# Inflation Report

# February 2010





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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.

### The Monetary Policy Committee:

Mervyn King, Governor Charles Bean, Deputy Governor responsible for monetary policy Paul Tucker, Deputy Governor responsible for financial stability Kate Barker Spencer Dale Paul Fisher David Miles Adam Posen Andrew Sentance

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

The entire *Report* is available in PDF at www.bankofengland.co.uk/publications/inflationreport/2010.htm.

PowerPoint<sup>™</sup> versions of the charts in this *Report* and the data underlying most of the charts are provided at www.bankofengland.co.uk/publications/inflationreport/2010.htm.

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# Overview

The world economy continued to recover, although global activity remained well below pre-crisis trends. After falling substantially, output in the United Kingdom stabilised in the second half of 2009 and a period of gradual expansion is in prospect. The outlook for growth is underpinned by the considerable stimulus from the easing in monetary policy, and supported by global growth and the past depreciation of sterling. But it is likely that credit conditions will remain restrictive for some time and that the need to strengthen public and private sector finances will weigh on spending. A degree of spare capacity is likely to persist over the forecast period, although its extent will depend on the strength of the recovery and on the evolution of supply, both of which remain highly uncertain.

CPI inflation rose sharply to well above the 2% target in December and is likely to have risen further in January. The pickup in inflation largely reflects the impact of one-off adjustments to the level of prices which should have only a temporary effect on inflation. Downward pressure from the persistent margin of spare capacity is likely to cause inflation to fall back to below the target for a period as these temporary effects wane. Under the assumptions that Bank Rate moves in line with market interest rates and the stock of purchased assets financed by the issuance of central bank reserves remains at £200 billion, it is more likely than not that inflation will be below the target for much of the forecast period, but the risks are broadly balanced by the end. The prospects for inflation remain unusually uncertain and there are significant risks to the inflation outlook in each direction.

### Financial and credit markets

Since the November *Report*, the MPC has held Bank Rate at 0.5% and continued its announced programme of asset purchases. Market participants' expectations of the near-term path of Bank Rate were marked down. Gilt yields rose. Corporate bond yields fell a little and equity prices firmed slightly. The sterling exchange rate was little changed. Broad money growth remained weak, although the growth of non-financial companies' deposits picked up further.

Some of the weakness in money growth reflected further steps taken by UK banks to repair their balance sheets, although significant challenges regarding their capital adequacy and funding persisted. Credit conditions remained tight. In aggregate, companies continued to raise funds in capital markets while repaying bank debt. Mortgage approvals picked up and house prices rose again.

### Demand

The world economy continued to recover, with a sharp rebound in manufacturing output and trade. Activity increased

in the United Kingdom's main trading partners but global activity and trade remained well below pre-crisis trends. The gradual expansion in foreign demand and the past substantial depreciation of sterling should support UK net trade over coming quarters.

Households' consumption was estimated to have stopped falling in 2009 Q3, having declined substantially over the previous year. And the household saving ratio picked up sharply. The past contraction in households' spending is likely to have been driven by weakness in actual and expected labour incomes, a desire to strengthen their balance sheets, and reduced availability of credit. Some indicators of consumption are consistent with an increase in spending in Q4, although this may partly reflect the impact of temporary factors.

The retrenchment in business spending eased. Capital expenditure was broadly flat in 2009 Q3, having fallen by almost 20% in the first half of the year. And the pace at which companies ran down inventories slowed further. But the substantial degree of spare capacity and the continuing tightness in credit conditions are likely to dampen any recovery in business investment.

A significant fiscal consolidation is in prospect. The precise nature and pace of that correction are uncertain. The Committee's projections are conditioned on the plans set out in the December 2009 *Pre-Budget Report*. That consolidation is likely to put downward pressure on spending and inflation over the forecast period.

### The outlook for GDP growth

GDP was provisionally estimated to have risen by 0.1% in 2009 Q4. Early estimates of GDP growth are prone to revision as more data become available. The Committee judges that it is more likely than not that estimates of GDP during the recession will be revised up a little over time. Business surveys pointed to continued growth in the first quarter of this year.

**Chart 1** shows the Committee's best collective judgement for four-quarter GDP growth, assuming that Bank Rate follows a path implied by market interest rates and the stock of purchased assets financed by the issuance of central bank reserves remains at £200 billion throughout the forecast period. The considerable stimulus from the easing in monetary policy and the past depreciation of sterling, combined with an expansion in world demand, should underpin a recovery in economic activity. But that recovery will be dampened by a number of forces. Credit conditions are likely to remain restrictive for some time and may become more binding as companies seek to expand. And the need to strengthen public and private sector finances is likely to weigh on spending.

The strength of the recovery is highly uncertain. It is difficult to assess with precision the impact of the unprecedented

Chart 1 GDP projection based on market interest rate expectations and £200 billion asset purchases



The fan chart depicts the probability of various outcomes for GDP growth. It has been conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves remains at £200 billion throughout the forecast period. 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 ecconomic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that the mature estimate of GDP growth would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outturns are also expected to lie within each pair of the lighter green areas on 10 occasions. In any particular quarter of the forecast period, GDP is therefore expected to lie somewhere within the 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-verse point of the projection.

Chart 2 Projection of the level of GDP based on market interest rate expectations and £200 billion asset purchases



Chained-volume measure. See the footnote to Chart 1 for details of the assumptions underlying the projection for GDP growth. The width of this fan over the past has been calibrated to be consistent with the four-quarter growth fan chart, under the assumption that revisions to quarterly growth are independent of the revisions to previous quarters. Over the forecast, the mean and modal paths for the level of GDP are consistent with **Chart 1**. So the skews for the level fan chart have been constructed from the skews in the four-quarter growth fan chart at the one, two and three-year horizons. This calibration also takes account of the likely path dependency of the economy, where, for example, it is judged that shocks to GDP growth in one quarter will continue to have some effect on GDP growth in successive quarters. This assumption of path dependency serves to widen the fan chart.

loosening in monetary policy when other significant and unusual forces are affecting the economy. And the extent to which net trade increases will depend on the vigour of the global recovery and on the ability of UK companies to benefit from sterling's depreciation by switching resources towards the production of tradable goods and services. There are also uncertainties about the strength of the headwinds to growth. Although it is likely to be a considerable time before banks are in a position to lend normally, it is unclear to what extent that will constrain household and company spending. The need for a significant fiscal consolidation is clear, but the nature and pace of that correction are uncertain. And it is unclear how much further households will retrench given the adjustment in their spending and saving already seen.

On balance, the Committee continues to judge that the interaction of these factors points to a slow recovery in the level of economic activity. The projected distribution for GDP growth is similar to that in the November *Report*.

**Chart 2** shows the Committee's best collective judgement for the level of GDP, corresponding to the distribution of GDP growth shown in **Chart 1**. Output is unlikely to return to a level consistent with its pre-crisis trend for a considerable period. That reflects not only the impact of the downturn on the evolution of the supply capacity of the economy, but also the sustained weakness of demand relative to that capacity.

### **Costs and prices**

CPI inflation rose sharply to 2.9% in December, from just 1.1% three months earlier. That increase was largely accounted for by higher petrol price inflation and the effects of the reduction in the standard rate of VAT a year earlier dropping out of the twelve-month comparison. Inflation is likely to have risen further in January, reflecting the restoration of the VAT rate to 17.5%. Measures of households' medium-term inflation expectations have been broadly stable.

The substantial rise in import costs associated with sterling's depreciation has also put upwards pressure on inflation. Against a background of weak demand, companies may have attempted to offset higher import costs by pushing down other costs, such as wages. Earnings growth remained low. The weakness of earnings growth may have contributed to the resilience of employment during the downturn relative to the amount of lost output.

### The outlook for inflation

**Chart 3** shows the Committee's best collective judgement of the outlook for CPI inflation, based on the same assumptions as **Chart 1**. Inflation is likely to remain significantly above the 2% target in the near term, reflecting the continuing impact of sterling's depreciation and the restoration of the VAT rate to 17.5%. But these factors should have only a temporary effect

# **Chart 3** CPI inflation projection based on market interest rate expectations and £200 billion asset purchases



The ran chart depicts the probability of various outcomes for CP1 initiation in the future. It has been conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves remains at £200 billion throughout the forecast period. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that inflation in any particular quarter would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outturns of inflation are also expected to lie within each pair of the lighter red areas on 10 occasions. In any particular quarter of the forecast period, inflation is therefore expected to lie somewhere within the 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 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.

on inflation. As their effects wane, downward pressure from the persistent margin of spare capacity is likely to cause inflation to fall back to below the target for a period.

The extent to which CPI inflation will deviate from the 2% target in the medium term is highly uncertain. Companies' pricing decisions will depend on the timing and strength of the recovery in nominal demand. But the degree to which weakness in nominal demand exerts downward pressure on inflation will also depend on the impact of the recession on the supply capacity of the economy, and on the sensitivity of inflation to the degree of economic slack. This downward pressure on inflation may build gradually if the disruption to supply capacity is most pronounced in the near term or if companies reduce prices in response to spare capacity only with a lag. And inflation may remain higher than otherwise if the period of above-target inflation in the near term causes expectations of medium-term inflation to rise. The profile for inflation will also depend on the extent to which companies need to adjust further to the effects of sterling's depreciation and on whether there are additional substantial movements in energy and commodity prices.

There is a range of views among Committee members regarding the relative strength of these factors. On balance, the Committee judges that, conditioned on the monetary policy assumptions described above, it is more likely than not that inflation will be below the target for much of the forecast period, but the risks are broadly balanced by the end. Overall, the projected distribution for inflation in the medium term is similar to that in the November *Report*.

### The policy decision

At its February meeting, the Committee noted that the immediate prospect was for CPI inflation to remain well above the 2% target, and for output to recover slowly. The downward pressure from the persistent margin of spare capacity was likely to cause inflation to fall back to below the target for a period, before gradually returning to around the target as the recovery proceeded. In the light of that outlook and in order to keep inflation on track to meet the 2% target over the medium term, the Committee judged that it was appropriate to maintain Bank Rate at 0.5% and its stock of purchased assets financed by the issuance of central bank reserves at  $\pounds$ 200 billion. The Committee noted that this stock of past purchases, together with the low level of Bank Rate, would continue to impart a substantial monetary stimulus to the economy for some time to come.

# 1 Money and asset prices

The MPC has maintained Bank Rate at a historic low of 0.5%, and has continued its programme of asset purchases financed by the issuance of central bank reserves to a total of £200 billion. Market participants revised down their short-term expectations for Bank Rate. Gilt yields have risen since the November *Report*. Equity prices rose a little, while corporate bond spreads narrowed. UK banks have continued to strengthen their balance sheets, but considerable challenges remain. Although bank lending was weak in 2009 Q4, there were signs of a slight improvement in credit conditions. Broad money growth remained weak in 2009 Q4, although growth in non-financial companies' deposits picked up further.





Sources: Bank of England and Bloomberg.

(a) The November and February curves are estimated using overnight index swap (OIS) rates in the fifteen working days to 4 November 2009 and 3 February 2010 respectively.

Since the November *Report*, the MPC has maintained Bank Rate at 0.5%, and has continued its programme of asset purchases. That substantial monetary policy stimulus is likely to have supported activity, and should continue to do so. One channel through which asset purchases financed with central bank reserves should boost activity is by raising the stock of broad money (Section 1.1). Large-scale purchases of gilts by the Bank also encourage investors to purchase other assets, boosting other asset prices, including corporate bonds and equities (Section 1.2). That helps to reduce the cost of finance for companies, and may help companies to access capital markets.

But the stimulus provided by policy is acting against the sharp monetary squeeze resulting from UK banks' efforts to repair their balance sheets (Section 1.3). Financial sector balance sheet repair continues to restrict the supply of bank credit to companies and households (Sections 1.4 and 1.5), and a key uncertainty for the MPC is the extent to which spending can recover without a marked pickup in bank lending (Section 5).

### 1.1 Monetary policy

The MPC has maintained Bank Rate at 0.5%, and has continued its programme of asset purchases to a total of  $\pounds$ 200 billion, financed by the issuance of central bank reserves. The reasons for the MPC's decisions in December and January are discussed in the box on page 10.

In the run-up to the MPC's February decision, financial market participants' short-term interest rate expectations were somewhat lower than at the time of the November *Report* (Chart 1.1). Bank Rate was expected to rise markedly over the next three years, although it was still expected to be below its early-2008 level by the start of 2013.

## Monetary policy since the November Report

The MPC's projection in the November *Report*, under the assumptions that Bank Rate followed a path implied by market interest rates and the stock of purchased assets financed by the issuance of central bank reserves reached £200 billion, was for a slow recovery in the level of economic activity over the forecast period. Under the same assumptions, the MPC's projection was for CPI inflation to rise above the 2% target in the near term, but to fall back through much of 2010. The risks of inflation being above or below target were judged to be largely balanced by the end of the forecast period.

Most members felt that there had been some small positive developments for the near-term outlook in the month preceding its meeting on 9–10 December 2009. The ONS had revised up its estimate of GDP growth in the third quarter to -0.3% from -0.4%. Some aspects of the expenditure breakdown within the Q3 GDP release had also seemed promising. And some of the macroeconomic data from overseas had been positive, especially in Asia.

But equally there had been some less favourable developments. Aggregate money growth had been weak. And while the growth rate of households' and non-financial companies' money balances had held up better than aggregate broad money, it remained weak in absolute terms. The narrowing of the spread between gilt yields and corresponding OIS rates, which Committee members had viewed as an indicator of the expansionary impact of the asset purchase programme, had partly reversed over the previous two months. The reasons for that were unclear, however, and it remained likely that the full impact of the asset purchase programme on the economy would be felt with only a lag.

CPI inflation had been 1.5% in October. Following the usual pre-release arrangements, an advance estimate for CPI inflation of 1.9% in November had been provided to the Governor ahead of publication. Those outturns were broadly in line with the November *Report* central projection.

In November, the Committee had announced a £25 billion extension to its programme of asset purchases that would take three months to complete. The medium-term outlook had changed little since then. For those members who had preferred a different policy action at the November meeting, a slightly different scale of asset purchases could still be justified. But the lack of significant news over the month meant that any case for deviating from the programme of asset purchases announced in November was outweighed by the benefits of completing it as previously announced.

Data over the month running up to the MPC's meeting on 6–7 January remained consistent with a continued global

recovery, albeit one that remained heavily dependent on policy stimulus and subject to downside risks. For example, indicators suggested that global manufacturing, which had contracted severely during the downturn, continued to recover. Global car sales had remained buoyant in November, despite the ending of some car scrappage schemes. And retail sales reports in many countries pointed to rising consumer spending. But the recovery appeared to be centred on emerging Asia, with the euro area, the United Kingdom's main trading partner, growing only slowly.

The most recent data provided mixed signals about the current state of UK demand. The latest surveys were, on balance, consistent with growth during the fourth quarter. In November, private non-financial companies had raised positive net finance for the first time since the summer, and there was evidence of some improvement in the availability of bank credit. But the growth in households' and private non-financial companies' money balances remained subdued.

It was increasingly probable that CPI inflation would rise to well above the 2% target in the early part of 2010 and remain elevated thereafter for several months. The most recent intelligence about the likely pass-through of the January VAT rise suggested that inflation in the short term would be further above target than the Committee had previously expected.

In contrast to the short-term inflation outlook, the YouGov/Citigroup survey measure of households' longer-term inflation expectations, which had edged up in previous months, had dropped back. Measures of forward inflation derived from financial market prices remained little changed. Taking the data together, there was little evidence that household or financial market inflation expectations had changed materially in the second half of 2009.

Overall, Committee members agreed that recent developments did not provide grounds for substantially changing their views about the medium-term prospects for activity and inflation. All members therefore voted to maintain the level of Bank Rate at 0.5%, and to continue with the announced programme of asset purchases.

At its meeting on 3–4 February, the Committee voted to maintain Bank Rate at 0.5%. The Committee also voted to maintain the stock of asset purchases financed by the issuance of central bank reserves at £200 billion.

#### Table 1.A Broad money<sup>(a)</sup>

Aver	ages <sup>(b)</sup>		2	009	
1997	–2008	Q1	Q2	Q3	Q4
Percentage changes:					
On a quarter earlier (annualised)	7.8	4.0	3.3	-2.3	-0.5
On a year earlier	8.0	4.1	3.3	2.2	1.1

(a) The series are constructed using headline M4 growth prior to 1998 Q1 (for growth on a quarter earlier) and 1998 Q4 (for growth on a year earlier), and M4 excluding intermediate OFCs thereafter. Intermediate OFCs are: mortgage and housing credit corporations; non-bank credit grantors; bank holding companies; and those carrying out other activities auxiliary to financial intermediation. Banks' business with their related 'other financial intermediaries' is also excluded, based on anecdotal information provided to the Bank of England by several banks.

(b) Averages of quarterly data

### Chart 1.2 Broad money, bank credit and nominal GDP



(a) Recessions are defined as two consecutive quarters of falling output (at constant market prices) estimated using the latest data. Recessions are assumed to end once output began to

(b) The series are constructed using M4 and M4 lending (excluding securitisations) growth prior to 1998 Q4, and equivalent measures excluding the deposits of, and borrowing by, intermediate OFCs thereafter. For the definition of intermediate OFCs, see footnote (a) in Table 1 A

(c) At current market prices. The latest observation is 2009 O3

### Chart 1.3 Sectoral broad money(a)



Monthly data, unless otherwise specified

(a) Monthly data, unless otherwise specified.
 (b) Based on quarterly data. For the definition of intermediate OFCs see footnote (a) in Table 1.A

### Money

Broad money growth in 2009 Q4 remained well below its recent average (Table 1.A). Although the Bank's asset purchases should support broad money holdings, they have been acting against a severe monetary squeeze, as banks have attempted to repair their balance sheets and activity has contracted. As banks have tightened the supply of credit, fewer loans have been advanced, reducing deposit growth. Furthermore, UK banks have issued a sizable amount of long-term debt and capital instruments in order to strengthen their balance sheets: when purchased by non-bank investors, that process also reduces money growth.

It is difficult to know precisely how much weaker broad money would have been in the absence of the Bank's asset purchases. But the slowdown in broad money growth during the recession has been somewhat less than might have been implied by the slowdown in nominal GDP growth: the early 1990s recession was associated with a sharper fall in money growth (Chart 1.2).

Although the monetary contraction has been reflected in weakness in money growth across all sectors, more recent movements in growth have varied across sectors (Chart 1.3). Growth in the deposits of non-bank financial institutions (excluding those that intermediate between banks) slowed markedly in 2009 H2, while household money growth was broadly stable, and private non-financial corporations' (PNFCs) money growth strengthened.

The purchases of gilts by the Bank should, in the first instance, primarily boost the deposits of non-bank financial institutions, as such institutions tend to be the main holders of gilts. Money deposits yield a relatively low return, however, so investors are likely to want to use higher money balances to buy other assets. Some of that money may have been used to purchase debt and equity issued by banks. And some may have flowed through into other sectors, for example as non-bank financial institutions purchased capital market instruments issued by PNFCs. Growth in PNFCs' deposits has indeed increased, and their issuance of equities and corporate bonds has picked up sharply since 2008 (Section 1.4). That may also reflect support in capital markets from the Bank's purchases of private sector assets.

Capital market issuance is unlikely to explain fully the pickup in PNFCs' money growth, however. Not all the proceeds of capital market issuance will have pushed up deposits: reports from the major UK lenders suggested that some of the proceeds have been used to repay bank debt. And it is possible that PNFCs' deposits have strengthened, in part, because they are keen to conserve cash flow at present; for example, some contacts of the Bank's regional Agents reported that they were focusing on preserving cash in order to improve the terms at which they could access bank credit.





Sources: Bloomberg and Bank calculations.

# Chart 1.5 FTSE All-Share and weight placed on a 20% fall in equity prices



Sources: Euronext.liffe, Thomson Datastream and Bank calculations.

(a) Based on six-month implied volatilities derived from options prices for the FTSE 100

Chart 1.6 Fund manager survey of market liquidity conditions<sup>(a)</sup>



Source: Bank of America/Merrill Lynch Fund Manager Survey Global.

(a) The survey asks: 'How would you rate liquidity conditions (eg depth of markets, narrowness of bid-offer spreads, ease of execution etc) at this time?'. The net percentage balance is calculated as the percentage reporting 'positive' less the percentage reporting 'negative'.

### 1.2 Asset prices

### Gilts

Gilt yields have increased across most maturities since the November *Report*. In part, gilt yields at a given maturity reflect market participants' expectations of the path of Bank Rate up to that horizon (**Chart 1.4** shows gilt yields at five-year maturity and estimated expectations of Bank Rate using overnight index swap (OIS) rates). But other factors specific to the gilt and OIS markets also change the wedge between gilt yields and OIS rates.

That wedge, the gilt-OIS spread, narrowed markedly between February and August 2009, but has widened somewhat since October (Chart 1.4). That pattern may in part reflect changes in expected demand for gilts from the Bank's asset purchase programme. As the MPC announced increases to the scale of the programme, market contacts reported that had pushed down gilt-OIS spreads. More recently, contacts reported that some market participants' expectations for the total scale of purchases fell back slightly, pushing up gilt-OIS spreads a little. Expectations of demand for gilts from the banking sector was also reported by market contacts to have risen during 2009 H1 following Financial Services Authority announcements regarding future liquidity requirements, but those expectations were scaled back in October after more details were provided.

As well as expected demand, increases in the expected supply of gilts are also likely to have contributed to the rise in gilt-OIS spreads since October. Market contacts reported that some market participants revised up their expectations of gilt issuance around the time of the December *Pre-Budget Report*.

### Equities and corporate bonds

Equity and corporate bond prices have picked up sharply over the past year, following marked falls during the financial crisis. In the run-up to the MPC's February meeting, the FTSE All-Share index was 3% higher than at the time of the November *Report*, although it remained around 20% lower than its mid-2007 peak (Chart 1.5). Yields on sterling-denominated investment-grade corporate bonds fell a little, and relative to gilts, spreads narrowed more substantially, by around 55 basis points. International equity prices and corporate bond spreads mirrored these improvements in sterling markets.

Asset prices have been supported internationally by expansionary monetary policy and by improved economic prospects. In the United Kingdom, the low level of Bank Rate and the Bank's asset purchases are likely to have supported asset prices, as investors rebalanced their asset portfolios away from gilts. In addition, signs of a recovery in activity (Section 2) are likely to have pushed up central expectations for corporate earnings. And the weight market participants

# Chart 1.7 Sterling non-bank investment-grade corporate bond spreads less CDS premia<sup>(a)</sup>



Sources: UBS Delta and Bank calculations.

(a) The data are based on individual corporate bond spreads (relative to asset swaps) less their corresponding CDS premia. The maturity of the bonds used in this calculation may not necessarily match the maturity of the corresponding CDS premia, as data are typically only available for five-year CDS. The chart shows five-day moving average median measures.

### Chart 1.8 Sterling exchange rates



### Chart 1.9 Property prices



Sources: Halifax, Investment Property Databank, Nationwide, Thomson Datastream and Bank calculations.

(a) Not seasonally adjusted. The latest observation is December 2009.
 (b) The average of the Halifax and Nationwide measures. The published Halifax index has been adjusted in 2002 by the Bank of England to account for a change in the method of calculation. The latest observation is January 2010.

place on the possibility of further large falls in equity prices appears to have fallen back (Chart 1.5).

Market functioning has improved significantly over the past year. During the worst of the financial crisis, volumes traded fell sharply and market participants became concerned about their ability to sell on assets. But investors have reported a marked improvement in market liquidity in recent months (Chart 1.6). Consistent with that, an indicator of illiquidity premia in corporate bond markets — the difference between corporate bond spreads and credit default swap (CDS) premia — has fallen back since early 2009 (Chart 1.7).

Although better market functioning is likely to be linked to improved global economic prospects and the substantial monetary policy stimulus, the direct support provided by the Bank to corporate bond and commercial paper markets is also likely to have played a role. In January 2010, the Bank began to sell, as well as buy, corporate bonds in order to improve secondary market functioning further.<sup>(1)</sup> Although the MPC voted to maintain the stock of asset purchases financed by the issuance of central bank reserves at £200 billion at its February meeting, the Bank will continue to purchase private sector assets on behalf of the Treasury and financed by the issue of Treasury bills, in line with the arrangements announced on 29 January 2009.

### Sterling

In the fifteen working days running up to the February *Report*, the sterling effective exchange rate index (ERI) was 1.3% higher than at the time of the November *Report* (Chart 1.8). That largely reflected an appreciation against the euro. By contrast, sterling has depreciated a little against the US dollar. The sterling ERI remains around 25% lower than in mid-2007. The box on page 24 discusses the implications of that depreciation for UK exports.

### Property

Residential property prices have continued to rise in recent months. According to the average of the Halifax and Nationwide measures, prices in January 2010 were 10% higher than their trough in April 2009, although they remained 12% below their October 2007 peak (Chart 1.9). Housing market transactions have also picked up further, but were still around 20% below their ten-year average in 2009 Q4.

In part, the recent strength in house prices may reflect an unusually weak supply of properties available to purchase relative to demand. But the Royal Institution of Chartered Surveyors (RICS) survey suggests that imbalance may have narrowed, as new instructions to sell have increased and new buyer enquiries have risen more slowly (Chart 1.10).

(1) See the box on page 269 of the 2009 Q4 Quarterly Bulletin.





(a) Data are for England and Wales, and show the percentage balance reporting an increase in new instructions to sell/new buyer enquiries over the past month since March 2002 (and over the past three months prior to March 2002) less the percentage reporting reduced instructions/enquiries. The latest observation is December 2009





Sources: Dealogic, published accounts and Bank calculations

(a) Excludes Northern Rock and Britannia. Core Tier 1 capital is defined as commor shareholders' equity and UK B shares adjusted for goodwill, intangibles and regulatory deductions. Data prior to 2009 are taken from annual published accounts. The latest observations are for 2009, and are based on third-quarter interim management stater for Banco Santander, Bank of Ireland, Co-operative Financial Services, HSBC, National Australia Bank and Nationwide; and on estimates on a *pro-forma* basis as at 30 June 2009 for Barclays, Lloyds Banking Group and Royal Bank of Scotland.



08 09 (a) Weighted responses of lenders. A positive balance implies an increase in the default rate over the past three months

Commercial property prices rose in 2009 Q4 (Chart 1.9). Although appetite for prime property had picked up strongly, market contacts reported that investor appetite for other types of property remained limited. Exposures to commercial property continue to pose a risk for the banking sector (Section 1.3).

## 1.3 The banking sector

UK banks continue to face two major challenges. First, regulators and investors — both in the United Kingdom and abroad — are likely to require banks to operate with higher capital ratios to improve their ability to absorb unexpected losses. Second, banks need to restructure the way that they fund their lending, reducing their reliance on short-term wholesale funding and replacing funding supported by the official sector during the crisis. These two challenges are closely related. In particular, the supply and cost of future funding is likely to depend, in part, on investors' perceptions of the adequacy of banks' capital cushions.

### Capital

UK banks' capital ratios have increased (Chart 1.11). In part, that reflects further capital raising, including both private sector equity issuance and also public sector equity injections, such as that associated with Royal Bank of Scotland's participation in the Government's Asset Protection Scheme.

Profits have also boosted banks' capital positions. The major UK banks' profits rose between 2008 H2 and 2009 H1. And the continued recovery in equity and corporate bond markets since then is likely to have supported profitability further. For example, although bank lending to PNFCs has remained weak, banks earn fees on capital market issuance, so recent strong issuance by PNFCs (Section 1.4) may have supported revenues. And rises in equity prices have strengthened banks' balance sheets.

Banks continue to make losses on past loans. On balance, lenders responding to the 2009 Q4 Credit Conditions Survey reported higher default rates on corporate loans than three months earlier, but default rates on household loans were reported to be broadly unchanged (Chart 1.12). But defaults were similar to, or smaller than, those expected by the lenders three months earlier.

The potential for significant losses on commercial property loans remains a major risk to UK banks' capital buffers.<sup>(1)</sup> The banking sector has a sizable exposure to commercial property: loans by UK-resident lenders to the UK real estate sector account for almost half of the stock of all bank loans to UK PNFCs. Losses on such loans have risen during the

(1) See the box on pages 24–25 of the December 2009 Financial Stability Report.





Sources: Bank of England, Dealogic, JPMorgan Chase & Co. and Bank calculations

(a) Issuance with a value greater or equal to US\$500 million equivalent and original maturity greater than one year. Data are converted into sterling terms using monthly averages of the sterling-dollar exchange rate.

(b) Senior debt issued under HM Treasury's Credit Guarantee Scheme.
(c) Averages of end-month sterling and euro-denominated secondary market spreads for Barclays, HSBC, Lloyds Banking Group and Royal Bank of Scotland.

# Chart 1.14 Bank Rate and quoted interest rates on households' fixed-rate bond deposits<sup>(a)</sup>



(a) The three-year and five-year bond rates are weighted averages of the rates from those banks and building societies that provide the Bank with quoted rates data and offer those products

Chart 1.15 PNFCs' net finance raised<sup>(a)</sup>



(a) Three-month moving averages. Includes sterling and foreign currency funds

(b) Non seasonally adjusted.

 (c) Includes stand alone and program bonds.
 (d) Owing to the method of seasonal adjustment of this series, the total may not equal the sum of its components. recession, and could rise further. Market contacts report instances where lenders have not foreclosed on loans in breach of loan to value covenants, so long as borrowers were able to meet interest payments. But, notwithstanding the low level of Bank Rate, sharp falls in rental values have made it harder for borrowers to service their debt, raising the likelihood of default. In addition, market contacts remain concerned that some loans will be difficult to refinance. Past falls in property prices and tight credit availability mean that borrowers may have to provide significant equity injections when their loan comes up for refinancing. If that proves difficult, defaults could be higher than lenders are expecting.

Overall, UK banks have made further progress in repairing their balance sheets. But markets and regulators are likely to require higher capital ratios in the future. Indeed, the major UK banks' CDS premia remain elevated compared with pre-crisis levels, suggesting that investors require greater compensation for bearing the default risk associated with the debt of banks.

### Funding

The cost of raising funding in wholesale markets has changed little since the November *Report*. Three-month Libor-OIS spreads have been stable. Secondary market spreads on unguaranteed senior debt issuance have also been steady. Issuance of such debt in primary markets has continued, with record levels of issuance in January (Chart 1.13).

The major UK banks have a significant amount of funding maturing over the next few years. That includes funding supported by the official sector, under the Bank's Special Liquidity Scheme and the Government's Credit Guarantee Scheme. The cost and availability of funds to replace maturing liabilities will be an important influence on banks' lending capacity. Asset-backed securities were a major source of funding pre-crisis, but it is not clear how strong investor appetite for such securities will be in the future.<sup>(1)</sup> Insofar as banks' demand for alternative funding sources, such as customer deposits or senior debt, therefore increases, that may put upward pressure on funding costs; some major UK lenders suggest that strong competition among banks for longer-term retail deposits has indeed pushed up the rates that they offer on such deposits. Moreover, funding at longer maturities is likely to be more costly than the short-term funding currently used by some banks, in part reflecting the low level of Bank Rate relative to longer-term interest rates, and also elevated investor concern about lending to banks over the longer term. Overall, rates paid on households' fixed-rate bonds are already significantly higher than Bank Rate, and increase with the maturity of the bond (Chart 1.14).

(1) See the box on pages 16–18 of the December 2009 Financial Stability Report.





(a) Weighted responses of lenders. A positive balance indicates that more credit is available, or that spreads or fees and commissions are lower over the past three months.

Chart 1.17 Contributions to growth in loans to UK PNFCs over the past three months (annualised)<sup>(a)</sup>



(b) Calculated as a residual.(c) Includes Banco Santander.

(c) includes banco santander.

### Table 1.B PNFCs' equity and debt issuance<sup>(a)</sup>

£ billions

2 bittions						
	Averag					
	2003–08	2009	Q1	Q2	Q3	Q4
Equities						
Net issuance	-0.7	2.6	3.1	4.4	1.0	2.0
Gross issuance	0.8	2.7	3.1	4.5	1.0	2.0
Repayments	1.5	0.0	0.0	0.0	0.0	0.0
Corporate bonds <sup>(b)</sup>						
Net issuance	1.1	1.4	0.1	2.8	1.0	1.6
Gross issuance	2.5	4.1	4.7	5.2	2.8	3.5
Repayments	1.4	2.7	4.6	2.4	1.8	2.0
Commercial paper						
Net issuance	0.0	-0.6	-1.1	-0.2	-0.8	-0.4
Gross issuance	4.4	3.3	6.0	3.8	2.1	1.1
Repayments	4.4	3.9	7.1	4.0	2.8	1.5

(a) Averages of monthly flows of sterling and foreign currency funds. Data are non seasonally adjusted.
 (b) Includes stand alone and program bonds.

Overall, funding remains a significant concern for many lenders. In the November 2009 *Systemic Risk Survey*, around a third of market participants reported that funding and liquidity problems were a key risk to the UK financial system, and that such problems were among the most challenging to manage.

### 1.4 Corporate credit conditions

The total amount of finance raised by PNFCs remained weak in 2009 Q4 (Chart 1.15). In aggregate, reductions in bank debt were offset by net issuance of equities and corporate bonds. Recent trends in corporate borrowing are likely to reflect both a restricted supply of bank credit and weak demand for finance. But as the economy recovers, some companies may find that lenders are not willing to provide enough finance to match their increased demand for credit. The prevalence of such credit constraints, and the extent to which companies are able to access alternative sources of finance, will be a key determinant of the strength of the recovery (Section 5).

The supply of bank loans to UK companies depends on the behaviour of both UK and foreign-owned lenders. The 2009 Q4 *Credit Conditions Survey*, which primarily reflects the experience of UK-owned lenders, suggested an increase in the availability of company credit (**Chart 1.16**). Lenders also reported lower spreads and fees and commissions on loans, following marked increases over much of the previous two years. Loans by foreign-owned banks have fallen sharply over the past year (**Chart 1.17**), as some left the UK market. But there have been some reports from the major UK lenders of renewed efforts by foreign banks to lend to UK companies in recent months.

According to reports from the Bank's regional Agents, companies perceive that credit conditions remain tight, although some noted an easing in the supply of bank credit. That was consistent with chief financial officers' responses to the Q4 *Deloitte CFO Survey*.

The extent to which an easing in the supply of bank credit results in higher borrowing will depend on companies' overall demand for finance. Demand for finance might be expected to pick up as economic activity recovers. For example, companies' sales will influence their demand for trade credit. To date, reports from the Bank's regional Agents suggest that demand for finance remains subdued, although that could in part reflect the tight supply of credit.

Companies' demand for bank finance will also depend on the cost and availability of alternative sources of finance. Large companies raised a sizable amount of finance via capital markets in 2009 Q4 (Table 1.B), consistent with a shift in credit demand away from banks. Higher equity prices and lower corporate bond spreads over the course of the year, in part reflecting the Bank's asset purchase programme





Chart 1.19 Mortgage approvals for house purchase(a)



(a) Data are net of cancellations. The latest observations shown are for December 2009; this chart differs from the printed version of the Report, for which the latest observations shown were for October 2009

Includes banks, building societies and other specialist lenders. Includes Banco Santander, Barclays, HSBC, Lloyds Banking Group, Nationwide and Royal Bank of Scotland. Some data prior to 2008 have been estimated



Chart 1.20 Average quoted interest rates on selected household loans

(Section 1.2), may also have supported issuance. Over 2009 as a whole, net equity issuance was particularly strong, reflecting both high gross issuance, and markedly lower repayments of equity finance than in recent years.

Many small and medium-sized enterprises (SMEs) cannot access capital markets, however, and rely more on bank finance. The box on pages 30–31 discusses SME financing and activity over the recession.

## 1.5 Household credit conditions

Secured household lending remained weak in 2009 Q4 (Chart 1.18). But mortgage approvals for house purchase picked up further, and should support net lending over time. In part, the pickup in mortgage approvals could reflect recovering demand for housing, consistent with the past strength in new buyer enquiries (Section 1.2). It could also reflect a slight easing in credit conditions offered by the major UK lenders. Lenders responding to the 2009 Q4 Credit Conditions Survey reported an increase in secured credit availability, and higher maximum loan to value ratios — for the first time in over two years. Quoted mortgage rates were little changed during 2009 H2.

It has been the major UK lenders that have driven higher mortgage approvals to date (Chart 1.19). The low level of approvals by other lenders, which include small building societies and specialist lenders, may indicate that limited credit supply capacity is holding back further mortgage lending. For example, market intelligence suggests that funding and liquidity challenges are greater for the smaller UK lenders. In addition, many specialist lenders previously focused on higher-risk loans, including self-certified mortgages, and may have reassessed the risk associated with such lending in view of the increase in arrears and repossessions during the recession. It remains uncertain whether the major UK lenders will increase capacity to fill the gap left by other lenders. For example, providing higher-risk loans may be less attractive than in the years running up to the financial crisis.

While the stock of secured loans has stabilised, the stock of unsecured loans has continued to fall (Chart 1.18). In part, that is likely to reflect tighter credit supply. In contrast to mortgage rates, unsecured borrowing rates have picked up over the past year (Chart 1.20).

# 2 Demand

UK GDP is estimated to have fallen by 0.2% in 2009 Q3. Consumption stabilised following five quarters of contraction. Business investment recorded a much smaller fall than in the preceding two quarters. Stockbuilding is estimated to have boosted growth in Q3, although companies continued to run down inventories. The world economy continued to show signs of recovery and a number of the United Kingdom's major trading partners recorded positive growth in Q3. But net trade reduced UK GDP growth. The ONS provisionally estimated that UK GDP grew by 0.1% in 2009 Q4.



#### Table 2.A Expenditure components of demand(a)

Percentage changes on a quarter earlier

	Averages	2008		2009	
	1997–2007	Q4	Q1	Q2	Q3
Household consumption <sup>(b)</sup>	0.8	-1.2	-1.5	-0.8	0.0
Government consumption	0.6	1.1	0.0	0.7	0.3
Investment	1.3	-2.4	-7.5	-5.9	2.2
of which, business investment	1.4	-1.6	-8.8	-10.3	-0.6
of which, dwellings investment <sup>(c)</sup>	0.7	-5.8	-8.7	-5.1	1.1
Final domestic demand	0.8	-0.9	-2.2	-1.3	0.4
Change in inventories <sup>(d)(e)</sup>	0.0	-0.9	-0.6	0.5	0.3
Alignment adjustment <sup>(e)</sup>	0.0	-0.5	0.4	-0.1	-0.6
Domestic demand	0.9	-2.3	-2.4	-0.9	0.1
'Economic' exports <sup>(f)</sup>	1.1	-4.3	-7.0	-2.2	0.7
'Economic' imports <sup>(f)</sup>	1.5	-5.9	-6.7	-3.3	1.6
Net trade <sup>(e)</sup>	-0.1	0.6	0.1	0.4	-0.2
Real GDP at market prices	0.7	-1.8	-2.5	-0.7	-0.2

(a) Chained-volume measures

Includes non-profit institutions serving households Whole-economy dwellings investment.

(d) Excludes the alignment adjustment.

Percentage point contributions to quarterly growth of real GDP. Goods and services, excluding the estimated impact of missing trader intra-community (MTIC) fraud

Monetary policy influences inflation through its impact on nominal demand. Nominal demand rose by 1.1% in 2009 Q3 - close to its ten-year average growth rate - but it remained significantly below its pre-recession level (Chart 2.1). Developments in nominal demand reflect movements in both real activity and prices. This section considers developments in real activity, while prices are discussed in Section 4.

Real GDP was estimated to have fallen by 0.2% in 2009 Q3. Final domestic demand increased and stockbuilding boosted growth. The contribution of net trade was, however, negative (Table 2.A). The ONS provisionally estimated that GDP growth was 0.1% in 2009 Q4. Section 2.1 looks at developments in domestic demand and Section 2.2 considers developments in the international economy, including the outlook for UK exports.

#### 2.1 Domestic demand

### Recent trends in household spending

Household consumption was estimated to have stabilised in 2009 Q3 (Table 2.A), having fallen by 4% since the start of the recession. Spending on vehicles boosted consumption growth in Q3, as it did in Q2 (Chart 2.2). Spending on other consumer goods and services fell at a slower rate than in the previous quarter.

Some indicators are consistent with an increase in consumer spending in Q4. Retail sales — one ONS measure of spending on goods — increased by 0.7% in Q4. But in recent quarters, positive retail sales growth has not been associated with positive growth in the ONS estimate of household spending on other consumer goods - the measure used in the estimate of overall consumption. Private new car registrations remained strong in Q4. And reports from the Bank's regional Agents suggested a modest pickup in spending on consumer services.



# Chart 2.2 Contributions to quarterly growth in consumer spending<sup>(a)</sup>

(a) Chained-volume measures. Excluding non-profit institutions serving households. Figures in parentheses are shares in total real consumption in 2008. Shares do not sum to 100 due to rounding.

# Chart 2.3 Contributions to four-quarter growth in real post-tax labour income



(a) Household taxes include income tax and Council Tax.

(b) General government benefits minus employees' National Insurance contributions.
 (c) Consumer expenditure deflator (including non-profit institutions serving households).
 (d) Wages and salaries plus mixed income.

### Chart 2.4 Household saving ratio<sup>(a)</sup>



Some factors are likely to have provided temporary support to consumer spending growth in the second half of 2009. For example, some households may have brought forward spending ahead of the restoration of the standard rate of VAT to 17.5% at the beginning of 2010. And spending on vehicles is likely to fall back following the expiry of the car scrappage scheme in March 2010.<sup>(1)</sup> But households' consumption and saving decisions more generally reflect a range of influences.

### Influences on household spending and savings

Consumption depends on income and how much of that households choose to save. Real post-tax labour income has been relatively resilient over the past year as weakness in pre-tax labour income has been offset by lower household taxes and increased benefit payments (**Chart 2.3**). That relative strength in income, at a time of falling consumption, is reflected in a higher saving ratio. The household saving ratio picked up sharply to 8.6% in 2009 Q3 (**Chart 2.4**), 7.7 percentage points higher than in the same quarter a year earlier. That was the largest four-quarter increase in the saving ratio since records began in 1955. The remainder of this subsection considers possible explanations for this sharp rise in the saving ratio.

Households may have revised down their expected future income, and therefore cut back sharply on spending now. The sharp fall in output has led to lower employment and a weakening in earnings growth, which may have caused some households to lower their expectations of future earnings. In addition, given the weakness in the United Kingdom's public finances, households may expect higher taxes to reduce their future take-home pay.

Households may also have increased savings due to heightened uncertainty following the financial crisis. If households think that the probability of adverse shocks to their income and wealth has risen, they are likely to reduce their debts or increase their assets to provide a buffer. Consistent with an increase in uncertainty, measures of consumer confidence fell sharply in 2008.

Tight credit conditions may also have led to higher saving. Accessing credit is more difficult now for some households than it was prior to the financial crisis. If tight credit conditions prevent some households from borrowing to fund consumption that would push down spending and push up aggregate saving. In addition, many lenders have withdrawn high loan to value mortgages and, though house prices have fallen, the average deposit needed to purchase a house has increased. Some households may have responded by increasing saving in order to facilitate future house purchases.

For more information on the economic impact of the car scrappage schemes see the box on page 19 of the November 2009 Report.



 (a) Chained-volume measures. The figures in parentheses show shares in the level of whole-economy investment in 2008. Because of rounding, the sum of the bars may differ from the total line. Shares do not sum to 100 due to rounding.
 (b) Includes dwellings investment and costs associated with the transfer of ownership of

(b) Includes dwellings investment and costs associated with the transfer of ownership of buildings, dwellings and non-produced assets, primarily stamp duty on housing transactions and estate agents' fees.

#### Chart 2.6 Business investment to GDP ratio<sup>(a)</sup>



(a) Chained-volume measures. Recessions are defined as two consecutive quarters of falling output (at constant market prices) estimated using the latest data.





(a) The balances show the proportion of companies, weighted by turnover, citing each factor as an important influence on capital expenditure decisions. Respondents could select more than one option. The survey was carried out between 16 October and 23 November 2009. The accommodative stance of monetary policy has acted against these forces and supported consumption. Lower interest rates increase the incentive to consume today. And the Bank's asset purchase programme is also bolstering consumption by boosting asset prices (Section 1). Consumption may have been further supported by a reduction in uncertainty: measures of consumer confidence have improved since early 2009.

It is difficult to judge the extent to which consumption has now adjusted to lower expected income and higher uncertainty — consumption has fallen by 4% over the recession and by considerably more relative to its pre-recession trend. Section 5 discusses the influences on consumption over the forecast horizon.

#### Investment

In 2009 Q3, whole-economy investment spending was 16% below its pre-recession level. That substantial fall was predominantly driven by the sharp fall in business investment, which accounts for around 60% of whole-economy investment (Chart 2.5).

Even allowing for the sharp fall in GDP, the cumulative fall in business investment appears large relative to previous recessions (Chart 2.6). The remainder of this subsection considers the main factors that have driven the fall in business investment, and the near-term outlook.

In large part, the fall in business investment since the start of the recession is likely to reflect weak demand conditions and uncertainty about the outlook. In a recent survey by the Bank's regional Agents, the fall in demand was the main factor cited by companies that had cut investment (Chart 2.7). As demand has contracted, companies have been operating well below normal levels of production (Section 3), limiting the need to expand capacity. Moreover, increased uncertainty about the outlook may have led some companies to put investment projects on hold.

Tight credit conditions are also likely to have played a role: the Agents' survey suggested that external finance had constrained investment for some companies over the preceding twelve months (Chart 2.7). Access to bank credit has become more difficult for many companies during the recession. And although the Bank's asset purchases may have helped to ease credit conditions, particularly for larger companies (Section 1), not all companies have access to capital markets.

Many companies typically fund their investment from internal funds rather than by borrowing, but the recession may have limited the scope to do that: internal finance was the second largest constraint on investment in the Agents' survey (Chart 2.7). In addition, if companies usually rely on bank

# Chart 2.5 Contributions to four-quarter growth in whole-economy investment<sup>(a)</sup>

### Chart 2.8 BCC business confidence<sup>(a)</sup>



<sup>(</sup>a) Net percentage balance of companies who believe turnover will improve over the next twelve months. Data are non seasonally adjusted.

Chart 2.9 Stockbuilding(a)



Per cent of nominal GDP 15 10 10 5 + 0 -1963 73 83 93 2003 13

Chart 2.10 Public sector net borrowing(a)

Sources: HM Treasury and ONS

finance to fund day-to-day operations, any increase in the cost of credit, or the withdrawal of credit facilities, could lead to internal funds being redirected from investment to meet existing obligations.

The retrenchment in business investment eased in Q3. And survey measures of companies' investment intentions have picked up from the very low levels seen around the end of 2008. That could, in part, reflect a reduction in uncertainty confidence indicators have recovered recently (Chart 2.8). But many of the factors constraining investment over the past year are likely to continue to do so in the near term (Chart 2.7). And if an improvement in demand conditions does encourage some companies to increase their spending, they may then find that a lack of credit becomes more of a constraint.

### Inventories

Companies continued to run down stocks in 2009 Q3 (Chart 2.9). But the pace of de-stocking is reported to have eased over the year, such that stockbuilding boosted GDP growth in Q2 and Q3. Revisions since the November *Report* suggest that stockbuilding reduced growth more than previously estimated in 2009 Q1, but boosted it by more in 2009 Q2.

The reduction in the level of stocks during the recession is likely to have reflected tight credit conditions as well as companies' response to weaker demand. Reports from the Bank's regional Agents suggest that some companies have reduced stocks in order to free up working capital. The scale of de-stocking is likely to ease further, however, and so continue to boost growth, as companies approach stock levels that are consistent with current production and credit conditions.

### Government spending

The MPC's projections are conditioned on the fiscal plans set out in *Pre-Budget Report 2009*. Those plans are very similar to the plans contained in *Budget 2009*, on which the November *Inflation Report* projections were based. Public sector net borrowing increased significantly in the 2008/09 financial year, and is projected to rise further in the near term, before falling back somewhat given the fiscal consolidation contained in the *Pre-Budget Report* (Chart 2.10). Reducing the deficit will require some combination of higher taxes and lower government spending, as shares of GDP.

### Imports

Imports have fallen sharply during the recession, though they are estimated to have increased somewhat in 2009 Q3. The demand for imports is closely related to overall demand, but import content varies across expenditure components — for example, business investment is particularly import-intensive. Once these differences are taken into account, the sharp movements in imports appear similar to those in demand (Chart 2.11). In addition to overall demand, import demand

<sup>(</sup>a) The chart shows financial year net borrowing data. The orange bars show HM Treasury 2009 Pre-Budget Report projections.





Sources: ONS and Bank calculations.

- (b) Excluding the estimated impact of MTIC fraud
- (c) Exclosing the contractor impact of three by weighting household consumption (including non-profit institutions serving households), whole-economy investment (excluding valuables), government spending, stockbuilding (excluding the alignment adjustment) and exports by their respective import intensities. The import intensities are estimated using the 1995 ONS Input-Output Analytical Tables.





Sources: JPMorgan Chase & Co. and Markit Economics.

(a) Based on the results of surveys in 29 countries. These countries account for an estimated 84% of global GDP. A figure over 50 indicates rising output compared with the previous month, and a figure below 50 indicates falling output.

# Table 2.B Final domestic demand in the United Kingdom's main trading partners<sup>(a)</sup> Final domestic demand in the United Kingdom's main

#### Percentage changes on a quarter earlier

	Avera	iges		2009			
	2000–07	2008	Q1	Q2	Q3	Q4	
Euro area	0.5	-0.3	-1.3	-0.2	-0.1	n.a.	
United States	0.7	-0.5	-1.6	-0.2	0.6	0.4	
Japan	0.3	-0.6	-2.0	0.1	-0.1	n.a.	

Sources: Bureau of Economic Analysis, Eurostat and Japanese Cabinet Office.

(a) Chained-volume measures.

should reflect the price of imported goods and services relative to that of domestically produced ones. The substantial depreciation in sterling since the middle of 2007 and the subsequent rise in import prices (Section 4) is therefore likely to encourage businesses and households to substitute away from imports.

### 2.2 The international economy

The world economy continued to recover towards the end of 2009. For example, the JPMorgan Global All-Industry Output Index suggests that growth resumed in 2009 Q3, and continued in Q4 (Chart 2.12). But, as in the United Kingdom, many countries have experienced sharp falls in output so that their GDP remains well below pre-crisis levels. This subsection considers recent developments in the global economy, world trade and UK exports.

### Recent developments in global growth

Activity increased in the United Kingdom's main trading partners in 2009 Q3, with positive growth rates recorded in the euro area, Japan and the United States. Growth in these economies was boosted by an easing in the pace of de-stocking. Final domestic demand picked up in the United States, but was broadly flat in the euro area and Japan, as it had been in the previous quarter (**Table 2.B**). US GDP increased by 1.4% in 2009 Q4.

GDP in the advanced economies remains significantly below its pre-recession level, while the strength of the recovery remains uncertain. Monetary and fiscal policies are providing considerable support to spending. But in many advanced economies, downside risks remain from overleveraged banking systems, the need for fiscal consolidation and elevated levels of private sector debt.

Much of emerging Asia recorded strong growth in 2009 Q3, and growth in that region has improved markedly since the end of 2008. In particular, industrial production has rebounded sharply (**Chart 2.13**), with indicators of manufacturing output suggesting that growth continued at a robust pace in Q4.

Current account deficits and surpluses have generally narrowed since the beginning of the financial crisis. But much of this rebalancing may prove temporary. Any re-emergence of the pre-crisis pattern of current account imbalances poses risks to the sustainability of the economic recovery.

### World trade and UK exports

Although world trade remains 12% below its pre-crisis peak, it increased by 3.4% in 2009 Q3. And monthly data on trade in goods suggest a further increase in Q4. The recovery in trade flows is closely related to the rebound in industrial production (Chart 2.13), as more than half of world trade is in

<sup>(</sup>a) Chained-volume measures.





Source: CPB Netherlands Bureau for Economic Policy Analysis.

(a) Volume measures. Country data are weighted together according to shares in world production

### Table 2.C Export orders(a)

	Average	s			2010	
	1998–2007	2008	H1	Q3	Q4	Jan.
Manufacturing						
BCC orders <sup>(b)</sup>	5	4	-18	-4	17	n.a.
CBI orders <sup>(b)</sup>	-13	-13	-39	-7	6	n.a.
CIPS/Markit orders <sup>(c)</sup>	50.3	45.5	43.8	50.0	51.9	58.1
Services						
BCC orders <sup>(b)</sup>	7	3	-11	3	4	n.a.

Sources: 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. Data are quarterly.
(c) A reading above 50 indicates increasing orders/new business this month relative to the situation one month area to the situation one month or an order to the data. ago. Averages of monthly data

manufactured goods. In part, the recovery in world trade is likely to reflect the easing of the pace of de-stocking in many countries.

UK exports increased by 0.7% in 2009 Q3, following four consecutive quarterly falls. Surveys of export orders point to a further improvement in Q4, with manufacturing export orders reported to be growing at an above-average rate (Table 2.C). In addition to the boost from the recovering world economy, UK exports should be supported by the past depreciation of sterling, which is around a quarter below its mid-2007 level. Recent developments in UK exports are discussed in the box on page 24.

### Influences on UK exports

UK exports fell by 12% between 2008 Q3 and 2009 Q3. This box examines how the contraction in world trade in late 2008 and early 2009 and the depreciation of around 25% in the sterling exchange rate since the middle of 2007, have affected UK exports, and their likely future influence.

### The impact of world demand

World activity contracted in late 2008 and early 2009, reducing demand for UK exports. In addition, global trade flows fell by significantly more than activity.<sup>(1)</sup> One indicator of these flows is OECD import volumes, which UK exports have moved broadly in line with recently (**Chart A**). Goods trade fell sharply in late 2008 and early 2009, but recovered somewhat in 2009 Q3. Trade in services also fell sharply but, unlike goods trade, continued to fall in Q3. As world activity and trade continue to recover, that should provide support to UK exports. Indeed, UK export orders surveys suggest further export growth in 2009 Q4 (Section 2.2).

#### Chart A OECD imports and UK exports<sup>(a)</sup>



(a) Volume measures.

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

But aggregate measures of trade, such as those in **Chart A**, do not fully capture changes in the demand for UK exports. For example, financial services account for a higher proportion of exports in the United Kingdom than in most other countries, and a considerable part of the recent weakness in UK services exports is accounted for by that sector. If global demand for financial services is weaker in coming years than it was before the financial crisis, then that will weigh on UK exports.

### The impact of sterling's depreciation

The lower level of the sterling exchange rate should, however, provide considerable support to UK exports. For example, the export market share of UK companies was boosted significantly following the somewhat smaller depreciation of sterling in 1992. That is, in part, because a depreciation allows

UK companies to cut foreign currency prices — increasing their competitiveness — while still receiving the same sterling revenue from each unit sold. Responses to the *CBI Industrial Trends Survey* suggest that UK manufacturing sector competitiveness has improved somewhat since mid-2007 (Chart B).

Chart B Sterling goods export prices and CBI indicator of manufacturing competitiveness



Sources: CBI and ONS.

(a) The question asks: 'What has been the trend in your competitiveness over the past three months?'. The balance is produced by weighting together balances for EU and non-EU markets using shares in nominal goods trade.

But UK companies have not fully passed through the decline in sterling: sterling goods export prices have increased by 17% since mid-2007 (**Chart B**). Some of that increase may reflect rising costs, but it is likely that profit margins in the export sector have risen significantly. Over time, higher margins should encourage existing exporters to increase production and other companies to enter the export sector, boosting export supply.

A sustained increase to export supply capacity will require resources to be redirected toward that sector. But there may be factors that limit how quickly that can occur. First, a rebalancing toward the export sector may require a change in the mix of skills held by the UK labour force. Second, it may be necessary for capital to be redirected toward export-oriented industries. And, with the financial sector currently impaired, that process may only occur slowly.

### Conclusion

UK exports have fallen sharply during the recession, broadly in line with movements in world trade. Lower sterling, and higher competitiveness, may have provided some support to UK exports, but a large part of the depreciation appears to have fed through into higher margins instead. A sustained recovery in world demand should boost UK exports. And, over time, higher margins should encourage an expansion of supply.

<sup>(1)</sup> The sharp fall in world trade was discussed in the box on pages 22–23 of the May 2009 *Report*.

# **3** Output and supply

Output rose slightly in 2009 Q4, following the substantial falls over the previous six quarters. Employment has fallen during the recession, but the decline has been small relative to the fall in output. And labour market conditions appeared to be stabilising in 2009 H2. The effective supply capacity of the economy is likely to have been impaired by the recession. But surveys suggest that the margin of spare capacity remains substantial, and that is likely to put downward pressure on inflation.



(a) Chained-volume measures. GDP is at market prices. Indices of sectoral output are at basic prices.

### Chart 3.2 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 38. 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 2005 is set to equal the ONS data. Output rose slightly in 2009 Q4, following a sharp contraction over the previous six quarters (Section 3.1). Employment has fallen in the recession, but the pace of decline eased markedly in 2009 H2, and the cumulative fall since the start of the recession has been small relative to the decline in output (Section 3.2). Although companies' effective supply capacity is likely to have been impaired by the recession (Section 3.3), survey indicators suggest that a substantial degree of slack has developed (Section 3.4). That is likely to put downward pressure on inflation.

### 3.1 Output

Following six quarters of falls, output is provisionally estimated to have risen by 0.1% in 2009 Q4, with small increases in output in the manufacturing and service sectors. But the level of GDP remains around 6% below its pre-recession peak (Chart 3.1). And GDP growth in 2009 Q4 was estimated to be slightly weaker than the MPC's central expectation at the time of the November *Report*.

A range of indicators are consistent with a sharp fall in output during the recession, but there is uncertainty about the precise magnitude of that fall. GDP estimates are prone to revision as new information becomes available to the ONS. Based on average revisions over the past, and information from surveys, the MPC takes account of the likelihood of revisions when assessing the state of the economy. **Chart 3.2** shows the MPC's judgement of the likely distribution of revisions for four-quarter GDP growth, together with the latest ONS data. Looking back over the past year, and taking into account other indicators and developments in the economy, the MPC judges that future revisions are somewhat more likely to reduce the scale of the fall in output during the recession than to increase it **(Chart 3.2)**.

Survey indicators suggest that output rose further in early 2010: the business activity indices in the CIPS/Markit





(a) Recessions are defined as two consecutive quarters of falling output (at constant market prices) estimated using the latest data. The recessions are assumed to end once output began to rise

(c) Chained-volume measure at market prices. (c) The diamonds are estimates for 2009 Q4 based on employment and total hours worked in the three months to November

### Chart 3.4 Contributions to quarterly LFS employment growth<sup>(a)</sup>



Source: ONS (including the Labour Force Survey)

(a) Figures in parentheses are shares in total employment in 2008

(b) Data have been adjusted to be on a calendar-guarter basis

(c) Total general government employees (excludes public corporations).
(d) Unpaid family workers and government-supported trainees.
(e) The diamond is an estimate for 2009 Q4 based on employment growth in the three months

to November. Data on the composition of employment are not available for that period

manufacturing and services surveys pointed to robust output growth in January, although forward-looking balances from the Q4 CBI and BCC surveys suggested that output growth would be more subdued. But even if output growth were to pick up this year, the level of output is likely to remain below its pre-recession peak for a considerable period (Section 5).

## 3.2 Labour demand and supply

Employment has fallen in this recession, but by much less than the decline in output (Chart 3.3). Some of that difference reflects companies cutting the hours that their employees work. For example, part-time employment has increased. Nonetheless, total hours worked has fallen by less than in previous recessions, despite a larger decline in output (Chart 3.3).

The resilience of employment, given the size of the falls in output, has continued in the most recent data. LFS employment is estimated to have been broadly unchanged in Q3. The number of private sector employees fell, but at a much slower pace than in previous quarters (Chart 3.4). That fall was offset by rises in self-employment and employment in the public sector. The most recent estimate for the three months to November indicated that employment also remained broadly unchanged in Q4.

As employment has stabilised, so has unemployment. According to the LFS measure, unemployment fell by 7,000 in the three months to November compared with the three months to August. The LFS unemployment rate was unchanged at 7.8% in the three months to November, having picked up from 5.2% over the course of the recession.

### Companies' demand for labour

Sharp falls in output tend to reduce businesses' demand for labour, so it is surprising that companies have not reduced hours worked by more in this recession. It is possible that the resilience of total hours worked indicates that output has fallen by somewhat less than currently estimated (Section 3.1). But it is also likely that companies and employees have responded differently to lower demand than in previous recessions. As discussed in the box on page 29 of the August 2009 *Report*, pay moderation may have helped to limit the extent to which companies have reduced employment and hours worked. The aggregate hourly real product wage — the cost of labour relative to companies' prices — fell by 0.3% in the year to 2009 Q3, whereas real product wages rose at a similar stage of the 1980s and 1990s recessions.

Although lower real hourly product wages have helped companies to contain labour costs, this has not been sufficient to offset the decline in labour productivity per hour. As a result, the share of income accounted for by compensation of

# Chart 3.5 Inflows to LFS employment and outflows from claimant count unemployment



(c) Inflows to LFS employment divided by the total number of unemployed and inactive people in the previous quarter. Based on LFS microdata that have been seasonally adjusted by Bank staff. Data are to 2009 Q3.

#### Table 3.A Surveys of employment intentions(a)

	Averages		2009						
	since 1999	Q1	Q2	Q3	Q4				
BCC(b)	15	-16	-10	3	3				
CBI(p)	1	-43	-20	-8	-2				
Agents <sup>(c)</sup>	0.3	-3.3	-2.7	-1.7	-0.8				
Manpower <sup>(b)</sup>	11	-5	-5	-1	0				

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

(a) Measures for the Bank's regional Agents (manufacturing and services), the BCC (manufacturing and services) and the CBI (manufacturing, financial services, business/consumer services) are weighted using employment shares from Workforce Jobs. The BCC data are non seasonally adjusted. The Manpower data cover the whole economy.

(b) Net percentage balance of companies expecting their workforce to increase over the next three months.
(c) End-quarter observation. The scores refer to companies' employment intentions over the next six months.

Chart 3.6 Company liquidations in England and Wales and GDP



Sources: The Insolvency Service and ONS.

(a) Recessions are defined as in Chart 3.3.

b) Chained-volume measure at market prices. Data are to 2009 Q4.
c) Data are to 2009 Q3. Changes to legislation, data sources and methods of compilation mean the statistics should not be treated as a continuous and consistent time series. Since the Enterprise Act 2002, a number of administrations have subsequently converted to creditors' voluntary liquidations. These liquidations are excluded from the headline figures published by The Insolvency Service and excluded from the chart. employees, the labour share, has risen since the start of the recession, and the profit share has correspondingly fallen.

One reason why some companies may have maintained employment is because the costs associated with firing and then rehiring staff are substantial. For example, if employers have found it difficult to find skilled staff in the past, they may have wanted to hold on to them, despite falls in demand. If such labour hoarding explains much of the resilience of employment, then companies may have less incentive to hire additional staff as demand recovers.

There is, however, some evidence to suggest that the rate at which businesses are hiring staff has picked up. The stabilisation of LFS employment in Q3 reflected, in part, higher inflows into employment (**Chart 3.5**). That contrasts with the 1990s recession, when evidence from the claimant count suggests that the rate at which people moved out of unemployment only started to rise some time after the recession had ended.

Employment intentions survey balances recovered over 2009 (Table 3.A), and most contacts of the Bank's regional Agents have reported that they expected headcount to remain broadly stable over the coming months. But there remains a risk that employment could fall significantly further. That could happen if the recovery in demand is more sluggish than companies expect, causing them to shed staff. In addition, a further pickup in corporate insolvencies would lead to lower employment: around a quarter of redundancies in this recession have been associated with businesses closing down, according to LFS data. So far, the rise in liquidations has been modest relative to the fall in output (Chart 3.6). That may, in part, reflect companies' creditors — including the tax authorities — showing forbearance. The outlook for insolvencies will therefore depend, in part, on the extent to which creditors continue to show forbearance to companies in financial difficulties.

The outlook for employment will also depend on whether employees attempt to resist further restraint in real take-home pay. Households appear to have become more confident about the employment outlook — for example, the unemployment expectations balance in the GfK consumer confidence survey has fallen back markedly since its peak in January 2009 — and that could encourage employees to push for higher pay settlements this year (Section 4). If that happened, then companies may then shed labour in order to contain costs.

### Labour supply

Employment is also affected by developments in labour supply. A higher supply of labour will tend to put downward pressure on wages, and so help to support employment. One determinant of labour supply is the participation rate — the

<sup>(</sup>a) Recessions are defined as in Chart 3.3.

<sup>(</sup>b) Outflow from the claimant count over the past month (which includes flows into both employment and inactivity) divided by total claimant count unemployment in the previous month. Data are to December 2009.



Source: ONS (including the Labour Force Survey)

(a) Recessions are defined as in Chart 3.3.

(b) Percentage of the 16+ population. Rolling three-month measure.
(c) Percentage of the population aged 50–64 for men, and 50–59 for women. Rolling three-month measure. The observations before 1992 are based on non seasonally adjusted, annual LFS microdata. The annual observations correspond to the March-May quarter.

Chart 3.8	Unemp	loyment	rate by	duration <sup>(a)</sup>
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Source: Labour Force Survey.

(a) Annual data. Data prior to 1992 are based on non seasonally adjusted, annual LFS microdata These annual observations correspond to the March-May quarter. number of people working or seeking work as a percentage of the population. The participation rate has declined only slightly in this recession, in contrast to the sharp fall that occurred during and after the 1990s slowdown (Chart 3.7).

One factor that has helped to support the participation rate is a rise in the participation of older people (Chart 3.7). Participation among this age group has increased over the past decade. In part, that trend is likely to reflect increased longevity and better health. But it is also likely to reflect greater concerns about pension provision, as more people have become part of defined contribution pension schemes, the values of which are affected by movements in asset prices. Those concerns are likely to have been exacerbated in this recession: although equity prices have recovered since March 2009, they remain around 20% lower than their mid-2007 peak (Section 1).

Labour supply growth also depends on changes in the population. Between 2004 and 2008, the UK population was boosted by relatively large net inward migration flows, with net inflows from the A8 Accession countries making a significant contribution. There are signs in both the ONS data and more timely air passenger data that net inward migration from A8 countries fell back slightly in 2009. It is likely that overall net inward migration, while remaining positive, made a smaller contribution to labour supply growth in 2009 than in recent years.

Even if measured labour supply holds up, there could still be downward pressure on the effective supply of labour. For example, if some people suffer an extended period of unemployment, they may be unable to retain or acquire the skills sought by employers. The long-term unemployment rate has risen in this recession, but it remains much lower than in the late 1980s and early 1990s (Chart 3.8). Mismatch between the skills of the labour force and those needed by companies could be exacerbated if there were a restructuring of economic activity away from some industries (for example, financial services and property-related sectors) and into others (such as the export sector). But any such effects are likely to take time to emerge.

## 3.3 Companies' supply capacity

The overall supply potential of the economy will depend not only on developments in labour supply, but also on companies' supply capacity. Companies' supply capacity depends on the size of the capital stock, and also on the efficiency with which businesses combine their labour and capital. In addition, companies' effective supply capacity — the level of output companies are currently able to produce — may vary over time. For example, the sharp falls in demand may have led some companies to make temporary changes to the scale of



### Chart 3.9 Credit and finance as a constraint on output<sup>(a)</sup>



Sources: CBI and ONS.

(a) This measure is produced by weighting together balances for the manufacturing sector and the consumer/business service sector using shares in nominal value added. Manufacturing companies are asked: "What factors are likely to limit output over the next three months?". Service sector companies are asked: "What factors are likely to limit your ability to increase the level of business over the next twelve months?".





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

(a) Includes four measures from the Bank's regional Agents, the BCC, the CBI and KPMG/REC. The Agents' scores (manufacturing and services), and BCC (manufacturing and services) and CBI (manufacturing, financial services, business/consumer services) balances are weighted together using Workforce Jobs employment shares. The BCC data are non seasonally adjusted.

Chart 3.11 Survey measures of capacity utilisation



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 and services), the BCC (manufacturing and services) and the CBI (manufacturing, financial services, business/consumer services, distributive trades) using shares in nominal value added. The BCC data are non seasonally adjusted. their operations, such as reducing the number of shifts worked, in order to cut costs.

Growth in companies' supply capacity is likely to have been depressed by lower capital stock growth. Business investment fell by 22% between its peak in 2008 Q2 and 2009 Q3. That fall in investment will have resulted in materially weaker capital stock growth.

In addition, companies' effective supply capacity is likely to have fallen in this recession as a direct consequence of the financial crisis. In particular, tight credit conditions may have made it difficult for some businesses to meet orders: the proportion of companies in the CBI surveys reporting that external finance was limiting output remained elevated in 2009 Q4 (Chart 3.9). As discussed in the box on pages 30–31, small and medium-sized enterprises are likely to have been particularly exposed to tight credit conditions, in part because they have few alternatives to bank finance. That said, there is little evidence, so far, that their output has been disproportionately affected.

Some developments will have limited the fall in supply. The increase in company liquidations has been less than the fall in output might imply (Chart 3.6), limiting the amount of capital that will have been scrapped. The number of new companies being created, which may influence competition and productivity growth, did not weaken over 2009. And labour supply has held up (Section 3.2). But overall, it is likely that the effective supply capacity of the economy has fallen in this recession.

### 3.4 Measures of spare capacity

Although the size of the fall in effective supply is uncertain, qualitative survey indicators suggest that demand has fallen by much more than supply capacity, creating a substantial margin of spare capacity in the economy. That reflects a loosening in the labour market (**Chart 3.10**), as companies' demand for labour has fallen, and labour supply has held up (Section 3.2). And it also reflects an increase in spare capacity within businesses: surveys of capacity utilisation, which capture the intensity with which companies work their employees and capital, remained well below average in Q4 (**Chart 3.11**).

Although it is likely that there is a large margin of spare capacity in the economy, key uncertainties for the MPC include the period over which that will persist as demand recovers and companies reassess their supply capacity, and the extent to which it will put downward pressure on inflation (Section 5).

# How have small and medium-sized enterprises been affected by the recession?

An important feature of this recession has been a marked tightening in the supply of bank credit. There are some reasons to believe that this might have particularly affected small and medium-sized enterprises (SMEs). In particular, larger companies are more likely to have access to other sources of external finance. This box assesses how SMEs have fared in this recession, and compares their experience with that of larger companies.

# The importance of SMEs and their use of external finance

SMEs account for a significant part of the UK economy, both in terms of output and employment. There is no single definition of what constitutes a small, medium or large enterprise, but one common approach is to categorise companies according to the number of employees. Using this metric, data from the Department for Business, Innovation and Skills (BIS) indicate that SMEs account for almost all enterprises in the United Kingdom, around 60% of employment, and around 50% of turnover (**Table 1**).<sup>(1)</sup> ONS data suggest that SMEs account for only around 15% of investment spending, however.

Table 1 Enterprises, employment and turnover by company size<sup>(a)</sup>

Number of enterprises				
s)	99.3	47.9	36.5	
employees)	0.6	11.5	13.6	
5)	0.1	40.6	49.9	
	Number of en s) 9 employees) s)	Number of enterprises s) 99.3 employees) 0.6 s) 0.1	Number of enterprises         Employment           s)         99.3         47.9           employees)         0.6         11.5           s)         0.1         40.6	

Source: Department for Business, Innovation and Skills.

(a) Data are for the private sector, and refer to the start of 2008. Shares may not sum to 100 due to rounding.
 (b) Turnover data exclude the financial intermediation sector.

External finance is important for the day-to-day business of many SMEs. And SMEs tend to be more reliant on bank credit than their larger counterparts. Company accounts data suggest that in 2007 bank loans to small enterprises were equivalent to almost half of turnover in that sector as a whole, compared with around a quarter for large companies. One reason for this difference is that large companies are likely to have easier access to alternative sources of finance, such as equity and bond finance.

### Credit conditions in the SME sector

SMEs have faced a marked worsening in credit availability during this recession: almost 60% of respondents to the September 2009 *SME Business Barometer* survey reported that they had experienced difficulties obtaining finance, compared with around a quarter in the survey conducted between October 2007 and March 2008. And the Bank's regional Agents have heard from many SMEs during this recession who have been rejected for finance or have seen the terms of their existing borrowing tighten.

There is some evidence to suggest that credit conditions facing SMEs have tightened by more than for large companies. The spread between interest rates charged on large loans and those charged on small loans has widened since mid-2007.<sup>(2)</sup> And a greater proportion of SMEs responding to CBI *Access to Finance* surveys in 2009 have reported tighter availability of existing credit lines compared with larger companies.

Although the supply of bank credit appears to have tightened by more for SMEs than for large companies, bank lending to SMEs weakened by less during most of 2009 (Chart A). That is likely, in part, to reflect SMEs' lack of alternatives to bank finance. And it may also reflect SMEs' greater use of bank finance for their day-to-day operations, rather than to fund longer-term projects. In the *SME Business Barometer* survey, working capital or cash flow was the reason most frequently cited by SMEs for seeking external finance.





Sources: Bank of England and Department for Business, Innovation and Skills.

(a) Stock of sterling and foreign currency loans, expressed in sterling terms. Data are non seasonally adjusted.

 (c) Lending by UK monetary and financial institutions to private non-financial corporations.
 (c) Lending by four major UK lenders to UK enterprises with annual bank account turnover unde £1 million (smaller SMEs) and turnover between £1 million and £25 million (medium SMEs).

# How have SMEs been affected compared with larger companies?

Companies of all sizes have been affected by the sharp fall in demand and the tightening in credit conditions in this recession. But given that SMEs are likely to have been particularly exposed to restrictions in the supply of bank credit, it is possible that SMEs may have had to cut back production, employment and spending by more than larger companies. The available data on this, which are somewhat limited, are assessed in this section. Business surveys, which provide only qualitative evidence, suggest that output falls have been similar across company sizes. The BCC home sales balances, for example, indicate that a similar proportion of companies have reported falling sales across company sizes throughout this recession (**Chart B**). And a similar picture emerges from the *CBI Quarterly Industrial Trends Survey*.

# Chart B Survey indicators of output growth by company size<sup>(a)</sup>



Sources: BCC and ONS

PricewaterhouseCoopers data on company insolvencies also suggest that the SME sector has not been disproportionately affected by this recession. Insolvencies have risen across all company sizes, but the proportion accounted for by SMEs has remained broadly constant.

While there is, to date, little evidence that SMEs' output has fallen by more than that of large companies, the LFS survey suggests that smaller companies made larger cuts in employment in the year to 2009 Q3. Most of the fall in employment in that period was accounted for by a sharp decline in the number of respondents reporting that they were employed in a small workplace (Chart C).

SMEs also appear to have cut investment spending more sharply than large companies, particularly during the early part of the recession (**Chart D**). The sharper fall in investment spending by SMEs may in part reflect restrictions on the availability of external finance: in a recent survey by the Bank's regional Agents, a greater proportion of smaller businesses cited credit constraints as a factor reducing investment spending over the previous twelve months than did larger businesses. But it is also possible that larger companies' investment projects are more sizable and harder to reverse.





Source: Labour Force Survey.

(a) Based on non seasonally adjusted LFS microdata. Data are available to 2009 Q3.

Chart D Capital expenditure by company size<sup>(a)</sup>



(a) These data are from the ONS Capital Expenditure Inquiry, and account for around half of total business investment. The data are for the private sector, at current prices, and are non seasonally adjusted. Data are available to 2009 Q3.

### Conclusion

SMEs are an important part of the UK economy, accounting for a large share of total employment and turnover. It seems likely that SMEs have been particularly exposed to the tightening in the supply of bank credit in this recession, in part because of a lack of alternative sources of finance. The available survey evidence suggests that output in the SME sector has not been disproportionately affected. But SMEs appear to have cut investment spending by more than larger companies. Smaller companies also reduced employment by more than larger companies in the year to 2009 Q3. The MPC will continue to monitor developments in the SME sector closely.

(2) This spread has been calculated from Bank of England data on effective interest rates charged on new borrowing. Large loans are defined as loans for greater than

<sup>(</sup>a) Home sales balances from the BCC manufacturing and services surveys have been weighted together according to shares in nominal value added. Data are non seasonally adjusted. Data are available to 2009 Q4.

<sup>(1)</sup> The BIS statistics use the EU definition of small, medium-sized and large companies.

<sup>£20</sup> million. Small loans are defined as loans for £1 million or less.

# 4 Costs and prices

CPI inflation rose from 1.1% in September to 2.9% in December, and is likely to have risen further in January. The past depreciation of sterling has continued to put upward pressure on inflation. Earnings growth remained subdued, consistent with the weakness of the level of nominal demand. Downward pressure on prices from weak nominal demand continued to be more evident in the service sector than in the goods sector. Measures of medium-term inflation expectations have remained broadly stable.



#### Chart 4.2 Contributions to CPI inflation(a)



 <sup>(</sup>a) Contributions to annual (non seasonally adjusted) CPI inflation
 (b) Includes a rounding residual.

CPI inflation rose to 2.9% in December and is likely to have risen above 3% in January, triggering an open letter from the Governor, on behalf of the Committee, to the Chancellor. That further pickup will partly reflect the restoration of the standard rate of VAT to 17.5% feeding through to the level of consumer prices (Section 4.1). To the extent that households' and companies' expectations remain well-anchored, a temporary boost to inflation should not have significant implications for inflationary pressure in the medium term. Developments in measures of inflation expectations are discussed in Section 4.2.

Abstracting from the price-level effects of the restoration of the VAT rate, inflationary pressures will be affected by developments in the domestic economy and in global costs and prices. The recent pickup in inflation has been almost entirely driven by consumer goods prices (**Chart 4.1**), the movements of which are, in part, related to developments in import and energy prices (Section 4.3). Consumer services inflation has in contrast remained subdued and earnings growth has been weak, consistent with the weakness of the level of nominal demand and the associated margin of spare capacity in labour and product markets (Section 4.4).

### 4.1 Consumer prices

CPI inflation rose from 1.1% in September to 2.9% in December (Chart 4.2). CPI inflation in Q4 as a whole was 2.1% — somewhat higher than the MPC's central projection at the time of the November 2009 *Report*.

As described in the box on page 33 in the November *Report*, two factors have largely accounted for the unusually rapid rise in twelve-month inflation since September. First, petrol prices have made an increased contribution to inflation as marked falls in this subcomponent in the last quarter of 2008 dropped out of the twelve-month comparison (shown by the turnaround in the brown 'Fuels and lubricants' bars in **Chart 4.2**). Second, those CPI components whose prices had

**Chart 4.3** CPI and households' inflation expectations for the year ahead, scaled to match CPI inflation<sup>(a)(b)</sup>



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

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

# Chart 4.4 Indicators of longer-term inflation expectations

- Barclays BASIX five years ahead<sup>(a)</sup>
- Five-year, five-year forward rate implied from RPI inflation swaps
   YouGov/Citigroup five to ten years ahead<sup>(a)</sup>
- HM Treasury survey of independent forecasters for CPI four years ahead<sup>(b)</sup>
   Bank/NOP five years ahead<sup>(a)</sup>



Sources: Bank of England, Barclays Capital, Bloomberg, Citigroup, GfK NOP, HM Treasury, YouGov and Bank calculations.

(a) The Barclays BASIX, Bank/NOP and YouGov/Citigroup household measures do not reference a specific price index and are based on the median estimated price change. (b) Taken from Forecast for the UK economy: a comparison of independent forecasts. Based on th

(b) Taken from Forecast for the UK economy: a comparison of independent forecasts. Based on the independent average of medium-term projections published in February, May, August and November. been reduced in December 2008 due to the temporary reduction in the standard rate of VAT stopped pulling down on twelve-month inflation this December (that is part of the reason for the pickup in the blue 'Other' bars in **Chart 4.2**).

CPI inflation is likely to have increased further at the start of 2010, largely due to the restoration of the standard rate of VAT from 15% back to 17.5% on 1 January. To the extent that companies pass the VAT rise through to consumer prices, that will boost the twelve-month rate of inflation for a year.

There is, however, a large degree of uncertainty about the size and timing of the impact of the VAT rise on inflation. For example, the degree of pass-through is likely to depend, in part, on the strength of demand. Evidence from a survey by the Bank's regional Agents in December 2009 suggested that, weighted by turnover, just under half of businesses were planning to pass through the VAT rise in full, with just over a third intending to pass through some but not all of the increase.

The Committee judges that CPI inflation is likely to have risen above 3% in January. That would trigger an open letter from the Governor, on behalf of the Committee, to the Chancellor.

RPI inflation rose from -1.4% in September to 2.4% in December. In addition to the factors discussed above, that increase also reflected the impact of mortgage interest payments on RPI inflation as past reductions in mortgage rates dropped out of the twelve-month comparison.

### 4.2 Inflation expectations

If the projected period of above-target inflation were to prompt a sustained rise in inflation expectations, there would be a risk of heightened inflationary pressures in the medium term. This subsection reviews the evidence on short and longer-term measures of inflation expectations.

Measures of households' inflation expectations for the next year have risen according to the most recent monthly data (Chart 4.3). For example, inflation expectations one year ahead in the YouGov/Citigroup and GfK NOP January surveys reached their highest levels since October 2008, although they remained below their series averages.

As discussed in a recent *Quarterly Bulletin* article,<sup>(1)</sup> there is evidence that households take a range of factors into account when forming their expectations of inflation, including past price trends and developments in demand. That suggests the further rise in CPI inflation that is likely at the start of 2010 could put greater upward pressure on short-term inflation expectations, but that this effect could be tempered by the continued weakness of demand.

 <sup>&#</sup>x27;Public attitudes to inflation and monetary policy', Bank of England Quarterly Bulletin, 2009 Q2, pages 101–09.





Sources: Bloomberg, Royal Bank of Scotland and Bank calculations.

(a) Probability that RPI inflation will be below zero or greater than 5% based on average probability distributions of annual RPI outturns for six to seven years ahead implied by options.





(a) The import price data are non seasonally adjusted. The latest observation is November 2009.
 (b) Monthly averages of daily data up to January 2010.





(a) The import price data are non seasonally adjusted. The latest observation is November 2009.
 (b) This series includes all goods components apart from food, alcohol and tobacco, and petrol and oil. The latest observation is December 2009.

More important for monetary policy, however, is that expectations about inflation for the medium to long term remain anchored to the target. A range of indicators of longer-term inflation expectations among households, financial market participants and professional economists are available (Chart 4.4). Some of these measures have ticked up recently, but most remain close to their series averages.

The message from market-based indicators of inflation expectations implied from index-linked gilts and inflation swaps is harder to discern. Medium-term forward rates implied from inflation swaps have fallen back recently (Chart 4.4). Medium-term breakeven rates implied from index-linked gilts have been extremely volatile since early 2009, perhaps reflecting factors specific to the gilt market. Both of these market-based indicators are above their past averages. But neither captures inflation expectations directly, because they also contain risk premia and are affected by market-specific factors. For example, demand for index-linked cash flows from pension funds that have long-term liabilities linked to inflation has probably pushed up these indicators since 2006.

There remain risks to medium-term inflation expectations in both directions. On the upside, the pickup in near-term inflation and the substantial policy stimulus could lead expectations to rise. And on the downside, a slow recovery in demand could lead companies and households to anticipate low inflation in the future. **Chart 4.5** shows indicators of the risk of low and high inflation outcomes implied by the RPI options market.<sup>(1)</sup> The weight attached to the possibility of high inflation started to rise as oil prices accelerated in early 2008, while the weight on falling prices rose as the financial crisis intensified. Since then both measures have remained elevated, suggesting that uncertainty about future inflation has stayed higher than before the crisis.

### 4.3 Import costs and commodity prices

Although the stance of monetary policy will determine inflation in the medium to long term, commodity and import prices can, like the restoration of the VAT rate, have a material short-term impact on CPI inflation. In particular, the prices of goods, which tend to be more energy and import-intensive than services, have been affected by commodity price volatility and the depreciation of sterling (Chart 4.1).

The sterling effective exchange rate depreciated markedly between mid-2007 and the end of 2008, but has since remained relatively stable. Import price inflation excluding oil has fallen back as the exchange rate has stabilised (Chart 4.6).

<sup>(1)</sup> For further details see the box on page 163 of the 2009 Q3 Bank of England Quarterly Bulletin, 'UK RPI inflation options'.





Sources: Bloomberg, Standard & Poor's and Thomson Datastream

(a) The agriculture and livestock, and industrial metals series are calculated using S&P (dollar) commodity price indices

(b) Brent dollar forward price for delivery in 10 to 21 days' time

#### Table 4.A Private sector earnings(a)

Percentage changes on a year earlier

Averag	es since	20	009	2009			
Mar	ch 2001	Q2	Q3	Oct.	Nov.	Dec.	
(1) AWE regular pay	3.6	1.5	0.4	0.3	0.2	n.a.	
(2) Pay settlements <sup>(b)</sup>	3.3	2.6	2.2	1.9	1.8	1.8	
(1)–(2) Regular pay drift <sup>(c)</sup>	0.4	-1.1	-1.8	-1.6	-1.6	n.a.	
(3) Total AWE	3.6	0.6	-0.3	-0.2	-0.1	n.a.	
Bonus contribution <sup>(d)</sup>	0.3	-1.2	-1.0	-1.0	-0.6	n.a.	
Memo item: Total AEI	3.5	2.3	1.0	1.2	1.3	n.a.	

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

Three-month moving average measures unless otherwise stated

(a) (b) Average over the past twelve months

 (c) Percentage points.
 (d) Percentage points, calculated using the change in the level of bonus payments and the level of weekly earnings a year earlier

### Chart 4.9 Earnings and unemployment



(a) Whole-economy average earnings index including bonuses. 2009 data proxied by average of October and November

As discussed in previous Reports, past increases in import prices, and the resultant rise in companies' costs, are likely to have placed upward pressure on consumer prices and downward pressure on nominal wages (Section 4.4). But it is uncertain how much of the required adjustment to higher import costs has been completed. The movements of imported goods prices and retail goods prices excluding food and energy over the past ten years suggest that the peak impact of the exchange rate on twelve-month inflation may be near (Chart 4.7). But, to the extent that the exchange rate remains near its current level, there may be further pass-through to the level of consumer prices if, for example, those companies that have so far avoided higher costs by maintaining long-term price contracts with overseas suppliers eventually renegotiate their arrangements.

As well as movements in the exchange rate, companies' import costs will be affected by commodity prices. Those prices will, in turn, be determined in part by global demand (Section 2). So the rise in commodity prices over the past year (Chart 4.8) could reflect the recovery in the world economy, particularly emerging Asia, that began in 2009 Q2. For example, in the fifteen working days to 3 February, metals prices were around 85% higher than in 2009 Q1, while the dollar oil price rose by around 65% over that same period.

Oil prices have a direct effect on inflation as petrol prices tend to move closely with sterling oil prices, after a short lag. On the assumption that oil prices evolve in line with futures prices (see the box on page 43), the positive contribution of petrol prices to CPI inflation (shown by the brown 'Fuels and lubricants' bar in Chart 4.2) is likely to remain broadly steady in the near term, before falling back later in 2010 as increases in prices during 2009 fall out of the twelve-month comparison.

Retail gas and electricity prices were more or less unchanged in 2009 Q4, while wholesale gas futures prices were around 18% lower in the fifteen working days to 3 February than at the time of the November Report. There is considerable uncertainty about the scale and pace of the pass-through of changes in wholesale energy prices to the prices of gas and electricity faced by households and companies. The MPC's latest projections for CPI inflation reflect the reduction in domestic gas prices already announced by one major supplier, together with an assumption that other suppliers announce price reductions in due course.

## 4.4 Labour costs and companies' pricing decisions

### Labour costs

Nominal wage growth remained at a very low level during 2009 H2. That weakness has been apparent in both the average earnings index and the measure that has supplanted it,

### Average weekly earnings

Average weekly earnings (AWE) replaced the average earnings index (AEI)<sup>(1)</sup> as the ONS's monthly measure of wages and salaries in January 2010<sup>(2)</sup> (**Chart A** shows regular pay growth in the two series). This box examines the differences between AWE and the AEI. Reasons for the sharp fall in both measures of earnings growth are discussed in Section 4.4.

**Chart A** Average weekly earnings, its employment composition effect and the average earnings index



(a) The contribution of changes in employment composition to annual AWE growth.

The ONS has conducted a monthly wages and salaries survey of earnings and employment in about 8,400 companies since 1963. These data can then be weighted together in different





(a) The 2010 survey asked respondents: 'What is your average pay settlement likely to be in 2010?'. The 2009 survey asked the same question for settlements in 2009. Responses are weighted by respondents' number of employees.

(b) Based on 272 responses (covering about 550,000 employees) to a survey of companies by the Bank of England's regional Agents in December 2008 and January 2009.

 (c) Based on 262 responses (covering about 550,000 employees) to a survey of companies by the Bank of England's regional Agents in January 2010.
 (d) A settlement that is a round number is classified within the bucket where that round number

is the upper bound. For example, a 2% settlement is included within the 1%–2% bucket.

ways to construct aggregate measures of average earnings, which can be used to assess inflationary pressures.

The AEI weights average pay growth using industry employment weights that are fixed annually. So it takes time to capture shifts in employment from, for example, high-paying to low-paying industries that would reduce aggregate average earnings. In contrast, AWE measures the average weekly wage per job based on the ratio of sampled earnings and employment, with industry employment weights updated monthly.

That difference in updating weights is one reason why AWE can diverge from AEI growth. In addition, improved treatment of non-respondents, small businesses and outliers in the AWE, together with other methodological differences, can also cause growth rates to diverge. Those conceptual and methodological differences mean that AWE should be a superior indicator of short-term pay dynamics than the AEI.

The broad trends in regular pay growth in the two series have been quite similar. That said, the employment composition effect has put persistent downward pressure on AWE growth during the recession as the share of jobs in lower-paid industries has increased (**Chart A**).

 The AEI will continue to be published by the ONS, one week after the AWE, until September 2010.

(2) The AWE gained National Statistic status in December 2009 after being published on an experimental basis since 2005. AWE was developed following a recommendation in the 1999 Turnbull-King review of the AEI, and improved further following the Weale review in June 2008.

average weekly earnings (AWE) (**Table 4.A**). The box above discusses the differences between the two measures.

Subdued pay growth could partly reflect companies continuing to respond to higher import costs, but is also likely to reflect the weak level of nominal demand (Section 2) and the related spare capacity in the labour market (Section 3).

In the short term, there is a tendency for increases in the unemployment rate to be associated with weakness in earnings growth, as a growing pool of available labour discourages employees from bidding up pay (Chart 4.9). There is some evidence that the sensitivity of wage inflation to a change in the unemployment rate has declined in recent decades, indicated by the lines in Chart 4.9 flattening relative to the horizontal axis. In that context, the fall in earnings growth in the year to 2009 Q4 appears broadly consistent with the loosening in the labour market during the first part of the recession, shown in Chart 4.9 by the rise in the unemployment rate in the four quarters to 2009 Q1.

As discussed in Section 3, pay restraint has been an important factor allowing companies to hold down their real labour costs and limiting the need for deeper employment cuts to date. Developments in nominal pay growth will therefore be

Table 4.B Indicators of output prices in the service sector

	Averages		2009				
	since 2000	Q1	Q2	Q3	Q4	Jan.	
Services Producer Price Index <sup>(a)</sup>	2.2	0.9	-0.4	-0.9	n.a.	n.a.	
Agents' scores <sup>(b)</sup>	1.6	0.0	-1.2	-1.7	-1.9	n.a.	
CIPS/Markit services <sup>(c)</sup>	52.2	45.2	46.3	47.8	48.9	50.2	
CBI business and professional services <sup>(d)</sup>	-8	-22	-35	-31	-35	n.a.	

Sources: Bank of England, CBI, CIPS/Markit and ONS

Chart 4.11 Manufacturing output prices(a)

(a) Percentage change on a year earlier. The Services Producer Price Index is an experimental index. It is not classified as a National Statistic.

(b) Average is based on quarterly data since 2005. Business to business services prices in the most recent three months compared with the situation a year earlier.
 (c) Quarterly figures are averages of monthly data. A reading above 50 indicates increasing average prices this

month relative to the situation one month ago. (d) Percentage balance of respondents reporting average selling prices to be 'up' relative to 'down' over the past three months



Sources: ONS and Bank calculations

(a) The bars show percentage changes on a month earlier in series that have been seasonally adjusted by Bank staff. The lines show annual (non seasonally adjusted) inflation. The latest observations are December 2009.



Chart 4.12 Indicators of manufacturing output prices

urces: Bank of England, BCC, CBI, CIPS/Markit and ONS

(a) Measures included are based on surveys of manufacturing output prices from the Bank's regional Agents, BCC, CBI and CIPS/Markit. (b) Seasonally adjusted by Bank staff.

relevant to companies' employment decisions, as well as the inflation outlook.

To the extent that a significant degree of slack persists in the labour market, there could be further downward pressure on earnings growth. But other factors may put upward pressure on pay. For example, increased profitability in the financial sector (Section 1) could be reflected in higher bonus payments this year than last. Bonus payments are related to past performance so changes in such payments may contain limited information about future pay pressures.

More generally, wage settlements could rise after the weakness seen in 2009 (Table 4.A), as higher RPI inflation the measure most often referenced explicitly in settlements leads to stronger pay demands. So far, however, there is little evidence of higher cost pressures from pay: a survey by the Bank's regional Agents in January 2010 suggested that businesses, on average, expected to make lower pay settlements in 2010 than in the corresponding survey last year (Chart 4.10).

### Companies' pricing decisions

Weakness in nominal demand and the related margin of spare capacity in the economy (Section 3) is likely to be putting downward pressure on prices as well as wages. This subsection discusses the evidence for such effects at an earlier stage of the supply chain than consumer prices.

Indicators of output price inflation in the service sector have remained weak. The four-quarter inflation rate of the ONS's experimental Services Producer Price Index fell further below zero in 2009 Q3 and survey indicators of output prices remained some way below their recent averages (Table 4.B).

Producer output prices in the manufacturing sector have, in contrast, risen strongly in recent months. Some of that strength has reflected higher commodity prices (Section 4.3): the headline data have been boosted by rising oil prices; and scrap metal prices have raised prices excluding food and energy (Chart 4.11). Manufacturing business surveys are also consistent with stronger output price inflation, although these indicators have picked up by less than the official data (Chart 4.12).

Downward pressure on output prices from the weakness in nominal demand has, to date, been more evident in the service sector than in manufacturing. At least in part, that is likely to be because higher commodity and other import prices have masked the effects of weak demand on goods prices. That is consistent with the sectoral pattern of inflation at the consumer price level (Chart 4.1). Uncertainties surrounding the sensitivity of inflation to spare capacity are discussed in Section 5.

# **5** Prospects for inflation

Output stabilised in the second half of 2009, but remains well below its pre-crisis peak. A recovery is in prospect, driven by the considerable stimulus from policy, and supported by global growth and the past depreciation of sterling. But a number of headwinds will restrain nominal spending, including restricted credit supply and the need to strengthen public and private sector finances. Those factors mean that spare capacity is likely to persist over the forecast period. CPI inflation is likely to remain elevated in the near term, given the restoration of the standard rate of VAT to 17.5% and the continuing adjustment to the past depreciation of sterling, before persistent spare capacity causes it to fall back to below the target. Under the assumptions that Bank Rate moves in line with market interest rates and the stock of assets purchased through the issuance of central bank reserves remains at £200 billion, it is more likely than not that inflation will be below the target for much of the forecast period, but the risks are broadly balanced by the end. The prospects for inflation remain unusually uncertain and there are significant risks to the inflation outlook in each direction.





The fan chart depicts the probability of various outcomes for GDP growth. It has been conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves remains at £200 billion throughout the forecast period. 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 ecconomic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that the mature estimate of GDP growth would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outturns are also expected to lie within each pair of the lighter green areas on 10 occasions. In any particular quarter of the forecast period, GDP is therefore expected to lie somewhere within the fan on 90 out of 100 occasions. 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-verse point of the projection.

## 5.1 The projections for demand and inflation

Output in the United Kingdom has stabilised. It remains significantly below its previous peak, suggesting a substantial degree of spare capacity. Despite that spare capacity, inflation has picked up sharply from its trough in September to well above the 2% target, and is likely to have risen further at the start of 2010, as the standard rate of VAT was restored to 17.5%. The MPC can do little to alter the near-term path of inflation. Rather, its task is to set policy so that the inflation outlook is close to the target in the medium term, when it will be determined by the balance between nominal spending and supply.

**Chart 5.1** shows the outlook for real GDP growth, on the assumption that Bank Rate follows the path implied by market interest rates. That chart, along with all others describing the MPC's latest projections shown in this section, is conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves remains at £200 billion throughout the forecast period.

There are several factors supporting an increase in GDP growth over the forecast period. The substantial stimulus from monetary policy has bolstered demand, and is likely to continue to do so as higher asset prices, and the boost to money holdings, further stimulate spending. Indicators of household and corporate confidence suggest that sentiment has improved markedly from its trough around the start of

# Chart 5.2 Projection of the level of GDP based on market interest rate expectations and £200 billion asset purchases



Chained-volume measure. See the footnote to **Chart 5.1** for details of the assumptions underlying the projection for GDP growth. The width of this fan over the past has been calibrated to be consistent with the four-quarter growth fan chart, under the assumption that revisions to quarterly growth are independent of the revisions to previous quarters. Over the forecast, the mean and modal paths for the level of GDP are consistent with **Chart 5.1**. So the skews for the level fan chart have been constructed from the skews in the four-quarter growth fan chart at the one, two and three-year horizons. This calibration also takes account of the likely path dependency of the economy, where, for example, it is judged that shocks to GDP growth in one quarter will continue to have some effect on GDP growth in successive quarters. This assumption of path dependency serves to widen the fan chart.

# Chart 5.3 GDP projection based on constant nominal interest rates at 0.5% and £200 billion asset purchases



See footnote to Chart 5.1.

2009. And the past depreciation of sterling, combined with the recovery in world demand growth, should provide a substantial boost to net exports.

The economy faces major headwinds, however. Balance sheet adjustment in the banking sector continues to drag on money and credit growth (Section 1). Fiscal consolidation will weigh on spending over the forecast period. And if households and companies are more uncertain about future macroeconomic prospects than in recent years, then spending may be further constrained by their attempts to strengthen their balance sheets against future volatility.

The Committee judges that the balance between those substantial forces points to a gradual recovery in the level of economic activity. Overall, the projected distribution for growth is similar to that in the November *Report*. As in November, it is more likely than not that growth will be above its historical average in 2011 and 2012. The Committee judges that while the most likely path for growth is somewhat weaker, some of the downside risks are smaller than in November.

Output is likely to remain substantially below the level it would have reached had it continued along its pre-recession trend (Chart 5.2). In large part that reflects the impact of the downturn on the supply capacity of the economy, but output is also judged likely to remain some way below capacity throughout the forecast period. Chart 5.3 shows the GDP growth projection for the next two years on the alternative assumption that Bank Rate is held constant at 0.5%. The uncertainties surrounding the GDP outlook are discussed in more detail below.

**Chart 5.4** shows the outlook for CPI inflation, on the assumption that Bank Rate follows a path implied by market interest rates. Inflation is likely to have risen above 3% in January, boosted by the restoration of the standard rate of VAT to 17.5%, and continued upward pressure from past increases in petrol prices and the depreciation of sterling since mid-2007. The outlook for inflation is somewhat higher in the near term than in the November *Report* (**Chart 5.5**). Inflation is then likely to fall back to below the target, as the margin of spare capacity exerts increasing downward pressure on prices, and the effects of sterling's depreciation and higher VAT wane.

The extent to which inflation will fall back is uncertain. That will depend in part on: the strength of the recovery in demand; how much further prices need to adjust to the past depreciation in sterling; the degree to which supply capacity will be eroded by the recession; and the sensitivity of inflation to spare capacity in the medium term. There is a range of views among Committee members regarding the strength of these factors. The risks around the most likely path for inflation are judged to lie to the upside, reflecting the

Chart 5.4 CPI inflation projection based on market interest rate expectations and £200 billion asset purchases



### Chart 5.5 CPI inflation projection in November based on market interest rate expectations and £200 billion asset purchases



Charts 5.4 and 5.5 depict the probability of various outcomes for CPI inflation in the future. Chart 5.4 has been conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves remains at £200 billion throughout the forecast period. **Chart 5.5** was conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves reached £200 billion and remained there throughout the forecast period. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that inflation in any particular quarter would lie within the darkest central bank on only 10 of those occasions. The fan charts are constructed so that outturns of inflation are also expected to lie within each pair of the lighter red areas on 10 occasions. In any particular quarter of the forecast period, inflation is therefore expected to lie somewhere within the fans 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.

Chart 5.6 CPI inflation projection based on constant nominal interest rates at 0.5% and £200 billion asset purchases



See footnote to Chart 5.4

possibility of further increases in commodity prices, and the risk that a sustained period of above-target inflation might cause inflation expectations to rise.

Overall, the Committee judges that, conditioned on the monetary policy assumptions described above, it is more likely than not that inflation will be below the target for much of the forecast period, but the risks are broadly balanced by the end. The projected distribution for inflation in the medium term is similar to that in the November Report. The uncertainties surrounding the degree of spare capacity in the economy, and the sensitivity of inflation to that slack, mean that the outlook for inflation continues to be unusually uncertain. Chart 5.6 shows the projection for CPI inflation conditioned on the alternative assumption that Bank Rate is held constant at 0.5%. On that assumption, CPI inflation rises more quickly towards the 2% target.

### 5.2 Key uncertainties

### How much will tight credit conditions constrain companies' spending?

Credit conditions remain tight. Banks have made some further progress in restructuring their balance sheets and boosting their capital positions, and there is some evidence that the availability of credit, at least from the major UK lenders, has begun to improve (Section 1). The degree to which credit conditions loosen further over the forecast period, and the extent to which spending and activity can recover without a marked pickup in net bank lending, remain key uncertainties for the demand outlook.

The Committee judges it likely that credit conditions will ease gradually over the forecast period, as the macroeconomic

environment improves. The pace of that improvement in credit supply is highly uncertain, however. Continued recoveries in asset prices, and a faster recovery in activity, would help to strengthen banks' balance sheets and might hasten the loosening in credit supply. But it is likely that regulators and investors will require banks' capital ratios, and their holdings of liquid assets, to rise further. Banks may face significant further losses on their loan books, in particular from loans secured against commercial property, where prices remain substantially below their levels prior to the crisis. Furthermore, a substantial fraction of banks' funding, including that supported by the official sector, will mature over the next few years (Section 1). Refinancing that funding, at a time of continued uncertainty over the adequacy of banks' capital, could raise their funding costs, slowing the pace at which credit supply to companies and households improves.

There are also uncertainties over the demand for bank lending as the economy recovers. Companies may require more credit as they seek to expand, and so restrictive credit conditions may become more binding. But large companies may be able to increase the amount of finance they raise from capital markets. And companies may be able to use internal finance to fund investment and day-to-day operations, given the surplus that the non-financial corporate sector has maintained over recent years. Overall, the Committee judges that access to the capital markets and recourse to internal finance should enable output to grow at healthy rates without requiring a significant pickup in net bank lending to UK households and companies. If foreign lenders continue to withdraw from UK markets, however, that would place a greater burden on the main domestic lenders. And many businesses may continue to be constrained by the lack of available credit, because they are unable to access capital markets and have insufficient internal resources.

# By how much will the process of fiscal consolidation reduce spending?

The Committee's projections are conditioned on the plans set out in the December 2009 *Pre-Budget Report*. A significant fiscal contraction is in prospect over the coming years, although its eventual nature and pace are uncertain. That will restrain overall demand. The impact on private spending will be weaker if households and companies have already factored some tightening into their spending decisions, for example by increasing saving in order to meet higher future tax bills.

Doubts that a sufficient consolidation would occur could also weigh on spending by putting upward pressure on long-term interest rates.

# By how much will households look to retrench over the forecast period?

Household spending has fallen substantially during the recession (Section 2). Falls in employment and weak earnings

growth have pushed down households' labour income growth. Income growth is likely to remain moderate throughout the forecast period, either due to continued subdued pay growth, or following further marked rises in unemployment, should employees resist further weakness in wages. In addition to subdued growth in incomes, the proportion of post-tax income saved has risen significantly. That higher saving is likely to have reflected lower income expectations, possibly including the anticipation of tax rises to come, and heightened uncertainty.

A key question for the demand outlook is the extent to which households will increase saving further. Tight credit conditions and uncertainty over income prospects may encourage households to reduce their debts or increase their asset holdings to provide a buffer against future volatility in incomes.

Weighing against any desire to rebuild balance sheets, monetary policy is likely to boost consumption over the forecast period. In addition to the stimulus from low interest rates, further support should come from lagged effects of the MPC's programme of asset purchases. Since that programme began in March, asset prices have risen significantly. The extent to which those higher asset prices have already boosted consumption, however, and therefore the degree of support that is still to come, is unclear.

Overall, the Committee judges that consumption is likely to grow more slowly than its long-term average for much of the forecast period. Household spending could recover more rapidly, however, if confidence recovers earlier, reducing households' desire to increase saving further, or if more of the boost from higher asset prices is still to come.

# How much, and how quickly, will growth be boosted by net trade?

Given the United Kingdom's long-standing trade deficit, and the fiscal consolidation that lies ahead, the pattern of demand will need to rebalance towards stronger net exports. That process will be supported by the large past depreciation of the exchange rate. The Committee therefore judges it likely that net trade will boost output throughout the forecast period. But the size of that boost will depend on the speed with which the world economy recovers from recession, and the pace with which the past depreciation boosts net exports.

A recovery in the world economy appears to be under way. That should support UK output through its effect on net trade, and also via its impact on confidence, increased returns on financial assets held abroad, and through higher profits of UK-owned businesses operating in overseas markets. Global industrial production and trade flows have rebounded, and many Asian economies are growing strongly. But a number of the countries that tend to be more important for UK exporters

## Financial and energy market assumptions

As a benchmark assumption, the projections for GDP growth and CPI inflation described in Charts 5.1 and 5.4 are conditioned on a path for Bank Rate implied by market interest rates (Table 1). In the period leading up to the MPC's February decision, the path implied by forward market interest rates was for Bank Rate to remain close to 0.5% until 2010 Q3. Bank Rate was assumed to rise thereafter, with the path 0.6 percentage points lower, on average, over the remainder of the forecast period than assumed in the November Report.

### Table 1 Conditioning path for Bank Rate implied by forward market interest rates(a)

Per cent

	2010			2011			2012				2013		
	Q1 <sup>(b)</sup>	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
February	0.5	0.5	0.6	1.0	1.3	1.7	2.1	2.5	2.8	3.1	3.3	3.5	3.6
Novembe	r 0.5	0.6	1.1	1.6	2.1	2.5	2.9	3.2	3.4	3.6	3.8	3.9	

(a) The data are fifteen working day averages of one-day forward rates to 3 February 2010 and 4 November 2009 respectively. The curves are based on overnight index swap (OIS) rates.
 (b) February figure for 2010 Q1 is an average of realised spot rates to 3 February, and forward rates thereafter.

The February projections are conditioned on an assumption that the total stock of asset purchases financed by the creation of central bank reserves remains at £200 billion throughout the forecast period, the same total scale of purchases assumed in the November projections.

The starting point for sterling's effective exchange rate index (ERI) in the MPC's projections was 81.2, the average for the

fifteen working days to 3 February. That was 1.3% above the starting point for the November projections. Under the MPC's usual convention,<sup>(1)</sup> the exchange rate is assumed to depreciate a little, to 80.9 by 2012 Q1, but is still higher throughout the forecast period than assumed in November.

The starting point for UK equity prices in the MPC's projections was 2727 — the average of the FTSE All-Share for the fifteen working days to 3 February. That was 2.8% above the starting point for the November 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.

Energy prices are assumed to evolve broadly in line with the paths implied by futures markets over the forecast period. Average Brent oil futures prices for the next three years were around 4% lower (in US dollar terms) than at the time of the November Report. Wholesale gas futures prices were around 18% lower over the forecast period. There is considerable uncertainty about the scale and pace of the pass-through of changes in wholesale energy prices to the prices of gas and electricity faced by households and companies. The February projections for CPI inflation reflect the reduction in domestic gas prices already announced by one major supplier, together with an assumption that other suppliers announce price reductions in due course.

(1) The convention is that the sterling exchange rate follows a path which is half way between the starting level of the sterling ERI and a path implied by interest rate differentials.

face similar headwinds to those described above for the United Kingdom: overleveraged banking systems; the need for considerable fiscal consolidation; and elevated levels of private sector debt. Even if those headwinds can be overcome, there is a risk that the international current account imbalances that contributed to the crisis will re-emerge. That would increase the risk of volatility in global demand further ahead

The boost from net trade over the forecast period will also depend on how rapidly the lower level of sterling encourages overseas and domestic spending to be switched towards UK-produced goods and services. The extent to which that will occur is uncertain. For example, on the export side, so far, much of the depreciation appears to have resulted in higher sterling export prices, and so higher profit margins for UK exporters, rather than increased price competitiveness and higher market share (see the box on page 24). That should still boost net trade, as UK companies respond to those higher profits by increasing the supply of exports, and surveys indeed suggest that exports have begun to improve. Nonetheless, the

full boost to net trade may take some time to materialise, particularly if it requires the formation of new companies to compete for those higher margins, or if existing companies need to expand into new markets.

# How much spare capacity is there, and how long will it persist?

The fall in nominal spending over the past 18 months is likely to have resulted in a significant shortfall in demand relative to supply capacity, which should result in downward pressure on inflation. The extent of that spare capacity, and its likely persistence, are difficult to judge.

In part, that is because there is some uncertainty about the current level of demand. Although a range of indicators point to a substantial fall in output during the recession, a number of them suggest that the scale of the fall may be somewhat less than the official GDP estimates. The Committee judges that those data are more likely to be revised up than down (Section 3).

More significantly, there is considerable uncertainty over the extent to which supply capacity has been impaired, and over its future path. It is likely that the downturn has resulted in a fall in companies' effective supply capacity — the level of output that companies are currently able to produce, should demand warrant it. Restricted access to working capital has reduced some companies' ability to meet orders. And the sharp falls in demand during the recession may have led some companies to make temporary changes to the scale of their operations, in order to be able to operate at a lower level of demand while protecting their profit margins.

Other dampening effects on potential supply are likely to accumulate over time. The lower level of business investment will reduce capital stock growth, and so the productive potential of the economy. Some companies may scrap some of the presently underutilised capacity, and some enterprises may fail, further reducing potential supply as capital and know-how are no longer utilised. Furthermore, a prolonged period of elevated unemployment would depress effective labour supply growth as people lose, or are unable to acquire, the skills sought by employers. Some of those effects may be smaller than previously judged, however, given that unemployment and company liquidations have both risen by less, so far, than might have been expected.

The Committee judges it likely that there has been a marked fall in the effective supply capacity of the economy, but that the falls in nominal spending have nonetheless increased the margin of spare capacity substantially. The outlook for supply will depend, in part, on the strength of the recovery in demand. Some of the falls in supply capacity are likely to prove temporary, as credit conditions loosen and demand picks up, encouraging companies to bring capacity back on line. Those

improvements will be offset over time, however, by the effects of higher unemployment on labour supply and by weaker growth of the capital stock, so potential supply is likely to remain below the level implied by a continuation of its pre-recession trend throughout the forecast period and beyond.

# How much will the degree of spare capacity bear down on inflation?

The wide margin of spare capacity is likely to put significant downward pressure on inflation over time. But in the near term, upward pressure from the restoration of the standard rate of VAT to 17.5%, higher petrol price inflation, and the continued adjustment of consumer prices to sterling's past depreciation will mean that inflation remains above the target over the coming months. Although those effects should be temporary, recent outturns for inflation have been somewhat higher than previously expected, and the MPC has revised up its near-term outlook for inflation.

Recent higher-than-expected inflation outturns may reflect the lag between the emergence of spare capacity and its effect on inflation, so that greater downward pressure on prices will emerge over the coming months. Alternatively, there are a number of factors that might have dampened companies' incentives to cut prices in order to boost sales, and so reduced, temporarily, the sensitivity of inflation to spare capacity. Companies faced with tight credit conditions may be unusually focused on maximising cash flow, and so may be unwilling to lower prices if there is a risk that might reduce revenues in the near term. And the incentive for companies to cut prices depends crucially on their expectations of their competitors' pricing decisions. If companies expect inflation to be elevated for a period, then they might delay cutting prices.

Notwithstanding those near-term effects, the wide margin of spare capacity is likely to bear down on inflation over time. As the effect of the past depreciation of sterling fades, and the VAT increase drops out of the twelve-month comparison, inflation is likely to fall back markedly. There are risks to inflation in both directions, however. On the upside, the near-term resilience of inflation may prove more persistent, if prices have further to adjust to the past depreciation, or if there are further rises in commodity prices. If sustained, that could cause inflation expectations, which currently appear well-anchored, to move up. On the downside, more of the recent resilience of inflation may reflect lags between spare capacity and its effect on inflation, suggesting greater downward pressure to come. Furthermore, companies may cut prices more rapidly than expected in order to boost sales as credit conditions loosen and uncertainty dissipates.

**Chart 5.7** Frequency distribution of GDP growth based on market interest rate expectations and £200 billion asset purchases<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.

Chart 5.8 Projected probabilities of CPI inflation outturns in 2012 Q1 (central 90% of the distribution)<sup>(a)</sup>



## 5.3 Summary and the policy decision

Output growth is likely to pick up further over the coming months, boosted by the stimulus from monetary policy and the past depreciation of sterling. A number of factors will weigh on the strength of the recovery, however, including the continuing restructuring of banks' balance sheets and the drag from fiscal tightening. The path of growth will depend on the balance between those two sets of forces. **Chart 5.7** shows frequency distributions for GDP growth at the two and three-year horizons. Despite the pickup in growth, output is likely to remain substantially below the level it would have reached had it continued along its pre-recession trend.

CPI inflation is likely to remain elevated in the near term, reflecting the impetus from higher VAT, higher petrol price inflation and the continuing adjustment of prices to the past depreciation of the exchange rate. As these effects dissipate, inflation is likely to fall back to below the target, given the effects of spare capacity. **Chart 5.8** shows the spread of outcomes for inflation at the two-year horizon, and the equivalent outlook at the time of the November *Report* is shown in **Chart 5.9**. **Chart 5.10** shows frequency distributions for inflation at the two and three-year horizons.

In evaluating the outlook for growth, the Committee will focus on: developments in the banking sector, and the growth of money and credit; the extent to which companies are able to raise finance from capital markets; the nature and speed of the fiscal consolidation; the evolution of incomes and household saving; and the pace of the global recovery.





(a) Chart 5.8 represents a cross-section of the CPI inflation fan chart in 2012 Q1 for the market interest rate projection. It has been conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves remains at £200 billion throughout the forecast period. 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 2012 Q1 for the number 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 5.9 shows the corresponding cross-section of the November 2009 *Inflation Report* fan chart, which was conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves reached £200 billion and remained there throughout the forecast period.
 (b) Average probability of inflation being between any two rates is given by the total area of the shaded bars between those rates. As the heights of identically coloured bars on either side of the central projection are the same, the ratio of the

probability contained in the bars below the central projection, to the probability in the bars above it, is given by the ratio of the width of those bars.

**Chart 5.10** Frequency distribution of CPI inflation based on market interest rate expectations and  $\pounds$ 200 billion asset purchases<sup>(a)</sup>



<sup>(</sup>a) These figures are derived from the same distribution as Chart 5.4. They represent the probabilities that the MPC assigns to CPI inflation lying within a particular range at a specified time in the future.

In monitoring those factors likely to affect inflation, the Committee will focus on: evidence regarding the evolution of the United Kingdom's supply capacity, and the response of price-setters to the corresponding margin of spare capacity; developments in the relative prices of tradable and non-tradable goods, in order to help assess exchange rate pass-through; and measures of inflation expectations.

At its February meeting, the Committee noted that the immediate prospect was for CPI inflation to remain well above the 2% target, and for output to recover slowly. The downward pressure from the persistent margin of spare capacity was likely to cause inflation to fall back to below the target for a period, before gradually returning to around the target as the recovery proceeded. In the light of that outlook and in order to keep inflation on track to meet the 2% target over the medium term, the Committee judged that it was appropriate to maintain Bank Rate at 0.5% and its stock of purchased assets financed by the issuance of central bank reserves at  $\pounds$ 200 billion. The Committee noted that this stock of past purchases, together with the low level of Bank Rate, would continue to impart a substantial monetary stimulus to the economy for some time to come.

## 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 January.

On average, CPI inflation was expected to be below the 2% target in 2011 Q1, rising over the following two years to reach the target by 2013 Q1 (Table 1). Compared with three months ago, inflation was expected to be slightly higher at the two-year horizon. The range of central views about the outlook for inflation two years ahead was narrower than at the time of the November 2009 Report (Chart A).

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

	2011 Q1	2012 Q1	2013 Q1
CPI inflation <sup>(b)</sup>	1.7	1.9	2.0
GDP growth <sup>(c)</sup>	2.2	2.4	2.5
Bank Rate (per cent)	1.4	2.8	3.5
Sterling ERI <sup>(d)</sup>	81.4	82.7	83.7

Source: Projections of outside forecasters as of 26 January 2010.

(a) For 2011 Q1, there were 24 forecasts for CPI inflation, GDP growth and Bank Rate and 19 for the sterling ERI. For 2012 Q1, there were 22 forecasts for CPI inflation, 21 for GDP growth, 20 for Bank Rate and 16 for the sterling ERI. For 2013 Q1, there were 20 forecasts for CPI inflation, GDP growth and Bank Rate and 16 for the sterling ERI. Twelve-month rate.

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

### Chart A Distribution of CPI inflation central projections two years ahead



Sources: Projections of 23 outside forecasters as of 23 October 2009 and 22 forecasters as of 26 January 2010.

(a) A projection that is on the boundary of these ranges is classified in the higher bucket. For example, a 1.8% projection is included within the 1.8% to 2.2% bucket.

On average, forecasters expected four-quarter GDP growth to be 2.2% at the one-year horizon and around 21/2% in the medium term. Those averages were higher than three months ago at the one and two-year horizons, but slightly lower three years ahead.

The average level of Bank Rate expected by forecasters was higher than three months ago, with the largest upward revision, of around 0.3 percentage points, at the two-year horizon. On average, the sterling ERI was projected to increase gradually over the next three years.

The Bank also asks forecasters for an assessment of the risks around their central projections for CPI inflation and GDP growth (Table 2). Respondents thought, on average, that there was around a 60% chance that inflation would be below target one year ahead. But at the three-year horizon, respondents judged there was a roughly equal chance of inflation being above or below target. In line with the higher central projection for output, the probability distribution of four-quarter GDP growth one year ahead has shifted to the right compared with three months ago (Chart B).

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

#### **CPI** inflation

Probability, per cent				Range:			
	<0%	0–1%	1–1.5%	1.5–2%	2–2.5%	2.5–3%	>3%
2011 Q1	4	13	22	21	19	14	7
2012 Q1	3	9	17	24	25	14	7
2013 Q1	3	8	14	24	26	15	10

#### GDP growth

Probability, per cent	Range:					
	<-1%	-1–0%	0–1%	1–2%	2–3%	>3%
2011 Q1	2	5	13	29	35	16
2012 Q1	3	7	13	24	34	19
2013 Q1	3	7	12	22	34	24

Source: Projections of outside forecasters as of 26 January 2010

(a) For 2011 Q1, 24 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 2012 Q1, 22 forecasters provided assessments for CPI and 21 forecasters provided assessments for GDP; for 2013 Q1, 20 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 Average of other forecasters' probability distributions for GDP growth one year ahead



Sources: Projections of 25 outside forecasters as of 23 October 2009 and 24 forecasters as of 26 January 2010.

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## Text of Bank of England press notice of 10 December 2009 Bank of England maintains Bank Rate at 0.5% and continues with £200 billion Asset Purchase Programme

The Bank of England's Monetary Policy Committee today voted to maintain the official Bank Rate paid on commercial bank reserves at 0.5%. The Committee also voted to continue with its programme of asset purchases totalling £200 billion financed by the issuance of central bank reserves.

The Committee expects the announced programme to take another two months to complete. The scale of the programme will be kept under review.

The minutes of the meeting will be published at 9.30 am on Wednesday 23 December.

## Text of Bank of England press notice of 7 January 2010 Bank of England maintains Bank Rate at 0.5% and continues with £200 billion Asset Purchase Programme

The Bank of England's Monetary Policy Committee today voted to maintain the official Bank Rate paid on commercial bank reserves at 0.5%. The Committee also voted to continue with its programme of asset purchases totalling £200 billion financed by the issuance of central bank reserves.

The Committee expects the announced programme to take another month to complete. The scale of the programme will be kept under review.

The minutes of the meeting will be published at 9.30 am on Wednesday 20 January.

# Text of Bank of England press notice of 4 February 2010 Bank of England maintains Bank Rate at 0.5% and maintains the size of the Asset Purchase Programme at £200 billion

The Bank of England's Monetary Policy Committee today voted to maintain the official Bank Rate paid on commercial bank reserves at 0.5%. The Committee also voted to maintain the stock of asset purchases financed by the issuance of central bank reserves at £200 billion.

After a substantial fall in output, the UK economy recorded sluggish growth in the final quarter of 2009. Spending by households appears to have picked up a little, though that may partly reflect temporary factors. The rate of decline in businesses' investment spending appears to have eased. And the world economy continued to recover, raising the demand for UK exports.

CPI inflation has risen sharply to well above the 2% target, reaching 2.9% in December. That rise was largely accounted for by higher petrol price inflation and the reduction in the main VAT rate a year earlier dropping out of the calculation. Inflation is likely to have risen further in January, reflecting the restoration of the VAT rate to 17.5%. Pay growth has remained subdued.

The considerable stimulus from the easing in monetary policy, the lower level of sterling and the recovery in UK export markets should together support domestic activity. But credit conditions are likely to remain restrictive, while the need to strengthen public and private sector finances will also weigh on spending. On balance, the Committee believes that the prospect is for a gradual recovery in the level of activity. The recession has probably impaired the supply capacity of the economy, but the scale and persistence of the fall in output means that a substantial margin of underutilised resources is likely to remain for some time to come. That is likely to mean that inflation will fall below the target for a period.

In the light of the Committee's latest *Inflation Report* projections and in order to keep inflation on track to meet the 2% inflation target over the medium term, the Committee judged that it was appropriate to maintain Bank Rate at 0.5% and its stock of purchases of government and corporate debt financed by the issuance of central bank reserves at £200 billion. The Committee noted that this stock of past purchases, together with the low level of Bank Rate, would continue to impart a substantial monetary stimulus to the economy for some time to come. The Committee will continue to monitor the appropriate scale of the asset purchase programme and further purchases would be made should the outlook warrant them.

The Committee's latest inflation and output projections will appear in the Inflation Report to be published at 10.30 am on Wednesday 10 February.

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

# Glossary and other information

### Glossary of selected data and instruments

AEI – average earnings index. AWE - average weekly earnings. CDS - credit default swap. 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. M4 – UK non-bank, non-building society private sector's holdings of sterling notes and coin, and their sterling deposits (including certificates of deposit, holdings of commercial paper and other short-term instruments and claims arising from repos) held at UK banks and building societies. OIS - overnight index swap. RPI – retail prices index. RPI inflation - inflation measured by the retail prices index.

### Abbreviations

A8 Accession countries – Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. BCC – British Chambers of Commerce. BIS - Department for Business, Innovation and Skills. CBI – Confederation of British Industry. CFO - chief financial officer. CIPS – Chartered Institute of Purchasing and Supply. EU – European Union. FTSE – Financial Times Stock Exchange. GfK – Gesellschaft für Konsumforschung, Great Britain Ltd. MPC - Monetary Policy Committee. MTIC - missing trader intra-community. OECD - Organisation for Economic Co-operation and Development. OFCs - other financial corporations. **ONS** – Office for National Statistics. PNFCs - private non-financial corporations. PwC – PricewaterhouseCoopers. REC – Recruitment and Employment Confederation. RICS - Royal Institution of Chartered Surveyors. SME - small and medium-sized enterprise. S&P – Standard & Poor's.

VAT – Value Added Tax.

### 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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