BANK OF ENGLAND

Speech

Stability, Instability and Monetary Policy

Speech given by

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To Members of South London Business

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Speeches by MPC members are frequently given on our travels away from London, which is a good way to stress our role of responding to conditions in the whole country. However, it is also vital to ensure we have enough contact with the London business community – so thank you for providing this opportunity. It also gives me the chance to comment on the strength and diversity of the London business community; while 40% of London's GDP came from the finance and business services sector in 2006, I am always surprised to be reminded that London also produces 10% of the UK's manufacturing output (80% of this being in firms employing fewer than ten people).

The financial sector of course is however where the present UK recession started, and for the UK as a whole we are now towards the end of what is pretty clearly going to be a second quarter in which national output falls very sharply. Although the latest CIPS/Markit business surveys suggested new orders at least had picked up a little, overall these and other business surveys remain at very weak levels. In the second part of my remarks this evening, I will discuss the present situation and how monetary policy is playing its role, alongside other measures, in building the conditions for recovery.

But first I want to discuss what I believe to be one of the factors which contributed to the present economic crisis, and in doing so address a question which business people often raised during the more tranquil years of the MPC. I should stress at the outset that this is intended as an account of only one of the factors which have led us into the present crisis.

UK real interest rates – a historical perspective

Following the significant appreciation in sterling's effective exchange rate in 1996/97, many UK exporters became concerned about the loss of the competitiveness which they had enjoyed in the period after sterling's departure from the European Exchange Rate Mechanism in autumn 1992. In the early years of the MPC, a frequent concern expressed by our business contacts was that interest rates in the UK were too high relative to our competitors (especially in the euro area), and that this both raised firms' costs and kept the exchange rate strong. As time went on, concerns about the

exchange rate were less often voiced, but the question of the UK's relatively high interest rates continued to be raised.

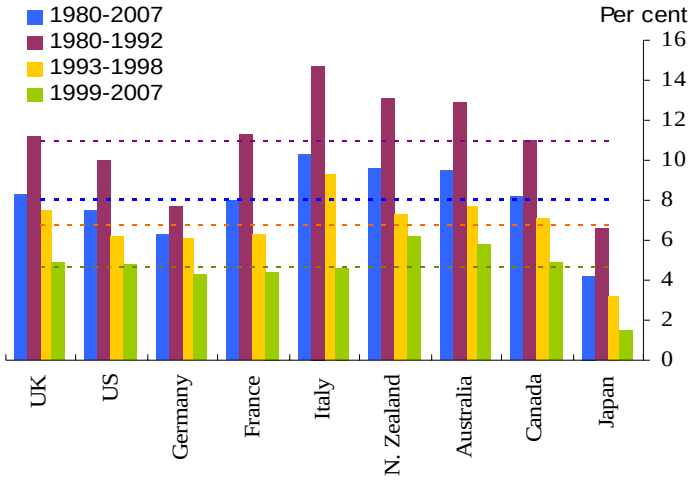
Of course, in the more turbulent conditions today, this is no longer top of anyone's worry list – indeed it is low interest rates for savers, which I will talk about later, that are of concern. Indeed, more generally looking back it is now usually to argue that interest rates globally were too low. But this exercise focuses on relative interest rates and their potential role in the UK's imbalances.

The general response to this concern is that UK policy rates are set to meet the UK's inflation target, and that the comparison with other countries is only relevant insofar as it affects the likely path for the exchange rate and so the rate of imported inflation. Certainly as far as the MPC period is concerned, the general proposition that the UK policy rate has been set 'too high' can be countered readily by pointing to the success on average in meeting the inflation target, rather than undershooting it. This broad picture holds despite the recent increased volatility of inflation. But if this had been achieved with short-term policy rates systematically higher than in other comparable countries, there would then be a puzzle about why the UK needed higher rates to keep inflation close to target.

What are the facts with regard to the UK's interest rates, relative to elsewhere? Looking back at the period before the current financial turmoil, Charts 1 and 2 show ten-year bond rates, both nominal and real, across a number of major economies for various periods since 1980. The big picture is that nominal bond rates have tended to decline over time since the 1980s, whereas real bond rates remained high through much of the 1990s[1]. For the UK, nominal rates were very close to the overall average in all of these periods, but real rates over recent years have been a little higher.

[1] The measurement of real rates is far from straightforward, since it requires a proxy for inflation expectations. Here, the calculation uses the ex-post CPI over the year after the bond was issued.

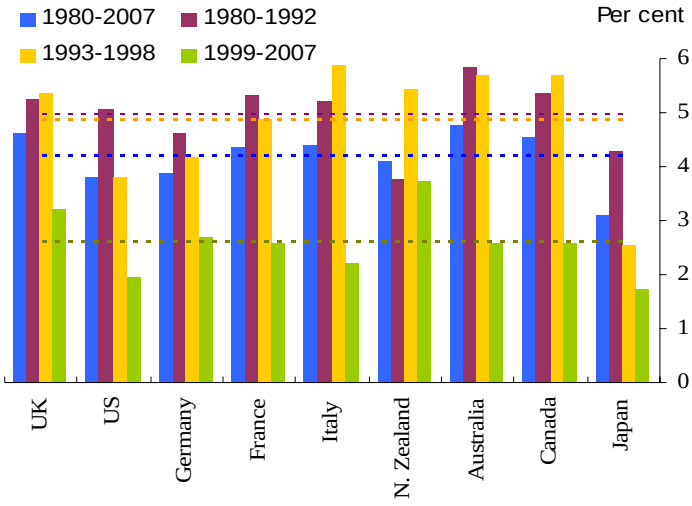
Chart 1: Long-term nominal interest rates[(a)]



Sources: Global Financial Database and Bank calculations.

(a) 10 year government bond. Dashed lines cross-country averages.

Chart 2: Long-term real interest rates[(a)]



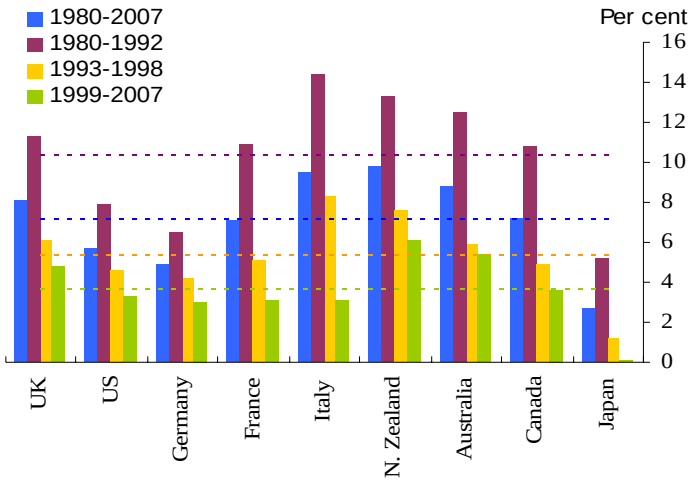
Sources: Global Financial Database, Thomson DataStream and Bank calculations.

(a) 10 year government bond. Real rates are ex-post calculated using annual CPI inflation in the year after the bond was issued. Dashed lines cross-country averages.

Looking at short-term interest rates for these countries (Charts 3 and 4), the same pattern of nominal rates generally falling across the time periods is observed, a trend perhaps accounted for in part by the high level of Asian savings. UK nominal rates have in fact been close to the (simple) average in all three time periods. However, they have been a little above rates in both the US and most other major EU

economies. The UK's real short-term rates on the other hand have been persistently above the average, and notably so in the most recent period[2]. In addition, they have been considerably above the real rates observed in both the US and in the euro area countries included, and this is presumably what gave rise to some business concerns during the MPC's first decade.

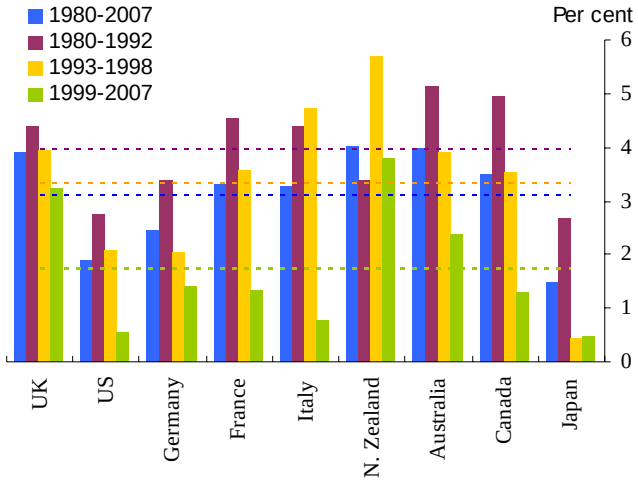
Chart 3: Short-term nominal interest rates[(a)]



Sources: Global Financial Database and Bank calculations.

(a) 3 Month Treasury bills. Dashed lines cross-country averages.

Chart 4: Short-term real interest rates[(a)]



Cross-country interest rate differentials

[2] The real rate is calculated using data on the three-month Treasury Bill, subtracting CPI inflation over the duration of the bond as a proxy for inflation expectations

The underlying drivers of real interest rates are not well understood overall; indeed Alan Greenspan famously described the fall in real long-term rates in the mid-2000s as a conundrum[3]. In theory, once real expected changes in exchange rates have been allowed for, risk-free long-term real interest rates should be equalised across countries (as if they were not, then capital would flow to the country where interest rates were higher until real rates were equalised). There may of course be risk premia in long-term real rates – for example arising from concerns about fiscal sustainability.

A further potential source of differences between countries comes from barriers to capital mobility – such as legal and taxation differences. These have generally been lessened in the recent past, and there has been some convergence in real bond yields, although this is also likely to reflect greater convergence in economic performance.

Long-term rates are a function of the sequence of expected short-term rates, together with a risk premium to reflect the fact that lending for longer periods is generally judged to be inherently more risky. Clearly the same considerations apply to short-term interest rates – namely that the real short-term rate, would be expected to be the same across countries, once allowance has been made for expected changes in real exchange rates.

These adjustments in real exchange rates are important, as they will tend to compensate for changes in the economic outlook (for example, an improvement in the relative growth rate) or for the fact that relative CPIs only imperfectly reflect the appropriate inflation differentials for cross-country comparisons.

It is therefore exchange rate adjustments which bridge the apparent gap between this approach to interest rates, which considers the international perspective, and the way in which we normally talk about interest rates, in which policymakers describe their activity as adjusting the short-term interest rate around the neutral[4] interest rate in response to changes in the estimated output gap and movements in expected inflation. So before any conclusion can be reached about whether there is any remaining puzzle

[3] Greenspan (2005)
[4] The neutral rate is defined as the rate consistent with stable inflation when the economy is growing at trend.

in the UK's recent interest rate history, some simple modelling needs to be undertaken to control for expectations of real exchange rate movements, and thereby ensure that it is not simply differences in growth prospects or price indices which give rise to any apparent puzzles in relative interest rates. In looking at this, the sample of countries considered was expanded to 18 developed countries, and a 'world interest rate' was calculated, over the period from mid-1985 to mid-2008, using a simple average of the short-term interest rate from these countries.[5] Prior to any allowance for exchange rate expectations, the UK was found to be among a number of countries whose short-term interest rates were significantly above this average.

A proxy for expectations of real exchange rate changes[6] was able to explain some of the variation in real interest rates across countries. However, there remained unexplained persistent deviations in a number of countries[7], including the UK (where short-term real rates were above the average) and the US (below the average).

The remaining unexplained differences would generally be attributed to risk or liquidity premia. So it is worth considering what might be expected to affect these. One plausible factor with regard to liquidity premia is whether or not a country's currency acts as a reserve currency, because of the size and security of its financial markets. It is not surprising, particularly in the light of the strong use by Asian countries of the US as a home for their excess savings, that controlling for this factor[8] helped explain why the US was below the global average throughout the period. But it could not explain why UK rates were relatively high.

Being a reserve currency is not the only factor likely to contribute to any risk premium. An additional consideration, which seems relevant both to the explanation of the UK's recent economic history, and to challenges for economic policy

[5] An alternative approach using principal component analysis to calculate the world interest rate did not change the conclusion

[6] The proxy was calculated under the assumption that past values of economic variables are used to form expectations about future real exchange rate movements – there may have been some temporary distortions around the ERM period.

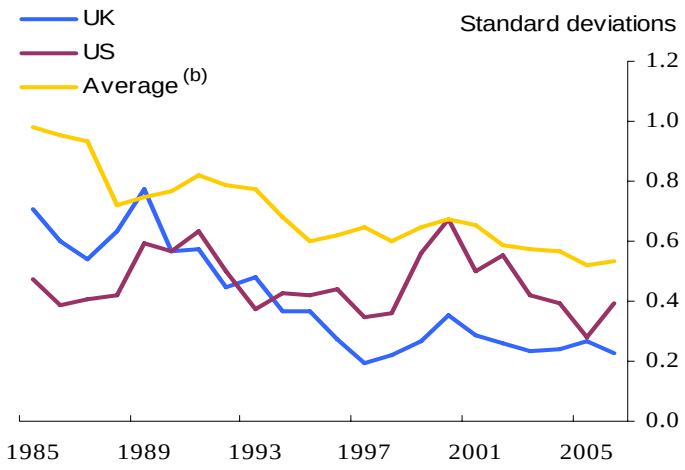
[7] The analysis reported in the next few paragraphs is the preliminary outcome from work carried out using panel data techniques. A forthcoming MPC Unit discussion paper by Groth and Zampolli will discuss this in more detail

[8] A fairly restrictive definition of a reserve currency was used – the US throughout the period, Germany (to 1999) and the Euro (post-1999).

management in the future, is economic volatility. In a country where economic conditions are relatively volatile, there would also tend to be a higher rate of savings, as consumers are more concerned to build up financial buffers against periods of unemployment. This higher rate of savings would tend to reduce the equilibrium real interest rate[9], as the risk premia on foreign assets means they are not a complete substitute for domestic assets. Conversely, a less volatile economy would tend to have a higher real interest rate.

To investigate whether relative economic volatility can play a role in explaining interest rate differentials, a three year rolling average measure of volatility in quarterly output growth was calculated.[10] Chart 5 shows this measure of volatility for the UK, the US and the 18 country average from 1985 to the start of the credit crisis. This indicates there was a decline in economic volatility in the UK up to the mid-1990s, and also that the UK was relatively stable over the period.

Chart 5: Volatility of GDP growth[(a)]



Sources: Global Financial Database and Bank calculations.

(a) 3 year rolling average of standard deviation of quarterly GDP growth.
(b) The average includes UK, US, Australia, Belgium, Canada, Denmark, France, Germany, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, and Switzerland.

[9] De Paoli and Sondergaard (2009, forthcoming) model the theoretical link between real interest rate differentials across countries, and relative economic volatility, through the latter's impact on the risk premium.
[10] The variable was calculated as the three-year rolling average of the standard deviation of quarterly GDP growth. Alternatives based on a five-year rolling average, or using household consumption instead of GDP, were also estimated – and found to produce very similar results.

Incorporating this measure of volatility into the investigation of cross-country real interest rate differentials, it was found that of the 18 developed countries studied, only three now showed any unexplained persistent deviation from the world real rate, Japan and Switzerland (whose rates were below the world rate) and New Zealand (whose rate was above the world rate).

This exercise concludes that it is true that over the past twenty years real UK interest rates tended to be a little higher, on average, than those prevailing in competitor countries, even when exchange rate changes have been allowed for. One plausible explanation for this difference is the relative economic stability of the UK, which depressed domestic saving, at the same time as it pushed up the risk premia and so real interest rates, and attracted flows of funding from aboard. In that sense, the long period of economic growth post-1992, generally thought of as benign, may have contributed to the increase in UK debt levels and higher interest rates.

The present global crisis is of course affecting almost all economies, and may in part have its roots in a period of low global interest rates. But the period of relative stability may have contributed to the UK now facing a situation in which the economy needs to adjust to less foreign borrowing and a reduction in the current account deficit, constraining domestic demand.

Current situation

This brings me to a consideration of the present economic situation, and how the MPC alongside the Government, is responding. Already, it seems very likely that the loss of output in this recession will exceed that of the early 1990s, but comparisons with previous recent recessions may not be terribly helpful. This downturn is different in a number of respects: the striking synchronicity of the weakness in the global economy which emerged last autumn; the severe impairment of much of the world's financial system; and the fact that rather than being produced by the need to fight high inflation, it has led to worries about deflation. As the financial crisis intensified last autumn, strong global trade and financial linkages seem to have combined with greater flexibility of labour and product markets than in the other post-1970 recessions to bring about a very sharp decline in world output growth and trade.

When recovery comes, however, these same factors could result in a quite sharp pick up in growth, at least initially.

It is clear that governments as well as central banks remain focused on tackling this crisis with a range of policies aimed both at supporting the overall economic position of their economies and at tackling the specific problems in the banking sector which are holding back the supply of credit. In addition the fall in the oil price is a beneficial factor, and for the UK the substantial depreciation of sterling (now well over 25% since its most recent peak in July 2007) will support the substitution of domestic production for imports as well as boosting exports when the global economy recovers. As the MPC commented in the February Inflation Report, this all adds up to a powerful stimulus.

Nevertheless, in February the MPC's forecast for growth was very gloomy and in the *Inflation Report* we indicated that the risk was of an even worse outcome. The projections then implied that the UK economy faced a period of a significant degree of spare capacity. Inflation pressures therefore would be strongly downward, even after allowing for the impact of lower sterling pushing up on import prices, leaving CPI below its 2% target.

Some UK economic news over the past month, while far from positive, has at least been a little less bleak. The main business surveys have remained fairly stable, there have been tentative signs of a little more activity in the housing market (although house prices have fallen further) and retail sales appear to be holding up better than I had expected. In addition, the first breakdown of GDP in the fourth quarter of 2008 suggested that there had already been a considerable reduction in stock levels in the UK, accounting for almost 0.9 percentage points of the 1.5% fall in GDP. If this early estimate proves reliable, then as destocking is likely to tail off this should support output growth later this year. However, industrial production fell by more than expected in January, and the labour market remains very weak, with employment falling by 45,000 in the fourth quarter of 2008.

And the financial markets have seen renewed uncertainty – with equity prices in the UK down around 12% since early February, including larger falls for the financial

sector. Latest data on the global economy have also been very downbeat, particularly for some Asian economies – including a 10% fall in January for Japanese industrial production. The negative impact of the crisis on the financial situation of much of Central and Eastern Europe has intensified. So on balance, the economic outlook has deteriorated further over the past month.

Policy response

Although the effects of the significant reduction in Bank Rate since last October have yet to be fully felt, it is very likely, in view of the outlook described above, that this monetary policy stimulus would fall well short of being sufficient to support the economy, reduce the risks of a prolonged deflation, and bring inflation back to target. For me, this conclusion was strengthened by the belief that, while the low level of Bank Rate will continue to stimulate the economy, it seemed all too likely that as Bank Rate has moved to historically low levels the impact of cuts has become successively reduced.

One reason for this is the possible change in the behaviour of savers in this historically unprecedented situation. Some recent commentary may have exaggerated the plight of savers. With CPI inflation expected to move down towards 1%, from a peak of 5.2% in September, Bank Rate has fallen less in real terms than in nominal. However, many savers will not perceive this fully today, as they will be comparing interest rates to the present CPI of 3%, rather than to the expected further fall in inflation. (Inflation on the RPI basis is already much lower at 0.1%, but this has been driven primarily by falls in mortgage rates and house prices, less likely to be factors which are beneficial for older savers).

In addition, it is possible that some savers will suffer from a form of money illusion, and be reluctant to run down their money savings significantly enough to maintain their spending levels (even though at higher inflation rates, a saver spending all of their interest income was effectively reducing the real value of their savings). The very rapid decline in the Bank Rate itself may have increased a sense of uncertainty among savers. Since one of the channels through which changes in the Bank Rate affect the economy operates because savers are usually less responsive to changes in their income than are borrowers, this suggests that the power of interest rate

reductions may be reduced when nominal rates are cut so far over such a short time period.

And there is a further factor, which is the response of the financial institutions. Since it is very difficult to pay savers negative interest rates, the last few interest rate cuts have not been passed on fully to savers or borrowers. While this has enabled banks and building societies to retain a margin between saving and borrowing rates, it has also lessened the impact of Bank Rate cuts. For some mortgage lenders with a large stock of tracker mortgages, lower interest rates have increasingly squeezed their margins, potentially reducing their ability to increase lending in the future.

For these reasons, although there would still be aspects of the normal transmission mechanism of monetary policy still in operation (especially through the exchange rate, and through support for asset prices), I believed there was a much increased risk of a perverse impact from cutting interest rates to 0.5%. However, the big picture was that even if the 0.5 percentage point cut had had the more usual full impact, this would have been an inadequate response to the prospective weakness of the real economy and the consequent danger of inflation remaining below target. A change in monetary policy tool was clearly required, which focuses on the quantity rather than the price of money. And as part of this overall strategy, it was appropriate to take Bank Rate closer to zero, to prevent too much of a gap opening up between Bank Rate and the overnight money market rate, as the latter may drift toward zero as quantitative easing gets underway. This could have encouraged the banks to accumulate reserves, remunerated at Bank Rate, rather than increasing lending.

I strongly support the move to quantitative easing, and consider that once this became necessary, it was important to act in a decisive manner. Although the timing of the impact on the economy remains uncertain, there are a range of potential effects which I will be looking at closely over the coming months to gauge the impact of the MPC's actions. These will include a flattening of the yield curve in the part of the gilts market where purchases will take place, a reduction in the spreads on corporate bonds directly to the extent that these are also purchased, and a positive impact on a range of asset prices as the sellers of gilts and corporate assets to the Bank find they need to readjust their portfolios away from their higher cash holdings. Importantly, to the

extent that the banks themselves gain higher money holdings, then there should also be a benefit as this will be further support for increased lending growth. (It will not, however, be easy to assess how far any improvement in lending conditions is due to our action, or to other recent Government steps.)

While the scale and timing of these various impacts is uncertain, quantitative easing should bring about a pick up from the present weakness in nominal spending, supporting economic activity. Concerns about inflation expectations falling too far should also be eased, and together these factors should push CPI inflation back towards the 2% target, after a period below target in the near term.

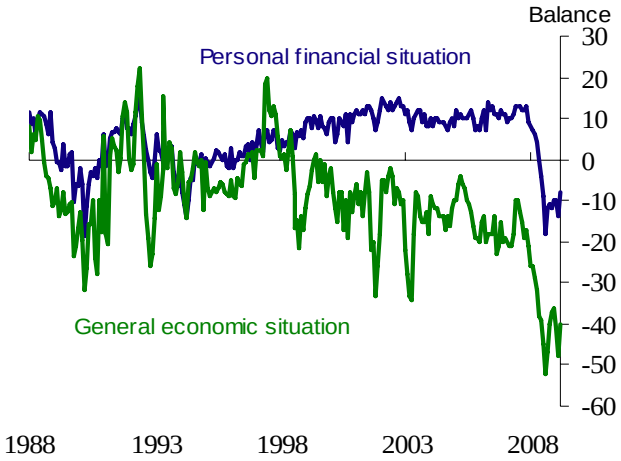
Conclusion

In the first part of this speech, I examined the question of how far it was true that UK real short-term rates were relatively high during the period (compared with the generally low level of global rates) since inflation targeting began post-1992. It was concluded that even allowing for the impact of expected real movements in exchange rates, UK rates were on average a little higher than the average for other developed countries. In part, this could be explained by the UK's relative economic stability, which reduced precautionary savings and through a higher risk premia on UK assets increased real interest rates as funding needed to be attracted from abroad.

In a speech in 2005[11], I discussed the fact that macroeconomic volatility had not led to greater stability for firms' individual performance. However, for individuals an economy which overall grew quite steadily and added to jobs (numbers in employment rose by an average of 1.0% per year between 1993 and 2007, and the unemployment rate fell from 10.4% to 5.4% over the same period), meant that firm volatility did not result in household insecurity. Chart 6 indicates that since the mid-1990s, households have been relatively positive about their own financial position, even when they have been more concerned about the economy overall.

[11] This was discussed more thoroughly in Parker (2006).

Chart 6: Indicators of consumer confidence [(a)]



Source: GfK NOP

(a) The GfK survey asks respondents how they expect their personal financial situation and the general economic situation to evolve over next 12 months.

Economic stability may encourage greater risk-taking, but the policy conclusion can hardly be that we should aim to avoid periods of economic stability in the future. Many challenges for policymakers are emerging from the present economic turmoil. In the future, there may well be efforts to devise measures to manage the overall growth of credit, and to ensure financial institutions take on less overall risk than in the immediate past. But it is not entirely easy to devise sound policies to prevent individual households from taking on more risk during stable periods, due to their misperceptions of the long-term outlook. The implication may therefore be that the public sector would also need to move to a stronger financial position in times of stability than appears justified just in terms of the public finances – in order that it can provide support to the private sector when the inevitable economic shocks occur.

Today however the economic problems are those of instability, and the UK is in much more troubled waters. The evidence over the last month was of more pronounced weakness in the global economy, and of fragility in the financial markets. This suggested that the downside risks to growth, and therefore to inflation, identified in the February *Inflation Report* were in danger of crystallising. I believe that the MPC's significant move to increase the money supply will help to support the economy through this difficult period, and that it is the best course in order to achieve

our objective of keeping inflation to target in the medium term. Of course, I recognise that at some point this stimulus may need to be unwound, possibly rapidly, to avoid an overshooting of inflation – and remain equally committed to acting as necessary to prevent this.

I am aware, however, that very low Bank Rate has adverse effects both for savers, and for some financial institutions. While it is not unusual for changes in Bank Rate to have differential impacts throughout the economy, the recent significant reductions may mean that at present these differences are unusually marked. But in reaching our decision last week, the MPC had to weigh these adverse effects against the potential costs of inaction in terms of lower growth, an even sharper rise in unemployment and the risk of deflation. This should eventually benefit all parts of the economy, including savers.

In continuing to take steps to move the economy back towards growth I am aware that it will not be easy to boost confidence, particularly as over the next few months unemployment, which reached 6.3% at the end of 2008, is likely to rise further. But in showing determination to stick to our job of keeping inflation at target I consider this should provide reassurance that, alongside other policymakers, the MPC is working to limit the social and economic costs of the recession.

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