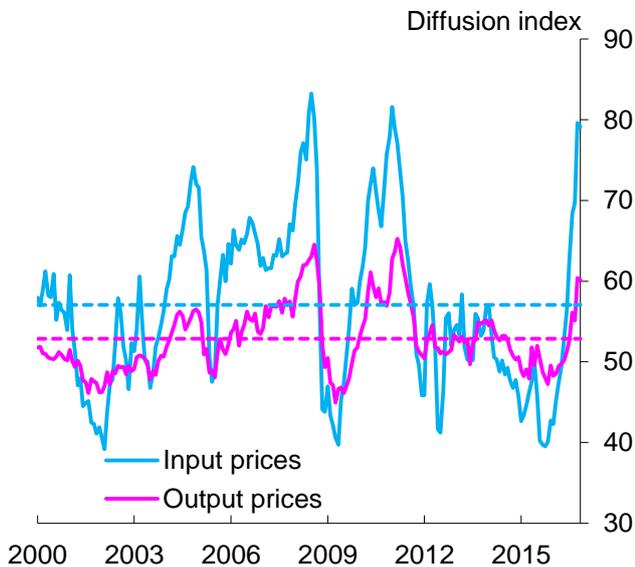
Sources: Bank of England, BCC, CBI, CBI/PwC, KPMG/REC/IHS Markit, Manpower, ONS and Bank calculations.

**Chart 10: UK consumer prices**



Source: ONS

**Chart 11: Markit/CIPS Manufacturing Input and Output Prices**



Source: IHS Markit.

## References

**Bank of England (2016)**, *Agents' Summary of Business Conditions*, November 2016 Update, available at <http://www.bankofengland.co.uk/publications/Pages/agentssummary/2016/nov.aspx>

**Bank of England (2015)**, *Inflation Report*, November 2015, available at <http://www.bankofengland.co.uk/publications/Pages/inflationreport/2015/nov.aspx>

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**Transcript of the Treasury Select Committee Hearing** for the November 2016 *Inflation Report* held on 15 November 2016, available at <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/treasury-committee/bank-of-england-november-2016-inflation-report/oral/43361.html>