

# Inflation Report

November 2008



BANK OF ENGLAND







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In order to maintain price stability, the Government has set the Bank's Monetary Policy Committee (MPC) a target for the annual inflation rate of the Consumer Prices Index of 2%. Subject to that, the MPC is also required to support the Government's objective of maintaining high and stable growth and employment.

The *Inflation Report* is produced quarterly by Bank staff under the guidance of the members of the Monetary Policy Committee. It serves two purposes. First, its preparation provides a comprehensive and forward-looking framework for discussion among MPC members as an aid to our decision making. Second, its publication allows us to share our thinking and explain the reasons for our decisions to those whom they affect.

Although not every member will agree with every assumption on which our projections are based, the fan charts represent the MPC's best collective judgement about the most likely paths for inflation and output, and the uncertainties surrounding those central projections.

This *Report* has been prepared and published by the Bank of England in accordance with section 18 of the Bank of England Act 1998.

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The Overview of this *Inflation Report* is available on the Bank's website at [www.bankofengland.co.uk/publications/inflationreport/infrep.htm](http://www.bankofengland.co.uk/publications/inflationreport/infrep.htm).

The entire *Report* is available in PDF at [www.bankofengland.co.uk/publications/inflationreport/2008.htm](http://www.bankofengland.co.uk/publications/inflationreport/2008.htm).

PowerPoint™ versions of the charts in this *Report* and the data underlying most of the charts are provided at [www.bankofengland.co.uk/publications/inflationreport/2008.htm](http://www.bankofengland.co.uk/publications/inflationreport/2008.htm).



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# Overview

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There has been a marked deterioration in the outlook for domestic and global economic activity. Instability in banking and financial markets intensified to levels not seen for almost a century. And, in the United Kingdom, official estimates of GDP growth, business surveys and reports from the Bank's regional Agents all weakened sharply. The economy probably entered recession in the second half of 2008 and output is likely to contract further. Consumer spending faltered in the second quarter under the weight of tighter credit and the squeeze on household budgets. Residential investment continued to fall rapidly and prospects for business investment weakened. Under the assumption that Bank Rate follows a path implied by market yields prevailing prior to the Committee's November decision, the MPC's central projection is for output to continue to fall in the early part of the forecast, followed by a gradual recovery.

CPI inflation rose to 5.2% in September. Sterling depreciated further, placing renewed upwards pressure on import prices. Even so, the near-term outlook for inflation improved significantly in the wake of sharp falls in commodity prices. Measures of household inflation expectations fell back and earnings growth remained contained. In the central projection, inflation slows sharply in the near term, as the contributions from energy and food prices decline. Further out, inflation falls well below the 2% target, reflecting a larger margin of spare capacity and the waning impact on import prices from the lower level of sterling. The prospects for economic growth and inflation are judged to be unusually uncertain.

## Financial markets

The global banking system experienced its most severe instability since the outbreak of World War I. Against a backdrop of a weakening economic outlook and increased aversion to risk, the process of financial sector consolidation and balance sheet adjustment became increasingly disorderly. Concerns about banks' solvency and strains in global money markets reached unprecedented levels. On 8 October, the UK authorities announced a comprehensive package to address the weaknesses in UK banks' balance sheets. Similar initiatives were announced by a number of other countries. Early indications suggest that these actions have helped to dissipate some of the concerns about possible bank failures.

The turmoil was accompanied by exceptional volatility in financial markets. In the period since the *August Report*, share prices fell by around a quarter in the advanced economies and by even more in many emerging markets. Sterling depreciated sharply, by some 6% for the effective exchange rate and by rather more against the dollar. And financial market participants revised down materially their expected path of

policy rates in the advanced economies. Several central banks reduced official interest rates substantially. In the United Kingdom, the Monetary Policy Committee (MPC) lowered Bank Rate by 0.5 percentage points in October, as part of a co-ordinated action with six other central banks, and by a further 1.5 percentage points in November.

## Domestic demand

The outlook for domestic demand deteriorated markedly amid a substantial tightening in the supply of money and credit. Household spending fell slightly in Q2 and indicators pointed to further contraction in the third quarter. Part of that weakening reflected the continued squeeze on households' purchasing power from past increases in energy and import prices. Although recent falls in commodity prices should alleviate much of that pressure, the boost to households' real incomes will be more than offset by weak employment, as companies shed labour. The conjunction of subdued real income growth, tight credit conditions and lower asset prices constrains consumer spending over the first part of the forecast.

Prospects for investment worsened. Business investment fell in the second quarter, restrained by the weaker, more uncertain outlook for demand and, increasingly, by reduced availability of credit. Weakness in residential and commercial property markets also pushed down on capital formation. Investment intentions dropped sharply.

In line with its usual convention, the Committee's central projection is based on the Government's tax and spending plans in *Budget 2008*, and the subsequent announcements over the summer on tax allowances and fuel duties. But the Government's announced intention to bring forward some planned spending commitments, together with the likelihood that the changing composition of output will lead to a fall in effective tax rates, suggests that the degree of fiscal stimulus may be greater than that assumed in the central projection.

## Overseas trade

The outlook for the world economy deteriorated substantially, as indicators of near-term growth weakened and strains in global financial and banking markets intensified. In the euro area, surveys were consistent with continued softness in economic activity in Q3, following a contraction in the previous quarter. US output declined, as weakness in housing and labour markets persisted. And activity in emerging market economies slowed, as growth in exports to the advanced economies eased back. The lower level of sterling should mitigate the impact of decelerating world demand on UK export volumes. Even so, prospects for exports have weakened significantly since the *August Report* and the

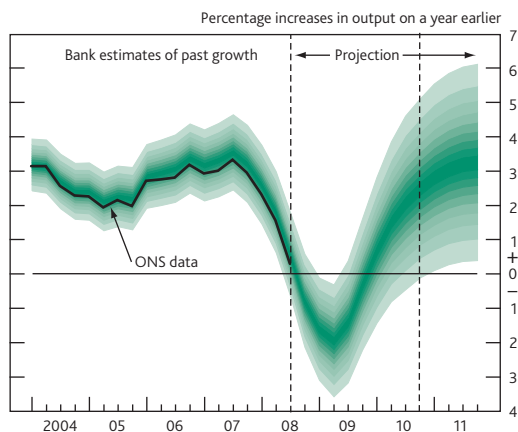


possibility of a larger and more widespread downturn in global demand poses a significant downside risk.

## The outlook for GDP growth

GDP was estimated to have fallen by 0.5% in Q3. Business surveys and reports from the Bank's regional Agents weakened markedly and pointed to a further contraction in output in the fourth quarter.

**Chart 1** GDP projection based on market interest rate expectations



The fan chart depicts the probability of various outcomes for GDP growth. To the left of the first vertical dashed line, the distribution reflects the likelihood of revisions to the data over the past; to the right, it reflects uncertainty over the evolution of GDP growth in the future. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that the mature estimate of GDP would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outcomes are also expected to lie within each pair of the lighter green areas on ten occasions. Consequently, GDP growth is expected to lie somewhere within the entire fan on 90 out of 100 occasions. The bands widen as the time horizon is extended, indicating the increasing uncertainty about outcomes. See the box on page 39 of the November 2007 *Inflation Report* for a fuller description of the fan chart and what it represents. The second dashed line is drawn at the two-year point of the projection.

Chart 1 shows the Committee's best collective judgement for four-quarter GDP growth. This assumes that Bank Rate, following a path implied by market yields prevailing prior to the Committee's November decision, falls from an average of 4% in the fourth quarter of this year to around 2¾% in the second half of next year, before picking back up to around 4% by 2011. In the central projection, a pronounced contraction in domestic demand causes output to fall in the early part of the forecast. The key drivers are a sharp tightening in the supply of money and credit, subdued growth in incomes and past falls in asset prices. However, there are a number of factors acting to stimulate activity over the forecast period: the assumed reductions in Bank Rate; a gradual expansion in credit supply as the effects of the authorities' recapitalisation programme take hold; lower world energy and food prices; the lower level of sterling; and a continued expansion in government spending. As a result, GDP begins to recover in the second half of 2009, rising somewhat above its historical average rate by the end of the forecast horizon. The central projection over the next two years is substantially weaker than in the August *Report*.

## Costs and prices

CPI inflation rose to 5.2% in September, much higher than at the beginning of the year. But the near-term outlook for inflation improved substantially in the wake of sharp falls in commodity prices. These falls, if sustained, will cause the contribution from energy and food prices to decline rapidly. However, the speed with which overall inflation moderates will depend, in part, on the extent to which the lower level of sterling is passed through into higher import prices.

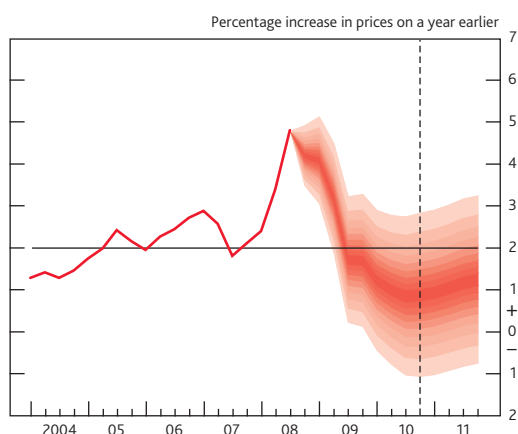
The weaker demand environment should also act to moderate increases in prices and wages. Companies may be forced to absorb a greater proportion of their costs in temporarily lower margins, while the loosening in the labour market is likely to erode the bargaining position of employees. But the impact of the current slowdown on prices and wages will be dampened by weaker growth in the supply potential of the economy. The supply capacity of companies is likely to be hindered by reduced availability of bank finance and trade credit, as well as by the redeployment of capital and labour away from sectors most affected by the downturn. Moreover, as employment

prospects deteriorate, some people may be temporarily discouraged from searching for work.

A key risk highlighted in recent *Reports* has been that the sharp increase in CPI inflation over the past year might cause companies and households to revise up their expectations of future inflation. Most measures of inflation expectations have fallen back in recent months. Given the lower near-term outlook for inflation, the MPC judges that the risk of inflation expectations remaining elevated has diminished.

## The outlook for inflation

**Chart 2** CPI inflation projection based on market interest rate expectations



The fan chart depicts the probability of various outcomes for CPI inflation in the future. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that inflation over the subsequent three years would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outcomes of inflation are also expected to lie within each pair of the lighter red areas on 10 occasions. Consequently, inflation is expected to lie somewhere within the entire fan chart on 90 out of 100 occasions. The bands widen as the time horizon is extended, indicating the increasing uncertainty about outcomes. See the box on pages 48–49 of the May 2002 *Inflation Report* for a fuller description of the fan chart and what it represents. The dashed line is drawn at the two-year point.

**Chart 2** shows the Committee's best collective judgement of the outlook for CPI inflation, assuming that Bank Rate follows a path implied by market yields prevailing prior to the Committee's November decision. In the central projection, inflation falls sharply in the near term, as the contributions from energy and food prices decline. Further out, inflation falls well below the 2% target, reflecting a larger margin of spare capacity and the waning impact on import prices from the lower level of sterling. The central projection is significantly lower than in the August *Report*.

The prospects for economic growth and inflation are judged to be unusually uncertain, reflecting the exceptional economic and financial factors affecting the outlook. The biggest risks to inflation stem from the uncertain depth and persistence of the slowdown in demand. There are also marked uncertainties over: the extent to which the slowdown in demand results in spare capacity despite slowing supply growth, and the degree to which it feeds through into easing price pressures; the prospects for world commodity prices; and the likely scale and pace of pass-through of a lower exchange rate. The risks around the central projections for both GDP growth and inflation shown in **Charts 1** and **2** are broadly balanced. But the heightened level of uncertainty means that the Committee has more confidence in the broad shapes of the fan charts than in the precise calibrations. There is a range of views among the Committee on both the central projection and the balance of risks.

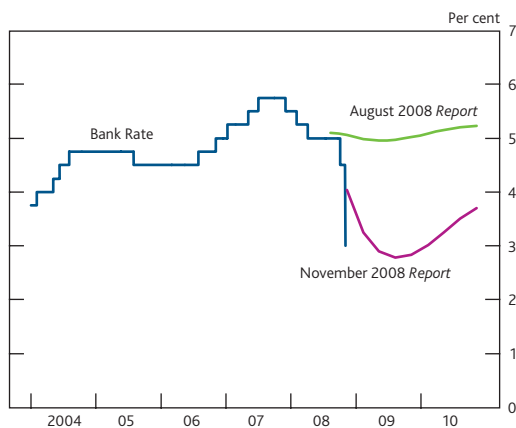
## The policy decision

At its November meeting, the Committee noted that the outlook for inflation had shifted decisively to the downside. The tightening in the supply of money and credit was likely to cause output to contract further. And CPI inflation was set to fall sharply. The risk of inflation materially undershooting the inflation target in the medium term had increased substantially. In the light of that outlook, the Committee judged that a significant reduction in Bank Rate was necessary in order to meet the 2% target for CPI inflation in the medium term, and accordingly lowered Bank Rate by 1.5 percentage points to 3%.

# 1 Money and asset prices

The period since the *August Report* has seen the most serious disruption in the global banking system for almost a century. Against a backdrop of a weakening economic outlook and increased risk aversion, concerns about banks' solvency and strains in global money markets reached unprecedented levels, prompting the introduction of bank support packages by a number of governments and central banks. There was a sharp tightening in the supply of money and credit to households and businesses. Sterling depreciated and equity prices fell substantially across the world. Property prices continued to decline. The MPC cut Bank Rate by a total of 2 percentage points in October and November.

**Chart 1.1** Bank Rate and forward market interest rates<sup>(a)</sup>



Sources: Bank of England and Bloomberg.

(a) The November and August 2008 curves are based on fifteen working day averages to 5 November and 6 August respectively. At short maturities, the curves are based on overnight index swap (OIS) rates. At longer maturities, they are based on instruments that settle on Libor, adjusted for credit risk.

Since the *August Report*, central banks in many countries have cut official interest rates substantially. On 8 October, the Monetary Policy Committee (MPC) reduced Bank Rate by 0.5 percentage points, as part of a co-ordinated action with six other central banks. On 6 November, the MPC reduced Bank Rate by 1.5 percentage points — a significantly larger cut than implied by market yields prior to the meeting (*Chart 1.1*). The reasons behind the Committee's recent policy decisions are summarised in the box on page 10, and in the press notices on pages 50–51.

The period since the *August Report* saw a marked deterioration in the international macroeconomic outlook and acute pressures in the global financial system. That led to growing anxieties about the solvency of financial institutions around the world, with banks finding it increasingly difficult to fund themselves (Section 1.1). Household and corporate credit conditions tightened further (Section 1.2). And there was significant volatility in equity and foreign exchange markets, as asset prices fell substantially across the world (Section 1.3).

Many governments and central banks responded to the threat to the stability of the international financial system by introducing a number of exceptional measures. In the United Kingdom, the authorities announced a system-wide support package on 8 October. Similar initiatives were announced by a number of other countries. These measures, and the events that preceded them, are discussed in more detail in the October 2008 *Financial Stability Report*.<sup>(1)</sup>

## 1.1 Developments in the banking sector

The global credit boom which characterised much of the past decade contributed to the build-up of two key vulnerabilities in

(1) Available at [www.bankofengland.co.uk/publications/fsr/2008/fsrfull0810.pdf](http://www.bankofengland.co.uk/publications/fsr/2008/fsrfull0810.pdf).

## Monetary policy since the August Report

The MPC's central projection in the August *Report*, under the assumption that Bank Rate followed a path implied by market yields, was for output to be broadly flat over the next year or so. The central projection was for CPI inflation to fall to a little below the target in the medium term, but the balance of risks was to the upside.

The Committee had for some time been monitoring two main risks around the outlook for CPI inflation. On the downside, a more pronounced slowdown in demand might pull inflation further below the target in the medium term. On the upside, high inflation outturns might lead to higher inflation expectations, more upward pressure on wages and prices, and hence greater persistence of above-target inflation.

In the month leading up to the Committee's meeting on 3–4 September, conditions in money and credit markets had remained difficult. The sterling effective exchange rate index had fallen sharply, by around 5%. The causes of the fall in sterling, and its likely persistence, were as yet unclear.

The most significant news about the international economy had been the further decline in US dollar oil prices. But over the month, sterling oil prices had been little changed, due to the offsetting impact of the depreciation of sterling against the US dollar. In the United States, Q2 GDP growth had been revised upwards, reflecting a significant contribution from net trade. But growth in the euro area and in Japan had been unexpectedly weak.

In the United Kingdom, output was flat in Q2, and survey indicators of near-term growth suggested that output might contract slightly in the third quarter. There had been further declines in housing transactions and prices, and the unemployment rate had risen.

Annual CPI inflation had risen by 0.6 percentage points in July, to 4.4%. It was expected to rise further, peaking in the autumn at around 5%. But there were some signs that inflationary pressures along the supply chain had eased a little. And the latest surveys provided some reassurance that medium-term inflation expectations had remained anchored. Measures of total pay growth had fallen.

For most Committee members, the medium-term outlook for inflation had not changed significantly, and maintaining Bank Rate at 5% would continue to balance the upside and downside risks to inflation appropriately. But for one member, the prospects for UK demand had clearly worsened, increasing substantially the downside risk to inflation in the medium term.

Given these considerations, eight members of the Committee voted to maintain Bank Rate at 5%. One member preferred a reduction in Bank Rate of 0.5 percentage points.

On 8 October the Governor convened a special meeting of the MPC to discuss a proposal to reduce Bank Rate by 0.5 percentage points as part of an internationally co-ordinated easing in monetary policy.

In the run-up to that meeting, conditions in international money and credit markets had deteriorated very markedly. The price of longer-term funding for banks had risen very sharply and its availability had declined further. A reduced appetite for risk and concerns about the economic slowdown had contributed to sharp increases in corporate bond spreads and falls in UK and global equity prices. Market participants appeared to be pricing in sharp reductions in Bank Rate. On the same morning, the Government had announced a programme for recapitalising a number of major UK banks, guaranteeing new bank debt, and providing extra liquidity to the banking system.

The prospects for demand growth in the United Kingdom's main export markets had deteriorated substantially over the month. In the United States, output measures had weakened further and non-farm payrolls had declined by nearly 160,000. The outlook for activity in the euro area and Japan had also weakened. Weaker global demand prospects, combined with a 3% rise in sterling over the month, suggested that the outlook for net trade had deteriorated.

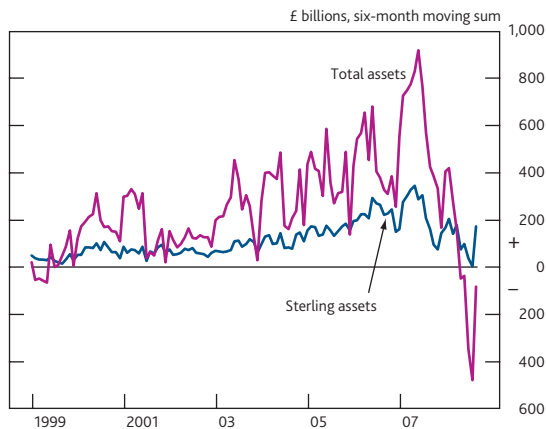
In the United Kingdom, the outlook for activity had weakened markedly. Industrial production had declined by 0.6% in August, and the main business surveys had fallen sharply in September. The weakness in UK output growth was likely to open a margin of spare capacity that would over time bear down on inflation. Broad money growth had continued to slow, consistent with monetary conditions weighing heavily on the growth of money spending.

The labour market had also weakened, and a range of survey-based evidence pointed to increasing slack over the coming months. That made it less likely that cost pressures would feed through into higher wage growth, which had remained subdued.

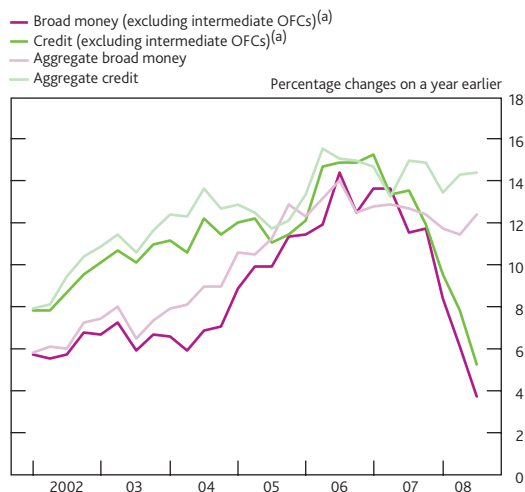
Although CPI inflation had risen further, to 4.7% in August, spot oil prices were about 20% lower on the month in sterling terms, and non-oil commodity prices had also declined. The risk that medium-term inflation expectations would be dislodged upwards had diminished in the light of the weaker outlook for economic activity.

These developments clearly pointed to the need for a relaxation of monetary policy. Against that background, the Committee voted unanimously to reduce Bank Rate by 0.5 percentage points, to 4.5%.

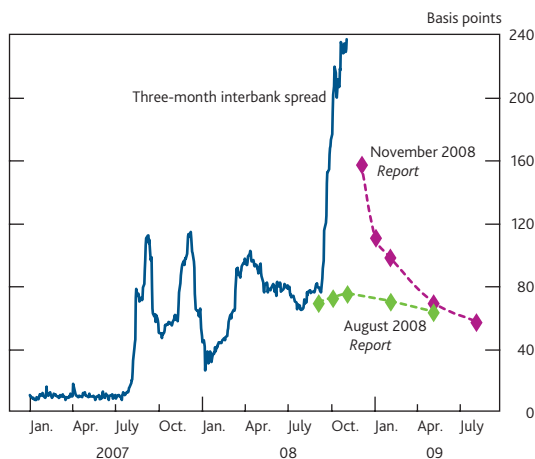
At its meeting on 5–6 November, the Committee voted to reduce Bank Rate by 1.5 percentage points, to 3%.

**Chart 1.2** Changes in UK banks' assets<sup>(a)</sup>

(a) The chart shows changes in all UK resident banks' assets (including the UK branches and subsidiaries of foreign banks, but excluding the Bank of England). Data are non seasonally adjusted.

**Chart 1.3** Broad money and credit

(a) The measures exclude the bank deposits of, and borrowing by, intermediate OFCs, such as: mortgage and housing credit corporations; non-bank credit grantors; bank holding companies; and other activities auxiliary to financial intermediation. Bank staff have also adjusted these measures for some additional intra-group business, based on anecdotal information provided by a small sample of banks. For more information, see Burgess, S and Janssen, N (2007), 'Proposals to modify the measurement of broad money in the United Kingdom: a user consultation', *Bank of England Quarterly Bulletin*, Vol. 47, No. 3, pages 402–14.

**Chart 1.4** Sterling three-month interbank rates relative to future expected policy rates<sup>(a)</sup>

Sources: Bloomberg and Bank calculations.

(a) Three-month Libor spread over equivalent-maturity overnight interest rate swaps. Dashed lines show forward spreads derived from forward rate agreements and are based on the fifteen working day averages to 6 August 2008 and 5 November 2008 respectively.

banks' balance sheets, both in the United Kingdom and abroad. First, banks became overly leveraged, as their balance sheets grew rapidly relative to their capital bases, and they increasingly branched out into assets whose underlying value, credit quality and liquidity were uncertain. Second, the availability of cheap wholesale funding encouraged banks to fund an increasingly large share of their long-term assets through short-term wholesale liabilities.

The financial market turmoil that began in the summer of 2007 exposed these vulnerabilities, and triggered a necessary adjustment in the banking system. Banks began to deleverage, by securing injections of new capital, by reducing lending, and by selling assets (**Chart 1.2**).

This deleveraging process has been evident in a marked slowing in money and credit growth. Although headline measures of money and credit growth have remained broadly unchanged over the past year, that conceals a much weaker picture once particular borrowing transactions, undertaken by financial companies specialising in intermediating between banks, are excluded (**Chart 1.3**).<sup>(1)</sup> Adjusting for these transactions, annual growth in domestic bank credit slowed to 5.2% in Q3, from 15% in 2007 Q1. On the liabilities side of banks' balance sheets, broad money growth also slowed sharply. Indeed, in 2008 Q3 annual real broad money<sup>(2)</sup> growth was negative, for the first time since the early 1980s.

Over the course of 2008, the slowdown in lending growth contributed to a deterioration in the macroeconomic outlook, which ignited fears of larger bank losses. This led to further restrictions in the supply of credit, and also reduced confidence in the sustainability of the business models of a number of financial institutions. A number of institutional failures, and in particular the collapse of Lehman Brothers on 15 September, led to rising anxieties about the survival of other financial institutions internationally. That caused a further significant reduction in the availability of bank funding, and a shortening in its maturity.

Moreover, the funding that banks were able to access became increasingly expensive. Term unsecured interbank rates rose substantially relative to expectations of the path of official policy rates across the developed economies. For example the three-month spread between sterling interbank rates and expected UK policy rates rose from around 80 basis points at the time of the MPC's September meeting, to over 200 basis points by 5 November (**Chart 1.4**), although illiquidity in unsecured interbank markets means that these spreads must be interpreted with caution.

(1) For a discussion of these adjustments, see the box on page 16 of the August 2008 Report.

(2) Defined as broad money (excluding intermediate OFCs) deflated using RPI inflation.

These developments in wholesale funding markets exposed the vulnerabilities in banks' funding structures. During late September and early October, fears about the survival of some financial institutions culminated in acute pressures in the global financial system, which threatened its stability. In response, the UK authorities announced a comprehensive and system-wide support package on 8 October. Similar initiatives were announced by a number of other countries.

The UK package directly addressed structural weaknesses in banks' balance sheets by supporting capital injections to bolster confidence in the resilience of UK banks. It also included the provision of government guarantees on new unsecured bank debt issuance, in order to safeguard banks' short-term and medium-term liquidity positions. That complemented the Bank of England's earlier decisions to extend the period in which banks could access the Special Liquidity Scheme, and to introduce other liquidity insurance measures.<sup>(1)</sup>

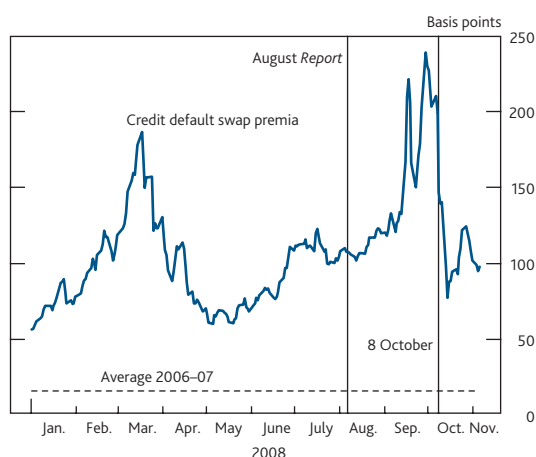
The announcement of the recapitalisation plan reduced some of the immediate concerns about possible bank failures. UK banks' credit default swap premia (the price market participants pay in order to insure themselves against a default), fell back sharply following the announcements (Chart 1.5). And although the spread between interbank rates and expected policy rates remained elevated, market participants expected it to fall back significantly, reaching similar levels to those anticipated at the time of the August Report (Chart 1.4).

It is too early to assess fully the impact of the support package on lending to households and businesses. In due course, it should help to establish the conditions for more sustainable credit growth. But banks will still need to adjust their balance sheets over time to reduce their leverage and reliance on short-term wholesale funding. The pace at which lending recovers depends on both the speed with which banks complete that adjustment, and on the degree of interaction between tighter credit and weaker economic activity (Section 5).

## 1.2 Credit conditions facing households and businesses

Since the *August Report*, the worsening economic outlook and the ongoing strains in financial markets have led to a further tightening in credit conditions. In particular, there was a widening in household lending spreads and a sharp rise in corporate bond yields. Indicators of credit conditions are discussed in detail below, although many of these indicators

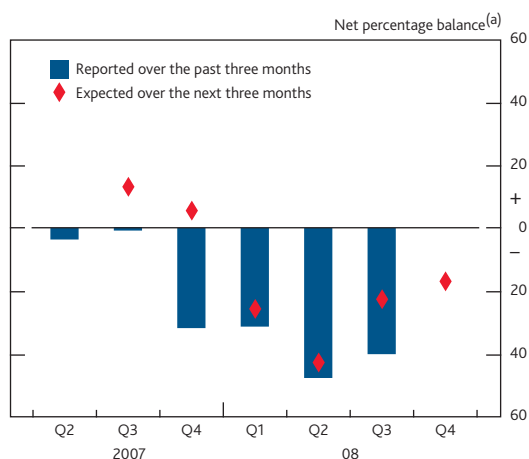
**Chart 1.5** Major UK banks' credit default swap premia in 2008<sup>(a)</sup>



Sources: Markit Group Limited, Thomson Datastream, published accounts and Bank calculations.

(a) The blue line shows a weighted average of the credit default swap premia of ten major UK banks, weighted by each bank's share in total assets.

**Chart 1.6** Credit Conditions Survey: availability of secured credit to households

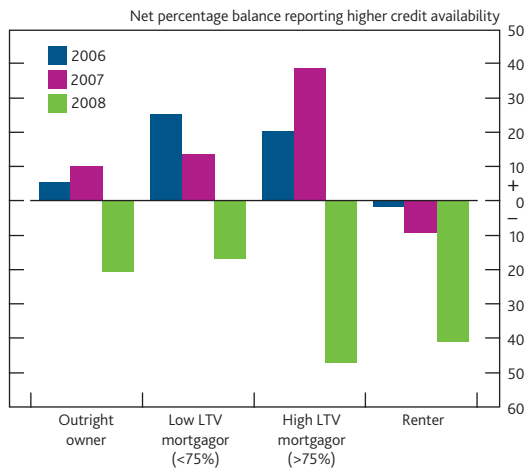


(a) Weighted responses of lenders. A positive balance indicates that more secured credit is available. The expectations balances have been moved forward one quarter so that they can be compared with the actual outturns in the following quarter.

(1) For more information, see *The development of the Bank of England's market operations: a consultative paper*, available at [www.bankofengland.co.uk/markets/money/publications/condococt08.pdf](http://www.bankofengland.co.uk/markets/money/publications/condococt08.pdf).



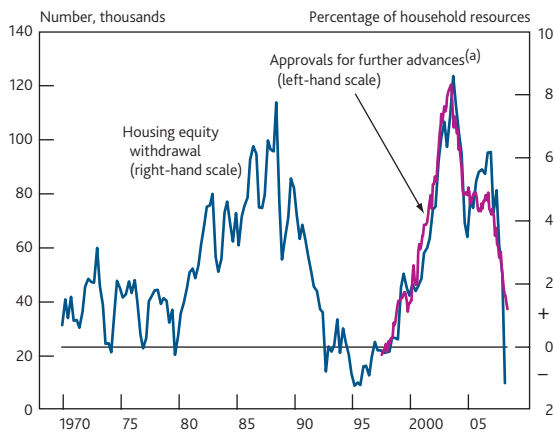
**Chart 1.7** Borrowers' experiences of changes in credit availability<sup>(a)</sup>



Sources: NMG Research and Bank calculations.

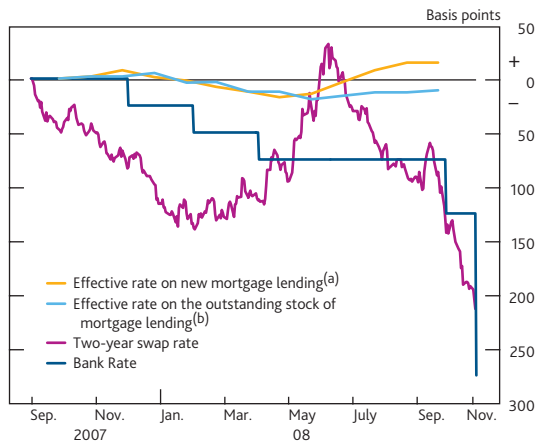
(a) Respondents were asked 'Have you found it easier or harder to borrow to finance spending than a year ago?'.

**Chart 1.8** Housing equity withdrawal and approvals for further advances



(a) The data exclude mortgage approvals for house purchase and refinancing of existing mortgages.

**Chart 1.9** Cumulative changes in selected interest rates since September 2007



Sources: Bank of England and Bloomberg.

(a) Average rate paid by new borrowers on mortgage loans, calculated using data on interest rate flows and the stock of new secured borrowing.

(b) Average rate paid by existing borrowers on mortgage loans, calculated using data on interest rate flows and the outstanding stock of secured borrowing.

predate both the acute intensification of pressures in financial markets during late September and early October, and the UK authorities' subsequent recapitalisation package.

### Changes in the availability of household credit

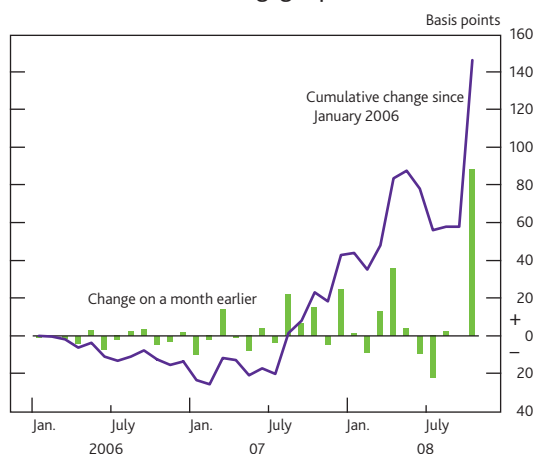
Annual growth in secured lending to individuals fell to 5.3% in September, its lowest rate in over a decade. That reflected a further contraction in the supply of credit by banks, as evidenced by the Bank's latest *Credit Conditions Survey*, in which a majority of lenders reported that they had reduced the availability of secured credit over the past three months (Chart 1.6). But it is also likely to have reflected a fall in the demand for credit, particularly if potential housebuyers expected further falls in residential property prices (Section 1.3). Looking forward, lenders responding to the Q3 *Credit Conditions Survey* expected to limit the availability of credit further during Q4 (Chart 1.6).

The tightening in credit supply over the past year has been most focused on those borrowers with higher levels of indebtedness or a history of arrears. The Bank's *Credit Conditions Survey* found that the reported reduction in credit availability in Q3 had been more acute for those households with lower levels of housing equity. And the 2008 NMG survey of household finances found that, while all borrowers had experienced reductions in credit availability, those with high loan to value (LTV) ratios had experienced the sharpest falls (Chart 1.7).

Some households may have relied on cushions of housing equity as collateral against which they could borrow. But the combination of falling property prices (Section 1.3) and tighter credit conditions has both eroded the value of those equity cushions, and made it harder or more expensive to access them. That is consistent with the recent data on housing equity withdrawal (HEW), which turned negative in Q2 (ie a net injection of equity) for the first time in ten years (Chart 1.8). Much of this fall is due to the sharply lower number of housing market transactions. For example, as the number of people selling their homes and buying cheaper properties falls, so does HEW. But the fall in HEW could also reflect a reduction in the amount of equity withdrawn by households from their current property. Indeed the number of loan approvals not related to house purchase or remortgaging activity has fallen sharply. To the extent that such loans are used to fund current spending, that fall, and the weakening in HEW more generally, is consistent with the weaker outlook for near-term household spending (Section 2).

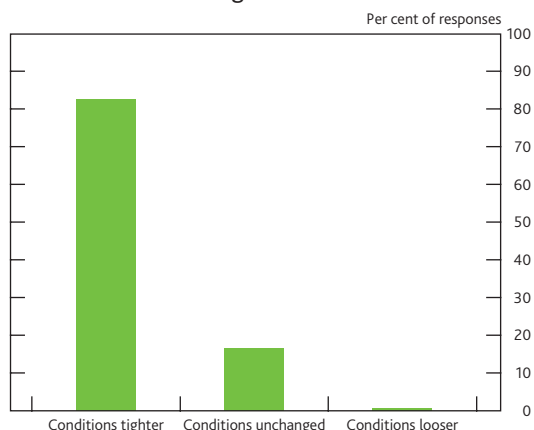
### Changes in the cost of household credit

The effective (average) interest rates on both the stock and the new flow of household secured borrowing had remained little changed in the year to September 2008 (Chart 1.9). But these data predate both the October and November reductions in

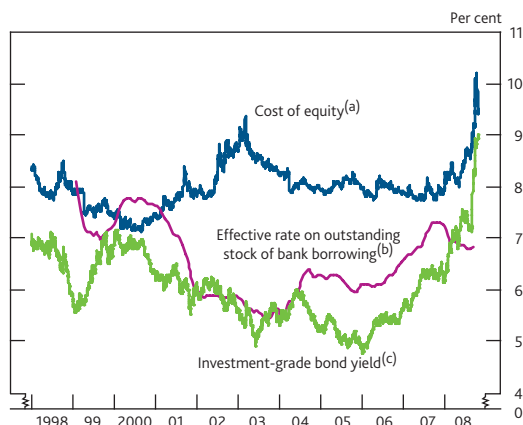
**Chart 1.10** Quoted mortgage spreads<sup>(a)</sup>

Sources: Bank of England and Bloomberg.

(a) Weighted average of fixed-rate and tracker spreads. Fixed-rate spreads are based on two, three and five-year fixed-rate 75% loan to value ratio quoted rates, relative to a 'risk-free' rate of similar maturity (lagged one month). The fixed-rate spreads are weighted together assuming the shares of fixed-rate borrowing for two, three and five-year fixed products are 54%, 18% and 28% respectively. Tracker spreads are relative to Bank Rate.

**Chart 1.11** Agents' survey: how have corporate bank credit conditions changed in recent months?<sup>(a)</sup>

(a) The survey was conducted between 9–23 September. The chart is based on 139 businesses who reported that bank finance was their most important source of finance, weighted by turnover. The question asked 'In recent months, has your company experienced a change in interest rates, terms or availability for credit?'.

**Chart 1.12** Corporate cost of finance

Sources: Bank of England, Merrill Lynch and Thomson Datastream.

(a) Estimated using equity prices of UK non-financial companies and by assuming that nominal dividends grow at 5% per annum.

(b) Average rate paid by existing borrowers on overdrafts and other loans, calculated using data on interest rate flows and the outstanding stock of borrowing. Latest data are for September 2008.

(c) Calculated using an index of bonds with a composite rating of BBB3 or higher.

Bank Rate. Furthermore, these average rates mask the diverging experiences of different types of borrower.

Borrowers with high debts or a poor credit history have found it increasingly expensive to borrow funds. The secured interest rates facing borrowers with high loan to value ratios have risen particularly sharply since the summer of 2007. Unsecured lending rates advertised at the end of October, which are likely to reflect the marginal borrowing rate faced by lower-quality borrowers, had also increased significantly over the past year. For example, personal loan rates were around 175 basis points higher than in October 2007.

By contrast, higher-quality borrowers, such as those with smaller debts, have on average experienced relatively little change in the price of credit. For example, the quoted (advertised) rates on new 75% loan to value mortgages have changed little since September 2007. But over the same period, there have been large falls in Bank Rate, and some other wholesale interest rates such as the two-year swap rate. As a result, implied mortgage spreads rose sharply. Indeed, between September and the end of October, average retail bank spreads on new lending rose at their fastest rate since the start of the financial turbulence in the summer of 2007 (Chart 1.10).

### Changes in the availability and cost of corporate credit

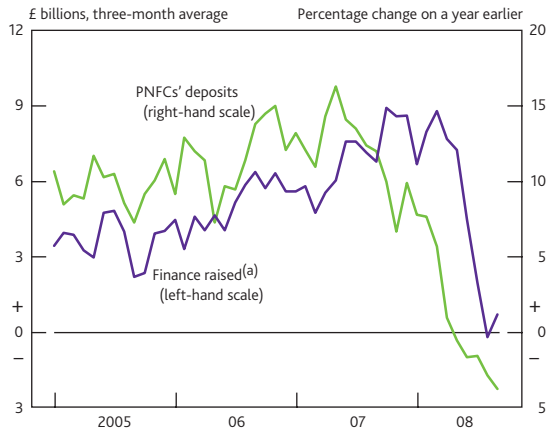
The availability of bank credit to corporates declined over the past three months. The Q3 *Credit Conditions Survey* and the September *Deloitte Chief Financial Officer Survey* both pointed to a marked fall in the amount of corporate credit available. And in a survey conducted by the Bank's regional Agents during September, over 80% of businesses for whom bank borrowing was their primary source of funds reported a tightening in credit conditions over the preceding few months (Chart 1.11).

The latest effective interest rate data, which predate both the October and November cuts in Bank Rate, also suggest a tightening in corporate credit conditions. The average interest rate paid by private non-financial corporations (PNFCs) on new bank borrowing rose by over 30 basis points in September. By contrast, the effective rate on the stock of outstanding borrowing was little changed in the three months to September. But, as discussed in previous *Reports*, those data may mask a tightening in credit conditions, as banks cut back on riskier lending, and as existing borrowers draw down on committed lines of credit.

Conditions in the corporate debt and equity markets have also worsened significantly since the August *Report*, as the economic outlook deteriorated and investors' appetite for risk diminished. International equity prices fell (Section 1.3), driving up the cost of corporate equity issuance (Chart 1.12). And the cost of corporate bond issuance has risen significantly:



**Chart 1.13** Private non-financial corporations' deposits and finance raised



(a) Net sterling and foreign currency funds raised from UK monetary and financial institutions and capital markets (excluding securitisations).

spreads on investment-grade corporate debt have risen by over 200 basis points since the MPC's September meeting. That rise was more than twice as large as any other over a comparable period since the MPC's inception.

Reports from the Bank's regional Agents suggest that a number of businesses have found it difficult to obtain trade credit in recent months (Section 3). In addition, market intelligence suggests that weaker investor demand rendered commercial paper issuance more difficult and more costly. However, this is not as significant a source of funds for UK businesses as for their US counterparts.

The reduced availability of bank and capital market finance has led to a rapid decline in the overall finance raised by PNFCs (Chart 1.13), and may have forced more businesses to rely on internally generated funds. That is consistent with the further sharp fall in PNFCs' deposits. Section 5 discusses the outlook for credit and its implications for investment spending.

### 1.3 Asset prices

The combination of tighter credit conditions and the deteriorating macroeconomic outlook has contributed to sharp falls in asset prices over the past three months. The sterling exchange rate depreciated sharply, and equity prices fell substantially across the world, amid exceptionally volatile conditions. Property prices continued to decline.

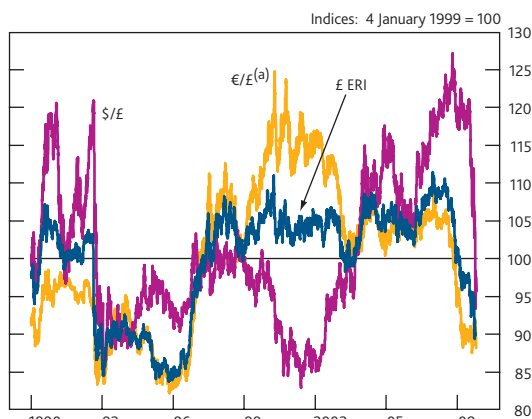
#### Exchange rates

Since the *August Report*, there has been exceptional volatility in foreign exchange markets. Over the fifteen working days to 5 November the sterling ERI averaged 87.9, 17% below its peak in July 2007, and 6% lower than at the time of the *August Report* (Chart 1.14). Since August, sterling fell particularly sharply against the yen and the US dollar, as both appreciated against a range of currencies. Sterling was little changed against the euro.

Some of the falls in sterling probably reflect the deterioration in UK growth prospects, and the associated expectations of lower official interest rates, relative to those in other countries. For example, the International Monetary Fund recently revised down its projections for UK growth more sharply than those of most other developed economies.<sup>(1)</sup> But relative interest rate movements appear to account for only a small part of the recent fall in sterling, so other factors are likely to have played a role.

One possible explanation is that increasing uncertainty about UK growth prospects has prompted an increase in the risk premium associated with holding UK assets, relative to those denominated in foreign currencies. In addition, some of the

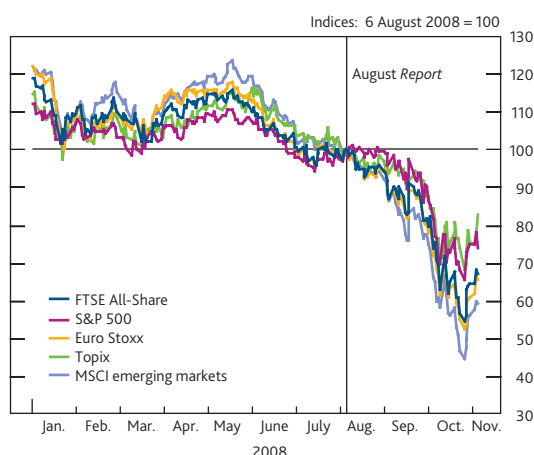
**Chart 1.14** Sterling exchange rates



Sources: Bank of England and Thomson Datastream.

(a) Prior to 1999, the euro-sterling rate is based on synthetic euro data.

(1) See [www.imf.org/external/pubs/ft/weo/2008/update/03/pdf/1108.pdf](http://www.imf.org/external/pubs/ft/weo/2008/update/03/pdf/1108.pdf).

**Chart 1.15** Changes in international equity prices<sup>(a)</sup>

Sources: Bloomberg and Thomson Datastream.

(a) In common currency (US dollar) terms.

**Table 1.A** Sectoral UK equity prices

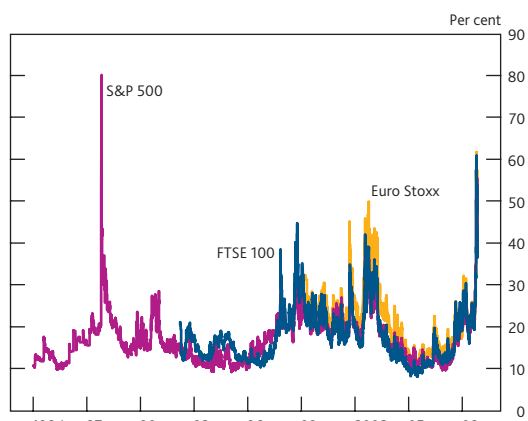
Per cent	Market share <sup>(a)</sup>	Changes since August Inflation Report <sup>(b)</sup>	Changes since July 2007 <sup>(c)</sup>
Financial	23	-30	-53
Oil and gas	19	-16	-21
Consumer goods	12	-9	-22
Consumer services	10	-20	-47
Health	9	-2	-12
Basic materials	8	-54	-52
Industrials	6	-26	-43
Telecomms	6	-21	-36
Utilities	5	-8	-11
Technology	1	-25	-40
Memo: FTSE All-Share		-23	-38

Sources: Thomson Datastream and Bank calculations.

(a) Shares based on the market values of the indices in the fifteen working days to 5 November. Shares do not sum to 100 due to rounding.

(b) Change in the fifteen working day average to 5 November, relative to the fifteen working day average to 6 August.

(c) Change in the fifteen working day average to 5 November, relative to the average of the indices in July 2007.

**Chart 1.16** Market uncertainty around future equity prices<sup>(a)</sup>

Sources: Chicago Mercantile Exchange, Eurex, Euronext.Liffe and Bank calculations.

(a) Estimates of market uncertainty are based on three-month implied volatilities, derived from option prices.

fall in sterling over the past year may have reflected a growing belief among market participants that a lower value of sterling was necessary in order to rebalance aggregate demand away from domestic spending and towards net exports, and hence reduce the United Kingdom's overall level of borrowing and the current account deficit.

The fall in sterling will be one factor pushing up on inflation, in the short term via its impact on import prices, and further out through its impact on demand pressures via net trade. However, depending on the drivers of the depreciation, these inflationary effects are likely to be offset to some degree. For example, if sterling has fallen because of the risk of a further deterioration in demand growth, then the boost to inflation is likely to be offset by the effect of weaker domestic demand. The extent to which the latest fall in sterling is likely to pass through into higher import and retail prices is discussed in Sections 4 and 5.

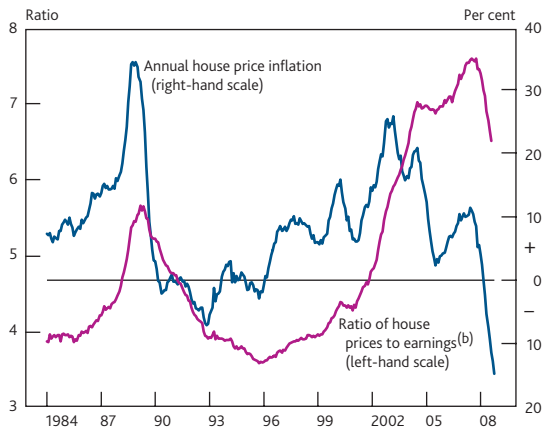
### Equity prices

International equity prices have fallen sharply since the August Report (Chart 1.15) amid extreme volatility. Many indices experienced both their largest single-day falls and rises for over 20 years. Overall, the declines in UK equity prices were comparable to those in the most severe episodes of UK financial stress over the past century. In the fifteen working days to 5 November, the index was 23% lower than at the time of the August Report, and nearly 40% lower than in July 2007. Those declines reflected falls across a number of sectors (Table 1.A). There were comparable falls in the major US, European and Japanese indices. And emerging market equity prices fell particularly sharply, as investors continued to reprice risk.

There are several factors underlying the recent drop in international equity prices. Some of the falls probably reflected the significant deterioration in global growth prospects (Section 2). But increasing perceptions of risk, heightened risk aversion, and the liquidation of assets by some financial institutions (as part of the deleveraging process), also contributed to lower equity prices. Looking ahead, equity price implied volatility — a measure of market uncertainty around future prices — has risen to near-record levels (Chart 1.16).

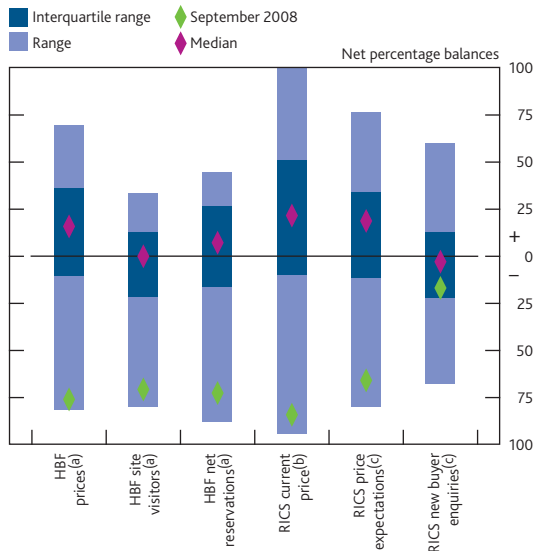
### Property prices

Falling property prices have played an important role in the recent financial market turbulence, because some bank assets are secured against residential and commercial buildings. Falls in property prices have therefore reduced the value of banks' collateral, increasing potential losses in the event of borrower defaults. According to the Q3 *Credit Conditions Survey*, that risk has been a key factor leading banks to reduce the availability of credit. As noted in previous Reports, that could amplify the weakness in both property markets and the wider

**Chart 1.17** House prices and earnings<sup>(a)</sup>

Sources: Halifax, Nationwide, ONS and Bank calculations.

- (a) House prices are based on the average of the Halifax and Nationwide measures from 1991 onwards. Prior to that, the Halifax measure is used as the Nationwide measure is not available at a monthly frequency. The published Halifax index has been adjusted in 2002 by the Bank of England to account for a change in the method of calculation.
- (b) Average house price divided by average annual earnings. Average annual earnings based on the 2007 annual survey of hours and earnings (ASHE) and the average earnings index (AEI).

**Chart 1.18** Survey indicators of housing market prospects

Sources: Home Builders Federation and Royal Institution of Chartered Surveyors.

- (a) Series began in April 1992. Data have been seasonally adjusted by Bank staff.
- (b) Series began in January 1978.
- (c) Series began in October 1998.

economy, although the support package announced by the UK authorities on 8 October should help mitigate that risk, by enabling a somewhat smoother adjustment in banks' balance sheets and funding structures.

Residential property prices fell by 15% in the year to October (**Chart 1.17**), and, relative to earnings, house prices are now at their lowest level for over four years. The commercial property market also continued to weaken sharply, with prices in September nearly 25% lower than their peak in June 2007.

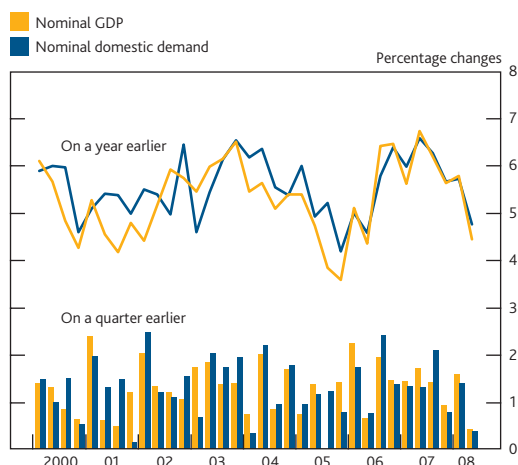
Some of the decline in property prices over the past year probably reflected the rising cost and reduced availability of secured credit (Section 1.2). However, the fall in credit supply has also been accompanied by weaker demand for credit. Expectations of further falls in property prices are likely to have discouraged some prospective buyers from entering the market. Indeed, the results of the Bank's latest *Credit Conditions Survey* suggest that the demand for borrowing for house purchase fell significantly over the three months to mid-September.

Looking forward, most indicators of residential housing market activity remained extremely subdued. The number of loan approvals for house purchase fell to 33,000 in September, down from around 100,000 a year earlier. And many survey measures of prices and activity remained near to their record lows in September (**Chart 1.18**). In the commercial property market, the outlook also remained poor, with increasing concerns over future occupancy rates and developers' ability to refinance their loans.

## 2 Demand

Demand growth has slowed markedly during 2008. GDP was flat in Q2 and is provisionally estimated to have fallen by 0.5% in Q3. A key driver of that slowdown has been weaker consumer spending, reflecting squeezed real incomes, tight credit supply and falls in asset prices. Business and dwellings investment fell in Q2, and forward-looking surveys of investment intentions declined sharply. Surveys of export orders have weakened, consistent with the marked deterioration in global economic activity.

**Chart 2.1** Nominal demand<sup>(a)</sup>



(a) At current market prices.

**Table 2.A** Expenditure components of demand<sup>(a)</sup>

Percentage changes on a quarter earlier

	Averages		2008	
	2006	2007	Q1	Q2
Household consumption <sup>(b)</sup>	0.5	0.9	0.9	-0.1
Government consumption	0.5	0.4	1.0	0.5
Investment	2.3	1.0	-2.0	-2.8
of which, business investment	2.7	1.5	-1.9	-1.0
of which, dwellings investment <sup>(c)</sup>	2.0	0.1	-2.8	-2.1
<b>Final domestic demand</b>	<b>0.8</b>	<b>0.8</b>	<b>0.4</b>	<b>-0.4</b>
Change in inventories <sup>(d)(e)</sup>	0.0	0.1	0.1	-0.4
Alignment adjustment <sup>(e)</sup>	0.2	0.0	-0.5	0.6
<b>Domestic demand</b>	<b>0.9</b>	<b>0.9</b>	<b>0.0</b>	<b>-0.1</b>
'Economic' exports <sup>(f)</sup>	0.6	0.7	0.8	-0.1
'Economic' imports <sup>(f)</sup>	1.1	1.2	-0.3	-0.6
Net trade <sup>(e)</sup>	-0.2	-0.2	0.3	0.2
<b>Real GDP at market prices</b>	<b>0.8</b>	<b>0.7</b>	<b>0.3</b>	<b>0.0</b>

(a) Chained-volume measures.

(b) Includes non-profit institutions serving households.

(c) Whole-economy dwellings investment.

(d) Excludes the alignment adjustment.

(e) Percentage point contributions to quarterly growth of real GDP.

(f) Goods and services, excluding the estimated impact of missing trader intra-community (MTIC) fraud.

Demand has slowed more sharply than the MPC had expected at the time of the *August Report*, and forward-looking surveys of activity have weakened markedly. The severe instability in banking and financial markets in late September and early October will weigh further on the outlook for both domestic demand (Section 2.1) and world activity (Section 2.2) through a tightening in credit conditions and heightened uncertainty.

Monetary policy affects inflation via its influence on nominal demand. Quarterly growth in both nominal aggregate demand and nominal domestic demand slowed sharply to 0.4% in Q2 (**Chart 2.1**). Real GDP was unchanged on the quarter as a fall in domestic demand was offset by a positive contribution from net trade (**Table 2.A**).

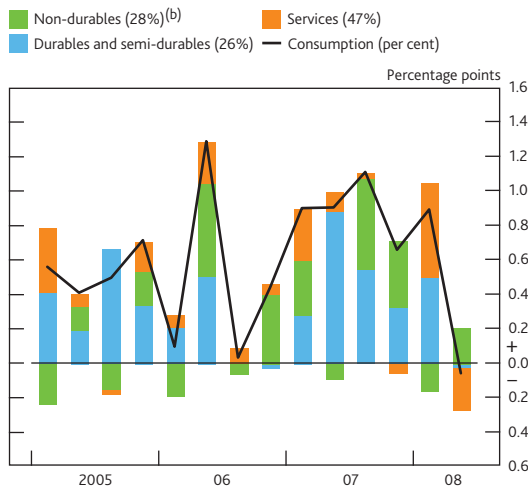
Real GDP is provisionally estimated to have fallen by 0.5% in Q3. The latest set of National Accounts contained revisions to GDP and its components stretching back to 1961, but the recent pace and composition of growth was little changed (see the box on page 25).

### 2.1 Domestic demand

#### Household consumption

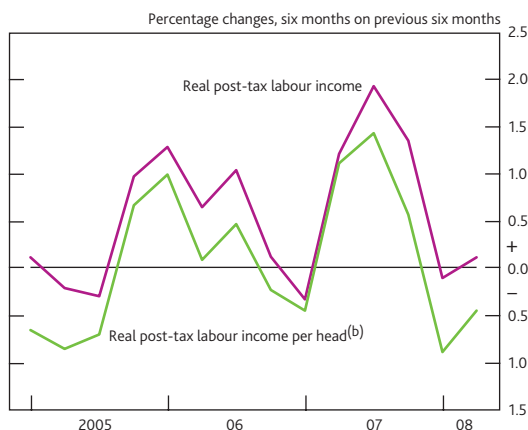
Growth in consumer spending has declined significantly during 2008. Spending on both services and durable goods fell in Q2 (**Chart 2.2**), and more recent indicators suggest that these components of consumption remained weak in the third quarter. For example, the Bank's regional Agents reported that spending on consumer services had weakened markedly in Q3. Private new car registrations — a timely but partial indicator of durables spending — fell by 23% in the twelve months to September. And in the *GfK Consumer Confidence Survey*, the balance of households saying that now was a good time to make a major purchase declined sharply in October, reaching its lowest level since the series began in 1988.

**Chart 2.2 Contributions to quarterly consumption growth<sup>(a)</sup>**



(a) Chained-volume measures. Figures in parentheses are shares in total consumption in 2007. The percentages do not sum to 100 due to rounding.  
(b) Includes net tourism and non-profit institutions serving households.

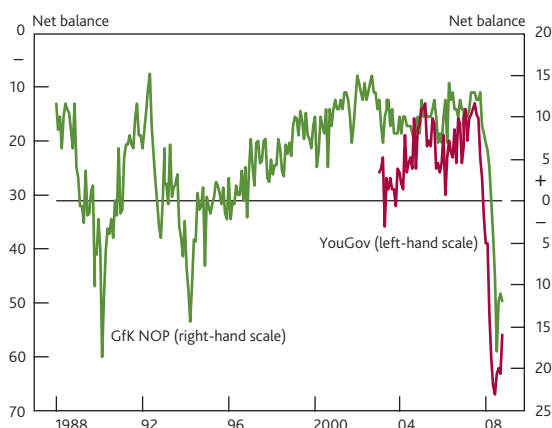
**Chart 2.3 Real post-tax labour income<sup>(a)</sup>**



Sources: ONS (including Labour Force Survey) and Bank calculations.

(a) Wages and salaries plus mixed income less taxes (including income taxes and Council Tax) plus net transfers (general government benefits minus employees' National Insurance contributions), deflated using the consumer expenditure deflator (including non-profit institutions serving households).  
(b) Real post-tax labour income divided by LFS employment.

**Chart 2.4 Survey indicators of income expectations<sup>(a)</sup>**



Sources: Research carried out by GfK NOP on behalf of the European Commission and YouGov.

(a) Net balances of respondents thinking that their household's financial situation will improve over the next twelve months. Data are non seasonally adjusted.

Quarterly growth in retail sales volumes also slowed, to 0.5% in Q2 and 0.1% in Q3. Survey indicators, such as the *CBI Distributive Trades Survey*, painted an even weaker picture of spending on the high street over that period. The ONS plan to update the weights underlying the retail sales index in the coming months.<sup>(1)</sup> That may cause the retail sales deflator to be revised up, which would imply weaker growth in retail sales volumes than currently estimated in the official data.

In part, the slowdown in consumption reflects weak real income growth: real post-tax labour income was broadly flat in 2008 H1, and income per head fell by 0.5% (Chart 2.3). That largely reflected the drag from rising food, energy and import price inflation. Although recent falls in commodity prices should alleviate much of that pressure (Section 4), the boost to households' real incomes will be more than offset by weakening employment (Section 5).

The downturn in consumer spending also reflects the tightening in credit conditions (Section 1). Over the past year, lenders have raised loan rates and reduced the availability of new lending for riskier borrowers. That makes it harder and more expensive for those households to sustain spending in the face of slowing income growth. According to the 2008 NMG survey, carried out in late September and early October, 17% of households reported that they had been put off spending because of concerns about credit availability, compared with 11% in the 2007 survey.

The effects of tighter credit conditions on household spending may be amplified by the weak housing market. Although lower house prices may not reduce household wealth in aggregate, they do reduce the amount of housing equity that homeowners can borrow against. And lower house prices weaken banks' balance sheets, which may reduce their willingness to lend (Section 1).

The squeeze on real incomes and tighter credit conditions will have reduced spending on durable goods. But the extent of the slowdown in spending on durable goods may suggest that expectations of future incomes have fallen. Durable goods provide consumers with a stream of services over a long period of time. So spending on durables is particularly sensitive to changes in expectations about future incomes. These income expectations cannot be directly observed, but survey responses are consistent with households having become significantly more pessimistic about their near-term income prospects during 2008 (Chart 2.4).

The extreme strains in financial markets in late September and early October are likely to have increased households' uncertainty about the economic outlook. Furthermore, the

(1) See *Report on the Full Triennial Review of the Retail Sales Inquiry*, [www.statistics.gov.uk/downloads/reviews/RSI\\_Triennial\\_Review\\_2007.pdf](http://www.statistics.gov.uk/downloads/reviews/RSI_Triennial_Review_2007.pdf).

**Table 2.B Mortgage arrears and repossessions**

	Series high	2007		2008
		H1	H2	H1
Stock of mortgage arrears <sup>(a)</sup>				
Three to six months	1.82 (1994 H1) <sup>(b)</sup>	0.59	0.62	0.75
Six to twelve months	2.07 (1992 H2)	0.31	0.35	0.42
More than three months	3.70 (1995 H2) <sup>(b)</sup>	1.02	1.10	1.33
Repossessions <sup>(c)</sup>	0.40 (1991 H2)	0.11	0.11	0.16

Source: Council of Mortgage Lenders.

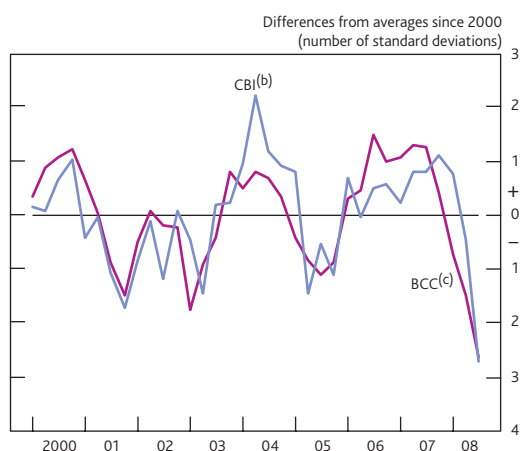
(a) Mortgages in arrears at half-year end as a percentage of outstanding mortgages.

(b) Earliest observation.

(c) Flow of repossessions per half year as a percentage of outstanding mortgages.

substantial fall in equity prices since the *August Report* (Section 1) will have reduced household wealth. These developments are likely to induce some households to save more in order to build up a buffer against possible future weakness in incomes, or to rebuild their balance sheets.

Indicators of households' financial distress, such as data on arrears and repossessions, provide an indication of how households are coping with weaker incomes, tighter credit and lower levels of wealth. These indicators picked up considerably in the first half of 2008, but most remain at historically low levels (**Table 2.B**). The extent to which households are having difficulty servicing their debts is assessed in more detail in the box on page 21. Prospects for consumer spending in the medium term are discussed in Section 5.

**Chart 2.5 Investment intentions (plant and machinery)<sup>(a)</sup>**

Sources: BCC, CBI, CBI/PwC and ONS.

(a) Measures weight together sectoral surveys using shares in real business investment.

(b) Net percentage balances of companies who plan to increase investment in plant and machinery over the next twelve months.

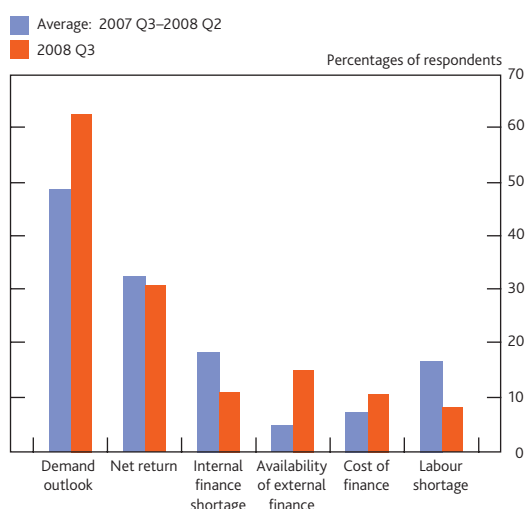
(c) Net percentage balances of companies who say they have revised up their planned investment in plant and machinery over the past three months. Data are non seasonally adjusted.

## Investment

The ONS estimate that whole-economy investment fell by 2.1% in the year to Q2. An important contribution to that fall came from lower private sector investment in buildings, including residential and commercial property, which represents some 40% of total investment. Lower house prices have made house building less profitable: dwellings investment contracted by around 8% in the year to Q2. Timely indicators, such as new construction orders, point to a further fall in Q3. And weakness in the commercial property market (Section 1) has begun to feed through into lower business investment on buildings. This effect has taken longer to emerge than in the residential market, due to the longer lead time typically involved in commercial projects. But business investment in buildings contracted sharply in Q2 and further falls are likely in the near term.

Surveys of companies' intentions to invest in plant and machinery weakened markedly in Q3 (**Chart 2.5**). For example, the fall in the weighted CBI survey was the largest since the series began in 1998 Q4. The survey responses suggest that much of this decline was due to greater concerns about the demand outlook (**Chart 2.6**). Weaker demand makes investment less profitable, and uncertainty about the depth and duration of the downturn may lead companies to delay spending on investment projects.

Tighter corporate credit conditions remain less likely to hold back investment than the outlook for demand, according to business surveys and reports from the Bank's regional Agents. Nevertheless, there was a marked pickup in concerns about the cost and availability of credit in Q3 (**Chart 2.6**). And since then, equity prices have fallen, corporate bond spreads have risen and corporate deposits have shrunk (Section 1). Those developments are expected to bear down further on business investment over the next year or more (Section 5).

**Chart 2.6 Factors likely to hold back investment<sup>(a)</sup>**

Sources: CBI, CBI/PwC and ONS.

(a) Measures weight together sectoral surveys using shares in real business investment. Companies are asked for their twelve-month forecast of factors likely to limit capital expenditure authorisations. Financial services companies are not asked to distinguish between a shortage of internal, and availability of external, finance, so their single response is used for both questions.



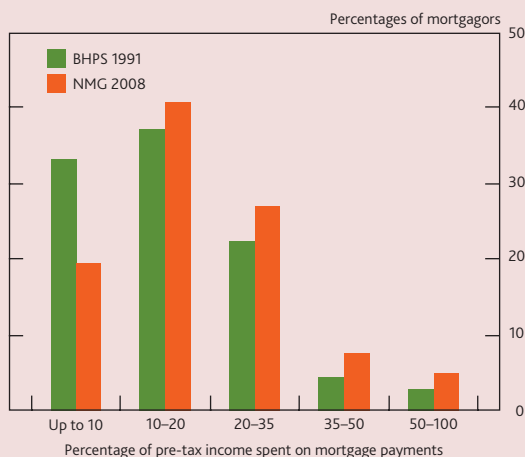
## How difficult are households finding it to service their debt?

When the UK economy last experienced a marked slowdown in the early 1990s, there was a sharp rise in the number of households experiencing problems servicing their debt. This box considers how households are currently faring, drawing on the latest in a series of annual surveys of UK households carried out for the Bank by NMG Research between 19 September and 2 October.

Household borrowing has increased markedly over this decade. The ratio of household debt to annual income reached 170% in 2008 Q2, compared with only around 105% in 1990–91. Yet in aggregate the proportion of household income devoted to servicing that debt in Q2 was not greatly different from that in the early 1990s. That reflects the significantly lower level of official interest rates in the more recent period.

Aggregate measures of income gearing mask significant variations across households. In particular, the proportion of mortgagors devoting a relatively large share of their pre-tax income to mortgage payments is higher than in 1991, according to the latest NMG survey (**Chart A**). Nevertheless, the percentage of mortgagors reporting payment problems is around half the levels seen in the early 1990s (**Chart B**). Other indicators of households' financial distress, such as mortgage arrears and repossessions, are also at low levels compared with that period (Section 2).

**Chart A** Distribution of mortgage income gearing

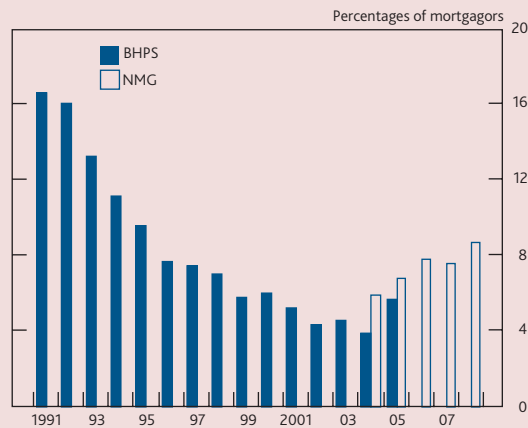


Sources: British Household Panel Survey, NMG Research and Bank calculations.

There are a number of reasons why fewer households have so far experienced payment difficulties over this decade than in the early 1990s. First, official interest rates increased sharply in the late 1980s and remained at over 10% throughout 1991. Given the size and speed of that increase, it is likely that the resulting increase in debt repayments was unanticipated by

many households. In contrast, the more gradual increases in mortgage payments during this decade have largely reflected the decisions of households to take on higher levels of debt relative to incomes.

**Chart B** Mortgagors reporting payment problems



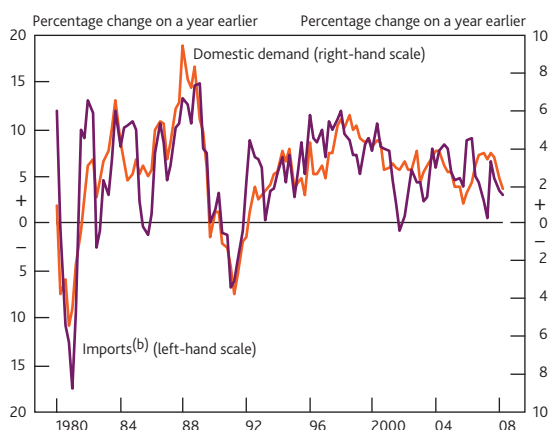
Sources: British Household Panel Survey, NMG Research and Bank calculations.

Second, labour market conditions have been more favourable over this decade compared with the early 1990s. This has enabled some households to accommodate higher debt repayments by working longer hours or finding a second job. In contrast, the early 1990s saw a marked rise in unemployment. Finally, as house prices rose rapidly during this decade, homeowners were able to draw on more housing equity than in the early 1990s should they have experienced temporary problems servicing their debt.

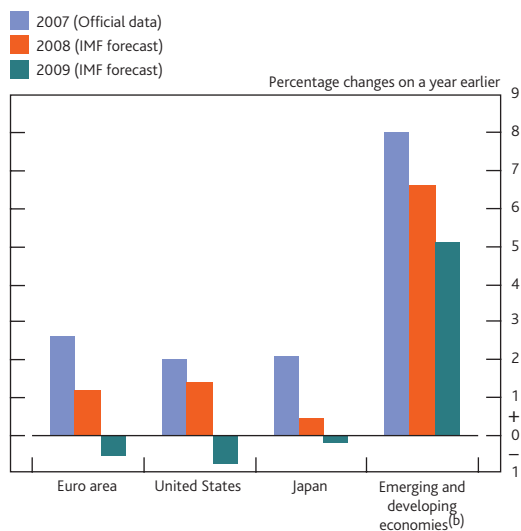
Nevertheless, over the past year, there has been a small increase in payment difficulties among mortgagors (**Chart B**). And the percentage of unsecured debtors reporting that their debts were a heavy burden rose slightly to 14%, compared with 12% in 2007. The primary cause of repayment problems cited by survey respondents was higher-than-expected household bills.

Moreover, the sharp deterioration in the macroeconomic environment since the *August Report* is likely to increase the pressure on household finances further. Most importantly, labour market conditions have started to deteriorate: unemployment has risen and the number of job vacancies has fallen (Section 3). And falls in house prices have eroded cushions of housing equity over the past year.

While the reductions in Bank Rate in 2008 should help to ease the burden of debt repayments, it is likely that there will be a further increase in households' repayment difficulties in the near term. The MPC will continue to monitor indicators of household distress closely to judge the extent of those problems. Medium-term prospects for household spending are considered in Section 5.

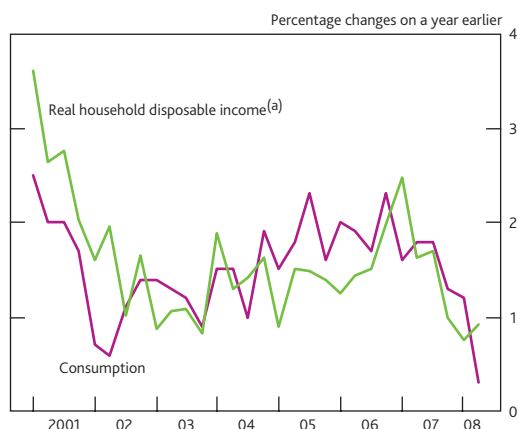
**Chart 2.7 Imports and domestic demand<sup>(a)</sup>**

(a) Chained-volume measures.  
 (b) Goods and services, excluding the estimated impact of MTIC fraud.

**Chart 2.8 GDP and IMF forecasts for selected countries<sup>(a)</sup>**

Source: IMF.

(a) The IMF forecasts are from the *World Economic Outlook* update, released on 6 November 2008.  
 (b) Includes 141 emerging and developing economies across the world such as Brazil, China, India and Russia, weighted together using purchasing power parity exchange rates.

**Chart 2.9 Euro-area consumption and household income**

Source: Eurostat.

(a) Gross household disposable income divided by the consumption deflator.

## Inventories

Inventories are estimated to have detracted 0.4 percentage points from quarterly GDP growth in Q2 (**Table 2.A**). But despite this slower pace of inventory accumulation, the latest information from business surveys indicates that stocks remain above desired levels in both the manufacturing and distribution sectors. That suggests that inventories may continue to weigh on GDP growth in the near term, as businesses continue to adjust to a lower level of demand.

## Government spending

Four-quarter growth in nominal government spending on consumption and investment rose slightly to 9% in 2008 Q2. As the economy slows, some components of government expenditure, such as benefit payments, will tend to grow more rapidly. And the proportion of income that households and companies pay in tax will fall. These 'automatic stabilisers' will dampen the slowdown in domestic demand to some extent. The Government's fiscal plans will be updated in the forthcoming *Pre-Budget Report*. The fiscal assumptions underlying the MPC's projections are discussed in Section 5.

## Imports

Changes in domestic demand are a key driver of fluctuations in import growth (**Chart 2.7**). So producers abroad will bear some of the brunt of weaker household and corporate spending in the United Kingdom. Indeed, import volumes fell in 2008 H1 (**Table 2.A**). The slowdown in import growth also reflects the rise in import prices over the past year (Section 4), which will have encouraged some substitution towards domestically produced goods and services. The weak near-term outlook for domestic demand, combined with the further fall in the exchange rate since August, are likely to continue to push down on import growth.

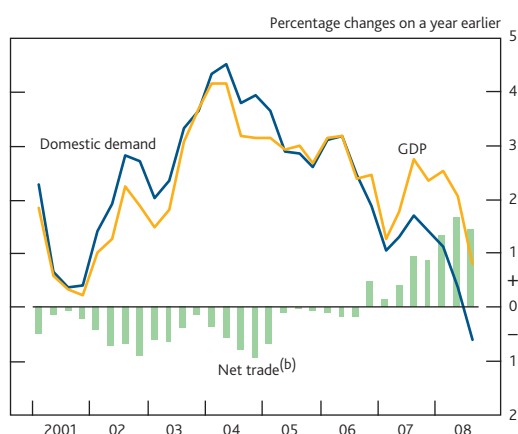
## 2.2 External demand and UK exports

The outlook for global activity has deteriorated markedly in recent weeks, as indicators of near-term growth have weakened and the global banking system has experienced its most severe instability since the outbreak of World War I. The IMF, for example, has revised down its projection for world growth in 2009 by 0.8 percentage points since the publication of its *World Economic Outlook* on 8 October. Underpinning that projection, activity in the advanced economies is forecast to contract in 2009, and growth in the emerging and developing economies is projected to slow sharply (**Chart 2.8**).

### The euro area

GDP in the euro area — the destination for around half the United Kingdom's exports — fell by 0.2% in Q2, reflecting falls in both consumption and investment. And business surveys pointed to continued softness in economic activity in Q3 and the early part of Q4. As in the United Kingdom, weak consumer spending partly reflects a slowdown in real income



**Chart 2.10** US GDP<sup>(a)</sup>

Source: Bureau of Economic Analysis.

(a) Chained-volume measures.

(b) Percentage point contribution to four-quarter GDP growth.

**Table 2.C** Export orders<sup>(a)</sup>

	Averages since 1998	2007 Q4	2008			
			Q1	Q2	Q3	Oct.
<b>Manufacturing</b>						
BCC orders <sup>(b)</sup>	5	19	16	22	-4	n.a.
CBI orders <sup>(c)</sup>	-26	-4	-12	-7	-32	n.a.
Agents' scores <sup>(d)</sup>	0.9	2.7	2.6	2.7	2.1	n.a.
CIPS/Markit orders <sup>(e)</sup>	50.0	53.0	48.9	48.8	45.2	43.5
<b>Services</b>						
BCC orders <sup>(b)</sup>	7	11	10	6	9	n.a.

Sources: Bank of England, BCC, CBI and CIPS/Markit.

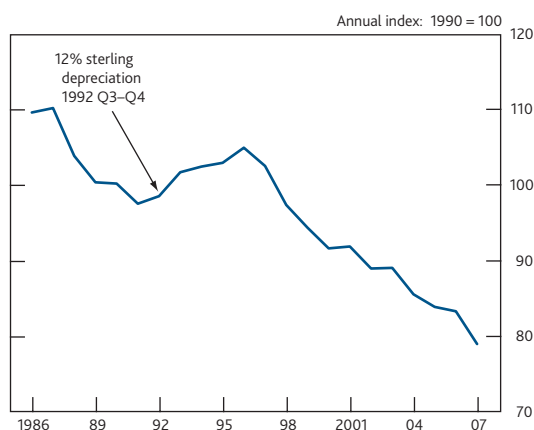
(a) Dates refer to the period in which the survey was conducted.

(b) Percentage balance of respondents reporting orders to be 'up' relative to 'down' over the past three months.

(c) Percentage balance of respondents reporting volume of orders to be 'above' relative to 'below' normal.

(d) Volume of sales over past three months compared with same period a year ago. End-quarter observation.

(e) A reading above 50 indicates increasing orders/new business this month relative to the situation one month ago. Quarterly data are averages of monthly indices.

**Chart 2.11** UK export market share<sup>(a)</sup>

Sources: IMF, ONS and Bank calculations.

(a) The volume of UK exports divided by the volume of UK-weighted world imports. UK exports exclude the impact of MTIC fraud. Import volumes data are weighted together using 2007 nominal export shares.

growth (Chart 2.9). Tighter credit conditions may also have restrained growth. The latest *ECB Bank Lending Survey* indicated that credit conditions for households and companies tightened in Q2, and were expected to have tightened further in Q3. In some countries, such as Ireland and Spain, the effects of this tightening on household spending may have been amplified by weakening housing markets.

### The United States

US domestic demand growth fell sharply in Q3, and the outlook for Q4 and beyond has deteriorated. Underlying the downturn in domestic demand was a sharp decline in consumer spending. That reflected tight credit conditions, lower household wealth and a deteriorating labour market: the unemployment rate rose to 6.1% in September, up from 4.9% in January. Residential investment also continued to weigh on domestic demand growth in Q3, and high levels of unsold homes pointed to further falls in Q4. Positive contributions from net trade — reflecting both strong export growth and weakening imports — have boosted overall GDP growth over the past year (Chart 2.10). But that support is likely to ease as global demand growth slows.

### Emerging and developing economies

Growth in the emerging and developing economies has begun to slow, partly reflecting weaker demand for exports. In addition, equity prices have fallen sharply in many of these economies (Section 1), and some countries that are particularly reliant on external financing have seen sharp declines in their exchange rates. That is likely to reflect a reduced appetite for risk on the part of investors.

### UK exports

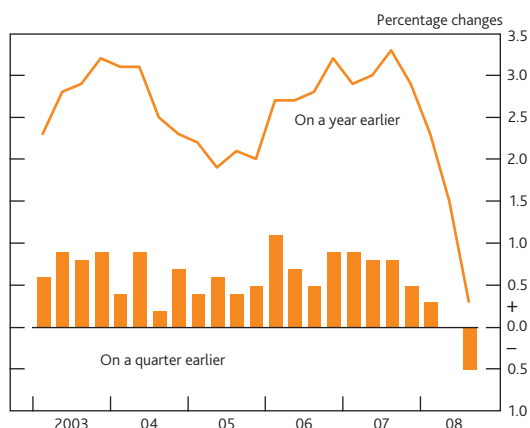
Official data suggest that UK export growth slowed sharply in Q2 (Table 2.A). And the latest business surveys suggest that the near-term outlook for manufacturing exports weakened markedly in Q3 (Table 2.C). That is likely to reflect the deterioration in prospects for global activity.

The impact of weaker world demand on UK export growth should be offset to some degree by the decline in the sterling effective exchange rate, which has fallen by around 17% since July 2007. That is a larger depreciation than occurred in the second half of 1992. On that occasion, the United Kingdom's export market share — the volume of UK exports as a share of world import volumes — picked up by around 7% over the subsequent four years (Chart 2.11). That rise reversed, for a time, a longer-term decline in the United Kingdom's export market share. Medium-term prospects for UK exports are discussed in Section 5.

## 3 Output and supply

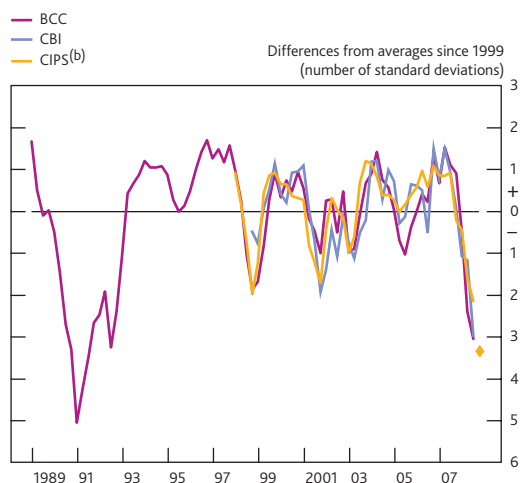
Output contracted sharply in 2008 Q3, and business surveys and reports from the Bank's regional Agents pointed to a further contraction in the fourth quarter. Lower output reduced pressures on companies' capacity. Labour market conditions deteriorated markedly, with a fall in employment and a pickup in unemployment in the three months to August. Survey measures of employment intentions fell further in Q3. Tighter credit supply and deteriorating employment prospects are likely to reduce growth in the supply potential of the economy.

**Chart 3.1** GDP at market prices<sup>(a)</sup>



(a) Chained-volume measures.

**Chart 3.2** Indicators of aggregate output growth<sup>(a)</sup>



Sources: BCC, CBI, CBI/PwC, CIPS/Markit and ONS.

(a) Three measures are produced by weighting together surveys from the BCC (manufacturing services), the CBI (manufacturing, financial services, business/consumer services, distributive trades), and CIPS/Markit (manufacturing, services, construction) using nominal shares in value added. The BCC data are non seasonally adjusted.

(b) The diamond for 2008 Q4 is based on October data.

The margin of spare capacity in the economy, a key influence on inflationary pressure, depends on the balance between output and potential supply. Output contracted sharply in 2008 Q3 and is likely to shrink further in Q4 (Section 3.1). But potential supply growth is also likely to slow, as tighter credit supply reduces companies' ability to produce goods and services (Section 3.2), and rising unemployment bears down on potential labour supply (Section 3.3).

### 3.1 Output

According to the ONS's preliminary estimate, output contracted by 0.5% in 2008 Q3 (Chart 3.1), the first quarter of falling output since 1992. Four-quarter growth also fell sharply, to 0.3%. That was significantly weaker than the MPC had anticipated at the time of the *August Report*. Business surveys also indicated that growth was extremely weak in Q3 (Chart 3.2): for example, the weighted BCC balance was at its lowest level since 1992.

Substantial methodological changes in the recent *Blue Book* raised the level of recorded GDP, but left the recent pattern of growth broadly unchanged (see the box on page 25).

The near-term outlook for activity has deteriorated significantly in recent months. The CIPS/Markit output indices fell in October, to below their average Q3 levels. Indeed, the CIPS/Markit weighted output indicator was at its lowest level since the series began in 1998. And reports from the Bank's regional Agents' contacts also suggested that conditions deteriorated in October from already subdued levels in Q3. These indicators suggest a further contraction in GDP in Q4.

Growth in the service sector, which comprises around 75% of GDP, fell sharply in Q3 (Table 3.A). That slowing is likely to reflect a combination of factors. Many companies in the business services and finance sector have been hit by the

## Revisions to the National Accounts

Each year, the ONS publishes a *Blue Book* which incorporates a much wider range of information, and includes more revisions, than other quarterly GDP releases. The scope of *Blue Book 2008* was broader than *Blue Book 2007*, but narrower than the ONS had previously intended.<sup>(1)</sup> This box discusses the major sources of revisions and their implications for the economic outlook. Overall, the revisions had little effect on the recent pattern of GDP growth. But the household saving ratio was revised down.

The *Blue Book* implemented a methodological improvement to the measurement of financial services. A greater range of services provided by banks are now assumed to contribute to GDP, in particular those services for which banks do not levy an explicit fee, such as some current accounts. The new method was backdated to 1961, and had the effect of raising the estimated level of nominal GDP by around 2% in 2007. However, that effect was partly offset by other revisions. In particular, total output, expenditure and income data in 2004–06 were ‘balanced’, a process that produces a more accurate estimate of GDP. Taking all the changes together, the level of nominal GDP was raised by 1.4% in 2007.

In forming its projections, the MPC factors in the likelihood that GDP data will be revised, and the past pattern of such revisions. In doing so, the MPC considers other information, such as business surveys. Prior to *Blue Book 2008*, the resulting ‘backcast’ for GDP growth had suggested that recent growth estimates were more likely to be revised up than down. Growth was indeed revised upwards in 2005. But it was revised down in 2006, and was unchanged in 2007 (Table 1). The new backcast continues to suggest that upward revisions are more likely than downward ones since 2004 (Chart A). But in the light of *Blue Book 2008*, the expected revisions are a little smaller than those at the time of the *August Report*.

There were revisions to the expenditure components of GDP (Table 1). The slowdown in household spending growth in 2004–05 is now estimated to have been somewhat shallower. Business investment was revised down in 2006 and up in 2007, suggesting that the pickup in investment spending, following subdued growth since 2000, occurred later than previously thought. The contribution of net trade to GDP growth was unchanged in 2007, although both exports and imports are estimated to have grown more strongly.

Sizable revisions were also made to the household and corporate sector net financial positions. However, the ONS have indicated that the income data may be unusually uncertain at present, so it is difficult to know how much

**Table 1** Revisions to annual growth in real GDP and selected expenditure components<sup>(a)</sup>

Percentage points	2005	2006	2007	2008 H1
GDP	0.2	-0.1	0.0	0.1
Household consumption <sup>(b)</sup>	0.4	0.0	-0.2	0.4
Business investment <sup>(c)</sup>	1.4	-2.9	1.5	-1.0
Net trade <sup>(d)</sup>	0.0	0.2	0.0	-0.2

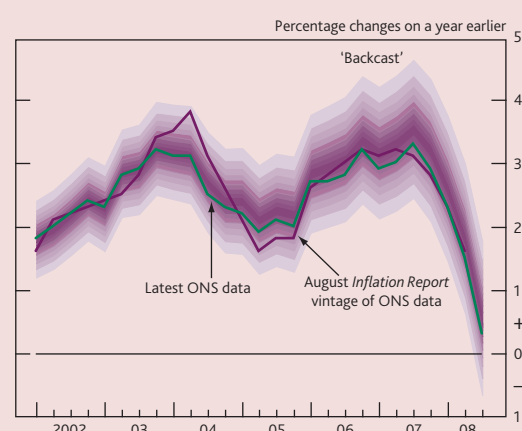
(a) Revisions are calculated as the September 2008 estimate less the August 2008 estimate. Figures for 2008 H1 are average revisions to four-quarter growth.

(b) Includes non-profit institutions serving households.

(c) Adjusted for the transfer of nuclear fuel reactors from the public corporation sector to central government in 2005 Q2.

(d) Contributions to GDP.

**Chart A** GDP at market prices<sup>(a)</sup>



Sources: ONS and Bank calculations.

(a) Chained-volume measures. The fan chart depicts an estimated probability distribution for GDP growth over the past. It can be interpreted in the same way as the fan charts in Section 5 and forms the first part of the fan chart shown in Chart 5.1 on page 36. For more information, see Cunningham, A and Jeffery, C (2007), ‘Extracting a better signal from uncertain data’, *Bank of England Quarterly Bulletin*, Vol. 47, No. 3, pages 364–75. When calculating growth rates, the level of output prior to 2004 is set to equal the ONS data.

weight to place on them.<sup>(2)</sup> The household saving ratio was revised down over the past, in part reflecting downward revisions to wages and salaries. In 2008 Q1, it was revised down by over 2 percentage points, taking it to -1.1%, although data for Q2 suggested a rebound to 0.4%. Taken at face value, the revisions suggest households have reduced savings more significantly than previously thought. By contrast, the equivalent balance for the corporate sector (defined as total income net of outgoings), was revised up, from around zero to 3.2% of nominal GDP in 2008 Q1. More recently, however, the financial conditions facing companies have worsened (Section 1).

(1) See Humphries, S (2008), ‘Modernisation of the UK’s National Accounts: progress and plans for Blue Book and Pink Book 2008’, *Economic and Labour Market Review*, Vol. 2, No. 6, pages 30–32.

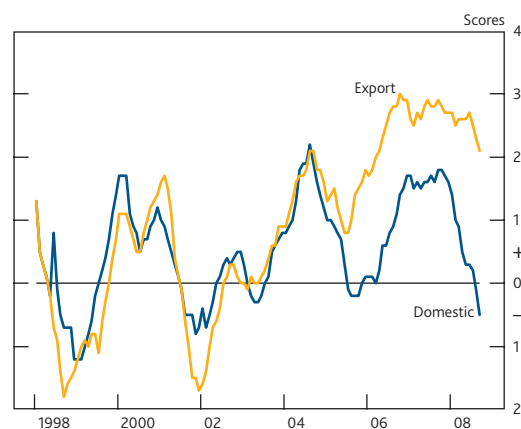
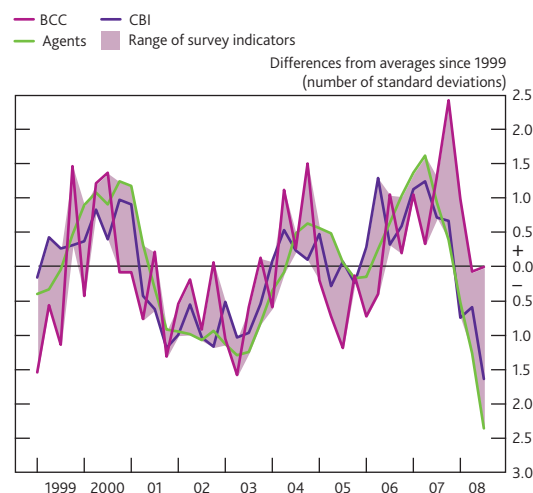
(2) See Akers, R and Clifton-Fearnside, A (2008), ‘Blue Book 2008 — balanced estimates of gross domestic product using a supply and use approach’, available at [www.statistics.gov.uk/about/methodology\\_by\\_theme/inputoutput/downloads/BlueBook2008SUT.pdf](http://www.statistics.gov.uk/about/methodology_by_theme/inputoutput/downloads/BlueBook2008SUT.pdf).

**Table 3.A** Four-quarter GDP growth<sup>(a)</sup>

	2007	2008		
	Q4	Q1	Q2	Q3
Total services (75%)	3.5	2.6	2.2	0.7
of which:				
distribution, hotels and catering (15%)	2.8	1.8	1.2	-1.2
transport, storage and communications (8%)	2.1	0.7	1.8	1.2
business services and finance (30%)	5.8	4.5	3.2	1.1
government and other services (23%)	0.9	1.0	1.3	1.2
Manufacturing (14%)	0.3	1.1	-0.9	-1.6
Construction (6%)	2.7	3.5	2.0	0.7
Other <sup>(b)</sup> (5%)	3.2	-0.7	-1.0	-1.9
GDP	2.9	2.3	1.5	0.3

(a) Chained-volume measures, at basic prices. The figures in parentheses show shares in GDP in 2003. These do not sum to 100 due to rounding. The table shows data consistent with October's Preliminary GDP release. Production data were subsequently revised.

(b) Includes: agriculture; extraction industries; and electricity, gas and water supply.

**Chart 3.3** Agents' scores for manufacturing output**Chart 3.4** Measures of capacity utilisation<sup>(a)</sup>

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

(a) Three measures are produced by weighting together surveys from the Bank's regional Agents (manufacturing, services), the BCC (manufacturing, services) and the CBI (manufacturing, financial services, business/consumer services, distributive trades), using nominal shares in value added. The BCC data are non seasonally adjusted.

financial market turbulence which started in mid-2007. And the subdued levels of housing market activity in recent quarters have had a substantial impact on housing-related services, for example estate agents' activity and legal services.

Other parts of the service sector have been particularly affected by the slowing in household demand (Section 2). For example, distribution, hotels and catering output is estimated to have fallen by 1.7% in 2008 Q3 alone. And within that, motor trades output, which consists mainly of vehicle sales, fell by nearly 5% in the three months to August, according to the latest official data. By contrast, measured government sector output growth, for example education and health, has remained steady.

Manufacturing output contracted sharply in Q3 (Table 3.A). Over much of the past year, relatively robust manufacturing exports had partially supported output in the face of slowing domestic demand. But that support has started to fall away in recent months (Chart 3.3), as world activity has slowed.

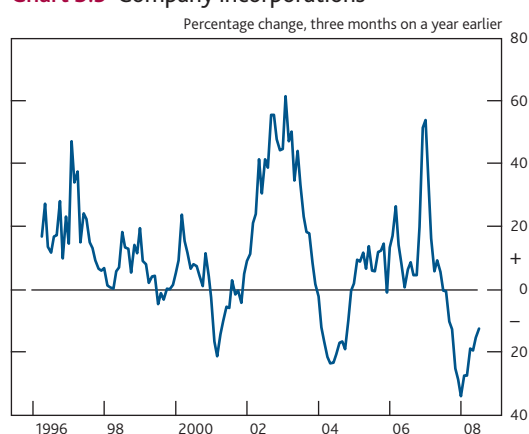
Falling demand for residential and commercial property has pushed down on construction activity. Four-quarter growth in the official estimate of construction output eased over 2008 (Table 3.A), despite an ongoing boost from projects begun some time ago. Public sector building has continued to contribute positively to overall construction activity.<sup>(1)</sup>

### 3.2 Capacity utilisation within businesses

The margin of spare capacity within companies — the balance between their output and their supply capacity — is a key determinant of inflationary pressure. Most survey measures of companies' capacity utilisation fell in Q3 (Chart 3.4). The weaker demand outlook suggests further falls in capacity utilisation. However, tighter credit conditions may also reduce companies' supply potential. The remainder of this subsection discusses three channels through which that may occur: a restriction on companies' working capital; slower accumulation of plant and equipment; and lower productivity growth.

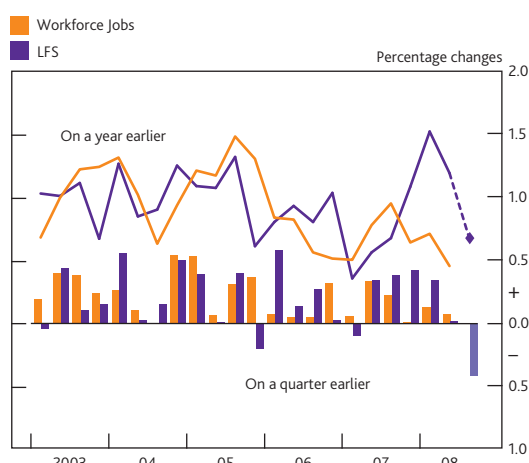
Restrictions on working capital may impair companies' ability to produce goods and services in the near term. Working capital includes various forms of trade credit from financial institutions, such as letters of credit and credit insurance. Market intelligence suggests that lenders have tightened the availability of such trade credit. Trade credit also includes extended payment periods to suppliers (so-called 'debtor days'). Some contacts of the Bank's regional Agents report that they have found it more difficult to obtain such credit from other companies in recent months. These developments

(1) For a discussion of the sensitivity of GDP growth to developments in construction sector activity, see the box on pages 26–27 of the August 2008 Report.

**Chart 3.5** Company incorporations<sup>(a)</sup>

Source: Companies House.

(a) Data are for Great Britain and are non seasonally adjusted.

**Chart 3.6** Measures of employment<sup>(a)</sup>

Source: ONS (including Labour Force Survey).

(a) The figures for LFS employment in 2008 Q3 are estimates based on data in the three months to August. There is a discontinuity in Workforce Jobs between December 2005 and September 2006.

**Table 3.B** Surveys of employment intentions<sup>(a)</sup>

Differences from averages since 1998 (number of standard deviations)

	2007		2008		
	Q3	Q4	Q1	Q2	Q3
<b>Manufacturing</b>					
BCC <sup>(b)</sup>	1.8	0.3	0.4	-0.9	-2.2
CBI <sup>(b)</sup>	1.3	0.0	0.3	-0.9	-1.7
Agents' scores <sup>(c)</sup>	1.8	1.6	0.9	0.5	-1.1
<b>Services</b>					
BCC <sup>(b)</sup>	0.5	1.3	0.1	-1.9	-2.6
CBI business and professional services <sup>(b)</sup>	0.5	0.9	-0.4	-0.6	-2.5
CBI consumer services <sup>(b)</sup>	0.2	1.1	-0.9	0.0	-0.1
CBI/PwC financial services <sup>(b)</sup>	0.4	0.1	-1.6	-0.9	-2.1
Agents' scores <sup>(c)</sup>	0.5	-0.1	-1.5	-2.1	-3.2
<b>Construction</b>					
Experian <sup>(d)</sup>	1.0	0.5	-1	-3.3	-4.6

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

(a) Dates refer to periods in which the survey was conducted.

(b) Net percentage balance of companies expecting their workforce to increase over the next three months. BCC balances are non seasonally adjusted. The CBI business and consumer service averages are since 1998 Q4.

(c) End-quarter observation. The scores refer to companies' employment intentions over the next six months.

(d) Quarterly averages of monthly employment prospects data.

are likely to reflect both heightened concerns over companies' financial positions, given the deteriorating demand outlook, and also the ongoing tightening in credit conditions more generally. A number of the Agents' contacts have reported that the tightening in trade credit has constrained their ability to meet orders.

Another important influence on companies' supply capacity is the amount of capital equipment — for example, machines and buildings — available to them. One measure of that is capital services, which weights together different types of capital by their estimated contribution to potential output. Four-quarter growth in private sector capital services was estimated to have been broadly unchanged in 2008 Q2, at around 3%. But lower investment over 2008 (Section 2) is likely to push down on capital services growth in the near term. And if tighter credit conditions and weaker demand lead to more company closures, and those companies' capital is not transferred to other businesses, aggregate capital services growth may weaken further.

Companies' production potential also depends on the efficiency with which they combine their capital and labour inputs, sometimes referred to as total factor productivity (TFP). Tighter credit supply may push down on TFP growth.<sup>(1)</sup> For example, it may have become harder for potential start-ups to access funding, which could potentially lead to slower TFP growth by restricting market entry and hindering competition. One early indication of that process may be the number of new companies being created; these incorporations have fallen in recent months compared with a year earlier (Chart 3.5). In addition, it may be costly to transfer buildings, plant and equipment between sectors (for example, away from the financial services and property-related sectors). TFP growth is likely to be reduced during that adjustment process.

### 3.3 Labour market tightness

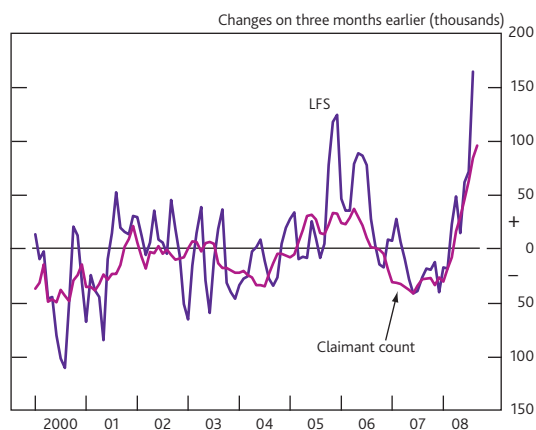
The balance between output and potential supply also depends on the degree of slack within the labour market. This subsection discusses recent developments in employment, influences on labour supply, and labour market tightness.

#### Employment

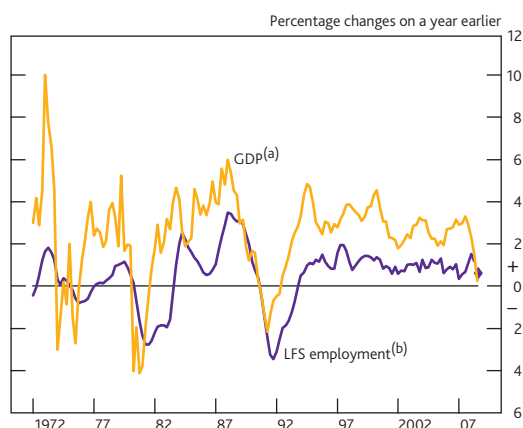
Labour market conditions have deteriorated sharply, and the weakening may be gaining pace. According to LFS data, employment fell by 0.4% in the three months to August compared with the previous three months, the largest such quarterly decline since February 1993. And within that, indicative monthly data suggest that the employment rate in August was particularly weak. That sharp slowing brings the LFS measure of employment growth more into line with the

(1) For illustrative estimates of recent TFP growth, see the box on page 28 of the May 2008 Report.



**Chart 3.7 Measures of unemployment**

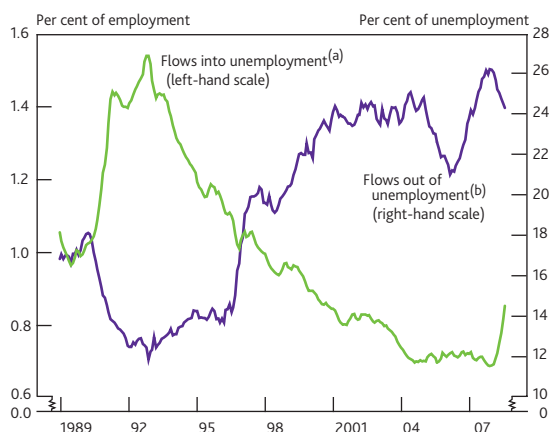
Source: ONS (including Labour Force Survey).

**Chart 3.8 GDP and employment**

Source: ONS (including Labour Force Survey).

(a) Chained-volume measure, at market prices.

(b) The diamond for 2008 Q3 is based on data in the three months to August.

**Chart 3.9 Flows into and out of unemployment**

Sources: ONS (including Labour Force Survey) and Bank calculations.

(a) Average inflow into the claimant count over the past three months divided by total LFS employment. The September 2008 observation includes an estimate for employment growth.

(b) Average outflow from the claimant count over the past three months divided by total claimant count unemployment.

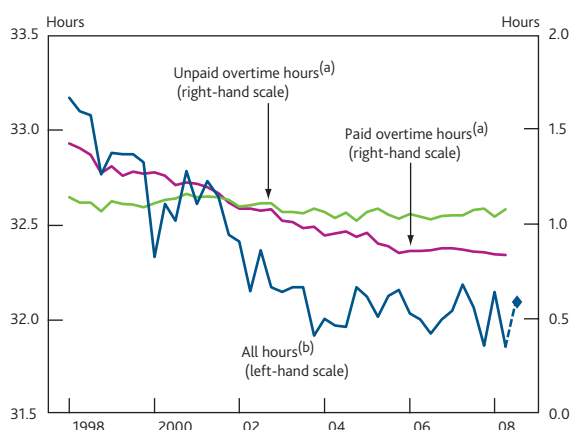
Workforce Jobs measure (**Chart 3.6**). Survey measures of employment intentions fell sharply in Q3, suggesting that employment growth will weaken further in the near term (**Table 3.B**).

The slowdown in four-quarter employment growth since mid-2007 was initially driven by lower employment in the finance and business service sector, according to Workforce Jobs data. But the easing in employment growth may have since become more broad-based: survey data for Q3 suggest employment intentions have fallen across a range of sectors (**Table 3.B**).

Unemployment has picked up markedly as employment growth has slowed (**Chart 3.7**). The data to August showed the largest increases compared with the previous three months in both the claimant count and LFS measure since the early 1990s. Although the LFS unemployment rate, at 5.7% in the three months to August, remained relatively low by historic standards, the number of people who were unemployed had risen by around 190,000 since its low point at the end of 2007.

The marked slowing in employment growth and associated pickup in unemployment follows a long period of stability in the labour market. Over that period, companies tended to maintain employment during modest and temporary demand slowdowns (**Chart 3.8**), a phenomenon sometimes known as 'labour hoarding'. Companies appear to be hoarding less labour at the current juncture. The resulting rise in unemployment is likely to put downward pressure on household spending, as those losing their jobs may cut back sharply on spending. But the spending of some of those who do not lose their job is also likely to be affected: surveys suggest that households have become increasingly concerned about further increases in unemployment. That may cause them to reduce spending in order to build up a stock of precautionary saving.

The marked deterioration in labour market conditions in recent months can be seen in data on flows into and out of unemployment. The flow of people into unemployment, relative to the number in employment, has picked up quite sharply — the rise in the three months to September was the largest since 1991 — although it remains at a low level (**Chart 3.9**). And the Bank's regional Agents reported a marked increase in redundancy consultations, which is likely to feed through into more actual redundancies over time. At the same time, the number of people leaving unemployment benefit, relative to the stock of people claiming unemployment benefit, fell back in the three months to September, as companies reduced hiring rates. That reduction in aggregate hiring rates could reflect both a reduction in the labour demand of existing companies, and also the lower rate of company formation.

**Chart 3.10** Average weekly hours worked per person

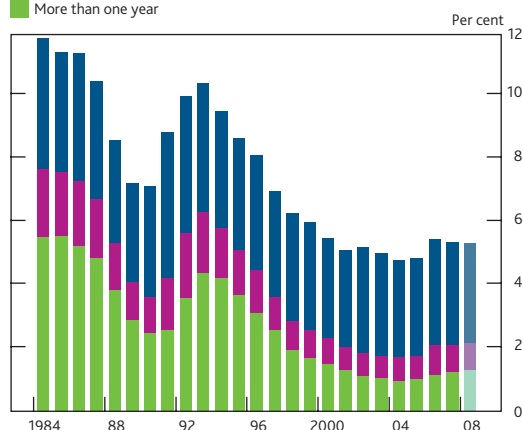
Sources: ONS (including Labour Force Survey) and Bank calculations.

(a) Based on LFS microdata.

(b) The diamond for 2008 Q3 is based on data in the three months to August.

**Chart 3.11** Unemployment by duration<sup>(a)</sup>

■ Less than six months  
■ Six to twelve months  
■ More than one year



Sources: ONS (including Labour Force Survey) and Bank calculations.

(a) Data for 2008 are for 2008 H1. Data prior to 1992 are based on LFS microdata.

**Table 3.C** Selected indicators of labour market pressure

	Averages 1998–2007 <sup>(a)</sup>	2008		
		Q1	Q2	Q3
Vacancies/unemployed ratio <sup>(b)</sup>	0.40	0.42	0.39	0.34
<b>Recruitment difficulties</b>				
BCC <sup>(c)</sup>	62	61	60	63
CBI skilled staff <sup>(d)</sup>	26	38	28	14
CBI unskilled staff <sup>(d)</sup>	7	5	3	3
Agents' scores <sup>(e)</sup>	1.6	0.3	-0.7	-1.8

Sources: Bank of England, BCC, CBI, CBI/PwC, ONS (including Labour Force Survey) and Bank calculations.

(a) Based on averages of quarterly data, unless otherwise stated.

(b) Number of vacancies divided by LFS unemployment. Vacancies exclude agriculture, forestry and fishing. The figure for 2008 Q3 is an estimate based on data in the three months to August. Average is since June 2001.

(c) Non seasonally adjusted. Manufacturing and services balances weighted by shares in employment.

(d) Averages since 1998 Q4. Balances of respondents expecting skilled and unskilled labour to limit output/business over the next three months (in the manufacturing sector) or over the next twelve months (in the financial, business, professional and consumer service sectors), weighted by shares in employment.

(e) Recruitment difficulties in the most recent three months compared with the situation a year earlier. End-quarter observations.

Measures of both total hours worked per person and overtime — which is likely to be the most flexible element of hours — have been broadly flat over the recent past (**Chart 3.10**). That is surprising given the slowdown in employment growth, as reducing average hours is likely to be a less costly substitute for cutting back on staff numbers. And average hours and employment were cut together during the slowdowns in the early 1980s and 1990s. It is possible that the relative strength in hours in the recent data could reflect some degree of measurement error. But some of this puzzle could reflect a lack of timely data: for example, data on overtime hours are only available to Q2.

### Influences on labour supply

The potential supply of labour is likely to grow less rapidly in the near term than over the recent past, due to a number of mechanisms.

The nature of the current slowdown is likely to result in some reallocation of individuals away from sectors most affected by the downturn, for example financial services and property-related sectors. Such a reallocation could take some time as individuals may need to retrain or relocate. The resulting 'mismatch' of workers would lead to a fall in the growth rate of effective labour supply.

In addition, the cyclical downturn could push down on potential supply growth via a deterioration in individuals' skills. If individuals are unemployed for a long period of time, their skills may become less relevant to employers, and it may become increasingly difficult for them to find work. That would push down on the labour available to companies. Long-term unemployment picked up in such a way during the early 1990s and was slow to fall back (**Chart 3.11**).

Other factors may also reduce the supply of labour. First, some people may be discouraged from seeking work as the number of available jobs falls. Second, the downturn could discourage some foreign workers from coming to, or staying in, the United Kingdom. Such effects may be temporary, however, if foreign and discouraged workers return to the labour market when demand recovers.

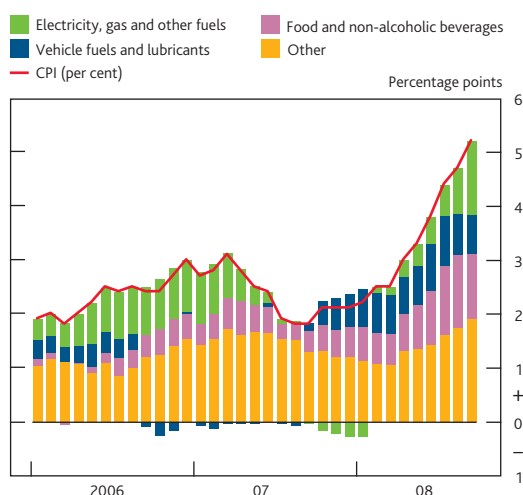
### Labour market tightness

So far the impact of weaker employment appears to have outweighed any fall in potential labour supply, leading to falls in measures of labour market tightness. For example, the ratio of job vacancies to unemployment has fallen sharply in recent months (**Table 3.C**), reflecting both a reduction in vacancies and the increase in unemployment. Several survey measures of recruitment difficulties also point to a significant reduction in labour market tightness.

## 4 Costs and prices

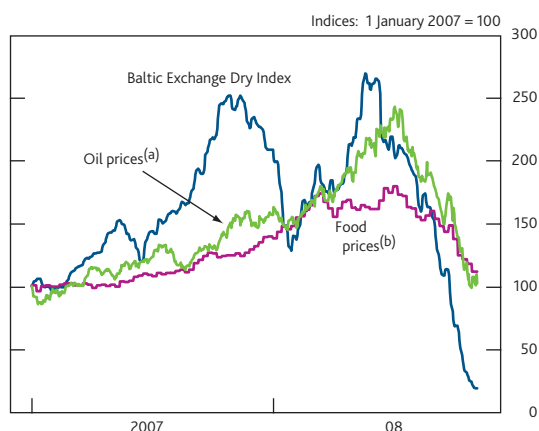
CPI inflation rose to 5.2% in September. But marked falls in commodity prices will put downward pressure on inflation in the near term, more than offsetting the impact of the lower exchange rate. Inflation is likely to fall back more quickly than anticipated at the time of the *August Report*. Most measures of households' inflation expectations have fallen back in recent months, substantially reducing the upside risks to inflation.

**Chart 4.1** Contributions to CPI inflation<sup>(a)</sup>



(a) Contributions to annual (non seasonally adjusted) CPI inflation.

**Chart 4.2** Commodity price pressures



Sources: Baltic Exchange, Bloomberg, *The Economist* and Thomson Datastream.

(a) Dollar Brent forward price for delivery in 10–21 days' time.  
(b) *The Economist* price index (in dollar terms).

CPI inflation was 4.7% in August, triggering an open letter from the Governor, on behalf of the Committee, to the Chancellor, as required by the monetary policy remit.<sup>(1)</sup> In September, CPI inflation picked up further to 5.2%.

CPI inflation in September was 3.4 percentage points higher than its level a year earlier. In an accounting sense that increase in large part reflected increased contributions from food and energy prices (**Chart 4.1**). However, oil, gas and food commodity prices have declined markedly since the summer (**Chart 4.2**). That is likely to push down significantly on CPI inflation over coming months. Possibly reflecting these downward pressures, and the weakening in domestic demand, households' inflation expectations have already begun to fall back (Section 4.5). Import prices are likely to rise further following the latest fall in the exchange rate (Section 4.2) which may offset some of the downward pressures on inflation.

### 4.1 Commodity prices and the near-term outlook for CPI inflation

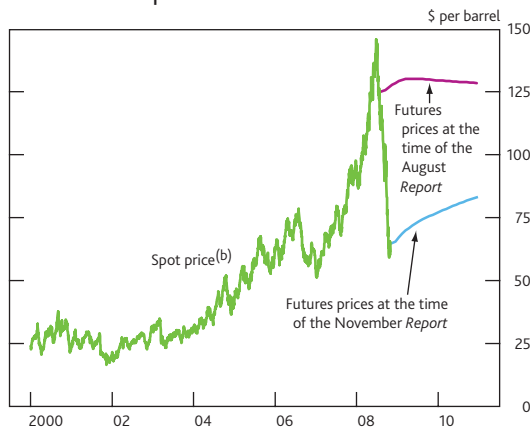
Commodity prices have fallen sharply since the *August Report*. That is likely to be related to the worsening outlook for the world economy (Section 2). One indicator of the pressure of demand on commodity prices is the Baltic Exchange Dry Index (**Chart 4.2**), which measures the cost of transporting bulk commodities such as coal and wheat. This has fallen by over 90% since its peak in May this year, to its lowest level since 1999. The rest of this subsection looks at developments in energy and food prices in more detail.

#### Energy prices

Oil prices have fallen very sharply over the past three months. In the fifteen working days to 5 November, Brent crude oil prices averaged \$64, compared with \$124 in the run-up to the

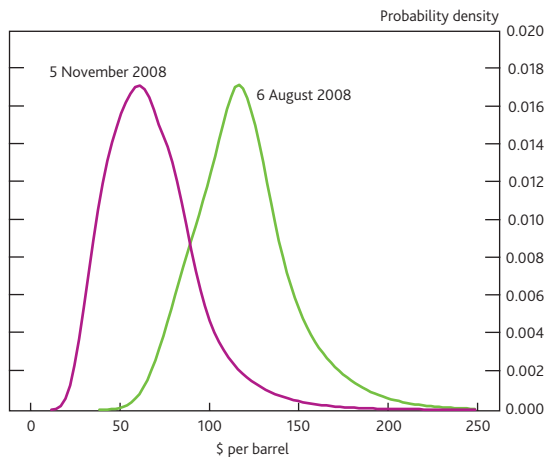
(1) The letter is available at [www.bankofengland.co.uk/monetarypolicy/pdf/cpiletter080915.pdf](http://www.bankofengland.co.uk/monetarypolicy/pdf/cpiletter080915.pdf).



**Chart 4.3 Oil prices<sup>(a)</sup>**

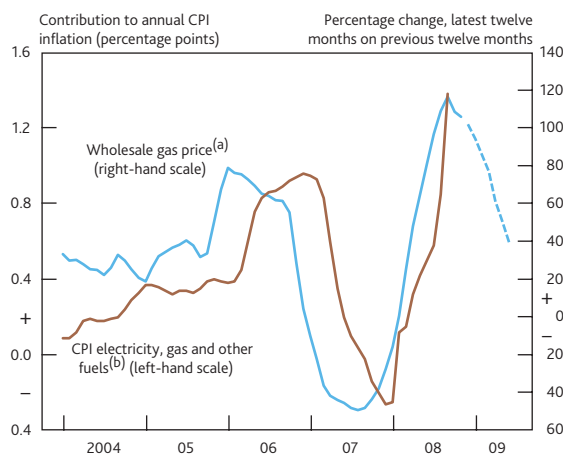
Sources: Bloomberg and Thomson Datastream.

- (a) Futures prices for August and November are averages during the fifteen working days to 6 August and 5 November respectively.  
 (b) Brent forward price for delivery in 10–21 days' time.

**Chart 4.4 Market beliefs about oil prices three months ahead<sup>(a)</sup>**

Sources: New York Mercantile Exchange and Bank calculations.

- (a) Data refer to the price of West Texas Intermediate crude oil. These calculations use options data and assume that investors are risk-neutral. For more details, see Clews, R, Panigirtzoglou, N and Proudman, J (2000), 'Recent developments in extracting information from options markets', *Bank of England Quarterly Bulletin*, February, pages 50–60.

**Chart 4.5 Wholesale gas and domestic energy prices**

Sources: Bloomberg, International Exchange ([www.theice.com](http://www.theice.com)), ONS and Reuters.

- (a) One-day forward price of UK natural gas, monthly averages of daily data. Data for November and the futures curve are based on the fifteen working days to 5 November. The dashed line shows the estimated movements between December 2008 and June 2009, assuming that spot prices follow the futures curve.  
 (b) Data to September 2008.

August Report, a 48% decline (**Chart 4.3**). The recent falls have unwound most of the rise in prices over 2007 and the first half of 2008.

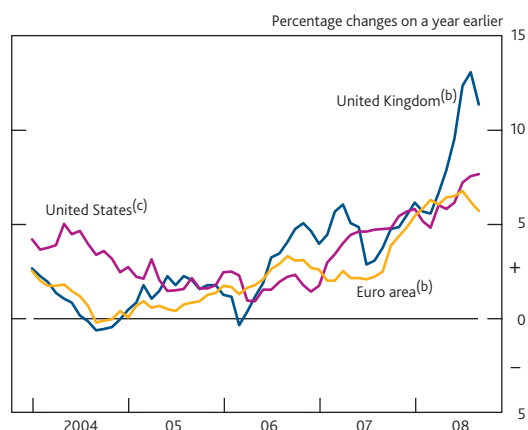
Because oil is a storable commodity, the current market price is influenced by news about demand and supply both now and in the future. The significant falls in spot and futures prices are likely to reflect the downside news on global activity and its implications for current and future oil demand. But the futures curve is now upward sloping, suggesting that with only modest growth in oil supply expected over the next three years, continued pressures on capacity are likely to provide some support to prices.<sup>(1)</sup> However, financial market prices such as futures have not provided an accurate guide to changes in prices recently. For example, options prices from August suggested that market participants placed little weight on the oil price falling as far as it has over the past three months (**Chart 4.4**).

The price of petrol at the pump tends to move closely with oil prices, after a short lag. At their recent peak, petrol prices contributed nearly 1 percentage point to CPI inflation. By September, that contribution had already fallen back somewhat. Given the further declines in oil prices, it is likely to fall to around zero by the end of this year.

Domestic gas and electricity prices depend more on developments in natural gas and coal markets than oil markets — for example, oil accounts for only 1% of the electricity generated in the United Kingdom. Although gas and coal prices often follow the broad trends in the oil price, they also reflect domestic demand and supply conditions. Gas futures prices are a key indicator of likely changes in domestic energy suppliers' costs and therefore the outlook for domestic energy tariffs. In the fifteen working days to 5 November, gas futures prices were around 25% lower on average than at the time of the August Report.

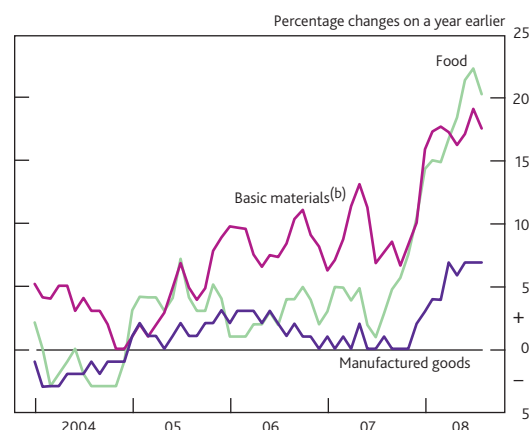
Past rises in wholesale energy prices led to increases in domestic gas and electricity prices over the summer (**Chart 4.5**), with all the major suppliers increasing tariffs to some degree. That was reflected in a rise in CPI domestic energy prices of 19% over August and September, in line with the assumptions underlying the August inflation projection. The August projection also incorporated a risk that domestic energy prices could rise again early in 2009. But, on the basis of past relationships, the lower level of gas futures prices now suggests falls in domestic energy prices over coming months. The MPC's projections assume a 10% cut in prices in Spring 2009.

(1) For more details on trends in oil demand and supply, see the box on page 32 of the August 2008 Report.

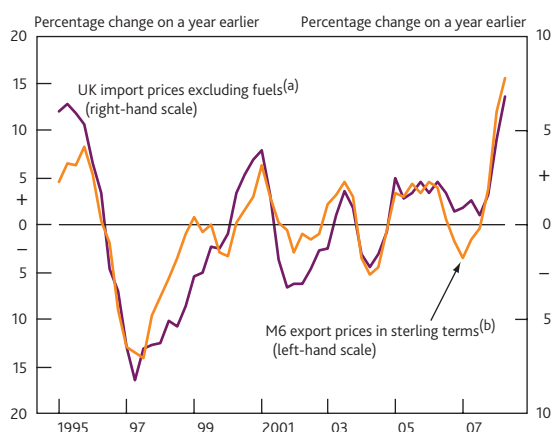
**Chart 4.6 Consumer prices for food<sup>(a)</sup>**

Sources: Bureau of Labor Statistics, Eurostat and ONS.

- (a) Data run up to September 2008, and are non seasonally adjusted. Euro-area figure for September 2008 is based on the preliminary CPI estimate.  
 (b) Food and non-alcoholic beverages.  
 (c) Food at home.

**Chart 4.7 Non-fuel goods import prices<sup>(a)</sup>**

- (a) Data are non seasonally adjusted.  
 (b) Includes items such as metals, rubber, wood and animal oils, but excludes fuels.

**Chart 4.8 UK import prices and foreign export prices**

Sources: Bank of England, ONS and Thomson Datastream.

- (a) Excluding the estimated impact of missing trader intra-community (MTIC) fraud.  
 (b) Domestic currency export prices of goods and services in Canada, France, Germany, Italy, Japan and the United States, weighted according to their share of UK imports in 2005, divided by the sterling effective exchange rate index.

## Food prices

Annual consumer food price inflation rose from close to zero around the start of 2006 to 11% in September 2008. That partly reflected pressures on global food prices. Elevated energy prices increased the cost of producing food. Rising demand for food from emerging market economies and increasing use of crops such as maize and sugar cane for biofuels pushed up demand for agricultural inputs such as land and fertiliser. And poor harvests last year put further upward pressure on prices. But global food prices have fallen back by nearly 40% since their peak this summer (**Chart 4.2**), as some of those upward pressures reversed and harvests improved worldwide.

Global commodity prices have not been the only influence on the price of food in the shops. The rise in UK consumer food prices has been greater than that experienced in other developed economies (**Chart 4.6**). That will have in large part reflected the impact of the lower sterling exchange rate. First, the past fall in sterling pushed up sharply on the cost of imported food (**Chart 4.7**), which accounts for around a third of UK consumer food costs. Second, the ability of UK farmers to trade easily with the large euro-area market means that, when sterling falls against the euro, UK farmers can achieve higher prices by exporting their products. Therefore in order to encourage them to sell into the smaller UK market, sterling prices need to rise.

The further depreciation of sterling against the dollar since the *August Report* will therefore partly offset the effect of the falls in world food prices. But even taking account of that, UK food prices are likely to rise less rapidly over the coming months than over the past year. So the contribution of food to CPI inflation should decline over the first year of the projection.

## The near-term outlook for food and energy prices

The current level of sterling commodity prices suggests that the contributions to CPI inflation of both petrol and food will fall back in the near term, and domestic energy tariffs are likely to decline over time. These lower contributions push down on the MPC's short-term profile for inflation by considerably more than expected at the time of the *August Report*. But the speed at which overall inflation moderates will in part depend on the extent to which the lower level of sterling is passed through to higher import prices.

## 4.2 Import prices

Import price inflation excluding fuels was 7% in 2008 Q2, its highest annual rate since 1993. The rise in UK import price inflation over the past year has reflected increases in other countries' export prices in sterling terms (**Chart 4.8**). Following rises in energy and commodity prices, exporters in other G7 countries raised their local currency export prices by

**Table 4.A** Private sector earnings<sup>(a)</sup>

Percentage changes on a year earlier

	Averages since 2000	2008		2008		
		Q1	Q2	July	Aug.	Sep.
(1) AEI regular pay	4.0	3.8	3.7	3.7	3.6	n.a.
(2) Pay settlements <sup>(b)</sup>	3.3	3.5	3.5	3.6	3.6	3.7
(1)–(2) Pay drift <sup>(c)</sup>	0.7	0.3	0.2	0.1	0.0	n.a.
(3) Total AEI	4.0	3.9	3.6	3.5	3.4	n.a.
(3)–(1) Bonus contribution <sup>(c)</sup>	0.0	0.1	–0.1	–0.2	–0.2	n.a.
Memo item: AWE <sup>(d)</sup>	4.3	4.2	4.5	3.8	3.3	n.a.

Sources: Bank of England, Incomes Data Services, Industrial Relations Services, the Labour Research Department and ONS.

(a) Three-month moving average measures.

(b) Average over the past twelve months.

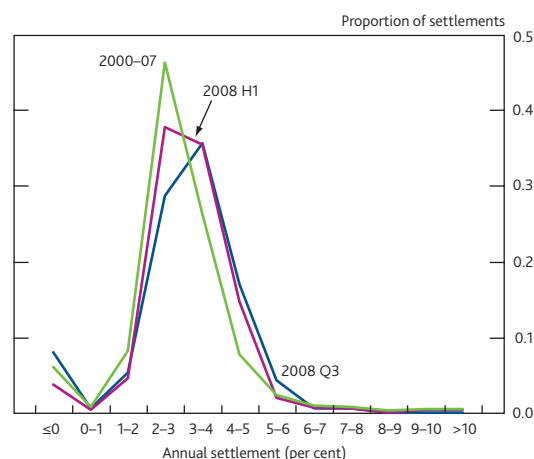
(c) Percentage points.

(d) AWE data exclude arrears. Average is since March 2001.

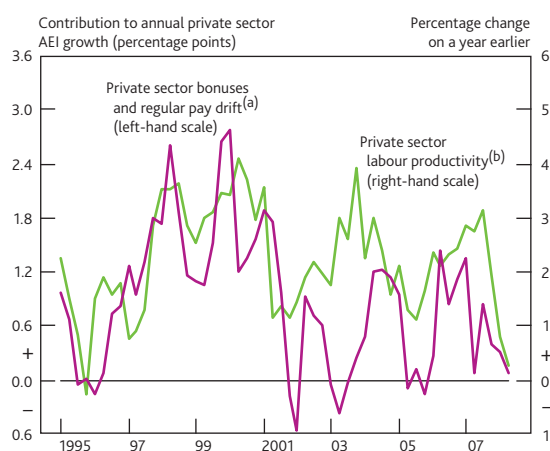
an average of 3% in the year to Q2, a slightly higher rate of increase than a year earlier. But the key factor behind the rise in import prices was the substantial depreciation in the sterling exchange rate in the second half of 2007 and first half of 2008.

The sterling exchange rate has fallen by a further 6% since the *August Report* (Section 1). That is likely to put more upward pressure on import prices over coming months. In particular, the sharp fall in sterling against the dollar partly offsets the falls in dollar commodity prices. But the impact of the lower level of the sterling exchange rate is less clear for the import prices of other goods and services. Companies exporting to the United Kingdom will take account of factors such as the strength of UK demand and domestic competitors' prices, as well as the likely persistence of the lower level of sterling, when deciding what price to charge. So, given the current weakening in demand, exporters may not fully pass through the lower sterling exchange rate into higher UK prices.

The question of how changes in import prices and other costs have been passed through to consumer prices is discussed in Section 4.4. Section 5 discusses the outlook for import prices and the likely impact of higher prices on CPI inflation.

**Chart 4.9** Pay settlements

Sources: Bank of England, Incomes Data Services, Industrial Relations Services, and the Labour Research Department.

**Chart 4.10** Private sector pay drift and productivity

Sources: Bank of England, Incomes Data Services, Industrial Relations Services, the Labour Research Department and ONS (including Labour Force Survey).

(a) Calculated as the difference between annual percentage changes in the three-month moving average measures of the private sector average earnings index and pay settlements.

(b) Market sector output divided by LFS employment excluding general government employees (adjusted to be on a calendar-quarter basis). Up to the end of 2005, market sector output is a Bank calculation based on ONS data. From 2006 the calculation uses the ONS experimental estimate of market sector value added.

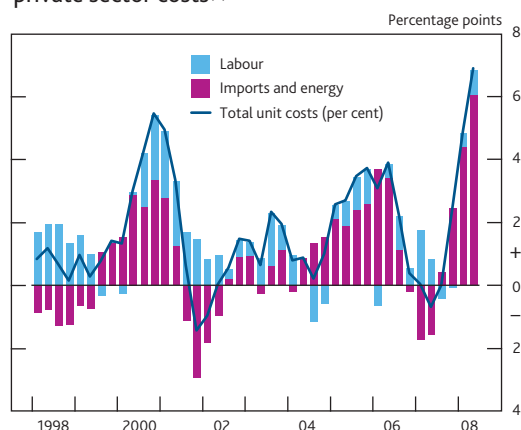
### 4.3 Labour costs

Wage growth over the past year has been shaped by several offsetting influences: on the downside, weakening demand and higher non-wage costs; but on the upside elevated levels of current and expected inflation. According to the latest available data, wage pressures have remained subdued. Both the average earnings index (AEI) and average weekly earnings (AWE) measures suggested that annual earnings growth weakened in August, and remained lower than over the past eight years on average (Table 4.A).

Growth in private sector wage settlements — a timely, albeit partial, indicator of developments in earnings — has remained broadly unchanged since mid-2007 (Table 4.A). But settlements vary markedly across companies, and changes in their distribution may contain additional information about underlying wage pressures. For example, the proportion of settlements at 3% or above was somewhat higher in the first three quarters of 2008 than over the first seven years of this decade on average (Chart 4.9), perhaps reflecting the higher level of inflation this year. But in 2008 Q3 the proportion of pay freezes also picked up, though the number of companies in the Q3 sample is quite small. That pickup could reflect the extent to which demand for some companies' output has fallen: the pay freezes were disproportionately concentrated in housing-related industries.

Although settlements may include some impact from slowing demand growth, in the past it has been the remaining

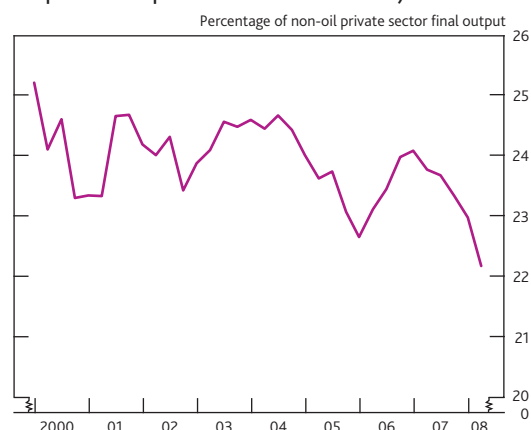
**Chart 4.11 Contributions to four-quarter growth in private sector costs<sup>(a)</sup>**



Sources: ONS (including Labour Force Survey) and Bank calculations.

(a) Bank estimate. Total nominal costs divided by non-oil and gas market sector output (gross value added plus intermediate inputs). Costs are estimated as the sum of compensation of private sector employees (grossed up for self-employment), nominal imports (excluding the impact of missing trader intra-community fraud) and the estimated value of domestic consumption of oil and gas.

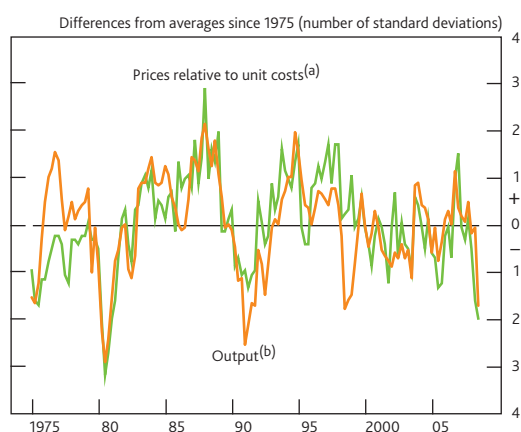
**Chart 4.12 Corporate profit share (excluding financial corporations' profits and the oil sector)<sup>(a)</sup>**



Sources: ONS and Bank calculations.

(a) Bank estimate. Final output is defined as gross value added of the non-oil and gas private sector plus intermediate inputs. Profits are defined as final output minus employees' compensation, intermediate inputs, alignment adjustments and financial companies' profits.

**Chart 4.13 Prices relative to unit costs and output in the manufacturing sector**



Source: CBI.

(a) Net percentage balance of companies' reported domestic price changes over the past three months less the net percentage balance of companies' reported unit cost changes.  
(b) Net percentage balance of companies reporting an increase in output over the past three months.

components of pay (so-called 'pay drift') that have moved more closely with real activity and productivity (Chart 4.10). Regular pay drift includes overtime payments and commission payments, which are both likely to move closely in line with companies' sales. Growth in these more cyclical elements of pay has already fallen back, and pay pressures more generally are likely to ease further in the months ahead as the labour market continues to loosen. Declines in most measures of inflation expectations (Section 4.5) mean that the upside risk to nominal earnings growth from elevated expectations, which had been identified in previous *Reports*, has diminished. The outlook for wages is discussed in Section 5.

## 4.4 Companies' pricing decisions

Taking energy, imported inputs and labour together, UK companies' costs increased significantly in the year to 2008 Q2 (Chart 4.11). Some of this increase in costs has been passed through to higher consumer prices for a range of goods and services. The inflation rates of items other than food and energy picked up in the six months to September, on average, so that their combined contribution to CPI inflation rose by 0.9 percentage points (shown in the 'Other' bars in Chart 4.1). But higher costs have probably not been passed through in full. Instead, some of the increase in costs appears to have been absorbed in lower profit margins — aggregate data show a fall in the non-oil non-financial corporate sector profit share over the first half of this year (Chart 4.12).

With cost pressures now easing, a key factor determining prices over the rest of this year is likely to be the sharp weakening in demand. It is harder for companies to raise prices when demand is weak. In the United Kingdom, that has been reflected in a positive relationship between companies' mark-ups and the economic cycle.<sup>(1)</sup> For example, the *CBI Industrial Trends Survey* suggests that, over the past 30 years, manufacturing companies have tended to raise prices (relative to costs) more slowly at times of weak demand, and more rapidly at times of strong demand (Chart 4.13). The latest reading from that survey suggests that the recent sharp fall in output is already putting downward pressure on prices. And a range of indicators of companies' pricing intentions for the next few months have also begun to fall back (Table 4.B). Greater declines in pricing pressures are likely in the months ahead as cost pressures ease and demand slows, though the impact of slower demand will in part depend on the extent to which it is mirrored by slower supply (Section 3).

## 4.5 Inflation expectations

Previous *Reports* have discussed the elevated level of inflation expectations and the upside risk they posed to prices and

(1) See Macallan, C and Parker, M (2008), 'How do mark-ups vary with demand?', *Bank of England Quarterly Bulletin*, Vol. 48, No. 2, pages 167–73.

**Table 4.B** Indicators of companies' expected output prices<sup>(a)</sup>

	Averages since 1997 <sup>(b)</sup>	Averages 2006	Averages 2007	2008		
				Q1	Q2	Q3
BCC manufacturing	16	29	30	42	45	42
CBI manufacturing	-2	12	16	25	34	10
BCC services	25	27	32	43	41	38
CBI business and professional services	-1	7	7	3	6	-10
CBI consumer services	15	42	38	45	14	28

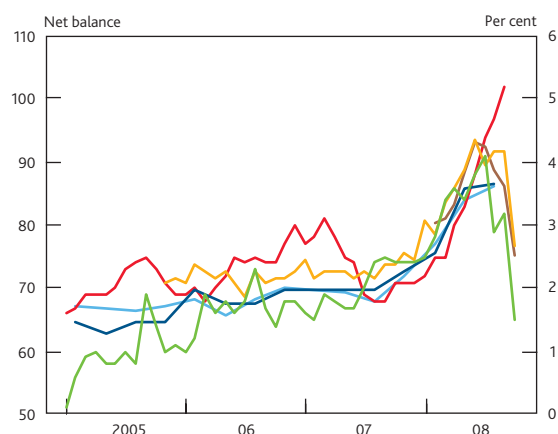
Sources: BCC and CBI.

(a) Net percentage balance of companies expecting to increase prices over the next three months. Data are shown in the quarter in which survey is published. BCC data are non seasonally adjusted.

(b) The averages for the BCC and CBI services surveys are since the series began in 1997 Q2 and 1998 Q4 respectively.

**Chart 4.14** CPI and households' inflation expectations for the year ahead, scaled to match CPI on average<sup>(a)</sup>

— CPI inflation (right-hand scale) — YouGov/Citigroup (right-hand scale)  
 — Bank/NOP (right-hand scale) — YouGovAlpha (right-hand scale)  
 — Barclays BASIX (right-hand scale) — GfK NOP (left-hand scale)



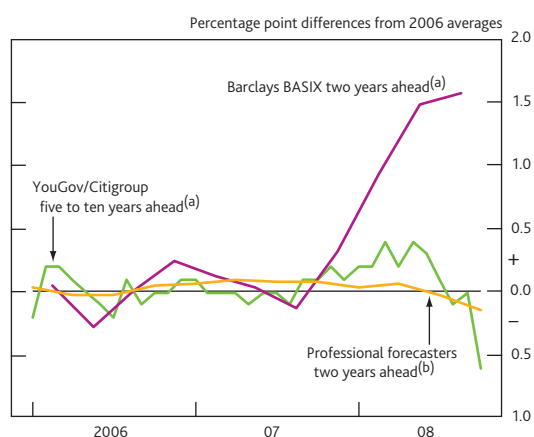
Sources: The AlphaMonitor: consumer, YouGovAlpha, Bank of England, Barclays Capital, Citigroup, GfK NOP, research carried out by GfK NOP on behalf of the European Commission and YouGov.

(a) Survey-based measures (apart from GfK NOP) have been scaled to have the same mean as CPI inflation over a comparable time period. The questions ask about expected changes in prices over the next twelve months, but do not reference a specific inflation index. All measures are based on the median estimated price change, except GfK NOP which captures the weighted net balance expecting prices to increase.

wages. Over the past three months many expectations measures have fallen back, despite the continued rise in CPI inflation. In large part that is likely to reflect the easing in commodity price pressures (especially as petrol and food prices are particularly visible to households) and the expected impact of the weaker demand outlook on inflationary pressures.

By October, monthly measures of households' near-term expectations had unwound a significant part of their previous rises (Chart 4.14). And the YouGov/Citigroup measure of households' expectations for five to ten years ahead had fallen to its lowest level since the survey began in November 2005 (Chart 4.15). Professional economists also revised down their expectations — on average, the economists surveyed by the Bank in October expected inflation in two years' time to be below the target at 1.8%. Breakeven inflation rates derived from index-linked gilts are particularly difficult to interpret at present, in the light of the recent market volatility. But taking these data at face value, rates have declined at many maturities. For example, the five-year breakeven rate was 0.9 percentage points lower in the fifteen working days to 5 November than in the run-up to the MPC's September meeting, its largest fall over a comparable period since late 1993. Although the measures of expectations reported in the Barclays BASIX and Bank NOP quarterly surveys have not yet fallen back, the most recent readings of these surveys predated much of the significant downside news on the outlook for inflation.

Reflecting the declines in most measures of expectations, and the improvements in the near-term outlook for inflation, the MPC judges that the risk from elevated expectations has diminished. Section 5 discusses the outlook for CPI inflation in the medium term.

**Chart 4.15** Inflation expectations at longer horizons

Sources: Bank of England, Barclays Capital, Citigroup and YouGov.

(a) Median of respondents' expected change in prices.

(b) For details of the latest survey, see footnotes to Table 1 on page 47.



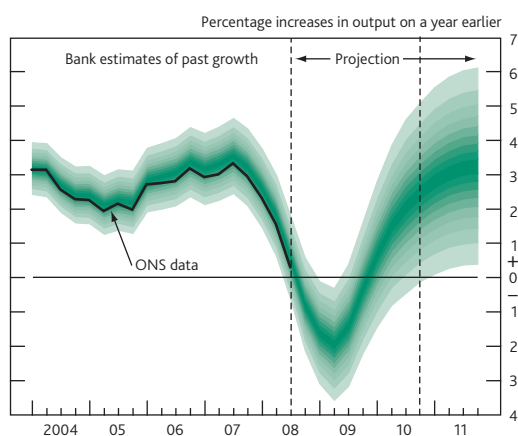
## 5 Prospects for inflation

The outlook for the UK economy has deteriorated sharply. On the assumption that Bank Rate follows a path implied by market yields prevailing prior to the MPC's November decision, the central projection is for GDP to contract further in the coming quarters. Growth begins to recover later in the forecast period as the substantial degree of stimulus embodied in the projection takes effect. CPI inflation falls back rapidly in the near term, as the contribution from food and energy prices diminishes. Further out, inflation falls well below the 2% target, reflecting a larger margin of spare capacity and the waning impact on import prices from the lower level of sterling. The projection for GDP growth is markedly weaker than in the *August Report* for the first two years of the forecast period, and the inflation projection is substantially lower throughout. The risks around the central projection for inflation are unusually large, reflecting uncertainties over: the likely scale and persistence of the tightening in the supply of money and credit, and the extent to which it amplifies the slowdown in demand; the extent to which supply growth also falls; world commodity price prospects; and the degree of exchange rate pass-through.

### 5.1 The projections for demand and inflation

Since the beginning of the year, the outlook for inflation has been shaped by two large but opposing risks: on the downside, that a sharp slowdown in growth would pull inflation materially below the target; and, on the upside, that above-target inflation might persist for a sustained period because of elevated inflation expectations. In recent weeks, the unexpectedly rapid deterioration in indicators of demand and output at home and abroad, the most serious disruption in the global banking system for almost a century, the sharp declines in commodity prices and the fallback in inflation expectations measures have all shifted the outlook for inflation decisively to the downside.

**Chart 5.1** GDP projection based on market interest rate expectations



The fan chart depicts the probability of various outcomes for GDP growth. To the left of the first vertical dashed line, the distribution reflects the likelihood of revisions to the data over the past; to the right, it reflects uncertainty over the evolution of GDP growth in the future. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that the mature estimate of GDP would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outcomes are also expected to lie within each pair of the lighter green areas on 10 occasions. Consequently, GDP growth is expected to lie somewhere within the entire fan on 90 out of 100 occasions. The bands widen as the time horizon is extended, indicating the increasing uncertainty about outcomes. See the box on page 39 of the November 2007 *Inflation Report* for a fuller description of the fan chart and what it represents. The second dashed line is drawn at the two-year point of the projection.

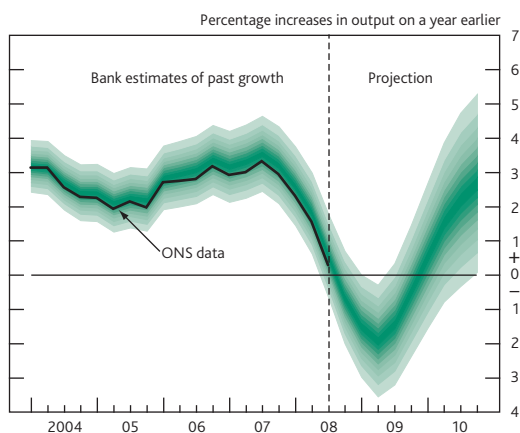
Chart 5.1 shows the outlook for GDP growth, on the assumption that Bank Rate follows a path implied by market yields prevailing prior to the MPC's November decision. That path falls from an average of 4% in the fourth quarter of this year to 2¾% in the second half of 2009, before picking up again to around 4% by 2011 (see the box on page 39). In the central projection, a pronounced slowdown in domestic demand pushes the economy into recession at the start of the forecast period, reflecting the sharp tightening in the supply of money and credit, subdued real income growth and falls in asset prices. The projection nevertheless embodies a substantial degree of stimulus from: the assumed reductions in Bank Rate; a gradual expansion in credit supply as the

effects of the authorities' recapitalisation programme take hold; lower world energy and food prices; the lower level of sterling; and a continued expansion in government spending. As a result, GDP begins to recover in the second half of 2009, rising somewhat above its historical average growth rate by the end of the forecast period.

The extended period of subdued demand opens up a substantial margin of spare capacity. But the weakness in demand is in part mirrored by a significant slowing in supply growth, which reflects a number of drivers. In the near term, tighter credit conditions are assumed to reduce the availability of working capital and trade finance, limiting effective supply, and increasing the risk of business closures or lay-offs. That effect should ease over the forecast period if credit conditions improve. But there may also be an impact on effective labour supply, if deteriorating employment prospects temporarily discourage people from searching for work, or if the skills of people previously employed in those sectors most affected by the downturn do not match those required elsewhere.

The projection for GDP growth over the next two years is considerably weaker than in the *August Report*. That reflects the unexpectedly severe deterioration in demand conditions at home and overseas and the pronounced dislocation in credit markets. But the projection is subject to substantial uncertainties. The slowdown may be deeper and longer lasting, if the supply of money and credit tightens further at home and abroad, if households and companies have to make bigger balance sheet adjustments, or if there is a larger shake-out in the labour market. There are also uncertainties over how rapidly and effectively reductions in Bank Rate feed through into activity. But the slowdown may be less pronounced if lending from newly recapitalised banks or conditions in money markets recover more rapidly, or if there is a stronger stimulus from fiscal policy.

**Chart 5.2** GDP projection based on constant nominal interest rates at 3%

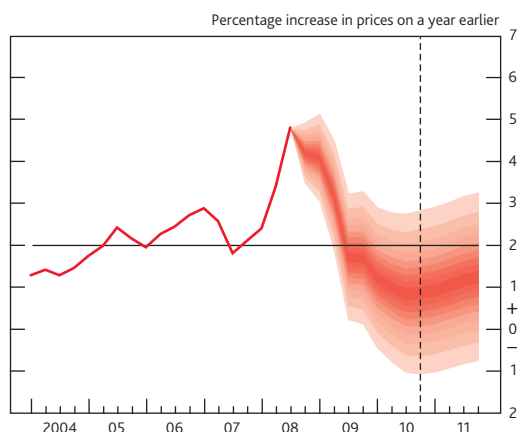


See footnote to Chart 5.1.

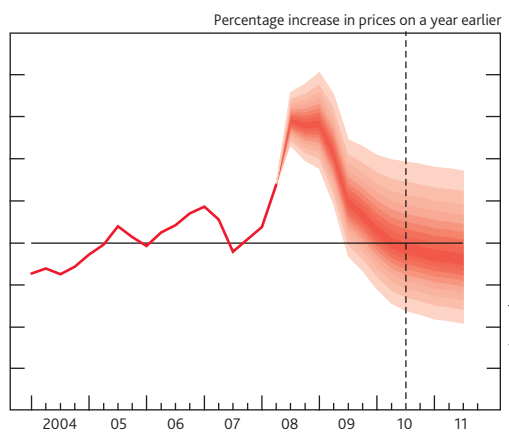
The exceptional degree of economic and financial market uncertainty in the current environment complicates any attempt to calibrate the scale and likelihood of these risks, or the balance between them. **Chart 5.1** shows the projection with balanced risks. But if either set of risks were to crystallise, growth would be materially different from the central projection. The scale of the uncertainty is reflected in a widening in the bands around the fan chart beyond that suggested by recent forecast errors. **Chart 5.2** shows the projection for GDP growth over the next two years on the alternative assumption that Bank Rate is held constant. The factors shaping the GDP projection are discussed in more detail in Section 5.2.

**Chart 5.3** shows the outlook for CPI inflation on the assumption that Bank Rate follows the same path as that underpinning **Chart 5.1**. In the central projection, inflation falls back sharply from its current high level in the near term, as the

**Chart 5.3** CPI inflation projection based on market interest rate expectations



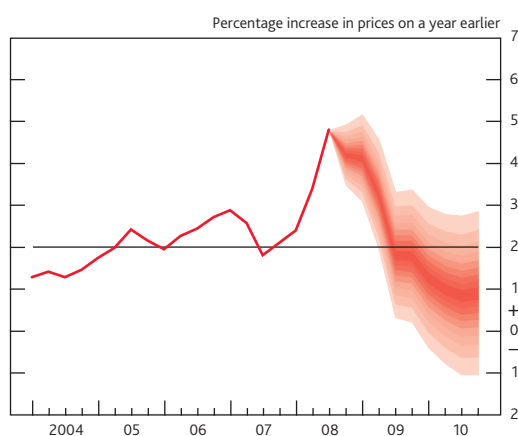
**Chart 5.4** CPI inflation projection in August based on market interest rate expectations



Charts 5.3 and 5.4 The fan charts depict the probability of various outcomes for CPI inflation in the future. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that inflation over the subsequent three years would lie within the darkest central band on only 10 of those occasions. The fan charts are constructed so that outcomes of inflation are also expected to lie within each pair of the lighter red areas on 10 occasions. Consequently, inflation is expected to lie somewhere within the entire fan charts on 90 out of 100 occasions. The bands widen as the time horizon is extended, indicating the increasing uncertainty about outcomes. See the box on pages 48–49 of the May 2002 *Inflation Report* for a fuller description of the fan chart and what it represents. The dashed lines are drawn at the respective two-year points.

contribution from energy and food prices declines steeply. Further out, inflation falls well below the 2% target, reflecting a larger margin of spare capacity and the waning impact on import prices from the lower level of sterling. In the light of the substantial amount of news since the *August Report*, the downward revision to the projection is the largest since the MPC was established. The August projection is shown in **Chart 5.4**.

**Chart 5.5** CPI inflation projection based on constant nominal interest rates at 3%



See footnote to Charts 5.3 and 5.4.

There are substantial uncertainties around the central projection. The most significant of these relates to the difficulty in forecasting the depth and persistence of the slowdown in demand. There are also marked uncertainties over: the extent to which the slowdown in demand results in spare capacity despite slowing supply growth, and the degree to which it feeds through into easing price pressures; the prospects for world commodity prices; and the likely scale and pace of pass-through of a lower exchange rate. The upside risk from elevated inflation expectations identified in previous *Reports* has diminished, reflecting the recent decline in most measures of expectations, and the improved near-term outlook for inflation. The risks shown in **Chart 5.3** are broadly balanced, and — as with the outlook for demand — the fan chart for inflation has been widened relative to that in the *August Report*. But the heightened level of uncertainty means that the Committee has more confidence in the broad shapes of the fan charts for inflation and growth than in their precise calibrations. There is a range of views among the Committee on both the central projection and the balance of risks. The factors shaping the inflation projection are discussed in more detail in Section 5.3. The projection under constant interest rates for the next two years is shown in **Chart 5.5**.

## 5.2 Risks to demand

Demand is set to contract further in the near term. But the key question for the inflation outlook is how deep and



## Financial and energy market assumptions

As a benchmark assumption, the projections for GDP growth and CPI inflation described in **Charts 5.1** and **5.3** are conditioned on a path for official interest rates implied by market yields prevailing prior to the MPC's November decision (**Table 1**).

**Table 1** Conditioning path for Bank Rate implied by forward market interest rates<sup>(a)</sup>

	Per cent																
	2008	2009				2010				2011							
	Q4 <sup>(b)</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
November	4.0	3.2	2.9	2.8	2.8	3.0	3.3	3.5	3.7	3.8	3.9	4.0	4.1				
August	5.1	5.0	4.9	5.0	5.0	5.1	5.1	5.2	5.2	5.2	5.2	5.2					

(a) The data are fifteen working day averages of one-day forward rates to 5 November and 6 August 2008 respectively. The curves are based on overnight index swap (OIS) rates at shorter maturities and instruments that settle on Libor (adjusted for credit risk) at longer maturities.

(b) November figure for 2008 Q4 is an average of realised spot rates to 5 November, and forward rates thereafter.

In the period leading up to the MPC's November decision, the path implied by forward market interest rates was for Bank Rate to fall rapidly over the next year. That was markedly lower than assumed in the *August Report*. However, these were only central estimates, and there remained significant uncertainty about the path of future short-term market interest rates. The reduction in Bank Rate agreed by the MPC at its November meeting was significantly larger than implied by the market curve.

The starting point for sterling's effective exchange rate index (ERI) in the MPC's projections was 87.9, the average for the

fifteen working days to 5 November. That was 5.8% below the starting point for the August projections. Under the MPC's usual convention,<sup>(1)</sup> the exchange rate is assumed to depreciate to 87.1 by 2010 Q4, and is markedly lower throughout the forecast period than assumed in August.

The starting point for UK equity prices in the MPC's projections was 2099 — the average of the FTSE All-Share for the fifteen working days to 5 November. That was 23% below the starting point for the August projection. In the long run, equity wealth is assumed to grow in line with nominal GDP; in the short run, it also reflects changes in the share of profits in GDP.

In the fifteen working days to 5 November, Brent crude oil prices averaged \$64, compared with \$124 in the run-up to the *August Report*, a 48% decline. Over the forecast period, energy prices are assumed to evolve broadly in line with the paths implied by futures markets. Average Brent oil futures prices for the next three years were nearly 40% lower (in US dollar terms) than at the time of the *August Report*, and wholesale gas futures prices were around 25% lower. There is considerable uncertainty about the scale and pace of the pass-through of these developments to the prices of gas and electricity faced by households and companies. But the central projection is conditioned on a benchmark assumption that bills are cut in the spring of 2009, reducing average gas and electricity prices by some 10%.

(1) See the box 'The exchange rate in forecasting and policy analysis', on page 48 of the November 1999 *Inflation Report*.

long-lasting that contraction proves to be. And that in turn depends on: the prospects for credit supply; the response of domestic spending; and the outlook for world activity.

### How rapidly will credit availability recover?

The supply of money and credit to households and companies has tightened sharply over the past year, as market concerns over the liquidity and solvency positions of banks led to deteriorating conditions in funding markets, and the worsening economic outlook prompted a reduced willingness to lend. That process reached a crisis point in September, as the banking system underwent the most severe episode of instability since the outbreak of World War I. The steps taken by the UK authorities on 8 October to recapitalise the banks, guarantee new bank debt and enhance the provision of liquidity have helped to underpin the banking system, and in due course should help to establish the conditions for more sustainable credit growth. But the pace at which lending recovers is highly uncertain, and depends both on the speed with which the banks complete the necessary balance sheet adjustments, and on the degree of interaction between tighter

credit and weaker economic activity. As such, this represents one of the key judgements in this forecast.

In the central projection, credit supply is assumed to remain tight in the near term, as confidence in funding markets remains fragile; rising arrears and falling collateral values (including house prices) limit profitable lending opportunities; and banks decrease their reliance on wholesale funding. That outcome, consistent with only very limited credit growth in the early part of the forecast period, is substantially tighter than assumed in the *August Report*, bearing down further on domestic demand. Credit supply begins to recover later in the forecast period, as the recapitalisation programme bolsters market confidence and banks start to seek out opportunities for profitable lending. But conditions are assumed to remain persistently tighter than their pre-turbulence levels.

There are marked uncertainties around this central case. On the upside, confidence in credit markets may return sooner, allowing lending growth to rise more rapidly. But on the downside, banks may be more reluctant to expand lending, if they are trying to reduce their reliance on central bank liquidity and wholesale funding, if money market conditions remain constrained, or if asset prices and macroeconomic conditions deteriorate by more than expected. The MPC will be monitoring the evolution of these risks closely, as discussed in Section 5.4.

### **How prolonged will the contraction in domestic demand be?**

Tighter credit and the marked deterioration in asset prices, employment prospects and macroeconomic uncertainty mean that the path of domestic demand in the central projection over the coming year is the weakest for over fifteen years. But the medium-term path depends on the interplay between those downside factors and the substantial stimulus expected over time from lower interest rates, the boost to real income growth from lower commodity prices, the gradual recovery in credit growth as the bank recapitalisation programme takes effect and the continued expansion in government spending.

Consumer spending — the largest single component of domestic demand — fell slightly in Q2 (Section 2), and is projected to contract further over the next few quarters. That is a substantially weaker outlook than in the *August Report*, and reflects the deterioration in labour market prospects, tighter credit conditions and lower asset prices. In the central projection, rising unemployment causes real incomes to contract in the first year of the forecast period, more than outweighing the benefits from lower commodity prices. But consumption falls by more than implied by the decline in incomes alone, raising the household saving ratio. That reflects two factors. First, tighter credit conditions reduce households' ability to borrow — a factor amplified by the continued fall in house prices, which reduces both the amount

of housing equity available as collateral for loans and the willingness of banks to lend. And, second, lower equity prices and heightened macroeconomic uncertainty induce some households to save more (or dis-save less) to provide a larger buffer against a possible future deterioration in their economic circumstances, or to repair their balance sheets.

The depth and persistence of the slowdown in consumer spending is uncertain. In the central projection, consumption begins rising again in the second half of 2009, as the substantial amount of stimulus assumed in the projection begins to take effect. But there are considerable risks to this outlook. On the downside, a larger pickup in unemployment would further depress incomes, and increase the number of households finding it difficult to service their debt. A more pronounced tightening in credit conditions or further falls in asset prices could prompt a bigger rise in the saving ratio. And a continuation of the dislocation in financial markets may delay the pass-through of reductions in Bank Rate. But on the upside, confidence and credit conditions may improve more rapidly as the recovery takes hold.

One of the biggest drags on domestic spending growth in the first half of 2008 came from a marked decline in new house building and home improvements. Further falls are expected in the coming quarters, reflecting the exceptionally weak conditions in the housing market. In the central projection, dwellings investment recovers only gradually. But the scale and pace of that recovery will depend on the future path of house prices and credit conditions.

Near-term prospects for business investment have also deteriorated. In large part, that reflects companies' increasing pessimism about future demand conditions, coupled with rising levels of spare capacity. But there are also signs that companies' cash flows have worsened. Corporate deposits have shrunk, credit availability has declined, corporate bond spreads have risen and equity prices have fallen (Section 1). In the central projection, business investment contracts over the next year or more, as weak and uncertain demand prospects and tighter credit cause companies to scale back or postpone their spending plans. Companies are also assumed to run down their stock levels, putting further downward pressure on output in the short term. Investment spending begins to rise again in the second half of the forecast period, as demand conditions improve. Nevertheless, the level of business investment remains substantially lower than in the *August Report* throughout the projection.

In terms of fiscal policy, the MPC has followed its usual convention and based its central projection on the Government's most recent tax and spending plans in *Budget 2008*, and the subsequent announcements over the summer on tax allowances and fuel duties. Those plans imply that government spending will make a positive contribution to

domestic demand growth over the forecast period. But the Government's announced intention to bring forward some planned spending commitments, together with the likelihood that the changing composition of output will lead to a fall in effective tax rates, suggests that the degree of fiscal stimulus may be greater than that assumed in the central projection.

### How will UK prospects be affected by the slowing world economy?

Past projections have assumed that prospective GDP growth would be supported by robust export growth. In recent months, however, the prospects for the global economy have deteriorated substantially, reflecting both the sharp worsening in near-term indicators, and the intensification of the global financial crisis. In the central projection, growth in UK trade-weighted world GDP is assumed to fall to its lowest rate for over fifteen years in 2009 — much weaker than assumed in the *August Report*. That primarily reflects a sharp deterioration in prospects for the developed economies, as tighter credit conditions, lower asset prices and weak income growth cause activity to contract a little in the euro area and materially so in the United States. But the outlook for growth in the emerging market economies has also worsened, reflecting weaker export prospects, and the heightened risk of capital flight from countries that are heavily reliant on external financing.

The central projection assumes that global growth begins to recover during the course of 2009, as the benefits of policy easing work through and credit conditions start to improve. But there are risks on both sides of this central case. On the upside, the policy actions taken in many countries to stabilise banks and financial markets may trigger a more rapid bounceback in confidence. On the downside, the interaction between tight credit, weak balance sheets and subdued spending may be more drawn out. The risks to activity in emerging markets have risen substantially in recent weeks, amid increasing signs of financial market contagion.

The marked weakening in global prospects means that the path for UK export growth assumed in the central projection is substantially below that in the *August Report*. Exports nevertheless continue to expand over the forecast period, buoyed by the lower level of sterling. And that, together with the weaker outlook for import growth as domestic demand contracts, means that net trade makes a positive contribution to overall GDP growth over the forecast period.

## 5.3 Risks to inflation

The near-term outlook for inflation has weakened substantially. But how far inflation falls in the medium term, for a given path for monetary policy, will depend on: future trends in world prices; the path of sterling and its

pass-through to retail prices; the pace of loosening in the labour market; and companies' pricing decisions in an environment of weak demand. A key judgement affecting both wage and price determination is the extent to which supply growth deteriorates over the forecast period.

### **Do world energy and food prices have further to fall?**

Global commodity prices have fallen sharply since the *August Report*, as world demand prospects have deteriorated (Section 4). The rapid decline in world oil prices has already begun to feed into petrol prices. Retail food price inflation has slowed, consistent with the reversal in agricultural commodity prices. And the marked falls in futures prices for wholesale gas — if they persist — are likely to lead to reductions in retail gas and electricity tariffs in due course. In the central projection — which assumes that wholesale energy prices evolve in line with current futures prices, and domestic energy tariffs are cut next spring — lower energy and food prices account for much of the near-term decline in CPI inflation. There is a risk that those declines could be even steeper, if further downside news on world growth leads to additional sharp falls in commodity prices, or if retail energy bills are reduced more quickly. Tempering that, however, is the possibility that oil producers may restrict supply growth, putting more upward pressure on energy prices than assumed in the central projection.

### **Does the lower level of sterling pose upside risks to inflation?**

Sterling has fallen significantly since the *August Report* (Section 1), so a key judgement affecting the projection is the extent to which that feeds through into higher import and retail prices. In the central projection, non-energy import price inflation picks up in the near term, and by more than assumed in the *August Report*. That in turn pushes up on retail prices. But the extent of the pass-through to retail prices is judged to be rather weaker than in the recent past, as retailers and distributors accept somewhat lower profits in a climate of declining demand, and push down on wage growth. Import price inflation falls back later in the projection, as the effects of the lower exchange rate wane. But there are risks on both sides of this projection, posed by uncertainties over the future level of sterling and the extent of the squeeze in retailers' costs and prices.

### **How rapidly will the labour market loosen?**

The sharp slowing in demand growth is likely to be associated with a significant adjustment in the labour market. When growth first began to slow last year, some employers held on to staff, not wishing to lose valuable skills or incur rehiring costs if demand quickly rebounded. But as the chances of that have receded, employment has fallen and unemployment has risen above its recent lows (Section 3). The extent to which unemployment will ultimately rise will depend on the severity of the demand slowdown, and the degree to which businesses adjust their labour costs by cutting hours and pay growth

rather than their workforce. But in view of the marked deterioration in demand prospects, the MPC has assumed that the relationship between output and employment is likely to be closer to that seen in previous sharp slowdowns, rather than the more modest labour market adjustments of recent years. In the central projection, employment falls significantly in the first two years of the forecast period, before picking up again as economic prospects improve. That is a substantially weaker picture than in the *August Report*.

As discussed in Section 5.2, falling employment is likely to amplify the slowdown in demand, reducing household income growth both directly, as the number of those in work declines, and by weakening employees' bargaining position. In the central projection, a substantial part of the downwards pressure on real wage growth is offset, however, by the sharp decline in energy and food prices, and by an assumption that labour supply growth also eases temporarily, as some people are discouraged from searching for work, some of those made unemployed find they do not have the right skills to pick up jobs quickly in other sectors, and some foreign workers leave.

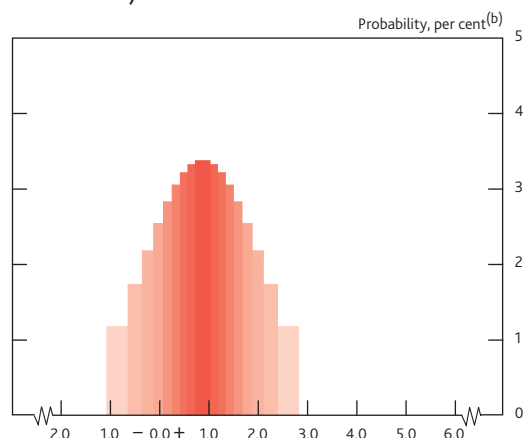
The upside risk to nominal earnings growth from elevated inflation expectations that was identified in previous *Reports* is judged to have diminished. Most expectations measures have fallen back recently, and are likely to fall further in the months ahead. Taken together with the erosion in employees' bargaining position, that ensures that nominal wage growth remains well contained over the forecast period.

### **How will company pricing respond to contracting demand?**

Companies' pricing decisions depend, among other things, on the extent of cost pressures and the outlook for demand. In the MPC's projection, the declining path of growth in non-labour costs, the increasing slack in the labour market and the receding risk from inflation expectations are key factors underpinning the decline in inflation over the forecast period. The decline in costs is partly offset by an assumed reduction in the growth rate of businesses' supply capacity as tighter credit temporarily: reduces the availability of working capital and trade finance; impairs growth in the capital stock, through weaker investment and company failures; and reduces productivity growth, as funding for new business start-ups and within-company innovation is cut back. But the sharply weaker path of demand and related increase in spare capacity puts further downward pressure on prices as some companies absorb more of their costs in temporarily lower profit growth. The uncertainties around the judgements on both supply growth and profits are particularly wide, however, reflecting the limited experience in recent years of such marked downturns in output growth, and the exceptional severity of the dislocation in credit markets.



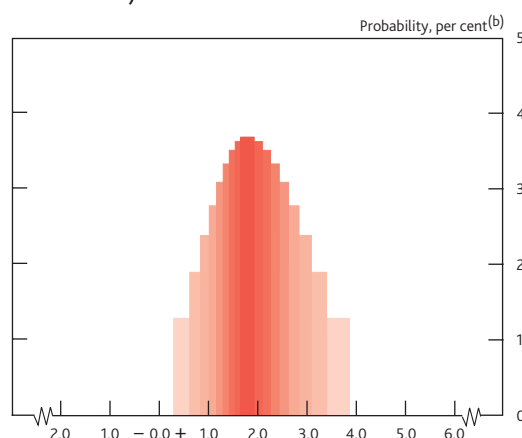
**Chart 5.6** Projected probabilities of CPI inflation outturns in 2010 Q4 (central 90% of the distribution)<sup>(a)</sup>



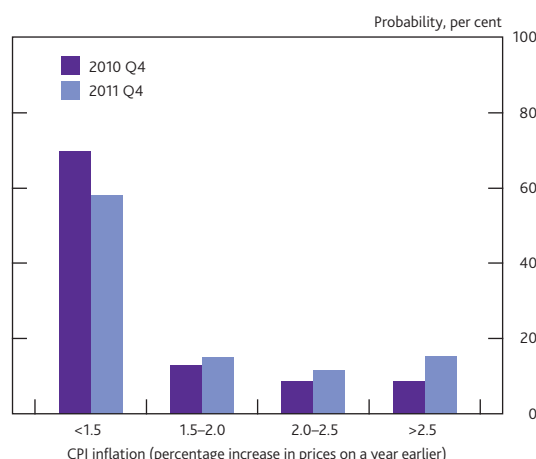
(a) Chart 5.6 represents a cross-section of the CPI inflation fan chart in 2010 Q4 for the market interest rate projection. The coloured bands have a similar interpretation to those on the fan charts. Like the fan charts, they portray the central 90% of the probability distribution. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that inflation in 2010 Q4 would lie somewhere within the range covered by the histogram on 90 occasions. Inflation would lie outside the range covered by the histogram on 10 out of 100 occasions. Chart 5.7 shows the corresponding cross-section of the August 2008 Inflation Report fan chart.

(b) Average probability within each band. The figures on the y-axis indicate the probability of inflation being within  $\pm 0.05$  percentage points of any given inflation rate, specified to one decimal place.

**Chart 5.7** Projected probabilities in August of CPI inflation outturns in 2010 Q4 (central 90% of the distribution)<sup>(a)</sup>

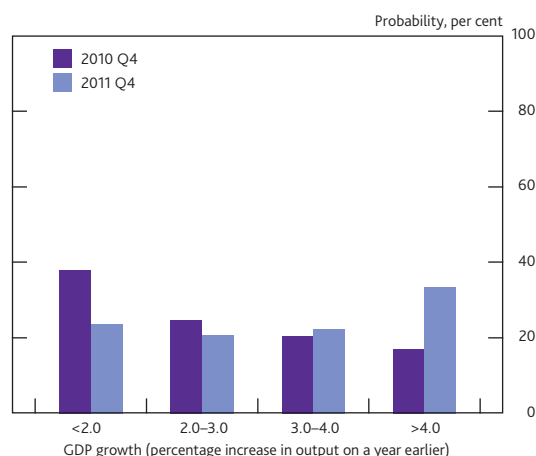


**Chart 5.8** Frequency distribution of CPI inflation based on market interest rate expectations<sup>(a)</sup>



(a) These figures are derived from the same distribution as Chart 5.3. They represent the probabilities that the MPC assigns to CPI inflation lying within a particular range at a specified time in the future.

**Chart 5.9** Frequency distribution of GDP growth based on market interest rate expectations<sup>(a)</sup>



(a) These figures are derived from the same distribution as Chart 5.1. They represent the probabilities that the MPC assigns to GDP growth lying within a particular range at a specified time in the future.

## 5.4 The balance of risks

Charts 5.1 and 5.3 show the risks around the central projections for demand and inflation to be broadly balanced. But the uncertainty around the outlook for growth, and hence inflation, is unusually large. The most likely spread of outcomes for CPI inflation at the two-year horizon is shown in Chart 5.6, and the equivalent outlook at the time of the August Report is shown in Chart 5.7. Charts 5.8 and 5.9 show frequency distributions for inflation and output at the two and three-year horizons.

To judge how the balance of risks is changing over the coming months, the MPC will be monitoring a range of data. In gauging the risks to the recovery in the supply of money and credit, the Committee will focus on: conditions in bank funding markets (including the price, quantity and maturity of interbank funding, and the take-up of facilities offered under the 8 October support programme); and the cost and availability of financing for households and companies (including the quantities of money and credit, liquidity conditions in corporate lending markets, and the extent of pass-through to interest rates). In gauging the impact of tighter credit on activity, the MPC will pay particular attention to: the most timely indicators of spending, including forward-looking surveys and reports from the Bank's regional Agents; and measures of the balance sheet positions of households and companies. In assessing the risks from global prices, the MPC will monitor commodity markets and import prices, and the exchange rate. And in assessing the impact of the banking crisis on supply growth, the Committee will look at: indicators of financing for working capital, including trade credit; the structure of unemployment, including signs of falling participation or rising mismatch in the labour market; and company creation and destruction rates. The Committee

will continue to monitor measures of inflation expectations to ensure they are returning to levels consistent with the inflation target.

## 5.5 The policy decision

At its November meeting, the Committee noted that the outlook for inflation had shifted decisively to the downside. The tightening in the supply of money and credit was likely to cause output to contract further. And CPI inflation was set to fall sharply. The risk of inflation materially undershooting the inflation target in the medium term had increased substantially. In the light of that outlook, the Committee judged that a significant reduction in Bank Rate was necessary in order to meet the 2% target for CPI inflation in the medium term, and accordingly lowered Bank Rate by 1.5 percentage points to 3%.

## Other forecasters' expectations

Every three months, the Bank asks a sample of external forecasters for their latest economic projections. This box reports the results of the most recent survey, carried out during October. On average, external forecasters expected CPI inflation to fall to 1.8% by 2009 Q4 and to pick up back to target by 2011 Q4 (Table 1).

**Table 1** Averages of other forecasters' central projections<sup>(a)</sup>

	2009 Q4	2010 Q4	2011 Q4
CPI inflation <sup>(b)</sup>	1.8	1.8	2.0
GDP growth <sup>(c)</sup>	0.3	1.8	2.5
Bank Rate (per cent)	3.2	3.4	4.3
Sterling ERI <sup>(d)</sup>	89.0	89.6	90.4

Source: Projections of outside forecasters as of 29 October 2008.

(a) For 2009 Q4, there were 23 forecasts for CPI inflation, GDP growth and Bank Rate and 17 for the sterling ERI. For 2010 Q4, there were 19 forecasts for CPI inflation, GDP growth and Bank Rate and 15 for the sterling ERI. For 2011 Q4, there were 19 forecasts for CPI inflation, 18 for GDP growth and Bank Rate and 15 for the sterling ERI.

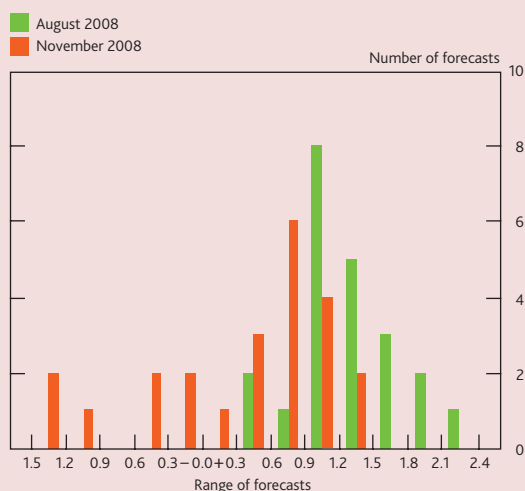
(b) Twelve-month rate.

(c) Four-quarter percentage change.

(d) Where necessary, responses were adjusted to take account of the difference between the old and new ERI measures, based on the comparative outturns for 2006 Q1.

For GDP, the average central projection for four-quarter growth in 2009 Q4 was 0.3%, with growth expected to pick up over the following two years (Table 1). The projections were significantly weaker on average than those reported three months ago, particularly in the near term. In the latest survey, around a third of forecasters expected GDP to contract over the next year, compared with none in the previous survey (Chart A). That was despite significantly lower average projections for both Bank Rate and the sterling ERI.

**Chart A** Distribution of GDP growth central projections one year ahead



Source: Four-quarter GDP growth forecasts of 22 outside forecasters as of 28 July 2008 and 23 outside forecasters as of 29 October 2008.

The Bank also asks forecasters for an assessment of the risks around their central projections for CPI inflation and GDP growth (Table 2). On average, forecasters thought that there

was only a 35% chance that inflation would still be above target in a year's time, down from 80% in the previous survey. The forecasters also judged that the risk of inflation being above target further out had receded — in the latest survey inflation was judged more likely to be below the target than above in all three years (Chart B). On average, respondents also believed that there was a 75% chance that four-quarter GDP growth would be below 1% in a year's time, around twice the probability reported three months ago.

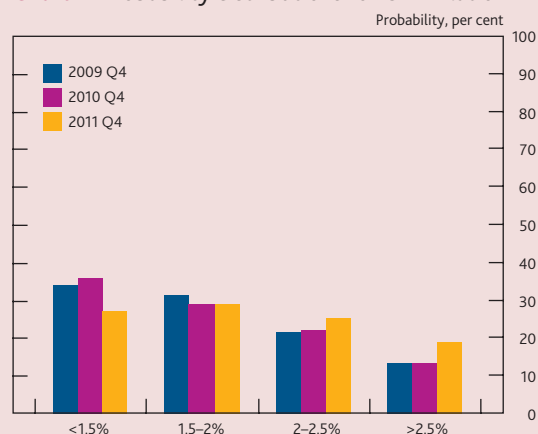
**Table 2** Other forecasters' probability distributions for CPI inflation and GDP growth<sup>(a)</sup>

<b>CPI inflation</b>						
Probability, per cent	Range:					
	<1%	1–1.5%	1.5–2%	2–2.5%	2.5–3%	>3%
2009 Q4	12	22	31	22	10	3
2010 Q4	14	22	29	22	10	3
2011 Q4	10	17	29	25	13	6
<b>GDP growth</b>						
Probability, per cent	Range:					
	<0%	0–1%	1–2%	2–3%	>3%	
2009 Q4	36	39	19	5	1	
2010 Q4	10	21	30	26	13	
2011 Q4	5	13	24	33	24	

Source: Projections of outside forecasters as of 29 October 2008.

(a) For 2009 Q4, 23 forecasters provided the Bank with their assessment of the likelihood of twelve-month CPI inflation and four-quarter GDP growth falling in the ranges shown above; for 2010 Q4, 20 forecasters provided assessments for CPI and 19 for GDP; for 2011 Q4, 19 forecasters provided assessments for CPI and GDP. The table shows the average probabilities across respondents. Rows may not sum to 100 due to rounding.

**Chart B** Probability distributions for CPI inflation



Source: Assessments of CPI inflation falling in ranges shown as of 29 October 2008. 23 forecasters provided assessments for 2009 Q4, 20 for 2010 Q4 and 19 for 2011 Q4.

The average forecast for Bank Rate in 2009 Q4 was 3.2%, more than a percentage point lower than the expectation for 2009 Q3 reported in the previous survey. On average, the sterling ERI was expected to remain close to 90 over the next three years. That was some 4% weaker than the average projection three months ago, reflecting the depreciation of sterling over that time.

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## **Text of Bank of England press notice of 4 September 2008**

### **Bank of England maintains Bank Rate at 5.0%**

The Bank of England's Monetary Policy Committee today voted to maintain the official Bank Rate paid on commercial bank reserves at 5.0%.

The minutes of the meeting will be published at 9.30 am on Wednesday 17 September.

## **Text of Bank of England press notice of 8 October 2008**

### **Bank of England reduces Bank Rate by 0.5 percentage points to 4.5%**

The Bank of England's Monetary Policy Committee today voted at a special meeting to reduce the official Bank Rate paid on commercial bank reserves to 4.5%.

The Monetary Policy Committee held a special meeting on Wednesday 8 October, some hours in advance of its normal schedule. After that meeting, the Bank of England, in conjunction with the Bank of Canada, the European Central Bank, the US Federal Reserve, Sveriges Riksbank, the Swiss National Bank and the Bank of Japan, released the following statement:

Throughout the current financial crisis, central banks have engaged in continuous close consultation and have co-operated in unprecedented joint actions such as the provision of liquidity to reduce strains in financial markets.

Inflationary pressures have started to moderate in a number of countries, partly reflecting a marked decline in energy and other commodity prices. Inflation expectations are diminishing and remain anchored to price stability. The recent intensification of the financial crisis has augmented the downside risks to growth and thus has diminished further the upside risks to price stability.

Some easing of global monetary conditions is therefore warranted. Accordingly, the Bank of Canada, the Bank of England, the European Central Bank, the Federal Reserve, Sveriges Riksbank, and the Swiss National Bank are today announcing reductions in policy interest rates. The Bank of Japan expresses its strong support of these policy actions.

In conjunction with the above statement, the Bank of England's Monetary Policy Committee released the following statement:

In the United Kingdom, CPI inflation rose to 4.7% in August, reflecting increases in food and energy prices. Inflation is likely to rise further to above 5% in the next month or two, in large part as the full effects of already announced increases in the price of domestic energy are felt. But inflation should then drop back, as the contribution from retail energy prices wanes and the margin of spare capacity in the economy increases. Pay growth has so far remained subdued and commodity price pressures have eased, with oil prices down substantially from their mid-summer peak.

Conditions in international credit and money markets have deteriorated very markedly. Many markets are closed. In the United Kingdom, the supply of credit to households and businesses is clearly tightening further as banks seek to adjust their balance sheets. The Committee noted that cuts in official interest rates could not be expected to resolve the current problems in financial markets and that a significant increase in the capital of the banking sector would be required. The Committee therefore welcomed this morning's announcement of a Government programme to recapitalise the major UK banks.

Data released over the past month indicate that the outlook for economic activity in the United Kingdom has deteriorated substantially, reflecting a sharp monetary contraction. Output growth slowed to a halt in the second quarter, business surveys point to further weakening during the second half of this year, and the labour market has softened. Consumer spending growth has slowed, in part as a result of the squeeze on real incomes, while business and dwellings investment have declined. Equity prices have fallen, and the further tightening in credit conditions will also weigh on domestic demand growth. The depreciation in sterling over the past year should support net exports, but the prospects for demand growth in the United Kingdom's main export markets have worsened. The weakness in output growth at home will open up a growing margin of spare capacity that will over time bear down on inflation.

The Committee remains focused on setting Bank Rate in order to meet the 2% inflation target. In doing so it continues to balance two risks. On the downside, there is a risk that a sharp slowdown in the economy, associated with weak real income growth and the tightening in the supply of credit, pulls inflation materially below the target. On the upside, there is a risk that above-target inflation this year and next raises inflation expectations so that inflation persists above the target for a sustained period. During the past month, the balance of those risks to inflation in the medium term has shifted decisively to the downside. In the light of that outlook, the Committee judged at its October meeting that an immediate reduction in Bank Rate of 0.5 percentage points to 4.5% was necessary to meet the 2% target for CPI inflation in the medium term.

The minutes of the meeting will be published at 9.30 am on Wednesday 22 October.



## Text of Bank of England press notice of 6 November 2008

### Bank of England reduces Bank Rate by 1.5 percentage points to 3.0%

The Bank of England's Monetary Policy Committee today voted to reduce the official Bank Rate paid on commercial bank reserves by 1.5 percentage points to 3%.

The past two months have seen a substantial downward shift in the prospects for inflation in the United Kingdom. There has been a very marked deterioration in the outlook for economic activity at home and abroad. Moreover, commodity prices have fallen sharply.

Since mid-September, the global banking system has experienced its most serious disruption for almost a century. While the measures taken on bank capital, funding and liquidity in several countries, including our own, have begun to ease the situation, the availability of credit to households and businesses is likely to remain restricted for some time. As a consequence, money and credit conditions have tightened sharply. Equity prices have fallen substantially in many countries.

In the United Kingdom, output fell sharply in the third quarter. Business surveys and reports by the Bank's regional Agents point to continued severe contraction in the near term. Consumer spending has faltered in the face of a squeeze on household budgets and tighter credit. Residential investment has fallen sharply and the prospects for business investment have weakened. Economic conditions have also deteriorated in the United Kingdom's main export markets.

CPI inflation rose to 5.2% in September. The substantial rise since the beginning of the year largely reflects the impact of higher energy and food prices. But commodity prices have fallen sharply since mid-summer, with oil prices down by more than a half. Inflation should consequently soon drop back sharply, as the contribution from retail energy and food prices declines, notwithstanding the fall in sterling. Pay growth has remained subdued. And measures of inflation expectations have fallen back.

Since the beginning of the year, the Committee has set Bank Rate to balance two risks to the inflation outlook. The downside risk was that a sharp slowdown in the economy, associated with weak real income growth and the tightening in the supply of credit, pulled inflation materially below the target. The upside risk was that above-target inflation persisted for a sustained period because of elevated inflation expectations. In recent weeks, the risks to inflation have shifted decisively to the downside. As a consequence, the Committee has revised down its projected outlook for inflation which, at prevailing market interest rates, contains a substantial risk of undershooting the inflation target. At its November meeting, the Committee therefore judged that a significant reduction in Bank Rate was necessary now in order to meet the 2% target for CPI inflation in the medium term, and accordingly lowered Bank Rate by 1.5 percentage points to 3.0%.

The Committee's latest inflation and output projections will appear in the *Inflation Report* to be published on Wednesday 12 November.

The minutes of the meeting will be published at 9.30 am on Wednesday 19 November.

# Glossary and other information

## Glossary of selected data and instruments

**AEI** – average earnings index.

**ASHE** – annual survey of hours and earnings.

**AWE** – average weekly earnings.

**CPI** – consumer prices index.

**CPI inflation** – inflation measured by the consumer prices index.

**ERI** – exchange rate index.

**GDP** – gross domestic product.

**LFS** – Labour Force Survey.

**Libor** – London interbank offered rate.

**OIS** – overnight index swap.

**RPI** – retail prices index.

**RPI inflation** – inflation measured by the retail prices index.

## Abbreviations

**BCC** – British Chambers of Commerce.

**BHPS** – British Household Panel Survey.

**CBI** – Confederation of British Industry.

**CIPS** – Chartered Institute of Purchasing and Supply.

**ECB** – European Central Bank.

**FTSE** – Financial Times Stock Exchange.

**G7** – Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

**GfK** – Gesellschaft für Konsumforschung, Great Britain Ltd.

**HBF** – Home Builders Federation.

**HEW** – housing equity withdrawal.

**IMF** – International Monetary Fund.

**LTV** – loan to value.

**M6** – Canada, France, Germany, Italy, Japan and the United States.

**MPC** – Monetary Policy Committee.

**MSCI** – Morgan Stanley Capital International Inc.

**MTIC** – missing trader intra-community.

**OFCs** – other financial corporations.

**ONS** – Office for National Statistics.

**PNFCs** – private non-financial corporations.

**PwC** – PriceWaterhouseCoopers.

**RICS** – Royal Institution of Chartered Surveyors.

**S&P** – Standard and Poor's.

**TFP** – total factor productivity.

## Symbols and conventions

Except where otherwise stated, the source of the data used in charts and tables is the Bank of England or the Office for National Statistics (ONS) and all data, apart from financial markets data, are seasonally adjusted.

n.a. = not available.

Because of rounding, the sum of the separate items may sometimes differ from the total shown.

On the horizontal axes of graphs, larger ticks denote the first observation within the relevant period, eg data for the first quarter of the year.



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