



BANK OF ENGLAND

# Speech

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## **The UK's inflation problem: selling England by the pound?**

Speech given by  
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I would like to thank Tomasz Wieladek and Adrian Chiu for research assistance and I am also grateful for helpful comments from other colleagues. The views expressed are my own and do not necessarily reflect those of the Bank of England or other members of the Monetary Policy Committee.

The Bank of England's latest quarterly *Inflation Report*, published yesterday, showed a very large upward revision in the short-term outlook for UK inflation. Despite this, the forecasts published in the Report still show inflation coming back to the target next year with the upside and downside risks to the medium-term inflation outlook roughly balanced. That view of inflation prospects underpinned the Committee's decision at last week's meeting that Bank Rate should be left at its record low level of 0.5%, despite persistently high and rising inflation.

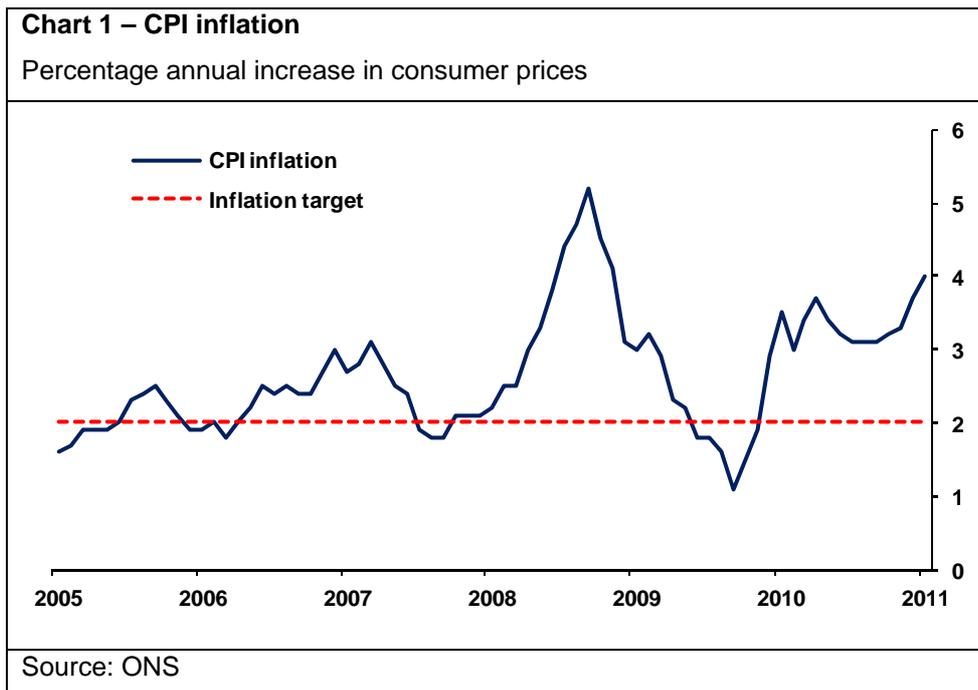
In my view, this medium-term assessment of the outlook for inflation is too optimistic. As both the Governor's letter on Tuesday and the latest *Inflation Report* make clear there are significant differences of view on the MPC at present. My judgement is that the upside risks to inflation are understated in the published fan charts. And monetary policy would most likely need to be tightened faster and by more than the markets currently expect to bring inflation back to target.

You will not be surprised to hear that I hold these views. Since last summer, I have been arguing that a gradual tightening of UK monetary policy was needed sooner rather than later. And I also argued that delaying policy action in the second half of last year would mean bigger and sharper interest rate rises might eventually be needed to control inflation. I am afraid that this warning is being borne out by events. We would be better placed to head off the upside pressures on inflation which are now apparent if we had taken earlier policy action. And the risk is that when policy tightening does start, it will be overdue and the MPC will be playing catch-up – which is not a good scenario for recovery prospects.

In today's speech I will highlight why I believe there are bigger upside risks to the medium term inflation outlook than the current *Inflation Report* forecast suggests. And I want to talk in particular about the inflationary impetus provided by the very substantial decline in the sterling exchange rate since 2007 and how that decline should be viewed in the context of the monetary policy issues we now face.

### **Upside risks to inflation**

January's CPI inflation number continues a run of persistent above target UK inflation which has persisted for nearly five years now, as Chart 1 shows. During my time as a member of the Monetary Policy Committee since October 2006, CPI inflation has been below target for only two brief periods – for three months in 2007 and for six months in the second half of 2009. This is despite the fact that below target inflation has been the medium term central projection in every *Inflation Report* forecast since August 2008. Indeed, the inflation forecast published a year ago in February 2010 suggested that CPI inflation would be around 1% in the first half of this year, whereas it has already hit 4% and is set to move higher.



While higher VAT can account for part of this significant upside forecast error, it is not the only element at work. And the response of consumer prices to the recent VAT rise appears to be part of a broader pattern in which consumers have suffered cost and price increases from a wide range of sources – despite the expectation that the recent recession would bear down heavily on inflation.

Why has inflation turned out persistently above target, despite the widespread expectation that it would be pushed down by the financial crisis and the global recession? And why has the Bank of England done such a poor job of forecasting it in recent *Inflation Reports*?

The answers to these questions are closely related. Inflation has run persistently above target because the upward impetus of global price pressures and the fall in the pound have been much stronger than any downward pressure we have seen from spare capacity in the aftermath of the recession. Similarly, in the Bank’s inflation forecasts, too much faith is being put on the impact of a large “output gap” pushing down on inflation and not enough weight has been put on the upward pressure from the global environment and the exchange rate. This tendency to overweight the downward pull of spare capacity in the UK economy and underweight the upward impact of external inflationary pressures has resulted in big upside inflation forecast errors over a number of years. And it also underpins the over-optimistic assessment of the medium-term inflation outlook in the current set of forecasts published yesterday.

## The “output gap” model of inflation

At the heart of the Bank of England’s approach to forecasting inflation and that of many other forecasters is the well-known “output gap” model of inflation. While many other factors affect the forecasts published in the *Inflation Report*, most of these drop out of the projections after a year or so. Longer-term inflation expectations are also important, but these are generally assumed to be well anchored around the inflation target. Hence, the assessment of the “output gap” or the margin of spare capacity tends to dominate the medium-term view of inflation published in the Bank of England’s *Inflation Report*.

The “output gap” model explains deviations in inflation from its target level based on the fluctuations of economic growth around its trend or capacity level. According to this view, strong growth puts upward pressure on prices and costs as companies find themselves operating close to capacity limits and on wages through the effect of a tightening labour market. The reverse is expected to happen if economic growth is weak or the economy moves into recession – with spare capacity pushing down prices and costs. Hence the persistent forecasts of inflation falling back towards target and the expectation that it would be pushed below it in the aftermath of the recent recession.

But as Chart 1 shows, we have seen very little of this output gap effect on inflation through the recession and in its aftermath. There are four reasons why inflation has not followed the course predicted by the “output gap”, and for the same reasons we should be wary of forecasts that it will do so in the future, especially when the recovery is more firmly established and memories of the recession have faded further.

First, the “output gap” and the margin of spare capacity in the economy are notoriously difficult to measure in real time and hence there is great uncertainty around the measurement and forecasting of these variables, particularly in the wake of a major recession. Some economists have warned about this problem for some time.<sup>1</sup> And it is significant that the margin of spare capacity that we currently observe in firms and in the labour market appears much less than we might have expected following a major recession. Within the labour market, unemployment has not risen as sharply as we have seen in previous recessions. In both the early 1980s and early 1990s recessions, the unemployment rate rose to over 10% and stayed at a high level for several years. By contrast, the current unemployment rate is still below 8%, and it should drop back gradually as the recovery proceeds.

This response of companies in terms of retaining employees is perhaps not unexpected in the “knowledge economy” we currently inhabit. The employees of a business represent a stock of experience and skills which is needed to underpin future profits and growth. In the recession, we saw many companies seeking to minimise lay-offs by making more flexible use of their labour resources and by agreeing or imposing wage freezes or very low pay increases. But now the economy is recovering, we are seeing these downward

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<sup>1</sup> Orphanides and Van Norden (2002) show that revisions to real-time estimates of the output gap are often of the same order of magnitude as the output gap itself. They find that this is mostly due to the difficulty of estimating the trend level of real GDP in real time.

pressures on pay beginning to unwind in the private sector. Pay settlements are now moving up again, and with headline inflation expected to remain high throughout this year, we should expect this trend to continue. In a recent survey conducted by the Bank of England Agents around the country, expected inflation is cited as the single biggest upward pressure on pay settlements.

<b>Organisation</b>	<b>Percentage increase</b>	<b>Employees covered</b>	<b>Effective date</b>
BMW Group Plant Oxford	2.2	2,750	Jan-11
BT	3.0	60,000	Jan-11
Cummins Engine Company (Daventry)	4.7	1,175	Feb-11
Engineering Construction NJC	4.7	20,000	Jan-11
Financial Times	3.0	600	Jan-11
GE Aviation (Hamble)	2.5	700	Jan-11
Heinz	3.9	1,200	Apr-10
Ibstock Brick	2.5	1,376	Jan-11
JCB	4.7	1,900	Jan-11
Network Rail *	5.2	15,000	Jan-11

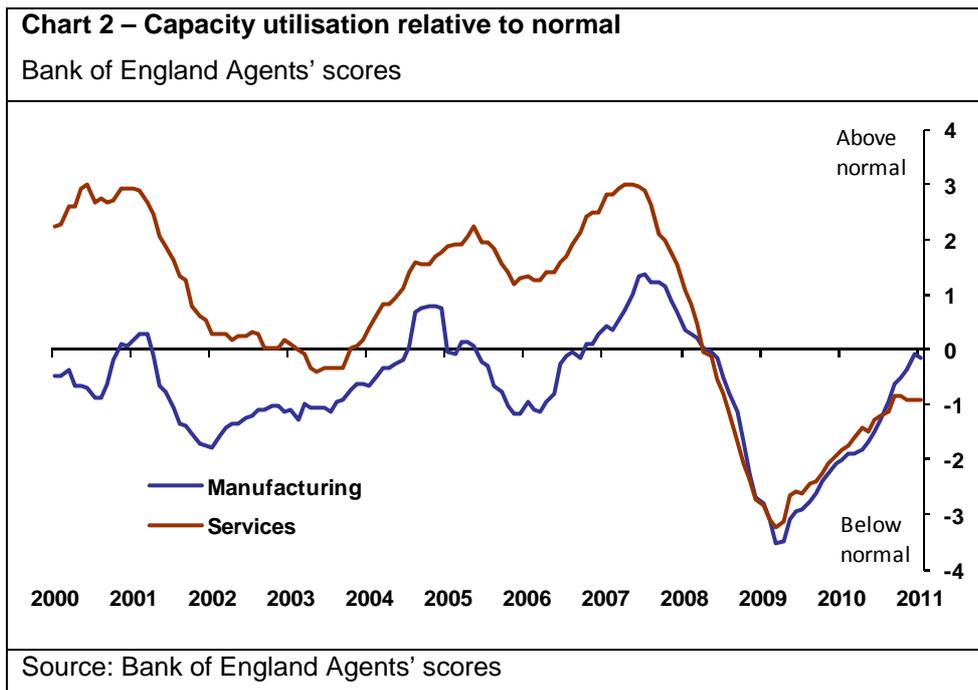
Source: Income Data Services

\*Third year of a three-year deal, based on Nov 2010 RPI plus 0.5%.

Table 1 below shows the most recent major pay settlements recorded by Income Data Services (IDS), the lowest of which is over 2% and the highest of which is over 5%. Their provisional average estimate for January settlements is 2.6%, not far short of the average of just over 3% recorded by IDS in the 2000s before the recession. And in manufacturing industry, which has recovered most strongly from the recession, regular pay growth measured by the ONS bounced back to its pre-recession level of around 4% per annum, in the second half of last year (although pay growth appeared to soften in November and December).

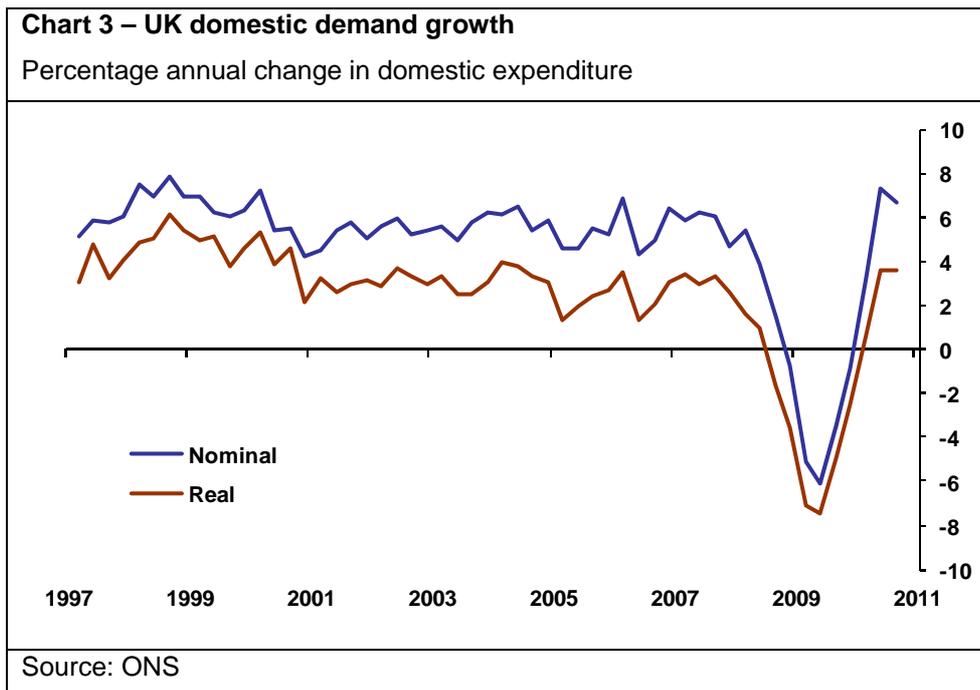
But if companies have retained labour resources rather than laying off workers, we might expect this to show up in a large margin of spare capacity within businesses. However, this does not appear to be the case either. In manufacturing industry, where we have our best measures of capacity utilisation, the CBI Industrial Trends Survey shows that the proportion of companies reporting they are working below capacity is around its historical average.<sup>2</sup> There is more evidence in the services sector that companies are working below capacity. But even here, the scores produced by the Bank of England Agents do not suggest a large margin of underutilised resources, as Chart 2 shows. This may be partly because the services sector appeared to be working considerably above capacity in the period of growth prior to the recession and so some easing of the pressure of demand during the recession has reflected a return to a more normal state of affairs.

<sup>2</sup> According to the CBI Industrial Trend Survey, the average proportion of manufacturing companies working below capacity between 1970 and 2010 was 60%. This compares with 59% working below capacity in January 2011.



Having said all this, there is still a bit of a puzzle around the level of capacity in the economy and this is discussed in some depth in the Bank's *Inflation Report*. Productivity fell sharply in the recession and this is normally an indicator that there is slack within firms which will be taken up in the recovery. But in these circumstances, I would rather put more weight on business surveys than productivity data, the latter may well change with future GDP revisions. The interpretation of recent movements in productivity is also sensitive to the estimate of trend productivity growth, which is notoriously difficult to make in real time.

A second reason why the domestic "output gap" model has failed to explain UK inflation recently is that it embodies an over-simplistic view of demand influences on inflation. I am a strong believer in the view that the demand climate has an important bearing on inflation. However, the "output gap" view of the world focuses on the **level** of demand relative to a notional capacity level in the domestic economy. This is only one dimension of the demand picture. In their pricing decisions, businesses will not just be looking at the level of demand but also at its actual and expected growth rate. As Chart 3 shows, the growth of domestic demand in the UK economy has bounced back strongly following the recession in both real and nominal terms. This rebound in the growth of demand in money and real terms will have made it easier for companies to pass through price increases. Though we may see some moderation in demand growth as higher VAT affects consumer spending and public spending restraint kicks in, strong demand growth over the past year can help to account for the recent tendency of inflation to run above target.

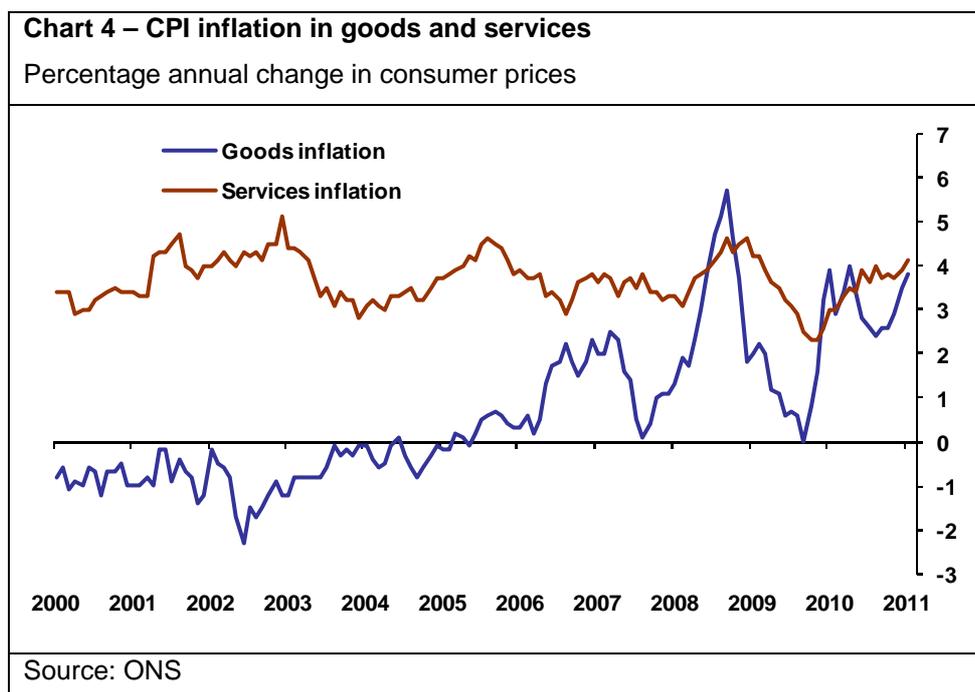


A third factor which could cause the “output gap” model to perform badly as a predictor of inflation is a change in the perceptions of businesses about the pricing climate. The pricing climate which businesses have faced in the recent recession and during the early phases of the recovery has been very different from the experience of the two previous recessions. In the early 1980s and early 1990s, the recession was itself part of a policy aimed at getting on top of inflationary pressures. As a result, the demand climate was kept tightly restrained through the recession and in the early stages of recovery and companies found it very difficult to pass through cost increases into prices. The objective was to break a cost-price spiral which had become deeply ingrained in inflationary expectations.

However, through the recent recession and the early stages of recovery, policy-makers have sent very different signals to the private sector about price-setting. Monetary policy has been highly stimulatory, to ward off a sharp decline in demand and potential deflationary pressures. In this environment, monetary policy was set to accommodate upward price and cost pressures to counter deflation and this has been very effectively achieved. The relatively high pass-through expected from the recent VAT increase can be seen as an example of this phenomenon.

The explicit and implicit signals from UK monetary policy have therefore been operating in an opposite direction to the “output gap” impact on inflation, whereas in previous recessions they were operating in the same direction. Businesses appear to have taken a stronger signal from the stimulatory policy and its impact on demand growth, and looked through what they might reasonably have expected to be a temporary shortfall in demand. The danger of this is, of course, that businesses come to expect higher inflation on an ongoing basis and the higher rate of inflation becomes deeply ingrained.

And there are some worrying signs that this may indeed be happening. In my January speech to the European Policy Forum<sup>3</sup>, I drew attention to the leap in the CBI survey measure of price expectations – the biggest jump in a single survey since 1968, following the 1967 devaluation. However, perhaps a more ominous indicator is the rate of inflation in the services sector. As Chart 4 shows, services inflation measured by the CPI has recently been running at just below 4% and picked up to 4.1% in January. Having dipped down to around 2.5% in the aftermath of the recession and the VAT cut in 2009, services inflation is back above its average level in the five years prior to the recession<sup>4</sup> – despite the fact we might have expected domestic spare capacity to have a bigger influence in this part of the economy which is much less exposed to international price pressures.



In the early to mid-2000s, high services inflation was offset by global disinflation in goods prices, which were flat or falling, as Chart 4 also shows. We now face the prospect of a much more inflationary climate in the goods sector, driven by strong demand in the global economy and rising oil and commodity prices. The fact that services inflation continues to be relatively strong despite the impact of the recession is perhaps an indication that companies face a benign pricing climate in the domestic market and highlights the risk that business price expectations are not currently consistent with the 2% inflation target.

<sup>3</sup> See Sentance (2011).

<sup>4</sup> Between 2003 and 2007, average year-on-year CPI services inflation was 3.6%. CPI services inflation for the year to January 2011 was 4.1%.

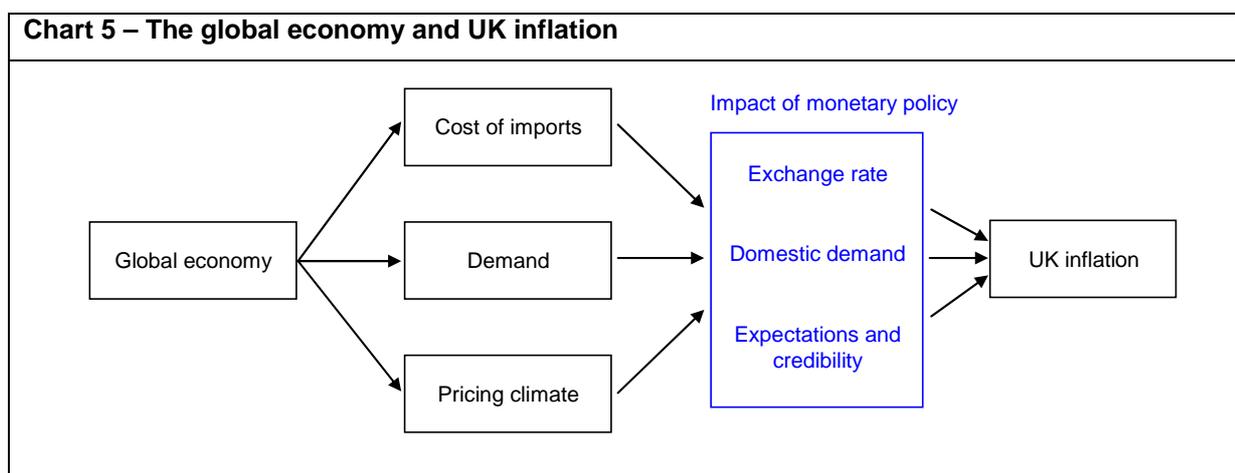
## The global economy

So to recap, I have highlighted three reasons why the “output gap” view that spare capacity would bear down on inflation might not have operated recently: the limited margin of spare capacity in the economy; the rebound in domestic demand growth; and a change in the pricing climate due to the accommodation of price and cost increases to ward off fears of deflation. These are not necessarily short-term influences and may well influence the scope for inflation to fall back in the medium term.

However, probably the most important reason why the simple “output gap” model of inflation has not been operating as predicted is the influence of the international economy on UK inflation. And in the transmission of global inflationary pressures to the UK economy, changes in the sterling exchange rate play a key role.

As the *Inflation Report* makes clear, the upward pressure of demand from the global economy – and its impact on the price of oil, other commodities and other globally traded manufactured goods – has been a major influence on UK inflation over the past year. However, this should not be a surprise as it is not a new phenomenon. I have argued in speeches and articles throughout my time on the MPC that the UK is a very international economy and global influences are a major issue for the course of demand and inflation in the British economy. To quote from my speech to the European Policy Forum just last month:

*“The UK economy is sufficiently open to international influences that our inflation outlook can never be purely a product of domestic factors. Properly taking into account the influence of the international economy is the key to the art of successful management of UK monetary policy.”*

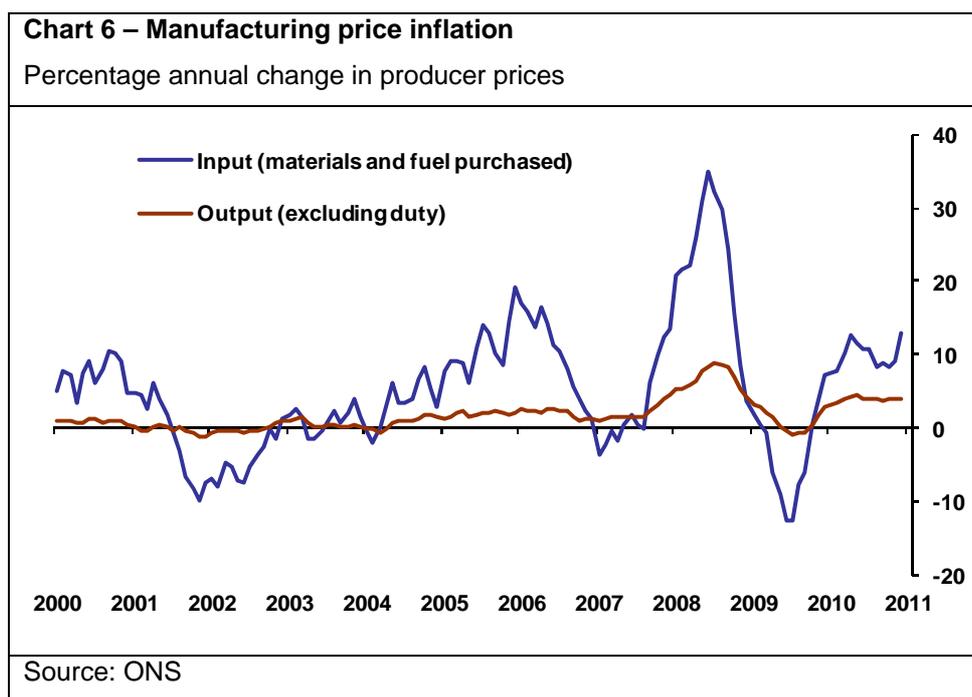


In that speech, I set out a framework which I first outlined in 2007, highlighting the main ways in which the global economy can affect UK inflation, and how monetary policy can stabilise our inflation rate in the face of

these influences. Chart 5 summarises the key elements of this analysis, and it is set out in more detail in last month's speech, which is available on the Bank's website.<sup>5</sup>

Inflationary pressure in the UK is influenced by the world economy, not just through one-off shocks, but through the way in which global demand, the path of import prices and the pricing climate for key international sectors of the economy affect the medium-term path of inflation. From the mid-1990s until the mid-2000s, these global influences were generally in a disinflationary direction and this allowed the MPC to allow services inflation to run at the higher level I drew attention to earlier, without threatening the inflation target. But since the mid-2000s, global prices have been rising sharply, particularly in oil and commodity markets – and global growth has been relatively strong.

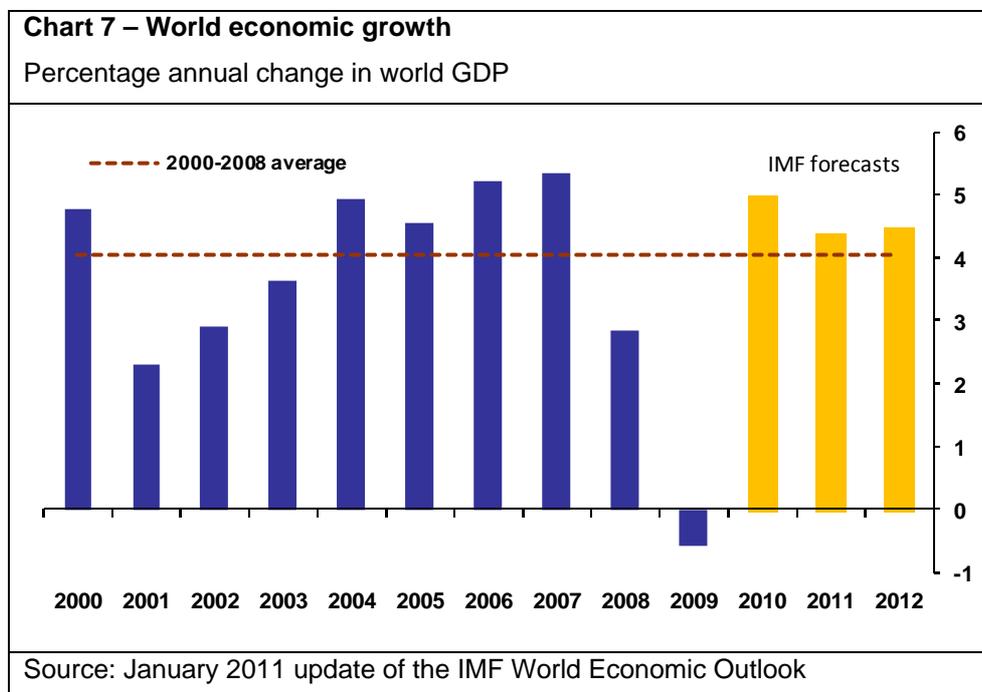
As I pointed out at the beginning of this speech, we enjoyed a brief respite from high UK inflation in the period of weak global demand in 2009 in the immediate aftermath of the global financial crisis. But now normal business is resumed. The oil price is back over \$100/barrel, and UK import prices are once again rising sharply. Manufacturing input prices are rising at double digit levels and factory gate prices are rising at nearly 4% per annum, as Chart 6 shows.



As the latest *Inflation Report* makes clear, the MPC has conditioned its forecasts on the basis that this surge in global inflation will quickly subside. This seems to me most unlikely. A key driver behind the upward pressure on prices in global markets has been strong global economic growth, particularly driven by Asia and other emerging markets. About six months ago, there were concerns that global growth may have been

<sup>5</sup> See Sentance (2011) and Sentance (2007) for the earlier exposition.

faltering, with the US economy in a soft patch and some evidence of slowing in Asia. But more recent indicators have been much more positive. Forecasts of future global growth are now being revised up again, with projections of US economic growth in particular being updated.



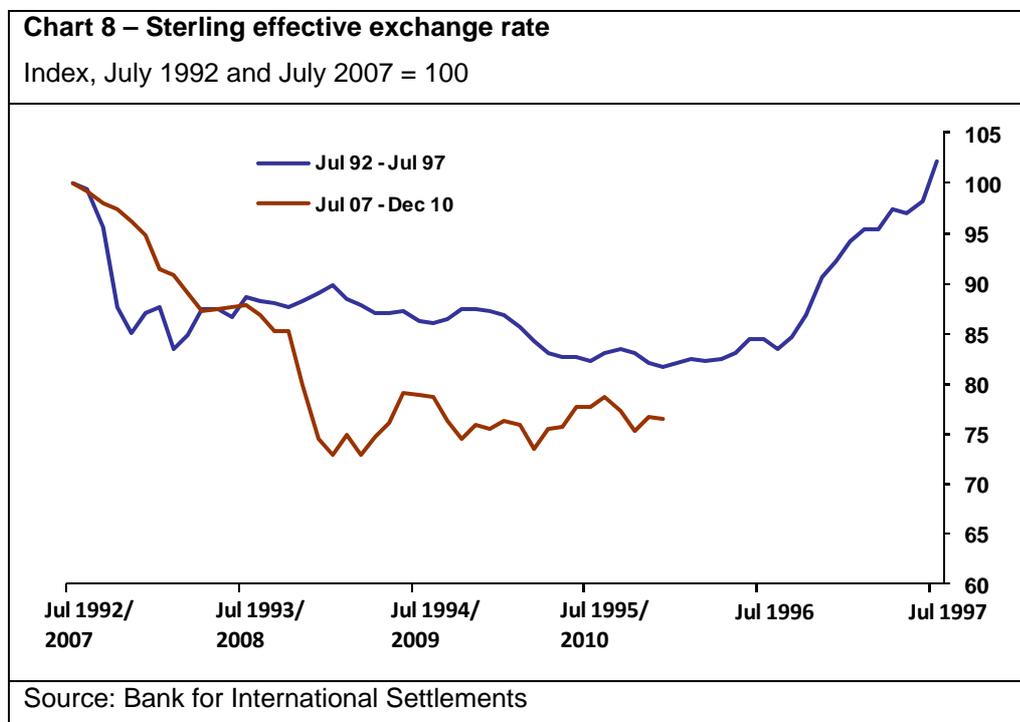
In its recent forecast update, the IMF has updated both its estimate of growth for 2010 and its forecast for 2011. Global growth for 2012 is forecast to be 4.5%, the third consecutive year of growth of over 4% in this recovery phase. As Chart 7 shows, global growth averaged 4% between 2000 and 2008. World economic growth is now back to the levels we saw from 2004 to 2007, which created sustained upward pressure on world energy and commodity prices and relatively strong price rises for manufactures and other traded goods. If strong global growth continues into 2012, as the IMF and other forecasters suggest, global inflationary pressures look set to continue and with them above-target UK inflation.

### UK Monetary Policy and Sterling

The first line of defence for the UK against global inflationary pressures is the value of the pound. The value of sterling can help dampen the impact of imported inflation, as the experience of the Bundesbank in combating the impact of global inflation in the mid-1970s showed. A relatively strong or an appreciating currency can provide a windbreak against an inflationary gale blowing in from the world economy. In the face of the current wave of global inflationary pressures, some other very open economies – such as Singapore – are now seeking to engineer an appreciation of the external value of their currencies as a protection against the impact of imported inflation and strong global demand.<sup>6</sup>

<sup>6</sup> Since the beginning of 2010, the Singapore dollar has appreciated against the US dollar by 8.75%.

The UK is not such a small and open economy as Singapore. But we are a much more open economy than the United States or the euro area. As such, the external value of the pound should have a significant weighting in our assessment of monetary conditions.<sup>7</sup>



Unfortunately, instead of operating as a windbreak for inflationary pressures, the decline in the external value of sterling has reinforced the upward shift in inflation from global price pressures over the past few years. As Chart 8 shows, since the middle of 2007, the sterling effective exchange rate (the value of the pound against a trade-weighted basket of currencies, of which the euro is by far the most significant component) has dropped in value by around a quarter. This is a much bigger fall in the external value of the pound than we saw in the early 1990s, following the departure of sterling from the Exchange Rate Mechanism. Also, that reduction in the value of the pound in the early 1990s was reversed after around five years, which helped to keep a check on inflationary pressures in the late 1990s. There is not much sign that sterling is now about to appreciate significantly to help protect the UK economy from the current wave of global inflationary pressures.<sup>8</sup>

<sup>7</sup> Monetary Conditions Indices (MCIs) estimated for the UK normally have a significant exchange rate weighting. For example, the various UK MCIs surveyed in Batini and Turnbull (2000), have an average exchange rate weight of 22%.

<sup>8</sup> The 1996/97 revaluation of sterling was, however, not widely expected either.

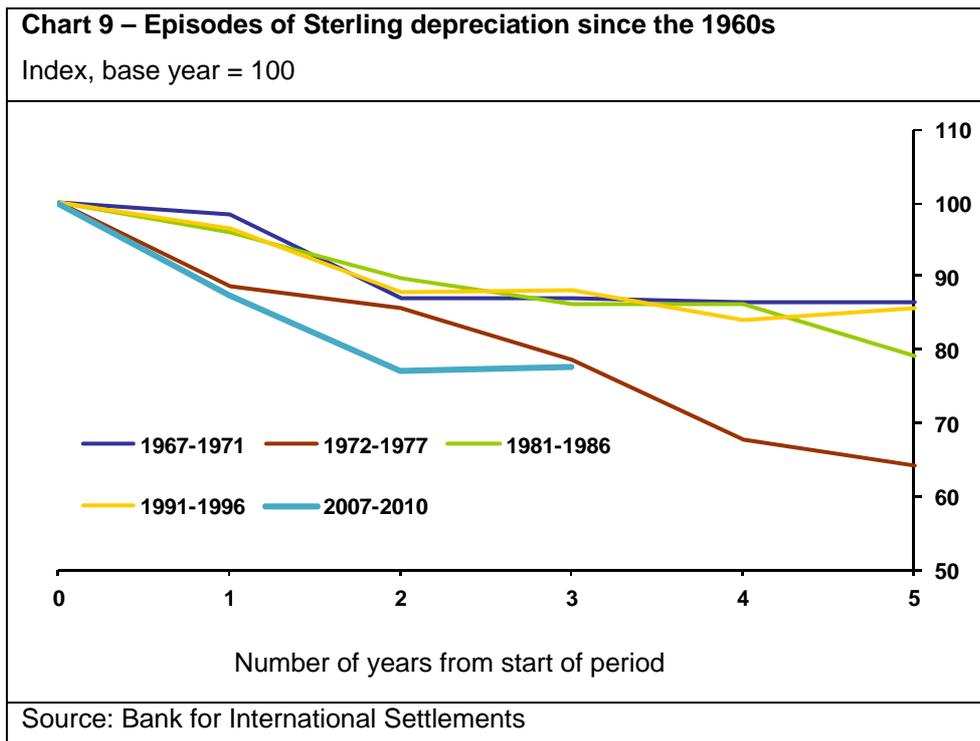


Chart 9 shows the large episodes of sterling depreciation that we have seen over the past fifty years. It shows that the fall in sterling since 2007 is certainly the biggest decline over a 2-3 year period that we have seen over the past fifty years. Indeed, the recent fall in the external value of the pound between 2007 and 2009 is probably the largest depreciation we have experienced in a relatively short period over the past two centuries – with the exception of the departure from the Gold Standard in the early 1930s.<sup>9</sup>

Some part of this decline in the exchange rate is clearly helpful in terms of rebalancing the economy, by providing manufacturers and other businesses trading on international markets with a competitive advantage. But in the wake of the inflationary pressures we are currently experiencing from the global economy, there must be a concern that we have let the pound fall much further than this rebalancing requires. In the 1990s rebalancing, when inflation was kept successfully in check as the economy rebalanced, the adjustment in the exchange rate was around 15%, not 25%. Similarly, when the pound corrected in the mid-1980s from its petrocurrency status, the adjustment was much smaller than we have seen since 2007. Indeed, it is perhaps a worry that the only broadly comparable decline in the pound we have seen over half a decade or so since the 1960s was in the period 1972-77, which was associated with a period of very poor UK inflation performance. While we are a long way from the double-digit inflation rates of that period, the weakness of sterling may still help to reinforce a cycle of rising inflation, as it did in the mid-1970s.

<sup>9</sup> Based on nominal effective exchange rate data from Dimsdale et al (2010), the biggest sterling depreciation over a two year period since 1847 is 24.5%, which occurred in 1932. This compares to the 22.3% depreciation over a two year period in the current episode. Though there was a large depreciation against the dollar in 1949, the move against a broader basket of currencies was not as large as this. Data supplied by Jim Lothian (see Lothian and Taylor, 1996), corroborates this result and confirms that there was no larger depreciation as far back as 1803.

## Monetary policy implications

The UK economy is not sufficiently small and open to overseas trade that we need to make the exchange rate the sole anchor of our monetary policy. That approach did not work well in the late 1980s and early 1990s and we have generally done a much better job of managing the UK economy under our current inflation target framework than when the exchange rate was the centrepiece of monetary policy twenty to twenty-five years ago. But nor can we treat the movement in the sterling exchange rate as a factor which is independent of UK monetary policy. The exchange rate is one of the key channels through which monetary policy can affect the course of the UK economy and our inflation rate.

The pound fell sharply in 2008 and early 2009 when the predominant worry was the negative impact of weak global demand and global deflation on the UK economy. In these circumstances, there was little reason to worry about the inflationary consequences of the decline in the pound. But the persistence of such a large depreciation and the change in the global climate has significantly shifted the balance of risks. We now find ourselves in a different world – one of relatively strong global demand and global inflationary pressures. In my view, these upward pressures on global demand and prices are not about to abate quickly and are one of the key reasons why I would expect UK inflation in the medium-term to be higher than the latest *Inflation Report* forecast suggests.

As I have argued since last summer, we face a very different balance of risks to inflation in the medium-term from the one we faced in the spring and summer of 2009 when interest rates were cut to 0.5% and the MPC injected £200bn of money into the economy through our programme of Quantitative Easing. Last July, I borrowed a film and album title from Led Zeppelin to highlight my message. For Led Zeppelin, the “Song Remains the Same” as they were playing their classic album tracks like “Stairway to Heaven” around the world in the mid-1970s and when the band reformed at the O2 Arena just over three years ago. But last summer, I argued that the monetary policy song should not remain the same if the global and domestic economy were playing a different tune.

Another classic album from that golden era of rock music and economic turmoil is “Selling England by the Pound”, released in 1973 by Genesis. If we are to avoid “selling England by the pound” in the sphere of monetary policy, we need to ensure that a weak or declining currency is not aggravating imported price pressures and destabilising the path of inflation over the medium term. We could be relaxed about that risk when global demand was so weak in late 2008 and 2009 and energy and commodity prices were falling. We cannot afford to be so relaxed now, against the background of strong and sustained global inflationary pressure – particularly given the historically large recent decline in the value of sterling.

The value of the pound on the foreign exchanges therefore needs to be one of the key areas of focus for the MPC as we seek to steer ourselves out of the current phase of high inflation. And one of the benefits which we might see from a policy of raising interest rates is a modest appreciation of sterling, which would mitigate

the impact of global inflationary pressures in the short term and help to steer inflation back to target over the medium term. By raising interest rates sooner rather than later to help offset global inflationary pressures, the MPC can help reassure the financial markets and the great British public that we remain true to our inflation target remit and are not intent on “Selling England by the Pound”!

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