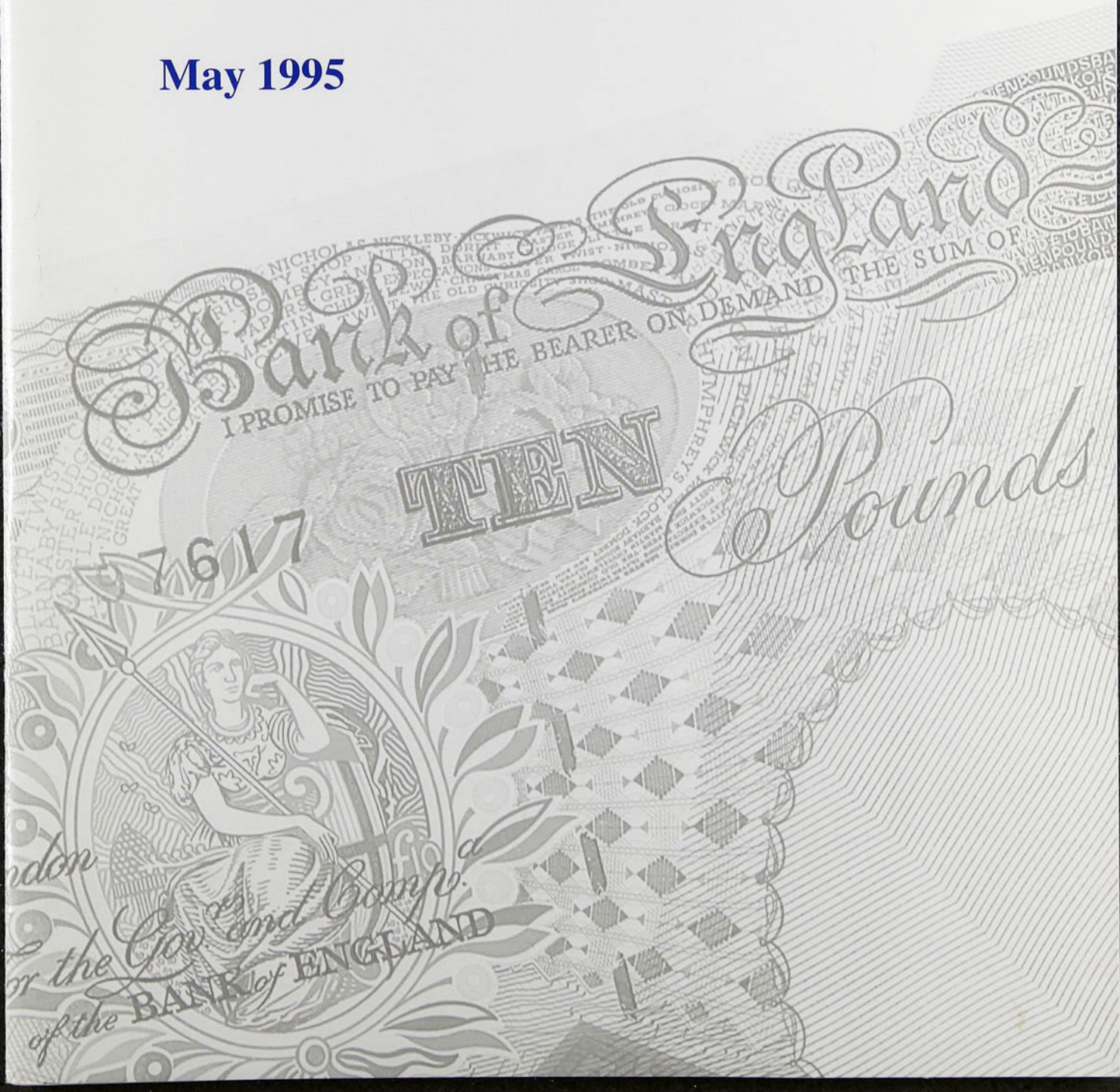
Bank of England

# Inflation Report

May 1995



# Inflation Report

## May 1995

## Symbols and conventions

Except where otherwise stated, the source for the data used in charts and tables is the Central Statistical Office.

.. not available.
— nil or less than half the final digit shown.
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.


Printed by Park Communications Ltd



ISBN 1 85730 048 3
ISSN 1353–6737

# Summary

Most measures of inflation increased a little over the past quarter. The Government's target measure of inflation—the twelve-month rise in the retail prices index excluding mortgage interest payments (RPIX)—was 2.8% in March, up from 2.5% in December. The RPIY measure of underlying inflation, which excludes indirect taxes, has also edged up.

Output growth in the economy as a whole was strong in the year to 1995 Q1. Although it slowed in the second half of 1994, it has shown no clear sign of moderating since then. Evidence of the dual nature of the economic recovery is compelling. Sectors dependent on tradable goods and services, which include industries as diverse as manufacturing and business services, have experienced strong growth in output over the past year. In the non-tradables sectors, however, the picture is very different, particularly for those industries dependent on domestic consumer demand.

Taking the evidence as a whole, it is likely that the growth of GDP remains significantly above any realistic assessment of trend. But the principal change in the central projection for RPIX inflation since the February *Report* is the increase in inflation over the next year or so resulting from a lower exchange rate. There is no mechanical link between changes in the exchange rate and the inflation rate. Different assumptions about the reasons for the fall in the exchange rate lead to different conclusions about the speed and extent to which the fall will feed through to higher domestic prices. **Given the Bank's assessment of the reasons for the fall in sterling, the new central projection shows a temporary rise in inflation—taking the twelve-month rate of RPIX inflation close to the top of its 1%–4% target range next year and remaining in the upper half of the target range two years ahead.**

Given the uncertainties, the risks to the inflation outlook are large. **Although the central projection for inflation two years ahead has risen only modestly since the February *Report*, that revision is in the upwards direction, and the risks remain on the upside as they were then. In these circumstances, although the projected rise in inflation does not persist, it is particularly important that monetary policy does not accommodate any second-round effects on wages and prices.**

# Recent developments in inflation 1

## 1.1 Retail prices

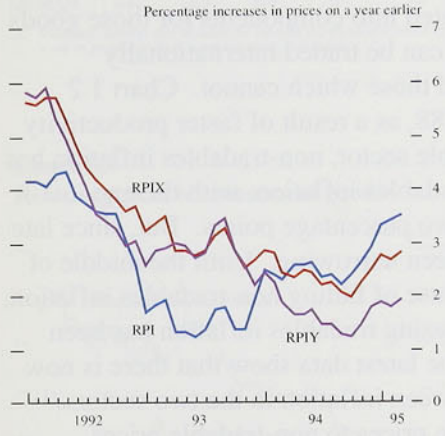
Both short-run and twelve-month measures of inflation have risen since the time of the February *Inflation Report*.(1) The Government's target measure of inflation—the twelve-month rise in the retail prices index excluding mortgage interest payments (RPIX)—was 2.8% in March, up from 2.5% in December and above the mid-point of the target range of 1%–4%. The increase in headline retail prices was greater: RPI inflation rose from 2.9% in December to 3.5% in March.

As expected, increases in indirect taxes, such as excise duties, added to inflation in the first quarter. But the RPIY measure of underlying inflation, which excludes indirect taxes, has also edged up on a twelve-month basis. It was 1.9% in March, compared with 1.8% in December (see Chart 1.1).

Changes in twelve-month inflation rates reflect price changes a year ago as much as more recent developments. Although twelve-month RPIX inflation rose significantly between December and January, the actual index was unchanged on the month. The increase in twelve-month inflation was the result of a large fall in the index between December 1993 and January 1994. By contrast, between February and March 1995, RPIX increased by 0.4%, while twelve-month inflation rose only slightly.

Short-run measures of inflation can provide a better guide to recent developments—if adjusted properly for seasonal effects—because they are unaffected by events a year earlier. Table 1.A shows how short-run measures of underlying inflation dipped in the middle of 1994, but have since picked up. The seasonal adjustment to RPIX will not fully account for the impact of indirect tax changes, since these have recently occurred at different times of the year, as a result of changes in the timing of Budgets, and differ in amount from one year to another. RPIY inflation is probably a better guide to inflation in

**Chart 1.1**
**Inflation**




RPIX = Retail prices index excluding mortgage interest payments.
RPIY = RPIX excluding VAT, local authority taxes and excise duties.

**Table 1.A**
**Short-run measures of inflation**

Percentage changes (a)

| | 1994 | | | | 1995 | | |
|---|---|---|---|---|---|---|---|
| | Mar. | June | Sept. | Dec. | Jan. | Feb. | Mar. |
| RPI | | | | | | | |
| 3-month | 2.3 | 2.5 | 2.5 | 4.3 | 5.8 | 5.8 | 4.8 |
| 6-month | 1.9 | 2.4 | 2.5 | 3.4 | 4.2 | 4.2 | 4.5 |
| RPIX | | | | | | | |
| 3-month | 2.6 | 1.2 | 2.6 | 3.4 | 5.1 | 4.9 | 4.0 |
| 6-month | 2.2 | 1.9 | 1.9 | 3.0 | 3.6 | 3.5 | 3.7 |
| RPIY | | | | | | | |
| 3-month | 2.3 | 1.5 | 1.7 | 1.6 | 2.9 | 3.1 | 2.8 |
| 6-month | 0.9 | 1.9 | 1.6 | 1.7 | 2.1 | 2.0 | 2.2 |
| HARP | | | | | | | |
| 3-month | 3.6 | 0.3 | 1.7 | 2.4 | 4.5 | 4.9 | 3.9 |
| 6-month | 2.1 | 2.0 | 1.0 | 2.1 | 2.7 | 2.9 | 3.1 |
| THARP | | | | | | | |
| 3-month | 3.3 | 0.2 | 0.7 | 1.0 | 2.8 | 3.0 | 3.4 |
| 6-month | 1.1 | 1.7 | 0.5 | 0.8 | 1.4 | 1.5 | 2.2 |

Sources: CSO and Bank calculations.

(a) The change between latest month and three/six months earlier (seasonally adjusted and annualised). The natural logarithms of the price series were seasonally adjusted using a Kalman filter to decompose the series into trend, cyclical, irregular and seasonal components.

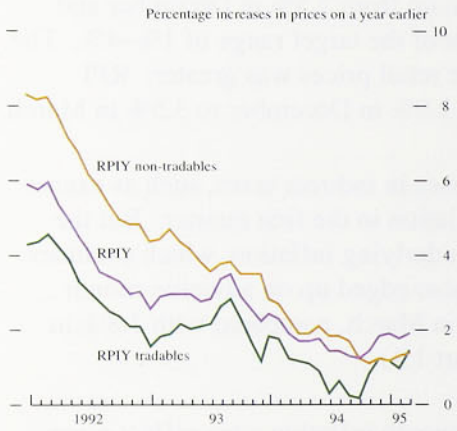
(1) There have been several changes relating to retail prices indices since the February *Inflation Report*. First, the Central Statistical Office is now responsible for calculating RPIY. Second, the recommendations of the RPI Advisory Committee on the treatment of cars and housing costs have been implemented. Third, data for the RPI are now collected by Research International Limited.

the short run. On short-run measures, RPIY inflation rose significantly in January, but has remained broadly stable since then.

It is clear that consumers remain bargain-conscious. A breakdown of the retail price data shows that clothing and footwear prices fell by 0.7% over the year to March, with the result that the volume of sales was pushed up by almost 3.1%. By contrast, in the household goods sector prices rose by 2.7% over the year and sales volumes were up only 1.5%.

RPIY can be separated into components for those goods and services which can be traded internationally relatively easily and those which cannot. Chart 1.2 shows that since 1988, as a result of faster productivity growth in the tradable sector, non-tradables inflation has been higher than tradables inflation, with the gap averaging around two percentage points. But, since late 1991, the gap has been narrowing. Until the middle of 1994, this was because of falling non-tradables inflation, but since then increasing tradables inflation has been more important. The latest data show that there is now little difference between inflation in the two sectors.(1) The ratio of tradable prices to non-tradable prices (seasonally adjusted) has increased a little since late 1994.

**Chart 1.2**
**RPIY inflation**




Sources: CSO and Bank calculations.

## 1.2 Output prices

Domestic manufacturing output price inflation has also risen since the end of 1994. For several months, output prices—excluding the food, drink, tobacco and petroleum-refining sectors—have risen by around 0.4% a month. As a result, the twelve-month inflation rate increased from a recent low of 1.9% in the middle of 1994 to 3.0% at the end of 1994, and 3.9% by March 1995. All-industry output price inflation was 3.8% in March, compared with 2.8% in December. Shorter-run measures of output price inflation, excluding food, drink, tobacco and petroleum, have increased more rapidly, and the three-month measure now stands at 5.0%.

## 1.3 Expenditure deflators

The annual rates of increase in the implied price deflators for the main expenditure components of GDP

(1) Total RPIY inflation is now higher than both tradables and non-tradables inflation; it includes rent, water charges and seasonal foods, which are excluded from both sub-indices.

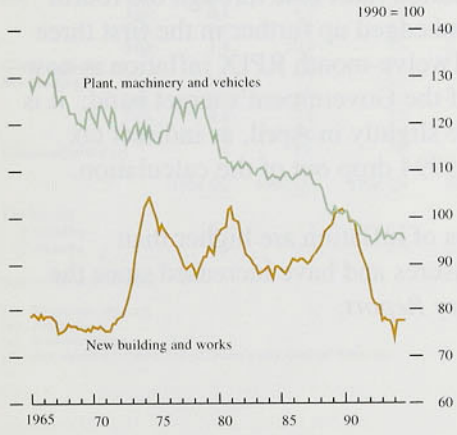
**Table 1.B**
**Expenditure deflators (market prices)**

Percentage changes on a year earlier

| | Consumption | Investment | Government | Domestic demand (a) | Exports | Imports | GDP |
|---|---|---|---|---|---|---|---|
| 1993 | 3.5 | 0.5 | 4.2 | 3.2 | 9.1 | 8.3 | 3.3 |
| 1994 | 2.5 | 1.3 | 2.5 | 2.3 | 0.8 | 1.9 | 2.0 |
| Seasonally adjusted growth rates | | | | | | | |
| 1993 Q1 | 3.6 | -0.5 | 6.2 | 3.6 | 10.3 | 9.0 | 3.8 |
| Q2 | 3.5 | 0.6 | 4.4 | 3.2 | 9.0 | 10.4 | 2.9 |
| Q3 | 3.6 | 1.1 | 3.0 | 3.2 | 10.7 | 10.9 | 3.0 |
| Q4 | 3.2 | 0.7 | 3.2 | 2.9 | 6.6 | 3.3 | 3.7 |
| 1994 Q1 | 2.7 | 0.9 | 2.4 | 2.4 | — | -0.9 | 2.7 |
| Q2 | 2.5 | 0.5 | 2.2 | 2.0 | 1.0 | 1.7 | 1.8 |
| Q3 | 2.4 | 1.4 | 2.8 | 2.3 | 0.9 | 3.0 | 1.7 |
| Q4 | 2.5 | 2.4 | 2.5 | 2.5 | 1.3 | 3.6 | 1.9 |
| Q3 on Q2 | 0.6 | 1.2 | 0.8 | 0.7 | 0.9 | 1.6 | 0.4 |
| Q4 on Q3 | 0.6 | 0.5 | 0.6 | 0.7 | — | -0.6 | 0.9 |

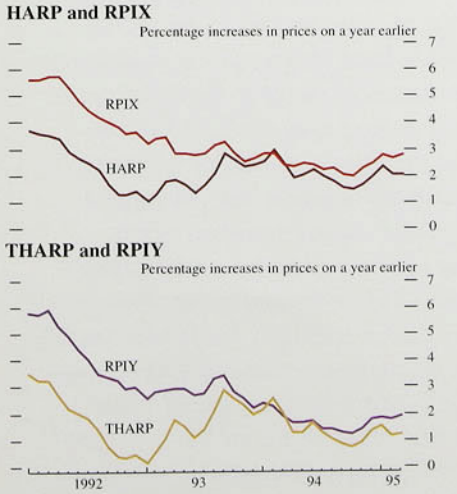
(a) Domestic demand also includes the value of the physical increase in stocks and work in progress, which is not included in this table.

**Chart 1.3**
**Relative prices of investment goods**(a)




(a) Price deflators relative to the GDP deflator.

**Chart 1.4**
**Housing-adjusted inflation rates**




Sources: CSO and Bank of England.

are shown in Table 1.B. These are comprehensive measures of inflation, but are less timely and more prone to revision than other series. The rate of increase of the GDP deflator rose from 1.7% in the year to 1994 Q3 to 1.9% in the year to 1994 Q4, in line with RPIY inflation. The consumers' expenditure deflator rose by 0.6% in each of the third and fourth quarters; indeed, its annual rate of change remained almost constant throughout 1994. The domestic demand deflator has been increasing faster than the GDP deflator on a four-quarter basis. The export and import deflators have been particularly volatile.

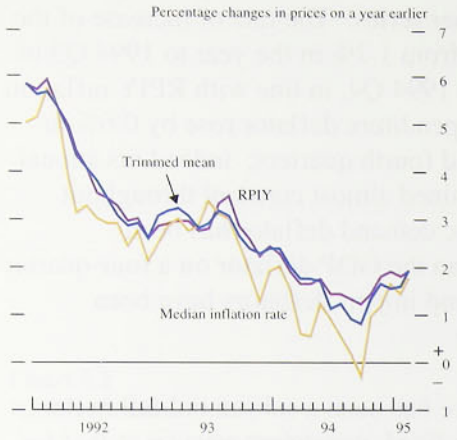
In recent years, there has been a substantial fall in the implied deflator for fixed investment relative to that for GDP, largely as a result of the sharp drop in construction prices, both residential and—particularly—non-residential. Since the first quarter of 1990, the GDP deflator has risen by 20%, while the deflator for investment in new building and works has fallen by almost 17% (see Chart 1.3). The deflator for other non-residential investment—in plant, machinery and vehicles—has increased by 14%, six percentage points less than the GDP deflator. This relative movement means that the investment-to-GDP ratio measured in current prices has fallen much more than that measured in constant prices.

## 1.4 Other measures of inflation

The Bank has calculated two price indices which account better than the RPI for the cost of owner-occupied housing. The housing-adjusted RPI (HARP) replaces the CSO's estimate of housing depreciation with a Bank estimate of the user-cost of housing. The THARP index adjusts RPIY in a similar fashion. As house prices have been subdued recently, HARP and THARP inflation rates have been a little below those for RPIX and RPIY (see Chart 1.4).

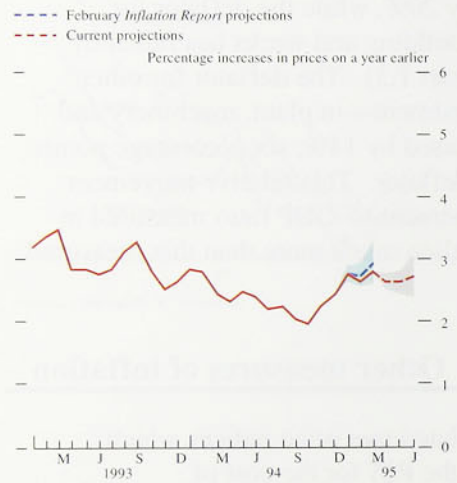
Inflation measured using RPIX and RPIY excludes the effect on prices of changes in interest rates and indirect taxes. However, some of the component prices that remain are either particularly volatile or change by large amounts at irregular intervals, disrupting the relationship between measured and underlying inflation. Two measures which attempt to correct for this are the weighted median and the trimmed-mean inflation rates. The median inflation measure uses all the component series of RPIY to compute a median inflation rate, whereas the trimmed-mean rate excludes the largest and

**Chart 1.5**
**Alternative measures of inflation**




Sources: CSO and Bank of England.

**Chart 1.6**
**RPIX inflation projections and outturns**




Sources: CSO and Bank of England.

The range is defined as the central projection plus or minus the average absolute error on such projections in the past.

smallest 15% of price changes. Chart 1.5 shows these measures: both show a more marked pick-up since October 1994 than does RPIY, but from a lower base. At low levels of inflation, it is not surprising that the distribution of price increases across the components of RPIY is skewed upwards, with several large price increases but few absolute price cuts. In these circumstances, the median price increase will be lower than the mean price increase.

Twelve-month RPIX inflation is likely to fall slightly in April. The effect of the introduction of VAT on fuel will drop out of the index, more than offsetting increases in Council Tax and rents. RPIX inflation will probably then be broadly stable in May and June (Chart 1.6).

## 1.5 Summary

Twelve-month inflation rates rose through the fourth quarter of 1994, and edged up further in the first three months of 1995. Twelve-month RPIX inflation is now in the upper half of the Government's target band; it is expected to decline slightly in April, as indirect tax increases in April 1994 drop out of the calculation.

Short-run measures of inflation are higher than twelve-month measures and have increased since the time of the February *Report*.

# Money and interest rates 2

## 2.1 Money and credit aggregates(1)

Short-run measures of narrow money growth have turned up since the time of the February *Report,* and the twelve-month growth rate of M0 has continued to be above its 0%–4% monitoring range. Broad money growth has also increased since then, but the twelve-month growth rate has remained in the lower half of its 3%–9% monitoring range. Credit growth has continued to revive: M4 lending increased by 6.1% in the year to March, the highest rate for three years (see Table 2.A).

**Table 2.A**
**Growth rates of monetary aggregates(a)**

Per cent

| | | 1 month | 3 months (b) | 6 months (b) | 12 months |
|---|---|---|---|---|---|
| Notes and coin | Jan. | 0.2 | 3.4 | 4.9 | 5.9 |
| | Feb. | 0.5 | 4.0 | 4.8 | 6.1 |
| | Mar. | 0.5 | 4.5 | 4.5 | 5.9 |
| | Apr. | 0.5 | 6.0 | 4.7 | 5.7 |
| M0 | Jan. | -0.1 | 3.3 | 5.1 | 6.5 |
| | Feb. | 0.4 | 4.3 | 5.6 | 6.1 |
| | Mar. | 1.0 | 5.6 | 5.6 | 7.0 |
| | Apr. | 0.4 | 7.8 | 5.5 | 6.2 |
| M4 | Dec. | 0.5 | 5.2 | 4.3 | 4.5 |
| | Jan. | 0.4 | 6.7 | 5.0 | 4.5 |
| | Feb. | 0.6 | 6.1 | 5.5 | 4.6 |
| | Mar. | 1.4 | 10.0 | 7.6 | 5.5 |
| *Glaxo adjusted* (c) | | ½ | 6 | 5½ | 4½ |
| M4 lending | Dec. | 0.6 | 7.1 | 6.1 | 4.7 |
| | Jan. | 0.7 | 8.7 | 6.8 | 5.4 |
| | Feb. | 0.6 | 7.9 | 7.2 | 5.7 |
| | Mar. | 1.3 | 10.6 | 8.8 | 6.6 |
| *Glaxo adjusted* (c) | | ¼ | 8½ | 7¼ | 6 |

| | 1994 Q2 | 1994 Q3 | 1994 Q4 | 1995 Q1 |
|---|---|---|---|---|
| Divisia (d) | | | | |
| 3 months | 0.2 | 1.1 | 0.5 | 1.6 |
| 12 months | 4.5 | 4.5 | 3.5 | 3.4 |

Source: Bank of England.

(a) Seasonally adjusted.
(b) Annualised.
(c) Rounded values.
(d) Not adjusted for the effect of Glaxo's take-over of Wellcome.

### *Narrow money*

Short-run measures of narrow money have increased in each month since the February *Report*. On a three-month annualised basis, notes and coin increased at 6.0% in April, compared with 3.4% in January. M0 rose at 7.8% in April on a similar basis, more than double the 3.3% rate recorded in January, when it was the lowest for 20 months. The twelve-month growth rate of M0 was 6.2% in April, down slightly from 6.5% in January.

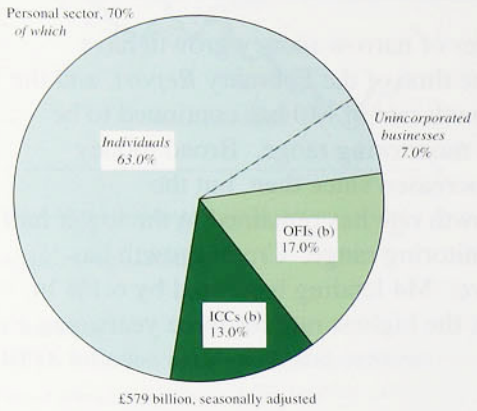
The reductions in interest rates between September 1992 and February 1994 had been expected to increase narrow money growth by reducing the opportunity cost of holding non interest bearing money, and hence to slow the rate at which cash changes hands. This seems to have happened during 1993 and 1994, but the effect of lower interest rates on narrow money velocity probably started to wear off towards the end of last year, when short-run measures of narrow money growth dropped sharply.

Recent movements in notes and coin have tracked the value of retail sales quite closely, re-establishing a historical pattern. This suggests that interest rate effects on narrow money velocity are currently neutral. It could be that the effects of previous cuts in interest rates are now being fully offset by the more recent interest rate

(1) Unless otherwise stated, references to M4 and M4 lending exclude the effects of securitisations and loan transfers. The Glaxo/Wellcome take-over in March inflated M4, M4 lending figures and Divisia temporarily; for this reason, the estimated impact of the Glaxo take-over is also excluded and March data are rounded to the nearest quarter of a percentage point or quarter of a billion pounds.

rises. If this is the case, narrow money growth should soon drop again, as recent increases in official rates start to have a greater effect and investors switch from cash into higher-yielding deposit accounts. In the past, M0 growth has been a better statistical leading indicator of inflation than have retail sales, perhaps because M0 measures economic activity more accurately. However, at the moment, one reason why M0 growth might exceed that of retail sales is the introduction of the National Lottery—and this activity is unlikely to be inflationary, as Section 3 explains.

**Chart 2.1**
**Shares of stock of M4 as at 1995 Q1(a)**




Source: Bank of England.

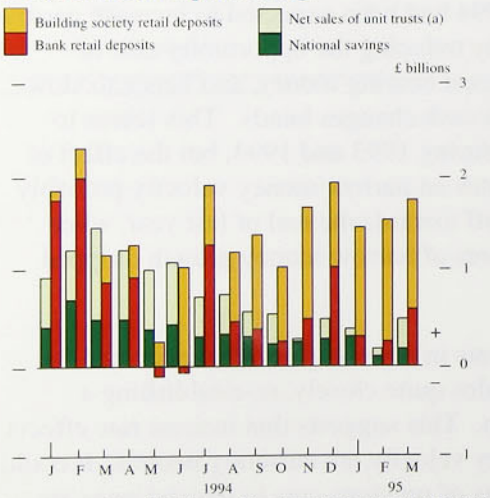
(a) Q1 data exclude the effect of Glaxo's take-over of Wellcome.
(b) OFIs are other financial institutions; ICCs are industrial and commercial companies.

*Broad money*

Broad money has started to increase more rapidly on short-run measures. The March data are particularly difficult to interpret as they are inflated by Glaxo's take-over of Wellcome; but even if the effect is stripped out, the three-month annualised rate of M4 growth was 6% in March, compared with 5.2% in December. It is now clear that, on short-run measures, broad money growth reached a trough in the summer of 1994. The twelve-month rate of M4 growth has remained at around 4.5% since November.

Broad money is used both as a store of value and a means of payment. Increases in M4 deposits may indicate higher future spending, because they signal either increases in wealth or a rise in planned spending. A breakdown of the data between different types of agent is helpful in disentangling the motives for holding money in bank and building society deposits, and can shed light on what will happen to economic growth and future inflation. Chart 2.1 shows the proportion of M4 deposits held by different sectors.

**Chart 2.2**
**Personal sector liquid savings**

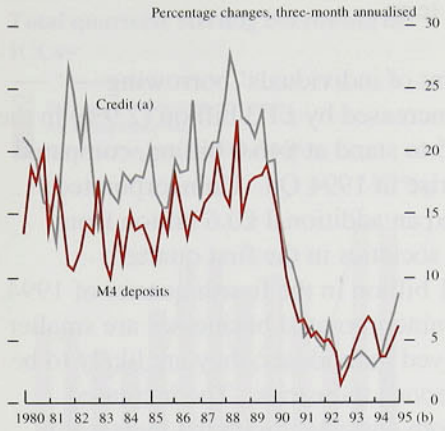



Sources: Association of Unit Trust and Investment Funds and Bank of England.

(a) Not seasonally adjusted.

Individuals' holdings of bank and building society deposits rose by £4½ billion (1.3%) in the first quarter of 1995, the strongest quarterly increase for three years; this was significantly higher than the £3.1 billion increase recorded in the fourth quarter of last year. In the past, a rise in personal deposits has presaged a pick-up in spending on durable consumer items. However, the strong rise in building society deposits suggests that depositors are reluctant to run down their savings in case they gain financially from their society being taken over or becoming a public limited company. Alternatively, they may be switching out of other assets, such as unit trusts and National Savings (see Chart 2.2).

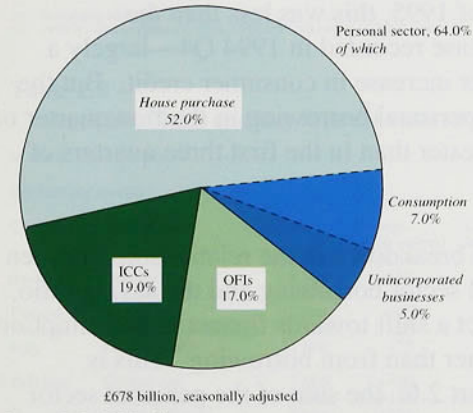
**Chart 2.3**
**Growth rates of M4 deposits and credit**




Source: Bank of England.

(a) Bank and building society lending to the private sector.
(b) 1995 Q1 data exclude the effect of Glaxo's take-over of Wellcome.

**Chart 2.4**
**Shares of stock of bank and building society credit as at 1995 Q1**(a)

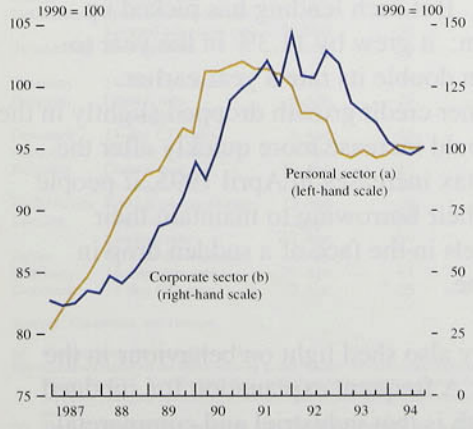



£678 billion, seasonally adjusted

Source: Bank of England.

(a) Q1 data exclude the effect of Glaxo's take-over of Wellcome.

**Chart 2.5**
**Personal and corporate sector gross debt as a proportion of income**




(a) Gross financial liabilities as a proportion of personal disposable income.
(b) Gross debt (at market value) as a proportion of post-tax income.

Industrial and commercial companies (ICCs) decreased their holdings of M4 deposits by £1 billion (1.4%) in the first quarter, the first reduction for more than two years. It could be that companies have drawn down their bank deposits to finance investment. Indeed, as Section 3 notes, investment in manufacturing has already picked up strongly.

Bank and building society *lending* is increasing more rapidly than M4 deposits, and rose at a three-month annualised rate of 8½% in March, up from 7.1% in December (see Chart 2.3). Part of the reason for strong credit growth is because the demand for credit will have increased as the recovery matured. Falling debt ratios in the corporate sector have reduced the incentive to repay debt; there was substantial stockbuilding during 1994; and investment has begun to accelerate. At the same time, commercial banks may have become keener to find good new lending opportunities.

A sectoral analysis of bank and building society lending is useful. Chart 2.4 breaks down lending by sector. Total net personal sector borrowing from banks and building societies increased by £6.8 billion (1.6%) in the first quarter of 1995 to £433.1 billion, slightly greater than the rise recorded in the fourth quarter of 1994. Of this, around 90% is lending to individuals—some of which is for house purchase and the rest for other consumption—and around 10% is lending to unincorporated businesses (which are part of the personal sector for statistical purposes).

Lending to individuals by banks and building societies increased by £6.2 billion (1.6%) in the first quarter of 1995 to stand at £397.0 billion. This was slightly less than the £6.6 billion rise recorded in the fourth quarter, which was a three-year high. A significant influence on individuals' borrowing is the state of the housing market. As Chart 2.5 shows, the personal sector's gross debt fell slightly as a proportion of income between 1991 and 1993, as it was affected by one-off repayments of mortgages and possessions by mortgage lenders. Since then, it has increased modestly. Borrowing for house purchase (or secured against housing)—which accounts for 90% of all individuals' borrowing—has grown relatively slowly during the upturn. During the first quarter of 1995, mortgage lending by banks and building societies was only slightly down on 1994 Q4, but significantly lower than in the first quarter of 1994, reflecting the continued weakness of the housing market. Given recent falls in house prices (see Section 3) and the

effects of weak prices on the amount of available collateral, mortgage lending is unlikely to pick up sharply in the short term.

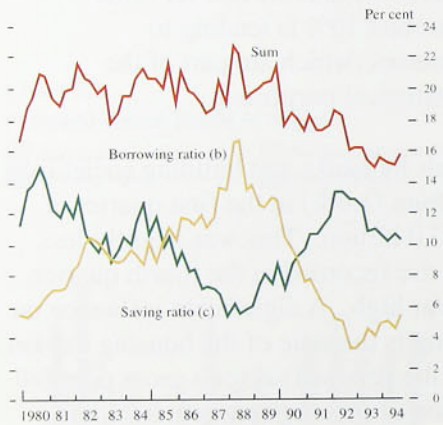
The other component of individuals' borrowing—consumer credit—increased by £1.3 billion (2.9%) in the first quarter of 1995 to stand at £46.0 billion, compared with a £1.4 billion rise in 1994 Q4. Unincorporated businesses borrowed an additional £0.6 billion from banks and building societies in the first quarter, compared with £0.1 billion in the fourth quarter of 1994. To the extent that unincorporated businesses are smaller firms or self-employed individuals, they are likely to be predominantly in service industries. The increased borrowing is therefore consistent with the increase in service-sector output recorded in the first quarter.

If lenders other than banks and building societies are included, the picture looks more subdued. Although total net personal borrowing increased by £6.4 billion in the first quarter of 1995, this was less than the £6.7 billion increase recorded in 1994 Q4—largely a result of a smaller increase in consumer credit. But the increase in total personal borrowing in the first quarter of 1995 was still greater than in the first three quarters of 1994.

There has been a breakdown in the relationship between total net personal sector borrowing and the saving ratio, which may reflect a shift towards financing consumption from income rather than from borrowing. This is illustrated in Chart 2.6: the sum of the personal sector borrowing and saving ratios dropped suddenly in 1992, implying that there was less financial intermediation. Until last April's tax rises, this was corroborated by very slow growth in bank and building society lending for consumption (that is, lending which is not secured against housing). But such lending has picked up sharply since then: it grew by 11.3% in the year to March, more than double its rate a year earlier. Although consumer credit growth dropped slightly in the first quarter, it could increase more quickly after the second round of tax increases in April 1995, if people again increased their borrowing to maintain their consumption levels in the face of a sudden drop in disposable income.

Lending data may also shed light on behaviour in the corporate sector. A frequent explanation for subdued investment growth is that industrial and commercial companies (ICCs) have preferred to repay bank debt,

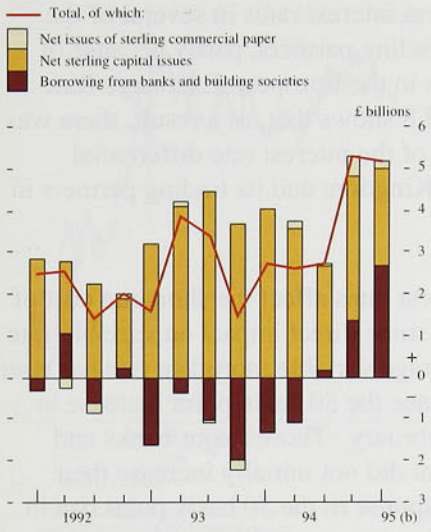
**Chart 2.6**
**Personal sector borrowing and saving ratios[a]**




Sources: CSO and Bank of England.

(a) Seasonally adjusted.
(b) Bank and building society lending to persons as a proportion of personal disposable income.
(c) Personal sector saving as a proportion of personal disposable income.

**Chart 2.7**
**Total quarterly sterling borrowing by ICCs**[a]




Source: Bank of England.

(a) Seasonally adjusted.
(b) 1995 Q1 data exclude the effect of Glaxo's take-over of Wellcome.

**Table 2.B**
**Changes in official and key interest rates**[a][b]

In chronological order

Per cent per annum

| Country | Interest rate | Date | Change (basis points) | Current level |
|---|---|---|---|---|
| Sweden | Deposit rate | 9 Feb. | +50 | 6.50 |
| | Lending rate | 9 Feb. | +50 | 8.50 |
| Finland | Tender rate | 10 Feb. | +25 | 5.75 |
| Norway | Overnight lending rate | 10 Feb. | -25 | 6.75 |
| Italy | Discount rate | 21 Feb. | +75 | 8.25 |
| Belgium | Central rate | 8 Mar. | +100 | 5.85 |
| | Overnight rate | 8 Mar. | +150 | 7.85 |
| Denmark | 14-day CD repo | 8 Mar. | +150 | 7.00 |
| | Discount rate | 8 Mar. | +100 | 6.00 |
| Ireland | Short-term facility | 9 Mar. | +50 | 7.25 |
| | Overnight deposit rate | 9 Mar. | +50 | 4.00 |
| France (c) | 24-hour repo rate | 9 Mar. | | 8.00 |
| Spain | 10-day repo rate | 14 Mar. | +50 | 8.50 |
| Austria | Discount rate | 31 Mar. | -50 | 4.00 |
| Belgium | Central rate | 31 Mar. | -60 | 5.25 |
| | Overnight rate | 31 Mar. | -60 | 7.25 |
| Germany | Discount rate | 31 Mar. | -50 | 4.00 |
| Greece | Overdraft rate | 31 Mar. | -208 | 29.12 |
| Netherlands | Special advances rate | 31 Mar. | -30 | 4.50 |
| | Secured advances rate | 31 Mar. | -50 | 4.00 |
| Switzerland | Discount rate | 31 Mar. | -50 | 3.00 |
| Germany | 14-day repo rate | 5 Apr. | -35 | 4.50 |
| Belgium | Central rate | 6 Apr. | -25 | 5.00 |
| | Overnight rate | 6 Apr. | -50 | 6.75 |
| Denmark | 14-day CD repo | 6 Apr. | -25 | 6.75 |
| France | 24-hour repo rate | 6 Apr. | -25 | 7.75 |
| Belgium | Central rate | 12 Apr. | -25 | 4.75 |
| | Overnight rate | 12 Apr. | -50 | 6.25 |
| Netherlands | Special advances rate | 12 Apr | -10 | 4.40 |
| Sweden | Deposit rate | 12 Apr. | +100 | 7.50 |
| | Lending rate | 12 Apr. | +50 | 9.00 |
| Japan | Official discount rate | 14 Apr | -75 | 1.00 |
| Germany | 14-day repo rate | 20 Apr. | +1 | 4.51 |
| Denmark | 14-day CD repo | 27 Apr. | -25 | 6.50 |

Sources: Datastream and Telerate.

(a) Changes since the last *Inflation Report*.
(b) Countries included are those relating to the 'basket' of currencies used to calculate the sterling ERI. New Zealand does not appear because policy there is not set by explicitly changing rates and Canada does not appear because its rates are adjusted weekly.
(c) The 5–10 day repo rate (previously 6.4%) has been suspended and replaced with the 24-hour rate.

rather than borrow to finance new capital projects. Certainly, there is evidence that this balance-sheet adjustment is now complete: ICCs' borrowing from banks and building societies resumed in the fourth quarter of 1994 and increased by £2¾ billion in the first quarter of 1995. Chart 2.7 shows that some of the rise in bank and building society borrowing was offset by lower net capital issues. This higher borrowing does not necessarily imply a pick-up in investment. In the past, an increase in ICCs' borrowing has been linked not so much with higher investment, but with an increase in mergers and acquisitions. Since much of the increased activity has been overseas—net cross-border acquisitions rose just over 50% in value terms in 1994—this would not necessarily imply any corresponding rise in M4 deposits. And if capital issues pick up over the coming months—announcements of issues were strong in 1995 Q1—ICCs' borrowing from banks and building societies may fall back.

### *Divisia money*

The Bank's Divisia measure of money, which weights the various components of M4 according to their transaction characteristics, rose by 1.1% in the first quarter of 1995, compared with 0.5% in the previous quarter. This gave a four-quarter growth rate of 2.7%. As with broad money, a sectoral breakdown of Divisia money provides a greater insight into economic activity and future inflation.

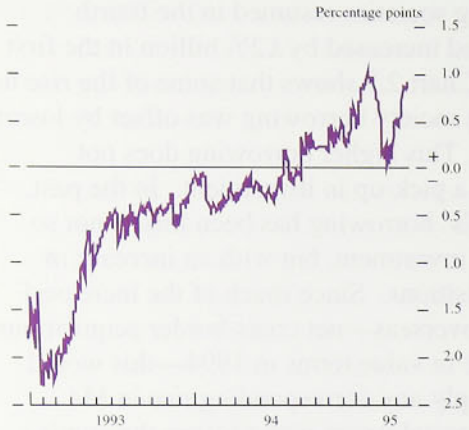
Personal sector Divisia money rose by 1.0% in the first quarter of 1995, up from 0.2% in 1994 Q4. In the past, changes in personal sector Divisia money have tended to signal future consumer spending, although the relationship is volatile. And corporate Divisia money has tended to track future investment activity fairly closely. It rose 1.6% in 1995 Q1, compared with 1.5% in 1994 Q4 and 0.1% in 1994 Q3.

## 2.2 Interest and exchange rates

### *Interest rates*

UK official interest rates have remained unchanged at 6.75% since the time of the February *Report*. Although one key French interest rate has risen, official interest rates in a number of other European countries fell, following the 50 basis-point cut in the German discount rate announced on 30 March (see Table 2.B). Japanese official interest rates were cut to 1% on 14 April.

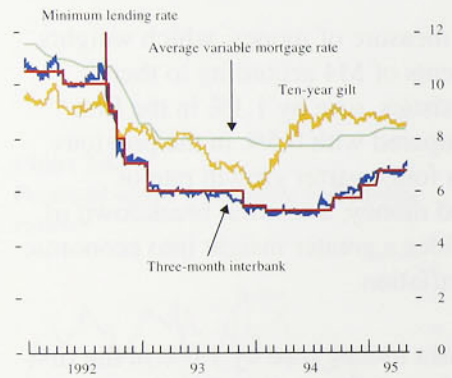
**Chart 2.8**
**Difference between UK and trade-weighted world interest rates**[a]




Sources: BIS and Bank of England.

(a) Three-month eurocurrency rates.

**Chart 2.9**
**Interest rates**




Source: Bank of England.

**Chart 2.10**
**Sterling interest rate expectations**[a]


Sources: Bank of England and LIFFE.

(a) Based on a combination of sterling interest rate future contracts.

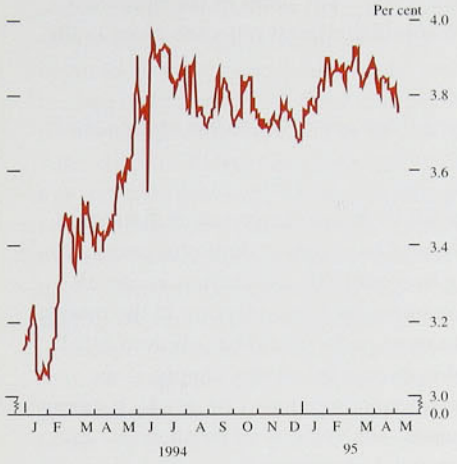
Three-month market interest rates in the United Kingdom fell below UK base rates after the February increase in official rates, largely because of technical factors. At the same time, there were temporary increases in short-term interest rates in several of the United Kingdom's trading partners, partly because of heightened pressures in the European Exchange Rate Mechanism. Chart 2.8 shows that, as a result, there was a marked narrowing of the interest rate differential between the United Kingdom and its trading partners in March.

Short-term UK interest rates affect the short-run cost of borrowing and have some direct impact on variable-rate mortgages. The average variable mortgage rate has risen by 10 basis points since the 50 basis-point increase in official rates on 2 February. Those major banks and building societies that did not initially increase their mortgage rates in response to the 50 basis-point rise in base rates in December have now done so, but it appears that lenders have not yet responded to the February increase.

However, a delayed reaction is not unusual. Past experience suggests that mortgage rates are likely to increase by around 35–40 basis points following a 50 basis-point rise in base rates. For example, mortgage rates increased less than official rates when the cost of borrowing started to rise in June 1988, and often after long delays. And conversely, lenders lower their mortgage rates less than official rates when base rates turn down in order to rebuild their margins. A major influence on the pass-through of base rates to mortgage rates is the state of the housing market, the weakness of which meant that the two years of monetary loosening starting in October 1990 fed through to mortgages fairly promptly. Indeed, lenders cut rates unilaterally in February/March 1992 and a few lenders have sharply reduced their rates on two-year fixed-rate mortgages in the past quarter.

The continuing weakness of the housing market in the current recovery means that lenders have continued their previous strategy of not passing on base rate increases in full. There are also other factors keeping mortgage rates relatively low. First, margins are historically high, suggesting that there is room for lenders to absorb higher costs. Second, fixed-rate mortgages and annual review schemes are more common than in the late 1980s (although the use of fixed-rate mortgages has dropped slightly over the past year), and this will lengthen the

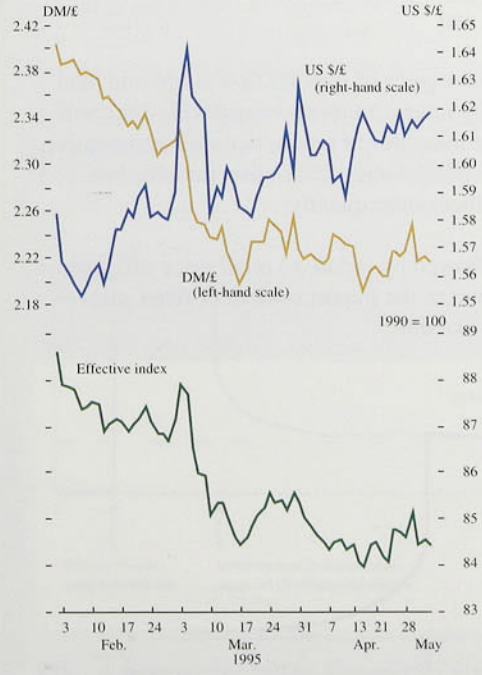
**Chart 2.11**
**Expected real interest rates**[a]




Source: Bank of England.

(a) Annual real interest rates expected in ten years' time, derived from the par yield curve using the Svensson method.

**Chart 2.12**
**Sterling exchange rates**




Source: Bank of England.

delay between changes in interest rates and mortgage rates. Around 40% of mortgages are on annual review schemes and most lenders adjusted their rates for these borrowers at the beginning of 1995, too early to capture the 50 basis-point rise in interest rates on 2 February. However, variable rates for other borrowers may be pushed up more strongly if interest rates increase again. Chart 2.9 shows some of the interest rates paid by different borrowers or used as a basis for calculating their borrowing costs as of 4 May.

Futures markets show that traders are expecting lower UK interest rates over the next eight months than at the time of the February *Report*. Rates on LIFFE's June contract fell from 7.68% on 2 February to 7.16% on 4 May (see Chart 2.10). They dropped from 8.12% to 7.60% on the September contract and were down from 8.43% to 7.90% on the December contract. The 53 basis-point reduction on the UK December contract compares with a drop of 149 basis points on the German December contract, 155 basis points on the US December contract, and 142 basis points on the Japanese December contract.

Long-bond yields can also affect the outlook for aggregate demand. For instance, a decline in long yields is likely to increase planned investment, if it reflects lower expected real interest rates rather than lower expected inflation. UK long-bond yields fell between 2 February and 4 May. Chart 2.11 shows that one-year expected real interest rates fell slightly at a ten-year horizon. The real interest rate expected on average over the next ten years also fell.

### *Exchange rates*

Sterling has fallen since the February *Report*. On its trade-weighted index, it fell by 4.7% between 2 February and 4 May, taking it outside the five-point range it had traded in since April 1993; against the Deutsche Mark, it fell by 7.8%, but against the dollar it rose by 2.3% (Chart 2.12).

If the fall in the exchange rate were to be reflected in higher import prices, the UK retail price level would rise in the short run, since UK monetary policy cannot easily and quickly ensure that the higher prices of goods imported from abroad are offset by lower domestic prices—that is, domestic prices are 'sticky'. The short-run response of UK firms to higher import costs is discussed in Section 5. However, it is clear that a decline in the pound—if it means higher import prices—

## Exchange rate movements and inflation

If a country's exchange rate is free to float against other currencies and suddenly changes, it is necessary to understand why this has happened in order to work out the implications for domestic inflation. Floating exchange rates move because of changes in demand and supply in the market for foreign exchange, brought about by flows of capital and trade, and should not be treated as exogenous. This box outlines how the effective exchange rate is likely to change in response to a selection of economic shocks,(1) and shows that there is no simple relationship between exchange rate changes and subsequent inflation, when domestic wages and prices adjust slowly. To simplify the exposition, monetary policy is defined in terms of changes in the money supply; in practice, it is normally interest rates which are used to achieve a desired path for money and inflation. The first example is given in some detail to illustrate the economics of adjustment.

**(1) A one-off increase in a country's money supply:** if prices of goods and services adjust slowly relative to interest rates and exchange rates, the nominal interest rate must fall in order to persuade people to hold the increased stock of money. If nominal interest rates are lower than in the rest of the world, people will only hold the country's financial assets if the country's exchange rate is expected to appreciate; the exchange rate must *drop* far enough to overshoot its new long-run level, to which it gradually appreciates. Domestic output prices are bid upwards as excess demand develops, responding to temporarily low interest rates and increased competitiveness; as they rise, nominal interest rates and the exchange rate rise. Eventually, prices will rise by as much as the initial increase in money supply; nominal interest rates will return to their original level and the exchange rate will stabilise below its original level (so as to maintain the country's competitiveness given its new higher price level). The paths of the exchange rate, prices and nominal interest rates are given in the chart above.

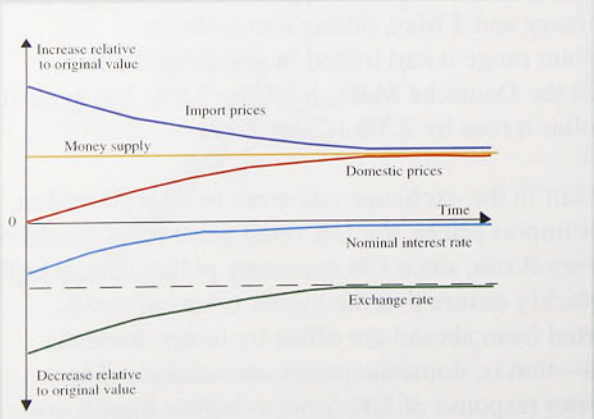
It is worth noting three points about this sequence of events:

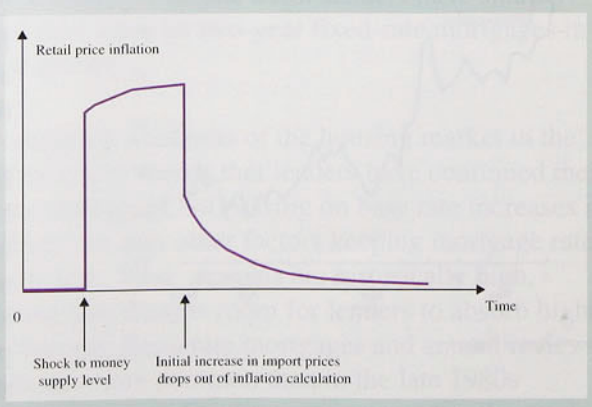
(i) although a fall in the exchange rate is associated with subsequent increases in domestic prices, it is misleading to regard this association as causal; the shock responsible is the increase in the money supply (the same paths would be followed by all the variables, except the money supply, if the shock were an increase in the rate at which money changed hands—its velocity of circulation—as a result of financial innovation);

(ii) the explanation holds for a change in money supply (or velocity) and price levels *relative* to the country's trading partners. A similar exchange rate path would be observed if other countries had reduced their money supplies. Yet in this case there need be no increase at all in the prices of domestically produced goods and services, only an increase relative to the new, lower level of prices abroad. Hence a fall in the exchange rate need not be followed by *any* increase in domestic output prices; and

(iii) the relative price of imports first jumps and then gradually returns to its previous level. This will increase measures of retail price inflation relative to underlying domestic inflation initially, but reduce them subsequently.

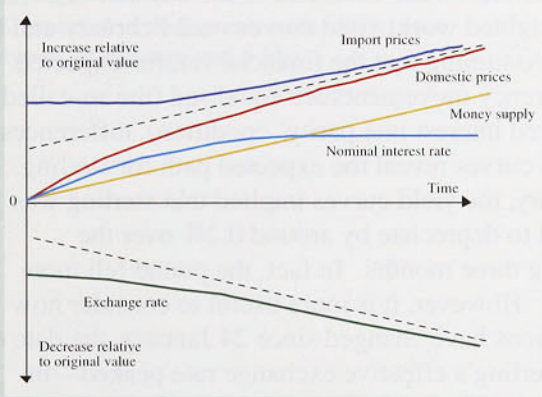
The path followed by (relative) retail price inflation—taking account of the import content of retail sales—would look like this:



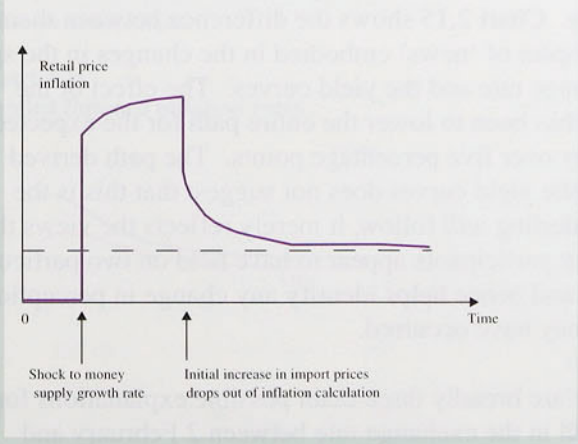




(1) Models of exchange rate behaviour can be found in many economic textbooks. A seminal article in this area was Dornbusch, R (1976), 'Expectations and Exchange Rate Dynamics', *Journal of Political Economy*, December.

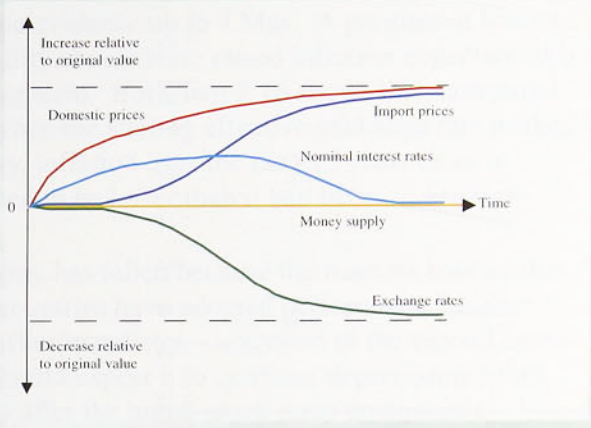
**(2) An increase in the growth rate of a country's money supply:** this leads to permantently higher inflation (see the chart below). Again, the exchange rate moves down sharply, stimulating competitiveness and beginning to push up domestic prices by increasing nominal demand. Nominal interest rates begin to increase; eventually, along with inflation and the rate of exchange rate depreciation, they are permanently higher and real money balances lower. After the initial sharp drop, the rate of depreciation is low and then picks up, while domestic price inflation falls back a little. The size of the initial drop depends more on how rapidly prices respond to excess demand than it does on the new growth rate of the money supply. A similar exchange rate path would be observed if other countries reduced the rate of growth of their money supplies, reducing their average inflation rate, but not affecting the inflation rate at home.



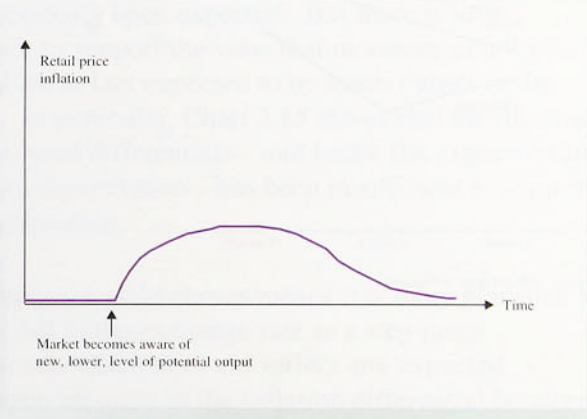

The path followed by (relative) retail price inflation would look like this:




**(3) A permanent fall in a country's potential output:** suppose an economy starts off with demand and output equal to potential output, and then suffers an adverse productivity shock which reduces potential. If actual output initially remains unchanged, domestic prices will start to increase, because output is temporarily greater than potential. Eventually, domestic prices go up enough to reduce real money balances to the level appropriate to the new, lower, level of potential output. Actual output contracts to this level, reduced by a temporary loss of competitiveness and temporarily higher interest rates. The next chart sketches how variables will change:

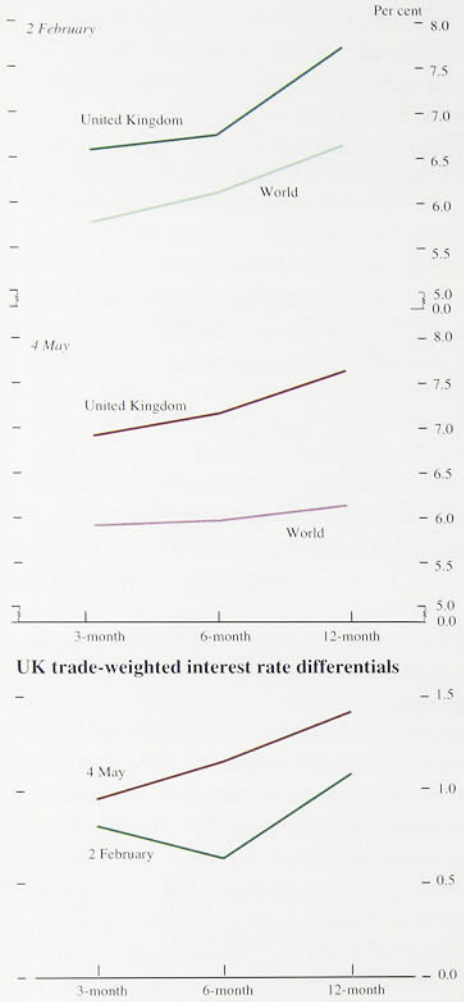



The path followed by (relative) retail price inflation would look like this:




**(4) A deterioration in a country's real terms of trade:** in the examples given above, import and domestic prices diverged only temporarily. Imports and exports were treated as perfect substitutes in the long run. But this need not be the case: the real exchange rate can change permanently. Suppose improvements in either the quality or reliability of foreign-produced goods enable the price of imported goods to be raised relative to the price of domestic exports. The nominal exchange rate will fall to restore competitiveness. There is a one-off rise in the retail price level which will affect the published inflation rate for twelve months. Domestic wages and prices will not rise if interest rates are held constant and only the first-round effect on retail prices is accommodated.

**Chart 2.13**
**UK and trade-weighted world interest rate yield curves**




Sources: BIS and Bank of England.

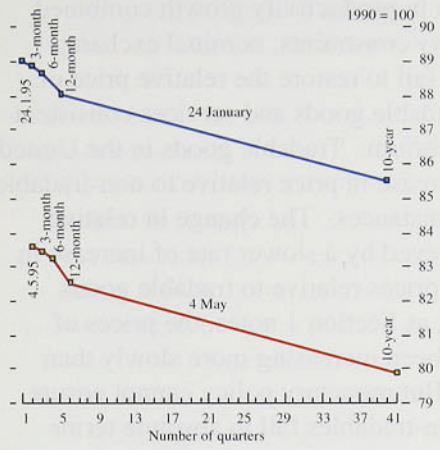
is likely to be accompanied by a rise in the UK price level and hence, at least temporarily, a rise in UK measured inflation. In the longer run, however, it is important to understand the causes of an exchange rate move in order to understand the consequences for prices and inflation. The box on pages 16–17 explains how the relationship between exchange rate changes and subsequent inflation depends entirely on why the change happened; a sharp depreciation may be followed by a pick-up in domestically generated inflation—or no change at all. Whether UK retail prices end up higher or not after a decline in the pound depends on the reason for the exchange rate fall and, crucially, on the response of monetary policy.

At the time of the February *Report,* market participants expected the exchange rate to fall, but only slightly. Chart 2.13 shows the short end of the UK and trade-weighted world yield curves on 2 February and 4 May. Assuming that the financial returns expected after currency movements are equalised (the so-called 'uncovered interest rate parity' condition), differences in the yield curves reveal the expected path for sterling. On 2 February, the yield curves implied that sterling was expected to depreciate by around 0.2% over the following three months. In fact, the pound fell more than 4%. However, it is more useful to consider how expectations have changed since 24 January, the date on which sterling's effective exchange rate peaked—in order to identify any 'news' which may have caused market perceptions to change and, hence, the exchange rate to fall. Chart 2.14 shows the exchange rate paths expected over the following ten years on 24 January and 4 May. Chart 2.15 shows the difference between them—the impact of 'news' embodied in the changes in the spot exchange rate and the yield curves. The effect of the news has been to lower the entire path for the expected rate by over five percentage points. The path derived from the yield curves does not suggest that this is the path sterling *will* follow, it merely reflects the views that market participants appear to have held on two particular dates and hence helps identify any change in perception that may have occurred.

There are broadly three main possible explanations for the fall in the exchange rate between 2 February and 4 May:

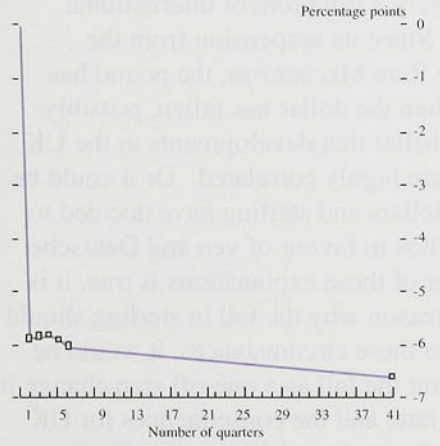
(i) UK monetary conditions are expected to be looser in the future, either permanently or temporarily;

**Chart 2.14**
**UK effective exchange rate profiles**



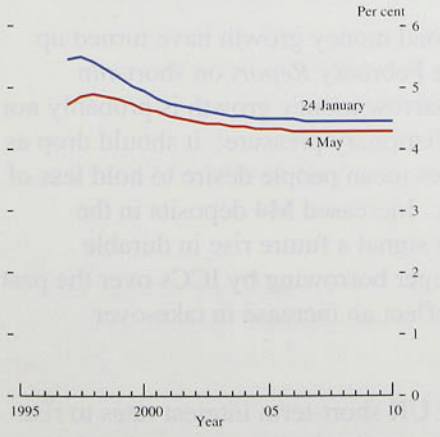

Sources: BIS and Bank of England.

**Chart 2.15**
**UK expected exchange rate path: difference between 24 January and 4 May**




Sources: BIS and Bank of England.

**Chart 2.16**
**Implied forward inflation rates**




Source: Bank of England.

(ii) markets believe that other countries have adopted tougher anti-inflation policies, either permanently or temporarily; and

(iii) potential output in the United Kingdom is lower than previously thought.

The first case, in which UK monetary conditions are expected to be looser in the future, is hard to reconcile with the evidence up to 4 May. A permanent loss of credibility should have raised inflation expectations over the long term. But Chart 2.16 shows that, compared with when the sterling effective exchange rate peaked in January, inflation over the next 15 years or so is expected to be *lower* than it had been.

If sterling has fallen because the markets believe that other countries have adopted permanently tougher anti-inflation policies—a version of the second case—they should expect it to continue depreciating more rapidly after the initial sharp jump downwards. Although there would be a one-off increase in the UK price level as a result of higher import prices, this effect would wear off as foreign inflation turned out lower than had previously been expected. But there is little evidence to support the view that monetary conditions abroad are in fact expected to be much tighter in the future. In particular, Chart 2.15 shows that the increase in long-bond differentials—and hence the expected rate of future depreciation—has been insufficient to support this explanation.

The change in yield curves means it is more plausible to see the fall in the exchange rate as a step jump downwards which does *not* reflect any expected permanent increase in the inflation differential between the United Kingdom and other countries. For instance, it could be that market perceptions of the current tightness of overseas monetary policy have changed. There is at least some news which supports this interpretation. The yield curve in Germany shifted down following two consecutive announcements of drops in the German money stock—suggesting that the future profiles of both interest rates and inflation in Germany are expected to be lower. That would be consistent with a one-off fall in the German price level relative to that in the United Kingdom and would imply only a temporary increase in the sterling price of imports.

Chart 2.14 is also consistent with a reappraisal of the level of potential output in the United Kingdom. If the

market had reassessed the output potential of the tradable sector of the economy following publication of data showing a reduction in productivity growth combined with signs of capacity constraints, nominal exchange rates would need to fall to restore the relative price of tradable and non-tradable goods and services consistent with long-run equilibrium. Tradable goods in the United Kingdom would increase in price relative to non-tradable goods in such circumstances. The change in relative prices could be achieved by a slower rate of increase in non-tradable goods prices relative to tradable goods prices. And indeed, as Section 1 notes, the prices of non-tradables have been increasing more slowly than tradables recently. But monetary policy cannot ensure that the prices of non-tradables fall in absolute terms immediately, so the overall price level is likely to increase by an amount which depends on the importance of tradables in final demand.

Of course, it remains possible that the fall in the exchange rate is merely a symptom of international currency upheaval. Since its suspension from the European Exchange Rate Mechanism, the pound has tended to decline when the dollar has fallen, possibly reflecting a market belief that developments in the UK and US economies are highly correlated. Or it could be that holders of US dollars and sterling have decided to readjust their portfolios in favour of yen and Deutsche Marks. But, if either of these explanations is true, it is difficult to see any reason why the fall in sterling should be reversed. Even in these circumstances, it would be reasonable to interpret the fall as a one-off step change in sterling's exchange rate, and the consequences for UK prices would be similar to those in the preceeding paragraph.

## 2.3 Summary

Both narrow and broad money growth have turned up since the time of the February *Report* on short-run measures. Higher narrow money growth is probably not signalling future inflationary pressure; it should drop as interest rate increases mean people desire to hold less of their money as cash. Increased M4 deposits in the personal sector may signal a future rise in durable consumption. Stronger borrowing by ICCs over the past two quarters may reflect an increase in take-over activity.

Markets still expect UK short-term interest rates to rise over the next twelve months, but the expected path has been revised downwards. The fall in the pound between

2 February and 4 May is unlikely to have been caused by perceptions that monetary policy is going to be permanently looser in the United Kingdom or tighter abroad. It is more appropriately interpreted as a step fall in sterling.

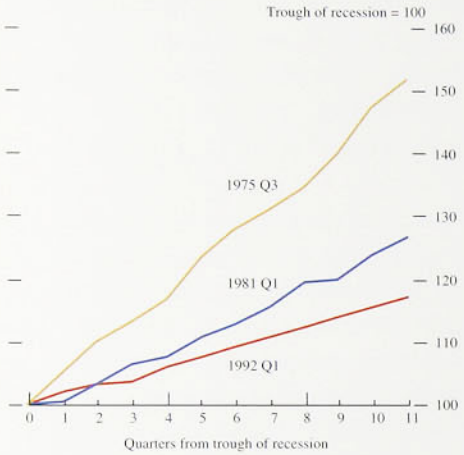
# 3 Demand and supply

## 3.1 Total demand

Real GDP is estimated to have grown by 3.9% in the year to 1995 Q1. Excluding the North Sea sector, output grew by an estimated 3.7%. Since the February *Report*, the estimate for growth in the year to 1994 Q4 has been revised up from 4.0% to 4.2%—the largest increase over four quarters since 1988 Q4. Quarterly growth rates suggest that real GDP decelerated between the first and second halves of 1994, but has not moderated since.(1) Real GDP grew at an average of 1.2% a quarter in the first half of 1994, but at an average of 0.8% a quarter in the second half. In 1995 Q1, GDP is provisionally estimated to have increased by a further 0.8%.

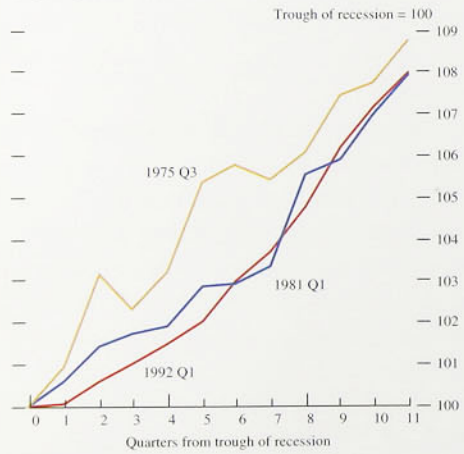
Nominal GDP grew by 1.5% in 1994 Q4, slightly higher than the average growth of 1.4% per quarter in the recovery so far. In the year to 1994 Q4, nominal GDP grew by 5.8%. As Chart 3.1 shows, it has increased more slowly in the current recovery than in the previous two upturns. The subdued growth of nominal output is a consequence of low inflation; there has been little difference between the evolution of real output in the previous two recoveries and the current upturn (see Chart 3.2).

**Chart 3.1**
**Nominal GDP(a) in recent recoveries(b)**




(a) At factor cost.
(b) Dates shown indicate the quarter in which the trough in output was reached.

**Chart 3.2**
**Real GDP(a) in recent recoveries(b)**




(a) At factor cost.
(b) Dates shown indicate the quarter in which the trough in output was reached.

## 3.2 Domestic demand

Domestic demand increased sharply in the fourth quarter of 1994, and was up by 2.4% in value and 1.7% in volume. These were the fastest seasonally adjusted quarterly growth rates for six years. One surprising feature in the quarter was the deterioration in net external trade. Net trade made a major contribution to output growth in the second and third quarters of 1994, but reduced growth in the fourth quarter (Table 3.A).

### *Personal sector demand*

Consumption grew by 0.8% in the fourth quarter of 1994, compared with a total increase of 1.2% in the previous three quarters. Most of the growth in Q4 was in the services sector: in particular, spending on 'other

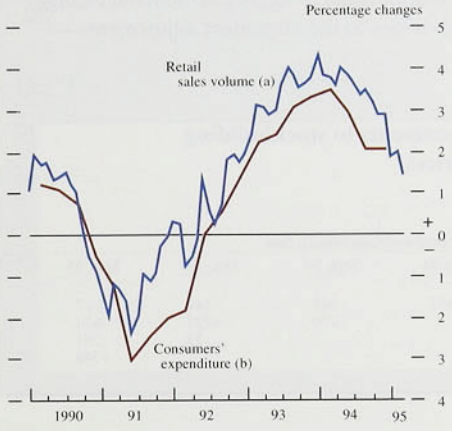
(1) Interpretation of the national accounts is complicated by adjustments made by the CSO to bring the various estimates of GDP into line (see the box on page 24).

**Table 3.A**
**Contributions to GDP growth**

Percentage contributions to quarterly growth

| | 1994 Q1 | Q2 | Q3 | Q4 |
|---|---|---|---|---|
| Total domestic demand | 1.2 | 0.3 | — | 1.9 |
| *of which:* | | | | |
| *Stockbuilding* | *0.3* | *0.3* | *-0.3* | *0.8* |
| Final domestic demand | 0.9 | — | 0.3 | 1.1 |
| *of which:* | | | | |
| *Consumers' expenditure* | *0.4* | *0.1* | *0.3* | *0.6* |
| *Government consumption* | *0.1* | *0.1* | *0.1* | *0.1* |
| *Fixed investment* | *0.4* | *-0.3* | *-0.1* | *0.4* |
| Net trade | -0.3 | 1.5 | 0.9 | -1.1 |
| Factor cost adjustment | 0.1 | -0.4 | — | — |
| GDP growth (percentage change over previous quarter) | 1.1 | 1.4 | 0.9 | 0.8 |

**Chart 3.3**
**Growth in consumers' expenditure and retail sales volume**




(a) Latest three months on the same three months in the previous year.
(b) Latest quarter on the same quarter in the previous year.

services' was up 4.5%. This includes spending by UK residents abroad—for example while on holiday—and spending on the National Lottery, which began in mid-November.

Monthly data on retail sales cover only about 40% of total consumption, but in the past they have been a good, timely guide to aggregate consumption. However, retail sales volumes rose by only 0.2% in the fourth quarter of 1994, while consumer spending increased by 0.8%—keeping its annual rate of growth constant (see Chart 3.3). Retail sales in the first three months of 1995 were 0.1% down on the fourth quarter of 1994.

One reason for subdued retail sales may be that their relationship with aggregate consumption has been altered by the introduction of the National Lottery, which—like other gambling—is not covered in retail sales. About £400 million was spent on lottery tickets in 1994 Q4, of which half was returned as prize money. The other half counts as consumer spending; over a full quarter, this would be equivalent to about 0.4% of total consumption. Reports from football pools companies and some charities suggest that spending on the lottery has partly been financed by lower spending on other forms of gambling and lower direct donations to charity. But there may also have been a one-off effect on the saving ratio if lottery tickets are financed out of 'loose change', as well as a direct effect on retailers as some expenditure is switched from them.

The weakness of the retail sector is confirmed by recent CBI Distributive Trades Surveys. Retail sales in the first quarter of 1995 were reported to be below normal for the time of year, although trade was expected to increase moderately in April. Single outlets are reporting a weaker position than large stores, supporting the suggestion that a structural shift away from high streets to out-of-town shopping centres is taking place. In the same surveys, the wholesale sector—much of whose business is supplying to the business sector—continued to report a buoyant position.

Since consumption accounts for over 60% of domestic demand, its future development will have a major influence on the course of total demand and output. Spending by consumers depends on their disposable income, their wealth, and their expectations both about the progress of the economy and their own prospects.

Real personal disposable income rose by an estimated 0.6% in 1994 Q4, and estimates of disposable income in

## Statistical adjustments to national accounts data

The 1994 Q4 national accounts recorded stockbuilding of £1,332 million at 1990 prices. Of this, £748 million—about 80% of the change in real GDP—was an 'alignment adjustment'. This box describes how these and other statistical adjustments arise when the national accounts are compiled.

Gross domestic product measures total economic activity in the United Kingdom. It can be measured in three ways:

- by summing the incomes earned from the production of goods and services (*income measure*);
- by summing the amount spent either on final goods and services or on increasing wealth (net of imports) (*expenditure measure*); or
- by summing the value added in all activities producing goods and services (*output measure*).

These three measures should be identical; but in practice differences are inevitable. Input-output balances are used to produce balanced national accounts, but these balances are only available about 18 months after the end of the year to which they relate. In the interim, the level is projected forward using movements in the output, expenditure and income totals. In order to make the totals consistent in quarters before input-output balances are available, the CSO makes a series of adjustments to the data.

The first stage of the process involves *alignment adjustments*. These mechanical adjustments alter the quarterly paths of the expenditure and income totals so that they follow the path of the output measure—which in the CSO's view is the best measure of volume changes in the short term—subject to the constraint that over a calendar year the alignment adjustments sum to zero. In the expenditure account, the adjustment is added to stockbuilding, and in the income account it is added to gross trading profits of companies, since these are believed to have the greatest margins for error.

The output estimate and the aligned expenditure and income measures are then averaged to give the GDP estimate, and three small statistical balancing items are used to reconcile the three accounts with this average total.

Alignment adjustments and statistical balancing items do not mean that domestic demand is a less reliable figure than total output. As new information becomes available, estimates of the components of aggregate demand change. This results in revisions to the alignment adjustments—see below.

**Alignment adjustments to stockbuilding 1990 market prices**

£ millions

| | National accounts release date: | | | |
|---|---|---|---|---|
| | June 94 | Sept. 94 | Dec. 94 | Mar. 95 |
| 1994 Q1 | -452 | -363 | -144 | +7 |
| Q2 | | -470 | +227 | -474 |
| Q3 | | | -23 | -281 |
| Q4 | | | | +748 |

**Table 3.B**
**Personal sector wealth**

£ billions at end-year

| | 1989 | 1993 | 1994 |
|---|---|---|---|
| *Assets* | | | |
| Bank and building society deposits | 282.1 | 366.8 | 378.2 |
| Unit trusts and company securities | 184.0 | 250.4 | 234.7 |
| Life assurance and pension fund holdings | 565.4 | 883.9 | 838.3 |
| Other financial assets | 137.3 | 180.3 | 193.6 |
| **Total financial assets** | **1,168.8** | **1,681.4** | **1,644.8** |
| Residential buildings (a) | 1,351.4 | 1,304.3 | .. |
| Other tangible assets | 137.5 | 118.9 | .. |
| **Total assets** | **2,657.7** | **3,104.6** | .. |
| *Liabilities* | | | |
| Loans for house purchase | 256.7 | 353.3 | 372.4 |
| Other bank borrowing | 78.6 | 77.1 | 78.9 |
| Other liabilities | 63.0 | 68.2 | 71.6 |
| **Total liabilities** | **398.2** | **498.6** | **522.9** |
| **Net financial wealth** | **770.6** | **1,182.8** | **1,121.9** |
| **Net wealth** | **2,259.5** | **2,581.7** | .. |

.. not available.

(a) Including non-marketable tenancy rights.

the first three quarters of 1994 have been revised up by 0.4 percentage points from the level estimated in December 1994. This gives a growth rate of 1.4% in the year to the fourth quarter. Nominal disposable income grew by 4.0%. Within this total, non-employment income—from state benefits, interest, dividends and so on—grew by 7.5%, while income from employment rose by 3.8%. Section 4 examines the state of the labour market and suggests that employment will continue to increase, boosting income from employment further. And strong employment growth is likely to outweigh the reduction in disposable income of around ¼% which will result from the tax increases introduced in April this year.

Owner-occupied housing accounts for about 50% of total net wealth in the personal sector. Of the remainder, the main components of personal wealth are financial: holdings in life assurance and pension funds account for about 50% of total financial assets, bank and building society deposits around 25%, and direct holdings of unit

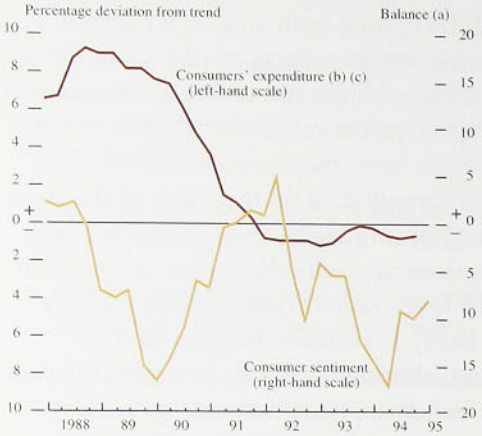
trusts and company securities around 15% (Table 3.B). Between the end of 1993 and the end of 1994, net financial wealth fell slightly, both absolutely and in relation to disposable income, because of falls in the value of direct equity holdings and of life assurance and pension funds. Equity prices recovered slightly during the first quarter of this year, but remained below their 1994 Q4 levels. Although data on the value of the stock of owner-occupied housing at the end of 1994 are not available, house values are unlikely to have risen much from the end-1993 level, so total net wealth probably also fell. This is likely to restrain the growth of consumer spending, although changes in wealth resulting from movements in house prices may simply reflect a change in the valuation of the flow of benefits that homeowners derive from ownership and so have no effect on other consumer spending.

The state of the housing market may have other important effects. Moving house often leads to spending on durable items such as carpets and furniture, as well as on a variety of services. But recent data show no sign of an upturn in housing activity. The number of particulars delivered—a measure of turnover—has generally remained in the range 104,000 to 106,000 a month since May 1994, compared with an average of about 150,000 a month between 1982 and 1988. Housebuilders reported falling net reservations in the three months to February, but this was reversed in March. They appear to have responded to weakening demand for new homes by reducing housing starts; private-sector starts were down by 8.2% in the three months to February compared with the previous three months. Private-sector housing completions have also begun to turn down, and fell 1.1% in the same period.

House prices confirm the subdued state of the market. According to the Halifax Building Society measure, house prices in April were about 1.5% lower than a year earlier, though the Nationwide Building Society measure showed a 1.1% increase. The prices of new homes held up better during the recession than those of existing homes; the prices of existing homes fell by 14%, compared with an 8% decline in the cost of new homes. New house prices have also risen slightly less in the recovery—by 3.3%, compared with 3.7% for existing houses.

Consumer confidence remains weak. Consumers are more pessimistic about their prospects over the coming year than on average since 1988, and the balance of respondents expecting to increase spending on major

**Chart 3.4**
**Consumer sentiment and expenditure**




Sources: CSO and Gallup.

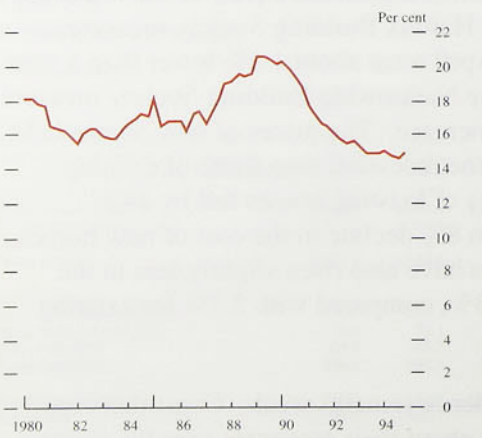
(a) Percentage of respondents expecting the financial situation of their household to improve in the coming year minus percentage expecting it to worsen.
(b) Deviation from a log-linear trend computed over the period 1965 Q1–1994 Q4.
(c) On 1990 market prices.

**Table 3.C**
**Growth in fixed investment**

Annualised percentage changes over period shown

| | 1981 Q1–83 Q4 | 1992 Q1–94 Q4 | 1993 Q4–94 Q4 |
|---|---|---|---|
| Total | 5.7 | 1.6 | 2.6 |
| *of which:* | | | |
| Private sector | 6.1 | 0.9 | -1.8 |
| *of which non-residential* | *6.0* | *-0.1* | *-3.3* |
| Public sector | 5.4 | 4.8 | 25.3 |
| *of which non-residential* | *3.3* | *5.7* | *34.6* |
| Residential | 8.4 | 4.0 | 1.8 |
| Plant and machinery | 3.1 | 2.6 | 7.2 |
| Manufacturing | -1.7 | 0.9 | 8.1 |
| Oil and gas extraction | 3.8 | -12.1 | -6.2 |

**Chart 3.5**
**Total investment as a share of GDP**(a)




(a) At current market prices.

purchases is also below its average over this period. However, there is little evidence that these measures are useful predictors of recent actual spending (see Chart 3.4)

### *Corporate sector demand*

In the fourth quarter of 1994, real total fixed investment grew by 2.2%, contributing 0.4 percentage points to GDP growth. A breakdown of the data shows that there was a 6.5% increase in private-sector investment in housing. Private-sector non-residential investment excluding oil and gas extraction was up 1.7%. Manufacturing investment was particularly strong: it increased by 4.4% in the fourth quarter of 1994, the largest quarterly rise since the second quarter of 1989. The entire increase in manufacturing was accounted for by plant and machinery, which in general accounts for around 80% of the total. The other components of manufacturing investment—new buildings and vehicles—both fell in the quarter.

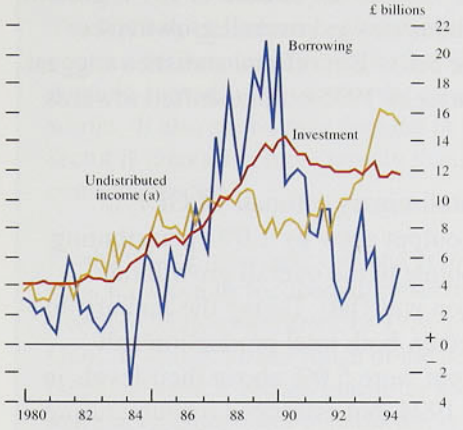
Fixed investment has so far grown relatively slowly in the current recovery (see Table 3.C). From the trough in 1992 Q1 to 1994 Q4, output rose by 8.0%, almost exactly the same amount as the increase in the three years following the previous trough. However, although total fixed investment grew by 16.6% in the early 1980s recovery, it has grown by only 4.5% in the early 1990s—despite the fall in the relative price of investment goods noted in Section 1 (see Chart 3.5).

One reason why investment has not picked up more sharply is that, in the 1980s, firms used bank borrowing to supplement their own internal funds to finance new capital projects (see Chart 3.6). During the current recovery, many companies have preferred to use undistributed profits to pay back the resulting debt, rather than to invest in new equipment. Balance sheets have now largely been repaired. If demand continues to be buoyant, further constraints on capacity will emerge and investment will rise.

### *Public sector demand*

General government consumption rose by 1.5% in real terms in the year to the fourth quarter of 1994. Since the trough of the recession, it has fallen as a share of GDP from 25.7% to 24.8%, as a result of a steady fall in the share of local government spending. As a percentage of GDP, central government consumption has increased from 16.0% to 16.2% over this period. General

**Chart 3.6**
**ICCs' undistributed income, investment and borrowing**




(a) Net of stock appreciation.

government investment has risen by 1.9% in real terms since the trough of the recession, almost exactly keeping pace with consumption. Strong growth in investment by public corporations in the second half of 1994, coupled with weak general government investment in 1993 Q4, produced growth of over 25% in public-sector investment in the year to 1994 Q4.

The Public Sector Borrowing Requirement for the 1994/95 financial year was £35.6 billion, compared with £45.4 billion in 1993/94. This was £1.3 billion above the forecast made in the 1994 Budget. Central government cash receipts were £3.2 billion below forecast, because of lower-than-expected receipts of income and corporation taxes and VAT. Cash outlays were also below forecast, by £1.2 billion.

## 3.3 Net external demand

Although net external trade made a major contribution to output growth in 1994 Q2 and Q3, it reduced output growth in the fourth quarter. National accounts data show that the volume of exports of goods and services grew by 2.6% in 1994 Q4, but this was outweighed by a 6.1% increase in the volume of imports of goods and services. Nonetheless, over 1994 as a whole, there was strong enough trade performance to record a visible trade deficit of £10.5 billion, compared with £13.4 billion in 1993. A surplus on investment income of £11.2 billion reduced the current account deficit for the year as a whole to £0.2 billion—the smallest since 1985. In the second half of the year, the current account was in surplus, helped by an improvement in the visible balance compared with the first half (see Table 3.D).

**Table 3.D**
**External accounts**

£ billions

| | 1994 | | | 1995 | | |
|---|---|---|---|---|---|---|
| | Q2 | Q3 | Q4 | Jan. | Feb. | Mar. |
| Visible balance (a) | -2.4 | -1.9 | -3.1 | -1.1 | .. | .. |
| *of which:* | | | | | | |
| *Non-EU* | *-1.0* | *-0.9* | *-1.4* | *-0.3* | *-0.3* | *-0.3* |
| *EU* | *-1.4* | *-1.0* | *-1.7* | *-0.9* | .. | .. |
| Visible balance excluding oil and erratic items | -3.9 | -3.1 | -4.1 | -1.6 | .. | .. |
| Invisible balance | 1.7 | 3.2 | 3.6 | .. | .. | .. |
| Current account balance | -0.7 | 1.4 | 0.6 | .. | .. | .. |
| *as a percentage of GDP* | *-0.4* | *0.8* | *0.4* | .. | .. | .. |

.. not available.

(a) Components may not sum to total because of rounding.

Demand in the United Kingdom's major trading partners showed some moderation of growth in the fourth quarter of 1994. However, prospects are good for the rise in their demand to continue above trend, as any slowdown in growth in the United States should be offset by faster growth in Western Europe. In Japan, the real appreciation of the yen will moderate the pace of recovery.

Between 1992 Q4 and 1994 Q4, sterling's real effective exchange rate—measured using relative unit labour costs—appreciated by 8%, having depreciated by over 17% between the first and fourth quarters of 1992. At the same time, the openness of the UK economy has increased, with imports and exports both increasing their share in GDP.

**Chart 3.7**
**Growth in real GDP at factor cost**

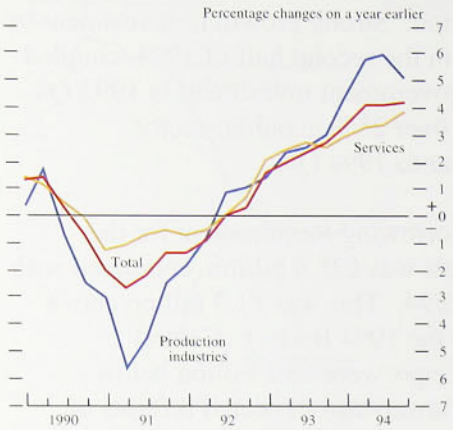
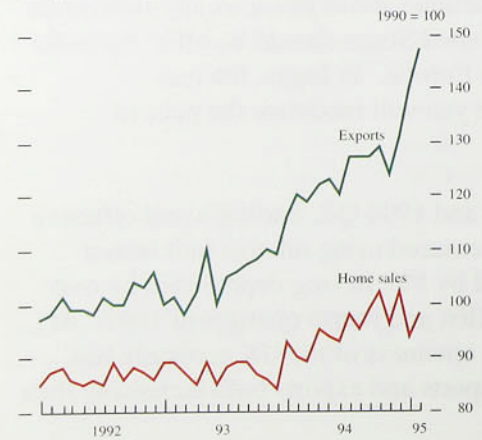



**Table 3.E**
**Output components of GDP at 1990 factor cost**

| | Weights (a) | Quarterly percentage changes | | Four-quarter percentage changes | |
|---|---|---|---|---|---|
| | 1994 | Q3 | Q4 | Q3 | Q4 |
| Construction | 72 | 0.2 | 0.4 | 3.7 | 2.8 |
| Production | 281 | 1.4 | 0.6 | 5.9 | 5.1 |
| *of which:* | | | | | |
| *Manufacturing* (b) | *237* | *1.2* | *0.7* | *4.8* | *5.2* |
| *Mining and quarrying including oil and gas extraction* | *22* | *0.7* | *1.2* | *17.3* | *9.4* |
| Services | 629 | 0.8 | 0.9 | 3.3 | 3.8 |
| *of which:* | | | | | |
| *Financial and business* | *186* | *0.7* | *1.0* | *3.1* | *3.8* |
| *Distribution, hotels, catering* | *142* | *1.1* | *1.0* | *4.1* | *4.9* |
| *Transport, storage, communication* | *84* | *1.6* | *1.4* | 7.4 | 7.7 |
| GDP | 1,000 | 0.9 | 0.8 | 4.1 | 4.2 |
| Non-oil | 983 | 0.9 | 0.7 | 3.6 | 3.9 |

(a) 1990 weights in GDP, out of 1,000.
(b) Revised definition.

**Chart 3.8**
**Engineering sales**




## 3.4 Output

From the middle of 1993 to the middle of 1994, growth in the production industries led overall growth (see Chart 3.7 and Table 3.E). But official statistics suggest that in the first quarter of 1995 output shifted towards the service sector.

According to the preliminary estimate of GDP in 1995 Q1, services output grew by 1.0%, contributing 0.6% percentage points to the overall growth rate. Industrial production was flat. Taking the January and February data together, both total production and manufacturing output were 5.0% above their levels in the first quarter of 1994, but estimated manufacturing output had barely risen since September 1994.

Survey data support the picture of broadly based growth in services industries in the first quarter of this year. The main puzzle concerning output growth in the first quarter of 1995 is the conflicting picture painted by the monthly manufacturing output statistics on the one hand, and buoyant survey and anecdotal evidence on the other.

There is a wide divergence between home and foreign markets for manufactured goods. For example, sales of engineering products for export have risen by almost 50% since the trough of the recession, while home sales have risen by only 13% (see Chart 3.8). The vehicles industry is a good example of this phenomenon (see the box opposite).

Surveys both for manufacturing and services are buoyant. Output and domestic orders are growing more slowly than at the end of 1994, but the level of demand remains high—especially in export markets. The Chartered Institute of Purchasing and Supply Survey reported that in April manufacturing output expanded for the 29th consecutive month, although not at as fast a rate as seen at the end of 1994. The British Chambers of Commerce reported that output in manufacturing and services expanded in 1995 Q1; the reported rate of growth in manufacturing slowed, while that in services was roughly constant. The Bank's Agents report similar developments. Furthermore, the CSO's coincident index of economic activity continued to increase in the first quarter.

The April CBI Quarterly Trends Survey was broadly in line with other surveys. It reported that manufacturing output growth slowed in the first part of 1995, but was

# The UK vehicle industry

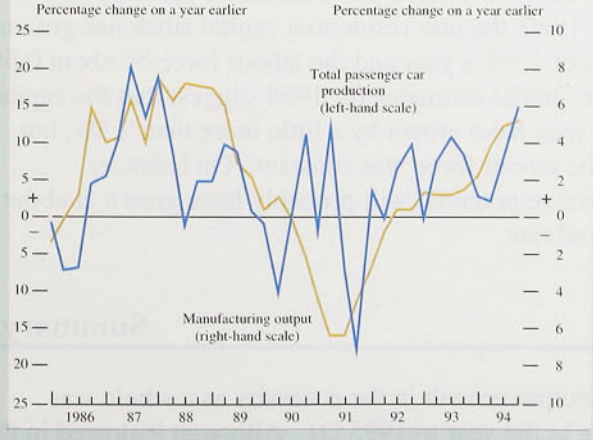
*Activity*

The UK vehicle industry epitomises the marked contrast between strong exports and weak domestic demand currently seen across the economy as a whole. It also shows how demand in the corporate sector is increasing more rapidly than in the consumer sector.

Production of passenger cars and commercial vehicles accounts for about 4½% of total output from production industries, or 1¼% of output-based GDP. It also generates much of the demand for the output of vehicle-related industries such as machinery, component manufacturers and a range of related services. Expenditure on vehicles accounts for about 5% of total consumer spending, equivalent to just under 4% of GDP.

Recent passenger car production data reflect a weak domestic consumer sector, coupled with buoyant business and export demand. Production increased strongly in 1993 and 1994 (see Chart A). Its strength came from production for export, which rose by over 16% in 1994, while production for the home market was broadly flat. Some of this export strength was the result of the continued build-up of production from Japanese implants.

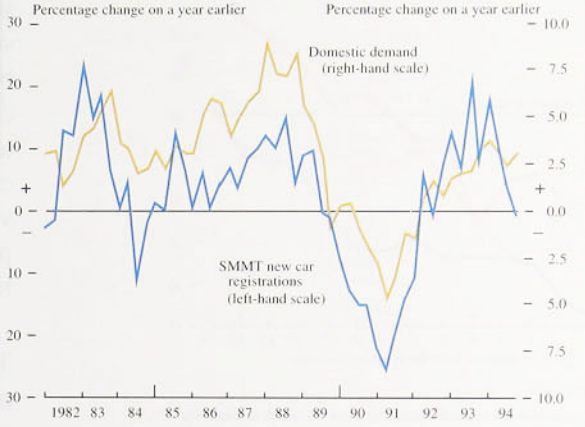
**Chart A**
**Growth of UK passenger car production and manufacturing output**




Increases in production of commercial vehicles indicated strong domestic replacement investment in new vehicles. Production of commercial vehicles for the home market rose by 29.4% in 1994, while production for export was up by 5.3%.

Growth in new car registrations is strongly correlated with growth in domestic demand, as Chart B shows, so the recent downturn in registrations also indicates weakness in the domestic sector.

**Chart B**
**Growth of new car registrations and domestic demand**



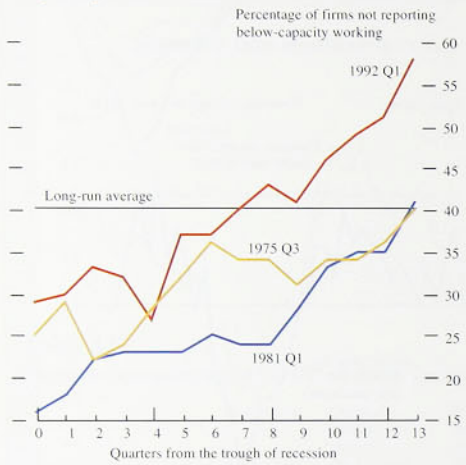

Sources: CSO and Society of Motor Manufacturers and Traders (SMMT).

Recent increases in registrations have derived primarily from corporate/fleet buyers (up 15.2% in 1994) while registrations to private consumers have been weak (up 1.0% in 1994). However, there is some evidence that activity may be stronger in the used-car market, particularly in the nearly-new market. ADT Auctions estimate that the used-car market expanded by 12.7% in volume terms between 1992 and 1993, reflecting some shift in consumer preferences and a faster turnover of new vehicles by contract-hire, rental and fleet purchases. Anecdotal evidence suggests that this trend continued throughout 1994. Nevertheless, there is little doubt that domestic demand for cars remains weak.

*Prices*

In 1995, car prices have a weight of 4.6% in the retail prices index (RPI) and other vehicle-related items, such as petrol, maintenance, insurance and tax, account for a further 7.9%. The RPI car price series is based on two and three year old car prices, which give a more accurate reflection of actual prices paid in the marketplace than do new car prices. Used-car price inflation has been below RPIY inflation since January 1995.

**Chart 3.9**
**Capacity utilisation in recent recoveries**[a]




Source: CBI.

(a) Dates shown indicate the quarter in which the trough in output was reached.

stronger than firms had been expecting. Export orders over the past four months grew at the fastest rate on record. The balance expecting higher output over the next four months was at around the same level as in January 1995 and October 1994.

Capacity utilisation in manufacturing[1] in 1995 Q1 was at its highest level for almost six years, at about 18 percentage points above its long-run average (see Chart 3.9). Because of changes in working practices, such as an increase in 'just in time' delivery, subcontracting and outsourcing, manufacturers may now be more comfortable working at higher levels of capacity. It is also likely that firms define capacity in terms of their current labour force which, in present circumstances, is easy to adjust. However, there are signs that capacity constraints are being hit. In particular, both the CBI and CIPS Surveys report lengthening delivery times.

The introduction of the National Lottery has boosted measured output by up to 0.1 percentage point. But it generates little or no additional pressure on capacity: the increase in output largely reflects profits arising from an innovation valued by consumers. It is best interpreted simply as a one-off increase in both measured GDP and potential output.

Over the medium term, the growth of productive potential is brought about by the growth of the capital stock, the labour force and total factor productivity. Since 1980, the non-residential capital stock has grown by about 2.5% a year and the labour force by about 0.5% a year. Initial estimates for 1994 suggest that the capital stock may have grown by a little more than 2.5%, but that the labour force was constant. On balance, productive potential will probably have grown at about its trend rate.

## 3.5 Summary

Real output growth in the economy as a whole was strong in the year to 1995 Q1. Although it slowed in the second half of 1994, it has shown no clear sign of moderating since then and remains above its long-run trend. Domestic demand started to increase more strongly towards the end of last year. Weakness in the real economy is becoming more concentrated—and is

(1) As measured by the proportion of firms *not* reporting that they were working below capacity in the CBI Quarterly Trends Survey.

particularly affecting the housing market, construction and parts of retailing. Prospects are better for producers of internationally-tradable goods and services.

# 4 The labour market

## 4.1 Earnings

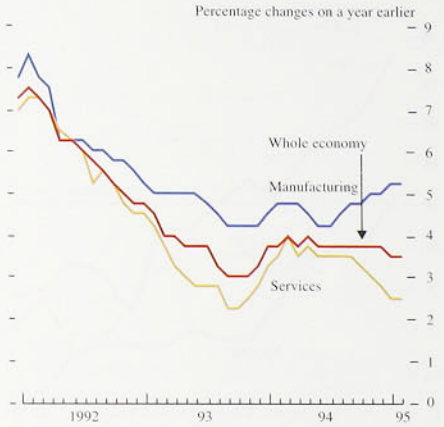
The annual growth rate of nominal earnings has fallen in recent months, despite further increases in employment. In February, underlying average earnings growth was 3½%; although unchanged from January, this was a quarter of a percentage point below its December level (Chart 4.1). Actual average earnings growth fell more sharply, and declined from 4.5% to 3.1% over the same period.

One reason for the recent downturn in wage inflation is that bonuses and overtime payments were unusually high in February and March of last year, particularly in the banking, finance, insurance and business services sector (Chart 4.2 and Table 4.A). This year, bonus payments in this sector fell back to more normal levels, pushing down the twelve-month growth rate. This may mean that earnings growth will soon start to increase on twelve-month measures. However, actual average earnings data are highly volatile, so even though the short-term growth rate—the change between the average for the latest three months and that for the previous three—has increased sharply since August, a pick-up in the twelve-month rate is not certain.

Within the February total, underlying manufacturing earnings increased at a twelve-month rate of 5¼%, unchanged from January but a quarter of a percentage point up from November and December. The growth rate in services was only 2½%. This differential in growth rates is high by historical standards, but not exceptional. Since 1980, the difference between the levels of average earnings in manufacturing and services has increased by around 11%. There are three possible reasons for this.

First, manufacturing companies are increasingly subcontracting out services such as cleaning and catering; between 1984 and 1990, the proportion of all inputs purchased by manufacturing industries that were supplied by services sector industries increased from 20% to 27%. Since such jobs tend to be lower paid than traditional manufacturing jobs, this has tended to push down average earnings in the services sector and push up average earnings in the manufacturing sector.

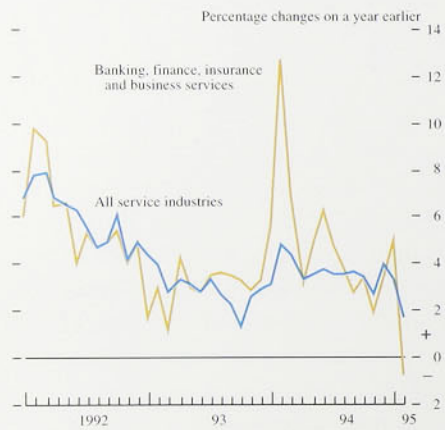
**Chart 4.1**
**'Underlying' earnings growth(a)**




Source: *Employment Gazette*.

(a) Underlying earnings growth is calculated by the Employment Department and makes allowances for temporary influences such as arrears of pay, variations in the timing of settlements, industrial disputes and the influenceof public holidays in relation to the survey period.

**Chart 4.2**
**Earnings growth in the service sector(a)**




Source: *Employment Gazette*. February 1995 observation constructed using SIC (92) industry calculations. All other data points are based on SIC (80).

(a) Growth in actual average earnings.

**Table 4.A**
**Average earnings growth by industry**

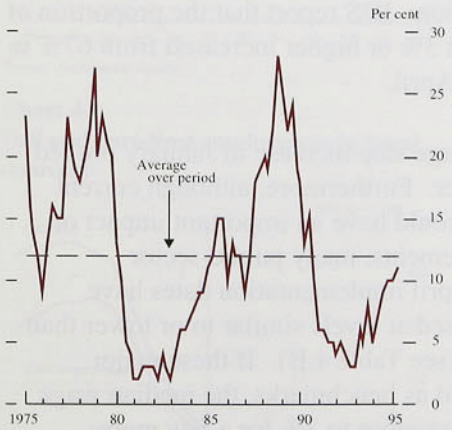
Year-on-year percentage change

| | Employment weight | 1994 Nov. | 1994 Dec. | 1995 Jan. | 1995 Feb. (a) |
|---|---|---|---|---|---|
| Production | 0.289 | 4.5 | 5.7 | 4.8 | 5.8 |
| *of which*: | | | | | |
| Manufacturing | 0.262 | 5.0 | 5.9 | 4.7 | 5.6 |
| Construction | 0.055 | 4.1 | 3.4 | 3.3 | 2.5 |
| Agriculture | 0.017 | 1.4 | 6.6 | 4.9 | 0.1 |
| Services | 0.639 | 2.6 | 3.9 | 3.3 | 1.7 |
| *of which*: | | | | | |
| Retail trade and repairs | 0.119 | 2.0 | 1.4 | 2.1 | 0.8 |
| Education and health | 0.120 | 1.1 | 6.0 | 1.2 | 1.8 |
| Financial intermediation | 0.049 | 2.7 | 5.4 | 6.4 | -4.7 |
| Real estate, renting and business activities | 0.050 | 1.5 | 1.9 | 3.3 | 3.2 |
| Whole economy | 1.000 | 3.3 | 4.4 | 3.7 | 3.1 |

Source: *Employment Gazette*, April 1995 Table 5.3.

(a) Provisional.

**Chart 4.3**
**Skills shortages**




Source: CBI Industrial Trends Survey.
Q: What factors are likely to limit your output over the next four months?
A: Skilled labour.

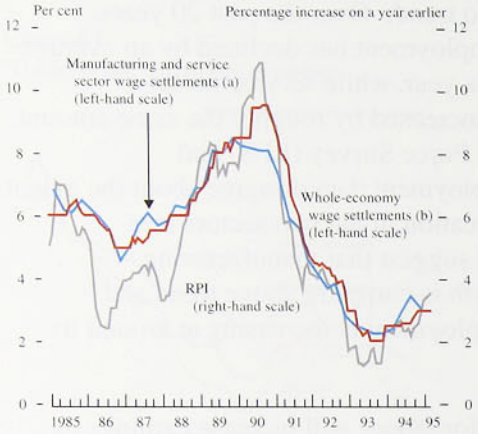
Second, movements in relative labour demand. Although workforce-in-employment data suggest that, in the year to 1994 Q4, more jobs were created in the services sector than in manufacturing (0.8% and 0.4% increases respectively), it is necessary to consider changes relative to trend. Over the past 20 years, manufacturing employment has declined by an average of about 150,000 a year, while service-sector employment has increased by roughly the same amount. While the Labour Force Survey (LFS) and workforce-in-employment data disagree about the extent of employment creation in the two sectors (see Section 4.2), both suggest that manufacturing employment growth is currently above trend and service-sector employment is increasing at around its trend rate.

A rise in demand for labour will increase earnings by raising the numbers of hours worked. In the year to winter 1994/95, average weekly hours worked in the manufacturing sector rose by 1.7% and hours of overtime worked increased by 5.6%. By contrast, in the services sector, average weekly hours worked rose by only 0.1%.

Third, manufacturing wages may have picked up in response to skill shortages. The evidence here is mixed. The latest CBI Industrial Trends Survey indicates that skill shortages in manufacturing are increasing, but are not significantly greater than usual. In the second quarter of this year, 11% of firms said that a shortage of skilled labour was the factor most likely to limit their output, up from 3% in 1993 Q1. Chart 4.3 shows that this increase is slightly greater than that seen following the 1980–81 recession, but that the extent of skill shortages is still below the 12% average seen over the past two decades. According to the British Chambers of Commerce's Survey, however, in the first quarter of 1995 a balance of 34% of manufacturers were having difficulties in securing skilled manual workers, substantially higher than the 19% balance recorded a year earlier. In the service sector, a balance of 13% of firms reported skill shortages, compared with 8% in the first quarter of 1994.

The picture of an improvement in manufacturing labour demand and an increase in skill shortages is consistent with the stronger increase in demand for tradable goods than for non-tradables discussed in Section 3. Such a dichotomy in demand could push up inflation if it reflects greater difficulty in reallocating resources between sectors than in the past. However, since many

**Chart 4.4**
**Wage settlements and RPI inflation**




(a) CBI employment-weighted average.
(b) IRS three-month median.

other labour-market indicators suggest that labour flexibility has increased over the past decade, the gap between earnings growth in manufacturing and services is likely to prove temporary.

Average earnings statistics are based upon figures for a firm's total wage bill, which includes overtime and shift payments, grading increments and bonuses, as well as basic wages. By contrast, settlement data generally cover only basic wages. Despite this narrower coverage, it is useful to consider wage agreement data, since basic wages make up by far the largest single component of a firm's overall wage bill.

Industrial Relations Services report that the median level of settlements for the three months to March was 3.0%, unchanged from the previous four months (see Chart 4.4). Similarly, Income Data Services (IDS) have found that the modal range of wage agreements moved up to 3.0%–3.9% in the fourth quarter of last year from 2.0%–2.9% in the third quarter, and that agreements implemented in January were in line with those in the fourth quarter of 1994. Most of these pay deals were determined against a background of RPI inflation of 2.6%–2.9%. The jump in the headline RPI inflation rate to 3.3% in January was announced in mid-February and was therefore too late to have affected many of the agreements. But there are early indications that private-sector pay awards with April implementation dates may have moved upwards, in line with the rise in headline RPI inflation: IDS report that the proportion of wage settlements at 3% or higher increased from 67% in January to 70% in April.

**Table 4.B**
**Major public-sector pay increases effective from 1 April 1995**(a)

Percentage increase

| | Numbers covered | 1994 | 1995 |
|---|---|---|---|
| Armed forces | 236,000 | 3.6 | 2.5–2.9 |
| Doctors and dentists | 120,000 | 3.0 | 2.5–3.0 |
| Nurses and midwives | 446,000 | 3.0 | 1.0–3.0 |
| Professions allied to medicine | 45,000 | 2.4 | 1.0–3.0 |
| Teachers (England and Wales) | 472,000 | 2.9 | 2.7 |

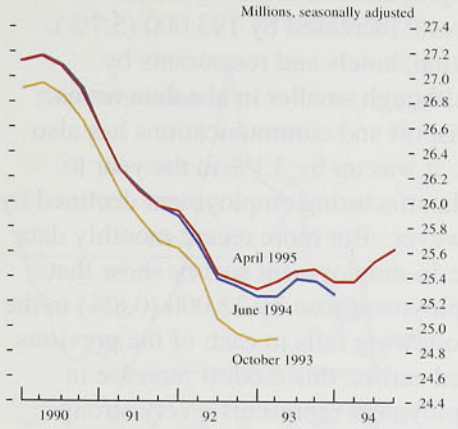
Source: IDS Report 683/February 1995.

(a) Includes all public-sector pay agreements covering more than 40,000 employees.

Earlier fears of a large step increase in January proved unfounded, however. Furthermore, although current headline inflation could have an important impact on private-sector agreements, many public-sector agreements with April implementation dates have already been finalised at levels similar to or lower than last year's awards (see Table 4.B). If these major agreements are used as benchmarks, the median wage settlement could stay close to 3% for a few more months. The importance of such developments is underscored by the fact that roughly half of all wage agreements have either January or April implementation dates.

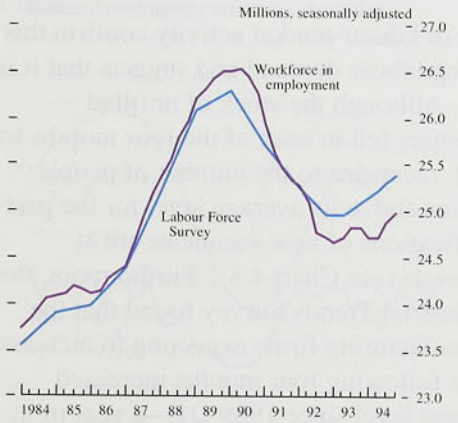
In spite of public-sector restraint, the above evidence suggests that the close correlation between movements in private-sector wage settlements and headline RPI

**Chart 4.5**
**Revisions to estimates of workforce in employment**



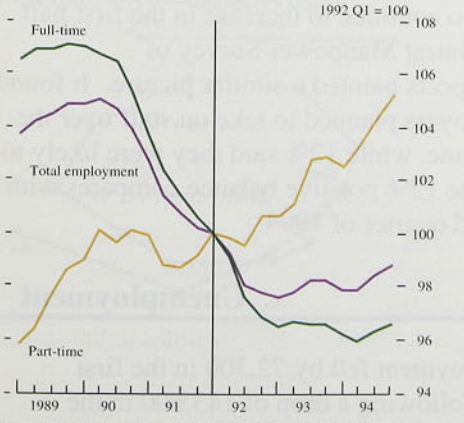

Source: *Employment Gazette*.

**Chart 4.6**
**Comparison of employment measures (Great Britain)**




Source: *Employment Gazette*.

**Chart 4.7**
**Full and part-time employment in latest recovery**




Source: *Employment Department* (seasonally adjusted data).

inflation will continue. So, given that inflation is expected to be higher in the fourth quarter of this year than it was in 1994 Q4, wage settlements are likely to rise further. This increase in basic wages is likely to result in a higher growth rate of average earnings.

## 4.2 Labour demand

Labour demand has continued to increase strongly. The workforce-in-employment series, based upon a survey of employers, rose by 107,000—or 0.4%—over the quarter to December 1994, following a rise of 124,000 in the previous quarter. In addition, the Employment Department has revised the data going back to December 1991, with the result that the new figure for September of last year is 89,000 higher than previously recorded (see Chart 4.5). These developments have helped to reduce the divergence between the two measures of employment, but the LFS measure,(1) based upon a survey of households, continues to show a greater rise in total employment since the trough in December 1992 (see Chart 4.6).

Not only has labour demand increased, but employers now seem to be more confident that the recovery will be sustained. Whereas the initial increase in employment in 1993 was concentrated in part-time work and self-employment, there is now evidence that full-time employment is rising and that greater numbers of workers are being taken on by companies. The number of full-time jobs, as measured by the workforce-in-employment series, has now risen in two successive quarters for the first time since 1989 (see Chart 4.7). LFS data show that total employment rose by 296,000 between winter 1993/94 and winter 1994/95, 186,000 of whom were full-time employees. In the previous year, by comparison, there was a 129,000 increase in total employment, despite a 93,000 fall in full-time jobs.

This shift towards full-time work has pushed up total hours worked—the most comprehensive indicator of labour demand. LFS figures indicate that in the winter of 1994/95 the average weekly hours worked by those in employment was 0.7% above the level a year earlier. Total employment rose by 1.2% over the same period, so that total hours worked increased by 2.0%, suggesting that labour demand is growing more strongly than it was six months ago (see Table 4.C).

(1) All LFS figures quoted in the text refer to Great Britain; the workforce-in-employment statistics refer to the United Kingdom.

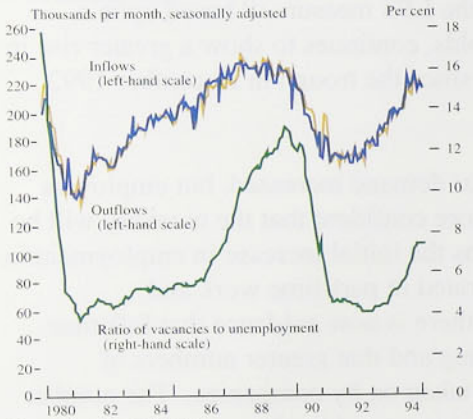
### Table 4.C
### Changes in employment:[a] seasonally adjusted

| Thousands | Winter 1993/94 | Spring 1994 | Summer 1994 | Autumn 1994 | Winter 1994/95 |
|---|---|---|---|---|---|
| **Employees** | | | | | |
| Full-time | 37 | 11 | 43 | 70 | 62 |
| Part-time | 4 | 28 | 34 | -34 | 39 |
| **Self-employed** | | | | | |
| Full-time | 19 | 1 | 2 | 47 | -10 |
| Part-time | 3 | 13 | 10 | 12 | 19 |
| **Men** | | | | | |
| Full-time | 52 | 15 | 26 | 85 | 2 |
| Part-time | — | 35 | 6 | 13 | 23 |
| **Women** | | | | | |
| Full-time | 21 | -18 | 34 | 19 | 41 |
| Part-time | 9 | 14 | 6 | -25 | 20 |
| **Total** [b] | **79** | **49** | **72** | **84** | **91** |
| Total hours worked per week (millions) | 828 | 833 | 833 | 842 | 845 |
| | 1993 Q4 | 1994 Q1 | Q2 | Q3 | Q4 |
| Workforce in employment | 13 | -45 | -27 | 124 | 107 |

Sources: *Employment Gazette* and Labour Force Survey.

(a) Respondents are classed as 'part-time' or 'full-time' according to self-assessment.
(b) Total also includes people on government training schemes and unpaid family workers.

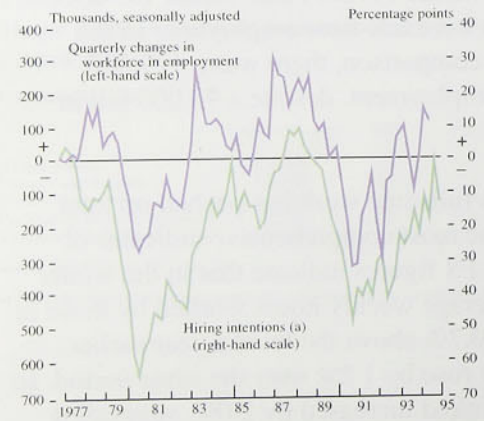
### Chart 4.8
### Vacancies at Jobcentres[a]




Source: *Employment Gazette*.
Note: It is thought that about a third of all vacancies are notified to Jobcentres.

(a) Excluding Community Programmes.

### Chart 4.9
### Changes in employment and hiring intentions




Sources: *Employment Gazette* and CBI.

(a) CBI Industrial Trends Survey: balance of firms expecting to raise employment in the following four months less those expecting a reduction.

The rise in labour demand has been concentrated in the services sector. The LFS reports that, in the year to winter 1994/95, employment in financial intermediation and business services[1] increased by 193,000 (5.7%), and that in distribution, hotels and restaurants by 106,000 (2.1%). Although smaller in absolute terms, employment in transport and communications has also increased strongly; it was up by 3.1% in the year to winter 1994/95. Manufacturing employment declined by 70,000 (1.5%), however. But more recent monthly data from the workforce-in-employment survey show that manufacturing employment rose by 32,000 (0.8%) in the year to February, following falls in each of the previous five years. As noted earlier, this modest increase in manufacturing employment represents a very strong performance relative to the sector's trend decline over the past 20 years. In five of the nine major sectors, average hours worked increased by at least 0.9% in the year to the winter of 1994/95.

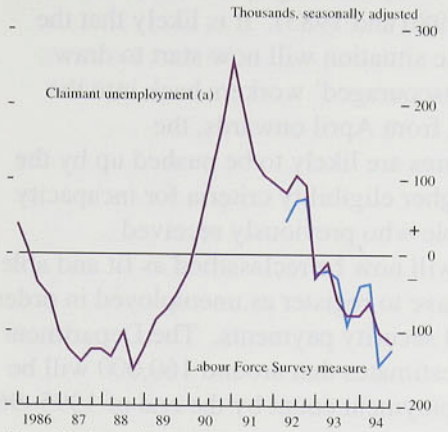
Indirect indicators of labour-market activity confirm this picture of increasing labour demand and suggest that it is likely to continue. Although the stock of unfilled vacancies at Jobcentres fell in each of the four months to March, the ratio of vacancies to the number of people unemployed remains above its average level for the past 15 years, and notifications of new vacancies are at historically high levels (see Chart 4.8). Furthermore, the CBI's January Industrial Trends Survey found that the net balance of manufacturing firms expecting to increase employment in the following four months increased sharply, to its highest level since 1989 Q1—a year in which total employment increased by 2.7% (see Chart 4.9). Although the balance fell back slightly in the April Survey, it remains eight percentage points above its average for the past 20 years, suggesting that labour demand is likely to continue to increase in the first half of this year. The latest Manpower Survey of employment prospects painted a similar picture. It found that 24% of employers planned to take on staff over the three months to June, while 12% said they were likely to shed workers. The 12% positive balance compares with 10% in the second quarter of 1994.

## 4.3 Unemployment

Claimant unemployment fell by 72,300 in the first quarter of 1995, following a drop of 143,600 in the previous quarter. It is too early yet to say whether there

(1) The business services category encompasses real-estate activities, letting and renting activities and other business activities.

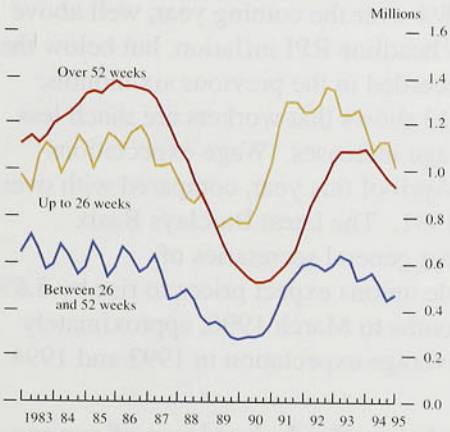
**Chart 4.10**
**Quarterly changes in unemployment (Great Britain)**




Source: *Employment Gazette*.

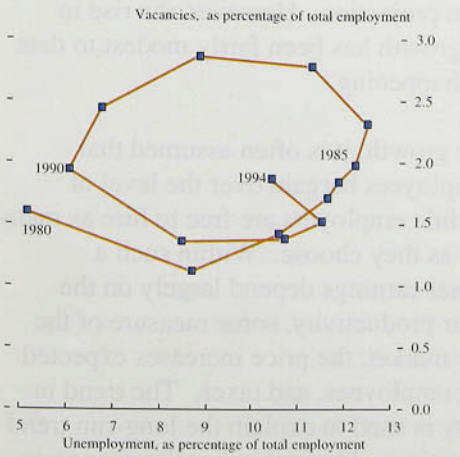
(a) Quarterly claimant unemployment constructed to align with Labour Force Survey periods, ie Q1 = December, January and February.

**Chart 4.11**
**Claimant unemployment by duration**




Source: *Employment Gazette*.

**Chart 4.12**
**Unemployment—vacancies curve**




Source: *Employment Gazette*.

has been a slowdown in the rate of decline. Chart 4.10 shows that when unemployment is falling, its rate of decline can vary significantly from quarter to quarter. The LFS measure of unemployment fell by 127,000 between autumn 1994 and winter 1994/95, and by 533,000 in the two years to this winter, well above the 424,000 increase in employment over the same period.

The reductions in claimant unemployment are the result both of more people leaving the count and fewer people joining it. In the eight quarters to 1994 Q4, the number of people joining the count as a proportion of total employment (the inflow rate) fell by 0.3 percentage points to 1.2%. Over the same period, the number of people leaving the count as a proportion of total unemployment (the outflow rate) rose by 1.7 percentage points to 14.1%. Unemployment among the long-term jobless has fallen by the same proportion as for those out of work for shorter periods. In the year to January 1995, the number of people who had been unemployed for over six months declined by 14.4% (232,000), while the number out of work for six months or less fell by 14.2% (see Chart 4.11).

As well as reflecting reduced inflows, declines in long-term unemployment may be being caused by more effective job searching. This may have come about as a result of: (i) the greater number of unemployed people who have completed work-related government training programmes; (ii) the declines in unemployment benefit relative to income from employment (increasing the incentive for the unemployed to take low-paid work); and (iii) the more even growth of output across regions in this recovery, which has helped to reduce local mismatches between demand for and supply of labour. However, there is only limited evidence to suggest any improvement in job search. In theory, more effective searching should result in a lower level of unemployment for a given number of vacancies. Chart 4.12 plots the relationship between unemployment and vacancies (known as the 'Beveridge curve'); it suggests that although search effectiveness has improved since 1985, it has deteriorated since 1990.

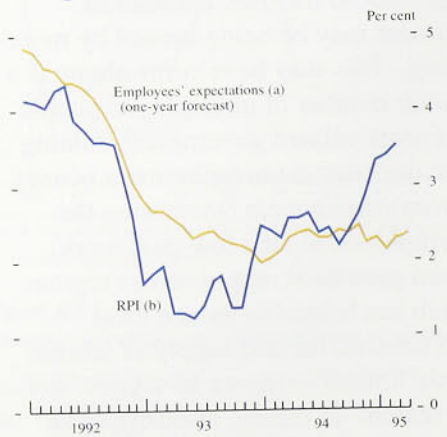
As a result of the improvement in labour-market conditions, the seasonally adjusted unemployment rate fell from a peak of 10.5% at the beginning of 1993 to 8.4% in March. In spite of this, the percentage of people aged 16 and over who are either employed or actively seeking work (the activity rate) has continued to decline; it began to fall in 1990. In the winter of 1994/95, the

activity rate was 62.6%, 0.3 percentage points lower than a year earlier and 1.7 percentage points below its 1990 peak (similar to the two percentage point drop that occurred between 1980 and 1983). It is likely that the improving economic situation will now start to draw some previously 'discouraged' workers back into the labour force. Also, from April onwards, the unemployment figures are likely to be pushed up by the introduction of tougher eligibility criteria for incapacity benefit; some people who previously received incapacity benefit will now be reclassified as fit and able to work, and will have to register as unemployed in order to obtain any social security payments. The Department of Social Security estimates that around 160,000 will be added to the unemployment count by the end of 1995–96 as a result of the change.

## 4.4 Price and wage expectations

According to the April Gallup Survey, employees expect prices to rise by 3.8% over the coming year, well above the current level of headline RPI inflation, but below the average of 4.5% recorded in the previous six months. However, Chart 4.13 shows that workers are much less optimistic about wage increases. Wage expectations averaged 2.3% in April of this year, compared with over 6% at the start of 1991. The latest Barclays Basix Survey indicates that general secretaries of TUC-affiliated trade unions expect prices to rise by 3.6% over the twelve months to March 1996, approximately the same as their average expectation in 1993 and 1994.

Chart 4.13
RPI inflation and employees' expectations of wage increases




(a) Based on Gallup Survey of Employees (three-month moving average).
(b) Percentage changes on a year earlier.

## 4.5 Explaining the behaviour of wages

In seven of the previous nine *Reports*, stronger average earnings growth has been cited as an important upside risk to the inflation projection. However, the rise in nominal earnings growth has been fairly modest to date. So what has been happening?

In analysing wage growth, it is often assumed that employers and employees bargain over the level of nominal wages, while employers are free to hire as many or as few workers as they choose. Within such a framework, nominal earnings depend largely on the trend rate of labour productivity, some measure of the state of the labour market, the price increases expected by employers and employees, and taxes. The trend in labour productivity is used to explain the long-run trend increase in real earnings. Unemployment or economic activity measures are included because employees are

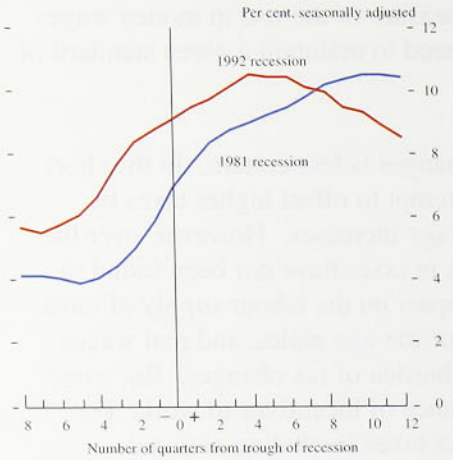
less likely to push for large pay increases if the prospects for alternative employment decline. Inflation expectations are a measure of the rise in money wages workers think they need to maintain a given standard of living.

The impact of tax changes is less certain. In the short run, workers may attempt to offset higher taxes by bidding for higher wage increases. However, over the longer term, changes in taxes have not been found to have a significant impact on the labour supply of most groups, particularly prime-age males, and real wages must absorb the full burden of tax changes. But some taxes change the balance of incentives to work. For instance, higher direct taxes (including national insurance contributions) reduce after-tax incomes for those in work relative to unemployment benefit levels, increasing the incentive for the low-paid not to work and so tending to raise both bargained pre-tax nominal earnings and unemployment.

Most of these factors suggest earnings should now be picking up: the unemployment rate has fallen sharply since the beginning of 1993, RPI inflation has increased by 2.3 percentage points since June 1993 and taxes, both direct and indirect, have risen over the past two years (producing at least some short-term upward pressure upon wages). In addition, labour productivity increased by 3.5% in 1994, up from 3.2% in 1993 and 1.9% in 1992, and well above the long-run trend of 2%–2¼% a year. Current productivity improvements may have an impact on wage settlements by boosting firms' profit margins; firms are likely to be more generous in wage bargaining when profits are high. Hence, it seems reasonable to conclude that this year's wage settlements are subject to the same, or slightly higher, upward pressure from productivity growth as last year's.

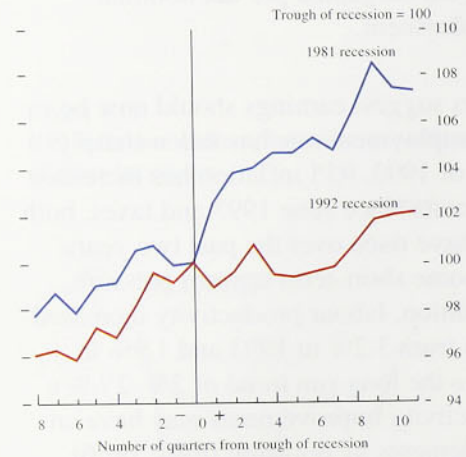
So is the explanation that employees are expecting lower inflation? Not according to the latest price expectations data in the Gallup Survey. However, inflation expectations are difficult to measure. It is possible that the decline in expected wage increases recorded by the Gallup Survey gives a better indication of the impact of expectations upon current wage bargaining. Indeed, if this is the case, inflation expectations have fallen sharply since 1991—a reduction which is key to the achievement of a sustained period of low inflation since, when expectations are higher than actual inflation, inflation will tend to rise.

**Chart 4.14**
**Unemployment around recessions**




Source: *Employment Gazette*.

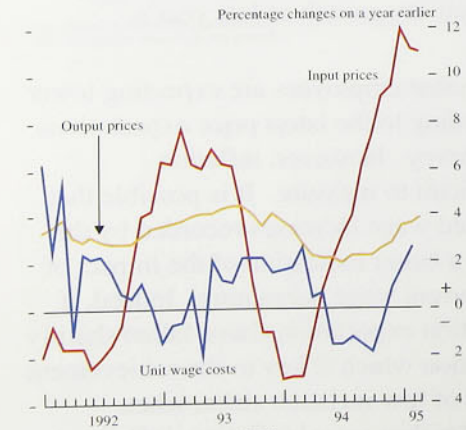
**Chart 4.15**
**Real product wages around recessions**(a)




Source: *Employment Gazette*.

(a) Real product wage defined as average earnings divided by the GDP deflator.

**Chart 4.16**
**Cost pressures in manufacturing sector**




Sources: *Employment Gazette* and CSO.

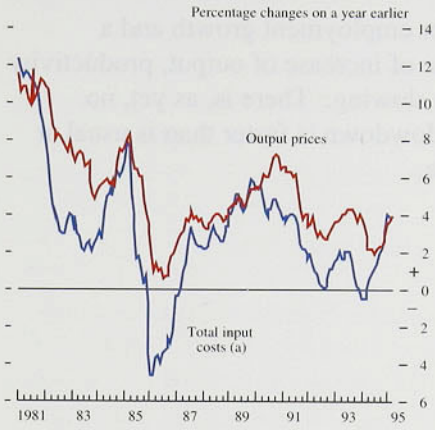
Another possible explanation for muted wage inflation is that the relationship between earnings and the 'natural' rate of unemployment has changed. This could be the result, for instance, of trade union legislation, recent changes in the tax and social security system, the deregulation of the product and labour markets, the abolition of Wages Councils, housing market reforms or increases in the proportion of total employment made up by part-time and temporary jobs. If the 'natural' rate were to have fallen, this would tend to push down wages for a given headline unemployment rate. Some evidence of this is presented in Charts 4.14 and 4.15, which show movements in unemployment and the average real wage paid by employers. Unemployment began to fall much earlier following the latest recession than in the previous one and is now at a lower rate than its equivalent point in the 1982–83 recovery. But despite this evidence of stronger relative labour demand, the increase in the average real wage employers have had to pay has been substantially less than in the 1982–83 period, providing circumstantial evidence that the labour market has become more flexible.

## 4.6 Productivity and unit labour costs

The ability of firms to keep prices down depends on their costs and their margins (see Section 5 for a discussion of price-setting). For many firms, the single biggest variable cost is their wage bill. This helps to explain why output price inflation in the manufacturing sector has only increased by 1.9 percentage points since its trough in July of last year, despite a 15 percentage point increase in input price inflation in the year to January 1995 (see Chart 4.16): firms were able to offset much of the increase in the price of their inputs because of strong productivity growth. In the year to October 1994, increased productivity meant manufacturing unit wage costs fell by 1.9%. A pick-up in productivity growth is not unusual in the early stages of a recovery, as firms have spare capacity and can meet increased demand for output by increasing hours worked. However, following the recent growth in manufacturing employment, it is likely that much of this spare capacity has now been absorbed. As a result, the twelve-month rate of change of manufacturing productivity fell to 3.1% in February from 7.0% in October, and unit wage cost growth increased to 2.5%.

If sustained, this turnaround in unit wage costs will make it difficult for manufacturers to absorb further large increases in input prices. Firms probably base

### Chart 4.17
### Manufacturing output prices and total input costs




Sources: CSO and Bank of England.

(a) Weighted average of trend unit wage costs (70%) and input prices (30%). Trend unit wage costs are constructed using a moving-average process.

### Table 4.D
### Unit wage costs and their components

Percentage changes on same period in previous year

| | Output | Employ-ment | Labour productivity | Earnings per employee | Unit wage costs |
|---|---|---|---|---|---|
| **(a) Whole economy** | | | | | |
| 1992 | -0.5 | -2.3 | 1.9 | 6.4 | 4.1 |
| 1993 | 2.2 | -0.8 | 3.2 | 3.2 | 0.3 |
| 1994 | 3.9 | 0.4 | 3.5 | 3.2 | 0.1 |
| 1993 Q1 | 1.5 | -2.4 | 4.0 | 4.9 | 0.7 |
| Q2 | 2.0 | -1.4 | 3.7 | 3.2 | -0.2 |
| Q3 | 2.4 | 0.2 | 2.8 | 2.5 | 0.3 |
| Q4 | 2.7 | 0.5 | 2.2 | 2.3 | 0.4 |
| 1994 Q1 | 3.2 | 0.4 | 2.8 | 3.5 | 1.0 |
| Q2 | 4.1 | 0.1 | 4.0 | 3.2 | -0.4 |
| Q3 | 4.1 | 0.3 | 3.8 | 3.2 | -0.1 |
| Q4 | 4.2 | 0.8 | 3.5 | 2.8 | -0.1 |
| **(b) Manufacturing industry** | | | | | |
| 1992 | -0.6 | -4.2 | 4.5 | 6.6 | 2.0 |
| 1993 | 1.3 | -3.2 | 3.8 | 4.5 | 0.6 |
| 1994 | 4.1 | -1.0 | 4.8 | 4.7 | -0.2 |
| 1993 Q1 | 1.4 | -4.4 | 5.8 | 4.7 | -0.9 |
| Q2 | 1.3 | -3.6 | 4.7 | 4.9 | 0.2 |
| Q3 | 1.3 | -1.8 | 2.9 | 4.4 | 1.5 |
| Q4 | 1.5 | -0.4 | 2.0 | 4.0 | 1.9 |
| 1994 Q1 | 2.3 | -0.5 | 2.8 | 4.8 | 1.8 |
| Q2 | 3.8 | -0.7 | 4.6 | 4.4 | -0.2 |
| Q3 | 4.8 | -0.9 | 6.0 | 4.5 | -1.5 |
| Q4 | 5.2 | -0.4 | 5.9 | 5.2 | -0.7 |

Source: *Employment Gazette*, Tables 1.8 and 5.8.
Note: Manufacturing employment and average earnings are based on SIC (80); manufacturing output is based on SIC (92).

their pricing decisions on movements in input prices and trend movements in their unit wage costs, that is, on movements in average earnings and some measure of trend productivity. Underlying average earnings in manufacturing have been creeping upwards since November 1993 and productivity growth has been falling. Chart 4.17 suggests that this measure of variable costs is very important in the determination of manufacturing output prices; the latest period appears unusual, in that variable input prices are rising faster than output prices. However, it is difficult to reconcile the flat profile for industrial production over the past six months with the increases in manufacturing employment, optimistic results from surveys of production and output expectations, and reports from the Bank's Agents of strong manufacturing output and orders. Assuming that the published productivity data are correct, the twelve-month growth rate in unit wage costs reached a trough in October 1994 and has since increased to 2.5% in February of this year.

As yet, there is no evidence of a similar turnaround in whole-economy unit labour costs, in part because data for whole-economy productivity are available only to the fourth quarter of last year. The pick-up in the growth rate of total employment has led to a slight slowing of measured productivity growth, as in previous cycles. Figures based upon employment data from the workforce-in-employment series suggest that productivity growth slowed to 3.5% in the fourth quarter of 1994 from 4.0% in the second quarter. Over the same period, unit wage cost growth increased by 0.3 percentage points, but was still down by 0.1%, the third successive quarter to show a fall in year-on-year terms (Table 4.D). Figures derived from the LFS employment data present a similar picture: productivity growth fell to 3.0% in 1994 Q4—down from 3.1% in Q2—and unit wage costs were unchanged from a year earlier.

## 4.7 Summary

Labour demand increased in 1994: the growth rate of employment (on the LFS measure) rose to 1.2% in the year to winter 1994/95, up from 0.5% in the previous year; average hours worked are rising; and claimant unemployment fell 172,000 in the year to 1994 Q1, but by 399,000 in the year to 1995 Q1. However, these developments have as yet produced only a small upward movement in wage settlements and average earnings growth. This implies either that price expectations have fallen sharply or that the slack in the labour market is

exerting greater downward pressure on real wages than expected. Despite these factors, the projected rise in inflation is likely to cause both wage settlements and average earnings growth to increase in the second half of the year.

As a result of stronger employment growth and a moderation in the rate of increase of output, productivity growth appears to be slowing. There is, as yet, no suggestion that this slowdown is faster than is usual at this stage of the cycle.

# Pricing behaviour 5

## 5.1 External influences

The February *Report* noted that the sterling exchange rate index had been stable against a background of international currency turbulence, and that commodity prices had been relatively flat when weighted by UK use. Since then, sterling has fallen sharply, import prices have risen and commodity prices have edged up.

The consequence of sterling's depreciation for UK inflation hinges on its causes and on whether the weaker pound will push import prices up faster. This section examines the short-run dynamics of a decline in the sterling exchange rate.

### *The exchange rate and import prices*

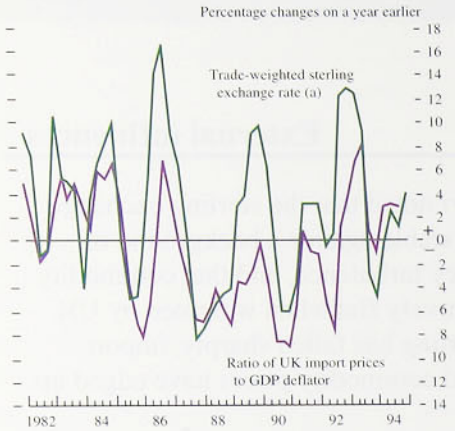
Sterling fell 4.7% on a trade-weighted basis between 2 February and 4 May, and was down 5.1% from its most recent peak on 24 January. The fall has not been even across currencies. Against the Deutsche Mark, the pound declined 7.8% since the February *Report*; against the dollar, it was up 2.3% (see Section 2).

Non-oil import prices rose 0.6% in the fourth quarter of 1994, but there are signs that import prices have started to rise faster. In December, whole-economy import prices rose by 3.7%, and they were up a further 2.5% in January. Non-EU non-oil import prices, the statistics on which are released more quickly, increased by 2.4% in February, but were flat in March.

The fall in sterling will lead to a rise in import costs and hence will have a direct, or 'first-round', effect on the UK retail prices index—that is, before taking account of any potential response from wages and domestic prices. In the longer run, firms' responses to a fall in the exchange rate will depend on whether higher import costs are permanent or temporary, and on the stance of UK monetary policy.

In markets with rapid price adjustment, such as wholesale commodity markets, the fall in the pound should be reflected immediately in higher import prices. Most traded commodities are priced in dollars, and these prices are likely to rise as the dollar exchange rate falls.

**Chart 5.1**
**Changes in sterling and the relative prices of UK imports**




(a) + indicates a depreciation of the exchange rate.

And, as sterling has tended to move with the dollar since the February *Report*, the sterling price of commodities should also increase. In other markets, prices may take longer to react—but import prices usually respond fairly quickly to a change in sterling's trade-weighted exchange rate. Chart 5.1 shows that there is a very close relationship between movements in the pound's trade-weighted exchange rate and changes in import prices relative to domestic costs. In order to understand how a fall in the exchange rate affects domestically determined prices in the short run, it is necessary to consider how firms react to the change in their costs which results from higher import prices.

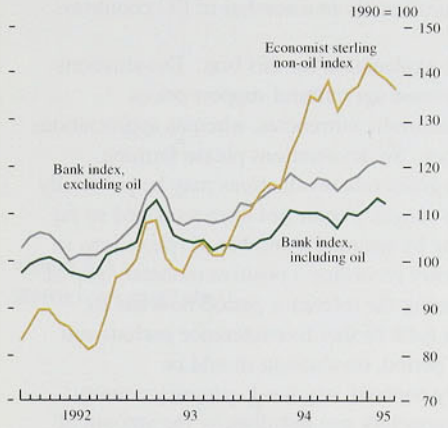
It is possible to set an upper bound for the first-round effect of a rise in import costs on UK retail prices. Around 15% of the RPI consists of imports sold direct to the consumer, so a 1% rise in import prices would be expected to lead almost immediately to a 0.15% rise in UK prices. In addition, however, imports feed directly into the supply chain, and rising import prices will therefore put pressure on firms to raise their own prices. Around a quarter of final demand is accounted for by imported materials—a rough guide to the import content of the retail prices index. In total, therefore, the first-round effect of a 1% increase in import prices would be to raise UK prices by a maximum of 0.25%.

This analysis suggests that the fall in the pound will lead to an increase in import prices in the short run. Some of this may have already come through; some should come through over the rest of this year. Firms may not yet be convinced that the rise in import costs is permanent, and may try to smooth out some of the rise in costs by narrowing their profit margins. However, there is likely to be some pass-through of higher import costs to UK prices. If import prices were to rise by the full amount of the decline in the exchange rate, a 5% fall in sterling would lead to a first-round increase in the UK price level of up to about 1¼%.

### *Commodity prices*

Although changes in the exchange rate have a significant impact on those commodity prices traded in world spot markets, many commodities are subject to regulation. In particular, the prices of a number of foods produced in the European Union are partially insulated from world price movements as a result of the Common Agricultural Policy (CAP). Conventional commodity price indices overestimate the price movements faced by British consumers.

**Chart 5.2**
**Commodity prices**




Sources: *Economist* and Bank of England.

The Bank has developed a commodity price index which is weighted by UK demand; it also takes account of the fact that the prices of many agricultural products are not determined in world markets. Although agricultural products are not an important component of manufacturing inputs, the demand-weighted index is, by its nature, a more accurate indicator than conventional indices of overall inflationary pressure arising from commodity markets. The index, however, is still provisional. At the moment, it suggests that non-oil commodity prices rose by around 1½% in January, and a further 1% in February. The non-oil index has shown a much flatter profile than other commodity indices over the past year: it increased by less than 10% in the year to February. This compares with a 22% increase in the *Economist* index, which places a much greater weight on metal prices (see Chart 5.2).

Will commodity prices start to pick up faster? Agricultural prices are key to the outlook for commodity costs facing UK consumers, since they make up one third of the Bank's index. Despite the 1992 CAP reform agreement to cut cereal support prices by around 7% between summer 1994 and summer 1995, agricultural market prices increased by around 11% in the year to January. There were also strong increases in the other components of the index, because agreed cuts in intervention rates were dominated by exchange rate movements. Indeed, the 'green pound' has been devalued by around 8% since 1 July 1994, compared with a fall in sterling's Ecu exchange rate of 5.6% and a fall in sterling's trade-weighted index of 4.6%.

The box on page 46 shows that the system which determines 'green' rates of exchange across EU countries has an in-built inflationary bias, with weak-currency economies devaluing more often than stronger-currency countries revalue. For the United Kingdom, devaluations of the green pound push up the minimum price that farmers are guaranteed for their products. Although recent devaluations have raised the intervention price of wheat, the effect on the market price has been small, because strong demand for UK wheat exports—because of high harvest quality and a weak pound—means that the market price is higher than the intervention price. By contrast, after sterling's suspension from the Exchange Rate Mechanism in 1992 when the green pound was devalued by 19%, the wheat market price hovered around the intervention price. In that situation, the devaluation of the green pound had a significant impact on the market price.

# 'Green' rates of exchange and agricultural prices

On 1 January 1993, a new system for controlling agricultural prices was introduced. The new system has not worked entirely as planned. Despite the programme of support-price reductions agreed in the 1992 Common Agricultural Policy price reforms, it has built in a tendency towards rising agricultural prices in the European Union.

## *The new agricultural price control system*

The new system intended that Member States should adjust their 'green' rates of exchange against the Ecu—used to determine the own-currency support price for their agricultural produce—in line with changes in market rates, according to a set of rules. Under the rules of the system, exchange rates in Member States were to be monitored over a number of (ten-day) reference periods. Revaluations or devaluations to green rates were to be made automatically at the end of these periods if the gaps between market rates and green rates (known as *monetary gaps*) exceeded certain trigger levels. Green rates could be adjusted more frequently if currencies were very volatile.

Table 1 shows that, despite these rules, there have been 124 *devaluations* since the beginning of 1992, but only 17 *revaluations*. Furthermore, the revaluations have been in countries (Portugal, Italy, Spain and the United Kingdom) that have experienced green-rate devaluations overall. The stronger-currency countries, whose market rates have appreciated significantly since 1992, have not revalued their green rates.

**Table 1**
**Operation of the green exchange rate system, January 1992–May 1995**

| | Number of revaluations | Number of devaluations | Percentage cumulative re/devaluations since 1992 | Percentage cumulative support price since 1992 |
|---|---|---|---|---|
| Belgium/ Luxembourg | — | 1 | 1.5 | +1.6 |
| Denmark | — | 2 | 3.9 | +4.1 |
| France | — | 2 | 1.1 | +1.1 |
| Germany | — | — | — | — |
| Greece | — | 25 | 31.1 | +45.0 |
| Ireland | — | 5 | 12.3 | +14.0 |
| Italy | 7 | 29 | 36.9 | +58.5 |
| Netherlands | — | — | — | — |
| Portugal | 1 | 10 | 12.8 | +14.7 |
| Spain | 1 | 20 | 25.0 | +33.3 |
| United Kingdom | 8 | 18 | 21.2 | +27.0 |
| Austria (a) | — | — | — | — |
| Finland (a) | — | 2 | 1.1 | +1.1 |
| Sweden (a) | — | 10 | 8.3 | +9.0 |

Source: Ministry of Agriculture, Fisheries and Food.

(a) These countries joined the European Union on 1 January 1995.

## *In-built bias in the system*

As sterling has moved sharply downwards against the Ecu, devaluations of the green pound have pushed up the domestic support prices which farmers in the United Kingdom are guaranteed for their produce by roughly the amount of the devaluation. However, strong-currency countries have avoided revaluing their currencies. Germany, for instance, has maintained its green rate of exchange at its 1992 level, despite the revaluation of the Deutsche Mark against the Ecu of almost 10%. The cumulative effect of devaluations has been to increase support prices significantly in a number of EU countries.

There is a simple explanation for this bias. Devaluations of green rates increase agricultural support prices denominated in domestic currencies, whereas appreciations reduce these prices. So devaluations please farming lobbies, whereas green rate revaluations may be politically difficult. Strong-currency countries have managed so far to avoid revaluing by winning a number of relaxations to the rules. A country recording a positive monetary gap of more than 5% during the reference period now has its green rate frozen for a further five reference periods and then, in the fifth period, revaluation should be implemented. By contrast, any weak-currency country with a negative monetary gap devalues by the amount of the gap at the end of each ten-day period. The result is that agricultural prices are higher on average across the European Union than if stronger-currency countries revalued automatically.

## *The impact of green-rate changes on the United Kingdom*

The new—relaxed—system has two effects. First, the weakness of the pound has led to a lower 'green' rate, and hence higher agricultural prices. Second, the distortion caused by the asymmetry of the system means that considerable profit opportunities exist for farmers and traders to sell their produce in the countries with the highest intervention prices unless agricultural market prices are equalised across countries; this tends to drive prices towards the highest level in the European Union.

**Table 2**
**Market and green rates against the Ecu, 25 April–3 May 1995**

| | Green rate 3 May | Average market rate 25 April–3 May | Real money gap |
|---|---|---|---|
| Belgium | 40.83 | 38.11 | +6.68 |
| Germany | 1.95 | 1.85 | +5.08 |
| Netherlands | 2.20 | 2.07 | +5.65 |
| United Kingdom | 0.84 | 0.83 | +0.40 |
| Denmark | 7.74 | 7.28 | +6.00 |
| France | 6.61 | 6.56 | +0.76 |
| Italy | 2,311.19 | 2,265.42 | +1.98 |
| Ireland | 0.83 | 0.82 | +1.01 |
| Greece | 302.8 | 301.88 | +0.32 |
| Spain | 170.17 | 165.28 | +2.87 |
| Portugal | 198.20 | 195.95 | +1.14 |
| Sweden | 9.92 | 9.81 | -1.11 |
| Austria | 13.72 | 13.02 | +5.09 |
| Finland | 5.88 | 5.72 | +2.79 |

Source: Home Grown Cereals Authority (HGCA).

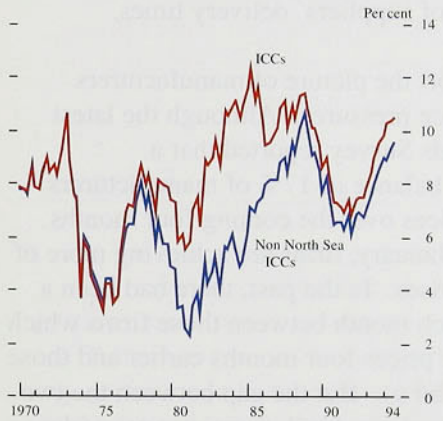
Note:

(1) All currencies with positive real money gaps (RMGs) are being monitored over the 30-day period, 25 April–24 May.
(2) On the basis of exchange rates over the period 25–26 April, RMGs for the Belgian franc, Dutch guilder and Danish krona have remained above 5%, and thus potential revaluations are currently expected to remain suspended from 25 May.
(3) RMGs for the German mark and Austrian schilling are currently above 5%. If they remain so on average for the whole period, they will enter a new reference period from 25 May.
(4) Currencies with negative gaps continue to face green-rate devaluations every ten days.

Looking ahead, if sterling remains weak against EU currencies, the green pound may be devalued again. The weakness of the pound, together with initial indications of a good quality crop in this country in 1995, suggests that agricultural prices will remain buoyant. It is likely that the Bank's commodity index will increase further over the coming year.

Crude oil prices have risen strongly since the time of the February *Report* and were up about 8% in sterling terms by the beginning of May.

**Chart 5.3**
**Return on capital**[a]

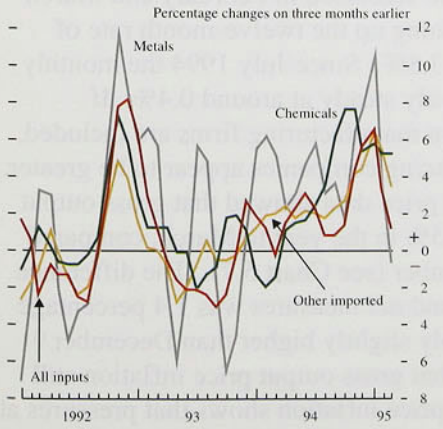



(a) Pre-tax rate of return on capital stock at replacement cost.

## 5.2 Profitability

Profits continued to increase strongly at the end of last year. In nominal terms, industrial and commercial companies' (ICCs') profits rose by 1.2% in the fourth quarter of 1994; they were up 10.8% on a year earlier. Profitability—the rate of return earned on capital—depends on how prices move relative to costs and on the extent of capacity utilisation in the economy. Chart 5.3 shows that profitability is now approaching rates last seen in the mid 1980s. There has been a stark contrast between profitability in the domestic market and that in export markets. Bank calculations suggest that whereas domestic profitability in manufacturing has been squeezed in recent months, export profits have risen fairly steadily over the past two years; they picked up particularly sharply at the beginning of 1995. Overall profit levels in ICCs probably flattened off in the first quarter of 1995.

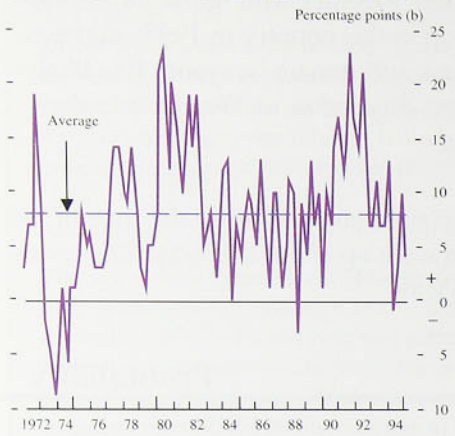
**Chart 5.4**
**Imported material input price changes**




*Manufacturing*

At the time of the February *Report*, input price inflation appeared to have fallen markedly on short-run measures. Subsequent revisions to the data have shown, however, that on a three-month annualised basis seasonally adjusted input prices were rising at 9.3% in December. There are signs of some recent moderation, and short-run input price inflation was 8.3% in March. However, there is little reason to be sanguine. Input price inflation has been running at a rate which, if it continues, is much higher than that consistent with long-run price stability. And, if import prices continue to increase faster than domestic prices, this will put additional pressure on manufacturers. Indeed, over the twelve months to March, imported metals, chemicals and other non-food materials—which make up around half of the index—together accounted for more than two thirds of the 10.9% rise in input prices (see Chart 5.4).

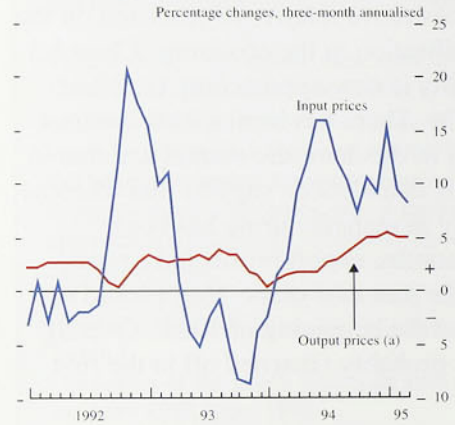
**Chart 5.5**
**Difference between number of firms planning and achieving price increases**[a]




Source: CBI Industrial Trends Survey.

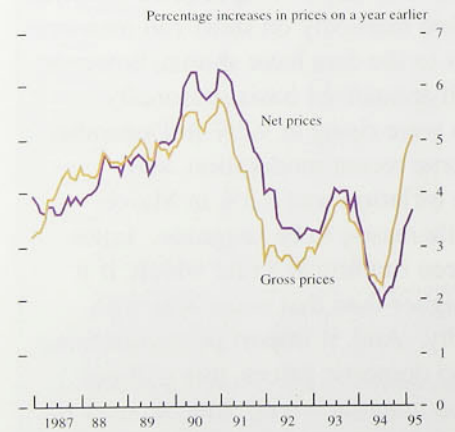
(a) The price series are adjusted to refer to the same four-month periods.
(b) Balance of firms expecting rises/falls in average prices of domestic orders minus those reporting rises/falls.

**Chart 5.6**
**Producer price inflation**




(a) Seasonally adjusted, excluding food, drink, tobacco and petroleum.

**Chart 5.7**
**Manufacturers' output price inflation**




Note: Both the gross and net output prices are calculated on the basis of SIC (80) classification.

In addition, survey evidence from the Chartered Institute of Purchasing and Supply (CIPS) paints a picture of strong price pressures in the supply chain. In the May CIPS Survey, a seasonally adjusted positive balance of 81% of purchasing managers reported that prices had risen during the month, up six percentage points from 76% in March (after rounding), a level around which the balance had remained since the beginning of 1995. Purchasing managers said that the recent weakness of sterling had driven up the price of imported raw materials and components during April. They noted that many price rises were a result of capacity constraints and shortages of supply—in particular, of many raw materials and semi-manufactures, including metals, plastics, electronics, chemicals and paper. This led to a further lengthening of suppliers' delivery times.

Other surveys support the picture of manufacturers facing persistent price pressures. Although the latest CBI Quarterly Trends Survey reported that a seasonally adjusted balance of 17% of manufacturers expected to raise prices over the coming four months, down from 24% in January, firms are achieving more of their planned price rises. In the past, there had been a considerable gap each month between those firms which had planned to raise prices four months earlier and those which in the event did so. But the gap between the two has almost disappeared; in April, there was no evidence that firms' ability to push through price increases had been particularly frustrated by weak demand (see Chart 5.5).

As yet, there is little sign of a sharp pick-up in output price inflation. Short-run measures of manufacturers' output price inflation stabilised in February and March (see Chart 5.6), pushing up the twelve-month rate of increase slightly to 3.8%. Since July 1994 the monthly rise has been relatively steady at around 0.4%. If transactions between manufacturing firms are included, the cost pressures facing companies appear to be greater. The latest producer price data showed that gross output price inflation was 5% in the year to March, compared with 3.9% in December (see Chart 5.7). The difference between the gross and net measures was 1.4 percentage points in March, only slightly higher than December.[1] However, the fact that gross output price inflation still exceeds net output price inflation shows that pressures at the intermediate stage of the supply chain are still intense.

(1) Gross output price data are only available using SIC (80) weights. The figure for the gap between net and output price inflation uses consistent weights.

As a result of cost pressures—particularly rising input and unit labour costs—margins have been squeezed in recent months; the Bank's estimate of domestic manufacturing margins as a share of total output fell sharply between January and February. The pressure on margins is particularly evident in short-term measures of costs. In February, unit labour costs rose at a three-month annualised rate of 8.6%, materials and fuels at 12.5%, and finished manufactured imports at 27.2%.(1) It is clear that profits per unit of output sold in the domestic market have fallen in recent months, even if profitability in export markets has been supported by the fall in the pound.

Profitability in the manufacturing sector also depends on capacity utilisation. According to the latest CBI Quarterly Trends Survey, the proportion of firms working below capacity fell from 49% in January to 42% in April, boosting profit levels. However, as pressures on margins increase, so do the pressures on producers to increase output prices faster.

### *Utilities*

Utilities charge prices within limits set by the official regulators. During 1994, utility prices added to twelve-month inflation rates, primarily because of increases in water charges and the introduction of VAT on fuel. In April 1995, the effect of the introduction of VAT on domestic fuel and power will drop out of the twelve-month calculation of the retail prices index, reducing the contribution to the annual RPIX inflation rate made by both electricity and gas. Regional electricity companies have also agreed to cut distribution prices—which account for around a quarter of a typical consumer's bill—by between 11% and 17% by March 1996. And the power industry regulator is considering revising the electricity distribution price controls which were agreed last August and come into effect in April 1996.

Most water companies set prices in April. Water bills are expected to rise faster than the rate of inflation, as the costs of quality improvements continue to be passed on to the consumer. Bills rose by 7% in 1994, but the rise is likely to be less in 1995, following a review of the pricing formula.

(1) Unit labour cost data are highly dependent on manufacturing output figures. If manufacturing output is revised up, unit labour cost data would be revised down.

*Retailing*

Retailers' margins are estimated to have fallen over the year to the fourth quarter of 1994, continuing the downward trend seen over the past two years. Bought-in goods account for the majority of retailing costs and their prices rose at almost twice the rate of retail goods inflation. Unit labour costs have been subdued over the past year, alleviating some of the pressure on margins. Despite fierce competition in the high street over the past two years and price wars between supermarket chains, company accounts data for 1993 suggest that the operating profits in the food sector and in department stores in the United Kingdom were substantially higher than in France or Germany. That suggests that there may still be scope for large retailers to absorb cost increases resulting from higher factory output prices. But small retailers may find it harder to refrain from passing on higher costs to consumers.

## 5.3 Summary

The sharp decline in the pound's trade-weighted exchange rate is likely to lead to a temporary pick-up in import price inflation. Some imports are sold directly to the consumer, so there will be an immediate effect on retail price inflation. Other imports are bought by UK companies. In the short run, firms will probably absorb some of the rise in import costs in their profit margins, although they are likely to pass on some of the increase to their customers. Other costs in the manufacturing sector also appear to be increasing. This suggests that profitability per unit of output in the domestic market is being squeezed. As a result, output price inflation, which has remained stable on short-run measures, is likely to start to increase. The extent to which higher output prices feed through to retail prices will depend on the stance of monetary policy. Retail margins have been falling since the beginning of 1992, but international comparisons suggest that there is scope for them to be squeezed further.

# Prospects for inflation 6

This section assesses the implications of the economic news of the past three months for the inflation outlook. It presents the Bank's medium-term projections for RPIX and RPIY inflation, and offers the Bank's conclusions about current inflationary pressures.

## 6.1 The economic news

The inflation assessment takes account of the main news reported in previous sections:

- Most measures of inflation increased a little over the past quarter (Section 1).

- Money and credit have been expanding at a faster rate than in the previous quarter, despite higher short-term interest rates; sterling's trade-weighted exchange rate fell by 4.7% between 2 February and 4 May (Section 2).

- According to the preliminary estimate, GDP growth in the first quarter continued at the same rate (over 3% annualised) as in the second half of 1994. Revised data indicate that output grew faster than previously thought in the year to 1994 Q4; domestic demand, in particular, was stronger in the fourth quarter than first estimated. Retail sales were more or less flat, although non-retail consumption appears to have been stronger. Surveys of firms' expectations about future sales continue to suggest that output growth will be buoyant, although perhaps lower than last year. But official data, rather surprisingly, show industrial production and manufacturing output to have been flat since September (Section 3).

- Underlying earnings growth has fallen, despite continued reductions in unemployment and increases in labour demand. But this fall is likely to be temporary (Section 4).

- The prices of manufacturers' inputs (including commodities and imports) continued to increase rapidly, squeezing domestic margins. In the first quarter of 1995, more firms expected to be able to

charge higher prices, according to the CBI, than in the previous quarter and purchasing managers said they had paid higher prices (Section 5).

## 6.2 The Bank's medium-term inflation projection

What does this news reveal about inflationary pressures? The labour market is tightening and the output gap in the economy as a whole is narrowing. Money and credit reflect these developments, which bring nearer the time when the pressure on domestic pay and prices is upward. So far, any increase in domestic inflationary pressure has been muted.

Evidence of the dual nature of the economic recovery is compelling. Sectors dependent on tradable goods and services, which include industries as diverse as manufacturing and business services, have experienced strong growth in output over the past year. More recently, investment demand has grown rapidly. Plant and machinery investment in manufacturing rose by over 10% during 1994, export volumes increased by almost 10% during last year, and the latest CBI Survey showed the balance of firms expecting export orders to increase at the highest level ever. The fall in the exchange rate is likely to increase their competitiveness further. Earnings in manufacturing are rising at over 5% a year, and employment has increased unusually rapidly. Output of tradable services is increasing.

In the non-tradables sectors, however, the picture is very different, particularly for those industries dependent on domestic consumer demand. Housing market activity is, if anything, falling. Retail sales fell in the first quarter of 1995, and have grown at an annual rate of only 0.6% over the past six months. Earnings growth in services fell in the latest month, and the gap between the rates of increase of earnings in manufacturing (with a high proportion of tradable output) and services (with a lower proportion) was, at almost 3%, very high.

The analysis is complicated by two puzzles which have emerged since the February *Report*:

- First, since September, manufacturing output growth has been close to zero, according to the official statistics. It is not easy to reconcile this with survey evidence and the reports of the Bank's Agents, both of which indicate continuing strength in the demand for manufactured goods.

- Second, the effective exchange rate has fallen significantly, during a period in which inflation expectations have fallen slightly.

On the first, the official output data are either incomplete (eg March data for industrial production and its components are not yet available) or preliminary (eg the provisional GDP estimate for the first quarter). Recorded manufacturing output has been more or less flat since last summer, despite most of it being internationally tradable, but manufacturing employment has increased significantly compared with its trend—and so have indicators of industrial activity such as the registration of commercial vehicles. Order books, particularly for exports, are doing well and firms report excellent prospects. Investment has increased sharply.

One possibility is that recorded manufacturing output is simply underestimating the true level of activity and will later be revised up. This would imply that the output gap will close faster than suggested by the GDP figures, and inflation would be higher. A second possibility is that manufacturers have run into capacity constraints as they have tried to increase production. This would be consistent with the lengthening of delivery times reported in surveys. If this is the case, the prospects for industry will depend on whether firms are able to mobilise additional resources quickly. Capacity constraints might reflect a lower-than-expected level of potential output. A third possibility is that demand is weak and that manufacturers do not wish to increase production.

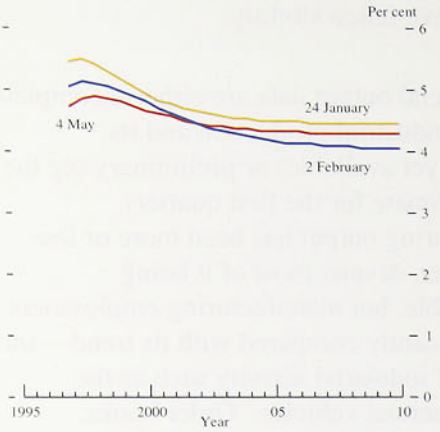
There are several possible explanations for the fall in the exchange rate—all imply a temporary rise in the inflation rate, but they differ in their implications for inflation in the long run. Section 2 considered three possibilities which appear to be broadly consistent with developments in both the exchange rate and interest rates:

(i) UK monetary conditions are expected to be looser in the future, either permanently or temporarily;

(ii) markets believe that other countries have adopted tougher anti-inflation policies, either permanently or temporarily; and

(iii) potential output in the United Kingdom is lower than previously thought.

**Chart 6.1**
**Implied forward inflation rates**



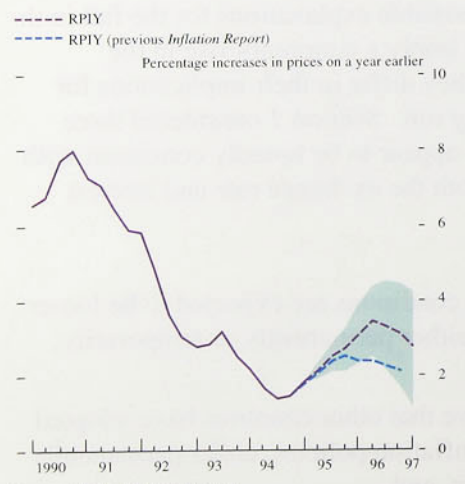

Source: Bank of England.

**Chart 6.2**
**Tradables prices relative to non-tradables prices**(a)


Source: Bank of England.

(a) Seasonally adjusted.

**Chart 6.3**
**RPIY inflation outturns and projections**




Sources: CSO and Bank of England.

The range is defined as the central projection plus or minus the absolute average error on RPIX inflation projections since 1985. These projections have all been based on the assumption that short-term nominal interest rates are unchanged.

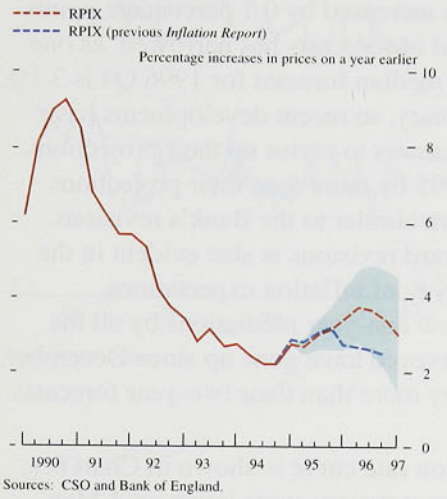
The possibility that an easing of monetary conditions in this country caused the exchange rate to fall sits uneasily with the fact that between 24 January, when sterling's effective exchange rate peaked, and 4 May, expectations of inflation implied by bond yields, fell slightly (see Chart 6.1).

It is more likely that the markets believe monetary conditions abroad are tighter than they had thought. M3 growth has been unexpectedly low in Germany, and prices have fallen in Japan over the past year while activity there has been weak. Short-term forecasts of inflation in these countries have been generally revised downwards, despite reductions in interest rates. A tightening in monetary conditions overseas would imply no change in the UK price level in the long run; import prices and measured inflation would be higher temporarily, but this effect would be reversed (ie import prices would fall and measured inflation would be temporarily lower) as foreign prices adjusted to the postulated monetary tightening.

The third possibility—a downward revision of estimates of potential output—is worth considering because of the fall in recorded productivity growth in manufacturing, the more frequent reports of emerging capacity constraints from the CBI and the Bank's Agents, and the rise in the price of tradables (including manufactures) relative to non-tradables in the domestic market (see Chart 6.2). If estimates of potential output were revised down, then the real exchange rate would depreciate as a consequence, and the relative price of tradables would go up. This would entail an increase in the overall price level, given that monetary policy cannot be adjusted fast enough to push down the price of non-tradables to compensate, so that there would be a temporary increase in the rate of inflation.

All three explanations entail at least a temporary increase in import prices and a temporary increase in twelve-month measures of retail price inflation. The first explanation implies a bigger increase in the price level in the long run than does the third explanation; the second implies no long-run increase at all. Which explanation is adopted for the purposes of the projection will affect how rapidly the projected twelve-month measure of inflation falls back (and whether it temporarily falls below its previous trajectory at some point). None of them can be ruled out as at least a partial explanation of the fall in sterling, given current

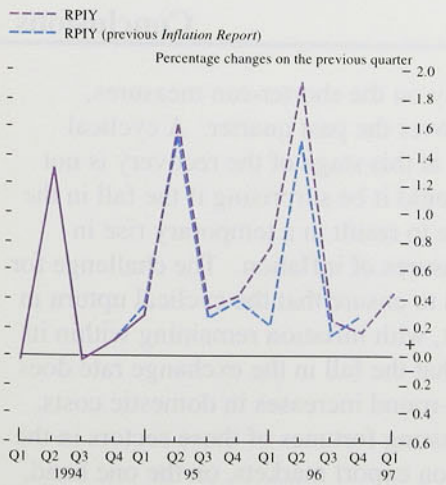
**Chart 6.4**
**RPIX inflation outturns and projections**




Sources: CSO and Bank of England.

The range is defined as the central projection plus or minus the absolute average error on RPIX inflation projections since 1985. These projections have all been based on the assumption that short-term nominal interest rates are unchanged.

**Chart 6.5**
**Quarterly percentage changes in RPIY**




Sources: CSO and Bank of England.

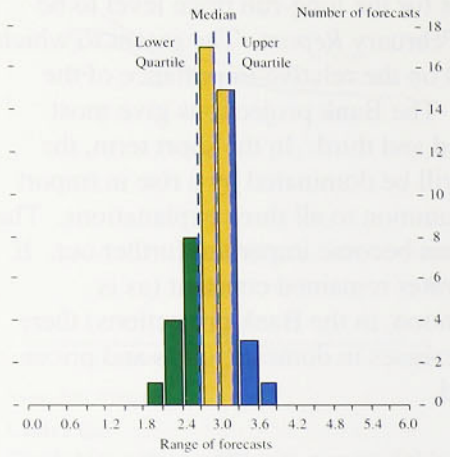
data, but, equally, none is completely convincing. Considerable uncertainty therefore remains about the reasons for the fall in the exchange rate. The Bank's central projection is for the long-run price level to be higher than in the February *Report*. The extent to which it is higher depends on the relative importance of the three explanations. The Bank projections give most weight to the second and third. In the short term, the increase in prices will be dominated by a rise in import prices—a feature common to all three explanations. The different explanations become important further out. If short-term interest rates remained constant (as is assumed, by convention, in the Bank projections) there might be further increases in domestic costs and prices as activity increased.

The Bank's central projections for twelve-month RPIY and RPIX inflation are shown in Charts 6.3 and 6.4. Official interest rates are assumed to remain unchanged, and the exchange rate is assumed to move to reflect the differential between UK short-term interest rates and the trade-weighted interest rate overseas. The sterling effective exchange rate closed at 84.4 on 4 May, when the projections were finalised.

Chart 6.3 shows that RPIY inflation is likely to rise further and for longer than previously projected, but then to fall back. At the two-year horizon, RPIY inflation is now expected to be higher than in the February *Report*. Chart 6.4 shows that the projected path of twelve-month RPIX inflation is very similar to that of RPIY inflation; the increase between the last quarter of 1995 and the first of 1996 is less pronounced because indirect tax increases in 1995 Q1 drop out of the calculation. The projection for RPIX inflation in 1997 Q1 is a little higher than it is for RPIY inflation, and, at around 3%, is above the mid-point of the Government's 1%–4% target range.

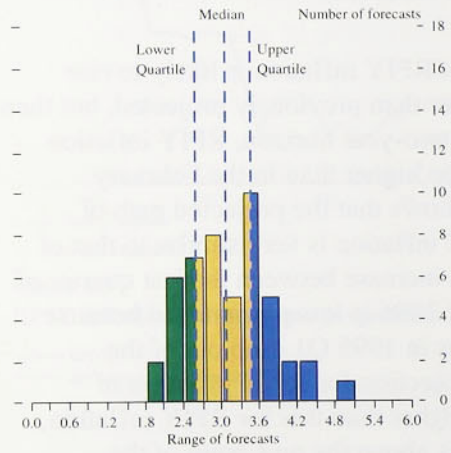
The projection reflects the Bank's judgment that the output gap will continue to close and the labour market to tighten. The fall in the exchange rate is the main reason why the central projection has been revised upwards since February and now shows a pronounced peak in twelve-month rates in 1996. Chart 6.5 illustrates how quarterly rates of increase in RPIY are projected to fall below their previous projections by 1996 Q4. This implies that the change in the projected price *level* as a result of the news of the past three months is likely to be complete by the end of 1996.

**Chart 6.6**
**Distribution of RPIX inflation forecasts for 1995 Q4**




Source: Forecasts of 49 private sector organisations as of April 1995.

**Chart 6.7**
**Distribution of RPIX inflation forecasts for 1996 Q4**




Source: Forecasts of 48 private sector organisations as of April 1995.

**Table 6.A**
**Barclays Basix Survey of inflation expectations**

| | One-year forecasts (mean) | | | Two-year forecasts (mean) | | |
|---|---|---|---|---|---|---|
| | Sept. | Dec. | Mar. | Sept. | Dec. | Mar. |
| General public | 4.1 | 3.9 | 4.3 | 4.7 | 4.4 | 5.0 |
| Academic economists | 2.9 | 2.8 | 3.4 | 3.5 | 3.6 | 3.9 |
| Business economists | 3.3 | 3.1 | 3.6 | 3.9 | 3.7 | 3.7 |
| Investment analysts | 3.2 | 3.2 | 3.7 | 4.2 | 4.1 | 4.1 |
| Finance directors | 3.2 | 3.2 | 3.5 | 4.2 | 3.9 | 4.0 |
| TU general secretaries | 3.9 | 3.2 | 3.6 | 4.9 | 4.1 | 4.6 |

Source: Barclays Bank.

## 6.3 Private sector inflation forecasts

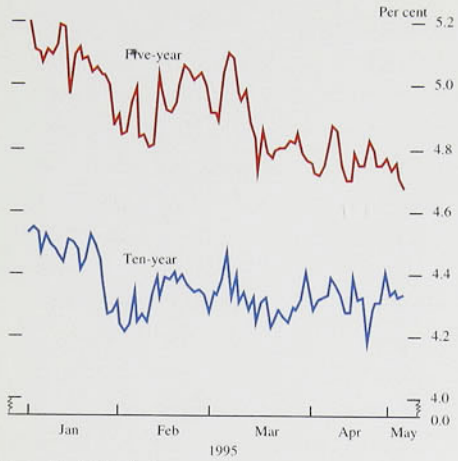
The distributions of private sector forecasts of RPIX inflation for 1995 Q4 and 1996 Q4 are shown in Charts 6.6 and 6.7. Expectations of inflation in 1995 Q4 have edged up a little since the February *Report*; the median forecast has increased by 0.1 percentage points to 2.9%. The spread of forecasts has narrowed, as one would expect. The median forecast for 1996 Q4 is 3.1%, the same as in February, so recent developments have tended to lead forecasters to revise up their projections of inflation over 1995 by more than their projections over 1996—a pattern similar to the Bank's revisions. This pattern of upward revisions is also evident in the Barclays Basix Survey of inflation expectations. Table 6.A shows how one-year predictions by all the different groups surveyed have gone up since December, and in most cases by more than their two-year forecasts.

The forward inflation rate curve is shown in Chart 6.1; it shows inflation expectations were lower on 4 May than on 24 January—when sterling peaked—but similar to those on 2 February, the latest date which was available for the February *Report*. Chart 6.8 shows that expected inflation at the five-year horizon, although volatile, fell over the period, but at the ten-year horizon there was little change.

## 6.4 Conclusions

Inflation, especially on the shorter-run measures, increased slightly over the past quarter. A cyclical upturn in inflation at this stage of the recovery is not surprising. Nor would it be surprising if the fall in the exchange rate were to result in a temporary rise in twelve-month measures of inflation. The challenge for monetary policy is to ensure that the cyclical upturn in inflation is modest, with inflation remaining within its target range, and that the fall in the exchange rate does not lead to second-round increases in domestic costs. The sharply contrasting fortunes of those sectors in the economy focused on export markets, on the one hand, and on domestic sales, on the other, poses a dilemma for monetary policy. There are clear signs of inflationary pressure in the manufacturing sector, with higher rates of both input and output price inflation, faster earnings growth and higher rates of capacity utilisation. The opposite is true in many parts of the non-tradables sector. This dilemma is exacerbated by the two most significant developments since the February *Report*. These are, first, the divergence between official and survey data for

**Chart 6.8**
**Implied forward inflation rates**




Source: Bank of England.

manufacturing output, and, second, the fall in the sterling effective exchange rate index of over 5%.

Taking the evidence as a whole, it is likely that the growth of GDP remains significantly above any realistic assessment of trend. But the principal change in the central projection for RPIX inflation since the February *Report* is the increase in inflation over the next year or so resulting from a lower exchange rate. There is no mechanical link between changes in the exchange rate and the inflation rate. Different assumptions about the reasons for the fall in the exchange rate lead to different conclusions about the speed and extent to which the fall will feed through to higher domestic prices. Given the Bank's assessment of the reasons for the fall in sterling, the new central projection shows a temporary rise in inflation—taking the twelve-month rate of RPIX inflation close to the top of its 1%–4% target range next year and remaining in the upper half of the target range two years ahead.

Given the uncertainties, the risks to the inflation outlook are large. Although the central projection for inflation two years ahead has risen only modestly since the February *Report*, that revision is in the upwards direction, and the risks remain on the upside as they were then. In these circumstances, although the projected rise in inflation does not persist, it is particularly important that monetary policy does not accommodate any second-round effects on wages and prices.

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