Charles Bean: The UK economy after the crisis – monetary policy when it is not so NICE

Speech by Mr Charles Bean, Deputy Governor for Monetary Policy at the Bank of England, to Alumni of Cambridge University, London, 16 March 2010.

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Good evening! Tonight I want to talk about what the future might hold for the British economy and draw a few lessons from the recent crisis for the conduct of monetary policy. As you will no doubt recall, the Bank was given the operational responsibility for setting interest rates in 1997 by the incoming Labour government. In retrospect, the Monetary Policy Committee's first decade can be seen to have been part of a golden era of steady growth and low and stable inflation, which began in 1992 after the exit from the Exchange Rate Mechanism and the subsequent adoption of the inflation target (Chart 1). Economists refer to this period of benign macroeconomic outturns – which was not confined to the United Kingdom – as the "Great Moderation", though the Governor has somewhat more colourfully referred to it as the NICE (for Non-Inflationary Consistently Expansionary) decade.

Well, it is pretty clear that the NICE decade has come to an end, with a financial crisis unparalleled in almost a century in its severity and reach, together with the sharpest and deepest downturn in global activity experienced in the post-war period. Peak to trough, output fell just over 6% in the United Kingdom, almost 4% in the United States, nearly 7% in Germany and more than 8% in Japan. And in the eight months following the collapse of Lehman Brothers, world trade collapsed by almost a fifth, a figure completely unmatched in peace time.

Governments and central banks around the world responded by providing substantial support to their banking systems, relaxing fiscal policy, slashing official interest rates and, in some cases, introducing unorthodox monetary measures. This succeeded in avoiding the worst of the immediate downside risks to activity and employment. China and some other emerging economies have subsequently rebounded strongly, and during the second half of last year, we saw growth resume, albeit at a moderate pace, in most of the advanced economies. It appears to have taken a little longer for expansion to return here but, according to the current vintage of official data, output rose 0.3% in the final quarter of 2009. Production and trade are likely to have been adversely affected by the inclement weather in January, but business surveys suggest that a similar rate of expansion will occur in the first quarter of this year.

While a return to growth is certainly good news, it is clear that we still have a very long way to go before recovery from the Great Recession of 2008–9 is complete. A large margin of underutilised resources in the economy remains and it will take time before these are returned to active use. How quickly that happens depends on the strength and durability of the recovery. Some of the turnaround in growth here and elsewhere is mechanical in nature, driven by a reduction in the rate at which businesses are running down their inventories. But as far as the strength of the recovery over the medium term goes, one needs to look at the underlying forces driving the demand for UK goods and services. On this score, there are both reasons to be fearful and reasons to be cheerful.

The reasons to be fearful are several. First, the banking system here and elsewhere is still dealing with the legacy of decisions taken before the crisis. The process of balance sheet repair has some way to run and that is likely to continue to restrain the supply of credit. Moreover, a key feature of the run-in to the crisis was an underestimation of risk and an excessive compression of risk premia. We should not expect premia to return to where they were before the crisis broke. The spreads on lending to businesses and households, particularly riskier prospects, will be higher in the future than before the crisis.

BIS Review 31/2010 1

Second, the housing boom has resulted in some households, especially younger ones, carrying forward high levels of debt. Although the burden of servicing these debts is currently manageable because of the low level of mortgage interest rates, concerns about future servicing costs as interest rates normalise may lead the high stock of outstanding debt to weigh on these households' spending. The possibility of unemployment may also encourage saving, though happily unemployment has so far risen by less than many observers, including the Monetary Policy Committee, feared. The relative robustness of employment, given the depth of the decline in output, owes something to the willingness of employees to accept low pay awards in the face of the downturn. Last year over a third of private sector pay settlements were pay freezes, and a recent survey of their business contacts carried out by the Bank's regional Agents points to a similar outcome this year (Chart 2).

Third, the Government allowed the fiscal deficit to rise in response to the downturn. That was helpful in cushioning the fall in demand. But the deficit now looks set to be around 12% of GDP this year, which is unsustainable in the medium term. That creates a difficult balancing act. Cutting spending and/or raising taxes is likely to result in lower domestic demand, though a failure to do so may lead long-term interest rates to rise, also hitting demand. The recent depreciation of sterling appears to owe something to heightened fears about the UK's fiscal prospects. Fortunately, all political parties recognise the need to put in place a credible plan for the consolidation of the public finances over the medium term, even if their preferred routes to doing so differ.

Finally, question marks remain about the durability of the recovery in the rest of the world and particularly in the UK's main export markets. Some of the advanced economies face headwinds similar to those facing the United Kingdom. The fate of the euro area, the destination of more than half our exports, is particularly important. The recovery there all but stalled in the fourth quarter and business surveys point to only moderate growth in the first part of this year. Moreover, Greece and some other euro-area countries face significant fiscal challenges. The necessary fiscal consolidations are likely to depress overall euro-area demand unless offset by demand expansion elsewhere.

But as I noted, there are also reasons to be cheerful. Two factors in particular should provide a boost to the demand for UK goods and services. First, there is a substantial policy stimulus still working through the economy. Bank Rate remains at a historical low of 0.5%, while the Bank has bought some £200 billion of assets, mainly gilts, financed by the issuance of central bank reserves (think of these as Bank of England IOUs that are held by the commercial banks) – so-called "quantitative easing". Even though we have called a pause in our asset purchase programme, the effects of past purchases will continue to work through the economy for some time to come. The aim of quantitative easing is to boost the supply of money, push up a wide range of asset prices and facilitate finance through the capital markets, thus raising nominal demand in the economy.

How well is quantitative easing working? Chart 3 shows, for the two days following each successive announcement about the scale of the asset purchase programme, the movements in: average gilt yields; the expected average level of Bank Rate over the same maturity (from Overnight Indexed Swap rates); and the spread between them¹. That suggests gilt yields are lower as a result of the programme by a total of around one percentage point. Moreover, since the programme began, investment-grade corporate bond yields have fallen by almost four percentage points, equity prices have recouped half their

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The impact is measured by the change over two days in the average 5 to 25 year (zero coupon) gilt spot rate. The event dates are the publication of the February 2009 *Inflation Report* and the associated press conference, which was taken to suggest a policy of quantitative easing was imminent; the decision at the March MPC meeting to use the Asset Purchase Facility as a monetary policy tool for initial asset purchases of £75bn; and the subsequent extensions of planned purchases to £125bn in May, to £175bn in August and to £200bn in November.

losses and capital market issuance has been unusually strong. Finally, nominal demand growth recovered to an annualised rate of around 4% in the second half of last year. Although we cannot be sure what would have happened without our asset purchases, these movements do at least go in the expected direction².

Some commentators have pointed to the weakness in bank lending and argued that this shows that quantitative easing has not worked. While the substantial increase in bank deposits and bank reserves as a result of the asset purchase programme could indeed encourage banks to extend more credit, such an effect was always likely to be quite weak, as at the current juncture banks are seeking to repair their balance sheets and to de-leverage. Rather, the objective of quantitative easing is to work around an impaired banking system by stimulating activity in the capital markets.

Of course, some businesses, especially small and medium-sized enterprises, will not find it possible to access funds through the capital markets. But the right response is then to get the banks back into a position to lend normally as soon as possible. The array of measures introduced by the Government to support the banking system – injections of new capital, insurance against losses on toxic assets, guarantees on bank debt – plus the Bank's Special Liquidity Scheme, which allows banks to swap illiquid mortgage-backed securities for liquid treasury bills, have all been aimed at that objective.

The second reason to be hopeful lies in the substantial depreciation of the sterling effective exchange rate, which has fallen by around a quarter since the middle of 2007. Prior to that, the MPC had already drawn attention to the need to re-balance the economy away from domestic spending towards net exports and so reduce the UK's current account deficit. A real depreciation, boosting the competitive position of UK producers in both domestic and overseas markets, is part of the mechanism to bring such a rebalancing about. And an increase in net exports will, of course, help to fill the hole made by the crisis-induced reduction in private and, potentially, public spending.

Unfortunately, there is little sign so far of a significant impact of the depreciation on the volumes of exports and imports, which have moved broadly in line with the movements in overall demand abroad and at home respectively (see Charts 4 and 5). Moreover, commentators have noted that exporters have responded to the depreciation by expanding their profit margins rather than cutting their foreign currency prices in order to boost market share. Does this mean that the depreciation will prove ineffective at boosting demand? I do not think that would be the right conclusion. Experience after previous large depreciations, such as following sterling's exit from the Exchange Rate Mechanism in 1992, suggests that it is normal for the initial impact to be seen mainly in expanded profit margins and only after some while does one see an impact on market shares. One reason for that may be that expansion in overseas markets requires some investment and businesses are likely to be cautious about making that expenditure until they are sure the improvement in profitability will be maintained. For that reason, I expect to see the contribution from net exports gradually building as the global recovery proceeds.

The path of the recovery will be determined by the balance between these two sets of forces. Our central expectation, as laid out in our February *Inflation Report*, is for four-quarter GDP growth to gradually strengthen as the year proceeds (Chart 6). But the quarterly path is sure to be uneven and there remains a risk of setbacks. And even if things turn out well, it is likely to be a considerable time before the substantial margin of underutilised resources in the economy developed in the downturn is whittled away (Chart 7).

BIS Review 31/2010 3

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For more analysis of the impact of quantitative easing, see: David Miles, "Interpreting Monetary Policy", speech at Imperial College Business School, London, 25 February 2010; and Spencer Dale, "QE One Year On", speech at CIMF/MMF Conference, Cambridge, 12 March 2010.

That brings me naturally to inflation, the MPC's mandated target. One might expect that, after such a sharp downturn, inflation would have dropped back. Indeed, inflation had fallen as low as 1.1% last September. Since then, it has moved up sharply, reaching 3.5% in January and triggering an open letter of explanation from the Governor to the Chancellor. That volatility in inflation can be explained in terms of a variety of factors impacting on the price level: the restoration of the standard rate of VAT to 17.5%; recent movements in the oil price and a year earlier; and the pass-through into consumer prices of the higher import prices associated with the depreciation in sterling. When setting monetary policy, the MPC looks through effects that can be expected to affect inflation only transitorily, to the underlying determinants of inflation in the medium term: inflation expectations; and the margin of slack in the economy.

Despite recent volatility in actual inflation, inflation expectations, according to a variety of measures, have remained stable and reasonably well anchored at levels consistent with the target. There is, however, considerable uncertainty about the extent of the downward pressure on inflation from economic slack. With output some 10% lower than it would have been if pre-crisis growth rates had been maintained, it would appear that the margin of spare capacity ought to be large. But the evidence from past sharp downturns after banking crises is that they can have a significant impact on the economy's supply potential (Chart 8). Downturns typically lead to less investment, more capital scrapping, fewer business start-ups and more business closures and a restriction in the availability of credit is likely to aggravate these effects. Moreover, lower employment can lead to skills atrophying and the long-term unemployed becoming disconnected from the labour market.

Business investment has fallen sharply in this recession – down more than a quarter from its peak – though only part of that is likely to reflect a restriction in the availability of credit. Heightened uncertainty is also likely to have played a part. But against that, both business closures and, as noted earlier, unemployment have risen less than feared. So the overall impact of the downturn on the present and future supply potential of the economy is rather uncertain.

In addition, in present circumstances the extent of the downward pressure on inflation from spare capacity is also uncertain. Once one allows for the effect of transient factors such as the restoration of the VAT rate, oil price movements and the likely impact of sterling's depreciation, underlying inflation has been surprisingly resilient. That could be because the impairment of effective supply as a result of the credit crunch is large. Or it could be that the spare capacity is exerting little downward pressure, because businesses with limited access to credit are unwilling to run the risk of reducing their cash flow by cutting prices in order to boost market share. Moreover, even though pay growth has been muted, unit wage costs have nevertheless risen quite sharply because businesses have held onto skilled labour through the recession, rather than lay it off. So the firmness in underlying prices may just be the flipside of the better-than-expected labour market outturns.

Despite these uncertainties, it seems likely that the margin of spare capacity will be sufficient to pull inflation back towards the 2% target from its present elevated level, as the near-term effects of the restoration in VAT and sterling's past depreciation work through. Our latest projections, contained in the February *Inflation Report*, are shown in Chart 9. The risks of inflation being above or below the target are roughly balanced by the end of the forecast horizon.

It should, I hope, be clear from my remarks that, although a recovery of sorts may have commenced, there are still considerable doubts about its strength and durability and about the accompanying path of inflation. The road ahead is likely to be bumpy and there is still the risk of further adverse shocks. All we can do on the Monetary Policy Committee is stand ready to react to those risks if and when they crystallise, either resuming asset purchases if further stimulation is required, or tightening policy through Bank Rate increases and ultimately asset sales.

Let me now step back from the UK's immediate economic prospects, to ask what recent experience has taught us about the broader monetary policy framework. After such a cataclysmic economic event, people have unsurprisingly questioned whether inflation targeting is the right regime or whether it needs to be modified or even abandoned. A variety of changes have been mooted.

First, some commentators have suggested that the focus on inflation is misplaced at the current juncture, when surely the aim ought to be to get output up and unemployment down; at the very least the Committee's objective ought to include a measure of activity, as, for instance, in the US Federal Reserve's "dual" mandate. In my view, this criticism is misplaced as the Chancellor's remit to the MPC already incorporates a subsidiary objective to support the Government's aims with respect to growth and employment, providing that it does not jeopardise meeting the inflation target.

When the economy experiences a contraction in demand, as in the wake of the collapse of Lehman Brothers, other things equal, inflation tends to fall. The objectives of maintaining full employment and stabilising inflation are therefore aligned, and there is no inconsistency in these circumstances between boosting growth and meeting the inflation target.

Things are more complicated when an adverse supply shock occurs, such as the sharp rise in oil prices that we saw during the first half of 2008. That tends to lower output at the same time as it raises inflation, so there is a tension between maintaining high growth and meeting the inflation target. But under the present regime, the MPC has "constrained discretion" to look through the inflationary impact of such a shock, provided it is temporary. What the regime does not permit is for such a shock to be accommodated in a persistently higher rate of inflation. That is what happened in the Seventies and I do not think we want to go back there.

The essential point that critics of the current set-up need to bear in mind is that an adverse supply shock will always leave the policy maker with a difficult judgement, as the appropriate monetary policy response depends on the extent to which it is likely to lead to compensating increases in wages and other prices. Changing the objective does not alter that basic dilemma, but compensating increases in wages and other prices will be less likely if people already expect inflation to remain low and stable.

Finally, as was illustrated in Chart 1, the inflation targeting period was, until the past two years, also a period of unusually steady growth. So, from a practical perspective, there was no obvious conflict between stabilising inflation and stabilising output.

A second suggested change to the framework has come recently from the IMF. While not questioning the basic framework, they suggest³ that inflation targeting central banks should aim to hit a rather higher inflation rate of around 4%, so as to give more room to cut official interest rates in the face of a collapse in demand before they hit their natural floor of zero. Thus, during the years leading up to the crisis, Bank Rate averaged around 4½%–5% and inflation averaged around 2%, so the real interest rate averaged 2½%–3%. If instead, inflation had been averaging 4% and Bank Rate 6½%–7%, i.e. the same real interest rate as before, then we would have been able to lower Bank Rate by another two percentage points before it approached its lower limit.

The thinking behind this seems entirely reasonable. But, aside from ignoring the fact that monetary policy, in the shape of asset purchases⁴, can still be effective even when the policy rate reaches zero, it underplays the costs of higher inflation. Inflation at 2% or less is

BIS Review 31/2010 5

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Olivier Blanchard, Giovanni Dell'Ariccia and Paolo Mauro, "Rethinking Macroeconomic Policy", International Monetary Fund, January 2010.

⁴ As well as more exotic options; see Willem Buiter, "Don't Raise the Inflation Target, Remove the Zero Bound on Nominal Interest Rates Instead", Citibank , 5 March 2010.

generally felt to be low enough that businesses and households do not have to consciously plan for rising prices – it is "close enough" to price stability, in other words. While 4% may not sound much higher than 2%, the difference is large enough that people would have to consciously take account of inflation in their decision making. Moreover, it is unexpected movements in inflation that are particularly costly and capricious in their impact, and there is a well documented empirical relationship between the level and the volatility of inflation (see, for instance, Chart 10). There is a risk that even a modest increase in the target, such as the IMF advocates, would lead to a corresponding increase in inflation volatility. Such an increase in the target should not be regarded as costless.

Moreover, it would be particularly dangerous to raise inflation targets at this juncture, as one should expect nominal interest rates to rise roughly in line. Even if expected long-term real interest rates were thus unchanged, the fall in bond prices would lower wealth and worsen the already-impaired balance sheets of financial institutions. So raising the inflation target represents a risky way of providing more room for manoeuvre in the face of a once-in-acentury financial crisis, whose potential repetition is any case best prevented through other means, as I will explain below.

A more potent challenge to the regime comes from the charge that, while the inflation-targeting regime may have delivered the goods during the Great Moderation, it singularly failed to prevent the build-up of the financial imbalances which are now unwinding so painfully. Indeed, an even stronger version of this argument is that the very success of the regime contributed to the decline in market participants' perception of risk and encouraged them in the leveraged acquisition of risky assets. According to this view, the MPC ought to put independent weight on credit and asset price developments and should have kept policy tighter during the years leading up to the crisis. That would have generated an undershoot of the inflation target in the near term but reduced the likelihood of a disruptive unwinding of the financial imbalances further out.

The first point to make is that interest rates affect the whole economy through a variety of channels. Raising Bank Rate in order to curb a credit boom would be fine if that credit boom was also associated with excessive demand growth and overheating in the real economy. But that, by and large, was not the case during the years leading up to the financial crisis. Raising interest rates enough to have had a material impact on the credit boom would most likely have resulted in an even higher value of sterling, markedly weaker activity and higher unemployment. Would businessmen, households and Parliament have accepted this as a price worth paying to bring down credit growth with the hope of forestalling a hypothetical future financial crisis? I suspect the answer to this would be No, even though equipped with 20/20 hindsight we might take a different view. The fact is that policy has to be made in ignorance of how the future will turn out, and one has to weigh certain near-term costs against uncertain longer-term gains.

Moreover, it seems unlikely that higher interest rates in this country alone would have prevented us experiencing a severe recession. Events in the United States would have proceeded in much the same way, regardless of what the MPC chose to do. And, as we have seen, the downturn has been global in nature, not confined to those economies with overblown financial or housing markets.

Would it have helped if our target variable had, say, included a measure of asset prices, particularly house prices? There is certainly a good case for including a measure of owner-occupied housing costs in any consumer price measure, as for many households it represents their largest single expenditure. And, depending on the measure used, that could have resulted in higher inflation figures during the years leading up to the crisis. That does not, however, translate directly into a higher level of Bank Rate. Monetary policy affects inflation with a long and somewhat variable lag and there is little the MPC can do to offset unanticipated movements in near-term inflation. Instead, we have to look at inflation prospects two or three years ahead. But it is in the nature of asset prices, including house

prices, that one can say rather little about their likely direction of movement that far ahead. Most of the time, the best projection of asset prices at that horizon is for them to be broadly flat. Consequently, I suspect that our policy choices would not have been radically different had we been tasked with targeting an inflation measure that included a measure of owner-occupied housing costs.

Finally, there is something of a logical error in moving from the indubitably correct observation that successful inflation targeting is insufficient to guarantee either macroeconomic stability or financial stability to the conclusion that monetary policy should in addition, or instead, be focussed on some other objective. There is a real danger in overburdening monetary policy if it is expected to achieve both price stability and financial stability simultaneously. With two objectives, one needs two independent means of achieving them. The assignment of instruments to targets then revolves around which instrument is most effective at achieving which objective.

Though loose monetary policy, particularly in the United States during 2001–5, arguably contributed to the build-up of the financial imbalances, it was but one of many causes, including a plethora of failings within financial institutions. These include: inadequate care in the extension of loans to risky individuals, when those loans are then sold on; the inappropriate use of off-balance-sheet vehicles to circumvent capital requirements; reward packages that encouraged an undue focus on short-term returns; excessive complexity and opacity in some asset-backed securities; and distorted incentives facing ratings agencies.

Although regulators and supervisors conspicuously failed to address these issues during the run-up to the crisis, prudential regulation and supervision should surely be the first line of defence, as they can be focussed directly on the source of the problem. Regulatory policies have a comparative advantage in combating excesses in financial markets. By contrast, inflation is, in the long run, a monetary phenomenon, so it is more naturally suited to the pursuit of price stability.

Beefing up the regulatory regime so it is better suited to preventing the re-emergence of financial excesses is very much work in progress. There are sound arguments for forcing banks to build up more capital and reserves during the good times, which they can then draw down if things turn bad, so improving the general robustness of the system – so-called "macro-prudential regulation". Under instruction from the G20, the Financial Stability Board, together with the Basel Committee on Banking Supervision, is therefore developing an appropriate set of cyclically-varying regulatory requirements on financial institutions⁵, together with a range of other changes to improve the stability of the global financial system.

Of course, no regulatory regime will be perfect, and financial institutions have an incentive to try to circumvent requirements that they perceive as onerous. So there may be times when monetary policy will need to work alongside regulatory policy in order to restrain excessive credit and asset price growth, even though the achievement of the inflation target may not immediately appear threatened. But, in my view, that is best facilitated by retaining the clarity of the present remit, rather than muddying the waters by introducing another objective for monetary policy. The onus would then lie with the Monetary Policy Committee to explain that it was permitting a temporary deviation from the inflation target so as to reduce the likelihood of future financial disruption and improve its chances of meeting the inflation target further ahead.

The past two and a half years have certainly been tumultuous for both the economy and for policy makers. After such an event, we should certainly examine how the overall policy-making framework should be re-made in order to reduce the chance of a repetition. But we

BIS Review 31/2010 7

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⁵ "The Role of Macroprudential Policy", Bank of England, November 2009 provides an outline of some of the Bank's thinking in this area.

should be careful not to throw the baby out with the bathwater. The inflation targeting framework served the real economy well for a decade and a half before the financial crisis. In addressing the shortcomings in the overall policy framework revealed by the crisis, we should be careful not to discard those parts that functioned satisfactorily. Thank you.

Chart 1 150 Years of output and inflation volatility 10-year standard deviations of GDP and RPI

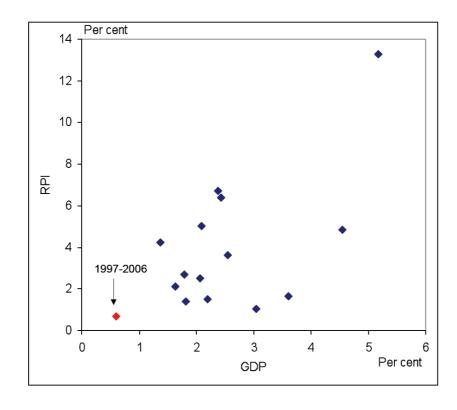
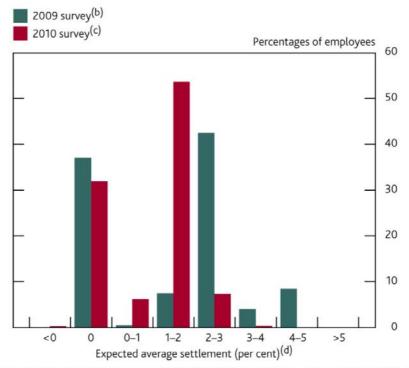
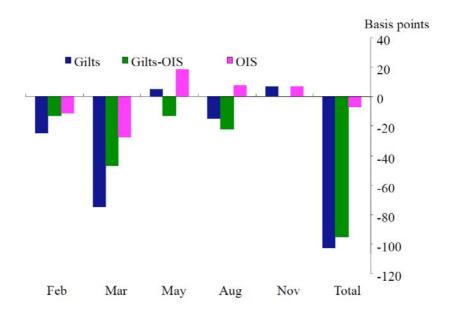


Chart 2 Agents' survey: expected average pay settlement(a)



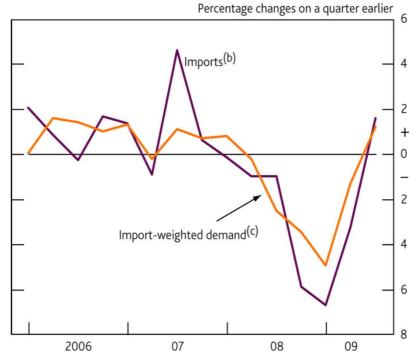
- (a) The 2010 survey asked respondents: "What is your average pay settlement likely to be in 2010?". The 2009 survey asked the same question for settlements in 2009. Responses are weighted by respondents' number of employees.
 (b) Based on 272 responses (covering about 550,000 employees) to a survey of companies by the Bank of England's regional Agents in December 2008 and January 2009.
 (c) Based on 262 responses (covering about 550,000 employees) to a survey of companies by the Bank of England's regional Agents in January 2010.
 (d) A settlement that is a round number is classified within the bucket where that round number is the upper bound. For example, a 2% settlement is included within the 1%–2% bucket.

Chart 3 Impact of asset purchases on gilt yields and spreads Effect over two days following QE announcements



The impact is measured by the change over two days in the average 5 to 25 year (zero coupon) spot rate. The event dates are the publication of the February Initiation Report and the associated press conference, which was taken to suggest a policy of quantitative easing was imminent, the decision at the March MPC meeting to use the Asset Purchase Facility as a monetary policy tool for initial asset purchases of £75bn, and the subsequent extensions of planned purchases to £125bn in May, to £175bn in August and to £200bn in November.

Chart 4 Imports and import-weighted demand(a)



Sources: ONS and Bank calculations

(a) Chained-volume measures.

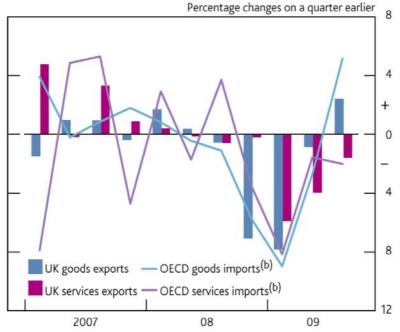
(a) Chain-de-Volume Theasures (b) Excluding the estimated impact of MTIC fraud.

(b) Excluding the estimated impact of MTIC fraud.

(c) Import-weighted demand is calculated by weighting household consumption (including non-profit institutions serving households), whole-economy investment (excluding valuables), government spending, stockbuilding (excluding the alignment adjustment) and exports by their respective import intensities.

The import intensities are estimated using the 1995 ONS Input-Output Analytical Tables.

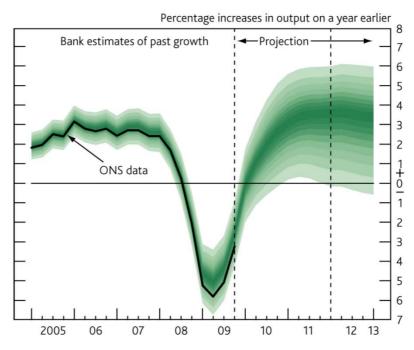
Chart 5 OECD imports and UK exports(a)



Sources: OECD and ONS.

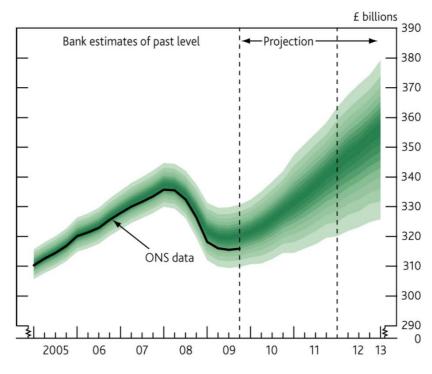
⁽a) Volume measures.
(b) Contains data for all 30 OECD countries, converted from national currencies into US dollars. Services imports are calculated as the difference between total imports and goods imports.

Chart 6 GDP growth projection based on market interest rate expectations and £200 billion asset purchases



Source : February 2010 Inflation Report

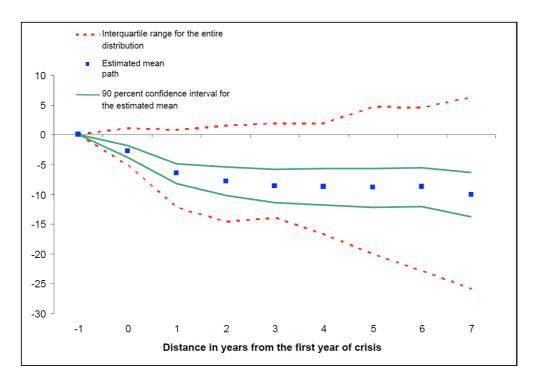
Chart 7 Projection of level of GDP based on market interest rate expectations and £200 billion asset purchases



Source : February 2010 Inflation Report

BIS Review 31/2010 11

Chart 8 Output per capita after banking crises



Source: IMF World Economic Outlook, October 2009

Chart 9 CPI inflation projection based on market interest rate expectations and £200 billion asset purchases

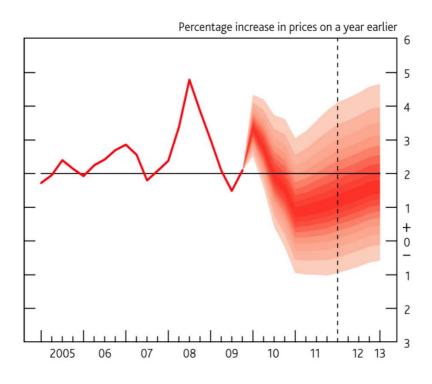


Chart 10 150 years of inflation and inflation volatility 10-year averages and standard deviations of RPI

