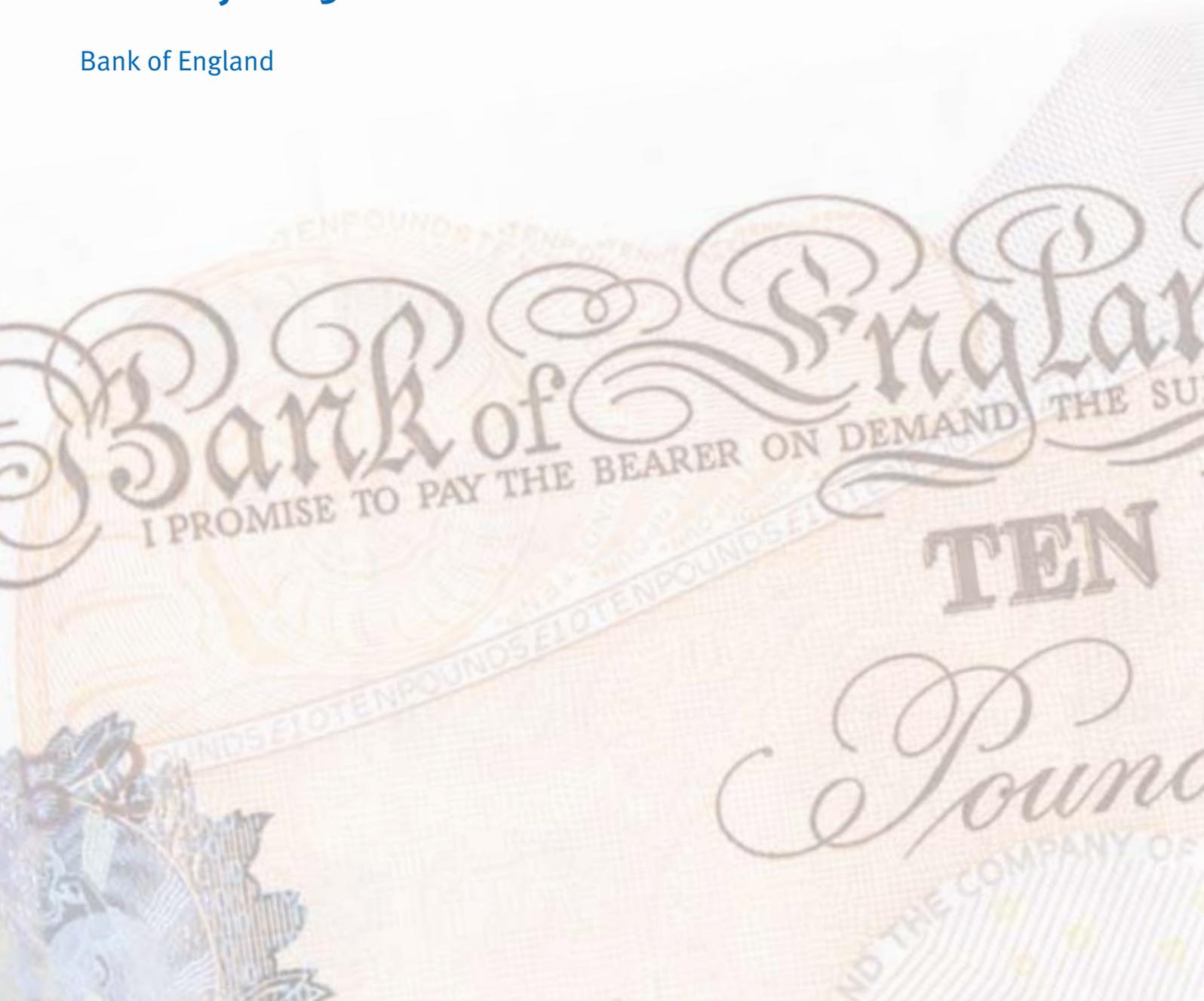




# Inflation Report

February 2005

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.

**The Monetary Policy Committee:**

Mervyn King, Governor

Rachel Lomax, Deputy Governor responsible for monetary policy

Andrew Large, Deputy Governor responsible for financial stability

Kate Barker

Charles Bean

Marian Bell

Richard Lambert

Stephen Nickell

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

The entire *Report* is available in PDF at [www.bankofengland.co.uk/inflationrep/index.html](http://www.bankofengland.co.uk/inflationrep/index.html).

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## Overview

*Since the November Report, the global economic recovery has continued, though the pace of expansion has slackened. In the United Kingdom, output growth was around trend. Retail sales weakened, though the underlying picture for household spending is, as yet, unclear. Investment decelerated, but public consumption quickened. Labour cost pressures remained muted, but input and import prices picked up and CPI inflation rose to 1.6%. In the Committee's central projection, four-quarter GDP growth remains robust and close to trend over the forecast period, while inflation rises gradually, passing through the 2% target during the second year. The balance of risks, both to growth and inflation, is to the downside.*

### The international economy

The world economic upswing has continued since the November Report, though the pace of expansion has slackened. In the United States, robust private sector spending underpinned brisk output growth, prompting the Federal Reserve to raise official interest rates a further 0.75 percentage points. But the euro-area recovery faltered during the second half of 2004. And though favourable corporate conditions should help to support investment spending in the future, the past appreciation of the euro may weigh on external demand. GDP growth stalled in Japan, though confidence measures suggest that the outlook remains positive. The Chinese economy continued to expand rapidly. Global growth is expected to moderate a little this year, though the prospect remains for continued robust expansion. Overall, the Committee judges the outlook for UK export markets to be a little weaker than in the November Report.

Oil prices were volatile. But while the spot price is lower than at the time of the November Report, futures prices are little changed. More generally, international price pressures increased, reflecting the pressure of global demand on capacity. The dollar price of non-oil commodities rose. And the average price of traded goods and services in foreign currency terms continued to pick up, having been broadly flat from 2001 to 2003.

### Demand in the United Kingdom

In the United Kingdom, domestic demand growth eased in Q3. Consumers' expenditure increased by 0.6%, a little below its average quarterly growth rate over the past three years. Retail sales growth weakened significantly in the fourth quarter,

reflecting an especially sharp fall in December. But uncertainty surrounding the appropriate seasonal correction for Christmas renders hazardous any inference as to the underlying momentum in household spending. Surveys of retailers painted a mixed picture, though reports from the Bank's regional Agents suggested that sales volumes held up reasonably well. House price inflation eased, broadly as expected.

Whole-economy investment grew by 0.6% in Q3, noticeably weaker than in the first half of the year. But with the cost of investment finance low and pressures on capacity relatively high, the prospects for investment spending remain good.

The volume of resources purchased by the public sector — more relevant for assessing the impact on inflationary pressure than the official measure of government output — accelerated in Q3. The *Pre-Budget Report* implies that spending by the public sector is likely to remain strong.

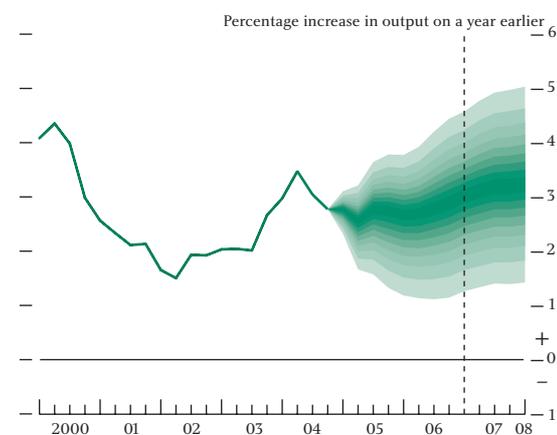
UK export growth has been fairly subdued given the pace of the global recovery and the comparative stability of the effective exchange rate for sterling. That reflects not only the relatively slow growth in the euro area — the United Kingdom's most important export market — but also a loss in market share. As a result, net trade has generally subtracted from growth. That was the case in the third quarter, while the current account deficit reached its highest share of GDP for nearly four years.

### The outlook for GDP growth

After a soft patch in Q3, quarterly GDP growth is provisionally estimated to have picked up to 0.7% in the fourth quarter. Growth in the service sector remained robust. Manufacturing output returned to modest growth, though the estimated rate of expansion through the second half of 2004 remains somewhat weaker than that suggested by business surveys.

Chart 1 shows the MPC's assessment of the outlook for four-quarter GDP growth under the assumption that official interest rates follow a path implied by market yields. Under the central projection, output growth remains robust and close to trend, picking up towards the end of the forecast period. This is a similar profile to that contained in the *November Report*, though a little stronger in the near term. Household spending grows at a slightly weaker pace than in recent years, but is accompanied by solid growth in investment and public consumption and stronger net trade.

**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 dotted line is drawn at the two-year point.

### Costs and prices

Despite the steady expansion in output, private sector employment growth remained subdued, implying productivity

growth that was high by historical standards. That may reflect the normal cyclical intensification in the use of labour, a reluctance to hire new workers, or difficulty in finding them. But it could also reflect a pickup in underlying productivity growth as UK businesses reap the gains from past investment, particularly in information and communications equipment.

There were scant signs of any change in the tightness of the labour market. The unemployment rate remained at its lowest since the mid-1970s. Private sector regular pay growth has been stable since last summer, after edging up over the previous year. The absence of significant upward pressure on wages, despite the apparently tight labour market, has been surprising. That may reflect the impact of past structural reforms, the scope for employers to outsource production or to use migrant labour to relieve staff shortages, and the stabilisation of inflation expectations. The rapid growth in productivity means that unit wage costs have been broadly flat over the past year.

Other cost pressures have been building for a while, reflecting higher commodity prices, but there are signs that the rate of increase may be slowing. Higher input prices in manufacturing and the diminished margin of spare capacity have raised inflation at the factory gate to its highest for nearly a decade and business surveys suggest continued upward pressure on output prices is likely. Service sector inflation appears stable.

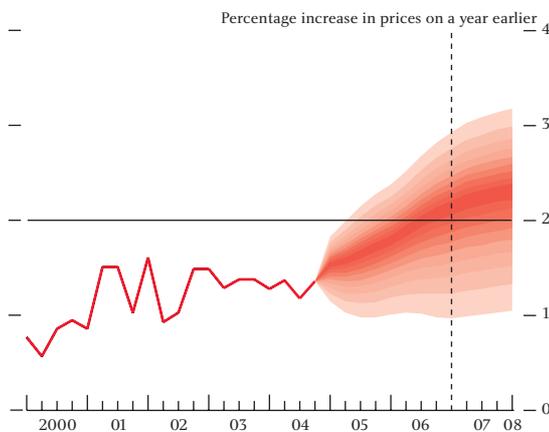
The price of imported goods and services had been flat or falling for some years, in part reflecting substitution towards cheaper sources of supply. That was a contributory factor to the subdued rate of consumer price inflation. But import prices have increased sharply since the spring of 2004, reflecting in part the pickup in global trade prices.

CPI inflation rose to 1.6% in December. That represents an increase of half a percentage point over just three months, but past experience suggests that such movements are not particularly unusual. Higher prices for domestic and imported goods can be expected to push up consumer goods price inflation. But that upward pressure on retail prices may be partly offset by further productivity improvements in the distribution sector.

### 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. On the central projection, higher import prices and the pressure of demand on supply push up inflation, which rises gradually to reach the 2% target during the second year and continues to rise a little thereafter. The profile is a shade higher than in the *November Report*.

**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 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 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 dotted line is drawn at the two-year point.

As usual there are considerable risks surrounding the central projections. These include: the outlook for the world economy; the prospects for domestic spending; the development of productivity; the evolution of wages; and the behaviour of import prices. Relative to the central projection, the Committee judges that the overall risks to growth and inflation are somewhat to the downside, though there is a range of views among members.

### **The policy decision**

At its February meeting, the Committee noted that, under the central projection, growth was near trend, with inflation rising to meet the 2% target in the second year and continuing to rise a little thereafter. But there were considerable uncertainties surrounding these projections, especially regarding the near-term strength of consumption, and the balance of risks was somewhat to the downside. In the light of this outlook, the Committee judged that no change in the current level of the official interest rate was necessary to keep inflation on track to meet the target in the medium term.

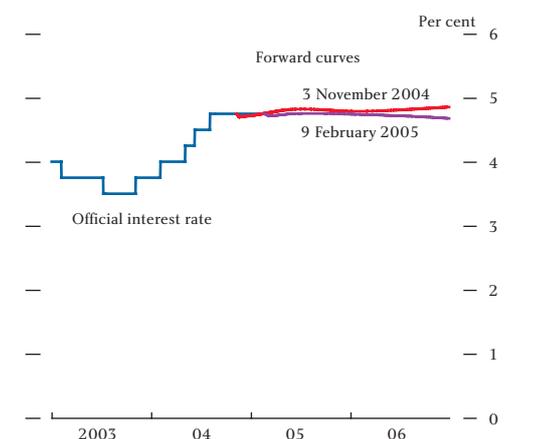
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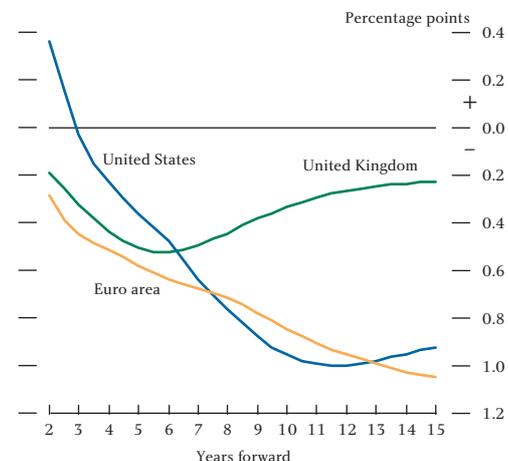
The MPC has left official interest rates unchanged since November. The yield curve implied a broadly flat profile for short-term rates over the next two years. The sterling ERI was a little higher than at the time of the November Report. Equity prices continued to rise, while house price inflation abated. Household borrowing growth eased further. Companies may be more comfortable with their balance sheet positions. Narrow money growth has stabilised after slowing during 2004, but broad money growth has eased.

**Chart 1.1**  
Bank of England repo rate and two-week forward curves<sup>(a)</sup>



(a) The forward curves have been derived from instruments that settle on the London interbank offered rate (Libor). That includes the market rates on short sterling futures, swaps, interbank loans and forward rate agreements, adjusted for credit risk.

**Chart 1.2**  
Changes in nominal forward rates<sup>(a)</sup>



(a) A forward interest rate at a point in the future implied by bond prices. The chart shows changes in instantaneous forward rates based on government bonds between 3 November 2004 and 9 February 2005.

## 1.1 Asset prices

### Short-term interest rates

The Monetary Policy Committee (MPC) has operational responsibility for meeting the Government's inflation target. It does this by setting the short-term interest (repo) rate at which the Bank of England deals in the money markets. Since the November Report, the Committee has left the repo rate unchanged at 4.75%.

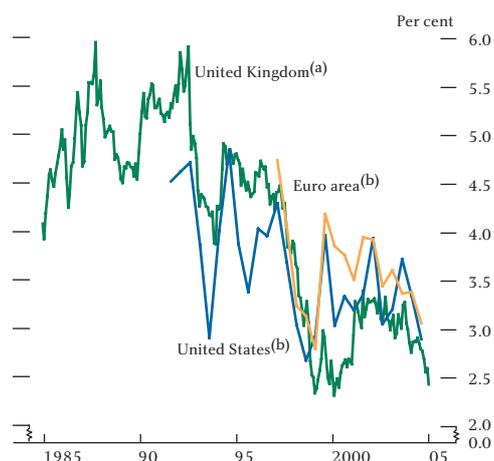
Market expectations of official interest rates over the next few years have edged lower since the November Report, according to estimates derived from yield curves (Chart 1.1). But the market curve still implied a broadly flat profile for interest rates during the next two years. On average, respondents to the latest Reuters poll of selected economists forecast that the repo rate would remain unchanged in 2005.

The ECB and Bank of Japan have left official interest rates unchanged since the November Report. The FOMC has raised the interest rate on federal funds three times during the same period to 2.5%, and futures contracts on 9 February pointed to a further tightening of policy. On the same basis, market participants expected more gradual rises in rates in the euro area and Japan.

### Longer-term interest rates

Medium-term forward rates in the United Kingdom have fallen since November (Chart 1.2). But forward rates at longer maturities have fallen by less. Longer-term forward rates declined in the United States and the euro area. The majority of the movements in these nominal rates reflected movements

**Chart 1.3**  
Measures of long-term real interest rates



Sources: Bank of England and Consensus Economics.

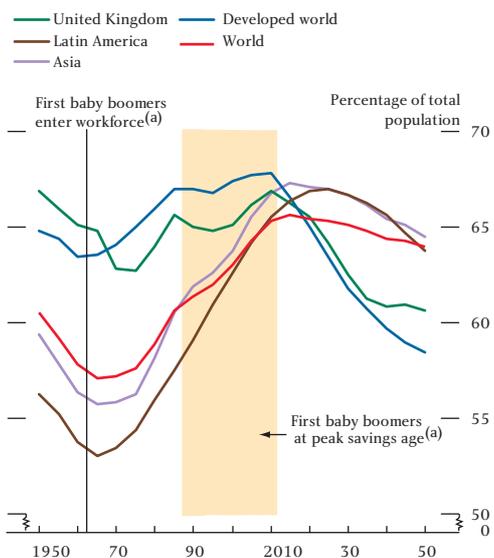
- (a) Calculated as the average index-linked yield on government bonds in five to ten years' time (based on five-year five-year forward rates), adjusted by the average difference between CPI and RPI inflation.
- (b) Calculated as the average yield on nominal government bonds in five to ten years' time, minus Consensus long-term inflation forecasts. These measures include inflation risk premia.

in real interest rates, rather than changes in market-based measures of inflation expectations.

More generally, long-term real interest rates have been notably low in several countries (Chart 1.3). Low real rates could either reflect a fall in the demand for funds — that is, weaker investment — or an increase in the supply of funds — that is, higher saving. But global investment has been relatively strong, particularly in countries such as China. So weak investment does not appear to be the reason for the low level of real rates. Instead, the answer may lie in changes to saving behaviour.

Demographic factors may be playing a role. The generation that was born in the baby boom after the Second World War has reached the age where it is likely to be saving most actively (Chart 1.4). Moreover, as life expectancies rise, households and companies will typically need to save more to fund retirement costs. Higher saving should push down on long-term rates.

**Chart 1.4**  
Working-age populations



Source: United Nations World Population Prospects.

- (a) Assumes that the first of the baby boom generation were born in 1946. Peak savings age assumed to be between 40 and 65.

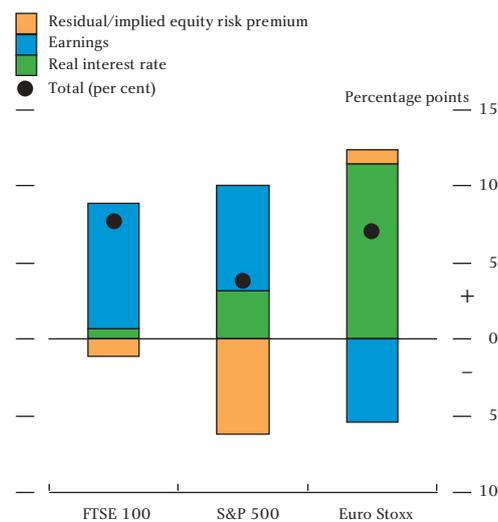
However, the evidence on saving behaviour is mixed. Household saving rates in some countries — such as Germany and Italy — have risen recently. And many Asian central banks have been investing their countries' savings in foreign government debt, particularly US bonds. But in other countries — such as the United States — household saving rates have been falling. And the emergence of fiscal deficits in some major economies may have reduced national saving rates. So current saving behaviour may not account for the low levels of real rates.

Instead, it is possible that financial market prices have responded to the prospect of increased saving in the future. The fall in equity prices between 2000 and 2003 — and the resulting shortfalls in some pension funds — may have led to a reassessment of the costs of funding retirement and a reduced willingness to take risk by mismatching assets and liabilities. That decline in equity prices may also have increased the attractiveness of bonds. Market intelligence suggests that institutional investors have indeed started to hold a larger proportion of their portfolios in long-dated bonds: in the United Kingdom, this has partly been instigated by regulatory changes. These factors could also have pushed down long-term real rates.

**Equities and corporate bonds**

Equities have continued to rise. The FTSE All-Share index averaged 2457 in the fifteen working days to 9 February — the starting assumption used in the MPC's latest projections. That was 6.8% higher than in the equivalent period used for the

**Chart 1.5**  
Accounting for changes in equity prices<sup>(a)(b)</sup>



Sources: Bank of England and IBES.

- (a) Between 15 January 2004 and 20 January 2005. These dates are determined by the availability of the Institutional Brokers' Estimate System (IBES) earnings forecasts: these are equity analysts' forecasts for earnings growth, typically over the next three to five years. The decomposition uses nine-year spot real interest rates, derived from US and UK index-linked yields, and nominal yields and inflation swaps for the euro area.
- (b) See Panigirtzoglou and Scammell (2002) for more details on the decomposition.

November projection, and 11% higher than a year earlier. Equity indices have also moved higher in the United States, the euro area and Japan.

Changes in equity prices can be attributed to one of three factors: real interest rates, expected future earnings or an implicit risk premium. Other things being equal, a fall in real interest rates is likely to boost equity prices by lowering the rate at which future earnings are discounted. A rise in expected earnings is also likely to push equity prices higher. Movements that cannot be ascribed to these factors are then attributed to changes in the implied equity risk premium — the premium that investors require to compensate them for uncertainty about future returns.

Analysis using this framework<sup>(1)</sup> offers only an imperfect guide to the drivers of changes in equity prices. But it can still provide an indication of which factors have been most important. Over the past year, such analysis suggests that the rises in UK and US equities can be ascribed to stronger observed and expected earnings (Chart 1.5). Lower real interest rates also play a role. By contrast, earnings do not account for the rise in euro-area equity prices, despite the strong growth in German profits over the past year. Instead, the rise in European equity prices is attributed to the lower real interest rate.

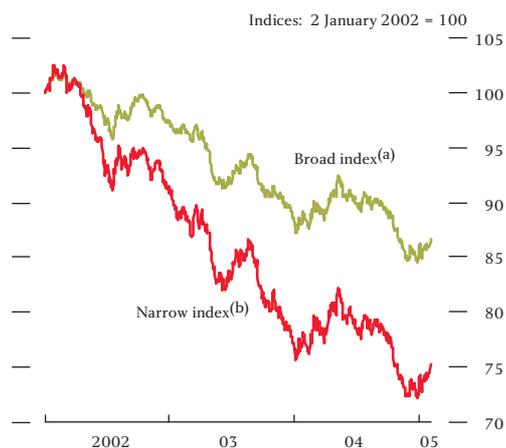
Spreads on corporate debt — the difference between yields on government and corporate bonds — can offer a guide to the perceived risks associated with default by companies. Spreads have narrowed in recent years, approaching the levels seen in the late 1990s. The general narrowing in spreads could reflect the successful restructuring of corporate balance sheets. But spreads have also fallen on emerging market sovereign debt.

The narrowing in spreads could instead be due to the continuing 'search for yield':<sup>(2)</sup> investors may have a greater willingness to take on risk, or perceive the risk associated with bonds to be low in the currently stable economic climate. Options prices are consistent with market participants expecting uncertainty and risk to remain low. Narrower spreads might also reflect developments in derivatives markets, which could have made it easier for investors to diversify their portfolios and allocate risk more effectively.

(1) For more details on this decomposition, see Panigirtzoglou, N and Scammell, R (2002), 'Analysts' earnings forecasts and equity valuations', *Bank of England Quarterly Bulletin*, Spring, pages 59–66.

(2) For more discussion of the 'search for yield', see recent issues of the Bank of England *Financial Stability Review*: for example pages 47–48 of the June 2004 *Review*.

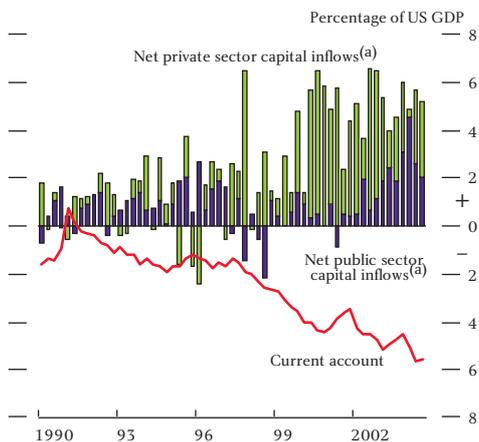
**Chart 1.6**  
**Measures of the dollar ERI**



Source: US Federal Reserve Board.

- (a) Includes currencies of all countries or regions that account for 0.5% or more of US imports or exports.
- (b) 'Major currency' index, including the Australian, Canadian, euro-area, Japanese, Swedish, Swiss and UK currencies.

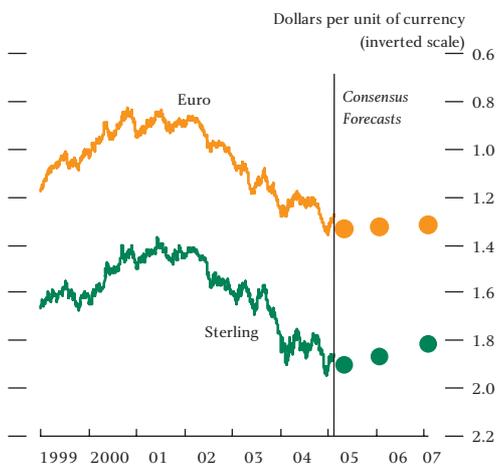
**Chart 1.7**  
**US international transactions**



Source: US Bureau of Economic Analysis.

- (a) Public and private refer to the sectors purchasing or selling assets.

**Chart 1.8**  
**Bilateral dollar exchange rates<sup>(a)</sup>**



Sources: Bank of England and Consensus Economics.

- (a) Dots are Consensus Forecasts from the January 2005 survey.

**Exchange rates**

During the past couple of years, foreign exchange markets have been dominated by the decline of the dollar against sterling and the euro. The dollar has been more stable against Asian currencies. The Chinese renminbi is pegged against the dollar, and the People's Bank of China has supported this policy by purchasing US securities. Some other Asian central banks have pursued similar strategies to limit the appreciation of their currencies against the dollar. So over the past three years, 'broad' exchange rate indices (ERIs) for the dollar, which include currencies like the Chinese renminbi, have fallen by less than 'narrow' ERI measures, which exclude them (Chart 1.6). The same is also true for broad and narrow measures of the real dollar ERI.

This purchasing activity by central banks shows up in international capital flows. Net flows of public sector funds into the United States — which includes central bank procurements of US assets — have picked up over the past few years (Chart 1.7), before falling back during 2004.

A key question is whether Asian central banks will continue to purchase US assets on such a large scale in the future. If these official purchases were to diminish, that could put further downward pressure on the dollar. However, it is also possible that the dollar may stabilise. For example, continued strong growth in the United States could trigger a new wave of private sector capital inflows. On average, economic forecasters expect the dollar to stabilise against the euro and sterling over the next two years (Chart 1.8), although that masks a wide range of views.

The sterling ERI has been volatile during the past three months: for example, it rose to 104.4 on 17 December, but fell back to 102.3 ten days later. In the fifteen working days to 9 February, it averaged 102.9. That is the starting point in the MPC's projections, and was 0.8% above the equivalent average at the time of the *November Report*. The Bank of England plans to publish new measures of the sterling ERI: these are discussed in the box on page 7.

**The housing market**

According to the Halifax and Nationwide indices house price inflation has eased over the past three months, broadly as the Committee expected in November (Chart 1.9). And inflation has eased in many regions, not just those that experienced the strongest gains in the recent past. Mortgage lending growth also appears to be slowing: in November 2004, the number of mortgage approvals for house purchase was the lowest since 1995. Approvals recovered a little in December.

## New measures of the sterling ERI

The Bank of England has recently proposed new measures of the sterling exchange rate index (ERI). The ERI is a measure of the UK exchange rate against a basket of other currencies. It is constructed by weighting together different bilateral exchange rates — that is, sterling’s value against individual currencies. The weights reflect the relative importance of different countries for UK trade.

The existing sterling ERI published by the Bank of England uses weights based on the trade of manufactured goods. These weights were last updated in 1995. The proposed new ERI measures also incorporate services trade and allow both the weights and countries included to vary over time.<sup>(1)</sup>

But the impact of these changes on the overall index is small. Chart A shows the existing sterling ERI alongside the proposed ‘narrow’ sterling ERI — an exchange rate measure that includes countries that account for 1% or more of either UK imports or exports.

**Chart A**  
Existing and proposed measures of the sterling ERI<sup>(a)</sup>



(a) Nominal indices.

In addition to this ‘narrow’ sterling ERI, the Bank is also proposing to publish a broader measure. The proposed ‘broad’ ERI includes countries that account

**Chart B**  
Proposed broad and narrow ERI measures<sup>(a)</sup>



(a) Calculated using bilateral exchange rates and relative consumer prices for individual countries, and then combining using trade weights.

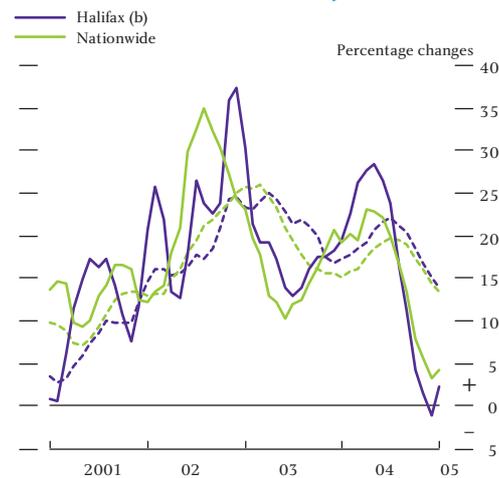
for 0.5% or more of either UK imports or exports. The new narrow and broad sterling ERIs are presented in Chart B in both nominal and real (that is, inflation-adjusted) terms.

In nominal terms, there are differences between the proposed narrow and broad ERI measures. But for gauging UK competitiveness it is real, rather than nominal, exchange rates that matter. Many of the countries included in the broad index have experienced significant currency depreciations in recent years, but have also experienced high inflation. So in real terms, the differences between the proposed broad and narrow ERI indices are small, as shown by the blue and red lines in Chart B. The same is also true when comparing the new measures to the existing index. Consequently, the new ERI measures have only minimal implications for the MPC’s assessment of activity and inflationary pressure over the past. The impact on monetary policy would have been negligible if the new ERI measures had been employed in the past rather than the existing measure.

(1) This is discussed in Lynch, B and Whitaker, S (2004). ‘The new sterling ERI’, *Bank of England Quarterly Bulletin*, Winter, pages 429–41.

Although the demand for mortgage lending appears to have been slowing, it is possible that approvals data have been distorted by the change to mortgage regulation on 1 November. Some lenders may have speeded up applications prior to the regulatory change, while others could have delayed applications. This may have pushed down approvals in the autumn, but overall the size of this impact is unclear.

**Chart 1.9**  
**Lenders' measures of house price inflation<sup>(a)</sup>**



Sources: Bank of England and Halifax.

- (a) Solid lines show the annualised percentage change of the past three months compared with the previous three months. Dashed lines show the percentage change during the past three months compared with the same period a year ago.
- (b) The Halifax series has been adjusted by Bank staff for a change in the method of calculation.

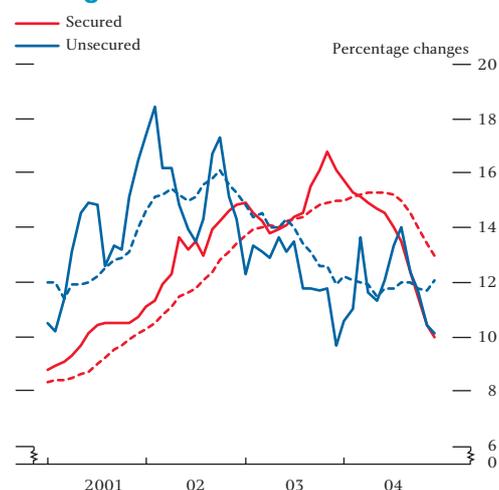
**Table 1.A**  
**Housing market indicators<sup>(a)</sup>**

| Activity   | Average since 2000 | 2004 |      |      |      | 2005 |
|--|--------------------|------|------|------|------|------|
|  |                    | Q3   | Oct. | Nov. | Dec. | Jan. |
| HBFB net reservations <sup>(b)</sup>                     | 4                  | -27  | -52  | -50  | -43  | n.a. |
| HBFB site visits <sup>(b)</sup>                          | -3                 | -34  | -44  | -49  | -22  | n.a. |
| RICS sales <sup>(c)</sup> to stocks <sup>(d)</sup> ratio | 0.46               | 0.43 | 0.35 | 0.32 | 0.31 | 0.31 |
| RICS new buyers enquiries <sup>(d)</sup>                 | -5                 | -28  | -19  | -5   | -6   | -3   |
| RICS new instructions <sup>(d)</sup>                     | 7                  | 15   | 17   | 23   | 22   | 17   |
| Mortgage approvals for house purchase (000s)             | 107                | 94   | 86   | 77   | 83   | n.a. |
| Land transaction returns (000s) <sup>(e)</sup>           | 126                | 150  | 137  | 125  | 140  | n.a. |
| <b>Prices</b>  |                    |      |      |      |      |      |
| HBFB house prices <sup>(d)</sup>                         | 35                 | 9    | -11  | -12  | -19  | n.a. |
| RICS house prices <sup>(c)</sup>                         | 24                 | -12  | -37  | -44  | -38  | -36  |
| RICS price expectations <sup>(c)</sup>                   | 15                 | -14  | -24  | -22  | -25  | -26  |

Sources: Bank of England, House Builders Federation (HBF), Inland Revenue and Royal Institution of Chartered Surveyors (RICS).

- (a) All series are net percentage balances unless otherwise stated.
- (b) Compared with a year ago.
- (c) During the past three months/expected over the next three months.
- (d) Compared with the previous month.
- (e) The number of transactions in England and Wales registered with the Land Registry. These include some commercial property transactions, and so may give a misleading picture of the residential property market. Before the start of 2004, the series was called particulars delivered and included fewer commercial property transactions.

**Chart 1.10**  
**Lending to individuals<sup>(a)</sup>**



- (a) Solid lines show the three-month annualised percentage change. Dashed lines show the percentage change over the past twelve months.

Approvals data may be distorted for several months, and indicators of activity further along the house purchase timeline — such as land transaction returns — could also be affected.<sup>(1)</sup>

The RICS sales to stocks ratio was broadly unchanged in January, after falling for much of 2004 — this measure of market tightness has been closely related to house price inflation in the past. Other housing market indicators have been mixed in recent months (Table 1.A). The MPC's central projection implies that house prices may fall modestly for a period. But the outlook for house prices is extremely uncertain.

## 1.2 Money, credit and balance sheets

### Households

Annual growth in secured lending to individuals has slowed over the past six months, consistent with the weakening in the housing market. Over the same period, annual growth in unsecured lending was largely unchanged. But shorter-run measures of both secured and unsecured lending growth have slowed (Chart 1.10). On average, most interest rates charged on secured and unsecured lending have been little changed since November, after rising with official rates during 2004.

Higher interest rates have made it more expensive for households to service their debt. But there are few signs of significant financial distress, taking the household sector as a whole. Mortgage possession actions have edged up over the past two years (Chart 1.11). But they remain low by historical standards, and at least some of the rise is likely to reflect legal changes that limit the time trustees have to repossess homes. The latest arrears data for both mortgages and credit cards suggest no material increase in financial distress. And recent surveys by the Bank of England<sup>(2)</sup> and the Financial Services Authority<sup>(3)</sup> suggested that household debt remained affordable for most people, even after the increases in official interest rates since 2003.

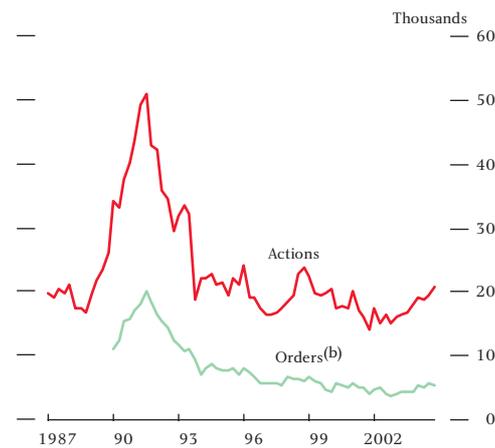
One possible sign of pressure is the continued rise in bankruptcies and personal insolvencies over the past year; these are now above their level in the early 1990s. The rise in insolvencies has been driven by petitions from debtors, rather than creditors. That could partly reflect legal changes that have reduced the penalties associated with most bankruptcies. But there may also have been an underlying increase in

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

(2) See [May, O., Tudela, M and Young, G \(2004\), 'British household indebtedness and financial stress: a household-level picture', Bank of England Quarterly Bulletin, Winter, pages 414–28.](#)

(3) See *Financial Risk Outlook 2005*, Financial Services Authority.

**Chart 1.11**  
Mortgage possession actions and orders<sup>(a)</sup>



Source: Department for Constitutional Affairs.

- (a) Data are for England and Wales, and cover both local authority and private mortgages.
- (b) Excludes suspended orders.

**Chart 1.12**  
PNFCs<sup>(a)</sup> capital gearing at market value<sup>(b)</sup>



- (a) Private non-financial corporations.
- (b) Net debt as a percentage of market valuation.

**Table 1.B**  
Monetary aggregates

Percentage changes on a year earlier

|                   | 2004 |     |     |     | 2005 |
|-------------------|------|-----|-----|-----|------|
|                   | Q1   | Q2  | Q3  | Q4  | Jan. |
| Notes and coin    | 7.0  | 6.3 | 5.8 | 5.7 | 5.8  |
| M0 <sup>(a)</sup> | 7.1  | 6.4 | 5.8 | 5.8 | 5.7  |
| M4 <sup>(b)</sup> | 8.0  | 8.1 | 8.9 | 8.6 | n.a. |

- (a) M0 is a narrow measure of money, consisting of notes and coin and bankers' operational balances held at the Bank of England.
- (b) M4 is a broad monetary aggregate. Its principal components are the UK private sector's holdings of sterling notes and coin, and its holdings of sterling deposits (including repos) with UK monetary financial institutions.

insolvencies, as these have also picked up in Scotland where there have been no legal changes.

Annual reviews of some mortgage rates and the expiry of some fixed-rate terms could add to the cost of borrowing during 2005. But in aggregate, the impact is likely to be small. Annual review mortgages account for a relatively small proportion of the total mortgage stock. And rates on three and five-year fixed deals are currently at or below their levels three to five years ago. To some extent, that will offset the impact of shorter-term deals, where fixed rates are higher than when loans were taken out.

**Companies**

Capital gearing for companies — the ratio of debt to the market value of assets — began to rise at the end of the 1990s, partly reflecting the fall in equity prices from early 2000 (Chart 1.12). In more recent years, many companies have scaled back cash outflows on dividends and investment in order to reduce debt levels, as discussed in the November *Inflation Report*. But there are signs that this adjustment may have abated. For example, investment spending has started to pick up over the past year or so. And since 2004 Q2, companies have chosen to buy back equities rather than to use those funds to repay debt.

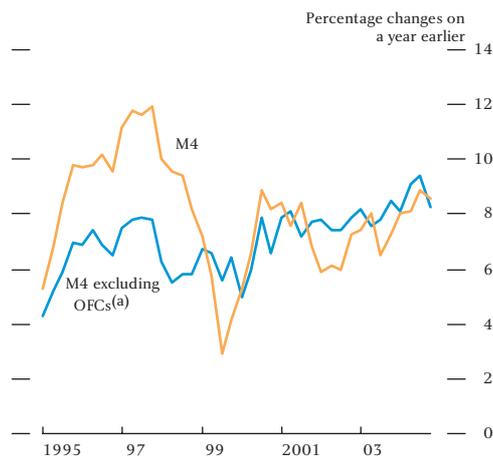
Overall, corporate liquidity appears ample. In recent years profitability has improved: on average profits have grown by around 2% a quarter since 2001. Growth in corporate deposits weakened at the end of last year, but that followed strong increases in the middle of 2004. And bond issuance picked up in 2004 Q4: narrow bond spreads are likely to have made it more attractive for companies to raise funds in these markets.

**Monetary aggregates**

Narrow money growth has been broadly unchanged since the November *Report* (Table 1.B), having drifted lower during 2004. Twelve-month growth in M0 was 5.7% in January 2005. Annual growth in M4, a broader monetary aggregate, has eased since the November *Report*. M4 includes other financial corporations' (OFCs') holdings of broad money, which can be volatile from quarter to quarter. When OFCs are excluded, the slowing in growth is more apparent (Chart 1.13). Divisia measures of money growth, which weight the components of M4 according to how useful they are for transactions, have also eased for both the household and corporate sectors (Table 1.C).<sup>(1)</sup> Nevertheless, broad money growth remained relatively buoyant.

(1) The Bank of England has recently changed its method of calculating Divisia money series. For more information see Hancock, M (2005). 'A new measure of Divisia money', *Monetary and Financial Statistics*, January, pages 13–14.

**Chart 1.13**  
**Measures of broad money**



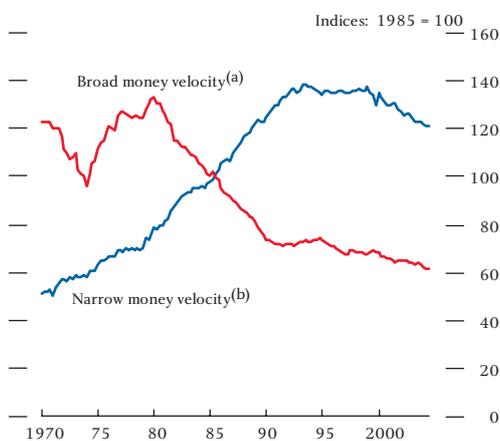
(a) Other financial corporations.

**Table 1.C**  
**Sectoral monetary aggregates**

Percentage changes on a year earlier

|                         | 2003 | 2004 |      |      |     |
|-------------------------|------|------|------|------|-----|
|                         | Q4   | Q1   | Q2   | Q3   | Q4  |
| Households' M4 deposits | 8.4  | 8.1  | 8.4  | 8.8  | 8.2 |
| PNFCs' M4 deposits      | 8.3  | 8.6  | 12.4 | 11.6 | 7.2 |
| Households' Divisia     | 9.9  | 9.2  | 9.6  | 9.0  | 8.1 |
| PNFCs' Divisia          | 7.0  | 11.0 | 16.0 | 10.0 | 8.6 |

**Chart 1.14**  
**Measures of money velocity**



(a) Ratio of nominal GDP at market prices to M4.  
(b) Ratio of nominal consumption to M0.

Money growth can be informative about the outlook for nominal demand in the economy. But the relationship between money and spending is blurred when the velocity of circulation — a measure of how often money is used in transactions — is unpredictable.

Narrow money is largely cash, and so holdings may be related to consumption. Chart 1.14 shows that narrow money velocity rose sharply throughout the 1970s and 1980s, before stabilising in the early 1990s. That rise in velocity most likely reflected new cash-saving technologies, such as credit and debit cards. These innovations may have been partly driven by high inflation and nominal interest rates, which make holding cash more costly. In more recent years, velocity has fallen a little, consistent with low levels of both inflation and nominal interest rates.<sup>(1)</sup>

Developments in broad money, which includes holdings of sterling deposits as well as cash, are likely to be associated with changes in aggregate demand. In contrast to its narrow counterpart, the velocity of broad money fell sharply during the 1980s following financial liberalisation (Chart 1.14). It has also fallen again more recently. The recent decline could reflect increased use of bank deposits as a savings vehicle following the equity price falls between 2000 and 2003. If that decline in velocity were permanent then the recent rapid growth in broad money (Chart 1.13) would have few direct implications for future nominal demand and inflation. However, there is a risk that households and companies will try to scale back their bank deposits at some point in the future, which could boost nominal demand directly. Or they could use the deposits to buy other assets, such as equities. That could boost spending on goods and services indirectly through higher asset prices.

(1) See Grant, K, Vlieghe, G and Brigden, A (2004), 'Assessing the stability of narrow money demand in the United Kingdom', *Bank of England Quarterly Bulletin*, Summer, pages 131–41.

Domestic demand growth eased in Q3, partly reflecting slower consumption growth. Retail sales growth weakened significantly in Q4, but the underlying trend in consumer spending growth remained unclear. Business investment growth edged down in Q3 but conditions remained in place for further recovery. Government consumption and investment growth moved higher. As a percentage of GDP, the current account deficit rose to its highest level in nearly four years. The US economy performed strongly in 2004 and the outlook is for further solid growth in the short term. But euro-area growth slowed in the second half of 2004, and the Japanese recovery appeared to stall.

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

Percentage changes on a quarter earlier

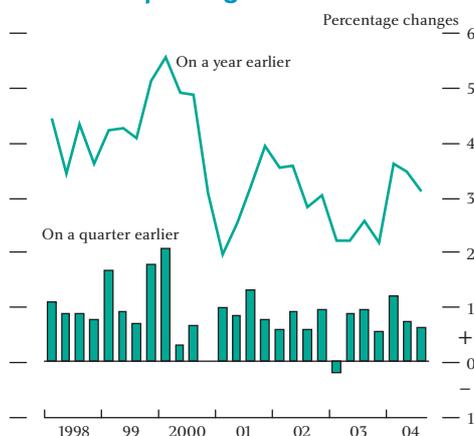
|   | Average    | 2004       |            |            |
|---|------------|------------|------------|------------|
|   | 1998–2003  | Q1         | Q2         | Q3         |
| Household consumption                   | 0.9        | 1.2        | 0.7        | 0.6        |
| Government consumption                  | 0.8        | 0.8        | 0.5        | 1.4        |
| Investment                              | 0.9        | 2.8        | 1.1        | 0.6        |
| of which, business                      | 0.9        | 1.5        | 1.3        | 1.0        |
| <b>Final domestic demand</b>            | <b>0.8</b> | <b>1.4</b> | <b>0.7</b> | <b>0.7</b> |
| Change in inventories <sup>(b)(c)</sup> | 0.0        | -0.1       | -0.1       | 0.1        |
| Alignment adjustment <sup>(c)</sup>     | 0.0        | -0.1       | 0.2        | -0.2       |
| <b>Domestic demand</b>                  | <b>0.8</b> | <b>1.2</b> | <b>0.7</b> | <b>0.6</b> |
| Exports                                 | 0.8        | -1.7       | 1.9        | 0.7        |
| Imports                                 | 1.4        | 0.1        | 1.3        | 1.3        |
| Net trade <sup>(c)</sup>                | -0.2       | -0.5       | 0.1        | -0.2       |
| <b>GDP at market prices</b>             | <b>0.7</b> | <b>0.7</b> | <b>0.9</b> | <b>0.5</b> |

(a) Chained volume measures.

(b) Excludes the alignment adjustment.

(c) Percentage point contributions to quarterly growth of GDP.

**Chart 2.1**  
Consumer spending<sup>(a)</sup>



(a) Chained volume measure.

Nominal domestic demand expanded by 1.3% in 2004 Q3, unchanged from the two preceding quarters. Growth in the volume of domestic demand eased slightly to 0.6% in Q3 (Table 2.A). As has been the case for several years, the volume of domestic demand expanded more rapidly than GDP, meaning that net trade again subtracted from growth. The rest of this section assesses domestic and external demand in more detail.

## 2.1 Domestic demand

### Household consumption

Consumption growth eased to 0.6% in Q3 (Table 2.A), broadly in line with the MPC's November projections. Over the past three years, consumer spending growth has averaged around 0.7% a quarter (Chart 2.1). That is similar to its average quarterly increase during the past 50 years. Consumer spending has risen broadly in line with household income during the past few years despite large rises in house prices and household debt.

Evidence on consumer spending growth over the Christmas and New Year period has been mixed. Official data suggest that the volume of retail sales fell by 1% between November and December after adjusting for seasonal variation. That was the largest monthly decline in nearly two years and helped to drag down overall growth in retail sales in Q4 (Table 2.B).

But the official headline statistics on December retail sales are not necessarily an accurate indicator of high street spending over the Christmas period. In part, that is because the underlying data are so highly seasonal. Unadjusted retail sales volumes rose by over 17% between November and December

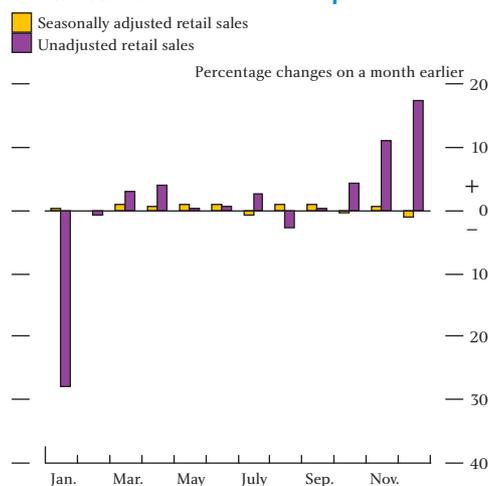
**Table 2.B**  
**Consumption indicators**

|   | 2005    |      | 2004 |      |      | 2005                |
|---|---------|------|------|------|------|---------------------|
|   | Average | Q1   | Q2   | Q3   | Q4   | Jan. <sup>(a)</sup> |
| <b>Indicators<sup>(b)</sup></b>                       |         |      |      |      |      |                     |
| Retail sales volumes <sup>(c)</sup>                   | 0.9     | 1.5  | 1.9  | 1.0  | 0.3  | n.a.                |
| BRC retail sales values <sup>(d)</sup>                | 4.7     | 5.5  | 5.5  | 4.0  | 2.6  | 2.8                 |
| CBI retailers' reported sales <sup>(e)</sup>          | 14.4    | 27.0 | 41.3 | 5.7  | 21.0 | 16.3                |
| <b>Private vehicle registrations<sup>(c)(f)</sup></b> |         |      |      |      |      |                     |
| GfK consumer confidence <sup>(g)</sup>                | 0.3     | 1.4  | -8.8 | -1.7 | 1.2  | -0.5                |
|   | -4.5    | -1.7 | -2.8 | -4.9 | -4.5 | -2.1                |
| <b>Determinants</b>                                   |         |      |      |      |      |                     |
| Real disposable income <sup>(c)</sup>                 | 0.8     | 0.4  | 1.4  | 0.9  | n.a. | n.a.                |
| Equity prices <sup>(h)</sup>                          | 1980    | 2219 | 2231 | 2206 | 2346 | 2384                |
| House price inflation <sup>(b)(i)</sup>               | 4.0     | 5.4  | 5.3  | 2.9  | 0.6  | 0.8                 |

Sources: Bank of England, Bloomberg, BRC, CBI, GfK, Halifax, Nationwide, ONS and SMMT.

- (a) January figure refers to three-month average/three-month change on previous three months.  
(b) Quarterly data are averages of monthly observations.  
(c) Percentage change compared with previous quarter/three months.  
(d) Percentage change in retail sales values compared with a year earlier. This is the 'total' measure.  
(e) Balance of respondents in the *CBI Distributive Trades Survey* reporting retail sales higher than a year earlier.  
(f) Data have been seasonally adjusted by the Bank of England.  
(g) Aggregate GfK measure.  
(h) Average level of the FTSE All-Share index.  
(i) Calculated from the average of Halifax and Nationwide quarterly indices, adjusted by Bank staff for a change in the method of calculation of the Halifax index.

**Chart 2.2**  
**Retail sales volumes in 2004**



(Chart 2.2). Therefore even a relatively small error in the estimate of the seasonal pattern can lead to a large error in the estimate of seasonally adjusted sales.

Survey evidence on the momentum in high street activity over the Christmas trading period was mixed. The British Retail Consortium (BRC) survey pointed to lower growth in retail sales values over the Christmas and New Year period. But within that, data for January suggested an upturn. On the other hand, the CBI survey suggested a slowdown in growth in January. The Bank's Agents have also surveyed their contacts about sales at the turn of the year. They reported that although growth in retail sales volumes had moderated, it had held up reasonably well when compared with official data.

Weaker retail sales growth does not necessarily imply weaker consumer spending growth. Retail sales account for less than two fifths of total consumption: they exclude spending on services such as housing costs, as well as on some goods such as cars. For Q4, there are as yet few hard data on these other components of consumer spending. But private vehicle registrations picked up in Q4, although data for January were weaker (Table 2.B). Movements in consumer confidence could shed some light on total consumer spending: this rose both in Q4 and in January.

Another way of assessing trends in total spending is to analyse movements in the main determinants of consumption. Table 2.B shows that real disposable income growth has remained robust for the most recent data. And renewed employment growth should support households' income in the near term. Equity prices have also risen recently. That should buoy spending by boosting households' financial wealth.

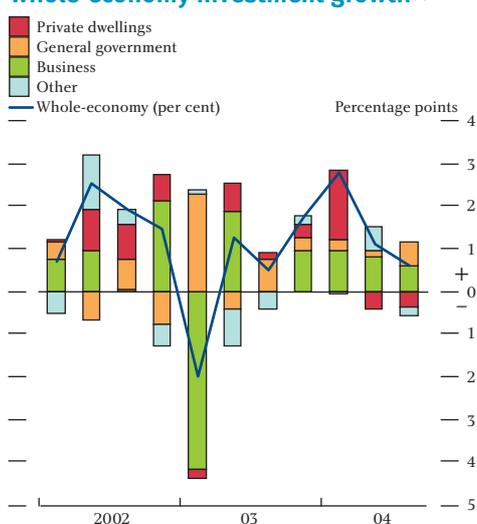
On the other hand, house price inflation has eased during the past few months. As discussed in the November *Inflation Report*,<sup>(1)</sup> the empirical association between house prices and consumer spending has weakened in recent years. And the MPC judges that an easing in house price inflation is likely to affect consumer spending only to a limited extent. Drawing together this information on indicators and determinants of spending, the MPC believes that household spending growth probably moderated in Q4. But there is considerable uncertainty about the near-term outlook.

### Government consumption

The pace of growth in government spending quickened in Q3. Measured real government consumption rose by 1.4% in Q3, following 0.5% growth in Q2. But real government spending is not the most relevant measure for assessing the impact of

(1) See the box on pages 12 and 13.

**Chart 2.3**  
Sectoral contributions to quarterly whole-economy investment growth<sup>(a)</sup>



(a) Chained volume measures.

**Chart 2.4**  
Business investment<sup>(a)</sup>



(a) Chained volume measure.

**Table 2.C**  
Corporate financial indicators

|                                  | 1987 | 1994 | 2003 | 2004 |      |
|----------------------------------|------|------|------|------|------|
|                                  |      |      |      | H1   | Q3   |
| Capital gearing <sup>(a)</sup>   | 10.8 | 20.8 | 37.5 | 32.0 | 32.1 |
| Corporate profits <sup>(b)</sup> | 16.6 | 17.3 | 15.3 | 15.7 | 15.6 |
| Income gearing <sup>(c)</sup>    | 14.9 | 15.8 | 18.2 | 18.4 | 18.8 |

(a) Private non-financial corporations' (PNFCs) net debt as a percentage of the market valuation of the PNFC sector.

(b) Non-oil PNFCs' gross operating surplus (excluding the alignment adjustment) as a percentage of GDP.

(c) PNFCs' interest payments as a percentage of their gross operating surplus (excluding the alignment adjustment).

public spending on private sector inflation. The impact of the government sector on CPI inflation is best assessed by considering the government's demand for resources: that is, the quantity of private sector goods and services purchased by the government and the labour that the public sector employs. A summary measure of the government's demand for resources also grew robustly in Q3.

### Investment and inventory accumulation

Whole-economy investment growth slowed to 0.6% in Q3 (Chart 2.3). Within that, government investment expanded briskly. Dwellings investment fell again in Q3 following a decline in Q2, consistent with the cooling housing market.

Business investment accounts for the lion's share of whole-economy investment. It rose by 1.0% in Q3 and has risen by around 1%–1.5% in most quarters during the past 18 months. This represents an increase in growth compared with the earlier part of the decade. But, when compared with previous business investment recoveries of 1987 and 1994, the recent rate of expansion looks modest (Chart 2.4).

One explanation is that financial factors have been less conducive to rapid investment expansion than in previous recoveries (Table 2.C). The financial climate has been improving in recent years: corporate indebtedness, as measured by capital gearing, has fallen and profits as a proportion of GDP have increased. Even so, compared with previous upturns, gearing has remained higher and profits lower.

What are the prospects for future investment? Some indicators point to near-term weakness (Table 2.D).

Investment intentions have dampened slightly, according to the CBI and BCC business surveys. And more businesses are pointing to demand uncertainty as a factor restraining future investment.

However, other data point to brighter investment prospects. Estimates of capacity utilisation have continued to imply that companies are operating above normal levels (Section 3), suggesting that they may require more capital equipment. Moreover, corporate bond spreads have remained low and equity prices have risen (Section 1). That should bolster investment by keeping the cost of capital low. And, as outlined in Section 1, companies may be more comfortable with their balance sheets: that should facilitate future investment spending. Taking this information together, the MPC judges that the business investment recovery will continue in the near term.

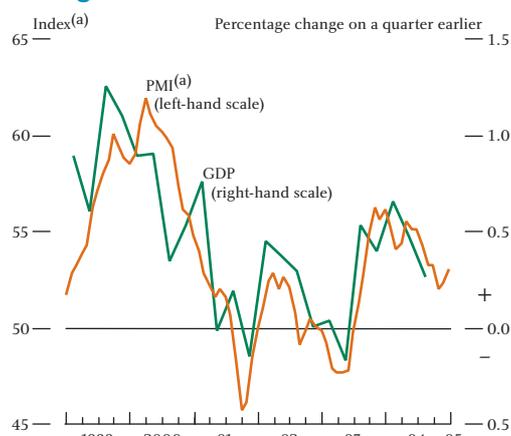
**Table 2.D**  
**Indicators of future investment**

|   | 2003 | 2004 |     |     |
|---|------|------|-----|-----|
|   |      | H1   | Q3  | Q4  |
| CBI investment intentions <sup>(a)</sup>    | -14  | -1   | -17 | -19 |
| BCC investment intentions <sup>(a)</sup>    | 10   | 18   | 17  | 15  |
| CBI uncertainty about demand <sup>(b)</sup> | 54   | 46   | 43  | 49  |

Sources: BCC and CBI.

- (a) Net percentage balance of businesses expecting to increase investment. The CBI balance refers to manufacturing sector firms. The BCC balance refers to the average of manufacturing and service sector firms' investment intention balances, weighted by the respective shares in aggregate investment in 2001.
- (b) Percentage of manufacturing sector businesses reporting demand uncertainty as a factor restraining investment.

**Chart 2.5**  
**Euro-area GDP and surveys of purchasing managers**



Sources: Eurostat, Reuters and Thomson Financial Datastream.

- (a) Weighted average of the PMI monthly indices for manufacturing and services, using the relative magnitude of value added in industry and services in 2003. A level below 50 indicates a decline in activity; above 50, an increase.

**Table 2.E**  
**Economic conditions in the euro area**

|  | 2002 |      | 2004 |      | 2005                |
|--|------|------|------|------|---------------------|
|  | Q3   | Q4   | Q3   | Q4   | Jan. <sup>(a)</sup> |
| GDP growth <sup>(b)</sup>                    | 0.3  | 0.0  | 0.3  | n.a. | n.a.                |
| Profitability <sup>(c)</sup>                 | 38.3 | 38.3 | 39.2 | n.a. | n.a.                |
| Long-term real interest rates <sup>(d)</sup> | n.a. | 3.4  | n.a. | 2.8  | n.a.                |
| Equity prices <sup>(e)</sup>                 | 229  | 212  | 244  | 259  | 265                 |
| <b>Survey data</b>                           |      |      |      |      |                     |
| PMI <sup>(f)</sup>                           | 50.7 | 50.1 | 54.2 | 52.6 | 52.5                |
| Industrial confidence <sup>(g)</sup>         | -4.1 | -2.5 | 3.5  | 3.9  | 3.2                 |
| Consumer confidence <sup>(g)</sup>           | 1.3  | -2.7 | -2.4 | -1.7 | -1.7                |
| Employment expectations <sup>(g)</sup>       | -1.1 | -2.1 | 0.9  | 0.9  | 0.9                 |

Sources: Eurostat, Reuters and Thomson Financial Datastream.

- (a) Data refer to three months to January.
- (b) Percentage change on previous quarter.
- (c) Gross operating surplus and mixed income as a percentage of GDP.
- (d) Long rates as defined in Chart 1.3. There are no Q3 observations as these data rely on long-term Consensus inflation expectations, which are only available twice a year. The Q4 observations use data from the October survey.
- (e) Average level of the Euro Stoxx index.
- (f) See footnote (a) of Chart 2.5.
- (g) European Commission survey. Reported numbers indicate the balance relative to average since 1985.

Inventories subtracted 0.1 percentage points from GDP growth in 2004 Q3. That entirely reflects movements in the alignment adjustment, a statistical device which ensures consistency between the different measures of GDP. Recorded inventories rose slightly in Q3.

## 2.2 External demand and UK net trade

The value of the United Kingdom's exports is equivalent to about one quarter of its output. So global economic developments affect aggregate demand in the UK economy.

World GDP appears to have expanded vigorously in 2004. World output growth should moderate in 2005, as the effects of higher oil prices and policy tightening in the United States take hold. But the continued rally in global equity indices as well as the low level of long-term interest rates (Section 1) should help support global prospects. And although the social and human losses from the tsunami disaster were devastating, the impact on economic activity at the global level is likely to be small.

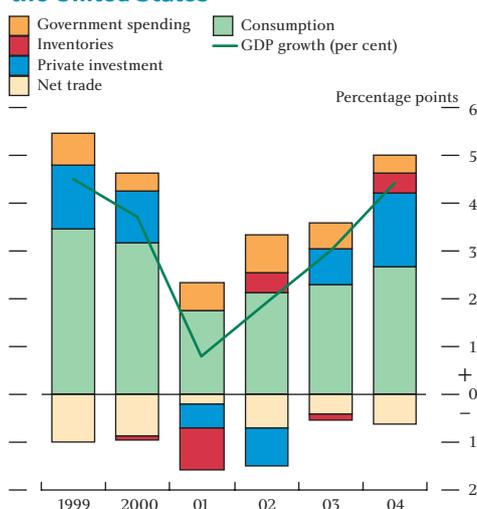
### The euro area

The euro area is the United Kingdom's chief trading partner, purchasing about half of all UK exports. GDP growth in the euro area slackened to 0.3% in Q3, modestly weaker than anticipated by the MPC in November. Two years ago, a similar easing in growth presaged three quarters of flat or falling output. The latest surveys of purchasing managers do not indicate an immediate rebound in activity (Chart 2.5), and consumer confidence remains relatively subdued, below its long-run average. So is the recovery under threat?

On a country basis, weaker Q3 growth mainly reflected developments in France and Germany. In France, part of the slowdown resulted from an unexpected drop in consumption. And monthly data on household consumption of manufactured goods for Q4 suggest a rebound in spending. However, Germany has been characterised by weak growth, in particular subdued domestic demand growth, for some time. Germany is the United Kingdom's second most important export market. So its domestic conditions particularly matter for UK demand. The box on pages 16–17 explores the reasons why German domestic demand has been so weak.

More generally, economic conditions in the euro area seem more supportive of continued recovery, particularly in investment, than at the cusp of the previous downturn two years ago. Higher equity prices and lower real interest rates should lower the cost of capital to businesses (Table 2.E and Section 1) and stimulate investment. Rising corporate

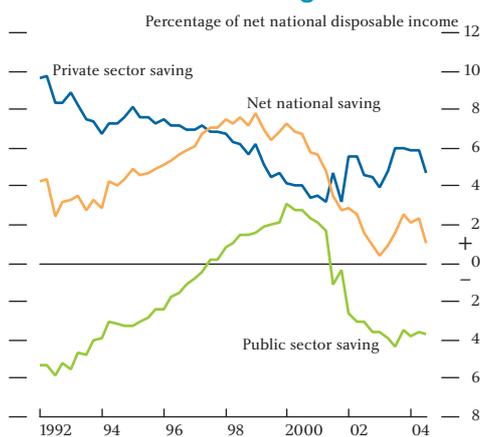
**Chart 2.6**  
Contributions to annual GDP growth in the United States<sup>(a)</sup>



Source: US Bureau of Economic Analysis.

(a) Chained volume measures.

**Chart 2.7**  
The US net national saving rate



Source: US Bureau of Economic Analysis.

**Table 2.F**  
Indicators of consumption and investment in the United States

|  | 2003    | 2004 |      |      |      |
|--|---------|------|------|------|------|
|  | Average | Q1   | Q2   | Q3   | Q4   |
| <b>Consumption indicators</b>                  |         |      |      |      |      |
| Employment <sup>(a)</sup>                      | 8       | 177  | 231  | 154  | 182  |
| US household net worth <sup>(b)</sup>          | 5.16    | 5.39 | 5.39 | 5.41 | n.a. |
| <b>Investment indicators</b>                   |         |      |      |      |      |
| Non-defence capital goods orders (\$ billions) | 172     | 184  | 191  | 202  | 204  |
| Corporate profits <sup>(c)</sup>               | 7.1     | 7.9  | 7.7  | 7.3  | n.a. |
| Lending to corporates <sup>(d)</sup>           | -2.0    | -0.7 | -1.1 | 1.5  | 1.4  |

Sources: US Bureau of Economic Analysis and Thomson Financial Datastream.

- (a) Average monthly increase in non-farm payrolls (000s).  
 (b) The level of US household net worth relative to personal disposable income.  
 (c) The level of post-tax corporate profits relative to GDP.  
 (d) Lending to industrial and commercial companies. Percentage change on previous quarter.

profitability could also buoy activity. But, on the other hand, it is possible that companies will plough some of those funds into debt reduction, especially given that the debt to GDP ratio in the euro area has remained high by recent historical standards.<sup>(1)</sup>

Taking all this information together, the MPC expects the euro area to resume its recovery this year.

## The United States

US GDP expanded by 0.8% in Q4 following a rise of 1% in the previous quarter. In 2004 as a whole, GDP rose by 4.4% — the highest growth rate since 1999. That has been driven by vigorous domestic demand growth in the private sector (Chart 2.6).

The strength of domestic demand growth has been reflected in a rising current account deficit — the United States as a whole increasingly has had to borrow to finance its demand for goods and services. In 2004 Q2 and Q3, that deficit widened to 5.6% of GDP — a post-war high. A counterpart to the deficit is the low net national saving rate (Chart 2.7).

Chart 2.7 suggests that the decline in the saving rate since 2000 entirely reflects government dissaving, as private sector saving has held up. However, recent movements in private sector saving mask two offsetting trends: household sector saving has fallen, while rising company profitability has boosted corporate savings.

There are, as yet, few signs of any significant slackening in domestic demand growth. Employment growth, which had been notably weak in the early stages of the recovery, picked up in 2004 (Table 2.F). And household sector wealth rose. That should support continued robust consumption growth. The latest capital goods orders data point to continued investment growth, reflecting healthy profitability in the corporate sector. Moreover, lending to companies rose further in Q4, perhaps indicating an appetite to borrow in order to invest.

## Asia

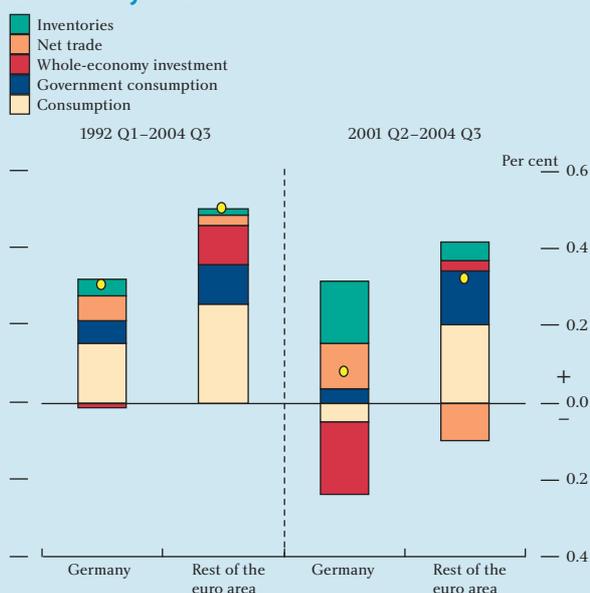
Official data paint a more downbeat picture for the Japanese economy compared with those available three months ago. Growth appears to have stalled in 2004 Q2 and Q3, having risen briskly since mid-2003 (Chart 2.8). The weakening of demand appears to have been broadly based. For example, net trade subtracted from GDP growth in Q3 — the first time it had done so for eight quarters.

(1) See Chart E on page 33 in the European Central Bank *Monthly Bulletin*, December 2004.

## Why has German domestic demand growth been so weak?

Germany has, on average, grown more slowly than the rest of the euro area since the early 1990s: in particular consumption and investment growth have been lacklustre (Chart A). And during the past few years, a period when euro-area GDP growth has been sluggish, German domestic demand has contracted, with investment being particularly hard hit. This box considers both why that has been the case and the prospects for future demand.

**Chart A**  
Contributions to average quarterly GDP growth<sup>(a)</sup> in Germany and the rest of the euro area



Source: Eurostat.

(a) The dots represent average quarterly GDP growth.

Three principal factors are likely to have contributed to subdued domestic demand growth in Germany relative to the rest of the euro area: low growth in labour supply; readjustment in construction investment; and a fragile corporate sector.

### Labour supply

Income from employment is an important determinant of households' consumption. Total wages and salaries growth has been subdued in Germany since the early 1990s. That partly reflects demographic factors affecting the labour market. Unlike in the rest of the euro area, the German working-age population has been flat during the past decade. Consequently, growth in the labour force has been muted (Table 1). Moreover, average hours worked have fallen more quickly in Germany than in the rest of the euro area — leading to relatively lower growth of output and income.

**Table 1**  
Labour market indicators in Germany and the rest of the euro area

| Per cent                          | 1995 | 1998 | 2001 | 2004 |
|-----------------------------------|------|------|------|------|
| <b>Annual labour force growth</b> |      |      |      |      |
| Germany                           | -0.8 | 1.0  | -1.0 | 0.1  |
| Rest of the euro area             | 0.2  | 1.5  | 2.8  | 0.8  |
| <b>Unemployment rate</b>          |      |      |      |      |
| Germany                           | 8.0  | 9.1  | 7.9  | 9.8  |
| Rest of the euro area             | 11.7 | 10.7 | 8.0  | 8.5  |

Sources: Bank of England and Thomson Financial Datastream.

### The construction sector

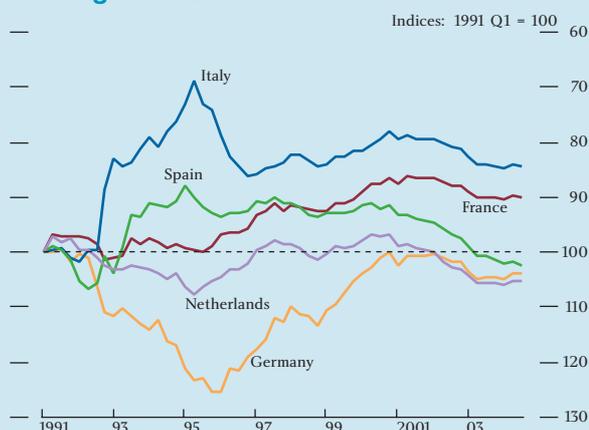
Construction investment expanded rapidly after German reunification in 1990, rising by almost 25% between 1991 Q1 and 1994 Q4. The post-reunification construction boom probably caused an investment overhang: since then, the construction investment to GDP ratio has fallen back by over 5 percentage points. That has dragged down overall investment growth.

### The corporate sector

German companies have been under intense pressure to restructure during the past decade. The underlying causes of that restructuring, as well as the restructuring itself, are likely to have been detrimental to consumption and investment growth.

The initial trigger for restructuring was a deep decline in competitiveness in the first half of the 1990s, which was not experienced by other euro-area economies (Chart B). Since then, the corporate sector has undergone a sustained period

**Chart B**  
Competitiveness — euro-area real effective exchange rates based on relative unit labour costs

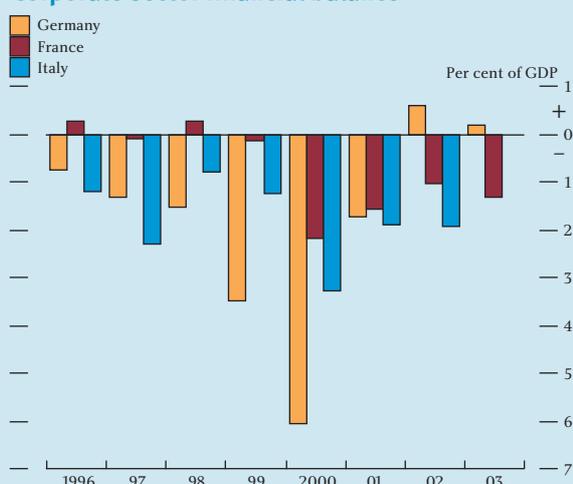


Source: Thomson Financial Datastream.

of restructuring in order to reduce unit labour costs. That has involved labour shedding and sluggish real wage growth, with knock-on effects for consumption.

More recently, equity prices have fallen — by around 60% between 2000 Q2 and 2003 Q2 — exacerbating the poor state of corporate balance sheets. Indeed, official data suggest that the subsequent balance sheet adjustment was substantial: the non-financial corporate sector moved from a significant financial deficit in 2000 to a surplus in 2002 and 2003. That turnaround was greater than in France or Italy (Chart C).

**Chart C**  
Corporate sector financial balance<sup>(a)</sup>



Sources: Eurostat and Deutsche Bundesbank.

(a) Non-financial corporate sector. 2003 data for Italy are not available.

The adjustment in balance sheets was partly achieved by reduced investment spending: since the start of the downturn in mid-2001, non-construction investment has fallen by almost 8%. But balance sheet repairs also seem to have reduced firms' willingness to hire: unlike in the rest of the euro area, employment fell in Germany between 2001 Q2 and 2003 Q4. Unemployment has increased more sharply in Germany than in the rest of the euro area (Table 1). More recently, the level of real wages and salaries has fallen, leading to muted growth in real disposable income. Falling employment and weak income growth, together with the direct impact of equity price falls on households' wealth, will have adversely affected consumer spending.

### Other factors

The combination of these underlying factors has meant that German domestic demand conditions have been particularly weak in recent

years. But the weak conditions themselves are likely to have had knock-on effects, further restraining demand.

Households are likely to have become more uncertain about their future income, given for example, the increased likelihood of job loss. So that should lead to even lower spending and a corresponding rise in precautionary saving. Indeed, despite weak income growth, the German household saving rate has risen during the past few years. The Bundesbank has recently reported that one of the chief reasons for spending restraint has been lack of confidence about future income. It suggests that this may partly reflect concern about future tax increases given the current condition of public finances.<sup>(1)</sup> But the lack of confidence about future income could also reflect the weak labour market, as well as worries about structural reforms weighing on future employment prospects and social benefits.

Weaker demand conditions than in the rest of the euro area have meant that inflation expectations have been lower in Germany. Consequently it is possible that German companies have faced a higher real cost of capital than other euro-area firms. That will have impinged upon investment growth.

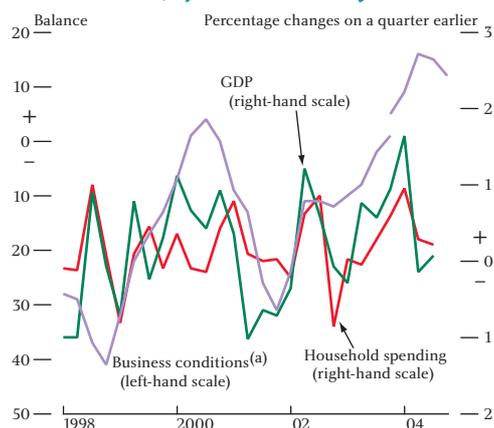
### Prospects for domestic demand

In 2004 Q3, German consumption was flat. Although construction investment continued to fall, investment in plant and machinery rose by over 4% — the strongest quarterly increase in over four years. Looking ahead, capital goods orders picked up in Q4, suggesting that the investment recovery will continue. The IFO index of the business climate has also risen recently: that could partly reflect the recent recovery in corporate profitability. If the corporate sector recovery continues this should eventually feed through to higher employment, wages and consumption.

But the overall recovery in domestic demand is likely to be tempered by the relative weakness of growth in the working-age population and the possibility of continued downward adjustment in construction investment. Ongoing concerns about structural reform and a continuation in balance sheet restructuring might also dampen demand. So the MPC remains cautious about prospects for German domestic demand and believes that growth there may remain lower than in the rest of the euro area.

(1) Bundesbank, *Monthly Report*, August 2004, page 7.

**Chart 2.8**  
Indicators of Japanese recovery



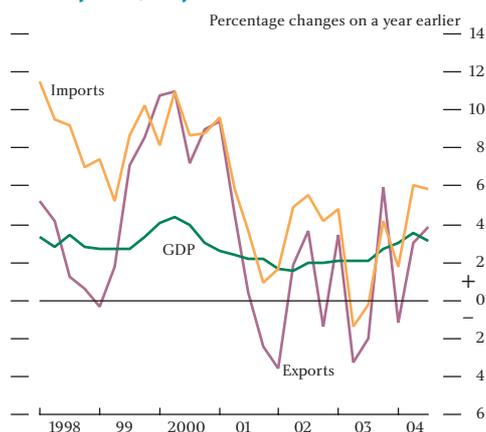
Source: Thomson Financial Datastream.

(a) Expected conditions over the next three months, from the Tankan survey of large enterprises. There is a discontinuity in the data between 2003 Q4 and 2004 Q1 due to a change in methodology. The results for 2003 Q4 are shown, therefore, on both bases.

Some of the indicators of near-term prospects in Japan do not chime with the weak GDP data. The Tankan survey of business confidence remained at a high level (Chart 2.8), as did consumer confidence. On the other hand, the most recent monthly data implied that industrial production fell and that export growth slowed considerably. Taking this information together, the MPC has revised down its view of near-term prospects for Japanese activity. But it still expects the recovery to continue, albeit at a slower pace than it did in November.

China only accounts for a small proportion of UK exports and imports, but nevertheless is still important for UK activity. Prospects in China matter for the rest of Asia, and China has a material influence in markets such as those for oil and metals. Annual GDP growth in China picked up in 2004 Q4. Growth in retail sales values also moved higher, as did growth in export values.

**Chart 2.9**  
UK exports, imports and GDP<sup>(a)</sup>

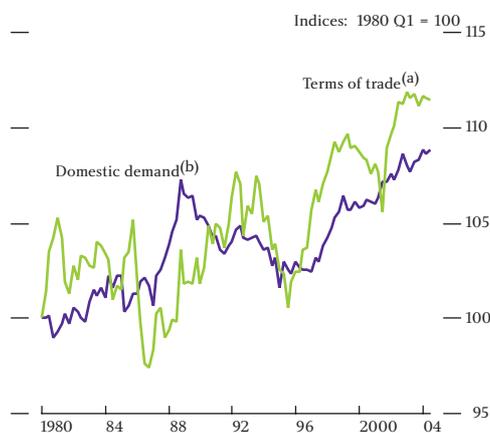


(a) Chained volume measures.

**UK net trade and the current account**

Growth in export volumes slowed to 0.7% in Q3, compared with 1.9% in Q2. More generally, UK export growth has been modest during the past three years, especially when compared with GDP growth (Chart 2.9). This restrained growth is surprising: global demand has strengthened, and there has been no trend appreciation in the sterling ERI. Given the importance of UK trade with the euro area, part of the weakness probably reflects sluggish growth in that economy. But as discussed in the November *Inflation Report*, UK exporters have also lost market share. Monthly data for export goods volumes suggest a pickup in growth over the course of Q4. However, the MPC believes that export growth will remain relatively moderate in 2005.

**Chart 2.10**  
Domestic demand and the terms of trade



(a) Export prices divided by import prices.  
(b) Ratio of domestic demand to GDP. Chained volume measures.

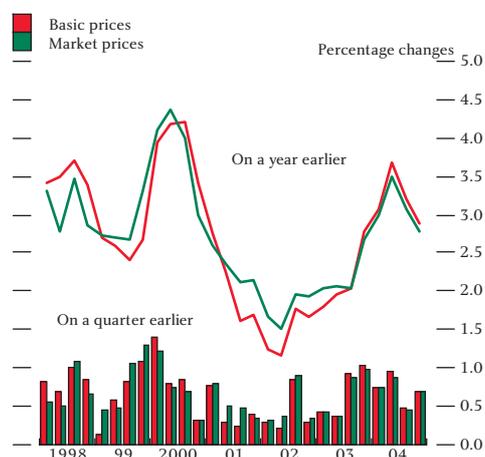
Import volumes are estimated to have risen by 1.3% in 2004 Q3, the same as in Q2. Import growth has exceeded that of exports for much of the period since the late 1990s, reflecting the strength of UK domestic demand (Chart 2.9). Until recently that had been accompanied by a rise in the terms of trade; in other words, the price of imports fell relative to exports (Chart 2.10). That allowed the United Kingdom to buy more from abroad for a given level of export volumes.<sup>(1)</sup>

More recently, the terms of trade have levelled off. Consequently, the strength of domestic demand relative to GDP has been reflected in larger current account deficits — in 2004 Q3 that deficit rose to its highest in nearly four years. As in November, the MPC expects net trade to continue to subtract from GDP growth in the coming quarters.

(1) See Dury, K, Piscitelli, L, Sebastia-Barriol, M and Yates, T (2003). 'What caused the rise in the UK terms of trade?', *Bank Of England Quarterly Bulletin*, Summer, pages 164–76.

GDP growth recovered in 2004 Q4 after a soft patch in Q3. Private sector employment growth remained subdued, implying further above-trend productivity growth. Companies appeared to be operating at or above normal rates of capacity, and there was little change in the apparent tightness of the labour market.

**Chart 3.1**  
Gross domestic product at basic and market prices<sup>(a)</sup>



(a) Chained volume measures. Annual growth of GDP at basic prices for 2004 Q4 has been estimated using the preliminary estimate of quarterly growth.

**Table 3.A**  
Output<sup>(a)</sup> of the production industries

|                                     | Share <sup>(b)</sup> | Average <sup>(c)</sup> | Percentage changes on a quarter earlier |      |      |      |
|-------------------------------------|----------------------|------------------------|---|------|------|------|
|                                     |                      |                        | 2004                                    |      |      |      |
|                                     |                      |                        | Q1                                      | Q2   | Q3   | Q4   |
| Production                          |                      | 0.1                    | -0.4                                    | 1.2  | -1.2 | -0.1 |
| Manufacturing                       | 78.9                 | 0.1                    | -0.3                                    | 1.4  | -0.8 | 0.2  |
| Mining and quarrying <sup>(d)</sup> | 12.8                 | -0.4                   | -1.2                                    | 1.5  | -5.6 | -2.9 |
| Electricity, gas and water supply   | 8.3                  | 0.5                    | -0.6                                    | -0.1 | 0.7  | 0.0  |

- (a) Chained volume measures.  
 (b) The share of total output of the production sector accounted for by each sub-sector in 2001.  
 (c) Calculated since 1995 Q1.  
 (d) Includes output of the oil and gas extraction sector.

## 1.1 Output

Output growth recovered in Q4, after a soft patch in Q3. According to the preliminary estimate, published in late January, gross domestic product (GDP) at basic prices was 0.7% higher than in the previous quarter. That followed a rise of 0.5% in 2004 Q3 (Chart 3.1). GDP at market prices was also 0.7% higher than in the previous quarter.

In the service sector, output was estimated to have risen by 1.0% in Q4 — the sixth quarter in succession that output had grown at or above its ten-year average rate. Within this, output growth in the business and financial services sector was particularly marked, at 1.5%.

The preliminary GDP release also reported that industrial production had fallen for the second successive quarter in Q4. That largely reflected estimated falls in manufacturing output and in the output of the mining and quarrying sector.

On 9 February, however, the ONS published revised estimates for the production industries. These suggested that industrial production had fallen by less in Q4 than previously reported; and that manufacturing output had not fallen, but risen by 0.2% (Table 3.A). How should policymakers interpret official preliminary estimates in light of such revisions?

### Dealing with data uncertainty

The first estimates of quarterly growth in whole-economy output are published less than a month after the end of each quarter. But at that stage, only a limited amount of the information that the ONS will ultimately use to obtain its growth estimates is available. As more information becomes available, so the ONS revises its earlier estimates.

Official estimates produced by the ONS are not the only source of information on output available to policymakers.

**Table 3.B**  
**Survey data for the manufacturing sector<sup>(a)</sup>**

|                     | 2004                   |      |      |      |      |      | 2005 |
|---------------------|------------------------|------|------|------|------|------|------|
|                     | Average <sup>(b)</sup> | H1   | Q3   | Oct. | Nov. | Dec. | Jan. |
| CIPS indices        |                        |      |      |      |      |      |      |
| Orders              | 52.6                   | 56.1 | 54.5 | 53.4 | 54.6 | 54.8 | 51.9 |
| Output              | 53.3                   | 56.7 | 55.3 | 53.6 | 57.7 | 54.4 | 53.5 |
| CBI balances        |                        |      |      |      |      |      |      |
| Orders              | -20                    | -10  | -4   | -12  | -16  | -4   | -13  |
| Output expectations | 7                      | 17   | 12   | 14   | 5    | -6   | 10   |

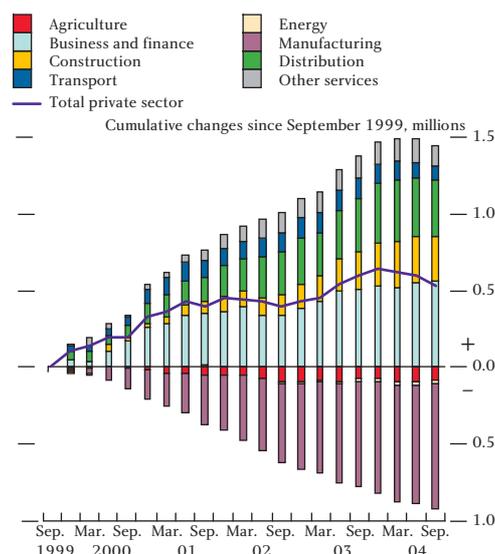
Sources: CBI and CIPS.

- (a) CBI data are percentage balances of respondents reporting 'higher' relative to 'lower'. CIPS indices signal rising activity when above 50 and falling activity when below 50. H1 and Q3 data are averages of monthly data.  
 (b) Calculated since July 1991 in each case.

Business surveys and reports from the Bank's regional Agents provide additional information on activity at the sectoral level. Such data have limitations. For example, they are typically based on qualitative, not quantitative, information. They are also based on small samples, especially compared with the large annual surveys that the ONS uses to produce its final output estimates. This suggests that the official data will, ultimately, offer a more reliable guide to growth. But survey data are timely, and can potentially signpost the sign and scope of any revisions to early official estimates.<sup>(1)</sup>

So how did the survey data compare with the initial official estimates for Q4? In the service sector, the CIPS output index in Q4 was unchanged from its high level in Q3. That was broadly consistent with the strong growth in services suggested by the preliminary ONS release. But in contrast with the preliminary official data for the manufacturing sector, both the survey data (Table 3.B) and reports from the Bank's regional Agents pointed to modest growth in Q4. Prior to the 9 February revisions, the MPC had placed some weight on this evidence in judging that manufacturing output growth had been higher than initial ONS estimates had suggested. As such, the revisions had little effect on the Committee's assessment of whole-economy output growth in Q4.

**Chart 3.2**  
**Private sector jobs<sup>(a)</sup>**



- (a) The private sector is defined as the sum of all sectors in the economy except the public administration, education and health and social work sectors. Based on Workforce Jobs data.

### 3.2 Labour and productivity

Employment increased by 99,000 in the three months to November, according to the household-based Labour Force Survey (LFS). The employment rate was 60.1%, up 0.2 percentage points on the same three months a year earlier. This pickup in employment primarily reflected an increase in the number of people employed by the public sector.

LFS data are a good guide to overall trends in employment. But Workforce Jobs data, which are based on surveys of companies rather than households, are a better source of information on employment at the sectoral level. These data show that one of the few private sector industries to increase employment in the three months to September was the business and financial sector, a key engine of net job creation over the past five years (Chart 3.2).

Evidence about the near-term demand for labour in the private sector has been mixed. The number of press advertisements for private sector jobs fell sharply in 2001, and

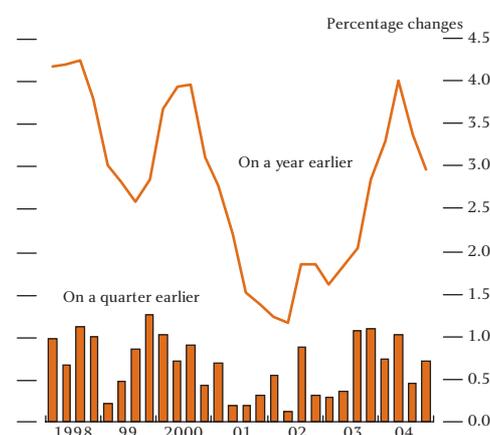
(1) For more details on how policymakers react to data uncertainty, see the recent speeches by Lomax, R (2004), 'Stability and statistics', delivered to the North Wales Business Club on 23 November, and Bell, M (2004), 'Monetary policy, data uncertainty and the supply side: living with the statistical fog', delivered to the Society of Business Economists on 15 September. Both speeches are reprinted in the Winter 2004 Quarterly Bulletin.

**Chart 3.3**  
Advertisements for private sector jobs



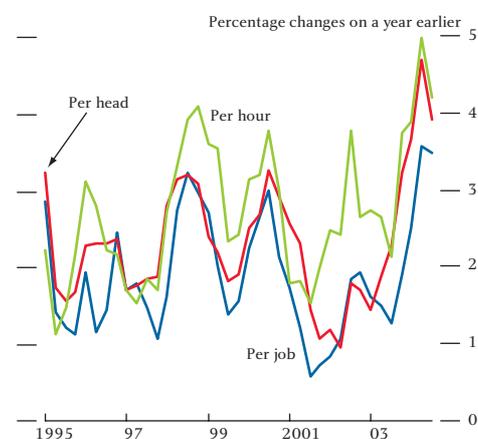
Source: Deloitte/REC Report on Jobs.

**Chart 3.4**  
Private sector output at basic prices<sup>(a)</sup>



(a) Chained volume measure, defined as GDP minus the output of public administration, education and health sectors. A full sectoral breakdown is not currently available for 2004 Q4. Data for Q4 have been estimated using published information supplied in the preliminary GDP press release.

**Chart 3.5**  
Private sector productivity<sup>(a)</sup>



(a) Data on private sector output are as defined in Chart 3.4. Data on private sector heads and hours are based on LFS microdata. Data on private sector jobs are Workforce Jobs data, which have been adjusted so as to be on a calendar quarter basis.

has not recovered since (Chart 3.3). But business surveys have been more positive: for example, according to BCC data for Q4, more companies expected their workforce to increase than to decrease in the near term.

If the recovery in private sector output growth (Chart 3.4) has not been matched by a strong pickup in private sector employment, then growth in output per worker — or labour productivity growth — must have risen. That is indeed the case (Chart 3.5). And despite the soft patch in output growth in Q3, annual private sector productivity growth remained high by recent standards.

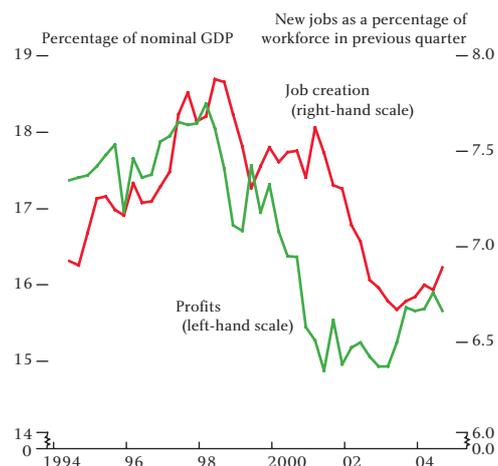
What can explain this strength in private sector labour productivity growth? In large part, it is probably a cyclical phenomenon. In the short run, companies typically respond to shifts in demand by adjusting the intensity with which they use their capital and labour, rather than the amount of these factors that they use. So the slowdown in productivity growth in 2001 may have simply reflected companies hoarding labour while demand was weak. When demand recovered, companies would then have been able to produce more output by returning effort to normal levels.

But there may be other reasons why companies have been reluctant to step up hiring in the face of stronger output growth. Part of the explanation may lie in corporate balance sheets. Until recently, high levels of debt and weak growth in profits may have deterred companies from taking on new workers. The decline in profitability did appear to lead the slowdown in the pace of job creation in the private sector after the millennium (Chart 3.6). By the same token, recent improvements in corporate conditions ([Section 1](#)) could stimulate private sector employment growth in the future.

Part of the weakness of private sector employment growth may also reflect a pickup in sustainable, or trend, labour productivity growth. In other words, companies might have been able to meet increases in demand without having to increase the size of their workforce or requiring each worker to commit more effort.

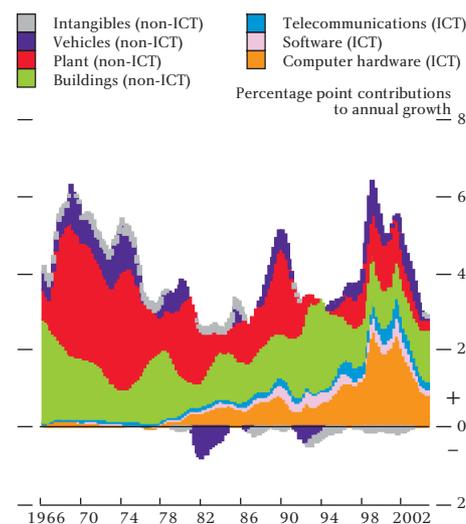
An increase in the amount of capital available to each worker — that is, capital deepening — should lead to a pickup in sustainable labour productivity. The pace of capital deepening has slowed in recent quarters. But since the mid-1990s, UK companies have invested heavily, particularly in ICT goods (Chart 3.7). And it may take time for companies to reap the return from those investments. It is often argued that the pickup in US productivity growth in the late 1990s was driven by heavy ICT investment during the 1980s and early 1990s.

**Chart 3.6**  
Private sector job creation rate<sup>(a)</sup> and profits<sup>(b)</sup>



- (a) Defined as the number of people who have been working in their main job for three months or less, divided by the number of people in employment three months earlier. Based on LFS microdata.
- (b) Profits of private non-financial companies, excluding oil companies and the alignment adjustment.

**Chart 3.7**  
Private sector capital services by asset<sup>(a)</sup>



- (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 more details on the methodology used to construct these data.

The reason that this investment did not show up straight away in productivity data was that companies had to restructure production processes and retrain staff before they could make effective use of new ICT capital goods.<sup>(1)</sup> So the recent strength of private sector productivity growth in the United Kingdom could also reflect the benefits from earlier large investments in ICT capital.

It is also possible that there has been an increase in the pace of technical progress — that is, the rate at which improvements in the production process enable more to be produced from a given amount of inputs. Such improvements — perhaps related to the restructuring discussed above — would lead to a pickup in sustainable labour productivity. In the short run, this would enable companies to increase output without having to hire new workers. But in the long run, if workers are more productive, then labour demand and hence employment should increase.

### 3.3 Factor utilisation

In the short run, companies typically respond to an increase in demand by increasing the rate of factor utilisation — that is, the intensity with which they use capital and labour. But it is not profitable for companies to increase factor utilisation indefinitely. Additional increases in utilisation lead to ever smaller increases in output. Moreover, if individuals are asked to work harder they will expect to be compensated accordingly. And if capital goods, such as machines, are used more intensively, then depreciation and maintenance costs will also rise. As a result, the marginal costs of production tend to increase, putting upward pressure on prices.

The rate of factor utilisation can therefore be a useful indicator of potential inflationary pressure. But there is no simple way to measure the rate of factor utilisation. It can only be inferred indirectly from the behaviour of other macroeconomic data, as discussed in the box on pages 24–25.

Various approaches, and reports from the Bank's regional Agents, suggest that factor utilisation rates in the private sector have been at, or above, normal levels. Usually, that would be consistent with building inflationary pressure. However, as [Section 4 notes](#), there is some evidence to suggest that prices may be less sensitive to changes in capacity pressures than they once appeared to be.

(1) For a recent discussion of this issue, see Bernanke, B (2005), 'Productivity', remarks delivered at the C. Peter McColough Roundtable Series on International Economics, Council on Foreign Relations, on 19 January 2005. Available at: [www.federalreserve.gov/boarddocs/speeches/2005/20050119/default.htm](http://www.federalreserve.gov/boarddocs/speeches/2005/20050119/default.htm).

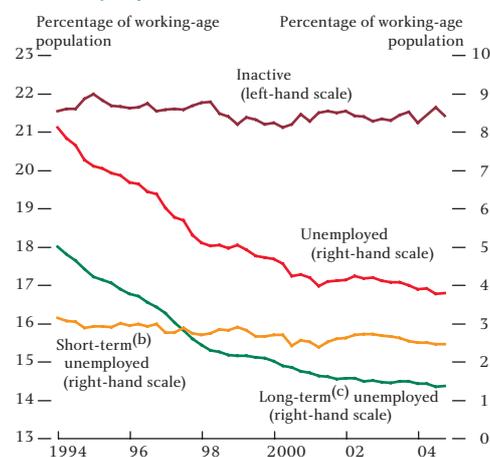
**Table 3.C**  
**Transitions from non-employment<sup>(a)</sup>**

Quarterly transitions over the year to Spring/Summer 2004

|                                      | Average number of transitions <sup>(b)</sup> | Average transition rate <sup>(c)</sup> |
|--------------------------------------|--|--|
| Unemployed                           | 429  | 30.3                                   |
| Short-term <sup>(d)</sup> unemployed | 344  | 37.9                                   |
| Long-term <sup>(e)</sup> unemployed  | 85   | 16.7                                   |
| Inactive                             | 495  | 6.4                                    |
| Student                              | 240  | 14.8                                   |
| Looking after family/home            | 90   | 3.7                                    |
| Temporarily sick                     | 15   | 8.4                                    |
| Long-term sick                       | 23   | 1.1                                    |
| Discouraged                          | 0  | 1.0                                    |
| Retired                              | 15   | 2.6                                    |
| Other                                | 110  | 14.9                                   |

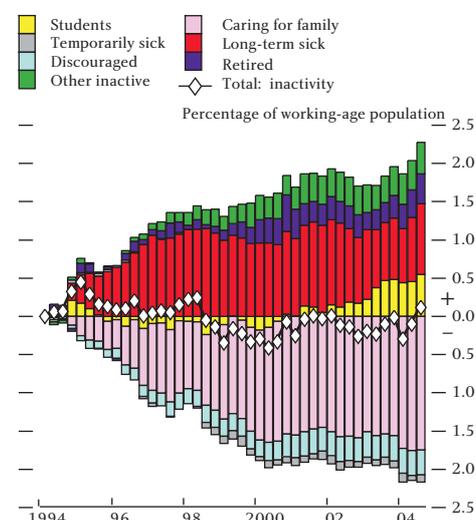
- (a) Based on LFS microdata.  
 (b) The number in thousands who moved into employment over the previous three months.  
 (c) The average number of transitions as a percentage of all working-age people in that category.  
 (d) Less than six months.  
 (e) Six months or more.

**Chart 3.8**  
**Non-employment<sup>(a)</sup>**



- (a) Data are shown for the non-overlapping quarters centred on January (Winter), April (Spring), July (Summer) and October (Autumn).  
 (b) Less than six months.  
 (c) Six months or more.

**Chart 3.9**  
**Cumulative changes in the composition of working-age<sup>(a)</sup> inactivity since 1994 Q1**



- (a) Refers to UK household population, aged 16–64 for males and 16–59 for females.

## 3.4 Labour market tightness

The balance between supply and demand in the labour market — or the degree of labour market tightness — is another key influence on inflationary pressure. A commonly used measure of spare capacity in the labour market is the unemployment rate, which has more than halved over the past decade and was at its lowest level in almost 30 years in the three months to November. But has the number of job seekers declined as much as the unemployment rate suggests?

The unemployment rate measures only a fraction of the total number of people looking for work. Of the 9.25 million people of working age without a job in the three months to November, less than a sixth were classified as unemployed. The majority were 'economically inactive' — either not looking for a job, unavailable to start work, or both. But more jobs are filled by individuals who three months previously reported themselves as being inactive than by the unemployed (Table 3.C). So measures of labour availability should take into account the inactive, as well as the unemployed.

What has been happening to labour availability over the past decade? Over the mid-to-late 1990s, the fraction of the working-age population without a job fell by almost 4 percentage points. That decline can be largely accounted for by a fall in the number of people who were unemployed (Chart 3.8) — there was only a slight fall in the working-age inactivity rate over this period. Since 2000, the unemployment rate has continued to fall. But inactivity has picked up a little (Chart 3.9).

The composition of the unemployed and inactive has also changed. That can have important implications for effective labour availability: the probability of finding work varies significantly across different groups in the non-employed stock (Table 3.C). For this reason, previous *Reports* have discussed a measure of availability that weights the different components of the non-employed stock according to their relative probability of finding work.

Over the mid-to-late 1990s, there were declines in both a weighted measure of labour availability (Chart 3.10) and the unemployment rate. But since 2000, the weighted measure has changed little — even though the unemployment rate has continued to decline.

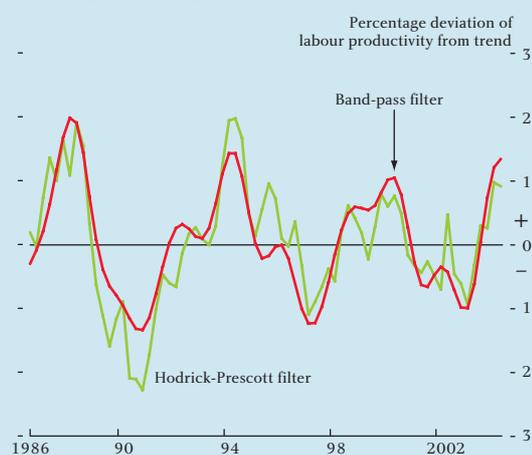
One reason for the relative flatness of the weighted availability measure is that the decline in unemployment has been concentrated among the long-term unemployed, rather than the short-term unemployed who are more likely to find work. A further explanation is that the rise in inactivity since 2000 has

## Factor utilisation in the private sector

The short-run outlook for CPI inflation is heavily influenced by the balance between demand for output in the private sector and the resources required to produce it. One aspect of that balance, and hence an indicator of inflationary pressure, is the intensity with which private sector companies use capital and labour — in other words, private sector factor utilisation. This box discusses some of the numerous alternative ways of estimating the rate of factor utilisation and what they imply about current inflationary pressure.

One way of assessing factor utilisation is to look at movements in private sector labour productivity. When companies use labour more intensively, labour productivity rises. So rising labour productivity may indicate rising factor utilisation. However, labour productivity may also rise if there has been an increase in trend or sustainable productivity, for example due to technical progress or increased efficiency. To assess factor utilisation, it is important to strip out these trend effects. Statistical filters can be used to isolate movements in labour productivity around its trend, and therefore can provide an estimate of factor utilisation. Among the statistical filters that can be used for this purpose are the Hodrick-Prescott and band-pass filters.<sup>(1)</sup>

**Chart A**  
Illustrative measures of private sector factor utilisation based on statistical filters<sup>(a)</sup>



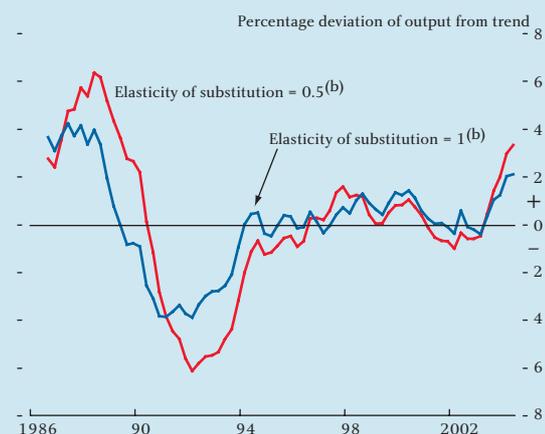
(a) Data to 2004 Q3. Based on a private sector output per hour measure of labour productivity, as defined in Chart 3.5. Qualitatively similar results are obtained from the output per head labour productivity series shown in Chart 3.5.

Although these two statistical filters use different methods to extract the unobserved trend in labour productivity from the data, both make the same key assumption: trend labour productivity grows smoothly over time. And that means that a sudden slowdown or pickup in trend productivity growth is

likely to be incorrectly attributed to a change in factor utilisation. Statistical filters are also subject to the 'end point' problem, whereby identification of the trend is most uncertain at the beginning and end of the period under consideration. For policymakers, who are primarily concerned with how far factor utilisation is from trend today, this is a particular concern.

A second, though related, approach to assessing factor utilisation is to use a production function. A production function describes the relationship between the inputs that companies use (labour and capital) and their output. If companies increase the amount of labour or capital that they use, then their output will rise. But output will also increase if companies use existing capital and labour inputs more intensively (that is, if the rate of factor utilisation increases).

**Chart B**  
Illustrative measures of private sector factor utilisation based on production functions<sup>(a)</sup>



(a) Data to 2004 Q3. The capital input series is the private sector services measure described in Chart 3.7. The labour input series is private sector hours worked; qualitatively similar results are obtained with a heads measure of employment.  
(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*.

The production function approach uses statistical techniques to try to identify those movements in output that are due purely to changes in factor utilisation. But this requires a number of assumptions to be made. These include: that the amount of capital and labour employed by firms can be measured accurately; that the ease with which capital and labour can be substituted for one another to produce a given amount of output (that is, the elasticity of substitution) is known, or can be reliably estimated; and that the rate of technical progress, or the rate at which efficiency is improved, is known or

(1) For more details on these filters see Benati, L (2001), 'Band-pass filtering, cointegration, and business cycle analysis', *Bank of England Working Paper no. 142*.

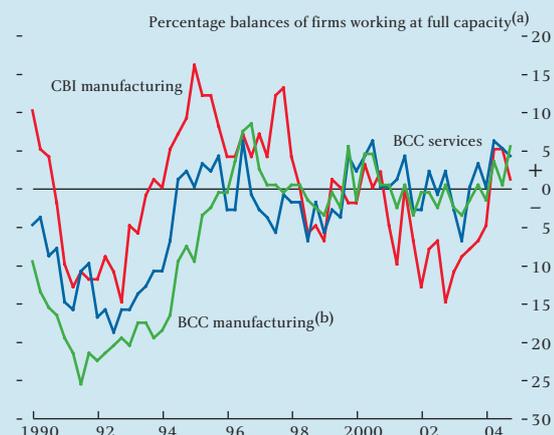
can be reliably estimated. Indeed, that rate is typically assumed to be a constant.

A third approach to measuring the degree of factor utilisation is to rely on business surveys that ask firms directly whether they are operating at full capacity. Assuming that the survey sample is broadly representative, then an increase in the proportion of companies who say that they are operating at capacity will tend to point to rising factor utilisation.

This survey-based approach also has its drawbacks. What matters for inflationary pressure is the extent to which companies are using capital and labour above or below *normal* levels. But in order to gauge whether the economy in aggregate is approaching normal levels, current survey data can only be compared against a historical average that is calculated over some arbitrary time period. This can give a misleading impression of what is 'normal'.

None of these three approaches to measuring factor utilisation in the private sector is ideal.<sup>(2)</sup> Each involves assumptions that are unlikely to hold exactly in practice. And so estimates of factor utilisation are

**Chart C**  
Illustrative measures of private sector factor utilisation based on survey data

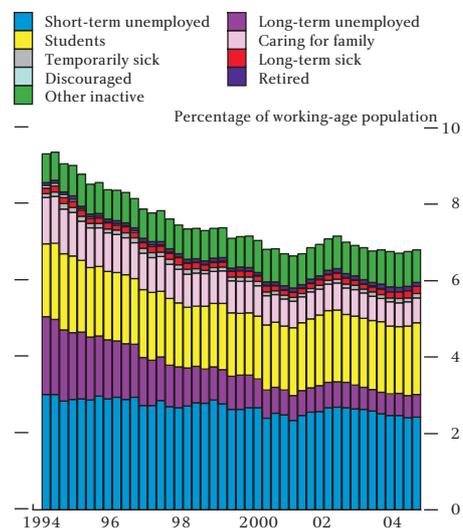


(a) Differences from series average since 1995. Data to 2004 Q4.  
(b) Also includes agriculture, energy and construction.

necessarily very uncertain. Nevertheless, taken together, this suite of measures provides a reasonably consistent description of capacity pressures in the private sector. Currently, companies do appear to be working inputs at, or above, normal levels.

(2) Nor do the three approaches discussed in this box constitute an exhaustive list. See, for example, the alternative approach outlined in [Larsen, J. Neiss, K and Shortall, F \(2002\). 'Factor utilisation and productivity estimates for the United Kingdom'. Bank of England Working Paper no. 162.](#)

**Chart 3.10**  
A weighted measure of labour availability<sup>(a)</sup>



(a) This measure is similar to that presented on page 27 of the August 2004 Report. The weights used in this measure are calculated as backward-looking four-quarter moving averages of the quarterly transition rates of each group into employment. Data are shown for calendar quarters.

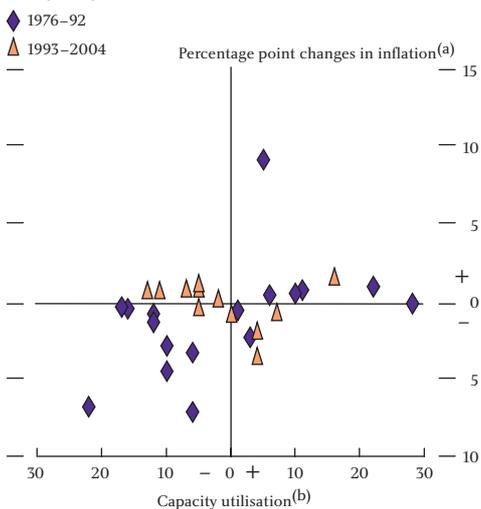
almost entirely reflected an increase in the number of people classified as 'inactive' because they are studying (Chart 3.9). Students are more likely to find a job than many other inactive people. So the impact of the decline in unemployment on effective labour availability, and hence wage pressure, will have been partially offset by the rise in inactivity.

If the unemployment rate is giving an inaccurate read on labour availability, then this may be one reason why the short-run relationship between unemployment and wage growth appears to have changed in recent years. This phenomenon is discussed further in Section 4. But there are a variety of other reasons why the short-run relationship between unemployment and wage growth may have altered.

First, the labour market reforms of the past 25 years may have led to a decline in the level of labour availability consistent with a given degree of wage pressure. Second, wage pressure may have become less sensitive to imbalances in the labour market — perhaps as a result of increased migration into the United Kingdom. If people can move easily across borders to find work, then companies may find it relatively easy to hire additional workers without having to raise wages significantly. And the knowledge that employers can move operations overseas could also have helped to limit UK employees' wage demands. In both cases, wages would become less sensitive to the degree of slack in the labour market.

The pressure of demand is likely to push up on CPI inflation. But there is uncertainty about the strength of the relationship between demand, supply and prices. Looking along the supply chain, private sector earnings growth has been steady at 4.3%. Spot oil prices have been volatile. Import prices picked up in Q3. Manufacturing output price inflation was the highest since 1996. CPI inflation increased to 1.6% in December, but remained below target. Supply chain pressures point to some increase in CPI inflation further out, particularly for goods.

**Chart 4.1**  
Manufacturing capacity utilisation and output prices



Sources: CBI and ONS.

- (a) The change in four-quarter inflation of output prices (excluding petrol, food, drink and tobacco) over the course of the year.  
 (b) CBI survey balance at the start of the year, less its average since 1971.

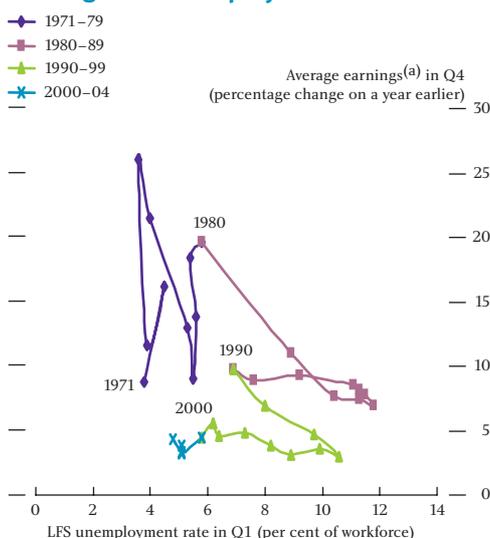
## 4.1 The relationship between demand, supply and inflation

The Committee judges that the demand pressures discussed in Section 2 have taken output close to, and possibly slightly above, potential supply, as discussed in Section 3. If companies are stretching their capacity beyond normal limits, then this would tend to push up production costs and hence prices. And if the pool of available labour is shrinking, then this would typically encourage companies to bid up wages, putting further upward pressure on prices.

Chart 4.1 shows that between 1976 and 1992, this short-run relationship between demand, supply and inflation did appear to hold, at least in the manufacturing sector. Generally, higher capacity utilisation led to higher output price inflation and *vice versa*. But since 1993 the relationship has been less apparent. The orange triangles have been in a broadly horizontal line, rather than in the top-right and bottom-left quadrants of the chart.

Chart 4.2 looks at similar evidence for the labour market, but this time for the whole economy. The succession of lines sloping downwards from left to right indicates a tendency for increases in unemployment to generate weaker earnings growth (and *vice versa*). Since 1980 the lines have tended to flatten, which may indicate a weakening relationship between wage inflation and the unemployment rate. As discussed in Section 3.4, unemployment can be an inaccurate guide to available labour supply, and this may be one reason why the short-run relationship between unemployment and inflation has appeared to weaken. But data before 1992 are not sufficiently detailed to assess fully the available labour supply, and measures of unemployment

**Chart 4.2**  
**Earnings and unemployment**



(a) Whole economy, including bonuses. 2004 data proxied by average of October and November.

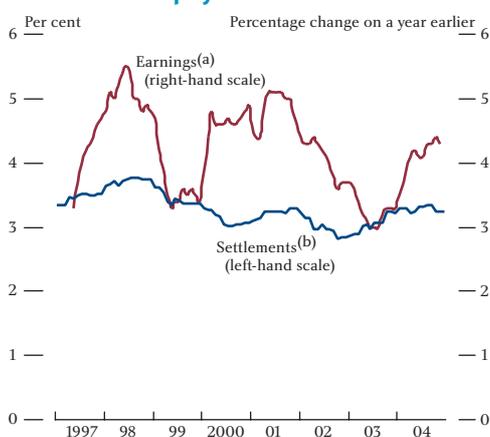
**Table 4.A**  
**Wage costs<sup>(a)</sup>**

|  | 2003     | 2004 |      |      |      |
|--|----------|------|------|------|------|
|  | Averages | Q1   | Q2   | Q3   | Q4   |
| Private sector regular pay <sup>(b)(c)</sup>     | 3.2      | 3.9  | 4.1  | 4.3  | 4.3  |
| Whole-economy earnings <sup>(b)</sup>            | 3.4      | 5.3  | 4.2  | 3.8  | 4.3  |
| REC salaries of permanent staff <sup>(d)</sup>   | 51.3     | 56.5 | 59.4 | 60.4 | 59.0 |
| REC hourly pay of temporary staff <sup>(d)</sup> | 52.7     | 55.8 | 57.9 | 57.2 | 60.6 |

Sources: Deloitte/REC Report on Jobs and ONS.

- (a) CBI and CIPS data refer to all costs, but they largely reflect labour costs.
- (b) Percentage change in the average index for that quarter, compared with a year earlier. 2004 Q4 proxied by average twelve-month growth in October and November.
- (c) Excludes bonuses.
- (d) Averages of monthly balances. A reading above 50 indicates rising pay or costs.

**Chart 4.3**  
**Private sector pay**



Sources: Bank of England wage settlements database (which draws on information from the Bank's regional Agents, Incomes Data Services, Industrial Relations Services and the Labour Research Department) and ONS.

- (a) Average earnings index. Three-month moving average, excluding bonuses.
- (b) Twelve-month moving average.

should be broadly indicative of labour market trends over a number of decades.

It may be that over the past decade, wage and price inflation have become less sensitive to immediate demand pressures. One explanation is the change in the UK monetary policy framework. In particular, the move to inflation targeting in 1992 appears to have established confidence that the policy framework would keep inflation close to target and so has stabilised inflation expectations. When inflation expectations are stable, swings in demand are less likely to affect inflation. That is because people expect monetary policy to offset the impact of changes in demand on inflation, and they set wages and prices accordingly.

There have also been important developments in the labour market and the retail sector that can help to explain the stability of inflation. In the labour market, there are an array of possible explanations why the relationship between demand pressures and wages may have changed: for example, structural reforms and increased migration (Section 3).<sup>(1)</sup> In the retail sector, increased sourcing of cheap foreign goods, together with greater competition, may have offset the impact of domestic demand pressures on retail prices (see the box on the distribution sector on pages 28–29).

The rest of this section considers recent wage and price developments, and monitors the extent to which the current pressures of demand on supply appear to be feeding through into higher prices.

## 4.2 Labour costs

Wage inflation has picked up since its trough in mid-2003, but appears to have stabilised recently. There are many different measures of wage costs (Table 4.A), but private sector regular pay growth is probably the most relevant for consumer prices. That measure excludes the public sector which plays little role in the provision of goods and services covered by the consumer price index. It also removes bonuses, which are often erratic, but it includes other performance-related pay awards. Private sector regular pay growth has been stable at around 4.3% since August 2004, after picking up over the previous year (Chart 4.3).

Other indicators of wage costs paint a similar picture to the official data. Private sector settlements picked up modestly during 2003, but have been flat through 2004 (Chart 4.3). The Recruitment and Employment Confederation survey

(1) For more discussion of the relationship between demand, supply and inflation see King, M (2004), 'Speech given at the Bank of England's Court dinner at the Eden project, Cornwall', 12 October.

## Retail goods prices and the distribution sector

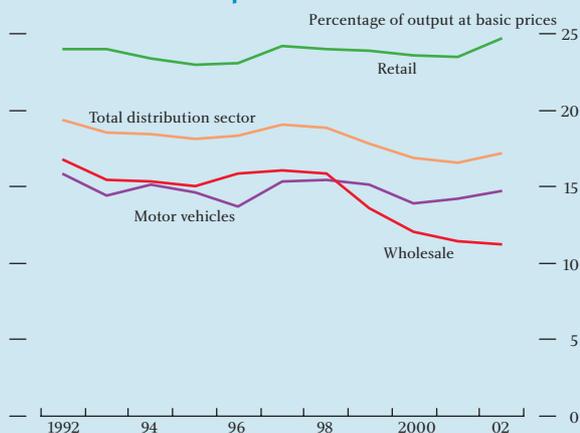
Retail goods prices have been flat or falling for some years. That weakness has continued despite evidence of building cost pressures earlier in the supply chain. A key factor behind this has been increased sourcing of cheap consumer goods from abroad.<sup>(1)</sup> But changes in the retail and wholesale sectors may also have been a contributory factor.

Retail goods prices reflect the prices paid to producers by the distribution sector. But they also cover distribution sector running costs (ie the cost of labour, buildings and transport) and they include a margin for distribution sector profits. So weakness in retail goods prices can be accounted for by one of three factors: weak producer prices either in the United Kingdom or abroad; reductions in distributors' profit margins; or reductions in distribution sector costs.

Distributors are supplied goods either by domestic producers or importers. The prices paid to domestic producers — known as output prices or factory gate prices — were flat or falling between 1996 and 2001. But since then, domestic output price inflation has been on an upward trend (Chart 4.13). Import prices of consumer goods have generally fallen in recent years, and distributors have increasingly sourced goods from abroad, as discussed in the main text. So weaker import prices have pushed down on UK retail prices of goods.

Have developments in the distribution sector also played a role? Profits data suggest that, between 1999 and 2001, some of the weakness in retail price inflation was associated with lower distributors' profits (Chart A). The reduction in profit share occurred predominantly in the wholesale sector. As yet, there are no consistent figures for aggregate profits in 2003 or 2004.

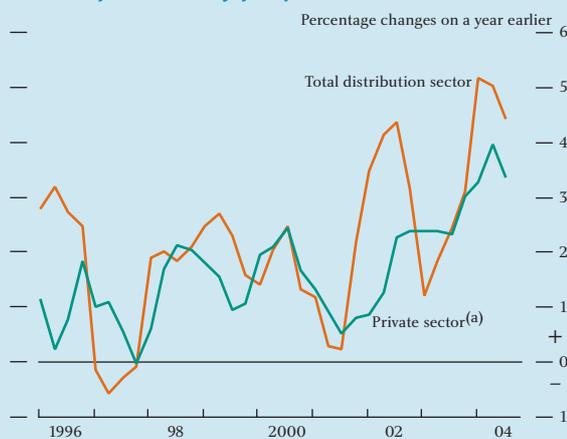
**Chart A**  
Distribution sector profits



(1) See Nickell, S (2005), 'Why has inflation been so low since 1999?', available on the Bank's website at [www.bankofengland.co.uk/publications/sninflation050127.pdf](http://www.bankofengland.co.uk/publications/sninflation050127.pdf).

Developments in the distribution sector's running costs also appear to have been pushing down on retail goods prices. Labour costs represent about 30% of gross output of the distribution sector. Since 2001, those costs have been held in check by an acceleration in productivity. On average between 2002 and 2004, productivity growth in the distribution sector has been 2 percentage points higher than between 1996 and 2001 (Chart B) with little change in earnings growth. Given the importance of labour costs, increases in productivity of that magnitude could have had a noticeable effect on retail goods prices.

**Chart B**  
Labour productivity per job



(a) Defined as whole-economy output less 'government and other services' divided by a Workforce Jobs measure of employees adjusted to be on a calendar quarter basis.

So official data suggest that developments in the distribution sector can account for some of the weakness in retail goods prices since the late 1990s. That reflects a combination of a squeeze in distribution sector profits from 1999 to 2001, and improved productivity performance since then.

Increased competition in the distribution sector might explain both the improvement in labour productivity, and the downwards pressure on profits. Contacts of the Bank's regional Agents report that competitive pressures have been particularly intense in recent years. The growth of internet shopping has simultaneously injected a new source of competition into retailing, and increased the ability of consumers to compare prices across retailers. The growing importance of international retail companies on UK high streets has added a further dimension to that competition. And the expansion of some supermarket chains into non-food items, including clothing and

electrical goods, has increased effective competition in those markets.

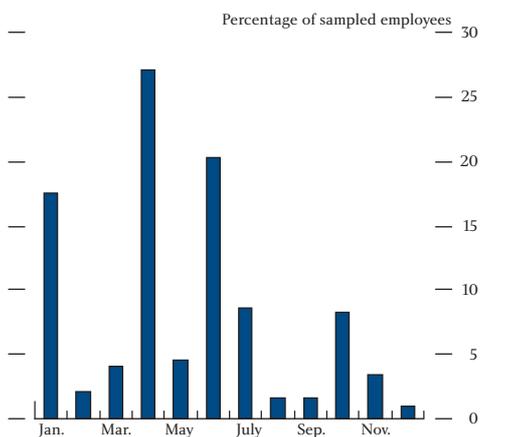
The squeeze on the wholesale sector may also have reduced retail prices, relative to producer prices. An increasing share of retailers on the UK high street source their supplies directly from producers, rather than from wholesalers. That probably reflects retail chains attempting to save money by ‘cutting out the middle man’. And it would explain the reduced profitability of the wholesale sector evident in Chart B.

But more intense competition is not the only potential explanation for recent developments in distribution sector productivity. As discussed in the May 2004 *Inflation Report*, the distribution sector in the United

States enjoyed a sustained boost in productivity from 1995 following strong investment in ICT some years earlier. The distribution sector in the United Kingdom invested heavily in ICT in the late 1990s. And this may also have led to the recent improvements in productivity growth. Improvements in ICT may also have supported the expansion of retailers into wholesaling.

So there is evidence that developments in the distribution sector may have depressed goods price inflation in recent years. And trends in the official numbers are consistent with reports to the Bank’s regional Agents of intense competition in retailing. But it is not clear whether those processes have come to an end, or whether there will be further downwards pressure on costs and prices in the future.

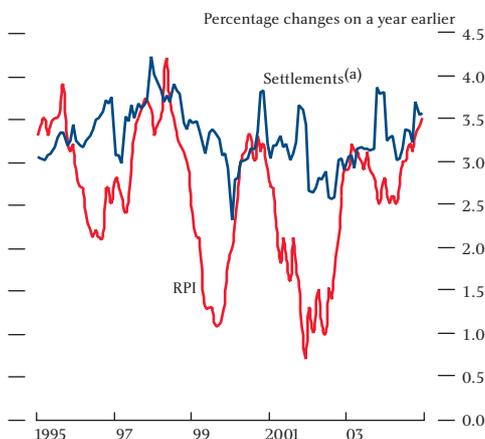
**Chart 4.4**  
**The monthly pattern of private sector settlements<sup>(a)</sup>**



Sources: Bank of England wage settlements database (which draws on information from the Bank’s regional Agents, Income Data Services, Industrial Relations Services and the Labour Research Department).

(a) In 2003, the most recent year for which there are complete data.

**Chart 4.5**  
**Private sector pay settlements and RPI inflation**



Sources: Bank of England wage settlements database (which draws on information from the Bank’s regional Agents, Incomes Data Services, Industrial Relations Services and the Labour Research Department) and ONS.

(a) Three-month moving average.

suggests that pay pressures have been stronger in 2004 than in 2003; though for permanent staff, this upwards momentum seems to have levelled off in recent quarters (Table 4.A).

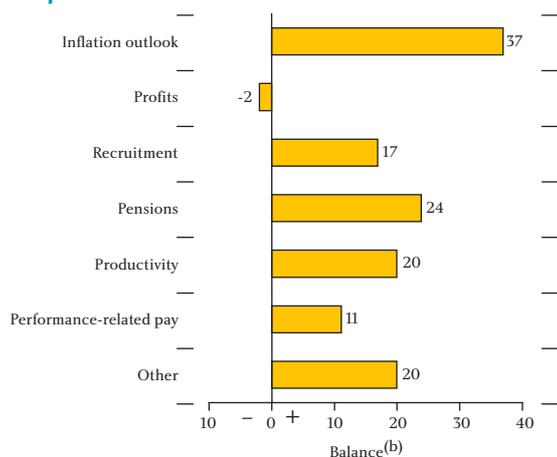
Inflationary pressures from the labour market have been restrained by strong labour productivity growth. Private sector productivity per job increased almost 4% in the year to 2004 Q3 (Section 3) compared with average growth of just over 2% since 1990. As a result, private sector unit wage costs — which take into account both wages and productivity — were almost flat in the year to 2004 Q3. But it is not clear whether this strong productivity growth will be sustained, or whether it will eventually be passed on to workers in higher earnings.

What are the pressures on wage growth looking ahead? Typically in the private sector, pay settlements are agreed in the first half of the calendar year, with January, April and June being the most popular months (Chart 4.4). According to Industrial Relations Services,<sup>(1)</sup> most pay settlements take account of the cost of living, and RPI inflation is the most popular indicator, rather than the CPI inflation rate targeted by the MPC.

In December 2004, RPI inflation was 3.5%, up 0.7 percentage points on a year earlier, and the highest inflation rate for more than five years. Historically, settlements have tended to respond to changes in RPI inflation. But the relationship is far from perfect, and the effect can be delayed (Chart 4.5). Nevertheless, according to the results from a special survey conducted by the Bank’s regional Agents, businesses expect wage settlements to pick up in 2005 and respondents

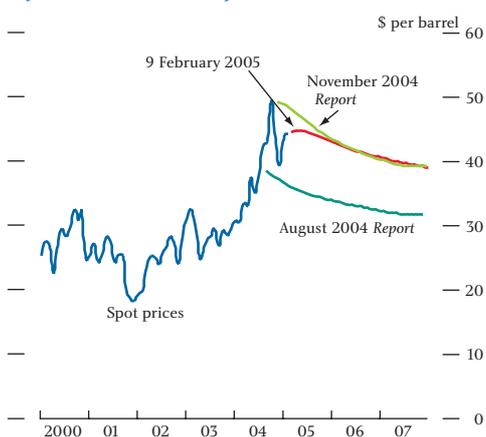
(1) See page 5 of the *Pay and Benefits Bulletin*, 16 November 2004.

**Chart 4.6**  
**Agents' survey: sources of upward pressure on private sector labour costs<sup>(a)</sup>**



(a) Based on 301 responses, weighted by employment, from a survey of companies in December 2004 and January 2005.  
 (b) Percentage of firms citing that factor as a reason for higher labour costs in 2005, less the percentage of firms citing it as a reason for lower labour costs.

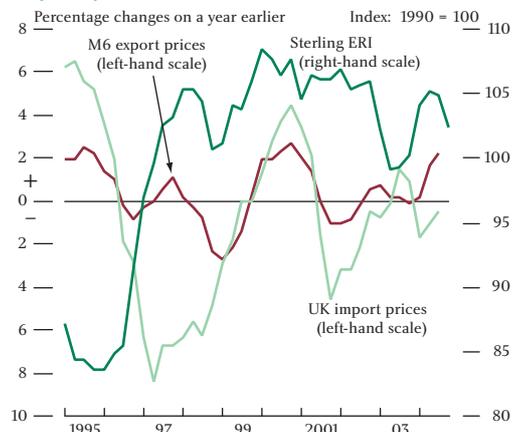
**Chart 4.7**  
**Spot and futures<sup>(a)</sup> prices of Brent oil**



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

(a) Average during the fifteen working days up to the time at which the MPC finalised its projections.

**Chart 4.8**  
**UK import prices, the exchange rate and M6 export prices<sup>(a)</sup>**



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

(a) The M6 consists of 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 according to their share of UK imports in 2000.

identified higher inflation as the most important influence (Chart 4.6).

## 4.3 Global costs and prices

### Oil and other commodity prices

The spot dollar price of Brent oil has been volatile. It peaked at over \$50 in October 2004, fell to around \$40 in November and December, but climbed back to an average of \$45 in the fifteen working days to 9 February (Chart 4.7). That was almost 10% lower than the equivalent average in the November Report. The volatility partly reflected reactions to OPEC announcements, but also changes in views both about the extent of disruption to non-OPEC supply and about global demand. Futures prices of Brent oil, which the MPC uses as a guide to its projections,<sup>(1)</sup> were little changed from November, with the profile continuing to fall to around \$40 by the end of 2006.

In dollar terms, non-oil commodity prices have increased by around 5% since the November Report. Those increases have been broadly based across different categories. The movements in non-oil commodities partly reflect recent falls in the US dollar, and have not been sufficiently large to affect significantly UK whole-economy costs or prices.

### Imports of goods and services

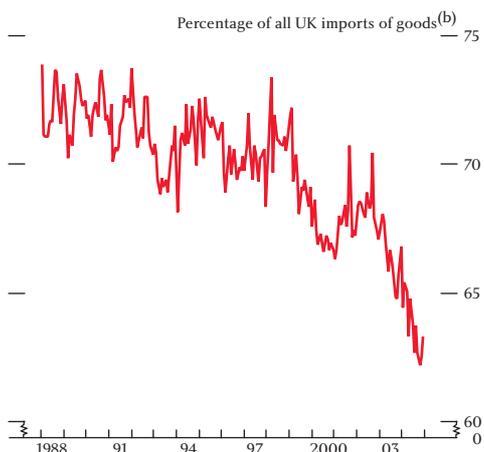
Broadly speaking, UK import prices have been flat or falling for several years. But there have been recent signs of a pickup.

In 2004 Q3, UK import prices of goods and services were 0.4% lower than a year earlier. But that reflected price falls in late 2003 and early 2004. Import prices rose quite strongly in Q2 and Q3, at an annualised rate of 4% — the sharpest increase in import prices over a six-month period since 2000. Data for imported goods prices suggest further, but modest, increases in Q4. Almost half of UK imports come from other G7 economies (referred to here as the M6). And part of the explanation for the recent increases in UK import prices may be higher M6 export prices, up 2.2% in the year to 2004 Q3 (Chart 4.8).

But M6 export prices are not the only influence on UK import prices. Indeed, on average since 1997, UK import prices have been falling relative to M6 export prices (Chart 4.8). That fall may have partly reflected a lagged response to the 20% appreciation of the sterling effective exchange rate between 1996 and 1997. The pass-through from exchange rate

(1) See the box on pages 28–29 of the November 2004 Report for a discussion of what interpretation can be placed on oil futures prices.

**Chart 4.9**  
**UK imports of goods from developed economies<sup>(a)</sup>**



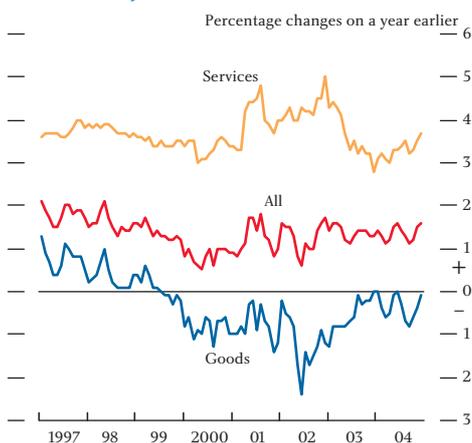
(a) Proxied by Canada, the euro area, Japan and the United States.  
 (b) In current prices. It includes intermediate goods and finished goods.

movements to UK import prices can take time: for example it is possible that when sterling appreciated, companies selling to the United Kingdom took the opportunity to boost their profit margins rather than to cut prices for their customers. The relative fall in import prices in recent years may have partly reflected competition slowly eroding those margins.

Another factor that has depressed UK import prices is increased sourcing of cheaper imports from developing countries, such as China. The proportion of UK imports of goods that come from developed economies has been falling since 1998, with particularly steep falls in recent years (Chart 4.9). If China and other low-cost exporters continue to pose a competitive threat to other suppliers, there will be further downwards pressure on UK import price inflation.<sup>(1)</sup>

The MPC expects M6 export prices to continue to rise in 2005, reflecting past increases in oil prices, and continued healthy growth in global demand. Combined with falls last year in the sterling exchange rate, that is expected to put further upwards pressure on import price inflation this year.

**Chart 4.10**  
**Consumer prices**

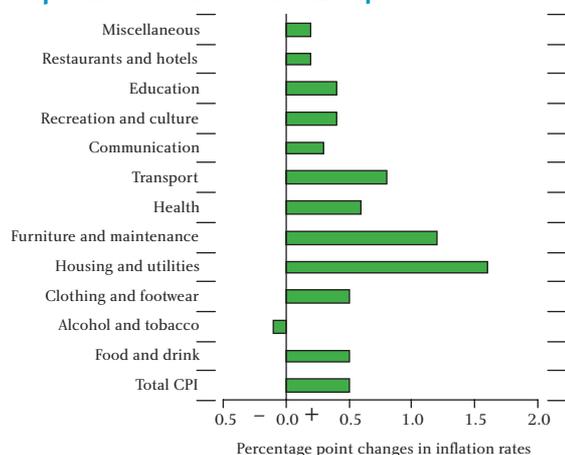


## 4.4 Consumer prices

### News since November

CPI inflation increased from 1.1% in September, to 1.6% in December (Chart 4.10), averaging 1.4% in Q4 as a whole. This was stronger than the MPC's central projection in the *November Report*, but remained below the MPC's target of 2%. The rise in CPI inflation between September and December was broadly based. Inflation picked up by roughly the same amount for both goods and services. On a more disaggregated basis, inflation picked up in almost all categories (Chart 4.11), so it was not driven by a single erratic factor.

**Chart 4.11**  
**The change in annual CPI inflation between September and December 2004**



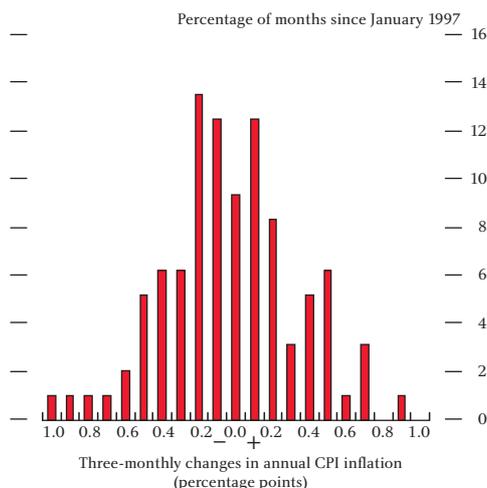
The recent increase in CPI inflation was not unusually large. Chart 4.12 shows the distribution of changes in CPI inflation, in any three-month window, since 1997. On average, in at least one month in every five CPI inflation has changed by 0.5 percentage points or more over the preceding three months.

### Supply chain pressures

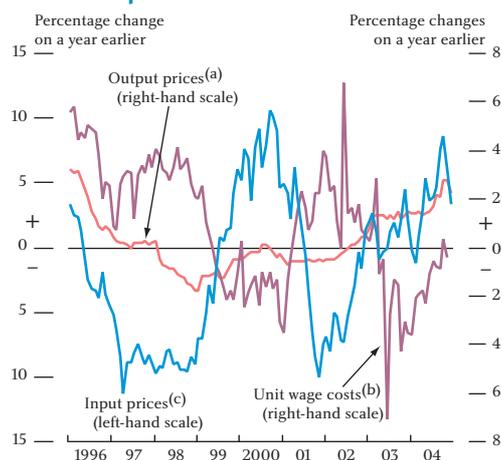
In the UK manufacturing sector, cost inflation has been on a rising trend since early 2003. Unit wage costs, which fell sharply in 2003, were broadly unchanged in the year to November 2004 (Chart 4.13). Raw material costs have been rising for a number of years, reflecting strong global demand

(1) For more details see Nickell, S (2005), 'Why has inflation been so low since 1999?', available on the Bank's website at [www.bankofengland.co.uk/publications/sninflation050127.pdf](http://www.bankofengland.co.uk/publications/sninflation050127.pdf).

**Chart 4.12**  
The distribution of three-monthly changes in annual CPI inflation



**Chart 4.13**  
Domestically produced manufactured goods: costs and prices



(a) Excludes food, beverages, tobacco and petroleum products.  
(b) For the manufacturing sector.  
(c) All manufacturing.

**Table 4.B**  
Private service sector costs and prices

|  | 2005     | 2004 |      |      |      |
|--|----------|------|------|------|------|
|  | Averages | Q1   | Q2   | Q3   | Q4   |
| Consumer prices <sup>(a)</sup>               | 3.6      | 3.2  | 3.2  | 3.4  | 3.5  |
| Corporate service prices <sup>(a)(b)</sup>   | 3.1      | 2.4  | 2.5  | 2.3  | n.a. |
| Earnings <sup>(a)(c)</sup>                   | 3.2      | 4.0  | 3.9  | 4.4  | 4.4  |
| Productivity <sup>(a)(d)</sup>               | 1.4      | 2.8  | 4.1  | 4.6  | n.a. |
| CIPS service sector costs <sup>(e)</sup>     | 55.5     | 56.1 | 60.1 | 59.9 | 61.7 |
| CIPS output prices <sup>(e)</sup>            | 51.3     | 52.1 | 54.4 | 54.3 | 53.7 |
| BCC service sector wage costs <sup>(f)</sup> | 30.3     | 37   | 31   | 28   | 31   |
| BCC expected output prices <sup>(f)</sup>    | 21.5     | 28   | 26   | 29   | 28   |

Sources: BCC, CIPS and ONS.

(a) Percentage changes on a year earlier.  
(b) Experimental price index.  
(c) Excluding bonuses. Q4 proxied by average of November and October.  
(d) Defined as total service sector output less 'government and other services', divided by a Workforce Jobs measure of employment, adjusted to be on a calendar quarter basis.  
(e) Averages of monthly indices. A reading above/below 50 suggests rising/falling prices or costs.  
(f) Percentage balance of firms expecting prices charged or costs to rise over the next three months.

for industrial commodities such as oil and metals. But the rate of increase in raw material costs may be slowing — in part because oil prices are not rising as fast as they were. The Bank's regional Agents also report that pressures on raw material costs may have peaked.

This increase in manufacturers' cost inflation has led to a steady pickup in the inflation rate of factory gate prices (also known as manufacturers' output prices). Even excluding the price of petrol and other erratics, annual output price inflation was 2.6% in 2004 Q4, up 1.3 percentage points on a year earlier. That was the highest rate since 1996 Q1 (Chart 4.13). Output prices fell back somewhat in December 2004, but it is too early to say whether output price inflation has peaked. Business surveys suggest continued upward pressure. For example, the CBI survey suggested that in January 2005, the balance of manufacturers expecting to raise their prices had picked up, and was the highest for almost a decade.

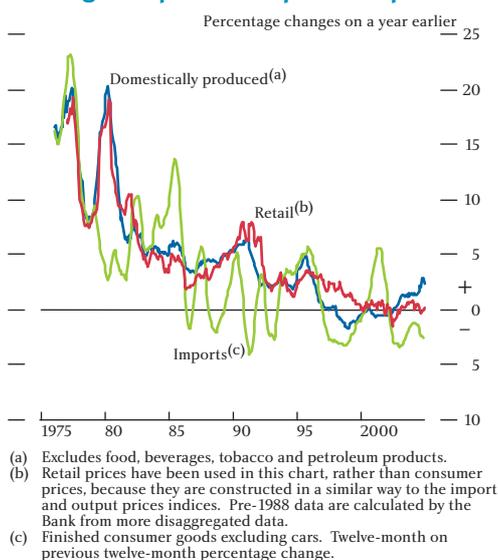
In the service sector, the evidence on supply chain pressures is more mixed. According to business surveys, cost pressures mounted in 2004 (Table 4.B), reflecting higher energy prices and wage costs. That has generated higher output price inflation. Official figures also show a pickup in private service sector earnings growth. But productivity growth appears to have been strong in 2004, suggesting that unit wage costs might have fallen. ONS data on prices show little evidence of cost pressures coming through. The ONS experimental measure of corporate services price inflation (a measure of prices charged to businesses) was weaker in 2004 than 2003. But it is not clear how reliable that measure is.

**Short-term prospects for CPI inflation**

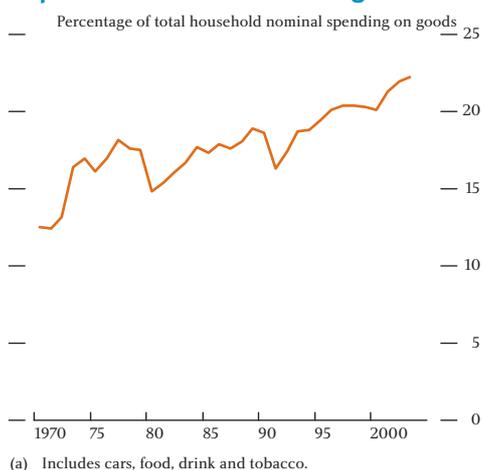
Rising factory gate prices are likely to exert upwards pressure on consumer goods price inflation. But the extent and timing of the pass-through is uncertain. In terms of the supply chain, CPI goods inflation can be accounted for by three broad components: domestic production and distribution costs, import prices, and distributors' profit margins. Between 1975 and 1995 the dominant force appears to have been domestic production prices, which were passed through rapidly and in full to retail prices. Since then the link between retail and domestic output prices has appeared less strong (Chart 4.14).

One explanation for this weaker link is the increased sourcing of cheaper goods from abroad. The value of imports of consumer goods has risen steadily, relative to nominal spending on consumer goods (Chart 4.15). That will have helped offset the impact of higher domestic output prices on retail prices of goods. A second explanation is developments

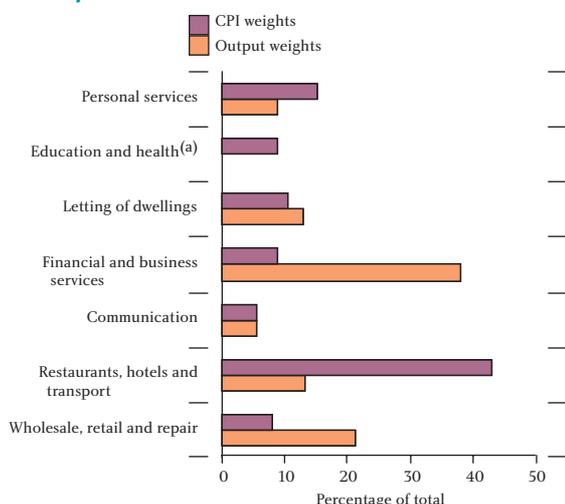
**Chart 4.14**  
Retail goods prices and producer prices



**Chart 4.15**  
Imports of finished consumer goods<sup>(a)</sup>



**Chart 4.16**  
The composition of CPI services relative to all private sector services



in the distribution sector, discussed in the box on pages 28–29.

Even though the relationship between domestic output prices and retail goods prices has become less immediate, it is still apparent. For example, between 1996 and 2000, the gradual reduction in retail price inflation appears to have been led by the sharp reduction in output price inflation. So it still seems likely that the recent pickup in domestic output prices will eventually feed through into higher goods CPI inflation. Furthermore, import price inflation is expected to rise this year (Section 4.3), which would also put upwards pressure on CPI goods inflation.

CPI service price inflation has been stable at around 3.5% for several years. Nevertheless, there may be upwards pressure on costs that are directly related to CPI services. Almost half of consumer services covered by the CPI are restaurants, hotels and transport (Chart 4.16) and those sectors employ large numbers of low-skilled workers. Recent increases in the minimum wage may therefore have put upwards pressure on their costs. For example, in the hotels and restaurants sector, annual wage growth was 6.8% in the three months to November 2004, up from 4.5% on average in 2003.

Inflation at the factory gate has risen, reflecting the pressures of demand on supply. There is some evidence of mounting cost pressures in the service sector, and import prices are likely to increase further. So supply chain pressures point to some increase in CPI inflation.

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## 5 Monetary policy since the November *Report*

*This section summarises the monetary policy decisions taken by the MPC since the November Report.<sup>(1)</sup> The Bank's repo rate was maintained at 4.75% in December, January and February.*

The MPC's central projection in the November *Report*, under the assumption that official interest rates followed a path implied by the market yield curve, was for four-quarter GDP growth to lie close to trend over the forecast period. CPI inflation was forecast to increase, reaching the 2% target after two years and continuing to rise a little thereafter. A limited margin of spare capacity, pricing pressures already working through the supply chain and the decline in the value of sterling gave upward impetus to consumer prices in the first year. Demand pressures were still evident in the second year of the forecast.

At the time of the Committee's meeting on 8–9 December, GDP growth in Q4 still seemed likely to pick up to around trend, broadly consistent with the November *Inflation Report*. Pay pressures remained muted and supply-chain costs and prices continued to increase. Oil prices had fallen substantially over the past month, but had been volatile.

There was a greater risk of weaker world activity than in the November central projection, largely on account of a weaker near-term outlook for the euro area and Japan. On domestic activity, there were further signs of weakness in manufacturing and strength in services. House prices seemed to be moving broadly in line with the central projection. There were few signs, so far, of the slowing housing market leading to a sharp slowdown in consumption growth. Short-term measures of money and credit were growing more slowly.

There was little news on pay pressures or on the degree of tightness in the labour market. Inflationary pressures continued to build in the supply chain, imported manufactures prices were starting to rise and headline producer prices were increasing at the fastest rate for nearly a decade. At 1.2% in October, CPI inflation had risen a little higher than expected. The short-term outlook for inflation

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(1) The *Minutes* of the November, December and January meetings (which set out the full discussion) are reproduced under a separate cover, published alongside this *Report*.

was also a little higher than expected in November. But the effective sterling exchange rate had risen by around 1½% over the past month, which could help to ease price pressures.

Overall, the news was mixed. The near-term outlook for domestic activity was broadly as expected, but world activity and oil prices had been rather weaker than expected. For some members, the news was balanced. For others, the downside risks to the inflation projection had increased, but not enough to justify a rate reduction. The Committee voted unanimously to maintain the repo rate at 4.75%.

At its meeting on 12–13 January, the Committee agreed that there had been relatively little news in the past month. Nor was there any evidence that the main risks identified in the November *Inflation Report* were materialising — with the possible exception of slightly weaker world activity. Euro-area and Japanese growth remained weaker than expected in November.

On domestic activity, the latest indicators pointed to GDP growth of close to trend in 2004 Q4, broadly in line with the *Inflation Report* central projection. The Committee saw no clear evidence of a significant change in the pace of consumption growth relative to its expectations, despite some initial downbeat press comments about retail sales. And house prices were, if anything, a little stronger than expected. There were further signs of slower money and credit growth.

Over the past month, sterling had fallen back to its level at the time of the November *Report*. There had been little movement in UK short-term interest rate expectations.

Pay pressures remained subdued. Supply-chain price pressures appeared to have eased a little, but producer output price inflation was still around 2%. Consumer price inflation had picked up a little more rapidly than expected in the November *Report*, illustrating that, over short periods, CPI inflation could be volatile. Apart from the likelihood of a slightly higher short-term profile for CPI inflation, November's projected pickup in inflation through 2005, reflecting the pressure of demand on supply and higher input and energy costs, still looked reasonable. There would be an opportunity to reassess the projections during the February *Inflation Report* round.

The Committee voted unanimously to maintain the repo rate at 4.75%.

At its meeting on 9–10 February, the Committee also voted to maintain the repo rate at 4.75%.

*In the MPC's central projection, assuming that official interest rates follow a path implied by market yields, GDP continues to grow robustly at around trend rates, before picking up towards the end of the forecast period. That is a slightly stronger near-term profile than the one described in the November Report, but similar further out. With import prices no longer falling and limited spare capacity in the economy, CPI inflation rises. It passes through the 2% target during the second year and continues to increase a little thereafter. That profile is marginally higher than the projection contained in the November Report. Key risks around the central projection for CPI inflation relate to: the prospects for domestic spending; the evolution of wages; the development of productivity; the behaviour of import prices; and the outlook for the world economy. The balance of risks, to both growth and inflation, is to the downside.*

## 6.1 World economy

The world economy grew vigorously in 2004, but is projected to slow a little in 2005. Policy tightening in the United States and the high price of oil are the main factors likely to curb short-term global demand growth. Nevertheless, the world economy is expected to grow at a steady rate during the next three years.

### The United States

In the United States, the strong rate of expansion in 2004 is likely to moderate towards trend in the wake of a tighter monetary policy. Consumption is likely to remain robust, supported by household income growth. Investment should increase over the forecast period at a solid pace, but it is likely to decelerate as profit growth falls back. Despite the depreciation of the dollar and healthy export growth, resilient demand for imports means that net trade may continue to subtract from GDP growth during the next couple of years.

### The euro area

The recovery in the euro area faltered in the second half of 2004. Nonetheless, the MPC expects quarterly GDP growth to pick up towards trend during 2005, and stay at around that rate during the remainder of the forecast period. Investment spending is likely to be the main impetus behind the resumption of the recovery. Improving corporate profitability, higher equity prices, and low long-term interest rates help to support the projected investment pickup. Consumption

growth is likely to recover slowly following a gradual improvement in employment and income growth.

## Asia

The recovery in Japan has stalled in recent quarters. Nevertheless, business and consumer confidence have both remained firm and the prospect is for a modest economic revival. The outlook for the Chinese economy is for further rapid development, though it may slow a little in 2005. Despite being devastating in human terms, the tsunami is unlikely to have a substantial impact on economic growth in the region as a whole.

## UK overseas markets, world trade prices, and the value of sterling

World trade expanded very strongly in 2004. That rate of expansion is likely to moderate somewhat as demand in the United States and Asia decelerates and the euro-area economy recovers only gradually. The outlook is a little weaker than in the *November Report*. Nevertheless, world trade is expected to grow robustly during the next three years.

Oil prices fell over the past three months, though there were some ups and downs in the intervening period. The futures price was little changed at most maturities compared with three months ago. The MPC uses the futures market to guide its oil price projection, and that implies that the prices for most types of crude oil are likely to fall gradually during the next three years.

Recovering economic activity and sharply rising oil prices meant that the foreign currency prices of traded goods and services picked up in 2004, having been broadly flat through the preceding three years. Further increases in these prices are likely, reflecting continued robust growth in the world economy. But the rate of increase should gradually slow in the absence of further upward pressure from oil prices.

The starting point for the sterling exchange rate index (ERI) of 102.9 in the MPC's projection is the average for the fifteen working days to 9 February. That was 0.8% higher than the equivalent average used for the November projection. Under the MPC's usual convention,<sup>(1)</sup> the exchange rate is assumed to depreciate to 100.5 by 2007 Q1 — 1.2% higher than the level implied by the November projection. World price developments and movements in the sterling exchange rate are an important influence on UK CPI inflation, as imports account for around a fifth of consumer spending in the United Kingdom.

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

**Table 6.A**  
**Expectations of the Bank's official interest rate**  
**implied by market yields<sup>(a)</sup>**

Per cent

February

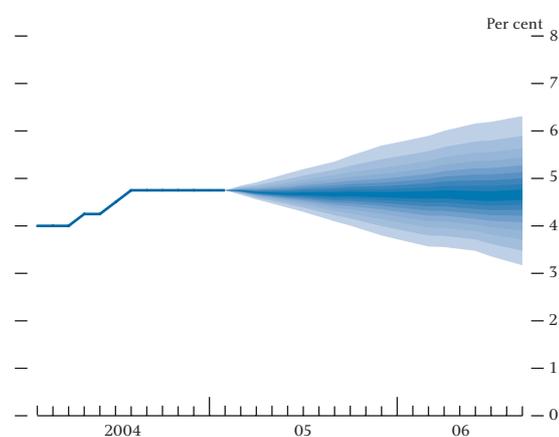
| 2005 |     |     |     | 2006 |     |     |     | 2007 |     |     |     | 2008 |
|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|------|
| Q1   | Q2  | Q3  | Q4  | Q1   | Q2  | Q3  | Q4  | Q1   | Q2  | Q3  | Q4  | Q1   |
| 4.7  | 4.7 | 4.7 | 4.7 | 4.7  | 4.6 | 4.6 | 4.6 | 4.6  | 4.6 | 4.6 | 4.6 | 4.6  |

November

| 2005 |     |     |     | 2006 |     |     |     | 2007 |     |     |     |
|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|-----|
| Q1   | Q2  | Q3  | Q4  | Q1   | Q2  | Q3  | Q4  | Q1   | Q2  | Q3  | Q4  |
| 4.7  | 4.7 | 4.7 | 4.7 | 4.7  | 4.7 | 4.7 | 4.7 | 4.8  | 4.8 | 4.8 | 4.8 |

(a) The data are fifteen-day averages to 9 February 2005 and 3 November 2004 respectively. The rates used for the February and November projections 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.

**Chart 6.1**  
**Market beliefs about future interest rates**



The line running through the mid-points of the fan chart is the market rate profile for the fifteen-day average ending 9 February, consistent with the measure of interest rates shown in Table 6.A. The distribution around that line is constructed using the prices of options on three-month Libor futures contracts traded on LIFFE. The fan chart depicts the probability of various outcomes for interest rates in the future. The fan has a similar interpretation to the fan charts in the Overview and those in this section of the *Report*. The chart is only indicative of market expectations because it is based on different, though related, instruments to the Bank's repo contracts, and is estimated on the assumption that investors are risk-neutral.

## 6.2 The interest rate assumption

The projection for the UK economy described below is conditioned on a path for official interest rates implied by market yields (Table 6.A). That path provides a convenient benchmark assumption on which to condition the MPC's projections.<sup>(1)</sup> The market yield curve implies a flat profile for official interest rates during the next three years — similar to the one used for the November projection. As always, there is a negligible probability that official interest rates will actually follow that profile. It is possible to generate a fan chart (Chart 6.1), which uses information from options prices to provide an approximate indication of market uncertainty about the future levels of interest rates. The chart suggests that market participants believe a wide variety of outturns is possible.

## 6.3 UK output and expenditure

### Household consumption

Despite large rises in house prices and household debt, consumption growth has averaged around 0.7% a quarter since 2002, broadly in line with its average of the past 50 years. With real incomes growing at around the same rate over the past three years, the household saving ratio has been broadly flat. Real income growth and a rising value of financial wealth are likely to support households' spending during the next three years. But a weaker housing market than in recent years implies that the MPC's central projection is for consumption growth to be slightly below its historical average for most of the forecast period.

### Business investment

According to business surveys, investment intentions have waned a little during the past three months. But the conditions remain in place for a continuation of the recovery in business investment. Capacity utilisation is high, and companies are likely to invest in order to accommodate further expansion. The cost of finance is low: corporate bond yields are at low levels, and equity prices have continued to rise. Corporate liquidity has remained ample. In its central case, the MPC projects business investment to grow at a slightly faster rate than GDP during the forecast period.

### Government spending

In forming its projections, the MPC assumed that nominal government final demand will increase in line with the plans outlined in the December 2004 *Pre-Budget Report* (PBR). They

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

imply that nominal government spending is set to grow strongly over the next three years.

The impact of the government sector on CPI inflation is best assessed by considering the government's demand for resources: that is, the quantity of private sector goods and services purchased by the government as well as the labour that the public sector employs. Given the Government's nominal spending plans, that demand for resources is likely to grow quite quickly during the next few years.

### Net trade

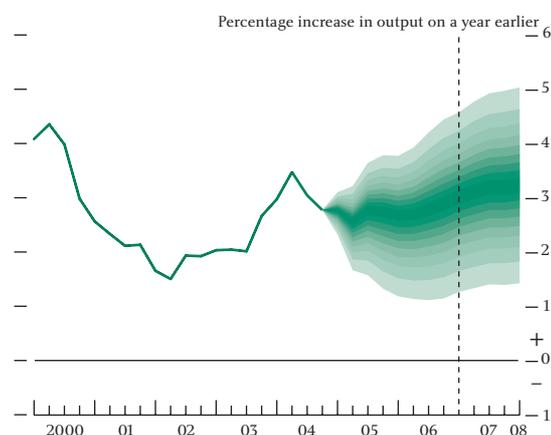
Despite the strong expansion in world trade in 2004, UK exports grew only moderately, implying a loss for UK companies of market share. And with world trade expected to slow in 2005, UK export growth is likely to remain relatively muted. The decline in market share during recent years has been marked. The MPC judges that such weakness is unlikely to persist and that the United Kingdom's market share will erode less quickly in the future — reverting to its longer-term trend decline. World trade growth is expected to remain fairly stable over the next three years. So the projected path for market share implies that UK export growth will pick up over the forecast period.

UK imports are expected to increase at a fairly steady pace throughout the forecast period, supported by firm domestic demand growth. Net trade — the combined impact of exports and imports on GDP — is likely to continue to subtract from growth in 2005, but to make a broadly neutral contribution further out. That turnaround reflects stable import growth combined with an improving export performance.

### The outlook for GDP

Chart 6.2 shows the projection for four-quarter GDP growth on the assumption that official interest rates follow a path implied by market yields. In the central case, output rises robustly at close to its trend rate throughout most of the forecast period, with a modest acceleration in the third year. This outlook is slightly stronger in the near term compared with the one described in the November *Inflation Report*. Recent business surveys have suggested greater momentum in output, especially in the service sector, than expected in November. However, the growth projections are little changed in the second and third years.

**Chart 6.2**  
Current GDP projection based on market interest rate expectations

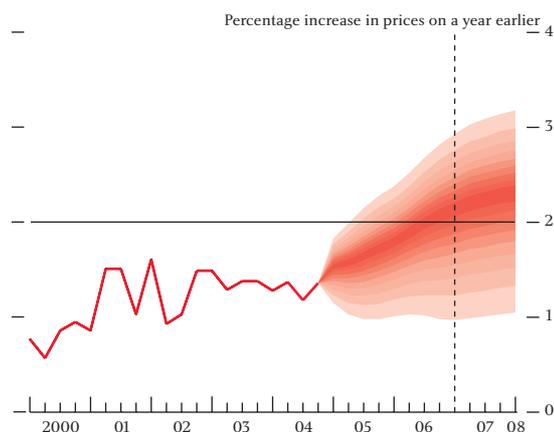


The fan chart depicts the probability of various outcomes for GDP growth in the future. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that GDP growth over the subsequent three years would lie within the darkest central band on 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 dotted line is drawn at the two-year point.

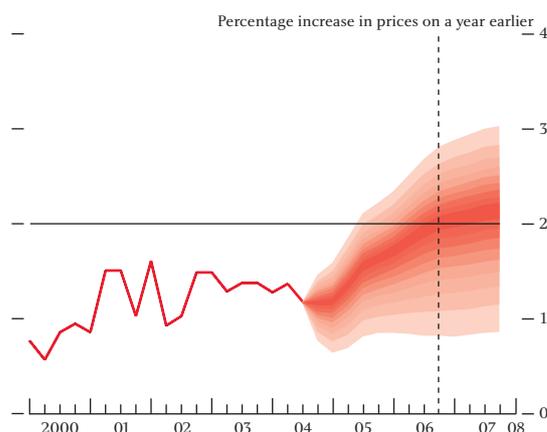
## 6.4 The outlook for inflation

The outlook for CPI inflation is strongly influenced by the balance between the demand for private sector output and the resources available to produce it. That balance reflects the

**Chart 6.3**  
Current CPI inflation projection based on market interest rate expectations



**Chart 6.4**  
CPI inflation projection in November 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 dotted lines are drawn at the respective two-year points.

degree of spare capacity within the private sector and conditions in the labour market.

Surveys, reports from the Bank's regional Agents, and statistical estimates<sup>(1)</sup> confirm the view that, on average, companies have been working close to or above their normal levels of capacity utilisation. Capacity pressures in manufacturing have also been evident in the rising rate of producer output price inflation.

With output growth probably remaining robust, the labour market is likely to tighten further. But there have been scant signs of upward pressure on wages in recent years despite the low level of unemployment, so the MPC believes that there will only be a modest further pickup in wage inflation.

During recent years, import price deflation has reduced UK CPI inflation. But import prices have begun to rise. Projected increases in world trade prices, combined with falls last year in the sterling exchange rate, should lift import prices further this year. That may put some upward pressure on UK consumer price inflation.

The Committee's projection for CPI inflation, assuming that official interest rates follow a path implied by market yields, is shown in Chart 6.3. CPI inflation rises gradually to reach the 2% target during the second year and continues to rise a little thereafter. A shortage of domestic capacity, along with rising pressure from import prices, lifts CPI inflation during the first year. With firm demand growth, continued pressure on supply

(1) See the box on pages 28–29 of this *Report*.

capacity is likely to persist and that pushes up inflation in the second and third years of the projection. Compared with the November *Report*, the profile for inflation is a little higher. In the near term, that partly reflects the higher starting point for CPI inflation itself. Also stronger demand growth in the short term translates into more upward pressure on inflation later in the forecast period.

## 6.5 Risks around the central projection

The prospects for output growth and inflation are, as always, uncertain. The central projection described above is only one of many possible outcomes, and the likelihood of it being realised is negligible. The width of the fan charts indicates the extent of the Committee's uncertainty about the prospects for the economy. There has been little change since November to the level of the MPC's uncertainty about the outlook for GDP growth and inflation over the forecast period. The main risks around the central projection relate to: the prospects for domestic spending; the evolution of wages; the development of productivity; the behaviour of import prices; and the outlook for the world economy.

In the short term, there is a downside risk to consumer spending. The underlying momentum of consumption may be weaker than in the central projection. And it is possible that the slowing of house price inflation may have greater downward impact on consumption than in the central projection.

But looking further ahead, there are also risks on the upside to domestic spending. Despite a recent slowdown, broad money growth has been buoyant for some time. There is a risk that households and companies will draw on those deposits to finance higher spending in the future than is implied by the MPC's central projection. There is also a possibility that they may use the money to buy other assets such as equities, which could boost spending on goods and services indirectly by inflating asset prices and increasing the value of wealth.

There is considerable uncertainty about the prospects for earnings growth, which has been unusually subdued in the face of historically low levels of unemployment. Part of the explanation lies in the various structural improvements made to the labour market during the past twenty-five years. But low wage inflation may also be the result of more recent and possibly temporary dampening effects. For example, migrant workers may have helped to ease labour shortages. And the knowledge that employers can recruit workers from abroad or move operations overseas may have helped to limit employees' wage demands. In constructing its central projection, the MPC judged that earnings growth builds gradually. But the

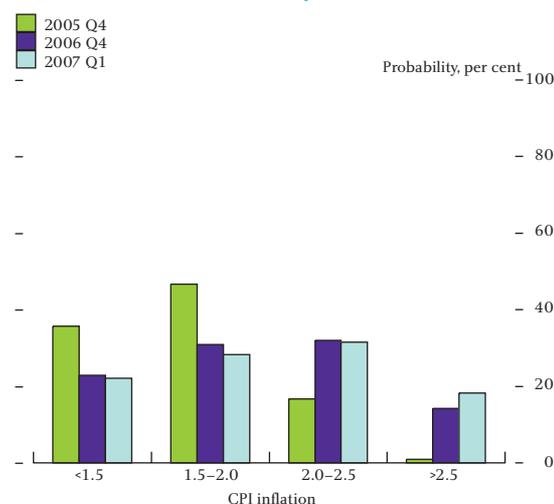
relative importance and durability of the various factors keeping wage claims in check is unclear. And the MPC believes that the balance of risks to the earnings outlook probably lies on the upside.

Private sector productivity growth has picked up markedly. The MPC has attributed much of the recent increase to a cyclical upturn. But there is a chance that more of it represents a higher level of sustainable productivity than the MPC has assumed. If that were the case, then it would represent a downside risk to CPI inflation, and an upside risk to the GDP projection. It is possible that strong productivity growth in the distribution sector over the recent past has helped to push down on CPI inflation. The MPC is uncertain about how quickly distribution productivity will increase in the future.

Almost half of UK imports come from other G7 economies, so their export prices are a key influence on UK import prices. But since the late 1990s, UK import prices have fallen, on average, relative to the export prices of other developed economies. It is possible that when sterling appreciated in the second half of the 1990s, companies selling to the United Kingdom took the opportunity to boost their profit margins rather than to cut prices for their customers. The relative fall in import prices in recent years may have partly reflected competition slowly eroding those margins. Another factor may have been increased sourcing of cheaper imports from developing countries such as China. The MPC has assumed further falls in the price of UK imports relative to that of developed economies' exports over the forecast period. But there is considerable uncertainty surrounding that judgement. Furthermore, the MPC is unclear about how fast any import price change might be passed through to consumer prices. Given the importance of imports within consumers' expenditure, that implies substantial short-term risks in both directions to the projection for CPI inflation.

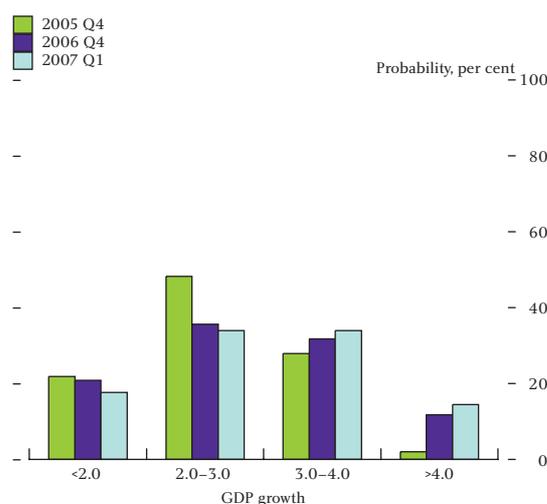
Another risk to the outlook concerns the prospects for world activity, especially in the euro area. The European economic recovery has faltered in recent quarters. The MPC has judged that a return to trend growth remains the likeliest outcome, although at a slower pace than was projected in November. But there is a risk that the euro-area economy could expand less quickly than the MPC has assumed. Companies' debt levels may act as more of a drag on investment and employment than anticipated by the MPC. And if the dollar were to fall further that could lead to weaker euro-area exports than is currently envisaged with negative consequences for the euro-area's domestic demand.

**Chart 6.5**  
The MPC's expectations for CPI inflation based on market interest rate expectations<sup>(a)</sup>



(a) These figures are derived from the same distribution as Chart 6.3. They represent the probabilities that the MPC assigns to CPI inflation lying within a particular range at a specified time in the future.

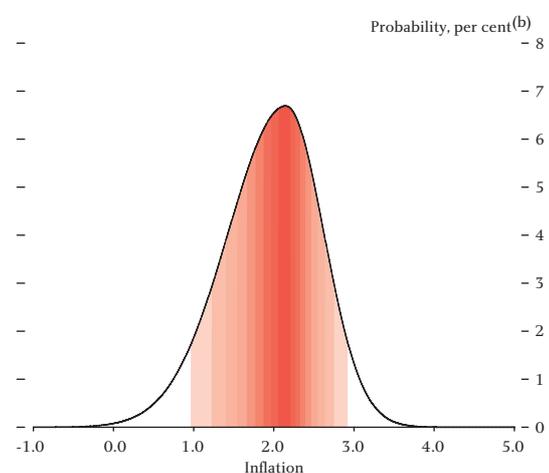
**Chart 6.6**  
The MPC's expectations for GDP growth based on market interest rate expectations<sup>(a)</sup>



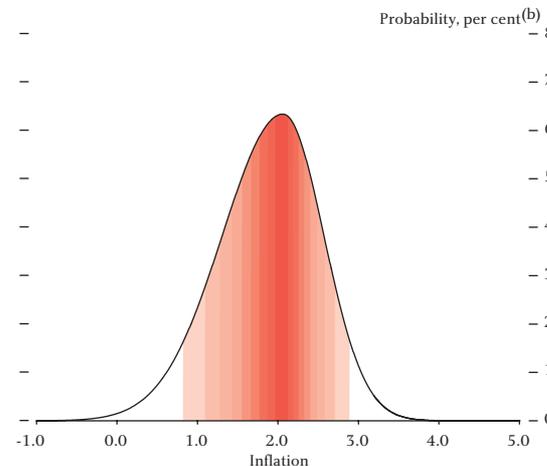
(a) These figures are derived from the same distribution as Chart 6.2. They represent the probabilities that the MPC assigns to GDP growth lying within a particular range at a specified time in the future.

The best collective judgement of the Committee is that the risks to both GDP growth and CPI inflation, relative to the central projection, are somewhat on the downside. The probabilities of various outcomes for CPI inflation and GDP growth under the market interest rate assumption are set out in Charts 6.5 and 6.6. The overall balance of risks to the inflation outlook at the two-year point is shown in Chart 6.7, alongside the corresponding balance from the November projection. There is a range of views among individual MPC members.

**Chart 6.7**  
Current projection for CPI inflation in 2007 Q1<sup>(a)</sup> based on market interest rate expectations

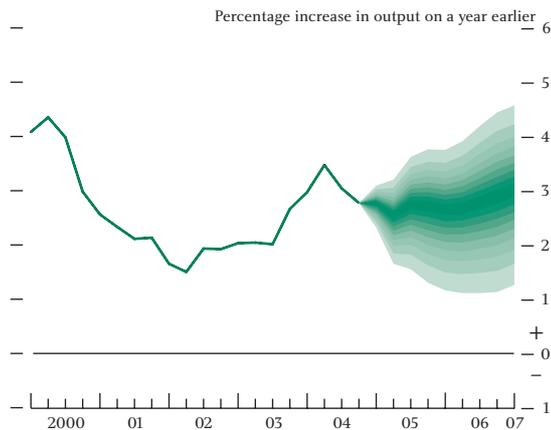


**Chart 6.8**  
November projection for CPI inflation in 2007 Q1<sup>(a)</sup> based on market interest rate expectations



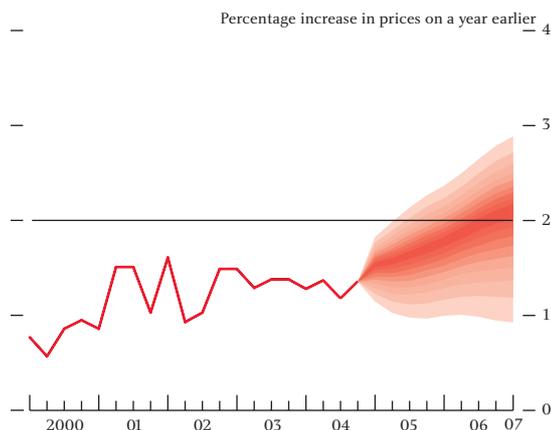
(a) These charts represent a cross-section of the respective fan charts in 2007 Q1 for the market interest rate projections. The coloured bands have a similar interpretation to those on the fan charts. For further details on how the fan charts are constructed see the [box on pages 48–49 in the May 2002 Inflation Report](#).  
 (b) Probability of inflation being within  $\pm 0.05$  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 6.9**  
**Current GDP projection based on constant nominal interest rates at 4.75%**



See footnote to Chart 6.2.

**Chart 6.10**  
**Current CPI inflation projection based on constant nominal interest rates at 4.75%**



See footnote to Charts 6.3 and 6.4.

## 6.6 Projection based on constant interest rates

The Committee's projections for GDP growth and CPI inflation conditioned on a constant interest rate at 4.75% are shown in Charts 6.9 and 6.10 respectively. These charts show projections only up to a two-year forecast horizon.<sup>(1)</sup> The projections for growth and inflation are almost identical to the ones based on market rates. The market yield curve implies a flat profile for official interest rates during the next two years and so is little different from the constant interest rate assumption.

## 6.7 The policy decision

At its February meeting, the Committee noted that, under the central projection, growth was near trend, with inflation rising to meet the 2% target in the second year and continuing to rise a little thereafter. But there were considerable uncertainties surrounding these projections, especially regarding the near-term strength of consumption, and the balance of risks was somewhat to the downside. In the light of this outlook, the Committee judged that no change in the current level of the official interest 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 Report explains why the projections based on constant interest rates are only shown up to two years ahead.

## Other forecasters' expectations of CPI inflation and GDP growth

In January, the Bank asked a sample of external forecasters for their latest projections of CPI inflation, output growth, interest rates and the sterling ERI (Table 1). Broadly speaking, their views had changed little since the November *Report*.

**Table 1**  
Average of other forecasters' projections of  
CPI inflation, GDP growth, interest rates and the ERI<sup>(a)</sup>

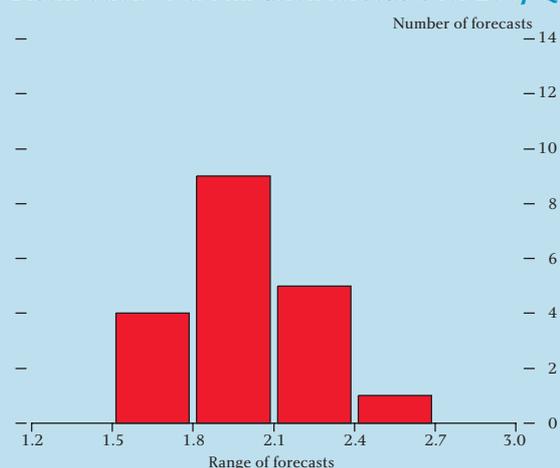
|                                     | 2004 Q4 <sup>(b)</sup> | 2005 Q4 | 2006 Q4 | 2007 Q1 |
|-------------------------------------|------------------------|---------|---------|---------|
| CPI inflation <sup>(c)</sup>        | 1.4                    | 1.8     | 1.9     | 1.9     |
| GDP growth <sup>(c)</sup>           | 2.8                    | 2.5     | 2.5     | 2.5     |
| Repo rate (per cent)                | 4.8                    | 4.8     | 4.6     | 4.6     |
| Sterling ERI<br>(Index: 1990 = 100) | 102.4                  | 100.4   | 99.2    | 97.9    |

Sources: Bank of England, ONS and central projections of outside forecasters as of 31 January 2005.

- (a) For 2005 Q4 and 2006 Q4, 23 forecasters provided the Bank with forecasts for CPI inflation, GDP growth and the repo rate, and 21 gave ERI forecasts. For 2007 Q1, there were 19 forecasts of CPI inflation, GDP growth and the repo rate, and 18 forecasts for the ERI.  
 (b) Outturns. GDP is the preliminary ONS estimate for chained volume GDP at market prices. The repo rate and sterling ERI are daily averages.  
 (c) Percentage changes on a year earlier.

On average, CPI inflation was expected to rise from the latest outturn of 1.4% in 2004 Q4 to around the 2.0% target at the two-year horizon. As in November, the range of views was narrow. All of the forecasters projected that CPI inflation would be within half a percentage point of the target in 2007 Q1 (Chart A).

**Chart A**  
Distribution of CPI inflation forecasts for 2007 Q1

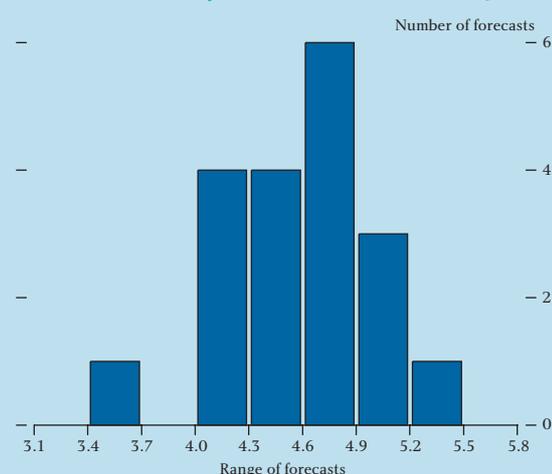


Source: Central projections of 19 outside forecasters as of 31 January 2005.

The forecasters' central projections for GDP growth were also broadly unchanged from three months earlier. The average forecast was for four-quarter growth to decline modestly from the preliminary outturn of 2.8% in 2004 Q4, to 2.5% in 2005 Q4 and beyond (Table 1).

These projections assume, on average, that the official interest rate remains close to its current level over the next two years (Table 1). That represents a slightly lower profile for interest rates than reported three months ago, reflecting both a rise in the number of forecasts at the lower end and a fall in the number at the upper end of the distribution (Chart B).

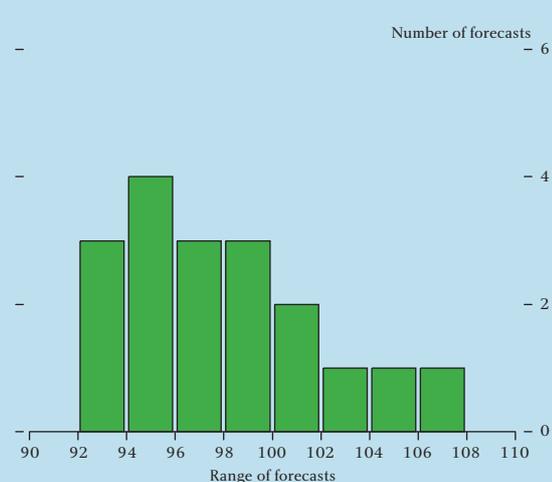
**Chart B**  
Distribution of repo rate forecasts for 2007 Q1



Source: Central projections of 19 outside forecasters as of 31 January 2005.

The projections were also based on the assumption that the sterling ERI falls to 97.9, on average, by 2007 Q1 (Table 1). That is a little lower than the profile assumed by the MPC in its central projection. But Chart C shows that the range of views is diverse, more so than three months ago.

**Chart C**  
Distribution of sterling ERI forecasts for 2007 Q1



Source: Central projections of 18 outside forecasters as of 31 January 2005.

External forecasters also provide the Bank with information on the likelihood of a range of possible outcomes for CPI inflation and GDP growth (Table 2). Looking two years ahead, they judged it slightly more likely that CPI inflation would be below rather than above the 2.0% target. And in their view, there was a greater chance that GDP growth would be below 2.0% than above 3.0%. This was a similar picture to that reported in November.

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

| <b>CPI inflation</b>                 |                |              |              |              |              |                |
|--------------------------------------|----------------|--------------|--------------|--------------|--------------|----------------|
| Probability, per cent <sup>(b)</sup> | 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% |
| 2005 Q4                              | 5              | 19           | 40           | 27           | 7            | 3              |
| 2006 Q4                              | 6              | 16           | 34           | 28           | 12           | 4              |
| 2007 Q1 <sup>(c)</sup>               | 6              | 15           | 33           | 29           | 13           | 5              |

| <b>GDP growth</b>                    |              |          |          |              |
|--------------------------------------|--------------|----------|----------|--------------|
| Probability, per cent <sup>(b)</sup> | Range:       |          |          |              |
|                                      | Less than 1% | 1% to 2% | 2% to 3% | More than 3% |
| 2005 Q4                              | 5            | 23       | 49       | 23           |
| 2006 Q4                              | 8            | 25       | 45       | 21           |
| 2007 Q1 <sup>(c)</sup>               | 8            | 26       | 44       | 23           |

Source: Projections of outside forecasters as of 31 January 2005.

- (a) 23 forecasters provided the Bank with their assessment of the likelihood, at three time horizons, of expected twelve-month CPI inflation and four-quarter output growth falling in the ranges shown above. For example, on average, forecasters assign a probability of 6% to CPI inflation turning out to be less than 1.0% in 2006 Q4.
- (b) Figures may not sum to 100 due to rounding.
- (c) 19 forecasters.

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## **Text of Bank of England press notice of 9 December 2004**

### **Bank of England maintains interest rates at 4.75%**

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 4.75%.

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

## **Text of Bank of England press notice of 13 January 2005**

### **Bank of England maintains interest rates at 4.75%**

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 4.75%.

The minutes of the meeting will be published at 9.30 am on Wednesday 26 January.

## **Text of Bank of England press notice of 10 February 2005**

### **Bank of England maintains interest rates at 4.75%**

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 4.75%.

The Committee's latest inflation and output projections will appear in the *Inflation Report* to be published on Wednesday 16 February.

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

## Glossary and other information

### Glossary of selected data

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

**CSPI:** corporate services price index.

**ERI:** exchange rate index.

**GDP:** gross domestic product.

**LFS:** Labour Force Survey.

**Libor:** London interbank offered rate.

**MO:** notes and coin in circulation outside the Bank of England and bankers' operational deposits at the Bank.

**M4:** UK non-bank, non building society private sector's holdings of notes and coin, plus all sterling deposits (including certificates of deposit) held at UK banks and building societies by the non-bank, non building society private sector.

**PMI:** purchasing managers' index.

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

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

### Abbreviations

**BCC:** British Chambers of Commerce.

**BRC:** British Retail Consortium.

**CBI:** Confederation of British Industry.

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

**ECB:** European Central Bank.

**FOMC:** Federal Open Market Committee.

**FTSE:** Financial Times Stock Exchange.

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

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

**HBF:** House Builders Federation.

**IBES:** International Brokers' Estimate System.

**ICT:** information, communications and technology.

**IFO:** Institute for Economic Research.

**LIFFE:** London International Financial Futures and Options Exchange.

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

**MFI:** monetary financial institutions.

**MPC:** Monetary Policy Committee.

**OFCs:** other financial corporations.

**ONS:** Office for National Statistics.

**OPEC:** Organization of the Petroleum Exporting Countries.

**PBR:** *Pre-Budget Report*.

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

**REC:** Recruitment and Employment Confederation.

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

**SMMT:** Society of Motor Manufacturers and Traders.

### Symbols and conventions

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

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.