



Inflation Report

May 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.

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

The entire *Report* is available in PDF at www.bankofengland.co.uk.

Overview

Global economic growth began to moderate and oil prices rose further. In the United Kingdom, output growth stayed close to its historical trend. But consumer spending faltered at the end of last year and that weakness appears to have persisted into the first quarter. Underlying labour cost pressures remained subdued, but input price inflation picked up. CPI inflation rose to 1.9%. In the Committee's central projection, GDP growth remains close to trend over the next three years. Inflation moves above the 2% target in the near term, partly due to the influence of temporary factors. It then eases back before settling around the target. The balance of risks to growth is on the downside, while the risks to inflation are broadly balanced.

The international economy

The pace of expansion of the world economy appears to be easing and the recovery in global equity prices has stalled. US output growth moderated in the first quarter from its recent rapid pace as investment decelerated, while the Federal Reserve lifted official interest rates by a total of 0.5 percentage points. In the euro area, final domestic demand accelerated slightly in Q4, but weak stockbuilding and a continuing drag from net trade — possibly reflecting past euro appreciation — generated a further slowing in GDP growth. In Asia, continued strong expansion in China was offset by stagnation in Japan and some slowing elsewhere. A moderation in global growth is in prospect for this year, though the rate of expansion is still likely to exceed the historical average. But the Committee judges that the outlook for UK export markets is a little weaker than at the time of the February *Report*.

The spot price of Brent crude moved above \$50 per barrel. The futures curve has risen by broadly the same amount, suggesting that these higher oil prices may persist into the medium term. The foreign currency prices of internationally traded goods and services also rose, reflecting the pressure of global demand on supply as well as higher energy costs.

Demand in the United Kingdom

In the United Kingdom, final domestic demand growth moderated in the fourth quarter. Household consumption slowed sharply — up just 0.2% — on the back of a standstill in spending on durable goods. Lacklustre retail sales, weak car registrations, gloomy surveys of distributors and reports from the Bank's regional Agents suggest that the softness continued

into the first quarter. But in the early part of this year, employment and earnings growth appear to have picked up and the housing market seems to have stabilised, suggesting that the softening may be temporary and that consumer spending may revive. But it is also possible that the deceleration in house prices and the cumulative impact on highly indebted households of past increases in interest rates may be associated with a more prolonged slowdown. The Committee judges that consumer spending is likely to recover, though the rate of growth may be a little weaker than in recent years.

Whole-economy investment growth eased back in Q4, with capital expenditure by businesses estimated to have risen by just 0.2%. But corporate sector cashflow has been healthy and surveys and reports from the Bank's regional Agents point to a continuation of last year's modest upturn in investment spending.

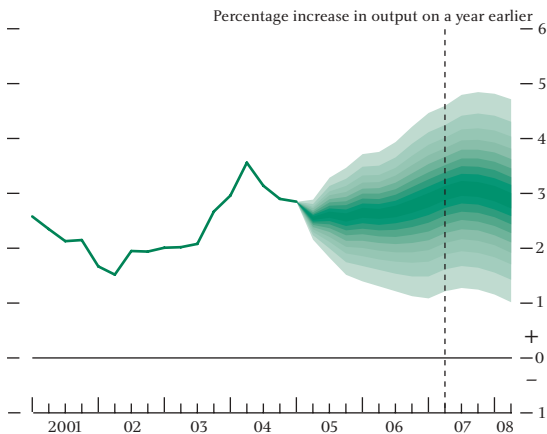
The Budget confirmed previous plans for increases in government spending, implying continued robust growth in the public sector's demand for resources, albeit at a rather less rapid rate than in recent years.

Despite a pickup in export growth in Q4, strong growth in imports implied that net trade again subtracted from the overall expansion in demand. Net exports may have picked up in Q1, but the trade data are volatile. Since the *February Report*, the effective sterling exchange rate has appreciated by nearly 2%. That may weigh on net exports, but the Committee nevertheless believes that a slowing in the rate of decline of the United Kingdom's world trade share is likely to boost exports and gradually eliminate the adverse contribution to growth from net trade.

The outlook for GDP growth

Quarterly GDP growth is provisionally estimated to have been 0.6% in Q1, only marginally lower than in the previous quarter. Distribution sector output fell but that was offset by robust growth in business services and finance. More recent data suggest that manufacturing output contracted. Business surveys point to a continuation of near-trend GDP growth in Q2. Output growth was relatively steady and close to trend through 2004, contrasting with the deceleration in final domestic demand and a weakening in net trade in the second half of the year. This discrepancy is accounted for by a large swing in the contribution from the statistical alignment adjustment that reconciles the growth in the output and expenditure-based measures of GDP. That makes it more difficult than usual to assess the underlying momentum in demand and output.

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.

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 close to trend. Softer consumers' expenditure growth than in recent years is counterbalanced by strong, but slowing, growth in government consumption, steadily increasing investment and an improving contribution from net trade. The profile is a little weaker than in the *February Report*.

Costs and prices

Employment rose strongly around the turn of the year. Average hours also increased sharply, though a measure of usual hours worked has not risen to the same extent, suggesting that some of the rise in the former may be erratic. Increased labour force participation meant that unemployment edged up despite the strong growth in employment.

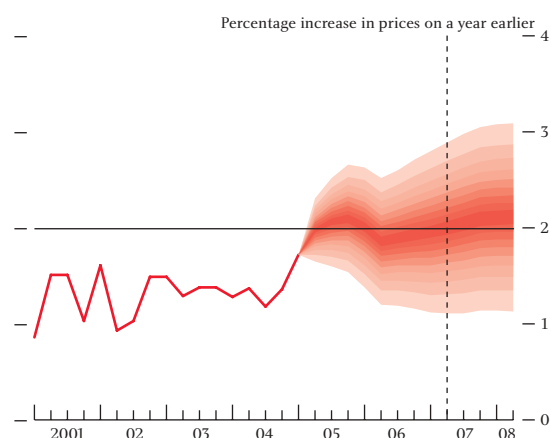
Private sector settlements and regular pay growth remained stable, though average earnings growth spiked up in February, reflecting higher bonus payments. The continued absence of sustained upward pressure on wages, despite the apparently tight labour market, has been notable. Although productivity growth eased, the rate of increase in unit wage costs remained low.

Other cost pressures continued to build, however. Commodity prices picked up and manufacturers' input price inflation was the highest in almost a decade. Moreover, businesses' utilisation of capacity appears to be at or above normal, which may add to the upward pressure on prices. But these influences have been offset by the subdued growth in private sector unit labour costs. Manufacturers' output price inflation has edged higher during this year, though that appears to be largely the result of higher prices for petroleum products. Indicators of output price inflation in the services sector were mixed.

Over much of the past decade consumer price inflation has been restrained by flat or falling import prices, in part reflecting intensified global competition and increased sourcing from low-cost countries. Looking forward, import prices are likely to add to consumer price inflation.

CPI inflation rose to 1.9% in March. Since its low point in September, CPI inflation has risen more sharply than expected. Moreover, that pickup has been relatively broad-based and does not appear to be solely attributable to the impact of higher oil prices.

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



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

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. Domestic pressures on supply capacity and higher import price inflation exert a gentle upward impetus over the forecast period. On the central projection, inflation moves above the 2% target in the near term, reflecting in part the impact of higher prices for water and sewerage services. Inflation then drops back before settling around the target as the impact of higher oil prices and other transient influences on the inflation rate abate. The projection is somewhat higher in the first year than in February but lower further out, reflecting the appreciation of sterling and the more subdued prospect for activity.

As usual there are considerable risks surrounding the central projections. These include: the outlook for consumer spending; the reaction of wages and prices to demand pressures; and the prospects for the world economy. There is a range of views among members, but the Committee judges that, relative to the central projection, the overall balance of risks to growth is on the downside, while the risks to inflation are broadly balanced.

The policy decision

At its May meeting, the Committee noted that, under the central projection, output growth was set to remain near trend, with inflation close to the 2% target throughout the forecast period. But there were considerable uncertainties surrounding these projections, especially regarding the strength of consumption and the prospects for inflation. In the light of this outlook and bearing in mind the balance of risks, 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.

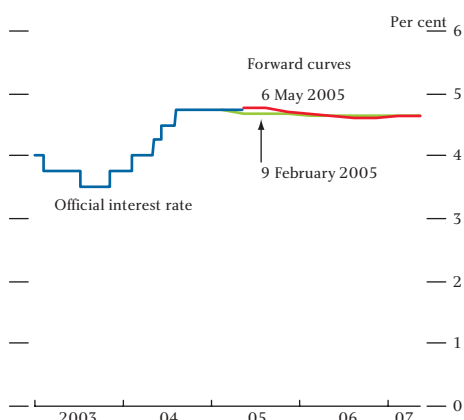
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The MPC has left the official interest rate unchanged since August 2004. As in the previous Report, market participants continued to expect little change in official interest rates. Nominal and real long rates remained low, although they have edged up during the past three months. Spreads on corporate debt widened. The recovery in global equity prices stalled. House prices have been broadly flat during the past three months. Household borrowing growth slowed and in 2004 Q4 mortgage equity withdrawal fell sharply. Corporate finances appeared healthy.

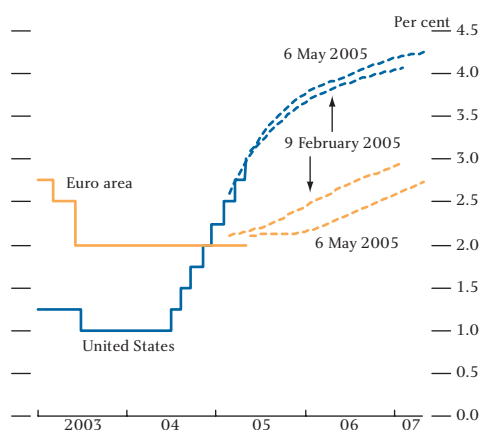
Chart 1.1
Bank of England repo rate and two-week forward curves^(a)



Sources: Bank of England and Bloomberg.

(a) The forward curves are fifteen-day averages to 6 May 2005 and 9 February 2005. They have been derived from instruments that settle on the London interbank offered rate (Libor). That includes market rates on short sterling futures, swaps, interbank loans and forward rate agreements. The curves have been adjusted for credit risk.

Chart 1.2
Official and forward interest rates in the euro area and the United States^(a)



Sources: Bank of England and Bloomberg.

(a) Solid lines are official rates. Broken lines represent forward curves. These have been derived from instruments that settle on Euribor and dollar Libor. They include market rates on futures, swaps, interbank loans and forward rate agreements.

1.1 Asset prices

Short-term interest rates

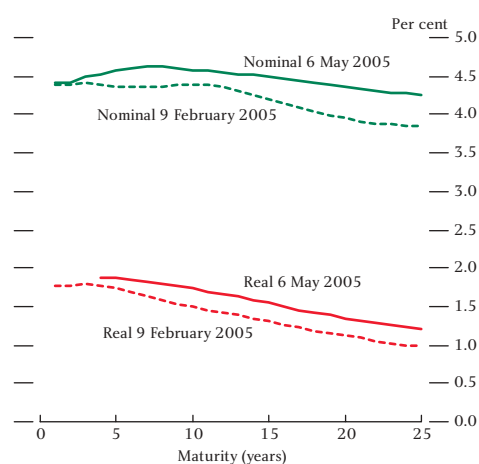
The Monetary Policy Committee (MPC) has left the official interest rate unchanged during the past three months. Forward interest rates continued to imply that market participants expected little change in official interest rates in the near term (Chart 1.1). According to the most recent Reuters poll, market economists also expected interest rates to be little changed by the end of the year.

Stimulative monetary policy in the United States has been an important factor boosting world growth. Although the US monetary stance remained consistent with further expansion, the FOMC has raised official interest rates from 2.5% to 3.0% since the previous Report. Forward contracts on 6 May suggested that the market expected further tightening in policy (Chart 1.2). Official interest rates in the euro area have been left unchanged since mid-2003.

Longer-term interest rates and corporate bond yields

Chart 1.3 shows that since the previous Report, UK nominal forward interest rates have edged higher at most maturities out to 25 years. In principle, movements in nominal forward interest rates can be accounted for by changes in one or more of the following: real forward rates (that is, inflation-adjusted interest rates), inflation expectations, or inflation risk premia (that is, the compensation investors require to hold nominal debt with an uncertain real return). Real forward rates, as derived from the yields on index-linked bonds, have risen during the past three months (Chart 1.3). Nevertheless, they remain low by historical standards: the box on pages 6–7 considers reasons why.

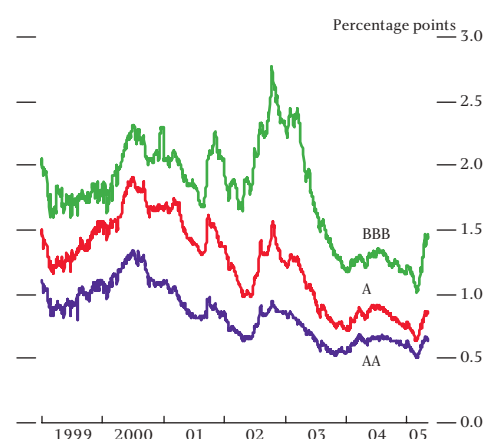
Chart 1.3
UK forward interest rates^(a)



Sources: Bank of England, Bloomberg and Debt Management Office.

(a) Instantaneous forward rates derived from yields on government bonds.

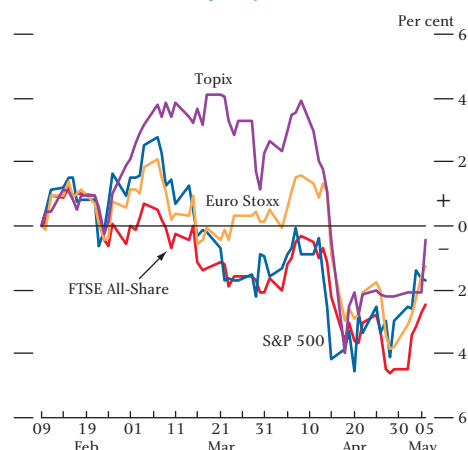
Chart 1.4
Sterling corporate bond spreads^(a)



Source: Bloomberg.

(a) The difference between corporate bond yields and UK government bond yields.

Chart 1.5
Cumulative changes in global equity indices since the February Report^(a)



Sources: Bloomberg and Thomson Financial Datastream.

(a) In local currency. Changes calculated on a daily basis.

As suggested in the box, investors may have increased their demand for long-dated securities in order to ‘search for yield’. This behaviour may also have pushed up the price of corporate bonds and so lowered their yield. Indeed, sterling corporate bond spreads (the difference between the yields on corporate bonds and government bonds) have narrowed during the past few years (Chart 1.4). But more recently, corporate bond spreads have edged up, particularly for lower-rated investment grade bonds. Spreads on emerging market sovereign debt have also widened. This may indicate that investors have begun to re-evaluate the risks associated with holding those types of debt.

At longer maturities, rising real rates are not the only factor behind the recent increase in nominal rates. The difference between real and nominal forward interest rates (the implied forward inflation rate) has also risen slightly since the February Report. That difference is often used to infer information about market participants’ expectations of future inflation. However, there has been no increase in survey-based measures of either near-term inflation expectations or, more pertinently, longer-term expectations. Therefore the higher forward inflation rate could reflect movements in the inflation risk premium or institutional factors affecting the gilts market, rather than increased inflation expectations.

Equity prices

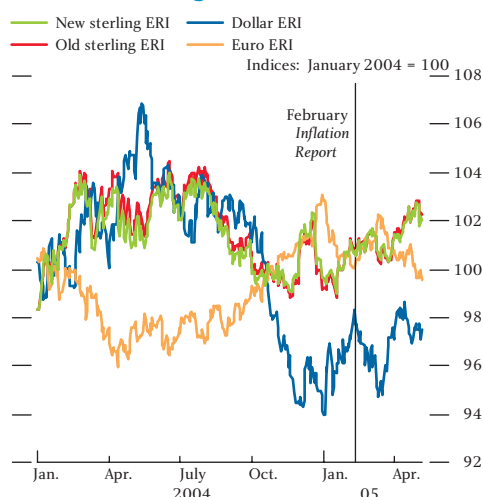
Since their trough in early 2003, global equity prices have recovered by over 40%. But that recovery has stalled. The FTSE All-Share index averaged 2425 in the fifteen working days to 6 May — the starting assumption used in the MPC’s latest projections. That was 1.3% lower than in the equivalent period used for the February projections. But comparisons between the fifteen-day average periods can obscure movements during the past three months, as well as more recent daily movements. Chart 1.5 shows that most of the falls in global equity indices occurred in April. For example, the FTSE All-Share fell by over 4% between 8 April and 29 April. The equity price falls have been broadly based across different sectors.

Exchange rates

Effective exchange rate indices measure an economy’s exchange rate against a trade-weighted basket of currencies. On 11 April, the Bank of England released a new sterling effective exchange rate index. As outlined in the February Report, the new weights incorporate services trade, rather than manufactured goods only, and are updated frequently to allow for changing trade patterns.⁽¹⁾ Chart 1.6 shows the new and

(1) For more details of the new ERI see the box on page 7 of the February 2005 Inflation Report, or Lynch, B and Whitaker, S (2004), ‘The new sterling ERI’, *Bank of England Quarterly Bulletin*, Winter, pages 429–41.

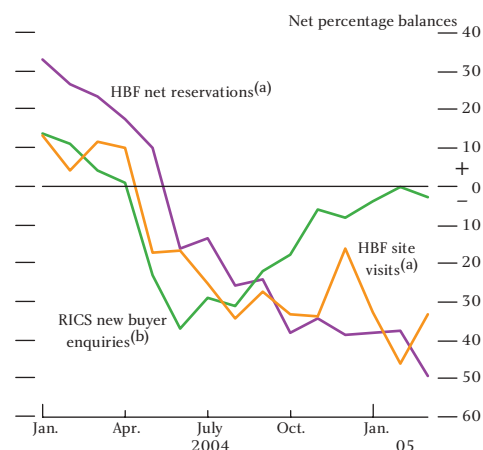
Chart 1.6
Effective exchange rates



old ERIs during the past 16 months. The differences between them have been negligible. In the fifteen working days to 6 May, the old sterling ERI was 1.72% higher than the equivalent average used in the February Report. The new sterling ERI, on which the MPC has based its latest projections, was 1.69% higher.

The dollar effective exchange rate has been more volatile than the sterling ERI during the past three months. Since mid-March it has appreciated by around 3%. Some of this may have been associated with upward revisions to market participants' views about the path of US interest rates relative to those in other economies (Chart 1.2). Nevertheless, the recent appreciation is small compared with the substantial fall in the dollar during the past three years.

Chart 1.7
Early leading indicators of housing market activity



Sources: HBF and RICS.

(a) Compared with a year ago. These data have been seasonally adjusted by the Bank of England.

(b) Compared with the previous month.

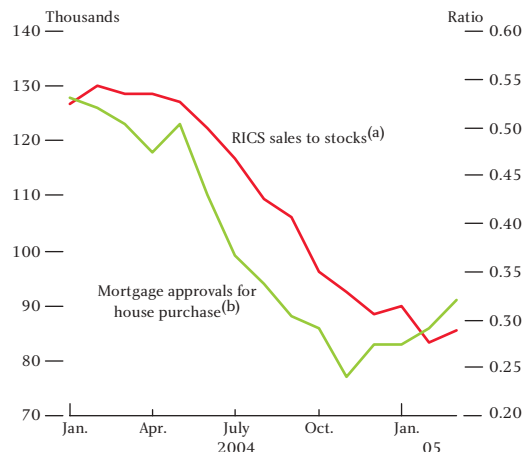
The housing market

Since the middle of last year, house price inflation has slowed across the United Kingdom. During the past three months, the rate of monthly house price inflation has been negligible according to the main lenders. Price balances recorded by the Royal Institution of Chartered Surveyors have been broadly flat during the past few months, indicating that monthly house price inflation has stabilised. But the House Builders Federation survey suggests that house price inflation has fallen further.

As well as price indices, the MPC also analyses housing market activity at different stages of the house purchase chain.⁽¹⁾ Those indicators can give an early read both on possible turning points in the housing market and on near-term trends in house price inflation.

Chart 1.7 shows indicators of housing market activity early in the house purchase chain. These include data on site visits and reservations of new homes. After falling sharply in 2004, most of these indicators appear to have flattened out recently. The same is true of indicators later in the house purchase chain such as the level of sales relative to the stock of housing on estate agents' books (Chart 1.8). Taken together, Chart 1.7 and Chart 1.8 suggest that housing market activity may have stabilised.

Chart 1.8
Other indicators of housing market activity



Sources: Bank of England and RICS.

(a) Ratio of sales recorded during the past three months to the level of stocks on estate agents' books (right-hand scale).

(b) Left-hand scale.

1.2 Money, credit and balance sheets

Households

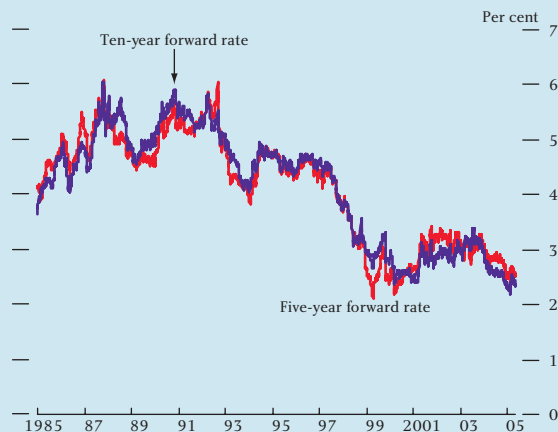
Annual growth in households' money has continued to hover above 8% (Chart 1.9). Households' Divisia, an alternative measure of household money that gives greater weight to those deposits most likely to be spent on goods and services,

(1) See Chart 1.6 on page 6 of the November 2004 Inflation Report.

The economics of low long-term bond yields⁽¹⁾

UK medium and long-term real forward interest rates, derived from index-linked government bonds, are low by historical standards (Chart A). Real rates of similar maturities in the euro area and the United States are also low. This box explores reasons why.

Chart A
Real interest rates in the United Kingdom^(a)



Sources: Bank of England, Bloomberg and Debt Management Office.

(a) Calculated as the average index-linked yield on government bonds in five to ten years' time, and ten to fifteen years' time, adjusted by the average difference between CPI and RPI inflation since 1989.

How are long bond yields determined?

Real interest rates move to bring desired saving and planned investment into line. Desired saving depends on factors such as demographics, changes in asset values, and households' uncertainty about future income flows. Planned investment is likely to be affected by factors such as productivity growth, labour force growth and investors' uncertainty about future rates of return. Higher desired savings should push down rates, as should lower planned investment.

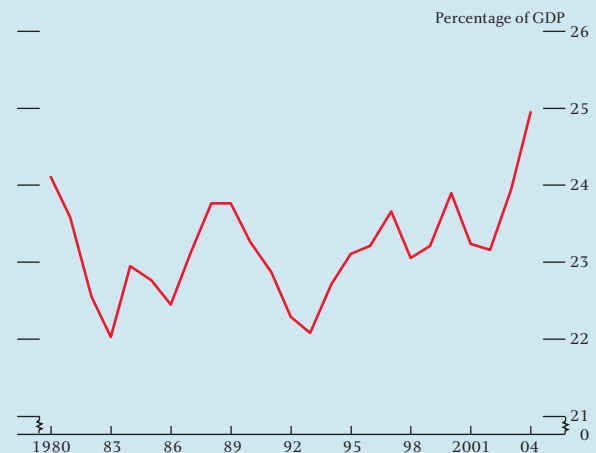
In practice, these fundamental determinants of real interest rates are not the only forces at work. Real long bond rates will be affected by a range of other market-specific factors. These include changes in insurance and pension fund regulation that can affect the demand for long-dated securities, as well as changes to investor behaviour and their attitude to risk. This box first looks at fundamental determinants, and then turns to other considerations.

The fundamental determinants: desired saving and planned investment

Chart B shows that world saving as a proportion of GDP has increased over the past decade. Given that

real interest rates have fallen during this period, the rise is likely to indicate an increase in desired saving. A decomposition of these saving flows reveals that the rise in world saving largely reflects increased saving in emerging Asian economies. Why might desired saving rates have increased in Asia?

Chart B
World saving^(a)



Sources: IMF World Economic Outlook Database, April 2005 and Bank of England calculations.

(a) This measure is constructed by aggregating national savings rates using time-varying purchasing power parity GDP weights. Constructing world national saving using purchasing power parity weights gives a measure of the real amount of goods and services saved in the world economy.

In recent years, Asian households have saved more than they needed to fund domestic investment needs. In part, that may have been in response to the economic instability triggered by the 1997 Asian crisis. At the same time, many Asian monetary authorities and governments have chosen to try to protect themselves against future crises by building up large foreign exchange reserves. This was accomplished by issuing debt to their citizens and using the proceeds to buy foreign assets, in particular US Treasury bonds. So in effect, the authorities intermediated domestic saving away from local investment and into international capital markets.⁽²⁾

It is also possible that markets have responded to the prospect of future increases in the desired saving level in advanced economies. As discussed in the February Report, rising life expectancy, and the movement of the baby-boom generation into the prime saving years should increase desired future saving in those economies.⁽³⁾ If that change has been anticipated by markets, that could have exerted downward pressure on longer-term yields.

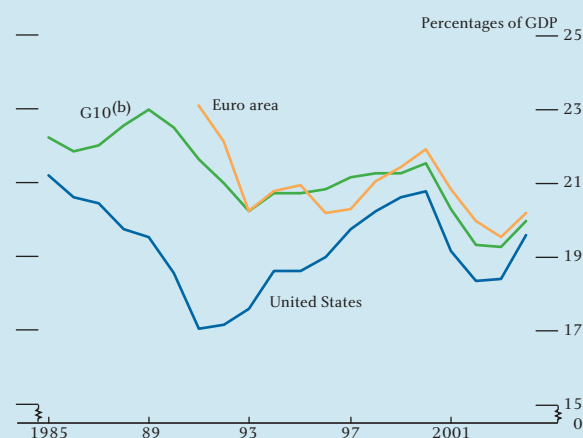
(1) The box on pages 12 and 13 of 'Markets and operations', *Bank of England Quarterly Bulletin*, Spring 2005 also discusses why global long-term real interest rates are low.

(2) See the speech by Bernanke, B (2005), 'The Global Saving Glut and the U.S. Current Account Deficit', given at the Homer Jones Lecture, St. Louis, Missouri, 14 April 2005.

(3) See page 4 of the February 2005 *Inflation Report*.

Is it possible that lower rates also partly reflect lower levels of planned investment? There are reasons to believe that investment demand has fallen in the advanced economies. Global equity prices dropped sharply at the turn of the century, increasing the cost of capital faced by companies. That, together with the uncertainty associated with corporate scandals earlier this decade, may have made companies more cautious about investing and put downward pressure on long-term real interest rates. Indeed, in advanced economies actual investment as a proportion of GDP has fallen since the late 1990s (Chart C).

Chart C
G10 investment^(a)



Sources: IMF World Economic Outlook Database, April 2005 and Bank of England calculations.

- (a) At current prices. Based on 2000 weights in world GDP.
(b) The G10 includes Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.

But although those flows have fallen, there must have been an increase in investment elsewhere in the world. That is because, at the global level, investment and saving flows must be equal and, as Chart B shows, saving flows have risen in recent years. Since 2000,

investment has increased in rapidly industrialising Asian economies such as China.

Other factors

Are there other factors which could have affected the demand for, and supply of, medium and long-dated debt? One possibility is regulatory change. Reforms to the regulation of insurance companies and pension funds during the past few years may have increased the demand for government bonds. For example, last year in the United Kingdom, the FSA published revised rules on capital requirements for life insurance companies which may have spurred changes in their asset portfolio.⁽⁴⁾ Market participants may also have been anticipating similar regulatory changes elsewhere. At the same time, equity price falls and subsequent pension fund shortfalls seen earlier this decade may have made pension fund investors believe that they could achieve a better match between assets and liabilities by holding more bonds.

Alternatively, the fall in long real rates may reflect a more generalised phenomenon of investors' 'search for yield'. In particular, at times of abundant liquidity and low short-term interest rates, some investors may have tried to seek out additional returns by taking more risk, including interest rate risk on longer-dated bonds. The associated fall in risk premia may have led to a temporary mis-pricing by driving long forward rates below their sustainable levels.

This box has explored why long real rates have been so low. Changes to current and expected future saving behaviour, as well as lower planned investment in advanced economies may have played a role. But other factors are also candidate explanations, and some of these could reverse quickly with the risk of long real bond rates rising sharply in the future.

(4) The underlying principles of the new regulatory regime were outlined in 'Markets and operations', *Bank of England Quarterly Bulletin*, Autumn 2004, pages 276–77.

has been growing at a similar rate.⁽¹⁾ Chart 1.9 shows that rapid rates of household money growth have been prevalent since mid-2001. The box on pages 10–11 examines reasons why.

Households' borrowing growth has also increased sharply in recent years (Chart 1.10). But since the middle of 2004 that growth has eased. In large part, the deceleration has been associated with developments in the housing market that affect secured lending: mortgage approvals have fallen back and house price inflation has slowed.

(1) The Bank has recently implemented changes to how Divisia money is calculated. See Hancock, M (2005), 'Divisia money', *Bank of England Quarterly Bulletin*, Spring, pages 39–46.

Chart 1.9
Households' deposits

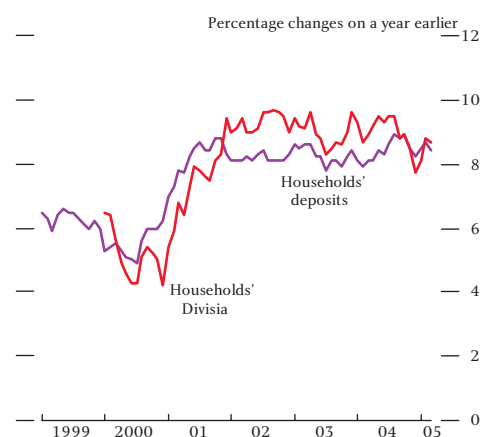
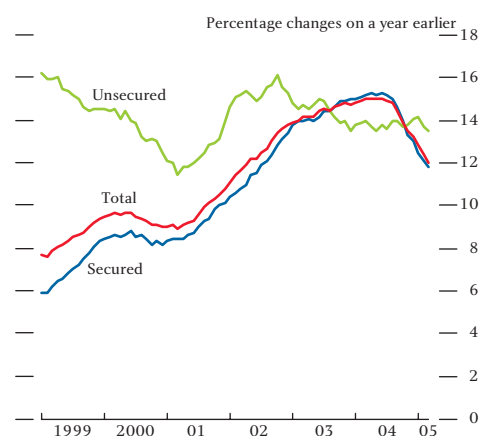
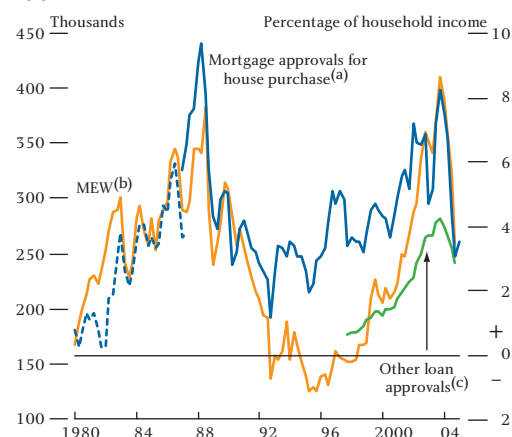


Chart 1.10
Households' borrowing^(a)



(a) As measured by lending to individuals.

Chart 1.11
Mortgage equity withdrawal and loan approvals



Sources: Bank of England and Council of Mortgage Lenders (CML).

- (a) Bank of England data on mortgage approvals from 1987 (solid line). CML data on mortgage approvals before then (dotted line). The CML data have been seasonally adjusted by the Bank of England. Left-hand scale.
- (b) The Bank's estimate of total MEW. Right-hand scale.
- (c) The value of secured loans approved for purposes other than house purchase or remortgaging. In principle this series should also include the portion of any remortgaging which is not used to replace the existing mortgage. Right-hand scale.

Within secured lending, there has been a marked fall in mortgage equity withdrawal (MEW) (Chart 1.11). One form of MEW occurs when an individual increases the size of the mortgage on his or her home, and uses that additional loan to finance spending. So, on the face of it, the scale of the drop in total MEW could indicate that households have become very reluctant to borrow to consume.

However, as outlined in previous *Reports* and *Quarterly Bulletins*, not all equity withdrawal involves active borrowing by the individual withdrawer, and not all funds released are used for spending.⁽¹⁾ That is because MEW also occurs naturally in some types of property sales: in particular, when an individual either sells a property and does not buy another, or trades down to a cheaper home. Survey evidence suggests that flows of MEW from property sales are more likely to be saved than spent in the near term. That may be because withdrawers use the capital to finance spending over the rest of their lifetime.

It is impossible to identify precisely how much of the recorded fall in MEW reflects property sales, and how much reflects active borrowing. According to past surveys of MEW, funds released through property sales typically account for the bulk of gross withdrawal. And, as discussed in the box on pages 10–11, high house price inflation during the past few years is likely to have boosted the value of that type of withdrawal.

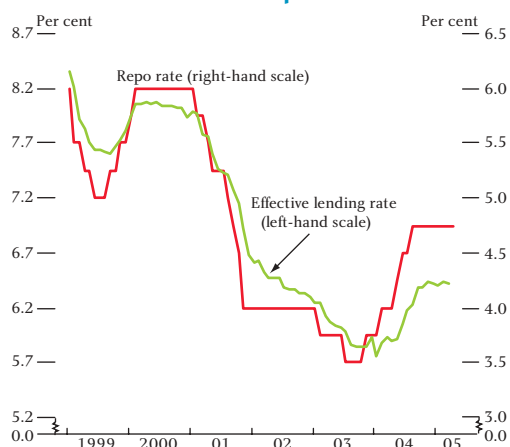
The value of MEW from property sales depends on the number of housing transactions as well as house prices. As Chart 1.11 shows, total MEW and housing market turnover (as proxied by mortgage approvals for house purchase) appear to have moved together in the past. In 2004, there was a marked fall in the number of housing transactions. And that is likely to explain at least some of the sharp drop in total recorded MEW.

One way to assess how much of the drop in total MEW reflects active borrowing is to examine the value of loan approvals by households that take out a further advance on their property. These 'other loan approvals' should provide a rough guide to MEW funds released solely by active borrowing. The value of other loan approvals eased in 2004, although by significantly less than total MEW (Chart 1.11). So these data indicate that consumers' reluctance to borrow may have been much less pronounced than the headline MEW figures suggest. The most recent data show that the value of 'other loan approvals' edged up in 2005 Q1.

Other indicators, such as developments in unsecured credit, suggest that consumers' appetite to borrow for spending has

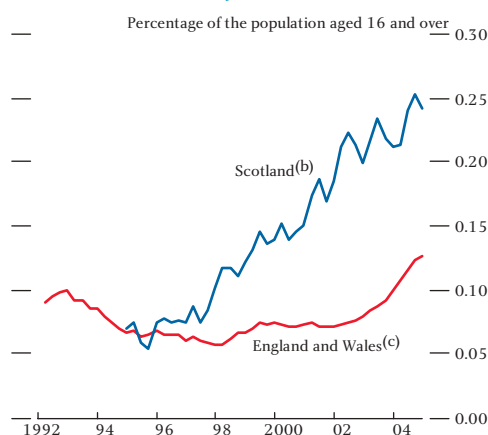
(1) See Davey, M (2001), 'Mortgage equity withdrawal and consumption', *Bank of England Quarterly Bulletin*, Spring, pages 100–103 and Benito, A and Power, J (2004), 'Housing equity and consumption: insights from the Survey of English Housing', *Bank of England Quarterly Bulletin*, Autumn, pages 302–09.

Chart 1.12
The effective bank lending rate to households^(a) and the repo rate



(a) The effective lending rate measures the average rate paid by households on their outstanding bank borrowing. It includes both secured and unsecured borrowing.

Chart 1.13
Personal insolvency rate^(a)



Source: Department of Trade and Industry.

- (a) Annualised rate. 2005 Q1 population data were not available so the population was estimated to grow in line with its average during the past five years.
 (b) Includes sequestrations and protected trust deeds (not seasonally adjusted).
 (c) Includes bankruptcies and individual voluntary arrangements (seasonally adjusted).

been undiminished during the past year. In March, annual growth of unsecured lending was 13.5%, broadly in line with growth in 2004 (Chart 1.10). However, according to recent discussions between the Bank of England and the major lenders, credit conditions have been tightened for some groups of unsecured borrowers perceived to be high risk.

Looking forward, are there any other signs of financial pressure which could indicate a more subdued outlook for consumer spending? As shown in Chart 1.12, the effective lending rate — that is, the average interest rate paid by households on their outstanding loans — has increased during the past year. That will have boosted debt servicing costs.

The chart also shows that the effective lending rate has risen by significantly less than the repo rate. Some of that reflects unsecured rates, which have remained broadly flat during the past 18 months despite the repo rate increases. But it also partly reflects the presence of fixed-rate deals in the stock of mortgages: they tend to smooth the impact of monetary policy on the effective rate. That effect is likely to be material as fixed-rate mortgages account for about one third of the value of the total stock of secured debt. As the low two-year deals offered by financial institutions in the summer of 2003 expire, the effective rate will probably rise. But those particular deals only constitute a small proportion of the stock of outstanding mortgages, so the impact is unlikely to be large.

Other indicators of financial pressures in the household sector are mixed. The number of households with mortgages in arrears remained historically low. And although the number of applications made by lenders to repossess homes increased, actual repossessions also remained very low. Personal insolvencies in England and Wales have continued to rise (Chart 1.13). As outlined in previous *Reports*, that may partly reflect changes to the legal regime. Insolvencies have also been increasing in Scotland where there have been no recent legal changes. But, as the chart suggests, insolvencies there have been on an upward trend for some time.

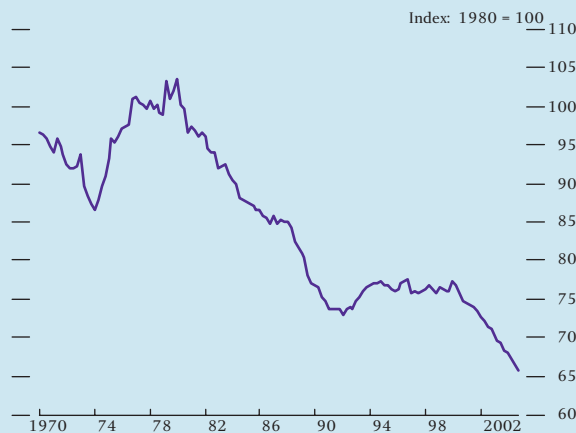
Companies

The ability of companies to invest in new capital equipment, or to expand their operations, partly depends on the availability and cost of finance. The generalised fall in bond yields and rise in equity prices during the past two years should have pushed down the effective cost of finance faced by businesses. But bank finance is also important to many firms, particularly those with little or no access to other sources of funds. And that form of finance has become more expensive as official rate increases have fed through to effective lending rates

Why has households' money growth been so strong?

Households' money growth — as measured by growth in deposits — has averaged over 8% a year since mid-2001 (Chart 1.9). If households mainly used these funds to pay for goods and services, then strong money growth should have presaged a similarly strong rate of growth in nominal consumer spending. But over the same period, nominal spending grew at an average annual rate of under 5%. So money growth outstripped spending growth. In other words, the velocity of households' broad money fell (Chart A).

Chart A
The spending velocity^(a) of households' money



(a) The ratio of nominal consumption to households' M4.

There is a raft of potential explanations for the strength of household money growth and the associated fall in velocity, some of which are interrelated. These include: financial innovation and structural change in the banking system; a shift in asset allocation by households; and developments in the housing market affecting households' accumulation of assets and debt. This box examines these factors in turn.

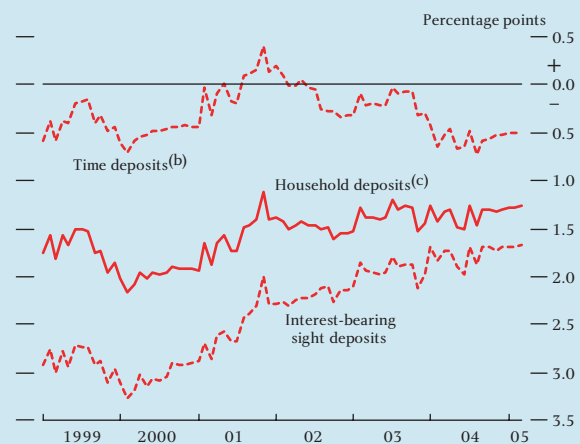
Financial innovation and structural change

Chart A shows that during the 1980s, the velocity of households' money fell sharply. That in part is likely to have reflected the more widespread use of the banking system. The percentage of adults with a bank account rose from just under 40% in 1976 to about 80% by the mid-1990s. And the percentage of employees paid in cash fell sharply.⁽¹⁾ An increase in the number of households using the banking system should have boosted deposits relative to the amount of nominal spending in the economy. But by the mid-1990s, that process was almost complete. And subsequently the velocity of broad money flattened. So increased access to the banking system probably

does not explain the most recent falls in broad money velocity.

But there appears to have been further structural change in the banking sector recently. Chart B shows that the difference (or spread) between the effective deposit rate and the repo rate has narrowed during the past five years. That could have elicited more saving in bank deposits.

Chart B
Spread between the effective bank deposit rate to households and the repo rate^(a)



(a) Measured as the effective rate less the repo rate. The effective rate measures the average rate paid to households on their outstanding bank deposits.

(b) Also includes cash ISAs.

(c) Weighted average of time and sight deposit rates.

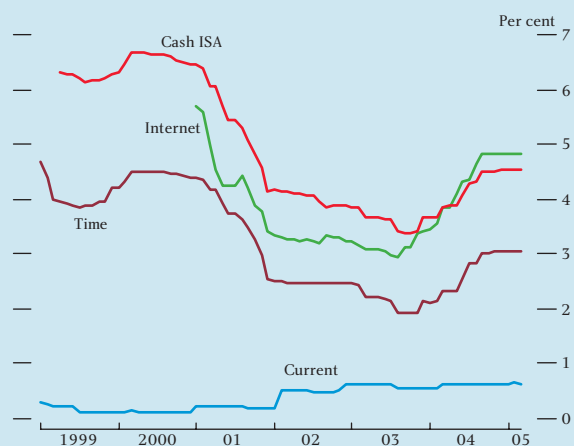
Chart B shows that there has been little change in spreads on saving vehicles such as cash ISAs and time deposits (that is, those which require notification before withdrawal). But the spread has narrowed substantially for interest-bearing sight deposits (that is, deposits which can be accessed on demand). That could reflect the combined effects of financial innovation and competition. For example, during the past few years internet accounts have been introduced. Typically, they are much more liquid than traditional saving accounts such as time deposits but offer considerably more competitive rates (Chart C). Although there are no firm data on the take-up of internet accounts, flows into interest-bearing sight deposits have increased in recent years, in line with the narrowing of the spread.

A portfolio shift?

Between March 2000 and 2003, UK equity prices declined by over 40%, directly reducing the value of

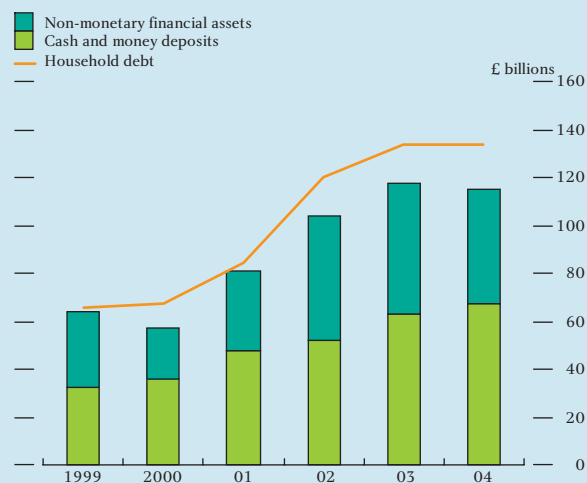
(1) See Grant, K, Vlieghe, G and Brigden, A (2004), 'Assessing the stability of narrow money demand in the United Kingdom', *Bank of England Quarterly Bulletin*, Summer, pages 131–41.

Chart C
Some quoted household deposit rates



households' gross financial assets. That may have prompted households to reassess their asset portfolios in favour of bank deposits, especially given that those accounts appeared to have become more competitive. Evidence on this is mixed. Sales of retail unit trusts to households fell back as the stock market declined. But National Accounts data imply that, in aggregate, households' accumulation of other financial assets, such as directly held shares, increased.

Chart D
Households' accumulation of financial assets and debt

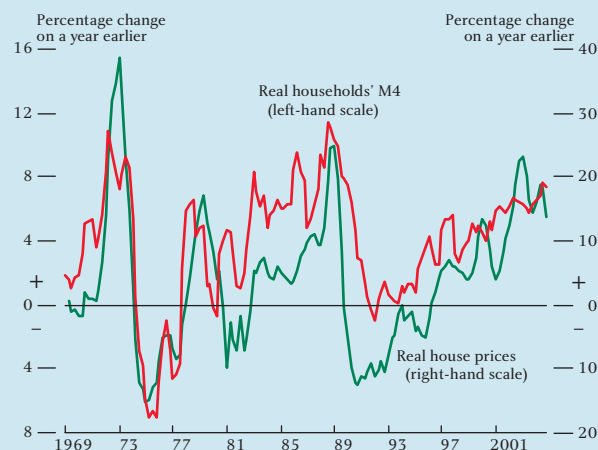


The impact of the housing market

Chart D shows that, in aggregate, households have simultaneously increased their accumulation of financial assets and debt during the past few years. Increased housing market activity together with rapid rates of house price inflation have pushed up secured debt. Is it possible that these could also have increased money growth?

One possibility is that funds released from equity withdrawal have been invested in bank deposits. Funds released through selling houses are thought to be the biggest component of gross withdrawal. And as discussed on page 8 those proceeds are more likely to be saved than spent. There is scant information on the total value of equity released by house sales. One estimate suggests that equity released specifically through last-time sales (that is, the funds released by selling an inherited property, or by leaving the owner-occupied housing market) was equivalent to just over 4% of household income, or £28 billion in 2000.⁽²⁾ The 80% rise in house prices since then should have boosted the value of those withdrawals. In addition to this, the equity released by trading down to cheaper properties will also have been boosted by house price inflation. If the effect of house price inflation has been material then it should move with money growth. Chart E suggests that there is a reasonable relationship (although that relationship says nothing about the direction of causality).

Chart E
Households' money and house price inflation^(a)



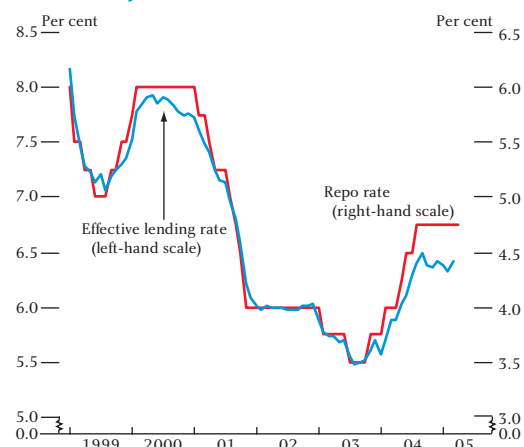
Sources: Bank of England, Halifax, Nationwide, ODPM and ONS.

(a) Average of the Nationwide and Halifax indices from 1984 Q1. ODPM index before then. House prices and households' M4 are deflated by the household consumption deflator.

This box has explored possible reasons why money growth has been so strong in recent years. Developments in the housing market have probably played an important role. And it is likely that many of the deposits created through that route will be saved and not spent on goods and services in the near future. However, so far there is little sign of households' money growth easing, even though the housing market has cooled. And there are other candidate explanations for the build-up in money growth consistent with a sustained decline in velocity. Nevertheless, the risk remains that households will use these deposits to finance spending.

(2) See Davey, M and Earley, F (2001), 'Mortgage equity withdrawal', Council of Mortgage Lenders.

Chart 1.14
The effective bank lending rate to PNFCS^(a)
and the repo rate



(a) The effective lending rate measures the rate paid by private non-financial corporations (PNFCS) on their bank borrowing. It includes both loans and overdrafts.

Chart 1.15
PNFCS' saving, investment and the financial balance

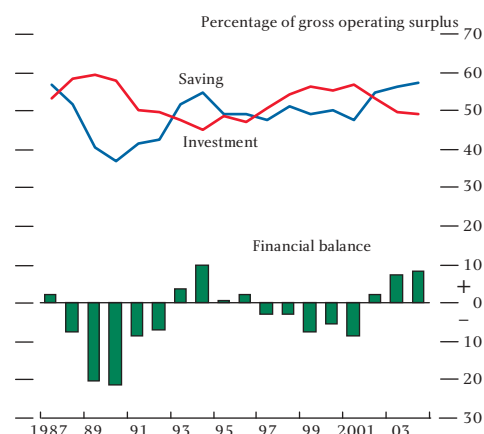
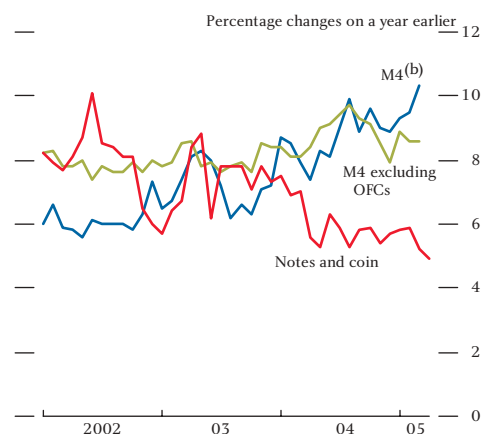


Chart 1.16
Monetary aggregates^(a)



(a) Seasonally adjusted.
 (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 (MFIs).

(Chart 1.14). However, according to the main lenders, intense competition has ensured that not all of the increase in the repo rate since November 2003 has been passed through to business customers.

In total, interest paid by the private non-financial corporate sector rose by 12% in 2004. Despite this rise, corporate saving increased further and the corporate sector financial balance remained in surplus (Chart 1.15).

Does the current level of companies' saving reflect concerns about high debt levels? That seems unlikely — bank lending to corporates remained robust in 2004. And in 2005 Q1, lending growth rose further. Instead, companies appear to have been using their increased saving to fund activities other than paying down debt. For example, the value of share buy-backs almost doubled last year. In 2004, mergers and acquisitions also picked up, and for some companies that may have been an attractive alternative to investing in a new capital project. In addition, companies have built up their bank deposits — during the past year, annual growth in private non-financial corporations' deposits has averaged over 10%.

Other indicators show few signs of corporate financial distress: corporate insolvencies have been on a downward trend since early 2003, and in 2005 Q1 they fell to their lowest level for over fifteen years. So companies seem well placed to finance future spending growth.

Monetary aggregates

Annual growth in notes and coin eased in March and April (Chart 1.16). Cash is primarily used by households for spending, so the fall in growth might indicate some further slowing in the rate of household spending growth. But the short-term relationship between growth in cash in circulation and spending can be tenuous. For example, notes and coin growth remained stable in 2004 Q4 even though many other household spending indicators weakened.

Broad money growth moved higher in 2005 Q1 (Chart 1.16) and in March reached its highest annual rate since July 1998. Broad money mainly consists of private sector deposits at UK monetary financial institutions (banks and building societies) — that includes the money holdings of other financial corporations (OFCs). Many OFCs such as securities' dealers use bank deposits solely for trading purposes: those deposits are therefore unlikely to be informative about the near-term outlook for nominal private sector demand. When OFCs' deposits are excluded, the most recent pickup in broad money growth has been less pronounced (Chart 1.16).

Final domestic demand decelerated in 2004 Q4. Consumer spending growth fell back sharply, and growth in government consumption and business investment also eased. Given the contrast with steady output growth, it is possible that some types of spending rose more rapidly in Q4 than initial official estimates suggested. But the consumer spending slowdown does appear genuine: alternative consumption indicators were also subdued in Q4 and remained so in early 2005. Internationally, activity has been buoyant in the United States, although it did ease back in 2005 Q1. By contrast, GDP growth tailed off in the euro area and Japan in the second half of 2004, and indicators point to only modest growth in early 2005.

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

Percentage changes on a quarter earlier

	2002	2003	2004			
	Average	Average	Q1	Q2	Q3	Q4
Household consumption ^(b)	0.7	0.5	1.2	0.8	0.7	0.2
Government consumption	0.6	1.3	0.9	0.7	1.2	0.9
Investment	1.7	0.6	0.2	2.6	1.0	0.6
of which, business	1.5	-0.4	1.3	1.3	1.6	0.2
Final domestic demand	0.9	0.7	1.0	1.0	0.9	0.5
Change in inventories ^{(c)(d)}	-0.1	0.0	-0.1	-0.1	0.1	0.1
Alignment adjustment ^(d)	0.1	0.0	-0.5	-0.1	0.2	0.4
Domestic demand	0.8	0.7	0.5	0.8	1.2	0.9
Exports	-0.3	1.2	0.6	2.2	-0.1	1.6
Imports	1.0	1.1	-0.1	1.5	2.1	2.2
Net trade ^(d)	-0.4	0.0	0.2	0.1	-0.7	-0.2
GDP at market prices	0.5	0.7	0.7	1.0	0.6	0.7
Memo:						
Nominal GDP at market prices	1.2	1.4	1.4	1.4	1.1	1.0

(a) Chained volume measures.

(b) Excludes non-profit-making institutions serving households.

(c) Excludes the alignment adjustment.

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

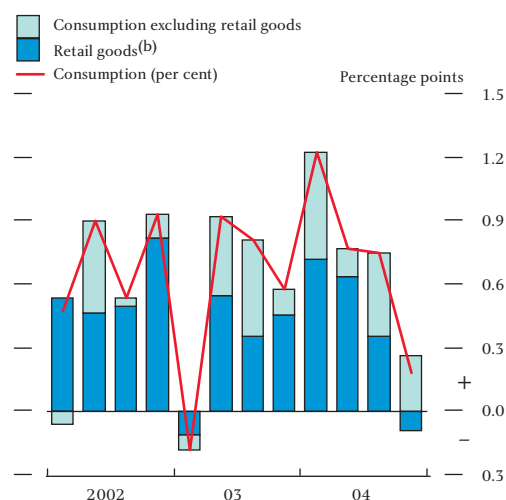
The profile of demand, relative to supply, is a key influence on inflationary pressures in the economy. In 2004 Q4, nominal GDP rose by 1.0% and real GDP rose by 0.7%, broadly in line with the previous quarter's growth rates. According to the provisional ONS estimate, real GDP rose by a further 0.6% in 2005 Q1 (Section 3). The rest of this section examines the developments in domestic and external demand underlying those headline numbers.

2.1 Domestic demand

In real terms, final domestic demand was estimated to have risen by 0.5% in 2004 Q4 (Table 2.A) — the weakest rate of expansion in almost two years. Within that, consumer spending growth fell back sharply. Some rebalancing in the composition of demand appears to have occurred: in 2004, whole-economy investment growth outstripped consumer spending growth for the first time since 1998.

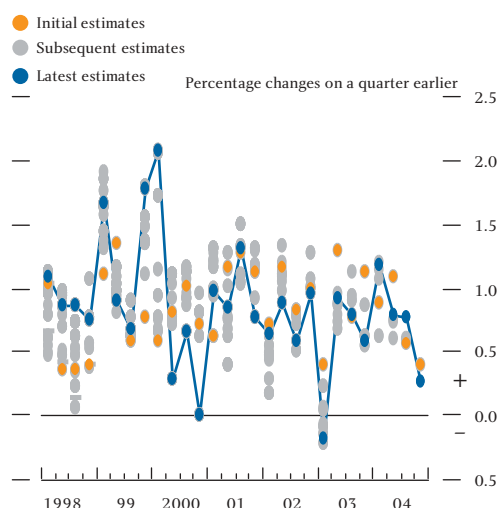
The marked deceleration in final domestic demand meant that, in Q4, total estimated expenditure growth was significantly weaker than total estimated output growth (Section 3). As a result, the alignment adjustment — which ensures consistency between the expenditure and output measures of GDP growth — contributed some 0.4 percentage points to growth. In the past, such large amounts of unallocated spending have tended to be revised away. But on average, that has not been through downward revisions to estimated output growth. Instead, there have typically been upward revisions to spending in certain areas — such as investment, inventories and exports. So it is possible that spending on these components rose more rapidly on the quarter than initial estimates suggested.

Chart 2.1
Contributions to quarterly growth in consumer spending^(a)



(a) Chained volume measures, excluding non-profit-making institutions serving households.
(b) Defined as durable and non-durable goods, less spending on vehicles and energy.

Chart 2.2
Official estimates of consumer spending growth^(a)



(a) Volume measures, including non-profit-making institutions serving households.

Table 2.B
Indicators of consumer spending

	Correlation ^(a)	2004				2005	
		Q1	Q2	Q3	Q4	Q1	April ^(b)
<i>Percentage changes on a quarter earlier</i>							
Retail sales volumes	0.5	1.6	2.0	0.9	0.1	0.3	n.a.
Private vehicle registrations ^(c)	0.1	1.5	-7.7	-0.8	-1.1	-5.4	-5.8
<i>Percentage changes on a year earlier</i>							
BRC retail sales values (total)	0.2	5.5	5.5	4.0	2.6	3.9	n.a.
BRC retail sales values (like-for-like)	0.2	2.4	2.7	1.5	0.0	0.7	n.a.
<i>Balance</i>							
CBI retail sales volumes ^(d)	0.3	27.0	41.3	5.7	21.0	-3.3	-7.0

(a) Contemporaneous correlation of each indicator with quarterly consumption growth between 1994 Q1 and 2004 Q4, with the exception of vehicle registrations (1999 Q2–2004 Q4).
(b) April figure refers to three-month average/three-month change on previous three months.
(c) Seasonally adjusted by Bank of England staff.
(d) Balance of respondents in the CBI Distributive Trades survey reporting sales higher than a year earlier.

Recent consumer spending behaviour

The latest National Accounts suggest that consumer spending growth slowed markedly in 2004 Q4. Expenditure rose by only 0.2%, compared with quarterly growth of 0.7% in the previous quarter. This means that spending has decelerated in every quarter since 2004 Q1.

The Q4 deceleration largely reflected spending on retail goods. Retail goods account for around two fifths of total consumer expenditure. And, in recent years, retail spending has made a substantial contribution to overall consumption growth (Chart 2.1). In Q4, however, retail spending fell by 0.2%, as spending on durable and semi-durable goods weakened.

How confident can we be about the Q4 estimates for consumer spending? Official estimates of quarterly growth can be revised significantly over time as more information becomes available (Chart 2.2). And there has been a tendency for low initial growth rates to be revised up in the past, as discussed in the August 2004 Report.⁽¹⁾ But Table 2.B shows that several different indicators of household spending also point to weakness in Q4. So there does appear to have been a genuine deceleration in consumer spending, even if the precise magnitude of the slowdown is as yet unclear.

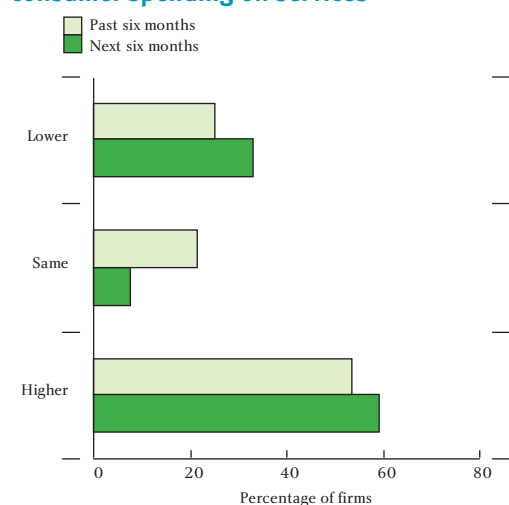
Official data on consumer spending in early 2005 are not yet available. But again, the indicators in Table 2.B potentially provide a useful guide.

Many of these indicators suggest that consumption growth remained subdued in early 2005. According to the ONS, retail sales volumes rose only modestly in Q1, by 0.3%. Business surveys conducted by the BRC and CBI, as well as reports from the Bank's regional Agents, also point to lacklustre retail spending. Vehicle spending growth appears to have been weak too, according to data on new car registrations and CBI survey information. Evidence on other types of spending is limited. But few contacts of the Bank's regional Agents have experienced, or expect to experience, a marked slowdown in household spending on services (Chart 2.3). And as discussed in Section 1, developments in households' money holdings and borrowing do not clearly signal weaker consumption growth.

Overall, recent official data and survey evidence suggest that consumer spending growth has been relatively subdued in both late 2004 and early 2005. The next section considers why spending growth has slowed.

(1) See page 15 of the August 2004 Report.

Chart 2.3
Bank of England regional Agents' survey of
consumer spending on services^(a)



(a) Firms were asked about the value of sales compared with the previous six months. Their responses were weighted by turnover. The survey was conducted in April 2005.

Why has consumer spending growth slowed?

Over the past year, income growth weakened, interest rates rose and the housing market slowed. Together, those factors are likely to have contributed to the deceleration in consumer spending.

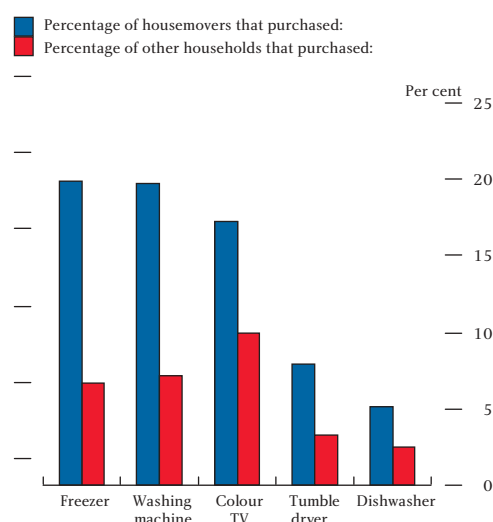
Real post-tax labour income — which takes into account the earnings and state benefits that households receive, as well as the income-related tax payments and contributions that they make — is volatile. It fell in Q3 and then rose strongly in Q4. But taken together, average quarterly growth in labour income was just 0.4% in 2004 H2, compared with 0.8% in 2004 H1. That could have dampened the spending of some households by slowing growth in the income that they had available for consumption.

Interest rates may have been another factor behind slackening consumer spending growth. They determine the potential returns from postponing consumption, as well as the disposable income that some people have available to spend. Between November 2003 and August 2004, the MPC increased the official short-term interest rate by 1.25 percentage points. And 0.75 percentage points of that rise took place between May and August, shortly before consumer spending slowed. Not all of these rate increases have passed through to the interest rates faced by households (Section 1). But the gradual rise in effective interest rates since late 2003 should still have acted as a brake on spending growth.

A third factor may have been the housing market — although the link between housing and consumer spending is less straightforward than often supposed. As discussed in the November 2004 *Report*,⁽¹⁾ movements in house prices do not make households in aggregate better or worse off. For example, while higher house prices benefit households that are trading down or selling a second home, they also mean that first-time buyers and those trading up have less resources to spend on other things. As such, changes in the value of housing tend not to affect overall household spending directly by raising or reducing the value of household wealth.

There are other ways in which the housing market can affect spending, however. House prices affect the collateral at households' disposal and, hence, their ability to withdraw mortgage equity to finance spending. And households are more likely to make certain types of purchases when they move home, as shown in Chart 2.4. But it is not clear that either of these effects has been especially large. Despite the slowing in

Chart 2.4
Consumer spending and moving house^(a)



Source: British Household Panel Survey 1992–2002.

(a) Refers to purchases and house moves over the past year. Note that 11.5% of the sampled households had moved home in the past year.

(1) See the box on pages 12–13 of the November 2004 *Report*.

house price inflation, earlier house price rises mean that a lack of collateral should not be a major constraint for most households. Furthermore, the types of goods and services that are closely related to moving house account for a relatively small proportion of total consumption, and the decline in those moving home between 2004 H1 and H2 represented less than 1% of all households. Nonetheless, the fall in house price inflation and housing market turnover during the past year probably dampened overall consumption growth.

Taken together, the MPC believes that these three factors can broadly account for the cumulative slowing in consumer spending over the past year. But they cannot fully explain its precise pattern and, in particular, why consumer spending has slowed so sharply since 2004 Q4. So what other factors could have been at work?

One possibility is that the weaker housing market has had a bigger effect on consumer spending than judged by the MPC. The Committee's central view is that the impact of the housing market on consumer spending is rather more modest than historical correlations might suggest.⁽¹⁾ But there is considerable uncertainty about the magnitude of this effect. And it is possible that the weakening housing market has had an unexpectedly large impact on consumer spending, a risk highlighted in recent *Reports*.

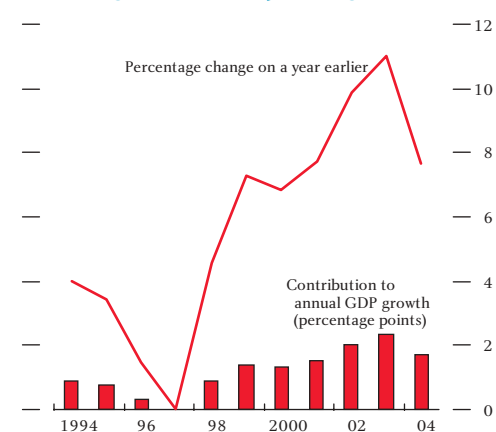
In addition, it could be the case that higher interest rates have had a larger-than-expected impact on consumer spending. That could be related to the recent expansion in household balance sheets. As noted in Section 1, both household borrowing and deposits have risen sharply over the past few years. This means that the interest rate rises of the past 18 months would have had a greater impact than before on both the costs that borrowers face in servicing debt and the receipts that savers earn. Those effects could have offset each other. But it is also possible that borrowers — and, in particular, heavily indebted individuals with limited access to further credit — have responded more to changes in their disposable income than savers. And as discussed in the February 2004 *Report*,⁽²⁾ that could have amplified the effect of rising interest rates on consumer spending.

A final candidate explanation is that households' expectations of future income have softened. Households are typically thought to want to smooth their spending over time, based on a long-run view of the resources available to them. So the income that households expect to earn from their employment

(1) See the box on pages 12–13 of the November 2004 *Report*.

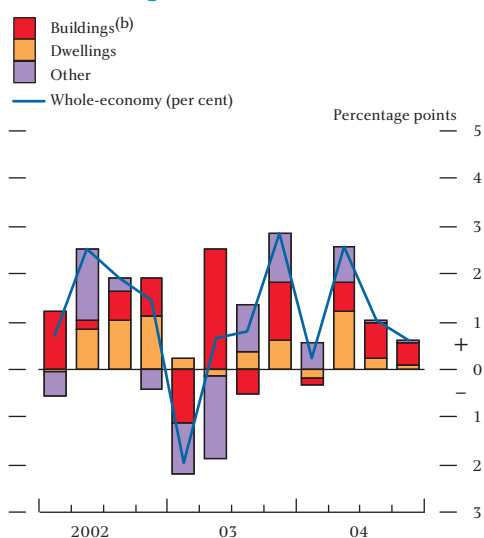
(2) See the box on pages 10–11 of the February 2004 *Report*.

Chart 2.5
Nominal government spending^(a)



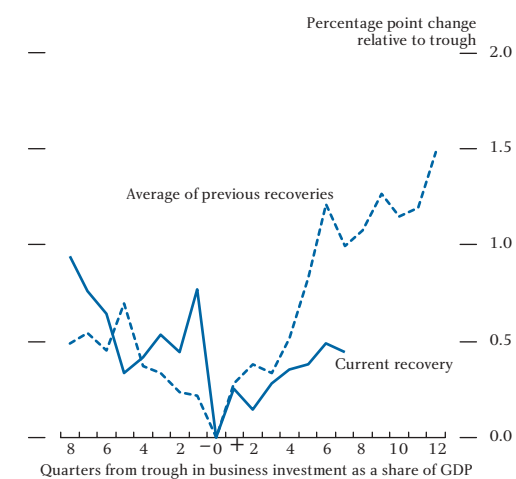
(a) Consumption plus investment.

Chart 2.6
Contributions to quarterly whole-economy investment growth^(a)



(a) Chained volume measures.
(b) Non-residential buildings and structures.

Chart 2.7
Business investment as a share of GDP during recoveries^(a)



(a) Chained volume measures. Troughs identified as 1972 Q3, 1983 Q3, 1986 Q2, 1994 Q2 and 2003 Q1. Note that comparisons across recoveries are complicated by idiosyncratic factors, such as tax changes (see page 17 of the August 2004 Report).

and assets in the future can affect consumer spending today. But there is little hard evidence that softer income expectations lay behind the sharp slowing of consumer spending in 2004 Q4.

Overall, a number of factors are likely to have contributed to the deceleration of consumer spending over the past year. Income growth weakened, interest rates rose and the housing market slowed. But it is less clear why consumer spending slowed so sharply from late 2004. Consequently, the near-term outlook for household spending is far from certain.

Government spending

Nominal government spending growth remained robust in 2004 (Chart 2.5). Nominal government consumption rose by nearly 8% and government investment expenditure by over 11%. Overall, public spending accounted for a third of nominal GDP growth last year.

What impact is this likely to have on future inflation? Inflationary pressure is influenced by the quantity of resources absorbed by the public sector⁽¹⁾ and, hence, the ability of the private sector to meet the demand for its goods and services. The relevant measure of these resources is not official estimates of real government spending — they correspond to the quantity of services supplied by the public sector. Instead, the relevant indicators are the quantity of private sector goods and services purchased by the government, and the labour that the public sector employs. Both have been rising strongly. And the government spending plans outlined in the March Budget pointed to further robust growth in 2005.

Investment

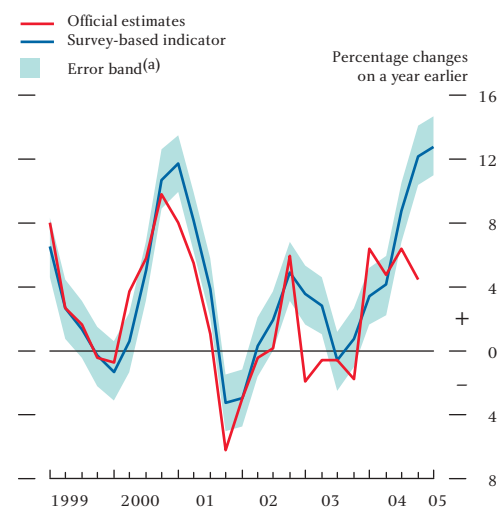
Whole-economy investment rose by 0.6% in 2004 Q4, according to the latest National Accounts. By asset, the increase entirely reflected construction-related investment — the source of almost all whole-economy investment growth over the past two years (Chart 2.6). Investment in machinery and equipment fell on the quarter.

Business investment was estimated to have risen by 0.2% in 2004 Q4. Official estimates suggest that business investment has now increased for five consecutive quarters. But the pace of recovery has been modest compared with previous upturns (Chart 2.7). What could explain this?

One possibility is that the apparently modest recovery is, at least in part, a statistical artefact. Official estimates of

(1) See the box on pages 24–25 of the May 2004 Report.

Chart 2.8
Official estimates of business investment and a survey-based indicator



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

(a) Shaded area shows the survey-based indicator plus and minus its average absolute difference from official estimates between 1995 and 2002.

quarterly business investment growth tend to be revised substantially over time. Since 1994, initial estimates have been revised upwards, on average, by 1 percentage point. And the average absolute revision has been even greater, around 3 percentage points. So early estimates may not provide a very accurate guide to companies' actual investment behaviour.

An alternative way of gauging recent investment developments is to examine business surveys. These contain companies' responses to questions on, for example, their investment intentions and capacity utilisation rates. A survey-based indicator of investment spending can be constructed by weighting these responses according to how well they have related to mature ONS estimates of business investment in the past. As Chart 2.8 shows, the survey-based indicator has pointed to rather more rapid business investment growth in recent quarters than suggested by early ONS estimates. And that would align the current recovery more closely with recoveries of the past.

Looking forward, the current climate for business investment appears favourable. Although corporate indebtedness has remained high relative to the average levels of the past, corporate finances otherwise appear healthy and there are few signs of financial distress (Section 1). The Bank's regional Agents report that investment intentions have held up. And corresponding measures from business surveys have remained broadly in line with their long-term averages, despite some softening in the recent past. Overall, solid growth in business investment is expected in the near term.

Inventories

Companies do not only invest in fixed capital, such as plant and machinery. Inventory investment can also be important. In 2004 Q4, a pickup in inventory holdings was estimated to have contributed 0.1 percentage points to GDP growth. The rise was concentrated in the retail sector — an indication perhaps that retailers had not expected consumers' demand for retail goods to weaken as it did.

Inventory holdings are not measured very accurately, however. So it is possible that the contribution of stockbuilding to GDP growth was greater in Q4 than official estimates suggest. If companies had not expected the fall in final domestic demand growth, they could have been left with a large amount of unwanted stocks. And that could potentially account for some of the discrepancy between recorded output growth and aggregate expenditure growth.

Table 2.C
World GDP^(a)

Percentage changes on a year earlier

	Average 1995–2004	2003	2004
World:			
Based on purchasing power parity	3.8	4.0	5.1
Based on market exchange rates	2.9	2.7	4.0
UK-weighted ^(b)	2.8	2.1	3.5
Euro area	2.0	0.5	1.8
United States	3.3	3.0	4.4
Japan	1.2	1.4	2.6

Sources: Bank of England, Eurostat, IMF World Economic Outlook Database April 2005, ONS, Thomson Financial Datastream and US Bureau of Economic Analysis.

(a) Volume measures.

(b) Based on *Pink Book* estimates of UK export destinations in 2003.

2.2 External demand and UK trade

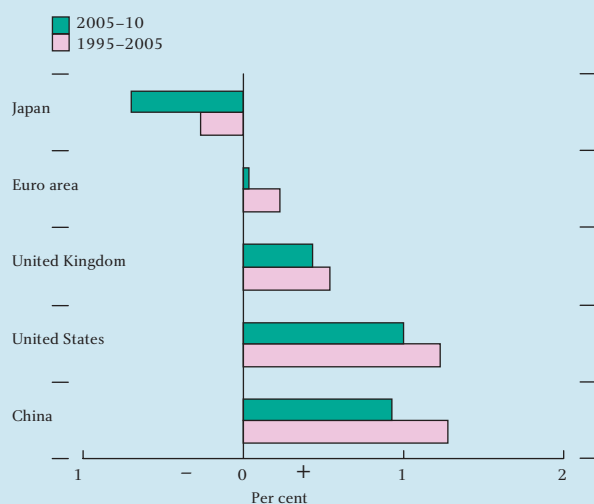
World GDP increased rapidly in 2004 (Table 2.C). But the pace of expansion varied markedly across countries as the year progressed. And that was also the case in early 2005: growth was firm in the United States in Q1, whereas activity appears to have remained relatively subdued in the euro area and Japan. For several years, the United States has been expanding considerably faster than either the euro area or Japan. In part, that is likely to reflect persistent factors, such as demographics, that determine the potential pace of growth in different countries (see the box below).

Potential growth in the major economies

GDP growth has differed markedly across the world's major economies over the past decade (Table 2.D). What lies behind that divergence?

Sustained differences in GDP growth typically arise from two sources: the people and capital at each economy's disposal; and the increases in efficiency with which they are employed. Over the past decade, the working-age population, and hence the available supply of labour, has increased markedly in the United States (Chart A). But the working-age population has risen more slowly in the euro area and has fallen in Japan. For these economies, that can account for much of the difference in GDP growth over the past decade — notwithstanding recent evidence of

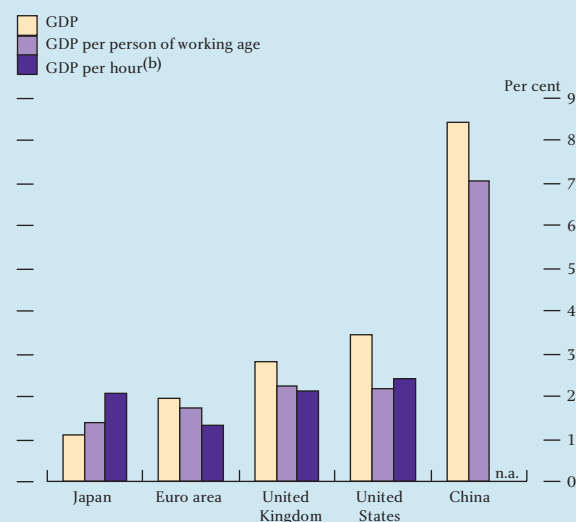
Chart A
Working-age population growth^(a)



Source: United Nations World Population Prospects.

(a) Geometric average annual growth rates. Working-age population refers to those aged 16–64 and projections refer to the United Nations' medium variant.

Chart B
Productivity growth between 1995 and 2005^(a)



Sources: Eurostat, IMF, OECD and United Nations World Population Prospects.

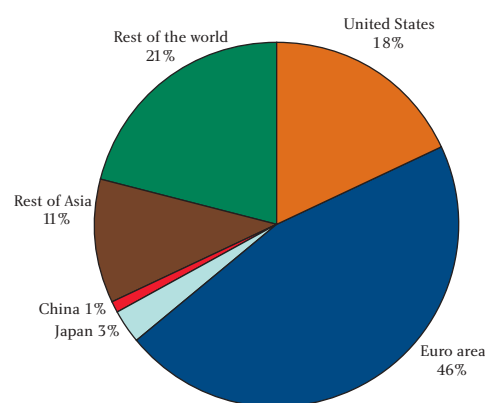
(a) Geometric average annual growth rates. 2005 data are based on IMF GDP projections.

(b) Between 1995 and 2003.

productivity acceleration in the United States. For China, on the other hand, productivity gains related to increased efficiency and rapid rates of capital accumulation have been much more important factors (Chart B).

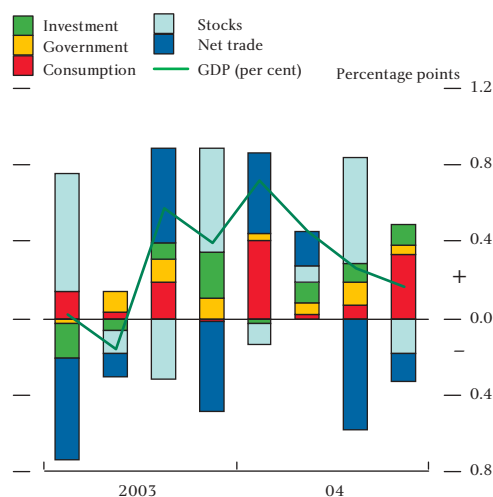
Looking ahead, there is further scope for rapid productivity gains in China, as it catches up with the other major economies. And although working-age population growth in the major economies is expected to slow in the coming years, the relative demographic pattern of the past decade should persist, according to the United Nations. As such, these factors are likely to remain key drivers of divergences in the pace of expansion across the major economies.

Chart 2.9
UK export destinations^(a)



(a) Shares of total UK exports in 2003.

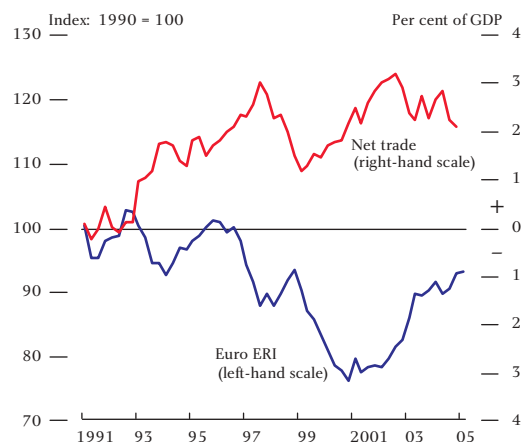
Chart 2.10
Contributions to quarterly euro-area GDP growth^(a)



Source: Eurostat.

(a) Volume measures.

Chart 2.11
Euro-area net trade^(a) and the euro



Source: Eurostat.

(a) Volume measure.

The price of oil has increased by around 50% since the May 2004 Report. So far, that rise does not appear to have had a major impact on world economic activity. And although dearer oil is likely to contribute to a slowdown in world economic growth this year, the impact is unlikely to be as great as in previous oil price spikes of the 1970s. Oil now plays a much less important role in production. And the real — that is, inflation-adjusted — price of oil is below the levels experienced then.⁽¹⁾

The euro area

The euro-area economy — which accounts for almost half of UK trade (Chart 2.9) — slowed in the second half of 2004. GDP rose by just 0.3% in Q3 and 0.2% in Q4, well below the pace of expansion experienced earlier in the year (Chart 2.10). And survey indicators, such as purchasing managers' indices of business conditions, point to only modest growth in the early part of 2005.

Net trade played a key role in the recent slowdown, with export growth slackening in the latter half of 2004. In part, that may have reflected exchange rate developments. The euro ERI appreciated by almost 20% between 2002 and 2004 (Chart 2.11). And the weakness in exports was most pronounced to countries, such as the United States, against whose currencies the euro had appreciated most.

By contrast, final domestic demand accelerated in the second half of 2004. Investment expenditure rose by 0.6% in Q4, the third consecutive increase. Household consumption also picked up: spending rose by 0.6% in Q4, following two quarters of negligible growth. And indicators such as retail sales and consumer confidence point to some further expansion in early 2005.

The United States

US activity rose steadily in 2005 Q1 (Table 2.D). GDP growth increased by 0.8%, a little below the pace of expansion experienced over the past two years. Consumer spending growth remained firm, at 0.9%, supported by a continued pickup in employment. But investment growth fell back to 1.2%, following the withdrawal of temporary fiscal incentives at the end of 2004.

For several years, strength in domestic demand has been reflected in a widening current account deficit. And by 2004 Q4, the current account deficit had reached 6.3% of GDP. Such imbalances, in the United States and elsewhere, continue to pose a risk to the world outlook.

(1) See page 16 of the November 2004 Report.

Table 2.D
US expenditure components of demand^(a)

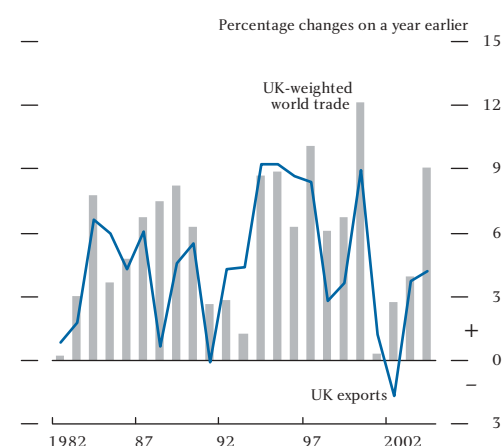
Percentage changes on a quarter earlier

	2003	2004				2005
	Average	Q1	Q2	Q3	Q4	Q1
Household consumption	0.9	1.0	0.4	1.3	1.0	0.9
Government ^(b)	0.6	0.6	0.6	0.2	0.2	0.1
Private investment	2.5	1.1	3.3	2.1	2.5	1.2
Final domestic demand	1.1	1.0	0.9	1.2	1.1	0.8
Change in inventories ^(c)	0.0	0.3	0.2	-0.2	0.1	0.3
Domestic demand	1.1	1.2	1.0	1.0	1.2	1.1
Exports	1.5	1.8	1.8	1.5	0.8	1.7
Imports	1.2	2.6	3.0	1.1	2.7	3.5
Net trade ^(c)	0.0	-0.2	-0.3	0.0	-0.5	-0.4
GDP	1.1	1.1	0.8	1.0	0.9	0.8

Source: US Bureau of Economic Analysis.

- (a) Chained volume measures.
(b) Consumption and investment.
(c) Percentage point contributions to quarterly GDP growth.

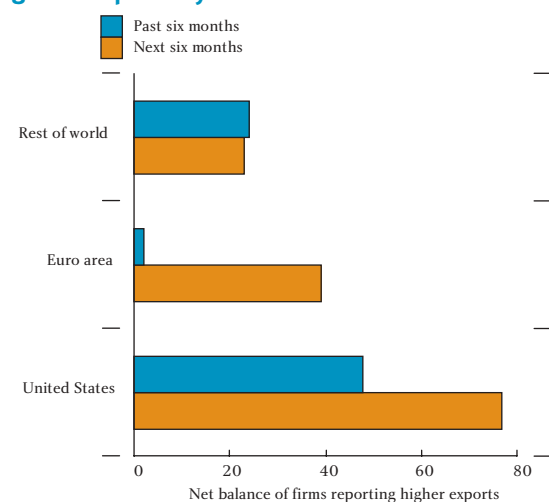
Chart 2.12
UK exports and UK-weighted world trade^(a)



Sources: Bank of England, IMF World Economic Outlook Database April 2005 and ONS.

- (a) Volume measures. Export series excludes impact of 'missing trader intra-community' fraud. World trade series is weighted according to *Pink Book* estimates of UK export destinations in 2003.

Chart 2.13
Bank of England regional Agents' survey of UK goods exports by destination^(a)



- (a) Compared with previous six months. Firms' responses are weighted by turnover to derive a net balance, where a zero balance indicates no change in the level of exports. The survey was conducted by the Bank of England's regional Agents in February 2005.

Asia

In China, GDP has continued to rise strongly, by some 9.5% in the year to 2005 Q1. But growth has slowed in some other Asian economies. And in Japan, conditions have remained fragile. According to official estimates, the Japanese economy emerged from a shallow recession in 2004 Q4. GDP rose by 0.1% on the quarter, supported by a pickup in government consumption. Investment expenditure also rose in Q4, by 0.1%. But household consumption fell again, by 0.3%. And in light of the recent tepid growth in household income, any recovery in spending in the near term is likely to be modest.

UK trade⁽¹⁾

UK import volumes rose by 2.1% in 2004 Q4, in line with their recent pace of growth. But export volumes have been increasing rather more gradually. Exports rose by 1.6% in Q4, and were broadly flat in the preceding quarter. As a result, net trade — the difference between the volume of exports and imports — again made a negative contribution to GDP growth in Q4. On an annual basis, net trade has detracted from growth in the economy for nine consecutive years, the longest period since at least 1830.

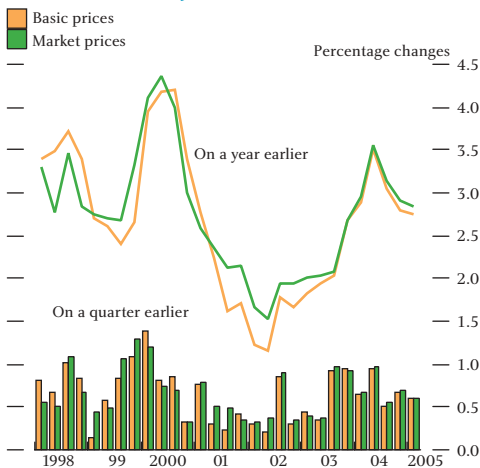
The weakness of export growth contrasts sharply with the robust expansion of the global economy. But the United Kingdom's major trading partner is the euro area (Chart 2.9). And domestic demand growth has been relatively subdued there in recent years. As a result, global demand growth has been less vigorous when weighted according to the importance of different trading partners as destinations for UK exports. Even so, UK-weighted world trade rose much more sharply than exports last year (Chart 2.12) and so market share continued to decline. That may, in part, be a delayed response to sterling's sharp rise in the mid-1990s, as discussed in the November 2004 *Report*.

More recently, trade growth appears to have been muted. UK goods imports declined in January and February, as imports of capital goods fell back. Goods exports were also subdued. But trade data are volatile, and other evidence is more positive. Contacts of the Bank's regional Agents have been relatively upbeat about their export prospects over the coming six months (Chart 2.13). And export order balances in business surveys remain at or above the average levels of the past decade, despite a recent softening in the optimism of manufacturing exporters. That points to some further recovery in exports in the near term.

(1) Import and export data in this section exclude the estimated effects of 'missing trader intra-community' fraud.

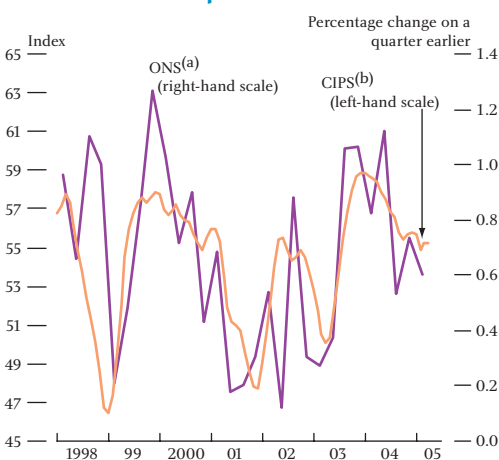
Output was provisionally estimated to have grown by 0.6% in 2005 Q1, a similar rate to the preceding quarter. But data released after that estimate was published suggest that manufacturing output fell sharply in early 2005. Average hours worked rose significantly in late 2004 and early 2005, in part due to erratic factors. Employment picked up in 2004 Q4, and productivity growth weakened. Companies seemed to be operating at, or above, normal rates of capacity, although utilisation rates may have stopped increasing. There was little change in the apparent tightness of the labour market.

Chart 3.1
Whole-economy GDP^(a)



(a) Chained volume measures. Annual growth of GDP at basic prices for 2005 Q1 has been estimated using the preliminary estimate of quarterly growth.

Chart 3.2
Private sector output



Sources: CIPS and ONS.

- (a) Chained volume measure at basic prices. Defined as whole economy minus public administration, education and health. The figure for 2005 Q1 was estimated using information in the preliminary GDP press release.
- (b) The trailing three-month moving average of CIPS activity indices for manufacturing, services and construction, weighted according to relative output shares.

3.1 Output

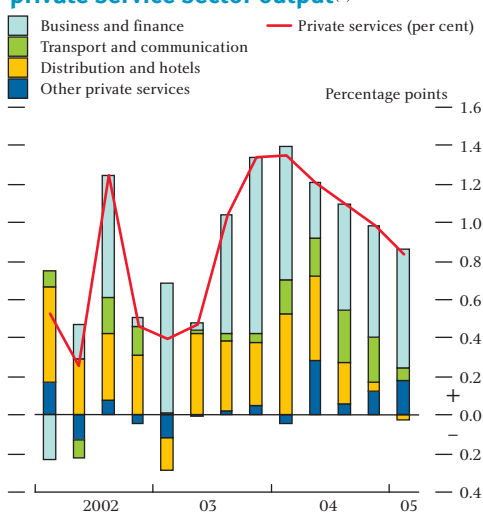
Whole-economy GDP was provisionally estimated to have grown by 0.6% in 2005 Q1, following growth of 0.7% in 2004 Q4. In the second half of 2003 and the first half of 2004, GDP growth was vigorous as the economy recovered from the sustained weakness of 2001 and 2002. But since then growth has moderated (Chart 3.1).

Private sector output is a better indicator of the pressure of demand on consumer prices than whole-economy output. That is because the public sector plays little role in the provision of goods and services covered by the consumer prices index. According to official data, the profile of private sector output growth has been similar to whole-economy GDP growth in recent quarters (Chart 3.2).

The ONS measures GDP in three ways: using data on output, expenditure, or income. As discussed in Section 2, the expenditure data for the second half of 2004 currently suggest weaker GDP growth than the output data. The ONS places more weight on output figures when determining early estimates of GDP growth. The stronger picture painted by the provisional ONS output numbers accords with CIPS survey data (Chart 3.2). And CIPS survey data in April on activity and new orders were consistent with private sector output in Q2 growing at a similar rate to the recent past.

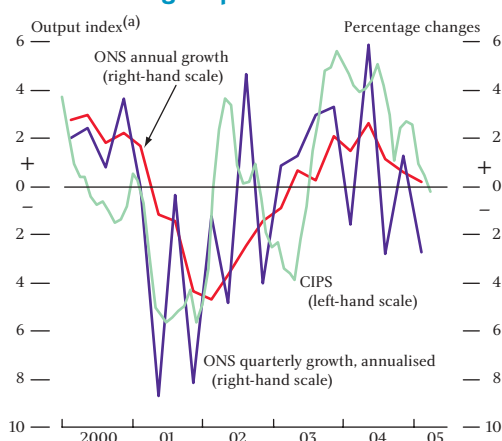
Part of the moderation in private sector output growth reflects developments in the service sector, and in particular weaker growth in distribution (Chart 3.3). The distribution sector covers wholesaling and retailing, and its recent weakness is in line with the slowing in household expenditure.

Chart 3.3
Contributions to quarterly growth in private service sector output^(a)



(a) Chained volume measure. Defined as all service industries minus public administration, education and health. 'Other' in 2005 Q1 was estimated using information in the preliminary GDP press release.

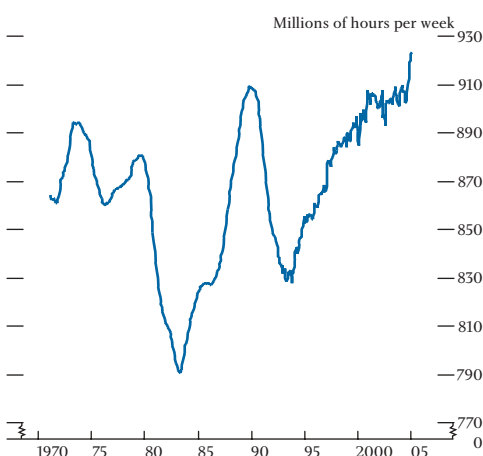
Chart 3.4
Manufacturing output



Sources: CIPS and ONS.

(a) A trailing three-month moving average of the index less its mean since 2000.

Chart 3.5
Total hours worked



Data released after the GDP preliminary estimate suggest that manufacturing output fell by 0.7% in Q1. Quarterly movements can be erratic, but taking annual growth as a guide, the underlying pace of manufacturing activity has eased significantly since early 2004. Surveys such as the CIPS index of business activity generally give the same message (Chart 3.4).

3.2 Supply

Potential supply is determined by the number of people available, the hours they choose to work, the capital available to them, and their productivity. This section covers each in turn.

Employment

Total hours worked increased sharply in 2004 Q4 and early 2005. The six-month increase to February 2005 was the largest since 1971 when consistent records begin (Chart 3.5). It followed a prolonged period when total hours had been broadly flat.

Increases in employment accounted for about a third of the rise in total hours worked. That partly reflected increased employment by the private sector in Q4 (Table 3.A). As discussed in previous *Reports*, the lack of private sector employment growth in the official statistics through much of 2004 has been difficult to square with the strength of private sector output growth. The increase in private sector employment in 2004 Q4 and early 2005 has partly resolved that puzzle.

Even allowing for the recent rise in private sector employment, business surveys appear to be telling a different story from the official statistics. The BCC, CIPS and REC surveys confirm that private sector recruitment weakened between 2001 and 2003. But they indicate that the recovery started in early 2004, and that annual employment growth in 2004 Q4 may have been stronger than implied by official data (Chart 3.6). More recently, most surveys suggested a modest weakening in quarterly employment growth in 2005 Q1 (Table 3.A). That is consistent with reports to the Bank's regional Agents.

Average hours

Total hours worked are determined not only by the number of people employed, but also by the number of hours that each person works. Average hours per worker have increased sharply in recent quarters (Table 3.A), according to the standard measure. In the three months to February 2005,

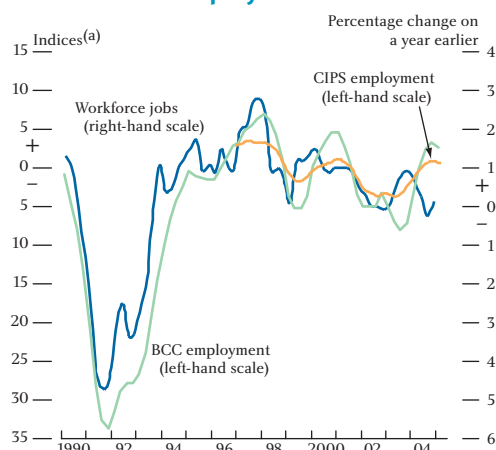
Table 3.A
Employment

	1996–	2001–	2004			2005
	2000	2005	H1	Q3	Q4	Q1
	Average	Average	average			
<i>ONS data: percentage changes on a quarter earlier</i>						
Total hours worked ^(a)	0.2	0.0	0.3	0.0	1.1	1.0
People employed ^(a)	0.3	0.2	0.3	0.2	0.3	0.5
Private sector jobs ^(b)	0.3	0.1	-0.1	-0.3	0.6	n.a.
Average hours per person ^(a) -0.1	-0.2	-0.2	0.0	-0.3	0.9	0.6
<i>Survey data</i>						
CIPS ^(c)	52.7	49.0	51.9	52.8	52.4	51.1
BCC ^(d)	16.0	9.1	17.6	17.5	15.7	14.3
BCC intentions ^(e)	17.9	14.0	23.0	17.2	20.6	23.8
REC ^(f)	59.0	55.2	60.2	58.0	58.0	55.0

Sources: BCC, CIPS, Deloitte/REC Report on Jobs and ONS.

- (a) Labour Force Survey. 2005 Q1 is proxied by the average in December to February compared with the previous three months.
- (b) Workforce jobs. Data are end-quarter, rather than quarterly averages.
- (c) A value above 50 indicates an increase.
- (d) Balance of respondents who increased employment. Manufacturing and services weighted according to employment shares. Data are seasonally adjusted by Bank of England staff.
- (e) Balance of respondents who intend to increase employment in the next quarter. Manufacturing and services weighted according to employment shares. Data are seasonally adjusted by Bank of England staff.
- (f) Recruitment agencies' report on the demand for permanent staff placements. A value above 50 indicates an increase. Data only available from October 1997.

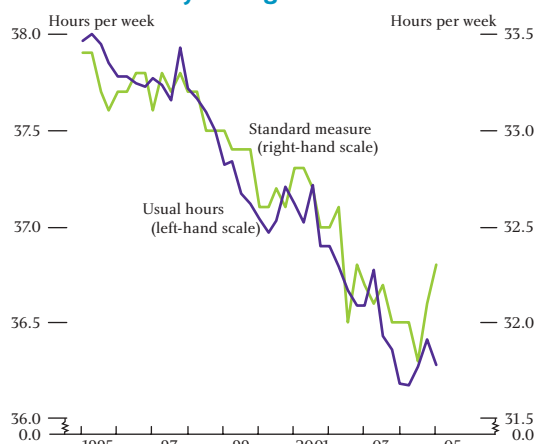
Chart 3.6
Private sector employment



Sources: BCC, CIPS and ONS.

- (a) Trailing twelve-month or four-quarter moving averages of the indices less their mean since 1996. Indices from different sectors have been weighted according to employment shares. Axes have been chosen so that a zero value for a survey index corresponds approximately to average growth in workforce jobs since 1996.

Chart 3.7
Whole-economy average hours worked



Sources: Bank of England calculations from LFS microdata and ONS.

each job holder worked an average of 30 minutes more per week than in the three months to August 2004 (Chart 3.7).

An alternative gauge of average hours — usual hours worked — tells a slightly different story from the standard measure (Chart 3.7). Usual hours, by definition, should exclude any changes in hours that the worker does not expect to persist. They should include normal overtime, but exclude absences from work, say due to holidays or illness. So usual hours tend to be a less volatile measure than headline average hours. The usual hours measure has not risen as steeply as the headline measure over the past six months. This suggests that at least some of the increase in the standard measure of average hours was erratic. Consistent with that, there is little evidence from weekly pay data of a sharp rise in average hours worked.

Even on the usual hours measure however, there does appear to have been a pause in the longer-term downward trend in hours since late 2003. One explanation is that there has been an increase in labour demand. That would be consistent with the strengthening in output growth in late 2003, and the subsequent increase in employment.

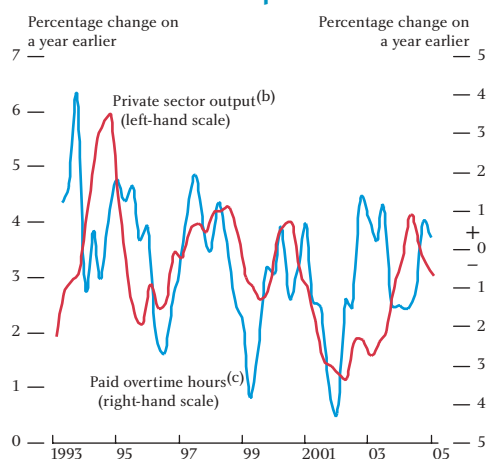
Changes in average hours driven by demand typically show up in changes in the growth rate of paid overtime (Chart 3.8).⁽¹⁾ Paid overtime stabilised in recent years, after falling sharply in 2001. If recent movements in average hours have been driven by firmer labour demand, that would suggest building pressure on capacity. That in turn could push up on wage and price inflation.

An alternative explanation is that the recent behaviour of usual hours signals some easing in their trend decline. That would have different implications for inflation from a rise in labour demand. Any easing in the downward trend in the hours that employees wish to work would boost the labour resources available to companies, putting downward pressure on wages and prices.

At present, there is little compelling evidence of a material easing of the trend decline in average hours worked. Between 1974 and 2004, hours fell 0.3% per year on average. That reflected people choosing to have more leisure time as their real incomes rose; and also the increased participation of women, who are more likely to want to work part time. The real wage has continued to rise, as has female participation, so it is unlikely that these structural trends have run their course.

(1) Shortall, F (2002), 'Working time in the United Kingdom: evidence from the Labour Force Survey', *Bank of England Quarterly Bulletin*, Summer, pages 192–202.

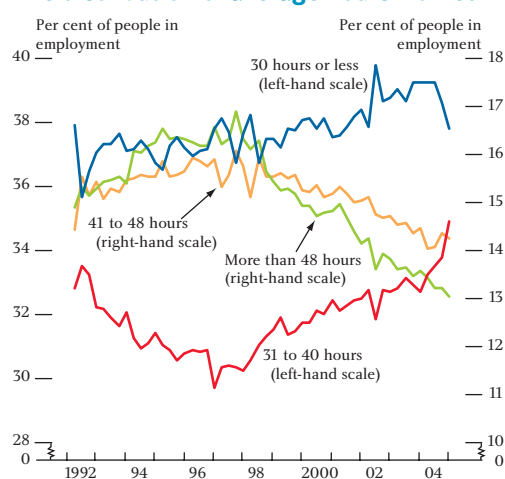
Chart 3.8
Paid overtime and output^(a)



Sources: Bank calculations from LFS microdata and ONS.

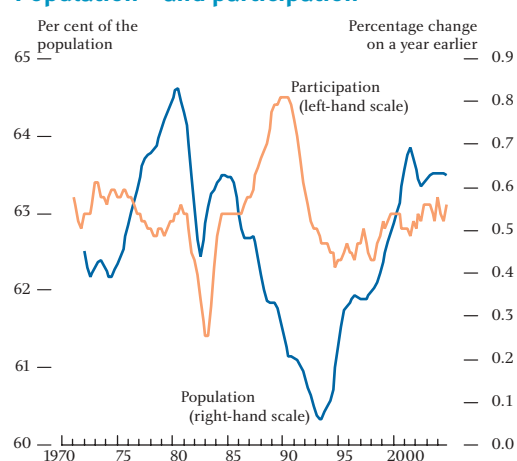
- (a) The series are plotted against different axes because paid overtime has been on a persistent downward trend.
 (b) See footnote (a) for Chart 3.2.
 (c) Average of people working paid overtime.

Chart 3.9
The distribution of average hours worked



Source: Bank of England calculations from LFS microdata.

Chart 3.10
Population^(a) and participation^(b)



- (a) Household population aged 16 and above.
 (b) The percentage of the population in or actively seeking work and available to start.

The EU working time directive (WTD) probably also contributed to the trend decline in hours in recent years. The WTD was introduced in October 1998. It limits employees to working, on average, a maximum of 48 hours per week, unless they opt out. The directive would appear to have been effective, as the proportion of people working more than 48 hours has fallen ever since it was introduced. But there has also been some fall in the share of people working 41 to 48 hours, suggesting that the WTD has not been the whole explanation for the move away from long working hours.

One possible reason for an easing in the underlying trend decline in average hours could be that after six years, adjustment to the WTD is complete. But that is not supported by the data, which suggest that the share of people working more than 48 hours continued to decline, even in 2004 (Chart 3.9). That might partly have reflected the phased introduction of the WTD. Some types of worker, mainly in the transport sector, were initially excluded from the WTD. And the last of those exclusions was phased out in March 2005.

Population and participation

In the short run, private sector capacity is determined by the number of people employed and the hours that those people work. But in the longer run, when companies have time to adjust their workforces, potential supply reflects all the people that could sustainably be employed. That is largely given by the size of the adult population and their willingness to work.

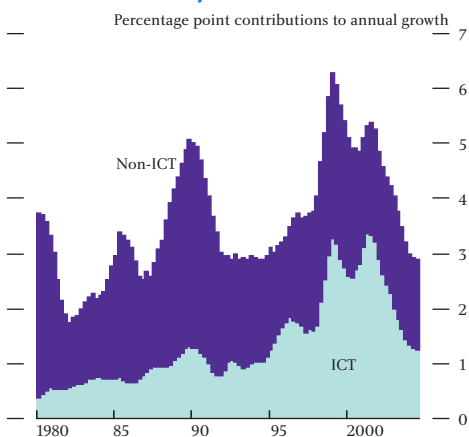
The participation rate — the percentage of the population in or seeking work — has increased a little over the past ten years. That partly reflects greater participation by older people, perhaps because of concerns about pension income.⁽¹⁾ Increased participation has boosted the workforce, but more importantly, the population aged 16 and above has been expanding strongly. Population growth is estimated to have increased from 0.1% per year in 1994 to over 0.6% since 2000 (Chart 3.10). That acceleration largely reflected higher net inward migration. There is considerable uncertainty around these estimates. But contacts of the Bank's regional Agents confirm that labour supply has been boosted by inward migration, which has helped to relieve labour shortages.

Capital

Standard measures of the capital stock weight assets by their value, and so indicate wealth rather than productive potential. In judging potential supply, the most appropriate measure of capital is one that weights assets by estimates of their

(1) See, for example, page 23 of the November 2004 *Inflation Report*.

Chart 3.11
Private sector capital services^(a)



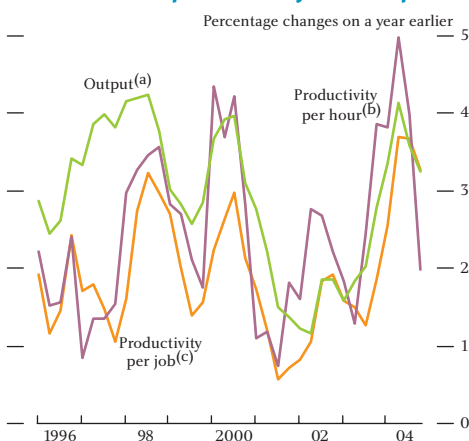
(a) See Oulton, N and Srinivasan, S (2003), 'Capital stocks, capital services, and depreciation: an integrated framework', *Bank of England Working paper no. 192*, for how these data are constructed.

contribution to output: so-called 'capital services'. The growth of capital services has fallen quite sharply since 2000, largely reflecting lower growth of investment in information, communication and technology (ICT) assets (Chart 3.11). Nevertheless, capital services grew by 2.9% per year in 2004 Q4 — in line with average growth between 1980 and 1995 before the ICT boom began.

Productivity

Private sector productivity growth picked up sharply in late 2003 and early 2004 (Chart 3.12). That acceleration followed a period when output and productivity growth were unusually weak. Weak productivity growth in 2001 and 2002 could have reflected labour hoarding: to avoid firing and rehiring costs, companies may have chosen to let staff put in less effort than normal, rather than to lay off workers.

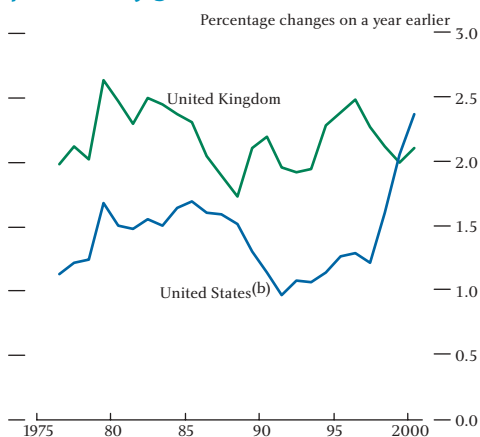
Chart 3.12
Private sector productivity and output



(a) See footnote (a) from Chart 3.2.
(b) Hours data extracted from LFS microdata.
(c) Workforce jobs data have been adjusted to be on a calendar quarter basis.

If companies were hoarding labour in 2001 and 2002, then the increase in productivity in late 2003 could simply have reflected a return to more normal levels of effort. If that were the case, productivity growth should fall back to more normal rates once the adjustment to effort levels is complete. Possibly reflecting that, productivity growth fell in late 2004, particularly on a per hour basis. It would not be wise to read too much into one quarter of data, especially as the slowdown was driven by the sharp pickup in hours, which may have been partly erratic. But to date, the increase in productivity growth has not been sufficiently protracted to suggest an acceleration in underlying trend productivity.

Chart 3.13
A measure of trend whole-economy productivity growth^(a)



Sources: ONS, US Bureau of Economic Analysis and US Bureau of Labor Statistics.

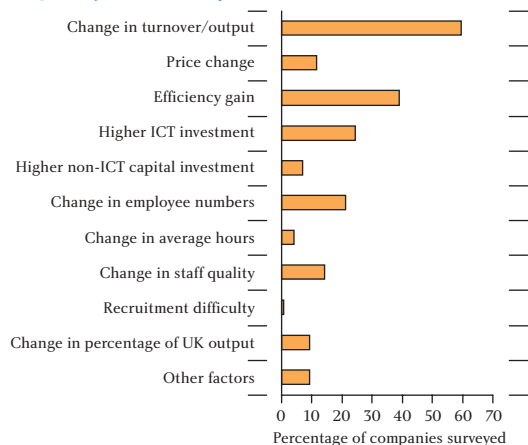
(a) A nine-year centred moving average of GDP per hour worked.
(b) Whole-economy average hours are assumed to grow in line with private sector average hours.

Nevertheless, it is still possible that the recent strengthening in actual productivity growth heralds some increase in the underlying trend. In the United States, there is strong evidence of such an acceleration (Chart 3.13). That was associated with rapid improvements in the production of ICT goods, which then led to heavy investment in ICT equipment during the late 1980s and early 1990s. These investments enabled US companies to increase automation and to improve management techniques in many industries. But first they had to restructure production processes and retrain staff, leading to long lags between the investment and subsequent productivity gains.⁽¹⁾ Because of these lags, it is too early to judge whether UK companies' investment in ICT in the late 1990s might also eventually reap similar rewards.

The US Federal Reserve started to suspect that underlying productivity was accelerating long before there was strong

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

Chart 3.14
Agents' survey:^(a) reasons companies expect higher productivity in the next twelve months



(a) Based on 232 responses from a survey of companies by the Bank of England's regional Agents in March 2005, weighted by employment and the ranking of companies' choices.

evidence from the economic data. That was partly because companies told Federal officials that investment in ICT was revolutionising production methods.⁽¹⁾ The Bank's regional Agents recently surveyed their contacts about developments in productivity. On average, companies expected productivity growth to weaken modestly over the next year. The majority cited changes in turnover as a factor driving productivity increases, affirming the importance of cyclical influences. But a quarter of companies reported ICT investment as a factor behind their expected productivity gains, confirming the importance of ICT, at least in some sectors (Chart 3.14).

Given the experience in the United States, it seems clear that developments in ICT can have dramatic effects on trend productivity. But to date, there is little compelling evidence of an acceleration in trend productivity in the United Kingdom. The recent rise in productivity growth appears to have been largely cyclical. That may indicate that demand was putting increasing pressure on supply.

3.3 Balance between demand and supply

Factor utilisation

The balance between demand and supply is a key determinant of inflation. One early indicator that demand is running ahead of potential supply is if companies are forced to work their capital and labour more intensively than usual — that is, if factor utilisation has risen above normal levels. A rise in factor utilisation would tend to push up on marginal costs of production, and hence prices, as employees need to be compensated for greater effort and as capital maintenance costs rise.

In the February 2005 *Inflation Report*, a box described various measures of factor utilisation. It concluded that while there are problems with most measures of utilisation, the available data suggested that companies were working their inputs at, or above, normal rates in 2004.

Recent data suggest that those pressures have not intensified. Private sector output growth has slowed. And the increases in private sector employment imply that companies have expanded their capacity. Taken together, the output and employment data suggest that the aggregate utilisation rate has stabilised, or even eased, in recent quarters. But they also indicate that utilisation remains at a high level. Reports to the Bank's regional Agents suggest that utilisation continued to be at, or above, normal rates. And business surveys paint a similar picture (Table 3.B).

Table 3.B
Survey indicators of factor utilisation^(a)

	1989–2004	1995–2004	2004				2005
	Average	Average	Q1	Q2	Q3	Q4	Q1
Manufacturing							
CBI	40	40	35	45	45	41	39
BCC ^(b)	33	36	36	42	41	40	38
Services							
BCC	33	39	37	42	39	44	38

Sources: BCC and CBI.

(a) Percentage of firms working at full capacity. Seasonally adjusted by Bank of England staff.

(b) Also includes agriculture, energy and construction.

(1) See for example the 1996 Federal Open Market Committee transcripts. www.federalreserve.gov/fomc/transcripts/1996/19960521meeting.pdf.

Labour market tightness

The outlook for CPI inflation is influenced by factor utilisation: that is, how hard companies are working their labour and capital.⁽¹⁾ It is also shaped by the degree of tightness in the labour market.

What is labour market tightness?

The labour market is in equilibrium — demand equals supply — when, for a given wage, the number of staff that companies employ is the same as the number of people who want to work. In equilibrium, wages should rise with productivity growth and price inflation. The degree of ‘tightness’ in the labour market depends on the balance between demand and supply. If labour demand outstrips labour supply then the market is tight, and companies may find it hard to recruit and retain staff. That would generate additional upward pressure on wages. Companies could react to — or pre-empt — the resulting rise in production costs by raising their prices.

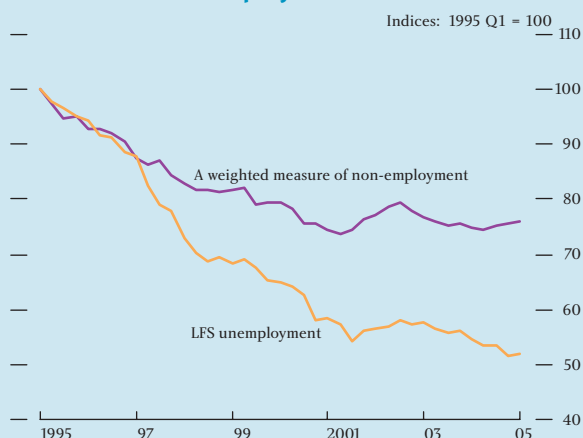
Changes in both labour demand and supply can affect tightness. For example, increased demand for companies’ products could encourage them to hire more workers. But without an increase in the pool of available labour, that would typically put upward pressure on wages. Alternatively, concerns about future pensions could encourage workers to retire at a later age, which would raise participation and hence labour supply, pushing down on wage inflation. An increase in net inward migration could also raise labour supply.

How can labour market tightness be measured?

Measures of unemployment offer a simple gauge of the excess supply of labour. But they do not paint a complete picture. Flows into employment from the inactive population — those individuals who say that they are not seeking or are not available for work — are large, and this potential source of labour supply must be taken into account. One way of doing this is to construct a measure of non-employment that weights different categories of people by how likely they are to find work.⁽²⁾ One of these measures is shown in Chart A.

Structural changes can affect indicators that are traditionally used to gauge labour market tightness. One example of structural change is the decline in

Chart A
Measures of non-employment



union power since the 1980s: this could have made workers less able to bargain for higher wages.⁽³⁾ That and other changes to the labour market during the past 25 years could explain why the fall in the unemployment rate since the early 1990s was not accompanied by a sizable pickup in wage pressure.

Using information on wage inflation and its determinants, it is possible to estimate an unemployment or non-employment rate that is consistent with stable wage growth, and equilibrium in the wider economy as a whole.⁽⁴⁾ Comparing this with the actual rate offers an estimate of tightness in the labour market. There are a wide variety of these estimates.⁽⁵⁾ Each of them depends on the exact method used, and the degree of uncertainty around each one is considerable. However, most estimates imply a fall in the jobless numbers consistent with stable wage inflation during the 1990s.

Another way to gauge labour market tightness is to look at survey indicators. For example, the quarterly BCC survey asks how difficult it is to recruit staff, and the CBI *Quarterly Industrial Trends* survey asks manufacturing companies whether labour shortages are restraining output (Table 1). Rises in recruitment difficulties or labour shortages are likely to indicate that the labour market has tightened. These measures suggest that the degree of tightness in the labour market is broadly unchanged from a year ago. However, reports from the Bank’s regional Agents suggest that the labour

(1) See the box on pages 24–25 of the February 2005 *Report*.

(2) See pages 23 and 25 of the February 2005 *Inflation Report*.

(3) See page 28 of the February 2004 *Inflation Report*.

(4) For more discussion of these concepts, see King, M (1999), ‘Monetary policy and the labour market’, *Bank of England Quarterly Bulletin*, February, pages 90–97.

(5) See for example Nickell, S and Quintini, G (2002), ‘The recent performance of the UK labour market’, *Oxford Review of Economic Policy*, Vol. 18, Issue 2, Summer, pages 202–20.

Table 1
Survey evidence on recruitment difficulties and labour shortages

	Average balance ^(a)	2004				2005 Q1
		Q1	Q2	Q3	Q4	
<i>Recruitment difficulties^(b)</i>						
BCC: Manufacturing ^(c)	66	64	66	51	60	58
BCC: Services	60	63	55	57	66	64
<i>Factors likely to limit output^{(b)(d)}</i>						
CBI: Skilled labour	12	10	13	14	14	11
CBI: Other labour	3	3	7	4	2	3

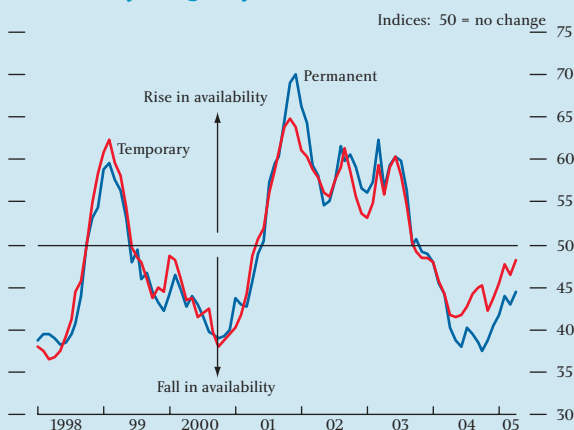
Sources: BCC and CBI.

- (a) Since 1995.
- (b) Percentage balance of firms.
- (c) Includes agriculture, energy and construction.
- (d) Manufacturing sector.

market may have slackened a little over the past twelve months.

Data from the Recruitment and Employment Confederation (REC) on the availability of agency staff may also be useful. A fall in the availability of staff may indicate that the labour market has tightened. In recent months, availability has continued to fall, but at a slower pace (Chart B): this could indicate that the labour market is still tightening, but more slowly.

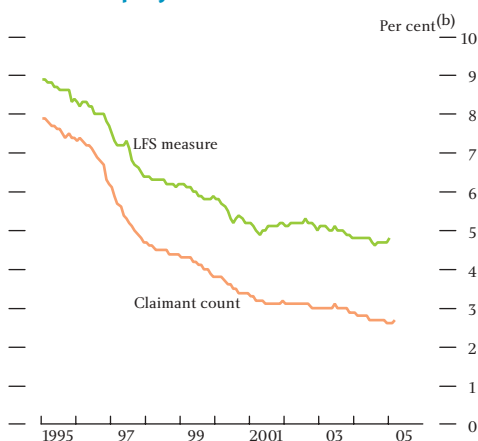
Chart B
Availability of agency staff



Source: Deloitte/REC Report on Jobs.

No single indicator is perfect, not least because standard measures of labour market tightness can be difficult to interpret in times of structural change. But drawing on a range of information, the Committee's best collective judgement is that the labour market does not appear to have tightened over the past year.

Chart 3.15
The unemployment rate^(a)



- (a) The LFS provides a household survey-based measure of those out of work, searching for a job and available to start work. The claimant count is an administrative record of the number of people claiming unemployment-related benefits.
- (b) Per cent of the labour force — the sum of the employed and unemployed.

Labour market tightness

As companies adjust their capacity in response to changes in demand, they may seek to change the size of their workforces. That can affect the balance between demand and supply in the labour market, which will have implications for wage and price inflation. A commonly used measure of labour market tightness is the unemployment rate. Unemployment has been broadly flat in recent quarters according to both the Labour Force Survey and claimant count measures (Chart 3.15). The latest rises in employment have not reduced unemployment because they were broadly matched by increased participation and population growth. The box on pages 28–29 discusses other measures of labour market tightness. It concludes that the labour market does not appear to have tightened over the past year.

Private sector earnings growth has increased during the past three months. But inflationary pressures in the labour market have remained relatively subdued. Commodity prices have risen since the February Report, but the pickup in UK import prices stalled in Q4. Manufacturing output price inflation edged higher, while signals on inflationary pressures in the service sector were mixed. CPI inflation increased to 1.9% in March, having been at 1.6% in both January and February.

The short-term outlook for inflation is influenced by the pressure of demand on capacity. As previous *Reports* have discussed,⁽¹⁾ wage and price inflation may have become less sensitive to changes in demand over the past decade. Nevertheless, during the past six months, there has been a marked rise in CPI inflation. This section assesses recent developments in costs and prices, as well as the outlook for CPI inflation in the near term.

4.1 Labour costs

Table 4.A
Private sector wage costs

Percentage changes on a year earlier

	Average ^(a)	2004				2005		
		Q1	Q2	Q3	Q4	Jan.	Feb.	Mar.
(1) Pay settlements	3.3	3.3	3.2	3.3	3.3	3.3	3.3	3.3
(2) Regular pay	4.2	5.9	4.1	4.5	4.4	4.0	4.1	n.a.
(2)-(1) Pay drift ^(b)	1.0	0.6	0.9	1.0	1.1	0.7	0.8	n.a.
(3) Average earnings	4.5	5.3	4.2	3.7	4.5	3.9	6.1	n.a.
(3)-(2) Bonus contribution ^(b)	0.1	1.4	0.1	-0.6	-0.1	-0.1	2.0	n.a.

Percentage changes on a quarter earlier

	Average ^(a)	2004				2005		
		Q1	Q2	Q3	Q4	Jan.	Feb.	Mar.
Regular pay	1.0	1.3	1.0	1.1	1.0	0.8	0.9	n.a.
Average earnings	1.0	2.4	-0.2	0.7	1.4	4.5	2.2	n.a.
Bonus contribution ^(b)	0.0	1.1	-1.2	-0.4	0.4	5.7	1.5	n.a.

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) Averages calculated between 1998 and 2004.
(b) Percentage points.

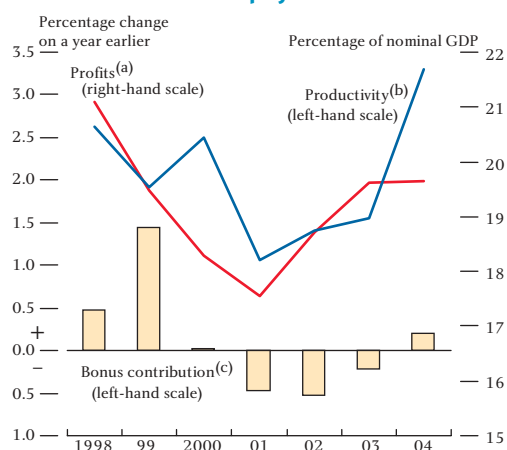
Inflationary pressures in the labour market reflect the balance between growth in earnings and improvements in productivity. Private sector average earnings were up 6.1% on the previous year in February, and up 2.2% on three months earlier (Table 4.A). That reflected rapid growth in bonus payments. Pay settlements have remained stable since the February *Report*. And growth in private sector average earnings excluding bonus payments — that is, regular pay — eased.

In the past, bonuses have caused volatile movements in earnings growth. For example, a large positive bonus contribution to average earnings growth in 2004 Q1 was followed by a large negative contribution in Q2 (shaded area in Table 4.A). One reason why regular pay growth, which excludes bonuses, is a helpful statistic is because it abstracts from that volatility.

But the contribution of bonus payments to earnings growth should not be ignored completely. Bonuses are not consolidated: in other words, a large bonus payment today does not commit a company to paying higher wages in the future. This means that growth in bonus payments may be more sensitive than other elements of pay to the economic

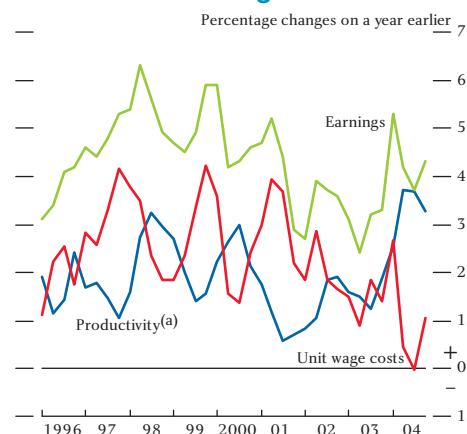
(1) See pages 26–27 of the February 2005 *Inflation Report*.

Chart 4.1
Private sector bonus payments



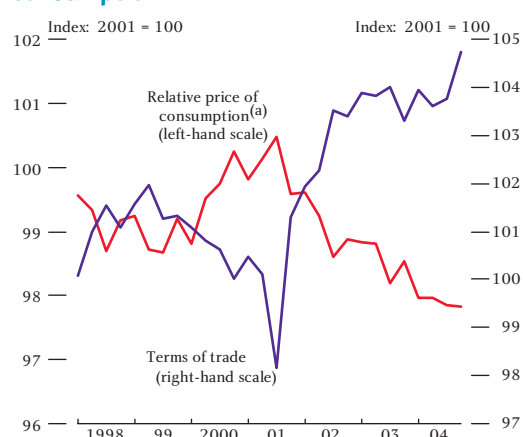
- (a) Excluding oil companies.
- (b) Private sector productivity is the per job measure defined in Chart 3.12.
- (c) Percentage point contribution to private sector average earnings growth.

Chart 4.2
Private sector unit wage costs



- (a) Private sector productivity is the per job measure defined in Chart 3.12.

Chart 4.3
Terms of trade and the relative price of consumption



- (a) Household expenditure deflator divided by the private sector output deflator (proxied by GDP less government consumption).

cycle. So the weakness of bonus payments over recent years may have reflected the corresponding weakness of profits and productivity (Chart 4.1). And the latest bonus-driven pickup in earnings may therefore reflect the state of the economy: in particular, a recovery in balance sheets (Section 1), or improvement in productivity (Section 3). If these factors persist, the increase in bonus payments may prove not to be erratic and could continue to make a positive contribution to average earnings growth.

Even if bonuses continue to push up on earnings growth that does not necessarily imply that there will be upward pressure on inflation. What matters to companies when setting prices are the wages they pay compared with the output their workforce produces — or the level of unit wage costs. In other words, it is both average earnings growth and improvements in productivity that matter. Since 2001 growth in unit wage costs has been weakening (Chart 4.2) as real earnings have not kept pace with productivity.

The subdued growth in unit wage costs could just reflect the degree of slack in the labour market.⁽¹⁾ Alternatively, it could reflect a shock which has temporarily depressed earnings relative to productivity. One candidate explanation for such a shock is the increase in the terms of trade — that is, the rise in the price of UK exports relative to UK imports.

UK consumers buy imported goods and services. But they do not buy UK exports. The improvement in the terms of trade in recent years should therefore have reduced the relative price of consumption — that is, the price of a basket of consumer goods and services relative to the price of all goods and services produced by UK companies (Chart 4.3). In the short run, workers who were aiming for a steady improvement in their living standards may have responded to this by settling for increases in earnings below the rate at which productivity and output prices have been increasing.

But eventually, nominal earnings should rise to reflect the value of output that labour produces. If wages have not kept pace with productivity, then companies' demand for labour should increase, bidding up wages.

4.2 Global costs and prices

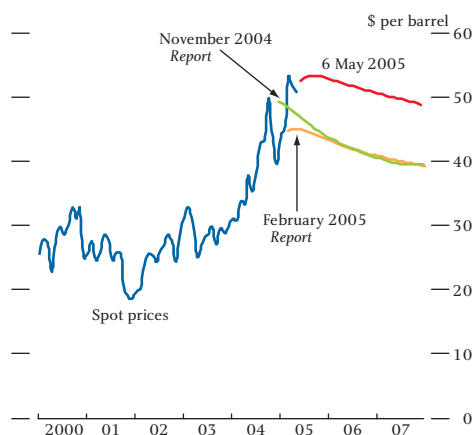
Imports account for just over a quarter of total UK spending. These imports include commodities and semi-manufactured goods as well as finished goods and services.

Oil and other commodity prices

In the fifteen working days to 6 May, the price of Brent crude oil averaged \$51. That compares with \$45 in the equivalent

(1) See the box on pages 28–29 for a discussion of labour market tightness.

Chart 4.4
Spot and futures^(a) prices of Brent oil



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

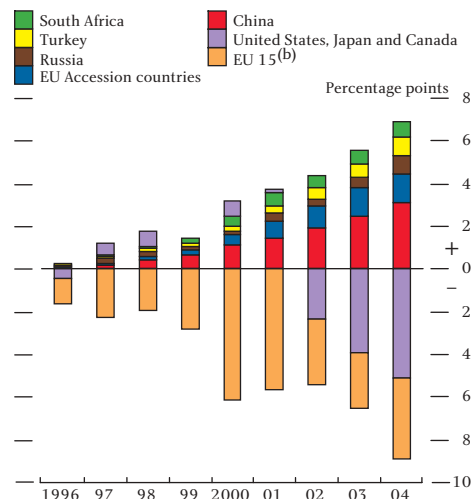
(a) Average during the fifteen working days up to the time at which the MPC finalised its projections.

Chart 4.5
Import prices relative to the price of private sector output^(a)



(a) Defined in footnote (a) of Chart 3.2.

Chart 4.6
Cumulative shift in the share of UK expenditure^(a) on imported goods since 1995



(a) Current prices.
(b) Excludes impact of 'missing trader intra-community' fraud.

period three months ago. Oil prices reached \$55 in early April, but subsequently fell back — partly in response to the International Energy Agency revising down its estimate of 2005 oil demand.

The futures curve has shifted by broadly the same amount as the spot price since the February Report (Chart 4.4). The futures price of Brent for December 2007 was \$49, up almost \$10 since February, suggesting that the spot price of oil is likely to remain high.⁽¹⁾ The sterling price of non-oil commodities has also increased since the February Report.

Imports of goods and services

The price of imported goods, which include commodities like oil and raw materials as well as finished goods, rose by 0.6% in Q4. But the price of imported services fell by 1.5% over the same period. Taking goods and services together, the price of UK imports rose by only 0.1% in Q4, having risen by 2% between 2004 Q1 and Q3. More recent data suggest that the price of imported goods was broadly flat in early 2005.

Import prices have been flat or falling for much of the past decade. And, relative to the price of domestically produced goods and services, that downward trend is more pronounced — the relative price of imports has fallen by around 30% since 1990 (Chart 4.5). This trend is also apparent elsewhere in the developed world. One explanation for the falls in import prices in recent years is trade liberalisation.⁽²⁾ The removal of tariffs directly reduces the relative price of imported goods. And trade liberalisation is also likely to have increased competition and so driven down the margin that can be charged over costs. Increased trade with relatively low-cost economies in the developing world is likely to have been another factor driving down the relative price of UK imported goods (Chart 4.6).⁽³⁾

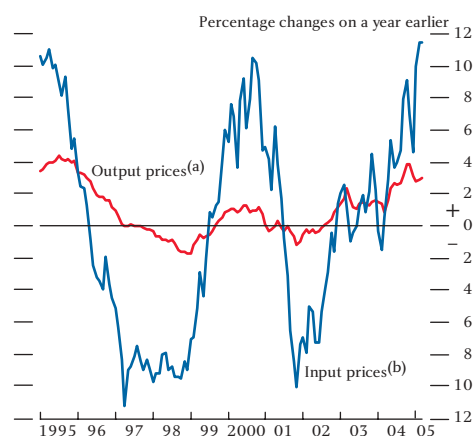
Movements in the exchange rate may also affect the relative price of UK imports. In particular, the sharp appreciation of sterling in 1996 and 1997 is likely to have contributed to the decline in the relative price of imports over the late 1990s. Looking ahead, both increased sourcing of imports from low-cost countries and trade liberalisation are likely to continue to push down on import prices. But the prices of goods and services exported by the United Kingdom's trading partners have been rising, and this will put upward pressure on import prices.

(1) See the box on pages 28–29 of the November 2004 Report on the economics of the oil futures market.

(2) For more details see Dean, M and Sebastia-Barriel, M (2004), 'Why has world trade grown faster than world output?', *Bank of England Quarterly Bulletin*, Autumn, pages 310–20.

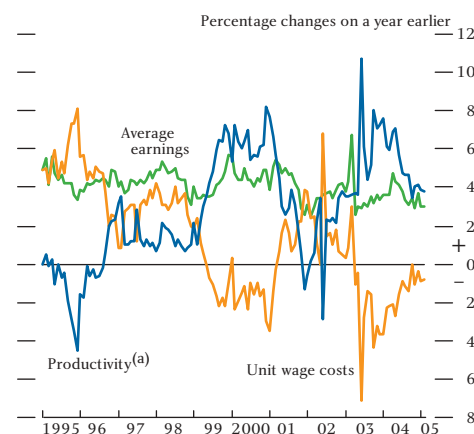
(3) See the box on pages 32–33 of the November 2004 Report for more details.

Chart 4.7
Manufacturers' input and output prices



(a) Excluding excise duties.
(b) Including Climate Change Levy.

Chart 4.8
Manufacturers' labour costs



(a) Output per filled job.

Table 4.B
Service sector costs and prices

	2004				2005		
	Averages ^(a)	Q1	Q2	Q3	Q4	Q1	Apr.
Costs							
Unit wage costs ^(b)	2.1	3.2	-0.3	-1.2	-0.1	n.a.	n.a.
CIPS ^(c)	57.0	56.1	60.1	59.9	61.7	58.8	58.1
Prices							
<i>Backward-looking</i>							
CIPS ^(c)	51.8	52.1	54.4	54.3	53.7	52.3	52.5
CSPI ^(d)	2.0	2.4	2.5	2.3	2.2	n.a.	n.a.
<i>Forward-looking</i>							
BCC prices balance ^(e)	23	28	26	29	28	35	n.a.

Sources: BCC, CIPS and ONS.

- (a) Average since 1997 for BCC data and 1996 for CSPI, CIPS and unit wage costs data.
(b) Refers to private services sector, as defined in Chart 3.3. Percentage change on a year earlier.
(c) A reading above/below 50 suggests rising/falling costs or prices.
(d) Corporate services price index. Percentage change on a year earlier.
(e) Percentage balance of firms expecting prices charged to rise over the next three months.

4.3 Sectoral costs and prices

Supply chain pressures in the manufacturing sector

The price of fuels and materials consumed by the manufacturing sector rose by 11% in the year to March (Chart 4.7). Even excluding the impact of recent increases in the price of oil, raw material costs have risen rapidly over the past year. But the price of fuel and raw materials is only one element of manufacturers' costs. Manufacturing unit wage costs fell over the year to February, reflecting the continued rapid increase in productivity (Chart 4.8).

Manufacturing output prices — which measure the price of manufacturing output sold to other sectors of the economy — continued to rise. The rate of output price inflation has been gradually moving higher over the past three years (Chart 4.7). It has edged up during this year, but that appears to be largely the result of higher prices for petroleum products. Survey data point to a decline in capacity utilisation in the manufacturing sector (Section 3). And so one source of upward pressure on manufacturers' output prices may be easing.

Supply chain pressures in the service sector

Data on costs and prices in the service sector have provided mixed signals about inflationary pressures.

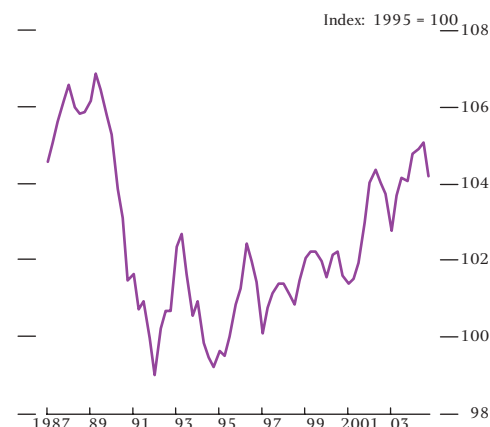
Companies in the service sector continue to report month on month increases in costs, according to the CIPS survey. But the net balance of companies reporting rising costs has fallen since late 2004. And ONS data on unit wage costs, which capture the most important component of service sector costs, were broadly unchanged over the year to Q4.

The ONS's experimental measure of business-to-business service prices — the corporate services price index (CSPI) — suggests that service sector output price inflation slowed in the year to Q4 (Table 4.B). The CSPI only covers a fraction of the service sector, however. The CIPS survey, which has a wider coverage than the CSPI, indicated that the net balance of companies who have increased their prices fell back in 2005 Q1. But forward-looking BCC survey data suggest that, in Q1, the balance of service sector firms expecting to raise prices was at its highest since the series began in 1997.

Supply chain pressures in the distribution sector

Previous *Reports* have discussed how the distribution sector could explain the apparent weakness of consumer prices in recent years. One factor which could have depressed consumer prices is the rapid growth in productivity in the distribution sector, which is likely to have put downward

Chart 4.9
Productivity^(a) in the distribution sector
relative to the private sector as a whole



(a) Defined as output per employee job.

Chart 4.10
Consumer prices

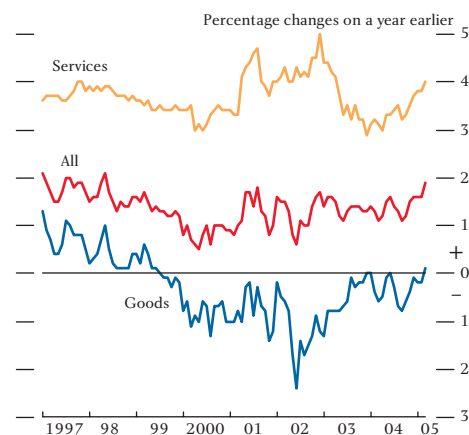
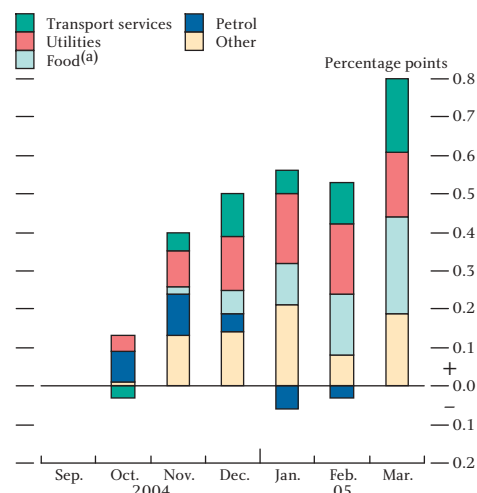


Chart 4.11
Cumulative contributions to the change
in CPI inflation since September



(a) Includes non-alcoholic beverages.

pressure on growth in unit wage costs (Chart 4.9). There was a marked slowdown in distribution sector productivity in Q4, reflecting an increase in employment and an easing in output growth. But it is too early to tell whether the structural improvements that have enabled rapid productivity growth in this sector have run their course.

4.4 Consumer prices

CPI inflation was 1.9% in March, the highest rate since May 1998 (Chart 4.10). For Q1, CPI inflation was 1.7%, above the MPC's central projection in the February Report.

The pickup in CPI inflation on the month was similar for both goods and services. The largest contribution came from air fares, which rose in March, having fallen the previous year. In part that may have been because the data on air fares included the Easter holiday period this year, when flight prices tend to be higher. That suggests that the contribution of air fares to the pickup in CPI inflation between February and March could unwind to some extent in April. But the increase in air fares may also reflect the impact of dearer oil on fuel costs. The futures curve indicates that oil prices are likely to remain around their current level, suggesting that air fares may not necessarily fall back over the near term.

CPI inflation increased by 0.8 percentage points over the six months to March. The February Report noted that a 0.5 percentage point increase in CPI inflation over any three-month period is not unusual. But an increase of 0.8 percentage points over six months is more unusual: the last time that happened was in December 2002.

As Chart 4.11 shows, the pickup in CPI inflation since September has been quite broadly based. And that suggests that at least some of the rise was due to building inflationary pressures. But some of the recent increase in CPI inflation may reflect temporary factors, which could unwind over the coming year. For example, the large increases in utility prices, which came into effect around the turn of 2005, will fall out of the twelve-month rate of increase over the coming year.

One temporary factor which does not explain the increase in CPI inflation since September is the retail price of petrol (Chart 4.11). The contribution of higher petrol prices to CPI inflation has been roughly constant over the past six months: a measure of inflation that excludes the retail price of petrol rose by 0.9 percentage points over the six months to March.

Looking ahead, the MPC expects a further increase in CPI inflation in the near term. In part, that reflects the increase in water and sewerage charges that came into effect in April.

This section summarises the monetary policy decisions taken by the MPC since the February Report.⁽¹⁾ The Bank's repo rate was maintained at 4.75% in March, April and May.

The MPC's central projection in the February Report, under the assumption that official interest rates followed a path implied by the market yield curve, was for four-quarter GDP growth to remain robust and close to trend. Higher import prices and the pressure of demand on supply were projected to push up inflation. On the central projection, CPI inflation was forecast to reach the 2% target during the second year and continue to rise a little thereafter.

There had not been a lot of news over the month at the time of the Committee's meeting on 9–10 March. GDP seemed likely to continue to grow at broadly its trend rate. But the news on UK-weighted world demand had been slightly on the downside. Oil prices had risen sharply and there were signs that growth in the euro area would be somewhat weaker than envisaged at the time of the February Report, at least in the near term. UK short and long-term market interest rates had risen. That would tend to reduce activity and lower inflation.

The two key risks discussed at the February meeting were to household spending in the near term, and how rapidly consumer prices would respond to demand and cost pressures. For most members, neither risk had crystallised or diminished over the past month. There was continuing uncertainty about the momentum in consumption growth, and still little evidence of inflationary pressures in the supply chain passing through into wages or consumer prices. For these members, the balance of risks to the inflation forecast remained sufficiently to the downside in the near term to justify maintaining the repo rate at its current level.

For some members, a rise of 25 basis points in the repo rate was warranted. It was likely that there was already a degree of excess demand in the economy. And indicators of output growth remained robust. With the prospect of import prices

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

no longer falling, the pressure of excess demand on supply would most likely feed through into higher CPI inflation.

Seven members of the Committee voted to maintain the repo rate at 4.75%. Two members voted against, preferring a rise in the repo rate of 25 basis points.

At its meeting on 6–7 April, the Committee noted that the news about the international economy had been mixed over the past month. Growth may have been a little stronger than expected in the United States, but a little weaker than expected in the euro area. The spot price of oil remained considerably higher than at the time of the February *Inflation Report* and futures prices had also risen, suggesting that the pressure on costs from oil might persist.

There were signs that the risk of weak household spending in the near term had crystallised to some degree. Consumption growth in 2004 Q4 had fallen sharply and Q1 retail sales looked to have been somewhat weaker than expected at the time of the February *Report*. But the outlook for most of the underlying determinants of consumption, such as real incomes, employment and wealth, had been resilient. Although house price inflation had fallen off sharply and housing market activity had declined from its peak, the most recent data suggested that the market might be stabilising. Hence consumption growth might pick up after its recent weakness. Also, it was possible that other components of demand might be taking up the slack, given that output growth seemed to have remained robust.

The second key risk had concerned how rapidly consumer prices would respond to demand and cost pressures. There had been little news about the strength of this response and it was uncertain how the substantial rise in oil prices this year would feed through if it were maintained.

For most members, the data suggested that the overall risk to the inflation forecast was still to the downside. More data were required to assess further the extent and persistence of the apparent slowdown in household spending. For some other members, however, there had not been much news over the month, so overall they continued to prefer an immediate rise in the repo rate of 25 basis points.

Seven members of the Committee voted to maintain the repo rate at 4.75%. Two members voted against, preferring a rise in the repo rate of 25 basis points.

At its meeting on 6 and 9 May, 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 grows at close to trend during the next three years. It is a slightly weaker outlook than the one described in the February Report. Demand pressures and import prices give some gentle upward impetus to CPI inflation over the forecast period. In the first year of the projection, inflation is also buoyed by a number of temporary factors that push it above the 2% target. As their impact dissipates, inflation eases back and stays close to target for the rest of the forecast period. That central projection is higher in the near term compared with the February Report, and lower further out. Key risks around the central projections for CPI inflation and GDP growth relate to: consumer spending; the reaction of wages and prices to demand pressures; and the world economy. The balance of risks to growth is on the downside, while the risks around the central projection for CPI inflation are broadly balanced.

6.1 World economy

The global economy expanded rapidly in 2004. That rate of growth appears to be easing. Even so, it is likely to maintain a reasonable pace throughout the forecast period. Slower growth in the United States and the emerging economies of Asia is likely to be coupled with sluggish recoveries in the euro area and Japan.

The euro area

The modest recovery in the euro area lost steam during the second half of 2004. Export growth, which had been a key prop for the economy in the first half of last year, slowed. Economic indicators in early 2005 have been mixed. But final domestic demand growth picked up in the second half of 2004. The improving financial health of companies together with the low cost of finance should help sustain the recovery in investment. Gradual improvements in employment and income growth are expected to support consumption. The strong global environment means that the recent weakness in exports is likely to prove temporary. So a recovery in output during 2005 with steady growth thereafter seems the most likely outcome.

The United States

US economic growth eased in 2005 Q1. But that is unlikely to mark the beginning of a substantial downturn. Monetary policy has remained stimulative. Solid employment growth should boost household incomes and sustain consumer

spending. Profitability has been healthy, and so investment growth should hold up. Over the next three years, the economy is likely to expand more slowly than in 2004. But it should maintain a reasonably robust pace.

Asia

Japanese GDP fell in the middle of 2004. Recent data generally suggest that activity is beginning to pick up, though any revival during 2005 is likely to be limited. In the rest of Asia, China's economy maintained its considerable momentum. Looking ahead, some slowing seems probable during the forecast period. Nevertheless, continued strong rates of Chinese expansion are likely to bolster activity elsewhere in the region during the next three years.

World trade, oil and the value of sterling

World trade, weighted to reflect the importance of different economies as destinations for UK exports, grew strongly in 2004. That rate of expansion is likely to moderate as demand growth in the United States slows and the euro-area economy recovers only gradually. The outlook for UK-weighted world trade growth is marginally weaker than the one described in the February *Inflation Report*.

World price developments and movements in the sterling exchange rate are an important influence on activity and inflation in the United Kingdom. The price of Brent crude averaged \$51 per barrel in the fifteen business days to 6 May, 14% higher than the equivalent period before the February *Report*, and around 50% higher than a year ago. The MPC assumes that oil prices follow the path of the futures curve when constructing its projections. That curve implies only a gentle decline in oil prices during the next three years.

Strong global economic activity and sharply rising oil prices have pushed up the export prices of the United Kingdom's trading partners, and hence UK import prices. Further increases in these export prices are likely, as world demand growth presses on supply. But the rate of increase should gradually slow in the absence of further oil price rises.

On 11 April, the Bank of England began publishing a new sterling effective exchange rate index (ERI).⁽¹⁾ The new index takes account of a wider range of trade and uses more up-to-date weights than the old ERI. Nevertheless, movements in the old ERI and the new index have been similar over the recent past. The starting point for the new measure of the sterling ERI in the MPC's projection is 102.3, the average for

(1) See the box 'New measures of the sterling ERI', on page 7 of the February 2005 *Inflation Report*.

Table 6.A
Expectations of the Bank's official interest rate implied by market yields^(a)

Per cent

May

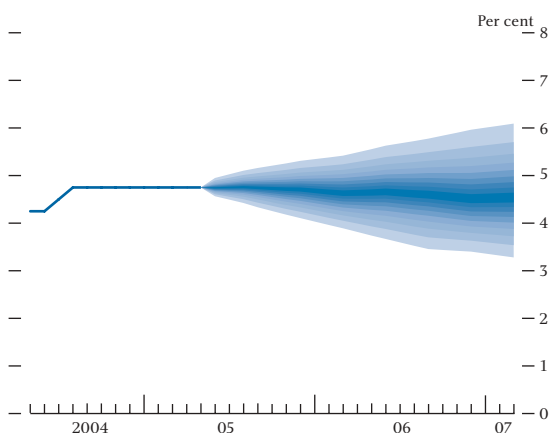
2005			2006				2007				2008	
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
4.8	4.8	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.7

February

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

(a) The data are fifteen-day averages to 6 May 2005 and 9 February 2005 respectively. The rates used for the May and February 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 mean of the fan chart is the market rate profile for the fifteen-day average ending 6 May, consistent with the measure of interest rates shown in Table 6.A. The distribution is derived using the prices of options on three-month Libor futures contracts traded on LIFFE. It is constructed by averaging the daily distributions around a common mean for each of the fifteen days. The average is calculated for each probability band at each quarter. The fan chart depicts the probability of outcomes for interest rates in the future. It has a similar interpretation to the fan charts in the Overview and in this section of the *Report*. The chart is only indicative of market expectations 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.

the fifteen working days to 6 May. That was nearly 2% higher than the equivalent period in February. Under the MPC's usual convention,⁽¹⁾ the exchange rate is assumed to depreciate to 100.0 by 2007 Q2.

6.2 The interest rate assumption

The projections for the UK economy described below are 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.⁽²⁾ On average, in the fifteen days leading up to the MPC's decision, the market yield curve implied a flat profile for official interest rates during the next three years — similar to the one underlying the February projection. There is only a small probability that official interest rates will follow any particular path. It is possible to generate a fan chart (Chart 6.1) that uses information from options prices to provide an approximate indication of market participants' uncertainty, ahead of the MPC's decision, about the future path of official interest rates. The chart suggests that market participants believed a wide variety of outturns was possible.

6.3 UK output and expenditure

Household consumption

Household spending growth slowed markedly towards the end of 2004, and recent indicators suggest that weakness persisted into 2005. The causes of the slowdown are unclear. Although changes in the determinants of consumer spending — post-tax income, household wealth and interest rates — can broadly account for the cumulative slowing in consumer spending since the middle of last year, it is more difficult to rationalise the sharpness of the slowdown from December 2004. So other factors may also be exerting an influence.

One possibility is that the impact of slowing house price inflation, through its impact on the collateral available to households against which they can borrow, may have been somewhat greater than the Committee expected. Moreover, the sharp decline in housing transactions may have led to reduced spending on household goods that has not been offset by higher spending elsewhere. However, as Section 2 notes, such a transactions-related effect is likely to be modest.

Another possible explanation is that the cumulative increase in interest rates between November 2003 and August 2004

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

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

has had a more substantial lagged effect than anticipated. As the Committee noted in the February 2004 *Inflation Report*, the impact of higher policy rates was likely to be particularly uncertain given the marked build-up in household debt. That build-up of debt has been largely matched by an equivalent accumulation of financial assets, so that higher interest payments have been roughly offset by higher interest receipts. But since creditors tend to spend less of any extra income than debtors, the net impact of the increase in interest rates should be to slow consumer spending. However, the magnitude of this distributional effect is impossible to predict with any precision, as are the lags between changes in interest rates and their impact on consumer spending.

The outlook for consumer spending is far from certain. But the Committee's central view is that household spending growth will recover, albeit to a rate below the average of the recent past. Household income growth is projected to be firm, supported by increases in earnings and employment. Furthermore, the outlook is conditioned on a flat profile for official interest rates, so the impact of past monetary tightening on consumer spending growth is projected to wane. The housing market appears to be stabilising. So its moderating effect on consumption growth is likely to diminish. Even so, the housing market will probably remain subdued and it may continue to dampen household spending growth.

Business investment

Company finances seem well placed to support further growth in investment. The Bank's regional Agents report that investment intentions have held up. Other surveys of intentions have softened slightly in the recent past, though they remained broadly in line with longer-run averages. In the MPC's central view, last year's revival in business investment is projected to continue.

Government spending

In forming its projections, the MPC assumed that nominal government final demand will increase in line with the plans outlined in the March 2005 Budget. Those plans imply that nominal government spending is set to grow strongly over the forecast period, albeit less quickly than over the previous three years.

The impact of government spending on CPI inflation is best assessed by considering the quantity of resources that the spending will require. Inflation reflects the balance between the demand for private sector output and the resources available to produce it. So the public sector can contribute to inflationary pressure by using resources that would otherwise

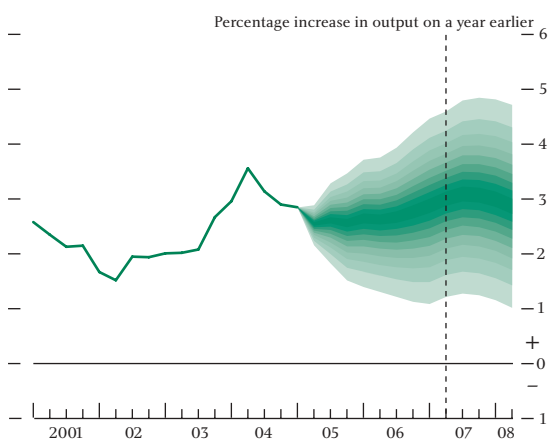
be employed in satisfying private sector demand. Given the Government's nominal spending plans, its demand for resources is likely to grow quite quickly during the next few years.

Net trade

Export growth has been relatively weak in recent years. UK exporters have experienced a significant loss of market share, partly as a delayed response to the sharp rise in the sterling exchange rate in the mid-1990s that proved to be more persistent than expected. With sterling assumed to decline gently over the forecast period, the MPC judges that such marked weakness is unlikely to persist and that the United Kingdom's market share will erode less quickly in the future. Consequently, export growth is expected to pick up during the forecast period.

Private domestic demand is likely to recover during 2005 and then to grow steadily, albeit less quickly than its average of the past few years. So imports are projected to increase at a steady pace through the forecast period, if slightly more slowly than in recent years. Net trade — the combined impact of exports and imports on GDP — has detracted from growth in the economy for nine consecutive years. In the MPC's central view, net trade is likely to continue to reduce growth in 2005, but to make a broadly neutral contribution further out. That turnaround reflects stable import growth combined with an improving export performance.

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.

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. Under the central projection, GDP grows steadily at close to trend rates during the next three years. Compared with the past three years, the composition of spending becomes more balanced: consumption growth is slower and government spending decelerates, investment growth is firm and net trade no longer subtracts from growth. The central view is for slightly lower GDP growth than at the time of the *February Report*.

6.4 The outlook for inflation

CPI inflation is influenced by the balance between the demand for private sector output and the resources available to supply it. That balance reflects the degree of spare capacity within the private sector and conditions in the labour market.

Reports to the Bank's regional Agents suggest that companies have continued to work their existing employees and capital at

or above normal levels. Indications from business surveys are broadly consistent with that view. Those high levels of utilisation will tend to push up prices.

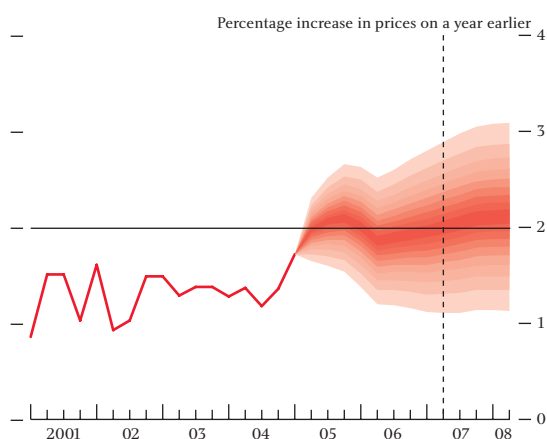
The pressure on companies' capacity may also have been reflected in the behaviour of hours worked. Average hours worked per employee picked up sharply in 2004 Q4. The MPC judges that part of the increase was erratic. However, after adjusting for volatility, the data suggest that the long-term decline in average hours worked may have paused, as companies have asked their employees to work longer hours to help meet growing demand. If demand continues to increase, companies are more likely to hire extra workers than to ask their existing employees to work longer hours.

With output growth likely to be firm, private sector employment will probably continue to recover and hours worked will resume their trend decline. The government's spending plans are also consistent with further growth in public sector jobs during the forecast period. So employment growth is likely to be robust. But the rising employment rate has met with little response from wages in recent years. Part of the explanation probably lies in the impact of government reforms spanning the past twenty-five years that have changed the relationship between wage growth and unemployment. Other factors may have changed the relationship more recently. Additional inward migration, delayed retirement and the possibility of international outsourcing may have helped to keep wage settlements in check during the past few years. So the MPC's central view is that robust prospective employment growth will not result in substantial additional pressures on labour supply and hence that wage inflation will be relatively stable.

In addition to demand and supply conditions within the United Kingdom, import prices also influence inflation. During the past few years, falling import prices have reduced CPI inflation. More recently, strong global economic activity and rising commodity prices have lifted the prices charged by the United Kingdom's trading partners in their own currencies. And these prices are likely to rise further over the coming years. Moreover, the MPC has assumed that sterling will decline slowly during the next three years. So the MPC judges that sterling import prices are likely to rise over the forecast period.

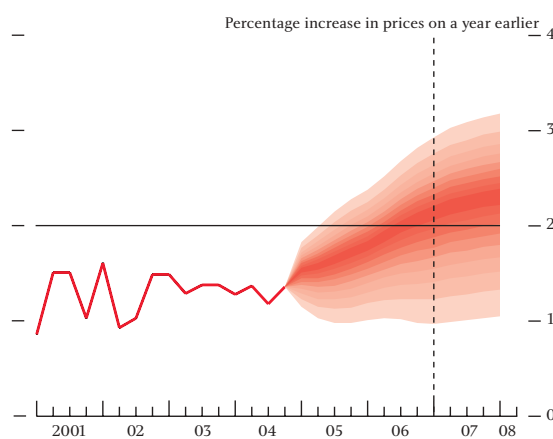
The Committee's projection for CPI inflation, assuming that official interest rates follow a path implied by market yields, is shown in Chart 6.3. Pressures on supply and import price rises give some gentle upward impetus to the central projection for inflation over the forecast period. In the MPC's

Chart 6.3
Current CPI inflation projection 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.

Chart 6.4
CPI inflation projection in February based on market interest rate expectations



central view, inflation rises above the 2% target for a short while in the first year of the projection. The short-term profile is affected by a number of temporary factors. Increases in oil, electricity and gas prices have already pushed up the published inflation rate. Furthermore, large increases in charges for water and sewerage services were introduced in April this year, and their impact should soon be evident in the CPI inflation data. The MPC assumes that oil prices decline gradually, in line with the oil futures curve, so their positive effect on the twelve-month CPI inflation rate is projected to diminish. And the sizable utility price increases of recent months are unlikely to be repeated during the next year. So the influence of these factors on inflation is likely to dissipate, and inflation edges back to the target in the first half of 2006.

CPI inflation then settles at close to 2% for the rest of the forecast period. The projection is higher in the short term compared with February, but lower further out. Unexpected large increases in CPI inflation during recent months together with the announcement of utility price increases have led the MPC to revise up its short-term projection for CPI inflation since February. The slightly weaker inflation profile in the medium term, compared with February, reflects the higher value of sterling and the softer outlook for economic activity.

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 small. The width of the fan charts indicates the extent of the Committee's uncertainty about the future. There has been little change since February 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: consumer spending; the reaction of wages and prices to demand pressures; and the world economy.

Some of the risks to consumption identified in the February *Report* appear to be crystallising. So the MPC's central projection implies a weaker near-term outlook for consumption growth than three months ago. But, as noted earlier, considerable uncertainty surrounds that central projection and the MPC judges that there are risks in both directions.

Among the downside risks is that the MPC has underestimated the impact of the slowdown in the housing market on consumer spending. The housing market will probably remain subdued in the short term and that could curb consumer spending by more than the MPC has assumed in its central case.

It is also possible that the impact of higher interest rates, particularly on spending by highly indebted households, has not yet fully worked through. Moreover, secured borrowing growth is likely to stay relatively high over the medium term, even if house prices were not to increase at all, because of the substantial rise in property values in recent years. As a result, although the central projection assumes flat interest rates, debt servicing burdens will continue to grow and that may act as more of a restraint on future consumption than the MPC has allowed for in its central case.

The recent weakness of consumption might in part reflect households' growing concerns about pensions or worries about the adequacy of endowment policies. That may have already led some households to raise their savings. And there is a risk that such concerns could restrain consumption more substantially in the future.

But there are also upside risks to consumer spending. It is possible that the sharp slowdown in spending towards the end of last year was associated with greater uncertainty among households, perhaps connected with the outlook for interest rates and the housing market. Such uncertainty could fade, leading to a sharper bounce back in consumer spending than in the central view.

Another potential upside risk to consumption relates to money growth. Household deposit growth has been buoyant for some time. The box on pages 10–11 explains why households may wish to continue to hold this money rather than spend it. But there is a risk that households may draw on their deposits to finance higher spending than is captured by the MPC's central projection.

Overall, the MPC believes that the balance of risks to consumption is to the downside. That implies a corresponding source of downside risk to GDP growth and inflation. But some of the downside risk to consumption identified in February appears to have already materialised and has therefore been incorporated in the central view. So the risks to growth and inflation from this source are slightly more evenly balanced than three months ago.

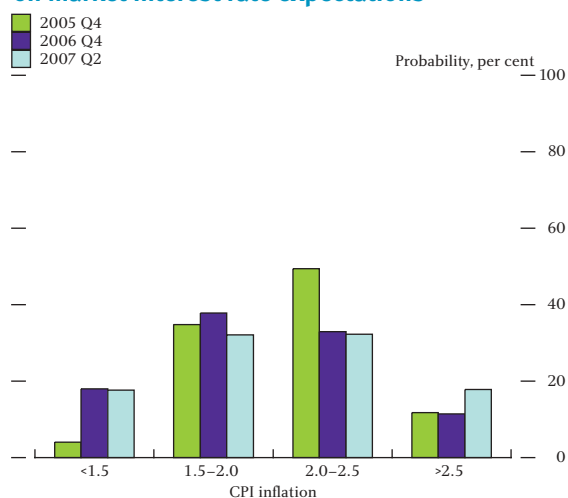
There are a number of other risks to the MPC's central projection for inflation. The Committee is uncertain about the level of demand relative to potential supply and the inflationary impact of any imbalance. A particular risk relates to the degree of slack within the labour market⁽¹⁾ and how that affects earnings growth. In constructing its central projection, the MPC judged that upward pressure on earnings growth is limited. But the Committee remains uncertain about the relative importance of different factors in explaining low outturns for earnings growth in the past, and about how long-lasting those effects will be. So the MPC believes that there is an upside risk to wage and CPI inflation from prospective robust employment growth.

Another risk relates to how demand pressures on supply are reflected in inflation itself. Inflation has risen markedly since September 2004. The MPC judges that some of that rise reflects the impact of one-off price increases whose effect on the twelve-month inflation rate will dissipate during the coming year. But it also attributes some of the rise to the pressures of demand on supply. It is possible, however, that the MPC has underestimated the extent of those pressures. Consequently, there is a risk that inflation will be higher than in the Committee's central projection.

In recent years, strong productivity growth in the distribution sector and falling import prices have reduced the impact of demand pressures on CPI inflation. But distribution sector productivity growth eased back towards the end of 2004 and import prices have stopped falling. The Committee believes that distribution sector productivity growth will push down on CPI inflation by less in the future than it has in

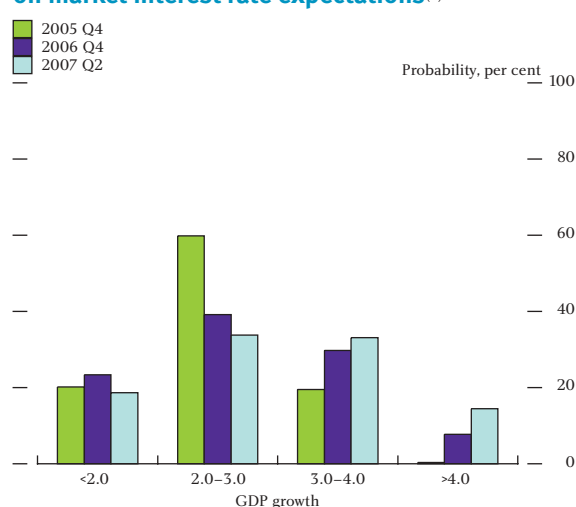
(1) See the box on pages 28–29.

Chart 6.5
The MPC's expectations for CPI inflation based on market interest rate expectations^(a)



(a) These figures are derived from the same distribution as Chart 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^(a)



(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 recent past. Moreover, import prices are projected to rise over the forecast period. But there are significant risks in both directions to the MPC's judgements about the future path for both of these variables. That adds to the uncertainty surrounding the prospects for CPI inflation.

There are also risks to the outlook for UK output and inflation from world developments. A key risk to the world economy is the oil market. Oil prices have risen markedly during the past 18 months. And the futures curve has also risen indicating that the market believes that these high prices are likely to persist. The MPC has assumed that the impact of the higher oil prices on inflation in the medium term and on growth is likely to be relatively modest. But it is possible that the price of oil could push up inflation and depress activity by more than in the MPC's central case.

Another risk to the world outlook could arise from the euro area. The euro-area economic recovery has faltered in recent quarters. The MPC has judged that a revival in growth remains the likeliest outcome. 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. Higher household saving in the face of uncertainty about future pension and health care reforms could also hold back domestic demand. And if the dollar were to fall further — perhaps as part of a correction to the pattern of international imbalances — that could lead to weaker euro-area exports than is currently envisaged, with negative consequences for euro-area domestic demand. A weaker euro area would pose a downside risk to activity in the United Kingdom, though the impact on CPI inflation would depend on any reaction of the sterling exchange rate.

The best collective judgement of the Committee is that the risks to GDP, relative to the central projection, are on the downside, while the risks to CPI inflation are broadly balanced. The downside risks to both growth and inflation have diminished since February. 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 in February. Though this reflects the best collective judgement, there is a range of views among individual MPC members.

Chart 6.7
Current projection for CPI inflation in 2007 Q2^(a)
based on market interest rate expectations

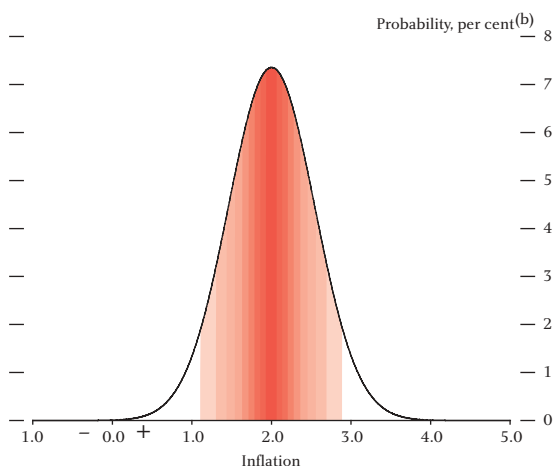
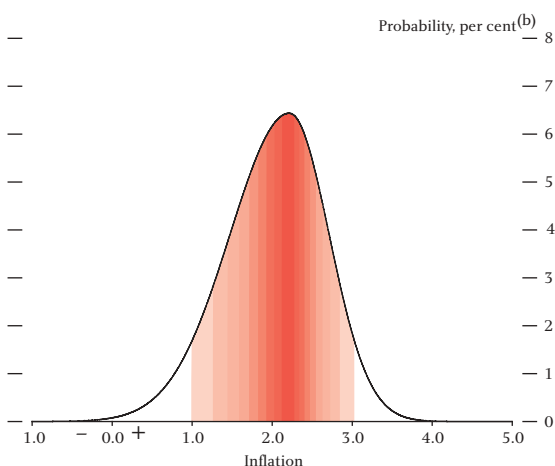
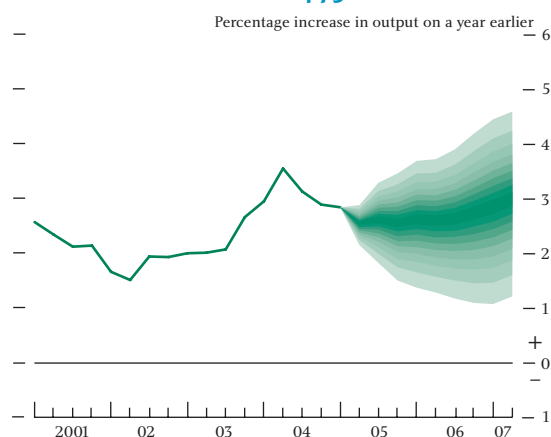


Chart 6.8
February projection for CPI inflation in 2007 Q2^(a)
based on market interest rate expectations



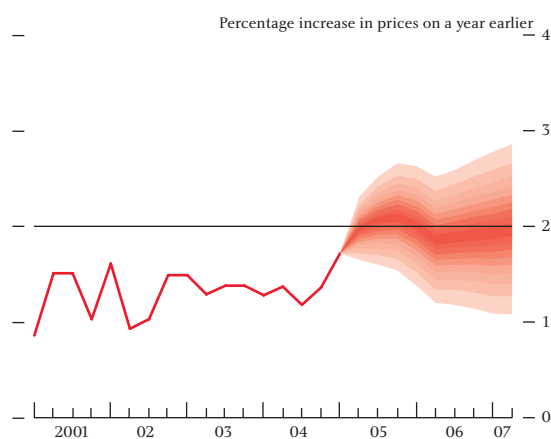
- (a) These charts represent a cross-section of the respective fan charts in 2007 Q2 for the market interest rate projections. The coloured bands have a similar interpretation to those on the fan charts. For further details on how the fan charts are constructed see the box on pages 48–49 in the May 2002 *Inflation Report*. The fan chart widens as the time horizon is extended. 2007 Q2 is nearer to the starting point in the current projection than it was in February so, for a given degree of uncertainty and balance of risks, the spread of possible outcomes in that quarter will tend to be narrower.
- (b) Probability of inflation being within ± 0.05 percentage points of any given inflation rate, specified to one decimal place. For example, the probability of inflation being 2.0% (between 1.95% and 2.05%) in the current projection is around 7%.

Chart 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.⁽¹⁾ The projections for growth and inflation are almost identical to the ones based on market rates. The market yield curve implied a flat profile for official interest rates during the next two years and so is virtually identical to the constant interest rate assumption.

6.7 The policy decision

At its May meeting, the Committee noted that, under the central projection, output growth was set to remain near trend, with inflation close to the 2% target throughout the forecast period. But there were considerable uncertainties surrounding these projections, especially regarding the strength of consumption and the prospects for inflation. In the light of this outlook and bearing in mind the balance of risks, 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 shown only up to two years ahead.

Other forecasters' expectations of CPI inflation and GDP growth

In April, 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). Their views had changed little since the February *Report*.

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

	2005 Q1 ^(b)	2005 Q4	2006 Q4	2007 Q2
CPI inflation ^(c)	1.7	1.9	1.9	1.9
GDP growth ^(c)	2.8	2.5	2.4	2.5
Repo rate (per cent)	4.8	4.8	4.7	4.7
Sterling ERI ^(d)	100.7	99.6	98.2	97.3

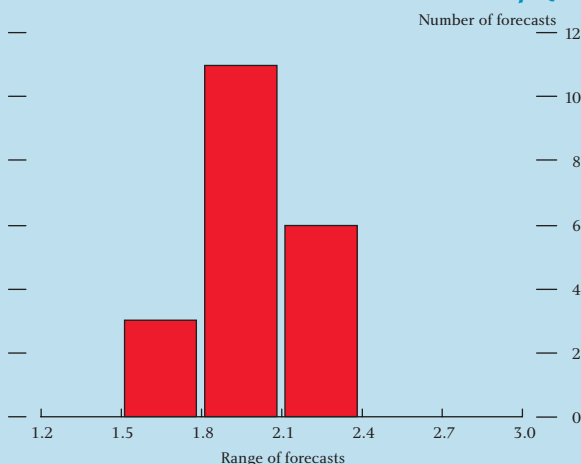
(New index: January 2005 = 100)

Sources: Bank of England, ONS and central projections of outside forecasters as of 5 May 2005.

- (a) For 2005 Q4 and 2006 Q4, 24 forecasters provided the Bank with forecasts for CPI inflation, GDP growth and the repo rate, and 23 gave ERI forecasts. For 2007 Q2, there were 20 forecasts of all four variables.
- (b) Outturns. GDP is the preliminary ONS estimate for chained volume GDP at market prices. The repo rate and sterling ERI are averages of daily values.
- (c) Percentage changes on a year earlier.
- (d) Responses were adjusted to take account of the difference between the old and new ERI measures.

The average forecast for CPI inflation was just below the 2.0% target at the two-year horizon. Over half of the forecasters expected inflation of between 1.8% and 2.1% (see Chart A). And, on average, the external forecasters saw a 58% probability of CPI inflation being at or below 2.0% in two years' time (Table 2).

Chart A
Distribution of CPI inflation forecasts for 2007 Q2



Source: Central projections of 20 outside forecasters as of 5 May 2005.

The forecasters' average central projection was for four-quarter GDP growth to decline modestly from the preliminary outturn of 2.8% in 2005 Q1, to around 2.5% in 2005 Q4 and beyond (Table 1).

And in their view, there was a greater chance that GDP growth would be below 2.0% than above 3.0% (Table 2).

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

	CPI inflation					
	Probability, per cent ^(b)					
	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	3	13	42	32	9	2
2006 Q4	4	14	39	29	10	4
2007 Q2 ^(c)	6	15	37	27	10	5

	GDP growth			
	Probability, per cent ^(b)			
	Less than 1%	1% to 2%	2% to 3%	More than 3%
2005 Q4	4	25	53	18
2006 Q4	7	28	47	18
2007 Q2 ^(c)	9	27	42	22

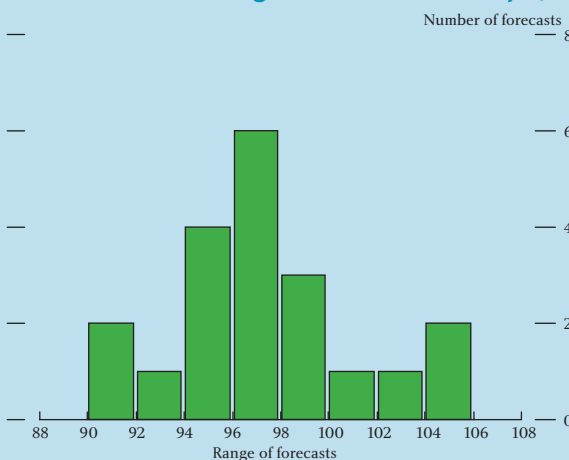
Source: Projections of outside forecasters as of 5 May 2005.

- (a) 24 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 4% 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) 20 forecasters.

The average forecast was for the official interest rate to remain broadly unchanged over the next two years (Table 1).

The external forecasters also expected the sterling ERI to fall over the next two years, reaching 97.3 on average by 2007 Q2 (Table 1). That is a little lower than the profile assumed by the MPC in its central projection. But Chart B shows that the range of views is diverse.

Chart B
Distribution of sterling ERI forecasts for 2007 Q2^(a)



Source: Central projections of 20 outside forecasters as of 5 May 2005.

- (a) Where forecasts were provided for the old ERI measure, they have been adjusted to correspond to the new index.

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Text of Bank of England press notice of 10 March 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 23 March.

Text of Bank of England press notice of 7 April 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 20 April.

Text of Bank of England press notice of 9 May 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 11 May.

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

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.

CML: Council of Mortgage Lenders.

EU: European Union.

FOMC: Federal Open Market Committee.

FSA: Financial Services Authority.

FTSE: Financial Times Stock Exchange.

G10: Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.

GfK: Gesellschaft für Konsumforschung, Great Britain Ltd.

HBF: House Builders Federation.

ICT: information, communications and technology.

IMF: International Monetary Fund.

ISA: individual savings account.

MEW: mortgage equity withdrawal.

MFI: monetary financial institutions.

MPC: Monetary Policy Committee.

ODPM: Office of the Deputy Prime Minister.

OECD: Organisation for Economic Co-operation and Development.

OFCs: other financial corporations.

ONS: Office for National Statistics.

PNFCs: private non-financial corporations.

REC: Recruitment and Employment Confederation.

RICS: Royal Institution of Chartered Surveyors.

S&P: Standard and Poor's.

WTD: working time directive.

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.