

Inflation Report

February 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

Economic activity in the United Kingdom has continued to recover from the slowdown experienced during 2001. Domestic demand growth has been sustained by buoyant household and government spending, though there are tentative signs that the growth of household spending may be starting to slow, and business investment has remained weak. The recovery in the world economy remains patchy and net trade has acted as a drag on growth. The Committee's central projection assuming official interest rates are maintained at 3.75% is for four-quarter GDP growth to remain close to trend over the next year and then ease back slightly. The outlook is somewhat weaker than in the November projection. Pay pressures remain subdued, though higher oil prices have raised input costs. Annual RPIX inflation rose to an average rate of 2.6% in the fourth quarter, reaching 2.7% in December. It is projected to remain above the 2.5% target in the near term and then drop back to target at the two-year horizon. Geopolitical risks make the outlook for growth and inflation particularly uncertain.

The global economic recovery remains patchy and equity prices have fallen, in part reflecting heightened geopolitical tensions. In the euro area, sluggish growth through last year was sustained by external rather than domestic demand. Though the ECB's 0.5 percentage point interest rate cut in December should bolster domestic spending there, the appreciation of the euro may hold back net exports. Confidence remains weak and prospects for this year are muted. The upturn in the United States has been stronger, supported by the working out of the inventory cycle and resilient consumer spending. Growth in Q4 was somewhat softer, but there are tentative signs that investment is starting to pick up, monetary policy remains stimulative, and the administration has proposed further fiscal measures to sustain the recovery. Some Asian economies have experienced healthy growth, but a durable recovery in Japan remains elusive. The Committee continues to expect UK-weighted world demand to strengthen gradually, though global prospects are somewhat weaker than in the November *Inflation Report*.

In the United Kingdom, GDP growth is provisionally estimated to have dropped back to 0.4% in the fourth quarter. But the pattern of growth in recent quarters has been affected by the Jubilee holidays, and the underlying growth rate in Q4 may have been somewhat higher. Service sector output growth eased back to around trend. Manufacturing output fell, though the impact of the Jubilee exaggerates the extent of the underlying contraction.

Consumers' expenditure increased 0.8% in the third quarter. Retail sales volumes grew strongly in Q4, but the seasonal adjustment factors around Christmas are particularly large, making extraction of the underlying trend difficult. Consumer confidence has deteriorated though households' confidence in their own financial position remains high. The stock of secured borrowing continues to rise rapidly, although the growth in unsecured debt has moderated slightly. House price inflation remains unsustainably high, though there are tentative signs that activity in the housing market may be beginning to soften. The Committee expects household spending growth to moderate this year in the face of slower growth in real disposable incomes, lower financial wealth and a lower rate of increase of house prices.

Government consumption rose 0.8% in the third quarter, and was more than 5% higher than a year earlier. The increases in public expenditure planned for this year and next should support future growth in domestic demand.

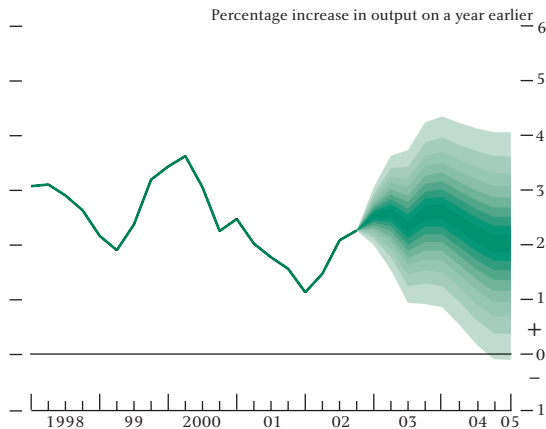
Business investment fell sharply in Q3, and was down nearly 10% on a year earlier. Survey and other evidence suggests that corporate capital expenditure is close to a trough, but excess capacity and heightened uncertainty are likely to mean that any recovery will be gradual. Housing investment has, by contrast, grown strongly. As expected, the Jubilee-related run-down in stocks in the second quarter was temporary and inventories were broadly unchanged in Q3.

Against the background of sluggish global activity, net trade has detracted from growth. But the sharp contraction in goods exports reported in October and November is difficult to reconcile with other indicators of export activity and may exaggerate the underlying trend.

Chart 1 shows the MPC's assessment of the outlook for GDP growth, on the assumption that the official interest rate remains at 3.75%. Under the central projection, four-quarter GDP growth stays around trend during the first half of the forecast period and then eases back a little. The broad picture is one of moderating consumer spending offset by robust growth in public expenditure and by a gradual pick-up in export demand and investment. The outlook is somewhat weaker than that shown in the November *Report*.

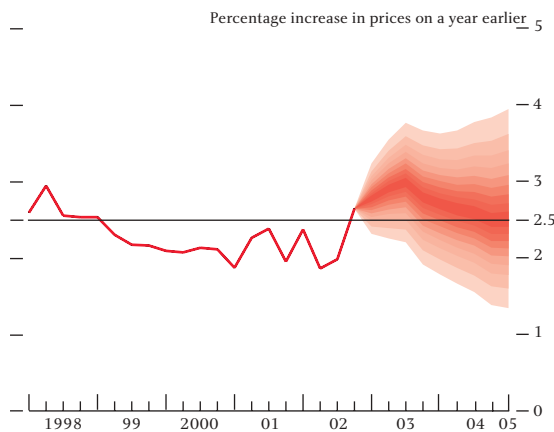
Movements in input costs have been dominated by oil. The strike in Venezuela and fears about war in Iraq have led to an increase of about \$6 per barrel in the spot price, though futures prices at the forecast horizon have been relatively unaffected suggesting that market participants expect the spike to be short-lived. The outlook for non-oil commodity prices is

Chart 1
Current GDP projection based on
constant nominal interest rates at 3.75%



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 3.75%



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.

little changed, but the local currency prices of internationally traded goods and services have been weaker than expected. Sterling has experienced sharp, though largely offsetting, movements against the euro and the dollar. The effective exchange rate is 2% lower than projected in November, adding somewhat to inflationary pressure.

Headline earnings growth has continued to run at a little under 4% since May, although public sector earnings have risen sharply as the delayed local authority settlement has come into force. Prospective pay pressures depend in part on labour market tightness. That has eased only a little during the slowdown: the ILO unemployment rate in the three months to November stood at 5.2%, just 0.3 percentage points higher than its May 2001 trough.

Growth in output per employee had been unusually weak during the slowdown, in part because employers have preferred to retain scarce skilled workers. Productivity growth has picked up somewhat with the recovery in activity and is likely to increase further over the course of this year. That will help to contain the growth of unit labour costs. Lower than normal capacity utilisation may also help contain inflationary pressures. RPIX inflation rose to an average of 2.6% in Q4, reflecting the impact of petrol prices and an unusually large contribution from the housing depreciation component. The exceptionally large divergence between retail goods and services price inflation persists.

Chart 2 shows the Committee’s assessment of the outlook for RPIX inflation. In the central projection, inflation moves further above the 2.5% target in the short term, driven by higher oil prices and the continuing impact of high housing depreciation. Inflation then falls back to the target by the two-year horizon as those temporary influences unwind. The profile is a little stronger than in the November *Report* for much of the forecast period, reflecting the greater importance of the transient factors and the weaker exchange rate. But towards the forecast horizon, and beyond, the more muted prospect for activity implies somewhat weaker inflationary pressures.

There are considerable risks surrounding these projections. The unusual uncertainty relating to the duration and impact of a possible war in Iraq has led the Committee to widen the range of possible outcomes. And, as in the previous *Report*, there are particular risks relating to the strength of the nascent global recovery, the rate at which house price inflation and consumer spending moderate, and the impact on wages and prices of the imminent increase in National Insurance contributions. The Committee judges that all but the last of these risks are broadly

balanced. Relative to the central projection, the overall balance of risks to growth consequently remains weighted marginally to the downside, while that to inflation is slightly on the upside.

At its February meeting, the Committee noted that although the profile for inflation in the central projection was above the 2.5% target for much of the forecast period, that largely reflected the influence of temporary factors. And without a reduction in interest rates, the weaker prospects for demand would be likely to push inflation below the target in the medium term. The Committee therefore judged that a small cut in official interest rates to 3.75% was necessary to keep inflation on track to meet the target in the medium term.

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UK equity prices have fallen sharply since the previous Report. Similar declines have been evident in other major economies. An increase in the perceived likelihood of a war in Iraq has been a significant factor. Short-term sterling interest rate expectations have declined. The sterling effective exchange rate has depreciated slightly in recent months, while the euro has appreciated markedly against the US dollar. House price inflation shows some signs of easing, albeit from a very high rate. There has been a sharp slowdown in narrow money growth. By contrast, in 2002 Q4, growth in the stock of total lending to individuals picked up for the seventh quarter in a row. Corporate borrowing strengthened towards the end of last year.

Chart 1.1
World equity markets since January 2002^(a)



Sources: Bank of England and Bloomberg.

(a) All equity price indices have been converted into sterling.

Table 1.A
Consensus forecasts of annual GDP growth in the major economies in 2003

Per cent

	Forecast date		Revision (a)
	Jan. 2002	Jan. 2003	
Euro area	2.7	1.4	-1.3
United States	3.5	2.7	-0.8
United Kingdom	2.8	2.3	-0.5
Japan	0.7	0.4	-0.3

Source: Consensus Economics.

(a) Percentage points.

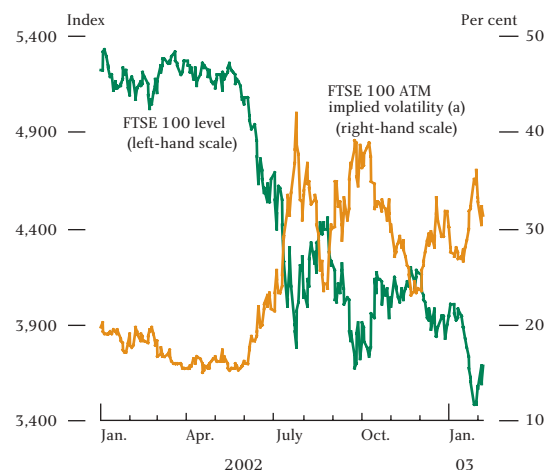
1.1 Asset prices

Equity markets

There have been large falls in global equity prices since the November Report (see Chart 1.1). On 29 January, the FTSE All-Share index closed at a seven-year low of 1686. That was nearly 50% below its all-time high on 4 September 2000. In the 15 working days up until 5 February, the index was, on average, 10% lower than during the 15 working days up until 6 November. That means the starting point for the equity price assumption underlying the MPC's central projection for RPIX inflation contained in this Report lies significantly below the starting point used in November.

Equity prices tend to fall when expectations of future dividend payments fall, when the yield on alternative assets rises, or when the equity risk premium rises. The equity risk premium is the required return on equities over and above the required return on a risk-free asset, such as an index-linked government bond. When expressed in a common currency, the relative performances of the FTSE All-Share, the S&P 500, the Euro Stoxx and the Japanese Topix indices have been broadly consistent with revisions to near-term growth prospects in the four economies as surveyed by Consensus Economics (see Table 1.A). That suggests a fall in expected future dividend payments may explain some of the decline in world equity markets since the beginning of last year. But it seems likely that an increase in the perceived level of uncertainty, and a corresponding rise in the equity risk premium, also played a significant role.

Chart 1.2
UK equity market uncertainty since January 2002



Sources: Bank of England, Bloomberg and LIFFE.

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

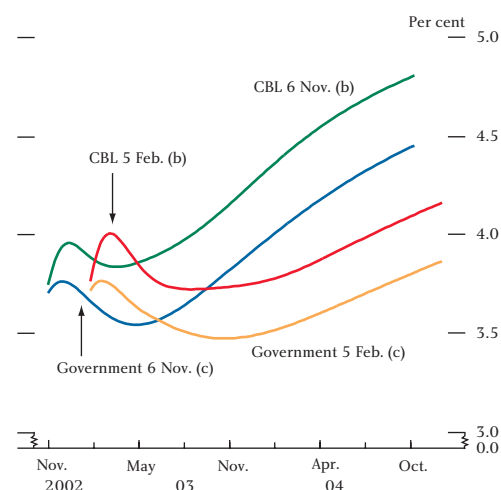
Table 1.B
Official interest rates in some of the major economies

Economy	Instrument	Level (a)	Latest change (b)	Date of latest change
Euro area	Minimum refinancing rate	2.75	-0.50	05.12.02
Japan	Official discount rate	0.10	-0.15	19.09.01
United Kingdom	Repo rate	3.75	-0.25	06.02.03
United States	Federal funds target rate	1.25	-0.50	06.11.02

Source: Bloomberg.

(a) Per cent.
(b) Percentage points.

Chart 1.3
Two-week forward interest rates^(a)



Source: Bank of England.

(a) A forward interest rate is the rate implied for a future period by comparisons of current shorter-term and longer-term rates.
(b) Commercial bank liability curve. Based on Libor rates and a number of derivative instruments that settle against Libor.
(c) Government liability curve. Based on GC repo rates and gilt yields.

Chart 1.2 shows how, during the past few months, 'at-the-money' (ATM) implied volatility—a measure of the amount of uncertainty surrounding the value of the FTSE 100 index in three months' time, derived from options prices—has mirrored almost exactly the level of the FTSE 100. In fact, the daily correlation between the two series in 2002, at -0.94, was the closest in a single calendar year since the options were first traded in 1992. The large increase in ATM implied volatility that took place around the middle of last year occurred alongside media reports of accounting irregularities at a number of large corporations in the United States. It seems likely that much of the recent increase in ATM implied volatility reflects the greater perceived likelihood of a war taking place in Iraq, and the uncertainties that such a war would bring. The price of gold, an asset that is often regarded as a 'safe haven' in times of uncertainty, has risen sharply since the previous *Report*.

Other things being equal, a reduction in equity prices will raise the cost of finance to firms and lower household sector financial wealth. That is likely to put downward pressure on investment and consumption.

Monetary policy

On 6 February, the MPC voted to lower the Bank of England repo rate by 0.25 percentage points to 3.75%. On 5 December, the ECB announced that it would reduce its minimum refinancing rate by 0.5 percentage points to 2.75%. Official interest rates in other major economies have remained unchanged during the past three months (see Table 1.B).

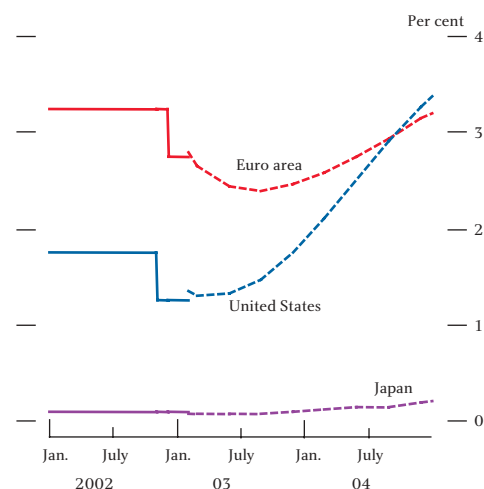
Information about expectations of official interest rates is contained in forward interest rate curves. Two such curves are shown for two different dates in Chart 1.3. The government liability curve is derived from a combination of general collateral (GC) repo rates and government bond yields.⁽¹⁾ It provides a measure of the price at which financial market participants are willing to lend to the UK government at different maturities. By contrast, the commercial bank liability (CBL) curve measures the price at which commercial banks are willing to lend to each other.⁽²⁾ Expectations of the level of the Bank of England repo rate cannot be read directly from either curve.⁽³⁾ The government liability curve can be affected by changes in the demand for and supply of gilts, while the CBL

(1) A 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.

(2) Estimates of both the government liability curve and the commercial bank liability curve are published daily on the Bank of England web site at www.bankofengland.co.uk/statistics/yieldcurve/main.htm

(3) For more information on how these curves are constructed, and for an outline of some of the difficulties faced when trying to interpret them, see pages 4–5 of the November 2002 *Inflation Report*, or 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 1.4
Official interest rates and future interest rates in some of the major economies^(a)



Source: Bloomberg.

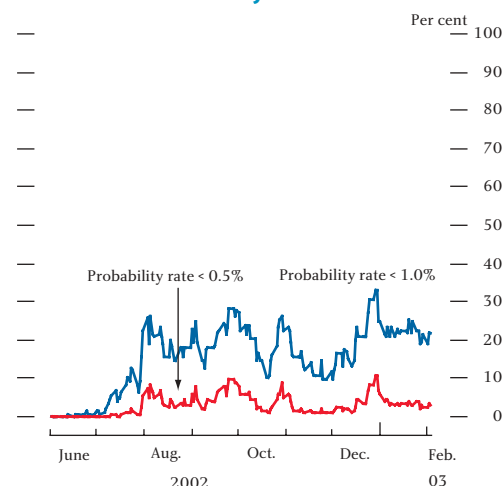
(a) Solid lines are official interest rates. Broken lines are three-month interest rates implied by futures contracts on 5 February 2003.

curve incorporates a time-varying credit risk premium, reflecting the possibility that any private sector organisation could default on its debt. Both curves are affected by term premia, which tend to widen the gap between the forward rate and the expected policy rate at longer maturities.

In the three months following publication of the November *Report*, these forward curves shifted slightly down and to the right, and lost some of their upward slope. By 5 February, rates implied for the end of 2003 were some 50 basis points lower than three months previously (see Chart 1.3). Market expectations of the future level of official interest rates fell further following the interest rate cut on 6 February.

Nominal official rates of interest are at, or close to, historic lows in all of the major economies. The Bank of Japan discount rate has been just 0.10% for more than a year. The reduction in the federal funds target rate from 1.75% to 1.25% on 6 November 2002 led some commentators to question whether nominal interest rates in the United States might soon approach their lower limit of zero. It becomes more difficult to lower the real rate of interest, and hence to stimulate aggregate demand, when the general price level is falling—a phenomenon known as deflation. The consequences of deflation are discussed in a box on page 36 of this *Report*.

Chart 1.5
Probability of different outcomes for eurodollar interest rates in one year's time^(a)



Sources: Chicago Mercantile Exchange and Bank of England.

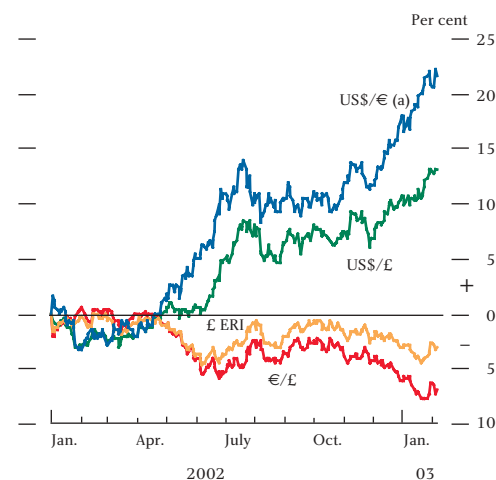
(a) Probabilities are based on an assumption of risk neutrality.

Chart 1.4 plots the interest rates implied by euribor, eurodollar and euroyen futures on 5 February. The eurodollar curve rises quite sharply from the middle of the year. The prices of options on eurodollar futures can be used to infer the probabilities that market participants attach to various outcomes for the eurodollar rate at different points in time. Chart 1.5 shows that, on 5 February, the probability of the eurodollar rate being below 1.0% in one year's time was around 20%. The probability of the eurodollar rate being below 0.5% in one year's time was close to zero.

Government bond yields

Between 6 November 2002 and 5 February 2003, which was one day before the 0.25 percentage point reduction in the Bank of England repo rate, ten-year yields on conventional gilts fell by 45 basis points. Ten-year yields on index-linked gilts fell a little further. Yields on government bonds in other major economies, such as France and the United States, also declined. It seems likely that high levels of uncertainty in financial markets raised the attractiveness of government debt. Other things being equal, this would tend to raise its price and lower its yield.

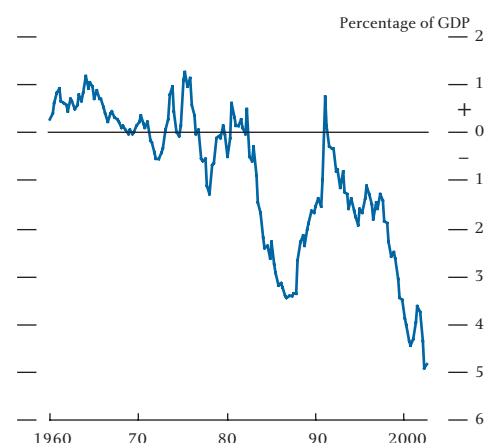
Chart 1.6
Cumulative change in key exchange rates since January 2002



Source: Bank of England.

(a) A rise in the line marked US\$/€ represents an appreciation of the euro against the US dollar.

Chart 1.7
US current account balance



Source: US Bureau of Economic Analysis.

Table 1.C
The housing market^(a)

	2002				2005
	Q1	Q2	Q3	Q4	Jan.
HBF survey					
Site visitors (b)	22.6	19.8	16.9	5.1	n.a.
Net reservations (c)	34.2	35.2	18.3	9.9	n.a.
Approvals (d)	115	118	116	120	n.a.
Monthly change in house prices (e)					
Halifax (f)	1.1	2.5	2.1	1.4	1.5
Nationwide	1.1	2.7	2.1	1.7	1.7
ODPM (g)	1.5	2.1	2.3	n.a.	n.a.
Particulars delivered (h)	126	136	139	130	n.a.

Sources: Bank of England, Halifax, House Builders Federation, Inland Revenue, Nationwide and Office of the Deputy Prime Minister.

- (a) Quarterly data are averages of the three monthly observations.
- (b) Percentage balance of respondents reporting more site visitors than during the same month of the previous year. Seasonally adjusted by the Bank of England.
- (c) Percentage balance of respondents reporting more net reservations than during the same month of the previous year. Seasonally adjusted by the Bank of England.
- (d) Number of loans approved for house purchase (thousands).
- (e) Per cent.
- (f) A change in the method of calculation used by the Halifax means that the index from December 2002 onwards is not directly comparable with the index for the preceding eleven months.
- (g) Index published by the Office of the Deputy Prime Minister based on a 5% sample of all mortgage completions during the quarter.
- (h) The number of transactions in England and Wales registered with HM Land Registry (thousands).

Exchange rates

During the past three months, the euro has appreciated against the US dollar by 9%, while sterling has appreciated against the US dollar by 6%. That means sterling has fallen against the euro. Because of the greater importance of the euro area to UK trade, the sterling effective exchange rate index (ERI) has depreciated slightly on an effective basis (see Chart 1.6). In the 15 working days up until 5 February, the sterling ERI averaged 104.0, some 2% below the expectation for February incorporated in the November central projection.

One of the main themes in international currency markets last year was a steady appreciation of the euro against the US dollar. Why might this have occurred? The spot value of a currency depends on market interest rates, the views of market participants about its future value, and the perceived risks involved in holding that currency.

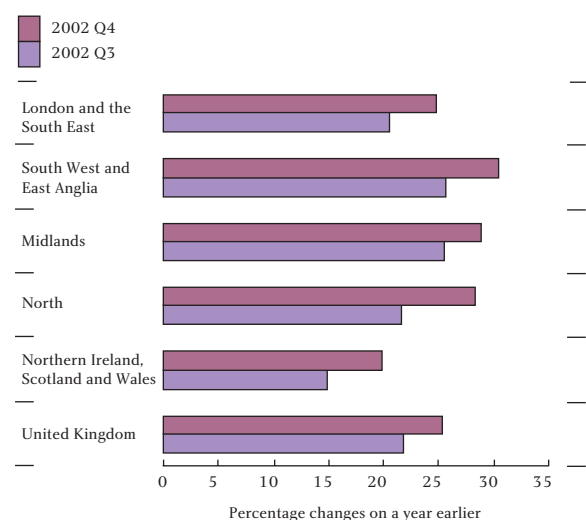
During the time period shown in Chart 1.6, market interest rates for the euro and the US dollar moved broadly in parallel, and so are unlikely to account for much of the euro appreciation. It is possible that the historically wide US current account deficit (see Chart 1.7) has led market participants to reassess their view about the sustainable value for the euro against the US dollar, and this could account for some of the rise in the euro spot rate. Finally, the perceived likelihood of a war taking place in Iraq has increased. That may have caused investors to demand greater compensation for the risks involved in holding the currencies of countries, such as the United States, that are likely to be most closely involved in a potential conflict.

Property prices

Section 1 of the November 2002 *Report* described the process leading up to a typical transaction in residential property, from the decision to begin searching, through to making an offer, arranging a mortgage, exchanging contracts and completion. Early indicators of housing market activity slowed further during 2002 Q4, with the balance of respondents to the House Builders Federation survey reporting more site visitors, and more net reservations, significantly lower than during the early part of the year (see Table 1.C). But this has not yet been associated with any slowdown in the number of mortgage approvals.

Short-term measures of house price inflation have eased somewhat since the middle of last year, albeit from very high rates (see Table 1.C). And the Committee expects that house price inflation will continue to slow. Nevertheless, the increase

Chart 1.8
Nationwide measure of regional house price inflation



Sources: Bank of England and Nationwide.

Table 1.D
The monetary aggregates

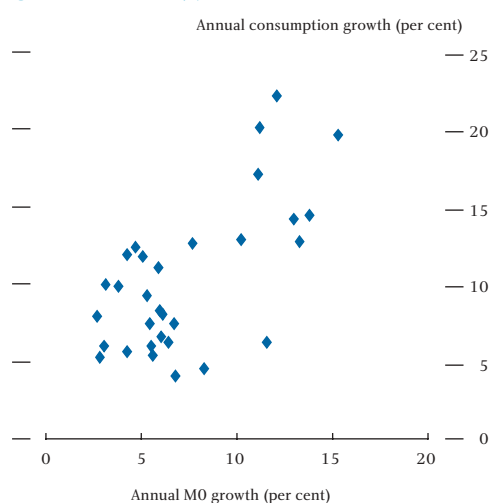
Percentage changes on a year earlier

	2002				2005 Jan. (a)
	Q1	Q2	Q3	Q4	
M0	7.1	9.6	8.1	5.5	5.0
M4	5.7	5.9	5.4	7.0	n.a.
M4 lending (b)	8.0	8.4	9.6	10.7	n.a.

Source: Bank of England.

- (a) Provisional estimate.
- (b) Excluding the effects of securitisations.

Chart 1.9
Nominal M0 growth and nominal consumption growth since 1971^(a)



Sources: Bank of England and ONS.

- (a) Growth rates are for Q4 compared with Q4 of the preceding year.

in house prices during the fourth quarter was somewhat stronger than had been expected by the Committee at the time of the *November Report*. Data from the Nationwide show that house price inflation in the year to 2002 Q4 was most rapid in the South West and East Anglia, followed by the Midlands and the North. House price inflation in London and the South East remained a little below the national average (see Chart 1.8).

1.2 Money and credit

Monetary aggregates

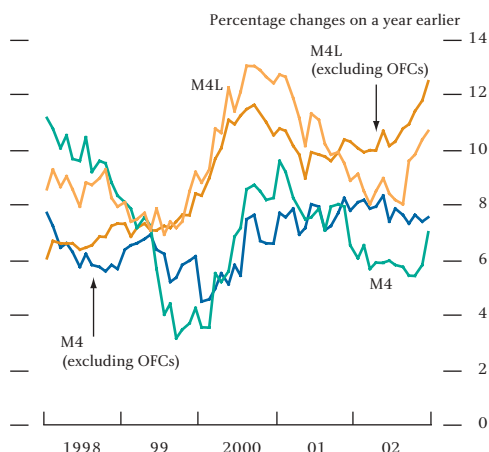
The rate of growth of M0—a narrow measure of money consisting of notes and coin, and bankers’ operational balances held at the Bank of England—has eased considerably during the past few months (see Table 1.D). Temporary factors, such as the more rapid withdrawal in 2002, compared with 2001, of funds set aside by the Post Office for the pensioners’ Winter Fuel Allowance, may account for some of the slowdown. But they are unlikely to be the sole explanation. What inferences about the rate of growth of nominal demand might be drawn from this weakening in narrow money growth?

The correlation between the rate of growth of narrow money and the rate of growth of consumption is imperfect (see Chart 1.9). Over long periods of time, a key factor affecting the relationship between the stock of M0 and the flow of nominal expenditure is the rate of interest. When interest rates fall, it becomes less costly to hold wealth in the form of cash. Consumers will hold money for a longer period of time before spending it. And retailers will hold a larger quantity of notes and coin in their tills before visiting the bank. In other words, the velocity of circulation of narrow money will fall. A box in the previous *Report* argued that velocity had not yet fully adjusted to the marked reduction in nominal interest rates that took place during the 1990s.⁽¹⁾ Consequently, it concluded that M0 might plausibly continue to grow in excess of nominal consumption for some time to come. So, against the background of an assumed downward trend in velocity, the recent slowdown in M0 growth is perhaps thrown into greater relief. If it were to persist, it might suggest an easing in nominal demand growth, and hence in inflationary pressure.

Aggregate M4, a broader measure of money, which includes sterling deposits held at UK banks and building societies by households, private non-financial corporations (PNFCs) and other financial corporations (OFCs), in addition to their holdings of notes and coin, rose by 7.0% in the year to

(1) ‘Developments in the velocity of narrow money’, November 2002 *Inflation Report*, page 9.

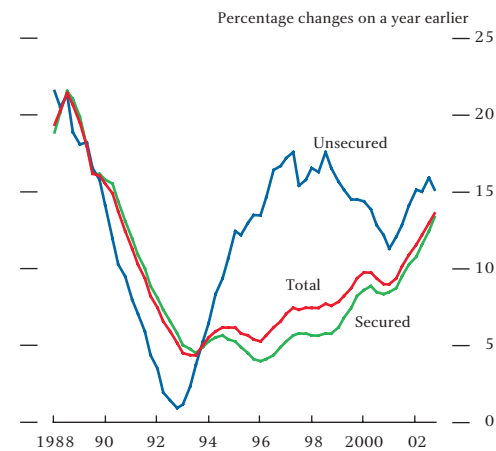
Chart 1.10
M4 and M4L^(a) including and excluding OFCs^(b)



Source: Bank of England.

(a) M4 lending excluding the effects of securitisations.
 (b) Other financial corporations.

Chart 1.11
Total lending to individuals



Source: Bank of England.

2002 Q4 (see Table 1.D). M4 lending (excluding the effects of securitisations), which measures sterling lending by UK banks and building societies to those same three sectors, rose by 10.7% during the same period. Before the recent sharp increases, the rates of growth of aggregate M4 and aggregate M4 lending had been on a downward trend. OFCs account for much of the variation in these rates of growth. Changes in OFCs' money and credit are thought to have fewer direct implications for nominal demand than those of households or PNFCs. When the OFC component is excluded, annual growth in M4 and M4 lending has been more stable in the recent past (see Chart 1.10). However, the recent pick-up in M4 lending growth is still evident, reflecting continued high rates of growth in household borrowing, and a recovery in lending to PNFCs (see below).

Households

Households' M4 deposits grew by 7.8% in the year to 2002 Q4. Growth in households' M4 borrowing continued to strengthen. In 2002 Q3, the household sector debt-to-income ratio reached a new record high. The stock of total lending to individuals, which measures lending by a broader set of institutions than banks and building societies, rose by 13.6% in the year to 2002 Q4. The annual rate of growth of total lending to individuals has now risen for seven consecutive quarters.

Much of the ongoing strength in household borrowing is related to developments in the housing market. Last year, the price of an average house rose by some 25%. That means, for a given loan-to-value ratio, first-time buyers, as well as those moving up the property ladder, will have taken out much larger mortgages than before. That boosts secured borrowing directly. But rapid house price inflation can also affect secured borrowing indirectly by raising the collateral of existing homeowners. This lowers the cost of finance for a subset of the population. In 2002 Q4, the effective rate of interest on a secured loan was 5.3%, around one half the effective rate on an unsecured loan.⁽¹⁾ In 2002 Q3, households undertook an additional £21 billion of secured borrowing. But only £9 billion, less than half this amount, was used to maintain or augment the housing stock. It is likely that some of the remainder, known as mortgage equity withdrawal, was spent on other goods and services.

Growth in unsecured lending to individuals has slowed slightly, albeit from a high level. It was 15.1% in the year to Q4, compared with a figure of 15.9% in the year to Q3.

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

Table 1.E
Bank and building society interest rates on unsecured loans to households

Per cent

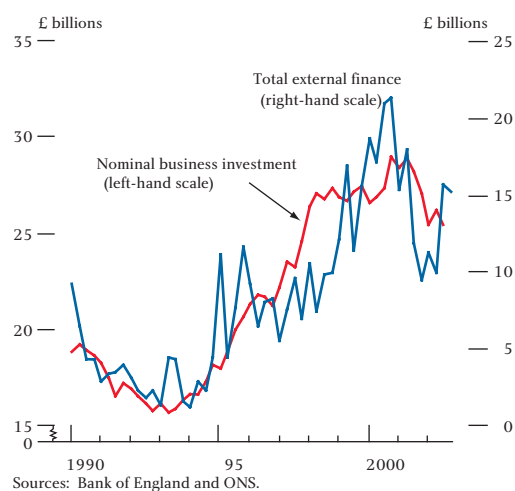
	2001 Dec.	2002 Dec.	2003 Jan.	Change since Dec. 2001 (a)
Credit card	17.66	15.84	15.84	-1.82
Personal loan	11.78	10.24	10.16	-1.62
Overdraft	17.10	15.28	15.28	-1.82

Source: Bank of England.

(a) Percentage points.

Unsecured lending has been growing rapidly for a number of years (see Chart 1.11). This probably reflects a combination of factors. On the demand side, and in common with secured borrowing, improved expectations of future income might have caused households to extend their borrowing in order to consume more now. On the supply side, it seems probable that increased use of risk-based pricing has simultaneously lowered the rates charged on good-quality loans, while improving access to credit for some groups of people who were previously unable to borrow. It also seems likely that increased competition has reduced the cost of borrowing. Table 1.E shows that average quoted rates on unsecured loans fell substantially last year, despite no change in the official rate of interest.⁽¹⁾ The quoted rate on credit card loans, for example, fell by almost two percentage points.

Chart 1.12
PNFCs' total external finance and nominal business investment



PNFCs

The rate of growth of PNFCs' M4 deposits was 6.6% in the year to 2002 Q4, compared with 5.7% in the year to Q3. The rate of growth of PNFCs' M4 borrowing, excluding the effects of securitisations, picked up sharply from 4.0% in the year to Q3 to 7.3% in the year to Q4. PNFCs' total external finance—a broad measure of the flow of net new borrowing that includes capital market issues, in addition to domestic and foreign currency borrowing from banks and building societies operating in the United Kingdom—was £15.2 billion in Q4. That was close to the amount raised in Q3, and considerably higher than figures for the early part of last year. In the recent past, PNFCs' total external finance has been quite closely related to the level of nominal business investment (see Chart 1.12). If the higher level of total external finance is maintained, it could be consistent with a return to positive growth in nominal business investment.

(1) Quoted interest rates are derived from a sample of the published rates offered to new borrowers by banks and building societies. These are a measure of the rates available to new borrowers.

Demand growth in the United Kingdom has continued to be driven by consumption and government spending. There are tentative signs that consumption growth might be about to moderate. Business investment is probably nearing a trough, but any recovery is likely to be gradual. The patchy recovery in the major economies is continuing, although output growth dipped towards the end of 2002. ONS estimates suggest that UK goods exports have fallen sharply, though the MPC considers that recent data probably overstate the underlying weakness.

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

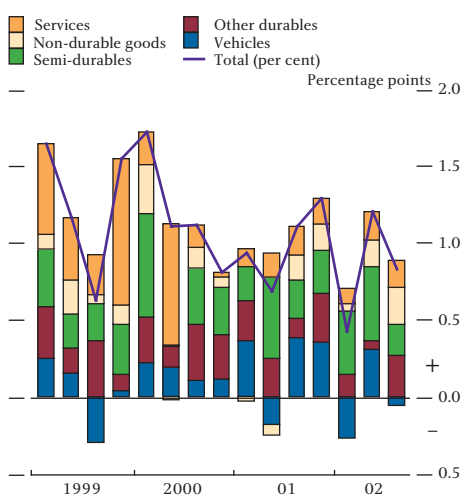
Percentage changes on a quarter earlier

	Averages		2001	2002		
	2000	2001	Q4	Q1	Q2	Q3
Consumption:						
Household	1.2	1.0	1.3	0.4	1.2	0.8
Government	0.3	1.3	2.7	1.2	0.7	0.8
Investment	1.1	-1.5	-1.7	-2.4	-0.1	0.1
of which, business investment	1.4	-1.7	-2.1	-6.3	0.5	-2.2
Final domestic demand	1.0	0.6	1.0	0.1	0.9	0.7
Change in inventories (b)	-0.2	-0.1	-0.1	0.7	-1.0	0.4
Excluding alignment adjustment (b)	-0.2	-0.2	-0.5	0.6	-0.5	0.4
Domestic demand	0.8	0.5	0.9	0.7	0.0	1.1
Exports	2.1	-1.5	-1.6	0.5	3.8	-1.2
Imports	2.6	-0.7	0.5	1.4	1.3	-0.5
Net trade (b)	-0.5	-0.2	-0.7	-0.4	0.7	-0.2
GDP at market prices	0.6	0.4	0.2	0.2	0.6	0.9

(a) At constant 1995 market prices.

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

Chart 2.1
Contributions to quarterly consumption growth



2.1 Domestic demand

Domestic demand growth in 2002 Q3 was once again underpinned by private and public consumption (see Table 2.A). In the five years to 2002 Q3, annual growth in private and public consumption together averaged 4.0%, compared with averages of 3.5% for domestic demand and 2.4% for GDP.

Household consumption

Household consumption grew by 0.8% in 2002 Q3, stronger than expected at the time of the *November Report*. Quarterly consumption growth has been somewhat volatile recently, partly due to the timing of the Easter and Jubilee holidays as discussed in the *November Report*. But erratic movements in vehicle purchases during 2002 also contributed to the volatility (see Chart 2.1). This may have reflected the difficulty in adjusting the data for seasonal variation when the monthly pattern of car purchases was changing.⁽¹⁾ Total household consumption growth over the first three quarters of 2002 averaged 0.8% a quarter. This was slightly slower than the average growth in 2000 and 2001, although still above trend.

Retail sales account for around 35% of household consumption, and the data provide more timely information on consumption trends than the quarterly National Accounts. Retail sales grew by 1.8% in 2002 Q4 (see Chart 2.2). This estimate should be largely unaffected by the timing of Easter and Jubilee holidays, and does not include vehicle sales. Retail sales grew by 1.1% in December, much higher growth than most commentators had been expecting. However, the high level of retail sales around Christmas means that the size

(1) In 1999 the registration dates moved to March and September instead of August, and a new numbering system was introduced in September 2001. These changes altered the seasonal pattern of car purchases.

Chart 2.2
Volume of retail sales

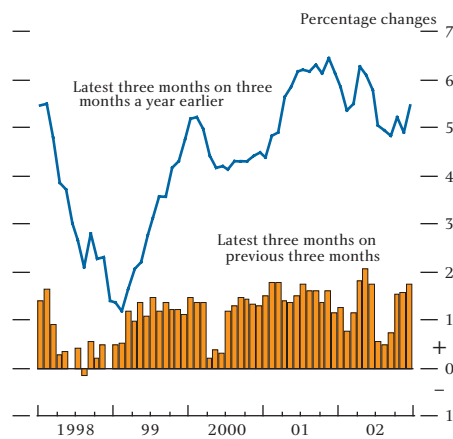
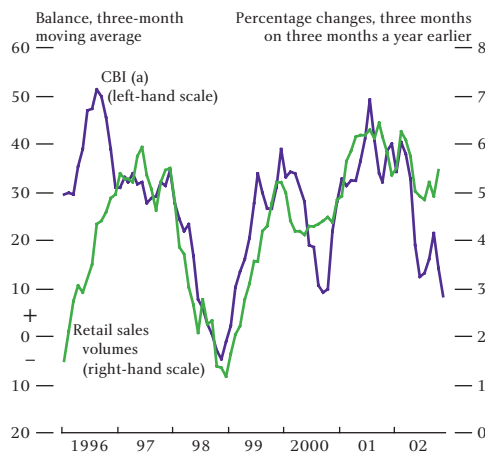


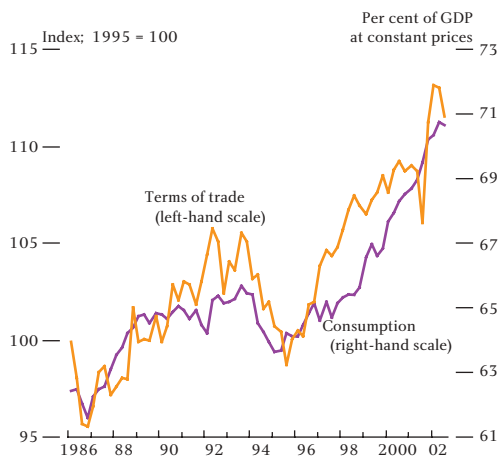
Chart 2.3
Retail sales and CBI distributive trades



Sources: CBI and ONS.

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

Chart 2.4
Consumption and the terms of trade



of the seasonal adjustment factor dwarfs other developments in the data. So care needs to be taken when assessing trends in seasonally adjusted data,⁽¹⁾ and especially when looking at monthly movements.

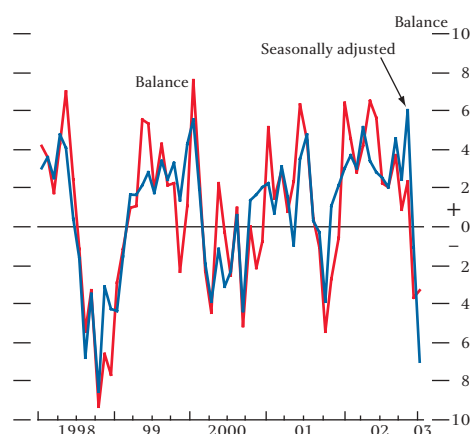
The CBI *Distributive Trades Survey* indicator of retail sales volumes (see Chart 2.3) suggests a weaker trend than ONS estimates. Despite a recovery in the autumn, the balance for reported sales volumes in the December CBI survey fell to its lowest reading since January 1999 and was the lowest December reading for ten years. The January survey suggested only a slight recovery in sales growth, with the three-month average falling further. However, a pronounced decline in the survey balance in late 2000 did not prove to be a reliable guide then to the retail sales trends described by the ONS data.

Current and expected incomes are key determinants of households' spending decisions. Consumption is likely to respond by more to changes in income that are thought to be permanent than to purely temporary fluctuations. Since the mid-1990s, the real incomes of consumers have been boosted by a rise in the sterling price of UK exports relative to that of UK imports (known as the terms of trade). A reduction in import prices would increase the purchasing power of households' incomes, while higher export prices would be likely to raise incomes for a given volume of sales. Chart 2.4 shows that the share of consumption in GDP has tended to move closely with the terms of trade. The box on pages 30–31 discusses possible reasons for the increase in the terms of trade and whether it is likely to be sustainable. Some households' decisions may have embodied an implicit view that the pace of the recent upward trend in real income, including the effect of rising terms of trade, will persist into the future. If such expectations were confounded, then those households could at some point be forced to cut back their consumption.

Consumption decisions are influenced by the extent of households' uncertainty about the future as well as expectations of future income. Households might rein back their consumption if they became more uncertain about future prospects, as a greater risk to future consumption would increase their desired stock of precautionary saving. The Bank's regional Agents have reported that some retail contacts feared that purchases would be delayed because of uncertainty over the situation in Iraq. And the GfK survey has shown a marked fall in consumer confidence in recent months, especially when seasonally adjusted (see Chart 2.5). The bulk

(1) The box on page 17 of the May 2002 *Report* discussed some of the problems associated with interpreting short-term movements in series that are subject to substantial seasonal variation.

Chart 2.5
GfK consumer confidence^(a)



Sources: Martin Hamblin GfK and Bank of England.

(a) The Consumer Confidence Index is the average response to questions on general economic and household financial situations and on major purchases.

of this fall reflected households' perceptions of the general economic situation, which may have been influenced by the falls in equity prices and perhaps the possibility of conflict in the Gulf.

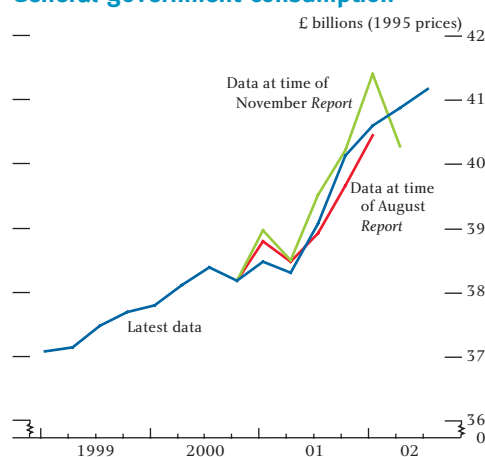
House prices and consumer spending are affected by similar factors, as house prices reflect the demand for consumption of housing services. But high house prices can also boost consumption, by increasing collateral against which borrowing can be secured, offering cheaper finance than unsecured borrowing. Section 1 highlights the continued strength of mortgage equity withdrawal. Consumption is also influenced by the value of equity holdings.⁽¹⁾ The large falls in share prices during 2001 and 2002 may have already restrained household spending. And the decline in equity values since the beginning of this year is likely to have a further moderating effect.

Consumption has grown at above-trend rates through 2002, albeit slightly less strongly than in the previous two years. There are some tentative signs from surveys, narrow money and unsecured lending (see Section 1) that consumption growth might be about to ease further. The MPC expects consumption growth to slow over the course of the year to below trend rates. Overall, the near-term path for consumption growth is weaker than that in the November Report.

Public sector spending

Government consumption is now estimated to have risen by 0.8% in 2002 Q3, to stand 5.4% higher than a year earlier. Chart 2.6 shows that data revisions since the November Report now imply a much smoother path of government consumption during the past two years. Government investment is less than one tenth the size of government consumption but is volatile from quarter to quarter. In 2002 Q3 it was 16.1% higher than a year earlier. The Pre-Budget Report on 27 November announced higher forecasts of government borrowing, but this was almost entirely due to lower expected tax receipts. There was a small increase in prospective government consumption, mostly away from transfer payments, but also a £1 billion special reserve was added in 2002–03 to meet overseas and defence needs. The Committee assumes that government spending will continue to support domestic demand growth through the coming year.

Chart 2.6
General government consumption



Investment

Whole-economy investment in 2002 Q3 was 4.1% lower than a year earlier. Outside of government, there was strong growth

(1) Davey, M (2001), 'Saving, wealth and consumption', *Bank of England Quarterly Bulletin*, Spring, pages 91–99, discusses the channels through which equity wealth can affect consumers' expenditure.

Chart 2.7
Contribution of investment to annual GDP growth

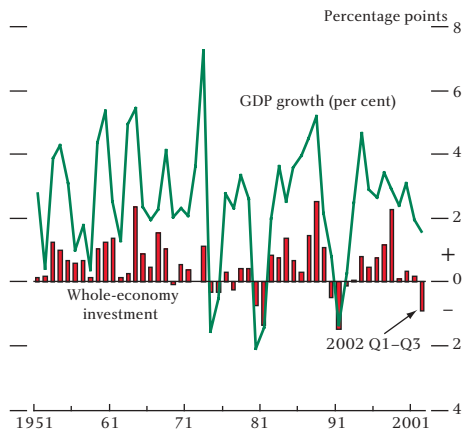


Chart 2.8
Business investment ratios

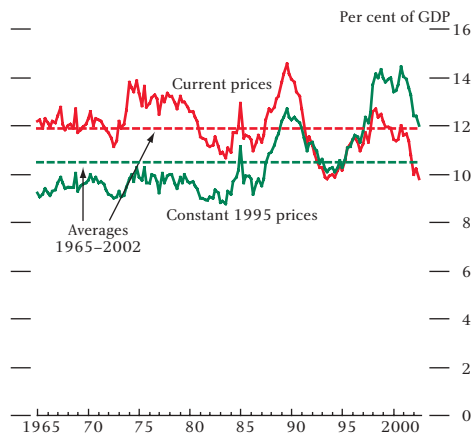
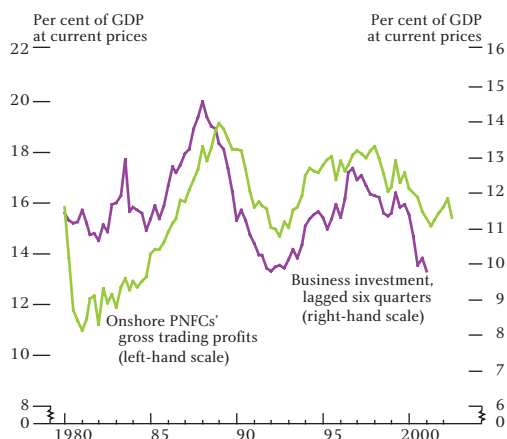


Chart 2.9
Gross trading profits and business investment



in private investment in dwellings, which was 9.7% higher than a year earlier. But business investment, which accounts for around three quarters of total investment, was 9.8% lower.

Investment tends to move in line with cycles in GDP (see Chart 2.7). So the current situation with sharply falling investment and continuing GDP growth is unusual. It might therefore be tempting to think that comparing the ratio of business investment to GDP with its long-run average could give some indication of where investment levels are relative to a sustainable path. At current prices, the ratio of business investment to GDP is at its lowest level since the data began in 1965. But at constant prices, the ratio is higher than at any time before 1989, and still well above its long-run average (see Chart 2.8).

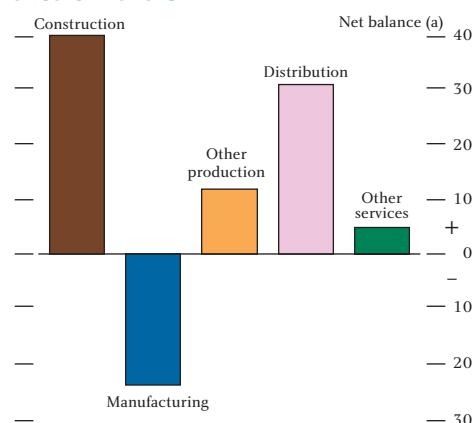
So what can be inferred about future investment from the divergent trends in the two ratios? The difference between the current and constant-price series is explained by the decline in the relative price of investment goods during the past 20 years. The *constant-price* ratio of investment to GDP would be relatively stable over the medium term if the proportions of capital and labour were fixed and could not be changed (ie if the elasticity of substitution between labour and capital were zero). In this case, a declining relative price of capital would lower the current-price ratio over time. On the other hand, the *current-price* ratio of investment to GDP would be relatively stable over the medium term if a reduction in the relative price of capital led to a proportionately equal increase in the volume of capital used (ie if the elasticity of substitution were one). In this case, a declining relative price of capital would imply a rising constant-price ratio over time.

Econometric evidence⁽¹⁾ suggests that the elasticity of substitution between labour and capital lies between zero and one. Indeed that finding is, not surprisingly, consistent with the longer-term trends in the two ratios: the current-price share has been falling and the constant-price share rising. So rather than assessing the level of business investment relative to a simple long-run average, both series are better judged against their respective longer-term trends. By that criterion, it seems likely that the latest observations are cyclically low. Although this might point to some recovery in investment, it does not suggest when that recovery might come about.

Future prospects are important for investment decisions. But it is possible that *current* profitability will also influence firms' plans, for instance if they face cashflow constraints. Chart 2.9 suggests that changes in business investment may

(1) A figure of around 0.5 for a range of manufacturing industries is suggested in Hubert, F and Pain, N (2001), 'Inward investment and technical progress in the United Kingdom manufacturing sector', *Scottish Journal of Political Economy*, Vol. 48, pages 134–47.

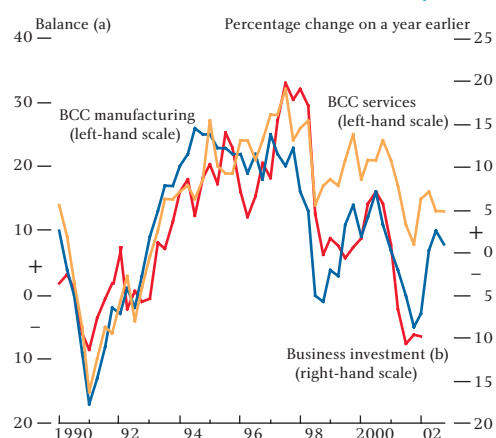
Chart 2.10
Investment plans for next twelve months compared with actual spending over past twelve months



Source: Bank of England.

(a) Net balance of responses, weighted by turnover, to the question: 'How does your planned investment spending for the next twelve months compare with your actual investment spending over the past year?' Possible responses were significantly/slightly less than the past year, the same, or slightly/significantly more than the past year. A positive balance indicates plans for higher spending than over the past year.

Chart 2.11
Business investment and BCC survey



Sources: BCC and ONS.

(a) Percentage balance of respondents revising investment plans upwards over the past three months less those revising plans downwards. Manufacturing balance includes agriculture, energy and construction.
(b) At constant 1995 prices.

Table 2.B
GDP growth in the major economies

Percentage changes on a quarter earlier

	Averages		2002			
	2000	2001	Q1	Q2	Q3	Q4
Euro area	0.7	0.1	0.4	0.3	0.3	n.a.
<i>of which, Germany</i>	0.5	0.0	0.3	0.2	0.3	n.a.
<i>France</i>	0.9	0.1	0.6	0.4	0.2	n.a.
<i>Italy</i>	0.6	0.1	0.1	0.2	0.3	n.a.
United States	0.6	0.0	1.2	0.3	1.0	0.2
Japan	1.0	-0.7	0.0	0.9	0.8	n.a.

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

have lagged changes in profits. Profitability picked up in the second half of 2001 and into 2002, although it dipped a little in 2002 Q3.

There are a number of other pieces of evidence suggesting that investment could be close to a trough. The Bank's regional Agents undertook a survey of UK investment in November 2002, covering nearly 200 companies with a combined turnover of £86 billion. The responses suggested that planned investment in the next twelve months would be slightly higher, with the exception of manufacturing, than spending over the past twelve months (see Chart 2.10). The factor most likely to stimulate an increase in investment was thought to be improved demand, with improved cashflow as the next most important. However, some of the Agents' contacts have cautioned that available cash would be allocated to eliminating shortfalls in pension funds, rather than being available for additional capital spending.

Survey evidence also suggests the possibility of some recovery in business investment during the course of the year.

Chart 2.11 shows that investment intentions balances from the British Chambers of Commerce quarterly survey recovered during 2002 and that they have tracked investment growth reasonably well over the 1990s.

Looking ahead, the indicators suggest that business investment is perhaps nearing its trough. The Committee expects it to turn around during the course of the year. But heightened uncertainty about both geopolitical risks and the robustness of the domestic and world recoveries means that any upturn in business investment is likely to be muted.

Inventories

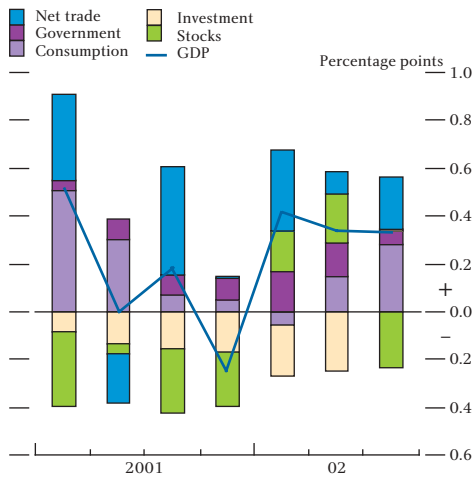
Stockbuilding, excluding the statistical alignment adjustment, is estimated to have contributed 0.4 percentage points to GDP growth in 2002 Q3. Stocks were broadly unchanged, following a substantial run-down in Q2.

There may have been a modest unplanned increase in stocks in the fourth quarter. This would be consistent with the CBI monthly manufacturing survey, which suggests that the proportion of manufacturers with more than adequate stocks of finished goods rose in 2002 Q4. At least part of that unplanned increase could be unwound relatively quickly. Although there may be some volatility from quarter to quarter, the Committee assumes that inventories will then rise in line with output.

2.2 External demand and UK net trade

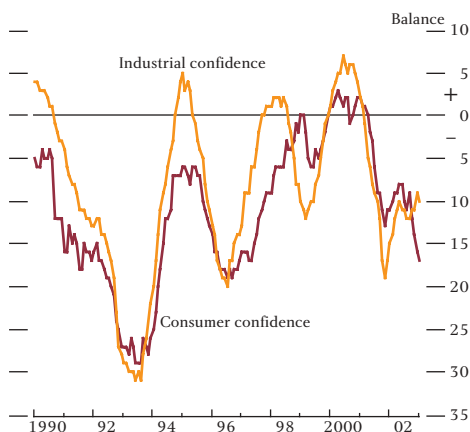
All the major economies grew at a more rapid pace in the first three quarters of 2002 than in 2001 (see Table 2.B). However,

Chart 2.12
Contributions to quarterly growth in euro-area GDP



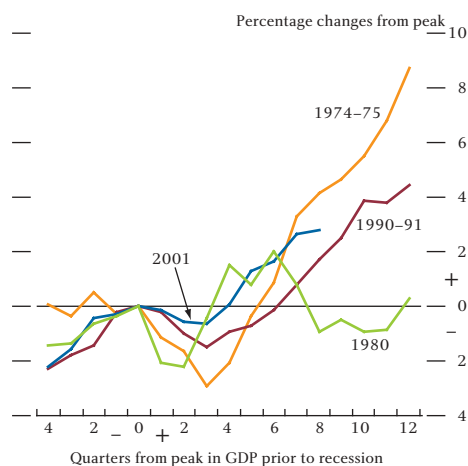
Source: Eurostat.

Chart 2.13
Euro-area confidence surveys



Source: European Commission.

Chart 2.14
US GDP in previous recessions^(a)



Source: US Bureau of Economic Analysis.

(a) Label for each period refers to the timing of the recession.

the global recovery remains somewhat fragile and growth is likely to have slowed in the fourth quarter.

Growth in the euro area continues to be modest, and driven by external more than domestic demand. Chart 2.12 shows that consumer spending recovered a little in 2002 Q2 and Q3, having fallen in the first quarter. But consumer confidence has declined sharply in recent months (see Chart 2.13), with the balance in January being the lowest since 1997.

Euro-area investment was flat in 2002 Q3 after six successive quarterly falls, although revised data suggest that investment in the first half of 2002 was weaker than thought at the time of the *November Report*. Along with concerns about geopolitical risks, the slow pace of the recovery thus far—and uncertainty about its durability—is likely to make firms cautious about embarking on new projects. Furthermore, the German construction sector, which accounts for 18% of euro-area investment, is still in the doldrums following the post-unification construction boom. Despite some rise in reported industrial confidence (see Chart 2.13), investment seems likely to remain muted in the near term.

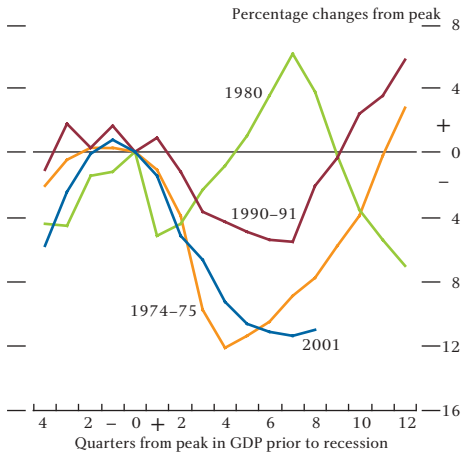
Recovery in the United States has been more evident than in the euro area. But this reflected a temporary boost in the first half of the year from the turnaround in the inventory cycle. And financial incentives being offered on new car sales stimulated consumption growth, particularly in the third quarter. GDP growth in 2002 Q4 was, at 0.2%, somewhat softer than it had been during the earlier quarters of the year (see Table 2.B). Consumption growth fell back as spending on cars declined. But fixed investment recorded its first quarterly increase since 2000 Q3.

Chart 2.14 shows that the fall in US GDP following the 2000 Q4 peak was quite mild relative to previous recessions. This largely reflected the continuing strength of household and government consumption. But the fall in investment was greater than in the early 1980s or early 1990s (see Chart 2.15).

The main area of weakness in US investment has been non-residential structures. A key question for the investment outlook is whether the rapid investment growth in the late 1990s left an 'overhang' of underutilised capital, which would delay any resumption of investment growth.

However, Chart 2.16 shows that the US capital-output ratio (measured at constant prices) was actually falling slightly for much of the late 1990s, as growth in the capital stock did not quite keep pace with GDP growth. Measures of the capital stock are subject to significant uncertainty, reflecting the dependency on assumptions such as average asset lives and

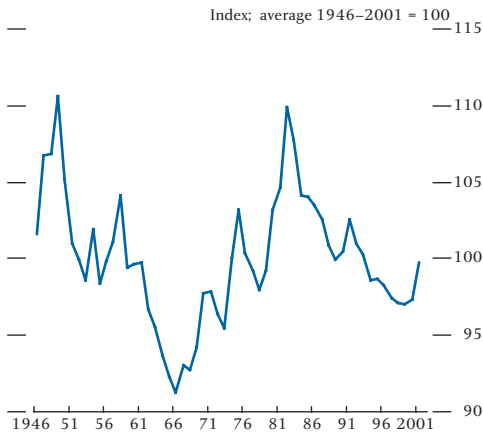
Chart 2.15
US non-residential investment in previous recessions^(a)



Source: US Bureau of Economic Analysis.

(a) Label for each period refers to the timing of the recession.

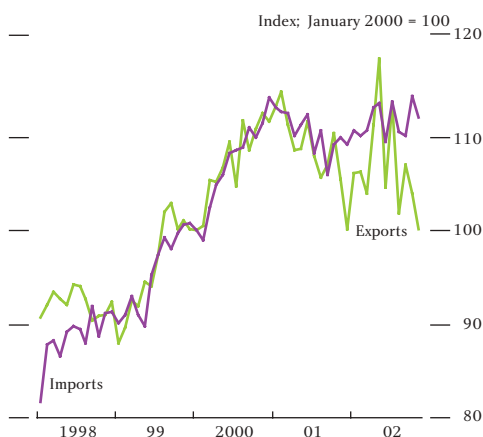
Chart 2.16
US capital-output ratio^(a)



Sources: US Bureau of Economic Analysis and Bank of England.

(a) Private non-residential fixed assets relative to GDP at constant prices.

Chart 2.17
Volume of UK goods exports and imports



the effect of premature scrapping. The US estimates do not appear consistent with a significant capital overhang, at least in aggregate, although there still may be particular industries where the capital stock is higher than desired. And the weakness of US investment during the past two years will have helped erode any capital overhang.

Growth resumed in Japan in 2002, following sharp falls in output during 2001. GDP in 2002 Q3 was 1.3% higher than a year earlier, following four successive quarters when year-on-year growth was negative. Nevertheless, it is difficult to judge the underlying trend in Japanese demand because national accounts data have been frequently and heavily revised in recent quarters, as statisticians seek to improve their methods. Monthly retail sales, activity and industrial production data suggest that growth in the fourth quarter is likely to have been weaker than in Q2 or Q3. Growth has held up well in most of the emerging Asian economies.

Looking forward, recent policy changes could have a substantial impact on the near-term outlook. Official interest rates were cut by 0.5 percentage points in the United States in November and in the euro area in December. And short-term interest rate expectations implied by futures contracts have fallen in all the major economies. Some euro-area governments have plans for fiscal tightening, while in the United States a substantial fiscal stimulus package has been announced and is expected to be agreed between the Congress and the administration in the coming months. The medium-term prospects for the Japanese economy will depend on the pace, and the success, of economic and financial reforms. A key element of this is the government's Programme for Financial Revival that is aimed at resolving the problem of non-performing loans in the banking system. As with most elements of structural economic reform, implementation could involve some short-term cost, but would be expected to improve medium and longer-term prospects.

The Committee judges that the overall outlook for the world economy is weaker than in the *November Report*. For the euro area, this reflects the recent sluggishness of domestic demand, prospective fiscal tightening in some countries and the appreciation of the euro. The near-term outlook for the United States is a little more subdued than in November, with the effects of further falls in equity prices partly offset by those of the fiscal package and the weaker dollar (see Section 1). In Japan, it is assumed that financial reform leads to some short-term tightening in credit conditions, which may curb domestic demand growth.

Net trade reduced UK GDP growth by 0.2 percentage points in 2002 Q3. Since then, Chart 2.17 shows that goods exports

are estimated to have fallen sharply in October and November, averaging 5.0% below the third-quarter level. With imports rising a little, net trade seems likely to have acted as a substantial drag on GDP growth in 2002 Q4.

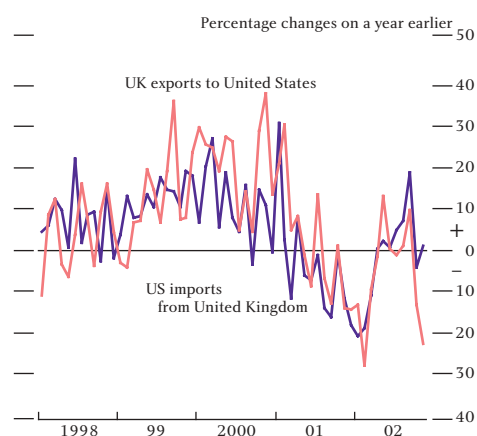
The underlying trend in exports during 2002 has been difficult to judge from the volatile monthly data for goods exports. It is possible that there was some effect on data earlier in the year from the timing of Easter and the Jubilee holidays. But this cannot explain the volatility in the latest few months.

Some of the decline in the most recent export data might reflect the likely slower fourth-quarter growth in some of the United Kingdom's major trading partners. But to explain fully the weakness of exports in the second half of 2002 would require a steep fall in world trade, or alternatively in the UK share of world trade. It cannot be ruled out that world trade may have fallen sharply or that the composition of world trade could have moved towards sectors or regions where there are fewer UK exports. But it is difficult to find any corroborating evidence to support these hypotheses. Nor is it easy to reconcile monthly UK export estimates with output data and survey information on stockbuilding.

Moreover, the most recent ONS monthly data indicate that the fall is concentrated in the value of UK goods exports to the United States. Chart 2.18 shows that data from the US Bureau of Economic Analysis do not suggest any severe decline in the value of US goods imports from the United Kingdom. While the two series have not matched perfectly over the past, and the US data may be revised, the comparison does nevertheless raise questions about the UK data. In addition, export data are uncertain and past experience is that there have been sizable revisions to early estimates of UK trade flows. For instance, looking at the first National Accounts quarterly estimates of exports since 1982, weak export growth estimates have been revised up on average by 0.6 percentage points in the following *Blue Book*,⁽¹⁾ and by a further 0.9 percentage points in the next *Blue Book*.

Although it may indicate some underlying weakness, the Committee assumes that much of the recent fall in goods exports is likely to be either erratic or subject to future data revision. Exports may be a little weaker this year than in the November projection, although the gradual recovery in external demand and the moderation in consumer spending should reduce the negative impact of net trade on GDP growth over time.

Chart 2.18
Value of UK trade in goods with United States



Sources: ONS and US Bureau of Economic Analysis.

(1) These calculations are based on quarterly estimates of exports published in the National Accounts, looking at episodes when exports were initially estimated to have fallen by 2% or more in one quarter. At present, monthly trade data are available for only two months of 2002 Q4.

The recovery in GDP continued in 2002 Q4, but its pace was a little less than the MPC had expected at the time of the November Report. Average hours worked have fallen in recent years, but employment has remained resilient. In part that is because employers have held on to employees during the slowdown, when faced with a relatively tight labour market. While the growth of labour productivity per person has been below trend in recent years, there has been some cyclical recovery in 2002. That is expected to continue in the near term. The ILO unemployment rate remains low, though it is slightly higher than its May 2001 trough. Capacity utilisation in aggregate is probably slightly below normal levels. The Committee expects four-quarter GDP growth to pick up a little in the first half of 2003.

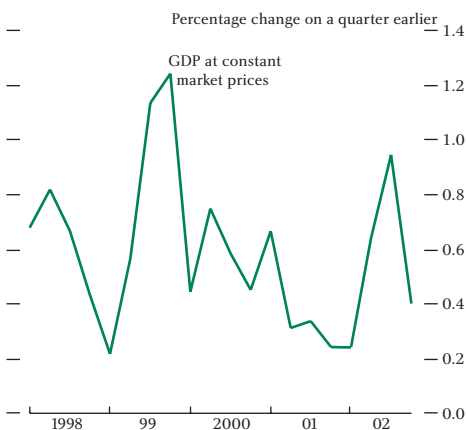
3.1 Output

The supply capacity of the economy depends on the available factors of production (such as labour, capital equipment and land); the work intensity of labour and capital; and the efficiency with which the factors are used. In the very short run, a business must decide how much to produce given its existing workforce and capital stock, in the light of demand and the price of its output. The outcome of these short-run supply decisions is reflected in GDP, which is a measure of the output produced in any period.

Revisions to the National Accounts published in December suggest GDP growth was a little higher than previously estimated from 2001 Q4 onwards, so that the level of GDP in 2002 Q3 was 0.4% higher than estimated at the time of the November Report. The ONS' preliminary estimate suggests that GDP at market prices grew by 0.4% in 2002 Q4 (see Chart 3.1). This follows growth of 0.9% in Q3 and 0.6% in Q2.

The pattern of GDP growth through 2002 was significantly affected by the Jubilee holiday in June 2002. The ONS has published some indicative figures for the possible magnitude of the effects, based on alternative assumptions rather than previously unpublished information.⁽¹⁾ That exercise suggests that the holiday may have reduced GDP growth in Q2 and increased it in Q3. The size of these effects will depend on the extent to which the fall in output in June was rescheduled to other months.

Chart 3.1
GDP



(1) See the ONS release *Quarterly national accounts*, 23 December 2002.

Chart 3.2
Services and manufacturing output

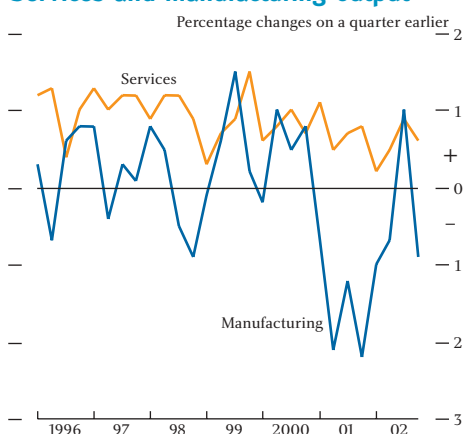
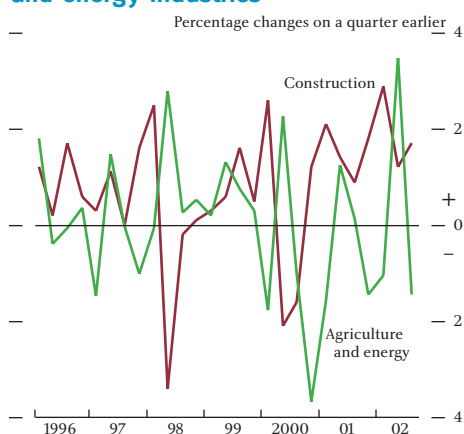


Chart 3.3
Output of the construction and agriculture and energy industries



Without the holiday, the ONS figures suggest that quarterly GDP growth might have been around 0.8%–1.3% in Q2 and 0.2%–0.5% in Q3. A lower quarterly growth rate than the published outturn in Q3 in part reflects the fact that there would have been a higher level of GDP in Q2 without the holiday. The ONS calculations did not include Q4 data and any effect on the level of GDP was assumed to be confined to Q2 and Q3. But if the Jubilee holiday led companies to reschedule some output from June into Q3, then the resultant uplift to the level of GDP in Q3 would have reduced quarterly GDP growth in Q4. The ONS assumptions are consistent with the Jubilee holiday reducing Q4 GDP growth by up to 0.2 percentage points. So without the holiday the preliminary estimate suggests GDP growth might have been around 0.4%–0.6% in Q4. The Committee expects four-quarter GDP growth to pick up a little in the first half of 2003.

The preliminary estimate of GDP shows services output increased by 0.6% in Q4, following growth of 0.9% in Q3 (see Chart 3.2). Manufacturing output declined by 0.9% in Q4 following growth of 1.0% in Q3. But quarterly growth rates for both sectors in 2002 may have been affected by the Jubilee holiday. Abstracting from that, it seems likely that the level of manufacturing output was broadly flat in 2002. Services output growth has outpaced manufacturing for some time. The box on pages 20–21 looks at the longer-term trends in the output of these sectors.

Output of the agriculture and energy industries,⁽¹⁾ which has a weight of nearly 7% in GDP, declined by 1.4% in Q3 (see Chart 3.3), reducing GDP growth by 0.1 percentage points. But the output of these industries is volatile, in part reflecting the weather. For example, their output grew by 3.5% in Q2, adding 0.2 percentage points to GDP growth. Construction output, which has a weight of 5.2% in GDP, increased by 1.7% in Q3, its average quarterly growth rate since 2000 Q4.

3.2 Employment

Businesses respond to changes in demand in part by varying their labour input. In the very short run, they are most able to vary the number of hours worked by their existing employees, for example by changing the amount of overtime. Costs associated with hiring and firing make rapid changes in staffing difficult. But if the changes in demand are perceived to be long lasting, companies may wish to change the number of employees.

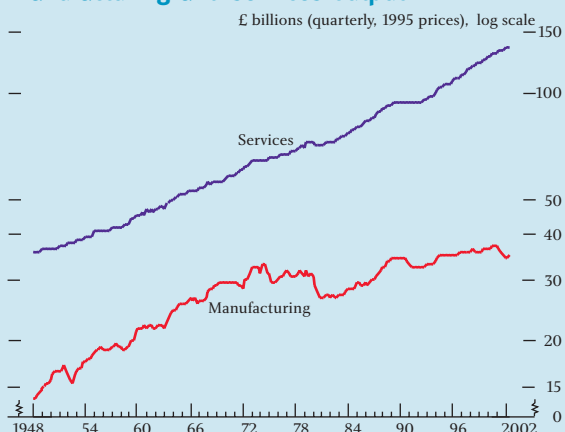
According to the household-based Labour Force Survey (LFS), the average working week declined by 0.2 hours (0.7%) in the

(1) The energy industries are mining and quarrying; oil and gas extraction; and electricity, gas and water supply.

Longer-term trends in manufacturing and service sector output

Manufacturing output has grown more slowly than services in the past 30 years, having increased at a slightly faster rate in the 1950s and 1960s (see Chart A). As economies mature and living standards rise over time, people's spending on manufactured goods tends to grow by proportionately less than their income. The counterpart to this is that demand for services usually increases disproportionately as people become richer.

Chart A
Manufacturing and services output



For example, people will tend to spend proportionately more of their income on health, leisure and financial services, and less on consumer goods. So this trend decline in the UK manufacturing share is partly because domestic demand for manufactures has grown more slowly than GDP.

Service sector output has also benefited from companies increasingly using a range of services, such as information technology and accountancy, in the production process. These 'intermediate' sales to companies have made up a rising share of GDP since the 1970s. Associated with that trend, the relative decline of manufacturing may in part reflect the growing reclassification of output to the service sector. For example, if a manufacturer outsources its computer services, these will be reclassified from manufacturing to the service sector.

Developments in international trade have also influenced the fortunes of UK manufacturing. There has been an increase in import penetration of manufactured goods since 1970 (see Chart B). And the United Kingdom's share of world markets for manufactured goods has shrunk with an increasing proportion of world trade accounted for by the industrialising economies. For example, China's

Chart B
Import penetration of the domestic market for manufactures

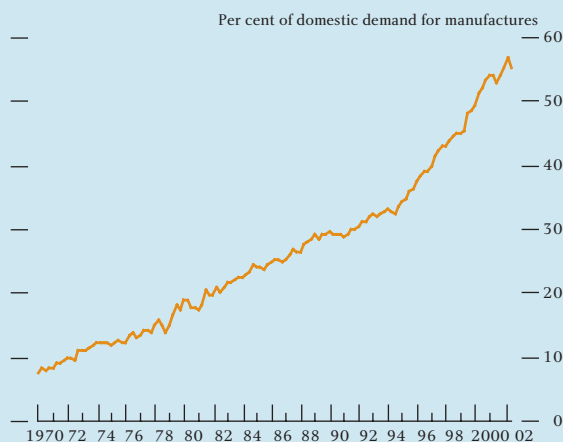
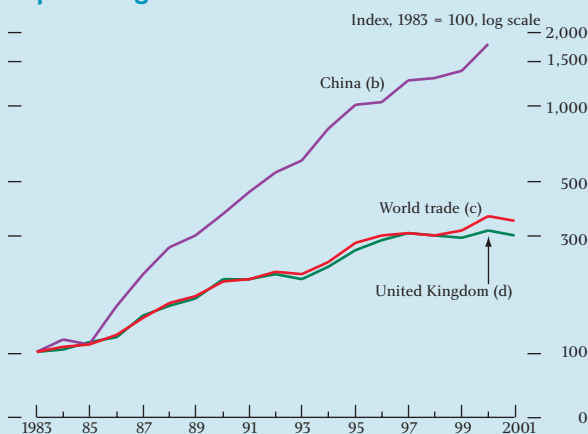


Chart C
Exports of goods^(a)



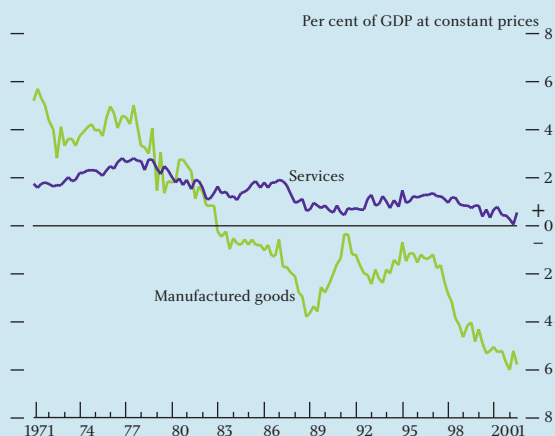
Sources: Thomson Financial Datastream, IMF and ONS.

- (a) Exports at current prices expressed in dollars.
- (b) Exports of manufactured goods.
- (c) Total world imports of goods.
- (d) Exports of goods.

annual growth of manufacturing exports at current prices has averaged over 18% from 1983 to 2000 (see Chart C). This compares with average annual growth of UK goods exports of 6.8% and world trade in goods of 7.7% in the same period. For manufactured goods, UK import volumes have consistently grown much faster than exports since 1970, so that the net trade position has detracted from manufacturing output growth (see Chart D).

By contrast, the growth of UK domestic demand for services during the past 30 years has been supplied predominantly by domestic companies. And growth of UK import volumes has been only slightly higher on average than that of exports since 1970 so that the net trade position has had much less

Chart D
Net trade volumes of manufactured goods and services



impact on service sector output growth than on manufacturing.⁽¹⁾

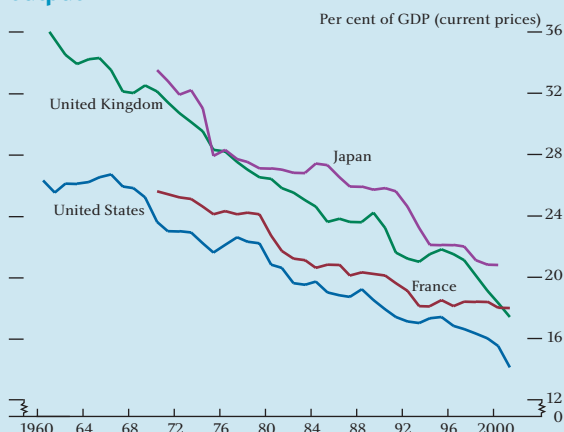
In part, the relative decline of some manufacturing industries and the increase in manufacturing imports during the past 30 years marks the displacement of relatively low value-added activities to countries with cheaper labour costs and the consequent transfer of resources within the UK economy to higher value-added manufacturing and services. Indeed, some manufacturing industries—for instance chemicals and electrical and optical equipment—have

(1) These trends in net trade in the two sectors have been rather different measured in current prices, due to the improvement in the terms of trade (see the box in Section 4).

grown more quickly than the service sector since 1970.

The share of manufacturing output in GDP has been declining for much of the past 30 years in all of the major industrialised countries (see Chart E). The fall in the UK share since the early 1970s is similar to that in the rest of the G7. The UK share is currently around the average of those countries shown in the chart.

Chart E
International comparisons of manufacturing output



Note: The rate of decline of the manufacturing output share in GDP at current prices is affected in all countries by a trend decline in the relative price of manufactures (see Section 4). That mostly reflects higher trend productivity growth in manufacturing.

Sources: ONS, OECD, US Bureau of Economic Analysis, Japanese Cabinet Office and Bank of England.

Chart 3.4
Average weekly hours worked



Note: Average hours in three-month periods including June 2002 were affected by the Jubilee holiday. This may also have affected earlier and later periods if businesses rescheduled work as a result of the holiday.

Source: LFS.

period September-November 2002 compared with a year earlier (see Chart 3.4). And it has declined by 0.5 hours since early 2001. To some extent, this may reflect cyclical factors associated with the relatively weak growth of GDP in this period. A fall in overtime—which is more affected by the cycle than the other components of total hours—has accounted for about one quarter of the decline in average weekly hours since early 2001. Falling average hours might also reflect structural factors. Chart 3.5 suggests that the decline in average hours in this period partly reflects a declining proportion of full-time employees working more than 45 hours a week. At least part of this trend is probably associated with a reduction in effective labour supply resulting from the introduction of the Working Time Directive in October 1998.

LFS employment increased by 223,000 (0.8%) in the period September-November compared with the same period a year earlier. Over two thirds of this increase was part-time employment. But the employer-based Workforce Jobs

Chart 3.5
Average working hours and the Working Time Directive

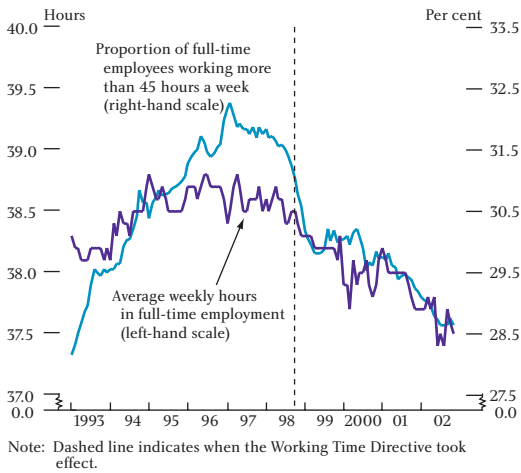


Chart 3.6
Jobs

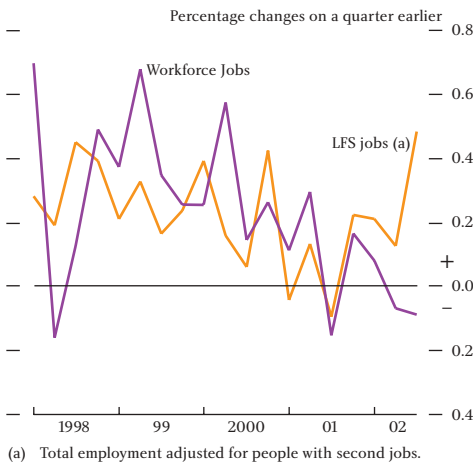
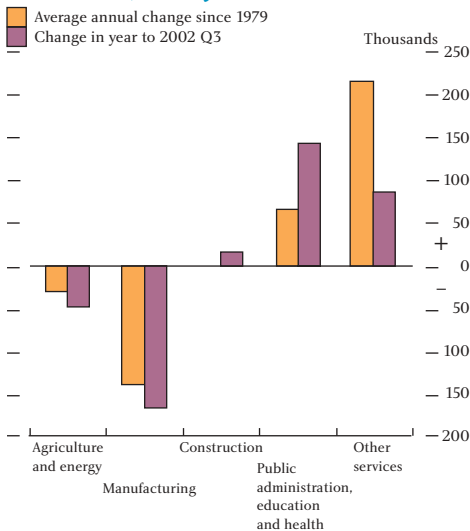


Chart 3.7
Workforce Jobs by sector



measure⁽¹⁾ indicates that employment has been falling recently. In 2002 Q3, according to that measure, the number of jobs in the economy declined by 27,000.

The LFS and Workforce Jobs employment figures should not be identical. Workforce Jobs is a measure of the total number of jobs in the economy whereas the LFS measures the number of people in work, some of whom will have more than one job. Nevertheless, even after making allowance for the number of people with second jobs, the divergent trend between the two series remains (see Chart 3.6). The differences between the growth rates of the two series hinder the interpretation of recent labour market data, and related indicators such as labour productivity.

The employer-based Workforce Jobs measure is generally regarded as a better source than the LFS for the industrial composition of employment. This is because employers are normally better placed than their employees to identify the main product of their business. According to the Workforce Jobs measure, manufacturing employment fell sharply in the year to 2002 Q3, continuing its long-term decline (see Chart 3.7). The fall in manufacturing employment in the year to Q3 was more than offset by increased services employment. Jobs in public administration, education and health rose by 142,000 in this period—nearly two thirds of the increase in services employment. Even so, services employment growth was quite broadly based. Only the finance and business services industry shed jobs. In general, therefore, these employment figures are broadly consistent with the output data, showing a relatively weak manufacturing sector but a more resilient service sector.

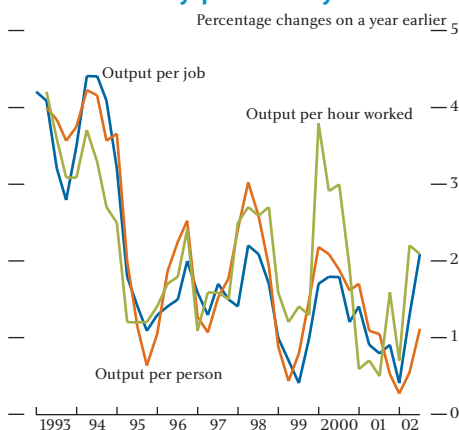
3.3 Labour productivity

The supply capacity of the economy depends partly on the rate of productivity growth. In the medium term, productivity growth depends, among other things, on the rate of technical progress, the growth of the capital stock and improvements in the skills of the workforce.

The ONS figures for whole-economy productivity per job are the ratio of GDP at basic prices to the total number of jobs in the economy.⁽²⁾ Output per job increased by 2.1% in the year to 2002 Q3 (see Chart 3.8). Estimates of labour productivity based on LFS employment figures show that output per person employed grew by 1.1% in the year to Q3. The

(1) Both the LFS and the Workforce Jobs measures are derived from official surveys of employment conducted by the Office for National Statistics.
 (2) The ONS figures for jobs in its productivity series include employee jobs from Workforce Jobs data, working proprietors, the self-employed, government-supported trainees and HM Forces.

Chart 3.8
Whole-economy productivity^(a)



(a) Output per person employed and per hour worked are based on LFS employment and hours data, respectively. Output per job is based mostly on the Workforce jobs estimates of employment.

difference between the two sets of figures reflects the discrepancies in the respective employment estimates, noted above. These productivity estimates also reflect any effects of the Jubilee holiday, which may have affected the level of GDP in both Q2 and Q3 (see above) but had little or no impact on the number of people employed. Nevertheless, the holiday may have had only a small impact on the level of labour productivity in Q3 and annual productivity growth has picked up significantly since Q1. So it is unlikely that the pick-up can be fully accounted for by the effects of the holiday. Output per hour worked increased by 2.1% in the year to Q3 compared with 0.7% in Q1. These figures are less affected by the holiday, which reduced total hours worked as well as output. But this recovery in labour productivity growth since Q1 most likely represents short-term cyclical factors rather than medium-term structural ones.

The growth of labour productivity per person since the mid-1990s has been below its long-run average. But output will depend in part on the average number of hours worked by each employee. Falling average hours since the mid-1990s have resulted in somewhat higher productivity growth in this period measured by output per hour worked than output per job.

Looking forward, the Committee expects growth in output per person employed to continue to recover in 2003. In part, this is because companies may have retained skilled employees in a relatively tight labour market, on the expectation that the recent slowdown would prove to be temporary. So the likely pick-up in GDP growth in 2003 is unlikely to result in a corresponding rise in employment. Indeed, the Committee believes that aggregate employment growth will slow over the next year or so.

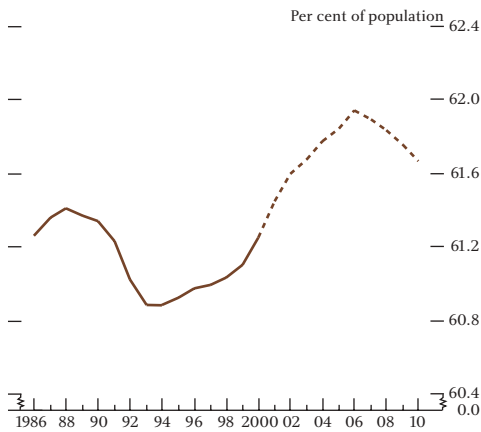
3.4 Labour supply

The supply capacity of the economy also depends on the size of the potential workforce. In addition to the average number of hours a person wishes to work, labour supply is determined by the population of working age and the proportion that is either employed or willing to work—the participation rate.

Working-age population

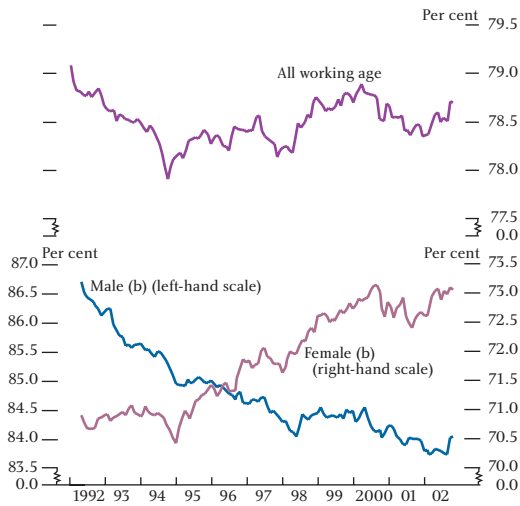
The population of working age (16–59 for women and 16–64 for men) is estimated to have risen by 37,000 (0.1%) in September–November compared with the previous three months and by 178,000 (0.5%) on the same three months a year earlier.

Chart 3.9
Working-age population^(a)



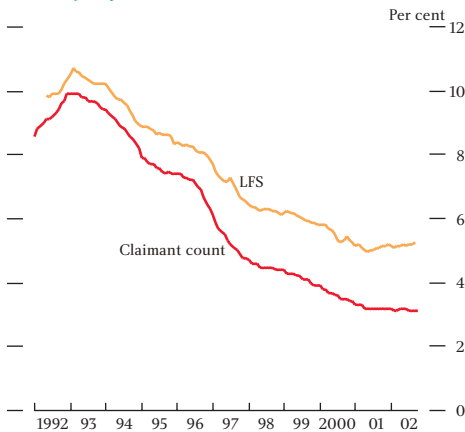
(a) Males aged 16–64, females aged 16–59. GAD projections for 2001–10.

Chart 3.10
Participation rates^(a)



(a) Percentage of population of working age.
(b) Percentage of the respective populations of working age.

Chart 3.11
Unemployment rate



The Government Actuary's Department (GAD) published new population projections for the period 2001 to 2026 in November 2002.⁽¹⁾ These are consistent with the results of the 2001 Census, which reduced the estimates of net inward migration and population from 1982 to 2001 (see the November 2002 *Report*). GAD has likewise reduced its projections of population growth. But the downward revisions to its projections were smaller than the Census-related revisions to the population data. This reflected new information from the International Passenger Survey (IPS). The Census suggested that total net inward migration had been less than previously estimated in the preceding 20 years. But the IPS indicated that net inward migration in the year to mid-2001 had been higher than GAD had previously assumed. This information was used to project future rates of net inward migration. The latest GAD projections show the working-age population growing somewhat faster than the population as a whole in the next few years (see Chart 3.9). The Committee has used the principal GAD projections for its forecasts of the working-age population.

Participation

People's decision whether to seek work depends in part on the difference between their expected income (after tax) from employment or not working. This will take account of the various government tax credits and benefits available to the employed and non-employed. It will also reflect social and demographic factors, such as the age at which people typically have children.

The participation rate⁽²⁾ has been on a slight upward trend since the mid-1990s (see Chart 3.10). That has more than fully reflected the increasing participation of women in the labour force. The female participation rate fell slightly during the recent slowdown. It started to pick up again about a year ago and was close to its highest recorded rate in September-November 2002. The participation rate of men has been on a downward trend in the past decade. However, it increased in the latest three months, by the largest amount since 1998. The overall participation rate increased to 78.7% in September-November and was at its highest for two years.

3.5 Unemployment

The difference between labour supply and demand is central to the determination of wage pressure. The most commonly

(1) See *United Kingdom interim national population projections*, GAD.

(2) The participation rate is defined as the economically active of working age as a percentage of the working-age population. The LFS classifies as 'economically active' those people with a job and those who meet the International Labour Organisation definition of unemployment.

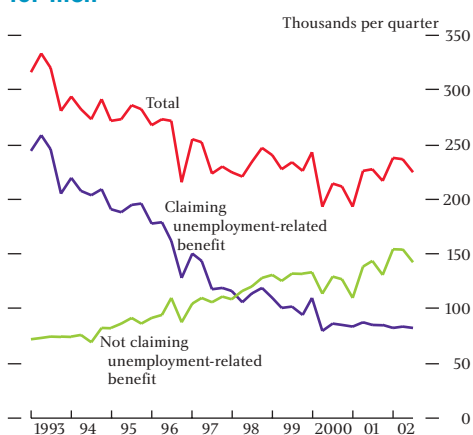
Table 3.A
Surveys of labour shortages and recruitment difficulties

Series	2001		2002			
	average (a)	Q1	Q1	Q2	Q3	Q4
CBI labour shortages (b)						
Skilled	13	17	9	9	10	9
Unskilled	3	2	3	2	3	2
BCC recruitment difficulties (c)						
Manufacturing	58	75	60	66	62	74
Services	52	66	60	58	60	63

Sources: CBI and BCC.

- (a) CBI average from 1972 and BCC from 1989.
 (b) Percentage of manufacturing firms citing labour shortages as a constraint on output over the next four months. The January 2005 *Quarterly Industrial Trends* survey, which was conducted between 12 December 2002 and 8 January 2003, has been allocated to 2002 Q4. Earlier surveys have been allocated to their respective quarters accordingly.
 (c) Percentage balance of firms experiencing recruitment difficulties during the past three months.

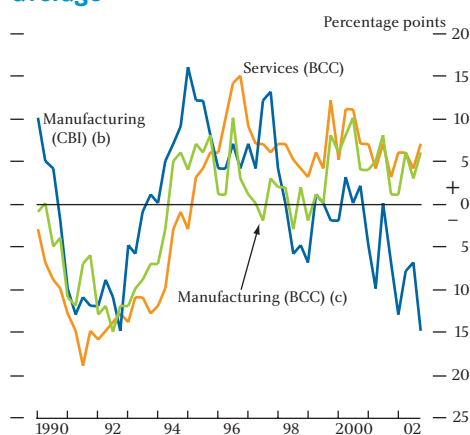
Chart 3.12
Flows from employment to unemployment for men



Note: These figures have not been regressed to reflect the 2001 Census population estimates.

Source: LFS.

Chart 3.13
Capacity utilisation: deviations from average^(a)



Sources: CBI and BCC.

- (a) Averages are calculated since 1972 for the CBI survey and 1989 for the BCC survey.
 (b) The January 2005 *Quarterly Industrial Trends* survey has been allocated to 2002 Q4. Earlier surveys have been allocated to their respective quarters accordingly.
 (c) Includes agriculture, energy and construction.

used measure of excess labour supply over demand is the unemployment rate.

On the International Labour Organisation (ILO) definition used in the LFS, the unemployment rate was 5.2% in the three months to November, compared with a trough of 4.9% in the period March-May 2001 (see Chart 3.11). The claimant count unemployment rate was 3.1% in December 2002 and has been in the range of 3.1% to 3.2% since April 2001. The ILO measure of unemployment suggests there has perhaps been a modest easing of the labour market during the past two years. Nevertheless, it remains relatively tight. This is confirmed by surveys of labour shortages and recruitment difficulties (see Table 3.A). Companies experienced above-average difficulties in recruiting throughout 2002. But, in general, these difficulties have eased a little in the past two years.

The difference between the LFS and claimant count unemployment rates was 2.2 percentage points in September 2002, the largest divergence since the quarterly LFS began in 1992. At the end of 1994 this difference was only 0.8 percentage points. The increase in this gap in part has reflected a steady decline in the proportion of newly unemployed men claiming unemployment-related benefits (see Chart 3.12). (By contrast, the proportion of newly unemployed women claiming these benefits has been very stable since 1992.) This may be because these men anticipated only a short spell of unemployment, and so felt that they had little to gain from claiming benefits.

3.6 Capacity utilisation

Estimates of capacity utilisation provide an indication of whether businesses are operating above or below normal levels of supply capacity, given their existing factor inputs. So they are potentially useful in assessing the balance between demand and supply in the market for goods and services in the short run, and hence the degree of inflationary pressure.

The British Chambers of Commerce (BCC) and CBI surveys include questions on capacity utilisation. The BCC survey asks if business are operating at, or below, full capacity, while the CBI *Quarterly Industrial Trends* survey asks whether businesses are working below a satisfactory full rate of operation. The BCC survey suggests services capacity utilisation increased in 2002 Q4 and was well above its average since 1989 (see Chart 3.13). The BCC 'manufacturing' survey covers the rest of the economy—that is, agriculture, energy and construction, as well as manufacturing. According to the BCC, capacity utilisation in these industries rose in Q4 and was also well above its historical average. In part this may

reflect strong growth in the construction sector. The CBI survey measure of manufacturing capacity utilisation fell sharply in 2002 Q4, to its lowest level for a decade, and was well below its average level since 1972. Both the BCC and CBI survey results are adjusted to allow for the size of participating companies. However, unlike its CBI counterpart, the BCC survey results are not adjusted to allow for the relative size of each industry. So if the industry coverage of the survey does not always exactly reflect that of the economy as a whole, it is possible that the BCC survey may at times be less representative.

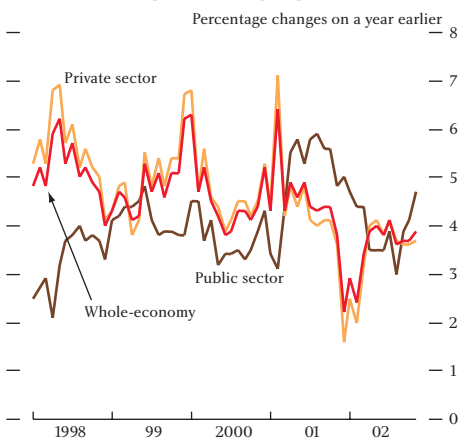
The Bank of England's regional Agents ask businesses about their capacity utilisation. In manufacturing, the responses are a little more optimistic than those from the CBI survey. Capacity utilisation is reported to have fallen slightly towards the end of 2002 and was below normal levels, if somewhat higher than at the end of 2001. Utilisation in services is reported to have remained close to normal levels in 2002, somewhat weaker than implied by the BCC survey.

Further qualitative evidence about the state of capacity utilisation can be found in the data for average hours worked and investment. When demand is weaker than businesses expect, they are likely to lower output by reducing capacity utilisation—that is, the intensity they work their employees and capital equipment. They might also reduce the hours of their employees and later, their investment spending. So the falls since early 2001 in average hours worked (noted above) and in investment (see Section 2) both suggest that businesses have unwanted spare capacity at the moment. Taken together with the surveys and the reports of the Bank of England's regional Agents, this suggests that, on balance, capacity utilisation is currently slightly lower than normal.

Underlying inflationary pressures have remained subdued. In the second half of 2002, whole-economy average earnings growth was stable at around 4%, levels of capacity utilisation were below normal and import prices remained lower than a year earlier. Nevertheless, annual RPIX inflation has risen substantially in the past six months to above the 2.5% target—as expected at the time of the November Report. The bulk of that increase reflected the impact of just two components: petrol prices and housing depreciation, directly associated with the recent sharp pick-up in oil and house price inflation. Looking forward, annual RPIX inflation may edge up further in the next few months, and by a little more than assumed in November, as the most recent higher-than-expected increases in oil and house prices continue to feed through. But inflation is likely to fall back towards the end of the year as these influences are expected to subside, although the depreciation of sterling and its upward impact on import prices may moderate that decline.

4.1 Earnings

Chart 4.1
Actual average earnings growth^(a)



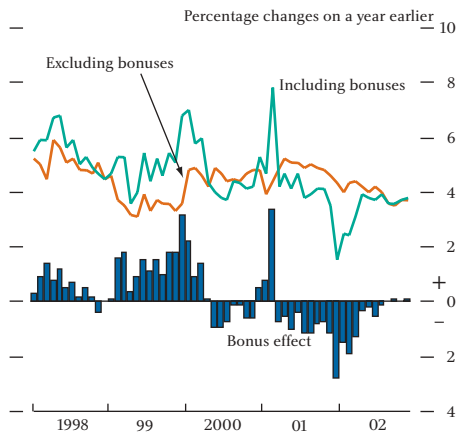
(a) ONS average earnings index measure, seasonally adjusted.

Pay pressures have remained relatively subdued since the November Report, and recent outturns for pay growth have been a little weaker than envisaged three months ago. Whole-economy earnings growth has been close to 4% since April (see Chart 4.1), reflecting the stability of earnings growth in the private sector, which accounts for around 80% of the total paybill in the United Kingdom. Private sector earnings growth has been around 4% since the middle of last year after recovering from earlier bonus-related low levels. Bonus payments are currently growing broadly in line with regular pay, and so are having little additional impact on pay growth (see Chart 4.2).

In contrast, earnings growth in the public sector has picked up sharply from its four-year low of 3.0% in August, to 4.7% in November. This largely reflects the partial unwinding of a number of temporary factors relating to the timing of last year's local authority pay settlement and of other increases in public sector pay. The full unwinding of these effects is likely to continue to raise measured public sector pay growth for the next few quarters, before dropping out of the annual comparison by the end of 2003. Only then are the data likely to give a clear picture of underlying earnings growth in the public sector.

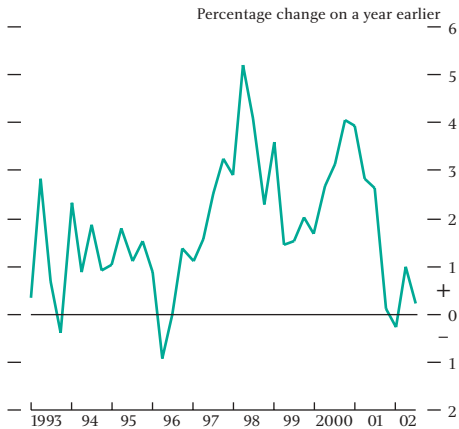
The probable further increase in public sector employment associated with the Government's planned expansion of public

Chart 4.2
Private sector pay growth^(a)



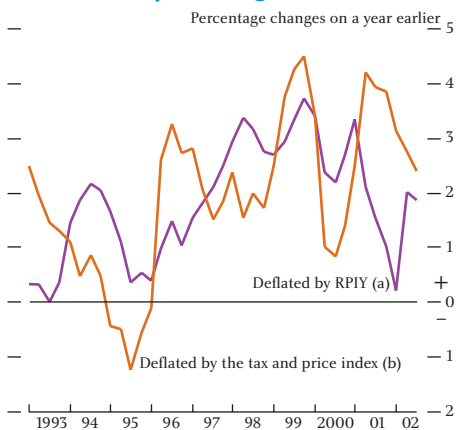
(a) ONS average earnings index measure, not seasonally adjusted.

Chart 4.3
Real product wage^(a)



(a) Wages and salaries and employers' social contributions per head divided by the GDP deflator at basic prices.

Chart 4.4
Real consumption wage



(a) Nominal earnings divided by the retail prices index excluding mortgage interest payments and indirect taxes.
(b) Nominal earnings divided by the tax and price index.

service provision may provide some additional support to public sector pay growth, and—given the current low level of unemployment—private sector earnings growth. This may be tempered, however, by the relatively weak short-term outlook for whole-economy employment growth (see Section 3) and if additional workers are attracted from outside the United Kingdom. In recent years, a large number of vacancies in the public sector have been filled from abroad, a trend that may increase following the full introduction of the High Skilled Migrants Programme in January 2003. The scheme is intended to enable a greater number of skilled workers to enter the United Kingdom without a prior job offer.

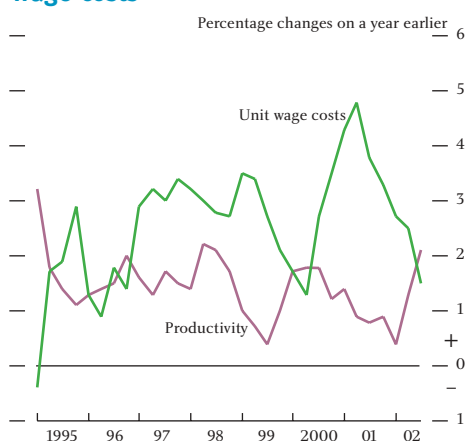
Real earnings growth depends on employers' demand for labour relative to the available supply. Real earnings growth eased in Q3 and remains well below the relatively high levels in late 2000 (see Chart 4.3). This is consistent with there having been a modest easing in labour market tightness during this period, associated with the cyclical slowdown in economic activity (see Section 3).

However, it is unlikely that the moderation in real earnings growth during the past two years was entirely the result of the softening in labour market conditions, particularly as the labour market remains relatively tight by historical standards (see Section 3). The slackening in real wage growth may also reflect the temporary restraining influence of reductions in taxes and mortgage interest payments, and of lower import prices associated with the improvement in the terms of trade (see Section 4.3 and the box on pages 30–31). Chart 4.4 shows that between mid-2001 and 2002 Q3 real earnings growth is much higher if deflated by the tax and price index (TPI) rather than RPIY (the retail prices index excluding mortgage interest payments and indirect taxes). TPI inflation measures the increase that would be needed in an average person's gross income to buy a standard basket of goods. It allows for changes in direct and indirect taxes, social security contributions and mortgage interest payments not included in RPIY. The lower rate of increase of the TPI since mid-2001 reflects factors such as the introduction of the Children's Tax Credit and reductions in mortgage interest payments and petrol duties. By boosting employees' take-home pay without changing employers' labour costs, these factors, in conjunction with lower import prices, may have lowered short-term wage pressure by reducing the bargaining intensity of wage negotiations.

Notwithstanding the relatively weak short-term outlook for employment growth, a number of factors are likely to push up nominal earnings growth somewhat in the near term. First, the much higher rate of annual RPI inflation in November

2002 than a year earlier (2.6% compared with 0.9%) may put upward pressure on wage settlements. November is an important month for inflation benchmarking of settlements early in the following year, and RPI remains the most frequently used benchmark. There are already some signs that settlements will edge a little higher in the current pay round. The latest IRS and IDS surveys of pay prospects point to a slight increase in average settlements this year. A recent survey by the Bank's regional Agents also suggests a modest rise in prospective pay pressure. Second, annual TPI inflation increased substantially between the third and fourth quarters of 2002. This will erode employees' purchasing power and may add some pressure to forthcoming wage negotiations. Third, the forthcoming increases in employee National Insurance contributions (NICs) in April may lead some employees to seek compensation in the form of higher pay. Although employers are likely to resist, and indeed the corresponding rise in employer NICs will encourage companies to offer less, there may be some temporary upward pressure on wages from the increase in NICs. Notwithstanding this expected rise over the next year, the outlook for earnings growth is slightly softer than in November, reflecting rather looser prospective conditions in the labour market and the recent weaker-than-expected outturns.

Chart 4.5
Whole-economy productivity and unit wage costs



Cost pressures from the labour market depend on productivity as well as earnings. Annual growth in the official ONS measure of productivity per job, based on the Workforce Jobs measure of employment, has strengthened in the past two quarters to 2.1% in Q3, its highest rate for four years (see Chart 4.5).⁽¹⁾ Faster productivity growth has more than offset the rebound in earnings growth from the bonus-related low levels at the turn of 2002, so that annual growth in whole-economy unit wage costs fell further in Q3 to the lowest rate on the ONS measure for over two years. In the near term, the Committee expects higher nominal earnings growth to be more than offset by a further pick-up in productivity growth, so that overall cost pressures from the labour market are likely to remain relatively muted.

4.2 Commodity prices

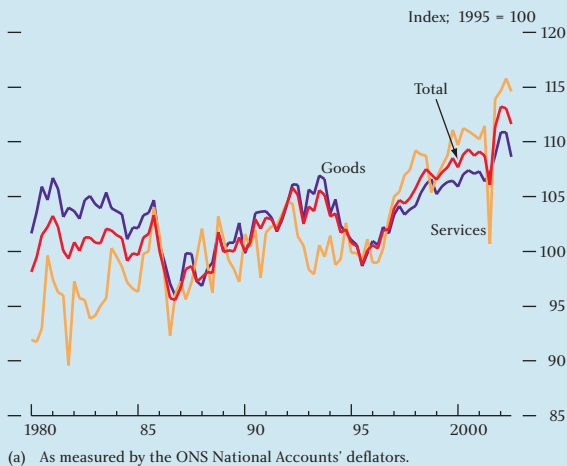
Oil prices have risen considerably since the November *Report* to their highest levels for two years. In the 15 working days to 5 February, the price of Brent crude averaged \$31 per barrel, around \$6 higher than expected in November. This sharp pick-up probably reflected the disruption to supplies since December relating to the strikes in Venezuela (see

(1) The pick-up in productivity growth has not been as rapid, however, when using LFS estimates of employment. As highlighted in Section 3, this reflects the faster growth in LFS employment than in Workforce Jobs over the past year.

Terms of trade

Since 1995 Q3, the terms of trade—the average price of UK exports relative to the average price of UK imports expressed in sterling—have risen by 13% (see Chart A).⁽¹⁾ As highlighted in Section 2, it is possible that this improvement in the terms of trade has helped to support demand in the United Kingdom during this period. The outlook for the terms of trade, and therefore for UK domestic demand, may depend, in part, on what caused their increase over the past seven years.

Chart A
Terms of trade^(a)



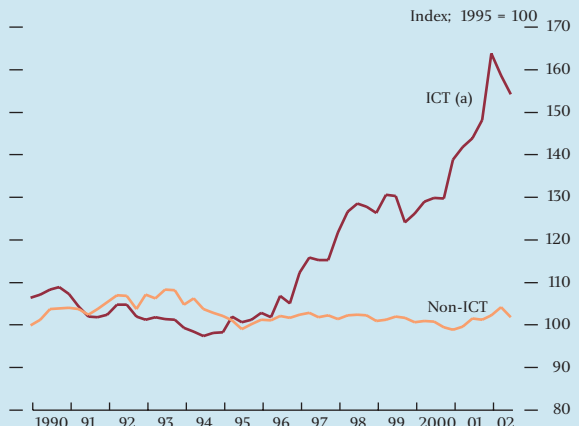
The improvement in the terms of trade since 1995—some associated facts

In trying to understand the reasons for the improvement in the terms of trade since 1995, it is useful to sketch out some associated facts. First, the rise in the terms of trade has been more marked for services than for goods (see Chart A). Second, the increase in the terms of trade for goods reflected sterling import prices falling by more than sterling export prices. In contrast, the rise in the terms of trade for services reflected an increase in sterling export prices, while sterling import prices were broadly unchanged. Third, the rise in the terms of trade for goods is entirely accounted for by information, communications and technology (ICT) goods (see Chart B), and predominantly reflects an increase against non-EU countries. Finally, only a tiny proportion of the increase reflects the rise of around \$10 per barrel in the price of oil since mid-1995, as net exports of oil are a very small fraction of UK trade.

What accounts for the improvement in the terms of trade since 1995?

The marked improvement in the terms of trade since mid-1995 has been accompanied by an appreciation of

Chart B
Terms of trade for goods



(a) ICT includes office machinery, computers and processing equipment, electronic components, TV transmitters and telephony and radio, sound and video.

26% in the sterling effective nominal exchange rate. If UK exporters and importers to the United Kingdom had fixed their prices in their own domestic currency, then the terms of trade would initially rise following an appreciation of sterling because import prices in sterling terms would immediately fall relative to unchanged sterling export prices.⁽²⁾ But in the absence of some underlying change in the demand for, and the supply of, UK imports and exports, prices in the United Kingdom and abroad would in due course adjust, and the terms of trade would return to their original level. It is unlikely, however, that the appreciation of sterling is the main explanation for the improvement in the terms of trade. First, the rise in the terms of trade began before sterling's appreciation. Second, while the rise in the exchange rate was sharp, the increase in the terms of trade was more gradual. Third, much of the rise in the terms of trade has been against non-EU countries, while most of the appreciation in sterling has been against the euro.

An alternative explanation is that the improvement in the terms of trade reflects shifts in the demand for, and the supply of, UK imports and exports. For example, the supply of foreign exports may have risen relative to the supply of UK exports, perhaps owing to an increase in the productivity or competitiveness of foreign export sectors relative to the United Kingdom. That would tend to bid down the relative price of UK imports. There is some evidence to support this hypothesis. First, average annual growth in UK productivity per hour in the manufacturing sector, a proxy for the traded goods sector, between 1995 and 2000 was 2.4%, lower than that in most of its major trading partners and compared with 4.7% in the United States. Second, there has been an increase in global ICT productivity growth during the past few years. The greatest price

(1) As measured by the ONS National Accounts' export and import deflators.

(2) Note that if both UK and foreign exporters 'priced to market', that is, set their prices in the importers' currency, a rise in sterling would lead to a fall in the terms of trade. This is because the sterling price of imports would be unchanged, but the sterling price of exports would fall.

declines within ICT goods associated with this productivity improvement have been in computers and computer-processing equipment. These goods have a higher weight in UK imports than in UK exports, and have therefore contributed to the improvement in the terms of trade.

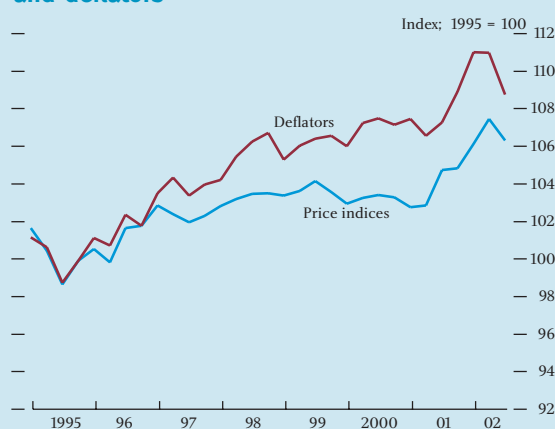
Another possibility is that global demand may have shifted towards some UK exports, thereby bidding up their price. There is some empirical support for this explanation. The rise in the relative price of UK exported services is consistent with the increase in specialisation in some services in the United Kingdom over this period, particularly financial services.⁽³⁾

A further possibility is that some of the rise in the terms of trade reflects changes in the composition of UK imports and exports. The terms of trade represent the movements in the average price of a country's exports relative to the average price of its imports and hence are affected by changes in the composition of trade. The implied trade deflators, mentioned above, do not distinguish between changes in price and changes in composition. The ONS also publishes fixed-weight trade price indices for goods, which isolate the impact of price changes. These show that the terms of trade for goods have risen by around 7.8% since 1995 Q3, compared with 10.1% based on the deflators (see Chart C). This suggests that about a quarter of the rise in the terms of trade for goods reflects changes in the composition of the United Kingdom's trade in goods, probably the result of a shift in the composition of UK

imports towards goods whose prices have fallen relatively sharply over the past few years. The rise in the share of ICT—the category that accounts for all of the improvement in the goods terms of trade—in goods imports from about 14% in 1995 to around 27% in 2001 is indicative of such a switch.

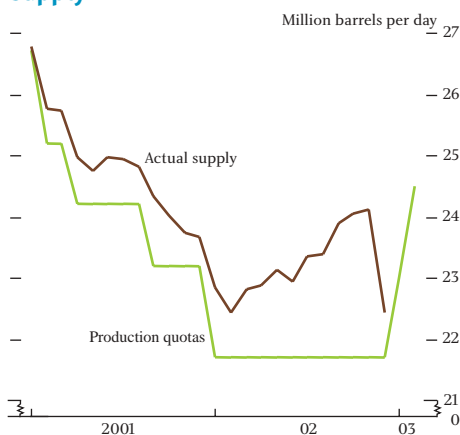
Although the evidence is not conclusive, it seems that factors related to changes in longer-term supply and demand patterns may have played a larger role than those relating to the appreciation of sterling in the improvement in the terms of trade since 1995. If so, this would suggest that at least some of the rise is likely to endure.

Chart C
Terms of trade for goods—based on price indices and deflators



(3) As indicated by the Michaely index. The Michaely index can be defined as the export share of a sector in national exports minus the import share of the same sector in national imports.

Chart 4.6
OPEC crude oil production quotas and actual supply^(a)



Source: International Energy Agency.

(a) OPEC excluding Iraq.

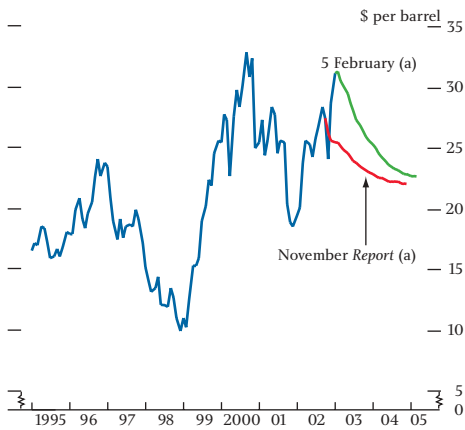
Chart 4.6), and increased concerns about any potential negative impact on supply of a possible military conflict in Iraq.

Despite OPEC's agreement at its meetings in December and January to raise its production quotas by a total of 2.8 million barrels per day,⁽¹⁾ equivalent to around 4% of total world output (see Chart 4.6), prices have remained high. This could be because the higher production quotas may not be matched by a commensurate expansion in actual supply to much above the levels which prevailed before the strikes in Venezuela. OPEC output has exceeded its quotas for two years, and at its meeting in January, it restated its intention to keep actual supply closer to its agreed quotas.

Nevertheless, the futures market does not expect the sharp increase in prices to persist. The futures curve points to

(1) At its meeting in December, OPEC agreed to increase its production quotas by 1.3 million barrels per day with effect from 1 January 2003. At its January meeting, it agreed to raise its quotas by a further 1.5 million barrels per day with effect from 1 February.

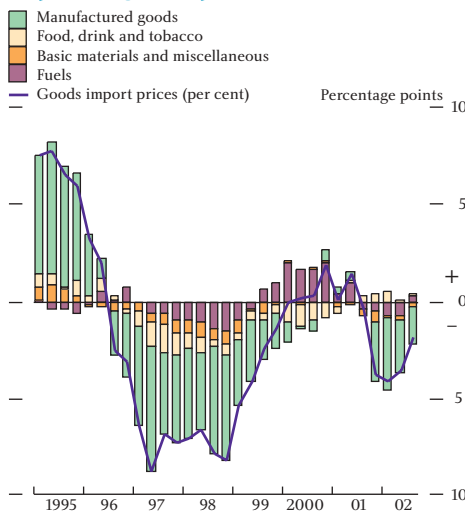
Chart 4.7
Brent oil futures



Sources: Thomson Financial Datastream and Bank of England.

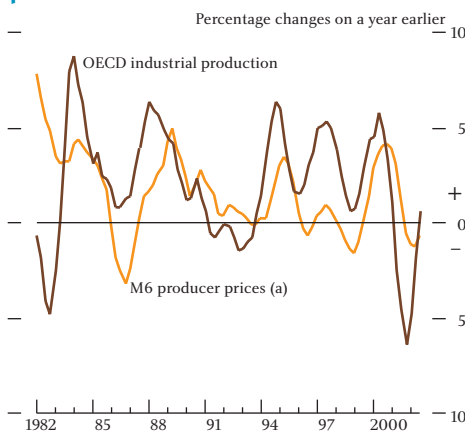
(a) Average during the 15 working days up to the time at which the MPC finalised its projections.

Chart 4.8
Contributions to annual changes in sterling imported goods prices



Sources: ONS and Bank of England.

Chart 4.9
M6 producer prices and OECD industrial production



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

(a) The other major (M6) economies are: United States, Japan, Germany, France, Italy and Canada.

a fall of nearly 30% in oil prices over the next two years to close to the levels implied at the time of the *November Report* (see Chart 4.7). This suggests that the incremental impact since November on the outlook for RPIX inflation from the oil market, predominantly via its effect on retail petrol prices (see Section 4.6), is likely to be positive in the first year of the projection and negative during year two as the temporarily higher prices unwind. However, the effect is likely to be negligible by the end of the forecast horizon. Probability distributions for oil prices three months ahead implied by options suggest that overall market uncertainty remains high and that it has increased since November.

By contrast, there has been little news on non-oil commodity prices since the *November Report*. *The Economist* dollar non-oil commodity price index rose by 4.1% in Q4, broadly as expected in November, and futures prices over the next two years are little changed from three months ago.

4.3 Import prices

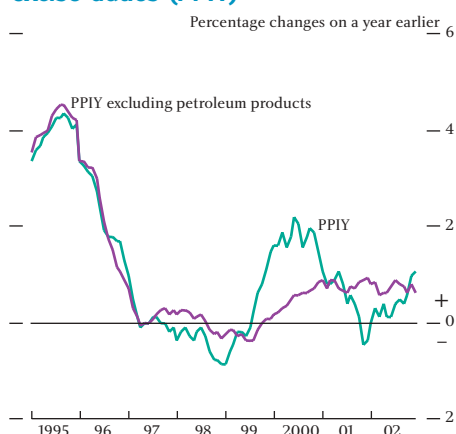
Sterling import prices were 1.2% lower than a year earlier in Q3. This was more than accounted for by lower goods prices, and within this, manufactured goods prices (see Chart 4.8). Falls in imported manufactured goods prices are partly a reflection of the slowdown in global producer price inflation. Producer price inflation in the other major six (M6) economies, which tends to move procyclically with OECD industrial production (see Chart 4.9), has turned negative over the past year as a result of lacklustre global demand for manufactured products, a factor also putting significant downward pressure on UK manufacturers' prices (see Section 4.4).

Consistent with the expected further gradual recovery in global activity, the MPC's central projection continues to assume that world export price inflation, and UK import price inflation, picks up during the next year. Although the Committee has revised down slightly its near-term projection for world export price inflation owing to the softer prospects for world activity, this is more than offset by the lower-than-expected level of the sterling effective exchange rate. The expected profile of import price inflation is therefore somewhat stronger than in November. And it is one of the influences that has helped to raise the short-term outlook for retail price inflation since the *November Report* (see Section 4.6).

4.4 Costs and prices in manufacturing

Pressures on manufacturers' costs generally eased during 2002. Annual growth in unit wage costs (which account for

Chart 4.10
Manufacturers' output prices excluding
excise duties (PPIY)



Sources: ONS and Bank of England.

around half of manufacturers' costs) fell further to 1.3% in Q3 from its most recent peak of 4.3% in Q1. This slowing was more than accounted for by higher productivity growth, as manufacturers have cut back employment in the face of falling or stagnant output. Annual input price inflation turned positive in October for the first time since mid-2001. But excluding oil, input prices were 3% lower than a year earlier in December and that twelve-month inflation rate has been negative for almost a year and a half. Looking ahead, input price inflation may rise a little further in the near term and then drop back, as recent increases and then prospective falls in oil prices feed through (see Section 4.2).

Manufacturers' output price inflation has edged up further since the November *Report*. But, as with input prices, this is more than accounted for by movements in the prices of oil-related products (see Chart 4.10). Excluding petroleum products, output price inflation has remained stable at just under 1% for over two years.

Downward pressure on manufacturers' prices remains strong. That reflects continued weak global demand for manufactured products (see Section 4.3), increased competition from abroad and the associated rise in spare capacity (see Section 3). In response to the significant fall in the price of imports relative to domestic products since 1996, UK customers have switched away more rapidly from domestic producers of manufactured goods. Chart B in the box on pages 20–21 shows that the ratio of imports to the total supply of manufactured goods sold in the United Kingdom has risen at a noticeably higher rate since around 1996. Looking forward, the downward pressure on manufacturers' output prices is likely to continue in the near term. The CBI *Quarterly Industrial Trends* survey balance for expected output prices fell in 2002 Q4 to its lowest level for a year.

Table 4.A
Measures of service sector costs^(a)

	2001		2002			
	Q3	Q4	Q1	Q2	Q3	Q4
Private services unit wage costs (b)	2.2	0.8	1.0	2.8	2.3	n.a.
CIPS average costs index (c)	54.7	51.8	53.1	53.9	54.6	54.7
BCC survey balances: (d)						
Pay settlements	27	27	27	28	28	29
Raw materials prices	16	19	18	19	16	17
Financial costs	13	14	15	15	16	13
Other overheads	32	34	34	35	40	40

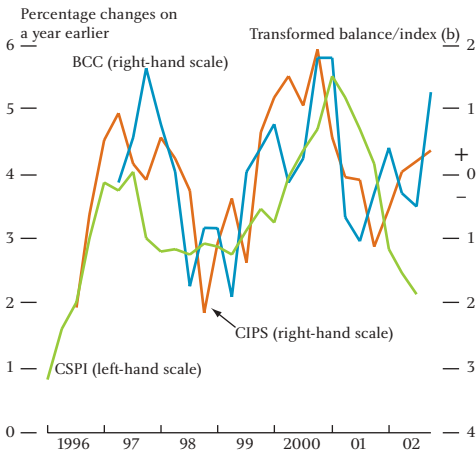
Sources: ONS, BCC and CIPS.

- (a) Responses are attributed to the quarter that is most closely associated with the reference period of each survey.
- (b) Private sector unit wage cost growth is proxied using private sector earnings growth and productivity growth in the service sector excluding public administration, education and health. Percentage changes on a year earlier.
- (c) A reading above/below 50 suggests rising/falling costs. The CIPS survey is monthly, and the quarterly values shown are averages over the relevant months.
- (d) Percentage of firms currently suffering pressures to raise prices from any of these factors.

4.5 Costs and prices in the service sector

Annual growth in private services unit wage costs, which make up the majority of service sector firms' costs, has picked up from the bonus-related low levels at the turn of 2002 to be broadly similar to a year earlier in Q3 (see Table 4.A and Section 4.1). This is broadly consistent with the movements in the CIPS services average cost index. The BCC survey suggests that, with the exception of overhead costs, non-labour cost pressures have been little changed during this period. The percentage of respondents citing overheads as a pressure to raise prices has increased to its highest level since the start of the series in mid-1997. This could reflect the sharp rises in insurance costs, which according to the Bank's

Chart 4.11
CSPI(a) and CIPS and BCC services output price indicators



Sources: ONS, BCC and CIPS.
 (a) ONS' corporate services price index (experimental index, including rent).
 (b) Balance/index minus series average, divided by the series standard deviation. This linear transformation has been made in order to show the BCC balance and the CIPS index on the same axis. The averages and standard deviations have been calculated over the total sample period of each survey—that is: 1996 Q3 to 2002 Q4 for the BCC balance and 1997 Q2 to 2002 Q4 for the CIPS index.

Chart 4.12
Retail price inflation

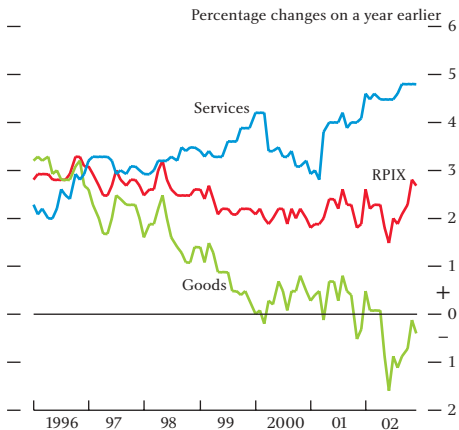
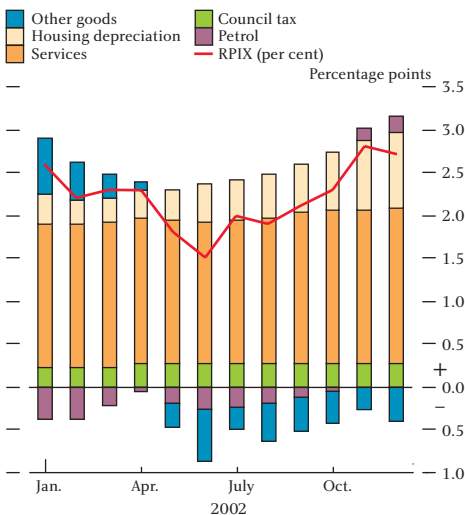


Chart 4.13
Contributions to annual RPIX inflation



Sources: ONS and Bank of England.

regional Agents have been a significant upward influence on firms' costs during the past 18 months.

The evidence on business services output price inflation is mixed. According to the ONS' experimental corporate services price index (CSPI), business services price inflation declined for the sixth successive quarter to 2.2% in Q3, down from 2.5% in Q2 (see Chart 4.11). However, the CSPI currently covers only around half of its targeted sample, and the decline in its annual inflation rate during the past year is at odds with more comprehensive, though qualitative, evidence from surveys. Both the BCC and CIPS services output price indicators have risen markedly from their troughs in late 2001. As with service sector costs, this may reflect the upward impact of recent large increases in insurance premia, which are currently not covered by the CSPI. Both the BCC and CIPS surveys point to a further pick-up in service sector price inflation in Q4.

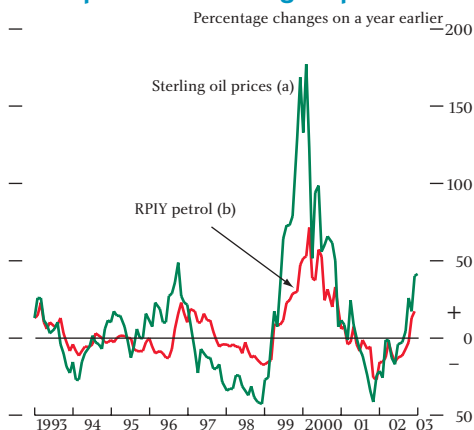
4.6 Retail prices

Annual RPIX inflation rose by 0.6 percentage points to 2.6% in Q4, in line with the Committee's expectations in the *November Report*. On a monthly basis, the increase has been even more pronounced. Since falling to 1.5% in June, it rose to 2.7% in December (see Chart 4.12), with around three quarters of that increase reflecting higher contributions from just two components, petrol prices and housing depreciation (see Chart 4.13).

The contribution of petrol prices to annual RPIX inflation has risen by 0.5 percentage points since June, reflecting the increase in oil price inflation during this period (see Chart 4.14). That contribution may edge up further in the next couple of months as the most recent increases in oil prices feed through. But it is then expected to decline given the prospective fall in oil prices implied by futures contracts (see Section 4.2).

Housing depreciation is included in the RPI to represent the costs that owner-occupiers face in maintaining the quality of their home. As it is difficult to measure directly, it is proxied by a smoothed index of house prices. The sharp increase in house price inflation during the past year has therefore directly resulted in a significant rise in the contribution of housing depreciation to its highest level since it was introduced into the RPI in 1995 (see Chart 4.15). It may rise a little further in the very near term reflecting the effects of the most recent increases in house prices, but it is expected to fall back thereafter given the Committee's central projection of slowing house price inflation.

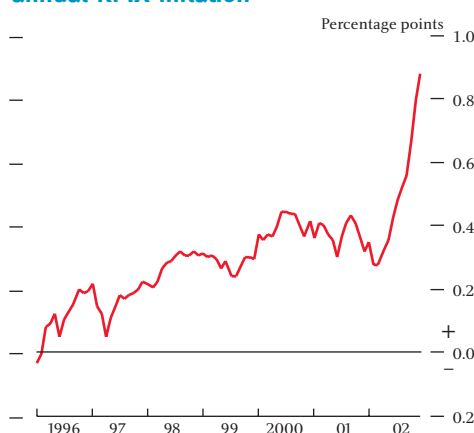
Chart 4.14
Retail petrol and sterling oil prices



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

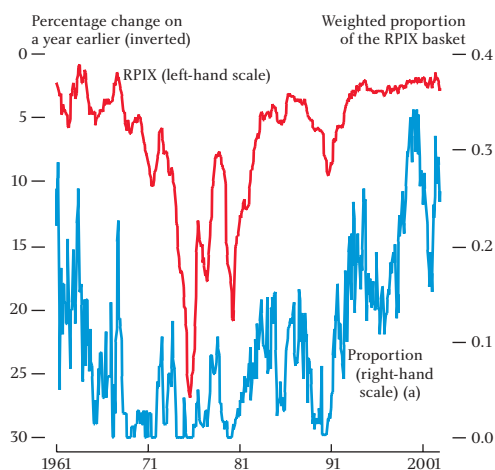
- (a) Brent spot price of oil in dollars divided by the dollar/sterling exchange rate.
- (b) Retail petrol prices excluding excise duties. This is a Bank of England estimate derived using the methodology set out in 'The construction of RPIY', *Bank of England Working Paper no. 28* (1995).

Chart 4.15
Contribution of housing depreciation to annual RPIX inflation



Sources: ONS and Bank of England.

Chart 4.16
Weighted proportion of the RPIX basket falling in price on an annual basis and annual RPIX inflation



Sources: ONS and Bank of England.

- (a) Weighted proportion of the RPIX basket with a negative twelve-month inflation rate.

Leaving aside recent movements in petrol prices, retail goods price inflation has remained negative and substantially below retail services price inflation (see Chart 4.12). Around half of the prices in the RPIX goods basket fell on an annual basis in December, entirely accounting for the relatively large proportion of the total RPIX basket with lower prices than a year earlier (see Chart 4.16). As the box on page 36 explains, it is quite normal at low levels of inflation for some prices to fall, reflecting relative demand and supply conditions in those particular markets. It does not appear that recent falls in goods prices have been caused by a lack of demand, however. The three retail sectors that have experienced the largest price declines during the past seven years—clothing and footwear, leisure goods and cars, which are all goods components of the RPI—are those that have recorded some of the strongest average consumption growth during that period (see Chart 4.17).

So what accounts for the divergence between retail goods and services price inflation? Sectoral productivity differentials may provide some of the answer. Productivity tends to grow more quickly in the more capital-intensive manufacturing sector. But given that labour is mobile between different industries, wages across sectors tend to grow at broadly similar rates over time. This implies that unit labour costs rise more rapidly in the service sector than in manufacturing, which is reflected in higher services price inflation.

When trying to account for the inflation differential between retail goods and services prices, it is probably more appropriate to use productivity growth in the consumer goods manufacturing sector than in the manufacturing sector as a whole. This is because most of the output of the other manufacturing sectors—intermediate and investment—is not sold to goods retailers. Chart 4.18 suggests that the large recent divergence of retail goods and services price inflation may partly be a reflection of much stronger productivity growth in the consumer goods manufacturing sector than in the private services sector. The two differentials are currently more similar than they were between 1996 and 1999 when some of the weakness of goods price inflation relative to services price inflation was associated directly with sterling's appreciation.

The Committee has judged that most of the recent rise in inflation and the earlier fall has reflected temporary movements in the relative prices of just a few components, notably petrol prices and housing depreciation. These large upward influences, relating specifically to developments in the oil and housing markets, have probably exaggerated the strength of underlying inflationary pressures, and have little

Deflation

What is deflation and how does it come about?

It is normal, particularly at low levels of inflation, for the prices of some goods and services in the economy to be falling, reflecting the demand and supply conditions in those individual markets. Deflation, however, is defined as a sustained fall in the *general* price level—that is a prolonged decrease in some broad-based measure of prices, like the retail prices index. Deflation typically results from a significant fall in aggregate demand, in response to which firms reduce their prices on an ongoing basis in order to sell their products.⁽¹⁾

Economic consequences of demand-driven deflation

In addition to the undesirable effects normally associated with sharp falls in aggregate demand—like rising unemployment and increased rates of insolvency—the presence of deflation may have three other adverse economic consequences, which may lead to a spiral of further falls in economic activity and prices.

First, deflation may limit the central bank's ability to use conventional monetary policy to stabilise the economy. The real interest rate, which is equal to the nominal interest rate minus the expected rate of inflation, affects the level of aggregate demand in the economy. Traditional monetary policy works by changing the nominal interest rate so as to bring the real interest rate to the level required to keep demand in the economy in line with supply. A fall in aggregate demand may be large enough to result in the central bank lowering the nominal interest rate to zero. But because lenders will not generally accept a negative nominal interest rate when it is possible instead to hold cash, no further downward adjustment can be made. This is the so-called 'zero lower bound' on nominal interest rates, which may mean that the central bank cannot use conventional means to reduce the real interest rate to the level necessary to stimulate demand sufficiently.

Second, deflation increases the real burden of debt, which may lead to further falls in aggregate demand. As debt contracts are usually denominated in nominal terms, a fall in prices will lead to a redistribution of wealth from debtors to creditors. If debtors have a higher marginal propensity to consume out of wealth than creditors, as is likely, this will lead to a fall in aggregate demand, exacerbating the initial decline in spending.

Third, deflation may lead to increased financial stress, which may limit the scope for economic recovery. The

increase in real debt burdens associated with a fall in prices in conjunction with a deterioration in economic activity is likely to lead to a worsening of household and corporate balance sheets, an increase in the number of non-performing loans and a deterioration in bank balance sheets. These developments may hold back economic recovery by reducing the ability and willingness of financial institutions to lend, lowering firms' desire to take on new debt and leading to increased saving by households.

How likely is deflation in the United Kingdom?

As highlighted in this section of the *Report*, the United Kingdom is currently experiencing unusually large movements in relative prices reflecting demand and supply conditions in particular markets, leading to falling prices of some goods, but not overall deflation. While it is important not to be complacent, there are a number of reasons why deflation is unlikely to occur in the United Kingdom.

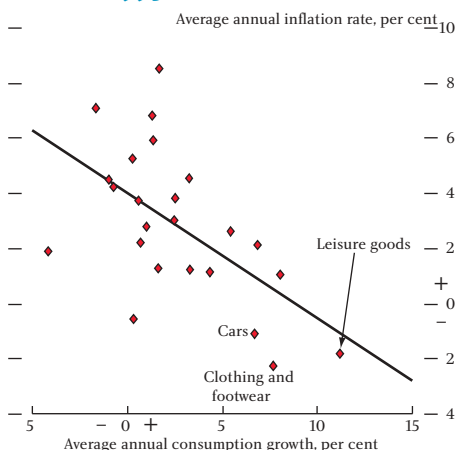
First, quarterly GDP growth is close to trend and annual RPIX inflation close to target. Though there are risks, the Committee's central expectation is for this to continue during the forecast period. Second, inflation expectations are stable and firmly anchored around the target. Thus, any deviations of inflation from target will not necessarily be reflected in wage settlements and expected real interest rates. Third, the monetary policy framework in the United Kingdom is a powerful bulwark against an episode of deflation. The symmetry of the inflation target means that deviations below the target are viewed just as seriously as those above it, and the MPC stands ready to take action as necessary to keep inflation close to target. With the repo rate at 3.75%, monetary policy is currently relatively stimulative, and there is plenty of room for manoeuvre for the rate to be lowered further if deemed appropriate. Fourth, fiscal policy is currently providing a significant boost to aggregate demand. Fifth, the balance sheets of financial intermediaries remain relatively healthy in the United Kingdom.⁽²⁾

These factors make the onset of deflation in the United Kingdom unlikely, but in the event of deflation and the hitting of the zero lower bound on nominal interest rates, the MPC has a range of options available if it cannot use conventional monetary policy. These include lowering longer-term interest rates by committing to keep short-term official interest rates lower for some specified period into the future, and buying longer-term government debt from the private sector and other assets.

(1) Deflation may also result from significant increases in aggregate supply, as in the United Kingdom in the 19th century. This form of deflation need not have the malign consequences associated with large falls in aggregate demand. In a demand-driven deflation, the real interest rate may not be able to fall far enough to bring aggregate demand in line with aggregate supply. In a deflation resulting from large increases in aggregate supply, the equilibrium real interest rate rises due to a higher marginal product of capital. In this event, the general price level can fall while at the same time aggregate demand can be growing in line with aggregate supply.

(2) See the *Bank of England Financial Stability Review*, December 2002.

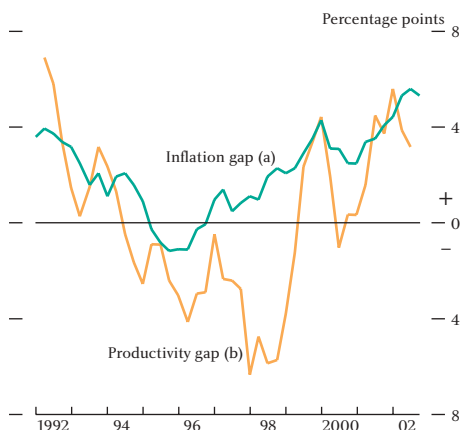
Chart 4.17
Average consumption growth and retail price inflation of the major components of RPIX, 1995–2002^(a)



Sources: ONS and Bank of England.

(a) Categories of consumption growth have been matched as closely as possible to the definition of each corresponding component of RPIX using disaggregated National Accounts data.

Chart 4.18
Inflation and productivity growth differentials



Sources: ONS and Bank of England.

- (a) Annual retail services price inflation minus annual retail goods price inflation.
- (b) Estimated annual productivity growth in the consumer goods manufacturing sector minus annual productivity growth in the private services sector. Productivity in the consumer goods manufacturing and petroleum products sectors, divided by total manufacturing employment excluding the wood and wood products, chemicals and man-made fibres, rubber and plastics, metals, machinery and equipment and electrical and optical sectors. Productivity in the private services sector is proxied by productivity in the service sector excluding public administration, education and health.

material bearing on the medium-term outlook for inflation. Looking forward, annual RPIX inflation may edge up further in the next few months, and by a little more than envisaged in November, as the most recent higher-than-expected increases in oil and house prices continue to feed through, and given the somewhat stronger outlook for import prices associated with the lower expected profile for sterling. Annual RPIX inflation is expected to fall back towards the end of the year, as the upward impetus from petrol prices and housing depreciation starts to unwind.

5 Monetary policy since the November *Report*

This section summarises the economic developments and monetary policy decisions taken by the MPC since the November Report.⁽¹⁾ The Bank's repo rate was maintained at 4% in December and January. It was reduced by 0.25 percentage points to 3.75% in February.

The MPC's central projection in the November *Report* was for RPIX inflation to rise above the 2.5% target by the end of 2002 and remain at the higher level for most of 2003. Inflation was then expected to fall to a little below target before edging back up as the two-year horizon approached. Four-quarter GDP growth was projected to rise to slightly above trend at the start of 2003 before gradually settling back. The forecast profile for GDP was broadly similar to that shown in the August *Report*. The MPC judged that the risks, relative to the central projection, were weighted marginally to the downside for growth and slightly to the upside for inflation.

At its meeting on 4–5 December, the Committee began by discussing the world economy. The month's information about the world economy contained few surprises. Recent data from the United States suggested prospects for recovery were unchanged from those envisaged in the November *Report*. Euro-area growth remained subdued, although some encouraging signs of recovery were starting to emerge in Japan. International financial markets had been more stable during November. The main stock market indices were little changed on the month and volatility had fallen.

In the United Kingdom household borrowing continued to grow strongly; the twelve-month growth rate of total secured lending to individuals was the highest since 1990. Household deposits were also growing quite rapidly, which might in part reflect as yet unspent funds realised from equity withdrawn from the housing market. Housing market developments had not changed substantially since the Committee's previous meeting, although the upward pressure on prices seemed to have shifted to the lower end of the market and away from London and the South East. Consumption remained robust and looked set to continue to grow strongly in the short term. Unemployment on the ILO measure had increased in the third

(1) The minutes of the November, December and January meetings are reproduced under a separate cover, published alongside this *Report*.

quarter, but it seemed unlikely that the increases in unemployment were yet sufficient to dampen the pace of consumption growth.

While discussing the immediate policy decision, the Committee agreed that the news on the month was limited and did not materially affect the projections for inflation and output growth as laid out in the *November Report*. Economic news from the euro area was somewhat weaker, as were one or two indicators from the United States. However, survey information about the US economy had, on balance, been mildly encouraging, as had the stronger-than-expected indicators of domestic demand from the euro area. Indicators from Japan had been more positive; and financial markets around the world seemed to have stabilised, at least for the present. In the United Kingdom, overall growth prospects were little changed, though consumption had been stronger and investment weaker than expected. This continued to suggest that UK inflation would be broadly around target over the next two years and growth close to trend. The immediate policy decision depended largely on judgments about the risks to this outlook.

A number of arguments were identified for leaving the repo rate unchanged. For most members, the central projection for inflation did not suggest that a reduction in the repo rate was necessary and the balance of risks for inflation was weighted modestly on the upside. The news on the world economy suggested that the downside risks to activity were no worse.

Some members took a slightly different view of the most likely path of inflation over the next two years and the risks around that path. The outlook for the world economy and for domestic investment was in their view a little weaker than in the Committee's central projection, and domestic inflationary pressures appeared muted. A small reduction in the repo rate was needed to keep inflation on target in their view.

The Committee voted by 7 to 2 to maintain the repo rate at 4%.

At its meeting on 8–9 January, the Committee considered the world and domestic economies before turning to the immediate policy decision. Recent indicators from the United States had been mixed, which was typical of an economy in the early stages of recovery. However, the pace of economic growth seemed broadly consistent with that envisaged at the time of the *November Report*. By contrast, recent euro-area data had been, on balance, more subdued than expected. Economic news from Japan was less encouraging, although Japanese exports to other Asian countries had been growing

robustly during 2002, reflecting the recovery elsewhere in that region.

Sterling had appreciated by about 2% against the dollar, but depreciated by a similar amount against the euro so that the effective exchange rate had fallen by about 1½% since the Committee's December meeting. Household debt (as a percentage of income) remained at historical highs, but the inflation-adjusted saving ratio was close to its average level for the past 20 years, and the personal sector's net financial deficit had been estimated to be around zero in recent quarters. This implied that households had, in aggregate, been acquiring financial assets at the same rate as debt. The aggregate financial balance data suggested that the risk of a sharp change to consumption was less than might be thought on the basis of the aggregate borrowing figures alone. But that risk depended on the balance sheet position of the household sector, which in turn required an assessment of disaggregated data. Various indicators suggested that output growth might have slowed in Q4 and there were some tentative signs that consumption growth might have moderated over the same period. House prices appeared to have increased by more in 2002 Q4 than had been envisaged in the November *Report*, although there were some signs that the rate of increase might be beginning to moderate. Demand and supply conditions in the labour market had remained broadly stable. Spot oil prices had risen, and the associated impact on petrol prices implied some short-term upward pressure on RPIX inflation. Overall, inflation in 2003 Q1 would probably be higher than projected in the November *Report*.

In discussing the immediate policy decision, the Committee agreed that, although there was a wide range of information to take into account this month, the net impact of the news was difficult to assess. The world economy was on balance slightly weaker. The effects of the current international political tensions were not clear, although they might be having some dampening effect on survey indicators of confidence, and perhaps also on demand, both in the rest of the world and the United Kingdom. Various arguments, taken together, implied no change in the repo rate was needed this month. First, although the balance of indicators on the world economy was probably negative on the month, the impact on UK inflation in the medium term might be relatively limited. Second, house price inflation looked likely to have been stronger in 2002 Q4 than projected in November. Third, the evidence that consumption growth was moderating was still tentative. Fourth, the depreciation of sterling and the fall in short and medium-term interest rates would support activity and tend to increase inflation, if sustained. The recent diverse news about the world and domestic economies and from financial markets

could be assessed more fully in the forthcoming forecast round.

Some members, however, continued to believe that an immediate repo rate reduction was warranted. These members had and still thought that the most likely path for inflation over the next two years would be slightly lower than the central projection in the November *Report* and that the balance of risks lay on the downside. The news from the world economy over the past two months had been negative and there were significant downside risks, from the euro area in particular. The risk of an unsustainable build-up in household debt and the current account deficit might also not be as severe as some thought. The upside risks to inflation were modest: the labour market was benign and consumption and house price increases appeared to be moderating. A reduction in the repo rate was needed to support activity and maintain inflation close to target in the medium term.

The Committee voted by 7 to 2 to maintain the repo rate at 4%.

At its meeting on 5–6 February, the Committee voted to reduce the Bank's repo rate by 0.25 percentage points to 3.75%.

The MPC's current projections for growth and inflation are presented below. The Committee reduced interest rates by 0.25 percentage points to 3.75% at the February meeting in response to the weakening of prospective underlying inflationary pressure in the medium term. Based on the assumption that official interest rates are maintained at 3.75%, the central projection is that four-quarter growth in UK GDP remains close to trend during 2003, but then eases a little. A slowdown in consumer spending growth over the forecast period is largely counterbalanced by the stimulus from a gradual strengthening in global demand, robust growth in public spending, and a mild recovery in business investment. The outlook is somewhat weaker than in November. Reflecting the heightened tension relating to the threat of war with Iraq, the Committee considers that the range of possible outcomes is unusually large at present. The risks are reasonably balanced around the central projection. RPIX inflation is likely to increase further above target in the near term, given the recent rise in oil prices and the impact of high house price inflation on the housing depreciation component of RPIX. But as these transitory influences gradually unwind, inflation is likely to fall back further ahead. The central projection settles at around the 2.5% target by the two-year forecast horizon. There are modest risks to the upside.

6.1 The inflation projection assumptions

The world economy continues to recover, hesitantly and unevenly. Towards the end of last year output growth dipped in the major industrial countries. Moreover, rising international political tension has weighed on confidence and added to volatility in financial markets. Global equity prices have fallen further and the dollar has weakened substantially against the euro during the past three months. Concerns that the recovery might be flagging prompted proposals for further fiscal easing in the United States and an additional cut in interest rates by the ECB. Although the outlook is highly uncertain, the supportive stance of policy should help to promote a gradual strengthening in global demand growth during the course of this year and into 2004.

Recent output indicators for the euro area have again proved disappointing. GDP growth of 0.3% in 2002 Q3 was supported by temporary investment incentives in Italy, and surveys point to an even weaker outturn in Q4. Final domestic demand growth remains anaemic, given persistently sluggish consumer spending growth and a continued decline in private investment in most countries—albeit at a slower pace than earlier in 2002. Fiscal consolidation is likely to delay the prospective recovery in Germany. Moreover, the further appreciation of the euro exchange rate in recent months has weakened the outlook for trade. In early December, the ECB

lowered official interest rates by 0.5 percentage points to bolster the prospects for demand. That, together with the decline in longer-term market interest rates, should help to offset some of the adverse influences on activity and inflation. The most likely prospect remains for a sluggish upturn in GDP growth over the forecast period to around trend rates. Nevertheless, reflecting the slower pace of recovery in recent months, the outlook for euro-area activity has been revised down since the *November Report*, particularly in 2003.

The upswing in the United States is likely to regain momentum, encouraged by the loosening of fiscal and monetary policy. Although GDP in 2002 Q4 was almost 3% higher than a year earlier, growth slowed in the fourth quarter, and was below expectations in the *November Report*. Slackening labour demand and sharp falls in equity prices have affected consumer confidence and household spending growth. Moreover, heightened concerns about geopolitical risks and the resulting uncertainty surrounding global economic prospects may be encouraging firms and households to defer major spending decisions and to raise precautionary saving. Notwithstanding these dampening forces, a number of factors point to a gradual improvement in the economic outlook. The 0.5 percentage point cut in official interest rates in early November and the fall in market yields over the past three months have increased the incentives to spend. Tax cuts in 2002 have raised disposable incomes, and the additional fiscal measures proposed recently by the administration should provide a further stimulus over the next two years. The decline in the dollar exchange rate during the past year has improved the prospects for trade. Furthermore, there are tentative signs of some brightening in the investment picture: private investment rose in 2002 Q4, the first quarterly increase for over two years. Underpinned by solid growth in productivity, US GDP growth is likely to pick up to around, or a little above, trend over the forecast period. The short-term outlook is somewhat weaker than in November given the recent softening in growth and the further drop in equity prices. But, supported by the supplementary fiscal package, growth prospects next year are a little firmer than in the *November Report*.

Although revised data point to a resumption of GDP growth in Japan in the middle of 2002, recent indicators suggest some faltering in the weak cyclical recovery. Moreover, the prospect that policy measures will be adopted to address the problem of non-performing loans in the Japanese banking system may have depressed the short-term outlook for growth, although resolution of the problem would significantly enhance longer-term prospects. Output growth elsewhere in Asia has held up well in recent months, aided by an upturn in export

growth. Growth may edge a little higher over the forecast period as world trade strengthens further.

Drawing the global picture together, world GDP, weighted according to UK export market shares, may have been a little softer around the turn of the year than expected in November. The short-term outlook also seems somewhat weaker. Global demand is still likely to pick up gradually over the course of 2003 on the central projection, with annual growth returning to around trend rates during 2004. But, given the slower rate of recovery, UK-weighted world trade may rise by around 5% on the central projection in 2003, some 1½ percentage points less than projected in November.

Oil prices have risen over the past three months, as the industrial dispute in Venezuela has severely curtailed production, and as uncertainty over the impact of a possible war against Iraq has intensified. Averaged over the 15 working days to 5 February, the spot price of Brent crude is some \$6 per barrel higher than expected three months ago. The Committee continues to use the futures market as a yardstick for the central projection. Although uncertainty has increased, futures markets currently assume that the recent increase in oil prices will prove relatively short-lived: futures prices fall back over the next two years, to around the levels assumed in November. There is little change to the outlook for non-oil commodity prices.

Internationally traded goods and services prices in the second half of last year were slightly weaker than expected in November, as relatively subdued demand and intense global competition continued to press down on prices. The outlook for local currency export prices from the major industrial economies—weighted by UK market shares—is a little softer than in November, principally reflecting the weaker prospects for global demand. Following a small fall in 2002, average export prices are expected to edge up only gradually over the forecast period.

The outlook for UK import prices also depends on sterling exchange rate prospects. The sterling effective exchange rate (ERI) has depreciated over the past three months, as the weakening of sterling against the euro has outweighed the appreciation against the dollar. In the 15 working days to 5 February, the ERI averaged 104.0, some 2% below the expectation for February incorporated in the November central projection. That average forms the starting point for the current projection, and is consistent with bilateral rates of \$1.63 and 66 pence against the euro. The sterling ERI is assumed to depreciate gently over the forecast period, reaching 101.8 by 2005 Q1 on the central projection.

Sterling equity markets have fallen further over the past three months. In particular, investors may have sought increasing compensation for risk, given the elevation in international tension and increased uncertainty surrounding economic prospects. The FTSE All-Share index averaged 1763 in the 15 working days to 5 February, some 10% below the expectation for February embodied in the November central projection. The Committee has maintained the assumption that equity wealth rises in tandem with nominal GDP over the forecast period.

The recent strength of house price inflation has once again exceeded earlier expectations. Annual price rises remain around 25% according to the Nationwide and Halifax indices, and strong mortgage demand continues to underpin the market. Nonetheless, recent monthly increases in house prices have slowed a little and there are tentative signs from housing market surveys and reports from the Bank's regional Agents of some moderation in the rate of increase. The Committee continues to expect a marked slowdown in house price inflation over the forecast period: prices are expected to be broadly stable on the central projection at the two-year forecast horizon. There remain substantial risks around the assumed path.

The MPC has updated the assumptions on fiscal policy in the light of the November Pre-Budget Report (PBR). The central projection continues to be based on the Government's announced nominal public spending objectives. Planned spending was increased a little in the PBR to finance the war on terrorism. A switch in the composition of public expenditure from transfers towards final consumption may also boost aggregate demand slightly. The Committee has updated the assumptions on average effective tax rates in the light of the PBR estimates: these are little changed from the assumptions incorporated in the November *Inflation Report*.

There are many uncertainties surrounding the above assumptions and their implications for UK economic prospects. The threat of military conflict in Iraq has added substantially to the risks. Asset markets such as those for oil, equities and foreign exchange have been affected by the prospect of war: heightened political tension may also be eroding business and household confidence across the globe. The Committee's latest projections are based on the usual conventions for asset prices: oil prices follow the futures curve; equity prices rise in line with nominal GDP from current levels; and exchange rate changes from present levels are guided by interest rate differentials. But the range of possibilities is very wide at present and asset prices as well as business and consumer confidence could change substantially

as events unfold. As discussed in the box on pages 48–49 uncertainty could be magnified if war ensues, with the possibility of further sharp movements in oil prices, continued unsettled conditions in equity and foreign exchange markets, higher public spending on military activity, and cutbacks in private final demand reflecting increased precautionary saving. On the other hand, resolution of the present tensions could promote a recovery in private sector confidence and lead to a pick-up in growth, both at home and abroad. Given the increase in uncertainty, the Committee decided to widen the range of possible outcomes represented in the fan charts for inflation and output growth.

6.2 The output and inflation projections

Economic activity in the United Kingdom continues to recover from the slowdown during 2001. According to the preliminary ONS estimate, GDP growth was 0.4% in 2002 Q4, rather weaker than projected three months ago. But growth earlier in the year has been revised up: the estimated level of GDP in 2002 Q3 is now some 0.4% higher than assumed in the November *Report*. So, although there may have been some slackening in the speed of recovery relative to expectations three months ago, the estimated level of output in the fourth quarter is in line with the November central projection.

Strong consumer spending has provided the mainstay to aggregate demand growth in the United Kingdom in recent years. Consumer spending volumes rose 0.8% in 2002 Q3, and were almost 4% higher than twelve months previously: notwithstanding downward revisions to earlier data, the level of expenditure was a little higher than expected in November. A number of indicators point to continued buoyancy in Q4. Real interest rates are low and total household borrowing growth remained strong. House prices rose rapidly. And household deposit growth remained brisk. Moreover, although interpreting spending trends around the end of the year is difficult given the hazards of seasonal adjustment, retail sales volumes rose by 1.8% in 2002 Q4—a gain of some 5½% over the year. Other indicators point to some easing in expenditure growth. Narrow money (M0) growth has slowed and the stock of unsecured household borrowing is rising less quickly. The CBI *Distributive Trades Survey* points to a weakening in sales growth. Furthermore, consumer confidence, which held up well during the autumn according to the GfK survey, fell sharply around the turn of the year.

The Committee continues to project a slowdown in consumer spending growth over the forecast period. Growth in real post-tax labour income has moderated from the peak rates in 2001, as employment growth has slackened, and as tax and price inflation has risen. Moreover, the increase in National

Insurance contributions in April will also have some moderating effect on disposable income growth. Financial wealth has fallen markedly during the past year given the sharp decline in equity prices. And, although the rapid increase in credit—associated with a buoyant housing market, and the greater access to collateral and low borrowing costs this facilitates—has helped to sustain expenditure growth, the recent rate of house price inflation is clearly unsustainable. It is likely that mortgage equity withdrawal will fall back and that support to consumer spending will consequently diminish. Spending growth may hold up in early 2003 given the recent strength of the housing market and household borrowing, but on the central projection expenditure is likely to decelerate to below trend rates by the end of the year, and to slow further during 2004. Growth is rather weaker than in the November projection, reflecting the further fall in equity prices and the more subdued outlook for output growth and labour income.

Business investment continues to fall. Capital spending volumes declined by close to 10% in the year to 2002 Q3, with equally marked reductions in both the manufacturing and services sectors. Although the rate of contraction has slowed, taking Q2 and Q3 together, and intention surveys are slightly firmer, there is little prospect of an imminent sharp turnaround. There are few signs of emerging pressure on plant capacity. Moreover, although corporate profitability has improved a little over the past year, and cashflow has strengthened somewhat according to the BCC survey, aggregate balance sheets remain relatively weak. And rectification of shortfalls in pension funds may also call on cash otherwise earmarked for capital spending. In addition, the latest CBI *Quarterly Industrial Trends* survey and the Banks' regional Agents report an increase in uncertainty surrounding demand prospects. That is likely to hold back non-essential capital spending. On the central projection, the Committee expects that business investment will recover only slowly. The outlook is weaker than in November reflecting the downward revision to output growth prospects and the rise in uncertainty. The outlook for whole-economy investment remains stronger than for business investment, given a more robust picture for residential investment and the rapid growth in government capital expenditure built into public spending plans.

Exports of goods have fallen sharply in recent months. Goods export volumes declined by some 3½% in 2002 Q3, a larger fall than projected three months ago. Further confounding earlier expectations, the steep drop in goods exports continued into Q4 according to the monthly trade data, with reductions of close to 3% in October and over 3½% in November. A decline of this magnitude is surprising. Surveys of exports remained relatively weak but were not consistent

The economic implications of a possible war in Iraq

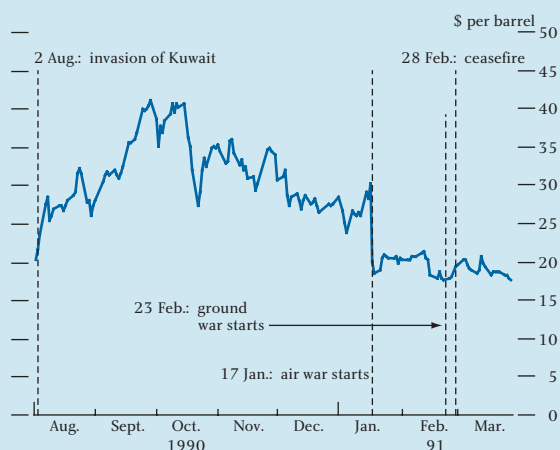
In preparing its projections, the Committee considered various possible channels through which a war in Iraq, or the prospect of it, could affect the economic outlook.⁽¹⁾ The impact of a war on future activity and inflation will depend on whether or not such a conflict ends quickly, and on the prospects for the region after any such conflict.

Oil

A major channel through which concerns about a military conflict have already affected the global economy is the price of crude oil. The spot oil price has risen sharply since the November *Report* (see Section 4), partly reflecting a higher risk premium as concerns about the impact of a war on oil supply have increased. The oil futures curve shows a marked fall in oil prices over the forecast period, which suggests that the market expects a military conflict to be resolved quickly without major implications for supply. These market expectations are typically used as a guide to the Committee's central projection.

Although the economic impact of one conflict may not provide a good guide to that of another, the spot price of crude oil dropped after the start of the Gulf War in January 1991 (see Chart A) and stabilised around this lower level after the War

Chart A
Oil spot price during the Gulf War



had ended—despite Iraqi damage to Kuwait's oil wells. Indeed, the spot price fell at a faster rate than had been implied by the futures curve ahead of the War, reflecting a sharp fall in the risk premium. So if a war in Iraq now were to be short and not lead to substantial damage of oil-production facilities, it is possible that the experience of the earlier Gulf War could be repeated. But in case of a more protracted military conflict, the oil price would almost certainly rise further and persist at that level for longer.⁽²⁾

Equities

Uncertainty about the effects of a possible war on the outlook for the world economy has probably also been reflected in a rise in the equity risk premium and has thus been an important factor behind the worldwide fall in equity prices this year (see Section 1). A short war may reduce some of this uncertainty, thereby unwinding some of the previous fall in equity prices. Likewise, a peaceful end to the current crisis may lead to a bounceback in equity prices. But were a war to continue for a long period of time, risk premia could remain high or rise even more, and expected earnings growth could fall, further depressing equity prices, lowering financial wealth and raising the cost of capital to the corporate sector.

Exchange rates

The recent depreciation of the dollar against the other major currencies may have partly been related to the increasing prospect of war in Iraq. The dollar's value fell in the run-up to the Gulf War (see Chart B). If war were to end quickly, or if the crisis were to be resolved peacefully, part of the depreciation could unwind, as it did in the final stages of the Gulf War. If the conflict were protracted, the dollar might fall further.

The Gulf War may of course not be a reliable guide to the outlook for the dollar. But it is even

(1) Meyer, L (2002), *After an attack on Iraq: The economic consequences*, Conference summary, Center for Strategic and International Studies, available on www.csis.org/features/attackoniraq_summary.pdf, discusses some simulation results for the United States and the world economy of different war scenarios.

(2) For an analysis of the possible impact of a war on oil prices, see Ebel, R, Franssen, H, Goldstein, L and Sieminski, A (2002), *After an attack on Iraq: The economic consequences*, Background paper: *Oil price paths under the four scenarios*, Center for Strategic and International Studies, available on www.csis.org/features/attackoniraq_background.pdf. See also Nordhaus, W D (2002), 'The economic consequences of a war with Iraq', *NBER Working Paper no. 9361*.

Chart B
US dollar: effective exchange rate during the Gulf War



less likely to be a helpful indicator of sterling's movements in the event of a war. During the Gulf War, sterling's membership of the Exchange Rate Mechanism meant that it could only fluctuate against other European currencies within a narrow band. Indeed, the effective value of sterling remained broadly stable during the Gulf War.

UK expenditure

A war is also likely to have implications for UK expenditure. One direct effect of war is that it would add to the upside risks to public spending. If the war ends quickly, its costs for the United Kingdom may be contained within current spending plans outlined in the November Pre-Budget Report. The latter includes a £1 billion special reserve in 2002–03 for overseas and defence needs in the fight against global terrorism. The MPC has included these plans in its central projection. But if a conflict were to drag on for some time, public expenditure could rise relative to the central projection. The impact on GDP would depend on the extent to which the additional spending,⁽³⁾ in particular on weapons and fuel, would leak into imports.

Other than via public spending, a war—or the prospect of one—could affect domestic demand through its effects on uncertainty about the future. Consumer confidence in the United

Kingdom (in particular expectations about the general economic situation over the next twelve months) has weakened somewhat recently, possibly as a result of the fall in equity prices, but also perhaps because of the increasing likelihood of a war. The Bank's regional Agents have reported that some retail contacts feared that purchases would be delayed because of uncertainty over the situation in Iraq (see Section 2). Consumer confidence could drop further if and when hostilities begin and uncertainty about the future may increase. The longer a conflict were to last, the greater the possible negative impact on consumer spending would be.

Business confidence has been weak for some time. Uncertainty about a prospective war in Iraq and its consequences may depress business confidence further in the near term, thus affecting investment and stockbuilding in opposite directions. Greater uncertainty increases companies' incentives to delay investment projects, though more uncertainty about potential supply disruptions and future demand may lead companies to hold larger stocks of raw materials and other inputs. But higher stockbuilding would probably not be sufficient to offset the negative impact on demand from weaker investment.

The prospect of a war has already depressed asset prices and probably tempered demand growth, both in the United Kingdom and in overseas economies. A war could depress the world economy further in its initial stages, affecting the UK economy adversely through weaker exports. But if it were over quickly, then uncertainty effects would be expected to unwind, which could give a fillip to world recovery. A similar outcome is to be expected if the present difficulties were to be resolved peacefully. A prolonged conflict or a continuation of the current tension could have more persistent and negative effects on activity, with a further marked impact on asset prices. The impact on inflation would depend, at least in the short term, on how far the impact of higher oil prices balanced out the effects of lower activity.

(3) Hartley, K (2002), 'The costs of war', *RUSI Journal*, Vol. 147, Issue 5, pages 16–19, available on www.rusi.org/upload/pdfs/JA00241-ecKPhx2POb/JA00241.pdf, contains estimates of the military costs of a war for the United Kingdom.

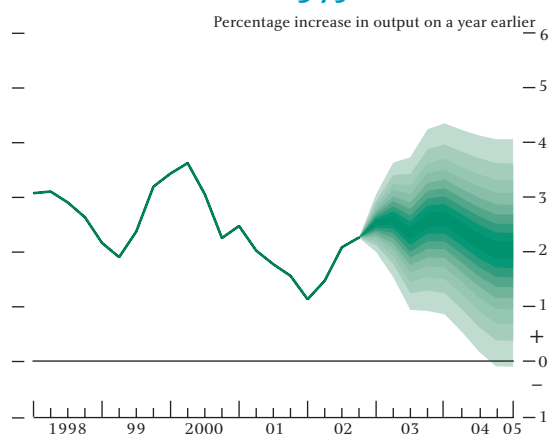
with such a precipitate fall. Moreover, the regional composition suggests that recent weakness was concentrated outside the European Union, which sits uneasily with information on the regional pattern of global demand. Finally, there was little change in manufacturing output over this period: although surveys are consistent with some increase in inventories at the whole-economy level, they do not point to a major unplanned build-up of stocks due to a sudden loss in export sales. Faced with the puzzle of reconciling the conflicting evidence on demand and supply, the Committee has assumed that the underlying weakness in exports is exaggerated by the most recent monthly trade data. Nonetheless, assigning some weight to the news, and given the downward revision to the near-term outlook for world trade growth, prospects for UK exports in 2003 have been revised down since November. The subsequent recovery in export growth may, nevertheless, be a little stronger than in November, reflecting the lower sterling exchange rate.

UK import volumes have changed little during the past year: higher imports of consumer goods and intermediate products have been largely offset by falling imports of materials and intermediate goods, with capital goods imports remaining weak. Looking forward, there is likely to be a gradual pick-up in imports over the forecast period given the expected resumption of investment growth and the projected recovery in exports, which in turn will stimulate additional demand for imported materials and components. Import growth is likely to be weaker than in the November projection linked to the more muted outlook for demand, and the lower sterling exchange rate. Nevertheless, combining the outlook for exports and imports, net trade trends may continue to act as a check on UK output growth in the short term, although this restraint should gradually fade away over the forecast period as the global recovery gathers momentum and as consumption growth moderates.

As noted above, there may have been some modest build-up in aggregate inventory levels towards the end of last year. Although surveys do not point to a major overhang, stocks may be above desired levels in some sectors. The Committee has assumed that firms will seek to run down any surplus stocks in the early months of 2003. The assumption that inventories rise with output in the medium term has been maintained.

The Committee's current projection for the four-quarter growth in GDP is portrayed in Chart 6.1.⁽¹⁾ It is based on the assumption that official interest rates remain constant at 3.75%.⁽²⁾ Four-quarter growth recovered steadily during 2002

Chart 6.1
Current GDP projection based on constant nominal interest rates at 3.75%



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.

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

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

from the low point at the start of the year, reaching 2.2% in 2002 Q4—in line with the November central projection. On the central projection, GDP growth may edge up to around trend rates during the first half of this year, reflecting the near-term resilience of consumer spending, robust growth in public spending, a gradual recovery in the world economy, and the first signs of a turnaround in business investment. But GDP growth may slow a little thereafter as lower growth in consumer spending gradually outweighs the continuing stimulus from the other components. Although the recent cut in interest rates will provide additional support, the outlook for GDP growth has weakened somewhat since the November *Report*, principally reflecting less favourable prospects for global demand and the deterioration in the climate for investment and consumer spending. The lower level of aggregate demand will act to moderate domestically generated inflationary pressure over the forecast period and beyond.

RPIX inflation has moved a little above target in recent months, as foreshadowed in the November *Report*. In 2002 Q4, inflation averaged 2.6%—in line with the Committee's central projection three months ago. The profile of inflation has been erratic during the past year: inflation fell from 2.6% in January 2002 to a trough of 1.5% in June, rebounding subsequently to 2.8% by November. Special factors and temporary influences have had a marked impact on the month-to-month outturns: abstracting from these influences, the underlying trend in inflation appears much flatter. In particular, the marked rise in recent months largely reflects a substantial contribution from just two components: petrol prices, echoing the oscillations in the oil market; and housing depreciation, linked to the continued increase in house price inflation. Given the central assumptions on oil and house prices both elements are likely to prove transient. Careful account must be taken of the likely evolution of these influences when formulating the near-term projection for inflation. But such short-term volatility has little bearing on the medium-term outlook for inflationary pressure which is the focal point for monetary policy. Medium-term inflation prospects depend on the pressure of nominal demand on the supply capacity of the economy, together with external influences on the prices of traded goods and services.

As highlighted in previous *Reports*, considerable uncertainty surrounds any estimate of the current trend in aggregate supply potential. Bearing in mind the many uncertainties, the Committee has maintained the assumption that underlying labour productivity growth over the forecast period is likely to be around the average of the past 40 years of just over 2% per annum. The central projection incorporates the latest Government Actuary's Department estimates, which suggest

that net inward migration could be higher than assumed recently by the Committee. The positive impact of higher labour availability on aggregate supply capacity is fully offset, however, by the downward revision to the prospective growth of the capital stock, given the weaker outlook for investment. Aggregate supply potential is assumed to rise by around 2½% a year over the forecast period.

Pay pressures remain relatively muted. Headline earnings growth was 3.8% in November, unchanged from three months earlier. Although public sector earnings growth has increased as the delayed local authority sector settlement has come into force, private sector earnings growth has eased slightly. Recent outturns for whole-economy earnings growth have been a little weaker than projected in the November *Report*.

A number of factors point to some increase in nominal earnings growth in the short term. First, although inflation expectations appear to be well-anchored to the target, the increase in retail price, and tax and price, inflation over the past year could induce higher pay claims. Second, the increase in employee National Insurance contributions (NICs) may lead some employees to seek compensation in the form of higher pay. Although employers are likely to resist, and indeed the corresponding rise in employer NICs will encourage companies to offer a lower pay award, there may be some temporary upward pressure on wages and prices from the increase in NICs. There are some signs that settlements will edge a little higher in the current pay round. The latest IRS and IDS surveys on pay prospects point to a slight increase in average settlements this year. A recent survey by the Bank's regional Agents also suggests a modest rise in prospective pay pressure.

Prospective earnings pressure depends on labour demand in relation to available supply. Recent trends are hard to gauge given conflicting evidence on employment trends from the two official measures and the difficulties of disentangling cyclical from secular trends in average hours worked. But taken together with information from business surveys and reports from the Bank's regional Agents, recent evidence is consistent with overall employment rising broadly in line with the increase in the working-age population. Unemployment rates continue to be stable at low levels. The prevalence of recruitment difficulties in the recent BCC survey suggests that the labour market remains relatively tight.

Looking forward, there may be some easing in labour market pressures in the coming months. Although public sector employment demand may remain robust given the planned expansion in public sector services, it is possible that there

may be some moderation in private sector demand. Productivity growth per head has been well below trend in recent years. In part, this may reflect a structural decline in average hours worked. But it may also have reflected a desire by companies to retain staff in a tight labour market, on the expectation that the recent cyclical downturn in aggregate demand would prove shallow and temporary. Although output is now recovering, companies may seek initially to rebuild productivity levels rather than to hire new employees. Moreover, as the upswing in domestic and global demand now appears less vigorous and less firmly entrenched than seemed likely six to nine months ago, some companies may shed staff or delay recruitment as a consequence. Aggregate employment growth may therefore slow over the next year or so.

As prospective employment growth falls short of the increase in the working-age population, the resulting slackening in the labour market should gradually curb any upward pressure on pay. So, although nominal earnings growth is likely to rise over the next twelve months or so, pay pressures may ease subsequently. The outlook for nominal earnings growth is slightly weaker than in November, reflecting the lower-than-expected recent outturn and the more subdued prospects for aggregate demand and employment. That outweighs the impact of somewhat higher price inflation in the short term.

Labour market influences on prices are determined by unit labour costs, which encapsulate other elements of costs as well as earnings and productivity trends. The April rise in employer NICs and the possibility of some increase in employer pension contributions will add to labour costs. A cyclical recovery in productivity growth over the forecast period may help to contain the short-term rise in cost pressure. But the recovery in productivity per head may, nevertheless, be less pronounced than expected in November, reflecting slower growth in output and a judgment that average hours worked could persist at lower levels. The latter judgment will tend of itself to lead to relatively stronger employment demand at the margin and to tighter labour market conditions than otherwise. Companies are likely to smooth through cyclical fluctuations somewhat and pay more attention to the underlying trend in cost pressures in assessing the implications for prices. Taking 2003 and 2004 together, domestic cost pressures appear marginally weaker than in the November central projection.

External influences on prices may be a little stronger over the forecast period than in the recent past. The average local currency price of exports from the main industrial countries

Chart 6.2
Current RPIX inflation projection based on constant nominal interest rates at 3.75%

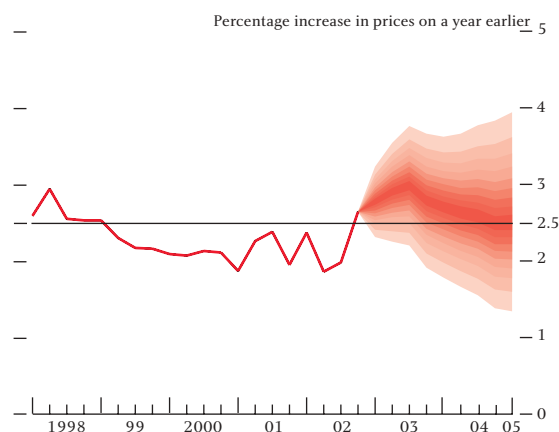
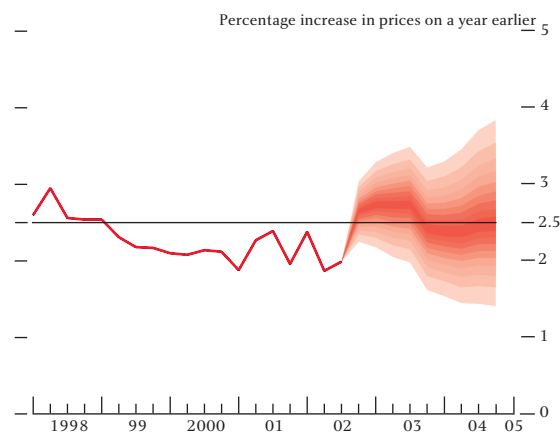


Chart 6.3
RPIX inflation projection in November based on constant nominal interest rates at 4%



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.

may edge a little higher as the global recovery gathers momentum. Moreover, the impact of higher world prices on UK import prices will be amplified by the recent depreciation of sterling. Indeed, reflecting the weaker profile for the sterling exchange rate, import prices may rise more quickly than envisaged in November.

The Committee's latest projection for the twelve-month rate of RPIX inflation is illustrated in Chart 6.2.⁽¹⁾ It is based on the assumption that official interest rates are maintained at 3.75%.⁽²⁾ The current projection is presented alongside the corresponding projection in the November *Report*, which was conditioned on the assumption of unchanged interest rates at 4%.

Inflation is likely to rise further above target in the near term as developments in the oil and housing markets remain the dominant influences. The substantial increase in oil prices in recent months has yet to feed through fully into retail prices and the additional increase in house price inflation in late 2002 will take a little time to be reflected completely in the housing depreciation component. But, as oil prices are assumed to decline in line with the futures market, and as house price inflation is expected to slow markedly, RPIX inflation is likely to fall back towards the end of this year and during 2004, declining to around the target by the two-year forecast horizon. Abstracting from the gyrations in oil and house price inflation, inflationary pressures in the economy are likely to be broadly stable over the forecast period, consistent with underlying inflation close to the inflation

(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

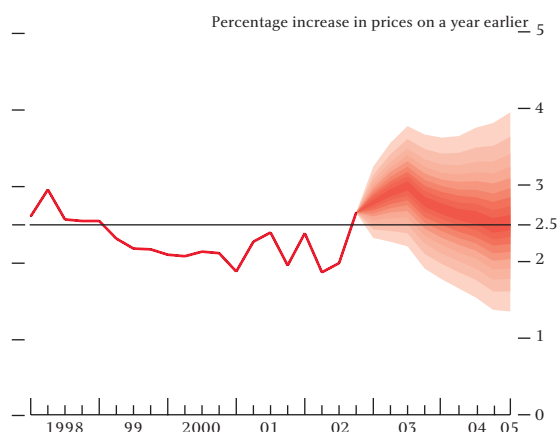
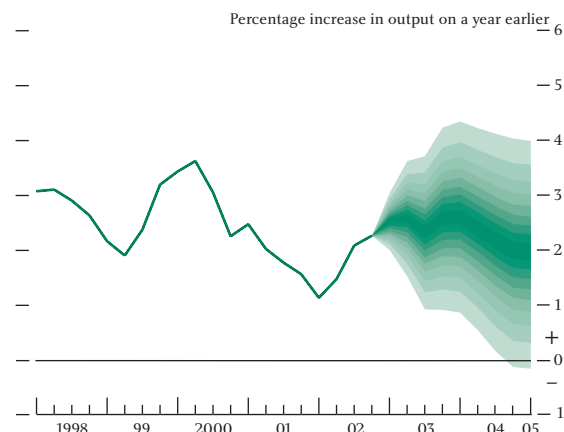


Chart 6.5
Current GDP projection based on market interest rate expectations



target, although pressures may ease slightly towards the forecast horizon given that demand is running a little below trend levels in the second year of the projection.

The short-term hump in projected inflation is more pronounced than in November, again linked to oil and housing developments, although these unusual influences gradually dissipate in the second year of the projection. External pressures on prices are also a little stronger than in the November *Report* given the lower profile for the sterling exchange rate. These factors together largely account for the slight upward revision to the inflation projection over the next twelve to eighteen months. But, reflecting the less buoyant outlook for global and domestic demand, the rather more muted prospect for domestic cost pressures dominates in the longer term. As a result, by the end of the forecast period overall inflationary pressures are easing marginally, in contrast to the projection three months ago where pressures were building slightly.

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

Per cent

2003				2004				2005
Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
4.0	3.8	3.7	3.7	3.8	3.9	4.0	4.1	4.2

(a) Based on the interest rate available on gilt-edged securities, including those used as collateral in short-term repo contracts, plus a small upward adjustment to allow for the average difference between this rate and the Bank's official interest rate. The data are 15-day averages to 5 February 2003.

Financial market participants have lowered their expectations of the likely path of UK official interest rates since the November *Report*. Adopting the same technique as in recent *Reports*, and based on market prices in the 15 working days to 5 February, participants judged that official rates could fall a little by the middle of 2003 to around 3³/₄%, or slightly below, followed by a very gradual increase during the second year of the projection—nudging back a little above 4% by the forecast horizon (see Table 6.A). Although the near-term trajectory is similar to November, the subsequent rise is much slower and gentler. The Committee's latest projections based on these market interest rate expectations are shown in Charts 6.4 and 6.5. The outlook for output growth and inflation is almost identical to that under the constant-rate

assumption. Market expectations of the future level of official interest rates fell significantly following the interest rate cut on 6 February.

There continue to be a number of major uncertainties in the global economic outlook. High levels of private sector debt and the large current account deficit in the United States remain a source of vulnerability. And there is considerable uncertainty on the possible timing and likely strength of the prospective upturn in global investment.

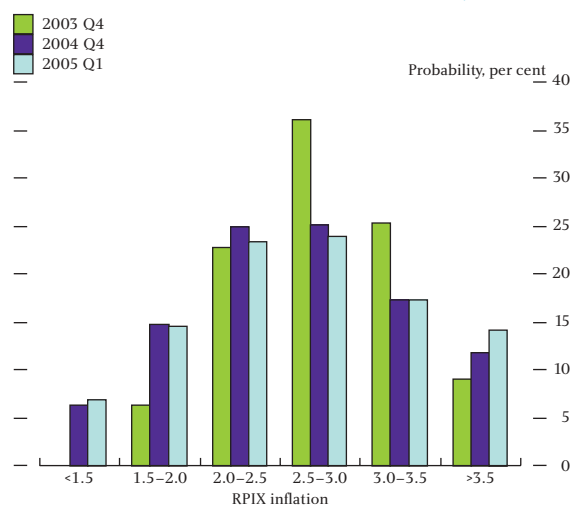
In the United Kingdom, there remain substantial risks surrounding the prospects for consumer spending. As explained in the November *Report*, these are closely interwoven with the outlook for the housing market and consumer borrowing. Current rates of house price inflation are unsustainable: the longer rapid house price inflation persists, the greater is the chance of a subsequent sharp slowdown, and the more extended is the likely adjustment needed to restore equilibrium in the market. There are risks around the central projection in both directions. Given still low rates of income gearing and high levels of housing equity, household borrowing could remain strong: in such circumstances, consumer spending could be higher and the likely slowdown in house price inflation could be somewhat less over the forecast period than currently assumed. But it is also possible that the adjustment in spending could be sharper, associated with a more abrupt change in house price inflation, if, for example, concerns about job security and prospective income growth intensified.

The Committee maintained the judgment, incorporated in previous *Reports*, that there is a risk that the impact of the forthcoming increase in National Insurance contributions could be understated in the central projection. The balance of risks to the outlook for RPIX inflation from this source is slightly upwards and to GDP growth marginally downwards.

Given the additional uncertainties surrounding the prospects of military conflict in Iraq, the Committee judges that the range of possible outcomes is unusually large at present. That judgment is reflected in the fan charts.

Notwithstanding the increase in overall risks in both directions, the Committee judges that the risks around the central projection are broadly balanced in relation to possible outcomes for the current political tensions and global prospects, and separately, for the outlook for UK consumer spending and the housing market. Reflecting the possible effects of the rise in National Insurance contributions, the overall balance of risks to the central projection for RPIX

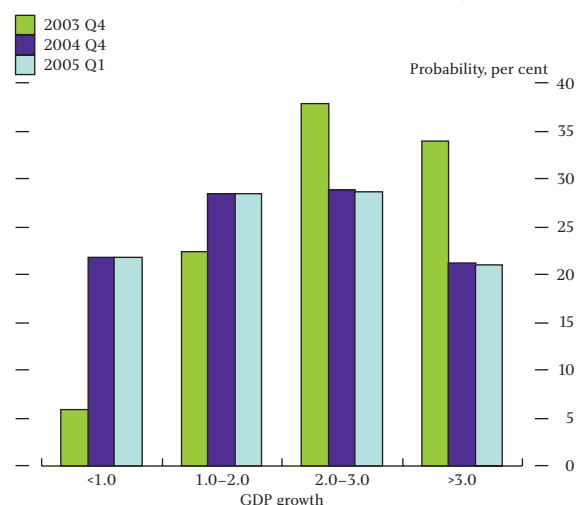
Chart 6.6
The MPC's expectations for RPIX inflation based on constant nominal interest rates at 3.75%^(a)



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 3.75%^(a)

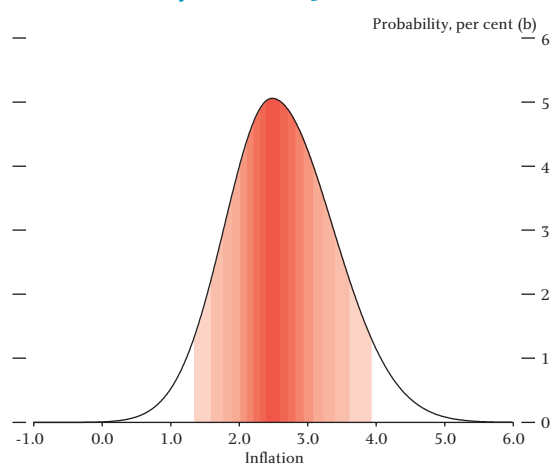


Source: Bank of England.

(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.

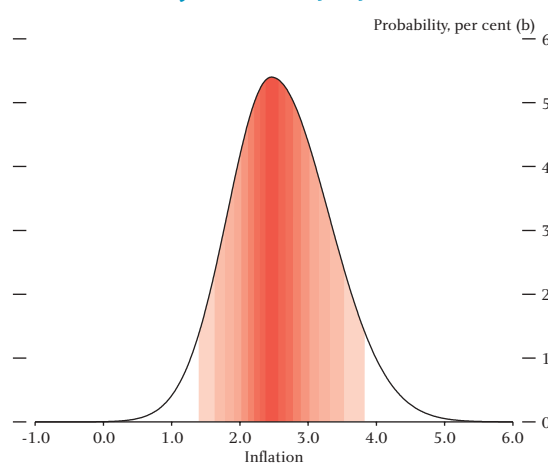
inflation is weighted a little on the upside, and that to the GDP projection marginally on the downside. The probabilities of various outcomes for RPIX inflation and GDP growth are shown in Charts 6.6 and 6.7. The overall balance of risks to the outlook for inflation at the two-year horizon is depicted in Chart 6.8, alongside the corresponding balance in the *November Report* (see Chart 6.9). The probability distribution is more dispersed than in November reflecting the increase in uncertainty. Bearing in mind the major

Chart 6.8
Current projection for the percentage increase in RPIX in the year to 2005 Q1^(a)



Source: Bank of England.

Chart 6.9
November projection for the percentage increase in RPIX in the year to 2004 Q4^(a)



(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 outturn will lie outside the shaded range. For further details on how the fan charts are constructed see the box on pages 48-49 in the May 2002 *Inflation Report*.
(b) Probability of inflation being within ± 0.05 percentage points of any given inflation rate, specified to one decimal place. For example, the probability of inflation being 2.5% (between 2.45% and 2.55%) in the current projection is around 5%.

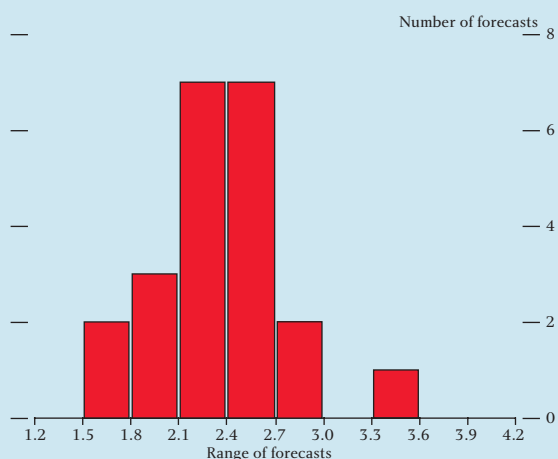
uncertainties, individual Committee members hold a range of views on the central projection, particularly regarding the speed with which inflation moderates in the second year, and on the overall balance of risks. Nevertheless, the range of opinion remains relatively narrow.

The Committee analysed the latest economic news, alongside the current projections and the risks to the outlook, at the policy meeting on 5–6 February. Without a reduction in interest rates, the Committee noted that the outlook showed a gradual easing of inflationary pressure in the medium term with RPIX inflation falling below target. The Committee therefore voted to lower the Bank's repo rate to 3.75% to keep inflation on track to meet the target over the medium term.

Other forecasters' expectations of RPIX inflation and GDP growth

In January, the Bank asked a sample of external forecasters for their latest projections of inflation and output. 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 1.8% to 3.5%), falling slightly to 2.3% in 2005 Q1 (with a range of 1.6% to 3.4%). Compared with the survey results in the November *Report*, the average forecast for inflation at the two-year horizon is slightly lower. The distribution of the central projection is also slightly flatter than in November with fewer forecasters expecting inflation to be between 2.1% and 2.7% (see Chart A). More central projections are in the range between 1.5% and 2.1% than before. On average, the external forecasters see a 59% probability of inflation being at or below 2.5% in 2005 Q1 (see the table below).

Chart A
Distribution of RPIX inflation forecasts for 2005 Q1

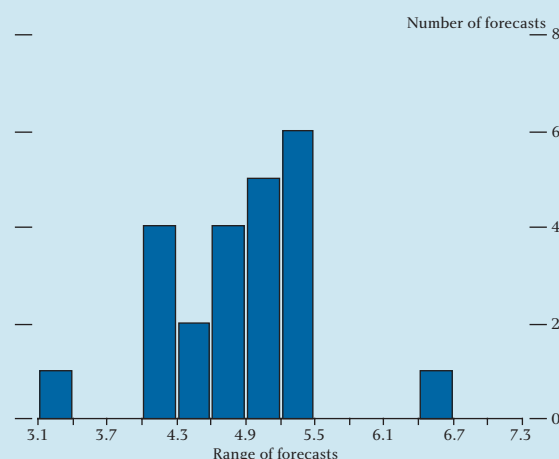


Source: Forecasts of 22 outside forecasters as of 27 January 2005.

The forecasters' average projection for four-quarter GDP growth in 2003 Q4 is 2.4% (with a range of 0.5% to 2.9%), which is somewhat lower than the 2.6% expected in November. The average projection for GDP growth in 2005 Q1 is 2.5% (with a range of 1.1% to 3.1%).

The average forecast for the official interest rate in 2003 Q4 is 4.2% (ranging from 3.0% to 4.9%), rising to 4.8% by 2005 Q1 (with a range of 3.4% to 6.5%). The forecast at the two-year horizon is somewhat lower than the average forecast in the November *Report*. On average, forecasters expect the sterling ERI to be 102.8 in 2003 Q4 (ranging from 97 to 116), falling to 101.0 by 2005 Q1 (ranging from 93 to 123.3).

Chart B
Distribution of repo rate forecasts for 2005 Q1



Source: Forecasts of 23 outside forecasters as of 27 January 2005.

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	5	17	36	27	10	5
2004 Q4	7	18	33	25	12	5
2005 Q1 (b)	8	18	32	24	12	5

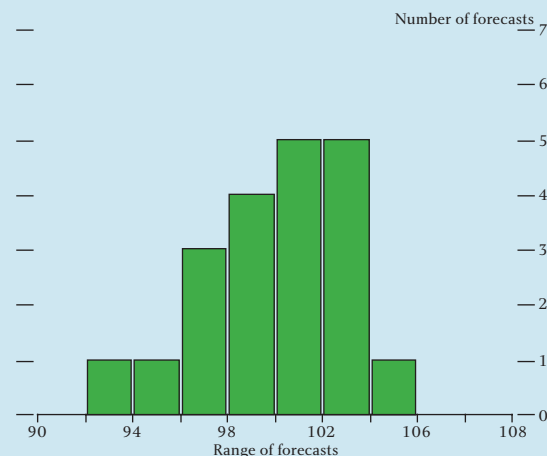
GDP growth

Probability, per cent	Range:			
	Less than 1%	1% to 2%	2% to 3%	More than 3%
2003 Q4	10	27	48	14
2004 Q4	13	25	39	24
2005 Q1 (b)	14	22	38	26

(a) 24 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 7% to inflation turning out to be less than 1.5% in 2004 Q4. Figures may not sum to 100 due to rounding.

(b) 22 forecasters.

Chart C
Distribution of sterling ERI forecasts for 2005 Q1^(a)



Source: Forecasts of 21 outside forecasters as of 27 January 2005.

(a) The highest forecast reported in the text and included in the average is not shown in this chart.

Bank of England

Agents' summary of business conditions

February 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-October and mid-January. 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.

- The nascent recovery in manufacturing output reported in the November *Summary* appears to have stalled. Strong consumer and public sector demand continued to underpin growth in some industries, but prospects weakened for a wide range of manufacturing businesses.
- Construction output remained at high levels, although growth in orders has moderated as some commercial developments were deferred or cancelled. The pace of house price increases slowed in most regions, especially for properties in the top price brackets.
- Corporate demand for some business services was constrained by the need to cut costs. In contrast, public sector and consumer demand for services continued to grow. The strongest growth in turnover was in housing-market-related services.
- Despite a slow start to Christmas trading, retail sales in December and early January were higher than a year earlier. Demand for new cars slowed towards the end of the year.
- Traditional export markets in the United States and European Union remained depressed, leading exporters increasingly to target markets in eastern Europe, Asia and Africa. Import penetration continued to grow.
- Lack of confidence about future demand and weak profitability continued to hold back non-essential capital expenditure. Some projects would be initiated during 2003 if funds allowed.
- Manufacturing margins continued to be squeezed by rising non-material input costs, which generally could not be passed on to customers in higher output prices. Price inflation eased for some business services, reflecting weakening demand.
- Retail goods price inflation remained subdued as a result of strong competition on the high street. Prices of new cars were subject to substantial discounting to support sales volumes. Prices of some consumer services were expected to increase further in response to rising labour costs. Air fares, however, continued to fall as new entrants to the industry expanded the routes they cover.
- There were further redundancies in manufacturing and financial services, although the public sector and retailers continued to expand staff numbers.
- Above-average settlements for skilled drivers, construction craftsmen and shift workers reflected continuing recruitment difficulties in these sectors. Pay settlements in many other sectors were little changed from the previous year. The rate of increase in employment costs in 2003 was expected to be higher, principally due to rising pension costs and increased National Insurance contributions.

(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

The impact of recent flooding on agriculture was not as severe as that of 2001. Overall, output of livestock and meat remained lower than before foot-and-mouth disease. Exports of beef and lamb meat began to recover modestly but exports of live lambs have not yet resumed in any quantity. Sheep and cattle prices have started to increase, but the price of milk remained below the cost of production for some farmers. Many pig farmers were also making a loss at current depressed prices. As a result, consolidation in and exits from dairy and pig farming continued.

Manufacturing

The recovery in manufacturing output reported in the previous *Agents' Summary* appears to have stalled. Earlier signs of an upturn in exports have faded, and output for the domestic market has flattened out. Contacts reported that orders had become more erratic and unpredictable with shorter delivery deadlines.

The relocation of production overseas has continued, and contacts from several industries suggested that further closure and consolidation is inevitable in UK manufacturing as a consequence of global overcapacity problems.

Production of investment goods remained weak, as companies' efforts to extend the working life of their assets led to a drop in capital goods purchases. The availability of second-hand equipment from downsizing factories also affected sales of new machinery and spares.

Agencies reported slowing orders in some parts of the automotive sector. As a result, production may well be scaled back in 2003. Strong demand for military aircraft contrasted with continued weakness in civilian aerospace, where many contacts expect no recovery in output before 2005. Demand for transport, health and defence goods remained buoyant.

Although manufacturers of consumer goods faced increasing competition from imports, many continued to report growth in output, albeit at a slower rate than six months ago. The strongest areas included chilled prepared meals, beauty and hygiene products, conservatories and fitted kitchens.

Towards the end of the reporting period, Agencies noted signs of a modest recovery in parts of the information, communications and technology (ICT) sector, boosted by

infrastructure projects in developing countries. At the same time, however, demand from the domestic financial services sector remained weak.

Construction and housing

Construction output continued at near-capacity levels in most regions. Agencies reported that work in progress would sustain many contacts throughout 2003, despite a slowing in commercial construction orders. Although building and refurbishment of retail premises continued at similar levels to a year earlier, some office and business park developments were deferred or cancelled because of weakening demand from potential occupiers. Public sector and infrastructure projects remained a major driver of orders for work relating to roads, rail, water, prisons, schools, hospitals and social housing.

Private housebuilding continued to be constrained by shortages of skilled labour and difficulties in securing planning permission. Demand for new houses remained buoyant, but city centre luxury apartments were taking longer to sell. In the secondary housing market, house price inflation slowed towards the end of the period in many regions. Prices at the top end of the market were static or easing slightly. Contacts reported that the average selling time for houses had lengthened since Spring 2002 as more properties had come on to the market. Amidst evidence of oversupply and falling rents, the buy-to-let market eased, particularly where investors were using borrowed funds.

Services

Poor profitability and increased cost consciousness led private sector clients to continue to economise on business services. Areas particularly affected included advertising, marketing, recruitment, information technology and PR services. But increased public sector expenditure on these services provided some offset. Commercial property services continued to report growth in fee income despite weaker demand for office and industrial space. Again, however, public sector demand was strong.

Financial services contacts reported continued weakness in fund management, equity trading and corporate finance. There was, however, some increase in restructuring and insolvency work, especially on behalf of manufacturing companies.

Increased regulation continued to generate business for legal advisory services, and solicitors reported a rising trend to litigation. Tax and pensions consultants noted an increase in turnover as clients sought to achieve cost savings. Outsourcing companies also increased their

turnover, on the basis of their ability to supply services to clients at below the cost of in-house provision.

Consumer services output remained relatively buoyant. Growth continued to be strongest for mortgage, credit and housing-market-related services. Spending in cinemas and on low-cost airline tickets remained robust, but there were some signs of easing demand for restaurant meals.

DEMAND

Consumption

After a slow start to Christmas retail trading, sales picked up strongly from 21 December. This late rush of spending continued into the January sales. Areas of particularly buoyant demand included audio-visual goods and digital cameras. Clothing sales were initially weaker, but recovered with the start of discounting. Reported growth in sales was slightly higher in northern regions than in London and the South.

Sales of new cars were flat to falling, compared with the previous year's high level. Used car sales, in contrast, strengthened towards the turn of the year as more nearly-new vehicles came onto the market.

Exports and imports

The US, EU and Japanese markets for consumer and capital goods remained weak, with Germany frequently cited as the most depressed market. Exporters were increasing sales in growing markets in eastern Europe, Asia and Africa. Exports of electronics and luxury goods to China were rising rapidly. Exports of components and heavy plant also increased as customers relocated production overseas.

Import penetration from Asia and Europe continued to rise and in some cases weakness in traditional markets has led to concerted targeting of the UK market. At the same time, the shift of production overseas resulted in imports of goods that were previously manufactured domestically. The weakness of the US dollar led UK retailers to purchase an increasing proportion of clothing abroad. Technological advances also allowed businesses to extend their use of overseas suppliers for accounting operations, software development and printing requirements.

Investment

Capital expenditure continued to be constrained by low profitability, doubts about future demand levels and growing international tensions. Many manufacturing and business services companies were authorising only

essential capital expenditure for 2003, intending to decide on other investment projects on the basis of profitability during the year. Some companies' investment was below depreciation levels and several contacts had shelved planned IT upgrades.

Some manufacturers were using investment budgets for acquisition as UK industrial consolidation continued; others were directing investment overseas, expanding capacity in lower-wage economies. Bankruptcy sales encouraged some purchases of second-hand machinery. Increased uncertainty about future demand and restrictions on capital expenditure led some companies to lease equipment for the length of a particular contract rather than buy it.

Retailers continued to invest strongly in warehousing, new stores and refurbishments. Firms serving retailers, including food processors, were also investing. Port facilities continued to expand and investment in regional airports resumed following a recovery in passenger numbers. But investment in many leisure facilities eased towards the end of the year.

COSTS AND PRICES

Input prices

There was a slight increase overall in the price of material inputs. Prices of oil derivative products, such as plastics, were expected to increase as a result of rising oil prices. But the recent weakness of the dollar against sterling reduced purchase costs of some imported materials.

Rising non-material costs continued to erode margins. Insurance premia for employers' liability, professional indemnity and public liability cover increased sharply again this year. Contacts also reported increases in the cost of compliance with increasing amounts of health and safety, environmental and employment legislation. Transport costs also rose. But companies were able to achieve savings in the costs of motor vehicle insurance, energy and telephone services as competition between providers had increased.

Output prices

Manufacturers continued to face resistance to price increases in domestic and export markets. The strengthening of the euro allowed some small price increases in sterling terms in EU markets, but elsewhere dollar-denominated export prices had to be trimmed to maintain sales.

Component manufacturers in the electronic, aerospace and automotive sectors continued to have to lower prices

on renewal of contracts. Internet auctions were still driving down prices for standardised goods. Manufacturers could generally only increase margins on new or niche products.

Many business service sector prices were also subdued. Rates for printing, advertising, IT services and shipping were lower compared with a year earlier. Accountants faced resistance to fee increases from clients who were increasingly willing to shop around.

Retail prices

High stock levels led to pre-Christmas discounting of clothing and footwear. For other retail goods, discounting in end-of-year sales was no earlier or deeper than the previous year. Agencies reported that competition from supermarkets was driving price declines in clothing, cosmetics and pharmaceuticals, and keeping food price inflation subdued.

Car prices continued to edge down and substantial discounts and cashbacks were offered in an attempt to maintain sales volumes.

Greater competition in provision resulted in falling air fares. More labour intensive services, such as care homes, expected to raise charges significantly in 2003 to reflect increased costs. In London, some contacts expected to pass on in higher prices the cost of the congestion charge.

Pay

Settlements remained subdued in most manufacturing and services subsectors. Contacts were concerned that negotiations with unions had become more protracted over the past few months, and that higher public sector settlements were raising expectations. But Agencies also reported realism in demands from workforces who knew profitability was weak. A number of firms in manufacturing and financial services made no award in

2002. At the other end of the scale, many estate agents and construction workers received double-digit pay rises. Train and HGV drivers also secured high single or double-digit increases. Shortages of shift workers, including security guards, hotel staff and call centre operatives led to awards of 4% or more in some regions.

Employment costs as a whole were expected to rise at a faster rate than settlement figures in 2003. Less overtime pay and reduced bonuses were expected to be outweighed by significantly higher employer contributions to pensions and the forthcoming increase in employers' National Insurance contributions.

EMPLOYMENT

Overall, the labour market appeared to have eased a little further during the past three months. Public sector employment continued to expand, as did numbers employed in retail, transport and leisure services. But employee numbers fell further in manufacturing and parts of the business services sector as a result of redundancies and natural wastage. The continuing shift of manufacturing plants and services, such as call centres, overseas also resulted in redundancies. At the same time, consolidation within UK manufacturing and financial services reduced the number of management and other staff required. In sectors where margins have been under pressure, contacts expected to have to shed labour to offset the cost of funding pension scheme deficits and the forthcoming rise in National Insurance contributions.

Although retention of staff had become less of a problem as the labour market eased, some recruitment difficulties persisted. Shortages of skilled staff remained acute in construction, haulage, health and electrical engineering. Companies reported less difficulty than in the past in recruiting legal, IT and accountancy staff. Shortages of labour in areas such as security, cleaning, construction, catering and care work continued to encourage recruitment of immigrant workers.

Text of Bank of England press notice of 5 December 2002

Bank of England maintains interest rates at 4.0%

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

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

Text of Bank of England press notice of 9 January 2003

Bank of England maintains interest rates at 4.0%

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

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

Text of Bank of England press notice of 6 February 2003

Bank of England reduces interest rates by 0.25% to 3.75%

The Bank of England's Monetary Policy Committee today voted to reduce the Bank's repo rate by 0.25% to 3.75%.

The Committee reviewed monetary and economic developments in the light of its latest quarterly projections for output and inflation, to be published in the February *Inflation Report*.

RPIX inflation has, as expected, moved a little above target, but this is the result of temporarily large contributions from petrol prices and from housing depreciation. These influences on inflation will persist for some time but are expected to unwind further ahead.

Over the next two years, the prospects for demand, both globally and domestically, are somewhat weaker than previously anticipated. In order to keep inflation on track to meet the target over the medium term, the Committee judged that it was necessary to reduce interest rates by 0.25%.

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

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

Glossary and other information

Glossary of selected data

CBL: commercial bank liability.

CSPI: corporate services price index.

ERI: exchange rate index.

GDP: gross domestic product.

LFS: Labour Force Survey.

M0: 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.

PPIY: manufacturing output price index excluding excise duties.

RPI inflation: inflation measured by the retail price index.

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

RPIY inflation: inflation measured by the RPI 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.

TPI: tax and price index.

Abbreviations

ATM implied volatility: at-the-money implied volatility.

BCC: British Chambers of Commerce.

CBI: Confederation of British Industry.

CIPS: Chartered Institute of Purchasing and Supply.

ECB: European Central Bank.

EU: European Union.

FTSE: Financial Times Stock Exchange.

GAD: Government Actuary's Department.

GC: general collateral.

GfK: Gesellschaft für Konsum, Great Britain Ltd.

HBF: House Builders Federation.

ICT: information, communications and technology.

IDS: Incomes Data Services.

ILO: International Labour Organisation.

IPS: International Passenger Survey.

IRS: Industrial Relations Services.

IT: information technology.

LIFFE: London International Financial Futures and Options Exchange.

MPC: Monetary Policy Committee.

NICs: National Insurance contributions.

ODPM: Office of the Deputy Prime Minister.

OECD: Organisation for Economic Co-operation and Development.

OFCs: other financial corporations.

ONS: Office for National Statistics.

OPEC: Organization of the Petroleum Exporting Countries.

PBR: Pre-Budget Report.

PNFCs: private non-financial corporations.

S&P: Standard and Poor's.

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.