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# Inflation Report

TO PAY THE BEARER ON

# May 2004

Bank of England

ROMISE

# **Inflation Report**

# May 2004

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 judgment about the most likely paths for inflation and output, and the uncertainties surrounding those central projections.

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

#### The Monetary Policy Committee:

Mervyn King, Governor Rachel Lomax, Deputy Governor responsible for monetary policy Andrew Large, Deputy Governor responsible for financial stability Kate Barker Charles Bean Marian Bell Richard Lambert Stephen Nickell Paul Tucker

The Overview of this *Inflation Report* is available on the Bank's web site at www.bankofengland.co.uk/inflationreport/infrep.htm. The entire *Report* is available in PDF at www.bankofengland.co.uk/inflationrep/index.html.

# Overview

The global economic upswing has continued and commodity prices have risen. In the United Kingdom, output growth is reported to have eased back in Q1, but business surveys suggest a stronger performance. Consumer spending remained buoyant and house price inflation has picked up further. The recovery in investment has been maintained, though the continued strength of sterling will moderate the impact on net exports of the global upturn. The Committee's central projection, assuming the official interest rate is maintained at 4.25%, is for vigorous GDP growth in the near term, easing back as the forecast horizon approaches. The labour market has tightened and private sector pay growth has edged up. Annual CPI inflation was 1.1% in March. On the central projection, CPI inflation increases in the near term as short-run factors unwind and then continues to move up as pressures on supply capacity build, rising above the 2% target by the end of the forecast period.

#### The international economy

The world economic upswing has continued. The United States experienced above-trend growth in output in the first quarter and higher activity has started feeding through into the job market. The pace of expansion in Japan quickened in Q4, underpinned by strong investment, while rapid growth in China led the expansion in the rest of Asia. By contrast, the revival in the euro area has been muted. Final domestic demand growth continued to be weak there in Q4, and indicators of business sentiment have been mixed. But tax cuts and low interest rates should help to boost demand this year. The Committee expects the global upturn to continue, and the outlook in UK export markets is slightly stronger than in the February *Report*.

The prices of oil and other commodities in both dollar and SDR terms have picked up further since the previous *Report*, reflecting the upturn in global activity, increasing demand from China and, in the case of oil, political uncertainties. But the global recovery has so far not fed through to the prices of other traded goods and services, which continue to be broadly flat. Overall the outlook for international export prices is marginally stronger than in February.

The effective exchange rate for sterling has risen slightly since February, largely reflecting appreciation against the euro. The increase since the start of this year has now unwound part of the depreciation that occurred early in 2003. That will attenuate the beneficial impact of the global recovery on UK net trade, but also offset the impact of higher world prices on UK inflation.

#### Activity in the United Kingdom

In the United Kingdom, GDP growth is provisionally estimated by the ONS to have dropped back to 0.6% in the first quarter, with service sector growth moderating and industrial production declining. That is in marked contrast to business surveys, which point to a broad-based acceleration in activity and overall growth above trend. The Committee places some weight on the latter evidence.

Private consumption grew robustly in the fourth quarter and retail sales data point to faster growth in Q1. House price inflation has risen and indicators of housing market activity point to continuing buoyancy in the near term. The implications of these developments in the housing market for consumption depend critically on three factors. First, the degree to which current house prices, relative to earnings, are above a sustainable level. Second, the nature of any adjustment back to a sustainable level. Third, the impact of movements in house prices on consumption. All three factors are subject to very great uncertainty. Although there are several reasons to suppose that the ratio of house prices to earnings might remain higher than in the past, it is hard to believe that they can account for the full extent of its recent rise. At some stage, therefore, house prices are likely to rise more slowly than earnings. As a result, the MPC's central projection is for house price inflation to slow sharply during the next two years, though house prices may well continue to rise strongly in the near term. The central projection is for consumer spending to continue growing strongly in the near term, underpinned by the strength in house prices, but then to ease as disposable income growth moderates and house price inflation slows.

The ONS measure of public sector output rose sharply in Q4, reflecting both higher spending growth in cash terms and a lower rate of increase in the implied deflator. But, as has been the case for a while, there is considerable uncertainty about the split between volumes and implied prices. A measure that is more relevant to the assessment of inflationary pressure is based on the quantity of resources absorbed by the public sector and that appears to have been growing rather more rapidly in recent years.

Private fixed investment grew strongly in the fourth quarter and revisions to back data now suggest that a steady recovery took place from the Spring of 2003. A pickup in profitability and bright investment intentions indicate that the revival in capital spending will probably continue through this year.

#### Chart 1 Current GDP projection based on constant nominal interest rates at 4.25%



The fan chart depicts the probability of various outcomes for GDP growth in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of probability, until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating 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.

#### Chart 2 Current CPI inflation projection based on constant nominal interest rates at 4.25%



The fan chart depicts the probability of various outcomes for CPI inflation in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of probability. until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating 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 outlook for growth

Chart 1 shows the MPC's assessment of the outlook for four-quarter GDP growth, on the assumption that the official interest rate remains at 4.25%. Under the central projection, output growth picks up to well above trend in the near term, sustained by continued buoyancy in household and government expenditure and the revival in business investment. The rate of expansion then drops back as consumer and public spending growth moderate somewhat. Overall, the outlook for GDP growth is stronger than expected in February during the first year of the projection, but weaker thereafter. The change in profile mainly reflects sharper movements in house price inflation, a higher starting value for investment and lower projected growth in the ONS measure of public sector output.

#### **Costs and prices**

The labour market appears to be tightening gradually. Employment picked up in the three months to February and the unemployment rate fell to its lowest since September 1975, while surveys point to a strengthening in labour demand. Private sector earnings growth increased sharply, largely reflecting an unusually strong contribution from bonuses. Regular pay and settlements have also edged up, consistent with the picture of a somewhat tighter job market, but accelerating productivity limited the impact on unit labour costs.

Higher commodity prices have not so far had a noticeable impact on sterling import prices which remained broadly flat. Manufacturers' input prices were unchanged over the past year, while output price inflation remained steady. Indicators of service sector price pressures have been mixed. Though inflationary pressures have been subdued, the existence of only a modest degree of spare capacity suggests they are likely to increase if output growth remains above trend.

Inflation according to the new target measure of consumer prices (CPI) fell to 1.1% in March. On the previous target measure (RPIX) it was 2.1%.

#### The outlook for inflation

Chart 2 shows the Committee's assessment of the outlook for CPI inflation, also assuming the official interest rate remains at 4.25%. CPI inflation is likely to move up in the near term as falls in petrol prices a year ago drop out of the annual comparison and increases in utility prices take effect. Thereafter, in the central projection, inflation increases gradually as pressures on supply capacity build, moving above the 2% target towards the end of the forecast period. Compared with the February *Report*, the profile for inflation is somewhat

#### Chart 3 Current CPI inflation projection based on market interest rate expectations



higher in the second year of the projection, mainly reflecting the stronger near-term pressures on capacity.

Chart 3 shows the corresponding projection assuming that official interest rates move up in line with market expectations. The rising profile for interest rates dampens growth, leading to a somewhat weaker projection for inflation. The central projection is for inflation at the forecast horizon to be a little above target.

As usual there are considerable risks surrounding these projections. The most significant uncertainty relates to the prospects for house prices and the impact of house price movements on household spending. Relative to the central projection, the Committee judges that the overall risks to growth and inflation are broadly balanced. There is a range of views among members, though the differences are small.

#### The policy decision

At its May meeting, the Committee noted that, at the then official interest rate of 4%, CPI inflation, though currently below the 2% target, was set to move up to above the target by the forecast horizon. The Committee also noted that the central projection, under the assumption that official interest rates follow market expectations, lay a little above target at the forecast horizon. Given that outlook for inflation, the Committee judged that an increase of 0.25 percentage points in the official interest rate to 4.25% was necessary to keep inflation on track to meet the target.

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# Money and asset prices

The MPC increased the official interest rate by 0.25 percentage points to 4.25% on 6 May. Bond yields indicated that market participants' expectations of CPI inflation in the medium term had remained broadly in line with the target of 2%. The sterling ERI has risen further since the February Report, largely reflecting appreciation against the euro. UK monetary aggregates continued to point towards firm nominal demand growth. Household borrowing growth remained high, in part related to past rapid house price increases. House price inflation has risen further.

#### Chart 1.1 Bank of England repo rate and GC repo/gilt<sup>(a)</sup> two-week forward curve(b)



2001 02 03 04 05 A general collateral (CC) reporate is the rate that one financial institution pays to borrow money from another when it effectively offers any gilt as a security against default. The two-week rate implied for a future period by comparison of shorter-term and longer-term interest rates available on a given date. No adjustment is made to allow for the average difference between the two-week GC repo rate and the Bank's official interest rate.

#### Chart 1.2

#### Official interest rates and forward interest rates in major economies(a)



Solid lines are official interest rates. Broken lines represent annualised three-month interbank interest rates implied by futures contracts on (a) 5 May 2004

## 1.1 Asset prices

#### Short-term interest rates

The MPC influences economic activity and inflation by setting the official repo rate-the short-term nominal interest rate at which the Bank of England deals with the money markets. On 6 May, the Committee increased the official repo rate by 0.25 percentage points to 4.25%, the first change since February. That rise had largely been priced into forward market rates. And the forward curve for the GC repo rate on 5 May suggested market participants continued to expect further rises (see Chart 1.1).

Central banks in the United States, the euro area and Japan have left official interest rates unchanged during the past three months. Futures contracts on 5 May suggested that official rates were still expected to increase in the latter half of 2004 (see Chart 1.2). But relative to the path anticipated at the time of the February Report, rates were expected to rise more steeply in the United States and more gradually in the euro area.

#### Government bond yields

Nominal yields on ten-year government bonds rose between early February and early May in the major economies, with the exception of the euro area where yields were little changed (see Chart 1.3). The rise was particularly marked in the United States. There, ten-year real yields also picked up, converging with those in the United Kingdom and the euro area. But relative to the past few years, real yields in these economies remained at low levels.

In the United Kingdom, the difference between nominal yields on conventional government bonds and real yields on





For the United Kingdom, the United States and the euro area, these are estimates of the yields on a synthetic, zero-coupon bond, derived from yields on a conventional bond. But for Japan, these are yields to maturity on conventional bonds.

#### Chart 1.4 **Medium-term inflation expectations**(a)



The implied five year ahead expectations of RPI inflation are derived from the (a) The implied five year ahead expectations of RPI inflation are derived from the difference between yields on nominal and index-linked government bonds. Implied CPI inflation expectations are derived from these RPI inflation expectations and assumptions about differences between RPI and CPI inflation in the medium term. In particular, it is assumed that the effective mortgage rate changes in line with market interest rate expectations, adjusted for the average spread of the effective mortgage rate over the official reportate since 1995; both mortgage debt and housing depreciation grow by 4.5% per year; Council Taxes grow at their average rate is ince 1995; and the use of geometric averaging in the CPI lowers its inflation rate by 0.5 percentage points each year relative to RPI inflation.

#### Chart 1.5

#### Sterling ERI and Consensus forecasts(a)



Sources: Bank of England and Consensus Economics

Consensus sterling ERI forecasts are calculated as a geometric average of bilateral rates against the euro, US dollar, yen and Canadian dollar. These currencies have some 90% weight in the ERI. Sterling ERI and Consensus forecasts plotted on survey dates. The latest survey was on 5 April 2004. (a) (b)

index-linked bonds provides an indication of market expectations of RPI inflation. But certain assumptions are required to infer expectations of CPI inflation. Chart 1.4 shows how five year ahead CPI inflation expectations appear to have evolved since last year, based on the implied expectation for RPI inflation and taking the past as a guide to future differences between RPI and CPI inflation (see the footnote to Chart 1.4). Since the new inflation target was formally announced in December 2003, the derived measure of medium-term CPI inflation expectations has remained broadly around target.

#### **Exchange rates**

The sterling effective exchange rate index (ERI) has appreciated further since the February *Report*. In the 15 working days to 5 May, the sterling ERI averaged 104.6. This is the starting assumption used in the MPC's projections and was 1.7% higher than in the equivalent period leading up to the February Report. That was largely accounted for by a 2.8% rise against the euro. By early May, the sterling ERI had risen by around 7% from its trough in May 2003, reflecting rises against all of the United Kingdom's main trading partners.

Currencies tend to move to equalise the risk-adjusted returns that investors expect to obtain on assets in different currencies. For example, an unanticipated rise in UK interest rates relative to those abroad should lead to an immediate sterling appreciation, other things being equal. That would be followed by a gradual depreciation, entirely offsetting the higher domestic-currency returns investors could now achieve on sterling-denominated assets. So one explanation for sterling's appreciation over the past year is the rise in relative UK short-term nominal market interest rates. But changes in short-term interest rates have tended to be relatively modest, and can account for only a small proportion of sterling's appreciation.

Alternatively, sterling's appreciation could reflect longer-term factors. The May 2003 Report discussed how the depreciation of sterling in early 2003 may have been related to a downward revision to market participants' views of sterling's sustainable real value, as demand prospects in the United Kingdom appeared to weaken relative to those abroad. The subsequent rise in sterling could have represented a reversal of that market judgment. Surveys conducted by Consensus Economics suggest that there has been a rise in the expected value of sterling two years ahead, albeit a more modest rise than that of sterling itself. That is consistent with such an upward revision to market participants' views about sterling's sustainable value (see Chart 1.5).





#### Table 1.A The housing market(a)

	2003				2004	
	Q1	<u>Q2</u>	Q3	Q4	Q1	April
Indicators of transactions						
HBF net reservations (b)	-33	-22	15	14	28	n.a.
Mortgage approvals (c)	102	104	121	131	127	n.a.
Land transaction returns (d	) 120	108	109	109	150	n.a.
Indicators of house price in Monthly percentage changes	<b>flation</b> in hous	ı se pric	es			
Halifax (e) Nationwide	$\begin{array}{c} 1.6 \\ 1.4 \end{array}$	0.8 0.9	$\begin{array}{c} 1.4 \\ 1.1 \end{array}$	1.5 1.5	2.1 1.7	$1.8 \\ 2.1$

Sources: Bank of England, Halifax, House Builders Federation, Inland Revenue and Nationwid

Quarterly data are averages of monthly observations. All data are seasonally (a) (b)

- (c) (d)
- Quarterly data are averages of monthly observations. All data are seasonally adjusted. Percentage balance of respondents reporting more net reservations than during the same month of the previous year. The number of loans approved for house purchase (thousands). The number of transactions in England and Wales registered with HM Land Registry (thousands). The series was formerly known as particulars delivered and is adjusted for the stamp office backlog in 2003 Q4 and 2004 Q1. The published index has been adjusted by Bank staff to account for a change in the method of calculation. (e)

#### Chart 1.7 House prices across the United Kingdom(a)



(a) Calculated from the average of the Halifax and Nationwide indices

Finally, the appreciation may reflect portfolio flows into sterling, perhaps related to changing perceptions of the relative riskiness of sterling-denominated assets or the desire to reduce risk by holding more sterling in a diversified portfolio. Indeed, market intelligence has highlighted the efforts of investors, including some Asian central banks, to diversify their portfolios by buying sterling. Overall, there is no way of discriminating with any certainty between the competing explanations, although the broad-based nature of sterling's appreciation would seem to indicate an important role for UK-specific factors.

#### **Equity prices**

The FTSE All-Share index averaged 2263 in the 15 working days to 5 May, 2.3% above the corresponding average at the time of the February Report (see Chart 1.6). Equity price changes were more modest in the United States and the euro area, although there were marked movements within the quarter, in part related to the Madrid bombings. By contrast, the Japanese Topix gained 13.6%, amid further evidence of renewed economic recovery.

#### The housing market

Housing market activity appears to have picked up in recent quarters, at various stages of the house-buying process.<sup>(1)</sup> Mortgage approvals did fall back slightly in 2004 Q1, but they remained well above the levels of early 2003. House price inflation has also strengthened (see Table 1.A). The Halifax and Nationwide indices suggest house price inflation increased to around 2% per month in early 2004, rising sharply in the North of England and remaining strong elsewhere (see Chart 1.7). The ratio of house prices to average annual earnings rose further above its previous peak in 1989 (see Chart 1.8).

Survey evidence points to further strength in the immediate future. An indication of the near-term outlook is provided by two RICS measures: the average number of residential sales over the past three months; and the average current stock of unsold properties. The ratio of these series can be interpreted as a measure of 'market tightness'—the greater the number of sales relative to the stock of unsold properties, the tighter the market. And the measure does at times appear to lead house price inflation (see Chart 1.9). In recent months, market tightness appears to have increased further.

Some of the increase in house prices may reflect fundamental demand and supply factors that have raised the sustainable level of house prices (see the box on pages 8 and 9 of the

(1) For a discussion of the timing of events leading up to a typical house purchase, see page 7 of the November 2002 Report.

#### Chart 1.8 Ratio of house prices to average annual earnings<sup>(a)</sup>



(a) The house price measure is the non seasonally adjusted Nationwide house price series. The earnings measure is based on New Earnings Survey data and the average earnings index.

# Chart 1.9

#### Market tightness(a) and house price inflation(b)



Sources: Halifax, Nationwide and RICS.

(a) RICS survey measure of average sales per surveyor divided by the average stock of unsold properties per surveyor.(b) Calculated from the average of the Halifax and Nationwide indices.

## Chart 1.10

# Estimated response of new housing supply to a 1% change in house prices



Source: Swank, J, Kakes, J and Tieman, A (2002), 'The housing ladder, taxation, and borrowing constraints,' MEB Series 2002–9, De Nederlandsche Bank, Monetary and Economic Policy Department. <u>August 2002 *Report*</u>). One supply factor is the structure of the UK housing market. As highlighted in the Barker Review of Housing Supply,<sup>(1)</sup> research indicates that the price elasticity of house building is low in the United Kingdom. Supply is estimated to rise less than proportionately to a given increase in house prices. That contrasts with the experience of many other countries (see Chart 1.10).

Demand for housing has been boosted by a number of developments that are unlikely to unwind significantly in the foreseeable future. Sustained low inflation over the past decade should have raised demand for loans, given that the initial burden of debt-servicing is lower as inflation declines (see below). Long-term real interest rates have fallen in recent years. That would have raised house prices by lowering the perceived real cost of owner occupation. And over the past two decades, the number of new households in the United Kingdom has tended to exceed the supply of new housing.

In recent years, a further source of rising demand for property has been investment demand, although its sustainability is perhaps less certain. In 2003 H2, the buy-to-let sector accounted for around 5% of the value of the outstanding mortgage stock and some 7% of new secured loans, according to the Council of Mortgage Lenders. More recently, Bank of England regional Agents have reported further strong investment demand, although there has been evidence of a gradual easing in some regions. Looking ahead, there are doubts as to whether this represents a temporary or permanent shift in demand.

## **1.2 Money, credit and balance sheets**

#### **Monetary aggregates**

Annual growth of narrow money fell back in April (see Table 1.B). But that reflected temporary distortions a year earlier (see page 7 of the May 2003 *Report*). Underlying narrow and broad money growth has remained steady since the February *Report*.

Narrow money growth may simply reflect current demand pressures in the economy. In that case, it could be a useful, timely indicator. But for narrow money to provide reliable signals, there needs to be a stable relationship with its fundamental determinants. In theory, a key determinant of narrow money holdings is the level of interest rates: at low nominal interest rates, the benefit from holding wealth in interest-bearing accounts is low and cash balances should be high relative to consumption (see page 7 of the February 2004

(1) Available at www.barkerreview.org.uk.

#### Table 1.B Monetary aggregates(a)

Percentage changes on a year earlier

	2003 Q1	Q2	Q3	Q4	<u>2004</u> Q1	April
Notes and coin	6.7	6.3	7.8	7.3	7.0	5.6
M0 (b)	6.6	6.2	7.7	7.2	7.1	5.6
M4 (c)	7.4	8.1	6.6	6.9	7.7	n.a.

(a) (b)

Seasonally adjusted. M0 is a narrow measure of money, consisting of notes and coin and bankers' operational balances held at the Bank of England. M4 is a broad money aggregate, equal to holdings by the UK private sector of sterling notes and coin, sterling deposits at UK monetary financial institutions and estimated holdings of sterling certificates of deposit. (c)

#### **Chart 1.11** A shift in narrow money demand(a)



Sources: Bank of England; Mitchell, B R (1988), British Historical Statistics, Cambridge University Press; and ONS.

#### Table 1.C Lending to individuals

4	2003 Q1	Q2	Q3	Q4	2004 Q1
Percentage changes on a year	earlier				
Unsecured lending Secured lending	$\begin{array}{c} 14.5\\ 14.0 \end{array}$	14.4 14.3	13.3 14.7	12.2 14.9	12.2 15.2
Flow as a percentage of house	old inc	ome			
Mortgage equity withdrawal	6.3	6.1	7.0	8.3	n.a

*Report*). Historically, that appears to have been the case (see Chart 1.11). It also appears that the relationship may have been non-linear-a given percentage point reduction in interest rates seems to have had a greater impact on narrow money holdings at very low than at high levels of interest rates.

In the 1980s, however, the relationship appeared to break down. Arguably, that was a period of transition, as cash-saving innovations, such as ATMs, were introduced. During the past ten years or so, there has been a more stable relationship between interest rates and narrow money holdings. And at the current level of nominal interest rates, the continued steady narrow money growth appears consistent with firm nominal consumption growth in the near term.

#### Households

Individuals' unsecured borrowing growth has slowed somewhat over the past year. But annual growth remained high, at over 12%, in the first quarter of 2004 (see Table 1.C). The continued high rates of growth could, in part, reflect past falls in interest rate spreads on unsecured debt. Some of these falls have been driven by increased competition (see the February 2003 Report). But discussions between the Bank of England and major lenders indicate that an increasingly important factor is risk-based pricing: loan rates are becoming more closely related to the perceived creditworthiness of individual borrowers, and that may have spawned an expansion of good-quality loans at more favourable rates of interest.

Secured borrowing by individuals has continued to rise rapidly since the February Report. Annual growth picked up to 15.2% in 2004 Q1 (see Table 1.C), the highest rate for over a decade. As the demand for housing has increased, so have secured borrowing and house prices. In part, that reflects the relatively low cost of borrowing. The effective mortgage ratethe average interest rate paid on the stock of household mortgage balances-declined broadly in line with official interest rates until mid-2003 (see Chart 1.12). Since then, official interest rates have risen. But there was a sharp rise in the take-up of fixed-rate mortgages in 2003, when fixed-rate deals were available at relatively low rates, and a fall in the proportion of mortgages at standard variable rates. As a result, the effective mortgage rate on outstanding borrowing has remained low.

Mortgage equity withdrawal (MEW) represents the part of the increase in secured borrowing that is not spent on improving or enlarging the housing stock. In 2003 Q4, MEW picked up to 8.3% of households' disposable income, the highest on record. The rise in MEW is the net result of the actions of different groups of individuals, who inject or withdraw equity

Data are annual between 1870 and 1991, but quarterly between 1992 Q2 and 2003 Q4. Best-fit curves are illustrative. (a)

#### Chart 1.12 Official interest rates and the effective mortgage rate<sup>(a)</sup>



a) The latest available effective mortgage rate data are for March 2004. The monthly decline in the effective mortgage rate in January 2004 was related, in part, to changes in calculation methods. Further details are provided in the explanatory notes to Table G1.4 of *Monetary and Financial Statistics*, available at www.bankofengland.co.uk/mfsd/current/ms/bkstnote.doc.

#### Chart 1.13 Mortgage equity withdrawal and approvals for further advances



 <sup>(</sup>a) Defined by the ONS as 'Total available households' resources'.
 (b) This includes advances that are spent on home improvements and so are not net withdrawals of housing equity.

in various ways (see <u>pages 8 and 9 of the November 2003</u> <u>*Report*).</u> Since the early 1990s, last-time sellers—such as those inheriting a property, selling it and depositing the proceeds have accounted for around two fifths of gross withdrawals of housing equity.<sup>(1)</sup> But theory suggests that the recipients will tend to spend the proceeds over the remainder of their lifetimes rather than immediately. So this form of equity withdrawal is likely to be accompanied by investment in other assets rather than feeding quickly into consumption.

Other forms of equity withdrawal reflect the deliberate decisions of households to borrow. Withdrawals by households taking out a further loan on their property, for example, appear to have risen steadily in the past few years, but less strongly in recent months (see Chart 1.13). Such advances seem rather more likely to be used for consumption.

The implications for consumption of last year's rise in MEW are not straightforward. There has been little evidence of a sharp rise in the more active forms of equity withdrawal described above. That is consistent with the relative flatness of the saving ratio last year (see Section 2), which indicated that consumption had not grown particularly rapidly relative to disposable income. And it accords with the stability of the household sector's financial balance, as rising debt levels have, in aggregate, been accompanied by increased acquisitions of financial assets by households. Instead, it is possible that the sharp rise in MEW reflects proceeds from last-time sales. These tend to be closely related to house prices. And house prices did rise sharply in 2003. But even so, it is not clear that these rises were sufficiently large to explain the jump in MEW. As such, last year's sharp increase in MEW remains somewhat puzzling.

The overall rise in debt could pose a risk to the consumption outlook, however. Households often have little discretion in making payments on their debt. So for households that face constraints on further borrowing, unexpected rises in interest rates can reduce the resources they have available for immediate consumption.

One way of gauging the potential size of such liquidity effects is to examine how future changes in official interest rates might affect aggregate debt-servicing costs. A simple measure of debt-servicing is the proportion of income required to meet both interest payments and regular principal repayments on mortgages. That does exclude repayments of unsecured debt, the future path of which is highly uncertain. And unsecured debt, like secured debt, has been rising rapidly. But this debt-servicing measure should be illustrative, as secured debt

Holmans, A E (2001), Housing and mortgage equity withdrawal and their component flows: a technical report, Council of Mortgage Lenders. Available at www.cml.org.uk/servlet/dycon/zt-cml/cml/live/en/cml/pdf\_pub\_resreps\_35full.pdf.

#### Chart 1.14 Aggregate debt-servicing costs<sup>(a)</sup>



a) Total interest payments plus regular mortgage principal repayments as a percentage of annual post-tax household income. Over the projection, debt and income are assumed to rise at their average rates of the past two years; and both the ratio of regular payments to debt and the spread between effective mortgage rates and the three-month Libor interest rate are assumed to be constant. Estimates are based on risk-neutral probabilities for the three-month Libor interest rate, implied by option prices on 5 May. These are different to the probabilities rate their average rates for risk. Also, trading in the underlying option contracts with horizons of more than one year is very limited.

#### Chart 1.15 The effect of inflation on debt-servicing costs over the lifetime of a mortgage<sup>(a)</sup>



(a) Debt-servicing costs for a standard repayment mortgage, assuming a real interest rate of 2.5%, real annual income growth of 2% per year, and an initial loan of three times annual earnings. accounts for over four fifths of individuals' total outstanding debt. The path of future market interest rates is also uncertain, but an indication of financial market views about the (risk-neutral) probability of different outcomes for interest rates can be derived from the option prices of three-month Libor market rates.<sup>(1)</sup>

Based on those expectations, Chart 1.14 depicts the estimated probabilities of different future levels of debt-servicing, assuming debt and income rise at their average rates of the past two years. The darkest, central band of the fan chart covers the single most likely case and covers 10% of the probability. Each successive pair of bands covers a further 10% of probability until 90% of the distribution is covered. This does not represent the MPC's best collective judgment about the future. Rather it is a distribution based on some simple assumptions. Nevertheless, the chart suggests that debt-servicing costs may rise over the next two years, perhaps reaching levels last seen in the early 1990s, but not necessarily the level of the previous peak in 1990.

Aggregate debt-servicing costs provide only a partial picture, however. The distribution of that burden—and the extent to which it falls on those who are particularly highly geared is also important. And for secured borrowing at least, debt-servicing costs appear to have become more evenly distributed among borrowers since the early 1990s.<sup>(2)</sup>

In large part, the more even distribution of secured debt-servicing costs reflects the shift to a low-inflation environment. In the United Kingdom, standard mortgages have constant monthly payments over the length of the mortgage, for a given mortgage interest rate. And as a result, real mortgage payments become front-loaded under high inflation (see pages 8 and 9 of the August 2002 Report). This means that an individual borrower's debt-servicing burden is initially high, but high inflation erodes the real value of the debt and so the burden tends to fall rapidly over time (see Chart 1.15). In contrast, low inflation tends to reduce a borrower's initial debt-servicing costs and makes them more even over the length of the mortgage. Given that the stock of secured debt consists of both new borrowing and the borrowing of individuals who have held their mortgage for some time, this means that lower inflation also tends to be associated with a more even distribution of debt-servicing burdens across borrowers.

See Clews, R, Panigirtzoglou, N and Proudman, J (2000), 'Recent developments in extracting information from options markets', *Bank of England Quarterly Bulletin*, February, pages 50–60.

<sup>(2)</sup> Cox, P. Whitley, J and Brierley, P (2002), 'Financial pressures in the UK household sector: evidence from the British Household Panel Survey, *Bank of England Quarterly Bulletin*, Winter, pages 410–19.

#### Chart 1.16 Distribution of debt-servicing costs for new mortgages<sup>(a)</sup>



Sources: Bank of England and CML

Mortgage interest and regular payments as a percentage of annual household income. The scenario for 2003 Q4, under the assumption that official interest rates had risen to 9%, also assumes that variable rates would have risen in line with the change in the official rate; and that fixed and discounted deals would have expired, reverting to the standard variable rate

#### **Chart 1.17** Corporate bond(a) and loan spreads(b)



Sources: Bank of England and Merrill Lynch

- The difference between UK yields on an aggregate index of investment-grade corporate bonds and yields on government bonds. The difference between PNFCs' effective borrowing rate and the (a)
- (b) three-month Libor interest rate

As a result, the burden faced by new secured borrowers is rather less now than in the early 1990s. Interest and regular repayments accounted for around 20% of the income of the median new borrower in 2003 Q4, compared with over 30% in 1990, when aggregate debt-servicing costs previously peaked. Moreover, it appears that interest rates would need to rise dramatically, other things being equal, for the distribution of new borrowers' debt-servicing to deteriorate to that experienced in 1990 (see Chart 1.16). That may provide a better guide to the extent to which high levels of secured debt pose a risk to the outlook for consumption.

Instead, risks to future consumption are perhaps more likely to be related to unsecured debt (as discussed in the February *Report*). For example, some of the past declines in interest rate spreads on unsecured borrowing might reverse if lenders judged the riskiness of unsecured lending to have risen, following the gradual rise in recent years in the proportion of unsecured debt being written off. And that could be of particular concern for non-homeowners, who account for a disproportionate number of those finding their unsecured debt to be a 'heavy burden'.<sup>(1)</sup> But given the modest number of individuals currently in that position, such a development would not necessarily have a large impact on the economy as a whole.

#### **Private non-financial corporations (PNFCs)**

PNFCs' M4 borrowing growth has eased since the February Report. Annual growth fell below 7% in 2004 Q1, compared with rates of around 11% last summer. Total external finance—a broader measure that captures both sterling and foreign-currency borrowing from banks and building societies, as well as equity and bond issuance—was broadly unchanged in Q1. But it has picked up somewhat since early 2003, perhaps consistent with further growth of corporate investment in the near term.

Looking further ahead, theory suggests an important role for the cost of finance in determining investment. Both loan and bond spreads have fallen over the past year (see Chart 1.17). That is consistent with the improving financial health of corporate balance sheets discussed in Section 2. But the decline in corporate bond spreads could also reflect a temporary increase in investors' appetite for risk. If that were to unwind, the role of declining spreads in supporting the investment recovery could prove to be short-lived.

<sup>(1)</sup> Tudela, M and Young, G (2003), 'The distribution of unsecured debt in the United Kingdom: survey evidence', Bank of England Quarterly Bulletin, Winter, pages 417-27

# Demand

Growth in final domestic demand in 2003 Q4 was the strongest for four years, and was broadly based. Household consumption growth was unchanged in Q4, at 0.9%, and strong growth is expected in 2004 Q1. Latest data suggest a more sustained recovery in investment through 2003. Some of the strength in demand in Q4 was met by a sharp increase in imports and possibly a rundown in stocks. *Exports continued to recover at the end of 2003 as overseas demand growth picked up. But consumer* confidence in the euro area, the United Kingdom's largest export market, remained low, restraining demand growth there.

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

Percentage changes on a quarter earlier

	Averag	ges	2003			
	2001	2002	Q1	Q2	Q3	<u>Q4</u>
Household consumption	1.1	0.7	0.0	0.7	0.9	0.9
Government consumption	1.0	0.1	1.0	0.1	0.2	1.9
Investment	-0.4	1.3	-2.0	1.3	1.9	2.4
of which, business	-1.3	0.4	-3.3	0.9	1.3	1.9
Final domestic demand	0.9	0.7	-0.1	0.8	0.9	1.3
Change in inventories (b)(c	) -0.1	0.1	0.0	-0.1	0.3	-0.6
Alignment adjustment (c)	-0.1	0.1	-0.1	-0.4	0.0	0.6
Domestic demand	0.7	0.8	-0.3	0.2	1.2	1.3
Exports	-0.7	-0.3	3.9	-1.9	0.1	1.3
Imports	0.2	1.1	1.4	-2.8	1.3	2.7
Net trade (c)	-0.3	-0.4	0.6	0.4	-0.4	-0.5
GDP at market prices	0.5	0.5	0.3	0.6	0.8	0.9

Chained volume measures. Excludes the alignment adjustment. Percentage point contribution to quarterly GDP growth.

### 2.1 Domestic demand

Final domestic demand grew vigorously, by 1.3%, in 2003 Q4-the fastest growth for four years. That reflected strong growth in all subcomponents (see Table 2.A).

#### **Household consumption**

Household consumption increased by 0.9% in 2003 Q4, the same rate of increase as in the third quarter. Initial indicators suggest that growth strengthened in 2004 Q1. For example, retail sales volumes growth rose to 1.9% in 2004 Q1, from 1.7% in 2003 Q4. And both the MORI and GfK surveys of consumers suggested an increase in confidence in the first quarter.

As discussed in Section 1, house price inflation rose further in Q1, and the level of house prices was high, relative to earnings, by historical standards. There was a similar picture in the late 1980s, but house price inflation then fell back and at the same time households reined in their spending. This section considers whether consumption could also slow sharply in the near future.

Why might the high level of house prices indicate a significant risk to future consumption? Improved expectations of household income can cause consumption and house prices to rise. If the level of house prices, relative to earnings, is unsustainably high, that might indicate overoptimistic expectations. And if those expectations were revised downwards, then there would be a correction to both house prices and consumption. Furthermore, developments in house prices can affect household consumption directly by changing households' collateral and their access to secured finance at

#### Chart 2.1 **Consumption and house prices**











low interest rates. So, if house price inflation were to slow sharply, that might give rise to lower consumption growth by reducing household borrowing.

The correlation between real house price changes and consumption growth has been strong in the past. For example, on the three occasions since 1970 when house prices fell in real terms, consumption also fell (see Chart 2.1). In each of those episodes, the large increases in house prices preceding the crash were accompanied by rapid consumption growth. But in the latest upturn, consumption growth has been more modest. And while real house price inflation has tended to increase since the mid-1990s, consumption growth has tended to slow. That might suggest that the latest increases in house prices have not primarily been driven by expectations of future income growth (see Section 1 for other possible explanations).

Spending on durables (eg cars, furniture and electrical goods) can also give an indication of a change in income expectations. That is because adjusting the stock of durable goods to a new desired level requires a large initial swing in expenditure.<sup>(1)</sup> During the late 1980s, the share of spending on durables increased significantly, and then fell back. Since 1993, the increase in spending on durables has been more modest, and in nominal terms, the current share of spending is only a little above the average since 1963 (see Chart 2.2). So that is further evidence that there has not been a significant upward revision to income expectations in the recent past, especially relative to the late 1980s.

Turning to the effect on spending of changes in households' collateral, data from the Family Expenditure Survey suggest that, in the past, the collateral effect may not have been very powerful. Swings in spending, relative to income, appear to have been at least as large for people living in rented accommodation as for homeowners (see Chart 2.3), even though renters have no housing collateral.

The notion that the recent increases in housing collateral may not have boosted household consumption much seems at odds with the strong increases in household debt, and in particular the rise in mortgage equity withdrawal (MEW). But as discussed in Section 1, a significant part of MEW reflects receipts from last-time sales, which will probably not be used to boost consumption in the short term. And over the past five years there appears to have been little correlation between MEW and spending: consumption has not risen, relative to income, while MEW has increased from zero to 8% of

(1) See Power, J (2004), 'Durable spending, relative prices and consumption', Bank of England Quarterly Bulletin, Spring, pages 21-31.



Chart 2.5 Household saving ratio and financial balance



<sup>(</sup>a) Removes the part of interest income that compensates for the erosion of the real value of wealth by inflation.

households' income. In contrast, in the 1980s, there was a close correlation between consumption and MEW (see Chart 2.4). That is further evidence that house prices have had less of an effect on consumption in recent years than in the late 1980s.

But this argument can be overstated. In the 1990s, the relationship between consumption and MEW may have been hidden by windfall payments. In 1997, the household sector received around £35 billion (or 7% of annual consumption), largely from the demutualisation of some building societies. This money was not recorded as income, but would have been available for consumption. Furthermore, at around the same time the profile of disposable income was affected by the introduction of income tax self assessment, and that may also have affected the ratio of consumption to disposable income. Leaving aside the period between 1997 and 2000, consumption has been on a rising trend, relative to income, since 1995 (see Chart 2.4).

Nonetheless, even taking into account the possible impact of windfalls and tax self assessment, the increase in consumption since 1995 has not been as large as the increase in MEW, and the relationship between the two series has been weaker than in the late 1980s. So although it is likely that house price increases have had some impact on spending, by boosting homeowners' collateral, the impact appears smaller than in the late 1980s.

The flip-side of households' spending behaviour is their saving. The saving ratio in recent years has been low relative to much of the 1990s, and only a little higher than in the late 1980s. That might indicate that spending and borrowing have been excessive, reflecting overoptimistic expectations; particularly as greater life expectancy has raised the cost of providing a pension, perhaps implying a need for a higher saving ratio. But the saving ratio is not comparable between periods with different inflation rates, because when inflation is high it is necessary to save more in order to maintain the real value of financial assets.<sup>(1)</sup> After adjusting for the effects of inflation, the saving ratio and the household financial balance do not appear as low, relative to the past two decades (see Chart 2.5). Furthermore, the combination of greater access to credit and possibly a less volatile macroeconomic environment might mean that households see less need to hold savings as a buffer against unexpected falls in income.

Taking all of the evidence together, despite the strong growth in household borrowing and house prices, it is not clear that the current level of consumption, relative to income, is

See Davey, M (2001), <u>'Saving, wealth and consumption'</u>, Bank of England Quarterly Bulletin, Spring, pages 91–99.

Chart 2.6 Contributions to annual business investment growth



# Chart 2.7 PNFCs' operating surplus, investment and financial balance



unsustainably high. Nor is it necessarily the case that consumption growth must weaken substantially if house price inflation were to slow sharply. In the Committee's central projection, consumption growth is expected to ease modestly over the coming year.

#### **Government consumption**

Real government consumption increased by 1.9% in 2003 Q4, the strongest increase for over two years, reflecting rapid growth in nominal government spending. The rate of increase in the implied deflator slowed sharply in 2003, from 3.7% in 2003 Q1 to 0.7% in Q4. But there remains considerable uncertainty about the split between prices and volumes, as much of the output of the government sector is not marketed, so there are no observable prices (see the box on pages 24–25 for more details).

In the Budget, the plans for total nominal government consumption were almost identical to those published in the *Pre-Budget Report*. The Chancellor also announced plans to increase efficiency in the delivery of public services over the next four years. If successful, these policies will imply stronger growth in real government consumption, for given nominal spending.

#### Investment

Whole-economy investment grew by a healthy 2.4% in 2003 Q4, with reasonably strong increases in housing investment, government investment, and business investment. At the time of the February *Report*, the data suggested that growth had been sporadic in 2003, with falls in the first and third quarters. Revised data now suggest that investment fell more sharply in 2003 Q1, but has recovered steadily since then.

Business investment grew by 1.9% in 2003 Q4, with manufacturing investment up by 5.5% and non-manufacturing investment up 1.5%. Investment by the 'other services' sector, which includes finance, communications, and business services, strengthened through 2003, increasing by 6% in 2003 Q4 on a year earlier. This sector has been the key driver of movements in business investment in recent years (see Chart 2.6).

An important factor that firms take account of when deciding how much to invest is the availability of funds. That includes external capital raised through equity and bond markets, and also internally generated funds. In broad terms, the financial climate has become more supportive of corporate investment with the recovery in equity prices and reduction in corporate

#### Chart 2.8 Business investment and intentions



#### Chart 2.9 Business investment and capital goods orders



(a) Monthly data. Above 50 indicates an increase, below 50 a decrease.

#### Chart 2.10 Stockbuilding and demand growth



 (a) Quarterly growth in GDP less stockbuilding.
 (b) Contribution to quarterly GDP growth (percentage points). Does not include the alignment adjustment. bond spreads since early 2003 (see Section 1). Profitability also increased: private non-financial corporations' (PNFCs') gross operating surplus in 2003 Q4 was 10.2% higher than a year earlier. These factors are likely to have supported investment spending. But partly offsetting that, the level of corporate debt remains high, relative to firms' assets. That implies a greater risk of bankruptcy, if revenues turn out lower than expected. One indication that the level of debt remained a concern to some firms is that the PNFC sector continued to run a financial surplus in 2003 Q4 implying a desire to continue to rebuild balance sheets (see Chart 2.7).

Looking forward, the CBI and BCC surveys of firms suggest that investment intentions strengthened in recent quarters. In the past these have given some guide to future behaviour as measured by the ONS (see Chart 2.8). Contacts of the Bank's regional Agents have also said that they intend to increase capital spending in the coming months. However, not all survey evidence has been positive. The CIPS survey suggested that orders of capital goods fell back sharply through 2004 Q1, and remained low in April. That series has also tracked movements in business investment reasonably well in the recent past (see Chart 2.9). The MPC's central projection is for continued growth in investment this year.

#### Inventories

In volume terms, stocks fell by almost £0.5 billion in 2003 Q4, after increasing by more than £1 billion in the preceding quarter. That sharp change in the rate of inventory accumulation reduced GDP growth by 0.6 percentage points in Q4. It is often the case that stocks bear the brunt of the adjustment when demand growth is unusually strong (see Chart 2.10). One interpretation of the Q4 data is that firms ran down their inventories to meet the growth in demand. That would imply a boost to output growth in the future when firms rebuild their stocks.

But stockbuilding is not measured very accurately. And there is more uncertainty than usual because the ONS is piloting a new method for compiling inventories data. The ONS estimate of aggregate expenditure growth was lower than its estimate for output. The discrepancy, captured by the alignment adjustment (which is used to ensure consistency between expenditure and output growth), was 0.6 percentage points in Q4. That might be because actual stockbuilding was higher than the ONS's initial estimates. Furthermore, if stocks had been run down to meet unexpectedly strong demand growth in Q4, that would usually show up in lower stocks of finished goods held by manufacturers and the distributive trades. But as measured, the fall in stocks was concentrated in materials, fuel, and work in progress.

## The UK current account

The current account of the balance of payments records the outcome of transactions between the UK population and people overseas. The balance of trade flows, as captured by the current account, and of investment flows, as captured by the capital account, are relevant to monetary policy in part because they affect the path of the exchange rate. Taking 2003 as a whole, the UK current account deficit was £18.8 billion, equivalent to 1.7% of annual output. So in aggregate, UK spending exceeded income and that was paid for by a combination of selling assets abroad and increased indebtedness to overseas lenders.

There are measurement problems with these data because not all international transactions are recorded. The current account balance, the capital account balance and net financial transactions should sum to zero: any deficit on the current account must be paid for, in net terms, by increased borrowing or selling assets. One example of measurement difficulties is that in practice this identity rarely holds. In 2002, for the United Kingdom the sum of the three accounts was -£10.5 billion. Another manifestation of missing data is that the measured current account balances of all countries in the world do not sum to zero, as they should. In 2002, as measured, advanced countries ran an aggregate current account deficit of almost \$200 billion with the rest of the world. But the aggregate current account surplus of all other countries was only \$80 billion.<sup>(1)</sup>

Taking the data at face value, between 1950 and 1972 the UK current account tended to be in surplus, averaging 0.5% of annual output. But since the early 1970s, it has generally been in deficit, averaging around 1% of GDP. For the past five years, the deficit has been close to 2% of GDP (see Chart A). There were particularly large deficits in 1974, following the sharp increase in oil prices, and in 1988–90 reflecting excessive demand growth.

The current account summarises four broad categories of international transactions: trade in goods, trade in services, net income flows, and overseas transfers. Chart A shows the balance in each of these categories. In 2003, the goods balance was in deficit equivalent to 4.2% of GDP. This was partially offset by a surplus on trade in services worth 1.3% of GDP, and positive net income flows of 2.1% of GDP. There was a small deficit in transfer payments which include the UK contribution to the European Union budget, aid, workers' remittances and payments to pensioners living abroad.

#### Chart A UK current account



One of the gains from international trade is that it allows countries to specialise in areas where they have a comparative advantage. The United Kingdom has a large deficit in trade in goods. This deficit has tended to increase as those countries with relatively low labour costs have expanded their manufacturing capacity. But in recent years, the goods deficit has been partly offset by surpluses in trade in services and in net income flows. This reflects, among other things, UK expertise in financial services.

Nevertheless, net income flows in 2002 and 2003 were unusually large. Movements in net income can be erratic, because the net figure is the difference between large gross flows in both directions. So there is a risk that net income flows will fall back in the future. That might cause the current account deficit to increase. But it is not clear how large the current account deficit might become if net income flows were to dwindle, as trade flows, exchange rates and other asset prices would also be affected.

Among advanced countries, there has been a large variation in current account positions recently (see Chart B), ranging from Norway which ran a surplus of 13% of its GDP in 2003, to Australia which ran a deficit of 6% of its GDP. Relative to this range, the UK current account in 2003 was actually quite close to balance. That has also been true for the average deficit since 1990.

The persistence of the UK current account deficit suggests that it reflects deep-seated structural factors. These include the demographic structure of the population, productivity growth, the preferences

(1) See Table 25 of the statistical annex of the IMF World Economic Outlook, April 2004.

#### Chart B Current account in advanced economies



Source: IMF.

(a) IMF forecast/estimates from the April 2004 WEO.

underlying savings and borrowing behaviour, and government policies, all relative to other countries. Many of these factors change slowly over time. That is why there was a strong correlation across countries between the average current account position between 1990 and 2002, and the position in 2003 (see Chart B).

Although the UK current account has tended to be in deficit since the early 1970s, there has not been a significant reduction in UK net external assets (see Chart C). The net position, measured in sterling terms, has been more affected by revaluations, due to changes in the sterling exchange rate and equity and bond prices, than by current account flows. For example, since 1998, current account deficits have cumulated to over 10% of annual GDP. Other things

#### Chart C UK net external assets and the current account



(a) The stock of overseas assets held by UK residents valued in sterling, less the stock of UK assets held by overseas residents.

being equal, that would have implied an equivalent reduction in net external assets. In fact, over that period the net asset position, as measured, increased by over 10% of GDP. But, precisely because revaluations can be so large, the net asset position is hard to measure accurately.<sup>(2)</sup>

To conclude, the UK trade deficit in goods was large in 2003. But this was partly offset by surpluses in income flows and trade in services. The current account deficit in 2003 was not particularly large by historic standards or compared with other countries. The current account has tended to be in deficit since the early 1970s, but this has not led to a significant reduction in UK net external assets. Indeed the net asset position was close to balance in 2003.

(2) For a discussion of the trends in the United Kingdom's net external asset position, and the difficulties of measurement, see Burnett, M and Manning, M (2003), 'Financial stability and the United Kingdom's external balance sheet', Bank of England Quarterly Bulletin, Winter, pages 463–75.

#### Chart 2.11 Imports of goods(a)



(a) In current prices.

#### Imports

Since 1999, imports and exports data have been affected by a type of VAT evasion known as 'missing trader intra-community' (MTIC) fraud.<sup>(1)</sup> The fraudulent activity was large enough to affect growth of imports and exports substantially in some quarters (see Chart 2.11 for the impact on imports). But quarterly growth rates in the fourth quarter of 2003 for both imports and exports were not significantly affected by this distortion.

As a result of the strong increase in domestic demand in 2003 Q4, import volumes rose by 2.7%. Consistent with the buoyant growth in consumption and business investment, imports of finished consumer goods and capital goods increased sharply in value terms, but imports of services fell on the quarter.

(1) See the box on pages 18 and 19 of the August 2003 Report for more details.

# Table 2.B Euro-area expenditure components of demand(a)

Percentage changes on a quarter earlier

I	Averages		2003	2003		
2	2001	2002	Q1	Q2	Q3	Q4
Household consumption	0.3	0.1	0.5	0.0	0.1	0.0
Government consumption	n 0.7	0.5	0.5	0.6	0.7	0.4
Investment	-0.5	-0.4	-0.8	-0.3	-0.2	0.6
Final domestic demand	0.2	0.1	0.2	0.1	0.2	0.2
Change in inventories (b)	-0.2	0.2	0.2	0.0	-0.3	0.6
Domestic demand	0.0	0.3	0.4	0.0	-0.1	0.8
Exports	-0.5	0.8	-1.3	-0.8	2.2	0.2
Imports	-1.0	0.8	-0.4	-0.5	1.1	1.6
Net trade (b)	0.2	0.0	-0.4	-0.1	0.5	-0.5
GDP	0.2	0.3	0.0	-0.1	0.4	0.3

Source: Eurostat.

(a) Volume measures.(b) Percentage point contribution to quarterly GDP growth.

#### Chart 2.12 Euro-area GDP and surveys of purchasing managers



Sources: Eurostat and Reuters.

 (b) Weighted average of the PMI monthly indices for manufacturing and services, using the relative magnitudes of value added in industry and services in 2002.

#### Chart 2.13 Euro-area household consumption



Sources: European Commission and Eurostat

(a) Deviation from mean since 1990.

The growth of imports has strengthened since late 2002. But monthly data for imports of goods in January and February suggested a modest slowdown in 2004 Q1. The MPC's central projection is for solid growth in imports this year, reflecting continued robust growth in domestic demand.

## 2.2 External demand and UK exports

#### The euro area

The latest euro-area data suggest that output continued to increase in the fourth quarter, but at a leisurely pace. GDP growth was 0.3% in 2003 Q4, down from 0.4% in the preceding quarter (see Table 2.B). Household consumption remained flat, but investment increased by 0.6%—the strongest increase for over three years. The Q4 data helped to resolve the puzzle of the strong positive net trade contribution in the third quarter. That now appears to have been due to an erratic increase in exports, which was largely reversed in Q4. The net trade contribution in Q4 was -0.5 percentage points: the weakest contribution for over ten years. Looking through erratic movements, the impact on net trade of the appreciation of the euro becomes a little more apparent. On average, the net trade contribution was -0.1 percentage points per quarter in 2003, down from 0.0 percentage points in 2002.

Survey indicators of business activity in Q1 were consistent with modest GDP growth. A weighted average of PMIs (survey indices of business conditions) for the euro area declined between January and March and was little changed in April, but the level remained high relative to the previous three years (see Chart 2.12). The European Commission survey of businesses gave a similar picture. The equivalent survey of euro-area households suggests some recovery in confidence since mid-2003. But the level of consumer confidence remains below average (see Chart 2.13). That probably reflects high unemployment in the euro area, low growth in incomes over the past year, and also concerns about expected reforms to the welfare system, especially pensions. In the MPC's central projection, domestic demand growth is expected to pick up through this year as household confidence continues to recover, partly in response to the low level of interest rates and income tax cuts in Germany and France.

On 1 May 2004, ten countries joined the European Union, taking total membership to 25 countries. The new entrants already had strong trade links with existing members, and so the macroeconomic impact on the euro area as a whole is likely to be small.

#### **The United States**

GDP in the United States increased by 1.0% in the first quarter of 2004 (see Table 2.C), continuing the pattern of strong

<sup>(</sup>a) A level below 50 indicates a decline in activity; above 50, an

#### Table 2.C US expenditure components of demand(a)

Percentage changes on a quarter earlier

	Averages		2003	2003		
	2002	2003	Q2	Q3	<u>Q4</u>	Q1
Household consumption	0.7	1.0	0.8	1.7	0.8	0.9
Government (b)	1.1	0.5	1.8	0.4	0.0	0.5
Private investment	0.0	2.0	1.5	3.7	2.4	1.3
Final domestic demand	0.7	1.0	1.1	1.7	0.9	0.9
Change in inventories (c)	0.2	0.0	0.0	0.0	0.2	0.1
Domestic demand	0.9	1.0	1.0	1.7	1.1	1.0
Exports	0.8	1.6	-0.3	2.4	4.8	0.8
Imports	2.3	1.1	2.2	0.2	3.9	0.5
Net trade (c)	-0.2	0.0	-0.3	0.2	-0.1	0.0
GDP	0.7	1.1	0.8	2.0	1.0	1.0

Source: US Bureau of Economic Analysis. Chained volume measures

Consumption and investment. Percentage point contribution to quarterly GDP growth.

#### Chart 2.14 US GDP and productivity<sup>(a)</sup>



Sources: US Bureau of Economic Analysis and US Bureau of Labor

(a) Output per hour of non-farm business sector

#### Chart 2.15 **US** employment



Relative to mean since 1970 for manufacturing and 1997 for (a)

non-manufacturing Non-farm payrolls. (b)

growth through 2003. Consumption growth remained vigorous, supported by tax rebates. Investment slowed, despite strong increases in profits in recent quarters. Exports outpaced imports, though the net trade contribution was zero.

Throughout the downturn and subsequent upswing in US output growth over the past three years, US firms appear to have achieved unusually strong labour productivity growth (see Chart 2.14). In 2001, jobs were shed at an aggressive rate. Since then employment growth has been weak given the pace of the recovery in output. But employment growth started to pick up in early 2004 according to the non-farm payrolls survey and evidence from business surveys (see Chart 2.15). If the recovery in employment growth is sustained, that should support continued growth in household consumption.

One factor that could dampen consumption in the future is an upturn in inflationary pressure, which could, for example, depress real incomes. The combination of past depreciations in the dollar and upward pressure on world commodity prices (see Section 4) has raised some prices, most visibly petrol. Underlying inflationary pressure may also be strengthening: annual core CPI inflation (which excludes food and energy prices) was 1.6% in March 2004, up from 1.1% in January. Over the next year or so, the MPC's central projection is for US demand to continue to grow vigorously, supported by monetary and fiscal policy.

#### Asia

In Japan, GDP growth was 1.6% in 2003 Q4, and quarterly growth averaged 0.9% in 2003. The strength in Japanese output growth reflected buoyant growth in investment, possibly to support increasing exports to China and other Asian economies. Japanese household consumption growth, as measured by the national accounts, also picked up towards the end of last year. On average, Japanese consumer prices appear to have stabilised, after falling for five years.

China has become an increasingly important destination for Japanese exports over the past decade or so (see Chart 2.16), and the surge in trade between Asian countries has benefited the Japanese economy. The Chinese economy continued to grow powerfully at the turn of the year, with GDP in 2004 Q1 almost 10% higher than a year earlier. A relatively small share of UK exports goes directly to China, but the phenomenal growth in that country has probably raised the demand for UK exports by boosting growth throughout Asia. However, partly offsetting that, the expansion of China's capacity has put greater competitive pressure on some UK exporters. China's growth has affected the United Kingdom in other ways, for

#### Chart 2.16 Importance of China in trade with major economies(a)



Includes Hong Kong, and trade only covers goods. Data labelled as 1990 is for 1991. Data labelled as 1990 is for 1992.







#### **Chart 2.18** UK goods exports and surveys of export orders



Three-quarter centred moving average.

Deviations from averages since 1990. Goods volumes, excluding MTIC fraud, ends in 2003 Q4.

example by putting upward pressure on world commodity prices (see Section 4 for more details).

#### **UK exports**

UK export volumes grew by 1.3% in 2003 Q4, compared with average long-run growth of around 1.1%. But UK imports grew considerably more than exports in Q4, and net trade detracted 0.5 percentage points from GDP growth. Net trade has acted as a drag on the economy in every year since 1995, and the United Kingdom's trade deficit has increased. But, as discussed in the box on pages 16-17, the UK current account deficit increased by less, and was not particularly large as a share of GDP in 2003.

Export growth has recovered steadily from the trough in 2001 as overseas demand has picked up. That is true of exports to most regions (see Chart 2.17). But, to date, export growth to the euro area has been lacklustre, despite the gain in competitiveness UK exporters have enjoyed following the depreciation of sterling against the euro since early 2002.

Measurement of the recent pattern of exports may have been affected by HM Customs and Excise's new data-processing system. As a result the ONS has said that the estimated seasonal adjustment for exports to non-EU countries is more uncertain than usual and is particularly prone to revision. Indeed, monthly trade data for January and February suggested that goods exports fell back sharply in the first quarter, particularly to non-EU countries, including the United States. Survey evidence on export orders has given a reasonable guide to export volumes growth in the past (see Chart 2.18). According to the CBI and BCC surveys, export orders increased sharply in 2003 Q4, and orders remained strong in 2004 Q1.

In the MPC's central projection, the strong export growth in 2003 Q4 is expected to continue this year, supported by the expected recovery in external demand, particularly in the euro area.

# Output and supply

Output growth is reported to have eased somewhat, with GDP rising by 0.6% in the first quarter of 2004 according to the ONS preliminary estimate. But survey data are consistent with a stronger outturn. Employment rose at the beginning of the year, and survey evidence suggests that this has continued in more recent months. Total hours worked have been broadly unchanged for the past three years, as rising employment has been offset by falling average hours. Part of that fall is likely to have been permanent. There is evidence of modest spare capacity in the economy, but the labour market has tightened.

#### Chart 3.1 GDP at market prices and GVA at basic prices<sup>(a)</sup>



Chart 3.2

#### GDP growth estimates(a)



#### 3.1 Output

The output of the UK economy as a whole reflects the sum of all goods produced and services provided by both the private and public sectors. According to the preliminary estimate, gross domestic product (GDP) at market prices increased by 0.6% in 2004 Q1, following a rise of 0.9% in the previous quarter. Gross value added (GVA) at basic prices also grew by 0.6% in Q1. When estimated accurately, the latter gives a better indication of the demand for resources in the economy, and hence the pressure on supply. That is because it excludes indirect taxes and subsidies on products: changes in these do not reflect changes in the actual quantity of goods and services produced. In previous quarters, GVA at basic prices grew a little more slowly than GDP at market prices (see Chart 3.1). But both measures show the same pattern of growth over the past year.

Estimates of GDP growth are often revised as the ONS incorporates new information or, less frequently, adopts methodological changes.<sup>(1)</sup> Chart 3.2 shows all official estimates since 1998 Q3, when the preliminary estimate of GDP at market prices was first published. On average, first estimates of growth have been revised up by 0.1 to 0.2 percentage points over that period.

According to the preliminary estimate, service sector output rose by 0.8% in Q1, following growth of 1.0% in the previous quarter. According to the GDP press release, manufacturing output fell in Q1, the first fall for five quarters. These outturns contrast with more vigorous survey evidence, such as

<sup>(1)</sup> For a discussion of historic revisions to GDP and its components, see Castle, J and Ellis, C (2002), '<u>Building a real-time database for GDP(E)</u>,' Bank of England Quarterly Bulletin, Spring, pages 42–49.

#### Table 3.A Activity measures(a)

Percentage changes on a quarter earlier

	2002 Average	<u>2003</u> Q1	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>2004</u> <u>Q1</u>
GVA at basic prices GVA excluding oil	$\begin{array}{c} 0.4 \\ 0.4 \end{array}$	$0.1 \\ 0.2$	0.5 0.6	0.7 0.8	$0.8 \\ 0.9$	0.6 n.a.
(a) Chained volume m	easures.					

#### Chart 3.3 Public(a) and private(b) sector output



Defined as the public administration, education and health sectors. This includes some private output. Defined as whole-economy excluding the public administration, education and health sectors. This includes some public output. (b)

that from CIPS.<sup>(1)</sup> The BCC and CBI surveys and reports from the Bank's regional Agents also painted a more buoyant picture for GDP growth in Q1 than ONS data. For services, part of the discrepancy may reflect the unusually low response of firms to the ONS's March inquiry for that sector.

Measures of whole-economy output are often used in conjunction with other variables to judge pressures on supply, and hence the implications for UK inflation. But whole-economy output includes the oil-extraction sector. The price of oil is determined in a global market, so it is not closely related to capacity pressures in the United Kingdom. Furthermore, oil extraction is capital intensive, so changes in production will have only small effects on whole-economy labour demand and wage pressure. Excluding oil extraction from GVA may yield a more useful gauge of inflationary pressure in the United Kingdom.<sup>(2)</sup> Oil production in 2003 was weak. That was partly due to maintenance and repair work on offshore platforms, but also reflected the longer-term decline in production. Between 2002 Q4 and 2003 Q4, GVA excluding oil grew by 0.3 percentage points more than the whole-economy measure. Table 3.A shows measures of activity including and excluding oil.

Whole-economy output growth also includes estimates of public sector output, such as health and education. Growth in public sector output has recently outpaced that in the private sector (see Chart 3.3). But measurement difficulties suggest that the official output data could have understated the volume of services provided by the government. And the demand for resources in the economy may have been much stronger than ONS data for government output would suggest. <u>The box on pages 24–25</u> discusses these issues in more detail.

Evidence from a range of surveys indicates that growth in activity is likely to be strong in Q2. The latest CBI Quarterly Industrial Trends and BCC surveys reported high balances for new orders in Q1. And the April CIPS surveys also pointed to further growth in new business and activity.

#### **3.2 Labour and productivity**

#### Labour

In the three months to February, the household-based LFS measure of employment was 183,000 higher than in the previous three months. That was the biggest increase since May 1989.<sup>(3)</sup> By itself, this suggests that firms'

<sup>(1)</sup> The relationship between CIPS and ONS data was discussed on page 22 of the February 2004 Inflation Report.

<sup>(2)</sup> The oil and gas extracting sectors were discussed in a box on pages 26-27 of the August 2003 Inflation Report.

<sup>(3)</sup> Data before May 1992 are currently published on an experimental basis.

#### Chart 3.4 Public and private sector employment(a)



Chart 3.5 Measures of employees



Sources: CIPS and ONS

Workforce Jobs measure: data are for the end-months in each (a) quarter. The distribution and repairs, public administration education and health sectors are excluded. CIPS data are quarterly averages of monthly indices. (b)

#### Chart 3.6 Measures of average hours worked per worker since 1856



demand for labour has increased markedly. But part of that rise may reflect erratic weakness towards the end of last year. By contrast, the employer-based Workforce Jobs measure of employment was stronger in 2003 Q4 than the equivalent LFS data.

The recent strength of public sector spending has been coupled with an increase in employment, relative to the private sector (see Chart 3.4). Private sector employment growth was weak in 2002, before recovering thereafter. Survey evidence from CIPS points to private sector firms having increased employment this year. Chart 3.5 shows the relationship between the CIPS survey and equivalent ONS data. The two measures are positively correlated, so it is likely that employment has continued to rise in recent months. In addition, most surveys of employment intentions rose in Q1, suggesting employment could continue to rise in the short term.

While the number of people in employment has been increasing during the past five years, the average number of hours each person works has fallen. In more recent years this fall in average hours has offset the rise in employment. Total hours worked—a wider measure of labour input than the number of people in employment—have been broadly unchanged since 2001.

Part of the fall in average hours worked is likely to reflect longer-term trends. Chart 3.6 shows the pattern of average hours over the past 150 years or so, using data from several sources. It shows that average hours have fallen over a very long period of time. This suggests that, in general, workers choose to enjoy more leisure as their real incomes rise over time, rather than working longer hours to buy more goods and services. So the recent fall in average hours may be partly a continuation of that trend.

Another explanation for the recent reduction in hours could be the EU Working Time Directive (WTD). That was implemented in October 1998 and limited most employees to working, on average, a maximum of 48 hours per week. Since then, the share of employees normally working more than 48 hours a week has fallen, which could reflect compliance with the WTD. However, the share working between 41 and 48 hours a week has also fallen (see Chart 3.7). That suggests that the WTD can only account for some of the fall in hours. But to the extent that it has had an impact, its effect is likely to persist unless the legislation is repealed or more workers choose to opt out. The WTD also introduced a right to a minimum of four weeks of paid holiday per year from the end of 1999. That has affected measures of actual hours worked

# Measuring the impact of government spending on inflationary pressure

It is common practice to use the growth of real GDP relative to an estimate of trend supply growth to gauge the pressure of demand on inflation. But this practice can in some circumstances be misleading unless the public sector is treated appropriately.

With private sector expenditure, the ONS typically estimates the change in the real volume of goods and services bought by subtracting the change in prices of those goods and services from the change in nominal spending.

The treatment of government expenditure is rather different. In the main, the public sector purchases goods and services from the private sector and employs labour in order to produce services—like health and education—that are provided free at the point of delivery. Real government spending then corresponds to the quantity of services supplied by the public sector, in other words the volume of public sector output.

For about two thirds of government output, the ONS estimates the change in the volume of services directly, for example by counting the number of pupils taught or the number of patient consultations in the NHS. An associated price can then be imputed by dividing nominal spending by the estimated volume of output. For the remaining third, output is assumed to grow at the same rate as the real value of the inputs used to produce it.

But it is particularly difficult to allow adequately for quality improvements in the measurement of public services. For example, if the NHS spends money improving the clinical effect of an operation, the measured output—one operation—would not change.<sup>(1)</sup>

Such measurement issues may be particularly important at the present juncture. Since 1997 Q1, nominal government consumption—spending on services like education, health, defence, law and order and local government, which comprise about a fifth of GDP—has risen by 62%. Over the same period the ONS measure of real spending has risen by just 14%, with the implied price deflator rising 42%. By contrast, the CPI has risen by 10% over that period.

But even if public sector output were measured perfectly for the purposes of estimating GDP, it would not necessarily provide an appropriate guide to inflationary pressures in the marketed sector of the economy. These are determined by the balance between overall nominal spending on marketed goods and services compared to their availability. So in assessing the impact of public spending on inflationary pressure it is more appropriate to consider the quantity of resources that the public sector absorbs and how that affects the ability of the private sector to meet the demand for its goods and services.

A summary measure of the real resources needed to meet the public sector's purchases of goods and services from the private sector can be calculated by deflating the nominal spending on those goods and services by an appropriately weighted private sector price index. And the volume of resources used to meet the public sector demand for labour is just the number of workers employed. But in order to be able to add the two types of resource demands together they need to be expressed in the same units. That can be achieved by converting the spending on public sector employment into a hypothetical quantity of goods and services that these workers would have produced if they had instead worked in the private sector.

Chart A shows the ONS figures for nominal spending and government output together with a preliminary Bank estimate of a resource-based measure that attempts to capture the real value of the resources absorbed by government. The cumulative increase in this measure since 1997 Q1 is 37%, compared with 14% for the ONS measure of government output.

#### Chart A Government consumption measures



The resource-based measure thus suggests that the demand for resources in the economy as a whole has risen rather faster than is implied by the ONS

(1) The methods of recording government output are the subject of an ongoing review led by Sir Tony Atkinson.

estimates of government output and GDP. Of course, that need not imply that inflationary pressures today are any greater, as other factors must have been working in an offsetting direction in order to deliver the inflation actually experienced since 1997.

In making its projections for CPI inflation, the MPC has therefore gauged the likely evolution of the supply of and demand for resources in the economy rather than focusing on the growth in measured GDP.

But in order to produce a projection for the ONS estimate of GDP shown, for example, in Chart 6.1 on page 46, it is also necessary to make some assumption about the evolution of the implied deflator for public spending in order to derive an estimate of the ONS measure of government output. Different assumptions about that path would change the projection for the growth of GDP but would leave the profile for CPI inflation over the forecast period largely unaffected.

#### Chart 3.7 Changes in the distribution of usual hours since 1998 Q3<sup>(a)</sup>



(a) Each bar represents the change in the proportion of all people in employment whose usual hours worked fell within the ranges indicated. The chart is based on LFS microdata.

#### Chart 3.8 Contributions to annual changes in usual hours<sup>(a)</sup>



per week, which include holidays, but not usual hours, which exclude them.

The lion's share of the decline in average hours worked reflects falls across all sectors of the economy. But the shift in the sectoral distribution of jobs has also played a role. Over the past decade, the number of manufacturing jobs in the economy has fallen, while the number of jobs in other sectors, such as distribution, has risen. But employees in the distribution sector usually work fewer hours than in the manufacturing sector. So the change in jobs between sectors has lowered average hours. This can account for a significant amount of the fall in usual hours over the past two years, and around a fifth of the fall since the start of 1998 (see Chart 3.8). Some of the recent falls in manufacturing employment may be due to long-term structural changes in the economy that will not reverse. But they could also reflect the cyclical position of the sector.

Indeed, more generally short-term movements in hours are related to activity. Chart 3.9 shows average hours and GDP growth—the scales are different because hours have been trending down while GDP has been rising over time. Nevertheless, the two series appear to be well correlated, although there was a divergence around the Millennium. That correlation is likely to reflect firms' uncertainty about whether changes in demand are permanent or temporary. In such circumstances, changing hours can be preferable to changing employment when firms face costs in altering the size of their workforce, such as redundancy payments and recruitment searches. In particular, evidence suggests that overtime hours respond most to the cycle.<sup>(1)</sup> So if activity in the UK economy gathers momentum, hours may also rise. But since 2002, indicators such as overtime hours have not responded to the pickup in activity.

See 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 3.9 Average hours and GDP



#### Chart 3.10 Labour productivity measures



Chained volume measure of GDP at market prices divided by (a) Workforce Jobs measure of employment. The Workforce Jobs data are for the end-month in each quarter. Chained volume measure of GDP at market prices divided by LFS

(b) employment

#### Chart 3.11 A measure of labour quality



On balance, the Committee believes that most of the fall in average hours worked since 2000 is due to structural factors. rather than the cyclical position of the UK economy. That implies less spare capacity, and more inflationary pressure, than would otherwise be the case.

#### **Productivity**

The productive potential of the economy depends on the amount of labour and capital employed. But it also depends on the efficiency with which these factors are used, or their productivity. Output per worker is a simple measure of productivity that implicitly incorporates both changes in capital and how efficiently firms use factor inputs.

Growth in output per worker rose sharply in 2003 Q4, based on LFS employment. But that could partly reflect some erratic weakness in the LFS data discussed earlier. A measure of output per worker based on the Workforce Jobs employment measure, which was stronger than the LFS measure at the end of 2003, has been more stable (see Chart 3.10). In recent years, productivity growth has generally been below its ten-year average. Some of that is due to the decline in average hours worked discussed earlier-growth in output per hour worked has been somewhat higher.

Changes in the skill base of workers will affect labour productivity. The February Report noted that the quality of employees is likely to vary: for example, it is possible that workers who are better qualified may be more productive than those who are less well qualified. Ongoing research at the Bank of England<sup>(1)</sup> has calculated a measure of labour quality. shown in Chart 3.11. The measure uses characteristics linked to different levels of productivity, such as education and age, to differentiate between the quality of hours worked. It shows that the average quality of labour has risen over the past decade, but at a slower rate in recent years. Taking this improvement in quality into account implies that firms' effective labour input has risen more quickly than total hours. During the past ten years, around a third of the rise in output per hour can be accounted for by the measured improvement in the quality of labour. And the slower improvement in labour quality in recent years can also account for some of the weaker growth in labour productivity.

The labour quality measure in Chart 3.11 makes an allowance for educational attainment. Employees are also likely to become more productive as they learn job-specific skills. Those effects might not be picked up by the labour

<sup>(1)</sup> This is described in Groth, C, Gutierrez-Domenech, M and Srinivasan, S (2004), 'Measuring total factor productivity for the United Kingdom', Bank of England Quarterly Bulletin, Spring, pages 63-73.

#### Output and supply

#### Table 3.B The mean return to schooling and job-specific experience<sup>(a)</sup>

Industry	Schooling	Job-specific experience
Manufacture of machinery	4.5	0.6
Manufacture of electrical	6.0	1.0
and optical equipment	6.8	1.0
Construction	4.0	0.5
Wholesale and retail	5.4	0.8
Hotels and catering	1.6	0.1
Financial intermediation	5.4	1.2
Business services	6.5	1.4

Source: Kirby, S and Riley, R (2003)

(a) The estimated percentage gain in earnings from an additional year of schooling or job-specific experience.

#### Chart 3.12 Public and private sector output per worker<sup>(a)</sup>



# Table 3.CSurvey measures of capacity utilisation

Percentage balances of firms working at full capacity

	Series	2003				2004
	average (a)	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	$\underline{Q1}$
Services BCC	32	36	35	37	39	37
Manufacturing BCC (b) CBI	32 40	33 29	29 31	36 32	39 33	36 35

Sources: BCC and CBI.

(a) Averages since 1972 for CBI and 1989 for BCC.(b) Includes agriculture, energy and construction.

quality measure. But recent research<sup>(1)</sup> suggests that the return to job-specific experience is far lower than that from schooling: Table 3.B shows results for a selection of industries. These imply that education boosts labour productivity by more than on-the-job learning. So the measure shown in Chart 3.11 may capture most of the improvement in labour quality. In addition, the study finds that investment in information and communication technology raises the return to schooling, but not the return to job-specific skills. That points to these technologies being suitable for general skills. In turn that may make it easier for workers to move between jobs in different industries in the future. That could reduce the degree of mismatch and friction in the labour market, and hence also inflationary pressure.

The sectoral make-up of the UK economy has also affected measures of productivity. In particular, growth in output per worker in the manufacturing sector has outpaced that in private services for much of the past five years. But as manufacturing is declining as a share of the UK economy, its contribution to aggregate productivity growth is getting smaller. Based on Workforce Jobs data, productivity growth in the private sector as a whole has slowed over the past year, but remains higher than in 2001. Measured productivity growth in the public sector has been negative recently (see Chart 3.12). That is because the increase in public sector employment has not been matched by an increase in measured public sector output of the same magnitude. That could reflect difficulties in measuring public sector output, as discussed in the box on pages 24–25.

## 3.3 Capacity utilisation

High levels of capacity utilisation can put upward pressure on costs, for example through higher overtime costs for workers. That might cause firms to raise prices. But while there is spare capacity for firms to use, any upward pressure on prices from strong demand could be partly mitigated.

The pickup in output growth over the past year is consistent with an increase in capacity utilisation. But survey evidence has been mixed. The BCC survey indicates above-average capacity utilisation in both the manufacturing and service sectors, although capacity utilisation eased at the start of 2004. In contrast, the CBI *Quarterly Industrial Trends* survey has pointed to below-average capacity utilisation in manufacturing, albeit rising during the past twelve months (see Table 3.C).

(1) See Kirby, S and Riley, R (2003), 'New technologies and industry variations in returns to skill', in *NIESR Annual Report*, NIESR, page 12.



(a) Responses, weighted by turnover, to the question: 'In relation to current demand, what is your current level of capacity in plant/machinery and labour?'





 (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) Three-month moving average. Data before May 1992 are currently published on an experimental basis.

published on an experimental basis.

#### Chart 3.15 The participation rate<sup>(a)</sup>



In light of this uncertainty, the Bank's regional Agents undertook a special survey on capacity utilisation in February 2004, covering around 230 companies. Overall, the responses suggested that current levels of capital and labour in the United Kingdom were a little more than adequate (see Chart 3.13). And around 60% of firms questioned (weighted by turnover) believed that they could increase output by more than 5% without having to increase the size of their workforce.

The survey appeared to show that there was still a significant degree of spare capacity in the economy. But it is also possible that these responses could, to some extent, be consistent with firms carrying a 'normal' degree of spare capacity. For example, they may want to be able to respond to an unexpected rise in demand. In the short term, this extra capacity would allow firms to raise output without having to hire more workers immediately and buy or rent more machines. However, firms might then try to restore their normal margins of spare capacity. That would increase the demand for resources in the economy, and put upward pressure on costs and prices.

## 3.4 Labour market tightness

Inflationary pressures partly reflect the amount of spare capacity held by firms. But they are also affected by the degree of slack in the labour market. One gauge of that is unemployment. The claimant count unemployment rate was 2.9% in the first three months of 2004, the lowest rate since June 1975 (see Chart 3.14). The LFS measure stood at 4.8% in the three months to February, a similar historical low.

The degree of slack in the labour market is affected by participation—how many of the population are judged to be economically 'active'. The participation rate has risen since the mid-1990s (see Chart 3.15). Some of the rise in participation is likely to reflect the cyclical position of the UK economy. But it could also be due to structural factors. Recent labour market reforms are likely to have had an impact. In particular, the Working Families Tax Credit (WFTC), introduced in October 1999, encouraged people without jobs to move into employment. In April 2003 the WFTC was replaced by the Working Tax Credit (WTC) and the Child Tax Credit (CTC). The WTC extended support to low income workers without children, which could have further raised participation. Participation has also risen among people of retirement age. Part of that is likely to be cyclical, but some of it could reflect concerns about pensions. Other things being equal, higher participation-more labour supply-implies less inflationary pressure.

#### Chart 3.16 Availability of staff



#### Chart 3.17 Vacancies and unemployment



The rise in public sector employment will have restricted the amount of labour available to the private sector, especially with unemployment so low. An apparent tightening of the labour market on this scale would normally be associated with strong earnings growth. But—January's high bonuses aside— private sector pay growth remains low, despite having risen since the middle of last year (see Section 4). In part, this is likely to reflect the public sector recruiting from abroad. The November 2003 *Report* noted an increase in the number of approvals for work permits in recent years, particularly in health and medical services. And migration could have acted to restrain wage growth more generally. The box on page 30 discusses the impact of migration in more detail.

The labour market has been affected by a number of structural changes over the past ten years, as documented in previous *Reports*. These changes have made it hard to gauge the degree of tightness in the market from indicators such as unemployment and activity. Survey measures of staff availability from recruitment agencies provide additional information. Since the middle of last year these have fallen (see Chart 3.16). And in their regular monthly reports from visits to businesses around the country, the Bank's regional Agents have noted that skill shortages have become more pronounced over the same period. Both of these indicate that the labour market has tightened. However, the CBI *Quarterly Industrial Trends* survey has not reported a pickup in skill shortages limiting output.

Can other data shed any light on the degree of slack in the market? Vacancies data are useful for giving an indication of firms' demand for labour. If firms are finding it hard to recruit suitable staff then the stock of vacancies may rise. In order to gauge the degree of tightness in the labour market, vacancies are often compared with unemployment, to provide a measure of the amount of labour available to meet firms' demand.<sup>(1)</sup>

Over the past year, vacancies have risen while unemployment has fallen (see Chart 3.17). This rise in the vacancy to unemployment ratio could suggest that the labour market has tightened. It could also reflect structural improvements in the labour market: the government policies mentioned earlier may have increased the incentives for people to search for work. But on balance, it is likely that at least part of the rise reflects the labour market having tightened over the past year.

# **Migration**

Since 1994, net inward migration has been an important driver of population growth in the United Kingdom. In many cases migrants require visas and work permits. But citizens of the European Union have the right to live and work in the United Kingdom. And since the start of May that has applied to people from the ten new member states<sup>(1)</sup> that have joined the Union.

#### Why do people migrate?

There are many reasons why workers may choose to migrate. A powerful driver can be the financial incentive—individuals may migrate when the expected increase in earnings exceeds the cost of relocation. That expected increase in earnings could reflect differences in job availability, as well as wage levels. But there are a number of other reasons for migrating, such as studying in a foreign country, joining family members, or more generally improving living standards.

Migration is principally measured by the International Passenger Survey. Over the past ten years, a large proportion of net migrants into the United Kingdom have been students (see Chart A). The net number of reported 'economic migrants', defined as those moving for work reasons, is relatively small. However, there are considerable uncertainties around these data.

#### **Chart A**



#### The economic impact of migration

Migration affects demand and supply in the economy. It can add to the pool of available labour for firms: for example, skilled migrants may alleviate shortages in particular sectors such as the NHS. An increase in labour supply from migration is likely to restrain wage growth in the short term, given the amount of labour that firms demand. In turn that would ease inflationary pressure. But the higher population resulting from a net inflow of migrants also engenders more demand for goods and services, such as clothing, food and housing. That would add to inflationary pressure. The balance between these two effects may depend on the composition of migrant flows. Economic migrants are likely to earn more than they spend. In contrast, students are unlikely to make a large contribution to labour supply while they are studying, but they will contribute to demand.

In the long run, inflation is determined by monetary policy, so it will not be affected by migration. However, migration is likely to raise output. That will partly reflect the higher number of workers. But the skill base of the labour force may also increase, for example if foreign students remain in the United Kingdom once their studies are completed. In turn this should lead to higher investment and a larger capital stock, as the marginal product of capital will be higher.

#### The outlook for migration

The net inflow of people to the United Kingdom could continue for some time. The latest long-term projections from the Government Actuary's Department indicate that migration is expected to add around 130,000 a year to the UK population.<sup>(2)</sup> The EU expansion may also raise migrant inflows. Home Office estimates suggest that it could result in between 5,000 and 13,000 immigrants entering the United Kingdom each year.<sup>(3)</sup> Such estimates are intrinsically uncertain, but other evidence also points to the impact of the expansion on the United Kingdom being relatively small.<sup>(4)</sup>

(1) Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic and Slovenia.

(2) These are available at: www.gad.gov.uk/Population/index.asp?dp=Current+projections&subYear=Proceed.

(3) See Dustman, C, Casanova, M, Fertig, M, Preston, I and Schmidt, C (2003), The impact of EU enlargement on migration flows', Home Office Online Report 25/03. The report is available at: www.homeoffice.gov.uk/rds/pdfs2/rdsolr2503.pdf.

(4) See for example Barrell, R, Holland, D and Pomerantz, O (2004), Integration, Accession and Expansion, NIESR Occasional Paper No. 57.

# Costs and prices

Private sector earnings growth picked up sharply at the start of this year, but that reflected unusually strong bonuses, mainly in the financial sector. Excluding bonuses, growth in pay has increased steadily since the middle of last year, but remains low compared with recent history and productivity growth. Oil prices and other commodity prices have risen since the February Report, in part reflecting strong global demand. UK import prices have changed little during the past two years despite movements in exchange rates, but the appreciation of sterling in recent months may push down on import prices further ahead. Manufacturers' input price inflation fell back early in 2004, but output price inflation has been more stable. CPI inflation was unchanged in 2004 Q1 at 1.3%, though within that quarter it fell as low as 1.1% in March.



#### Chart 4.2 Private sector average earnings including and excluding bonuses



There are a number of near-term influences on CPI inflation. The prices of domestically produced consumer goods and services depend on the cost of various inputs, such as labour, and the profit margin added to these costs. Inflation is also affected by the price of goods and services imported from other countries. All of these factors are examined in this section.

## 4.1 Labour costs

Whole-economy earnings growth picked up sharply at the start of 2004. That entirely reflected developments in the private sector (see Chart 4.1). Public sector earnings growth eased. The ONS presents its measures of earnings growth primarily as three-month moving averages. Annual growth in whole-economy earnings was 4.9% in the three months to February, compared with 3.6% in the three months to November. That was the strongest growth since August 2001. Wages are a key element of companies' costs, and can therefore feed through into inflationary pressures. And when considering near-term pressures on CPI inflation, it is likely to be private sector, rather than whole-economy, earnings that are most directly relevant. That is because the goods and services contained in the CPI basket are almost entirely produced by the private sector.

The simple twelve-month growth rate of private sector earnings was boosted by a sharp increase in bonuses in January (see Chart 4.2). Excluding bonuses, private sector earnings growth remained low, although it has picked up steadily since last summer. Bonuses added 4.4 percentage points to private sector earnings growth in January, the largest

#### Chart 4.3 Equity prices and private service sector bonuses



(a) Annual contribution to earnings in the three months to February of each year.(b) Annual percentage change in the FTSE All-Share index at the

Percentage changes on a year earlier 4.5

(b) Annual percentage change in the FTSE All-Share index at the end of the preceding year.

#### Chart 4.4 Wage settlements<sup>(a)</sup>

- 4.0 Public sector 3.5 3.0 Whole-economy Private sector - 2.5 7  $\exists_{0.0}^{2.0}$ 1997 98 99 2000 01 02 03 04 Source: Bank of England wage settlements database, which draws on information from the Bank's regional Agents, the CBI, Incomes Data Services, Industrial Relations Services and Labour Research Department

(a) Twelve-month AEI-weighted mean

#### Chart 4.5 Whole-economy real unit labour costs<sup>(a)</sup> and unemployment



c) Outturns for the two years are virtually identical.

(c) Outtuins for the two years are virtually identic

contribution since the series began in 1997. That reflected strong bonuses in private services, and in particular the financial sector, relative to the previous year. Those financial sector bonuses probably reflected the improvement in financial markets during 2003. In recent years, bonuses have often followed movements in the equity market (see Chart 4.3). But what are their implications for future pay prospects? Bonuses may simply reflect profit sharing of transient income, with little direct implication for future pay pressures. But they may also allow companies to compensate workers for a low regular pay bargain during the previous year. If that were the case, settlements and earnings excluding bonuses might grow more rapidly this year as higher wages become locked in permanently. Private sector settlements in the early part of this year picked up slightly. That continued the trend seen during 2003 (see Chart 4.4). But they remained low. Public sector settlements so far this year have been similar to the previous year. Settlements therefore suggest only moderate near-term increases in earnings growth.

Nominal earnings growth has been very subdued over the past decade, relative to the 1970s and 1980s. Nominal earnings growth contains an element that compensates for expected inflation. And changes to the monetary policy framework in the 1990s have lowered inflation expectations substantially. That should keep nominal earnings growth lower on average.

Real earnings growth also appears to have been weak more recently. Real labour costs—the major part of which are earnings—should rise in line with productivity, on average. But the degree of tightness in the labour market can also have an important cyclical influence. Growth in whole-economy real labour costs was lower in 2002 and 2003 than might have been expected given its relationship with productivity and unemployment during the 1980s and 1990s (see Chart 4.5). That is most likely to be the consequence of improvements in the functioning of the labour market. The February Report highlighted a number of reasons why the level of unemployment consistent with a given degree of wage pressure may have fallen. And increased flexibility in the labour market may also mean that labour supply can respond more easily to fluctuations in demand. That could result from reforms to the domestic labour market, such as the New Deal initiatives and the Working Tax Credit, or more flexible use of labour from overseas (see the box on page 30). Nevertheless, it is possible that the recent weakness in earnings may provide some upward impetus to near-term wage deals as workers try to make up lost ground.

The Chancellor announced in the Budget that the main rate of the National Minimum Wage (NMW) would increase from

#### Chart 4.6 Cumulative growth<sup>(a)</sup> in earnings and the National Minimum Wage



(a) Since April 1999.

(b) Main adult rate.(c) Whole-economy AEI.

#### Chart 4.7 Brent crude oil price



£4.50 to £4.85 in October, an increase of 7.8%. The impact on aggregate earnings is expected to be small. The Low Pay Commission has estimated that, including pay differential effects, the increase might add around 0.2% to the total wage bill.<sup>(1)</sup> But that is slightly larger than for previous increases. This year's increase is above earnings growth, and follows a similar rise last year (see Chart 4.6). So the NMW uplift may put greater upward pressure on total pay than in previous years, as workers across the wage distribution try to unwind the more compressed differentials. Overall, the increasing evidence of tightening in the labour market (see Section 3), and the prospect of strengthening activity, are expected by the Committee to lead to a further pickup in regular pay growth in the near term.

Other labour costs continue to rise rapidly. Non-wage compensation rose by 2.6% in Q4, and was 12% higher than a year earlier. That was almost entirely due to a further sharp increase in contributions to private pension funds. The ONS has noted that pension contributions may currently be overstated.<sup>(2)</sup> But part of these increases is likely to be genuine, and may reflect attempts to reduce pension shortfalls associated with earlier equity price declines. While these contributions are a cost for firms, they are not part of the marginal cost of production-the cost of producing an additional unit of output. And as it is the marginal cost that is important for pricing decisions, the attempts to reduce the pension deficit are not likely to put significant upward pressure on prices. Pension contributions may also have risen due to other factors, however, such as increasing life expectancy or falling annuity rates. These could affect the marginal cost of production if workers manage to bargain for higher overall compensation. But they may just imply weaker earnings growth as the form of compensation is switched. In any case, such changes are likely to be much more gradual.

#### 4.2 Commodity prices

In the 15 working days to 5 May, the price of Brent crude oil averaged a little over \$34 per barrel,  $3^{1/2}$  above the average used as the starting point of the February *Inflation Report* projections. Much of the rise in the dollar price of oil towards the end of 2003 is likely to have been a response to the depreciation of the dollar. But the rise in oil prices since February has been broadly based across all currencies (see Chart 4.7). As well as the rise in spot prices for oil, longer-term futures prices have also risen recently. The MPC

(1) See Low Pay Commission (2004), 'The National Minimum Wage', Low Pay Commission Report for more details, available at www.lowpay.gov.uk/lowpay/the\_national\_minimum\_wage.pdf.

 $www.statistics.gov.uk/about/methodology\_by\_theme/pensions\_review.asp.$ 

See ONS (2004), Discussion note on insurance companies' recording of pension transactions, available at

#### Chart 4.8 Brent oil futures



(a) Average during the 15 working days up to the time at which the MPC finalised its projections.





Source: International Energy Agency.

#### Chart 4.10 Metals prices and world industrial activity



(a) Shown in Special Drawing Right (SDR) terms, an IMF unit of account.

uses the futures curve to guide its central projection for oil prices. Since the November 2003 *Report*, the futures price for delivery at the end of 2006 has increased by around \$3 per barrel (see Chart 4.8). And over the past year it has risen by a fifth. The depreciation of the dollar may explain part of that. But even in Special Drawing Right (SDR) terms—an IMF unit of account that incorporates a basket of major currencies—the increase over the past year has been almost 15%.

The increases in both the spot and futures prices reflect a combination of demand and supply factors. The decision by OPEC on 10 February to reduce its quotas in April is likely to limit further increases in overall supply. Perceived increases in geopolitical risk, and their effect on world oil supply, may also have played a role. The recovery in global activity is likely to have boosted demand. And the rapid expansion of the Chinese economy has been an important new source of demand for commodities. During the past decade, China's demand for oil has increased by 77%, and its share of world demand has increased by a half (see Chart 4.9). It grew particularly strongly in 2003, and that is expected to continue this year.

Non-oil commodity prices have also picked up since the February Report, across all currencies. In sterling terms, The Economist price index has increased by 8.5%. As with oil, the cyclical recovery and the growing importance of China are likely to have been key influences. The prices of agricultural products within the index can often be influenced by supply-side factors, such as poor harvests or the weather, as well as demand. But metals prices tend to track demand developments quite closely (see Chart 4.10). The sharp increases over the past year have been consistent with the recovery in OECD industrial production. And the continued rises in metals prices early in 2004 suggest that world activity has expanded briskly so far this year. China's influence on the world steel market is even larger than for oil. It accounted for just over a quarter of world steel consumption in 2002. Chinese steel consumption doubled in the five years to 2002. And the recent strength of industrial activity in China suggests that such rapid growth has continued.

Oil and other commodities are an input into the production process, and can therefore affect overall costs and inflationary pressures. But their importance for inflation is likely to have diminished over time. Commodities are more important for the production of goods than for services. And the share of goods in the consumption basket has declined significantly over time. Over the past 15 years, the share of goods in the CPI has fallen from around 70% to just over 50%. However, commodities are subject to greater price variation than other

#### Chart 4.11 Import prices and the sterling ERI



Ratio of the implicit UK import price deflator to M6 export prices. M6 defined as Canada, France, Germany, Italy, Japan and the United States. Countries are weighted by their weights in the (a)

sterling ERI.





M6 defined as Canada, France, Germany, Italy, Japan and the United States. Countries are weighted by their weights in the (a) sterling ERI.

#### Chart 4.13 **Contributions to annual manufacturers'** input price inflation



costs so they may still be an important influence on movements in CPI inflation. And they may provide a useful indicator of global inflationary pressures more generally, as changes in world demand feed in to traded commodity prices more rapidly than in to those of other goods and services.

## 4.3 Import prices

UK import prices fell by 0.8% in 2003 Q4, but they have been broadly stable for the past two years. Two key factors drive import prices: price pressures in the countries from which the United Kingdom imports goods and services, and the value of sterling relative to their currencies. Global export prices, proxied by those of the other 'major six' (M6) industrialised economies,<sup>(1)</sup> have also changed little over the past two years. Movements in sterling should lead UK import prices to change relative to global export prices. While this has been the case in previous episodes such as the depreciation following the ERM crisis in 1992 or the substantial appreciation of sterling in 1996-97, recent movements have had little effect (see Chart 4.11). That may be because the later moves were perceived to be transitory.

Global export prices tend to be cyclical. So far they have not responded to the pickup in global activity in the second half of 2003 (see Chart 4.12). But a continued world recovery is likely to put upward pressure on export prices and therefore UK import prices. Nevertheless, the Committee expects the recent appreciation of sterling to attenuate the effect of rising global inflationary pressures on UK import prices to some extent.

## 4.4 Sectoral costs and prices

Manufacturers' input prices fell by 0.3% in the year to 2004 Q1. The turnaround in the annual rate early this year reflected oil prices (see Chart 4.13). But much of this was due to the strength of oil prices a year earlier affecting the annual comparison. Prices of domestically produced inputs have continued to rise rapidly. And the increases in metals prices mentioned earlier have fed through into manufacturers' input prices. But the prices of other imported materials have weakened. That may be an early indication of some impact from the appreciation of sterling, although the prices of these goods have been falling for much of the past few years. Unit wage costs in the manufacturing sector continued to fall early this year. Cost pressures in manufacturing, therefore, appear to have weakened.

Manufacturers' output prices rose by 1.5% in the year to Q1, slightly below the 1.6% increase in 2003 Q4. Although the

(1) The M6 consists of Canada, France, Germany, Italy, Japan and the United States.

#### Chart 4.14 CPI goods prices and producer prices



#### Chart 4.15 Corporate services price index



#### Chart 4.16 Consumer prices



pickup in output price inflation over the past 18 months has been matched by a similar rise in CPI goods price inflation, there remains a substantial difference between the two measures (see Chart 4.14). That is unlikely to be explained by the broader goods coverage of manufacturers' output prices. Output price inflation for consumer goods has also been much stronger than CPI goods inflation. Part of the divergence may be due to the different methods of constructing the indices, in a similar way to the 'formula effect' between RPIX and CPI inflation.<sup>(1)</sup> However, given the variability of the difference, there may be other factors, such as changes in retailers' margins or import prices, that are also playing a role (see Section 4.5). Output prices, therefore, give an incomplete picture of likely near-term developments in consumer goods prices.

In the service sector, the ONS experimental corporate services price index (CSPI) suggested a lower rate of increase in 2003 Q4, rising by 2.9% on a year earlier, compared with 3.1% in the previous quarter. There have also been substantial revisions to that index. The weights of the various components have been updated, and new information on business telecommunications and banking services has been included. The new estimates generally suggest smaller increases than previously thought, particularly around 1999 when the CSPI is now estimated to have fallen (see Chart 4.15). According to the CIPS survey, service sector input and output price inflation picked up early in 2004. Both rose to their highest rates in three years in April.

## **4.5 Consumer prices**

Annual CPI inflation was unchanged in 2004 Q1 at 1.3%, though within that quarter it fell as low as 1.1% in March. Goods prices fell slightly faster in Q1 than in the previous quarter, but services price inflation picked up a little. As a result, the differential between goods and services price inflation widened marginally, after narrowing sharply during the previous year (see Chart 4.16).

CPI inflation has been low relative to the current inflation target for some time. It has been below 2% since May 1998. Understanding why that occurred is likely to be important for inflation prospects. If the factors holding down inflation persist, then it may be less likely to pick up as activity strengthens. Part of the weakness, particularly in the most recent years, is likely to relate to housing costs. RPIX inflation fluctuated around the previous 2.5% target for most of the past six years. But a large part of inflation on that measure was due to the housing component. Monetary policy restrained

(1) See the <u>box on page 36 of the February 2004 *Report* for a description of the formula effect.</u>

#### Chart 4.17 CPI and import prices











<sup>(</sup>a) Component of CPI, which includes new and second-hand cars.

other price rises in order to meet that inflation target. And CPI inflation, which excludes housing costs, mainly captures changes in those other prices.

More generally, the weakness of inflation during the past few years may have reflected weaker activity associated with the domestic and world slowdowns. But inflation was also low in periods of cyclical strength, such as in 1999 and 2000. Annual GDP growth was above trend in 1998, 1999 and 2000, averaging over 3%. And the unemployment rate fell by over a percentage point. Despite this, CPI inflation slowed from 1.6% at the end of 1998 to 0.9% by the end of 2000. That weakness is harder to explain. But are the factors behind it still relevant for the current inflation outlook?

Import prices have generally risen less rapidly than CPI inflation in recent years (see Chart 4.17). Over a fifth of consumption is made up of imported goods and services, suggesting that import prices have helped to keep CPI inflation low. But their role in 1999 and 2000 is less clear. Import price inflation picked up during that period, as CPI inflation slowed. There may have been delayed effects, however, from the sharp falls in import prices in 1997 and 1998, following the appreciation of sterling. If the rise in the exchange rate was initially perceived to be temporary, consumer prices may only have been reduced with a lag. That would imply that the profit margins of retailers and wholesalers had risen and then fallen back. A simple proxy for margins—the profit share—suggests that this did occur in the second half of the 1990s (see Chart 4.18). The appreciation of sterling in 1996-97 may, therefore, have restrained CPI inflation for some years after it occurred. But it is unlikely still to be an influence on inflation.

Other factors may also have influenced the changes in margins, however. The increases in 1996 and 1997 may reflect cyclical factors. But that is unlikely to explain the subsequent declines, given the strengthening in activity during that period. One possibility, though, is that the degree of competition increased. Whether that is still relevant for the current inflation outlook depends on its persistence. Margins cannot be reduced indefinitely, so their effect on inflation can only be temporary. Nevertheless, a structural adjustment may take a considerable period of time. Data on sectoral margins are only available up to 2001. But the whole-economy profit share has picked up in the past two years, suggesting that pressure on margins may have eased more recently. Why might the impact of competition on inflation have been so short-lived? One reason may be in the market for cars. The price of cars fell sharply around the time of the Competition Commission inquiry into the industry in 1999 and 2000. But prices have since stabilised (see Chart 4.19). There may still

#### Chart 4.20 UK and US distribution sector productivity<sup>(a)</sup>



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

(a) Output per employee in the distribution sector.(b) Retail sector only.

be competition effects pushing down on inflation more generally, but unless these increase sharply, inflation should still pick up as activity strengthens.

A more recent negative influence on consumer prices inflation may have been improved productivity in the retail and wholesale sectors. Labour productivity growth in these sectors has been strong during the past two years, averaging 3%. In part that may simply reflect a bounceback from the weakness in 2001. But it may also have been boosted by efficiency gains, such as improved inventory management, similar to those seen in the United States in recent years. US retail sector productivity has been rising rapidly for a much longer period, since the mid-1990s (see Chart 4.20). There may be scope, therefore, for a similar sustained period of strong productivity growth in the UK distribution sector, helping to reduce costs. That could be used to rebuild margins, but competition between firms is likely to mean most of the savings are passed through into lower prices.

Inflation is likely to pick up over the next few months. Utility prices are expected to boost inflation, with larger announced increases for this year than last year feeding through. And petrol prices are likely to make a substantial contribution in the short term. That partly reflects the recent increases in oil prices, but also the effect of falling prices a year earlier dropping out of the annual comparison.

# Monetary policy since the February Report

This section summarises the monetary policy decisions taken by the MPC since the February Report.<sup>(1)</sup> The Bank's repo rate was maintained at 4.0% in March and April. It was increased to 4.25% at the MPC's meeting in May.

The MPC's central projection in the February *Report* was for CPI inflation to move up in the middle of this year. Thereafter, it was expected to continue to edge up to the 2% target as growing pressures on supply capacity were projected to add to a modest rise in import prices. Output growth was projected to pick up further above trend in the near term and to ease back subsequently.

At its meeting on 3–4 March, the Committee noted that world activity was perhaps a little weaker than had been expected in February. Though the US recovery was broadly on track, the latest euro-area data were softer than anticipated. Growth in Asia remained robust.

The main news for the UK economy was the marked appreciation of sterling, which would weaken the prospects for net trade, and the stronger recent picture of domestic demand, together with continued strength of retail sales growth and a buoyant housing market. Overall, a steady pickup in CPI inflation towards target remained in prospect, as the gap between actual and potential output closed.

Committee members gave different weights to arguments for raising the repo rate. UK final domestic demand growth seemed likely to continue to be stronger than previously thought, reinforcing the expected gradual build-up in inflationary pressure. The pickup in house price inflation and the continued rapid accumulation of household debt increased the probability of an eventual abrupt adjustment. An immediate increase in the repo rate might reduce such risks.

Though the decision was finely balanced for some members, for most there was a good case for not changing the repo rate. The news since February was unlikely to raise the Committee's

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*.

central projection for inflation materially. To increase the repo rate would be a surprise, which might generate further upward pressure on sterling. Inflationary pressures could be expected to build over the forecast horizon, but had not yet done so sufficiently to warrant a further repo rate increase.

The Committee voted unanimously to maintain the repo rate at 4.0%.

At the time of the Committee's meeting on 7–8 April, the world economic recovery appeared to be on track, although the picture was patchy. US indicators for the first quarter had perhaps been a little softer than expected, but Asian indicators had been stronger. Growth in the euro area this year appeared to be broadly consistent with expectations at the time of the February *Report*.

Sterling had strengthened again and UK output had been weaker than expected. But the labour market appeared to be gradually tightening and the housing market had been unexpectedly robust. Uncertainty about the past and future impact of housing market developments on consumption and aggregate demand was considerable. Though the news was mixed, the broad economic outlook had probably not changed much since the February *Report*.

The Committee discussed a number of arguments for increasing the repo rate. Some of the downside risks to UK inflation and US consumption growth had diminished. A rate rise would not be a major surprise in financial markets and might help to discourage unsustainable rates of house price inflation, reducing the risk of a sharp correction to the housing market and consumption later.

The Committee also considered arguments for maintaining the repo rate, to which most members attached more weight overall. Although it would be appropriate to withdraw some of the monetary stimulus in due course, the news since the February Report suggested little change to the inflation projection at that time. For some members, certain downside risks to inflation had increased. Euro-area domestic demand showed little sign of increasing at the pace that would be necessary by the second half of the year to be consistent with the Committee's projections, and geopolitical risks to world demand might have increased. Inflation expectations remained firmly anchored to the target, reducing the risks of delaying any further move in interest rates. Finally, the May Report would provide an opportunity to evaluate the mixed economic news, reconsider some of the unresolved economic issues and explain the Committee's thinking.

Eight members voted to maintain the repo rate at 4.0%. One member preferred an increase of 25 basis points.

At its meeting on 5-6 May, the Committee voted to increase the repo rate to 4.25%.

# **Prospects for inflation**

In the MPC's central projection, conditioned on a constant interest rate of 4.25%, continued short-term strength in GDP growth is supported by final domestic demand, in particular household consumption. But a deceleration of household spending helps to slow activity later in the forecast period. CPI inflation is likely to rise from its current low levels. For the near-term projection, that reflects one-off boosts from utility and petrol prices. But pressures on supply are likely to increase, so that CPI inflation rises to above the 2.0% target at the two-year horizon.

#### 6.1 World economic activity

Developments in the rest of the world have an important impact on the demand for UK goods and services—the United Kingdom exports around a quarter of its output.

#### The euro area

The euro area is the United Kingdom's biggest overseas market. Euro-area GDP growth in 2003 Q4 was 0.3%, somewhat lower than the MPC expected at the time of the February *Report*. Nevertheless, the MPC expects euro-area GDP growth to continue its revival during 2004 and 2005. The recent depreciation of the euro and the pickup in activity in the rest of the world are likely to provide some positive stimulus to euro-area net trade. Tax cuts and low interest rates are likely to bolster domestic demand. Compared with the February *Report*, the outlook is for slightly stronger GDP growth in 2004, but marginally weaker thereafter.

#### **The United States**

GDP in the United States grew by 1.0% in 2004 Q1. Surveys and official payrolls data point to an improving labour market, which should underpin household income growth and consumption. Business investment is likely to grow rapidly in 2004 as firms take advantage of temporary investment allowances currently due to expire at the end of the year. Much of that growth represents firms bringing forward investment plans, so 2005 may witness a deceleration in capital spending. The MPC believes that US GDP is likely to increase at a rate well above trend this year. But, as expected in February, growth is likely then to ease back, as the impetus from the present accommodative monetary and fiscal policies diminishes.

# 6

#### Asia

In Japan the outlook is somewhat brighter than expected in February. Japanese GDP grew by 1.6% in 2003 Q4, well above expectations and the highest quarterly rate since 1990 Q2. Some of that strength was likely to have been erratic, but some will probably persist in the near term. In the rest of Asia—a much bigger market for UK exports than Japan—recent economic activity has also been stronger than anticipated, mainly in China and India, and growth there is expected to continue at a rapid rate.

#### **UK overseas markets**

The United Kingdom's export markets are likely to expand during the next two years at a reasonably vigorous pace. It is a slightly stronger outlook than the one that formed the backdrop to the MPC's February projection for UK output growth and CPI inflation.

#### 6.2 UK output and expenditure

#### **Household consumption**

Household consumption increased by 0.9% in 2003 Q4, the same rate as in the third quarter, and above its long-term average of 0.7%. More recent indicators are consistent with continuing near-term strength. Retail sales volumes grew briskly in Q1, while the growth rates of notes and coin and households' bank deposits have remained firm. Although unsecured credit growth eased, it maintained a rapid pace in the first quarter of 2004. House price inflation rose further, and by more than the MPC expected in February. Real income growth probably remained strong. Growth in mortgage borrowing also increased. Taken together, these data imply greater near-term momentum for household spending and house prices than anticipated in February.

The extent to which this momentum will be maintained depends critically on three factors. First, the degree to which current house prices, relative to earnings, are above a sustainable level. Second, the nature of any adjustment back to a sustainable level. Third, the impact of movements in house prices on consumption. All three factors are subject to very great uncertainty.

The ratio of house prices to earnings has risen very sharply during the past three years and is well above its long-run average. There are several reasons why some of that rise may be sustainable in the longer term. First, lower long-run real interest rates have boosted the demand for housing services. Second, under high inflation, the heavy burden of real payments in the early years of a mortgage discouraged people from borrowing. Low inflation spreads the load more evenly over the lifetime of the loan, so making people more willing or able to borrow. Third, the rate of household formation has tended to exceed the limited response of housing supply, which has helped to support rising house prices. Nevertheless, it is hard to believe that these factors can account for the full extent of the recent rise in the ratio.

House prices are, therefore, likely to rise, at some stage, by less than earnings. That could come about in a variety of ways. On the one hand, the adjustment could occur rapidly, with house prices falling back relatively quickly to a sustainable level. On the other hand, house prices could continue to rise, but by less than earnings for an extended period. The outcome is likely to depend upon the macroeconomic environment and the nature of any trigger that might precipitate the adjustment. The MPC's central projection is for house price inflation to slow sharply during the next two years, though house prices may well continue to rise strongly in the near term.

House price inflation and consumption growth are affected by many of the same factors and have tended to move together over a long run of years. Because the supply of housing changes only slowly, price movements tend to reflect shifts in demand. Increased demand for housing services often reflects improved expectations of household incomes, increased job security, or reduced uncertainty about the future more generally. Those same factors are also likely to cause consumption to rise. Additionally, higher house prices can provide a direct stimulus to consumption by raising the value of housing collateral, thus facilitating more or cheaper borrowing. But the relationship between house price inflation and consumers' expenditure does not appear to have been as strong recently when compared with most of the past 30 years. That may be because expectations of higher income growth have not been a key factor behind the current upturn in the housing market, and also because consumers have not been using mortgage equity withdrawal to finance additional consumption to the extent that they had before. Furthermore, some of the recent demand for housing could have reflected an investment motive, which may have helped to change the relationship between house prices and consumption. The weaker association between house prices and consumption in the past few years has led the MPC to judge that the relationship may also be less strong in the future when house price inflation slows.

During the next two years, the central projection is for household spending growth to slow, easing to a little below its long-run average. That reflects both weakening real income growth and a slowdown in house price inflation. Nevertheless, the deceleration in consumer spending is quite gradual, even though house price inflation slows sharply. The profile of consumption growth is higher in the first year of the forecast than in the February projection. But thereafter it is marginally weaker than expected three months ago.

#### **Business investment**

Business investment grew by 1.9% in 2003 Q4, and revisions to back data now suggest that a steady recovery took place from Spring 2003. Realised profits are a cheaper source of finance than borrowed money, and may be indicative of the returns on new investment projects. So profitability can be a guide to future investment trends. The share of profits in GDP has increased and the rate of return in 2003 Q4 for the non-oil corporate sector was at its highest level since 1999. The CBI and BCC surveys record that investment intentions have risen during the past year, and reports to the Bank of England's regional Agents also indicate that companies intend to increase capital spending in the coming months. The moderate recovery in business investment looks likely to continue, with higher growth in the first year, but lower growth in the second than in February's projection.

#### **Government expenditure**

By convention, the MPC assumes, in forming its projections, that nominal government spending will grow broadly in line with the Chancellor's plans. The latest plans were announced in the Budget and were very similar to those in the *Pre-Budget Report*, and hence to those embodied in the MPC's February projection.

Although nominal public spending has grown rapidly over the past few years, the ONS has recorded slow growth in the volume of public sector output, which is part of real GDP. But, as explained in the <u>box on pages 24–25</u>, in assessing the impact of public spending on inflationary pressures in the marketed sector of the economy, it is the scale of the resources that are absorbed by the public sector, rather than the output produced with those resources, that is material. And a preliminary Bank estimate of the government sector's demand for resources has been growing more rapidly in the past few years than the ONS volume measure of public sector output.

Though the reported level of government output in the National Accounts is not the appropriate measure for assessing inflationary pressures, an assessment of its likely evolution is necessary in order for the MPC to project GDP growth. As the box on pages 24–25 also explains, the ONS

#### Chart 6.1 Current GDP projection based on constant nominal interest rates at 4.25%



The fan chart depicts the probability of various outcomes for GDP growth in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of probability until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating increasing uncertainty about outcomes. See the box on pages 48–49 of the May 2002 *lnflation Report* for a fuller description of the fan chart and what it represents. faces considerable measurement difficulties in estimating government output. Those difficulties may help to explain the recent slow growth in the reported volume of public sector output and the correspondingly rapid rate of increase in the implied price deflator. In this forecast, the Committee has incorporated a somewhat higher rate of increase in the implied government deflator than in the February projection; that means that government output growth is projected to be somewhat slower.

#### Net trade

The effective exchange rate for sterling—an important influence on UK trade flows—has risen significantly since the start of this year, unwinding part of the depreciation that occurred early in 2003. In the 15 working days to 5 May, the sterling ERI averaged 104.6, the starting point used in the MPC's central projection. That was 1.7% above the equivalent value used in its February projection. Using the MPC's conventional approach,<sup>(1)</sup> sterling is assumed to depreciate to 101.4 by 2006 Q2, above the path assumed in the February *Report* throughout the next two years. A higher value for sterling would normally act as a brake on the growth of UK exports. But other countries' export prices are also likely to be above the level projected in February. That offsets the impact of sterling's appreciation on UK competitiveness within the forecast.

The measurement of the recent pattern of exports may have been affected by HM Customs and Excise's new data-processing system, but survey evidence on orders is consistent with continuing export growth. In the MPC's central projection, exports are expected to grow at a healthy pace throughout the next two years, as the recovery in the world economy continues to boost demand for UK goods and services. But import growth is also expected to pick up, reflecting the strength of domestic demand, so that net trade makes a negative contribution to GDP growth in both calendar years covered by the central projection. If that were to happen, it would mean that net trade had acted as a drag on annual GDP growth for ten consecutive years. The likely profile for net trade is weaker than in the February *Report*.

#### The outlook for GDP

The Committee's latest projection for four-quarter GDP growth is shown in Chart 6.1. It is based on the assumption that official interest rates are maintained at 4.25%. The ONS provisional estimate for growth in the first quarter was 0.6%; other evidence, such as business surveys and reports from the

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

Bank's regional Agents, is consistent with a higher figure. The MPC has put some weight on this latter evidence. Recent survey data also suggest that strong growth is likely to persist in the near term. Household spending is the main influence supporting above-trend GDP growth through 2004. Then, as private consumption and public spending growth slow, GDP growth eases back. The outlook is for slightly faster GDP growth in the near term compared with February, because of the higher consumption profile. But growth is projected to be slower further out, reflecting weaker consumption and investment, together with the MPC's change of judgment about the likely future path for real government expenditure, as measured by the ONS.

#### 6.3 The outlook for inflation

The prospects for CPI inflation are influenced by international and domestic factors. World commodity prices have continued to rise rapidly, reflecting the current and anticipated global recovery. In particular, the price of oil has risen sharply since the February *Report*, partly because of political uncertainties. Export prices in the major industrial countries have shown virtually no reaction to the turnaround in world economic growth, having been largely flat for the past two years. But the MPC believes that they should begin to pick up as the world economic recovery is consolidated.

The future path for UK inflation also depends on the balance between demand and supply in the domestic economy. Recorded growth in the UK economy has been reasonably strong over the past twelve months. If the ONS measure of real government spending were replaced by a measure that captured the growth in the government sector's use of resources (see the box on pages 24–25), the demand picture would have been even more buoyant. There is considerable uncertainty about the level of potential supply in the economy, but it seems likely that the margin of spare capacity is small.

That judgment is supported by evidence from the labour market where underlying earnings pressures have been building, but only gradually. Rising participation rates and inward migration have in part helped to meet growing labour demand. The MPC believes that participation is likely to rise further during the next couple of years, adding to the pool of spare resources from which employers can draw. But average hours worked have been falling in recent years, and the MPC has assessed that much of this represents a longer-term trend that will continue over the forecast period. Further inward migration may provide some extra opportunities for employers seeking to recruit. The prospect of buoyant private sector output growth in the first year of the projection and continued

#### Chart 6.2 Current CPI inflation projection based on constant nominal interest rates at 4.25%





The fan charts depict the probability of various outcomes for CPI inflation in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of probability, until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating 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.

high growth in the government's demand for resources means that the labour market may begin to encounter supply limits. And so upward pressure on earnings growth is likely to build further.

Price and cost inflation throughout the supply chain has been reasonably subdued-consistent with few binding domestic capacity constraints. Annual CPI inflation was unchanged in 2004 Q1 at 1.3%, though within that quarter it fell as low as 1.1% in March. The Committee's projection for CPI inflation is presented in Chart 6.2, conditional on the assumption that official rates are maintained at 4.25%. It is shown alongside the corresponding projection in the February Report, which was based on constant interest rates at 4.0%. Inflation is likely to pick up over the next few months. Utility prices are expected to give a temporary boost to the twelve-month inflation rate during 2004 and into 2005, with announced increases for this year larger than last year. And petrol prices are likely to push up the near-term profile for CPI inflation. In part, that reflects the recent increases in oil prices, but also falls in petrol prices a year ago dropping out of the annual comparison. The economy is projected to move from a position just below its potential level to one where it is somewhat above throughout most of the forecast period. As a result, underlying inflation is also likely to start climbing, so that actual CPI inflation is somewhat above the 2.0% target rate by 2006 Q2. Compared with the February Report, inflation is lower in the first year. That partly reflects the higher value of the sterling exchange rate. Moreover, the

#### Chart 6.4 Current CPI inflation projection based on market interest rate expectations



#### Chart 6.5 Current GDP projection based on market interest rate expectations



#### Table 6.A Market expectations of the Bank's official interest rate<sup>(a)</sup>

Per ce	nt							
2004			2005				2006	
Q2	Q3	<u>Q4</u>	Q1	Q2	Q3	Q4	Q1	Q2
4.2	4.5	4.6	4.7	4.8	4.8	4.9	4.9	5.0

(a) Based on the interest rate available on gilt-edged securities, including those used as collateral in short-term repo contracts, plus a small upward adjustment to allow for the average difference between this rate and the Bank's official interest rate. The data are 15-day averages to 5 May 2004.





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

lower-than-expected recent outturns for CPI inflation contained some news about likely near-term weakness. The projection for CPI inflation in the second year is steeper than it was in the February *Report* as pressures on supply are expected to build more intensely during the next twelve months.

# 6.4 Projections based on market interest rates

The Committee's projections for CPI inflation and GDP growth conditioned on an estimate of financial markets' expectations for official interest rates are shown in Charts 6.4 and 6.5 respectively. That estimate of interest rate expectations, shown in Table 6.A, has been constructed from the 15-day averages of interest rates on government securities of the appropriate maturity. These expectations were formed before the Committee raised rates on 6 May, but that rate rise was largely priced into market expectations. According to these estimates, the official interest rate increases to 4.6% by 2004 Q4 and to 4.9% by the end of 2005. These imply earlier increases in rates than the equivalent estimate implied in the February *Report*, and a slightly higher level by the end of the projection.

The profile for GDP growth in Chart 6.5 is marginally lower than in the constant-rate version. Lower consumption and investment growth—resulting from the rising path of interest rates—accounts for much of the difference between the two GDP projections. The slightly weaker profile for private sector demand and a marginally higher value of the sterling ERI result in the lower profile for CPI inflation in the market rate chart. Even so, the inflation projection based on market rates is still a little above the 2% target rate at the two-year horizon.

#### Chart 6.7 The MPC's expectations for GDP growth based on constant nominal interest rates at 4.25%<sup>(a)</sup>



(a) These figures are derived from the same distribution as Chart 6.1. They represent the probabilities that the MPC assigns to GDP growth lying within a particular range at a specified time in the future.

## 6.5 Risks around the central projection

The central projection is only one of many possible outcomes and the prospects for output growth and inflation are, as always, uncertain. The fan charts illustrate the Committee's best collective assessment of the likelihood of possible outcomes, including judgments on the principal risks to the outlook. The width of the fan charts indicates how uncertain the Committee is about the prospects for the economy. There has been little change to the level of the MPC's uncertainty about the outlook for GDP growth and inflation since February.

The main risks around the central projection relate to the outlook for the world economy, the prospects for earnings, the degree of pressure on potential supply and, in particular, the prospects for house prices and consumption.

The best collective judgment of the Committee is that the risks to the central projection for both GDP growth and CPI inflation are broadly balanced. The probabilities of various outcomes for CPI inflation and GDP growth are set out in Charts 6.6 and 6.7. The overall balance of risks to the inflation outlook at the two-year horizon is shown in Chart 6.8, alongside the corresponding balance in February. Given the many uncertainties in the outlook, Committee members hold slightly different views on the most likely path for inflation and on the overall balance of risks.

#### Chart 6.8 Current projection for the percentage increase in CPI in the year to 2006 Q2<sup>(a)</sup>



#### Chart 6.9 February projection for the percentage increase in CPI in the year to 2006 Q1<sup>(a)</sup>



Source: Bank of England.

- (a) These charts represent a cross-section of the fan chart at the end of the respective forecast periods for the constant interest rate projections. As with the fan charts themselves, the shaded areas represent 90% of the distribution of possible outcomes for CPI inflation in the future. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands covers a further 10%. There is judged to be a 10% chance that the outturn will lie outside the shaded range. For further details on how the fan charts are constructed see the box on pages 48–49 in the May 2002 Inflation Report.
- (b) Probability of inflation being within ±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 6%.

# 6.6 The policy decision

At its May meeting, the Committee noted that, at the then official interest rate of 4%, CPI inflation, though currently below the 2% target, was set to move up to above the target by the forecast horizon. The Committee also noted that the central projection, under the assumption that official interest rates follow market expectations, lay a little above the target at the forecast horizon. Given that outlook for inflation, the Committee judged that an increase of 0.25 percentage points in the official interest rate to 4.25% was necessary to keep inflation on track to meet the target.

# 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 (see Table 1).

The average forecast is for CPI inflation to rise from its outturn of 1.3% in 2004 Q1 to 1.6% in 2004 Q4 and just below the 2.0% target in 2005 Q4 and 2006 Q2. These average projections for CPI inflation are very slightly lower compared with those made in February. In 2006 Q2 over half the forecasters expect inflation of between 1.8% and 2.1%, and none of these forecasts are more than one percentage point above or below the target (see Chart A).

#### Table 1

#### Average external forecasts of CPI inflation, GDP growth, interest rates and the ERI(a)

	2004 Q1 (b)	2004 Q4	2005 Q4	2006 Q2
CPI inflation (c)	1.3	1.6	1.8	1.9
GDP growth (c)	3.0	2.9	2.6	2.4
Repo rate (per cent)	3.9	4.6	4.8	4.8
Sterling ERI				
(Index; 1990 = 100)	104.1	103.4	102.6	101.7

(a) For 2004 Q4 and 2005 Q4, 23 forecasters provided the Bank with forecasts for CPI inflation, GDP growth and the repo rate; and 19 gave ERI forecasts. For 2006 Q2, there were 21 forecasts of CPI inflation, GDP growth and the repo rate; and 16 forecasts for the ERI.

16 forecasts for the ERI. Outturns. GDP growth is based on preliminary ONS estimates for chained volume GDP at market prices. The repo rate and sterling ERI are daily averages. Percentage changes on a year earlier. (b)

(c)

#### Chart A Distribution of CPI inflation forecasts for 2006 Q2



Source: Central projections of 21 outside forecasters as of 30 April 2004.

The average forecast is for GDP growth to decline in the next two years, with four-quarter growth falling from its 2004 Q1 preliminary outturn of 3.0% to 2.9% in 2004 Q4, 2.6% in 2005 Q4 and 2.4% in 2006 Q2. These average projections for GDP growth are slightly higher than in February.

These forecasts assume, on average, that official interest rates rise to 4.8% in 2005 Q4 and 2006 Q2

(see Table 1). Chart B shows that, at the two-year horizon, there are a similar number of forecasters projecting official interest rates at each of five different intervals within the range of 4% to 5.5%. That contrasts with the forecasts made last July, when over half the group at that time expected interest rates of between 4% and 4.6% at the two-year horizon.

# **Chart B**

#### Distribution of repo rate forecasts for 2006 Q2



Source: Central projections of 21 outside forecasters as of 30 April 2004

The forecasts assume, on average, that the sterling ERI falls from its outturn of 104.1 in 2004 Q1 to 102.6 in 2005 Q4 and 101.7 in 2006 Q2 (see Table 1). The external forecasters' assumptions for the sterling ERI at the two-year horizon are quite diverse (see Chart C), with between two and four forecasters in each of the six intervals for the ERI between 96 and 108. But forecasting exchange rates is extremely difficult and it is common for the external forecasters to have a wide range of projections.



Apart from providing their central projections, the external forecasters also provide the Bank with information on the likelihood of a range of possible outcomes for CPI inflation and GDP growth (see Table 2). On average, the external forecasters see a 58% probability of CPI inflation being within half a percentage point of 2.0% in two years' time, with a 26% probability of inflation below 1.5% and a 16% probability of inflation above 2.5%. So on average, the probability of CPI inflation being below 1.5% is rather higher than it being above 2.5%.

On average, the forecasters see a 40% probability of GDP growth being between 2% and 3% in two years' time, with a 34% probability of GDP growth below 2% and a 25% probability of GDP growth above 3%. So on average, the probability of GDP growth being below 2% is rather higher than it being above 3%.

# Table 2Other forecasters' expectations of CPI inflationand GDP growth(a)

**CPI** inflation

Probability, per cent (b)	Range:					
	Less	1.0%	1.5%	2.0%	2.5%	More
	than	to	to	to	to	than
	1.0%	1.5%	2.0%	2.5%	3.0%	3.0%
2004.04	0	=0	17			
2004 Q4	8	30	43	14	4	1
2005 Q4	6	21	40	22	9	3
2006 Q2 (c)	8	18	36	22	11	5
GDP growth						
Probability, per cent (b)	Range:					
	Less	1%	2%	More		
	than	to	to	than		
	1%	2%	3%	3%		
2004 04	3	16	43	37		
2005 04	7	21	46	26		
2005 Q1	0	21	40	20		
2006.02.6	g	25	40	25		

(a) 23 forecasters provided the Bank with their assessment of the likelihood, at three time horizons, of expected twelve-month CPI inflation and four-quarter output growth falling in the ranges shown above. For example, on average, forecasters assign a probability of 6% to CPI inflation turning out to be less than 1.0% in 2005 Q4.

(b) Figures may not sum to 100 due to rounding.(c) 21 forecasters.

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# Bank of England Agents' summary of business conditions

This publication is a summary of monthly reports compiled by the Bank of England's Agents,<sup>(1)</sup> following discussions with around 2,000 businesses in the period between mid-January and mid-April 2004. It provides information on the state of business conditions, from firms across all sectors of the economy. The report does not represent the Bank's own views, nor does it represent the views of any particular firm or region. The Bank's Monetary Policy Committee uses the intelligence provided by the Agents, in conjunction with information from other sources, to assist its understanding and assessment of current economic conditions.

- Manufacturing output has continued to increase, with the recovery becoming more broadly based.
- Construction output growth remained strong and demand for commercial property has recovered a little.
- Housing demand and house price inflation have picked up and the short-term outlook has remained buoyant. Rental yields have eased, though investor demand generally remained strong.
- Output in the service sector grew above trend, particularly in business and financial services. Demand for information technology (IT) services began to strengthen.
- Annual growth in retail sales volumes may have slowed since the turn of the year, though spending on durables continued to grow strongly. Most consumers have been little affected by past interest rate increases.
- Export sales and orders increased, as world trade recovered, but profit margins remained under pressure. Forward orders suggested a tentative recovery in demand from the euro area in the second half of the year.
- Investment intentions continued to edge higher. Manufacturers were less optimistic than their counterparts in the service sector, and were more inclined to invest to raise productivity than to expand capacity.
- The labour market remained tight, which was mostly the result of increasing private sector employment.
- Private sector settlements edged higher, though they remained close to 3% on average. Average earnings growth was picking up a little more quickly.
- Prices of raw materials and energy increased sharply, but insurance premia increases may have peaked. There were few signs of inflationary pressure in the retail sector.

<sup>(1)</sup> The Bank of England has Agencies for Central Southern England, the East Midlands, Greater London, the North East, the North West, Northern Ireland, Scotland, the South East & East Anglia, the South West, Wales, the West Midlands, and Yorkshire & the Humber.

# OUTPUT

#### **Primary production**

The recovery of the world economy, and rapid manufacturing output growth in China in particular, has sharply increased global demand for a wide range of commodities, including metals and foodstuffs. With global capacity constraints biting in several of these industries, contacts reported growing concerns of potential supply shortages of raw materials and rising prices. On the plus side, domestic farms and mining companies have benefited from increased demand and prices.

#### Manufacturing

The Agencies reported that manufacturers' confidence has continued to grow. There has been a steady improvement in orders and output, though not perhaps to the extent suggested by recent BCC and CBI surveys. Capacity utilisation was close to normal levels. Sterling's appreciation against the dollar in the past year reduced contacts' price competitiveness in those markets where prices were set in dollars. As a result, profit margins on exports to dollar markets were lower. Comparatively few contacts were looking to expand capacity, which continued to be relocated overseas.

Manufacturers of consumer goods and

construction-related products have fared best in recent months, though the recovery has become more broadly based. For instance, there was growing evidence of recovery in the information, communications and technology (ICT) sector. The more traditional parts of the engineering industry have been the slowest to revive.

#### Construction and housing

Construction output continued to grow strongly. Some Agencies noted tentative signs of tighter public sector budgets for capital spending, especially on infrastructure projects. By contrast, there was a little more optimism in the commercial property sector, and some contacts reported more interest in office development and a shortage of prime-quality office space. And there were signs of higher occupancy rates in southern England. In Greater London, however, excess supply of offices was expected to continue into 2006, so maintaining downward pressure on rental yields.

Demand for new houses continued to exceed supply. Forward sales remained strong and some house builders have increased their projections of volumes for 2004. Price inflation for new houses was not expected to slow quickly. That was partly the result of persistent bottlenecks in supply, which was accounted for by labour shortages and difficulties in securing planning permission for new developments. In the secondary market, some Agencies reported a tendency for people to extend their house rather than move. That may have reduced supply and possibly added to house price inflation. Overall, with little change in their stocks, estate agents reported a pickup in housing demand and inflation. That was most evident in the northern regions, where house price inflation has been much higher recently than in southern England.

First-time buyers increasingly were being priced out of the market and forced into rented accommodation. That has supported rental yields to some extent. But continuing buoyant investor demand in the buy-to-let market has resulted in excess supply, with consequent downward pressure on rents. A few Agencies reported that this may have dampened investor demand recently. Some contacts were concerned that, while there was little evidence to date of distress, forced selling in the buy-to-let market could lead to a substantial slowdown in the housing market.

#### Services

The Agencies reported strong output growth in the service sector in Q1, consistent with the buoyancy of recent BCC and CIPS surveys. Signs of growing business confidence were reflected in increased IT spending after a virtual moratorium in the past three years. And activity has begun to pick up for firms in the advertising industry and those undertaking work related to company mergers and acquisitions. The Agencies believed that capacity utilisation in the service sector may have risen to slightly above normal levels.

## DEMAND

#### Consumption

After allowing for seasonal influences, contacts reported that growth in the value of retail spending may have moderated in the three months under review, following a buoyant period around Christmas and the New Year. Part of the slowdown was probably the result of greater-than-normal price discounting. So measured by volume, the picture for retail spending was a little brighter. The Agencies reported a steadily growing market share of internet retailers, due partly to their price competitiveness.

There was tentative evidence from some Agencies that consumer spending by lower income households has eased due to past (and possibly prospective) interest rate rises. But confidence seems to have been resilient amongst higher income households, which was reflected in strong demand for prestige cars and other durable goods. Several Agencies noted that bookings for longer distance summer holidays have been strong, which was partly the result of the weak dollar. This too did not suggest consumers were retrenching. By contrast, bookings through travel agents have been comparatively weak. Consumers were increasingly likely to book holidays and travel directly using the internet.

#### Exports and imports

Contacts reported steady increases in both export sales and order books, which was mostly the result of the ongoing recovery in world trade. UK exporters were maintaining growth of volumes in the United States and the Far East mostly by reducing margins, which was necessary due to the loss of price competitiveness against overseas firms pricing in dollars. Looking forward, the low profitability of exports to dollar markets could reduce sales, unless the dollar continued its recent rise. Demand was strongest from the United States, East Asia and eastern Europe, with sluggish growth of sales to the euro area. However, forward orders pointed to a slight improvement in exports to the euro area in the second half of the year. Turning to imports, there continued to be a steady stream of contacts looking to reduce costs by sourcing parts and finished goods from abroad, including from companies that have relocated overseas.

#### Investment

There was a steady improvement in investment intentions, consistent with the general upturn in business confidence. Most manufacturers highlighted the need for investment to raise productivity, rather than to expand capacity. When faced with capacity constraints, manufacturers have tended to invest overseas. By contrast, service sector contacts have been more inclined to invest to increase their output capability, given above-average rates of capacity utilisation.

# **EMPLOYMENT**

Regional labour markets remained tight and private sector employment was rising, the result of strong demand from business and financial services. The rate at which jobs were being lost in the manufacturing sector was easing, largely on account of the pickup in output and orders. There was some evidence of weaker growth of public sector employment.

# **COSTS AND PRICES**

#### Pay

Private sector wage settlements edged higher in recent months, though they remained close to 3% on average. Contacts reported that annual growth of earnings was picking up a little more quickly. Some contacts in the retail and tourism sectors reported concern that the scheduled 7.8% increase in the National Minimum Wage this October would result in some job losses, especially if it necessitated greater-than-normal pay rises higher up the earnings scale, should employees seek to restore pay differentials. There were very few reports that last December's change to the consumer prices index as the targeted measure of inflation has had any effect on wage bargaining.

#### Input prices

Contacts reported further increases in the prices of energy and materials, particularly metals such as iron and steel where supply bottlenecks were occurring (see above). The rate of increase of insurance premia, which have been rising sharply in the past year or so, may have peaked.

#### Output and retail prices

Although there were some signs of emerging inflationary pressures from input prices and wage costs, generally the Agencies saw little evidence of that being transmitted to consumer prices. Contacts expected retail goods prices to continue declining for some time to come. By contrast, in the service sector contacts reported that the rates of price increase generally remained fairly steady.

# Text of Bank of England press notice of 4 March 2004

# Bank of England maintains interest rates at 4.0%

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 4.0%.

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

# Text of Bank of England press notice of 8 April 2004

# Bank of England maintains interest rates at 4.0%

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's reportate at 4.0%.

The minutes of the meeting will be published at 9.30 am on Wednesday 21 April.

# Text of Bank of England press notice of 6 May 2004

# Bank of England raises interest rates by 0.25 percentage points to 4.25%

The Bank of England's Monetary Policy Committee today voted to raise the Bank's reported by 0.25 percentage points.

The global economic upswing has been maintained. In the United Kingdom, output growth has been at or above trend and business surveys are consistent with further strengthening. Retail spending continues to be robust, underpinned by income growth and unexpectedly strong house price inflation. Investment prospects have improved.

CPI inflation has been below the 2% target and is likely to remain so in the near term. But earnings growth has picked up and commodity prices have risen sharply. With a small and diminishing margin of spare capacity, inflationary pressures are likely to build despite a higher level of sterling than at the beginning of the year. Against that background, the Committee judged that an increase of 0.25 percentage points in the repo rate to 4.25% was necessary to keep CPI inflation on track to meet the target in the medium term.

The Committee's latest inflation and output projections will appear in the Inflation Report to be published on Wednesday 12 May.

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

## **Glossary and other information**

#### Glossary of selected data

**AEI:** average earnings index.

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

**CSPI:** corporate services price index.

ERI: exchange rate index.

GDP: gross domestic product.

GVA: gross value added.

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.
- **M4 borrowing:** sterling borrowing by the UK non-bank, non building society private sector from UK banks and building societies.

MEW: mortgage equity withdrawal.

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

ATMs: automated teller machines.
BCC: British Chambers of Commerce.
CBI: Confederation of British Industry.
CIPS: Chartered Institute of Purchasing and
Supply.
CML: Council of Mortgage Lenders.
EU: European Union.
FES: Family Expenditure Survey.
FTSE: Financial Times Stock Exchange.
GC: general collateral.
GfK: Gesellschaft für Konsumforschung, Great Britain
Ltd.
HBF: House Builders Federation.
HM: Her Majesty's.
<b>ICT:</b> information, communications and technology.
IMF: International Monetary Fund.
ISM: Institute for Supply Management.
IT: information technology.
LIFFE: London International Financial Futures
and Options Exchange.

MPC: Monetary Policy Committee. MTIC: missing trader intra-community. **NHS:** National Health Service. NIESR: National Institute of Economic and Social Research. NMW: National Minimum Wage. **OECD:** Organisation for Economic Co-operation and Development. **ONS:** Office for National Statistics. **OPEC:** Organization of the Petroleum Exporting Countries. PNFCs: private non-financial corporations. **RICS:** Royal Institution of Chartered Surveyors. S&P: Standard and Poor's. SDR: Special Drawing Rights. VAT: value added tax. WEO: World Economic Outlook. WFTC: Working Families Tax Credit. WTC: Working Tax Credit. 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.