

Inflation Report

May 2009



BANK OF ENGLAND





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

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

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

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

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

The entire *Report* is available in PDF at www.bankofengland.co.uk/publications/inflationreport/2009.htm.

PowerPoint™ versions of the charts in this *Report* and the data underlying most of the charts are provided at www.bankofengland.co.uk/publications/inflationreport/2009.htm.

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Overview

The world economy remained in deep recession: output contracted further and international trade fell precipitously. The global banking and financial system remained fragile despite further significant intervention by the authorities. In the United Kingdom, GDP fell sharply in the first quarter of 2009. But there were promising signs, both in the United Kingdom and globally, that the pace of decline had begun to moderate. The outlook for domestic economic activity continues to be dominated by opposing forces. Weak global demand, combined with the process of adjustment under way in the UK economy, as private saving rises and banks restructure their balance sheets, will continue to act as a significant drag on economic activity. But pushing in the opposite direction, there is considerable economic stimulus stemming from the easing in monetary and fiscal policy at home and abroad, the substantial depreciation in sterling, past falls in commodity prices, and actions by the authorities internationally to improve the availability of credit. Over the forecast period, that stimulus should lead to a recovery in economic growth, but the timing and strength of that recovery is highly uncertain.

CPI inflation remained close to 3%, significantly higher than the 2% inflation target. Past falls in sterling continued to put upwards pressure on inflation. But the degree of spare capacity in the economy increased further and the loosening in the labour market contributed to a sharp easing in pay pressures. CPI inflation is likely to drop below the 2% target later this year. Under the assumptions that Bank Rate moves in line with market rates and the stock of purchased assets financed by the issuance of central bank reserves reaches £125 billion, it is more likely than not that CPI inflation will be below the 2% inflation target in the medium term. But there are significant risks to the inflation outlook in each direction. The assessment of these risks is key to MPC decisions.

Financial and credit markets

Since the *February Report*, the MPC has cut Bank Rate to 0.5%, and announced a programme of asset purchases totalling £125 billion, including an extension by a further £50 billion announced on 7 May, in order to boost the growth of money and credit and of nominal demand. Over the past three months, yields on gilts eligible for purchase fell, as did those on non-financial corporate debt. Money growth remained weak but did not yet reflect the full impact of the asset purchase programme. Growth in bank lending to companies and households remained sluggish, but the Government's Asset Protection Scheme should improve the resilience of some banks to further losses. There were also signs that companies were making increasing recourse to the capital markets. Equity prices rallied over the past month or so but were little changed from the time of the *February Report*. The sterling effective exchange rate remained around a quarter below its 2007 peak.

Global activity

The sharp and synchronised fall in global economic activity continued in the early months of 2009. Spending on consumer durables and capital goods fell further, reflecting weak consumer and business sentiment and tight credit conditions. The considerable macroeconomic stimulus implemented by governments and central banks should help to ameliorate the global downturn and business surveys pointed to a moderation in the pace of contraction.

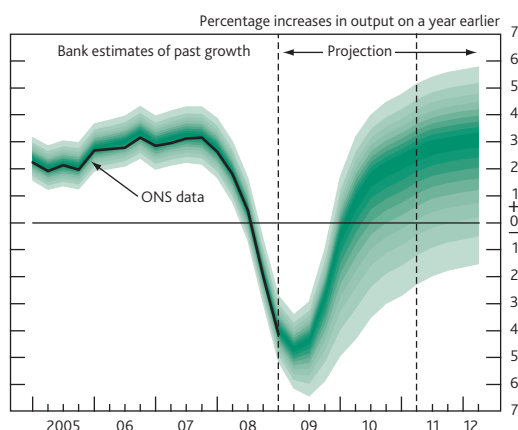
The fall in world activity was accompanied by a sharp contraction in international trade flows. That decline was probably associated with a marked reduction in both inventory holdings and in the demand for capital and consumer durable goods. The substantial depreciation of sterling should continue to encourage both domestic and overseas spending to switch towards UK-produced goods and services.

Domestic demand

Falls in business spending accounted for most of the overall decline in domestic demand in the fourth quarter of 2008. Weak and uncertain demand prospects, together with tight credit conditions, led to a further scaling back of capital expenditure. And companies ran down their stock levels very sharply, significantly amplifying the decline in economic activity.

Consumer spending fell by 1% in 2008 Q4, as households saved a higher proportion of their income. It is likely that households' spending continued to fall in the first quarter of 2009, weighed down by concerns about job prospects and a desire to strengthen their finances.

Chart 1 GDP projection based on market interest rate expectations and £125 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 reaches £125 billion and remains there 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 economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that the mature estimate of GDP growth would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outcomes are also expected to lie within each pair of the lighter green areas on 10 occasions. 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-year point of the projection.

The Committee's projections are based on the fiscal plans set out in the 2009 Budget. Those plans included some additional discretionary measures which should help to support demand in the near term. But the projection for public sector net borrowing was revised up substantially and this may pull down on spending if households and companies expect the increased level of borrowing to lead to higher taxes in the future.

The outlook for GDP growth

GDP was estimated to have fallen by 1.9% in 2009 Q1, a larger decline than anticipated at the time of the February *Report*. But there were signs from surveys that the rate at which output was contracting had begun to moderate.

Chart 1 shows the Committee's best collective judgement for four-quarter GDP growth, assuming that Bank Rate follows a path implied by market rates and the stock of purchased assets financed by the issuance of central bank reserves reaches £125 billion and remains at that level throughout the forecast period. The outlook for economic growth is unusually uncertain. The sharp downturn in global economic activity,

combined with the process of adjustment under way in the UK economy, as private saving rises and banks restructure their balance sheets, continues to act as a significant drag on UK growth. But that is counteracted by the considerable stimulus stemming from the easing in monetary and fiscal policy at home and abroad, the substantial depreciation in sterling, past falls in commodity prices, and actions taken by authorities internationally to bolster the availability of credit. This stimulus, when combined with a turnaround in the stock cycle, should lead to a recovery in economic growth over the forecast period.

The timing and strength of that recovery is, however, highly uncertain. The pace of the recovery may be slowed by a number of factors: the contraction in world demand and trade may be protracted; households may save more; and the availability of credit to companies and households may improve only gradually. That said, the substantial scale of the stimulus in train may prompt a rapid rebound in activity. In particular, the impact of monetary policy on nominal spending is more difficult to judge than normal given the use of unconventional measures. The risks are more than usually interdependent given the importance of credit supply and conditions in the banking system. On balance, the Committee judged that these factors point to a relatively slow recovery in economic activity. The projected distribution for GDP growth is weaker than in the *February Report*, reflecting lower-than-expected activity in the first quarter of 2009, both at home and abroad, and a judgement that it is likely to take longer for bank lending to return to normal than assumed in February.

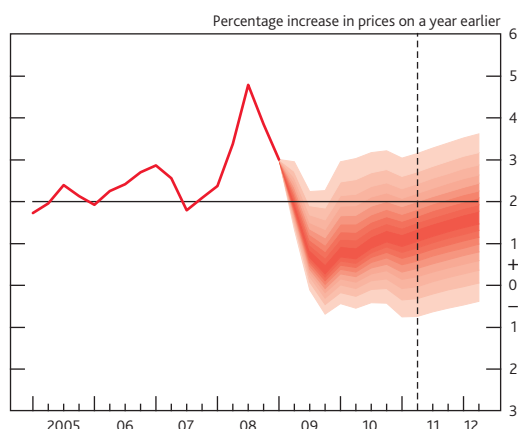
Costs and prices

CPI inflation was 2.9% in March, significantly higher than the 2% inflation target. Measures of households' inflation expectations changed little and appeared broadly consistent with inflation returning to target in the medium term.

Inflation is likely to fall back to below the 2% target later this year, driven in part by diminishing contributions from food and energy prices. The growing margin of spare capacity will also act to depress wage and price increases. The labour market has loosened substantially and pay pressures have eased markedly.

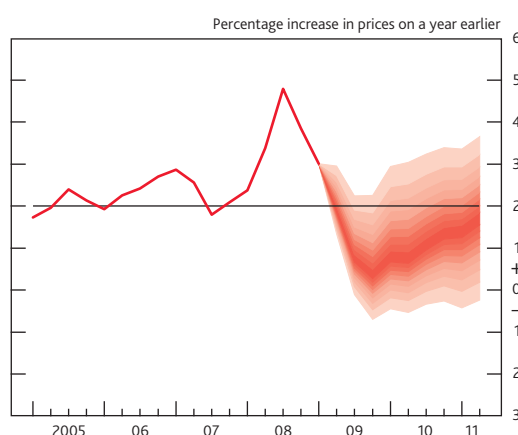
The significant depreciation of sterling has, however, raised companies' import costs. The continued elevation in CPI inflation in the first few months of 2009 probably owed much to the upward pressure from higher import costs. The extent to which the adjustment to sterling's depreciation will come through higher prices rather than lower wages is a key uncertainty surrounding the inflation outlook.

Chart 2 CPI inflation projection based on market interest rate expectations and £125 billion asset purchases



The fan chart depicts the probability of various outcomes for CPI inflation in the future. It has been conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves reaches £125 billion and remains 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 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.

Chart 3 CPI inflation projection based on constant nominal interest rates at 0.5% and £125 billion asset purchases



See footnote to Chart 2.

The outlook for inflation

Chart 2 shows the Committee's best collective judgement for the outlook for CPI inflation, assuming that Bank Rate follows a path implied by market rates and the stock of purchased assets financed by the issuance of central bank reserves reaches £125 billion. The outlook for inflation remains extremely uncertain. The margin of spare capacity that is likely to persist over the forecast period bears down on CPI inflation. That force is partially offset by the upward pressure associated with the pass-through of sterling's depreciation to consumer prices and by the judgement that inflation expectations remain anchored around the inflation target.

The relative magnitude of these opposing influences on inflation is highly uncertain, and there is a range of views on the relative strength of these forces among Committee members. The downward pressure from the margin of spare capacity will depend on the timing and strength of the recovery, as well as on the impact of the slowdown on the growth of productive supply and on the sensitivity of inflation to the degree of slack in the economy. The pass-through from the lower level of sterling will depend critically on the behaviour of the labour market and the extent to which companies adjust to higher import costs by lowering wages. The balance of these factors suggest that, conditioned on the monetary policy assumptions described above, it is more likely than not that CPI inflation will be below the 2% inflation target in the medium term. The projected distribution for inflation in the medium term is higher than in the February *Report*.

Chart 3 shows the projection for CPI inflation conditioned on the assumptions that Bank Rate is held constant at 0.5% and the stock of purchased assets increase to £125 billion. This suggests that, on those assumptions, the risks of inflation being above or below the 2% target become more evenly balanced towards the two-year horizon.

The policy decision

At its May meeting, the Committee noted that the immediate prospect was for CPI inflation to fall substantially below the 2% target, while output continued to contract. But a substantial stimulus was in train which should lead to a recovery in output growth. There were significant uncertainties regarding the inflation outlook relating to the timing and strength of that recovery and the extent of the pass-through from sterling's depreciation. In the light of that outlook, the Committee judged that maintaining Bank Rate at 0.5% and increasing the size of the programme of asset purchases financed by the issuance of central bank reserves by £50 billion to a total of £125 billion was, on balance, most likely to keep CPI inflation on track to meet the 2% inflation target over the medium term.

1 Money and asset prices

Bank Rate has been cut to 0.5%. The MPC announced purchases of government bonds and private sector debt totalling £125 billion, funded by the issuance of central bank reserves. Those purchases are intended to boost the growth of money, ease corporate credit conditions and stimulate nominal demand. The global banking system remained fragile. In the United Kingdom, banks' losses increased towards the end of 2008, reflecting increased levels of defaults and lower property prices. The growth of credit to companies and households remained considerably weaker than over the past decade. House prices continued to fall but housing market activity picked up modestly. The sterling effective exchange rate appreciated a little, but remained well below its mid-2007 level.

Chart 1.1 Bank Rate

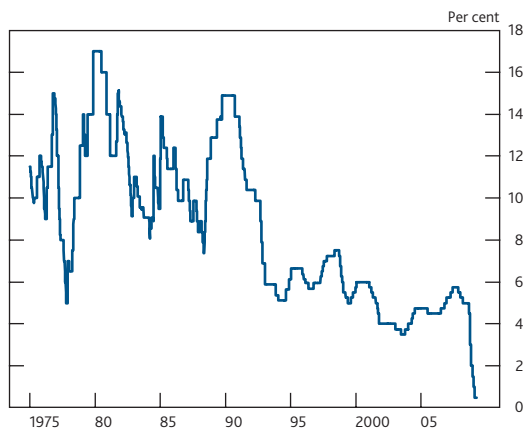
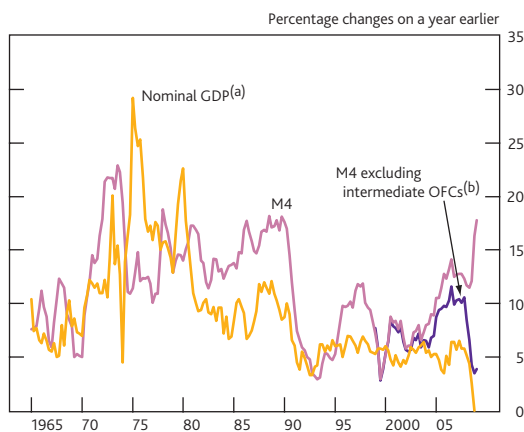


Chart 1.2 Money and nominal GDP



- (a) At current market prices.
 (b) This measure excludes the bank deposits of, and borrowing by, intermediate OFCs. These 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 by several banks.

1.1 Money and monetary policy

The MPC cut Bank Rate to 0.5% in March (**Chart 1.1**), the lowest level of official interest rates in the Bank's history. Also in March, the MPC announced a programme to purchase £75 billion of medium and long-term government bonds and private sector debt, financed by the issuance of central bank reserves. In May, the MPC increased the size of the programme to £125 billion. The objective of this policy is to boost the supply of money in the economy, ease conditions in corporate credit markets, and, ultimately, to raise the rate of growth of nominal demand to ensure inflation meets the 2% target in the medium term.⁽¹⁾

As discussed in Section 2, UK nominal demand growth has fallen to well below its average annual rate of around 5% since the MPC's inception, a period over which inflation has been, on average, close to target. Growth in broad money, as measured by M4, has picked up since mid-2008. But as described in the box on page 13, that pickup wholly reflected strong growth in money holdings of institutions which intermediate between banks. Growth in a more economically relevant measure of broad money, which excludes such institutions, has slowed broadly in line with nominal spending (**Chart 1.2**).

As explained in the box on pages 16–17, the MPC's asset purchases should boost nominal spending through a number of channels. Although it will be some time before a full assessment of the effectiveness of the purchases can be made, this section discusses some of the immediate consequences of the introduction of the Asset Purchase Facility (APF). The impact of policy easing will be influenced by the extent to which banks are able to lend and companies and households

(1) The box on page 10 sets out the factors behind the MPC's March and April decisions.

Monetary policy since the February Report

The MPC's central projection in the February *Report*, under the assumption that Bank Rate followed a path implied by market rates, was for output to continue to contract in the near term, and for CPI inflation to fall to well below the 2% target in the medium term. There were significant risks around these projections. On the downside, the main risk was that the recession would be more pronounced than in the central case, putting further downward pressure on inflation. On the upside, the main risk concerned the implications of sterling's depreciation for consumer prices.

In the month leading up to the MPC's meeting on 4–5 March, equity prices had fallen internationally. Market expectations of Bank Rate had declined on the month. Short to medium-term nominal forward rates had also decreased, by as much as 45 basis points. It was likely that this, in part, reflected increased expectations of gilt purchases for monetary policy purposes. The sterling exchange rate index was little changed on the month.

Output had weakened considerably across a wide range of economies in 2008 Q4. Among the major industrialised economies, Japan had seen the largest contraction in output. A number of other Asian economies had also released data showing particularly large falls in industrial production, output and trade flows. Output was also estimated to have fallen sharply in the United States and the euro area in Q4. The JPMorgan Global Purchasing Managers' Index for manufacturing had risen slightly in February, but the Global Services Index had fallen.

In the United Kingdom, nominal GDP was estimated to have fallen by 0.8% in 2008 Q4, and was only 0.5% higher than its level a year earlier. De-stocking was estimated to have made an even larger contribution to the 1.5% decline in real output than the Committee had anticipated, accounting for almost two thirds of the entire fall. Output surveys continued to point to a broadly similar rate of contraction in output in the first quarter of 2009 to that in the fourth quarter of 2008. But the evidence on de-stocking in Q4 provided some support for the Committee's central projection in the February *Report* of a partial recovery in growth rates over 2009, as the negative contribution to growth from de-stocking lessened.

CPI inflation had fallen slightly, to 3% in January from 3.1% in December, much as the Committee had expected at the time of the February *Report*. But it remained significantly above the 2% target.

The Committee agreed that further monetary easing was required to meet the inflation target, and that was likely to require asset purchases as well as a further cut in Bank Rate. The Committee voted unanimously to reduce Bank Rate by

0.5 percentage points. The Committee also voted unanimously in favour of the proposition that the Bank of England should seek to make £75 billion of asset purchases funded by the issuance of central bank reserves within the following three months. The Committee noted that, insofar as purchases of private sector assets fell short of the £75 billion target, the Bank would buy medium and long-term gilts to fulfil the overall quantity of purchases.

In the month leading up to the Committee's meeting on 8–9 April, around £26.5 billion of assets had been purchased. Yields on those gilts with 5–25 years to maturity had fallen on the announcement.

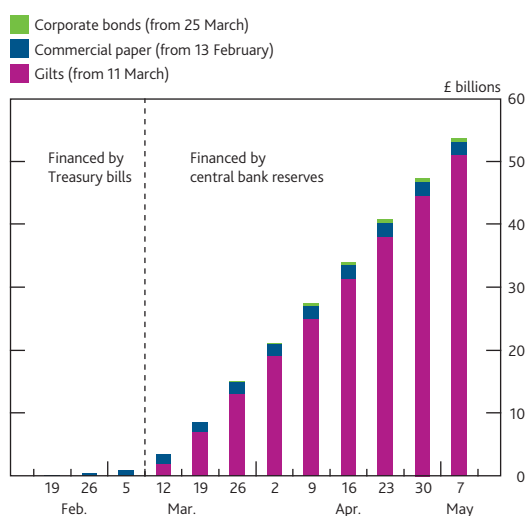
Around the turn of the year there had been a deterioration in world trade of unprecedented magnitude and speed. World output growth had also been weak, but the collapse in world trade appeared to be much more severe than its long-term average relationship with output implied. Purchasing managers' indices from a wide variety of economies were suggesting that the pace of deterioration in global output growth might be moderating.

In the United Kingdom, the monthly increase in the CIPS/Markit manufacturing output index had been the largest since the survey began in 1991 and the services index had risen for four months in a row. Those indicators were still consistent with falling output. But the steady slowing in the rate of contraction during 2009 implied by the central projection in the February *Report* seemed broadly on track.

CPI inflation had risen to 3.2% in February, higher than the Committee had expected. Much of the upside news had been in CPI components that had a relatively high import content. It seemed likely that the increase largely reflected faster or greater-than-expected pass-through from the depreciation of sterling. Despite the pickup in inflation in February, inflation still seemed likely to fall below target by the second half of the year, reflecting diminishing contributions from retail energy and food prices and rising spare capacity. Labour cost growth had been very weak on the month: settlements had fallen sharply, and there had been continued evidence of pay freezes.

Overall, the risks to the domestic economy remained weighted to the downside. But the initial effects of the Committee's asset purchases had been encouraging. The Committee voted unanimously to maintain Bank Rate at 0.5%, and to continue with the asset purchase programme agreed at the March meeting.

At its meeting on 6–7 May, the Committee voted to maintain Bank Rate at 0.5%. The Committee also voted to continue with its programme of asset purchases financed by the issue of central bank reserves and to increase its size by £50 billion to a total of £125 billion.

Chart 1.3 Cumulative APF asset purchases by type

want to borrow — Section 1.2 considers developments in the banking sector and corporate and household credit conditions. Section 1.3 looks at recent equity price and exchange rate movements.

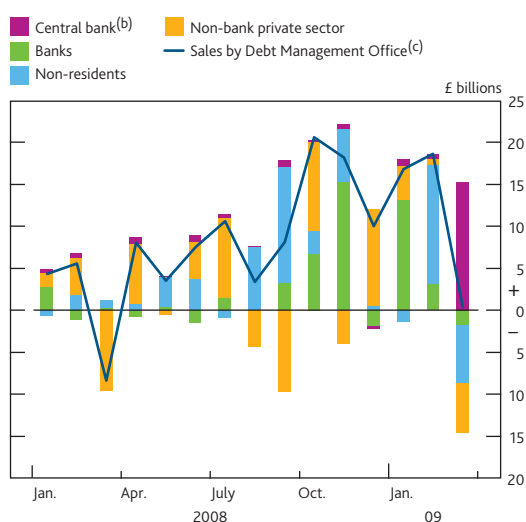
Asset purchases and the gilt market

Between 5 March and 7 May, the Bank made £51 billion of purchases of UK Government medium and longer-term gilts, funded by the issuance of central bank reserves (**Chart 1.3**). As discussed below, the programme of purchases has depressed yields on gilts at eligible maturities. That also put downward pressure on other interest rates, such as those on corporate bonds (Section 1.2). In addition, the Bank purchased £2.0 billion of commercial paper and £0.6 billion of corporate bonds — just over half of which was financed using central bank reserves.⁽¹⁾ The impact of these purchases of private sector debt, which are intended to ease corporate credit conditions more directly, is discussed in Section 1.2.

As discussed in the box on pages 16–17, asset purchases work in part because they increase the liquidity of some investors' portfolios. Investors who sell their assets find that their money holdings have increased. To the extent that their holdings of money are then above their desired levels, they may buy other assets to rebalance their portfolios.

To monitor the impact of asset purchases through this channel, it is therefore necessary to monitor which investors have seen increases in the liquidity of their portfolios due to the Bank's programme, and how, over time, they have reacted to that increased liquidity. But it is not straightforward to identify those investors, as it is not necessarily the final seller of an asset to the Bank who ends up with increased liquidity. For example, some investors may have bought gilts in order to sell them to the Bank. In that case, it would be those that they bought the gilts from whose liquidity would ultimately be affected by the Bank's purchases. With that caveat in mind, data on net sales of public sector debt show that the increase in the Bank's holdings of public sector debt in March was accompanied by a fall in the gilt holdings of the UK non-bank private sector and of overseas residents (**Chart 1.4**).

Looking ahead, sectoral balance sheet data may provide useful information on how investors are rebalancing their portfolios, but these data are currently available only to 2008 Q4. As more data become available, changes in UK-based non-bank financial companies' portfolios will be of particular interest. This sector, which includes insurance companies and pension funds, held more than half of UK eligible gilts at the end of 2008. It is therefore likely that they will be the source of a significant proportion of the Bank's eventual purchases.

Chart 1.4 Monthly changes in gilt holdings by sector^(a)

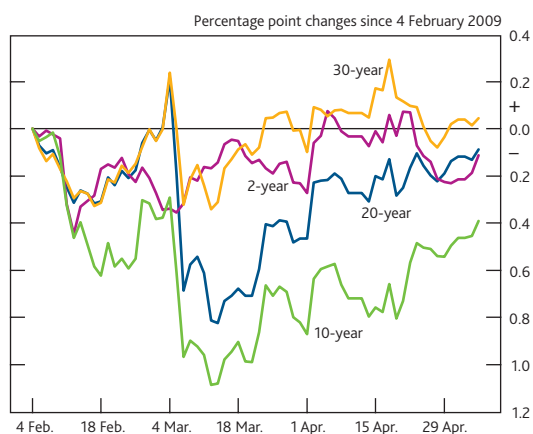
Sources: Bank of England and Debt Management Office.

- (a) Non seasonally adjusted.
 (b) Changes in sterling holdings of all securities issued by public sector.
 (c) Net issuance by the Debt Management Office.

(1) APF purchases between 13 February and 5 March were funded by the issuance of Treasury bills. Further details of the operation of the APF can be found at www.bankofengland.co.uk/markets/apf/index.htm#quarterlyreports.

If asset purchases raise holdings of bank deposits by the UK non-bank private sector, measures of broad money will also rise. Purchases of £125 billion are equivalent to some 8% of the stock of M4 excluding intermediate OFCs. March's purchases, the only ones to affect currently available money data, are equivalent to 1 percentage point on annual growth in Q1. Other factors will also influence money growth: four-quarter growth in M4 excluding intermediate OFCs ticked up to 3.9% in Q1, from 3.5% in Q4.

Chart 1.5 Nominal spot gilt yields



Sources: Bloomberg and Bank calculations.

Gilt purchases are likely to raise the price of gilts, and so reduce their yields, regardless of who they are bought from (see the box on pages 16–17). Gilt yields fell slightly following the release of the February *Inflation Report*, which discussed the APF and the possibility that it might be used to purchase government securities.⁽¹⁾ When the MPC's initial programme of asset purchases was announced on 5 March, yields on eligible gilts (conventional gilts with maturities between 5 and 25 years) fell further (**Chart 1.5**). Although gilt purchases are likely to have continued to bear down on yields, other factors have put some upward pressure on gilt yields over subsequent weeks. For example, projections for Government borrowing were revised up by more than market participants expected in the Budget in April, contributing to an increase in expectations of bond issuance; this may have raised yields.

1.2 Banks and credit conditions

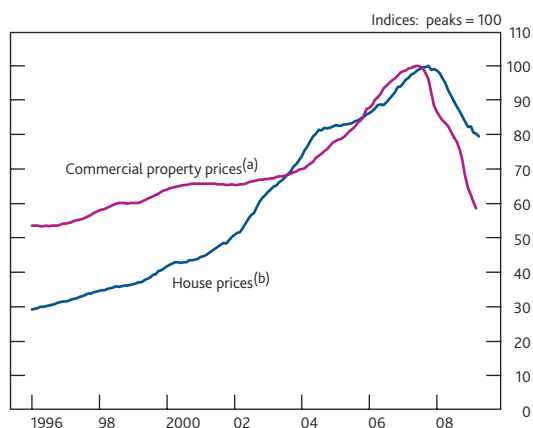
Banks' capital and funding

A concern throughout the financial crisis has been whether banks have adequate capital to absorb potential losses. And as the economic outlook has worsened, the likely scale of losses has increased. Indeed, banks have already seen an increase in losses on past loans to companies and households. That reflects both a rise in the number of borrowers defaulting on loans, and a fall in the value of collateral against which those loans were secured as both commercial and residential property prices have fallen (**Chart 1.6**). Banks have made provisions for further losses on lending.

The Government has taken steps to improve banks' capital positions.⁽²⁾ It has provided capital injections to some banks. And, under the Asset Protection Scheme (APS), it offered banks the option to buy insurance against severe losses on certain assets. The Royal Bank of Scotland and the Lloyds Banking Group took up that insurance.

Banks have also been facing funding difficulties since the onset of the financial crisis. Shorter-term funding conditions have become a little easier since the February *Report* — for example, three-month interbank lending rates have fallen back further

Chart 1.6 Property prices



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

(a) Commercial property prices are indexed to their peak in June 2007.

(b) The average of 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. House prices have been indexed to their peak in October 2007.

(1) See pages 44–45 of the February *Report*.

(2) See pages 11–12 of the February *Report* for more details on these measures.

Broad money

The quantity of money in the economy is closely linked to the medium-term path of nominal spending. There are several alternative concepts of money, but the MPC seeks to monitor measures that are most closely related to nominal spending — that is, those based around the liquid assets of the sectors most likely to drive activity. This box sets out the Bank's thinking on an economically relevant measure of broad money, and recent trends in that relative to the headline M4 measure.

Defining money

Money is a good or asset which meets three requirements: it serves as a unit of account; it is a store of value; and it is accepted as payment for goods and services. A simple, but very narrow, measure of money is therefore the amount of notes and coin in circulation. But as financial systems have developed, the relative importance of notes and coin has declined. And broader measures of money, incorporating a wider range of assets such as bank deposits, have been developed.

Generally, measures of broad money aim to exclude money held by sectors which create money (ie institutions whose liabilities are used as a medium of exchange). Only banks and building societies are money creators in the United Kingdom. So the UK M4 measure comprises the money holdings of households, non-financial companies, and those financial companies which are not banks or building societies (called 'other financial corporations' or OFCs).

In late 2007, the Bank of England set out a proposal to exclude the money holdings of some OFCs from UK M4.⁽¹⁾ A large part of the OFC sector is made up of institutions such as pension funds, whose money holdings are likely to influence asset prices and spending. But other OFCs specialise in intermediating between banks; for example, central clearing counterparties, which facilitate the settlement of securities transactions, and also securitisation special purpose vehicles (SPVs), which have been used by banks as a way to transfer risk off their own balance sheet.

It makes sense to exclude the deposits of these types of 'intermediate OFCs' from broad money. In addition, headline M4 data have been affected by significant flows between institutions belonging to the same banking group. A measure of broad money which excludes both intermediate OFCs, and estimates of intragroup transactions based on anecdotal information, is shown in **Chart A**.⁽²⁾

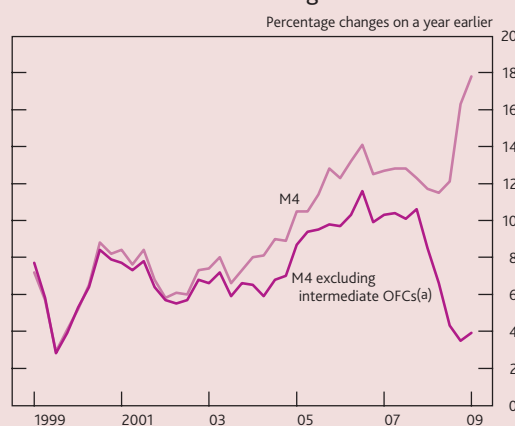
Recent trends in broad money

Between 2004 and 2007, M4 and M4 excluding intermediate OFCs both grew rapidly. But since the onset of the financial crisis, the two measures have shown very divergent trends (**Chart A**). That is because changes in market behaviour have

led to sharp rises in the money holdings of intermediate OFCs. For example, SPVs previously sold securitised bonds to other non-banks in the United Kingdom. But with no market for securitised assets, banks have instead retained securities issued by their SPVs. In turn, SPVs have been holding the proceeds from this issuance on deposit. That has boosted OFCs' money holdings and, therefore, M4. Excluding these, and other transactions which have artificially raised headline M4, growth has fallen sharply.

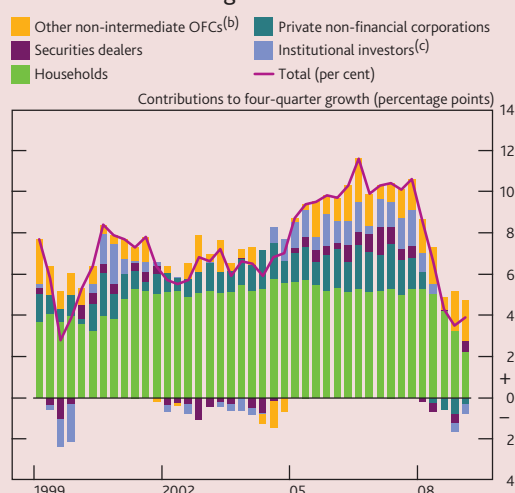
Since the present financial crisis began, growth in M4 excluding intermediate OFCs has fallen back markedly. That has been broadly based across sectors (**Chart B**). But, from March, the MPC's asset purchases should begin to boost money growth (see the box on pages 16–17). In 2009 Q1, four-quarter growth ticked up a little.

Chart A M4 and M4 excluding intermediate OFCs



(a) See footnote (b) to **Chart 1.2**.

Chart B M4 excluding intermediate OFCs(a)



(a) See footnote (b) to **Chart 1.2**.

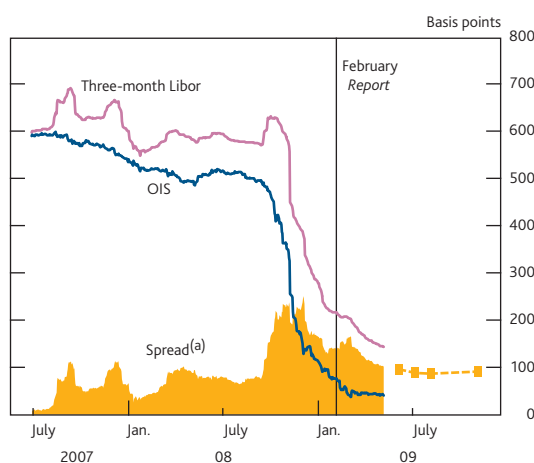
(b) Calculated as a residual.

(c) Includes insurance companies and pension funds, money market mutual funds, investment and unit trusts and activities auxiliary to financial intermediation placed by fund managers.

(1) Burgess, S and Janssen, N (2007), 'Proposals to modify the measurement of broad money in the United Kingdom: a user consultation', *Bank of England Quarterly Bulletin*, Vol. 47, No. 3, pages 402–14.

(2) Over the past few months, Bank staff have undertaken a project to improve the quality of this adjusted measure of money, which has led to some revisions to the back data. More information on these measures is available at www.bankofengland.co.uk/statistics/statsdevelopments/index.htm.

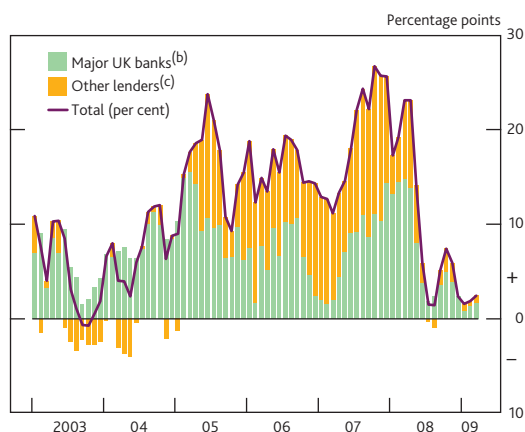
Chart 1.7 Three-month interbank rates and spreads relative to future expected policy rates



Sources: Bloomberg and Bank calculations.

(a) Three-month Libor spread over equivalent-maturity overnight index swap (OIS). Dashed line shows the average forward spreads derived from forward rate agreements over the fifteen working days to 6 May 2009.

Chart 1.8 Contributions to growth in loans to UK private non-financial corporations (PNFCs)^(a)

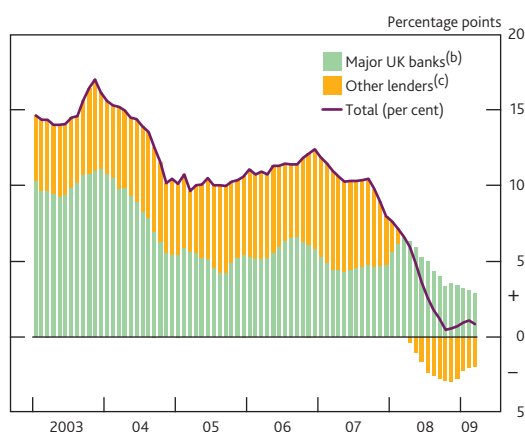


(a) Annualised percentage changes in sterling and foreign currency loans over the past three months.

(b) This group comprises Banco Santander, Barclays, HSBC, Lloyds Banking Group and Royal Bank of Scotland.

(c) Calculated as a residual.

Chart 1.9 Contributions to growth in net secured lending to households^(a)



(a) Annualised percentage changes over the past three months. Excludes lending to housing associations.

(b) This group comprises Banco Santander, Barclays, HSBC, Lloyds Banking Group, Nationwide and Royal Bank of Scotland.

(c) Calculated as a residual.

as the spread over expected policy rates has diminished (**Chart 1.7**). Market intelligence suggests that longer-term funding is still scarce, perhaps reflecting continuing concerns about banks' capital. But lenders have been more willing to supply funding if covered by a Government guarantee. So both the Credit Guarantee Scheme, which has been in operation since the autumn, and the guarantee on the issuance of highly rated asset-backed securities launched in the Budget in April, should help ease overall funding pressures.

Bank lending

A key concern of the MPC has been the extent to which banking sector dislocation constrains companies and households. To help monitor developments in lending, the Bank has been collecting more timely data from the largest UK lenders — referred to here as the 'Lending Panel banks'. In addition, the Bank has published a new monthly report, *Trends in Lending*, which brings together a range of data, surveys and intelligence.⁽¹⁾ This subsection uses that and other information to, first, discuss overall developments in bank lending, and subsequently to examine corporate and household credit conditions in more detail.

The dislocation in the financial sector has contributed to a sharp slowing in the rate of growth of lending to households and companies over the past 18 months. As **Charts 1.8** and **1.9** suggest, that has in part been because some foreign and smaller UK institutions, which had played a key role in the previous expansion of lending, have withdrawn from the market. Growth in lending by the major UK banks has also slowed. The slowing in lending growth may not only have been due to a reduced supply of credit — it could also reflect a fall in the demand for credit by companies and households, as the economy slowed and property prices fell.

Lending growth remained weak at the start of 2009. But there have been signs of a modest increase in willingness to lend by those institutions still active in UK markets. In aggregate, respondents to the Bank's *Credit Conditions Survey* in April reported an intention to increase the availability of corporate and secured household credit over the following three months. Government actions should provide some support to lending over the coming year. In return for access to the APS, Royal Bank of Scotland and Lloyds Banking Group each made lending commitments. And Northern Rock has been directed by the Government no longer actively to reduce its mortgage book. Separately, Barclays and HSBC have announced an intention to expand their net lending to businesses and households modestly over the coming year. Section 5 discusses the risks around growth in the supply of credit. The following

(1) The Lending Panel comprises Government, lenders, consumer, debt advice and trade bodies, regulators and the Bank of England. See www.hm-treasury.gov.uk/press_126_08.htm. *Trends in Lending* is available at www.bankofengland.co.uk/publications/other/monetary/trendsinlending.htm.

subsections look more closely at corporate and household credit conditions.

Corporate credit conditions

The tightening in corporate credit conditions over the past year has been a major concern to the authorities. There have been some signs of improvement over the past three months, especially in corporate debt markets, but the weakness in bank lending indicates that overall conditions remain tight for many companies.

There is mixed evidence on the cost of bank borrowing for companies. The average effective interest rates charged on new and outstanding loans have fallen, according to official data (**Table 1.A**), as Bank Rate has been reduced. Taken at face value, that might imply a loosening in corporate credit conditions. But rates may, in part, have fallen because only less risky customers, who therefore tend to be charged lower rates, are able to access finance — Lending Panel banks report that they have been targeting their lending at companies with good credit quality. And the cost of borrowing also depends on any fees charged by the lender. There are no official data on fees on corporate lending, but contacts of the Bank's regional Agents report that a wide range of bank fees have been introduced or increased, and Lending Panel banks report higher fees on new borrowing facilities.

The amount of net bank lending to companies grew only weakly over the first three months of the year (**Chart 1.8**). That weakness in part reflects developments in the supply of finance. But at the same time, the slowdown in economic activity has reduced demand for new loans. Banks responding to recent *Credit Conditions Surveys* report fewer companies wanting to borrow to invest, consistent with evidence from business surveys (Section 2).

Of those companies that do wish to raise finance, however, some are able to bypass the banking sector and access capital markets directly. Gross issuance of corporate bonds and commercial paper was relatively high in the first quarter (**Chart 1.10**), reflecting issuances by a range of investment-grade companies. Net issuance fell in the three months to March, largely on account of bond repayments by Network Rail. Between September and February, net issuance averaged a little over £2 billion a month, but that remained low relative to past bank lending flows, which averaged around £6 billion a month between 2005 and the middle of 2008.

The increased volume of gross issuance in recent months may in part reflect debt restructuring rather than finance for new projects — banks in the Lending Panel have reported that some companies are using the proceeds of bond issuance to pay down bank debt. And the option of issuing bonds is currently open to only a small proportion of companies — no UK PNFC

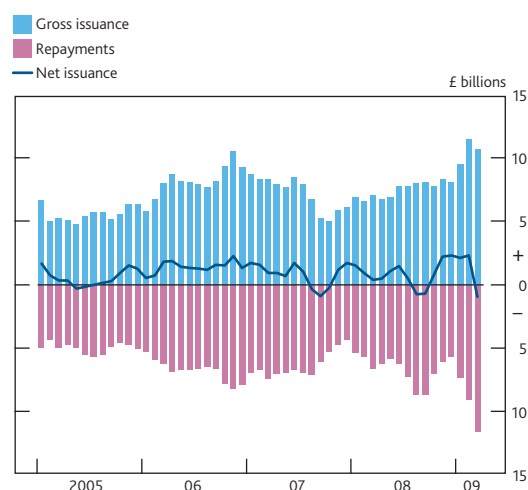
Table 1.A Effective interest rates on borrowing by PNFCs

Per cent	2008		2009
	Sep.	Dec.	Mar.
New business^(a)			
Fixed	6.48	3.64	2.46
Variable	6.58	3.86	2.66
Outstanding stock^(b)			
Fixed	7.04	6.05	4.12
Variable	6.67	4.44	2.72
Overdrafts	6.94	4.89	3.24

(a) Weighted average of interest rates paid on new loans.

(b) Weighted average of interest rates paid on outstanding balances of all loans.

Chart 1.10 Debt issuance by UK PNFCs^(a)



(a) Three-month average flows of sterling and foreign currency funds raised from corporate bond and commercial paper markets.

Monetary policy and asset purchases

Since the February *Report*, the Monetary Policy Committee has begun a programme to purchase £125 billion of assets, financed by the issuance of central bank reserves, including an extension by a further £50 billion announced on 7 May. The objective of this policy is to boost the supply of money in the economy, ease conditions in corporate credit markets and, ultimately, to raise the rate of growth of nominal demand and keep inflation on track to meet the 2% target in the medium term. The MPC is pursuing a twin-track approach by purchasing both government and high-quality corporate debt. This box discusses the impact of such asset purchases, some influences on their effectiveness, and the range of indicators the MPC is monitoring to judge their impact.

The impact of asset purchases

Purchases of gilts and corporate debt financed by the issuance of central bank reserves influence nominal spending through a number of channels (**Chart A**).

Purchases of assets financed by central bank reserves should push up the prices of assets and lower yields. That boosts wealth and reduces the cost of borrowing for households and companies, both of which should boost their spending.

The Bank's asset purchases can boost prices, and reduce yields, in a number of ways. For example, when investors sell assets to the Bank, their money holdings increase. If that leaves their holdings of money above their desired levels, they may buy other assets to rebalance their portfolios. Moreover, to the extent that the Bank's purchases depress yields on gilts and corporate debt relative to those on other assets, households and companies may respond to those lower yields by switching into assets with higher returns. The higher demand for a wide range of assets that might result from these effects is likely to raise prices and reduce yields.

Some investors, particularly those based overseas, may choose to invest the money in overseas rather than UK assets. But to do that they would need to exchange their sterling holdings for foreign currency. That would pass the money on to someone else, who may then decide to use it to buy sterling assets. And selling sterling for foreign currency may put downward pressure on the exchange rate (Section 1.3).

In addition, the purchases of corporate bonds and commercial paper should reduce the cost of borrowing for companies by improving the functioning of corporate debt markets. The cost of borrowing in capital markets has been pushed up by elevated liquidity premia (Section 1.2), as low market activity has left potential investors concerned that they will be unable to find buyers for corporate debt if they need to sell quickly.

The Bank's offer to be a ready buyer, if required, should give investors greater confidence to hold such assets.

As well as their influence via prices, asset purchases financed by the issuance of central bank reserves increase commercial banks' reserve balances at the Bank of England. That increases the supply, and therefore reduces the cost, of liquidity. As their stock of liquid assets increases, banks may be more willing to lend to companies and households. More generally, as money balances rise, companies and households may increase their spending. For example, some companies may currently be holding on to cash due to worries about their ability to access working capital. Higher money balances may therefore encourage them to expand spending.

Finally, as with conventional monetary policy, expectations play a key role. Without the stimulus from asset purchases, households and companies might have expected a protracted period of below-target inflation. But the asset purchase programme means that the risk of that is diminished. And, for a given level of nominal interest rates, the resulting increase in inflation expectations, by pushing down on real interest rates, may provide a further boost to spending and inflation. Expectations also influence the price-setting behaviour of companies, so could lead to a more direct impact on inflation.

Factors influencing the effectiveness of purchases

Asset purchases should raise nominal spending and inflation over time, but a number of factors will determine the size and speed of that effect.

If the Bank buys assets from non-banks, it credits their account at a commercial bank. Therefore asset purchases from non-banks will lead directly to a rise in bank deposits. But the ultimate impact on nominal spending depends on how investors subsequently rebalance their portfolios. The impact is likely to be greater if investors switch into UK corporate bonds or equities, boosting demand for those assets and raising their price. On the other hand, the impact will be smaller if sellers leave the cash on deposit.

Another factor influencing the effectiveness of purchases is the extent to which banks choose to hoard the extra liquidity, or increase lending. That may depend on the form the new bank deposits take — for example, banks may be less willing to increase lending if deposits are placed with them in very short-term accounts. Banks are also less likely to expand lending if they remain capital constrained. Section 1.2 discusses banking sector developments.

Finally, as with any economic policy, households' and companies' decisions will affect the efficacy of asset purchases. It is possible that households and companies may not wish to spend out of higher wealth, if they are aiming to rebuild their

balance sheets. Or their demand for credit may remain subdued, so that lending does not rise even if banks are more willing to extend credit.

Assessing the impact of purchases

As with changes in Bank Rate, it will take time to assess the extent to which the MPC's asset purchases have stimulated nominal spending. The first leg of the transmission mechanism is the resulting changes in yields and asset prices, and the Asset Purchase Facility does appear to have borne down on gilt yields (Section 1.1). Further asset price impacts may occur as the Bank makes further purchases, investors rebalance their portfolios, and market participants assess the impact of purchases on the outlook for the UK economy. But it will continue to be difficult to isolate the impact of the APF.

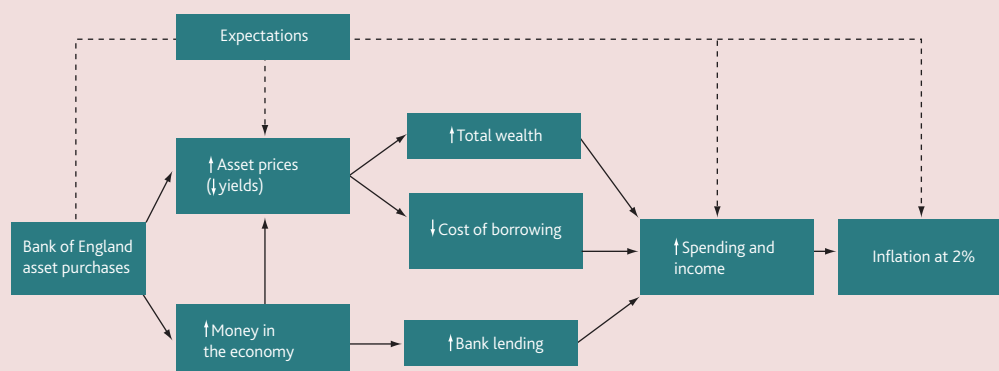
To the extent that assets are bought from non-banks, measures of the broad money stock will rise. But it will take time for this effect to become visible in the data. The purchases in March — the latest month for which broad money data are available — amount to around 1% of M4 excluding intermediate OFCs. The box on page 13 examines some issues around the measurement of money.

A key aspect of the policy is to ease credit conditions, especially those facing companies. The purchases of corporate debt are designed to improve the functioning of those markets, and so this impact needs to be judged by developments in those markets, not by the size of the stock of purchased assets. The MPC will continue to monitor the cost of corporate borrowing, and in particular evidence whether the liquidity premium on corporate debt is declining. The extent to which the corporate sector as a whole is credit constrained will continue to be assessed using survey evidence and intelligence from the banks, the Bank's regional Agents, and financial market participants. Section 1.2 examines evidence on recent developments in credit.

The MPC will also continue to pay close attention to measures of inflation expectations, and in particular whether expectations in the medium term remain consistent with the 2% inflation target. Section 4 describes recent movements in measures of inflation expectations.

Finally, the MPC will be monitoring developments in nominal demand growth closely. But it will be many months before the policy stimulus would be likely to appear in published estimates of final expenditure.

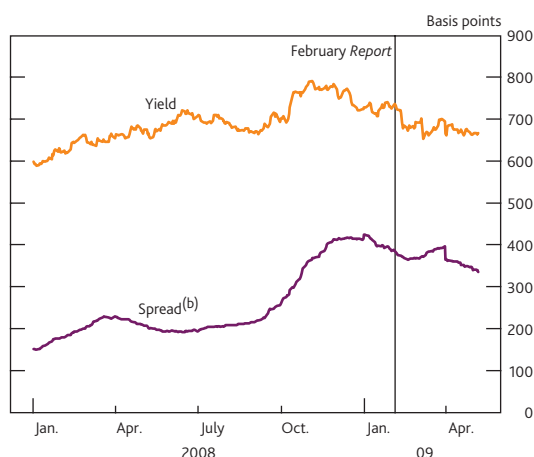
Chart A Stylised transmission mechanism for asset purchases



with a rating of BB or below has issued bonds since the onset of the financial crisis.

The cost of borrowing in capital markets provides another indicator of corporate credit conditions. Although companies issuing bonds generally have to offer a higher yield than those on government bonds of the same maturity, the difference between these corporate and government yields rose over 2008 (**Chart 1.11**). That rise in corporate bond spreads in part reflected the need for greater compensation for the risk of default as the economy slowed. But, on top of that, reduced activity in bond markets since the onset of the financial crisis increased the compensation demanded by buyers against the possibility that it might be difficult to sell those bonds on in the future. In other words, liquidity premia rose.

Chart 1.11 Investment-grade industrial sterling corporate bond yields and spreads^(a)



Source: Merrill Lynch.

- (a) Calculated using an index of bonds with a rating of BBB3 or above. The bonds used to calculate these series change from month to month. This can potentially cause sharp movements at month ends if spreads on bonds leaving or entering the index are materially different to those on other bonds in the index. For example, the sharp narrowing in the spread on 31 March largely reflects such a change.
- (b) Option-adjusted spread over government bonds.

The Bank's willingness, under the APF, to be a ready buyer of high-quality corporate bonds is intended to reduce such liquidity premia (see the box on pages 16–17). It is difficult to measure this component of bond spreads precisely and there is no consistent evidence on whether premia have fallen back. But market contacts suggest that the APF has improved market conditions. And average industrial investment-grade corporate bond spreads have fallen since the *February Report*. That fall in spreads, together with the fall in UK government bond yields, has reduced investment-grade corporate bond yields (**Chart 1.11**).

Under the APF the Bank has also purchased commercial paper — short-term debt which is used by some companies to finance day-to-day operations. This market is relatively small and there are few data against which to assess the impact of the Bank's purchases. But data on primary market transactions suggest spreads for A1-rated issuers narrowed over 2009 Q1. Net issuance of sterling non-bank commercial paper increased slightly over the quarter for lower-rated companies, and market contacts expected the level of issuance to increase further.

A widely used form of short-term finance for companies is trade credit — the ability to delay payment for goods and services received. Most companies will extend credit as a supplier and receive it as a buyer. Since the autumn, the Bank's regional Agents have reported that some suppliers have been asking their creditors to settle invoices more quickly. Although that helps ease cash-flow constraints for suppliers, it imposes a cost on their trading partners. Moreover, some companies have noted a tightening in conditions on trade credit related products. There are a range of products available to help companies manage the risks associated with extending credit — companies can sell on their invoices, borrow against them, or take out insurance against non-payment.⁽¹⁾ The costs of providing such products has been pushed up by both the increased likelihood that a trading partner will default on their payment and developments in the banking sector. The cost and availability of trade credit insurance remains a particular concern for contacts of the Bank's regional Agents. The Government outlined a scheme in the Budget in April to top up insurance cover for UK companies temporarily if they have had their private sector cover reduced. That may help to ease this constraint.

Table 1.B Lending to individuals

Annualised percentage changes on three months earlier

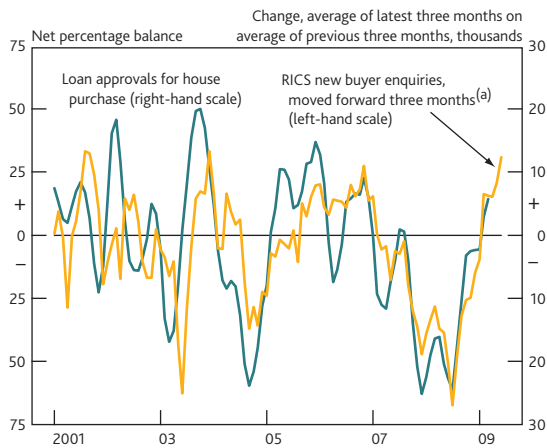
	Averages ^(a)		2009		
	1998 to 2007	2008	Jan.	Feb.	Mar.
Total lending	11.0	3.7	1.4	1.3	1.0
Secured	10.6	3.4	1.2	1.4	1.0
Consumer credit	12.7	5.2	2.1	1.0	0.6
of which, credit card	16.5	7.4	4.9	3.3	5.5
of which, other unsecured	11.5	4.5	1.2	0.3	-0.8

(a) Averages of end-quarter observations.

Household credit conditions and the housing market

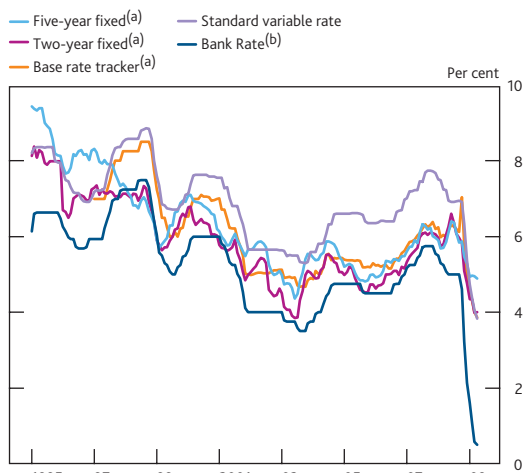
Overall, household lending growth remained very weak in 2009 Q1 (**Table 1.B**). Within that, consumer credit grew at its weakest quarterly rate since 1992, consistent with weakness in consumer spending (Section 2). And the stock of secured lending, which comprises the majority of household debt, grew

(1) See the box on page 15 of the February 2009 *Report*.

Chart 1.12 Housing market activity

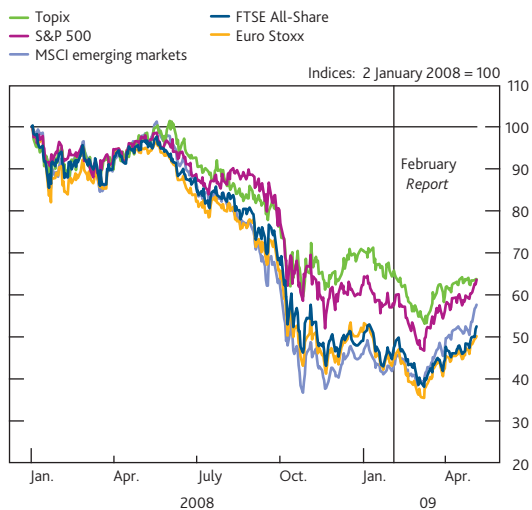
Sources: Bank of England and Royal Institution of Chartered Surveyors.

(a) Net percentage balance of respondents saying that enquiries had increased over the previous month, less those saying enquiries had decreased.

Chart 1.13 Quoted mortgage rates and Bank Rate

(a) On mortgages with a loan to value ratio of 75%.

(b) Monthly average.

Chart 1.14 International equity prices^(a)

Sources: Bloomberg and Thomson Datastream.

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

by only 1% on an annualised basis over the same period, substantially below rates seen earlier in the decade.

The supply of secured lending has tightened since the onset of the financial crisis. That has been reflected in a sharp rise in the spread lenders charge borrowers over Bank Rate or swap rates. The tightening has been most marked for customers who are perceived to be more risky. For example, there has been a significant fall in the number of products available at high loan to value ratios. In part, that is due to the departure from the market of lenders which previously specialised in riskier lending.

In addition to the tightening in supply, demand for secured borrowing also fell, as the economy slowed and some potential homebuyers stayed out of the market in anticipation of further house price falls. Given both tighter supply and lower demand, the number of loans approved for house purchase fell to a low of 27,000 in November 2008, well below the average of 95,000 approvals a month over the past fifteen years.

But there have been some signs of a modest improvement in housing market activity. The number of loan approvals for house purchase, while still well below average, picked up to 39,000 in March. And the recent rise in the number of people looking for property, as reported by estate agents responding to the RICS survey, is likely to feed through to further rises in approvals in coming months, if those potential buyers can access finance (Chart 1.12). This modest recovery in activity could in part reflect lower borrowing costs. The large falls in Bank Rate and swap rates since September 2008 have more than offset rising spreads so that quoted mortgage rates have fallen (Chart 1.13).

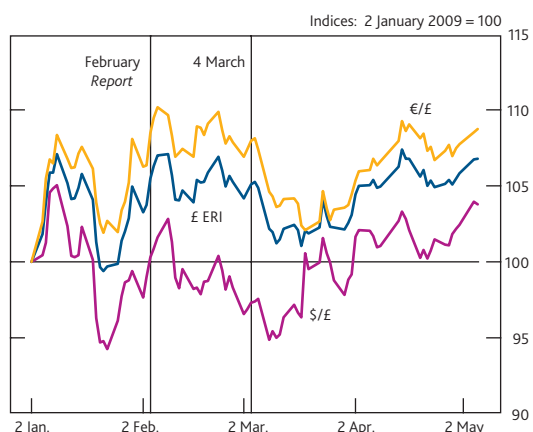
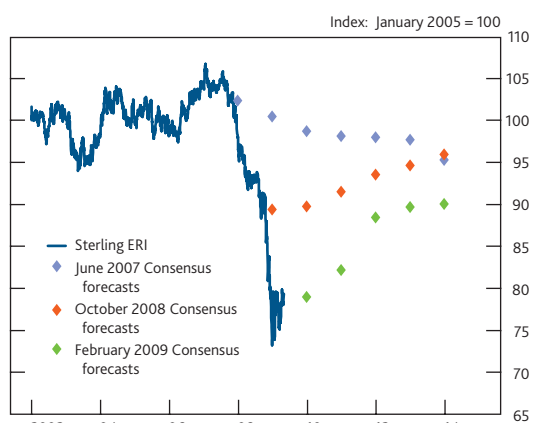
House prices continued to fall in April, by 1% based on the average of the Halifax and Nationwide measures (Chart 1.6). The monthly falls in 2009, however, have been smaller than those seen towards the end of 2008.

1.3 Equity prices and exchange rates

Equity prices

In the period since the *February Report*, equity prices first fell sharply, before recovering from early March. In the fifteen working days to 6 May, the FTSE All-Share was 1.9% above its level at the time of the *February Report*, and 19% above its March low. But equity prices remain substantially lower than at the start of 2008.

Movements in UK equity prices have mirrored those seen in other countries (Chart 1.14). Indeed, over the past year, global equity prices have been closely correlated, perhaps reflecting the synchronised nature of the economic slowdown (Section 2). Market intelligence suggests that the rise in prices

Chart 1.15 Sterling exchange rates**Chart 1.16 Sterling ERI and Consensus expectations^(a)**

Sources: Bank of England and Consensus Economics.

(a) Expectations for the ERI are derived from bilateral US dollar, euro and yen exchange rates, weighted by UK trade shares in 2006. Expectations are for year ends.

seen since the start of March reflects a number of factors, including a positive reaction to policy developments around the world.

Exchange rates

In the fifteen working days to 6 May, the sterling effective exchange rate (ERI) was 3.3% above its February starting point (**Chart 1.15**). As discussed in the box on pages 16–17, the Bank's asset purchases are likely to lead investors to buy other assets to rebalance their portfolios. That could include purchases of overseas assets if, for example, overseas assets are viewed as substitutes for those assets bought by the Bank. That could put some downward pressure on the exchange rate. It is difficult, however, to isolate any impact to date.

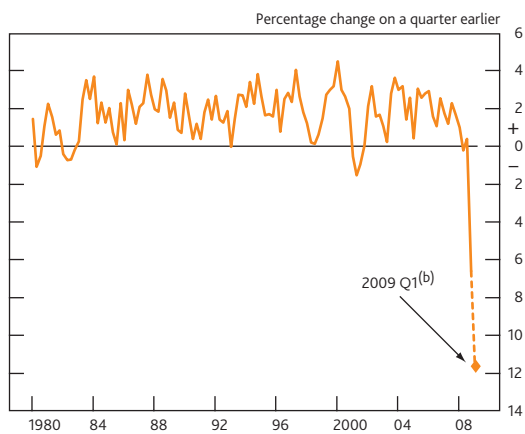
Despite the appreciation over the past three months, the sterling ERI remains around a quarter below its 2007 peak. As discussed in the *February Report*, changes in relative interest rates in the United Kingdom and abroad can explain only some of the fall since 2007. A further part may reflect a reduction in market participants' view of the longer-term value of sterling — respondents to Consensus surveys revised down their view of the likely level of the exchange rate at the end of 2013 by around 6% between October 2008 and February 2009 (**Chart 1.16**). In addition, some of the depreciation is likely to reflect a rise in the sterling risk premium. That could be because investors believe that the risks to the UK outlook — and therefore to the return on UK assets — have increased, relative to those in other economies. An increase in the perceived risk associated with holding sterling assets relative to those denominated in other currencies means that investors will tend to require a higher return.

The lower exchange rate has raised UK inflation (Section 4), but it should also mitigate the impact of the slowdown in global demand on UK activity (Section 2). The MPC's assessment of the risks to inflation from the sterling exchange rate is discussed in Section 5.

2 Demand

The sharp and synchronised fall in global economic activity continued in the early months of 2009. That was accompanied by a plunge in world trade flows. In the United Kingdom, real GDP is provisionally estimated to have fallen by 1.9% in Q1, following a fall of 1.6% in 2008 Q4. Consumer spending has fallen, reflecting heightened uncertainty, rising unemployment, tight credit conditions and lower financial wealth. Business and dwellings investment have also declined, and near-term indicators point to further falls. The slowdown in activity has been significantly amplified by companies running down stocks.

Chart 2.1 World trade^(a)



Sources: CPB Netherlands Bureau for Economic Policy Analysis and OECD.

- (a) Volume measure. Countries are weighted together according to shares in world trade in 2005.
 (b) Estimate based on world trade in goods in January and February.

Global activity continued to fall sharply in the early months of 2009. Official data and business surveys suggest that GDP contracted markedly in Q1 in many advanced economies, following the widespread falls in output in 2008 Q4. The weakness in global activity in Q4 and Q1 has been accompanied by a very sharp decline in world trade (**Chart 2.1**), discussed in the box on pages 22–23.

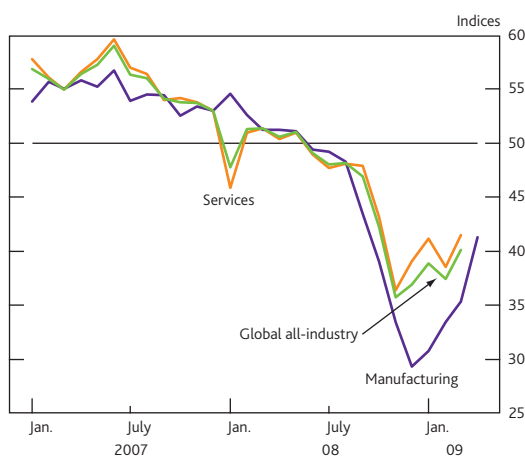
In the United Kingdom, nominal GDP fell by 1% in Q4, the largest quarterly decline since 1974. Real GDP fell by 1.6% in the fourth quarter, and is provisionally estimated to have fallen by a further 1.9% in 2009 Q1. Consumer spending and business investment both declined in Q4, and are likely to remain weak in the near term (Section 2.2). But the weakness of GDP growth in Q4 was significantly amplified by companies reducing stocks, and that drag is likely to dissipate over coming quarters (see the box on page 26).

2.1 External demand and UK trade

There was a sharp slowdown in global demand growth in 2008 Q4. The IMF estimate that world GDP fell by around 1.6% in the fourth quarter. And official data and business surveys indicate that activity continued to fall sharply in the United Kingdom's major trading partners in 2009 Q1. In the euro area — the destination for around half of the United Kingdom's exports — business surveys point to a further marked contraction in GDP in Q1 following the 1.6% decline in 2008 Q4. And in the United States, output fell by 1.6% in 2009 Q1. GDP is also likely to have fallen in many other countries over the past two quarters: the OECD expect more than four fifths of its 30 member countries to have been in recession in 2009 Q1.

In recent months, there have been some signs that the pace of contraction in global activity may be moderating. Survey indicators of global output have picked up from their troughs

Chart 2.2 Survey indicators of global output^(a)



Sources: JPMorgan Chase & Co. and Markit Economics.

- (a) Based on the results of surveys in 26 countries. Together these countries account for an estimated 81% of global GDP. A figure over 50 indicates rising output compared with the previous month, and a figure below 50 indicates falling output.

What has driven the sharp fall in world trade?

World trade is estimated to have fallen by around 7% in 2008 Q4. In part, that decline reflected a marked contraction in world output: the IMF estimates that world GDP fell by around 1.6% in 2008 Q4. Trade flows tend to be more volatile than output. But the plunge in world trade still looks large even taking the past relationship between activity and trade into account. This box considers the causes of the fall in world trade, and their implications for UK activity.

Causes of the fall in world trade

One factor underlying the collapse in world trade flows is that, during the current downturn, the more trade-intensive elements of demand have been most affected. For example, demand for items such as capital goods, motor vehicles and other consumer durables appears to have fallen particularly markedly across a range of countries (Section 2.1). Correspondingly, global output of manufactured goods has weakened significantly (**Chart A**). That contraction in manufacturing output may also have been exacerbated by the desire of manufacturing companies to run down stocks (see the box on page 26).

Chart A World industrial production and world trade in goods^(a)



Sources: CPB Netherlands Bureau for Economic Policy Analysis and IMF.

(a) Volume measures.

The volume of world trade is likely to be particularly sensitive to changes in output in the manufacturing sector. Not only are finished manufactured goods highly traded, but different stages of production are often carried out in different countries (a phenomenon sometimes referred to as 'globalisation of supply chains'). This means that during the production of a single good, its components can cross national borders many times, with production processes in each country adding just a small part to the overall value of the good. Trade flows are measured as the full value of an item as it crosses national borders, while GDP is measured only by the value that is added to an item

within each country. So in the presence of globalised supply chains, a change in the demand for manufactured goods will have a disproportionately large impact on world trade flows, relative to its impact on global GDP.

In addition to the downturn in demand for highly traded manufactured goods, and the falls in trade flows resulting from the disruption of globalised supply chains, a reduction in the supply of credit used to facilitate international trade may also have exacerbated the decline in trade flows.⁽¹⁾ Limited data are available on the supply of such trade finance, so it is difficult to assess the extent to which reduced access to trade credit has pushed down on world trade. A survey of banks carried out in March 2009 by the Bankers' Association for Finance and Trade and the IMF reported that the decline in the value of trade finance business accelerated between October 2008 and January 2009 across a range of countries, and that around 60% of banks cited reduced credit availability as a reason for that decline. The G20 has moved to address this issue by making available \$250 billion of support for trade finance over the next two years.

It is difficult to judge the relative importance of these explanations for the decline in world trade, and it is likely that each of them has played some role. But the sharpness of the falls in manufacturing output suggests that a marked decline in the demand for highly traded manufactured goods, whose production processes span a number of countries, has been particularly influential.

Implications of the fall in world trade for UK activity

The sharp slowdown in the demand for highly traded manufactured items has weighed on UK goods exports, which fell by 6.9% in Q4. The outlook for these exports will partly depend on the severity and persistence of the slowdown in the global demand for traded goods. The latest data suggest that the pace of contraction eased in the early part of 2009. World trade in goods is estimated to have grown by 0.8% in February, following declines of around 6% in each of the previous three months.

The outlook for overall UK export growth will also depend on exports of services, which make up around 40% of UK exports. In Q4, exports of services grew by 1.1%. That meant that the total fall in UK exports in Q4 was much smaller than the declines in many countries that are more specialised in the production of manufactured goods (**Chart B**). Some of the growth in UK services exports in Q4 reflected increased exports of financial services. That is somewhat puzzling, given the ongoing dislocation in the UK financial sector. So while services exports may help to cushion the impact of the large decline in world trade on UK activity, some of the recent strength of services exports may prove short-lived.

Chart B Size of the manufacturing sector and export growth in selected countries^(a)



Sources: OECD, ONS and Thomson Datastream.

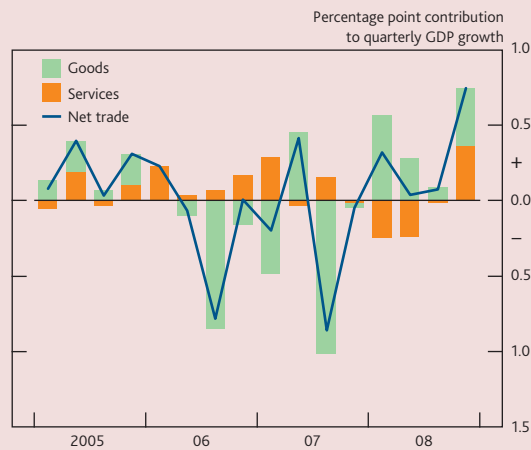
(a) Countries included are those for which OECD data on industrial composition are available: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, United Kingdom and United States.

(b) Excluding the estimated impact of MTIC fraud.

(c) In 2001.

Some of the impact of the sharp fall in world trade on overall UK GDP is also likely to be offset by lower import growth. Where UK exporters are part of global supply chains, lower exports will lead to falls in imports of part-finished goods or components. So the headline fall in world trade would overstate the likely impact on UK output. In Q4, net trade made a positive contribution to UK GDP growth (**Chart C**) despite the sharp decline in world trade.

Chart C UK net trade^(a)

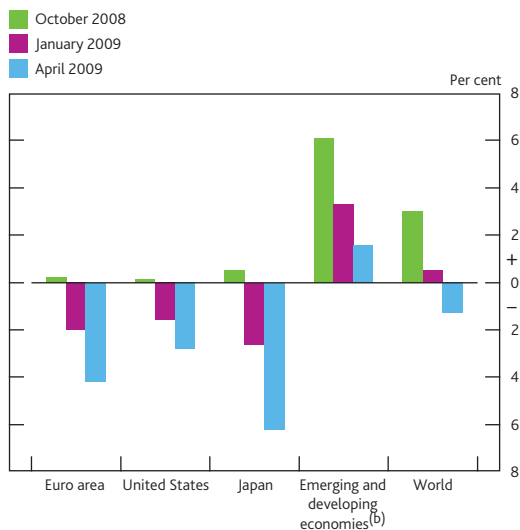


(a) Chained-volume measures. Excluding the estimated impact of MTIC fraud.

Overall, the sharp drop in world trade has pushed down markedly on UK exports. But to the extent that the contraction has been focused on the manufacturing sector, falls in UK exports may be less severe than in many other countries. And lower imports may partly offset weaker exports. Net trade may be further supported by the impact of the sterling exchange rate, which has fallen by around a quarter since mid-2007. The implications of the decline in world trade for UK activity in the medium term are discussed in Section 5.

(1) For a more detailed discussion of trade credit, see the box on page 15 of the February 2009 *Report*.

Chart 2.3 IMF forecasts for GDP growth in 2009^(a)



Source: IMF.

(a) The IMF forecasts are from the October 2008 *World Economic Outlook (WEO)*, the January 2009 *WEO* update, and the April 2009 *WEO*.

(b) Includes 139 emerging and developing economies across the world such as Brazil, China, India and Russia.

in late 2008, particularly in the manufacturing sector (**Chart 2.2**). Nonetheless, the weakness of the incoming data has led to further downward revisions to forecasts for global activity since the February *Report*. The IMF, for example, now forecast a contraction in world GDP in 2009 of 1.3% (**Chart 2.3**). If that were realised, the current downturn would be by far the deepest global recession during the post-war period.

Underlying the sharp and synchronous downturn in global demand has been a deterioration in consumer and business sentiment, and a tightening in credit conditions. Those factors caused consumers to reduce spending, particularly on durable goods: for example, car sales have fallen sharply in both the United States and the euro area. And orders for capital goods have plummeted as companies have cut back on investment spending (**Table 2.A**).

The substantial macroeconomic stimulus implemented by governments and central banks around the world will in due course help to lessen the scale of the downturn. Discretionary fiscal injections have been announced in a number of countries, in addition to the automatic stimulus from

Table 2.A Indicators of spending on consumer durables and capital goods in the United States and euro area

Percentage changes, latest three months on previous three months

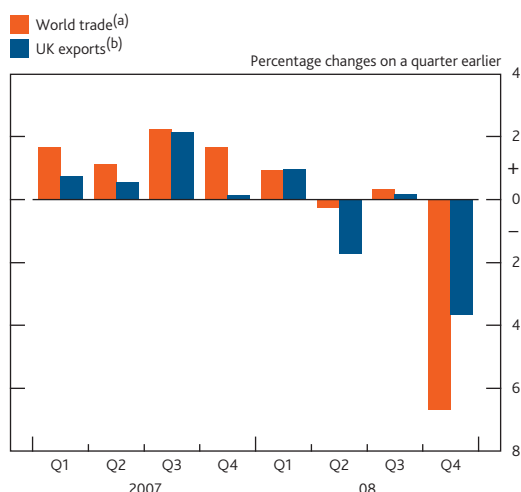
	2008		2009			
	Q3	Q4	Jan.	Feb.	Mar.	Apr.
Private new car registrations						
United States	-13.1	-20.7	-20.1	-13.5	-8.8	-1.6
Euro area	-1.9	-7.6	-8.5	-3.4	-1.0	n.a.
Capital goods orders						
United States ^(a)	-3.7	-15.9	-18.7	-19.8	-15.0	n.a.
Euro area ^(b)	-4.2	-21.7	-22.6	-18.1	n.a.	n.a.

Sources: European Central Bank and Thomson Datastream.

(a) New orders for non-defence capital goods in current prices.

(b) Volume of industrial orders for capital goods.

Chart 2.4 World trade and UK exports

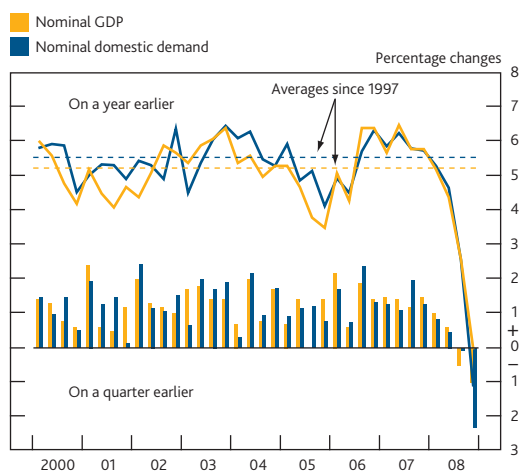


Sources: OECD and ONS.

(a) Volume measure. Countries are weighted together according to shares in world trade in 2005.

(b) Chained-volume measure. Excluding the estimated impact of missing trader intra-community (MTIC) fraud.

Chart 2.5 Nominal demand^(a)



(a) At current market prices.

increased benefit payments and reduced tax takes. Interest rates have been cut, and, in some countries, additional monetary policy measures have been introduced to boost the supply of money and credit, and hence nominal spending.

The sharp falls in global demand have been accompanied by a very marked contraction in world trade (**Chart 2.1**). The sharp decline in demand for manufactured goods (**Table 2.A**), which are relatively highly traded, is likely to have been an important factor underlying the decline in world trade. In addition, a reduction in the supply of credit used to facilitate international trade may have exacerbated the slowdown in trade flows. The box on pages 22–23 discusses these issues in more detail.

The global slowdown has weighed heavily on the demand for UK exports, which fell by 3.7% in Q4. But that fall was smaller than the decline in world trade (**Chart 2.4**), resulting in a pickup in the United Kingdom's share of world exports. The relatively small fall in UK exports partly reflects the smaller proportion of manufactured goods in total UK exports compared with other countries. Furthermore, it is likely that the downward pressure on export growth from the decline in world trade is being partly offset by the boost to competitiveness arising from the decline in the sterling exchange rate, which has fallen by around a quarter since mid-2007.

UK import volumes fell more sharply than exports in Q4. As a result, net trade contributed 0.7 percentage points to GDP growth. The weakness of imports suggests that the fall in sterling, and the associated rise in the relative price of imports, has encouraged UK households and businesses to purchase domestically produced goods and services rather than imports. Indeed, import penetration — the ratio of imports to total final expenditure — has fallen by around 5% from its peak in 2007 Q3. The low level of sterling, combined with the weak outlook for domestic demand, is likely to continue to put downward pressure on imports in the near term.

2.2 Domestic demand

Nominal GDP fell by 1% in 2008 Q4 (**Chart 2.5**), the largest quarterly decline since 1974. Weakness in nominal spending growth has coincided with a sharp slowing in money growth (Section 1). The low level of Bank Rate and the MPC's programme of asset purchases (see the box on pages 16–17) will act to boost nominal spending over time, but it is too early to assess the full impact of these measures.

Real GDP fell by 1.6% in Q4, partly reflecting a fall in final domestic demand. But the fall in GDP was amplified by a large negative contribution from stockbuilding (**Table 2.B**). The weakness of domestic demand, including the contribution from stocks, was partly offset by the boost from net trade.

Table 2.B Expenditure components of demand^(a)

Percentage changes on a quarter earlier

	Averages		2008	
	2007	2008 H1	Q3	Q4
Household consumption ^(b)	0.9	0.2	-0.2	-1.0
Government consumption	0.4	1.2	0.7	1.3
Investment	1.1	-2.0	-2.8	-1.4
of which, business investment	1.7	-1.1	-0.8	-1.5
of which, dwellings investment ^(c)	-0.4	-2.7	-6.0	-1.9
Final domestic demand	0.8	0.0	-0.5	-0.6
Change in inventories ^{(d)(e)}	0.1	0.0	-0.4	-1.3
Alignment adjustment ^(e)	0.0	0.0	0.1	-0.3
Domestic demand	0.9	0.0	-0.8	-2.2
Exports ^(f)	0.9	-0.4	0.2	-3.7
Imports ^(f)	1.4	-0.9	-0.1	-5.7
Net trade ^(e)	-0.2	0.2	0.1	0.7
Real GDP at market prices	0.8	0.1	-0.7	-1.6

(a) Chained-volume measures.

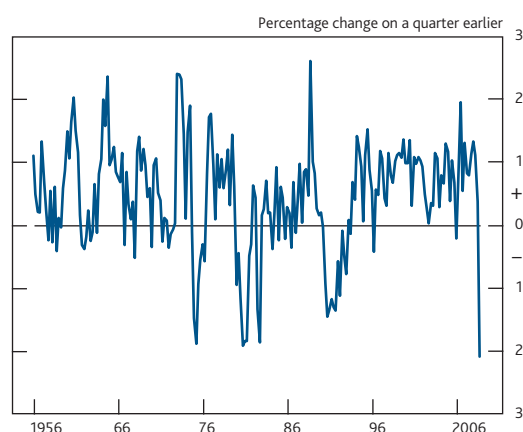
(b) Includes non-profit institutions serving households.

(c) Whole-economy dwellings investment.

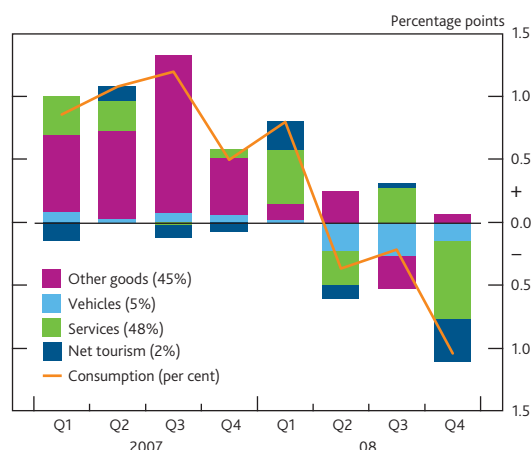
(d) Excludes the alignment adjustment.

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

(f) Goods and services, excluding the estimated impact of MTIC fraud.

Chart 2.6 Whole-economy stock level^(a)

(a) Based on the level of stocks in 2007 Q4 and stockbuilding, excluding the alignment adjustment.

Chart 2.7 Contributions to quarterly growth in consumer spending^(a)

(a) Excluding non-profit institutions serving households. Figures in parentheses are shares in total consumption in 2008.

Real GDP is provisionally estimated to have fallen by a further 1.9% in 2009 Q1.

Inventories

The fall in the level of stocks in Q4 was the largest since quarterly records began in 1955 (**Chart 2.6**). De-stocking therefore accounted for around three quarters of the fall in GDP in Q4 (**Table 2.B**). This sharp de-stocking, discussed in more detail in the box on page 26, is likely to partly reflect the weakness of demand prospects, and therefore a reduction in companies' desired levels of stocks. But it also suggests that companies may be adjusting to the lower level of demand more quickly in this recession compared with previous slowdowns, perhaps because of improvements in stock management techniques. The MPC judges that the recent drag on growth from de-stocking is likely to ease over coming quarters.

Consumer spending

Consumer spending fell by 1% in Q4, the largest quarterly decline since 1980. A fall in spending on consumer services, such as on restaurants and hotels, accounted for much of that fall (**Chart 2.7**). Falling vehicle sales weighed on consumption for the third consecutive quarter. And consumer spending in Q4 was reduced further by net tourism, largely reflecting lower spending by UK residents abroad. But that reduction in spending abroad does not affect overall GDP, since it will have led to an equal reduction in imports.

The latest indicators of household spending suggest that consumption continued to fall in Q1. There are few indicators of spending on consumer services, but the sharp fall in private sector services output in Q1 (Section 3) points to a further contraction in this component of consumption. Spending on retail goods looks to have held up better: the ONS estimates that retail sales volumes rose by 0.9% in 2009 Q1, following growth of 0.7% in Q4. But recent estimates of retail sales growth are likely to be revised down somewhat in the coming months, when the ONS updates the weights underlying the retail sales index.

A key determinant of consumer spending is household income growth. Real post-tax labour income rose by 1.3% in Q4, above its average rate of quarterly growth over the past decade of 0.7%. That strength partly reflected a boost from lower commodity prices. But income growth is likely to weaken in the near term, driven by lower earnings growth and falls in employment (Section 3).

A second key influence on spending is the extent to which households increase the proportion of their income that they save. The household saving rate picked up during 2008 (**Chart 2.8**). Increased uncertainty about job prospects, and the economic outlook more generally — as indicated by the sharp fall in the GfK measure of consumer confidence during

The implications of the recent fall in stocks for the near-term growth outlook

The level of companies' stocks is estimated to have fallen by 2.1% in 2008 Q4. If unrevised, that would be the largest decline since quarterly records began in 1955. De-stocking accounted for around three quarters of the 1.6% fall in overall GDP in 2008 Q4. This box considers the factors behind this de-stocking and the associated implications for the near-term growth outlook.

Recent trends in stockbuilding

Stockbuilding occurs when a business puts finished goods or raw materials to one side to hold in reserve, or when the volume of work in progress increases. Changes in companies' stock levels can result from unexpected fluctuations in demand. But they may also reflect companies choosing to hold a different level of stocks. Companies take a number of factors into account when planning what volume of stocks to hold. Those include their expectations of future demand, and also the cost of holding stocks.⁽¹⁾

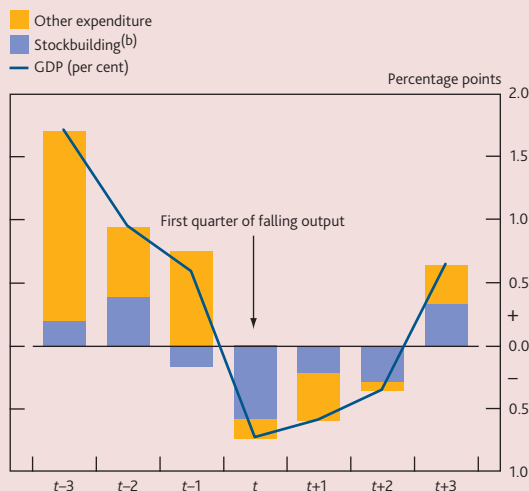
Stockbuilding data need to be interpreted with care, since quarterly estimates of this component of GDP are prone to large revisions. But the ONS data chime with survey evidence that businesses cut back on stocks in Q4. Those surveys, and reports from the Bank's regional Agents, suggest that de-stocking continued in Q1.

In the light of the sharp de-stocking in Q4, the Bank's regional Agents have focused their discussions with companies more closely on inventories in recent months. The majority of their contacts reported that they had lowered their planned stock levels, with falls in current and expected sales the main factors behind that change. Many contacts also reported that concerns about the cost and availability of finance for working capital were an additional factor underlying the fall in their planned stockholdings.

Implications for the near-term growth outlook

The evidence from previous recessions suggests that stock cycles tend to amplify the slowdown in GDP growth initially, and then contribute to the turnaround in output growth later on (**Chart A**). Arithmetically, de-stocking only reduces GDP growth if the fall in stock levels is larger than the fall in the previous period. So although stocks may have declined for a number of quarters during previous recessions, the impact on GDP growth has tended to be particularly pronounced in the early stages of downturns, as companies began to de-stock. In the 1990s recession for example, stockbuilding accounted for around one half of the falls in GDP growth in the first six months of falling output, before that drag eased as the pace of de-stocking stabilised.

Chart A Average contribution of stockbuilding to quarterly GDP growth in previous recessions^(a)



(a) The starting periods of each recession are defined as 1956 Q2, 1961 Q3, 1973 Q3, 1980 Q1 and 1990 Q3.

(b) Excluding the alignment adjustment.

The scale of the de-stocking in 2008 Q4 suggests that companies may be adjusting to the lower level of demand particularly quickly. Other things being equal, that could point to a shorter and sharper stock cycle in this recession compared with those in the early 1980s and early 1990s, when stock levels continued to fall for two years or more. A shorter stock cycle may reflect improvements in stock management techniques. For example, the introduction of just-in-time production, and the greater use of information technology to manage stocks, allows companies to respond more quickly to fluctuations in demand.

De-stocking in Q4 also reflected the weakness of demand prospects, and the tightness of credit conditions. So the scale of the fall in stock levels may suggest that companies are particularly pessimistic about future demand, or that tight credit conditions have forced companies to run down stocks to maximise cash flow. To the extent that the large fall in stocks reflected those factors, that could point to downside risks to investment, employment and hence GDP growth in the near term.

Overall, the size of the fall in stock levels is likely to reflect both the weakness of demand prospects, and a more rapid adjustment by companies to the lower level of demand. The majority of the Agents' contacts reported that they expected to be able to return stocks to desired levels within the next year. The MPC judges that the drag from stockbuilding on GDP growth is likely to ease during 2009.

(1) Companies' decisions to invest in stocks are examined in more detail in Elder, R and Tsoukalas, J (2006), 'Investing in inventories', *Bank of England Quarterly Bulletin*, Summer, pages 155–60.

Chart 2.8 Household saving ratio^(a)

(a) Percentage of households' total post-tax income.

2008 — is one factor that is likely to have encouraged households to increase savings. This measure of confidence picked up in the early months of 2009, but remained at a historically low level.

In addition, some households may have saved more in response to the significant falls in their financial wealth. Households' net financial wealth fell by 17% in the year to 2008 Q4.

The aggregate household saving rate may also have risen due to some households reducing their borrowing as the supply of credit has tightened. The effect of this tightening has been amplified by the weakness of the housing market, which has reduced the amount of housing equity against which homeowners can borrow. The latest *Credit Conditions Survey* pointed to a further reduction in the availability of secured credit to households in the three months to mid-March, although lenders expected credit availability to improve over the coming months (Section 1).

Looking ahead, there would also be upward pressure on saving if households became more pessimistic about their income prospects in the medium to long term. For example, in the April Budget the Government revised up its projection for public sector net borrowing. That could cause saving to rise, if households expected the increased level of public sector borrowing to lead to higher taxes, and so to lower post-tax incomes, in the future.

But offsetting these factors that might increase saving, the substantial monetary stimulus implemented since September should encourage households to spend rather than save. The lower level of Bank Rate has reduced the debt-servicing costs faced by many households and should, in aggregate, boost household spending, given the likely higher propensity to consume from current income of borrowers, relative to savers. And both the low level of Bank Rate and the recently announced programme of asset purchases may raise household wealth, and hence spending, through their impact on asset prices. In addition, lower Bank Rate will encourage households to bring forward some spending.

Although the low level of Bank Rate has reduced the interest payments of many borrowers, arrears and repossessions picked up during 2008 (Table 2.C), and are likely to rise further in the near term as unemployment rises. But so far, mortgage arrears and repossessions remain at lower levels than in the early 1990s, partly reflecting the fact that official interest rates increased sharply in the late 1980s, and remained at over 10% throughout 1991.

Weighing up these influences on household spending, the MPC judges that consumer spending is likely to continue to fall in the near term. And a key risk to the medium-term outlook for

Table 2.C Mortgage arrears and repossessions

	Series high	2007	2008	
		H2	H1	H2
Mortgage arrears ^(a)				
Three to six months	1.82 (1994 H1) ^(b)	0.60	0.73	1.01
Six to twelve months	2.07 (1992 H2)	0.34	0.41	0.62
More than twelve months	1.58 (1993 H1)	0.13	0.15	0.25
By more than 2.5% of outstanding balance	4.12 (1995 H1) ^(b)	1.08	1.19	1.57
Repossessions ^(c)	0.40 (1991 H2)	0.11	0.16	0.18

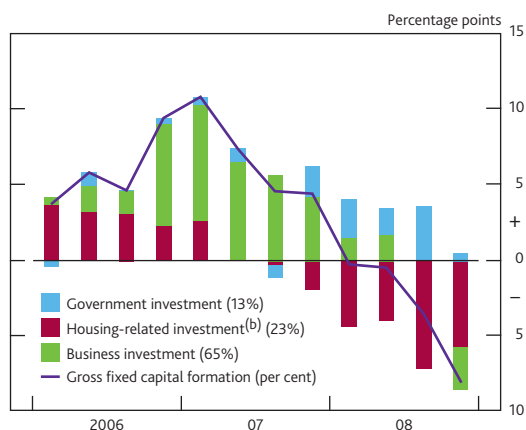
Source: Council of Mortgage Lenders.

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

(b) Earliest observation.

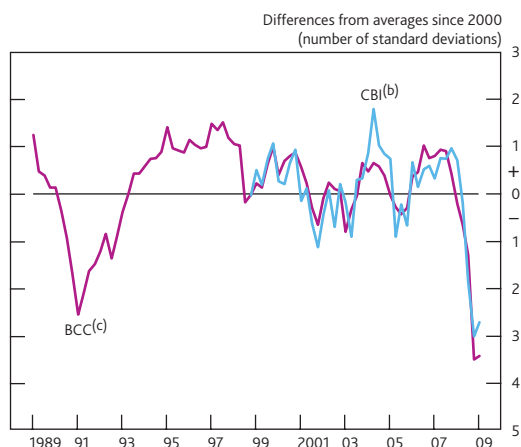
(c) Flow of repossessions per half year as a percentage of outstanding mortgages.

Chart 2.9 Contributions to four-quarter growth in whole-economy investment^(a)



- (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 separate items may sometimes differ from the total shown.
- (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 2.10 Investment intentions (plant and machinery)^(a)



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

- (a) Measures weight together sectoral surveys using shares in real business investment.
- (b) Net percentage balances of companies who plan to increase investment in plant and machinery over the next twelve months.
- (c) Net percentage balances of companies who say they have revised up their planned investment in plant and machinery over the past three months. Data are non seasonally adjusted.

Table 2.D Projections for government borrowing, spending and receipts

Per cent of nominal GDP	Public sector net borrowing		Government spending ^(a) and receipts in 2009 Budget	
	2008 Pre-Budget Report	2009 Budget	Spending	Receipts
2008/09 (estimate)	5.3	6.3	43.1	36.9
2009/10	8.0	12.4	47.5	35.1
2010/11	6.8	11.9	48.1	36.2
2011/12	5.3	9.1	46.3	37.2
2012/13	4.1	7.2	44.9	37.7

Source: HM Treasury.

- (a) Current expenditure plus gross investment.

consumer spending is that there is a more substantial retrenchment in the household sector (Section 5).

Investment

Investment was a significant drag on GDP growth during 2008, falling by 8% in the year to Q4. A sharp contraction in those elements of investment related to the residential housing market can account for almost three quarters of that decline (Chart 2.9). Some measures of housing market activity have risen somewhat in recent months, but indicators of new home building, such as housing starts, suggest that housing-related investment is likely to continue to fall during 2009.

Business investment growth remained weak in Q4. That reflected a further slowdown in both investment in buildings and in spending on plant and machinery. The outlook for both of these components of business investment remains very subdued. Construction orders for new commercial property fell by 36% in the three months to February compared with the previous three months. And although forward-looking surveys of investment in plant and machinery stabilised in Q1, they remained at historically low levels (Chart 2.10).

Two factors continue to underlie the weakness of business investment, according to contacts of the Bank's regional Agents. First, and most importantly, the worsening outlook for demand since Autumn 2008, combined with the high level of uncertainty about the depth and persistence of the slowdown, has led businesses to cut back or defer their capital spending. Second, the reduced availability of finance has weighed on investment plans: consistent with that, the proportion of respondents to the CBI surveys of the manufacturing and service sector who cited the availability of finance as a constraint on their investment plans remained at a historically high level in Q1.

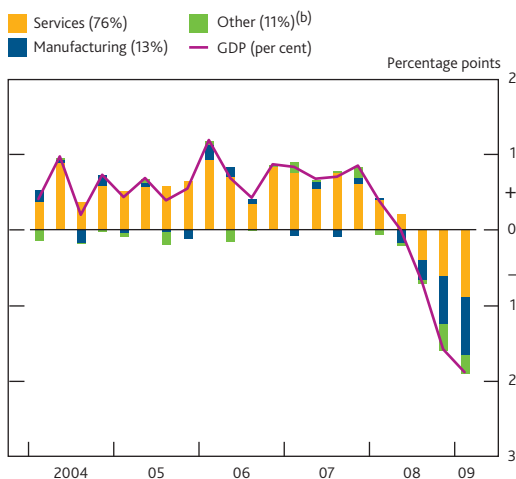
Government spending

The Government set out its latest fiscal plans in the April Budget. The projection for public sector net borrowing was revised up substantially compared with the 2008 Pre-Budget Report (Table 2.D), reflecting both a stronger projection for government spending and a weaker projection for government receipts. Those revisions partly reflected the weaker outlook for nominal GDP, which raises some components of government spending, such as social security benefits, and pushes down on tax receipts. But even after adjusting for the economic cycle, net borrowing was revised up. The Government also announced some modest discretionary measures to support demand in the near term. Overall, public sector net borrowing as a share of nominal GDP was projected to peak at 12.4% in fiscal year 2009/10, before falling back.

3 Output and supply

Output is estimated to have fallen by 1.9% in 2009 Q1, following a decline of 1.6% in 2008 Q4. Business surveys suggest that output will have fallen further in 2009 Q2, but that the pace of contraction will have moderated. Recent declines in output have meant that a substantial degree of spare capacity has developed. Labour market indicators remained weak: unemployment continued to rise sharply and survey measures of employment intentions point to further falls in employment.

Chart 3.1 Contributions to quarterly GDP growth^(a)



(a) Chained-volume measure, at basic prices. The figures in parentheses show shares in the level of nominal value added in 2007.
(b) Calculated as a residual.

The outlook for inflation is influenced by the degree of slack in the economy. The marked falls in output since mid-2008 (Section 3.1) have meant that companies have worked their inputs less intensively, and so the degree of spare capacity within companies has increased (Section 3.2). In addition, employment has fallen, leading to a further loosening in the labour market (Section 3.3). Looking ahead, the amount of slack in the economy will depend on the persistence and depth of the recession, and also the extent to which the downturn impairs the economy's supply capacity.

3.1 Output

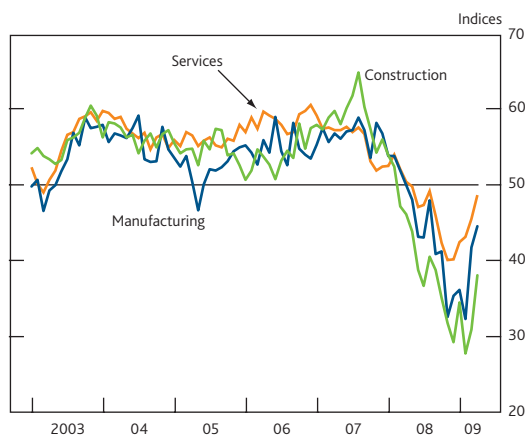
According to the latest official data, output fell by 1.9% in 2009 Q1, a larger decline than anticipated at the time of the *February Report*. This sharp contraction followed a decline of 1.6% in 2008 Q4 (**Chart 3.1**). Taken together, this represents the largest six-month fall in output since quarterly records began in 1955.

The manufacturing sector has contracted by around 14% over the past year. The fall in UK manufacturing output in part reflected lower demand for manufactured goods, both in the United Kingdom and abroad (see the box on pages 22–23). Manufacturers have responded to that weaker demand by cutting output even more sharply than the fall in demand, and so running down stocks. The drag on manufacturing output growth from de-stocking is likely to ease over the coming quarters (see the box on page 26).

Service sector output has contracted by more than 2% over the past year, and fell by 1.2% in 2009 Q1 alone. That meant that the service sector accounted for around half of the fall in overall output in Q1 (**Chart 3.1**). The fall in services output over the quarter was broadly based across private sector services.

Business surveys provide a timely indication of output growth. The CIPS/Markit indices remained at low levels in April and so

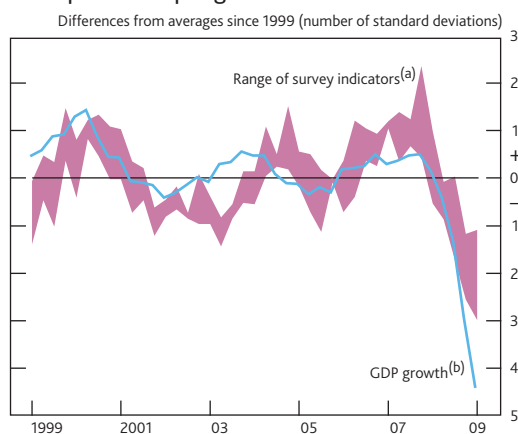
Chart 3.2 CIPS/Markit indicators of output growth^(a)



Source: CIPS/Markit.

(a) A figure over 50 indicates rising output compared with the previous month, and a figure below 50 indicates falling output.

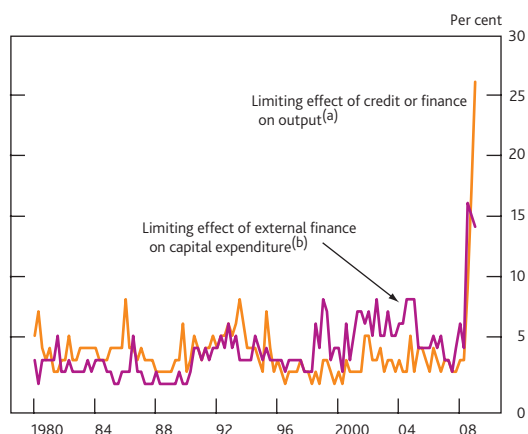
Chart 3.3 Measures of capacity utilisation and four-quarter output growth



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 nominal shares in value added. The BCC data are non seasonally adjusted.
(b) Chained-volume measure at market prices.

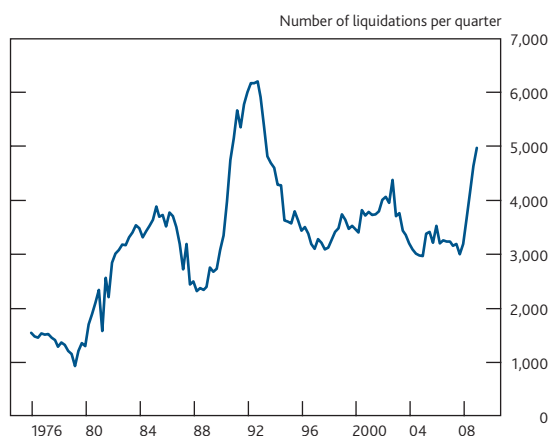
Chart 3.4 Impact of credit and finance on manufacturers' output and investment



Source: CBI.

- (a) The question asks: 'What factors are likely to limit output over the next three months?'.
(b) The question asks: 'What factors are likely to limit (wholly or partly) capital expenditure authorisations over the next twelve months?'.

Chart 3.5 Corporate liquidations in England and Wales^(a)



Sources: The Insolvency Service and Bank calculations.

- (a) 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. Pre-1998 data have been seasonally adjusted by Bank staff.

pointed to further falls in output in 2009 Q2. But the indices have picked up from their troughs, suggesting a more moderate pace of decline than in 2009 Q1 (Chart 3.2).

3.2 Capacity utilisation

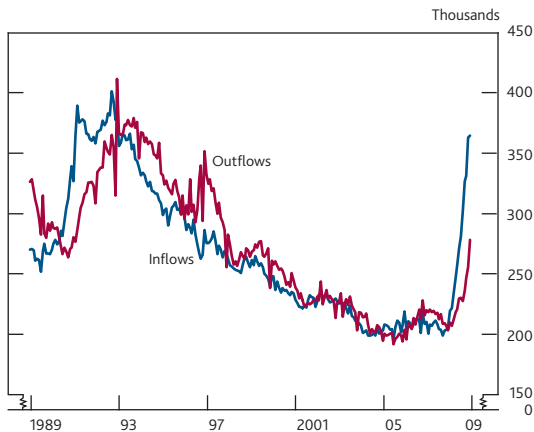
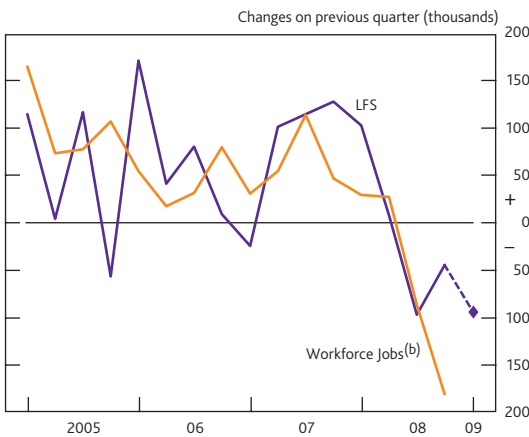
The weakness in output has led to a considerable increase in spare capacity within businesses (Chart 3.3). That would typically be expected to put downward pressure on prices. And if companies expect spare capacity to persist, then they are also likely to respond by cutting investment (Section 2) and employment (Section 3.3).

The extent to which spare capacity rises when output growth is weak depends on developments in companies' potential supply capacity. In particular, any associated moderation in potential supply growth will mean a smaller increase in spare capacity. The remainder of Section 3.2 considers factors affecting companies' supply capacity. Supply effects that operate through the labour market are discussed in Section 3.3.

One factor restricting some companies' supply capacity is access to credit. Bank lending to the corporate sector slowed sharply over 2008 (Section 1). In addition, credit extended by one company to another, known as trade credit, is likely to have become harder to obtain for some companies. Contacts of the Bank's regional Agents cite the cost and availability of trade credit insurance as a significant burden.⁽¹⁾ And business surveys suggest that an increasing proportion of companies faced constraints on production due to difficulties accessing credit. For example, the *CBI Industrial Trends Survey* shows a sharp rise in the proportion of manufacturing companies reporting that credit or finance is a constraint on output (Chart 3.4). For these companies, tight credit conditions will limit output. But it will not lead to reduced pricing pressures, as there will be little incentive to reduce prices to attract additional demand.

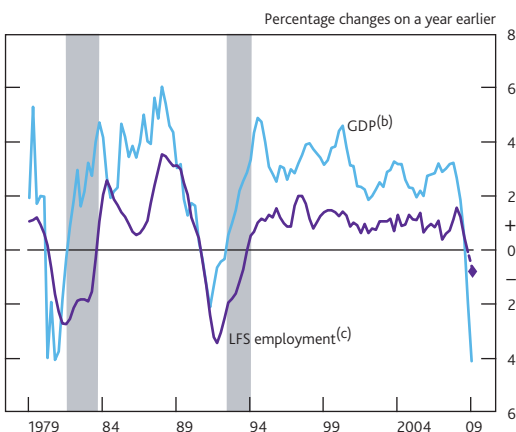
Potential supply may also be reduced by an increase in corporate bankruptcies. Some of the capital from insolvent companies is likely to be scrapped. Consequently, any rise in insolvencies is likely to lead to a reduction in the economy's capital stock and its supply capacity. Since the end of 2007, there has been a marked increase in the number of corporate liquidations (Chart 3.5). Despite this, the number of liquidations remains below its 1990s' peak. The liquidation rate — the number of liquidations as a proportion of the total number of companies — was even further below its 1990s' highs, reflecting the rapid growth in the number of active companies. But a further rise in the liquidation rate is likely in coming quarters, and this will weigh on supply capacity.

(1) For more details on trade credit, see the box on page 15 of the February 2009 Report.

Chart 3.6 Flows into and out of claimant unemployment**Chart 3.7** Measures of employment^(a)

Source: ONS (including Labour Force Survey).

- (a) The figure for LFS employment in 2009 Q1 is based on the three months to February. There is a discontinuity in Workforce Jobs between December 2005 and September 2006.
 (b) These data have been adjusted to be on a calendar-quarter basis.

Chart 3.8 GDP and employment^(a)

Source: ONS (including Labour Force Survey).

- (a) The shaded areas indicate the quarters during recoveries in output growth where four-quarter GDP growth had become positive but four-quarter employment growth remained negative.
 (b) Chained-volume measure at market prices.
 (c) The figure for LFS employment in 2009 Q1 is based on the three months to February.

Potential supply growth will also be reduced by companies cutting back on investment. Companies have reduced investment spending as demand has slowed and uncertainty about the outlook has increased. In addition, some businesses have reported that difficulties in raising external finance have constrained their capital expenditure (as **Chart 3.4** shows for manufacturing companies). But annual business investment flows are small relative to the size of the non-residential capital stock. So a sustained period of weak business investment would be needed for the capital stock to decrease materially.

3.3 Labour market developments

Since the *February Report*, most labour market indicators have weakened further. This section considers companies' demand for labour, labour supply, and labour market tightness.

Companies' demand for labour

Following the recent sharp falls in output, companies' demand for labour has fallen, and unemployment has risen sharply on both the LFS and claimant count measures. LFS unemployment increased by 177,000 in the three months to February. And the more timely claimant count measure rose by 74,000 in March.

The increase in claimant unemployment has been driven by a sharp increase in flows into unemployment, rather than reduced flows out of unemployment (**Chart 3.6**). Rising inflows have been driven in part by rising job losses. Consistent with that, redundancies rose in the three months to February. In addition, if new entrants to the labour force, from education for example, have been unable to find a job, that would also push up on inflows.

Employment has continued to fall on both the LFS and Workforce Jobs measures (**Chart 3.7**). LFS employment fell sharply in the three months to February compared with the three months to November. Business surveys of employment intentions suggest further marked falls in employment in the near term.

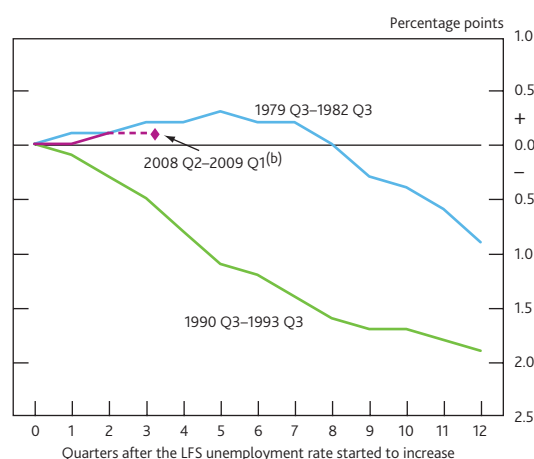
Looking further ahead, the prospects for employment are uncertain. In the recessions of the 1980s and 1990s, employment continued to fall even after output had started to grow again (**Chart 3.8**). But the structure of the labour market is likely to have changed since then, and so these recessions may not give a good guide to developments in this episode.

It is possible that companies are more able to reduce labour costs by adjusting wages than was the case in the past. This might mean that employment will fall by less than would otherwise have been the case. Recent developments in pay growth are discussed in Section 4. Practices such as short-term working could also help reduce pressure on costs,

and support employment. LFS data point to a relatively small reduction in average hours worked over the past year, but reports from the Bank's regional Agents suggest that cutting hours has played an important role in controlling costs for some companies.

But some features of the current episode could act to increase the pickup in unemployment, offsetting the factors described above. Tight credit conditions could make it more difficult for companies to retain workers during the downturn, leading to a larger fall in employment. In addition, businesses that import a high proportion of their inputs are likely to face significant cost pressures as a result of the exchange rate depreciation since mid-2007. This could also push down on employment, if wages do not adjust sufficiently. Influences on wages, including the exchange rate, are discussed in Section 4.

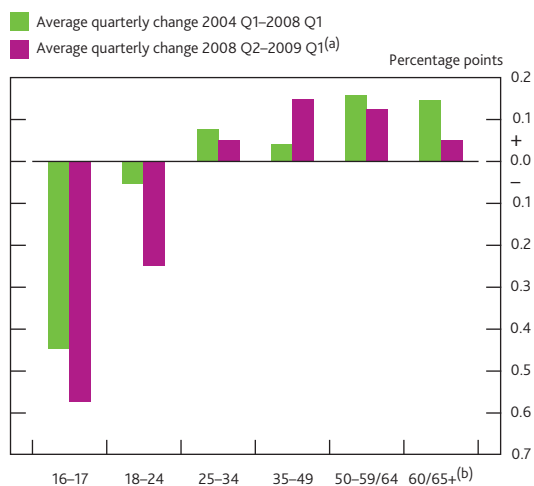
Chart 3.9 Cumulative changes in the economic activity rate^(a)



Source: Labour Force Survey.

- (a) Data are for 16+ population. Prior to 1992, the Labour Force Survey was conducted annually. Before this date the ONS estimated the quarterly path of the series using a range of other labour market indicators including the Workforce Jobs series and the claimant count.
 (b) The economic activity rate in 2009 Q1 is based on the three months to February.

Chart 3.10 Changes in economic activity rates by age



Source: Labour Force Survey.

- (a) The figure for Q1 is based on the three months to February 2009.
 (b) This category includes individuals at or above retirement age. That is currently 65 for men and 60 for women.

Labour supply

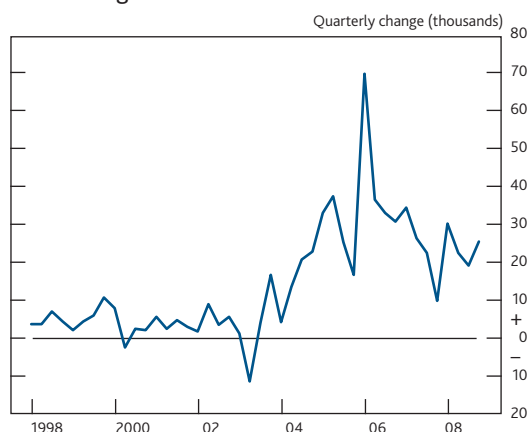
Rising unemployment is likely to put downward pressure on wages. But the outlook for wages will also be affected by developments in the supply of labour provided by households. During periods of rising unemployment, labour supply may moderate if, for example, individuals perceive their prospects of finding work to be low and so stop searching. In the current recession, labour supply growth has so far remained relatively strong. That contrasts with the 1990s recession, during which labour supply declined markedly (Chart 3.9).

There are a number of potential explanations for the current resilience of labour supply. First, the downturn may have heightened households' concern over their debt position. The participation rate for the 35–49 year old age group has increased over the past year (Chart 3.10); on average, people in this age group have relatively high levels of debt. Second, falls in financial wealth may have lowered households' income expectations. That is likely to be of particular concern to those closest to retirement age. Participation rates for these groups have continued to increase, albeit more slowly than in recent years. A third possible explanation is that individuals may expect the weakness in the labour market to be short-lived, so that few unemployed individuals have become discouraged and stopped looking for work.

It remains possible that labour supply will fall back, as it did in the early 1980s (Chart 3.9). If so, this would lower the growth of the supply capacity of the economy. Some people may decide to leave the labour market permanently. For others, a prolonged absence could lead to a deterioration in their skills, making it more difficult for them to return to the labour market when prospects improve. A persistent reduction in labour supply would attenuate the impact of weak labour demand in lowering wage pressure.

There are additional labour market channels through which potential supply might be reduced, even if measured labour

Chart 3.11 Air passenger flows between the United Kingdom and A8 countries^(a)



Sources: Civil Aviation Authority — Airport Statistics and Bank calculations.

(a) These figures are calculated from Civil Aviation Authority data on flights between the United Kingdom and A8 airports. Flights between UK airports and those in A8 countries have been identified by Bank staff, and those routes which have at some point transported at least 1,000 passengers in a single quarter are included in the calculation. Net flows have been calculated as the number of passengers arriving in the United Kingdom each quarter less those leaving. These net flows have been seasonally adjusted by Bank staff. The A8 countries are the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

Table 3.A Selected indicators of labour market pressure^(a)

	Averages	2008			2009		
	2007	H1	Q3	Q4	Jan.	Feb.	Mar.
LFS unemployment rate ^(b)	5.4	5.3	5.8	6.3	6.5	6.7	n.a.
Claimant count ^(c)	2.7	2.5	2.8	3.4	3.9	4.3	4.5
Vacancies/unemployed ratio ^(d)	0.40	0.41	0.33	0.27	0.25	0.23	n.a.
Recruitment difficulties ^(e)	1.3	-0.2	-1.8	-3.1	-3.2	-3.4	-3.5

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

(a) Based on three-month moving average measures, unless otherwise stated.

(b) Percentage of the economically active population.

(c) Percentage of the sum of the claimant count and Workforce Jobs, monthly data.

(d) The vacancies/unemployed ratio is calculated as the number of job vacancies divided by the LFS measure of unemployment. Vacancies exclude agriculture, forestry and fishing.

(e) Agents' scores for recruitment difficulties in the most recent three months compared with the situation a year earlier.

supply remains resilient. First, unemployed workers may reduce the time and effort they spend searching for work, reducing the downward pressure on wages. The likelihood of this happening will depend, in part, on the persistence of weak labour demand. Second, if there is a change in the sectoral composition of jobs, then when demand recovers there could be some mismatch between the skills of the unemployed, and those skills which companies are seeking. This too could reduce the potential supply of the economy, so reducing the extent to which rising unemployment reduces wage pressure.

Another possible impact on potential supply is through changes in migration flows. Migration from A8 Accession countries has boosted UK potential supply since 2004. But as the UK economy slows, net migration may moderate. Offsetting this, however, migration flows are also likely to be affected by the economic situation in the home countries of recent and potential migrants — in recent months the outlook for Central and Eastern European countries has deteriorated markedly. Data from the Civil Aviation Authority on net passenger airflows, one indicator of migratory flows, suggest that, up to the end of 2008, there had not been a marked decline in net migration to the United Kingdom from the A8 Accession countries (**Chart 3.11**).

Labour market tightness

The labour market has loosened significantly over the past year. The vacancy to unemployment ratio — a summary indicator of labour market tightness — has fallen, and companies report that recruitment difficulties have eased (**Table 3.A**). Further loosening in the labour market is likely, although some of the reduction in employment could be offset by a moderation in potential labour supply growth.

4 Costs and prices

Since the *February Report*, CPI inflation has remained close to 3%, significantly higher than the 2% target. Past falls in the sterling effective exchange rate continued to put upwards pressure on inflation through their influence on import prices and businesses' costs. Pay growth eased markedly, reflecting both sharp falls in bonus payments and a significant reduction in pay settlements. Output price inflation fell back and most surveys of corporate pricing intentions weakened further. Measures of inflation expectations were broadly consistent with inflation returning to the target.

Chart 4.1 Contributions to CPI inflation^(a)

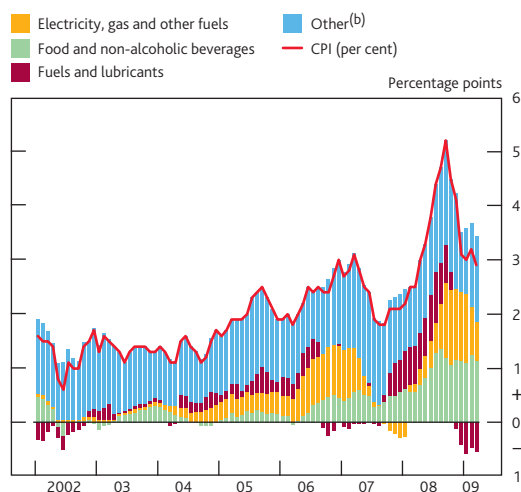


Table 4.A CPI inflation and market expectations

Per cent	2008		2009		
	Nov.	Dec.	Jan.	Feb.	Mar.
(1) Annual CPI inflation	4.1	3.1	3.0	3.2	2.9
(2) Median market forecast ^(a)	3.9	2.6	2.7	2.6	2.9
Maximum	4.1	3.6	3.0	2.8	3.0
Minimum	3.6	1.6	2.4	1.8	2.5
(1)–(2) Forecast error (percentage points)	0.2	0.5	0.3	0.6	0.0

Sources: Bloomberg and ONS.

(a) One month ahead market forecasts, based on between 28 and 33 forecasts for CPI inflation.

Since the *February Report*, CPI inflation — the measure targeted by the MPC — has remained elevated. In March 2009, annual CPI inflation was 2.9%, down from 3.2% in February and 3.0% in January. The February outturn, which was more than 1 percentage point above the 2% target, triggered an open letter from the Governor to the Chancellor, on behalf of the MPC.⁽¹⁾ Food and utilities prices continued to boost annual inflation throughout 2009 Q1, and contributed nearly 2 percentage points to CPI inflation in March (**Chart 4.1**).

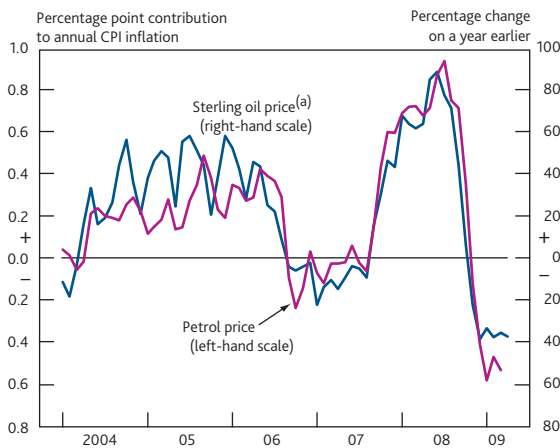
Recent inflation outturns have tended to be higher than expected by market participants (**Table 4.A**). The Q1 data were also towards the upper edge of the MPC's February CPI inflation fan chart. Some of that surprising strength is likely to have reflected stronger, or faster, exchange rate pass-through, following the fall in sterling since the middle of 2007 (Section 4.1).

The lower level of sterling is likely to continue to exert upwards pressure on CPI inflation for a while. But, as discussed in Section 4.2, the path of inflation will also depend on how businesses respond to the combination of higher imported costs and a significant margin of spare capacity (Section 3). The near-term outlook for inflation is discussed in Section 4.3, alongside recent movements in measures of inflation expectations.

4.1 The exchange rate and inflation

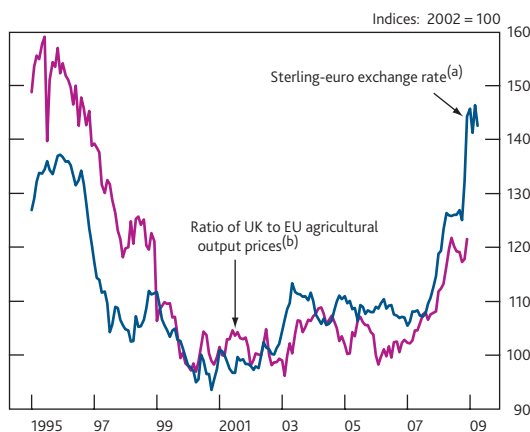
The sterling ERI has fallen by around a quarter since mid-2007. That has had a pronounced effect on many businesses' costs, by increasing the price of imported goods and services used in production. The degree to which businesses pass those

(1) The Governor's letter, as well as the Chancellor's response, can be found at www.bankofengland.co.uk/publications/news/2009/027.htm.

Chart 4.2 Sterling oil prices and retail petrol prices

Sources: Bank of England, Bloomberg and ONS.

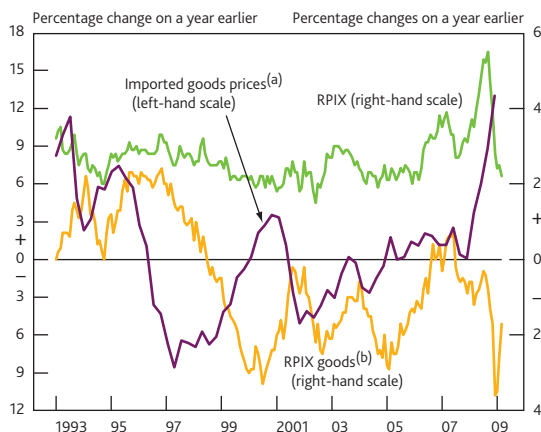
(a) Brent forward price for delivery in 10–21 days' time.

Chart 4.3 UK and euro-area agricultural output prices and the sterling-euro exchange rate

Sources: Bank of England, Department for Environment, Food and Rural Affairs and Eurostat.

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

(b) Ratio of UK producer prices of agricultural products to a comparable series for the EU15, in local currency terms. The latter has been constructed by splicing together a weighted average of monthly country data in 1995 and 1996, monthly EU15 series covering the period 1997–2004, and a quarterly series since 2004, which has been interpolated to generate a monthly series ending in December 2008.

Chart 4.4 Measures of consumer and imported goods prices

(a) Excluding fuels, food, beverages and tobacco and the estimated impact of missing trader intra-community (MTIC) fraud.

(b) Excluding food, alcohol, tobacco, petrol and oil.

increases in costs into their final prices is a key issue for the inflation outlook.

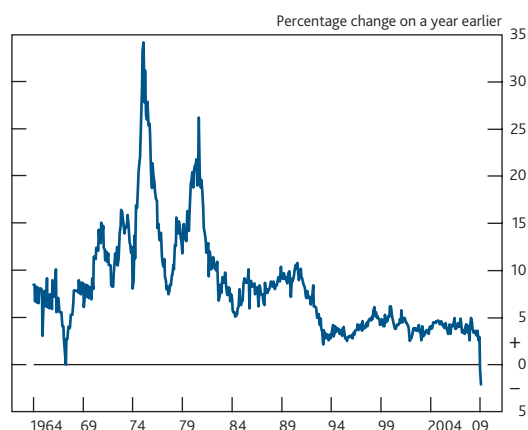
The magnitude and speed of pass-through from changes in the exchange rate to changes in consumer prices varies according to both economic conditions and the cause of the change in the exchange rate. In the past, the degree of pass-through has also varied markedly across different types of goods and services. For example, the prices of some products, such as petrol, tend to move closely with the exchange rate. That is because petrol prices are closely related to sterling oil prices (**Chart 4.2**), which in turn reflect developments in globally determined US dollar oil prices, and in the sterling-dollar exchange rate.

Food prices, which have contributed strongly to CPI inflation in 2008 and 2009, have also been boosted significantly by the fall in sterling. In part, that has reflected the resulting increases in the price of imported food. But in addition, the price of domestically produced food tends to respond particularly strongly to exchange rate movements against the euro. That is because when sterling falls, UK farmers can achieve higher prices by exporting their produce to nearby European trading partners. As a result, depreciations against the euro tend to be followed by rising domestic food prices, which encourage farmers to sell their output in the United Kingdom (**Chart 4.3**).

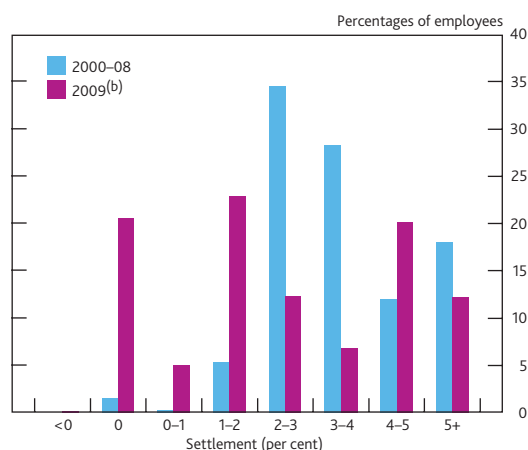
But the final prices of many other goods and services appear to respond much more slowly to changes in the exchange rate. For example, although the import prices of goods other than food and energy have risen markedly since sterling began to depreciate in the middle of 2007, a related measure of consumer prices — retail goods price inflation excluding food and fuels — has remained subdued so far (**Chart 4.4**).⁽¹⁾ That muted response may reflect the growing margin of spare capacity, which is likely to have prompted businesses to either absorb some of the rise in import costs in temporarily lower profit margins, or to offset it by bearing down on other costs (Section 4.2).

Nonetheless, in the past, non-food, non-energy retail goods price inflation has eventually tended to increase following periods of rising import price inflation (**Chart 4.4**). But even once retail goods price inflation has picked up, the overall impact on aggregate inflation has been less clear. That may, in part, have been because the growth rate of nominal spending (which is ultimately determined by monetary policy) was relatively stable. Therefore, increases in the prices of some goods and services may have meant that household spending on other items tended to fall, putting downward pressure on the prices of those goods and services. That may have served to offset the impact of higher import prices — aggregate

(1) **Chart 4.4** shows changes in RPI inflation, rather than CPI inflation, as the RPI data have a longer back-run of component prices.

Chart 4.5 Whole-economy earnings^(a)

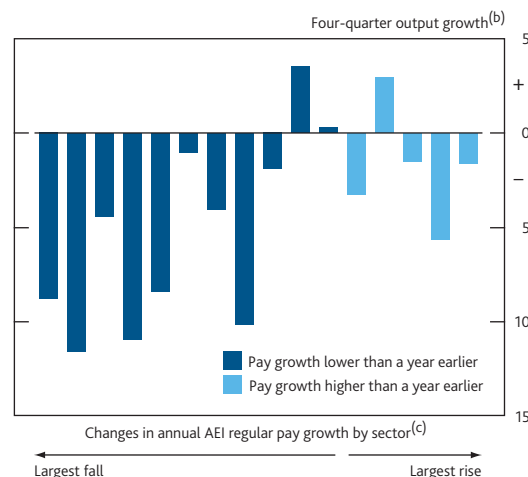
(a) Single-month growth rates based on the average earnings index. Prior to 1990, the series may contain discontinuities when compared to more recent data.

Chart 4.6 Distribution of private sector wage settlements^(a)

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

(a) Weighted by employees.

(b) Based on settlements effective between 1 January and 6 May 2009.

Chart 4.7 Sectoral changes in private sector AEI regular pay growth and output^(a)

(a) Excludes agriculture, forestry and fishing.

(b) Four-quarter output growth in 2008 Q4. Chained-volume measure, at basic prices.

(c) Percentage point difference between annual growth in the three months to February 2009 and annual growth in the three months to February 2008. The data are non seasonally adjusted.

measures of inflation remained relatively stable over most of the inflation-targeting period (Chart 4.4).

Overall, judging the likely impact on inflation of the exchange rate depreciation is difficult. But given that imports account for around one quarter of the CPI basket, the impact on consumer prices could be large. The MPC judges that much of the strength of CPI inflation over the past three months reflected the impact of the fall in sterling. The Committee's assessment of likely future pass-through, and its impact on the inflation projection, is discussed in Section 5.

4.2 Labour costs and companies' pricing intentions

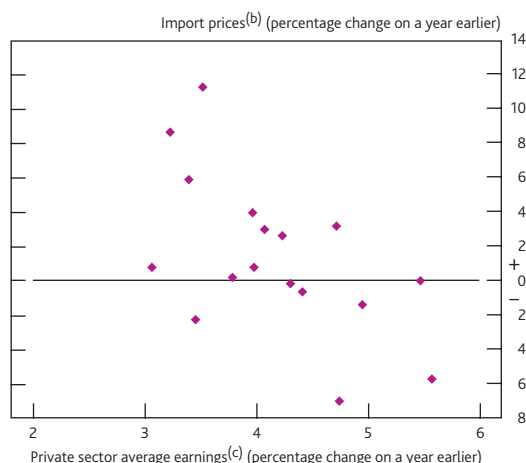
Recent movements in businesses' costs and prices have been shaped by the balance of two factors. First, the impact of the marked rise in import prices following the fall in the exchange rate since the middle of 2007 (Section 4.1). And second, the recent falls in demand (Section 2), together with the associated rise in spare capacity (Section 3).

Both these factors are likely to prompt businesses to bear down on labour costs. But they have opposing implications for output prices. On the one hand, businesses may raise prices in an attempt to recoup some of the rise in import costs. But on the other hand, the falls in demand will encourage businesses to cut prices in an effort to increase sales. This subsection discusses the latest developments in companies' labour costs, output prices and pricing intentions.

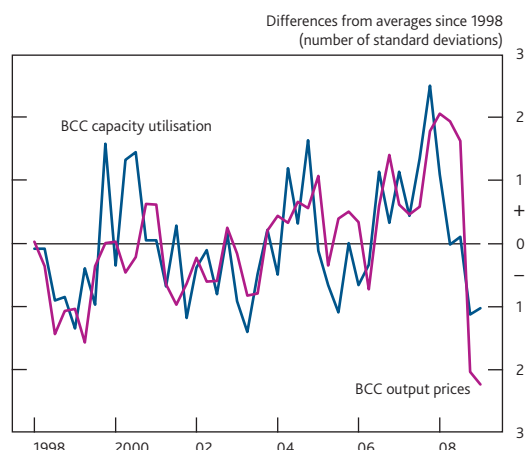
Labour costs

Overall earnings growth fell very sharply in the early months of 2009. Compared to a year earlier, the whole-economy average earnings index (AEI) fell by 0.4% in January and by 2.1% in February, the first such falls in earnings since the series began in 1964 (Chart 4.5). The average weekly earnings measure was even weaker, falling by nearly 6% in the year to February.

The falls in overall earnings growth mainly reflected sharp falls in bonuses, particularly in the financial sector. Because bonuses are usually related to past performance, changes in bonus payments may contain limited information about future pay pressures. Annual AEI regular pay growth, which excludes bonus payments and hence is likely to be more informative about future pay pressures, fell back to 2.9% in February, from 3.4% in January. The latest wage settlements data also point to weak earnings growth. For example, around 20% of private sector wage settlements agreed so far in 2009 were for no increase in basic pay, compared with less than 2% of settlements over the past eight years (Chart 4.6). And, according to the Bank's regional Agents, a small but growing minority of businesses had either made cuts in pay or were planning to do so.

Chart 4.8 Import prices and private sector AEI^(a)

- (a) The data are for each calendar year. The sample period is 1992 to 2008.
 (b) Excluding the estimated impact of MTIC fraud.
 (c) Including bonuses.

Chart 4.9 Output prices and capacity utilisation^(a)

Sources: BCC, ONS and Bank calculations.

- (a) Manufacturing and services balances, weighted using nominal shares in value added. The data are non seasonally adjusted.

Table 4.B Announced changes in gas and electricity prices^(a)

	Price cuts (per cent)		Dates effective	Market shares ^(b) (per cent) (Gas/electricity)
	Gas	Electricity		
British Gas	10.0	10.0	19 Feb./7 May	44/22
E.ON	–	9.0	31 Mar.	13/18
Scottish and Southern Energy	4.0	9.0	30 Mar.	15/19
npower	–	8.0	31 Mar.	12/15
ScottishPower	7.5	3.0	31 Mar.	9/12
EDF Energy	–	8.8	31 Mar.	7/13

Sources: Company press releases and Ofgem.

- (a) Headline reductions in gas and electricity prices as announced by domestic energy suppliers. These may differ slightly from the actual changes in retail energy prices.
 (b) Market shares for Great Britain in June 2008, taken from Ofgem's October 2008 *Energy Supply Probe – Initial Findings Report*. The shares may not sum to 100 due to rounding.

The recent weakness in earnings is likely to reflect the combined influence of a number of factors. First, the contraction in output is likely to have reduced businesses' demand for labour, increasing the degree of labour market slack (Section 3), and so reducing pay pressures. **Chart 4.7** shows that the largest falls in regular pay growth have tended to occur in those sectors that have experienced the sharpest contractions in output. Second, businesses may have reacted to exchange rate driven increases in import prices by cutting back on other costs, such as their wage bills. In the past, earnings growth has tended to be relatively weak during periods of strong import price inflation (**Chart 4.8**).

Both these factors are likely to continue to exert downward pressure on pay growth. As a result, the future path of wages will depend on both the persistence and severity of the recession, and also on the trends in businesses' other costs. But it will also depend on the degree of wage flexibility in the labour market. Reports from the Bank's regional Agents towards the end of 2008 suggested that employees had become increasingly anxious about their job security following the onset of the recession, and that this had reduced their resistance to weaker pay growth. That influence may have grown in importance, given the further increases in unemployment and falls in output. Employers may then be able to achieve more of their desired reduction in labour costs through weaker pay, rather than through reductions in employment. The Committee's judgements on wages are discussed in Section 5.

Companies' output prices and pricing intentions

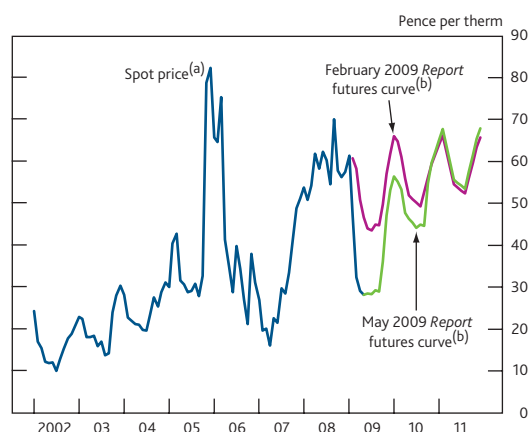
The rise in import costs and the falls in demand exert opposing pressures on companies' output prices. To the extent that they are unable to bear down sufficiently on labour costs, businesses may recoup increases in their costs, such as those associated with rises in import prices, by raising output prices. But at the same time, businesses tend to respond to weakness in output, and the associated build-up of spare capacity, by cutting prices to stimulate demand (**Chart 4.9**).

Manufacturing output price inflation has continued to fall sharply. Part of that reflects the impact of previous falls in oil prices on petrol prices. But output price inflation excluding petrol has also slowed, suggesting that the effect from weaker demand may have dominated the impact of the exchange rate. Looking ahead, most surveys of corporate pricing intentions weakened further, pointing to a further easing in output price inflation in the coming months.

4.3 The near-term inflation outlook and changes in inflation expectations

The near-term inflation outlook

Despite recent unexpectedly high outturns, the MPC continues to expect CPI inflation to fall back to below the 2%

Chart 4.10 UK wholesale gas prices

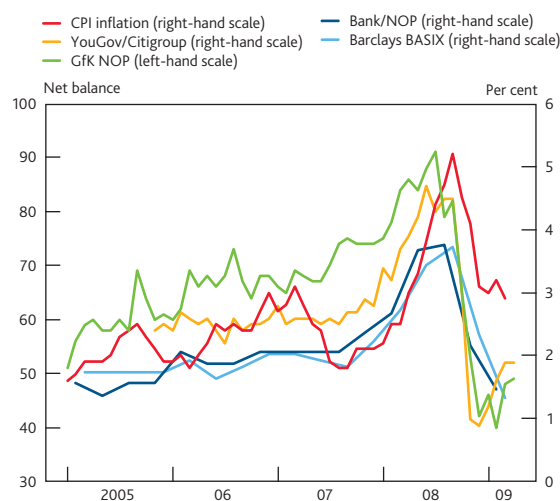
Sources: Bloomberg, Reuters and Bank calculations.

- (a) One-day forward price of UK natural gas.
 (b) Futures prices and spot data for May are averages during the fifteen working days to 6 May. The equivalent data for the February Report are averages during the fifteen working days to 4 February. The spot price data, and the futures prices to late 2010, are monthly averages of daily data. Thereafter, futures prices have been interpolated from quarterly data.

Table 4.C Contributions to the wedge between annual RPI and annual CPI inflation^(a)**Percentage points**

	Average since 1997 ^(b)	Minimum since 1997	2008 Dec.	2009		
				Jan.	Feb.	Mar.
Mortgage interest payments	0.2	-2.6	-1.9	-2.2	-2.6	-2.6
Other housing components	0.5	-0.9	-0.7	-0.7	-0.8	-0.9
Weights, coverage and formula effect	0.4	-0.5	0.4	0.1	0.2	0.2
Total	1.1	-3.3	-2.1	-2.9	-3.1	-3.3

- (a) This wedge is calculated as annual RPI inflation minus annual CPI inflation. For further details on the calculation of these contributions, see Table 10 of the March ONS *Consumer Price Indices* release at www.statistics.gov.uk/pdfdir/cpi0409.pdf. The data are non seasonally adjusted. Components may not sum to the total wedge due to rounding.
 (b) Averages of monthly data.

Chart 4.11 CPI and households' inflation expectations for the year ahead, scaled to match CPI inflation^(a)^(b)

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 time 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 GfK NOP which captures the weighted net balance expecting prices to increase.

target later this year, driven in part by diminishing contributions from food and energy prices. In particular, announced cuts in domestic gas and electricity prices (Table 4.B) will exert further downward pressure on CPI inflation from April.

Furthermore, wholesale gas futures prices for the second half of 2009 were around 25% lower than at the time of the February Report (Chart 4.10). As a result, the MPC's projections are conditioned on the assumption of further retail energy price cuts later this year, which reduce average gas and electricity bills by around 15%. That is a larger reduction than incorporated in the February projections (see the box on page 43). Spot oil prices have crept higher over the past three months, averaging around \$50 per barrel in the fifteen working days to 6 May. The futures curve over the next three years was around 6% higher (in dollar terms) than at the time of the February Report (see the box on page 43).

There are significant risks to the near-term outlook for CPI inflation. For example, on the upside, businesses may choose to pass through a larger part of the rise in import costs into their final prices rather than pushing down on wages and employment. But on the downside, the margin of spare capacity may put greater pressure on wages and prices. The MPC's latest projections for CPI inflation are discussed in Section 5.

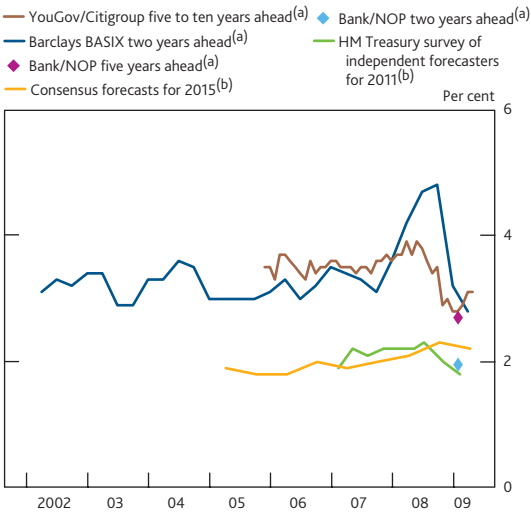
As expected at the time of the February Report, RPI inflation has eased back further over the past three months, turning negative in March for the first time since 1960. The growing wedge between RPI and CPI inflation in recent months mainly reflects the impact of the lower level of Bank Rate on household mortgage interest payments. But it also reflects the impact of further falls in house prices on the housing components of the RPI (Table 4.C). The MPC expects RPI inflation to fall further over the coming months.

Inflation expectations

Inflation expectations play an important role in determining the path of inflation. Measures of near-term household inflation expectations, on average, suggest that inflation is expected to be slightly below the 2% target in a year's time (Chart 4.11).

There was, however, an unusually wide range of views about the short-term inflation outlook. For example, a historically high proportion (around 15%) of respondents to the February 2009 Bank/NOP survey expected inflation to be negative in a year's time. But a similar proportion continued to expect inflation to exceed 5% over the same period. The unusually wide spread of responses may reflect uncertainties about how the opposing influences of, on the one hand, the fall in the exchange rate, and on the other, the recession will affect

Chart 4.12 Measures of inflation expectations beyond a year ahead



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

(a) The questions do not reference a specific price index. All measures are based on the median estimated price change.

(b) Expectations for CPI inflation.

inflation. It may also reflect the volatility of CPI inflation in recent months.

Looking further ahead, measures of households' medium-term inflation expectations changed little on the quarter, and remained slightly below their recent averages. Respondents to the Bank's survey of external forecasters expected CPI inflation to be slightly below the target in 2012 Q2 (see the box on page 49). The average of professional forecasters' longer-term expectations for CPI inflation, as collated by Consensus Economics, remained close to the 2% target (Chart 4.12).

5 Prospects for inflation

The outlook for domestic activity and inflation continues to be dominated by the balance between opposing forces. The adjustments under way in the UK economy, combined with weak global demand, continue to act as a significant drag on economic activity. But pushing in the opposite direction there is considerable economic stimulus in train. That stimulus should lead to a recovery in growth over the forecast period, but the strength and timing of that recovery is highly uncertain. CPI inflation is likely to drop below the 2% target later this year, driven in part by diminishing contributions from food and energy prices offsetting the upward impetus from the depreciation of sterling. The persistent and substantial margin of spare capacity is also likely to push down on inflation. 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 reaches £125 billion, it is more likely than not that CPI inflation will be below the 2% inflation target in the medium term. There are significant risks to the inflation outlook in each direction, with downside risks from weaker activity and an upside risk from the depreciation of sterling. The assessment of these risks is key to MPC decisions.

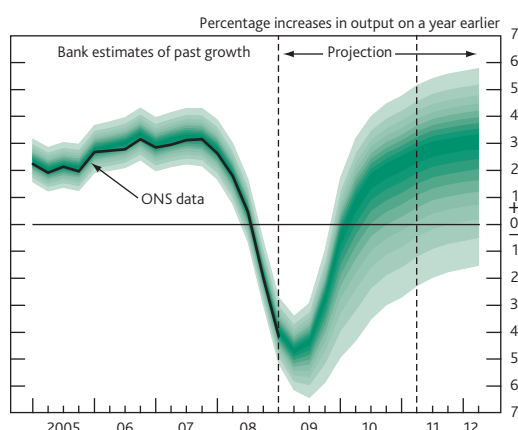
5.1 The projections for demand and inflation

The outlook for domestic activity and inflation reflects the balance between a number of influences that are depressing activity and other offsetting forces.

There are three main factors supporting a recovery in output growth over the forecast period. First, the recent drag on growth from de-stocking is likely to ease over the coming quarters. Second, the significant policy stimulus in train at home and abroad will provide a boost to UK and global growth. Since the *February Report*, the MPC has cut Bank Rate to 0.5%, and announced a programme of asset purchases totalling £125 billion, including an extension by a further £50 billion announced on 7 May, in order to boost the growth of money and credit and of nominal demand. Third, the lower level of sterling should shift both domestic and overseas expenditure towards goods and services produced in the United Kingdom, shielding domestic activity from some of the effects of the slowdown in world trade.

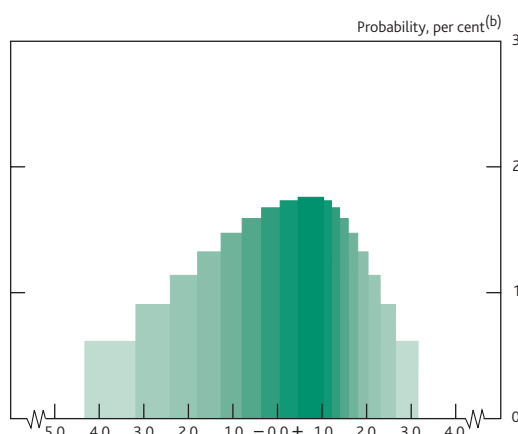
But there are three key factors which could moderate the pace of that recovery. First, the availability of credit to companies and households may improve only gradually; that depends importantly on developments in the domestic and overseas banking systems. Second, households and companies may save more and spend less, for example due to concerns over future earnings or if they anticipate that the increased level of

Chart 5.1 GDP projection based on market interest rate expectations and £125 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 reaches £125 billion and remains there 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 economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that the mature estimate of GDP growth would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outcomes are also expected to lie within each pair of the lighter green areas on 10 occasions. 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-year point of the projection.

Chart 5.2 Projected probabilities of GDP growth outcomes in 2010 Q2 (central 90% of the distribution)^(a)



(a) Chart 5.2 represents a cross-section of the GDP fan chart in 2010 Q2 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 reaches £125 billion and remains there 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 the mature estimate of GDP growth in 2010 Q2 would lie somewhere within the range covered by the histogram on 90 occasions. GDP growth would lie outside the range covered by the histogram on 10 out of 100 occasions.

(b) Average probability within each band. The figures on the y-axis indicate the probability of four-quarter GDP growth being within ± 0.05 percentage points of any given growth rate, specified to one decimal place.

government borrowing will lead to higher taxes in future. Third, the domestic and global economies are vulnerable to further shocks, particularly given weak consumer and business sentiment.

Given these offsetting factors, the outlook for GDP growth is unusually uncertain. As a consequence, the Committee has more confidence in the broad shape of the GDP fan charts than on their precise calibration. That is also reflected in a widening of the bands around the GDP fan charts relative to the February *Report*. All the fan charts describing the MPC's latest projections shown in this section are conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves reaches £125 billion and remains at that level throughout the forecast period. **Chart 5.1** shows the outlook for four-quarter GDP growth, and **Chart 5.2** represents a cross-section of that fan chart in 2010 Q2. Both are conditioned on the assumption that Bank Rate follows a path implied by market rates. The projected distribution for GDP growth is below that in the February *Report*, reflecting lower-than-expected output at home and abroad in the first quarter of 2009, and a judgement that it is likely to take longer for bank lending to return to normal than assumed in February. On balance, the Committee judges that these factors point to a relatively slow recovery in economic activity.

Despite the projected recovery in activity, a substantial margin of spare capacity is likely to persist over the forecast period. **Chart 5.3** shows the Committee's best collective judgement about the outlook for CPI inflation under the same assumptions that underpin **Chart 5.1**. CPI inflation is likely to drop below the 2% target later this year, driven in part by diminishing contributions from food and energy prices. At the start of 2010, there is an upward impetus from the reversal of the VAT cut but much of this is likely to be offset by other factors, including a negative effect from the substantial margin of spare capacity. That pulls down on inflation throughout the forecast period, offsetting the upward pressure from the depreciation of sterling.

The relative magnitude of these opposing influences on inflation is highly uncertain and there is a range of views on the relative strength of these forces among Committee members. The downward pressure from the margin of spare capacity will depend on the timing and strength of the recovery, as well as the impact of the slowdown on the growth of productive supply, and the sensitivity of inflation to the degree of slack in the economy. The pass-through from the lower level of sterling to consumer prices will depend critically on the behaviour of the labour market and the extent to which companies adjust to higher import costs by bearing down on wages. As with the fan charts for GDP, the Committee has more confidence in the broad shape of the fan chart than on its precise calibration. The balance of these factors suggest that, conditioned on the market path for interest rates, it is more

Chart 5.3 CPI inflation projection based on market interest rate expectations and £125 billion asset purchases

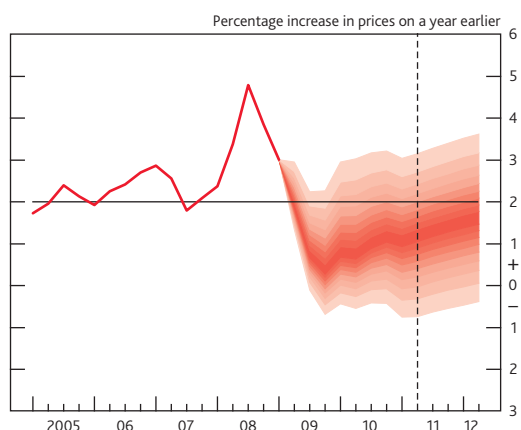
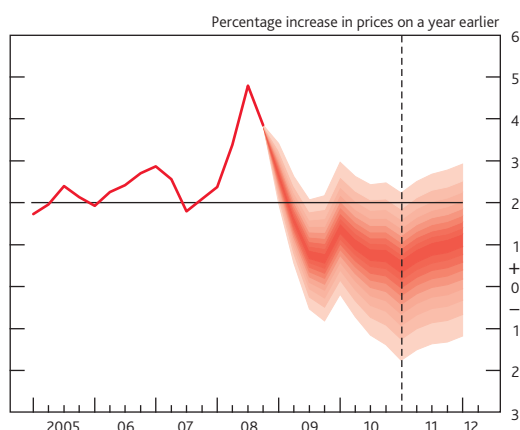
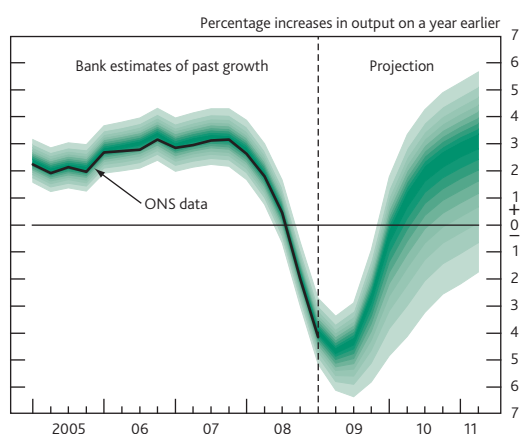


Chart 5.4 CPI inflation projection in February based on market interest rate expectations



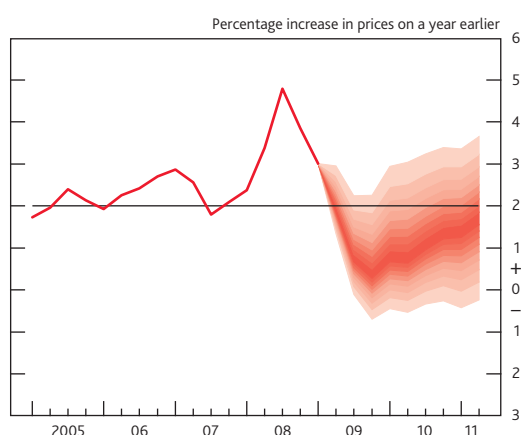
Charts 5.3 and 5.4 The fan charts depict the probability of various outcomes for CPI inflation in the future. **Chart 5.3** has been conditioned on the assumption that the stock of purchased assets financed by the issuance of central bank reserves reaches £125 billion and remains there throughout the 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 band on only 10 of those occasions. The fan charts are constructed so that outcomes of inflation are also expected to lie within each pair of the lighter red areas on 10 occasions. 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 5.5 GDP projection based on constant nominal interest rates at 0.5% and £125 billion asset purchases



See footnote to **Chart 5.1**.

Chart 5.6 CPI inflation projection based on constant nominal interest rates at 0.5% and £125 billion asset purchases



See footnote to **Chart 5.3**.

likely than not that CPI inflation will be below the 2% inflation target in the medium term. The projected distribution for inflation in the medium term is higher than in the February Report (**Chart 5.4**).

Chart 5.5 shows the GDP projection over the next two years on the assumption that Bank Rate is held constant, while **Chart 5.6** shows the corresponding projection for CPI inflation. The risks of inflation being above or below target become more evenly balanced towards the two-year horizon.

5.2 Key risks to demand

When will credit supply recover?

The outlook for credit supply is a key uncertainty, and depends in part on the adjustment under way in the banking system. The UK banking system expanded rapidly in recent years, with funding from sources other than retail deposits enabling banks to increase lending significantly. Banks are now in the process of reassessing the scale of their lending, reflecting an increase in their perceptions of risk and a reduction in their access to funding. In principle, banks could reduce the scale of their lending gradually. But, as the economic outlook has deteriorated, so banks' current and prospective losses have increased and there has been an abrupt reduction in the supply of credit to households and companies.

Various interventions by the authorities should support credit supply over the forecast period. The UK Government has put in place a range of measures designed to improve the ability of banks to absorb losses and raise funding (Section 1). Lloyds Banking Group and the Royal Bank of Scotland, the two banks participating in the Asset Protection Scheme, have each made lending commitments. Two other large banks, Barclays

Financial and energy market assumptions

As a benchmark assumption, the projections for GDP growth and CPI inflation described in **Charts 5.1** and **5.3** are conditioned on a path for official interest rates implied by market interest rates (**Table 1**). In the period leading up to the MPC's May decision, the path implied by forward market interest rates was for Bank Rate to remain close to 0.5% for the rest of 2009 before rising gradually. That was broadly similar to the path assumed in the *February Report*.

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

Per cent	2009			2010				2011				2012	
	Q2 ^(b)	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
May	0.5	0.5	0.6	0.9	1.2	1.7	2.1	2.5	2.8	3.0	3.1	3.2	3.3
February	0.8	0.7	0.8	1.1	1.4	1.7	2.1	2.4	2.6	2.7	2.8	3.0	

(a) The data are fifteen working day averages of one-day forward rates to 6 May and 4 February 2009 respectively. The curves are based on overnight index swap (OIS) rates at shorter maturities and instruments that settle on Libor (adjusted for credit risk) at longer maturities.

(b) May figure for 2009 Q2 is an average of realised spot rates to 6 May, and forward rates thereafter.

In addition, the projections are conditioned on an assumption that the total stock of asset purchases financed by the issuance of central bank reserves reaches £125 billion and remains there for the remainder of the forecast period.

The starting point for sterling's effective exchange rate index (ERI) in the MPC's projections was 78.7, the average for the fifteen working days to 6 May. That was 3.3% above the

starting point for the February projections. Under the MPC's usual convention,⁽¹⁾ the exchange rate is assumed to depreciate slightly, to 78.4 by 2011 Q2, but is still higher throughout the forecast period than assumed in February.

The starting point for UK equity prices in the MPC's projections was 2115 — the average of the FTSE All-Share for the fifteen working days to 6 May. That was 1.9% above the starting point for the February 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 6% higher (in US dollar terms) than at the time of the *February Report*. Wholesale gas futures prices for the second half of 2009 were around 25% lower, but broadly similar by the end of 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. But the central projection is conditioned on a benchmark assumption that domestic energy bills are cut in the second half of 2009, reducing average gas and electricity prices by around 15%, a larger reduction than assumed in the *February Report*.

(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.

and HSBC, have also announced that they intend to expand their lending over the next year.

These Government interventions by themselves, however, may not increase lending sufficiently. For instance, banks might respond to recent strains by choosing to hold more capital against their loans than before, which would inhibit their lending. The reassessment of lending is being carried out by overseas, as well as UK, banks. Foreign-owned banks played a particularly significant role in the expansion of lending to the UK corporate sector in recent years. Some of them are scaling back their lending outside their home countries. That means some UK companies may need to replace loans as they mature, either from UK banks or the capital markets.

The ability of some large, highly rated companies to raise funding outside the banking system has improved recently. Gross issuance in capital markets has risen since the start of this year. And the cost of raising funds in the commercial paper and corporate bond markets has fallen, possibly helped by the establishment of the Bank of England's Asset Purchase Facility (Section 1). Small and medium-sized companies are,

however, unlikely to be able to raise funds in capital markets easily, and remain heavily reliant on bank lending.

It is extremely difficult to assess the time it will take for bank lending to return to more normal levels. On balance, the MPC judges that it is likely to take somewhat longer than envisaged in the *February Report*. An even slower recovery of credit growth would delay the recovery of nominal demand further.

Will there be a sharp retrenchment in household spending?

Consumption is likely to remain weak in the near term. Falling employment is likely to reduce household income growth and hence spending. And tight credit conditions will mean that some households are unable to borrow — and spend — as much as they would like. In the last quarter of 2008, there was a sharp increase in the proportion of income saved by households (Section 2).

A key uncertainty facing the MPC is whether this likely weakness of consumption will be augmented by other factors raising household saving. Past falls in financial asset prices and increased uncertainty associated with the economic downturn may lead households to augment their saving. Should households become more worried about their job prospects or future income, they may decide to save more or pay down debt as a precaution. Households might also reappraise the prospects for their income in the medium to long term. For instance, in the 2009 Budget the Government revised up substantially its projection for public sector net borrowing. That could pull down on consumer spending if households expect the increased level of borrowing to lead to higher taxes in future. And if households fear that it will be difficult to obtain credit in the future, either because of reduced credit availability or because of the reduced value of housing collateral, then they may decide to increase saving. As a result of these factors, there is a risk of a further sharp adjustment in household spending.

A number of other factors should encourage households to spend rather than save. The considerable stimulus in train should support household spending. Government measures already enacted to support lending should improve the flow of credit (Section 1). The low level of Bank Rate will reduce debt-servicing costs faced by households and companies, and, combined with the MPC's asset purchases, should raise asset prices, increasing households' financial wealth. And past falls in commodity prices will boost the purchasing power of household incomes.

Given these offsetting factors, it is uncertain by how much households will want to increase saving, and over what period this adjustment will take place. The MPC's judgement is that there is likely to be a fairly pronounced increase in saving in the near term, and that over the medium term households are

likely to continue to save more of their income than in recent years. This increase in desired saving dampens household spending over the forecast period. But, over time, strengthening income growth — reflecting stronger employment growth and a pickup in wage growth — is likely to support a relatively subdued recovery in spending. An even sharper retrenchment by households would depress consumption to a greater extent, posing a significant downside risk to activity.

What are the implications of the contraction in world trade for UK activity?

In recent months, there has been a precipitous decline in world trade flows (Section 2). In part, that reflected a sharp contraction in global activity. GDP fell in many countries in the last quarter of 2008, and the available indicators suggest that in the first quarter of 2009 output continued to decline in a number of countries, including the United States, the euro area and Japan. But even relative to the fall in world output, the scale of the recent contraction in trade flows appears unusually large.

There is uncertainty about the reasons behind, and the likely persistence of, the contraction in world trade. Some of the sharp reduction in trade flows is probably associated with a marked reduction in inventory holdings. It is also likely to reflect the composition of the drop in world demand, which has been disproportionately concentrated in highly traded goods such as capital equipment, motor vehicles and other consumer durables. Because different stages in production of these goods often take place in different countries, a decline in the demand for them may trigger a far greater fall in trade flows. This suggests that, when global demand picks up, trade should also recover. But an additional possible factor underlying the weakness of global trade is a reduction in the availability of credit used to facilitate international trade. This could lead to more persistent weakness in trade flows if the supply of credit remains tight for a period. It is difficult to determine how important reduced access to trade credit has been.

The United Kingdom is a relatively open economy, and so persistent weakness in world trade could significantly restrain UK output. But a number of factors should mitigate this effect. First, the United Kingdom exports relatively more services than other countries; goods make up a smaller proportion of UK exports than for the world as a whole. Second, to the extent that the weakening of world trade reflects the global nature of supply chains, UK imports as well as exports may also contract, reducing the impact on overall UK activity. And, third, the substantial depreciation of sterling will encourage spending by domestic and overseas consumers to switch towards UK-produced goods and services. That should mean that UK exports will fall by less than world trade, and should reduce UK import growth.

Overall, the Committee judges that world trade is likely to recover somewhat over the coming year, and that the total fall in UK exports will be smaller than the total fall in world trade. Net trade is likely to contribute to growth over the forecast period, in part reflecting the depreciation of sterling. But there is a risk of an extended contraction of trade flows, for example as a result of a slower restoration of lending and a more gradual improvement in confidence at home and abroad. That would delay the recovery of both the global and domestic economies.

5.3 Key risks to inflation

The downside risks to demand described above pose downside risks to the outlook for inflation. The impact of weaker demand growth on CPI inflation depends on both the extent to which that weaker demand leads to an increase in the degree of spare capacity, and on the sensitivity of inflation to spare capacity. The outlook for inflation also depends importantly on the extent to which increases in import prices following the past depreciation in sterling push up on consumer prices and on the behaviour of inflation expectations.

To what extent will weaker demand reduce inflation?

The slowdown in demand and the restriction in the availability of credit are likely to weaken the growth of productive supply in the economy, reducing the degree of spare capacity that emerges. Perhaps most importantly, the ongoing adjustment in the banking system and heightened economic uncertainty have reduced the availability of working capital, which may constrain some companies' output. More generally, weak demand and subdued credit growth will depress business investment. Some companies are likely to become insolvent as a result of falling demand and lower revenue, and some of their capital may be scrapped or used less efficiently. It may prove hard to launch new companies given constraints on lending by banks. And the growth of the effective labour supply may slow, for instance if unemployed individuals reduce the time and effort they spend looking for work, or leave the labour market altogether (Section 3).

The Committee judges that the growth of productive supply is likely to weaken over the forecast period, reducing the build-up of spare capacity in the economy. But the precise extent to which supply will adjust is very uncertain, and there are upside and downside risks to inflation from alternative judgements.

How will sterling's depreciation affect consumer prices?

The sterling ERI has recovered slightly over recent months to around 3% higher than at the time of the February Report. But it remains around a quarter lower than in mid-2007. That significant depreciation is continuing to raise companies' imported costs. Companies can adjust to those higher costs through a combination of responses, and the nature and speed

of their adjustment will affect the prospects for inflation in the near term.

If companies were mainly to adjust to higher imported costs by raising their prices, that would tend to raise CPI inflation. That effect could be material, given that around a quarter of the CPI basket is imported. But some of the adjustment to the increases in imported costs is likely to be borne by companies pushing down on non-imported costs, including wages. And some companies may initially not pass through higher costs, and instead accept lower profit margins for a while.

While it is hard to assess exactly how the adjustment to higher imported costs will take place, the Committee's judgement is that some part of it is likely to occur through weaker wages. That judgement partly reflects the weakness of demand, which may make it difficult for companies to increase prices if they wish to support sales. It also reflects some recent evidence of considerable nominal wage flexibility and the likely influence of the inflation-targeting regime in anchoring inflation expectations. There is, however, a risk that a greater proportion of the adjustment will take place by companies increasing prices, posing an upside risk to inflation in the near term.

How will expectations of inflation be affected?

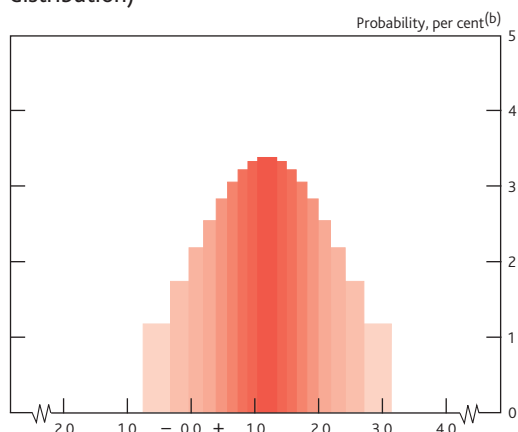
The Committee judges that inflation expectations are likely to remain anchored around the inflation target. If that were not the case, however, there could be significant implications for the inflation outlook. There are downside risks to expectations from a prolonged period of below-target inflation, and upside risks from the depreciation in sterling and the substantial monetary and fiscal expansion.

5.4 Summary and the policy decision

As discussed in Sections 5.1 and 5.2, there are a number of factors that may delay the recovery in output. In particular, weak credit supply growth, a sharper retrenchment by households, and a more protracted contraction in global activity would all increase the risk of a relatively weak recovery in GDP growth. As discussed in Sections 5.1 and 5.3, the key factors affecting the spread of the CPI distribution are: how much spare capacity develops and how this feeds through into inflation; and how consumer prices are affected by sterling's depreciation. The spread of outcomes for CPI inflation at the two-year horizon is shown in **Chart 5.7**, and the equivalent outlook at the time of the *February Report* is shown in **Chart 5.8**. **Charts 5.9** and **5.10** show frequency distributions for inflation and output at the two and three-year horizons.

The outlook for growth is dominated by two opposing sets of forces. In monitoring the impact of those forces on growth, the Committee will focus in particular on: indicators of banks' access to funding and their willingness to supply loans,

Chart 5.7 Projected probabilities of CPI inflation outturns in 2011 Q2 (central 90% of the distribution)^(a)



(a) Chart 5.7 represents a cross-section of the CPI inflation fan chart in 2011 Q2 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 reaches £125 billion and remains there 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 2011 Q2 would lie somewhere within the range covered by the histogram on 90 occasions. Inflation would lie outside the range covered by the histogram on 10 out of 100 occasions. Chart 5.8 shows the corresponding cross-section of the February 2009 *Inflation Report* fan chart.

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

Chart 5.8 Projected probabilities in February of CPI inflation outturns in 2011 Q2 (central 90% of the distribution)^(a)

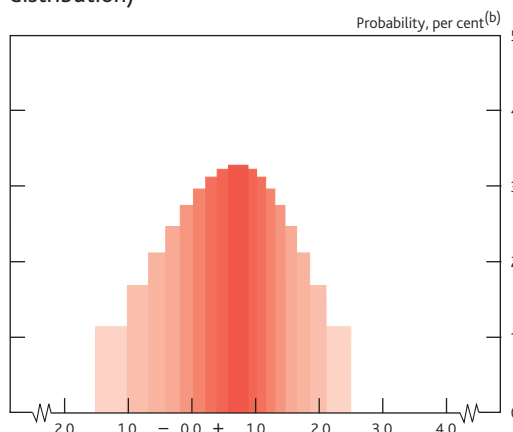
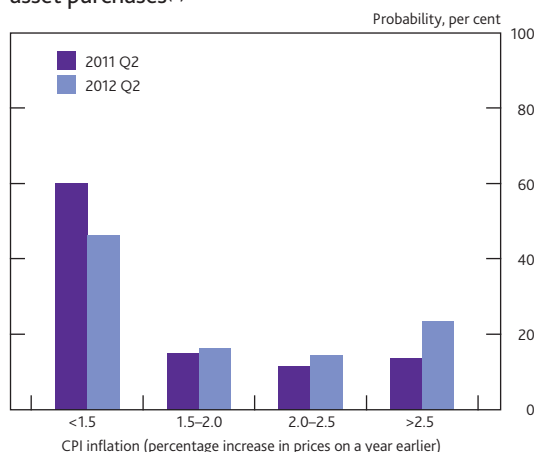
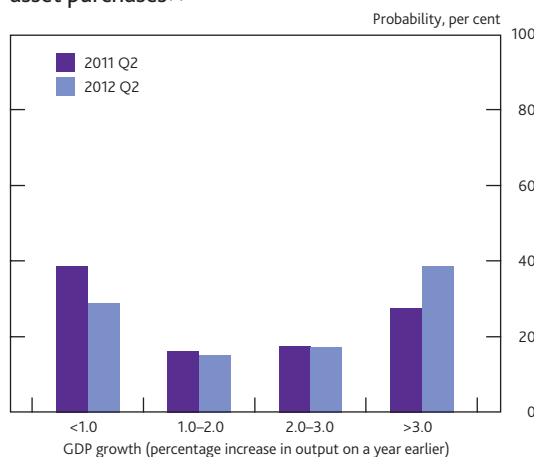


Chart 5.9 Frequency distribution of CPI inflation based on market interest rate expectations and £125 billion asset purchases^(a)



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

Chart 5.10 Frequency distribution of GDP growth based on market interest rate expectations and £125 billion asset purchases^(a)



(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.

together with the ability of companies to tap alternative sources of funds in the capital markets; measures of consumer and business confidence and other survey indicators; the development of private sector balance sheets; the effectiveness of the Bank's asset purchases in reducing longer-term interest rates and in boosting the quantity of money and credit; and the evolution of world activity and trade, together with the impact of sterling's depreciation on UK producers' market share.

In evaluating the evolving outlook for inflation, the Committee will, in addition, monitor: the evidence regarding the pass-through into prices of sterling's depreciation; the response of wages to the growing margin of spare capacity and higher import prices; and the evolution of measures of inflation expectations.

At its May meeting, the Committee noted that the immediate prospect was for CPI inflation to fall substantially below the 2% target, while output continued to contract. But a substantial stimulus was in train which should lead to a recovery in output growth. There were significant uncertainties regarding the inflation outlook relating to the timing and strength of that recovery and the extent of the pass-through from sterling's depreciation. In the light of that outlook, the Committee judged that maintaining Bank Rate at 0.5% and increasing the size of the programme of asset purchases financed by the issuance of central bank reserves by £50 billion to a total of £125 billion was, on balance, most likely to keep CPI inflation on track to meet the 2% inflation target over the medium term.

Other forecasters' expectations

Every three months, the Bank asks a sample of external forecasters for their latest economic projections. This box reports the results from the latest survey, carried out during April.

On average, external forecasters expected annual CPI inflation to have fallen below the inflation target by 2010 Q2, to have remained below 2% in 2011 Q2, and to have picked up in 2012 Q2 (**Table 1**). That was slightly weaker than expected three months ago. On average, the level of GDP in 2010 Q2 was expected to be similar to that a year earlier, but was expected to increase by 1.8% over the following four quarters. Those projections were broadly similar to those made three months earlier. The level of Bank Rate underlying those projections was also little changed on three months ago. On average, the sterling ERI was projected to be around 1% higher in the first year, but 2%–3% lower thereafter.

Table 1 Averages of other forecasters' central projections^(a)

	2010 Q2	2011 Q2	2012 Q2
CPI inflation ^(b)	1.5	1.5	1.8
GDP growth ^(c)	-0.1	1.8	2.4
Bank Rate (per cent)	0.7	1.9	3.4
Sterling ERI ^(d)	80.9	84.0	85.3

Source: Projections of outside forecasters as of 29 April 2009.

(a) For 2010 Q2, there were 19 forecasts for CPI inflation, GDP growth and Bank Rate and 16 for the sterling ERI. For 2011 Q2, there were 17 forecasts for CPI inflation and GDP growth, 16 for Bank Rate and 13 for the sterling ERI. For 2012 Q2, there were 16 forecasts for CPI inflation, GDP growth and Bank Rate and 13 for the sterling ERI.

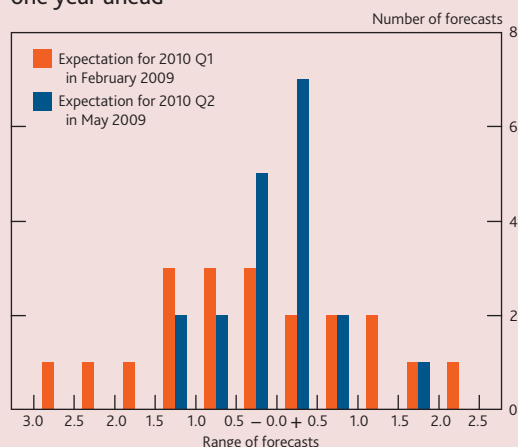
(b) Twelve-month rate.

(c) Four-quarter percentage change.

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

In the previous survey, carried out during January, the range of forecasters' central projections for four-quarter GDP growth a year ahead had been particularly wide. By contrast, a modal projection re-emerged in the latest survey (**Chart A**). The

Chart A Distribution of GDP growth central projections one year ahead



Sources: Four-quarter GDP growth forecasts of 20 outside forecasters as of 28 January and 19 outside forecasters as of 29 April 2009.

range of central views about the outlook for CPI inflation in a year's time was also a little narrower than at the time of the February Report.

External forecasters continue to think, however, that there are significant risks around their central projections for both CPI inflation and GDP growth (**Table 2**). Despite an average central projection of below-target inflation in 2010 Q2, on average respondents thought that there was around a 25% chance that inflation would be at, or above, target instead. Expectations were similarly diverse for both 2011 Q2 and 2012 Q2 (**Chart B**). Although forecasters' central projections were, on average, for broadly flat output in the year to 2010 Q2, they attached a slightly larger probability to growth being above 1% than to it being below -1%.

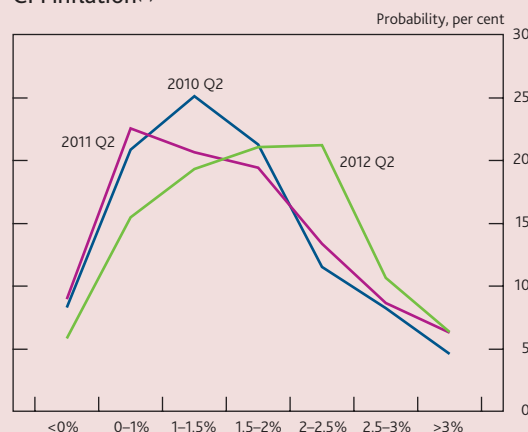
Table 2 Other forecasters' probability distributions for CPI inflation and GDP growth^(a)

CPI inflation							
Probability, per cent	Range:						
	<0%	0–1%	1–1.5%	1.5–2%	2–2.5%	2.5–3%	>3%
2010 Q2	8	21	25	21	12	8	5
2011 Q2	9	23	21	19	13	9	6
2012 Q2	6	16	19	21	21	11	6
GDP growth							
Probability, per cent	Range:						
	<-1%	-1–0%	0–1%	1–2%	2–3%	>3%	
2010 Q2	15	33	31	14	4	2	
2011 Q2	4	10	20	29	24	13	
2012 Q2	3	7	15	24	29	22	

Source: Projections of outside forecasters as of 29 April 2009.

(a) For 2010 Q2, 19 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 2011 Q2, 17 forecasters provided assessments for CPI and GDP; for 2012 Q2, 16 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 Other forecasters' probability distributions for CPI inflation^(a)



Source: Projections of outside forecasters as of 29 April 2009.

(a) Nineteen forecasters provided their assessments for 2010 Q2, 17 for 2011 Q2 and 16 for 2012 Q2.

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Text of Bank of England press notice of 5 March 2009

Bank of England reduces Bank Rate by 0.5 percentage points to 0.5% and announces £75 billion Asset Purchase Programme

The Bank of England's Monetary Policy Committee today voted to reduce the official Bank Rate paid on commercial bank reserves by 0.5 percentage points to 0.5%, and to undertake a programme of asset purchases of £75 billion financed by the issuance of central bank reserves.

World activity continued to weaken, reflecting both depressed confidence and the persistent problems in international credit markets. In the United Kingdom, output dropped sharply in the fourth quarter of 2008. That reflected lower consumer spending, a further fall in business investment and a rapid run-down in stocks, in part offset by stronger net exports as the past depreciation of sterling began to take effect. Business surveys continue to point to a similar rate of contraction in the early part of this year. Unemployment has risen markedly. Credit conditions faced by companies and households remain tight.

CPI inflation declined to 3.0% in January. The depreciation of sterling is adding to imported cost pressures, but pay pressures continue to wane. Inflation is likely to fall below the 2% target by the second half of the year, reflecting diminishing contributions from retail energy and food prices and the impact of the temporary reduction in Value Added Tax.

At its March meeting, the Committee noted that the February *Inflation Report* had implied a substantial risk of undershooting the 2% CPI inflation target in the medium term and that a further easing in monetary policy was likely to be needed. Data released since the finalisation of the *Report* had not materially altered that prospect. Accordingly, the Committee concluded that a further easing in the stance of monetary policy was warranted. But the Committee also noted that a very low level of Bank Rate could have counter-productive effects on the operation of some financial markets and on the lending capacity of the banking system. On balance, the Committee decided to reduce Bank Rate by 0.5 percentage points, to 0.5%.

The Committee judged that this reduction in Bank Rate would by itself still leave a substantial risk of undershooting the 2% CPI inflation target in the medium term. Accordingly, the Committee also resolved to undertake further monetary actions, with the aim of boosting the supply of money and credit and thus raising the rate of growth of nominal spending to a level consistent with meeting the inflation target in the medium term.

To that end, and noting the recent exchange of letters between the Governor and the Chancellor of the Exchequer concerning the use of the Asset Purchase Facility for monetary policy purposes, the Committee agreed that the Bank should, in the first instance, finance £75 billion of asset purchases by the issuance of central bank reserves. The Committee recognised that it might take up to three months to carry out this programme of purchases. Part of that sum would finance the Bank of England's programme of private sector asset purchases through the Asset Purchase Facility, intended to improve the functioning of corporate credit markets. But in order to meet the Committee's objective of total purchases of £75 billion, the Bank would also buy medium and long-maturity conventional gilts in the secondary market. It is likely that the majority of the overall purchases by value over the next three months will be of gilts.

At its future meetings, the Committee will monitor the effectiveness of this purchase programme in boosting the supply of money and credit and in due course raising the rate of growth of nominal spending, adjusting the speed and scale of purchases as appropriate.

The minutes of the meeting will be published at 9.30 am on Wednesday 18 March.

Text of Bank of England press notice of 9 April 2009

Bank of England maintains Bank Rate at 0.5% and continues with £75 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 the programme, announced on 5 March, of asset purchases totalling £75 billion financed by the issuance of central bank reserves.

The Committee noted that since its previous meeting a total of just over £26 billion of asset purchases had been made and that it would take a further two months to complete that programme.

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

Text of Bank of England press notice of 7 May 2009

Bank of England maintains Bank Rate at 0.5% and increases size of Asset Purchase Programme by £50 billion to £125 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 continue with its programme of asset purchases financed by the issuance of central bank reserves and to increase its size by £50 billion to a total of £125 billion.

The world economy remains in deep recession. Output has continued to contract and international trade has fallen precipitously. The global banking and financial system remains fragile despite further significant intervention by the authorities. In the United Kingdom, GDP fell sharply in the first quarter of 2009. But surveys at home and abroad show promising signs that the pace of decline has begun to moderate.

CPI inflation was 2.9% in March, significantly higher than the 2% inflation target. Past falls in sterling have continued to put upwards pressure on inflation. But the degree of spare capacity in the economy has increased and the loosening in the labour market has contributed to a sharp easing in pay pressures. CPI inflation is likely to drop below the 2% target later this year, driven in part by diminishing contributions from food and energy prices. The substantial margin of spare capacity in the economy should continue to bear down on inflation thereafter.

The Committee noted that the outlook for economic activity was dominated by two countervailing forces. The process of adjustment in train in the UK economy, as private saving rises and banks restructure their balance sheets, combined with weak global demand, will continue to act as a significant drag on economic activity. But pushing in the opposite direction, there is considerable economic stimulus stemming from the easing in monetary and fiscal policy, at home and abroad, the substantial depreciation in sterling, past falls in commodity prices, and actions by authorities internationally to improve the availability of credit. That stimulus should in due course lead to a recovery in economic growth, bringing inflation back towards the 2% target. But the timing and strength of that recovery is highly uncertain.

In the light of that outlook and in order to keep CPI inflation on track to meet the 2% inflation target over the medium term, the Committee judged that maintaining Bank Rate at 0.5% was appropriate. The Committee also agreed to continue with its programme of purchases of government and corporate debt financed by the issuance of central bank reserves and to increase its size by £50 billion to a total of £125 billion. The Committee expected that it would take another three months to complete that programme, and it will keep the scale of the programme under review.

The Committee's latest inflation and output projections will appear in the *Inflation Report* to be published on Wednesday 13 May.

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

Glossary and other information

Glossary of selected data and instruments

AEI – average earnings index.

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.

RPIX – RPI excluding mortgage interest payments.

Abbreviations

A8 Accession countries – the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

APF – Asset Purchase Facility.

APS – Asset Protection Scheme.

BCC – British Chambers of Commerce.

CBI – Confederation of British Industry.

CIPS – Chartered Institute of Purchasing and Supply.

EU – European Union.

FTSE – Financial Times Stock Exchange.

G20 – The Group of Twenty Finance Ministers and Central Bank Governors.

GfK – Gesellschaft für Konsumforschung, Great Britain Ltd.

IMF – International Monetary Fund.

MPC – Monetary Policy Committee.

MSCI – Morgan Stanley Capital International Inc.

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.

RICS – Royal Institution of Chartered Surveyors.

SPV – special purpose vehicle.

S&P – Standard & Poor's.

VAT – Value Added Tax.

WEO – IMF *World Economic Outlook*.

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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