



Inflation Report

May 2006

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/2006.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/2006.htm.

Overview

Over the past six months, output growth has recovered to near its long-term average rate and surveys point to further strengthening. Household consumption growth seems to have slowed in the first quarter. Business investment has been weak, but surveys suggest that a pickup is in the offing. And demand growth in the main UK export markets looks to have firmed. In the Committee's central projection, under the assumption that official interest rates follow a path implied by market yields, GDP growth remains close to its historical average.

With unemployment continuing to rise, pay pressures remained muted. But energy prices rose further and import price inflation picked up. CPI inflation edged down to 1.8% in March. In the central projection, inflation moves above the 2% target in the near term and then drops back to around the target. The risks to growth and inflation are broadly balanced.

Domestic demand

Consumers' expenditure recovered through 2005 as real post-tax labour income growth picked up. Retail sales fell back in the first quarter, suggesting only moderate growth in total consumption, though surveys indicate that retail spending may have picked up since. Real incomes are likely to be squeezed in the near term by higher utility prices and taxes, but past increases in equity prices and the continuing revival in the housing market should provide some offsetting support to consumption. Overall, household expenditure is projected to grow at a little below its post-war average.

Recent outturns for government spending have been slightly stronger than anticipated, while the level of planned spending for future years was marginally reduced in the Budget. Together, these imply that the public sector will make a diminished contribution to demand growth over the forecast period.

Official estimates suggest that business investment weakened in the fourth quarter. Capital expenditure is reported to have been relatively subdued in the past couple of years, despite buoyant corporate cash flow, falling capital goods prices and a low cost of finance. That may reflect some combination of muted demand prospects, increased uncertainty following the rise in energy costs, the diversion of internal finance to reduce pension fund deficits and the allocation of capital spending overseas. It is also possible that the present vintage of data may underestimate spending over this period. Recent survey

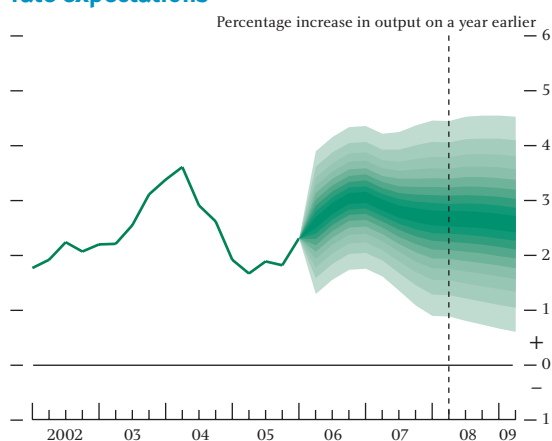
indicators suggest that a modest pickup in business investment may be in prospect.

External demand and net trade

Despite the drag from high oil prices, the global economy continued to expand at a robust pace, with signs that a more even pattern of growth may be developing. Although output growth in the euro area faltered at the end of 2005, business surveys point to a pickup in the first part of this year, underpinned by recovery in Germany. Following a weak fourth quarter, GDP growth in the United States rebounded in Q1 and is likely to moderate to around trend for the rest of the year. The revival in Japan continued and vigorous expansion in the rest of Asia was maintained. Possibly reflecting the continuing strength in global growth, long-term real interest rates edged up, though they remained low by historical standards. The Committee expects strong growth in world trade to be sustained over the forecast period.

Net trade made a broadly neutral contribution to UK output growth in 2005. Intense competition from low-cost producers in Asia and Eastern Europe is likely to continue to bear down on the market share of UK exporters and to raise import penetration. But robust global growth will stimulate exports and recent surveys suggest that foreign orders have picked up. Overall, net trade is expected to provide a modest boost to UK GDP growth over the forecast period.

Chart 1
Current GDP projection based on market interest rate expectations



The fan chart depicts the probability of various outcomes for 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 GDP growth over the subsequent three years would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outturns of GDP growth are also expected to lie within each pair of the lighter green areas on 10 occasions. Consequently, GDP growth is expected to lie somewhere within the entire fan chart on 90 out of 100 occasions. The bands widen as the time horizon is extended, indicating the increasing uncertainty about outcomes. See the box on pages 48–49 of the May 2002 *Inflation Report* for a fuller description of the fan chart and what it represents. The dashed line is drawn at the two-year point.

The outlook for GDP growth

Following a soft patch at the start of 2005, output growth has recovered to around its long-term average. In the first quarter, GDP is provisionally estimated by the ONS to have increased by 0.6%, the same as in the previous quarter. Manufacturing output picked up and business services remained buoyant, but sectors more dependent on consumption slowed. Business surveys point to a strengthening of growth in the second quarter.

Under the assumption that official interest rates follow a path implied by market yields, the MPC's central projection is for output to continue rising steadily at a rate close to its historical average. Steady growth in consumer spending, a modest recovery in investment and a small boost from net trade offset slower growth in public expenditure. Chart 1 shows the resulting outlook for four-quarter GDP growth, which continues to edge up in the near term as the period of weak growth in 2005 drops out of the annual comparison. The profile is slightly weaker than in February.

Costs and prices

Business surveys and reports from the Bank's regional Agents suggest that capacity pressures within firms eased during 2005, but there are signs that these have troughed. The labour market has also slackened over the past year, with an easing in employment growth and an increase in labour force participation leading to a modest rise in unemployment. However, surveys of employment intentions suggest that this period of loosening may soon be at an end.

Energy prices have risen further. Spot oil prices touched a record high, partly reflecting disruptions to production in Nigeria and concerns about potential supply in the Middle East. The futures curve suggests that oil prices may remain elevated into the medium term. Wholesale gas prices have been volatile since the *February Report*, and remain somewhat higher than a year ago. Although efforts to increase the capacity to supply gas to the domestic market are under way, the short-term prospect for gas prices remains uncertain.

There is little sign yet that the past increases in energy prices have led to greater pay pressures. Settlements edged down and regular pay growth was flat, though other labour costs rose, partly as a result of increased pension contributions. But surveys suggest that the public's inflation expectations moved up, possibly prompted by the announcement of higher prices for domestic energy.

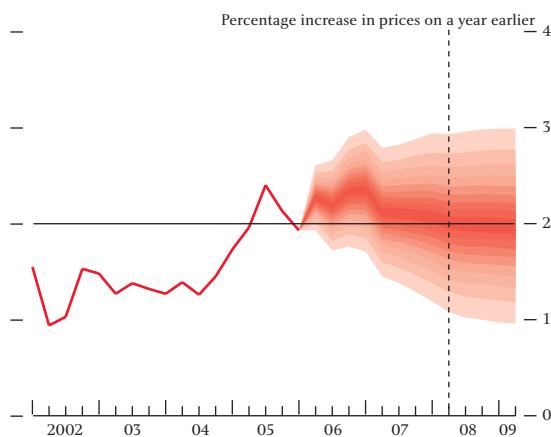
Import price inflation rose to its highest rate for five years, reflecting both the impact of higher energy prices and increased global capacity pressures. If oil prices stabilise, then import price inflation can be expected to fall back.

CPI inflation has been close to the 2% target in recent months, easing slightly to 1.8% in March. The latest increases in energy prices are likely to push inflation back above the target in the short term. The extent to which the presently subdued rate of inflation in the non-energy components of the CPI will persist once the temporary influence from higher energy prices abates remains a source of considerable uncertainty.

The outlook for inflation

Chart 2 shows the Committee's assessment of the outlook for CPI inflation, also assuming that official interest rates move in line with market yields. Under the central projection, inflation rises in the near term, reflecting higher energy and import costs. As energy and import price inflation ease, so CPI inflation falls back to around the 2% target. Compared with February, the profile is higher in the first part of the projection

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



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

and similar thereafter. Some members judge that the central projection is a little higher; others that it is a little lower.

As usual, there are substantial risks surrounding the central projections. These include, in particular: the outlook for spending by households and businesses; the prospects for world activity; the evolution of energy and import prices; the extent of wage and price inertia; and the margin of spare capacity. There is a range of views among members, but the Committee judges that, relative to the central projection, the overall risks to growth and inflation are broadly balanced.

The policy decision

At its May meeting, the Committee noted that the central projection under market rates was for output growth to remain close to its long-term average and for inflation to settle around the target in the medium term. In the light of this outlook, and bearing in mind the balance of risks, the Committee judged that no change in the repo rate was necessary to keep inflation on track to meet the target in the medium term.

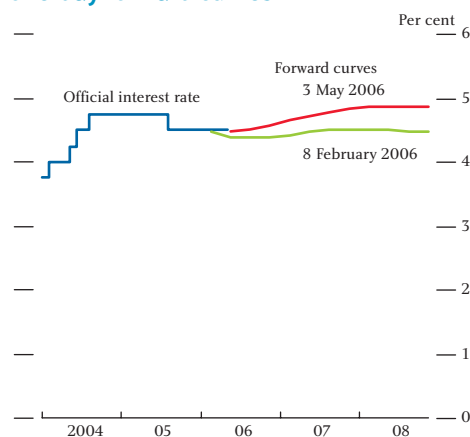
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The MPC has left official interest rates unchanged since the February Report. Both short and long-term interest rates rose over the past three months. But the level of long-term real interest rates remained low, both in the United Kingdom and abroad. Equity prices rose and the housing market revival continued. Broad money growth remained strong. Banks and building societies selectively tightened credit conditions on unsecured lending. The corporate sector recorded another financial surplus in 2005.

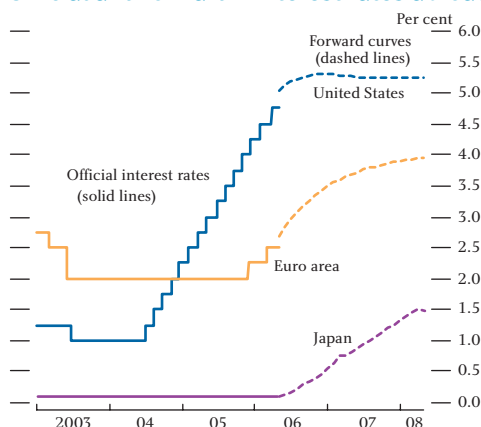
Chart 1.1
Bank of England official interest rate and one-day forward curves^(a)



Sources: Bank of England and Bloomberg.

(a) Forward rates are interest rates expected to prevail in a future period. They are derived from instruments that settle on the London interbank offered rate (Libor). That includes market rates on short sterling futures, swaps, interbank loans and forward rate agreements. The forward curves shown in the chart are fifteen-day averages of one-day forward rates. The curves have been adjusted for credit risk.

Chart 1.2
Official and forward^(a) interest rates abroad



Sources: Bank of England and Bloomberg.

(a) These are one-month forward rates. The US, euro-area and Japanese curves have been derived from instruments that settle on dollar Libor, Euribor and yen Libor respectively. These curves have not been adjusted for credit risk.

1.1 Asset prices

Short-term interest rates

The MPC has left official interest rates unchanged during the past three months. A summary of the reasons for the MPC's policy decisions since the February Report is provided in the box on page 4.

Short-term forward rates provide a guide to market expectations about the future path of monetary policy. Market interest rates have risen since February. In the run up to the MPC's decision in May, forward rates suggested that market participants expected the policy rate to increase to 4.75% in the next twelve months or so (Chart 1.1).

In the United States, the FOMC continued to tighten policy, raising official interest rates by 0.25 percentage points to 4.75%. In the euro area, the ECB increased interest rates by the same amount to 2.5% (Chart 1.2). Market participants expected further policy tightening in both economies. The Bank of Japan ended its policy of quantitative easing and announced that an inflation range of around 0%–2% was consistent with its view of medium to long-term price stability. Although the Bank of Japan left the policy rate unchanged, market participants expected interest rates to rise over the next two years. The removal of monetary accommodation around the world has been prompted by continued strong growth and rising inflationary pressure.

Long-term interest rates

Long-term real interest rates around the world also moved up during the past three months (Chart 1.3). However, they remained low by recent historical standards. Previous Reports

Monetary policy since the February Report

The MPC's central projection in the February *Inflation Report*, under the assumption that official interest rates followed a path implied by market yields, was for four-quarter GDP growth to move slightly above its historical average as the quarters of weak growth in 2005 dropped out of the annual calculation. In the third year of the projection, GDP growth was then expected to ease back towards its long-term average rate. CPI inflation was projected to remain close to the 2% target throughout the forecast period.

At the time of the Committee's meeting on 8–9 March 2006, equity prices had continued to rise and asset prices remained supportive of a strengthening in economic activity. The latest indicators of overseas economic activity seemed consistent with further robust global growth throughout the first half of 2006, while output indicators suggested that GDP growth in the United Kingdom would be above trend in 2006 Q1. There had been little evidence of second-round effects on earnings growth from the rise in energy prices. But retail gas prices were set to rise by more than previously assumed.

For most members, the evidence warranted no change in the repo rate. Growth had recovered from the trough at the beginning of 2005 and was now close to its historical average. There was some, but not much, spare capacity in the economy. And inflation was close to target. The outlook was, on balance, for continued growth near trend and inflation close to target.

For one member, there was a case for an immediate reduction in the repo rate. Business surveys, the recent rise in unemployment and the relative weakness of GDP growth during much of the past 18 months pointed to a degree of spare capacity in the economy. It was unlikely that this spare capacity would diminish as much as envisaged in the central projection of the February *Inflation Report* and it seemed likely that inflation would fall below target once the effects of higher energy prices had dropped out of the year-on-year calculations.

Given these considerations, eight Committee members voted to maintain the repo rate at 4.5%.

One member preferred a reduction in the repo rate of 25 basis points.

At the time of the MPC meeting on 5–6 April 2006, interest rates had risen internationally and at all maturities. But equity prices had risen strongly, house price inflation remained at a quarterly rate of around 2% and the exchange rate had depreciated by over 1%. These asset price movements were likely to be supportive of UK demand growth. The international economy continued to be relatively strong. And abstracting from erratic quarterly movements, it seemed that both GDP and consumption in the United Kingdom had grown around trend in the past couple of quarters. Consumer price inflation was little changed on the month, although inflation expectations had picked up in recent surveys.

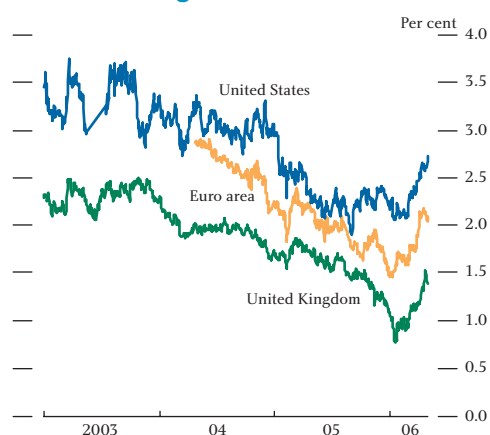
Overall, the Committee agreed that the news on the month did not significantly change the outlook for the economy. For most members, the recent data suggested that output had continued to grow at or around its trend rate. Inflation was likely to remain close to target, with some upside risks in the near term related to recent increases in energy prices. In light of those considerations, it was appropriate to leave the repo rate unchanged.

For one member, there remained a case for the repo rate to be 25 basis points lower. The data continued to suggest that there was a degree of spare capacity in the economy, particularly in the labour market. Permanent income would be adversely affected by higher energy prices and a rising effective tax rate, so consumption growth was unlikely to pick up. There was no evidence of any second-round price effects from higher energy prices. Inflation was therefore likely to fall modestly below the target as the first-round effects dropped out of the annual rate.

Seven Committee members voted to maintain the repo rate at 4.5%. One member preferred a reduction in the repo rate of 25 basis points.

At its meeting on 3–4 May, the Committee also voted to maintain the repo rate at 4.5%.

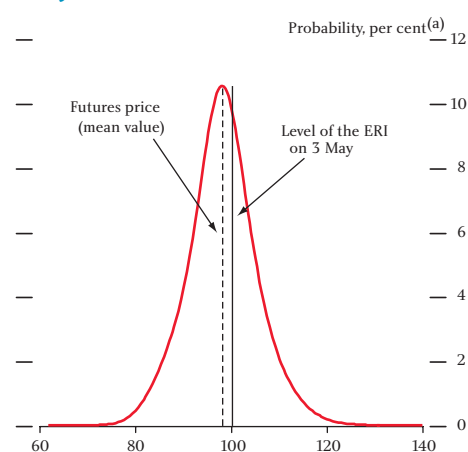
Chart 1.3
Global real long-term interest rates^(a)



Sources: Bank of England and Bloomberg.

(a) Nine-year instantaneous forward rates. The US real interest rate is derived from government bonds which are linked to CPI. The euro-area real interest rate is derived from nominal government bond yields and CPI inflation swaps. The UK real interest rate is derived from government bonds linked to RPI. CPI and RPI-based measures of real interest rates are not strictly comparable, as the inflation rates are constructed differently.

Chart 1.4
Market beliefs about the sterling ERI in two years' time



Sources: Bank of England calculations and Bloomberg.

(a) Probability of the sterling ERI being within ± 0.5 units of any given level. For example, the probability of the ERI being at 100 (between 99.50 and 100.50) in two years' time is around 10%. Those probabilities have been derived from information in currency options. See footnote (2) on this page for further details.

have discussed reasons why long-term interest rates have been so low.⁽¹⁾ They include: higher levels of desired saving; a dearth of investment opportunities; increased global liquidity; greater risk appetite; and higher demand by pension funds for long-dated bonds. It is possible that some of those factors have unwound in recent months. For example, market participants may expect lower global liquidity growth on the back of recent or anticipated global monetary policy tightening.

Exchange rates

In the fifteen working days to 3 May, the sterling effective exchange rate (ERI) averaged 98.9, down 0.4% on the equivalent period used in the *February Report*. Since the substantial appreciation in 1996 and 1997, both the nominal and real sterling effective exchange rates have moved within a relatively narrow range. During that period, the UK current account deficit has widened (the box on pages 16–17 discusses some aspects of that widening). There is a possibility that any rebalancing of the economy will be associated with a depreciation in the sterling exchange rate. According to information from currency options, financial markets expect sterling to depreciate a little over the next two years (Chart 1.4). But the risks around that futures price appear broadly balanced. In other words, market participants believe that a large rise in the exchange rate is as likely as a large fall.⁽²⁾

The dollar effective exchange rate depreciated by over 1% during the past three months, and has depreciated by around 25% since its peak in February 2002. That may be related to market participants' concerns over the size of the US current account deficit.

Equity prices

International equity prices continued to rally. Most of the major indices troughed in 2003, but are now close to, or at, the previous peaks reached in 2000. In the United Kingdom, the FTSE All-Share averaged 3091 in the fifteen working days to 3 May. That was 6.1% higher than the equivalent period three months ago.

Equity prices should reflect the value that investors place on the flow of dividend payments that they expect to receive in the future. That depends on future earnings, real interest rates and a risk premium to compensate investors for uncertainty about future equity returns. Since the beginning

(1) See pages 5 and 6 and the box on page 7 of the February 2006 *Inflation Report*, and the box on pages 6 and 7 of the May 2005 *Inflation Report*.

(2) This calculation assumes that investors are risk-neutral. For more details, see Clews, R, Panigirtzoglou, N and Proudman, J (2000), 'Recent developments in extracting information from options markets', *Bank of England Quarterly Bulletin*, February, pages 50–60.

Table 1.A
Housing market indicators^(a)

	Average since 2000	2004		2005		2006	
		H2	H1	H2	Q1	Apr.	
<i>Activity</i>							
Mortgage approvals (000s) ^(b)	319	262	272	327	350	n.a.	
RICS sales to stocks ratio ^(c)	0.43	0.38	0.28	0.31	0.35	n.a.	
RICS new buyer enquiries ^(d)	-3	-20	-5	16	12	n.a.	
HBF net reservations ^(e)	0	-31	-41	-3	14	n.a.	
HBF site visits ^(e)	-7	-30	-34	-19	-3	n.a.	
<i>Prices</i>							
House price inflation ^(f)	1.0	0.4	0.1	0.6	0.8	1.1	
RICS price expectations ^(g)	13	-19	-25	9	24	n.a.	

Sources: Bank of England, Halifax, Home Builders Federation (HBF), Nationwide and Royal Institution of Chartered Surveyors (RICS).

- (a) All series are averages of monthly net percentage balances unless otherwise stated.
 (b) The quarterly number of loan approvals for house purchase based on monthly data.
 (c) Ratio of sales recorded during the past three months relative to the level of stocks on estate agents' books at the end of the month.
 (d) Compared with previous month.
 (e) Compared with a year ago. These data have been seasonally adjusted by Bank staff.
 (f) Average monthly house price inflation, based on the Halifax and Nationwide house price indices.
 (g) Change expected over the next three months.

of 2003, UK dividend payments have increased by about 30%. Long-term interest rates have fallen by nearly 1 percentage point, even allowing for their recent rise (Chart 1.3). And the equity risk premium is likely to have declined too.⁽¹⁾ Those developments would have boosted equity prices.

The housing market

The revival in the housing market has continued since the *February Report*. Most indicators of activity along the house purchase timeline — running from first enquiry to completion — have risen (Table 1.A).⁽²⁾ The table also shows that monthly house price inflation has risen, averaging 0.9% a month so far this year.

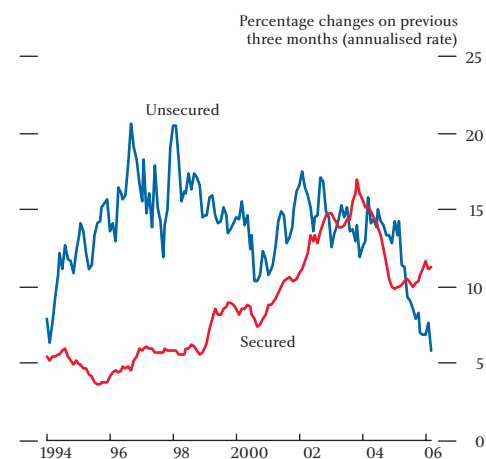
1.2 Money, credit and balance sheets

Monetary aggregates

Growth in the quantity of notes and coin, having drifted lower during the past two years, has risen in recent months. In April, the annual growth rate stood at 5.4%.

While movements in notes and coin may serve as a coincident indicator of household spending, trends in the growth of broad money provide information about the medium-term outlook for nominal demand. Growth in broad money has risen sharply during the past two years (Chart A in the box on page 7). In large part, that reflects a build-up of deposits by non-bank financial organisations (other financial corporations — OFCs), though growth in household and corporate deposits has also been strong. The current strength of M4 growth might imply an increase in medium-term inflationary pressures, irrespective of the sector that is building up deposits. The box on page 7 uses statistical evidence to assess that risk.

Chart 1.5
Net lending to individuals



Households

Growth in households' secured borrowing has generally edged higher during the past year (Chart 1.5). That pickup in growth is consistent with the recovering housing market. In contrast, unsecured borrowing growth has eased over that period.

One possible reason for the slowdown in unsecured lending growth is that lenders have tightened credit conditions for some borrowers, perhaps in response to higher levels of default on unsecured debt and personal insolvency. As discussed in the box on pages 8–9, lenders appear to have

(1) See the box on page 7 of the February 2006 *Inflation Report* for a discussion of why risk premia may have fallen in recent years.

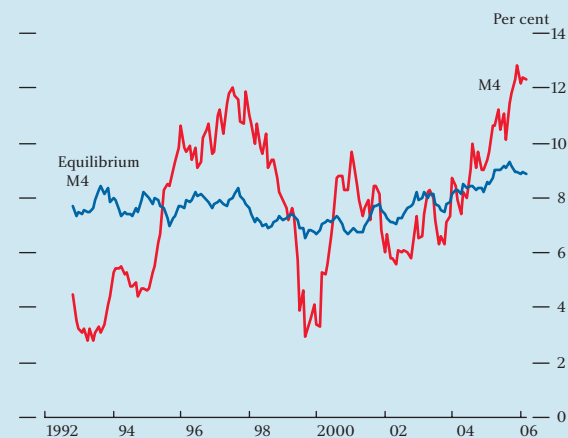
(2) See page 6 of the November 2004 *Inflation Report* for a description of the house purchase timeline.

Estimates of excess broad money growth

Broad money growth has risen during the past two years. That could imply future inflationary pressures if that growth were higher than a long-run sustainable or 'equilibrium' rate. This box presents one estimate of equilibrium money growth, and assesses its usefulness in identifying inflationary pressures.

There are several ways to estimate equilibrium money holdings. One approach is to use statistical techniques to filter out the noisy or transitory components from the data. Chart A shows broad money growth and an estimate of equilibrium money growth using such a statistical technique.⁽¹⁾ The chart suggests that broad money growth is currently well above its equilibrium rate. That excess money growth could indicate building inflationary pressures.

Chart A
Annual broad money growth and an estimate of its equilibrium rate^(a)



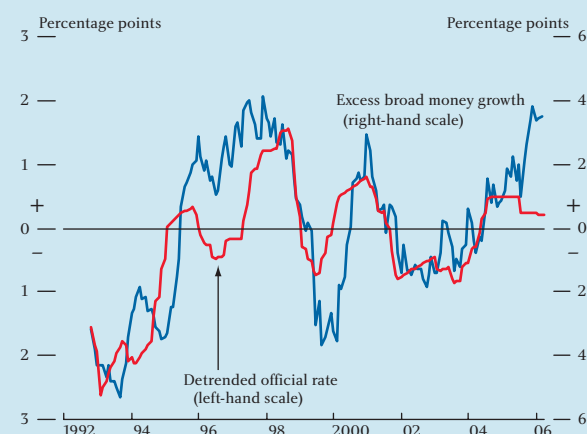
(a) The equilibrium estimate is derived from a multivariate statistical filter as outlined in the paper cited in footnote (1) below. This technique uses information from the money data themselves as well as other variables which are related to broad money.

A disadvantage of this approach is that it is entirely data-driven — it is not based on the underlying economic relationship between money, nominal demand and inflation.⁽²⁾

Moreover, statistical tests suggest that previous episodes of monetary growth in excess of its equilibrium have not been a good predictor of inflation. But such tests can be misleading. If these estimates did contain information about future inflation, the monetary authorities could use that information to adjust policy, by raising interest rates to keep inflation under control. In that case, there would be no apparent relationship between estimates of excess monetary growth and future inflation.

Since the beginning of the inflation-targeting era in 1992, estimates of excess money growth and official interest rates have been related, though by no means perfectly (Chart B). That could indicate that policymakers have at times reacted to the information contained in that estimate, or to other information that correlates well with excess money growth. Whatever the reason, this leaves open the possibility that estimates of excess money growth may contain useful information about future inflationary pressure.

Chart B
Estimates of excess broad money growth^(a) and the detrended official interest rate^(b)



(a) Actual M4 growth less the equilibrium estimate of M4 growth in Chart A.
(b) The official rate has been detrended using a Hodrick-Prescott (HP) filter so that it is conceptually comparable with excess money estimates. The HP filtering has been implemented as suggested in Ravn, M and Uhlig, H (2002), 'On adjusting the Hodrick-Prescott filter for the frequency of observations', *Review of Economics and Statistics*, Vol. 84(2), May, pages 371–76.

(1) The technique employed is based on a filter described in Forni, M, Hallin, M, Lippi, M and Reichlin, L (2000), 'The generalized dynamic-factor model: identification and estimation', *Review of Economics and Statistics*, Vol. 82(4), August, pages 540–54.

(2) For a structural approach to modelling broad money and inflation, see Hauser, A and Brigden, A (2002), 'Money and credit in an inflation-targeting regime', *Bank of England Quarterly Bulletin*, Autumn, pages 299–307, and Thomas, R (1996), 'Understanding broad money', *Bank of England Quarterly Bulletin*, May, pages 163–79.

Personal insolvency

Personal insolvencies have risen sharply over the past few years. This box explores the characteristics of insolvency regimes across the United Kingdom, why insolvencies have risen and the impact of insolvency on the wider macroeconomy.

Insolvency regimes

Insolvency regimes differ across the United Kingdom. In England and Wales, insolvencies are comprised of bankruptcies and individual voluntary arrangements (IVAs). Bankruptcy is the legal means through which individuals are relieved of their debts, and creditors can claim debtors' assets or some of their income. Restrictions apply to the bankrupt before they are freed, or 'discharged', from bankruptcy.⁽¹⁾ An IVA is an alternative to bankruptcy. It is a formal agreement where debtors agree to repay a proportion of their debts, but do not lose control of their assets. IVAs normally last for about three to six years.

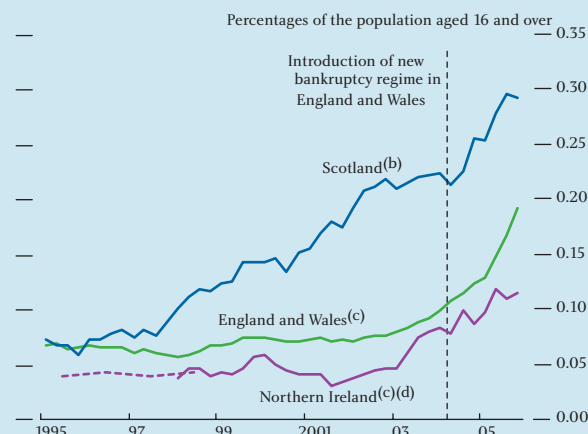
Legislation enacted in April 2004 (Enterprise Act 2002) reduced the period of automatic discharge from bankruptcy to one year from three years. However, that legislation also stiffened the penalties for debtors going bankrupt through wilful or reckless behaviour.

In Scotland, there has been no recent change to the regime governing insolvencies.⁽²⁾ In March 2006, legislation was enacted to bring the regime in Northern Ireland closer into line with that currently operating in England and Wales.

Why have insolvencies increased?

Chart A shows that insolvencies have risen throughout the United Kingdom. Growth in household debt has been very strong over the past decade. So the increase in insolvency may be related to there being more borrowers, as well as rising individual debt burdens. However, insolvency is only likely to have affected limited groups of vulnerable households, such as those with few assets, but a large amount of unsecured debt. Mortgage arrears have remained very low in recent years, so the pickup in insolvencies does not appear to have been primarily driven by

Chart A
Insolvencies in the United Kingdom^(a)



Sources: Bank of England calculations, Department of Enterprise, Trade and Investment Northern Ireland, Department of Trade and Industry, Insolvency Service and ONS.

- (a) Annualised rate based on the quarterly flows unless otherwise stated.
- (b) Sequestrations and protected trust deeds. These are equivalent to bankruptcies and IVAs. Data have been seasonally adjusted by the Bank of England.
- (c) Bankruptcies and IVAs.
- (d) From 1998 the annualised rate is based on quarterly flows (solid line). Prior to that annual data are used (broken line). The quarterly data have been seasonally adjusted by the Bank of England.

households experiencing problems with secured debt.

Legislative changes may also be behind the most recent spate of insolvencies. The insolvency rate in England and Wales has doubled over the past two years — coinciding with the introduction of the new bankruptcy regime there (Chart A). One possibility is that the new regime is perceived as more debtor friendly, and that has led to an increase in debtors (rather than creditors) petitioning for bankruptcy. The data for England and Wales confirm that the bulk of the rise in bankruptcies reflects higher debtor petitions.

But the impact of the legal changes should not be overstated. The number of new IVAs in England and Wales (which accounted for about 30% of all new insolvencies in 2005) has more than trebled since the beginning of 2004, even though the Enterprise Act left the regime governing those insolvencies unchanged. Moreover, Chart A also shows that insolvencies have accelerated in Scotland and Northern Ireland where, over that period, there had been no change in regime.

(1) For example, they cannot apply for credit for amounts greater than £500 without declaring their bankruptcy, or manage a limited company without permission from the courts. Moreover, in practice their access to banking services may be restricted.
 (2) The Scottish Executive has, however, published a draft bill on reform of bankruptcy and diligence. For details of the reform see www.aib.gov.uk/policy/policy.html.

The impact of insolvency on spending

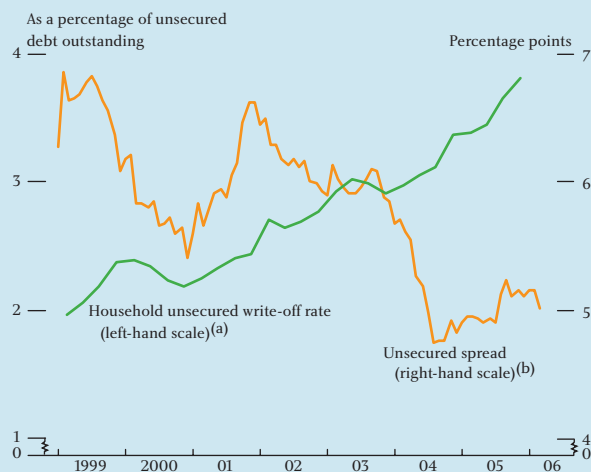
Insolvency can affect the spending of a range of different households. First, it could change the spending behaviour of the insolvent themselves. Insolvency offers a means by which households can protect their spending in the event that their debt obligations become overwhelming. So, in the short term, insolvency could help support a household's spending.

However, over the medium term, insolvency might act as a drag on such households' spending. That is because insolvency normally stays on a person's credit record for six years. So those individuals might find it hard to access credit, even after they were discharged from bankruptcy.

Banks are also likely to tighten credit conditions more generally in response to losses incurred from insolvency. So other households' spending may be affected too. Chart B shows that there has been an increase in write-offs on unsecured debt, which currently account for 99% of all household debt written off.

Partly in response to this, the major lenders have indicated that they have tightened credit access to some groups of individuals — notably younger

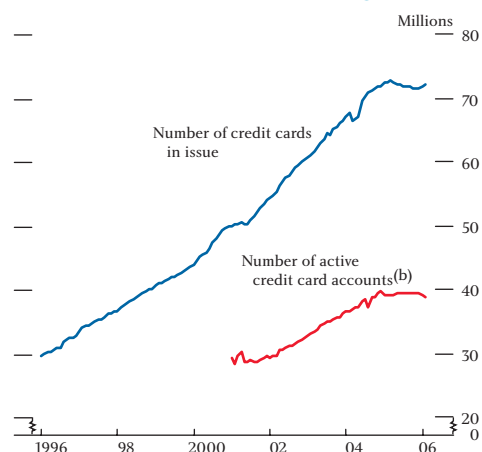
Chart B
The household unsecured write-off rate and the spread between the effective unsecured lending rate and the official rate



(a) Annualised rate based on quarterly debt write-off flows.
(b) Measured as the unsecured effective rate less the official interest rate.

borrowers and the highly indebted. The lenders have also increased the interest rate charged to some individuals. But, as Chart B shows, the overall spread on the unsecured effective rate has only increased slightly during the past 18 months compared with the increase in the write-off rate. That suggests that the direct impact of higher insolvency on credit conditions has been small.

Chart 1.6
Credit cards^(a) in the United Kingdom



Source: British Bankers' Association.

(a) Mastercard and Visa only. There is a break in these series in June 2004 due to the inclusion of a new card issuer.
(b) An active account is defined as one which has an outstanding balance.

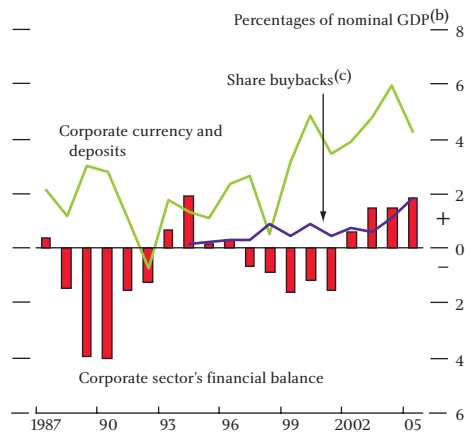
limited the availability of unsecured credit to certain groups of borrowers perceived to be a high risk. That chimes with other information on the supply of unsecured credit. For example, the number of credit card balance transfers has fallen over the recent past, perhaps indicating that lenders have reduced the attractiveness of those deals. And the number of credit cards in issue — having risen during the past decade — was broadly flat in 2005 (Chart 1.6).

It is also possible that the appetite of some consumers for unsecured borrowing has diminished. That could have occurred if consumers had become more worried about future prospects. Consistent with that, households' worries about unemployment appear to have risen over the past year (Chart 4.7). Section 2 assesses other evidence on the state of household balance sheets and its impact on consumer spending.

Companies

Despite a pickup in profits in the oil sector, growth in UK corporate profits eased back in 2005. However, profits after

Chart 1.7
The corporate sector^(a) financial balance
and some selected financial counterparts



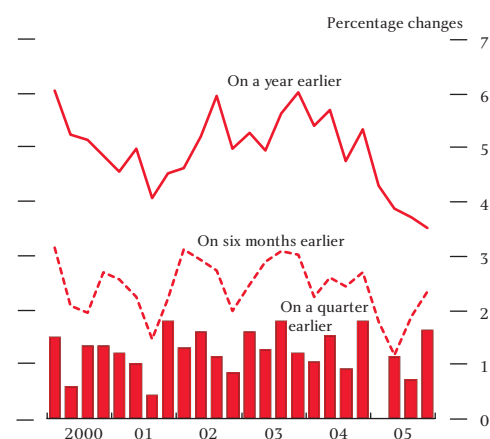
(a) Private non-financial corporate sector.
 (b) At market prices.
 (c) Data for share buybacks before 1994 are unavailable.

deducting running costs, taxes, and dividend payments continued to exceed capital investment. So, for the fourth consecutive year, the corporate sector registered a financial surplus (Chart 1.7).

The National Accounts provide a breakdown of how companies have used their surpluses. Some companies have been accumulating deposits. Another part of the overall surplus reflects companies returning funds to shareholders through share redemptions (Chart 1.7). Companies have also increased pension contributions to plug their pension fund deficits (Section 4). But the rising financial surplus does not reflect that. That is because the financial balance is measured after employers' pension fund contributions have been deducted. Section 2 discusses why companies have bought back shares, as well as the weakness of investment more generally.

GDP growth recovered in the second half of 2005. A broad range of indicators points to a slowdown in consumption growth in 2006 Q1, following robust growth in the previous quarter. Business investment is estimated to have remained weak, but surveys suggest that a pickup is in the offing. Demand growth in the main UK overseas markets appears to have firmed and surveys suggest that export orders have picked up. In 2005 net trade made a broadly neutral contribution to UK GDP growth.

Chart 2.1
Nominal GDP^(a)



(a) The level of nominal GDP in 2005 Q3 and the rate of growth in Q3 and Q4 were distorted by the impact of Hurricane Katrina on the value of insurance services; for more details see pages 12–13 of ONS (2005), *2005 Q3 Quarterly National Accounts*. The rate of growth on six months ago therefore provides a more reliable gauge of the recent growth in nominal GDP at the end of 2005 than the rate of growth on a quarter earlier.

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

Percentage changes on a quarter earlier

	2004		2005			
	H1 ^(b)	H2 ^(b)	Q1	Q2	Q3	Q4
Household consumption ^(c)	1.2	0.6	0.0	0.2	0.5	0.8
Government consumption	0.2	0.3	0.4	1.3	1.4	1.2
Investment	1.9	0.2	0.9	0.0	2.7	-0.5
Business investment	0.4	0.7	0.2	0.8	1.2	-0.9
Final domestic demand	1.1	0.5	0.2	0.5	1.0	0.7
Change in inventories ^{(d)(e)}	0.0	0.1	-0.4	-0.3	0.1	0.0
Alignment adjustment ^(e)	-0.2	0.1	-0.1	0.2	-0.1	-0.4
Domestic demand	0.9	0.7	-0.3	0.4	1.0	0.3
Exports	2.0	1.0	0.4	3.6	0.9	2.2
Imports	2.1	1.8	-1.3	2.7	2.3	1.0
Net trade ^(e)	-0.1	-0.3	0.5	0.1	-0.5	0.3
Real GDP at market prices	0.8	0.5	0.2	0.5	0.5	0.6

(a) Chained-volume measures.
(b) Averages of quarterly growth.
(c) Includes non-profit institutions serving households.
(d) Excludes the alignment adjustment.
(e) Percentage point contributions to quarterly growth of real GDP.

2.1 Nominal demand

Monetary policy affects the level of nominal demand for goods and services by influencing market interest rates, exchange rates and other asset prices. How that nominal demand affects the outlook for inflation depends on the economy's capacity to produce those goods and services.

Four-quarter growth in nominal GDP continued to ease in 2005 Q4 (Chart 2.1). But shorter-run measures pointed to a recovery in spending. Growth in nominal GDP over the second half of 2005 was broadly in line with the average rate since 2000.

2.2 Domestic demand

Growth in the volume of aggregate demand (real GDP) edged up in 2005 Q4 to 0.6% — its long-run average rate of growth. Real GDP was provisionally estimated to have risen by 0.6% again in 2006 Q1 (Section 3).

Consumption

Household spending recovered during 2005 (Table 2.A). The latest National Accounts provide data for consumer spending up to 2005 Q4 and suggest that consumption grew faster than its long-run average in that quarter. But a range of indicators points to a slowdown in household spending growth in early 2006.

The volume of retail sales fell by 0.7% in Q1. Business surveys and reports from the Bank's regional Agents also suggest that spending growth was weak. That weakness may simply reflect retail sales returning to more normal levels, following the unusually strong spending at the end of 2005 (Chart 2.2). But it is also possible that the unusually cold weather in early

Chart 2.2
Volume of retail sales

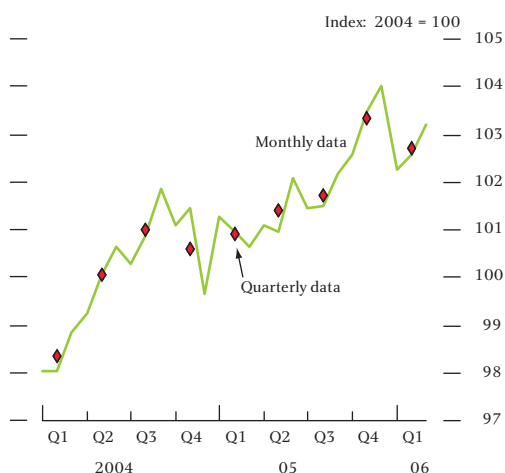
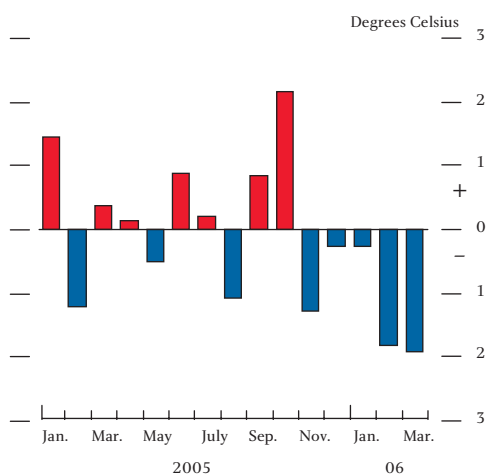


Chart 2.3
Monthly temperatures^(a) relative to their recent historical averages^(b)



Source: © Crown copyright 2006. Published by the Met Office.

- (a) These data refer to the average temperature in the Central England region in a particular month. Further information on these data are available at www.metoffice.com/research/hadleycentre.
- (b) Defined as the average temperature in a particular month over the ten years 1995–2004.

2006 (Chart 2.3) may have depressed spending, particularly on clothing and footwear.⁽¹⁾ Surveys for April are consistent with a slight pickup in retail sales.

Retail sales are a reliable guide to early ONS estimates of household spending on goods. But they are less useful as a guide to more mature estimates that incorporate information from other sources. So the retail sales data may provide an inaccurate indication of the slowdown in consumption that will eventually be captured in the National Accounts data.

The near-term outlook for consumer spending

The near-term outlook for consumer spending reflects a number of factors, including households’ income, the state of their balance sheets and developments in the housing market.

Growth in real households’ disposable income has been relatively subdued over the recent past, according to the latest official data (Chart 2.4). In late 2004 and early 2005, that reflected a pickup in consumer price inflation and an increase in effective tax rates. Since then, growth in real post-tax labour income has risen. But, in 2005 Q4, this was offset by a fall in property income.

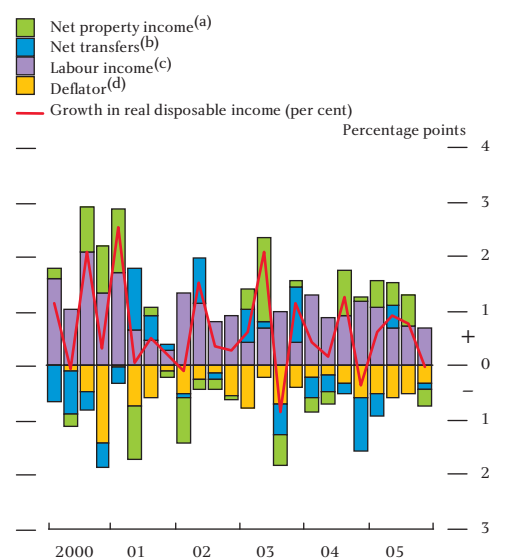
Movements in nominal income and consumer prices have been driven in part by shifts in the terms of trade. The terms of trade measure the price of UK exports relative to the price of UK imports. Higher export prices raise corporate revenues which boost households’ income and wealth, while lower import prices reduce the cost of living. So the sustained improvement in the terms of trade between 1995 and 2004 (Chart 2.5) boosted UK households’ purchasing power. But the terms of trade have deteriorated since 2004 and that may have curbed households’ spending power.

More recent data on employment and earnings suggest labour income growth was muted in early 2006 (Sections 3 and 4). Oil and gas price rises are likely to push up consumer prices in the coming months and that will reduce real disposable income growth. Furthermore, according to the Government’s projections, the share of national income paid in tax is set to rise over the next three years.⁽²⁾

The state of households’ balance sheets will also affect consumer spending as the net financial assets that the household sector owns represent an additional source of current and future spending power. Based on their current market value, the household sector’s financial assets are worth in excess of £3 trillion, compared with financial liabilities of

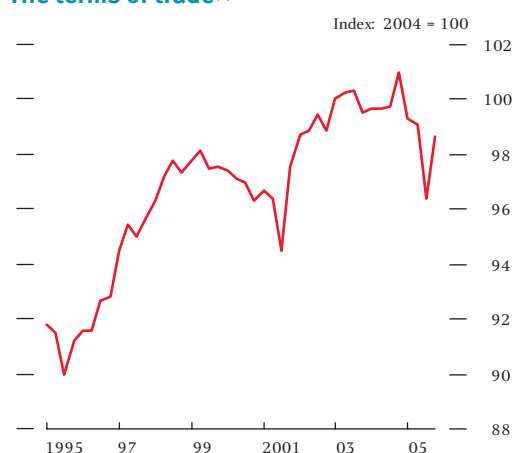
(1) See BRC/KPMG (2006), *Retail Sales Monitor*, March.
 (2) See HM Treasury (2006), *Financial Statement and Budget Report*, HMSO, available at www.hm-treasury.gov.uk/budget/budget_06/budget_report/bud_bud06_repindex.cfm.

Chart 2.4
Contributions to quarterly growth in households' disposable income



- (a) Net interest and rental payments plus imputed rents, distributed income of corporations and attributed property income of insurance policyholders.
 (b) Predominantly benefits received less taxes and social contributions paid by households.
 (c) Wages and salaries plus mixed income.
 (d) Final consumption expenditure deflator (includes non-profit institutions serving households).

Chart 2.5
The terms of trade^(a)



- (a) The price of UK exports of goods and services relative to the price of UK imports. The level of the terms of trade was affected by the impact of the terrorist attacks on 11 September in 2001 Q3 and by the impact of Hurricane Katrina in 2005 Q3 because these events affected the value of UK exports of insurance services.

Table 2.B
Government spending plans^(a)

£ billions

	Pre-Budget Report	Budget	Difference ^(b)
2004/05	487.3	491.0	1.2
2005/06	519.9	525.2	0.8
2006/07	550.1	552.3	-0.3
2007/08	580.1	582.8	-0.4

Source: HM Treasury.

- (a) Total managed expenditure.
 (b) The data have been adjusted for the change in the classification of the BBC licence fee, which is now treated as a tax, rather than as a service charge. As a result parts of the BBC, which were previously classed as being within the public corporations sector, are now treated as part of central government. This re-classification increases government receipts and expenditure by the same amount — assumed in these calculations to be £2½ billion per year. For more details, see page 268 of HM Treasury (2006), *Financial Statement and Budget Report*, HMSO.

around £1 trillion. Net financial worth increased by 15% between 2004 and 2005, which could have eased any pressure on households to save rather than spend their income. That could support future consumption growth.

Data on activity and prices suggest that the housing market has revived after a period of stagnation in late 2004 and early 2005 (Section 1). Developments in the housing market can influence consumer spending in a variety of ways, as previous *Reports* have discussed.⁽¹⁾ So the revival in the housing market should also support consumption.

Overall, the MPC judges that a period of moderate consumption growth is in prospect.

Government spending

The Government set out its latest fiscal and macroeconomic projections in the Budget. The MPC assumes that government spending will broadly follow the path described in those plans. Government spending has turned out a little stronger over the recent past than was anticipated at the time of the *Pre-Budget Report*. The current plans point to continued firm growth in government spending, but the level of spending is now projected to be slightly lower than at the time of the *Pre-Budget Report* (Table 2.B).

Investment

Official estimates suggest that whole-economy investment spending fell by 0.5% in 2005 Q4. Within that, both residential investment and spending by companies on capital goods fell. Government investment increased by 3.4%.

Business investment is reported to have risen only moderately in recent years. In part, that may be related to muted demand growth in the second half of 2004 and early 2005. But other factors may also have been important.

One factor that could have depressed capital spending is uncertainty, related perhaps to the recent increase in energy costs (Section 4). Large permanent changes in energy costs will encourage companies to shift towards more energy-efficient production techniques. But it is unlikely that companies would respond immediately to a large increase in energy costs. They might prefer to wait until they are reasonably sure that energy costs will not fall back. So the recent rise in energy costs could have depressed capital spending, although it may support investment in the future.

It is also possible that companies have been deterred from undertaking investment by the state of their balance sheets.

(1) See pages 13–14 of the February 2006 *Inflation Report*.

The corporate sector is highly geared by historical standards, as previous *Reports* have discussed. But there is little evidence that the level of corporate debt has acted as a brake on capital expenditure. Companies have not been paying an excessive fraction of their profits in debt-servicing costs. And if shareholders were uncomfortable with the level of corporate debt, it is not clear why companies have continued to borrow funds and not paid off debt.

Spending on capital goods could also have been weak because companies have spent money on other items. Dividends and share buybacks have increased over recent years (Section 1). The return of money to shareholders could reflect their concerns about corporate governance in the wake of the Enron scandal. Worries about pension fund deficits may also have depressed investment. Companies have made substantial contributions to their pension schemes over the recent past (Section 4).

It is possible that the recent weakness in business investment reflects increased outsourcing or investment overseas. Overseas investment is treated as a financial rather than a physical investment. But information from the corporate sector financial accounts implies that investment in financial assets (apart from bank deposits) abroad has not risen. It is less clear what role outsourcing has played, however.

Overall, there are a number of potential explanations why investment spending has been relatively subdued. But it is also likely that the data are not giving an accurate picture of the recent profile of investment. In the past, early estimates of investment have usually been revised upwards as new information arrived.⁽¹⁾ It is quite likely that the recent path of business investment will eventually be revised upwards.

Recent investment intentions surveys and other indicators of capital goods orders and production point to an acceleration in investment spending over the next year or so (Table 2.C).

Table 2.C
Survey data on investment intentions^(a)

	Average since 1997	2005				2006 Q1
		Q1	Q2	Q3	Q4	
BCC services	17	11	8	6	8	15
BCC manufacturing	10	10	9	9	8	15
CBI manufacturing	-13	-16	-15	-19	-14	-9
CBI distributive trades	-1	-18	-29	5	-8	-8

Sources: BCC and CBI.

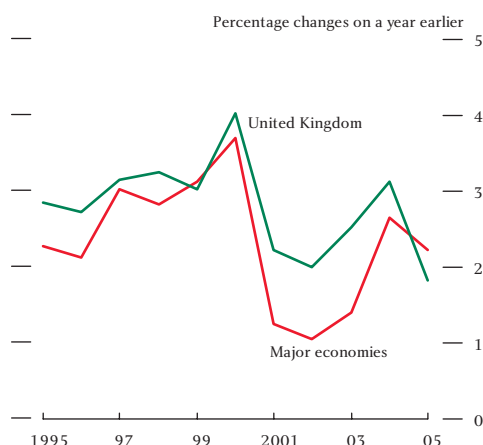
(a) Percentage balance of respondents. These data are not seasonally adjusted. For more details on these surveys see Barnes, S and Ellis, C (2005), 'Indicators of short-term movements in business investment', *Bank of England Quarterly Bulletin*, Spring, pages 30–38.

Inventories

The official estimates of GDP growth implied by raw data on expenditure tend to differ from those suggested by raw data on output. The ONS incorporates statistical alignment adjustments into the estimates of expenditure to ensure that the published path of spending tracks the path of output. The alignment adjustment reduced the recorded growth in aggregate demand in 2005 Q4 by 0.4 percentage points (Table 2.A). In other words, the raw data on expenditure suggest that GDP grew more rapidly at the end of 2005 than do the raw data on output.

(1) See Barnes, S and Ellis, C (2005), 'Indicators of short-term movements in business investment', *Bank of England Quarterly Bulletin*, Spring, pages 30–38.

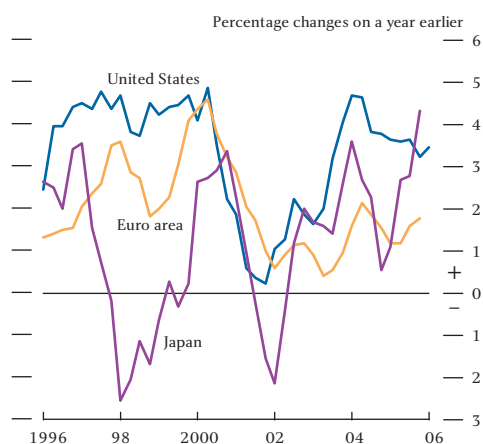
Chart 2.6
UK GDP and UK-weighted activity in the world's other major economies^(a)



Sources: ONS and Thomson Financial Datastream.

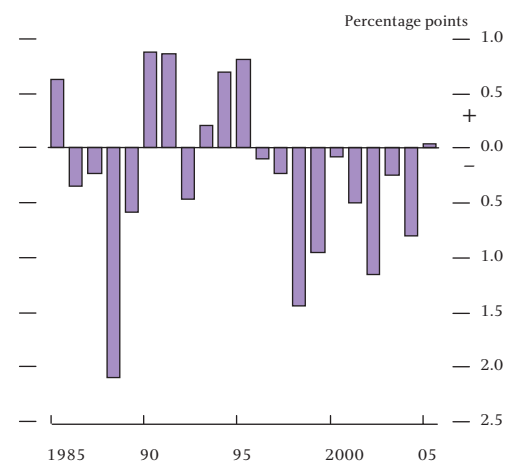
(a) Canada, France, Germany, Italy, Japan and the United States. National data are aggregated together using the *Pink Book* estimates of the share of UK exports accounted for by each country in 2002.

Chart 2.7
Activity in the United States, Japan and the euro area



Source: Thomson Financial Datastream.

Chart 2.8
Contribution of net trade^(a) to annual GDP^(b) growth



(a) These data strip out the estimated impact of VAT fraud from the headline trade data.
 (b) Chained-volume measure.

The alignment adjustment is attributed to stockbuilding as it is the component of expenditure that is hardest to measure precisely. These adjusted data suggest that companies ran down their stocks in 2005 Q4. That could have reflected companies' response to unexpectedly strong demand in 2005 Q4. If companies did reduce their stocks to meet demand in late 2005, they may have tried to rebuild them in early 2006.

2.3 External demand

Spending on UK exports accounts for over a quarter of UK GDP. So the UK economy will be directly affected by developments overseas (Chart 2.6).

The world

The euro area is the United Kingdom's largest trading partner, accounting for around one half of all UK exports. Growth in demand has been relatively subdued in the euro area in recent years (Chart 2.7). Euro-area GDP rose by only 0.3% in 2005 Q4. But survey data point to a pickup in euro-area activity in the first half of 2006. A weighted average of PMIs (survey indices of business conditions) points to robust growth and the German *Ifo Business Climate* survey reached a 15-year high in April.

Output growth appears to have recovered in the United States, after temporary weakness in 2005 Q4. US GDP rose by 1.2% in 2006 Q1. That recovery was supported by a bounceback in household spending. Looking ahead, output is likely to return towards its recent average rate of growth.

Japanese GDP rose by 1.3% in 2005 Q4, with net trade making the largest contribution to growth in over a decade. Data from the Tankan survey of business conditions point to further robust growth in Q1. In the rest of Asia, activity appeared to remain buoyant.

Net trade

According to the latest vintage of data, net trade boosted GDP growth by 0.3 percentage points in 2005 Q4 and made a broadly neutral contribution to GDP growth in 2005 as a whole (Chart 2.8). More timely data on trade in goods suggest that spending on both imports and exports increased sharply in early 2006, although part of that pickup may reflect an increase in fraud.⁽¹⁾ And recent surveys suggest a pickup in foreign orders for UK exports.

(1) For more details on how VAT fraud affects the trade data see pages 7–9 of ONS (2006), *UK trade February 2006*.

The current account and the United Kingdom's international investment position

The United Kingdom has run a current account deficit since 1984. Those deficits have led to a deterioration in the international investment position (the stock of external assets less liabilities). But despite estimated net external liabilities of almost 20% of GDP, UK residents enjoy net inflows of investment income. This box explores these data in greater detail.

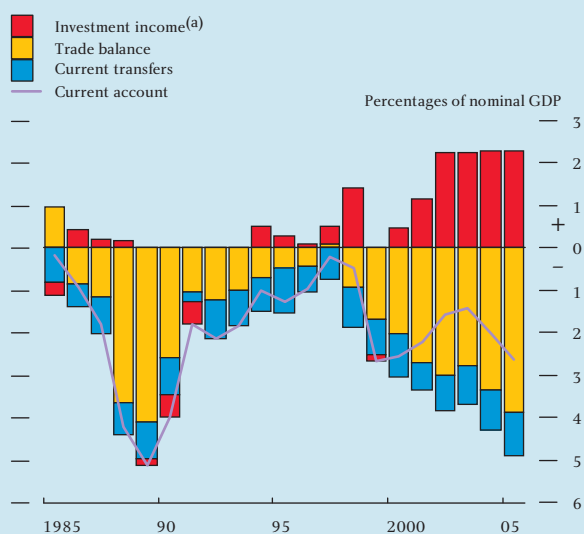
The current account

The balance of payments describes the value of transactions between households, companies and institutions based in the United Kingdom and those in the rest of the world. Those transactions are recorded on either the current or the financial account, depending on the nature of the transaction.⁽¹⁾ The value of the goods, services and incomes that flow into and out of the United Kingdom is described on the current account. And the financial account records the transfer of ownership of financial and physical assets.

The current account reflects the balance between the level of UK income and expenditure. For example, if the current account is in deficit, then UK residents are spending more on imports than the amount of income they receive from overseas purchases of UK exports, any net inflow of investment income and transfers from abroad. So if the current account is in deficit, UK residents will be either building up debts with foreign lenders or selling off foreign assets. And those transactions will generate an offsetting surplus on the financial account.

The United Kingdom ran a current account deficit of almost £32 billion in 2005. In nominal terms that was the largest deficit on record, although as a share of GDP, the deficit was significantly larger in the late 1980s (Chart A). Within the current account, UK spending on imports outstripped overseas spending on UK exports by around £47 billion. That deficit on trade was large in both nominal terms and as a percentage of GDP (Chart A). Current transfers — which include the UK government's net contribution to the European Union budget and the cash that migrants living in the United Kingdom send abroad — added a

Chart A
The current account



(a) Includes compensation of employees.

further £12 billion to the current account deficit. But those negative contributions from trade and current transfers were partly offset by significant net investment income. The net flows of interest payments and dividends have boosted the current account by over 2% of UK GDP for the past four years.

The international investment position

Official estimates imply that the United Kingdom is a net external debtor. In other words, the combined value of overseas claims on UK resources (UK external liabilities) exceeds the value of UK residents' claims on resources in the rest of the world (UK external assets) — by almost 20% of annual UK GDP. That primarily reflects the counterpart to cumulated deficits on the current account: the persistent transfer of ownership of assets overseas and the accumulation of external liabilities. But the net foreign asset position will also be affected by revaluations, that is changes in the value of assets and liabilities on the United Kingdom's external balance sheet.⁽²⁾

Given the state of its external balance sheet, it is perhaps surprising that the United Kingdom receives a net inflow of investment income. UK residents appear to earn a significantly higher rate

(1) There is a third account — the capital account — which records transfers of ownership of non-produced, non-financial assets (such as copyrights) and transactions by extra-territorial institutions (like embassies). The combined value of the credits and debits on the capital account is dwarfed by the corresponding transactions on the current and financial accounts.

(2) The sterling value of any item on the balance sheet can change either because its price changes (when measured in the currency in which it is denominated), or because the exchange rate moves (if the item is not denominated in sterling). For more details see Elliot, J and Wong Min, J (2004), 'The external balance sheet of the United Kingdom: recent developments', *Bank of England Quarterly Bulletin*, Winter, pages 485–94.

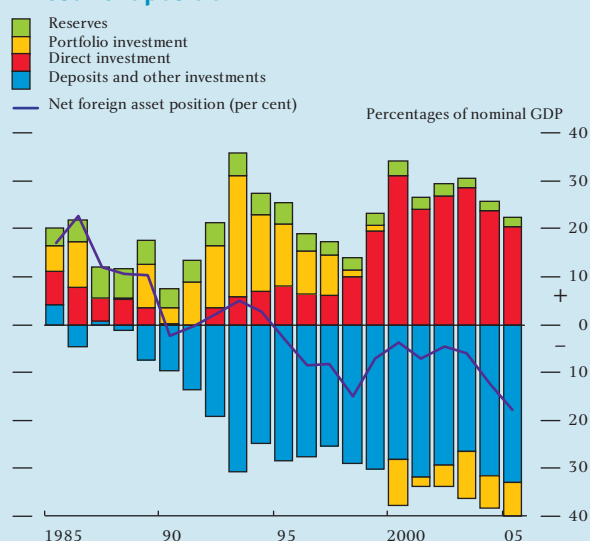
of return on their foreign assets than overseas residents earn on UK liabilities. What could explain that puzzle?

Most assets offer uncertain returns. The difference between the rate of return earned by UK and overseas residents could therefore simply reflect good luck. UK residents may have enjoyed unusually strong returns on the overseas assets in their portfolio. Investors may also demand an additional return — or risk premium — to hold assets which offer uncertain returns.⁽³⁾ So the difference in rates of return could also reflect greater uncertainty about returns on overseas assets, relative to those on UK assets. For example, investors may demand a larger expected return to hold bonds issued by companies and governments in the developing world than those issued in this country, if they believe that there is a higher probability of default on those overseas bonds. And if property rights are less well established in some countries, that would also lead UK residents to demand a higher rate of return on certain foreign direct investments (FDI).

The negative international investment position is largely driven by the large stock of deposits held in UK banks (Chart B). Overseas residents may have a motive for holding these assets over and above earning a return to fund future consumption — for example, these deposits may facilitate transactions in the UK financial system. In that case, overseas residents may be willing to accept a low return on these assets.

The flow of interest payments and dividends recorded in the current account captures only part of the return on an investment, because they should exclude any capital gain or loss.⁽⁴⁾ Overseas residents may have invested heavily in assets that have enjoyed significant capital gains, over and above any rental income or dividend payments recorded on the current account. And so their overall returns on their UK assets may not be significantly lower than UK returns on foreign assets.

Chart B
Contributions to the United Kingdom's international investment position



Finally, the puzzling size and direction of the net flow of investment income received by UK residents, given the state of the external balance sheet, may reflect mismeasurement. Some assets — and in particular direct investments in physical capital — are recorded at what is called 'book value', rather than the amount the owner would raise if they sold the asset. For example, when UK companies open a plant overseas, the data may only measure the value of the buildings and machinery the company has purchased. The data may not capture the valuable knowledge that the company uses to combine capital and labour overseas to produce output.

As a result of this mismeasurement, foreign direct investments are likely to generate surprisingly large returns given the measured book value of the investment. These assets appear on both sides of the United Kingdom's external balance sheet. But the value of FDI assets far exceeds that of the liabilities on the balance sheet. So if these assets were properly measured — at market value — then the United Kingdom's estimated international investment position would look healthier.⁽⁵⁾

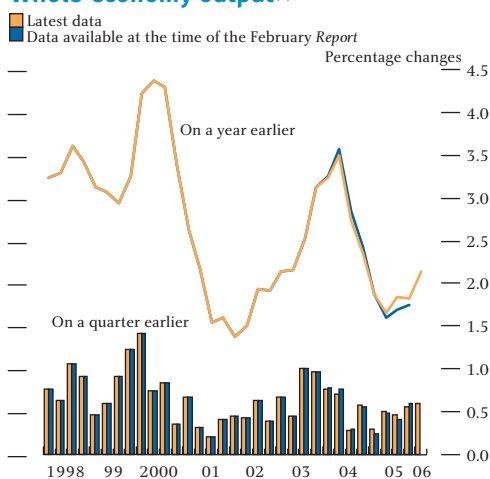
(3) See the box on page 7 of the February 2006 *Report* for a discussion of the economics of risk premia.

(4) See page 492 of Elliot, J and Wong Min, J (2004), 'The external balance sheet of the United Kingdom: recent developments', *Bank of England Quarterly Bulletin*, Winter, pages 485–94.

(5) See Nickell, S (2006), 'The UK current account deficit and all that', available at www.bankofengland.co.uk/publications/speeches/2006/speech271.pdf.

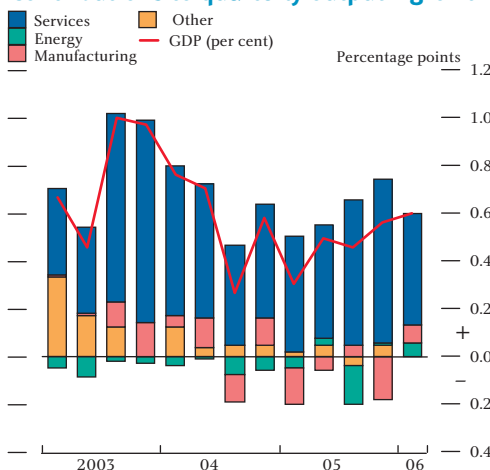
Whole-economy output growth remained around its historical average in 2006 Q1. Service sector growth slowed, driven by the weak performance of the distribution sector. But that was offset by a pickup in manufacturing output growth. Business surveys point to a strengthening of growth in the second quarter. Twelve-month employment growth continued to ease. Labour productivity increased sharply from its trough. The decline in capacity pressures within firms throughout much of 2005 appeared to end. The MPC judges that the degree of tightness in the labour market may have eased since the February Report.

Chart 3.1
Whole-economy output^(a)



(a) Chained-volume measure of gross value added at basic prices. 2006 Q1 data were unavailable at the time of the February Report.

Chart 3.2
Contributions to quarterly output^(a) growth



(a) Chained-volume measure of gross value added at basic prices.

3.1 Output

Whole-economy output, measured by the ONS as GDP at basic prices, was provisionally estimated to have increased by 0.6% in 2006 Q1. That was similar to the pace of growth in the previous quarter (Chart 3.1). The official data suggest that there has been a gradual increase in the quarterly growth of whole-economy output — and within that private sector output — since 2005 Q1.

Service sector output growth is estimated to have fallen back in 2006 Q1. But that was offset by a turnaround in the manufacturing sector (Chart 3.2). Developments in these sectors are discussed below.

Service sector

Service sector growth is estimated to have fallen at the beginning of 2006. The preliminary estimate of service sector output growth in 2006 Q1 was 0.6%, compared with 1.0% in the previous quarter. Business surveys had generally pointed to more rapid growth in early 2006 (Table 3.A).

Within services, output was estimated by the ONS to have grown at a rate reasonably close to historical norms in 2006 Q1 in all sectors except distribution (Table 3.B). Early official estimates are prone to revision as more information becomes available over time. But the apparent weakness of distribution sector output growth in early 2006 accords with other evidence, such as weak retail sales growth, falling distribution sector employment, reports from the Bank's regional Agents and survey evidence on consumer services.

The weakness of distribution sector growth in early 2006 may reflect the strength of growth at the end of 2005. Taking

Table 3.A
Surveys of service sector activity

	2005					2006	
	Average ^(a)	Q1	Q2	Q3	Q4	Q1	Apr.
CIPS/RBS business activity index ^(b)	56.0	56.0	55.8	55.5	56.6	57.7	59.7
BCC sales balance ^(c)	18	18	11	10	14	26	n.a.
CBI/Grant Thornton (business)	18	39	14	18	41	44	n.a.
CBI/Grant Thornton (consumer)	3	33	0	9	0	-10	n.a.

Sources: BCC, CBI/Grant Thornton and CIPS/RBS.

- (a) Average taken from 1996 for the CIPS survey, 1991 for the BCC survey, and 1998 for the CBI/Grant Thornton survey.
 (b) Quarterly data refer to the average of the three CIPS/RBS monthly indices. An index above/below 50 implies rising/falling activity.
 (c) Average of the 'home sales' and 'export sales' balances.

Table 3.B
Output of the service industries

Percentage changes on a quarter earlier

	Average	2005				2006
	1995-2004	Q1	Q2	Q3	Q4	Q1
Distribution, hotels and catering	0.8	-0.2	0.3	0.1	1.1	0.0
Business services and finance	1.0	0.9	0.8	1.1	1.1	0.9
Transport and communications	1.3	1.2	0.4	0.6	1.4	0.9
Government and other services	0.6	0.8	0.8	0.9	0.5	0.5

Chart 3.3
Manufacturing output and exports of goods^(a)

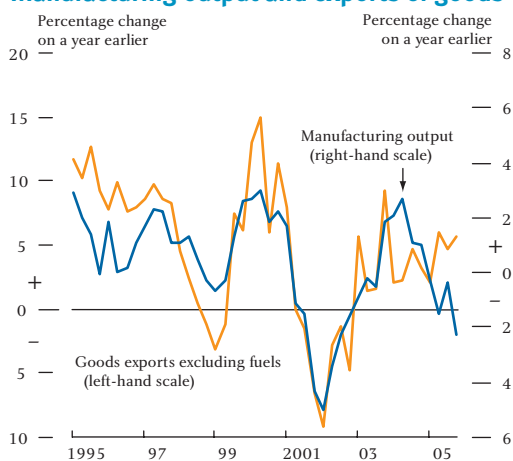
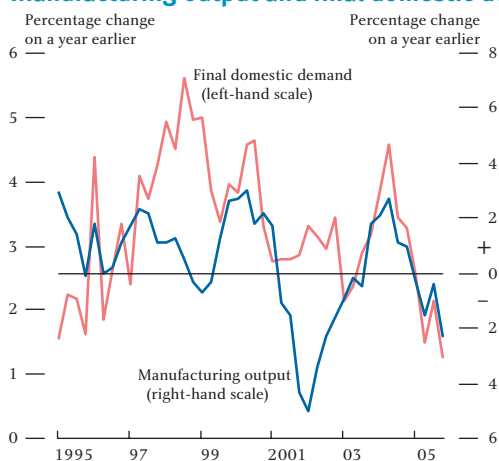


Chart 3.4
Manufacturing output and final domestic demand



2005 Q4 and 2006 Q1 together, distribution sector output grew more rapidly over the past six months than earlier in 2005, but at a rate below the average of the past decade.

Looking ahead, business surveys point to a strengthening of overall service sector growth in 2006 Q2. Within that, the prospects for the distribution sector are closely linked to the outlook for consumer spending (Section 2).

Manufacturing sector

The ONS provisionally estimates that manufacturing output growth picked up at the beginning of 2006 to a quarterly rate of 0.5%, well above its 2005 average of -0.6%.

Around half of UK manufacturing output is ultimately exported. So a potential explanation for the reported frailty of manufacturing output in 2005 is lower demand from overseas. Chart 3.3 shows the relationship between manufacturing output and exports of goods from the United Kingdom. While manufacturing output fell by more than 2% in the year to 2005 Q4, exports of goods rose. That suggests that the subdued performance of manufacturing in 2005 was not, in aggregate, export-led.

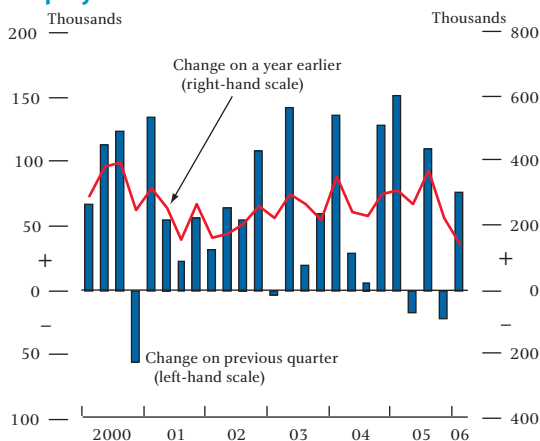
Instead, the weakness of manufacturing output during 2005 seems to be linked to the slowdown in domestic demand. Around one third of manufacturing output is consumed by UK households, and a further 10% takes the form of investment goods purchased by UK businesses. Chart 3.4 shows that the recent pattern of domestic demand growth was paralleled in manufacturing output. Survey evidence also suggests that sales and orders for the domestic market may have fallen by more than those for export in 2005. More recently, however, surveys have pointed to a recovery in domestic sales and orders.

Oil and gas

Oil and gas accounts for around 90% of output in the extraction sector. Output in that sector is estimated to have increased by 1.8% in 2006 Q1, following a rise of 0.8% in the previous quarter. Those were the first consecutive quarters of expansion since 2002. But the recent pattern of growth may be distorted by the unusual timing of infrastructure maintenance work in the North Sea. Over the past year as a whole, output fell by 5.4%, continuing the downward trend of the past six years.

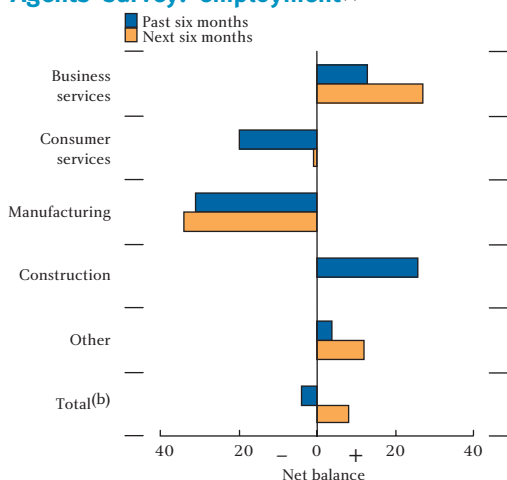
The trend decline in oil and gas output may moderate a little as recent increases in fuel prices should make extraction more profitable. Data from the DTI suggest that the number of oil wells on the UK Continental Shelf undergoing exploration

Chart 3.5
Employment^(a)



(a) Employment of those aged 16+ from the LFS are for non-overlapping quarters ending in February, May, August and November each year.

Chart 3.6
Agents' survey: employment^(a)



(a) Based on 224 responses from a survey of private sector companies by the Bank of England's regional Agents in February 2006, weighted by respondents' number of employees. Companies were asked what had happened to the number of their employees over the past six months, and what they expected to happen to employee numbers over the next six months.
(b) Excludes the public sector.

Table 3.C
Survey data on employment intentions

	Average 2000–06	2005				2006
		Q1	Q2	Q3	Q4	Q1
<i>Manufacturing balances</i>						
BCC ^{(a)(b)}	5	18	0	8	10	8
CBI ^(b)	-19	-15	-14	-15	-16	-15
<i>Services balances</i>						
BCC ^(b)	20	24	15	19	20	24
CBI/Grant Thornton ^(c) (consumer)	5	12	11	14	-16	1
CBI/Grant Thornton ^(c) (business)	15	28	23	6	12	27

Sources: BCC, CBI and CBI/Grant Thornton.

(a) Also includes agriculture, energy and construction.
(b) Seasonally adjusted by Bank staff.
(c) Not seasonally adjusted.

and appraisal was 30% higher in 2005 than in the previous year, while the number of wells in the development phase increased by 38%. But the absolute number of new wells under appraisal or development is not large by historical standards. And it is uncertain how quickly any new oil production can be brought on stream and how significant any extra supply might be.

3.2 Supply

Labour

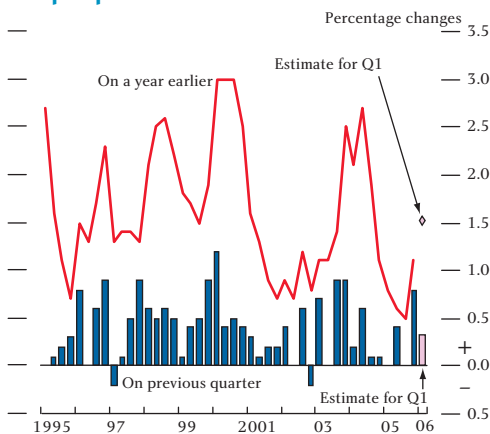
In the three months to February, total hours worked were 0.4% higher than a year earlier. Within that, average hours per worker were broadly unchanged. So the growth of total hours worked reflected a change in the number of people employed.

According to the household-based Labour Force Survey (LFS), the number of people employed rose by 76,000 in the three months to February compared with the previous three months (Chart 3.5). But that followed a fall of 22,000 in the previous non-overlapping quarter. Quarter-to-quarter movements in measured employment are volatile. Smoothing through that volatility, by considering changes on a year earlier, may give a better guide to underlying employment growth. Compared with a year ago, the number of people employed rose by 147,000, or 0.5% — only a little over a half of the average annual increase of the past five years.

The picture of a moderate softening in annual employment growth is supported by data from the employer-based Workforce Jobs Survey, which provides a breakdown of employment at a sectoral level. According to these data, the majority of the recent slowing in employment growth can be explained by the distribution sector (including hotels and restaurants), which employs around a quarter of the UK workforce. In the year to 2005 Q4, employment in that sector is estimated to have fallen by 1.1%. That is likely to be related to weak distribution sector output growth throughout much of 2005.

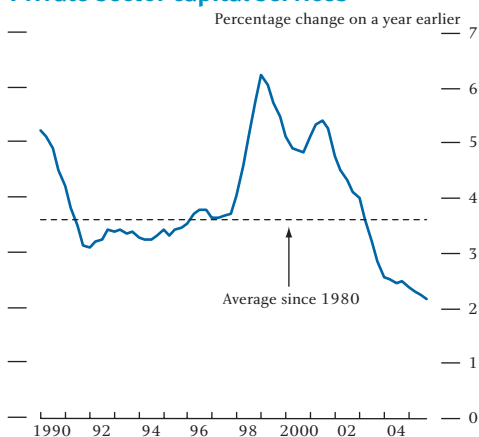
A survey by the Bank's regional Agents confirms that pattern of employment growth (Chart 3.6), with recent employment weakness attributed to the consumer services and manufacturing industries. Looking ahead, survey respondents expected the decline in consumer services employment to moderate. And the business services sector was expected to provide additional impetus to employment growth. The prospects for employment over the next six months consequently appeared more positive than the outturns over the previous six months. The sectoral picture from the Bank's Agents is consistent with other surveys of employment intentions (Table 3.C).

Chart 3.7
Output per worker^(a)



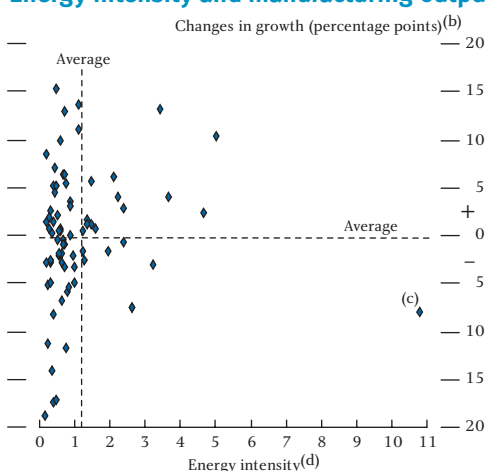
(a) The estimates for 2006 Q1 are constructed using the preliminary estimate of GDP, and the assumption that LFS employment in 2006 Q1 grows by the same quarterly rate as in the three months to February.

Chart 3.8
Private sector capital services^(a)



(a) See Oulton, N and Srinivasan, S (2005), 'Capital stocks, capital services, and depreciation: an integrated framework', *Bank of England Working paper no. 192*, for a discussion of how these data are constructed.

Chart 3.9
Energy intensity and manufacturing output^(a)



(a) Based on a division of manufacturing into 74 sectors. Data for some small manufacturing sub sectors are not available. Excludes petrol.
 (b) Change in average four-quarter growth between 1996 Q4–2003 Q4 and 2003 Q4–2005 Q4.
 (c) Fertilisers, which account for 0.1% of manufacturing output.
 (d) Oil and gas inputs as a proportion of total output. Bank estimates based on ONS data.

Productivity

Whole-economy output per worker increased by 0.8% in 2005 Q4 (Chart 3.7), as output picked up and employment growth eased. That is the highest quarterly rate of growth since the end of 2003.

As noted in the February *Report*, the weakness of productivity growth during much of 2005 may have reflected employers hoarding labour in the belief that the demand slowdown would prove short-lived. The acceleration of labour productivity at the end of 2005 is consistent with an unwinding of that labour hoarding as demand conditions improved.

It is also possible that another factor lay behind the weakness of labour productivity — the amount of capital that workers use to produce output. In judging productive potential, the most appropriate measure of capital is one that weights together assets by estimates of their contribution to output, a 'capital services' measure (Chart 3.8).⁽¹⁾ Bank estimates suggest that capital services have grown at below-average rates since the middle of 2003, which would have depressed labour productivity growth.

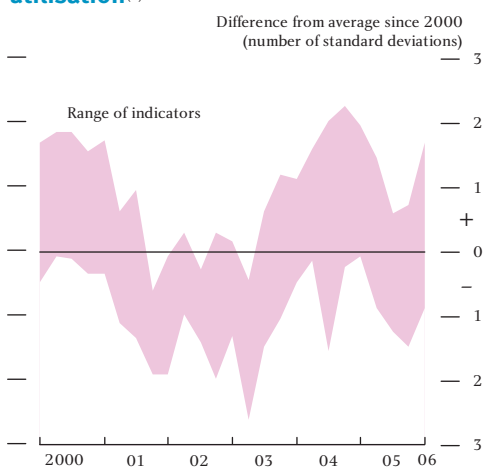
But measures of capital are highly uncertain. One uncertainty relates to the fact that, in the absence of robust quantitative estimates of scrapping, capital measures are constructed by cumulating past expenditure on investment goods and assuming that they depreciate evenly over time. So any scrapping or lower utilisation of energy-intensive capital that might have occurred as a result of high energy prices would not be captured in existing capital estimates. The measure of capital shown in Chart 3.8 could, therefore, overestimate the actual capital available to firms.

If higher energy prices had affected businesses' use of energy-intensive capital and hence their productivity, then the effects on output might have been most keenly felt in the more energy-intensive industries, typically within the manufacturing sector. However, there is little evidence to suggest that this has occurred. As energy prices rose in 2004 and 2005, different sectors' output performance appeared to be largely unrelated to their dependence on energy in production (Chart 3.9). And the Bank's regional Agents report that capital scrapping has not been widespread.

A second uncertainty relates to the investment data on which capital calculations are based. In February, the ONS set out

(1) See Oulton, N (2001), 'Measuring capital services in the United Kingdom', *Bank of England Quarterly Bulletin*, Autumn, pages 295–309.

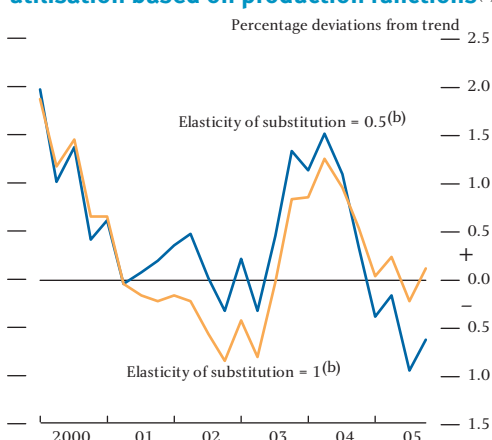
Chart 3.10
Survey measures of private sector factor utilisation^(a)



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

(a) Bank calculations based on the BCC survey balances for the manufacturing and service sectors, the CBI survey for the manufacturing sector, CBI/Grant Thornton surveys of the consumer and business services sectors, the CBI/PwC survey of the financial services sector and the Bank's regional Agents' scores for capacity pressure in the manufacturing and service sectors. The series have been subtracted by their respective means and divided by their standard deviations to normalise for volatility.

Chart 3.11
Illustrative measures of private sector factor utilisation based on production functions^(a)



(a) Data are to 2005 Q4. The capital input series is the private sector measure described in Chart 3.8. The labour input series is private sector hours worked.
 (b) The higher the elasticity of substitution, the easier it is for companies to switch capital for labour and vice versa. For more details on these production functions, see Ellis, C and Price, S (2003), 'The impact of price competitiveness on UK producer price behaviour', *Bank of England Working Paper no. 178*.

plans to revise its software investment data.⁽¹⁾ As yet it is unclear how the software revisions will affect capital estimates. But it is also quite likely that the estimated path of total business investment in recent years will eventually be revised upwards (Section 2.2). That would imply that capital growth has been more rapid — and less of a dampening influence on productivity growth — than suggested by Chart 3.8.

Overall, there are considerable uncertainties surrounding the measurement of capital and the impact of energy prices on the economy's productive potential. But the MPC judges that labour hoarding by employers is likely to explain the majority of the recent pattern of labour productivity growth.

3.3 Balance between output and potential supply

Factor utilisation

The intensity with which private sector businesses use capital and labour — factor utilisation — is a key element in the assessment of inflationary pressure. But the rate of factor utilisation is impossible to estimate with any precision, so the MPC reviews a range of indicators. Some of those indicators come from survey sources and the Bank's regional Agents. Chart 3.10 shows the range of the various survey indicators, adjusted for differences in their levels and volatility to make them comparable (see chart footnote).

Taken together, the surveys point to a fall in factor utilisation through most of 2005. But the majority of the surveys suggest a small increase in factor utilisation at the beginning of 2006. In order to gauge whether the economy is operating above or below 'normal' levels of factor utilisation, current survey data can be compared against a historical average. But that is sensitive to the choice of time period, and so can give a misleading impression of what is 'normal'. An alternative approach to assessing factor utilisation is to use a production function describing the relationship between the labour and capital inputs that firms use and their output.⁽²⁾ Measures of this kind are shown in Chart 3.11.

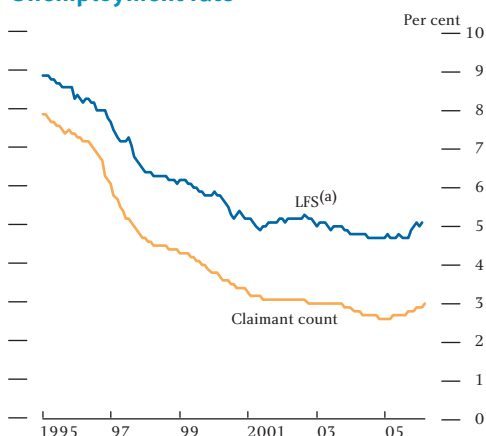
Overall, the MPC judges that factor utilisation fell during 2005, and now appears to be at, or slightly below, normal levels.

Labour market tightness

The balance between demand and supply in the labour market is another key determinant of inflationary pressure.

(1) Chamberlin, G and Chesson, A (2006), 'Survey-based measures of software investment in the UK', *Economic Trends*, No. 627.
 (2) See pages 24–25 of the February 2005 *Inflation Report*.

Chart 3.12
Unemployment rate



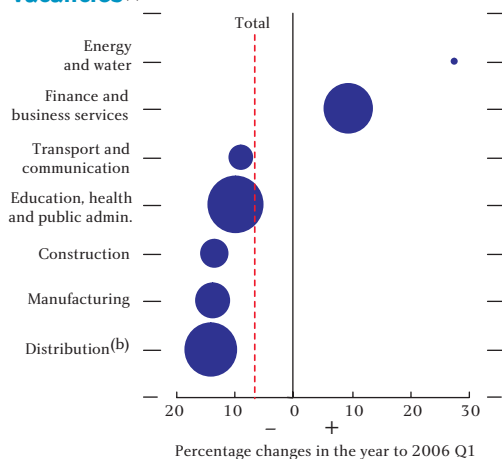
(a) Three-month moving average. This measure includes all those actively looking for work and available to start, and those due to start a new job in the next two weeks.

Chart 3.13
Job vacancies per unemployed person^(a)



(a) Number of job vacancies divided by the LFS measure of unemployment. Both series are three-month averages. Vacancies exclude agriculture, forestry and fishing.

Chart 3.14
Vacancies^(a)



(a) Vacancies data as defined in Chart 3.13. The areas of the circles on the chart are proportional to the level of employment in the respective sectors in 2005 Q4 as a share of total employment.
(b) Includes hotels and catering.

A commonly used gauge of labour market tightness is the unemployment rate. The LFS measure of all those unemployed as a proportion of the economically active rose to 5.1% in the three months to February, from 4.7% in the middle of 2005 (Chart 3.12). The claimant count measure of unemployment is based on a headcount of all those claiming unemployment benefits. On that measure, the unemployment rate has increased to a similar extent, but more gradually, from 2.6% in March last year to 3.0% in March 2006.

An alternative measure of labour market tightness is the number of job vacancies per unemployed person. This ratio can be interpreted as a comparison of the unsatisfied demand for labour with the available supply. That measure has declined since mid-2005 (Chart 3.13), indicating a looser labour market. But it appears to have levelled off in the most recent data. Official data suggest that vacancies themselves fell by 6.8% in 2006 Q1 compared with a year earlier. That was spread across most sectors (Chart 3.14), although vacancies in finance and business services rose — in line with that sector’s more robust recent output performance and the employment intentions expressed in the Bank’s regional Agents’ survey (Chart 3.6).

Interpreting the apparent easing in labour market tightness

The implications for inflation of the rise in unemployment and decline in vacancies depend crucially on their cause. One possibility is that the movements simply reflect lower demand for labour by firms in response to weak domestic demand at the end of 2004 and first half of 2005. If so, we might expect that to be associated with a dampening of wage growth and therefore inflation.

The increase in the unemployment rate may also reflect increased participation in the labour market since the middle of 2005. That increase has been especially pronounced among individuals over retirement age, perhaps related to concerns over the adequacy of their retirement income. The proportion of individuals over retirement age either in work or actively seeking it — the participation rate — increased by 0.7 percentage points in the three months to February compared with six months earlier. That was the largest half-yearly increase since the high-frequency LFS series began in 1992. Individuals over retirement age entering the workforce might be expected to put downward pressure on wages and inflation if they had not previously been looking for work and represented a genuine increase in the supply of labour.

But there may be other explanations for the apparent reduction in the degree of tightness in the labour market that

could have different implications for inflationary pressure. One explanation is less efficient matching between potential workers and job opportunities. That would not necessarily imply lower inflationary pressure. Less efficient matching might be related to the administrative problems in Jobcentre Plus offices highlighted in a recent report by the House of Commons Work and Pensions Committee.⁽¹⁾ But there is, as yet, little evidence on the size of the effect. And, as the report notes, employers placing vacancies at job centres have been content with the speed with which those vacancies have been filled with suitable workers.

The apparent easing in measures of labour market tightness might also be related to factors such as the deterioration in the terms of trade — the price of the United Kingdom's exports relative to its imports — and the increase in energy prices since 2004. These factors have reduced the purchasing power of workers' take-home pay relative to the costs faced by employers. In response, workers may have attempted to resist the erosion of their real wages. That would tend to cause the demand for labour to fall and unemployment to rise. But it would also push up on firms' costs, so the increase in unemployment may in fact be associated with increased inflationary pressure if businesses attempt to pass on higher labour costs in the prices that they charge consumers. In practice, earnings growth has remained subdued, but other labour costs — such as pensions contributions — have picked up (Section 4.2). And, overall, businesses' employment costs have risen a little more quickly since the start of 2005. That may indicate some degree of real wage resistance on the part of workers.

Table 3.D
Survey evidence on recruitment difficulties and labour shortages

	2005					2006	
	Average ^(a)	Q1	Q2	Q3	Q4	Q1	Apr.
<i>Availability of agency staff^(b)</i>							
KPMG/REC:	48.3	42.8	46.0	48.0	45.6	45.6	46.4
Permanent							
KPMG/REC:	49.1	46.4	49.1	50.6	48.8	51.5	50.2
Temporary							
<i>Recruitment difficulties^{(c)(d)}</i>							
BCC: manufacturing ^(e)	64	58	44	44	46	39	n.a.
BCC: services	60	64	63	58	61	62	n.a.
<i>Factors likely to limit output^{(c)(f)(g)}</i>							
CBI: skilled labour	12	11	11	16	10	15	n.a.
CBI: other labour	3	3	3	4	2	2	n.a.

Sources: BCC, CBI and KPMG/REC.

- (a) Averages are from 1995 apart from the KPMG/REC survey (October 1997).
 (b) Indices, for which 50 represents no change.
 (c) Data are not seasonally adjusted.
 (d) Percentage balance of firms.
 (e) Also includes agriculture.
 (f) Manufacturing sector.
 (g) Percentages (weighted by respondents).

Survey evidence provides mixed signals on whether the labour market has genuinely loosened. The availability of temporary staff is reported to have increased at the beginning of this year, but the availability of permanent staff is still declining (Table 3.D). Reported recruitment difficulties in the service sector have edged up fractionally since the second half of 2005, while the evidence on manufacturing firms' ability to recruit staff is inconclusive. Overall, however, the MPC judges that the degree of labour market tightness has continued to ease since the February Report.

(1) See House of Commons Work and Pensions Committee (2006), *The efficiency savings programme in Jobcentre Plus*, Second Report of Session 2005–06, Vol. 1, March.

Oil prices touched record highs. Gas prices rose sharply in mid-March. Though gas prices subsequently fell back, the futures curve in early May pointed to further increases later in the year. Import price inflation picked up, in part related to higher energy prices. Some measures of households' inflation expectations increased. But wage pressures were muted. CPI inflation fell to 1.8% in March, as non-energy price inflation remained subdued. Looking ahead, substantial increases in domestic gas and electricity prices, and the recent rise in petrol prices, are likely to boost CPI inflation in the near term.

4.1 Commodity prices

Oil prices

The dollar price of Brent crude reached \$66 on 1 February. It then fell back, but subsequently increased, to a new record level of \$74 on 2 May. The latest rise appeared to reflect disruptions to production in Nigeria and concerns about potential oil supplies from the Middle East. The oil price averaged \$72 in the fifteen working days to 3 May, 13% higher than at the time of the February Report.

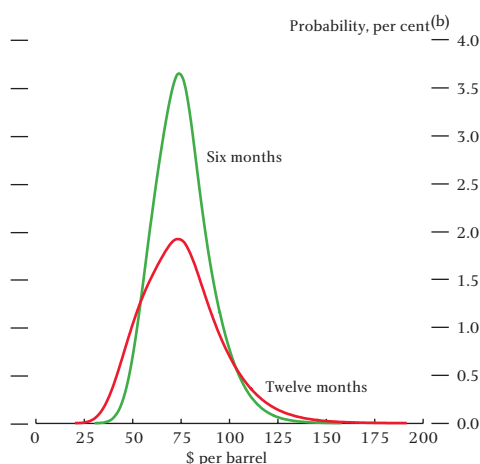
In early May, the futures curve pointed to the spot oil price remaining around current levels over the next few years. Prospects for the oil price are uncertain. But according to estimates derived from options prices,⁽¹⁾ financial market participants believed that the risks around the oil price were broadly balanced, both at the six and twelve-month horizons (Chart 4.1).

Gas prices

UK wholesale gas prices have been volatile since the February Report. On 13 March, they tripled. But they subsequently fell back sharply: by early May, wholesale gas prices were almost 40% lower than at the time of the February Report (Chart 4.2).

A number of factors lay behind this extraordinary volatility. Demand for gas is likely to have increased in the first half of March because of especially cold weather. There were also problems with gas supply, following a fire at the United Kingdom's main gas storage facility. And the problems

Chart 4.1
Market beliefs about oil prices six and twelve months ahead^(a)

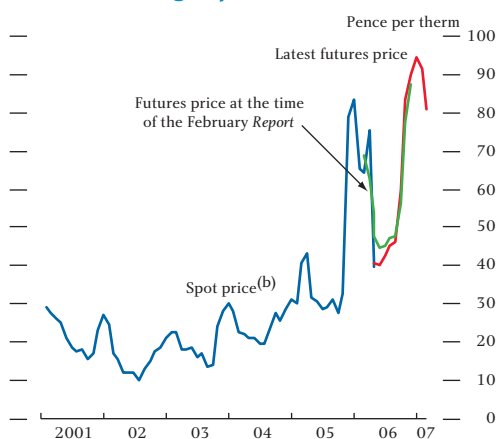


Sources: Bank of England, Bloomberg and New York Mercantile Exchange.

- (a) Data refer to the price of US light sweet crude oil on 3 May 2006.
 (b) Probability of the oil price being within +/- \$0.5 of any given price level. For example, the probability of the price of a barrel of oil being \$75 (between \$74.50 and \$75.50) in six months' time is around 3.6%. See footnote (1) on this page for more details.

(1) This calculation assumes that investors are risk-neutral. For more details, see Clews, R, Panigirtzoglou, N and Proudman, J (2000), 'Recent developments in extracting information from options markets', *Bank of England Quarterly Bulletin*, February, pages 50–60.

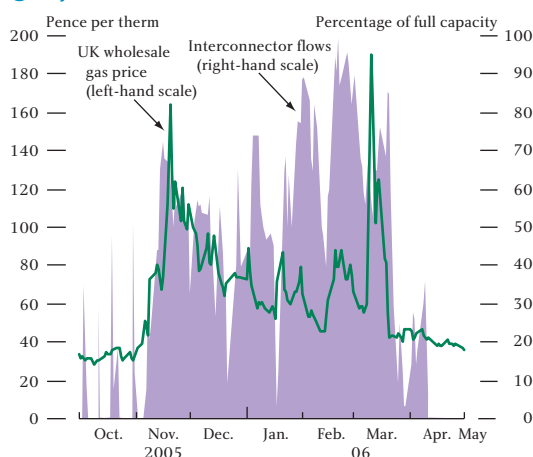
Chart 4.2
UK wholesale gas prices^(a)



Source: Bloomberg.

- (a) Monthly averages of daily data. Futures prices, and spot price data for May, are averages during the fifteen working days to 3 May 2006.
- (b) One-day forward price of UK natural gas.

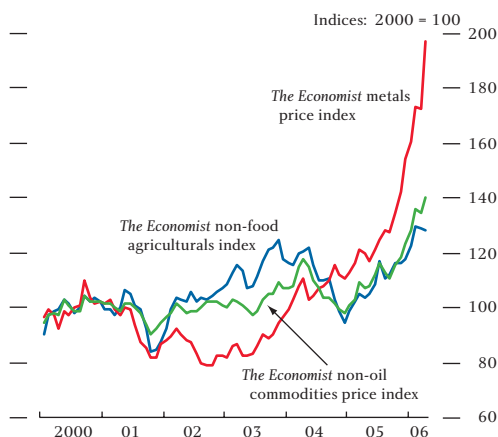
Chart 4.3
Interconnector imports^(a) and the UK wholesale gas price^(b)



Sources: Bloomberg and Interconnector (UK) Limited.

- (a) Daily UK imports at the Bacton Terminal, excluding holidays and weekends.
- (b) One-day forward price of UK natural gas.

Chart 4.4
Non-oil commodity prices^(a)



Source: Thomson Financial Datastream.

- (a) Monthly averages, in sterling terms. Indices exclude iron and steel.

with gas supplies highlighted in the *February Report* continued.⁽¹⁾ Even as the UK wholesale gas price surged, the interconnector pipeline used to import gas from the Continent operated below full capacity (Chart 4.3). These factors led to a National Grid warning on 13 March that gas demand might exceed supply. Such warnings seek to encourage suppliers to maximise deliveries and to persuade industrial users to reduce demand.

As at the time of the *February Report*, gas futures prices in early May pointed to another rise in wholesale gas prices next winter, following a temporary seasonal lull in the summer (Chart 4.2). But there are a number of planned changes to gas supply in the United Kingdom that should help to alleviate the pressure on prices. Four projects aimed at raising the United Kingdom's interconnector and pipeline capacity from Europe are progressing. Although the exact timing is uncertain, some increased capacity may be available by the end of 2006, with more coming on stream in 2007 and 2008. Two further import terminals are under construction, and should be operational by 2007. And plans to increase gas storage in the United Kingdom are under way. Finally, the European Commission has published a preliminary report detailing the barriers currently impeding a competitive European energy market.⁽²⁾ Nevertheless, there is a great deal of uncertainty about when these improvements will be realised and how they will affect gas prices in the next year or two.

Non-oil commodity prices

Non-oil commodity prices have risen sharply over the past 18 months. *The Economist* non-oil commodities price index has risen by around 45% in sterling terms during this period (Chart 4.4). Within this, *The Economist* metals price index has risen even more rapidly, by around 150% since its recent trough in October 2002. As with oil prices, the strength in global growth, and the growing importance of emerging economies like China, are likely to have been key forces driving the rise in non-oil commodity prices. But so far, this has not fed through into significant rises in manufacturers' non-energy costs (Section 4.3). That partly reflects the fact that *The Economist* indices exclude the prices of some metals that are important for manufacturers, such as iron and steel, and their prices have been relatively stable recently. More importantly, non-oil commodities represent only a small part of manufacturers' costs.

(1) See page 23 of the *February 2006 Report*.

(2) For details of the report, see: www.europa.eu.int/comm/competition/antitrust/others/sector_inquiries/energy/.

4.2 Inflation expectations and labour costs

Inflation expectations

Table 4.A
Measures of inflation expectations

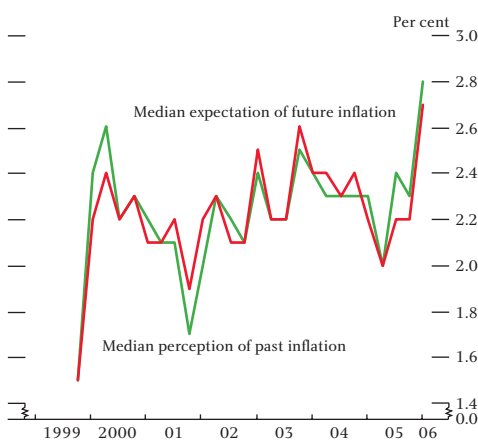
Per cent (except where stated otherwise)

	2004	2005		2006			
		Q3	Q4	Q1	Q2		
<i>Financial markets (inflation swaps)^(a)</i>							
RPI inflation expectation, two years ahead	n.a.	2.6	2.6	2.6	2.6		
<i>Financial markets (nominal less index-linked gilts)^(a)</i>							
RPI inflation expectation, four years ahead	2.8	2.6	2.6	2.7	2.8		
<i>External forecasters (Bank of England)^(b)</i>							
Mean CPI inflation expectation, one year ahead	n.a.	n.a.	n.a.	n.a.	1.9		
Mean CPI inflation expectation, two years ahead	n.a.	1.9	1.9	1.9	1.9		
<i>General public (Bank of England/GfK NOP)^(c)</i>							
Median expectation over next twelve months ^(d)	2.4	2.2	2.2	2.7	n.a.		
<i>General public (Citigroup/YouGov)</i>							
Median expectation over next twelve months ^(e)	n.a.	n.a.	2.4	2.3	2.6	2.5	2.4
Median expectation in the longer term ^(f)	n.a.	n.a.	3.5	3.3	3.7	3.7	3.6
<i>General public (GfK NOP)^(g)</i>							
Net balance expecting prices to increase	65	62	62	60	62	69	66

Sources: Bank of England, Bloomberg, Citigroup, GfK NOP and YouGov.

- (a) Averages of daily data. 2006 Q2 figure is average to 3 May.
 (b) Survey results are published each quarter in the *Inflation Report*.
 (c) The survey takes place in February, May, August and November each year.
 (d) The question asks: 'How much would you expect prices in the shops generally to change over the next twelve months?'. The 2004 figure is the average of the quarterly surveys.
 (e) The question asks: 'How do you expect consumer prices of goods and services will develop in the next twelve months?'. The survey began in November 2005 so the data for 2005 Q4 are the average for November and December.
 (f) The question asks: 'What do you think will happen to the prices of goods and services, on average, over the longer term — say five to ten years?'. The survey began in November 2005 so the data for 2005 Q4 are the average for November and December.
 (g) The question asks: 'In comparison with the past twelve months how do you expect consumer prices will develop in the next twelve months?'.

Chart 4.5
Perceptions of past inflation and expectations of future inflation^(a)



Source: Bank of England/GfK NOP.

- (a) Survey respondents are asked how prices have changed over the past twelve months, and how they expect prices in the shops generally to change over the next twelve months. To calculate the median, responses are assumed to be evenly distributed within bands.

Recent *Reports* have highlighted how changes in inflation expectations can influence the price and wage-setting decisions of companies, and hence CPI inflation. External forecasters' expectations of CPI inflation over the next two years remained steady around the MPC's inflation target. But financial market measures based on the difference between yields on nominal and index-linked bonds suggest a modest rise in medium-term inflation expectations since the beginning of the year (Table 4.A).

A number of surveys have suggested that households' expectations of inflation have also increased recently. According to the February 2006 Bank/GfK NOP survey, the median rate of inflation expected over the next twelve months rose from 2.2% in November to 2.7%, the highest rate since the survey began over six years ago (Chart 4.5). There was also a sharp rise in the net balance of households in the March GfK NOP survey expecting prices to increase over the next twelve months, though this fell back a little in April (Table 4.A).

A relatively new monthly survey conducted by YouGov for Citigroup also showed an increase in households' inflation expectations over the next twelve months. The median expectation rose to 2.6% in February, from 2.3% in January. But it fell back in March and April. This survey additionally canvasses expectations of inflation five to ten years ahead. There was a similar pickup in households' longer-term expectations of inflation between the January and February 2006 surveys, but those expectations also fell back a little in the April survey (Table 4.A).

Households' inflation expectations appear to be related to their perceptions of inflation over the previous year (Chart 4.5). And in the February survey, households perceived that inflation had risen. One reason for that might be the recently announced rises in energy utility prices (Section 4.3). Even though the Bank/GfK NOP survey asks about prices in the shops, households may also take into account changes in utility prices when answering the survey. The February survey was conducted in mid-February and mid-March, periods when a number of utility companies announced substantial increases in prices and the UK wholesale gas price spiked. Even though these increases had not affected domestic bills at that stage, they did receive extensive media coverage.

Despite the pickup in households' inflation expectations, it is not clear how much influence these households have on companies' wage and price-setting decisions. As the next

section discusses, there is little evidence of higher inflation expectations feeding through to higher earnings growth in the most recent data.

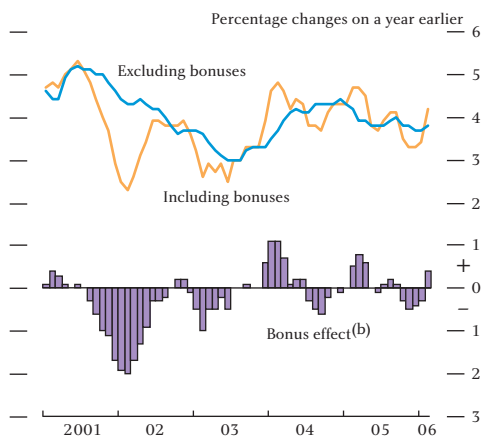
Labour costs

Measures of earnings growth have remained relatively subdued since the February *Report*. In the three months to February, private sector earnings excluding bonuses — regular earnings — were 3.8% higher than a year earlier. That compared with rates of over 4% at the beginning of 2005 (Chart 4.6). Growth in the average earnings index (AEI) for the private sector, which includes bonuses, was 4.2% over the same period. That was also below the rates experienced in early 2005, albeit somewhat higher than in recent months.

Regular earnings growth has also slowed a little recently on the ONS's experimental average weekly earnings (AWE) measure. Settlement indicators paint a similar picture: private sector settlements fell a little in the second half of 2005, and edged down further in early 2006.

Chart 4.6

Private sector earnings^(a)



(a) Three-month average measure of the average earnings index.
 (b) Percentage points. Defined as average earnings growth less regular earnings growth.

The muted pace of earnings growth

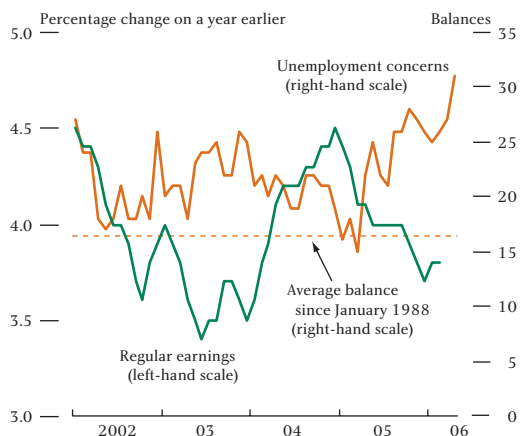
There are a number of potential explanations for the recent subdued rate of earnings growth. The weakening in demand growth in the second half of 2004 and early 2005 may have made companies more reluctant to raise wages. It may also have heightened workers' concerns over their job prospects and made them more wary about pressing for higher wages. Chart 4.7 shows that as households' concerns over the prospect of rising unemployment appeared to increase, so regular earnings growth tended to decline. In addition, as highlighted in previous *Reports*, increased inward flows of migrant workers may have helped to ease the degree of tightness in the labour market, so restraining upward pressures on earnings.

Companies care about the total cost of employing workers. So another explanation for the subdued pace of earnings growth is that other labour costs have increased and companies have pushed down on earnings growth in an attempt to compensate for this.

One source of higher labour costs is companies' pension contributions, which have increased substantially over recent years. Some of these payments relate to the funding of pension deficits that have accumulated over the past. Contributions made by companies to fund past pension deficits do not affect the costs of employing workers to produce goods and services today or in the future. They are therefore unlikely to influence companies' pay decisions. If

Chart 4.7

Unemployment concerns^(a) and earnings^(b)



Sources: GfK NOP and ONS.

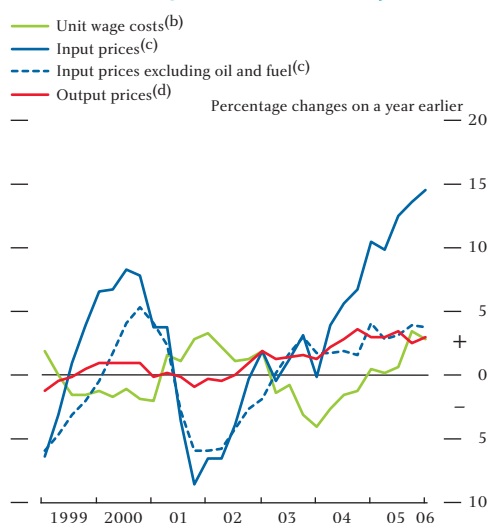
(a) The question asks: 'How do you expect the number of people unemployed in this country will change over the next twelve months?'. Net percentage of respondents who say unemployment will rise.
 (b) Three-month average of the whole-economy average earnings index excluding bonuses.

they did, companies would find it harder to retain or recruit workers.

But companies have also had to increase the regular contributions they make to their pension funds. That, in part, reflects the realisation by companies that people are living longer than previously anticipated. For those companies that operate defined benefit schemes, the rise in longevity means that employers have to pay workers' pensions for a longer period than they would have done in the past. In addition, declines in long bond yields (Section 1) have raised the estimated value of companies' pension fund liabilities. Companies may respond to that unexpected increase in workers' total remuneration by reducing the generosity of their pension provision, by moderating earnings growth, or by reducing employment growth. So this may be a factor behind the muted pace of earnings growth and the rise in unemployment over the recent past (Section 3).

Looking ahead, a factor that could boost earnings growth is the forthcoming rise in the National Minimum Wage. The Chancellor announced in the Budget that the main rate would increase from £5.05 per hour to £5.35 in October, a rise of 5.9%, in line with the Low Pay Commission's recommendation. That could lead to some upward pressure on wages if workers try to restore the gap between their wages and those of the lower paid. Some contacts of the Bank's regional Agents have highlighted this as a factor that may influence earnings growth. But, overall, the Committee expects earnings growth to remain relatively muted in the near term.

Chart 4.8
Manufacturing sector costs and prices^(a)



- (a) Data are non seasonally adjusted except unit wage costs data.
 (b) 2006 Q1 data are proxied by the average twelve-month growth rate in January and February 2006.
 (c) Including climate change levy.
 (d) Excluding excise duties.

4.3 Consumer prices

Annual CPI inflation was 1.8% in March. For Q1 as a whole, CPI inflation was 1.9%, marginally lower than the MPC's central projection in the February *Report*. But recent increases in gas, electricity and petrol prices are expected to push up CPI inflation in the near term. These, and other, supply-chain pressures are discussed in this section.

Supply-chain pressures on consumer prices

Energy prices have been a major source of recent supply-chain pressures. A number of gas and electricity suppliers have announced further increases in domestic gas and electricity prices since the February *Report*. Between March and the beginning of May, the average rises in domestic gas and electricity prices were around 20% and 15% respectively. Domestic gas and electricity each have weights of about 1.5% in the CPI, so substantial increases in their prices imply a significant direct effect on consumer price inflation. These

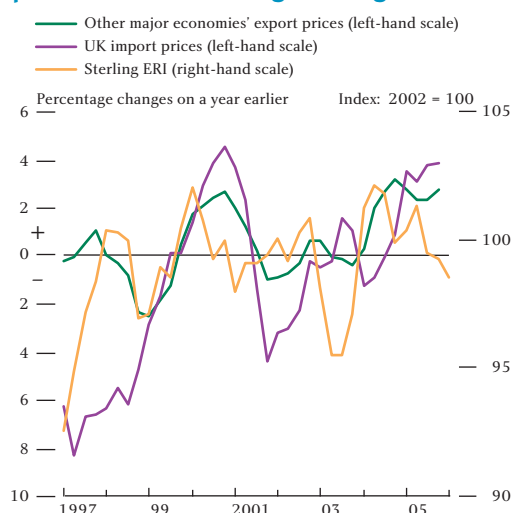
Table 4.B
Service sector costs and prices

	2004	2005			2006	
		Q2	Q3	Q4	Q1	Apr.
Costs						
Percentage changes on a year earlier						
Unit wage costs ^(a)	1.4	2.5	2.2	0.5	n.a.	n.a.
Index						
CIPS/RBS ^(b)	59.5	57.5	58.6	58.5	59.5	61.8
Prices						
Percentage changes on a year earlier						
CSPI ^(c)	2.4	3.4	3.8	3.8	n.a.	n.a.
Index						
CIPS/RBS ^(b)	55.6	52.5	51.6	52.8	52.5	54.7

Sources: Bank of England calculations, CIPS/RBS and ONS.

- (a) Estimate of average earnings divided by output per workforce job in the private service sector.
- (b) Quarterly and annual CIPS/RBS data are averages of monthly indices. A reading above/below 50 implies rising/falling costs or prices.
- (c) Non seasonally adjusted, net sector measure of the ONS Corporate Services Price Index.

Chart 4.9
UK import prices, other major economies' export prices^(a) and the sterling exchange rate



Sources: Bank of England, ONS and Thomson Financial Datastream.

- (a) These countries are Canada, France, Germany, Italy, Japan and the United States. The index is an average of domestic currency export prices of goods and services for those countries, weighted by their share in the sterling ERI in 2002.

price rises are likely to boost annual CPI inflation in 2006 Q2 by a little more than expected at the time of the February Report.

In the UK manufacturing sector, input prices rose by 14.5% in 2006 Q1 compared with a year earlier (Chart 4.8). That was the fastest rate of increase in almost 25 years. The current high rates of input price inflation largely reflect rising energy prices. Once crude oil and fuels are excluded, the rate of input price inflation has been stable over the past year. Labour costs are another important element of overall manufacturers' costs. Unit wage costs picked up towards the end of 2005, largely because of weak productivity in that sector. But rising cost pressures have not yet fed through into output prices, where the rate of inflation has remained steady.

In the service sector, business surveys suggest cost pressures have picked up since the first half of 2005, whereas official data point to an easing in unit wage cost inflation (Table 4.B). The CIPS/RBS survey suggests some rise in output price inflation recently. And according to the ONS's experimental corporate services price index, annual inflation remained at its highest rate in over four years in 2005 Q4.

Import prices are a further potential source of supply-chain pressure. In 2005 Q4, UK import prices of goods and services were 3.8% higher than a year earlier (Chart 4.9). That was the fastest rate of inflation in five years.

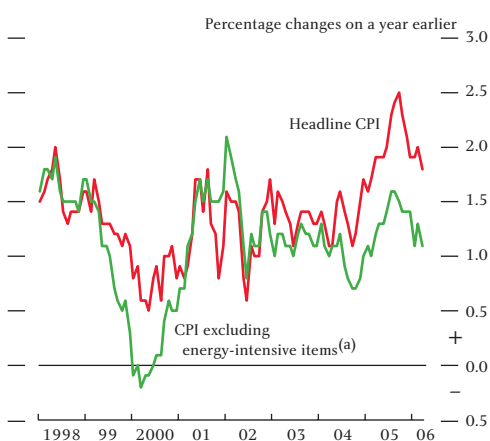
Around half of UK imports come from other G7 economies. And some of the rise in import prices can be accounted for by a pickup in those countries' export prices, which rose by 2.7% in the year to 2005 Q4. The rise in other major economies' export price inflation partly reflects the direct impact of higher oil prices and, to a lesser extent, non-oil commodity prices (Section 4.1). But the rise in all of these prices is also symptomatic of the strength of global demand.

The weakness of non-energy price inflation

It is impossible to know the precise impact of higher energy prices on CPI inflation over the past couple of years. But excluding the most energy-intensive items — utilities, petrol and transport services — consumer price inflation has been more subdued since early 2002 and some way below 2% (Chart 4.10). That subdued pace of non-energy price inflation is not unique to the United Kingdom. Chart 4.11 shows that non-energy price inflation in the United States, Japan and the euro area has also been muted over this period.

One potential explanation for the weakness of non-energy price inflation relates to the rise in energy prices. The rise in

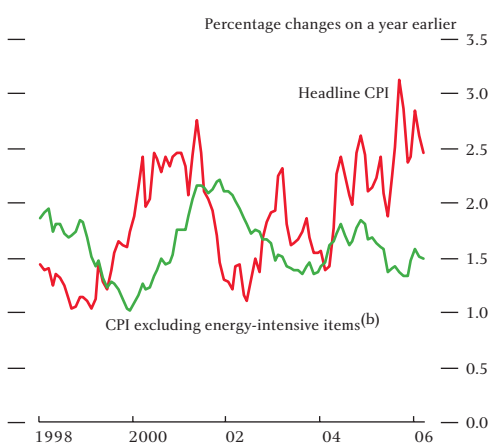
Chart 4.10
CPI inflation



Sources: Bank of England calculations and ONS.

(a) This measure excludes utilities, petrol and transport services from the CPI.

Chart 4.11
CPI inflation in the United States, Japan and the euro area^(a)



Sources: Bank of England, Bureau of Labor Statistics, Eurostat, Statistics Bureau of Japan and Thomson Financial Datastream.

(a) Inflation rates in the United States, Japan and the euro area are weighted together using purchasing power parity weights.

(b) Based on Bank of England calculations. Excluded from the headline index are: energy and public transportation in the United States; petrol, energy utilities and transport services in the euro area; fuel, light, water charges and transportation and communication in Japan.

energy prices has reduced the income available for spending on other items. So the rise in energy prices could have displaced demand for non-energy goods and services. Together with the general weakness in demand growth in the second half of 2004 and early 2005, that would have put downward pressure on non-energy price inflation.

Another possible reason for the weakness of non-energy price inflation relates to the change of inflation target. In December 2003, the Chancellor changed the inflation target from 2.5% for RPIX inflation to 2% for CPI inflation. There are differences between RPIX and CPI.⁽¹⁾ For example, most housing costs are not included in the CPI. Between 1997 and 2004, the housing component generally pushed up on RPIX inflation as house prices rose rapidly. So other price rises had to be relatively muted in order to meet the target. That could be why CPI inflation averaged only 1.3% between 1997 and 2004, 0.7 percentage points below the MPC's current inflation target. It is possible that producers and employees became used to setting prices and wages for their own industries in an economic environment that generated low CPI inflation. If that were the case, then there may have been a tendency for non-energy price inflation to remain subdued.

The subdued rate of non-energy price inflation may also be related to more intense global competition from countries such as China. Increased competition could have made it more difficult for companies to raise prices, resulting in wages and margins being squeezed. Low non-energy price inflation may additionally reflect greater net inflows of migrant workers putting downward pressure on labour costs (Section 4.2).

Overall, the Committee believes a number of factors lie behind the recent subdued pace of non-energy price inflation. And some of these forces may persist into the medium term.

The short-term outlook for inflation

CPI inflation is expected to rise in the short term by more than expected at the time of the February *Report*. That reflects the recent increases in petrol and domestic gas and electricity prices, as well as the impact of higher import prices. Thereafter, the Committee expects inflation to fall back to around the target.

(1) See the box on page 36 of the February 2004 *Report*.

In the MPC's central projection, assuming that official interest rates follow a path implied by market yields, GDP growth is close to its long-run average throughout the forecast period. The rate of expansion is a little weaker than in the February Report. In the central projection, CPI inflation rises above the 2% target in the near term. It then edges down, settling close to the target in the medium term. Compared with February, the inflation projection is a little higher in the near term, mostly reflecting higher energy and import prices, but it is similar further out. The main risks around the central projection relate to: the outlook for spending by households and businesses; world economic activity; the evolution of energy and import prices; the degree of wage and price inertia; and the margin of spare capacity. Overall, the risks to growth and inflation are broadly balanced.

5.1 The outlook for demand

The prospects for demand are a key influence on the outlook for inflation. This section discusses the different components of demand and then outlines the Committee's assessment of the prospects for GDP growth.

Consumption

Consumption growth has picked up from the low levels seen in the first half of 2005. The MPC expects consumption to grow a little below its long-term average rate over the forecast period.

The substantial rise in equity prices over the recent past is likely to bolster household spending. The revival in the housing market should also support consumption growth in the near term. Higher consumer price inflation and effective tax rates are likely to depress real disposable income and consumption growth, but their combined impact is projected to diminish during the forecast period.

One factor likely to support household income and consumption growth during the next few years is a prospective improvement in the terms of trade — the price of UK exports relative to the price of UK imports. Higher export prices boost companies' revenues and ultimately benefit UK households by increasing their incomes and wealth, while lower import prices reduce the cost of living. Over much of the past decade, the terms of trade have improved. But during 2005, they deteriorated. That partly reflected a steep rise in the price of imported gas, although other import prices picked

up too. The MPC expects import price inflation to fall during the forecast period,⁽¹⁾ though recent strong outturns have led the MPC to expect that decline to be a little less pronounced than in its February projection. UK export prices are likely to increase at a similar rate to those of other developed economies, and more quickly than import prices. So the terms of trade are projected to improve, albeit by less than the MPC assessed in February.

There is a risk that consumer spending growth will be more subdued than implied by the central projection. Real disposable incomes may grow more slowly because of adverse movements in energy prices or the terms of trade. Debt might prove a heavier burden than some households foresaw, which could lead them to spend less. And households may decide that they need to save more to provide for their retirement.

Business investment and stockbuilding

Recent growth in business investment is estimated to have been muted. Some of that reported weakness may be genuine, especially in 2005 when demand growth was weak and capacity utilisation eased. Nevertheless, as more information becomes available to the ONS, it is quite likely that the data will be revised upwards. The MPC expects business investment to accelerate gradually during the next three years, reflecting the recovery in demand growth. Supportive financial conditions and further falls in the relative price of capital goods should also encourage companies to invest. The projected pickup is relatively gentle and there is a possibility that the recovery could be stronger, in particular given the recent strengthening in surveys of investment intentions.

According to provisional ONS estimates, GDP grew by 0.6% in the first quarter of 2006, though business surveys suggest that output growth could have been higher. The latest information on consumption and net trade suggests that these expenditure components were relatively subdued in 2006 Q1. It is possible that strong stockbuilding may account for some of the output growth. The stock-output ratio has been gently rising in recent years, and the MPC expects that trend to continue. As such, after picking up sharply in the first half of 2006, the level of stockbuilding barely changes in the MPC's central case throughout the forecast period. Consequently, it makes little contribution to GDP growth other than at the very beginning of the forecast.

Government spending

In forming its projections, the Committee has assumed that nominal government spending will increase broadly in line

(1) The projection for import prices is described in more detail on page 39.

with the plans outlined in the Chancellor's Budget. Those plans imply that nominal government spending will grow at a firm pace over the forecast period, though somewhat weaker than in recent years. Outturns for government spending have been a little stronger than anticipated. And the level of planned spending for future years was reduced marginally in the Budget. So the implied growth rate for nominal government spending is slightly weaker than in the MPC's February projection. The ONS's estimate of real government spending also depends on its estimate of the government deflator. The MPC's judgement is that this estimate of the government deflator may rise slightly faster than projected in February. That translates into lower growth for the volume of government spending.

External demand and UK net trade

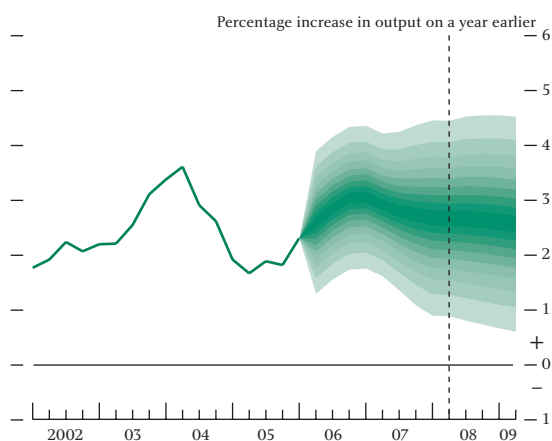
Surveys suggest that the near-term prospects for exports have picked up. The outlook for exports is heavily influenced by developments in the euro area — the United Kingdom's largest export market. Growth in the euro area dipped in 2005 Q4 to 0.3%. But survey and other indicators suggest that growth rebounded in the early part of 2006, and may remain strong in the near term. Further out, the MPC's central view implies that euro-area GDP will expand steadily, at close to its long-term sustainable rate.

In the United States, growth rebounded strongly at the start of 2006. Some slowing from that erratically high rate seems likely. But, overall, the MPC's central view implies that the US economy will expand steadily during the next three years. In Japan, continued recovery is likely, while vigorous growth in the rest of Asia is expected.

For many years, UK exporters have been losing market share to competitors overseas. In the recent past, that is likely to have been associated with the emergence of low-cost competitors based in China and Eastern Europe. In the Committee's central view, the decline in export market share is assumed to continue through the forecast period. Despite this, the firm outlook for world trade means that exports are likely to grow steadily over the medium term.

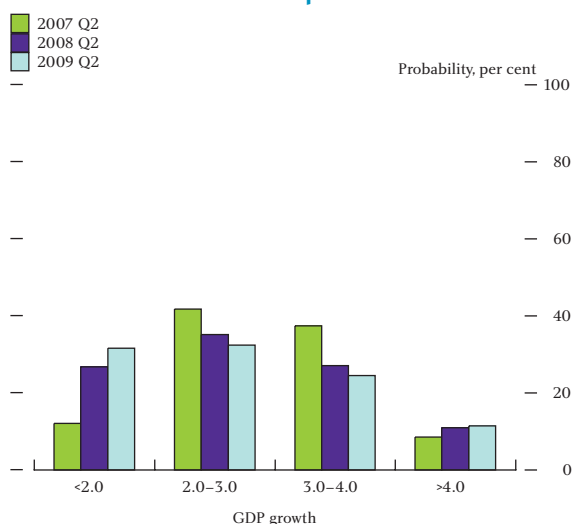
Imports have accounted for an increasing share of the UK domestic market over many years, mirroring the declining export share. The Committee's central view implies that the share of imports in domestic spending will continue to rise during the forecast period. This, combined with the projection for domestic demand, implies steady growth in imports. Taking exports and imports together, net trade makes a slightly positive contribution to GDP growth during the forecast period. That is in contrast to the previous ten

Chart 5.1
Current GDP projection based on market interest rate expectations



The fan chart depicts the probability of various outcomes for 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 GDP growth over the subsequent three years would lie within the darkest central band on only 10 of those occasions. The fan chart is constructed so that outturns of GDP growth are also expected to lie within each pair of the lighter green areas on 10 occasions. Consequently, GDP growth is expected to lie somewhere within the entire fan chart on 90 out of 100 occasions. The bands widen as the time horizon is extended, indicating the increasing uncertainty about outcomes. See the box on pages 48–49 of the May 2002 *Inflation Report* for a fuller description of the fan chart and what it represents. The dashed line is drawn at the two-year point.

Chart 5.2
The MPC's expectations for GDP growth based on market interest rate expectations^(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.

years, when net trade pulled down the economy's overall growth rate.

The profile for net trade is associated with a number of risks. The recent strength of business surveys and production data might indicate that there is greater near-term momentum in the euro-area economy than allowed for in the Committee's central projection.

Global imbalances are probably the main downside risk to world activity and hence UK net trade. In particular, the US national savings ratio is historically low and the current account deficit is correspondingly high. That is likely to correct at some point. But there is considerable uncertainty about the speed and nature of that adjustment, and the scale of its impact on the United Kingdom.

The GDP projection

The Committee's projection for four-quarter GDP growth in the United Kingdom, assuming that official interest rates follow a path implied by market yields, is shown in Chart 5.1. The asset price assumptions underpinning that projection are described in the box on page 36.

Business surveys point to strengthening growth in the near term. But overall quarterly GDP growth is projected to remain close to its long-term average during the next three years. GDP growth is underpinned by a steady expansion in consumer spending over most of the next three years; a recovery in investment offsets slower government spending growth. The contribution to growth from net trade is slightly positive. In the central projection, the four-quarter growth rate of GDP picks up, although that mostly reflects weak data from early 2005 dropping out of the four-quarter comparison.

The profile for GDP growth is slightly lower than it was in February. Energy prices and the impact of higher prospective import price inflation on households' spending power have led the MPC to revise down a little its projection for consumer spending growth. A flatter profile for stockbuilding means that inventories make less of a contribution to quarterly GDP growth compared with February. And the MPC now believes that the reported level of real government spending will be rising less rapidly than in the February projection. Partially offsetting these, the contribution from net trade to the current profile is stronger than three months ago.

Overall, the Committee judges that the risks to GDP growth, relative to the central projection, are broadly balanced. The probabilities of various outcomes for GDP growth under the market interest rate assumption are set out in Chart 5.2.

Asset price assumptions

The projections for GDP growth and CPI inflation described in Charts 5.1 and 5.3 are conditioned on a path for official interest rates implied by market yields (Table 1). That path provides a convenient benchmark assumption on which to condition the MPC's projections.⁽¹⁾

Table 1
Expectations of the Bank's official interest rate implied by market yields^(a)

Per cent

May

2006			2007				2008				2009	
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
4.5	4.5	4.6	4.6	4.7	4.8	4.8	4.9	4.9	4.9	4.9	4.8	4.8

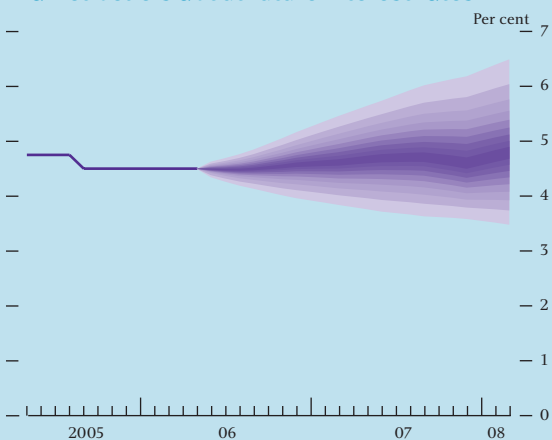
February

2006			2007				2008				2009
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4

(a) The data are fifteen-day averages of one-day forward rates to 3 May 2006 and 8 February 2006 respectively. They have been derived from instruments that settle on the London interbank offered rate. That includes the market rates on futures, swaps, interbank loans and forward rate agreements, adjusted for credit risk. The MPC may change the way it estimates these expectations from time to time, as shifting market conditions can alter the relative advantages of using different methods.

On average, in the fifteen days leading up to the MPC's decision, the market yield curve implied that financial market participants expected the policy rate to increase to 4.75% at some point during the first part of the forecast. That is slightly higher than the profile expected in February. Chart A uses information from option prices to provide an approximate indication of market participants' uncertainty, ahead of the MPC's decision on 4 May, about the future path of official interest rates. The chart suggests that market participants believed that a wide variety of outturns was possible.

Chart A
Market beliefs about future interest rates



The mean of the fan chart is the market rate profile for the fifteen-day average ending 3 May, consistent with the measure of interest rates shown in Table 1. The distribution is derived using the prices of options on three-month Libor futures contracts traded on Euronext.liffe. It is constructed by averaging the daily distributions around a common mean for each of the fifteen days. The average is calculated for each probability band at each quarter. The fan chart depicts the probability of outcomes for interest rates in the future. It has a similar interpretation to the fan charts in the Overview and in this section of the Report. The chart is only indicative of market expectations of future policy rates as it is based on Libor instruments, and is estimated on the assumption that investors are risk-neutral.

The starting point for the sterling exchange rate index (ERI) in the MPC's projections for GDP growth and CPI inflation is 98.9, the average for the fifteen working days to 3 May. That was 0.4% below the starting point for the February forecast. Under the MPC's usual convention,⁽²⁾ the exchange rate is assumed to depreciate to 97.8 by 2008 Q2, and is lower throughout the forecast period than assumed in February.

Equity prices are expected to rise broadly in line with nominal GDP over the forecast period.

(1) See the box 'The interest rate assumptions in the projections', on pages 42–43 of the August 2004 *Inflation Report*.

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

Consumer spending may prove to be weaker than assumed in the central view. But there are upside risks associated with investment. There are risks in both directions to the outlook for world economic activity. Though the fan chart reflects the best collective judgement of the MPC, there is a range of views among members.

5.2 CPI inflation

CPI inflation has been close to the 2% target in the past few months, reflecting a combination of large energy price increases and a low average inflation rate for the other goods and services in the index.

Energy prices

Since the February *Report*, there has been a further increase in the spot price of oil, and suppliers of domestic gas and electricity have announced large price increases. Both of these factors are likely to put upward pressure on consumer price inflation in the near term. But the impact of those higher prices on the twelve-month rate of inflation should recede over the forecast period. The MPC's inflation projection assumes that the spot price for Brent crude evolves in line with the futures curve, which is broadly flat for the next three years. Petrol price inflation would then subside were oil prices to follow that path. The futures market suggests that the twelve-month rate of increase for wholesale gas prices is unlikely to be as marked next winter as in the recent past.

But oil and gas prices are extremely volatile. And there is a great deal of uncertainty surrounding future developments in world oil supply and the European gas market. So the evolution of energy prices poses considerable risks to the MPC's projection for CPI inflation.

Other domestic consumer prices

Consumer price inflation excluding the prices of energy-intensive goods and services has been low for a number of years. How it evolves depends on why it has been subdued recently and how the key influences will develop over the future. There is a range of possible reasons and judgements.

One explanation for the weakness of non-energy price inflation relates to the rise in the price of energy itself. This reduced the income available for spending on other items, which may have put downward pressure on non-energy price inflation. Energy price inflation is likely to ease over the forecast period. That should generate higher demand growth for other goods and services and hence allow larger increases in their prices.

Another possible explanation for the low rates of non-energy price inflation relates to inertia in wage and price setting. Although the average rate of RPIX inflation during 1997–2004 was close to the old target of 2.5%, CPI inflation during that period averaged only 1.3%, somewhat below the current target, and the rate of inflation in the non-energy components has remained subdued since. To the extent that the inflation target is credible, non-energy price inflation might be expected to pick up as energy price inflation abates. But there is uncertainty about how quickly that will occur. Companies and employees may take time to adjust prices and wages in their own industries from recent low rates of non-energy price inflation.

A further reason for the subdued rate of non-energy price inflation may be that more intense global competition, from countries such as China, has put downward pressure on domestic selling prices and labour costs. That influence on inflation is likely to persist to some degree over the forecast period.

In the Committee's central view, there is a margin of spare capacity that has also restrained inflation recently. The economy is likely to grow at a firm pace during the next three years, but not quickly enough to erode that margin of spare capacity completely. So this downward influence is likely to diminish over the next few years, though not disappear altogether.

Domestically generated non-energy price inflation picks up over the forecast period. The easing of energy price inflation boosts demand growth for other goods and services and pushes up their prices. Factors such as spare capacity in the economy, global competition, and wage and price-setting inertia have probably been holding down CPI inflation. And although the influence of those factors is likely to persist in the future, the Committee judges that their combined downward effect on inflation is likely to diminish during the next three years.

There are several risks to that view. In particular, some measures of inflation expectations have picked up in recent months. If price setters and wage bargainers' inflation expectations have also risen, there is a risk that CPI inflation could turn out higher than in the MPC's central case. But equally there is a risk there may be more inertia in companies and workers' price and wage-setting behaviour than implied by the MPC's central projection.

The degree of spare capacity cannot be assessed with any precision, given the difficulty of measuring supply and the revisions to GDP data. It may be smaller than in the central view. In particular, the high level of energy prices may have an adverse effect on potential supply — for example, by encouraging companies to scrap energy-intensive machinery.⁽¹⁾ That poses an upside risk to the projection for CPI inflation.

Furthermore, assessments of the degree of labour market slack in the United Kingdom have been complicated by inflows of migrant workers. In recent years, non-UK nationals have played an increasingly important role in the jobs market, and this rise in labour supply has probably helped to hold down the rate of wage growth and CPI inflation. The MPC's central projection continues to assume further migration inflows. But

(1) See the box on page 19 of the November 2005 *Inflation Report*.

there remains considerable uncertainty around the future magnitude of migration flows, their likely impact on potential supply, and their effect on CPI inflation.

Import prices

Import prices have picked up over the past year, partly reflecting sharp rises in energy costs. In the Committee's central projection, import price inflation eases back during the forecast period, though to levels higher than experienced in the early part of the decade. In part, that is because oil prices are assumed to remain broadly unchanged, and so make a diminishing contribution to import price inflation. Other than the prospects for oil prices, the path for import price inflation over the forecast reflects the balance between a number of influences. The assumed slight depreciation of sterling during the next three years⁽¹⁾ gives a small upward impetus to import prices. The firm outlook for global growth provides some support for prices charged in world markets. Working in the opposite direction, low-cost imports from China and other industrialising nations should exert continued downward pressure on import price inflation over the next three years. Export price inflation in industrialised economies has run ahead of their domestic cost pressures recently. The MPC expects those costs and prices to come more into line in the future implying weaker price inflation for globally traded goods and services. Import price increases are likely to put some upward, though diminishing, pressure on UK CPI inflation during the forecast period.

There is a risk that import price inflation will not decline as in the MPC's central view. Strong global growth could sustain higher global cost and price increases. Moreover, there is also uncertainty surrounding the future path for the sterling exchange rate.

The outlook for CPI inflation

The Committee's central projection for CPI inflation, assuming that official interest rates follow a path implied by market yields, is shown in Chart 5.3. The near-term profile is quite volatile. That reflects price level changes a year earlier affecting the twelve-month inflation rate. But in the MPC's central case, inflation is above 2% for most of the first year. It then gradually declines to around the target by the end of the second year, where it stabilises. Some members judge that the central projection is a little higher; others that it is a little lower.

There are several countervailing influences that help to shape this projection. In the first part of the forecast period, energy

(1) See the box on page 36.

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

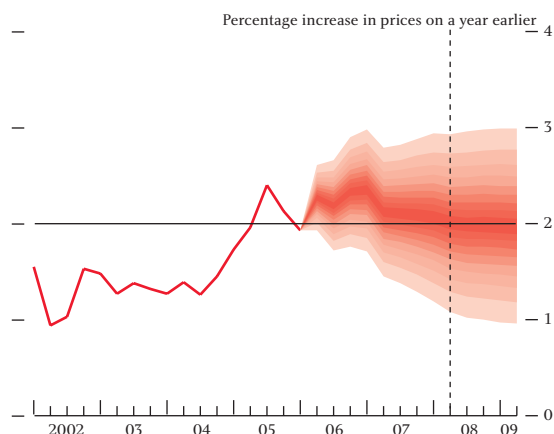
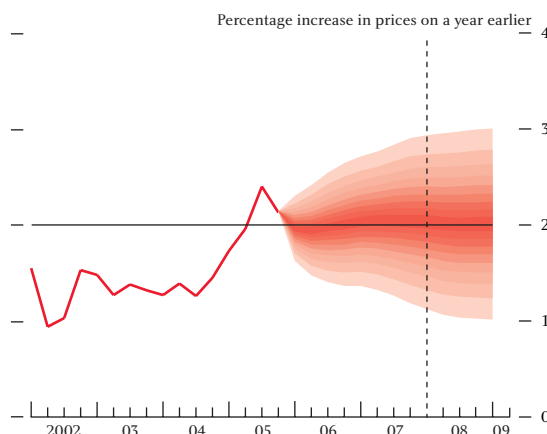


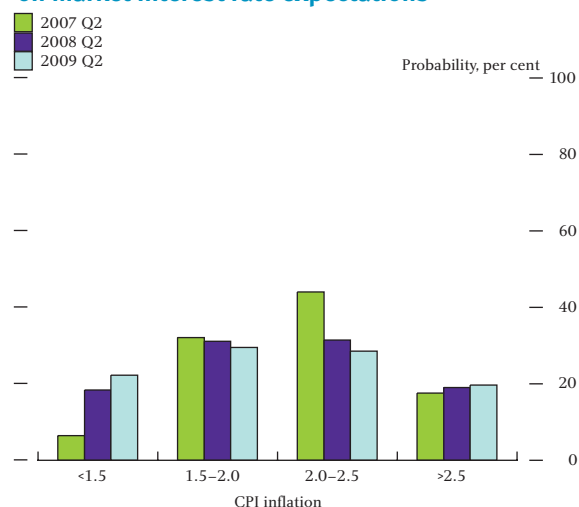
Chart 5.4
CPI inflation projection in February based on market interest rate expectations



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

price increases, along with higher prices of many imports, push CPI inflation above the 2% target. These factors subside as the projection extends into the future. But that is offset to some extent as domestically generated non-energy price inflation picks up throughout the forecast period.

Chart 5.5
The MPC's expectations for CPI inflation based on market interest rate expectations^(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.

Compared with February, the profile for CPI inflation is higher in the first part of the forecast period. That is primarily because of energy and import prices. The domestic gas and electricity price increases announced during the past three months are larger and will come through earlier than the MPC anticipated, while the world price of oil has risen compared with the flat profile underlying the MPC's February projection. World export prices in general have also risen more quickly than expected and are projected to increase more rapidly than they were in February, reflecting a more upbeat outlook for world demand. So UK import prices push up the central projection for CPI inflation by more than in February. Overall, once the impact of higher energy prices has dissipated, CPI inflation is broadly the same in the second half of the forecast period as it was in the February projection.

The best collective judgement of the Committee is that the risks to CPI inflation, relative to the central projection, are broadly balanced. The main risks around the central projection relate to: the outlook for spending by households and businesses; world economic activity; the evolution of energy and import prices; the degree of wage and price inertia; and the margin of spare capacity. Though the projection reflects the best collective judgement of the MPC, there is a range of views among members.

Chart 5.6
Current projection for CPI inflation in 2008 Q2^(a)
based on market interest rate expectations

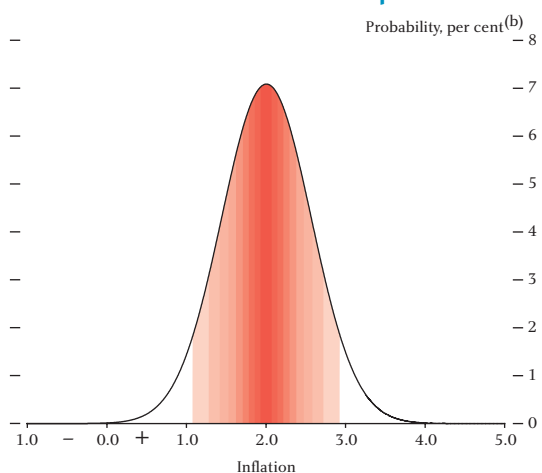
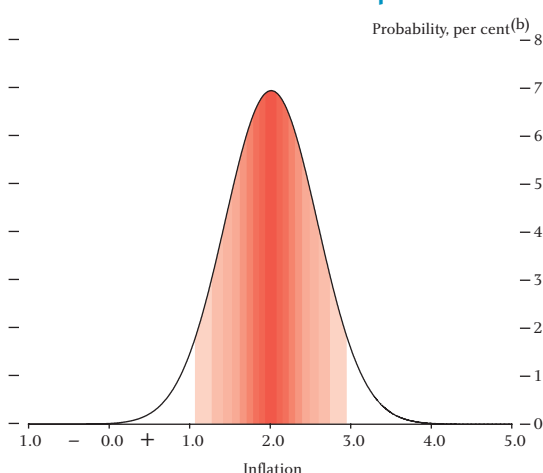
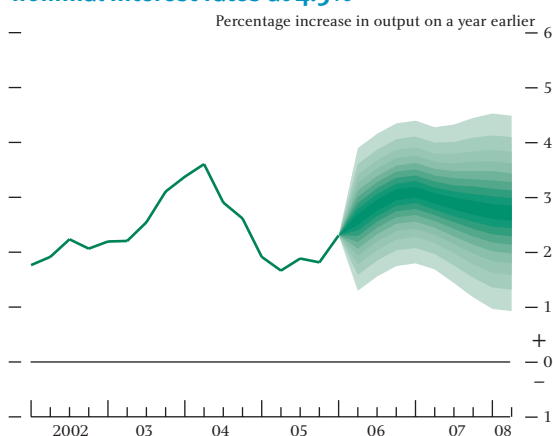


Chart 5.7
February projection for CPI inflation in 2008 Q2^(a)
based on market interest rate expectations



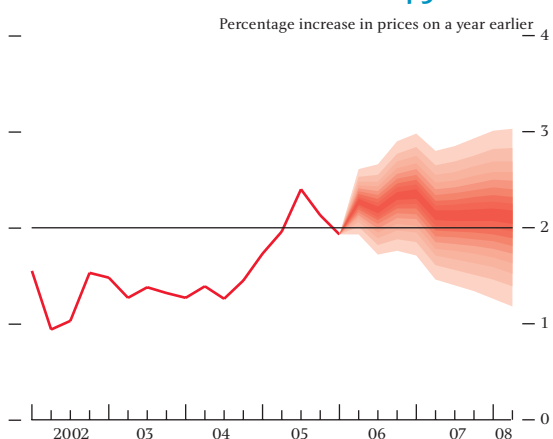
- (a) These charts represent a cross-section of the respective fan charts in 2008 Q2 for the market interest rate projections. The coloured bands have a similar interpretation to those on the fan charts. The fan chart widens as the time horizon is extended. 2008 Q2 is nearer to the starting point in the current projection than it was in February so, for a given degree of uncertainty and balance of risks, the spread of possible outcomes in that quarter would tend to be narrower in Chart 5.6 than in Chart 5.7.
- (b) Probability of inflation being within ± 0.05 percentage points of any given inflation rate, specified to one decimal place. For example, the probability of inflation being 2.0% (between 1.95% and 2.05%) in the current projection is around 7%.

Chart 5.8
Current GDP projection based on constant
nominal interest rates at 4.5%



See footnote to Chart 5.1.

Chart 5.9
Current CPI inflation projection based on
constant nominal interest rates at 4.5%



See footnote to Charts 5.3 and 5.4.

The probabilities of various outcomes for CPI inflation are set out in Chart 5.5. The overall balance of risks to the inflation outlook at the two-year point is shown in Chart 5.6, alongside the corresponding balance in February (Chart 5.7).

5.3 Projection based on constant interest rates

The Committee's projections for GDP growth and CPI inflation conditioned on a constant interest rate at 4.5% are shown in Charts 5.8 and 5.9 respectively. These charts show projections only up to a two-year forecast horizon.⁽¹⁾ The projections for GDP growth and inflation are a little higher than those based on market interest rates. That is because the market yield curve slopes upwards gradually for the next two years.

5.4 The policy decision

At its May meeting, the Committee noted that the central projection under market rates was for output growth to remain close to its long-term average and for inflation to settle around the target in the medium term. In the light of this outlook, and bearing in mind the balance of risks, the Committee judged that no change in the repo rate was necessary to keep inflation on track to meet the target in the medium term.

(1) The box on pages 42–43 of the August 2004 *Inflation Report* explains why the projections based on constant interest rates are only shown up to two years ahead.

Other forecasters' expectations

Every three months, the Bank asks a sample of external forecasters for their latest projections of CPI inflation, GDP growth, interest rates and the sterling ERI. In April, the average expectation for the official interest rate was a little higher than at the time of the February Report. But the external forecasters' other projections were broadly unchanged on three months earlier.

Table 1
Average of other forecasters' projections of CPI inflation, GDP growth, interest rates and the ERI^(a)

	2006 Q1 ^(b)	2007 Q2	2008 Q2	2009 Q2
CPI inflation ^(c)	1.9	1.9	1.9	1.9
GDP growth ^(c)	2.2	2.4	2.6	2.5
Official rate (per cent)	4.5	4.4	4.6	4.5
Sterling ERI ^(d)	98.9	97.0	96.1	96.2

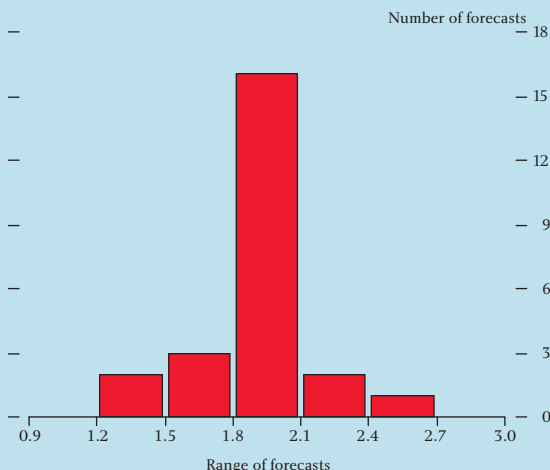
(New index: January 2005 = 100)

Sources: Bank of England, ONS and central projections of outside forecasters as of 26 April 2006.

- (a) For 2007 Q2, 27 forecasters provided the Bank with forecasts for CPI inflation, GDP growth and the official rate. For 2008 Q2, there were 24 forecasts in each case. For 2009 Q2, there were 23 forecasts for CPI inflation and GDP growth, and 22 for the official rate. For the sterling ERI, there were 23 forecasts for 2007 Q2, and 19 for 2008 Q2 and 2009 Q2.
- (b) Outturns. GDP is the preliminary ONS estimate for chained volume GDP at market prices. The official rate and sterling ERI are averages of daily values.
- (c) Four-quarter percentage changes.
- (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.

The vast majority of outside forecasters expected CPI inflation to remain close to the 2.0% target over the next three years (Chart A). Indeed, more than half

Chart A
Distribution of CPI inflation forecasts for 2008 Q2



Source: Central projections of 24 outside forecasters as of 26 April 2006.

expected inflation to be within 0.1 percentage points of the target at the two-year horizon. But, on average, the external forecasters thought it a little more likely that CPI inflation would be below rather than above 2.0% over the next three years (Table 2).

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

	CPI inflation					
	Probability, per cent ^(b)					
	Range:					
	Less than 1.0%	1.0% to 1.5%	1.5% to 2.0%	2.0% to 2.5%	2.5% to 3.0%	More than 3.0%
2007 Q2	2	14	41	30	10	3
2008 Q2	5	14	38	28	11	4
2009 Q2	7	14	36	28	11	5

	GDP growth			
	Probability, per cent ^(b)			
	Range:			
	Less than 1%	1% to 2%	2% to 3%	More than 3%
2007 Q2	4	28	53	15
2008 Q2	7	27	47	19
2009 Q2	8	27	44	21

Source: Projections of outside forecasters as of 26 April 2006.

- (a) For 2007 Q2, 26 forecasters provided the Bank with their assessment of the likelihood of expected twelve-month CPI inflation and four-quarter GDP growth falling in the ranges shown above. For 2008 Q2, this was provided by 23 forecasters. For 2009 Q2, there were 22. The table shows the average probabilities across respondents: for example, on average forecasters assigned a probability of 57% to CPI inflation turning out to be 2.0% or less in 2008 Q2.
- (b) Figures may not sum to 100 due to rounding.

The forecasters' average central projection was for four-quarter GDP growth to pick up from the preliminary outturn of 2.2% in 2006 Q1 and to settle around its long-run average of 2.5% over the next three years (Table 1). In their view, there was a greater chance that GDP growth would be below 2.0% than above 3.0% over this period (Table 2).

On average, external forecasters expected the official interest rate to remain around its current level throughout the next three years (Table 1). They also expected the sterling ERI to fall gently over the next two years, on average reaching 96.1 by 2008 Q2 (Table 1). That is lower than the profile assumed by the MPC in its central projection. But external forecasters held a diverse range of views about exchange rate prospects.

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(a) 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/2006.htm.

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Text of Bank of England press notice of 9 March 2006

Bank of England maintains interest rates at 4.5%

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 4.5%.

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

Text of Bank of England press notice of 6 April 2006

Bank of England maintains interest rates at 4.5%

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 4.5%.

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

Text of Bank of England press notice of 4 May 2006

Bank of England maintains interest rates at 4.5%

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 4.5%.

The Committee's latest inflation and output projections will appear in the *Inflation Report* to be published on Wednesday 10 May.

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

Glossary and other information

Glossary of selected data

AEI: average earnings index.

AWE: average weekly earnings.

CPI: consumer prices index.

CPI inflation: inflation measured by the consumer prices index.

Euribor: euro interbank offered rate.

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.

RPI: retail prices index.

RPI inflation: inflation measured by the retail prices index.

RPIX: RPI excluding mortgage interest payments.

RPIX inflation: inflation measured by the RPI excluding mortgage interest payments.

Abbreviations

BBC: British Broadcasting Corporation.

BCC: British Chambers of Commerce.

BRC: British Retail Consortium.

CBI: Confederation of British Industry.

CIPS: Chartered Institute of Purchasing and Supply.

DTI: Department of Trade and Industry.

ECB: European Central Bank.

EU25: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.

FDI: foreign direct investments.

FOMC: Federal Open Market Committee.

FTSE: Financial Times Stock Exchange.

HBF: Home Builders Federation.

HMSO: Her Majesty's Stationery Office.

HM Treasury: Her Majesty's Treasury.

HP filter: Hodrick-Prescott filter.

Ifo: Institute for Economic Research.

IVAs: individual voluntary arrangements.

MPC: Monetary Policy Committee.

NMW: National Minimum Wage.

OFCs: other financial corporations.

ONS: Office for National Statistics.

PwC: PricewaterhouseCoopers.

RBS: Royal Bank of Scotland.

REC: Recruitment and Employment Confederation.

RICS: Royal Institution of Chartered Surveyors.

VAT: value added tax.

Symbols and conventions

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

n.a. = not available.

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

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

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