

Inflation Report

August 2003

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.

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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 recovery in the world economy has been slow and uneven. Output appears broadly flat in the euro area, but there are indications of a revival in growth in the United States. Growth in the United Kingdom also picked up in the second quarter, though it remained well below trend. Public spending continues to rise strongly and there are signs of resilience in consumer spending. Investment remains subdued. Revisions to the trade data have materially widened estimates of trade deficits in the past. The Committee's central projection, assuming official interest rates are maintained at 3.5%, is for GDP growth around trend over the forecast period. Annual RPIX inflation has dropped back from its spring peak—to 2.8% in June. Pay pressures remain benign. Inflation is projected to run somewhat below target through next year as temporary influences wane, before edging up to around the target as sterling's depreciation earlier this year continues to feed through, international prices move higher and domestic cost pressures strengthen.

In the euro area, output has continued to stagnate in the face of persistent weakness in final domestic demand and a growing drag from net trade following the appreciation of the euro. Prospects there remain subdued. Although still below trend, growth in the United States picked up somewhat in Q2 and surveys suggest that a further quickening is likely going forward. Both the ECB and the Federal Reserve have reduced official interest rates again over the past quarter, to 2% and 1% respectively. The SARS outbreak temporarily restricted growth in some of the Asian economies, although the picture for Japan appears a little brighter than of late. The Committee continues to expect the global economic recovery gradually to pick up momentum, underpinned by the generally stimulative policy stance.

In the United Kingdom, GDP growth is provisionally estimated to have increased to 0.3% in the second quarter, below the rate expected in May. Service sector output growth continued below trend, while manufacturing output was broadly flat. Recent business surveys paint a mixed picture but, on balance, suggest an improving outlook going into the second half of this year.

Consumers' expenditure has provided the main source of the expansion in demand over the past seven years, but spending decelerated sharply at the start of the year. Since then retail sales growth has picked up, though some of that strength may be temporary. The recovery in consumer confidence after the conclusion of hostilities in Iraq has continued, house price inflation has eased rather less than expected and the growth in

household borrowing remains buoyant. The prospect for consumer spending remains for growth below trend, but the near-term outlook is somewhat stronger than in May.

Fixed investment fell in the first quarter, reflecting a sharp decline in housing investment. Capital spending by businesses appears to have been broadly stable during the past year. Though the financial position of companies has improved, low capacity utilisation and uncertainty about the strength of the recovery abroad and at home mean that any cyclical pick-up is likely to be modest. Lower stockbuilding reduced growth in Q1.

Public spending rose sharply in the first quarter. That was partly associated with higher defence spending, but government expenditures are set to grow briskly throughout the forecast period, partially offsetting the more moderate growth of consumer spending.

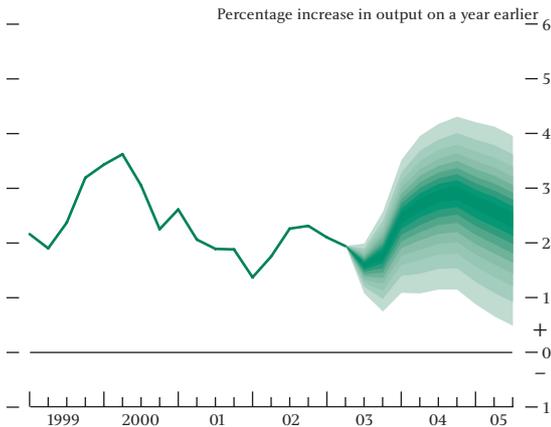
There have been significant upward revisions to the level of imports over the past four years following evidence of VAT-related fraud. These widened the estimated trade deficit by around 1% of GDP. The fraudulent activities also artificially inflated recorded exports and recent export weakness in part reflects a reduction in such activities. While these revisions could mean that GDP was weaker than previously thought, the ONS has indicated that broadly offsetting revisions to other expenditure components can be expected in the *Blue Book* release. Consequently, the Committee has assumed that the historical path of output is largely unaffected by the revisions to the trade data, though private sector domestic demand over the past will be higher than currently published estimates.

In response to weaker-than-expected foreign and domestic activity and the consequent reduction in prospective inflationary pressures, the MPC lowered official interest rates by 0.25 percentage points at its July meeting.

Equity prices have continued to recover from their March lows. Yield curves have risen, reflecting falls in bond prices at most maturities. The effective exchange rate for sterling is marginally below that embodied in the *May Report*—though it has fluctuated in the interim—and remains more than 5% lower than at the start of the year.

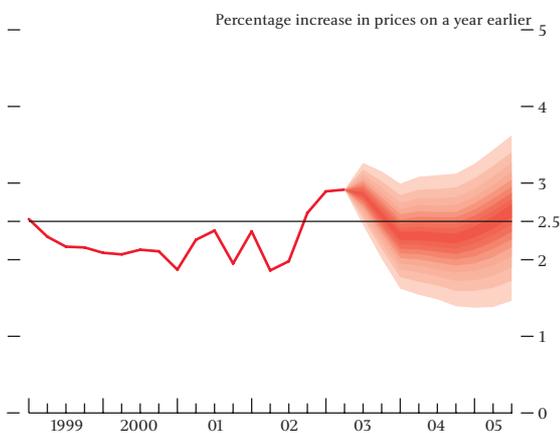
Chart 1 shows the MPC's assessment of the outlook for four-quarter GDP growth, on the assumption that the official interest rate remains at 3.5%. Under the central projection, output growth picks up to marginally above trend by early next year, easing back thereafter. The broad picture remains one of moderate growth in consumer spending, accompanied by strong growth in public expenditure, a gradual improvement in the

Chart 1
Current GDP projection based on
constant nominal interest rates at 3.5%



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 RPIX inflation projection based
on constant nominal interest rates at 3.5%



The fan chart depicts the probability of various outcomes for RPIX 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.

contribution of net trade and a modest increase in business investment. Overall, the outlook for GDP growth is similar to that expected in May, though the pick-up occurs a little later and growth is slightly lower during the second year of the projection.

The spot price of oil has risen by around \$5 per barrel since the *May Report*, perhaps reflecting delays in restoring Iraqi production and low inventory levels, but the futures price two years ahead is little changed. There is also little change in the outlook for non-oil commodity prices. Internationally traded goods prices remain under intense downward pressure.

Domestic cost pressures remain subdued. Private sector pay growth has been moderate despite low unemployment, increased tax and price inflation and rapid earnings growth in the public sector. Earnings growth is likely to strengthen as output accelerates, but a corresponding cyclical rebound in productivity should temper the impact on unit labour costs.

Annual RPIX inflation peaked at 3.0% in the spring but dropped back to 2.8% by June. By contrast, inflation according to the harmonised index of consumer prices (HICP) that month was just 1.1%. As noted in the *May Report*, the gap between the two measures is unusually wide at present, reflecting the influence of the housing cost element in RPIX. That gap is expected to narrow considerably over the forecast period.

Chart 2 shows the Committee’s assessment of the outlook for RPIX inflation. In the central projection, inflation continues to drop back, slipping below target around the year-end as the contributions of housing costs and other transitory influences subside. It then runs a little below target through next year, before edging up as sterling’s depreciation earlier this year continues to feed through, international prices move higher and domestic cost pressures gradually strengthen. The profile is somewhat weaker in the near term than in the *May Report*, but the medium-term outlook is little changed.

As always there are considerable risks surrounding these projections. Particular uncertainties relate to: the strength of the world economy; the sustainability of present international current account imbalances; the profiles for consumer spending and house price inflation in the United Kingdom; and the prospects for earnings growth. Relative to the central projection, the Committee judges that the overall risks to growth and, to a lesser extent, inflation are on the downside. There is a range of views among members, though the differences are narrow.

At its August meeting, the Committee noted that inflation, though currently above the 2.5% target as a consequence of temporary factors, was set to dip beneath the target by early next year and then edge back up to around the target by the end of the forecast period. Bearing in mind the balance of risks, the Committee judged that the current level of interest rates of 3.5% remained appropriate to keep inflation in line with the target.

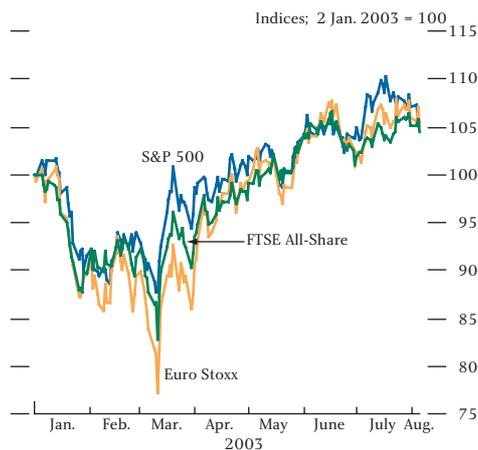
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Equity prices around the world have risen since the May Report. Long-term interest rates fell to low levels in mid-June. But they have subsequently risen to a level higher than three months ago. The MPC reduced the Bank's official repo rate to 3.5% in July. The US dollar depreciated further against major currencies until mid-June, but has since reverted to a value closer to that in early May. Having fluctuated during the past three months, sterling has returned to a level only marginally weaker than that assumed as the starting point for the May Inflation Report projection. But it has remained well below the range in which it moved between September 1999 and January 2003. Aggregate money and credit continued to grow briskly and household borrowing growth remained strong. UK house price inflation slowed further in Q2, though by less than the MPC had anticipated.

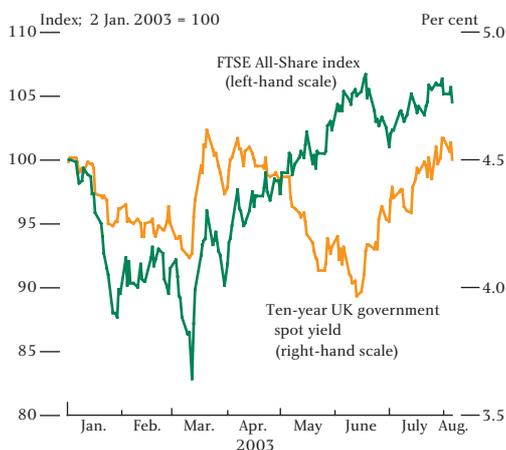
Chart 1.1
World equity markets since January 2003^(a)



Sources: Bank of England and Bloomberg.

(a) All equity prices have been converted into sterling.

Chart 1.2
UK equity prices and bond yields



Sources: Bank of England and Bloomberg.

1.1 Asset prices

Equity prices

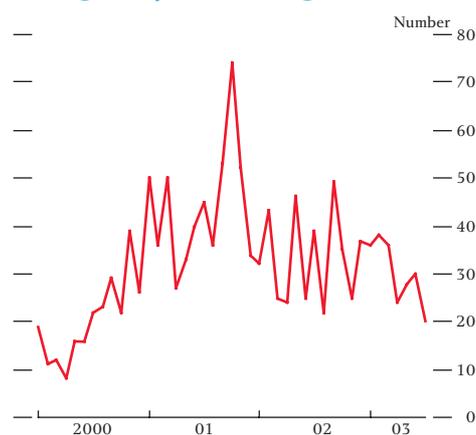
Equity prices have continued to recover since May. The average level of the FTSE All-Share index was 7% higher in the 15 working days to 6 August than the equivalent average used in the May Report as the starting assumption for the MPC's inflation projections. This level is 27% higher than the trough in mid-March (see Chart 1.1). There were broadly similar movements in the euro area and the United States.

Early this year, equity prices and bond yields both fell (see Chart 1.2). One explanation for this might be that uncertainty, perhaps related to hostilities in Iraq, made equities less attractive relative to safer assets such as government bonds, leading to higher bond prices and lower yields. As this uncertainty abated, equity prices recovered and bond yields rose.

From May to mid-July, by contrast, there was an inverse relationship between equity prices and bond yields (see Chart 1.2). This is closer to historical experience. One reason for equity prices to rise when bond yields fall is that equity valuations are higher, other things being equal, when future dividends are discounted at a lower rate. But equity prices are also affected by expectations of companies' future earnings and by investors' attitudes to risk. Equity prices could increase if expectations of future earnings improve or if investors become less concerned by risk.⁽¹⁾

(1) See Panigirtzoglou, N and Scammell, R (2002), 'Analysts' earnings forecasts and equity valuations', *Bank of England Quarterly Bulletin*, Spring, pages 59–66.

Chart 1.3
UK negative profit warnings



Sources: Bank of England, LexisNexis and Reuters.

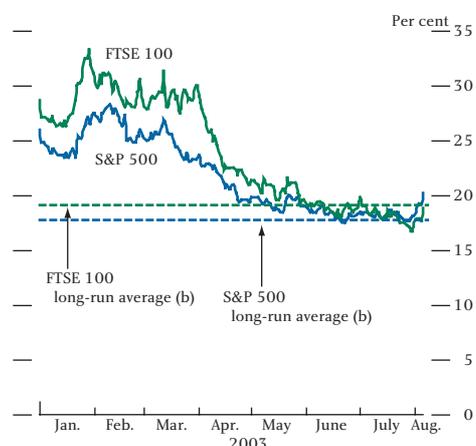
Chart 1.4
IBES medium-term earnings per share growth forecasts



Source: Institutional Brokers' Estimate System.

(a) FTSE Europe excluding UK index before 2000.

Chart 1.5
Six-month implied volatility of major equity indices^(a)



Sources: Bank of England, Chicago Mercantile Exchange and London International Financial Futures Exchange.

(a) 'At-the-money' (ATM) implied volatility measures, which are derived from call and put options where the exercise price equals the corresponding futures price for that maturity.
(b) Averages since 1992.

Over the period since the *May Report* as a whole, a lower discount rate does not account for the rise in equity prices because bond yields have risen. It is not possible to say with any certainty how far the equity price recovery can be explained by improved prospects or a greater willingness to hold risky assets.

There has been some positive news on short-term profitability. The number of negative profit warnings in July was the lowest in three years (see Chart 1.3). But the outlook for longer-run profitability is likely to have a greater impact on equity prices. The Institutional Brokers' Estimate System (IBES) reports that analysts' forecasts of earnings over the next business cycle for the FTSE 100, Euro Stoxx and S&P 500 indices have been revised down further since May (see Chart 1.4). It is unclear how representative this measure is of equity investors' expectations in general, but it suggests that improved expectations of medium-term corporate profitability may not explain the rise in equity prices.

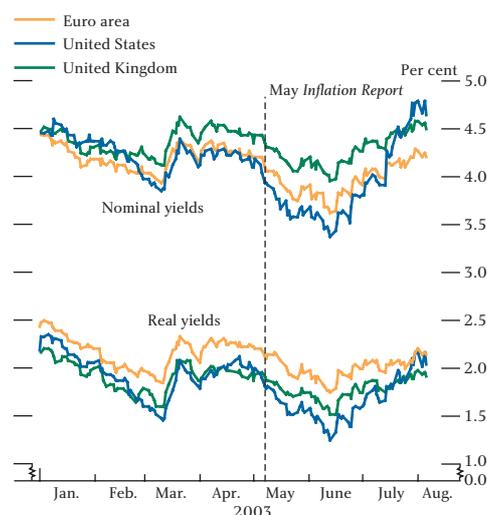
Investors are more likely to want to hold equities if they perceive them to be less risky. The implied six-month ahead volatility of the major equity market indices is a measure of short-term market uncertainty about equity prices. Since May, this has remained close to its long-run average having fallen sharply in Q1 (see Chart 1.5). This suggests that some of the increase in equity prices, at least since March, could have reflected reduced uncertainty about future equity valuations.

The equity price recovery may also have resulted from a greater willingness to hold risky assets, such as equities, for given expected returns and perceived uncertainty. Since May, the price of riskier assets has increased relative to that of safer assets in several different markets: the lower-capitalisation FTSE 250 and Small-Cap indices have risen more than the FTSE 100; and spreads on the Merrill Lynch sterling high-yield corporate bond index have narrowed more than for investment-grade credits. This would suggest that investors have generally become more willing to hold risky assets, although in each case it might partly reflect improved relative prospects or reduced uncertainty. The low level of yields on safer assets, such as government bonds, might have encouraged investors to seek higher returns by bearing more risk.

Government bond yields

Ten-year nominal yields fell sharply between early May and mid-June in a number of major economies (see Chart 1.6), with UK ten-year rates reaching their lowest point in several decades. Yields subsequently rose to a level higher than at the time of the *May Report*.

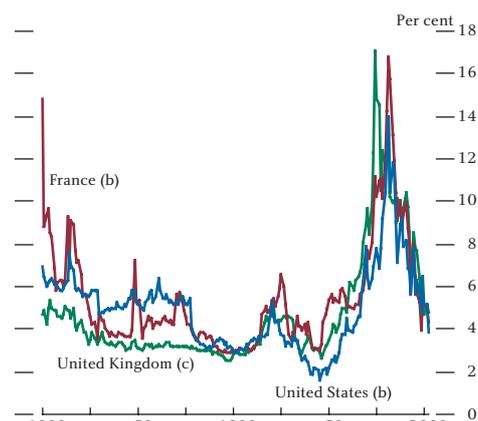
Chart 1.6
World ten-year government bond yields since January 2003^(a)



Sources: Bank of England and Bloomberg.

(a) Euro-area real yield is for euro-area CPI-indexed French government bond maturing in July 2012. US real yield is for Treasury inflation-protected security maturing in January 2011.

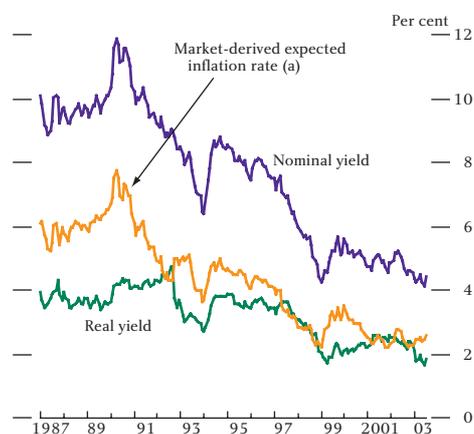
Chart 1.7
Yields on long-dated government debt^(a)



Sources: Global Financial Data; Mitchell, B R (1988), *British historical statistics*, Cambridge University Press; and ONS.

(a) Annual data to 2002.
(b) Yield on ten-year government bond.
(c) Yield on perpetual government bond.

Chart 1.8
UK ten-year spot yields



Source: Bank of England.

(a) Inflation expectations are derived as the difference between nominal and real (index-linked) yields.

Nominal interest rates can be decomposed into the real interest rate, expected inflation and an inflation risk premium.⁽¹⁾ Since May, much of the movement in nominal rates internationally has reflected changes in real interest rates (see Chart 1.6).

It seems unlikely that much of the sharp dip and subsequent rise in worldwide real yields in June reflected changes to expectations about long-run economic conditions. Some commentators suggested that the low level of long yields in mid-June reflected concerns about the risks of deflation. But this explanation was puzzling as inflation expectations appeared little changed. That could have indicated that monetary policy was expected to respond successfully to those risks, although anticipation of such a policy reaction should have reduced short and medium-term rates rather than long rates. For the United States, one possibility was that market participants raised the probability they attached to the Federal Reserve using purchases of long bonds to achieve further monetary policy easing, should the effective lower bound on nominal short-term interest rates be reached. Since mid-June, markets appear to have judged that this probability has lessened. US yields have subsequently increased sharply, supported by stronger US economic data releases and also hedging activities of investors in mortgage-backed bonds.

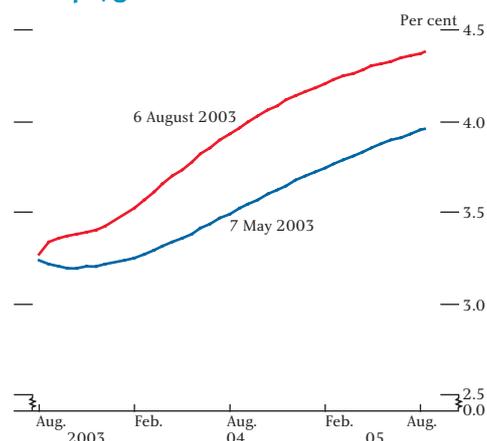
Despite the recent increase, long nominal yields in several major economies have remained low compared with recent decades. But even these rates are still higher than those prevailing through much of the past 200 years (see Chart 1.7). The fall in UK nominal yields over the past decade can be attributed both to lower inflation expectations and lower real rates (see Chart 1.8).

Expectations of low real rates over the next few years have depressed spot yields on long-dated UK index-linked bonds. But forward real interest rates suggest that the real interest rate expected in ten years' time has also been relatively low in recent years, remaining on average around 2 percentage points lower than in the late 1980s.

The low level of long real rates in the United Kingdom and other economies since the late 1990s may have a number of possible explanations. First, in some countries it could reflect a low level of government debt relative to GDP compared with the mid-1990s. This reduces the supply of low-risk assets, pushing up their price and lowering the yield. Second, a lower real interest rate might result from a downward revision to expected future productivity growth. Expectations of lower productivity growth would depress the return of future

(1) See Scholtes, C (2002), 'On market-based measures of inflation expectations', *Bank of England Quarterly Bulletin*, Spring, pages 67–77.

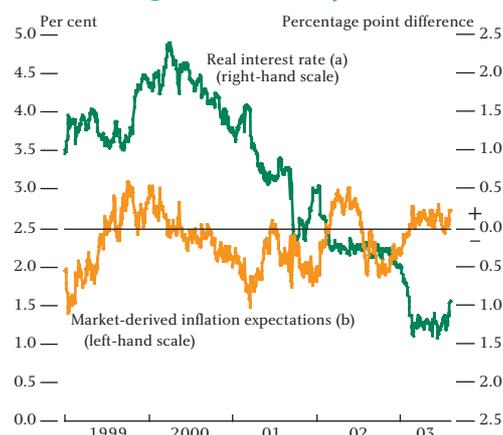
Chart 1.9
GC repo/gilt^(a) two-week forward curve^(b)



Source: Bank of England.

- (a) A general collateral (GC) repo rate is the rate that one financial institution pays to borrow money from another when it effectively offers any gilt as security against the risk of default.
- (b) A forward rate is the rate implied for a future period by comparison of current shorter-term and longer-term interest rates.

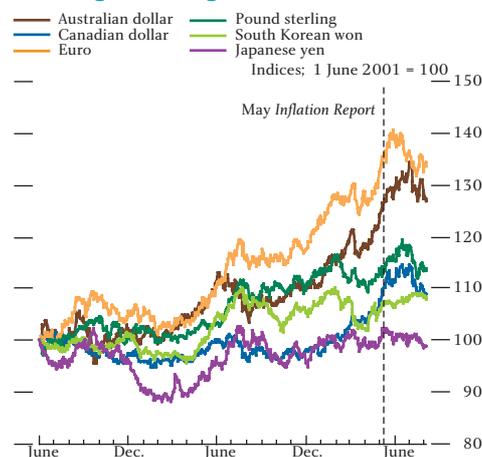
Chart 1.10
Short real interest rates relative to implied future average levels and expected inflation



Source: Bank of England.

- (a) Defined as the average real interest rate for the next 2.5 years, measured by the 2.5-year spot rate, less the average real interest rate for five to ten years ahead, measured as the five-year ahead five-year forward rate.
- (b) Inflation expectations refer to RPI inflation and are derived as the difference between nominal and index-linked yields.

Chart 1.11
Exchange rates against the US dollar^(a)



Source: Bank of England.

- (a) Exchange rates as US dollars per unit of local currency.

investment in capital, reducing the real interest rate as fewer resources would need to be drawn into capital formation. But it is unclear why such a revision would have occurred recently. Third, there may be a greater desire to hold bonds, perhaps as a consequence of population ageing and the need to hedge pension liabilities. Fourth, the risk premium associated with long real interest rates may be less if monetary policy regimes are now perceived as more stable and less likely than in the past to generate large fluctuations in real interest rates.⁽¹⁾

Short-term interest rates

The MPC reduced the Bank's official repo rate by 0.25 percentage points to 3.5% on 10 July in response to the possibility of subdued economic activity continuing in the near term and against a background of muted underlying inflationary pressures. On 5 June, the ECB announced a reduction in its policy rate by 0.5 percentage points to 2%. On 25 June, the US Federal Open Market Committee cut the target for the federal funds rate by 0.25 percentage points to 1%.

The general collateral (GC) repo/gilt two-week forward curve has shifted up and steepened compared with the *May Report* (see Chart 1.9), particularly since mid-July. It suggests that interest rates are anticipated to rise next year, although the curve cannot be read directly as the market expectation of the Bank of England repo rate.⁽²⁾

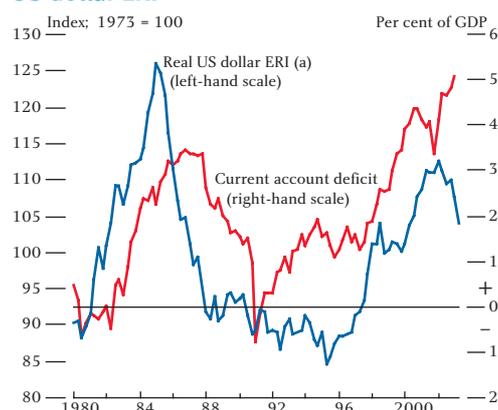
Policy-makers set short-term interest rates to influence economic activity by changing real interest rates from those that might otherwise prevail. One indication of the current stance of monetary policy is to compare the real interest rate over the next two or three years with a measure of the real interest rate expected in the longer term, which should depend less on current policy. This indicator suggests that the market views the current stance of monetary policy as stimulating economic activity, because short real rates are currently well below their expected future level (see Chart 1.10). But the rate of inflation expected over the next two to three years has remained close to the inflation target. This suggests that financial markets expect monetary policy to remain expansionary in the near term, but believe that policy remains consistent with maintaining low and stable inflation.

Exchange rates

The widespread depreciation of the US dollar against a range of currencies has been the major feature of exchange rate

(1) See also Brooke, M, Clare, A and Lekkos, I (2000), 'A comparison of long bond yields in the United Kingdom, the United States, and Germany', *Bank of England Quarterly Bulletin*, May, pages 150–58.
 (2) See Brooke, M, Cooper, N and Scholtes, C (2000), 'Inferring market interest rate expectations from money market rates', *Bank of England Quarterly Bulletin*, November, pages 392–402.

Chart 1.12
US current account deficit and real
US dollar ERI



Sources: Federal Reserve Board and US Bureau of Economic Analysis.

(a) Quarterly average of price-adjusted Broad Dollar index.

Chart 1.13
Sterling ERI and Consensus forecasts^(a)



Sources: Bank of England and Consensus Economics.

(a) Consensus sterling ERI forecasts are calculated by using the euro, US dollar, yen and Canadian dollar. By weight of trade, these make up some 90% of the ERI.

(b) Forecasts plotted on the date of forecast publication.

Table 1.A
The housing market^(a)

	2002		2003		
	Q3	Q4	Q1	Q2	July
HBF survey					
Site visitors (b)	16	4	-35	-24	n.a.
Net reservations (c)	17	9	-33	-25	n.a.
Approvals (d)	114	116	100	98	n.a.
Particulars delivered (e)	137	130	124	104	n.a.
Monthly percentage change in house prices					
Halifax (f)	1.9	2.2	1.5	0.9	1.3
Nationwide	2.1	1.7	1.3	0.8	1.0
Surveys of house price expectations					
RICS (g)	34	23	-35	-20	n.a.
HBF (h)	90	67	46	59	n.a.
Woolwich/NOP (i)	63	59	50	56	n.a.

Sources: Bank of England, Halifax, House Builders Federation, Nationwide, NOP, Royal Institution of Chartered Surveyors and Woolwich.

(a) Quarterly data are averages of monthly observations.

(b) Percentage balance of respondents reporting more site visitors than during the same month of the previous year.

(c) Percentage balance of respondents reporting more net reservations than during the same month of the previous year.

(d) Number of loans approved for house purchase (thousands).

(e) The number of transactions in England and Wales registered with HM Land Registry (thousands).

(f) The published indices in 2002 have been adjusted by the Bank of England to account for the change in method of calculation by the Halifax in December 2002.

(g) Percentage balance of chartered surveyors expecting an increase in the price at which sales are agreed over the next three months.

(h) Percentage balance of respondents expecting to see an increase in the prices of new homes over the next twelve months.

(i) Percentage balance of homeowners expecting an increase in the value of their property over the next twelve months.

movements over the past two years (see Chart 1.11). The main exception to this has been its relative stability against Asian currencies. The US dollar depreciated by a further 5% against the euro between 7 May⁽¹⁾ and mid-June, although it has since recovered.

The depreciation of the US dollar since 2001 may reflect movement towards a more sustainable level following its post-1996 strength. Several explanations were put forward to explain the US dollar appreciation in the late 1990s, some related to an improvement in prospective US productivity, although none was sufficient to explain the full extent of the dollar's strengthening.⁽²⁾ The high value of the US dollar has been associated with a large current account deficit, which reached a record level of 5.1% of GDP in Q1 (see Chart 1.12). The US dollar depreciation of the past two years has been consistent with the direction of change in the relative prices of domestic and foreign goods necessary to narrow the US trade deficit, although additional changes in domestic demand may also be needed to balance potential output and final demand (see Section 2).

The sterling effective exchange rate index (ERI) has depreciated marginally between the 15-day moving average up to 6 August used as the starting assumption for the MPC's forecast and the equivalent average used in the *May Report*. A box on pages 8–9 of this *Report* considers the construction of the ERI. Although sterling has fluctuated substantially in recent months, the sterling ERI has remained around 3%–7% weaker than at the time of the *February Report* and below the range in which it fluctuated from September 1999 to January 2003 (see Chart 1.13).

Projections from a survey conducted by Consensus Economics suggest that the sterling ERI is forecast to be close to the current level in two years' time (see Chart 1.13). When sterling was stronger, these forecasts consistently predicted that the ERI would fall by more than relative interest differentials suggested,⁽³⁾ implying that the level of sterling was then viewed as unsustainably high. The narrowing of the gap this year between the sterling ERI forecast and the level implied by interest differentials suggests that respondents to the Consensus survey perceive that sterling has moved closer to a medium-term equilibrium value.

Property prices

UK house price inflation has slowed since the *May Report* by less than the Committee expected. The Nationwide and

(1) The cut-off date for inclusion of data in the *May Report*.

(2) See for example Bailey, A, Millard, S and Wells, S (2001), 'Capital flows and exchange rates', *Bank of England Quarterly Bulletin*, Autumn, pages 310–18.

(3) See Bridgen, A, Martin, B and Salmon, C (1997), 'Decomposing exchange rate movements according to the uncovered interest rate parity condition', *Bank of England Quarterly Bulletin*, November, pages 377–89.

The sterling effective exchange rate index

Changes in exchange rates can have important effects on the outlook for output and inflation.⁽¹⁾ A change in the nominal exchange rate usually only affects real activity if it also changes the real exchange rate, which is a measure of the relative price of foreign and domestic output expressed in a common currency. But measuring the real exchange rate at a high frequency is not possible, as there are insufficient data for international prices. In any case, most short-term changes in the real exchange rate result from movements in the nominal rate rather than changes in countries' domestic currency prices. So movements in nominal exchange rates can be a useful proxy for movements in real rates.

Each hour that the London market is open, the Bank of England calculates a nominal effective exchange rate index (ERI) for sterling. This is based on sterling's bilateral exchange rates with the currencies of 21 other countries, which are collectively the most important of the United Kingdom's main trading partners. The bilateral rates are weighted according to each country's relative importance in UK trade, to give an average sterling exchange rate. The weights, which are calculated by the IMF, aim to capture all aspects of trade competition between countries. That includes, for example, competition between UK companies and US companies not just in the two countries but also in all other markets, such as the euro area. So calculating the weights requires a large amount of international trade data. The weights proxy the relative effects on the UK visible trade balance of an equal percentage change in each sterling bilateral exchange rate. The weight of the euro in the sterling ERI, for example, is roughly four times that of the US dollar. So, with other rates unchanged, a 1% appreciation of the sterling exchange rate against the euro should have about the same impact on the UK trade balance as a 4% appreciation of the sterling-dollar rate.

The sterling ERI appreciated by about 29% between end-1995 and end-1999. It remained around that higher level during the next three years. Since the beginning of 2003, the ERI has declined by around 5% (see Chart A). What would the past behaviour of the ERI look like if different methods were used in its calculation?

To calculate the weights, the IMF uses international data for trade in manufactured goods at current prices from 1989 to 1991.⁽²⁾ In 2002, UK imports and exports of manufactured goods accounted for about 61% of all UK trade in goods and services. That was

Chart A
Sterling ERI



Source: Bank of England.

slightly lower than their share between 1989 and 1991. Ideally, the ERI trade weights would take into account recent trading patterns for all goods and services, not just manufactures. They would also allow for the rising share of world trade of, for example, some of the emerging Asian countries that are excluded from the current calculations. Some commentators have suggested that the weights should take into account other current account transactions, such as investment income flows between countries. But if the ERI estimates are used to assess the effects of exchange rate changes on the demand for, and supply of, UK output, then the trade weights should be based only on those transactions that directly affect GDP. It should therefore include all trade in goods and services, but exclude other current account transactions such as net investment income.

In addition to the official Bank of England estimates, Chart B shows three other measures of the sterling ERI. One is based on a method used by the European Central Bank.⁽³⁾ This uses more recent trade data for manufactured goods from 1995 to 1997 to update the IMF weights and has a slightly different group of UK trading partners. The more recent data increase the weight in the sterling ERI of the Japanese yen and reduce the weight of the euro. This measure of the sterling ERI is slightly lower in recent years than the Bank measure. However, the difference between the two indices is small and almost completely disappears recently.

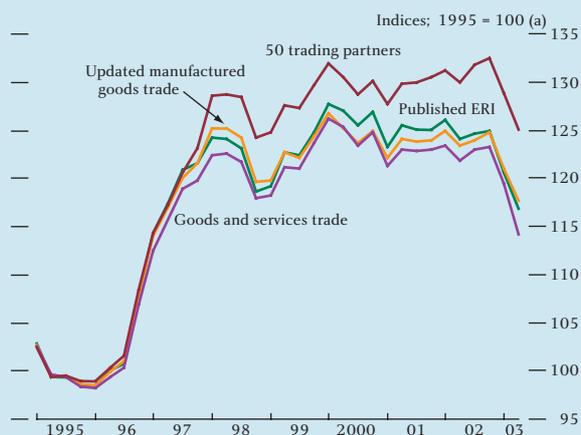
Trade weights can be estimated using more up-to-date data (from 1999 to 2001) for trade in services as well as goods. But this method does not allow for trade in third markets because the necessary data relating to

(1) See the box 'The exchange rate and inflation' on page 36 of the May 2003 *Inflation Report*.

(2) For more information on the methods used to calculate the ERI, see 'Revisions to the calculation of effective exchange rates', *Bank of England Quarterly Bulletin*, February 1995, pages 24–25 and 'Revision to the calculation of effective exchange rates', *Bank of England Quarterly Bulletin*, 1981, pages 69–70.

(3) See Buldorini, L, Makrydakis, S and Thimann, C (2002), 'The effective exchange rates of the euro', *ECB Occasional Paper*, No. 2.

Chart B
ERI estimates based on different trade weight calculations



Source: Bank of England.

(a) The published ERI has a base year of 1990 (see Chart A).

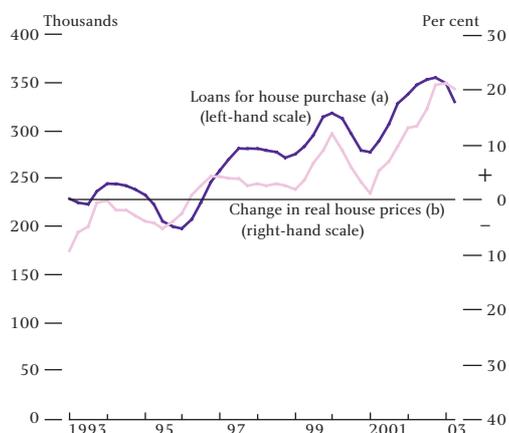
services are difficult to obtain. On this basis, the dollar has a higher weight than in the official sterling ERI, as a relatively high proportion of UK services trade is with the United States. The weights of the euro and the Japanese yen are correspondingly

reduced. Chart B shows that this measure is also a little below the official ERI in recent years. Because most of sterling's appreciation since the end of 1995 has been against the euro, the lower weight of the euro in this measure of the ERI results in a slightly smaller increase.

Finally, it is possible to increase the number of UK trading partners in the index from 21 to 50 while simultaneously allowing for trade in non-oil commodities and tourism services as well as manufactures. In other respects, the method used is very similar as for the official sterling ERI and so allows for trade in third markets. Chart B shows that, using this method, the sterling ERI rose relative to the official index from early 2002, but otherwise movements of the two indices have closely matched each other since 1997. The gap, which opened up in 1997, can largely be accounted for by the sharp depreciation of some currencies reflecting economic problems in Asia at that time.

Overall, these alternative methods for calculating the trade weights seem to make relatively little difference to the ERI estimates in recent years.

Chart 1.14
House prices and housing market transactions



Sources: Bank of England, Council of Mortgage Lenders, Halifax and ONS.

- (a) Four-quarter moving average of seasonally unadjusted quarterly loan completions for house purchase by banks and building societies.
- (b) Annual change in RPIX-deflated Halifax all-houses index. The published Halifax index in 2002 has been adjusted by the Bank of England to account for the change in method of calculation by the Halifax in December 2002.

Halifax indices rose by 1.0% and 1.3% respectively in July (see Table 1.A). The housing market is unambiguously weaker than at the end of last year. But the rate of decline in activity indicators such as site visitors, net reservations and the number of loan approvals for house purchase slowed in Q2. The further large fall in particulars delivered was an exception to this trend, although they record the end of the house purchase process and consequently tend to lag other housing market indicators. The attenuation of the weakening picture might reflect greater confidence following the end of the war in Iraq. Nevertheless, the MPC expects house price inflation to continue to slow.

There is a relationship between the number of new mortgages for house purchase and house price inflation (see Chart 1.14). The number of loans for house purchase in Q2 was lower than a year ago. Around half of these loans have typically been to first-time buyers in the past and the 35% reduction in their numbers since last year largely accounts for the fall in the total. House purchases by first-time buyers are sensitive to the terms at which they are able to borrow. New mortgages usually have loan-to-value (LTV) ratios lower than 95% and the average LTV ratio for first-time buyers has not changed substantially in recent years. But house prices have risen, so first-time buyers now need to raise a larger deposit to purchase a given house. Data from the Council of Mortgage Lenders suggest that the deposit-to-income ratio for first-time buyers has risen sharply, from an average of 28% of annual income in 1997 to 80% in 2003 Q2. The need to raise higher deposits may have deterred or delayed some first-time buyers from entering the housing

market, which could have dampened overall demand for owner-occupied housing.

1.2 Money, credit and balance sheets

Monetary aggregates

The annual growth rate of notes and coin was 7.8% in July (see Table 1.B). Various temporary factors make recent month-to-month changes in the annual growth rate difficult to interpret. But growth rates were generally higher than at the beginning of the year, consistent with some rebound in the growth of retail sales (see Section 2).

The annual growth rate of aggregate M4—the sum of notes and coin and sterling deposits held with UK banks and building societies by households, private non-financial corporations (PNFCs) and other financial corporations (OFCs)—rose to 8.0% in Q2 (see Table 1.B). Faster growth of OFCs' money more than accounts for the increase in annual M4 growth this year, as households' and PNFCs' M4 growth has remained relatively stable (see Chart 1.15).

Other financial corporations include insurance companies and pension funds, financial leasing corporations, unit trusts and securities dealers. Industrial analysis of UK residents' sterling bank deposits suggests that the growth in OFCs' money this year has largely been related to short-term activity within the financial system rather than institutional investors increasing their holdings of deposits. As a result, it is less likely to have a direct impact on economic activity.

The annual growth rate of M4 lending (excluding the effects of securitisations) increased to 11.9% in Q2 (see Table 1.B). Lending growth to households has remained strong and lending to PNFCs and OFCs has accelerated.

Households

Household sector M4 borrowing (excluding the effects of securitisations) has remained robust with annual growth of 14.7% in June. The twelve-month growth rate of total lending to individuals—lending by a broader set of institutions than banks and building societies—increased to 14.0% in Q2, the fastest rate since 1990 Q2. But the six-month annualised growth rate, which may currently give a better indication of the trend, remained slightly below its peak in 2002 Q4 (see Chart 1.16).

Strong borrowing growth raised the ratio of households' secured debt to income to a record high of 93% in Q1 (see Chart 1.17). An important factor underlying the trend towards higher secured debt has been the steady expansion of

Table 1.B
Monetary aggregates^(a)

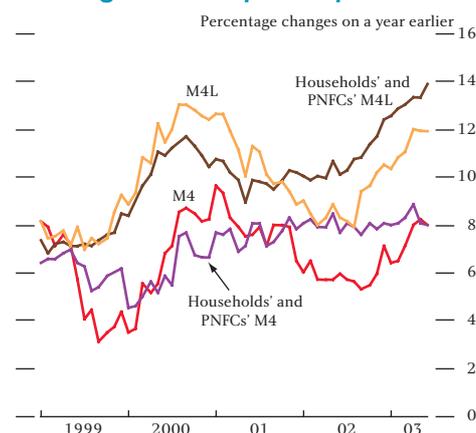
Percentage changes on a year earlier

	2002		2003		
	Q3	Q4	Q1	Q2	July
Notes and coin	8.2	5.6	6.5	6.8	7.8
M0 (b)	8.2	5.6	6.4	6.7	8.1
M4	5.3	7.1	7.1	8.0	n.a.
M4 lending (c)	9.4	10.5	11.0	11.9	n.a.

Source: Bank of England.

- (a) Seasonally adjusted.
- (b) M0 is a narrow measure of money consisting of notes and coin, and bankers' operational balances held at the Bank of England.
- (c) Excluding the effects of securitisations.

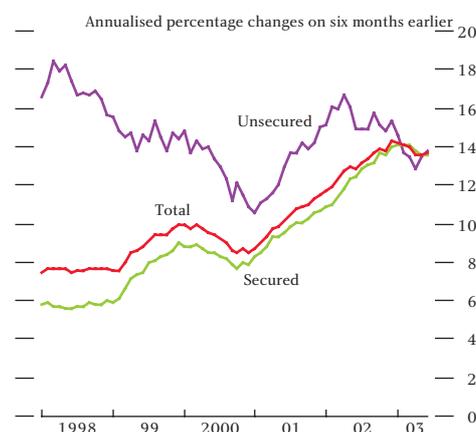
Chart 1.15
Annual growth of M4 and M4L^(a)



Source: Bank of England.

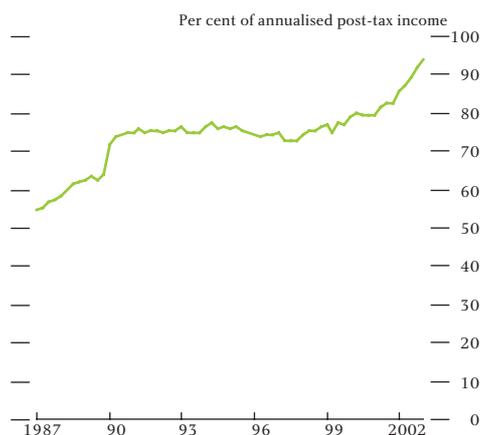
- (a) M4 lending excluding the effects of securitisations.

Chart 1.16
Total lending to individuals



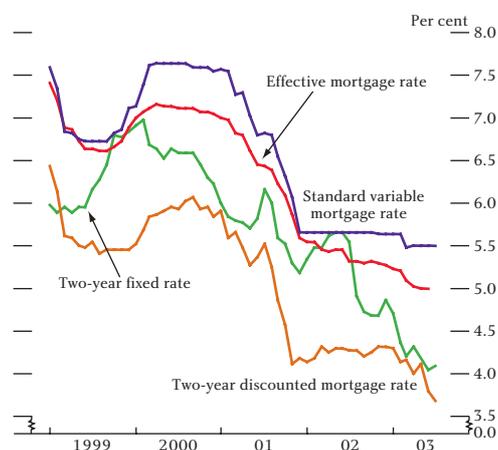
Source: Bank of England.

Chart 1.17
Household secured debt



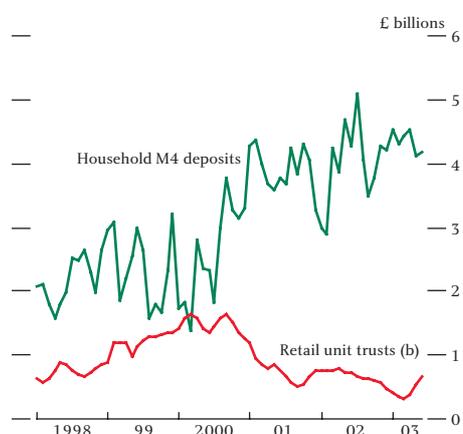
Sources: Bank of England and ONS.

Chart 1.18
Mortgage interest rates



Source: Bank of England.

Chart 1.19
Household M4 and retail unit trust flows^(a)



Sources: Bank of England and Investment Management Association (IMA).

(a) Three-month moving averages of net flows into the stock.
(b) Retail unit trust flows seasonally adjusted by the Bank of England.

owner-occupation over the past 20 years. This tends to raise the number of mortgages. As the ratio of house prices to earnings has risen, the average value of mortgages relative to income has also increased. Following a period of rapid house price inflation, the new debts of those entering the housing market or trading up are likely to be larger than those of existing homeowners. That would still be true for some time even if house prices remained broadly flat, given the relatively slow rate at which houses change hands. Secured debt growth may consequently moderate more slowly than house price inflation, and the ratio of secured debt to income may rise significantly further in the coming years.

Mortgage equity withdrawal, secured borrowing that is not used to maintain or augment the housing stock, was estimated to have increased further in Q1 to 7.3% of post-tax income, the highest proportion since 1988 Q3. But net housing equity—the value of housing less secured debt—also increased as the rise in debt was less than the change in housing wealth.

Secured borrowing by individuals has been supported by lower interest rates. The standard variable mortgage rate (SVR) fell by 0.16 percentage points in the year to June, mostly in response to February’s repo rate cut (see Chart 1.18). But the effective mortgage rate fell by 0.45 percentage points,⁽¹⁾ partly as a result of borrowers refinancing their mortgages from the SVR to cheaper discounted rates. Fixed interest rates declined due to reductions in financial market interest rates at comparable maturities. This reduced the cost of borrowing for those refinancing fixed-rate mortgages and supported an increase in the share of fixed-rate mortgages in new business reported by the Council of Mortgage Lenders from 32% in December 2001 to 53% in June.

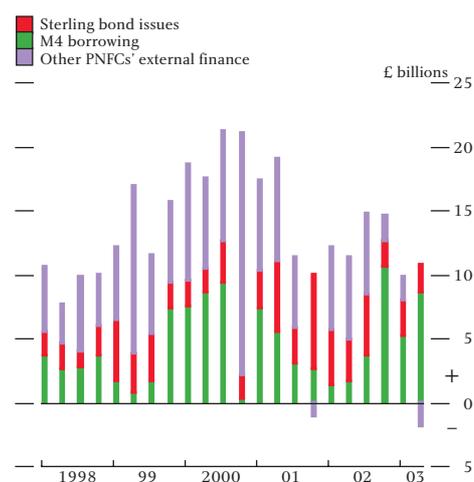
The annual rate of household deposit growth slowed slightly in Q2 but remained strong at 8.0%. The strength of deposit flows since late 2000 may partly have resulted from households reallocating their portfolios towards deposits and away from unit trusts and other equity investments (see Chart 1.19). But there are signs that this may have begun to reverse in recent months as equity prices have recovered.

Private non-financial corporations

The annual growth of PNFCs’ M4 deposits fell to 7.8% in Q2. PNFCs’ M4 borrowing (excluding the effects of securitisations) accelerated further, with annual growth of 11.5%. Companies in the non-financial services sector largely accounted for borrowing in the past year, within which borrowing by the real

(1) Effective interest rates are derived from data on interest payment flows and outstanding loan stocks. They measure the average rate paid by all borrowers.

Chart 1.20
PNFCs' total external finance^(a)



Sources: Bank of England and ONS.

(a) Excluding the effects of securitisations.

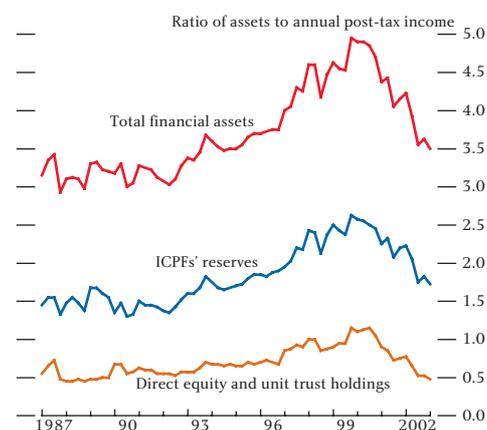
estate sector remained very strong. The rate of repayment of debt by manufacturers eased.

The stronger growth of PNFCs' M4 borrowing may partly be explained by firms substituting sterling UK bank borrowing for other types of finance. PNFCs' total external finance is a broad measure of the net flow of corporate funding that includes M4 borrowing as well as foreign currency borrowing from banks in the United Kingdom and capital market issues (see Chart 1.20). This broader measure of corporate finance declined modestly in Q2 but the proportion accounted for by sterling bank borrowing has risen. The cost of capital and borrowing conditions for firms appear to have eased this year, but the high level of corporate debt relative to the value of firms' assets could be restraining demand for additional funds.

Pensions

Current savings and balance-sheet decisions by households and firms are also likely to depend on pension entitlements and obligations. Around 25 million people have entitlements under occupational pension schemes.⁽¹⁾ Households' pension wealth from occupational schemes is recorded in the National Accounts as part of insurance corporations' and pension funds' (ICPFs') reserves.

Chart 1.21
Household sector financial assets



Recent changes in the value of pension wealth, as measured by ICPFs' reserves, have been large relative to household income and financial wealth (see Chart 1.21). As equities continue to constitute the majority of pension fund assets, the value of ICPFs' reserves can change sharply. But the recovery in equity prices since March is likely to have reversed only a small part of the fall in pension wealth since 2000.

The vast majority of pension entitlements in occupational schemes is held in defined-benefit (DB) schemes. Under this arrangement, employers guarantee to pay a pension dependent on employee earnings and the length of service. This suggests that the fall in households' pension wealth since 1999 may be less than indicated by the reduction in ICPFs' reserves, as firms are committed to meet over time any shortfall between DB pension fund reserves and pension commitments. The value of DB pension fund reserves relative to pension commitments also depends on how long people live and the rate at which assets and future liabilities are discounted. The lower level of interest rates in recent years has reduced the rate at which future pension payments are discounted, which may also have contributed to shortfalls between DB pension fund reserves and commitments.

(1) Figures from the Government Actuary's Department for 2000.

The commitment of firms with DB pension schemes to meet shortfalls between pension entitlements and reserves may have lowered the value of their equity, reducing the wealth of shareholders, unit-trust investors and people whose pensions depend directly on pension fund returns. The implications of these shortfalls for investment and labour costs are discussed in Sections 2 and 4.

GDP growth in the major industrial economies remained weak in Q1. Signs of recovery in Q2 were patchy. In the United Kingdom, GDP is provisionally estimated to have grown by 0.3% in Q2, up from 0.1% in the previous quarter. Final domestic demand growth slowed in Q1, mostly reflecting a slowdown of consumption. Consumption growth seems to have picked up in Q2. Government spending continued to underpin domestic demand growth in Q1, while business investment remained flat. Revised data show a much weaker trade position in recent years than previously thought. But the ONS has indicated that the revisions will not lead to significant changes in the historical path of GDP, implying that domestic demand growth in the past has been stronger than currently estimated.

Table 2.A
GDP growth in the major economies

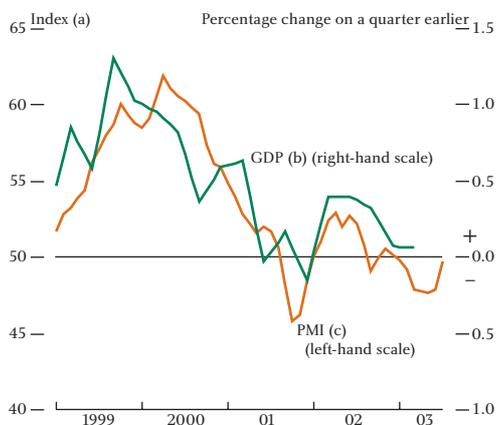
Percentage changes on a quarter earlier

	Averages		2002		2003	
	2001	2002	Q3	Q4	Q1	Q2
Euro area	0.2	0.3	0.3	0.1	0.1	n.a.
of which: Germany	0.0	0.2	0.3	0.0	-0.2	n.a.
France	0.2	0.4	0.3	-0.1	0.3	n.a.
Italy	0.2	0.2	0.3	0.3	-0.1	n.a.
United States (a)	0.0	0.7	1.0	0.3	0.4	0.6
Japan	-0.6	0.6	0.6	0.4	0.1	n.a.

Sources: Eurostat, Japanese Cabinet Office and US Bureau of Economic Analysis.

(a) Advance estimate for 2003 Q2.

Chart 2.1
Euro-area GDP and surveys of purchasing managers



Sources: Eurostat and Reuters.

- (a) A level below 50 indicates a decline in activity; above 50, an increase.
 (b) Quarterly growth rates have been allocated to the third month of the relevant quarter.
 (c) Weighted average of the PMI monthly indices for manufacturing and services, using the relative magnitudes of value added in industry and services in 2003 Q1 as weights.

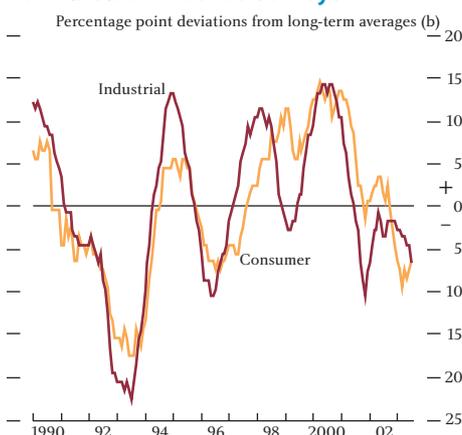
2.1 External demand and UK net trade

GDP growth remained below trend in the major industrial economies in early 2003. In the euro area, GDP increased by 0.1% in Q1, the same growth as in 2002 Q4 (see Table 2.A). In the United States, GDP rose by 0.4% in Q1, a little higher than in the previous quarter. The advance estimate shows that GDP growth increased in Q2, to 0.6%.

Euro-area surveys of purchasing managers suggest that GDP was no higher in the second quarter than in Q1, although there was some pick-up in the July surveys (see Chart 2.1). Surveys of consumer and industrial confidence show few signs of optimism (see Chart 2.2). In July, consumer confidence was only slightly higher than at its recent trough in March and well below its long-term average. Declining export prospects may help to explain lower industrial confidence during 2003. In April and May, average monthly goods exports at current prices were 2.5% lower than in the first quarter and 4.5% lower than in 2002 Q2. Net trade detracted substantially from euro-area GDP in both 2002 Q4 and 2003 Q1, after a prolonged period during which it had supported growth (see Table 2.B). The turnaround is likely to have been partly the result of the 16% appreciation of the euro effective exchange rate index since early 2002. That could also stimulate euro-area imports in 2003, despite subdued domestic demand.

Looking further back, modest GDP growth in the euro area in the past two years has been mostly accounted for by weak growth of domestic demand, especially of the private sector. In 2002, the private sector had a financial surplus of around

Chart 2.2
Euro-area confidence surveys^(a)



Source: European Commission.

- (a) Each survey reports the average balance of a number of questions covering different aspects of consumer and industrial confidence.
(b) Long-term averages are for the period January 1990 to July 2003.

Table 2.B
Contributions to euro-area GDP growth

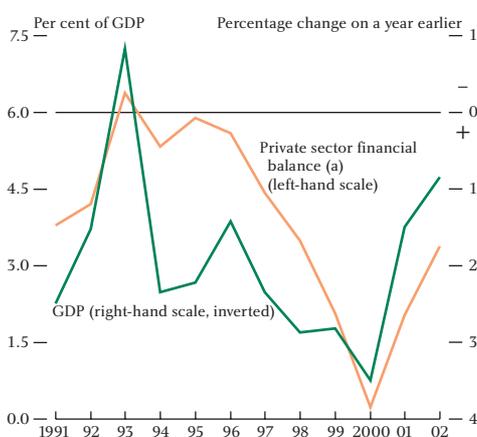
Percentage point contributions to quarterly growth

	Averages		2002			2005
	2001	2002	Q2	Q3	Q4	Q1
Consumption:						
Household	0.2	0.1	0.2	0.3	0.2	0.2
Government	0.1	0.1	0.2	0.1	0.1	0.1
Investment	-0.1	-0.1	-0.3	0.0	0.0	-0.3
Change in inventories	-0.2	0.0	0.1	-0.1	0.1	0.4
Domestic demand (a)	0.0	0.2	0.2	0.2	0.4	0.5
Net trade	0.1	0.1	0.3	0.1	-0.4	-0.4
GDP (a)	0.2	0.5	0.4	0.3	0.1	0.1

Source: Eurostat.

- (a) Components may not sum to totals due to rounding.

Chart 2.3
Euro-area GDP growth and the private sector financial balance



Sources: Eurostat and OECD.

- (a) Includes public corporations. Figures are not available for the financial balance of the private sector (including public corporations). By accounting identity, it equals the national financial balance minus the government financial balance, for which figures are available.

3% of GDP, compared with approximate balance two years earlier. Periods of weak GDP growth are often associated with private sector retrenchment and rising financial surpluses (see Chart 2.3).

The near-term prospects for a recovery in euro-area GDP growth depend heavily on the outlook for private sector domestic demand. In the short term, there are only limited prospects of a larger contribution to GDP growth from either government spending or net trade. Government borrowing in the euro area last year averaged 2.2% of GDP, and some countries were close to or above the 3% of GDP reference value for determining excessive budget deficits as part of the Stability and Growth Pact. That is likely to constrain fiscal policy in those countries, unless changes are made to the pact. And euro-area net trade is unlikely to improve significantly, in view of the large appreciation of the euro and the still sluggish recovery in the rest of the world.

What factors might stimulate a pick-up in the growth of private sector domestic spending? First, the ECB reduced its policy rate by a further 50 basis points in June, to 2%. In the past year, official short-term interest rates have fallen by 125 basis points and long-term interest rates have fallen by around 60 basis points. That has reduced the returns from saving and the cost of capital for investment. Second, equity prices have risen by about 21% since end-March and are back to their levels at the start of this year. Higher equity prices raise households' wealth, which should boost consumption. They may also reduce the cost of capital to businesses. Third, the euro's appreciation may improve the terms of trade—the average price of euro-area exports relative to the average price of euro-area imports. That could lower consumer prices, thereby increasing households' real wealth and income, which would support consumption. Finally, the recently announced measures in Germany to reduce non-wage labour costs and increase labour market flexibility next year may improve business confidence and the incentives to invest.

Looking forward, the Committee expects an acceleration in final domestic demand to raise GDP growth over the next year to around trend rates. However, the Committee has further reduced its forecast of euro-area GDP growth in 2003. That is mostly a result of more subdued current activity than the Committee had expected in May.

In the United States, consumer and business confidence have improved since March, following the end of the uncertainties associated with the war in Iraq. In July, the University of Michigan indicator of consumer confidence had more than recovered its sharp decline in Q1. The Conference Board

Table 2.C
Contributions to US GDP growth

Percentage point contributions to quarterly growth

	Averages		2002		2003	
	2001	2002	Q3	Q4	Q1	Q2 (a)
Consumption:						
Household	0.5	0.5	0.7	0.5	0.3	0.6
Government	0.2	0.2	0.1	0.2	0.0	0.3
Investment	-0.2	0.0	0.0	0.2	0.0	0.3
Change in inventories	-0.4	0.3	0.1	0.1	-0.2	-0.2
Domestic demand (b)	0.0	1.0	1.0	0.7	0.2	1.0
Net trade	0.0	-0.2	0.0	-0.4	0.2	-0.4
GDP (b)	0.0	0.7	1.0	0.3	0.4	0.6

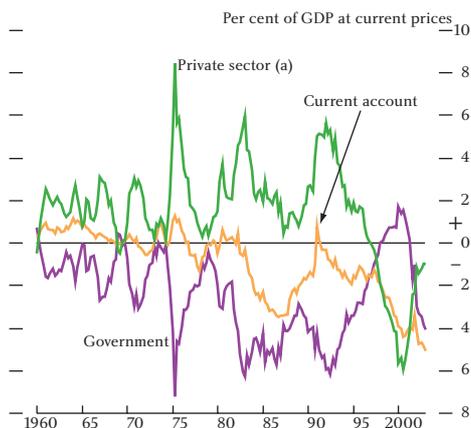
Source: US Bureau of Economic Analysis.

(a) Advance estimate.

(b) Components may not sum to totals due to rounding.

measure of consumer confidence declined sharply in July, in part on account of concerns about job prospects, although it too remained above its level in Q1. Since April, the ISM manufacturing purchasing managers' index has recovered somewhat while the non-manufacturing index has risen strongly since March and in July was the highest since the survey began in July 1997. However, improvement is not so evident yet in the official data. There was only a modest pick-up in GDP growth in Q2 according to the advance estimate, as an acceleration in domestic demand was mostly offset by weaker net trade (see Table 2.C). Around two thirds of quarterly GDP growth in Q2 was the result of national defence spending, its largest addition to GDP growth since 1967. The unemployment rate has risen further since the May Report. In June it was the highest for nine years, although it fell back a little in July. But after declining in Q1, business investment grew strongly in Q2, perhaps encouraged by improving corporate profitability.

Chart 2.4
US financial balances



Source: US Bureau of Economic Analysis.

(a) Includes public corporations. National Accounts figures are not available for the financial balance of the private sector (including public corporations). By accounting identity, it equals the national financial balance minus the government balance. For the estimates of the private sector balance, the national balance has been proxied by the current account balance.

The US current account deficit was 5.1% of GDP in Q1, the highest deficit since quarterly figures began in 1960 (see Chart 2.4). The current account deficit implies an increasing claim of overseas residents on US resources. In 2002, the United States had net indebtedness overseas equivalent to about 25% of GDP. Despite this, the United States had a small net income in 2002 from its net overseas liabilities. Nevertheless, it is unlikely that the United States could carry on increasing its overseas indebtedness at recent rates indefinitely. A current account deficit reflects the excess of national investment relative to saving. If the gap between national investment and saving is to fall, the proportion of GDP devoted to domestic demand must decline. What factors may help to reduce these imbalances?

Since end-March 2002, the dollar ERI has fallen by about 15% (see Section 1). So more resources may flow into the traded goods sector in the medium term as a result of improved US competitiveness. And the decline in the terms of trade, possibly associated with the dollar's depreciation, may subdue domestic demand, by reducing private sector real incomes. Finally, if sustained, the recent sharp increase in US long-term interest rates will reduce the potential gains to households from mortgage refinancing, which in turn may dampen consumption growth. Even so, looking forward, in the short term the MPC expects domestic demand growth to continue at around its strong rate in Q2. Federal tax and spending policies are supporting growth, while the Federal Open Market Committee reduced its target for the official short-term interest rate by a further 25 basis points in June, to 1%. This should underpin a recovery in US GDP growth to above

trend rates in the coming quarters. The current account deficit is expected to remain at around its Q1 level for the rest of 2003.

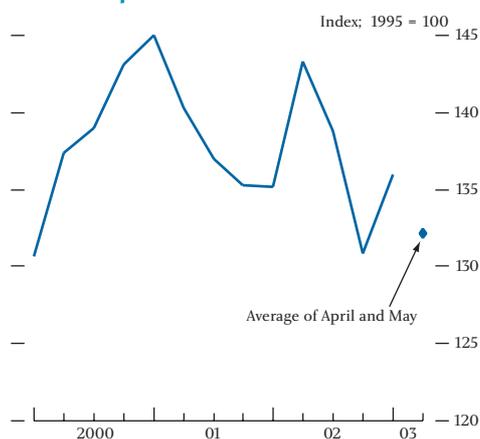
GDP in Japan grew by 0.1% in Q1. The June Tankan manufacturing survey exceeded market expectations and gave a less pessimistic assessment of the short-term outlook. That may, to some degree, be evidence of an easing of concerns following the end of the war in Iraq, the reduction in SARS in other parts of Asia and the boost to consumer and business confidence from a recovery of equity prices. GDP growth in the rest of Asia, which accounts for a higher share of UK trade than Japan, may have weakened temporarily in the first half of 2003. That in part reflects the weaker world environment and some temporary disruption associated with the SARS outbreak. Nevertheless, annual GDP growth in non-Japan Asia remained much higher than in the major industrial economies.

Overall, the Committee judges that the near-term outlook for the world economy has weakened slightly since the *May Report*. That largely reflects developments in the euro area, where there are only tentative signs of recovery. In the United States, GDP growth in Q2 was weaker than expected. But official short-term interest rates have fallen further since May, equity prices have risen and there are signs of improving business and consumer confidence. That should help support the projected strengthening in growth in the second half of 2003 and beyond.

In the May trade release published on 9 July the ONS made large upward revisions to the data for imports from the European Union, extending back to 1999 (see the box on pages 18–19 of this *Report* for further details). The ONS data for UK trade with the rest of the European Union are based on companies' VAT forms submitted to HM Customs and Excise. The new data take account of estimates by the ONS, in partnership with HM Customs and Excise, of imports for which VAT forms had fraudulently not been submitted. The revisions increased the level of total import volumes in 2002 by 1.6% of GDP. That has not yet been reflected in the National Accounts data. The ONS has stated that the upward revisions to imports are expected to have little effect on GDP. Instead, there will be similar upward revisions to domestic demand when revised GDP figures are published in late September.

Recent UK trade data have been weak. In April and May, the average monthly volume of goods exports was 2.8% lower (see Chart 2.5), and the volume of goods imports 2.2% lower, than in Q1. According to the ONS, at least some of that weakness

Chart 2.5
Goods export volumes

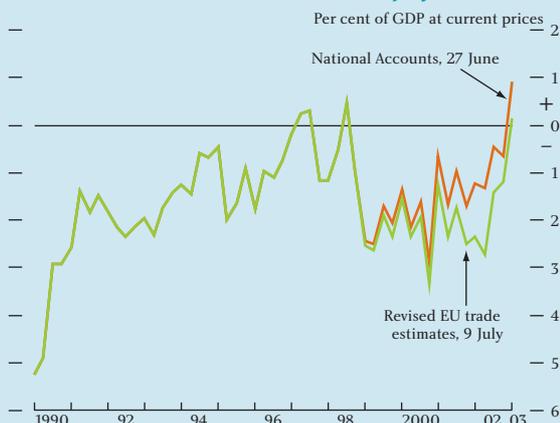


Data revisions for imports from the European Union

In July, the ONS substantially revised up its estimates of goods imports to allow for previously unrecorded transactions. Data for UK trade with the rest of the European Union are based on companies' VAT records submitted to HM Customs and Excise. A particular type of VAT evasion, known as missing trader intra-community (MTIC) fraud, during the past four years has led to imports from the European Union being underrecorded. As a percentage of GDP, the revisions increased the current account deficit by 0.7 percentage points in 2001 and 1.0 percentage point in 2002, to stand at 2.0% and 1.9%, respectively, in the two years.

The ONS has publicly stated that real GDP is likely to be little changed as a consequence of these revisions when it publishes new National Accounts figures in late September. Estimates of GDP growth from 2002 Q1 are based primarily on data for output and thus will not be affected by the revisions to imports. So from 2002 Q1 the effects of the new imports data will be offset by upward revisions to other expenditure components of GDP. For earlier quarters, the ONS believes that other new information mostly offsets the potential effects on GDP of the new imports data, leaving GDP broadly unaffected by these recent revisions.

Chart A
Current account of the balance of payments



Why were imports revised?

The revisions to imports account for the impact of MTIC fraud. The fraud involves a fraudster importing goods VAT-free from one EU country and selling them to another company within the United Kingdom at a price including VAT. The fraudster

then goes missing without paying the VAT to HM Customs and Excise. As the fraudster does not submit any VAT returns, HM Customs and Excise will not record the imports.

There are two types of MTIC fraud. 'Acquisition' fraud arises if the goods are sold on the home market for consumption. With 'carousel' fraud, the goods are not sold for consumption on the home market, but bought by a series of companies in the United Kingdom, re-exported to another member state and then sometimes re-imported. Hence the goods move around as if on a carousel. The exporter does not charge VAT on its export transaction, and correctly accounts for its exports to HM Customs and Excise. The latest revisions to the imports data only take account of carousel trade. Goods most susceptible to carousel trade have included mobile phones and computer components.⁽¹⁾

Effects on the trade balance

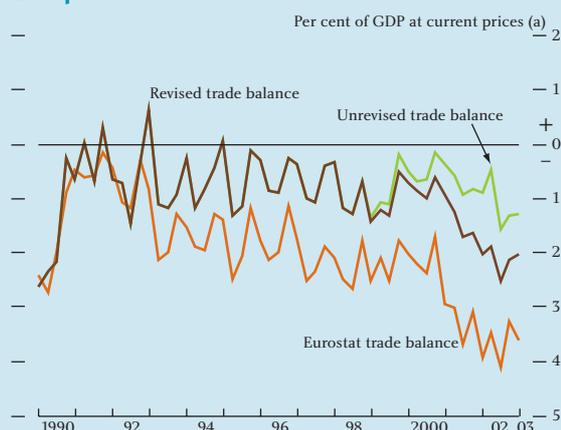
The revisions have increased imports from the European Union at current prices by £1.7 billion in 1999, £2.8 billion in 2000, £7.1 billion in 2001 and £11.1 billion in 2002. Based on revised ONS trade data, the UK trade deficit with the rest of the European Union was around 0.6% of GDP in 2000, 1.2% of GDP in 2001 and 2.0% of GDP in 2002.

The revisions have reduced, but not eliminated, the discrepancies between the UK published trade data and Eurostat data, with the latter indicating a much larger UK trade deficit with the rest of the European Union in recent years (see Chart B). Eurostat data show the United Kingdom's trade with the rest of Europe as measured from the European side. As MTIC fraud leads to imports being underrecorded in EU countries, the UK data for UK exports to the rest of the European Union may be more reliable than the equivalent Eurostat figures for EU imports, which have not been adjusted for VAT fraud. Equally, the Eurostat data for EU exports to the United Kingdom would take account of other types of VAT-related fraud not yet allowed for in the equivalent UK data for UK imports. For instance, estimates of acquisition fraud have yet to be developed, which could further reduce the discrepancy. There are also a number of other reasons why discrepancies will occur between

(1) The National Accounts are constructed according to the European System of Accounts (ESA) 1995. Under ESA 1995, illegal activity such as carousel fraud should be included in the National Accounts, provided the transaction is undertaken by mutual agreement of the buyer and seller. For further information on the effects of this fraud on the National Accounts, see Ruffles, D, Tily, G, Caplan, D and Tudor, S (2003), 'VAT missing trader intra-community fraud: the effect on balance of payments statistics and UK National Accounts', ONS, July. This article is available at www.statistics.gov.uk/articles/nojournals/MITC.pdf and forthcoming in *Economic Trends*, August.

countries' trade figures.⁽²⁾ In 2002, UK imports from the European Union were around £5 billion higher measured by the Eurostat data than the fraud-adjusted estimates of HM Customs and Excise. The UK trade deficit with the rest of the European Union in 2002 was around £16 billion higher measured by Eurostat data than the fraud-adjusted estimates.

Chart B
Goods trade balance with the rest of the European Union



Note: The trade data in the chart are based on Eurostat trade statistics from EU customs bodies. These are on a different basis to the ONS trade data reported elsewhere in this box.

Sources: Bank of England, Eurostat and HM Customs and Excise.

(a) Trade data are not seasonally adjusted.

The revisions to the imports data are the result of transactions that may not have been profitable without this type of VAT fraud. It is possible to use these revisions to estimate trends in non-fraudulent exports. Chart C shows that based on published data, UK goods exports as a share of goods imports by the major six economies were relatively flat until

Chart C
UK share of major six trade^(a)



Sources: Bank of England and ONS.

(a) Volumes of goods and services, ratio of UK exports to UK-weighted imports of the major six economies (Canada, France, Germany, Italy, Japan and the United States).

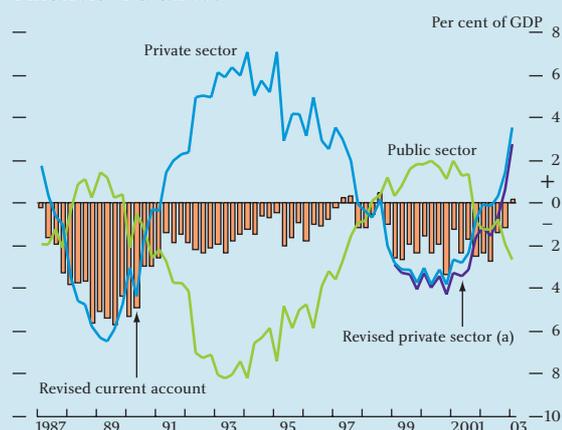
(2) See the annex of Ruffles *et al*, *op cit*.

early last year, when the UK trade share declined sharply. However, removing the adjustments for the impact of carousel fraud indicates that the UK non-fraudulent trade share has been declining persistently since late 1996, perhaps in part as the result of sterling's appreciation. Looking further back, the UK trade share has been on a fairly prolonged downward path during the past 20 years, in part as the share of emerging economies in world trade has risen.

What do these revisions imply for imbalances?

The counterpart to an increased UK current account deficit is likely to be a downward revision to the financial balance of the private sector (see Chart D). That may be the result of increased spending by corporations (reflecting higher business investment) and the household sector (as a result of higher consumption). But these revisions will not change significantly recent trends.

Chart D
Financial balances



Sources: Bank of England and ONS.

(a) Bank of England estimates.

Effects on the Committee's forecasts

The Committee's latest projections take into account an estimate of the possible ONS revisions to the expenditure components of GDP to be published in late September. These revisions are inevitably uncertain prior to publication. The ONS has already announced that the level of GDP is expected to be largely unaffected. The MPC has assumed that of the increase in import volumes compared with the unrevised ONS data (equivalent to around 1.6% of GDP in 2002) roughly half will be offset by upward revisions to household consumption, with the remainder balanced by a higher level of investment. The Committee's latest projections are summarised in Section 6 of this Report.

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

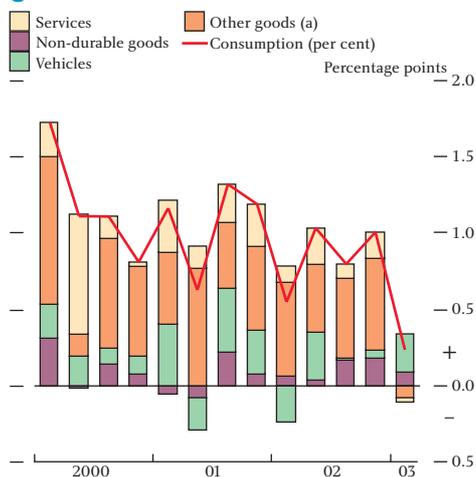
Percentage changes on a quarter earlier

	Averages		2002			2003
	2001	2002	Q2	Q3	Q4	Q1
Consumption:						
Household	1.1	0.8	1.0	0.8	1.0	0.2
Government	1.1	0.4	-1.1	0.3	0.9	2.5
Investment	-1.2	0.3	2.5	-0.1	0.2	-1.1
of which, business	-1.7	-1.0	2.4	-2.9	0.5	0.0
Final domestic demand	0.7	0.7	0.9	0.6	0.8	0.4
Change in inventories (b)	-0.1	0.3	-0.9	0.6	1.0	-0.7
Excluding alignment adjustment (b)	-0.2	0.2	-0.5	0.1	0.4	-0.3
Domestic demand	0.6	0.9	0.0	1.1	1.8	-0.3
Exports	-1.2	-0.1	3.4	-0.6	-3.9	2.2
Imports	-0.6	0.9	1.3	0.1	0.4	0.7
Net trade (b)	-0.1	-0.4	0.6	-0.3	-1.5	0.4
GDP at market prices	0.5	0.6	0.6	0.9	0.5	0.1

(a) At constant 1995 market prices.

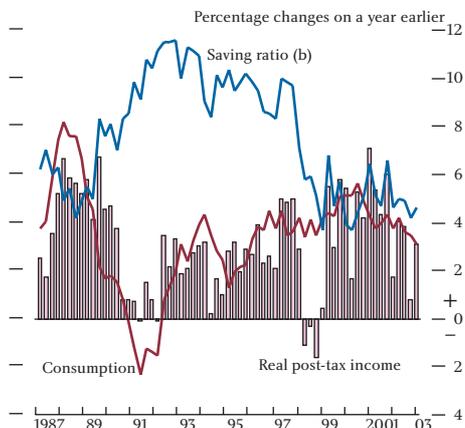
(b) Percentage point contribution to quarterly growth of GDP.

Chart 2.6
Contributions to quarterly consumption growth



(a) Durable goods other than vehicles, plus semi-durable goods.

Chart 2.7
Household real post-tax income,^(a) consumption and saving



(a) Deflated by the household consumption deflator. Income refers to household disposable income before payments to, or receipts from, pension funds.

(b) Household saving as a percentage of nominal disposable income.

in the trade data was the result of the reduction in fraudulent activity related to the evasion of VAT.

2.2 GDP and domestic demand

GDP growth slowed to 0.1% in Q1 from 0.5% in the previous quarter (see Table 2.D). That was the weakest quarterly outturn for over ten years. Final domestic demand increased by 0.4% in Q1, its lowest growth for over five years, and household consumption decelerated sharply. The preliminary estimate suggests that GDP growth was 0.3% in Q2.

Household consumption

Real household consumption in Q1 increased by 0.2%, compared with 1.0% in the previous quarter. That was a larger decline in growth than the Committee had expected at the time of the *May Report* and Q1 exhibited the weakest quarterly growth for over five years. Despite the positive impetus from expenditure on vehicles, total spending on durable and semi-durable goods increased by just 0.5% in Q1, compared with 2.1% in 2002 Q4. That accounted for over half of consumption's deceleration in Q1 (see Chart 2.6).

Growth of household real post-tax income picked up to 0.7% in Q1, from 0.3% in the previous quarter (see Chart 2.7). Within household income, employers' real pension and other social contributions increased by 4.7% in Q1, probably a response to the pension fund deficits reported by many companies (see Section 1). These contributions are not paid to employees but nonetheless count as household income in the National Accounts. They added 0.5 percentage points to the quarterly growth of household real post-tax income in Q1. Real wages and salaries increased by 0.1% in the same quarter, the lowest growth rate for nearly seven years.

The available indicators point to a pick-up in the growth of consumption since Q1. The ONS figures for retail sales cover around 35% of household consumption, and these data provide more timely information than the quarterly National Accounts. Retail sales increased by 1.6% in Q2, following an unchanged level of sales in the first quarter (see Chart 2.8). Growth in Q2 was significantly higher than would have been implied by the Committee's May forecast for consumption. But if Q1 represented a temporary lull in retail sales, perhaps in response to the war in Iraq, then taking the first two quarters of 2003 together indicates that quarterly growth on average was around half that in the second half of last year. In July the CBI *Distributive Trades Survey* indicator of retail sales rose to its highest level for 15 months (see Chart 2.9).

Chart 2.8
Retail sales

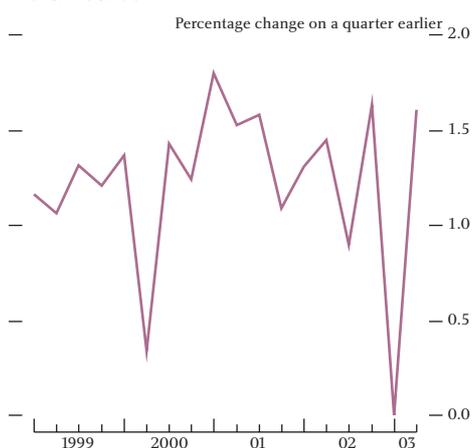
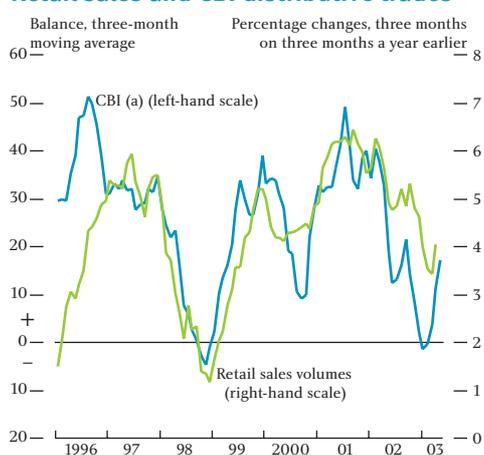


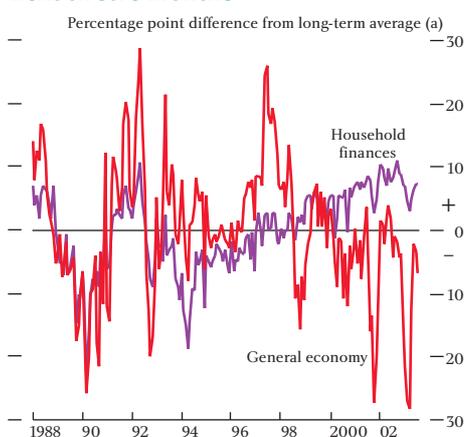
Chart 2.9
Retail sales and CBI distributive trades



Sources: CBI and ONS.

(a) Balance of respondents reporting retail sales higher than a year earlier.

Chart 2.10
GfK consumer confidence: situation over next twelve months



Source: Martin Hamblin GfK.

(a) Long-term averages are for the period January 1988 to July 2005.

The GfK consumer survey indicates that households' confidence in the outlook for the economy over the next twelve months has recovered sharply since March, although the indicator fell back a little in July (see Chart 2.10). The same survey indicates that households' confidence in their own financial position has also improved since March, although it remained lower than at the end of last year.

Since the *May Report*, there has been a further recovery of equity prices and somewhat stronger-than-anticipated increases in house prices (see Section 1). And the MPC reduced the repo rate by 25 basis points to 3.5% at its July meeting. Nonetheless, the Committee expects that the outlook is for below-trend consumption growth. While higher employer pension contributions may continue to boost the growth of real incomes as defined by the ONS, they are unlikely to affect consumption. Growth of real take-home pay is expected to remain subdued in the short term. And house price inflation is slowing.

Public sector spending

Government consumption volumes increased by 2.5% in Q1. Investment by general government was boosted in Q1 by a transfer of assets from NHS trusts, which are classified as public corporations in the National Accounts. Even so, investment by general government and NHS trusts together was particularly strong in Q1, increasing by 13.9% compared with the previous quarter.

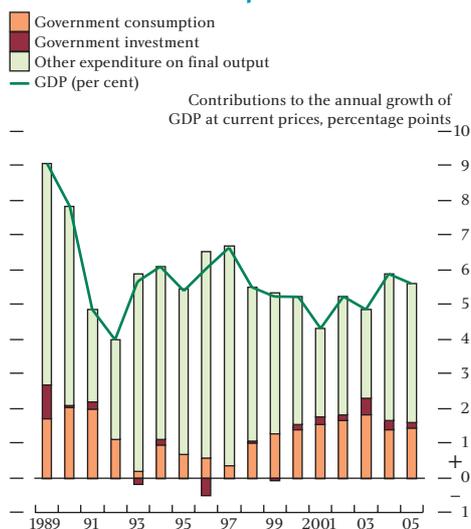
In the 2003 Budget, nominal government consumption and investment together were forecast to grow by nearly 11% in 2003–04.⁽¹⁾ Based on the Budget forecasts of nominal GDP underlying the fiscal projections, that would add 2.3 percentage points to nominal GDP growth in 2003–04, the largest such contribution of government spending in any financial year since the late 1980s (see Chart 2.11).

Investment

Whole-economy investment declined by 1.1% in Q1. That mostly reflected a decline of 8.8% in private sector dwellings investment. Business investment was unchanged in Q1. After declining sharply in the year to 2002 Q1, business investment was broadly flat in the following year. Revisions have further raised the level of business investment and in 2003 Q1 it was 1.3% higher than the MPC had projected in May (see Chart 2.12). In preparing its forecast the MPC has made further upward adjustments to the level of business

(1) See Table C24 on pages 278–79 of the *Budget Report*, HM Treasury, April 2005. Based on public sector accounts definitions of government consumption and gross investment.

Chart 2.11
Government consumption and investment



Note: Financial years. Figures for 2002–03 to 2005–06 are the Treasury’s Budget 2003 forecasts.

Sources: HM Treasury and ONS.

Chart 2.12
Business investment

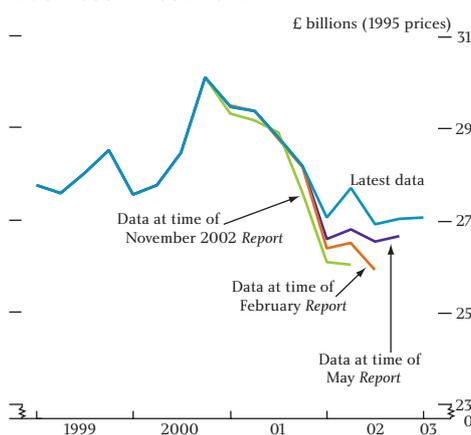
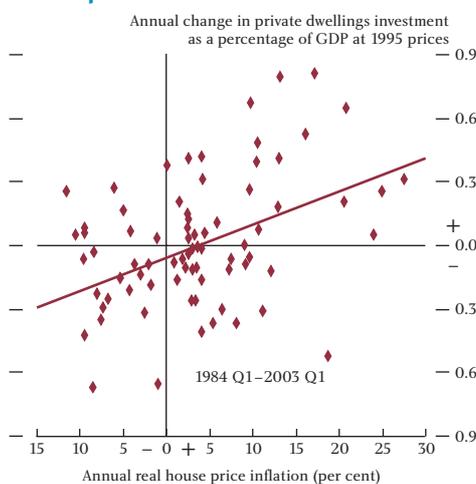


Chart 2.13
Private dwellings investment and real house prices^(a)



Sources: Halifax and ONS. Correlation coefficient is 0.40.

(a) The Halifax index divided by RPIX.

investment, as a partial offset to the impact on GDP from the ONS revisions to the imports data (see the box on pages 18–19).

Indicators such as the financial balance and liquidity ratio of private non-financial corporations (PNFCs) suggest that firms are better positioned to finance investment. The financial surplus of PNFCs increased further in Q1 to its highest percentage of GDP since figures began in 1987. And reports of business intentions to the Bank’s regional Agents suggest some pick-up in investment in the near future. Nevertheless, in the short term business investment may be restrained by uncertainty about the strength of the recovery, the high level of capital gearing, the existence of spare capacity (see Section 3) and company pension fund deficits diverting cash away from other uses. While many companies should be able to finance profitable investment, perhaps by borrowing, others may have limited access to credit or find it too costly. The drain on cash-flow from increasing pension fund payments may restrain these companies’ investment plans.

Private investment in dwellings in Q1 was 10.2% higher than a year earlier. This was despite its sharp quarterly decline in Q1. That decline was surprising in view of other indicators of the housing market, such as increased construction of private new housing in the first quarter (see Section 3).

Housing supply is sensitive to changes in real house prices, which affect the profitability of new housebuilding (see Chart 2.13). Studies suggest that a 1 percentage point increase in real house prices increases housing supply by about half a percentage point. That is low by European standards.⁽¹⁾ In 2001 Q2, constant-price private investment in dwellings was the lowest proportion of GDP since figures began in 1962. High real house price inflation since then has stimulated dwellings investment and its share of GDP in 2002 Q4 was the highest since the late 1980s. Even so, constraints on housebuilders may be limiting supply. The Bank’s Agents have reported that private housebuilding has continued to be affected by shortages of skilled labour and difficulties in securing sufficient planning permission.

Looking ahead, the MPC believes that the growth of whole-economy investment may pick up slightly in the second half of 2003. That mostly reflects stronger business investment, although judged against its recent rate of contraction, the expected pick-up is quite modest. The growth of housing investment in 2003 is likely to be weaker than last year, in part because house price inflation continues to slow.

(1) See ‘Housing, consumption and EMU’, HM Treasury, June 2003, available at: www.hm-treasury.gov.uk/documents/the_euro/assessment/studies/euro_assess03_studdorset.cfm.

Chart 2.14
Stock-to-output ratio:^(a) whole economy
and manufacturing



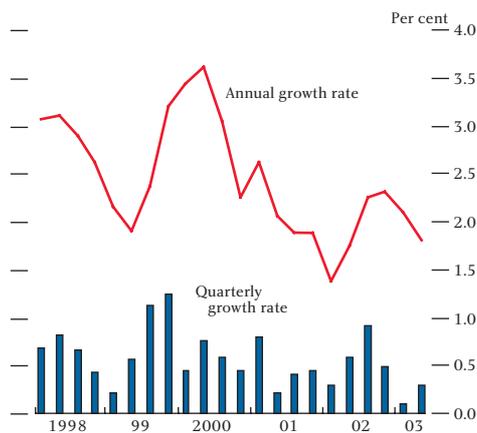
(a) Stock of inventories (excluding the alignment adjustment) as a proportion of quarterly gross value added at 1995 prices.

Inventories

Manufacturers continued to reduce stocks in Q1 (see Chart 2.14). Overall, stocks rose slightly in Q1. But stockbuilding—the change in stocks—was lower than in the previous quarter and consequently detracted 0.3 percentage points from GDP growth in Q1. Inventory accumulation in the National Accounts includes a statistical alignment adjustment, which the ONS adds to its estimates of changes in the raw stock data to ensure the same growth of the expenditure and output measures of GDP. Once that is taken into account, inventories reduced GDP growth by 0.7 percentage points in Q1.

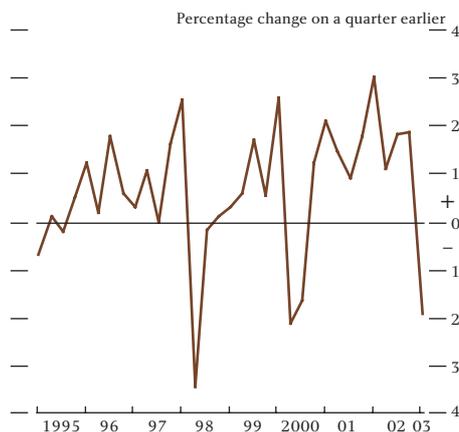
GDP is estimated to have grown by 0.1% in 2003 Q1. Growth appears to have picked up a little in the second quarter, to 0.3% according to the ONS preliminary estimate. Capacity pressures are lower than normal. People have, on average, been working fewer hours. But the number of people in employment has continued to rise, partly reflecting increased recruitment in the public sector. Measures of productivity growth give conflicting signals. Unemployment has been stable for over a year and is low by recent historical standards. Companies' reports to the Bank of England's regional Agents suggest that skill shortages have eased over the past year, but continue to be above normal.

Chart 3.1
GDP^(a)



(a) At constant market prices.

Chart 3.2
Construction output



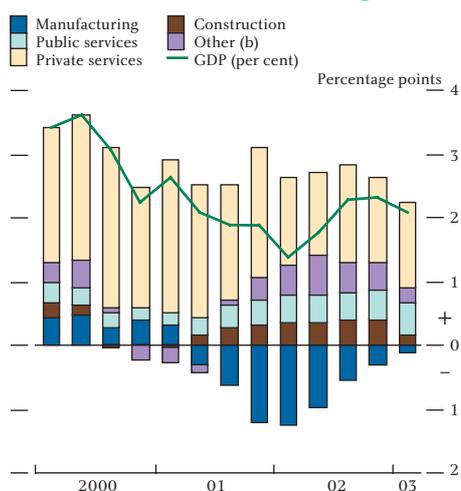
3.1 Output

Whole-economy output reflects the production decisions of all firms and public sector organisations. Those decisions will take account of the expected level of demand, of the resources available, and of prices. Each quarter, the ONS estimates whole-economy output, termed gross domestic product (GDP). According to the June release of the National Accounts, GDP grew by just 0.1% in 2003 Q1 after growing by 0.5% in 2002 Q4 (see Chart 3.1).

When interpreting GDP data, the Committee takes account of activity in different sectors. The slower growth in Q1 was partly driven by volatile movements in particular elements of GDP. On a seasonally adjusted basis, energy-related output fell in Q1, owing in part to an unusually warm first quarter, reducing GDP growth by 0.1 percentage points. A box on pages 26–27 of this *Report* describes how oil and gas extraction, one part of energy-related output, can affect GDP growth.

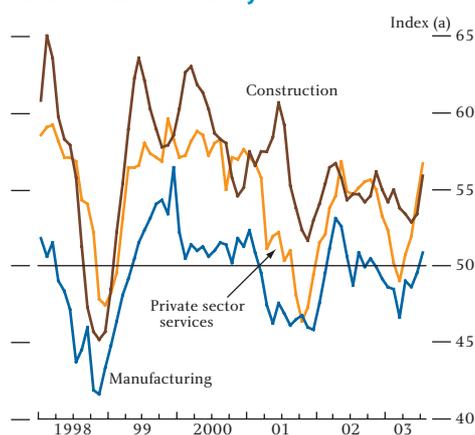
Construction output is currently estimated by the ONS to have fallen sharply in 2003 Q1, after strong growth for the previous two years (see Chart 3.2). The weakness in construction was concentrated in corporate sector activity, while there were increases in construction of public sector projects and new housing. Construction output can be erratic from one quarter to another. For example, in 2000 Q2 and Q3 output fell sharply, partly in response to higher rainfall than normal. But the unusually warm weather in 2003 Q1 might, if anything, have increased output. There was little sign of a fall in output from other indicators of construction—the volume of new orders, employment growth, the CIPS survey of construction companies, and reports to the Bank of England's

Chart 3.3
Contributions to annual GDP^(a) growth



(a) GDP at constant market prices.
(b) Includes agriculture, energy and the difference between GDP at market prices and gross value added at basic prices.

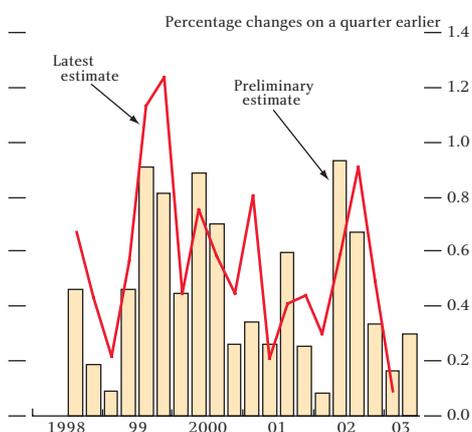
Chart 3.4
CIPS business activity



Source: CIPS.

(a) A reading of 50 indicates no change on the previous month.

Chart 3.5
GDP^(a) growth: preliminary estimate and latest estimate



(a) At constant market prices.

Agents. It therefore seems likely that the fall was erratic, and that the underlying trend is one of continuing growth.

A further source of weakness in 2003 Q1 was the sharp slowdown in the output of private sector services, to 0.2% in 2003 Q1 from 0.8% in 2002 Q4. This sector makes up about half of GDP and therefore has a large impact on whole-economy growth (see Chart 3.3). Partially offsetting the slowdown in private sector services in Q1, public sector output growth increased, while output in the manufacturing sector stabilised, after two years when production generally declined.

According to the ONS preliminary estimate, GDP grew by 0.3% in 2003 Q2 (see Chart 3.1), a little higher than growth in Q1, but still below trend and below the MPC's expectations in May. Service sector output grew by 0.4%, the same as in the first quarter. And according to more recently published data, manufacturing output was slightly higher on the quarter. The CIPS survey indicates some recovery in growth in private sector services, manufacturing and construction in June and July (see Chart 3.4).

The MPC takes account of the likelihood that GDP data will be revised when deciding how much weight to put on the latest data. Chart 3.5 compares the preliminary estimate of GDP growth with the latest estimate.⁽¹⁾ Preliminary estimates of GDP were first released on a market-prices basis for 1998 Q3. On average, the latest estimate of growth is 0.1 percentage points higher than the corresponding preliminary estimate. Since 1998 Q3, low preliminary estimates have generally been revised up by more than this (preliminary estimates below 0.4% were revised up by 0.2 percentage points on average).

3.2 Factor inputs

Output is determined by the factor inputs into the production process: labour and capital; and the efficiency with which they are combined, sometimes called total factor productivity (TFP).

Employment

The Labour Force Survey (LFS) asks a sample of households about their labour market activity over the past three months. It suggests that total hours worked have been flat to falling since early 2002, after sustained increases in preceding years (see Chart 3.6). Slower output growth since early 2001 appears to have translated into weaker labour demand growth.

(1) For a more detailed discussion of GDP revisions see Akritidis, L (2003), 'Revisions to quarterly GDP growth', *Economic Trends*, May; and Castle, J and Ellis, C (2002), 'Building a real-time database for GDP(E)', *Bank of England Quarterly Bulletin*, Spring, pages 42–49.

The impact of oil and gas extraction on UK GDP

Oil was first extracted from the UK continental shelf in 1975, and gas extraction started earlier, in 1965. Since 1980, oil and gas extraction has generally been close to 2% of whole-economy output (measured at 1995 prices). Oil and gas output can be volatile; indeed some quarterly fluctuations have been large enough to alter GDP growth significantly. This box describes key features of the industry and considers whether the fluctuations in its output contain information for monetary policy.

Oil prices are determined in a global market, and are continually updated to reflect market expectations of global demand and supply. In 2002, total production of oil in UK fields was just 3.5% of global oil production, and so changes in UK output will have little, if any, effect on the price of oil.

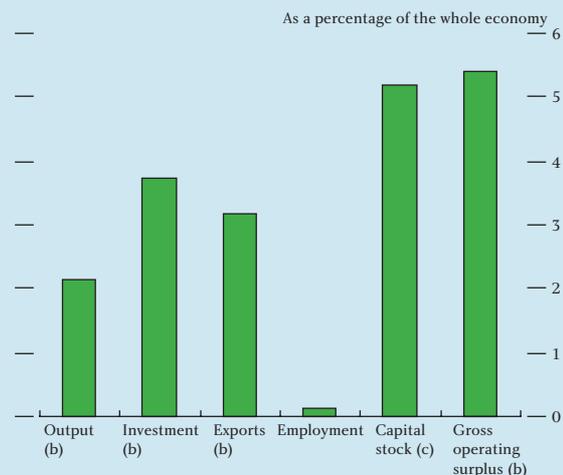
There is not, as yet, a global market for gas, since the trade in gas is mainly carried out over pipeline networks, and these do not link all of the continents. So arbitrage pressures between different regions of the world are considerably weaker than in the oil market. The United Kingdom has been connected to the European gas network since 1998 (through the so-called 'Interconnector' that runs from Norfolk to Zeebrugge in Belgium). Since then gas prices in the United Kingdom have broadly reflected the balance between demand and supply in Europe. The United Kingdom is a relatively large supplier within the EU market, producing around a quarter of total EU consumption of gas in 2002. And so capacity pressures in the domestic production of gas are one factor that will affect gas prices in the United Kingdom.

Relative to the rest of the UK economy, the oil and gas extraction industry is capital intensive. The industry employs just 0.1% of the UK employed labour force, but around 5% of the total capital stock is devoted to oil and gas extraction, in the form of oil rigs, tankers and pipe lines (see Chart A). This implies that even large changes in oil and gas output will have very little effect on the demand for labour.

Oil and gas extraction can be volatile, both from one quarter to the next, and from year to year (see Chart B). Quarterly volatility, which is visible by comparing actual output with the five-quarter mean in Chart B, is largely caused by changes in the weather, and production decisions relating to demand and maintenance requirements. The swings in output over a longer time period, captured by the five-quarter mean, are more related to changes in technology and the number of sites in production.

Although oil and gas extraction makes up just 2% of GDP, it is sufficiently volatile to affect whole-economy

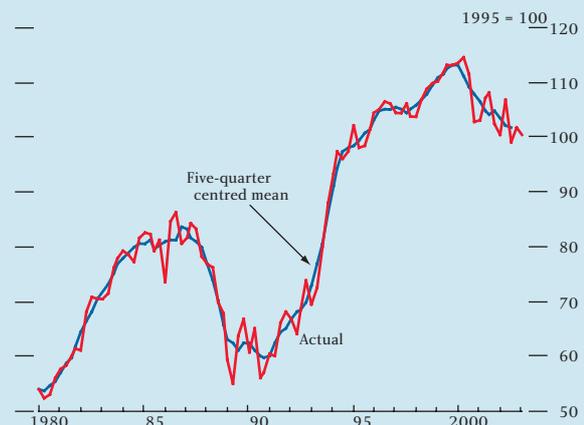
Chart A
Size of the oil and gas extraction industry^(a)



Sources: Bank of England and ONS.

- (a) Averages between 1995 and 2000.
- (b) In 1995 prices.
- (c) In 1995 prices. These estimates are derived from the Bank of England's capital stock model. See Oulton, N and Srinivasan, S (2003), 'Capital stocks, capital services, and depreciation: an integrated framework', *Bank of England Working Paper no. 192*.

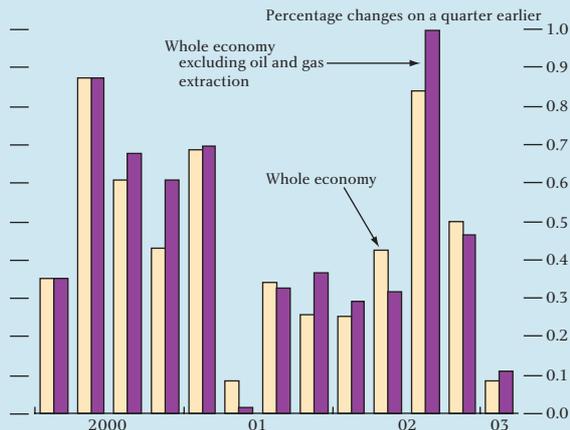
Chart B
Oil and gas extraction



output growth from quarter to quarter. GDP growth in 2003 Q1 appears to have been virtually unaffected by oil and gas extraction, but for example, in 2002, oil and gas extraction boosted GDP quarterly growth by 0.1 percentage points in the second quarter, and reduced growth by 0.2 percentage points in the third quarter (see Chart C). Movements in oil and gas extraction from year to year have, in general, not been large enough to change significantly annual GDP growth (see Chart D).

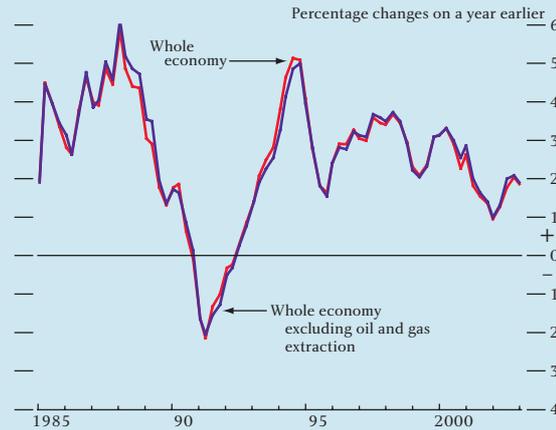
GDP growth is a key input into the MPC's assessment of the balance between demand and supply in the United Kingdom, and hence the pressure on domestically generated inflation. There is a case for focusing on GDP growth excluding the North Sea sector. The prices of oil and (to a lesser extent) gas in the United Kingdom are not closely related to

Chart C
GDP



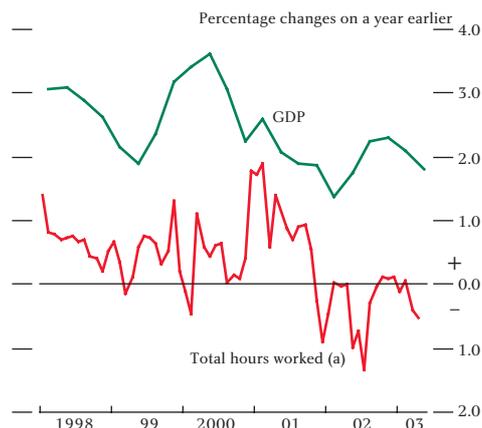
capacity pressures in UK production of oil and gas, but instead reflect the expected balance between demand and supply in world markets. Furthermore, because oil and gas extraction is capital intensive, even large changes in production have small

Chart D
GDP



implications for whole-economy labour demand and thus for wage pressure. So the growth rate of output in oil and gas extraction probably carries little news for medium-term inflationary pressure in the United Kingdom.

Chart 3.6
Total hours worked and GDP

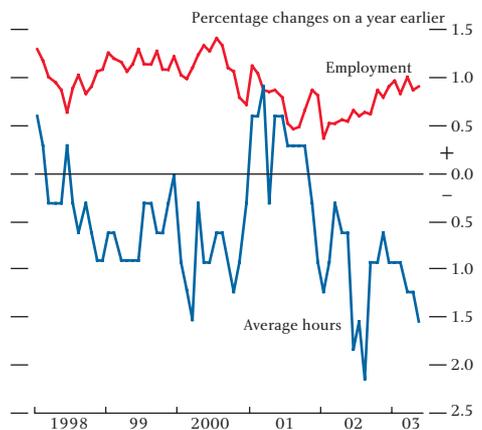


(a) LFS measure.

The weakness in total hours worked is the result of contrasting trends in average hours and in the numbers employed. According to the LFS, average hours worked have fallen around 1% a year, over the past two years, while the number of people in employment has risen quite strongly, particularly over the past year (see Chart 3.7).

There are several possible explanations for the recent fall in average hours worked. If firms perceive the slowdown in demand to be temporary, they may have chosen to retain their existing staff and have attempted to reduce labour costs by reducing hours worked, perhaps by cutting overtime. This 'labour hoarding' would avoid the cost of making changes to staff levels. But it would not explain why the number of people in employment has been rising.

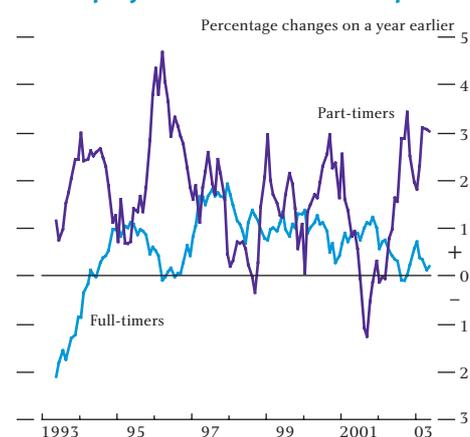
Chart 3.7
LFS employment and average hours



It is possible that firms have been employing more people because their staff want to work fewer hours. The average number of hours worked per week has fallen by 0.5% per year on average since 1950,⁽¹⁾ as rising real wages have allowed households to enjoy more leisure time. In the past year, average hours have fallen more sharply, partly due to the strong growth in the number of people working part-time (see Chart 3.8). Detailed data from the LFS indicate little change in the number of part-timers who would prefer to work full-time, suggesting that the increase in part-time work has generally been voluntary. Falling average hours may also have reflected increased compliance with the EU Working Time Directive (WTD) introduced in October 1998, which limited the average working week to 48 hours. On 1 August 2003, this

(1) See page 27 of the May 2003 *Inflation Report* for more details.

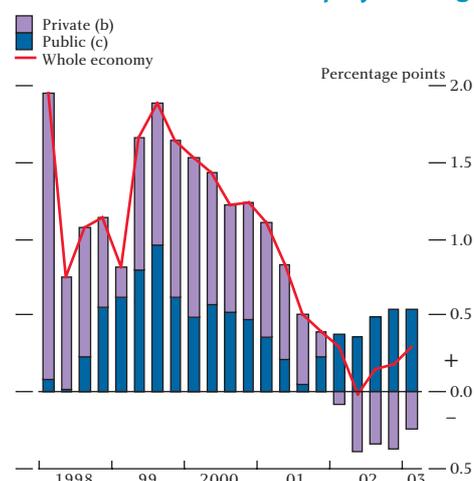
Chart 3.8
LFS employment: full-timers and part-timers



was extended to some workers in the transport sector who were previously exempt.

The Workforce Jobs survey provides an alternative official estimate of employment to the LFS, by asking a sample of firms how many people they employed on a single day towards the end of each quarter. This measure has suggested somewhat weaker growth in employment than the LFS in the recent past. The workforce data are generally regarded as a better source than the LFS for the industrial composition of employment. They suggest that in 2003 Q1, private sector employment was 0.3% lower than a year earlier. But total employment was supported by the 2.3% increase in the public sector (see Chart 3.9).

Chart 3.9
Contributions to annual employment^(a) growth

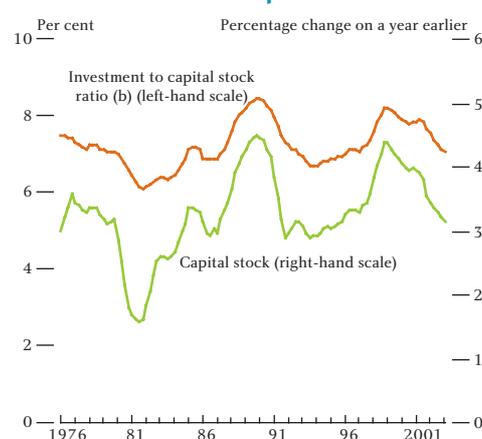


- (a) Workforce Jobs measure.
- (b) Equals whole economy less public.
- (c) Public administration, education and health; includes some private sector workers.

Capital stock

Over the past few years, the annual growth rate of the capital stock is estimated to have fallen to around 3% as the level of whole-economy investment (excluding housing), relative to the stock of capital, has declined (see Chart 3.10). The estimates of the capital stock reported here are constructed by Bank of England staff from published investment data.⁽¹⁾ Investment may be revised up in the forthcoming *Blue Book* (see the box on pages 18–19 of this *Report*).

Chart 3.10
Investment and the capital stock^(a)



Sources: Bank of England and ONS.

- (a) Excludes housing.
- (b) The sum of investment over the preceding four quarters, divided by the capital stock four quarters earlier.

Since 1976, the capital stock has grown faster than output by about 1 percentage point per year on average. The main reason is that technological advances have reduced the price of new capital goods relative to other goods. For example, since 1976, the ratio of the price of non-residential investment goods to other prices (as measured by the GDP deflator excluding investment) has fallen by around 40%. So long as the relative price of investment goods continues to fall, the capital stock is likely to grow faster than output. But in light of the prospects for investment discussed in Section 6, there is unlikely to be a substantial pick-up in the growth of the capital stock in the near term.

Productivity

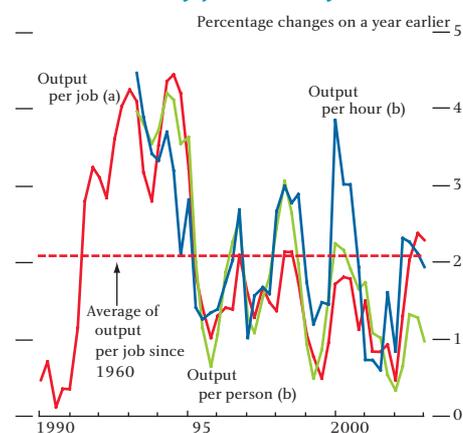
The supply capacity of the economy also depends on the level of total factor productivity (TFP) which determines how much output can be produced from given quantities of labour and capital inputs. TFP reflects the level of productive knowledge in an economy at any given time, and hence the technology available to entrepreneurs, and the efficiency of their business practices. A box in the *May Report* explained one method for assessing the trend in TFP.⁽²⁾ This method suggested that TFP growth had raised the supply

(1) See Oulton, N and Srinivasan, S (2003), 'Capital stocks, capital services, and depreciation: an integrated framework', *Bank of England Working Paper no. 192*.
(2) See pages 26 and 27 of the *May 2003 Report*.

capacity of the economy by more than 30% over the past 25 years.

Labour productivity measures output per unit of labour input, expressed either in terms of persons employed or hours worked. The long-run trend in labour productivity per hour is determined by TFP growth, and the growth rate of the capital stock, while productivity per person employed will also depend upon changes in the average number of hours worked. Since 1960, the official measure of productivity per job has grown by just over 2% per year. Given the long-run tendency for average hours to fall, productivity per hour is likely to have grown faster than productivity per head on average over the past.

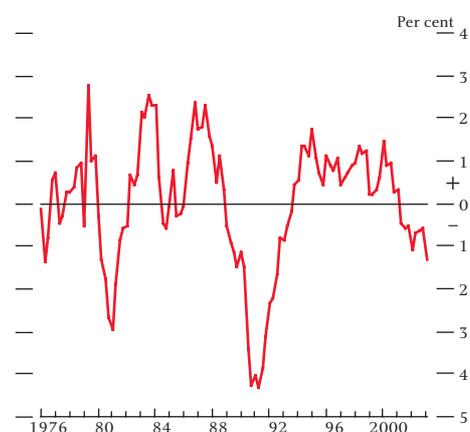
Chart 3.11
Whole-economy productivity



(a) Official measure, based mostly on Workforce Jobs data.
(b) Based on LFS employment and hours data.

The official measure of productivity grew by 2.3% in the year to 2003 Q1, following several years of below-trend growth (see output per job in Chart 3.11). But the employment series used to construct that measure ('productivity jobs') fell by 0.4% in the year to 2003 Q1, somewhat at odds with published Workforce Jobs data and LFS employment. An alternative measure of productivity growth, using LFS employment data (output per person) suggests 1.0% productivity growth in the year to 2003 Q1. Growth in measures of productivity based on numbers employed has tended to be weaker than normal since 1995, but this is probably not evidence of a slowing trend in TFP growth. Part of the weakness relates to the large falls in average hours worked in recent years, which is why output per hour has tended to grow faster than other measures.

Chart 3.12
A measure of whole-economy capacity utilisation derived from a production function^(a)



Sources: Bank of England and ONS.

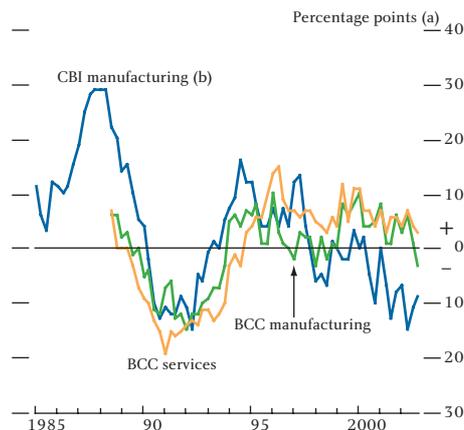
(a) Deviation from estimated trend. The construction of this series is described on pages 26–27 of the May 2003 Report.

3.3 Capacity utilisation

Capacity utilisation gives an indication of how hard the factors of production are being worked. This includes both the effort asked from employees, and how intensively plant and machinery are used. A reliable estimate of capacity utilisation would be informative about the short-run balance between demand for, and supply of, goods and services in the economy, and hence about pressures on prices. But in practice, there is no single, reliable measure of capacity utilisation.

One measure compares data on actual output with estimates of what would usually be produced, given the stock of capital, the amount of labour employed, and an assumption on the rate of growth of TFP. It suggests that whole-economy capacity utilisation has been somewhat below normal rates for the past two years (see Chart 3.12). A lower than normal rate of capacity utilisation is consistent with some labour hoarding in recent years. It could also indicate that the capital stock has been used less intensively, which might suggest a subdued outlook for investment in the near future.

Chart 3.13
Survey measures of capacity utilisation
in the manufacturing and service sectors



Sources: BCC and CBI.

- (a) Percentage point deviation from series mean.
- (b) The July 2003 *Quarterly Industrial Trends Survey* has been allocated to 2003 Q2. Earlier surveys have been allocated to their respective quarters accordingly.

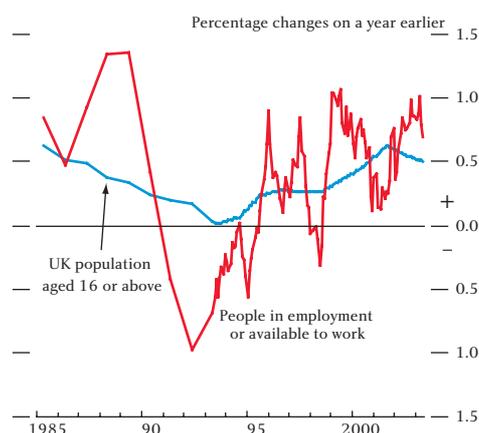
Companies' responses to surveys give a mixed reading on capacity utilisation. Each quarter the CBI and the British Chambers of Commerce (BCC) ask employers whether they are operating at or below full capacity. According to the CBI survey, the balance of manufacturers who reported that they were operating at full capacity has been below its long-run average for at least two years (see Chart 3.13). The BCC survey suggests that manufacturers' capacity utilisation was lower than normal in 2003 Q2, but, in contrast to the CBI, for the two years prior to that it had been higher than normal, and at a similar level to that of service sector firms. The BCC manufacturing survey includes responses from the agricultural, energy and construction sectors, while the CBI survey exclusively questions manufacturers. The general buoyancy of the construction sector in recent years might explain part of the gap between the two surveys. Furthermore, the BCC surveys are not adjusted to ensure that the weight given to different sectors is the same as their weight in the whole economy, which might at times make the BCC survey less representative.

The Bank of England's regional Agents regularly ask firms about their capacity utilisation. Manufacturers' responses suggest capacity utilisation has been below normal over the past two years, which is more consistent with the CBI than the BCC survey. Service sector firms reported to the Agents that, on average, capacity utilisation fell from high levels in 2001, and has been close to normal since then.

On balance, it seems likely that capacity pressures are weaker than normal, which would put downward pressure on inflation. But inflation is affected by other factors, including the rate of increase of labour costs, and this reflects the balance between demand and supply in the labour market.

3.4 Labour supply

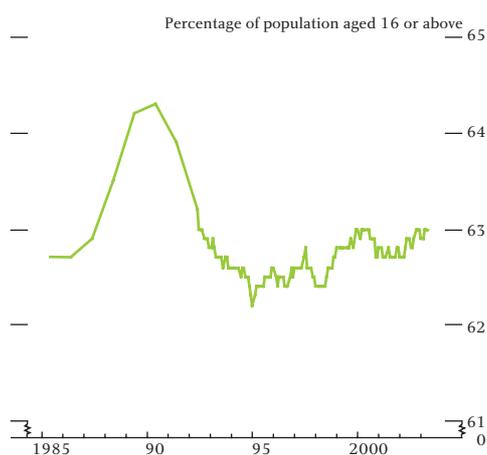
Chart 3.14
Population and those available to work



The size of the potential workforce is an important determinant of an economy's medium to long-term productive capacity. In addition to the number of hours a person wishes to work (discussed above), labour supply is determined by the size of the population and their ability and willingness to work.

The UK population, aged 16 or above, is estimated to have increased by around 0.6% per year over the past three years—a slightly higher rate of growth than experienced during the past decade (see Chart 3.14). Population numbers are not known with certainty and get revised from time to time. Estimates of the population are based on the national Census, carried out once every ten years, supplemented with near-comprehensive data on births and deaths, and survey-based estimates of migration flows. The current higher

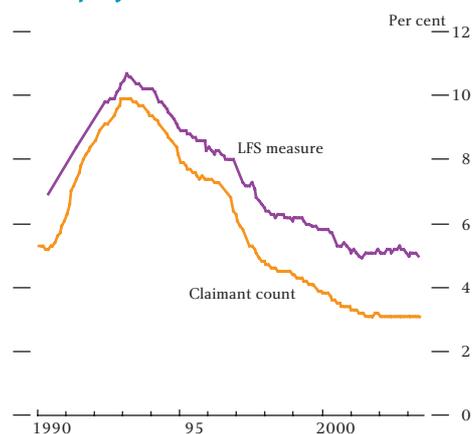
Chart 3.15
Participation rate



population growth rate reflects estimates of net inward migration. In the latest Government Actuary's Department 'principal' or central forecast, the population aged 16 or above is expected to continue to grow at 0.5% per year over the next few years, assuming similar migration flows to the recent past. This forecast is incorporated in the Committee's central projection.

Currently, around two thirds of the population aged 16 or above are in work, or are actively looking for work (described as economically active). But this proportion (called the participation rate) has changed over time, and that has affected the labour resources available to firms. Since the mid-1990s, the participation rate has been on a slight upward trend (see Chart 3.15). That has raised the labour resources available by around 0.1% per year, over and above the increase in the population (see Chart 3.14).

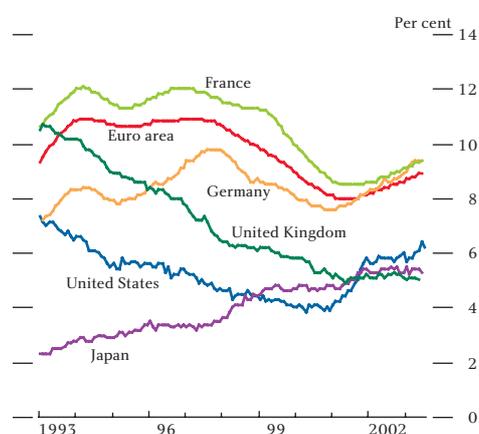
Chart 3.16
Unemployment rate



3.5 Labour market tightness

The most commonly used indicator of labour market tightness, or the balance between demand and supply in the labour market, is the unemployment rate. This measures the proportion of people who would like a job, but are unable to find one. The claimant count unemployment rate, based on the number of people receiving the Job Seeker's Allowance, has fallen sharply over much of the past decade and has been unchanged at 3.1% for well over a year. On the LFS measure, which is consistent with the International Labour Organisation (ILO) definition, the unemployment rate has followed a broadly similar trend, and has been stable at just above 5% since early 2001 (see Chart 3.16). Over the past decade, the unemployment rate, measured on a comparable basis, has fallen more in the United Kingdom than in other major industrial countries (see Chart 3.17).

Chart 3.17
International unemployment rates^(a)



Sources: ONS and Thomson Financial Datastream.

(a) ILO definition.

The LFS is a better measure of the amount of available labour than the claimant count, because some people who are seeking work do not claim the Job Seeker's Allowance. But the LFS data are estimates based on a survey of 57,000 households, and are subject to sampling error. The claimant count is useful for judging recent trends, because data are released earlier than the LFS, and because the claimant count is comprehensive and so not subject to sampling error.

People who report themselves as not available to work (sometimes called 'economically inactive') can also be a source of labour. For example, the participation rate (Chart 3.15 above) appears to respond to the business cycle. The economically inactive include people who have retired early, some students, those with health problems, and those who are

Table 3.A
Average transition rates into employment between 1993 and 1999^(a)

	Proportion that moved into employment within three months (per cent)	Number of people in 2002 (thousands)
Unemployed less than six months	34	956
Unemployed more than six months	14	532
Seeking work but not yet available	24	197
Want work, but not currently seeking	7	2,058
Don't want work	5	5,469

Sources: Bank of England and LFS.

(a) See Schweitzer, M E (2003), 'Ready, willing, and able? Measuring labour availability in the UK', *Bank of England Working Paper no. 186*.

Chart 3.18
Labour availability

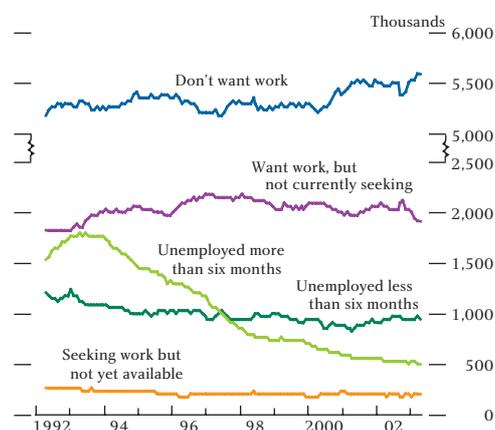
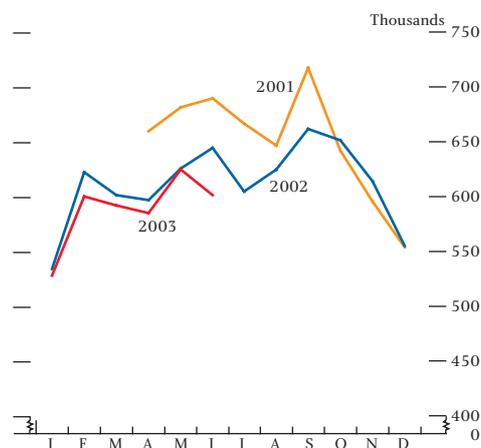


Chart 3.19
Vacancies^(a)



(a) Not seasonally adjusted.

looking after their families. They make up about a fifth of the UK population of working age, and a significant proportion does subsequently become employed. On average, between 1993 and 1999, around a quarter of the inactive who reported themselves as 'seeking work, but not available to start' subsequently went into employment within three months (see Table 3.A). Even of the 5 million people who said they did not currently want a job, 5% went into employment within three months.

The fall in unemployment over the past ten years probably overstates the degree to which the labour market has tightened. Chart 3.18 shows how the number of people not in work, but in different categories, has changed over the past decade. This will reflect inflows into each category, and also outflows, which are partly determined by the transition rate into employment. The striking feature of the chart is that the number of people in most groups has not changed very much since 1992. But there have been large falls in the number unemployed for more than six months, which, in part, may have reflected government policies. This group has had a relatively low average transition rate into employment (see Table 3.A). That means the extent to which they compete for jobs, and hence put downward pressure on wages may have been limited. In contrast, the number of people unemployed for less than six months, with a high transition rate, has increased slightly over the past two years, perhaps indicating some easing in labour market conditions. The weakness in average hours, to the extent that it reflects labour hoarding, might also indicate some loosening in the labour market, which would not show up in unemployment data.

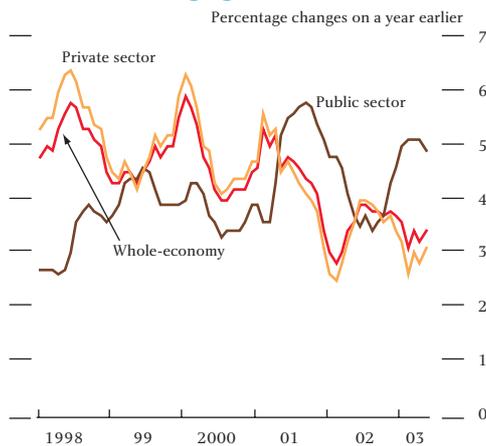
Companies' responses to the Bank's regional Agents can also give an indication of spare capacity in the labour market. Firms have been reporting fewer skill shortages over the past year, implying some easing in labour market conditions. But they continue to report that skill shortages are greater than normal, and therefore that the labour market remains tight by historical standards.

Employers also report vacancies to the ONS, which might give an indication of labour market tightness. This information has only been collected since April 2001, so does not give an indication of long-run trends. The data suggest that the number of vacancies in the first half of 2003 was very similar to 2002, but lower than in 2001 (see Chart 3.19). A lower number of vacancies might indicate a looser labour market, for a given labour supply.

Taking all of this evidence together, the Committee judges that the labour market remains tight by historical standards. But in the private sector, conditions may have eased recently.

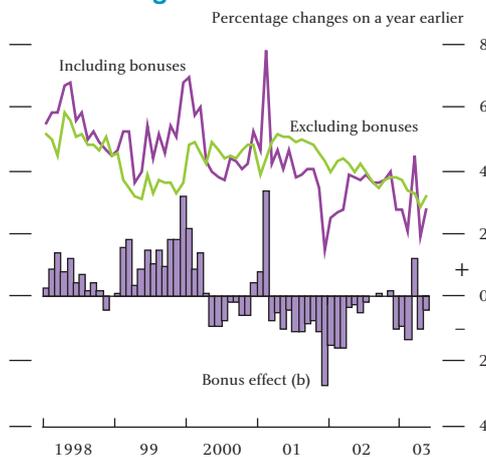
Private sector pay growth has remained subdued, but public sector pay has continued to grow quite strongly. Price developments along the supply chain have been mixed. Crude oil prices have been above levels anticipated at the time of the May Report, but they are expected to fall gradually over the forecast period. Import prices rose in Q1. The costs of manufacturers' material inputs and output prices fell in Q2, reflecting earlier movements in oil prices. The more recent rise in the oil price together with sterling's decline since the start of the year may give some upward impetus to manufacturers' output prices, but low capacity utilisation should ensure this remains limited. Service sector costs have been rising more quickly than last year. But the near-term outlook for service sector output price inflation appears muted. Annual RPIX inflation, though still above the target, was slightly weaker than projected in May.

Chart 4.1
Headline earnings growth^(a)



(a) Three-month moving average of the annual rate of growth of ONS average earnings index, seasonally adjusted.

Chart 4.2
Private sector earnings growth including and excluding bonuses^(a)



(a) ONS average earnings index measure, not seasonally adjusted.
(b) Percentage point contribution to annual growth of private sector earnings including bonuses.

4.1 Labour costs

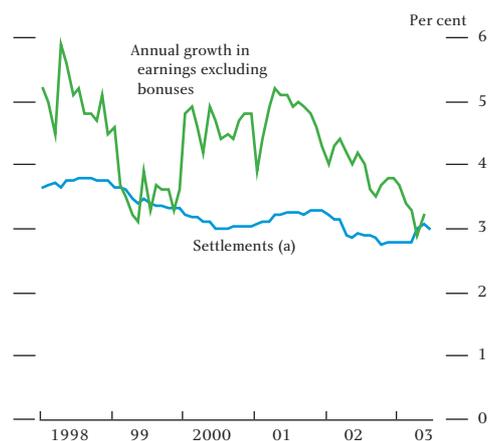
Headline whole-economy earnings growth has been just above 3% in recent months. That is a little lower than the MPC anticipated three months ago. Public sector pay continued to grow quite strongly, but private sector pay growth remained subdued (see Chart 4.1).

Public sector earnings growth has remained close to 5%. That was associated with increased recruitment by the public sector, and the funding of improvements in the delivery of public services. The growth in public sector pay can differ from its underlying trend if the timing of pay increases changes from year to year. Data for May were probably not affected much, but it is likely that timing effects will boost public sector pay in the third quarter.

The weakness in private sector earnings growth has reflected both a slowdown in regular pay (which excludes bonuses) and a lower level of bonus payments (see Chart 4.2). For the past two years, bonuses have generally been lower than they were the year before, largely due to retrenchment in the financial sector, and that has reduced earnings growth. But the total amount paid in bonuses in March 2003 was higher than a year earlier, as some companies disbursed them earlier than usual, perhaps to avoid the increase in National Insurance contributions (NICs) which took effect in April this year.

Private sector regular pay growth has been on a downward trend since early 2001. It was 2.9% in April, the lowest rate

Chart 4.3
Private sector earnings and settlements



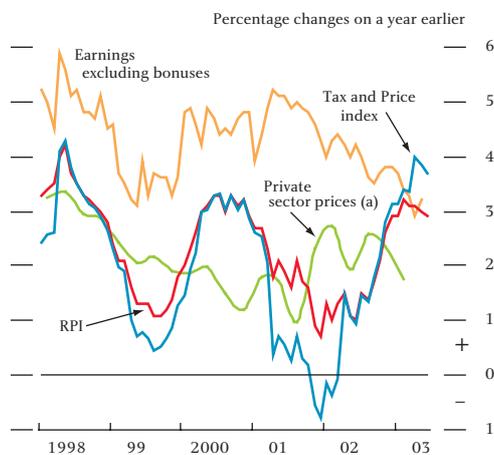
Source: Bank of England wage settlements database. The database draws on information from the CBI, Incomes Data Services, Industrial Relations Services, Labour Research Department and the Bank's regional Agents.

(a) Twelve-month weighted mean. The weights are the AEI industry shares of the wage bill.

since March 1997, though growth increased to 3.2% in May. This measure of pay captures changes in workers' monthly earnings. So one reason for the weakness in this measure is the fall in average hours worked and the growth in numbers working part-time discussed in Section 3. Pay growth has been stronger if measured per hour, rather than per month. Private sector pay settlements are less sensitive to trends in hours worked. They were broadly flat over the past year at 2.8%, and have edged up in recent months (see Chart 4.3).

Pay negotiations in early 2003 were made against a backdrop of rising retail price inflation. Workers' real take-home pay was further squeezed by the pre-announced increases in employees' NICs which came into effect in April. As a result, annual Tax and Price index inflation, which takes account of changes in prices and taxes relevant to employees, was 3.7% in June 2003—an increase of almost 3 percentage points over the preceding year (see Chart 4.4). These factors might have been expected to lead to stronger growth in earnings this year. But employees' confidence about their job prospects might have weakened, particularly in the run-up to the Iraq war when consumer confidence was subdued, and if there was some labour hoarding as discussed in Section 3.

Chart 4.4
Private sector earnings and prices



Sources: Bank of England and ONS.

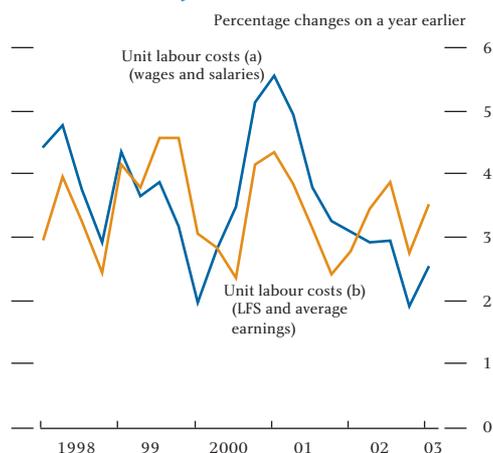
(a) GDP deflator excluding government consumption.

A number of factors might have increased employers' incentives to reduce pay growth in the latest negotiations. The war with Iraq, and generally weak demand for private sector output could have raised concerns about future profits. Retail price inflation has increased over the past year, but the inflation rate of prices that private sector firms in the United Kingdom receive for their output has, if anything, fallen back (see Chart 4.4). And firms would have wanted to limit pay growth to offset the impact on their labour costs of the increase in employers' NICs in April.

The shortfall in company pension funds, described in Section 1, is unlikely to affect significantly employees' total pay package—their take-home pay plus the future value of their company pensions. Total remuneration should adjust to reflect the balance between demand and supply in the labour market. So if firms make pension provisions less generous, they are likely to experience recruitment difficulties, unless there are compensating adjustments to other elements of pay. Similarly, firms that try to finance pension fund shortfalls by reducing wages may have difficulties retaining staff.

The adult rate of the National Minimum Wage is to be increased from £4.20 to £4.50 in October 2003, a rise of 7.1%. The MPC continues to believe that the macroeconomic impact is likely to be small.

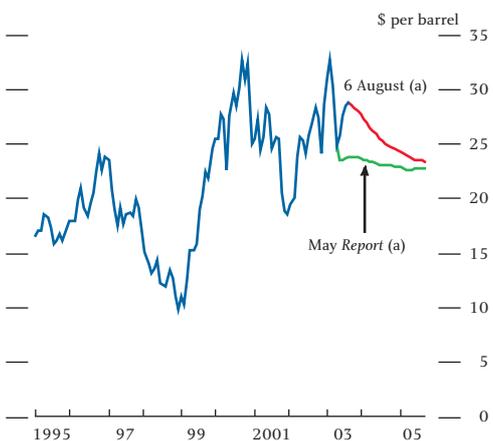
Chart 4.5
Whole-economy unit labour costs



Sources: Bank of England and ONS.

- (a) Wages and salaries plus employers' social contributions divided by GDP at basic prices.
- (b) LFS employment multiplied by the average earnings index, adjusted for employers' social contributions, divided by GDP at basic prices.

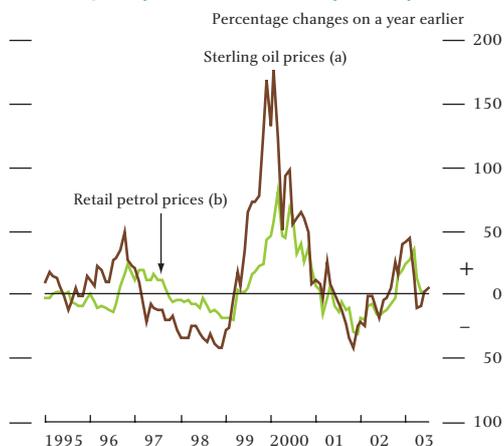
Chart 4.6
Brent oil futures



Sources: Bank of England and Thomson Financial Datastream.

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

Chart 4.7
Sterling oil prices and retail petrol prices



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

- (a) Monthly average of Brent spot price of oil in dollars divided by the dollar/sterling exchange rate.
- (b) Retail petrol prices excluding excise duties. This is a Bank estimate derived using the method set out in Beaton, R and Fisher, P (1995), *The construction of RPIY*, Bank of England Working Paper no. 28.

The labour costs facing firms depend upon earnings growth, but also on productivity growth, and on non-wage costs such as employers' NICs and pension contributions. These are all captured in unit labour costs. Unit labour costs based on wages and salaries data have slowed markedly since 2001 and grew by 2.5% in the year to 2003 Q1. An alternative measure, based on LFS employment and average earnings data, shows annual growth of 3.5% in the latest quarter (see Chart 4.5).

Non-wage costs have been increasing strongly in recent years, partly reflecting increased contributions by firms into pension funds. To the extent that these payments relate to shortfalls in assets relative to pension liabilities built up in the past, the Committee does not expect them to be passed on in higher prices, as they are not a part of current or future production costs. However, unit labour costs are likely to have increased further in the second quarter, when the increase in employers' NICs took effect. This will increase firms' costs in the future, so may have some effect on prices.

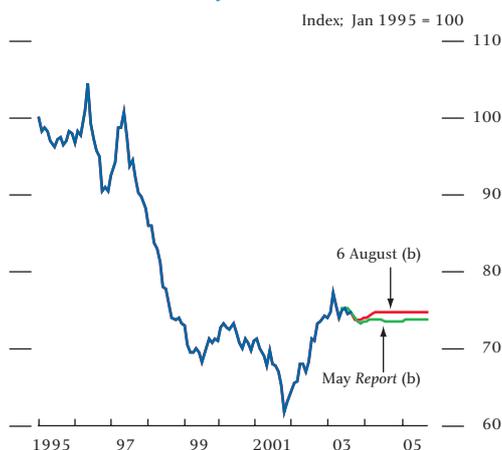
4.2 Commodity prices

In the 15 working days to 6 August, crude oil prices were around \$5 or 20% higher than both the average level expected for Q3 at the time of the *May Report* and the average in the 15 working days to 7 May (the day the MPC finalised its May projections). The increase in prices was partly associated with Iraqi supply not returning to the market as rapidly as expected in May. Lower-than-normal oil inventories, in the United States and more generally in OECD economies, may also have helped to support prices, as the market anticipated that these stocks would be rebuilt. In sterling terms, the oil price rise since May has been slightly less pronounced, at around 18%, reflecting sterling's small appreciation against the dollar.

The higher level of spot oil prices compared with May and the market's expectation that Iraqi supply will remain below pre-war levels in 2003 have led to a shift up in the futures curve, mainly during the first year of the forecast period (see Chart 4.6). But its profile suggests that oil prices are expected to fall gently, reaching similar levels in two years' time to those assumed in the *May Report*. The futures curve indicates that, towards the end of the year, dollar oil prices will fall below levels of a year earlier. Overall, given the close relationship in the past between sterling oil prices and retail petrol prices excluding excise duties (see Chart 4.7), this suggests that the latter will start to detract from annual RPIX inflation early next year.

The weighted average of non-oil commodities' dollar prices (as measured by *The Economist* index) has risen slightly since the

Chart 4.8
Non-oil commodity futures^(a)



Sources: Bank of England, *The Economist* and Thomson Financial Datastream.

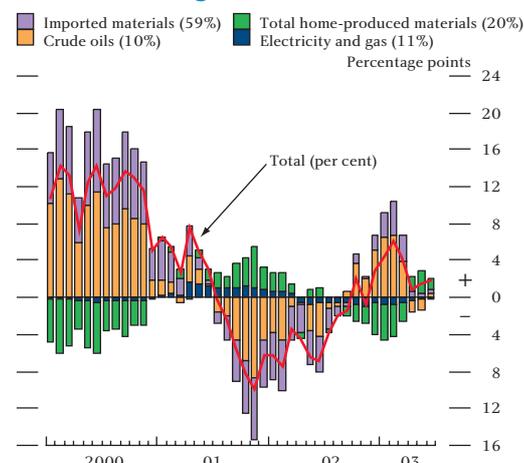
- (a) *The Economist* all-items index in dollars.
- (b) Average during the 15 working days up to the time at which the MPC finalised its projections. Based on futures prices for around 80% of the all-items index.

May Report. But the prices of the three broad categories have moved more noticeably. Food prices (which account for over half of the index) fell by around 3%. This was largely offset by the prices of non-food agricultural products (which have the lowest weight) and metals rising by 3% and 9% respectively. In sterling terms, non-oil commodity prices have fallen by nearly 1% since May. The futures curve in dollars has shifted up slightly (see Chart 4.8), though prices are expected to be broadly unchanged from their current levels in two years' time.

4.3 Import prices

The depreciation of sterling since October 2002 has begun to affect import prices. But the pass-through appears to have been less than complete so far. The local-currency prices of the exports sold by the other major six economies (M6) serve as a useful proxy for the prices of internationally traded goods and services. The UK trade-weighted average of M6 local-currency export prices in 2003 Q1 was broadly the same as at the end of 2002. And, on average, the sterling effective exchange rate index (ERI) fell by more than 3% between 2002 Q4 and 2003 Q1. So if importers had passed that decline in sterling on to their customers, prices would have risen by roughly 3%. But sterling import prices rose by only 0.6% in Q1 and goods import prices excluding oil were on average 0.9% higher in April and May than in Q1. Overall, these increases are consistent with the slow pass-through of exchange rate changes discussed in a box on page 36 in the *May Report*.

Chart 4.9
Contributions to annual input price inflation in manufacturing^(a)



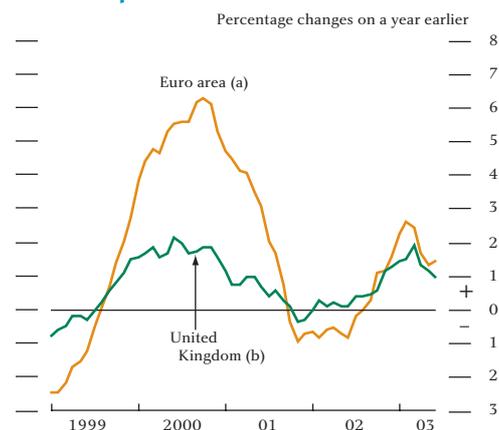
- (a) Not seasonally adjusted. Figures in parentheses represent the weights in the manufacturing input price index.

4.4 Costs and prices in manufacturing

Unit wage costs (which account for around 40% of manufacturers' costs) rose by 0.7% in Q1, compared with 1.0% in 2002 Q4. This moderation in wage costs largely reflected stronger productivity growth than in Q4, only partly offset by companies bringing forward bonuses to Q1 (see Section 4.1). In the three months to May, unit wage costs fell by 0.7% compared with the previous three months, as earnings growth fell and productivity growth continued to recover. But unit wage costs do not include employers' NICs and the April increase will have added just under 1% to manufacturers' total labour costs.

The costs of manufacturers' materials and fuels were 2.1% lower in Q2 than in Q1, largely reflecting the fall in crude oil prices in the early spring. Indeed, over the past three years, movements in the annual inflation rate of material input costs have largely been dominated by changes in crude oil prices (see Chart 4.9). So the rise in oil prices since May should put some further upward pressure on input prices in the near term. And non-oil input prices continued to rise in Q2. In

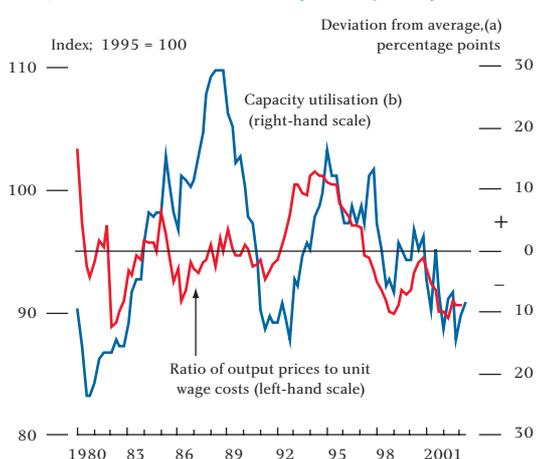
Chart 4.10
Producer prices



Sources: Eurostat, ONS and Thomson Financial Datastream.

- (a) Prices of industrial goods excluding construction.
- (b) Excluding the effects of excise duties.

Chart 4.11
Manufacturing: ratio of output prices to unit wage costs and CBI survey of capacity utilisation



Sources: Bank of England, CBI and ONS.

- (a) Average since 1972. The July 2003 Quarterly Industrial Trends Survey has been allocated to 2003 Q2. Earlier surveys have been allocated to their respective quarters accordingly.
- (b) Percentage of respondents answering 'no' to the following question: 'Is your present level of output below capacity (ie are you working below a satisfactory full rate of operation)?'

Table 4.A
Measures of service sector costs and prices

	Series average (a)	2002			2003		
		Q2	Q3	Q4	Q1	Q2	July
Backward-looking							
Private services unit wage costs (b)	0.4	0.8	-0.2	-0.4	0.2	n.a.	n.a.
CIPS average cost index (c)	56.7	53.9	54.6	54.7	55.8	55.4	54.8
CIPS average prices charged index (c)	51.5	51.6	51.9	52.1	51.1	51.4	52.0
BCC survey: (d)							
Pay settlements	27	28	28	29	31	30	n.a.
Raw material prices	17	19	16	17	18	18	n.a.
Finance costs	15	15	16	15	15	14	n.a.
Other overheads	34	35	40	40	44	40	n.a.
Forward-looking							
BCC prices balance (e)	22	20	19	29	24	17	n.a.

Sources: BCC, CIPS and ONS.

- (a) Average since 1991 for unit wage costs, 1996 for CIPS and 1997 for BCC.
- (b) Private service sector unit wage cost growth is proxied using private service sector earnings growth and productivity growth in the service sector excluding public administration, education and health and social work. Percentage change on a quarter earlier.
- (c) A reading above 50 suggests rising costs/prices, a reading below 50 suggests falling costs/prices. The CIPS survey is monthly, and the quarterly values shown are averages over the relevant three months.
- (d) Percentage of respondents citing each factor as a significant upward pressure on their costs.
- (e) Percentage balance of responses to the question: 'Over the next three months, do you expect the price of your services to increase/remain the same/decrease?'

part, that probably reflected increases in non-oil commodity prices in Q1.

Though they remained higher than a year earlier, manufacturing output prices (excluding the effects of excise duties) fell slightly in Q2, largely reflecting the effects of lower oil prices in early spring passing through the supply chain. Output prices excluding those of petroleum products continued to rise at a slow pace in Q2. Weak producer price inflation has been a feature of the United Kingdom and the euro area during the past two years (see Chart 4.10). Intense international competition, mainly from industrialising countries such as China, and weakness in global demand since 2001 have probably accounted for capacity utilisation in manufacturing being below normal levels in these economies. That has exerted downward pressure on the prices UK and other European manufacturers can charge for their products. Indeed, Chart 4.11 suggests that underutilisation of productive capacity has depressed UK manufacturing companies' returns, despite continued productivity gains having helped to limit cost pressures.

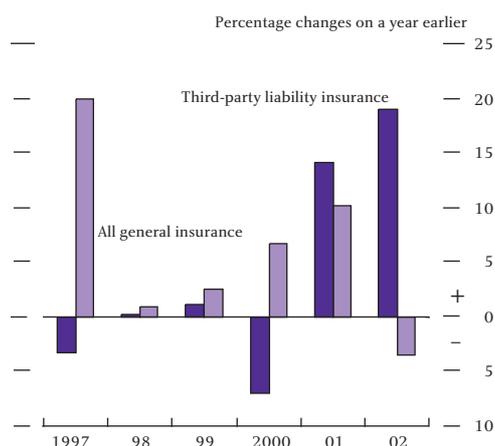
The exchange rate may also have had an important influence on UK and euro-area producer price inflation in recent years. While the sterling ERI remained stable between 1999 and 2001, the euro depreciated and that was reflected in the relative rates of producer price inflation (see Chart 4.10). The fall in the sterling effective exchange rate since the beginning of this year may thus give producers some scope to raise their prices and the rise in oil prices since May may also provide some short-term upward momentum. But underused capacity should help to keep output price inflation in check.

4.5 Costs and prices in the service sector

Following two quarters of decline, unit wage costs—the major cost component for private services companies—rose by 0.2% in Q1 (see Table 4.A), mainly accounted for by a slowdown in productivity. Data are not yet available for 2003 Q2, but unit wage cost growth may have risen somewhat. Private service sector earnings growth picked up in April and May, and the likely slow pace of output growth in Q2 suggests that productivity growth has also remained low. Furthermore, unit wage costs do not include NICs, and so, as in manufacturing, the increase in April would have boosted overall labour costs in the service sector.

Consistent with the Q2 BCC survey (see Table 4.A), contacts of the Bank's Agents continued to report high overhead cost pressures resulting from rises in third-party liability insurance premia and compliance with increased regulation. Third-party liability insurance premia increased rapidly during 2001 and

Chart 4.12
Insurance premia^(a)



Sources: Bank of England, OFT and S&P.

(a) Proxied by earned gross premium income of UK-registered insurers. OFT estimates suggest the volume of business was broadly unchanged over the period shown.

Chart 4.13
Contributions to annual CSPI inflation

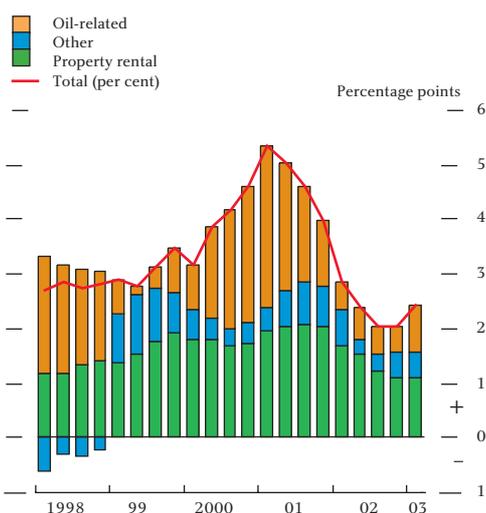
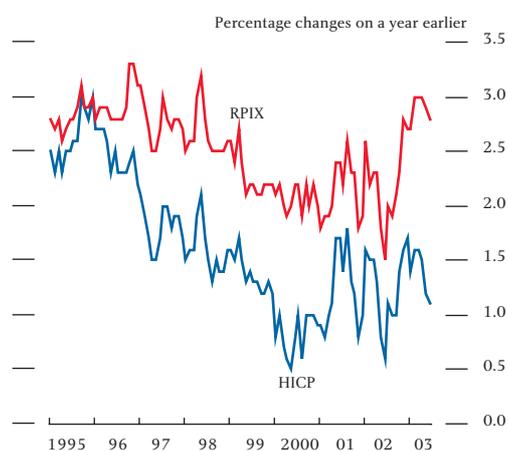


Chart 4.14
Retail and consumer price inflation



2002 (see Chart 4.12). Estimates from the Office of Fair Trading suggest that, within third-party liability insurance, premia for employers' liability insurance (which is compulsory) rose by around 50% in 2002.

The CIPS survey suggests that, in the first half of 2003, overall service sector costs have risen at a faster rate than during the previous 18 months. In addition to the factors mentioned above, higher fuel prices and, more recently, higher prices of imported inputs from the euro area (reflecting the fall of sterling against the euro) were quoted as reasons for the increase in average cost pressures this year.

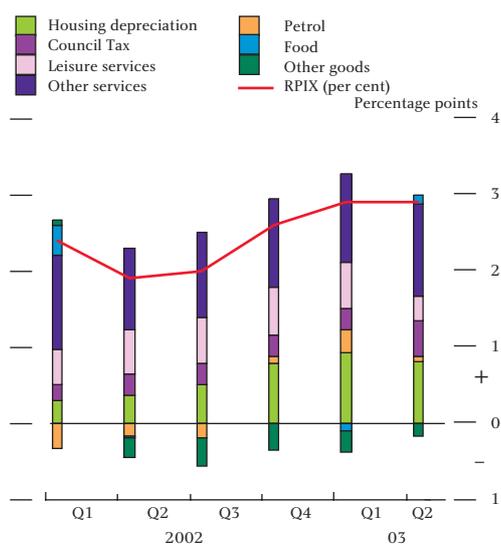
Annual output price inflation of business services, as measured by the ONS' experimental corporate services price index (CSPI), picked up in Q1 (see Chart 4.13). This was associated with higher oil prices in the run-up to the war in Iraq, which were mainly passed on to the costs of transport services (included in Chart 4.13 as 'oil-related'). But this experimental index covers only around 50% of its ultimate targeted sample; for example, output prices in the insurance sector are not included yet. The CIPS survey suggests that the rate of increase of output prices has picked up slightly in Q2 and beyond (see Table 4.A). But it remains around levels prevailing in 2002, and respondents reported that the scope for price increases remained limited due to severe competition. The balance of respondents to the Q2 BCC survey expecting to raise prices fell below its long-run average (see Table 4.A).

4.6 Retail prices

Annual RPIX inflation in Q2 turned out slightly weaker than the MPC's central projection in the *May Report*; at 2.9%, it was unchanged compared with Q1. On a monthly basis, annual RPIX inflation has also been comparatively stable this year; it was 3.0% from February to April before falling to 2.9% in May and 2.8% in June (see Chart 4.14).

As anticipated in the *May Report*, the impact of housing depreciation and petrol prices on annual RPIX inflation declined during the second quarter (see Chart 4.15), associated with the slowdown in house and oil price inflation (see Section 4.2). The contribution from leisure services to overall inflation also fell throughout the quarter, some of which was unexpected and due to less strength in foreign holiday prices. These downward effects on inflation were offset to some extent by the sharp increase in Council Tax rates, which took effect in April. Partly reflecting their low level in Q2 last year, food prices (and those of seasonal foods in particular) also boosted retail price inflation during Q2, and the decline in the prices of other goods attenuated slightly.

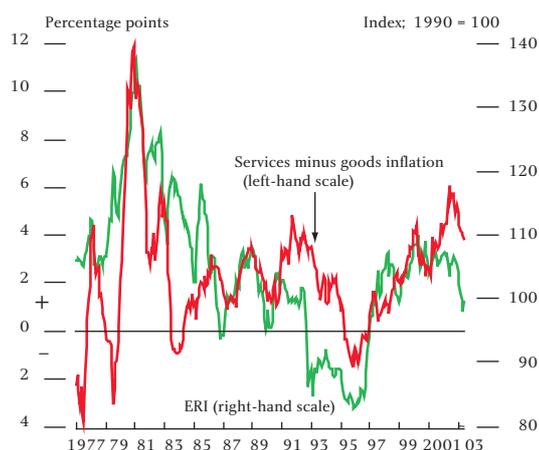
Chart 4.15
Contributions to annual RPIX inflation



The overall contribution from retail services prices to annual RPIX inflation has fallen gradually since the end of last year, as services price inflation has continued to ease. But annual retail goods price inflation rose to 0.1% in Q2 from its record low of -1% in 2002 Q3.

The difference between retail services and goods price inflation tends to follow movements in the sterling ERI (see Chart 4.16). Goods are more likely to be internationally tradable than services, which implies that goods prices are affected more by exchange rate changes. Sterling's strength between 1996 and early 2002 was associated with a widening of the difference between retail services and goods price inflation. Now that sterling has fallen back somewhat, the relative pick-up in goods price inflation suggests that suppliers may have passed on some of the depreciation in the exchange rate, though the sharp fall in seasonal food prices last year also affected the annual comparison.

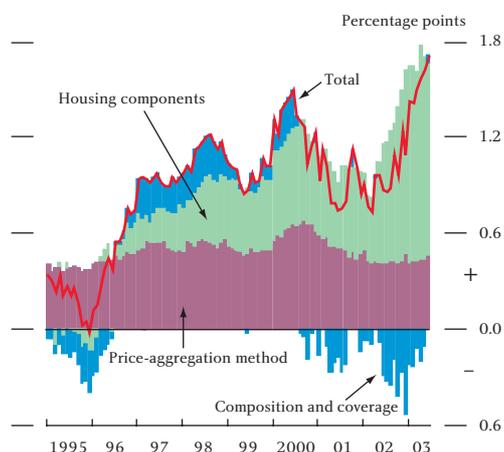
Chart 4.16
Sterling ERI and differences between retail services and goods inflation



Looking ahead, the Committee expects RPIX inflation to fall below the target around the turn of the year. As in recent *Reports*, this is largely accounted for by a further fall in the contribution from housing depreciation as annual house price inflation continues to weaken. But it also reflects more moderate increases in the prices of leisure services than previously expected.

Annual inflation in the harmonised index of consumer prices (HICP) fell to 1.3% in Q2, from 1.5% in Q1 (see Chart 4.14). On 9 June the Chancellor of the Exchequer announced that, subject to confirmation at the time of the Pre-Budget Report, he intends to change the inflation target to one based on this measure of consumer prices.

Chart 4.17
Contributions to the difference between annual RPIX inflation and HICP inflation



The difference between annual RPIX and HICP inflation reached a record high of 1.7 percentage points in May and June (see Chart 4.17). As a box on pages 38–39 of the May *Report* explained, the difference between these measures of inflation can be attributed to three main factors. The difference accounted for by those housing costs that are excluded from HICP, but included in RPIX fell marginally between April and June, in line with the slowdown in house price inflation. But this was more than offset by the difference due to composition and coverage turning positive in June. The latter mainly reflected the different effects of airfares on HICP and RPIX inflation. The gap between the two inflation rates accounted for by different price-aggregation methods has changed little. The difference between RPIX and HICP inflation is expected to narrow in the coming quarters, as the contribution from housing depreciation to RPIX inflation falls.

This section summarises the monetary policy decisions taken by the MPC since the May Report.⁽¹⁾ The Bank's repo rate was maintained at 3.75% in June. It was reduced to 3.5% at the MPC's meeting in July and maintained at 3.5% at its meeting in August.

The MPC's central projection in the *May Report* was for RPIX inflation to move further above the 2.5% target in the near term, before dropping back slightly below target in early 2004. Inflation was projected to edge up subsequently to around the target at the two-year horizon. Four-quarter GDP growth was expected to average around trend over the forecast period.

At its meeting on 4–5 June, the Committee agreed that the net implications of the economic news since it last met were small, except that sterling's sharp depreciation in the days before the May meeting had not been reversed. The policy decision continued to be finely balanced and depended largely on judgments about the risks surrounding the *May Inflation Report* projections.

To some members, various arguments suggested that a reduction in interest rates was appropriate now. News on the world economy was weighted to the downside, at least in the near term. In the United States, the labour market remained weak, consumer confidence in the current situation had fallen and growth in the second quarter seemed likely to fall short of expectations. The continued strengthening of the euro would further weaken the net trade position of the euro area. Growth in Asia had slowed.

Also, the short-term downside risks to UK output seemed to be crystallising. There were no signs of exports rebounding as expected. GDP growth seemed likely to return to trend more slowly than anticipated at the time of the *May* projections. And with inflation expectations well anchored to the target, the pass-through of sterling's depreciation to UK inflation was likely to be muted. A boost to the economy was therefore warranted to offset the current weakness in activity and to ensure that output returned quickly to trend. These members did not expect such a boost to add materially to inflationary

(1) The minutes of the May, June and July meetings (which set out the full discussion) are reproduced under a separate cover, published alongside this *Report*.

pressures further out. If aggregate demand were to recover rapidly, any reduction in interest rates could quickly be reversed.

Most members found the various arguments for leaving interest rates unchanged more persuasive. Sterling had remained below the level incorporated in the projections for output and inflation in the *May Report*. Sterling's stability at this lower level therefore provided upside news for medium-term inflation. Some of the downside risks to the May projections seemed to have diminished. For example, the faster-than-expected pace of UK house price inflation suggested that, although it was clearly slowing, it was now less likely that there would be an abrupt price correction in the housing market. Finally, these members remained concerned that a reduction in interest rates would add to the vulnerability of households to adverse shocks, by encouraging a further accumulation of debt.

Six members voted in favour of maintaining the repo rate at 3.75%, while three preferred a reduction of 0.25 percentage points.

At its meeting on 9–10 July, the Committee identified various reasons for an immediate rate reduction. There had been some material downside news since the *May Inflation Report* projections. Most notably, UK-weighted world activity was weaker than expected. UK output growth in Q2 might also have been slightly weaker than anticipated in May. And pay pressures and RPIX inflation had so far been lower than expected. In deciding not to vote for a repo rate reduction at the time of the May projections, some members had given weight to the sharp fall in sterling after the projections were finalised, and the possibility that the decline could go further. That fall had now been reversed.

In addition, some important elements in the balance of risks had shifted in favour of a reduction. The short-term rise in RPIX inflation above 2.5% was the result of temporary factors, which were expected to unwind in the coming months. And that rise did not seem to have caused any drift in inflation expectations away from the target. Also, a repo rate reduction seemed unlikely to cause house prices to accelerate, given the current slowdown in housing activity. This meant that there was less risk than earlier in the year of stimulating household borrowing and exacerbating the imbalance between domestic demand and net trade. There was also less risk that a rate reduction would be read as an unexpectedly negative signal about the Committee's view of UK economic prospects. Finally, uncertainties relating to National Accounts data would not be resolved by the time of the next full assessment in the

August *Inflation Report* round, and so there was no real advantage in delaying a reduction for a further month.

The Committee also identified some arguments for leaving rates unchanged. There were some positive indications in recent data. The outlook for consumption seemed stronger than envisaged in May, and the strength of house prices, equity prices and household borrowing would all work to offset the squeeze on post-tax incomes. Also, the cost of equity and (for many companies) debt finance had fallen. Corporate cash flows had improved, and a sharp fall in house prices seemed less likely.

Moreover, there had been a substantial cumulative easing in the stance of macroeconomic policy over the past two years, including the June repo rate cut by the ECB, the fiscal loosening in the United States and the recent further reduction in the federal funds target rate. The impact on demand of an easing on this scale was difficult to predict, and posed an upside risk to the US and euro-area outlook relative to the May projections. UK monetary policy was already stimulatory, with real short-term interest rates below their likely long-term average, and the fiscal position expansionary.

Eight members of the Committee voted to reduce the repo rate by 25 basis points to 3.5%. One member preferred to maintain it at 3.75%.

At its meeting on 6–7 August, the Committee voted to maintain the repo rate at 3.5%.

The Committee's latest projections are set out below. GDP growth in the United Kingdom was sluggish in the first half of 2003, as the global recovery faltered and private final demand slowed. Assuming unchanged official interest rates at 3.5%, GDP is expected to rise around trend over the forecast period on the central projection, as robust public spending, an upswing in global demand, and a modest increase in business investment, offset below-trend growth in household expenditure. RPIX inflation averaged 2.9% in 2003 Q2—below expectations three months ago, but remaining above target because of an exceptional contribution from transient influences such as housing depreciation. As transitory influences wane, inflation is likely to dip below target around the turn of the year, edging up thereafter to around target by the two-year horizon, as underlying external and domestic cost pressures gradually build. The near-term inflation outlook is weaker than in May, although following the cut in official interest rates in July, prospects are little altered in the medium term. Risks around the central projection for output growth and, to a lesser extent, inflation are weighted to the downside.

6.1 The inflation projection assumptions

The recovery in the world economy has been slow and uneven. Since the *May Report*, global demand growth has fallen somewhat short of expectations, dampening prospective inflationary pressure and prompting further easing of monetary policy to bolster the upswing. Forward-looking indicators point to a gradual strengthening in growth in the coming quarters. Global equity prices have regained ground and corporate bond spreads have narrowed over the past three months. Government bond prices have been volatile, particularly in the United States. Yields rose sharply in the run-up to the Committee's August meeting to reach levels above those three months ago. Surveys report an improvement in business confidence in the United States, although sentiment in the euro area remains depressed.

Output in the euro area appears to have been broadly flat in the first half of the year. The considerable appreciation of the euro over the past year and a half has led to a more pronounced decline in net external demand than expected in May. And final domestic demand remained weak. Consumer spending growth remained sluggish, reflecting subdued real personal income growth and high unemployment, while private investment fell in Q1. Given the weaker outlook for aggregate demand and inflationary pressure, the ECB reduced official interest rates by 0.5 percentage points to 2% in June following earlier reductions in March and November. The

cumulative easing in monetary policy over the past year or so, combined with a gradual strengthening in euro-area export markets, should induce a slight rise in output in the second half of this year, with GDP growth subsequently picking up to around trend rates in 2004 on the central projection. But the near-term prospects for euro-area output are somewhat weaker than expected three months ago.

The latest data point to clearer signs of recovery in the United States, although the improvement in GDP growth in 2003 Q2 failed to match the MPC's expectations in May. Given weak inflationary pressures and below-par growth, the FOMC lowered the target federal funds rate by a further 0.25 percentage points to 1% in June. A number of factors point to a quickening in growth in the coming quarters. Both monetary and fiscal policy are strongly expansionary. Improved corporate profitability and liquidity should support the nascent upturn in private capital spending, although low capacity utilisation and high capital gearing may temper the prospective recovery. Moreover, tax cuts are likely to spur faster consumption growth, although currently weak labour market conditions continue to weigh on household confidence. In addition, the substantial depreciation in the dollar since early 2002 has significantly improved the outlook for US exports. And underlying productivity growth remains robust. On the central projection, US GDP accelerates during the second half of this year and into 2004 to above-trend rates of growth, moderating thereafter as the policy stimulus gradually fades. US GDP growth in 2003 is likely to be slightly weaker than foreshadowed in May, although output may then rebound more rapidly next year.

There is little change to the outlook for Japan since the *May Report*. The recent picture has brightened slightly, consistent with a muted cyclical recovery over the forecast period. Elsewhere in Asia, output has grown robustly in recent years, although the SARS outbreak was a setback earlier this year. That should prove temporary, and output growth is expected to remain strong during the next two years.

Drawing together the regional picture, the global recovery is likely to regain momentum over the forecast period in response to the additional policy stimulus during the past year or so. However, reflecting the sluggish outturns in recent months, the near-term outlook is a little weaker than expected three months ago. But, as in May, global demand growth is expected to pick up to around trend in annual terms by the second half of 2004 on the central projection.

The spot price of oil has risen by some \$5 per barrel over the past three months. Hopes of a speedy restoration of Iraqi

supply have been frustrated, and pressure to rebuild inventories from present low levels is boosting prices. But current price levels are unlikely to be sustained. The futures curve, which is used to guide the Committee's central projection, suggests that oil prices are likely to drop back gradually to the levels projected in the *May Report* by the two-year forecast horizon. There is little change to the outlook for non-oil commodities: futures curves suggest that dollar prices are expected to be broadly stable over the forecast period.

Internationally traded goods and services prices remain under intense competitive pressure given subdued global demand and low levels of capacity utilisation. Moreover, exporters in the euro area may also be paring margins to limit the loss of market share resulting from the sharp appreciation of the euro. Weighted by shares in UK trade, average local-currency export prices in the major overseas economies are expected to fall a little in the second half of 2003, before edging higher during 2004 and beyond as the world economy strengthens.

The impact of international price trends on UK inflationary pressure hinges on the prospects for sterling exchange rates. Although there have been swings during the quarter, the sterling effective exchange rate index (ERI) averaged 98.6 in the 15 working days to 6 August, marginally below the central projection for August incorporated in the *May Report*. The 15-day average forms the starting point for the current projection. It is consistent with sterling bilateral rates of \$1.61 and 71 pence against the euro. Using the conventional approach, the sterling ERI is assumed to depreciate modestly over the forecast period to 96.7 by 2005 Q3 on the central projection.

UK equity prices have recovered further from the trough in early March, in line with the rally in global equity markets. The FTSE All-Share index averaged 2021 in the 15 working days to 6 August, some 6% above the central projection for August embodied in the *May Report*. Over the forecast period, equity prices are assumed to rise broadly in line with the growth in nominal GDP.

House price inflation continues to slacken from the exceptional pace in late 2002. However, the slowdown in inflation in recent months has been less rapid than assumed in the *May Report*, suggesting somewhat greater momentum than previously judged. As a result, the Committee has moderated the assumed rate of deceleration of house prices over the forecast period. On the central projection, house prices are broadly flat towards the forecast horizon.

The Committee continues to base the projections on the Government's published nominal spending plans and on HM Treasury estimates of effective tax rates drawn from Budget forecasts. There are no changes to the assumptions incorporated in the *May Report*. Fiscal policy continues to support economic growth over the forecast period.

6.2 The output and inflation projections

According to the preliminary ONS estimate, GDP rose by 0.3% in 2003 Q2—up on the 0.1% growth recorded in Q1, but below the May central projection. The resolution of the Iraq conflict has removed one major source of uncertainty, and surveys of business and consumer confidence have moved up from their low point in the early spring. Different surveys paint a rather mixed picture on current trends in private sector activity, with CIPS responses suggesting greater buoyancy than the BCC and the CBI. But the broad thrust is that business conditions appear to have improved moderately in recent months—a view corroborated by contacts of the Bank's regional Agents.

Interpreting recent trends in demand and output is hampered by partial revisions to aggregate spending data. In early July, the ONS published substantial upward revisions to estimates of UK imports since 1999 to take account of unreported trade in high-value goods associated with VAT fraud (see the box on pages 18–19). On their own, the new estimates would tend to point to weaker aggregate demand in the United Kingdom than previously estimated. However, the ONS has indicated that estimates of aggregate GDP are likely to be little changed. The corollary is that other components of aggregate demand are likely to be revised upwards to offset the import revisions when fully consistent National Accounts estimates are published in late September, and so the divergence between domestic demand and net trade has been larger than previously reported. Absent consistent ONS estimates in the interim, the Committee has incorporated the judgment that business investment and consumer spending in recent years have been stronger than existing published estimates. The Committee currently assesses that the overall impact of these potential revisions has little effect on the outlook for output and inflation, but notes that the additional statistical fog reduces the clarity of signals in recent economic data.

Consumer spending growth has slackened from the robust pace in recent years. Indeed, household spending volumes rose only 0.2% in 2003 Q1, below the central projection in May. But that is likely to exaggerate the deceleration in the trend, given the exceptional weakness in January retail sales volumes, and the plunge in confidence in the run-up to the

Iraq conflict. Although the outturn for June appears erratically strong, the rebound in retail sales volumes in Q2 suggests that underlying consumer spending has eased by less than previously envisaged. Other indicators corroborate this view. Consumer confidence has recovered from the Q1 dip. Moreover, resilient growth in household credit, and associated high mortgage equity withdrawal, has enabled households to smooth their flow of spending given lower real disposable income growth. In addition, the recent rebound in equity prices, in combination with the cut in interest rates in July, and the more moderate projected slowdown in house price inflation, are likely to support a somewhat stronger near-term outlook for consumer spending than in May. But although projected expenditure over the next 18 months or so may hold up better than assumed three months ago, the recovery thereafter is expected to be less pronounced than previously judged. Consumer spending growth is likely to remain below trend into the medium term.

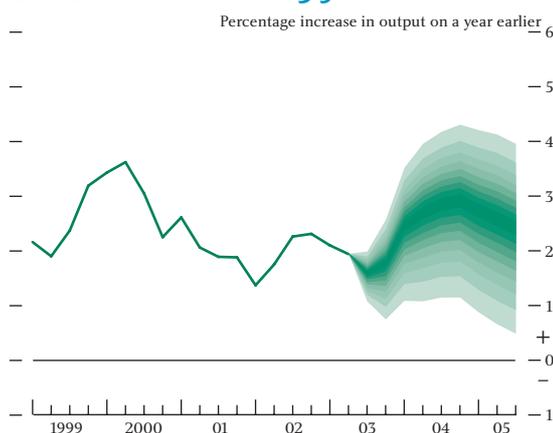
Following the marked decline during 2001 and early 2002, business investment has levelled off in recent quarters. The recent path is somewhat stronger than estimated in May. Published data revisions have raised the level since the start of 2002. Moreover, given the uncertainty attached to investment data, further upward data revisions are considered likely, particularly given ONS indications of stronger domestic demand since 1999. A very mild cyclical upturn in business investment seems likely over the forecast period. The cost of capital has fallen, and non-financial companies have improved their profitability, liquidity and cash flow, supporting investment prospects, although capital gearing remains high, and capacity utilisation is below normal levels. Reports from the Bank's regional Agents point to a gradual recovery in business investment over the next few quarters.

Public spending on goods and services increased sharply in 2003 Q1, providing a partial offset to the weakness in private domestic demand. Government spending is planned to rise briskly over the forecast period. Growth is expected to be most rapid in the current financial year, with some easing back thereafter.

A decline in the rate of stockbuilding lowered domestic demand growth in 2003 Q1. The Committee has maintained the judgment that inventories will rise broadly in line with output over the forecast period: as stockbuilding returns to normal levels that is likely to boost growth temporarily.

Interpreting recent UK trade trends is complicated at present by data revisions and uncertainties. Estimated trade data—both current and prospective—reflect both fraudulent and

Chart 6.1
Current GDP projection based on constant nominal interest rates at 3.5%



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.

legitimate activity. For this reason, estimated trade flows may change for reasons unconnected with their fundamental economic determinants. The upward revisions to imports entirely reflect estimates of fraudulent activity. But, as the corresponding export counterpart was already captured in the trade data, the level of ‘economic’ exports in 2003 Q1 is around 4% lower than previously identified, revealing a weaker underlying trend over the past few years.

Recent trade estimates also exhibit considerable volatility. Given ONS estimates of fraudulent activity, the current level of underlying export volumes appears a little weaker than expected three months ago. Import volumes also seem somewhat softer. Despite the stimulus from the recent sterling depreciation, exports are likely to rise marginally slower than world trade over the forecast period. Imports are expected to grow slightly less quickly than exports given the relatively moderate growth of UK private final demand. The brake on GDP growth from trade trends may lift in the coming quarters; the net trade contribution to GDP is likely to move to a broadly neutral position over the next year or so.

The Committee’s latest projection for the four-quarter growth rate in GDP is illustrated in Chart 6.1.⁽¹⁾ The projection is based on the assumption that official interest rates are maintained at 3.5% over the forecast period.⁽²⁾ Given sluggish growth in the first half of this year, four-quarter GDP growth eased to 1.8% in 2003 Q2—below expectations in the May *Report*. On the central projection, quarterly GDP growth is expected to pick up to marginally above trend rates by early next year, easing back to around trend in 2005. The four-quarter growth profile may be uneven initially, reflecting the unwinding of the rather erratic pattern of growth over the past year. Over the forecast period, robust growth in public expenditure, a gradual strengthening in global demand, and a modest increase in corporate capital spending, outweigh the slowdown in household spending and underpin the recovery in output growth. The broad picture of around-trend growth over the forecast period is similar to that outlined in the May *Report*, though the pick-up occurs a little later and growth is slightly lower during the second year of the projection.

The outlook for inflation depends upon the pressure of aggregate demand on the potential supply capacity of the economy. As emphasised in previous *Reports*, the level and prospective growth of potential output are uncertain. Bearing this caveat in mind and recognising that there are marked differences across sectors, pressures on aggregate supply capacity appear to have dipped a little beneath normal levels

(1) Also shown as Chart 1 in the Overview.

(2) An alternative projection based on market interest rate expectations is shown in Chart 6.5 below.

following the recent spell of below-trend growth. The Committee continues to assume that supply capacity over the forecast period will grow broadly in line with the long-run average rate of GDP growth over the past 40 years of some 2½% per annum.

RPIX inflation averaged 2.9% in 2003 Q2, identical to the previous quarter, but slightly under expectations three months ago as certain services prices were somewhat weaker than projected. As highlighted in previous *Reports*, RPIX inflation is currently above target because of temporary factors, in particular reflecting an exceptionally strong contribution from housing depreciation. Other transient influences, such as the sharp increase in Council Tax in April 2003, are also making an unusually large contribution to RPIX inflation at present. Abstracting from these elements, underlying inflationary pressures are notably weaker.

External influences are likely to add somewhat to UK inflationary pressures over the forecast period, as the global recovery gathers momentum, but more noticeably as the depreciation in sterling since the beginning of the year is translated into higher import price levels. Although the recent rebound in oil prices is adding to immediate price pressures, the subsequent projected decline will reduce inflation over the remainder of the forecast period. Moreover, competitors' export prices to the United Kingdom are likely to fall slightly in the short run and rise only moderately thereafter—a similar outlook to that in May. The assumed sterling exchange rate profile is also very similar to that in the *May Report*.

Domestic price prospects are heavily influenced by the outlook for labour costs and for competitive pressures in product markets. Pay pressures remain benign. Although public sector earnings are rising at close to 5% per annum, whole-economy average earnings growth per person was 3.4% in the three months to May, up slightly from the recent trough, but still down on levels in the second half of last year. Pay settlements continue to average around 3%.

A number of factors may help to account for the current low rate of earnings growth. Although unemployment has remained low, the 0.5% fall in total hours worked over the past year implies some weakening in underlying labour demand. The decline in average hours worked has also reduced earnings growth per person. Moreover, pay bargaining in the early months of the year took place in conditions of high economic and political uncertainty when household and business confidence were particularly depressed. In such circumstances, it is possible that prospective pressures on pay from the April increases in National Insurance contributions

and Council Tax were assigned less weight than otherwise. Equally, it is possible that employees have extrapolated gains in the terms of trade in recent years which have helped to support household purchasing power and may thus have affected pay claims: the potential reversal of some of these gains as sterling depreciated in early 2003 may not have been fully anticipated. A further possibility is that the structural performance of the labour market may have improved by more than previously assumed, reducing prospective upward pressure on pay.

Nominal earnings growth is expected to rise over the next year or so. The recovery in output growth to trend rates is likely to be associated with a cyclical improvement in productivity, supporting faster growth in earnings. In addition, labour markets are expected to remain relatively tight given the projected pick-up in activity. And the rise in Tax and Price inflation from negative rates in early 2002 to close to 4% in recent months has been reflected in downward pressure on real take-home income. This squeeze on households' purchasing power could have a delayed impact on settlements and pay growth during the forthcoming pay round. On the central projection, growth in earnings is expected to be lower than in May in the short term, reflecting weaker outturns in recent months. But pay growth may be slightly higher in the second year of the projection, as the influences currently dampening pay attenuate.

The projected cyclical rebound in productivity will mitigate the impact of higher earnings on unit labour costs. Nonetheless, higher employer National Insurance contributions raised labour costs from April 2003. Largely echoing the profile of earnings, unit labour costs are likely to rise more slowly than projected three months ago in the short term, but may then increase slightly more rapidly in the second year. As capacity utilisation is expected to remain a little below normal, competitive pressures may continue to restrain domestically generated inflation over the forecast period.

The outlook for RPIX inflation continues to be heavily influenced by prospects for a number of special factors—such as housing depreciation, Council Tax, duties, and petrol prices. These elements are often affected by specific forces which have a one-off impact on the price level and typically contain little information on general inflationary pressures. The current strong positive contribution to RPIX inflation from these factors is likely to decline substantially over the forecast period, as house price increases slow, oil prices decline, and future Council Tax increases are smaller than this year. The difference between RPIX and HICP inflation is especially large at present, reflecting the exceptional contribution of housing

Chart 6.2
Current RPIX inflation projection based on constant nominal interest rates at 3.5%

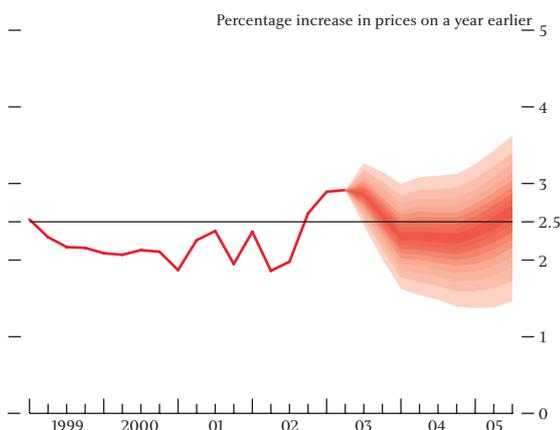
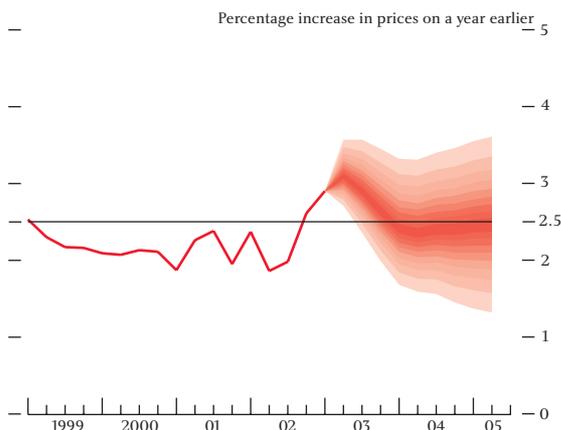


Chart 6.3
RPIX inflation projection in May based on constant nominal interest rates at 3.75%



The fan chart depicts the probability of various outcomes for RPIX 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.

cost elements that are incorporated in RPIX but not in HICP. The gap is likely to narrow considerably over the forecast period as the housing component decreases.

The Committee's latest projection for twelve-month RPIX inflation is presented in Chart 6.2.⁽¹⁾ The projection is conditioned on the assumption that official interest rates are maintained at 3.5%.⁽²⁾ It is shown alongside the corresponding projection in the *May Report*, which was based on constant interest rates at 3.75% (see Chart 6.3).

On the central projection, RPIX inflation declines in the coming months, dipping under target around the turn of the year as the contribution of various transitory influences diminishes, and as domestic costs remain relatively subdued. Inflation remains below target through 2004, as the contribution of temporary factors continues to contract, counterbalancing a slight rise in both external pressure, as sterling's depreciation earlier this year continues to feed through and as global inflation inches up, and in domestic costs, as earnings growth strengthens. Inflation then edges higher during the second year of the projection as underlying domestic and external forces predominate. On the central projection, inflation is close to target at the two-year forecast horizon. Relative to May, inflation is likely to be a little weaker over the next 12–18 months, reflecting slightly less underlying pressure. But following the cut in interest rates in July, the medium-term outlook is little altered.

(1) Also shown as Chart 2 in the Overview.

(2) An alternative projection based on market interest rate expectations is presented in Chart 6.4 below.

Chart 6.4
Current RPIX inflation projection based on market interest rate expectations

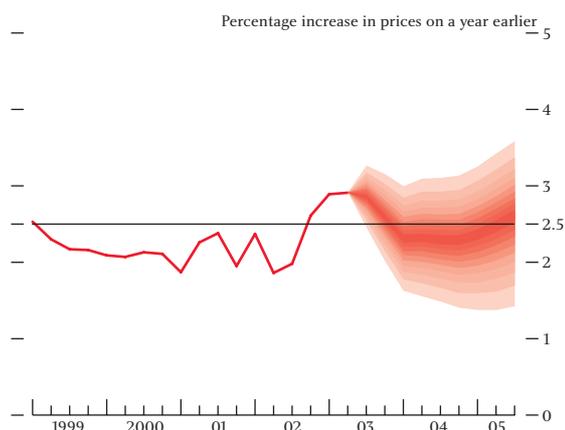


Chart 6.5
Current GDP projection based on market interest rate expectations

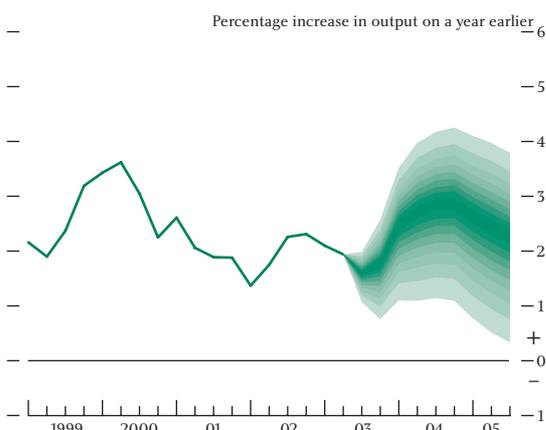


Table 6.A
Market expectations of the Bank's official interest rate^(a)

Per cent

2003		2004				2005		
Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
3.5	3.4	3.5	3.6	3.8	3.9	4.1	4.2	4.3

(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 6 August 2003.

Based on the 15-working-day average to 6 August, financial market expectations of the likely path of official interest rates are similar to those incorporated in the *May Report* (see Table 6.A), although the Committee noted that the expected interest rate path had risen recently and on 6 August stood above the 15-day average. The Committee's latest projections conditioned on the 15-day average of market interest rates are shown in Charts 6.4 and 6.5. In response to the assumed rise in interest rates in the second year, the outlook for growth and inflation is marginally weaker around the forecast horizon than in the constant-rate projections.

Prospects remain uncertain, although the Committee judges that the exceptional uncertainty related to the Iraq crisis has now dispersed. In consequence, the Committee has reduced the variance of the fan chart by restoring the convention, last used in the *November 2002 Report*, that uncertainty around the central projection is guided by the average of forecast errors over the past ten years.⁽¹⁾

The Committee considers that there are a number of major risks to the economic outlook, which could materially affect the prospects for output and inflation over the forecast period and beyond. These relate chiefly to: the outlook for the world economy; the profile for consumer spending and the housing market; and the prospects for the UK labour market and wage pressures.

The central projection is predicated on the assumption of a steady recovery in the world economy, fuelled by the expansionary stance of macroeconomic policy. The balance of risks to this assessment remains weighted to the downside. In

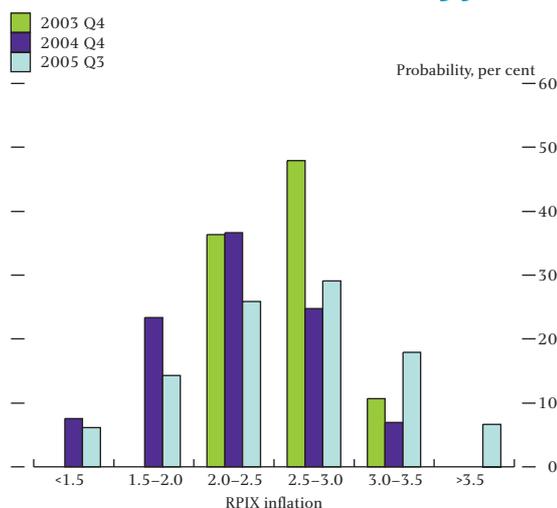
(1) A short analysis of MPC forecast errors is appended to this section.

the near term, low levels of business and consumer confidence in the euro area could hold back spending by more than currently projected and thus delay the recovery. And weak labour market conditions in the United States could provide a greater check on household spending than presently envisaged. Moreover, the large current account deficit in the United States remains a source of vulnerability. At some point, that may precipitate marked downward pressure on the dollar, and lead to more unsettled conditions in global financial markets and a dent in confidence that could stimulate additional precautionary saving and a decrease in UK-weighted global demand. Crystallisation of the downside risks to the world economy would lower UK export demand and GDP growth relative to the central projection. The possible magnitude of the effect and the implications for the inflation outlook are highly uncertain. These would depend additionally on the extent of any associated adjustment in the sterling exchange rate and in turn on the impact of any such adjustment on UK price and wage setting.

There remain major risks surrounding the outlook for UK household spending. Recent trends in both consumer spending and house prices appear rather stronger than projected in May, and there are consequently some risks of underestimating the near-term impetus. That could place additional upward pressure on output growth and inflation in the short run. But there are also considerable downside risks over the longer term. Although the sustainable level of house prices is highly uncertain, the longer rapid house price inflation continues, the higher the likelihood of a subsequent correction. The central projection assumes that, towards the end of the forecast period, house prices are broadly flat. But a sharper correction remains possible that could have a powerful influence on the outlook for consumer spending. Moreover, rapid growth in borrowing and the fall in equity prices have weakened household balance sheets in recent years. There consequently remains a risk of a substantial increase in the savings ratio at some point, given high household debt levels and possible concerns about future pension entitlements and endowment mortgage values. That could decrease prospective output growth and inflationary pressure considerably. In sum, there are risks to the judgment in the central projection that the necessary rebalancing of domestic and external demand in the United Kingdom over the longer run can be achieved gradually while maintaining output growth around trend.

The outlook for UK earnings growth is a further source of uncertainty. There are risks around the central projection in both directions. On the one hand, the present subdued

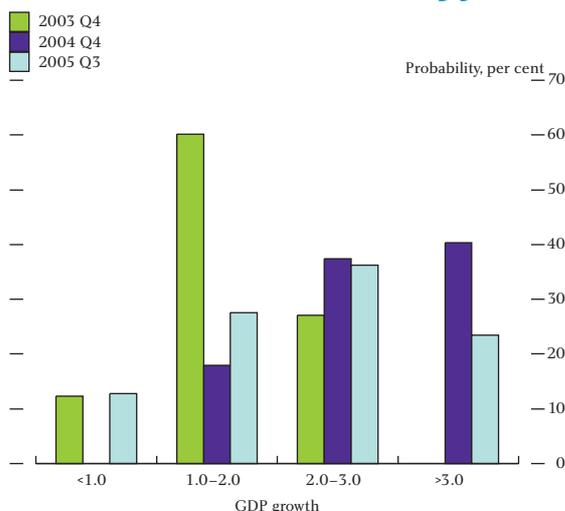
Chart 6.6
The MPC's expectations for RPIX inflation based on constant nominal interest rates at 3.5%^(a)



Source: Bank of England.

(a) These figures are derived from the same distribution as Chart 6.2. They represent the probabilities that the MPC assigns to RPIX inflation lying within a particular range at a specified time in the future. Because of the difficulties in precisely quantifying low-probability events, probabilities of less than 5% are not shown in this chart.

Chart 6.7
The MPC's expectations for GDP growth based on constant nominal interest rates at 3.5%^(a)



Source: Bank of England.

(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. Because of the difficulties in precisely quantifying low-probability events, probabilities of less than 5% are not shown in this chart.

growth in earnings at a time of historically low unemployment could indicate a further improvement in the structural characteristics of the labour market. If so, that could presage less of an upturn in pay pressure than currently foreseen. But it is also possible that the unexpected squeeze in real take-home pay in early 2003 reflected an unusually strong reaction to purely temporary factors, as employees acquiesced in low rates of earnings growth because of fears of a possible deterioration in labour market conditions. As output growth recovers over the forecast period, and confidence in future job prospects improves, there are consequently risks of a sharper rebound in pay.

The Committee noted that the risks associated with global current account imbalances and the rebalancing of demand in the United Kingdom could persist into the medium term and that their realisation could thus have a material impact on economic prospects beyond the forecast horizon.

The best collective judgment of the Committee is that the overall balance of risks to the central projection for GDP growth is weighted to the downside over the next two years. Risks to the central projection for RPIX inflation are also a little on the downside in the second year. These judgments are embodied in the fan charts. The probabilities of various outcomes for RPIX inflation and GDP growth are outlined 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,

Chart 6.8
Current projection for the percentage increase
in RPIX in the year to 2005 Q3^(a)

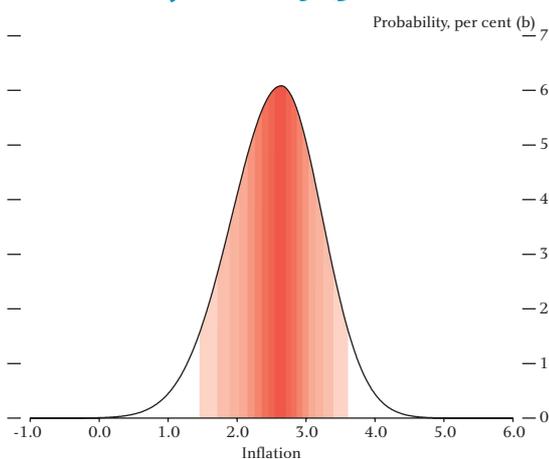
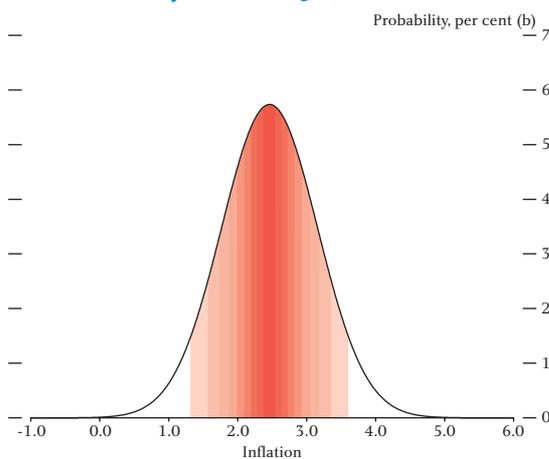


Chart 6.9
May projection for the percentage increase
in RPIX in the year to 2005 Q2^(a)



Source: Bank of England.

- (a) These charts represent a cross section of the fan chart at the end of the respective forecast horizons. As with the fan charts themselves, the shaded areas represent 90% of the distribution of possible outcomes for RPIX 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 outcome 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 2.5% (between 2.45% and 2.55%) in the current projection is around 6%.

alongside the corresponding balance in May (see Chart 6.9). Given the many uncertainties in the outlook, Committee members hold small differences of views on the most likely path for inflation and on the overall balance of risks.

The Committee reviewed the latest economic news and current projections at the policy meeting on 6–7 August. The central projection, maintaining interest rates at 3.5%, was for inflation to fall slightly below target around the turn of the year and then to increase very gradually to around target by the two-year horizon. Given prospective inflationary pressure edging higher into the medium term, and bearing in mind the risks, the Committee voted to maintain interest rates at 3.5%.

The MPC's forecasting record

The MPC's inflation projection is a key input to policy decisions, because interest rate changes take time to affect growth and inflation.

An evaluation of short-term forecast errors is an integral part of the Committee's forecast process. This box assesses how well past projections have served as a guide to the outturns for inflation and output growth. It is part of a series published each year in the August *Inflation Report*.

The Committee's projections are conditioned on assumptions about key influences such as the world economic outlook and exchange rate prospects, and about structural economic relationships. Given the inherent uncertainty in these economic judgments, the Committee presents its forecasts as a probability distribution rather than as a single projection. It is the distribution of possible outcomes that is crucial for monetary policy.

The fan charts show the MPC's assessment of the probability distributions for inflation and GDP growth over the following two years. The darkest band includes the central (single most likely or modal) projection and covers 10% of the probability. Each successive pair of bands covers a further 10% of the distribution, and the total shaded area covers 90%. If the MPC's forecast distribution is correctly estimated then, over a large number of years, 10% of inflation and output growth outturns would be expected to lie in the central darkest band. A similar number of outturns should lie in each pair of bands, with 10% of outturns outside the shaded area.

In the box prepared for the August 2002 *Inflation Report*, the main findings were first, that inflation outturns had tended to be closer to the centre of the MPC's fan charts than would have been expected. Second, inflation had tended to be somewhat lower than expected by the MPC, with the overprediction on average larger for two-year-ahead projections than for those one year ahead. Third, GDP growth had on average been slightly underpredicted in the MPC's one-year-ahead projections and overpredicted by a similar amount in its two-year projections. However, these conclusions were drawn on rather a small sample of observations.

This box updates that analysis with the four most recent quarterly outturns for inflation and GDP growth. Outturns are first compared with the Committee's fan charts produced assuming interest rates follow a path implied by financial market expectations, and then with the associated mean forecasts. The discussion of errors concerns the

mean forecasts as they best summarise, on the balance of probabilities, the Committee's expectations of inflation and output growth. On average the mean forecasts have tended to lie a little above the modal forecasts for inflation, and a little below for GDP growth.

Table 1 shows how many outturns for inflation and GDP growth have fallen within the central 30% and 50% bands of the MPC's market rate based fan charts. For inflation, just under half of the outturns have been within the central 30% bands of the fan charts for both one-year-ahead and two-year-ahead projections. Around two thirds of inflation outturns have been in the central 50% bands for one-year forecasts and more than three quarters of inflation outturns were in those bands at the two-year forecast horizon. For both one-year-ahead and two-year-ahead forecasts of GDP growth, about a quarter of outturns were within the central 30%, and around two thirds were in the central 50%, of the fan chart bands.

Table 1
Dispersion of outturns relative to fan chart probability distributions^(a)

	Number of outturns	Number in central 30% bands	Number in central 50% bands
RPIX inflation			
One year ahead	18	8	11
Two years ahead	14	6	11
Annual GDP growth			
One year ahead	18	4	11
Two years ahead	14	4	10

(a) Calculated for the market rates fan charts published between February 1998 and May 2002.

These results are broadly consistent with those presented in the August 2002 *Report*. Inflation and GDP outturns have generally been closer to the centre of the MPC's fan charts than would have been expected. However, despite the addition of four observations, this analysis is still based on a small number of outturns. So it is difficult to draw firm conclusions.

Another aspect of the MPC's forecasting record is the average absolute size of its forecast errors. Table 2 shows these errors for inflation and GDP growth, comparing outturns with the Committee's mean, market interest rate based forecasts. The table shows that, on average, inflation has differed from the MPC's one-year-ahead projections by 0.3 percentage points and from its two-year-ahead projections by 0.4 percentage points. The average one-year error is unchanged, while the average two-year error has fallen slightly, compared with those reported in August 2002.

Table 2
Average absolute forecast errors of mean projections^(a)

	Size of sample	RPIX inflation	Annual GDP growth
One year ahead	18	0.3	0.7
Two years ahead	14	0.4	0.5

(a) Calculated for the market rates fan charts published between February 1998 and May 2002. Similar calculations for mean and mode projections based on constant nominal interest rates are published on the Bank of England web site at www.bankofengland.co.uk.

For GDP growth, outturns have been on average 0.7 percentage points away from the MPC's one-year-ahead projections, and 0.5 percentage points away from the two-year-ahead projections. These average absolute errors have declined since the previous published analysis, as GDP in the four most recent quarterly outturns has mostly grown only a little below the broadly trend rates projected in the previous two years. The sample includes some relatively large one-year errors for projections made in late 1998 and early 1999, as output growth recovered more quickly than expected from the dip in early 1999. So the average one-year errors are a little larger than those two years ahead.

As well as examining the absolute size of forecast errors, it is important to investigate whether forecasts have tended to be one side or other of the outturns; that is, whether there is evidence of forecast bias. The presence of bias might indicate that there is information the MPC could use to improve its forecasting performance over time. The previous analysis last August indicated that the MPC had on average overpredicted inflation. However, Table 3 shows that, once the latest outturns are included, one-year-ahead inflation forecast errors have been close to zero on average. And while there is still a tendency to overpredict inflation two years ahead, the average error has declined to 0.3 percentage points. What lies behind these changes? Inflation has risen in the past year from its lowest level to close to its highest since August 1997, while on average being near to the target in this period. Transient factors, notably the strong contributions of housing depreciation and petrol prices, were mainly responsible for this rise in inflation. At the time of the *Reports* between May 2001 and February 2002, these temporary factors were not anticipated; inflation was below target and projected to remain so over much of the forecast horizon. Rising inflation has led to progressively larger one-year-ahead underpredictions, completely offsetting the past average overprediction. Two-year-ahead projections made between the May 2000 and February 2001 *Reports* were close to the target. So above-target inflation in the first two quarters of 2003 resulted in significant underpredictions, reducing the overall average two-year overprediction error.

Table 3
Average errors of mean projections^(a)

	Size of sample	RPIX inflation	Annual GDP growth
One year ahead	18	0.0	0.3
Two years ahead	14	-0.3	-0.3

(a) Calculated for the market rates fan charts published between February 1998 and May 2002. The error is calculated as outturn minus forecast.

The pattern of errors in the MPC's GDP growth forecasts is broadly unchanged since the previous analysis. Table 3 shows that one-year-ahead forecasts have on average slightly underpredicted GDP growth, although the two most recent quarterly outturns were weaker than expected a year ago. Low GDP growth in 2001 Q4 and 2002 Q1 was the result of weak net trade and investment growth. The February 2002 and May 2002 *Inflation Report* forecasts anticipated a pick-up in GDP growth to around trend by the end of the first year, supported by rising global demand, public spending and business investment. While GDP growth did indeed recover somewhat, recent outturns have remained below trend, as the world recovery disappointed and business investment was stable.

GDP growth two years ahead has on average been 0.3 percentage points lower than the MPC has forecast. Indeed, the two-year-ahead forecasts have overpredicted GDP growth in each outturn since 2000 Q4. To understand this series of errors, it is instructive to look at the errors made on the expenditure components of GDP. Consumption was mostly stronger, while investment and net trade were weaker, than forecast two years previously. Stronger-than-expected consumption was accompanied by unexpectedly rapid house price inflation and stronger-than-expected growth in real labour income. A weaker-than-projected world economy and the persistent unexpected strength of the sterling effective exchange rate over most of the period, are likely to have contributed to the overprediction of net trade.

Firm conclusions about the source of forecast errors are not possible, as there is no well-defined counterfactual against which to compare the MPC's performance. For example, it is not possible to know with any certainty how the economy would have been affected had the exchange rate fallen as expected, or if world demand had been stronger, because the models the MPC uses are imprecise and uncertain. So the attribution of errors is inherently uncertain. Nonetheless, looking at patterns across a range of economic variables helps in understanding why errors are made, and in improving future forecasting performance.

Other forecasters' expectations of RPIX inflation and GDP growth

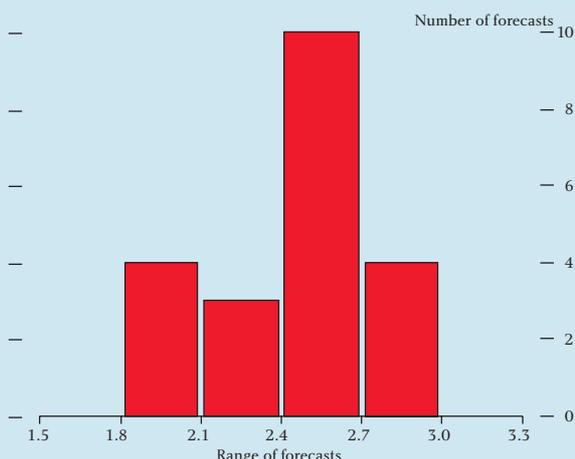
In July, the Bank asked a sample of external forecasters for their latest projections of inflation and output growth. The average forecast for the twelve-month rate of RPIX inflation in 2003 Q4, based on the results of this survey, is 2.4% (with a range of 2.0% to 2.8%). The average forecast for 2005 Q3 is also 2.4% (with a range of 1.8% to 2.9%), which is slightly higher than the average forecast at the two-year horizon in the *May Report*. As in May, the distribution has the greatest number of respondents expecting inflation to be between 2.4% and 2.7% (see Chart A). On average, the external forecasters see a 55% probability of inflation being at or below 2.5% in 2005 Q3 (see the table below).

The forecasters' average projection for four-quarter GDP growth in 2003 Q4 is 1.7% (with

a range of 1.1% to 2.5%), slightly lower than the forecasters' expectation in May. The average projection for GDP growth in 2005 Q3 is 2.6% (with a range of 1.5% to 3.5%), identical to the two-year-ahead average forecast reported in May.

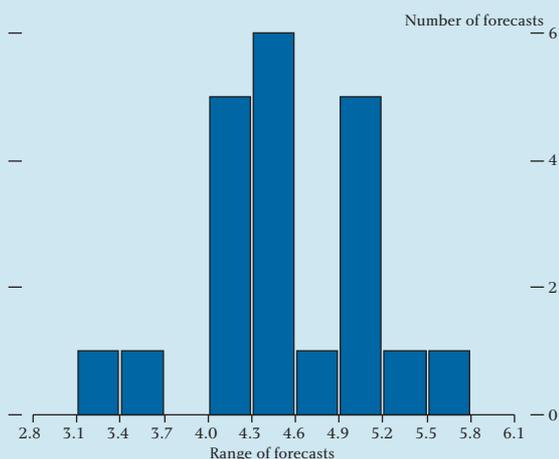
The average forecast for the official interest rate in 2003 Q4 is 3.5% (ranging from 3.1% to 3.8%), rising to 4.5% by 2005 Q3 (with a range of 3.3% to 5.5%). The forecast for interest rates at the two-year horizon is marginally above that in the *May Report*. On average, forecasters expect the sterling ERI will be 99.4 in 2003 Q4 (ranging from 96 to 106), falling to 97.2 by 2005 Q3 (with a range of 91 to 108). The average profile is very similar to that reported in May.

Chart A
Distribution of RPIX inflation forecasts for 2005 Q3



Source: Central projections of 21 outside forecasters as of 25 July 2003.

Chart B
Distribution of repo rate forecasts for 2005 Q3



Source: Forecasts of 21 outside forecasters as of 25 July 2003.

Other forecasters' expectations of RPIX inflation and GDP growth^(a)

RPIX inflation

Probability, per cent	Range:					
	Less than 1.5%	1.5% to 2.0%	2.0% to 2.5%	2.5% to 3.0%	3.0% to 3.5%	More than 3.5%
2003 Q4	3	13	41	30	10	2
2004 Q4	8	16	34	27	11	4
2005 Q3 (b)	9	17	29	26	14	5

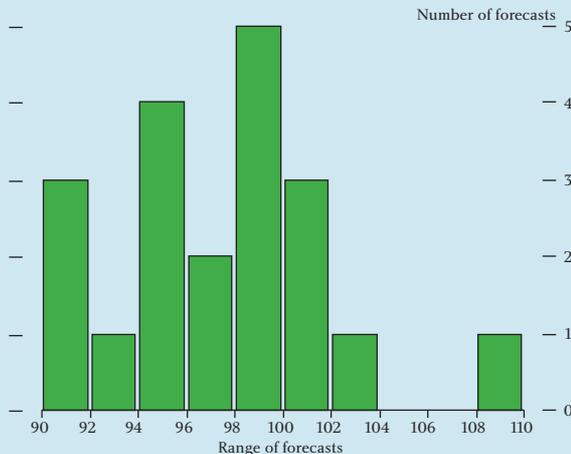
GDP growth

Probability, per cent	Range:			
	Less than 1%	1% to 2%	2% to 3%	More than 3%
2003 Q4	10	53	33	4
2004 Q4	9	23	40	28
2005 Q3 (b)	10	24	39	27

(a) 25 other forecasters provided the Bank with their assessment of the likelihood, at three time horizons, of expected twelve-month RPIX inflation and four-quarter output growth falling in the ranges shown above. This table represents the means of the responses for each range. For example, on average, forecasters assign a probability of 8% to inflation turning out to be less than 1.5% in 2004 Q4. Figures may not sum to 100 due to rounding.

(b) 21 forecasters.

Chart C
Distribution of sterling ERI forecasts for 2005 Q3



Source: Forecasts of 20 outside forecasters as of 25 July 2003.

Bank of England

Agents' summary of business conditions

August 2003

This publication is a summary of monthly reports compiled by the Bank of England's Agents, following discussions with around 2,000 businesses in the period between mid-April and mid-July. 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 orders, as well as confidence, have begun to improve. Producers of goods for the public sector or for export generally reported stronger growth than those producing for the domestic consumer market. Suppliers of some intermediate goods saw orders decline as former customers moved production overseas.
- Public sector and infrastructure contracts have become the major driver of construction output as demand for new office and industrial space has weakened. The residential housing market cooled in most regions as potential buyers became more cautious, although demand and price inflation remained strong in Scotland and parts of northern England.
- Turnover in business services grew most strongly for those with a public sector client base. Corporate finance activity began to revive, but demand for pensions and life assurance from personal investors remained weak. Domestic tourism continued to grow, but revenues from overseas visitors were depressed.
- Growth in new car and retail sales has moderated, although sales of certain products were boosted by the sunny weather during much of the period. Pensioners appeared to be curtailing their discretionary spending.
- The appreciation of the euro against sterling made UK exports more competitive in continental markets. However, many of these markets remained depressed. The US market also showed little sign of recovery, with the weaker dollar impacting on the competitiveness of exporters' prices. Import penetration in the supply of services continued to grow.
- Investment intentions were slightly more positive overall, although many capital expenditure projects continued to be aimed at reducing labour costs rather than expanding capacity.
- Exchange rate movements replaced oil as the most significant factor in input cost movements. Many contacts who were not locked into long-term contracts switched to importing from outside the euro area. Manufacturers faced increased downward pressure on output prices from large domestic customers, but many were able to increase margins on exports to the euro area.
- Retail goods price inflation remained subdued as clothing retailers passed on some of the lower cost of clothing imported from dollar areas. Discounts were used to stimulate demand for new cars. And retail services inflation moderated.
- Despite more protracted dialogue with unions, pay settlements showed little increase on last year's modest rates. Some employers negotiated higher employee pension contributions. And bonuses were often reduced.
- Manufacturing employment continued to decline, albeit at a slower rate than earlier in the year. Private and public sector employment growth appeared to be slowing. Labour shortages of staff with particular skills, as well as for low-paid jobs, persisted in most regions.

(1) 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

Agencies reported a modest improvement in confidence among agricultural contacts. Higher incomes reflected the effect of the depreciation of sterling against the euro on Common Agricultural Policy support payments from July. Prices for arable crops were firmer, with cereal prices up by a quarter compared with last year as a result of world shortages, following droughts in Canada and Australia.

Manufacturing

Manufacturing confidence showed some improvement, reflecting the appreciation of the euro, the end of war in Iraq and upward movement in the stock market. A pick-up in enquiries and, more recently, in orders and output was reported. Some Agencies, however, believed that the upturn in confidence was frequently due to contacts gaining market share from domestic competitors who have left the industry, rather than a significant increase in overall demand.

There were signs of recovery in electrical and optical manufacturing, with contacts reporting increased output of electronic components, plasma screens, circuit boards and semi-conductors. Producers of capital goods reported that enquiries had risen, but orders for civil aerospace and telecommunications remained depressed. Growth in orders for durable consumer goods has weakened since the turn of the year as household spending growth has slowed. Some suppliers of intermediate engineering goods and packaging reported falling orders as their former customers had moved production overseas and were now sourcing locally.

Some manufacturers benefited from increased defence spending related to the war in Iraq, and public sector orders also boosted production of healthcare equipment, pharmaceuticals, printing and education goods. Growth in output of construction products moderated as exchange rate movements resulted in increased competition from dollar-denominated imports. Meanwhile, some contact companies that are part of multinational groups reported that the appreciation of the euro had enabled them to win back work from continental European plants.

Construction and housing

Weakening occupier demand led to a fall in new private sector construction orders. Government agencies' requirements absorbed some of the excess supply in the

office rental market in various regions. Demand for industrial space also remained weak as production was relocated overseas. Distribution warehouses continued to be in demand from retailers. Retail groups have also switched their focus away from building new stores to refurbishment of existing outlets.

An important driver of construction output continued to be projects for prisons, hospitals, educational establishments and roads, financed by Public Private Partnerships, the Private Finance Initiative and local authorities. Contacts noted, however, that substantial delays were common in the award of contracts and subsequently in obtaining permission to start work.

New housing starts were down year-on-year due to planning and labour constraints. House builders began to offer more discounts and incentives as prospective buyers became more cautious. Transaction prices in the secondary housing market were also under less upward pressure, as the average number of viewings per sale was significantly higher compared with a year ago. In Scotland and parts of the North of England, the housing market was somewhat stronger, reflected in buoyant demand and rising price inflation.

Services

Towards the end of the period, business services' turnover picked up a little and optimism among contacts increased. Activity relating to possible mergers and acquisitions began to revive, although the market remained fragile. Personal investors, however, continued to avoid equity-related investments, including life assurance and pension funds. Mortgage lending continued to grow, although much of the business consisted of refinancing and equity withdrawal. Credit card lending also remained buoyant.

Many business service providers, including recruitment, advertising, training, IT and PR companies, continued to rely on the public sector for growth, as private sector clients sought to economise. Telecommunications services generally remained depressed, with the significant exception of broadband. Areas of expansion included waste disposal services, disaster recovery and energy efficiency advice. Demand for legal and accountancy services remained strongest in the areas of restructuring and insolvency, pensions, property and tax advice. And some legal firms in regional cities reported winning work from more expensive London based competitors.

Although overseas visitor numbers to the United Kingdom have started to record year-on-year growth,

tourist service providers reported that they were largely short-break visitors from Europe and backpackers rather than the higher-spending US business and leisure travellers. UK domestic tourism continued to grow compared with last year and budget airlines reported strong bookings and expansion of routes.

DEMAND

Consumption

The annual rate of growth in retail sales was half that recorded in mid-2002 for many contacts. Sales of consumer durables, including furniture, carpets and electrical appliances, slowed during the period, while sunny weather boosted sales of women's clothing, alcoholic drinks and garden furniture. Discretionary spending on perfume, cosmetics, premium food lines and hairdressing remained buoyant.

Bookings for overseas holidays, including US destinations, revived following the end of war in Iraq. And demand for domestic leisure breaks remained strong. Coach tours and holidays for older age groups sold less well, attributed by contacts to reduced disposable income among pensioners. This was also evident from reports of weaker sales in department stores.

New car sales were flat to falling, and were weakest in the South of England. Demand was largely sustained through manufacturers' discounts and incentives.

Exports and imports

SARS caused some disruption to trade with the Far East during May and June as business meetings and attendances at trade fairs were cancelled. The disruption was, however, temporary. Trade with the Middle East also began to recover following the end of the war in Iraq.

The recovery in export orders from the United States reported in the previous *Agents' Summary* appeared to be short-lived, with contacts now frequently describing the US market as weak. Exporters continued to find it difficult to compete in dollar-denominated markets generally. In contrast, confidence relating to European export markets picked up significantly as a result of exchange rate movements. Although many exporters saw little prospect of encouraging demand through euro price cuts in weak continental export markets, they were able to gain an improvement in revenues through higher sterling margins. However, a small number of contacts had reduced prices to try to stimulate demand and some had regained business lost five to six years ago. The partial recovery of sterling towards the end of the period did not reverse the more positive outlook for exporters.

The appreciation of the euro also lessened import penetration from the continent and Ireland. Those not locked into long-term contracts have increasingly switched to importing from dollar-denominated sources. Imports of services continued to grow, with one new example being the outsourcing to India of translation from French and German into English.

Investment

On balance, investment intentions were slightly more positive by the end of the period, although uncertainty about future sales growth persisted as the main constraint for manufacturers and service providers. Many manufacturers were also limiting capital expenditure due to lack of funds: the result of weak profitability, the depressed stock market, the need to plug pension fund deficits and little appetite for additional bank debt. Much investment in productive capacity was overseas and disinvestment through rationalisation of sites and sale of land surplus to businesses' requirements was widely reported. Manufacturers producing for the public sector, and food processors were the group most likely to be investing in their UK plants. But often the impetus for investment was greater efficiency and the reduction of labour costs.

Investment in industrial vehicles picked up. And some companies were opportunistically buying nearly new equipment as competitors went out of business.

Service sector investment growth appeared to have slowed, with chains of estate agencies, gyms, bars and hotels scaling back their expansion plans. Retail investment remained buoyant in acquisitions, refurbishment, logistics, anti-theft equipment and display products.

COSTS AND PRICES

Input prices

Overall, material input costs remained fairly flat. The reduced cost, in sterling terms, of imports priced in dollars offset more expensive imports from the euro zone. The extent of currency hedging and purchases of forward contracts determined the impact on costs of the euro's appreciation; many contacts were able to switch to suppliers outside the euro area.

The sharp fall in the price of oil in early spring fed through to lower costs for fuel and petro-chemicals. Printed circuit board and semi-conductor prices fell as a result of world oversupply. But price increases were recorded for steel, wool, cocoa, sugar and sawn timber.

Contacts were able to achieve savings, through shopping around, on the costs of travel, information technology, energy and professional services. Other increasing overhead costs, such as retail rents and the cost of sea transport, could not be avoided. Agencies reported liability insurance renewals rising by between 20% and 50% this year; lower than the increases seen in 2002 but often with more policy exclusions and greater excesses.

Output prices

Manufacturers reported continuing downward pressure on prices from main customers. This downward price pressure was increasing for food and automotive and aerospace components. Printing and electronics prices were also falling in an oversupplied market. However, many exporters were able to benefit from enhanced margins as a result of leaving their euro prices unchanged following exchange rate movements.

Business service prices rose more slowly than last year, reflecting weaker demand and fiercer competition. Clients were increasingly pressing for fixed professional services fees rather than paying hourly rates.

Retail prices

Retail goods price inflation remained subdued, although there were reports that prices were rising for goods imported from the euro zone. Examples included wine, cheeses, furniture and flower bulbs. Non-food prices remained under downward pressure due to slower sales growth and increased competition from supermarkets and internet suppliers. Prices of clothing continued to fall as the proportion sourced from lower-cost countries, which also price in dollars, increased. New car prices remained under downward pressure as weakening demand encouraged greater discounting and incentives. Overall, retail services price inflation was also moderating. Gym memberships and foreign holidays were subject to price falls to stimulate demand. Some other leisure services and bar and restaurant prices increased in response to rising labour costs.

Pay

Pay settlements remained mostly in the 2% to 4% range in manufacturing and a little higher in services. But an

increasing number of pay freezes was also reported in financial and legal services in some regions. Bonuses in parts of the service sector were significantly lower than a year ago, or non-existent for many employees in stockbroking, advertising and PR services. Some of those who did award bonuses brought payment forward to March to avoid the higher rate of National Insurance contributions (NICs).

Contacts reported more protracted pay negotiations and delayed settlements as employers resisted unions' attempts to offset the impact of NICs and Council Tax increases. Employers were increasingly switching away from across-the-board settlements to individual rises or bonuses linked to productivity. Pensions have also become an issue in pay negotiations and some awards have been linked to higher employee, as well as employer, contributions.

EMPLOYMENT

Further large-scale redundancies in manufacturing were reported at the beginning of the period in the food processing, textiles, engineering and steel sectors. Some contacts in services, as well as in manufacturing, reduced staff numbers or hours as a result of the increase in NICs. In more recent weeks, however, fewer manufacturing redundancies have been reported and employment attrition was more the consequence of natural wastage coupled with recruitment freezes.

Employment growth in business and financial services slowed during the period, with job cuts as call centres moved overseas, and many contacts recruiting a lower-than-usual number of graduates to start in the autumn. Employment creation in parts of the public sector also appeared to be slowing.

Although slackening in the labour market has resulted in reduced voluntary turnover among staff, labour shortages have persisted for low-skilled work. The main sectors affected are hospitality, catering, security and production. Contacts in many regions were using immigrant labour or actively going overseas to recruit staff. Shortages of higher skilled staff were also apparent, including chefs, construction craftsmen and transport and haulage drivers.

Text of Bank of England press notice of 5 June 2003

Bank of England maintains interest rates at 3.75%

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 3.75%.

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

Text of Bank of England press notice of 10 July 2003

Bank of England reduces interest rates by 0.25% to 3.5%

The Bank of England's Monetary Policy Committee today voted to reduce the Bank's repo rate by 0.25% to 3.50%.

The global economic recovery has remained hesitant. Although the preconditions for recovery remain in place, the prospect for external demand for UK output is weaker than previously expected. Output growth in the United Kingdom has recently been below trend. Slower consumer demand and subdued private investment have so far offset the impact of higher public spending. Although RPIX inflation is currently above the 2.5% target, this is the result of temporary factors which are expected to unwind in the coming months. Overall pay growth has been muted so far this year. The fall in the sterling effective exchange rate since the start of this year should help underpin growth, but in recent weeks that fall has been partly reversed, reducing the prospective impact on inflation. Against that background, and given the possibility of subdued economic activity continuing in the near term, the Committee judged that a reduction in official interest rates to 3.50% was necessary in order to keep inflation on track to meet the target in the medium term.

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

Text of Bank of England press notice of 7 August 2003

Bank of England maintains interest rates at 3.5%

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 3.5%.

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

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

Glossary and other information

Glossary of selected data

AEI: average earnings index.

CPI: consumer price index.

CSPI: corporate services price index.

ERI: exchange rate index.

GDP: gross domestic product.

HICP inflation: inflation measured by the harmonised index of consumer prices.

LFS: Labour Force Survey.

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 lending: sterling lending by UK banks and building societies to the UK non-bank, non building society private sector. M4 lending includes loans and advances as well as investments, acceptances and reverse repo transactions.

PMI: purchasing managers' index.

RPI inflation: inflation measured by the retail prices index.

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

RPIY: the retail prices index excluding mortgage interest payments and the following indirect taxes: Council Tax, VAT, duties, car purchase tax and vehicle excise duty, insurance tax and airport tax.

SVR: standard variable rate.

TFP: total factor productivity.

Abbreviations

BCC: British Chambers of Commerce.

CBI: Confederation of British Industry.

CIPS: Chartered Institute of Purchasing and Supply.

DB: defined benefit.

ECB: European Central Bank.

EMU: Economic and Monetary Union.

ESA: European System of Accounts.

EU: European Union.

FTSE: Financial Times Stock Exchange.

GC: general collateral.

GfK: Gesellschaft für Konsumforschung, Great Britain Ltd.

HBF: House Builders Federation.

IBES: Institutional Brokers' Estimate System.

ICPFs: insurance corporations and pension funds.

ILO: International Labour Organisation.

IMF: International Monetary Fund.

ISM: Institute for Supply Management.

IT: information technology.

LTV: loan to value.

M6: major six economies.

MPC: Monetary Policy Committee.

MTIC: missing trader intra-community.

NHS: National Health Service.

NICs: National Insurance contributions.

OECD: Organisation for Economic Co-operation and Development.

OFCs: other financial corporations.

OFT: Office of Fair Trading.

ONS: Office for National Statistics.

PNFCs: private non-financial corporations.

PR: public relations.

RICS: Royal Institution of Chartered Surveyors.

S&P: Standard and Poor's.

SARS: severe acute respiratory syndrome.

VAT: value added tax.

WTD: Working Time Directive.

Symbols and conventions

Except where otherwise stated, the source of the data used in charts and tables is 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.