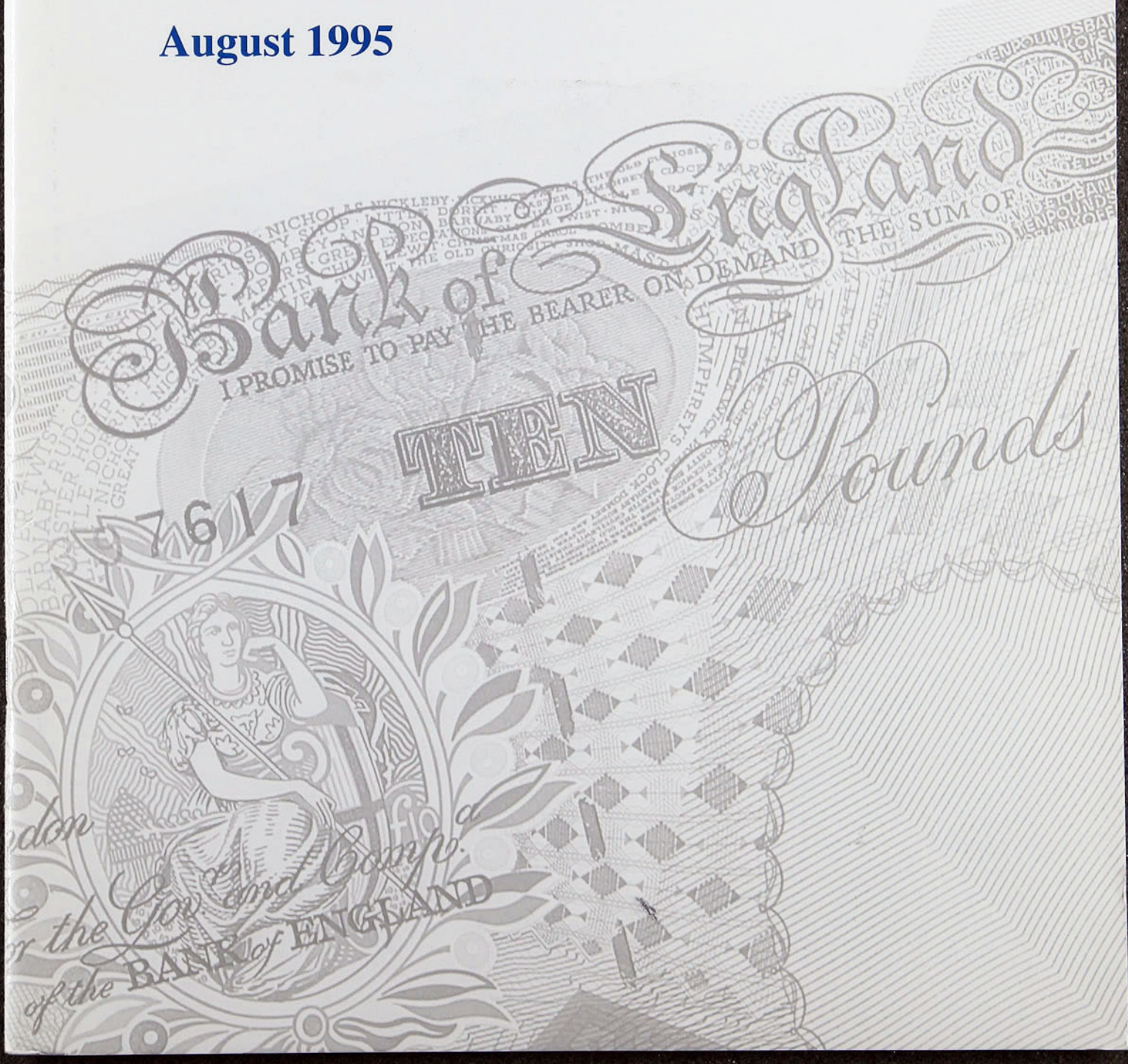
Bank of England

Inflation Report

August 1995



Inflation Report

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Symbols and other information

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.

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The Summary of this *Report* is available at:
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Summary

Twelve-month RPI and RPIX inflation rates have declined slightly since the May *Report*. Twelve-month RPIY inflation has continued its gradual climb upwards. These measures of inflation are likely to increase over the summer. Domestically generated inflation has been much weaker than retail price inflation.

Narrow money (measured by notes and coin), broad money and credit have all grown strongly. The exchange rate is slightly lower than at the time of the May *Report*. Bond yields suggest sterling is expected to fall a little further over the next ten years. Expectations of inflation in five and ten years' time have increased, but they have fallen for shorter horizons.

Most activity indicators have been weak since the May *Report*. But non-oil GDP expanded at a rate a little above trend in the second quarter, as the output of services more than made up for the weakness of industrial production. The main danger is a downturn due to destocking. Trade performance was strong in the first quarter, and the outlook continues to be good, because of the lower real exchange rate. The growth rate of the demand for labour fell in the first half of this year. There are still very few indications of upward pressure on wages. Price pressures at the early stages of the supply chain have increased, largely as a result of higher prices for imports. The pattern of a 'dual economy', with sharply contrasting fortunes in the tradable and non-tradable sectors, remains marked.

The Bank's central projection for inflation two years ahead is similar to that in May. It remains the case that it is more likely than not that RPIX inflation will be above 2½% in the middle of 1997.

The dual nature of the economic recovery makes the dilemma for monetary policy more acute than before. Time will resolve the puzzles about the strength in activity, money growth and domestic inflation. But the lags between changes in monetary policy and their impact on inflation mean that decisions must be made before the puzzles are fully resolved. The familiar danger is that delay in taking action could ultimately result in interest rates having to go higher than would otherwise be the case.

Recent developments in inflation 1

1.1 Retail prices

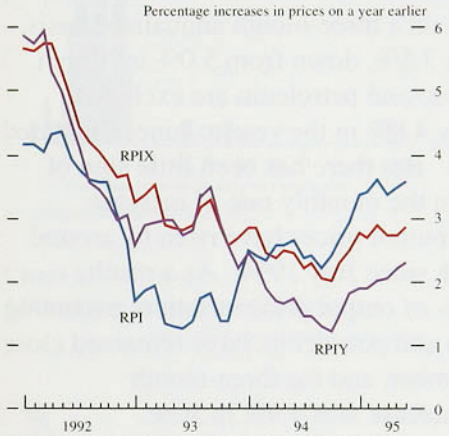
Headline measures of inflation have fallen slightly since the time of the May *Inflation Report*—once the published data are adjusted for the Central Statistical Office's (CSO's) error in calculating retail prices in March, April and May.(1) Retail price inflation was 3.5% in June, down from 3.6% in March. 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 June, compared with 2.9% in March.

The RPIY measure of underlying inflation—which excludes indirect taxes—has, however, continued to edge up. It was 2.3% in June, compared with 2.2% in May, 2.1% in April and 2.0% in March (see Chart 1.1).

Shorter-run measures of inflation can provide a better insight into more recent price developments, provided they are accurately adjusted for seasonal patterns and changes in the timing of tax changes. Table 1.A uses a rough-and-ready method to adjust RPI and RPIX for seasonal effects, but not tax changes; the latter do not follow a fixed seasonal pattern because of the change in the timing of the Budget. It shows that short-run measures of headline inflation fell between March and June, as the effect of tax increases around the Christmas period dropped out of the calculation. Seasonally adjusted RPIY inflation, which was the measure least affected by the change in the date of the annual Budget from April to November, has, in the past, given the best guide to the underlying trend; it also declined.

The goods and services covered in the RPIY measure can be separated into two major categories—those goods and services which are commonly traded internationally, and those which are not. As seen in Chart 1.2, tradables inflation reached a low point—virtually zero—in October 1994, but subsequently rose fairly steadily to

Chart 1.1
Inflation(a)



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

(a) Adjusted for CSO error in underrecording RPI and RPIX inflation.

Table 1.A
Short-run measures of inflation

Percentage changes (a)

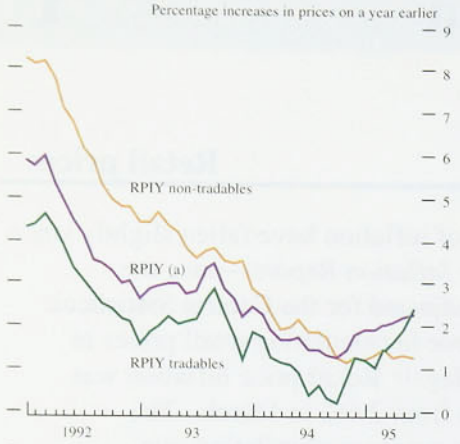
	1994			1995			
	June	Sept.	Dec.	Mar.	Apr.	May	June
RPI (b)							
3-month	3.7	1.7	4.8	4.1	4.2	3.9	3.6
6-month	2.6	2.7	3.2	4.4	4.9	4.7	3.8
RPIX (b)							
3-month	2.6	1.7	3.6	3.6	3.1	2.8	2.5
6-month	2.3	2.1	2.7	3.6	4.2	3.9	3.0
RPIY (b)							
3-month	1.5	1.7	1.6	3.1	2.7	2.7	2.6
6-month	1.9	1.6	1.7	2.4	2.8	3.0	2.8
HARP							
3-month	1.4	1.1	3.2	2.8	2.0	1.4	1.2
6-month	1.9	1.3	2.1	3.0	3.3	3.0	2.0
THARP							
3-month	0.1	1.3	1.5	2.6	2.1	1.3	0.6
6-month	1.4	0.7	1.4	2.1	2.3	2.1	1.6

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. The seasonal adjustment of RPI and RPIX excludes taxes by multiplying the ratio of RPI to RPIY and RPIX to RPIY by seasonally adjusted RPIY.
(b) Adjusted for CSO error in underrecording RPI and RPIX inflation.

(1) An error in the CSO's calculation of retail prices led to an underrecording of the headline inflation rate by 0.1 percentage points in March and May. RPIX inflation was underrecorded by 0.1 percentage points in March and April, and the Bank has adjusted RPIY inflation by a similar amount in February and March to take account of this change. This error was announced by the CSO on 13 July, but the published data were not revised. All measures referred to in this *Report* are corrected by the Bank for the error.

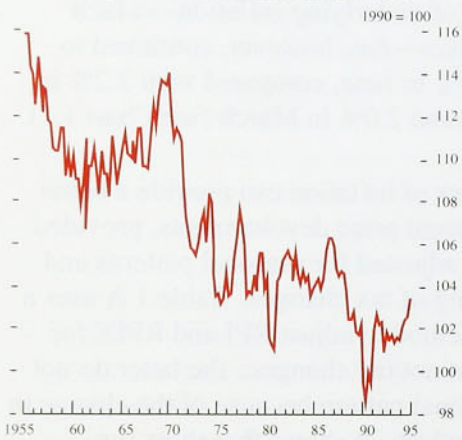
Chart 1.2
RPIY inflation



Sources: CSO and Bank calculations.
Note: RPIY inflation can be greater than both non-tradables and tradables inflation since RPIY includes seasonal food, rents and water charges, which are excluded from both the sub-indices.

(a) Adjusted for CSO error in underrecording RPI and RPIX inflation.

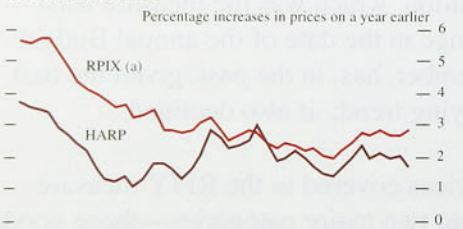
Chart 1.3
Relative price of consumer purchases[a]



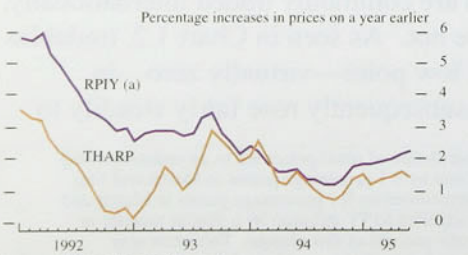
(a) Defined as the ratio of consumption deflator to GDP deflator.

Chart 1.4
Housing-adjusted inflation rates

HARP and RPIX



THARP and RPIY



Sources: CSO and Bank of England.

(a) Adjusted for CSO error in underrecording RPI and RPIX inflation.

reach 2.4% in June 1995; in March, it was above the inflation rate in the non-tradables sector for the first time since the data were first available in 1988.

1.2 Producer output prices

Domestic manufacturing output price inflation has been rising since last summer. Output price inflation in manufacturing as a whole was 4.2% in June, up from 3.8% in March; but on a three-month annualised basis, output prices rose at 3.5%, down from 5.0% in March. If food, drink, tobacco and petroleum are excluded, output prices rose by 4.8% in the year to June, compared with 3.9% in March. But there has been little sign of any recent pick-up in the monthly rate of increase: seasonally adjusted output prices have risen by around 0.4% in every month since July 1994. As a result, shorter-run measures of output price inflation, excluding food, drink, tobacco and petroleum, have remained close to 5.0% since September, and the three-month annualised rate of increase was 4.9% in June.

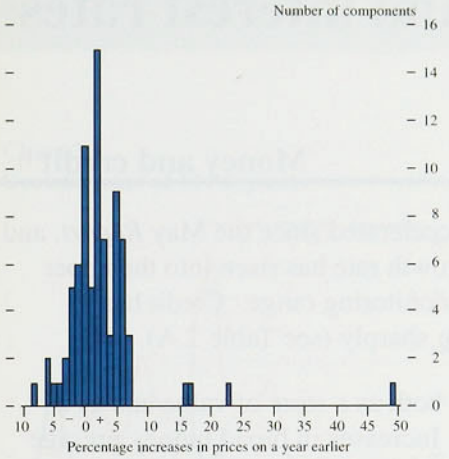
1.3 Expenditure deflators

The GDP deflator (at factor cost) fell by 0.1% in the first quarter of 1995 and was up only 0.7% on the same quarter a year earlier. This suggests that there has been little domestically generated inflation. But the GDP deflator is likely to have picked up again in the second quarter, as prices set by UK producers and retailers were increased to reflect higher import costs. The consumption deflator has tended to rise faster than the GDP deflator since the middle of 1990, as consumers have had to pay higher prices for imports than for domestically produced goods (see Chart 1.3).

1.4 Other measures of inflation

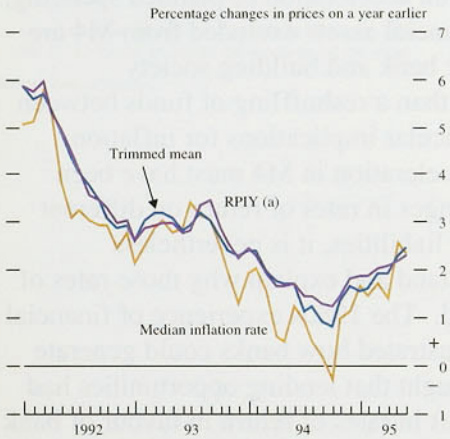
Measures of inflation which adjust RPIX and RPIY to take account of the cost of owner-occupied housing suggest that inflation is weaker than indicated by the unadjusted figures. The housing-adjusted RPIX (HARP) measure replaces the CSO's estimate of housing depreciation with a Bank estimate of the user-cost of housing. The THARP index adjusts RPIY in a similar manner. Chart 1.4 shows that the recent decline in house prices has opened up a considerable gap between the adjusted and unadjusted measures, adding to the evidence that domestically-set prices have been particularly subdued.

Chart 1.5
Distribution of price changes(a)



(a) Components of RPIY in June 1995.

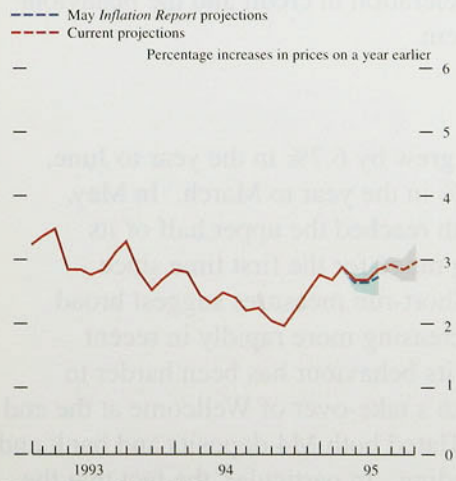
Chart 1.6
Alternative measures of inflation



Sources: CSO and Bank of England.

(a) Adjusted for CSO error in underrecording RPI and RPIX inflation.

Chart 1.7
RPIX inflation projections and outturns(a)



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.

(a) Adjusted for CSO error in underrecording RPI and RPIX inflation.

Although the RPIX and RPIY measures of inflation provide insight into the 'underlying' rate of inflation by excluding changes in mortgage interest payments and indirect taxes, they include prices which are particularly volatile or which change by large amounts at irregular intervals. Such price movements can obscure the underlying picture. Two measures of inflation which attempt to correct for this volatility are the median and the trimmed-mean rates. The median inflation measure uses all the component series of RPIY each month to compute a median twelve-month inflation rate; the trimmed mean excludes the largest and smallest 15% of price changes over the year. Chart 1.5 shows the distribution of price changes in June 1995; it illustrates that the distribution is skewed upwards. Despite this bias, Chart 1.6 shows that the trimmed mean inflation rate has not diverged significantly from the RPIY inflation rate in recent months. The median inflation rate has been much more volatile; it was lower than RPIY inflation throughout 1994, but has since picked up.

Over the next few months, RPIX and RPIY inflation are likely to edge up, reflecting both smaller discounting in the summer sales this year than last and higher import prices feeding through to retail prices (see Chart 1.7).

1.5 Summary

Twelve-month RPI and RPIX inflation rates have declined slightly since the May *Report*—when adjusted for the CSO's error. Twelve-month RPIY inflation has continued its gradual climb upwards. These measures of inflation are likely to increase over the summer.

Most shorter-run measures of inflation have fallen sharply since the time of the May *Report*—even if indirect taxes are excluded. Domestically generated inflation has been much weaker than retail price inflation and short-run measures of inflation which adjust for housing costs have fallen.

2 Money and interest rates

2.1 Money and credit(1)

Broad money has accelerated since the May *Report*, and its twelve-month growth rate has risen into the upper half of its 3%–9% monitoring range. Credit has continued to pick up sharply (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	Apr.	0.5	6.1	4.8	5.8
	May	0.8	7.8	5.8	6.3
	June	0.3	7.0	5.7	5.9
	July	0.6	7.1	6.6	6.1
M0	Apr.	0.5	8.0	5.7	6.3
	May	-0.2	5.7	5.0	5.9
	June	0.3	2.4	4.0	5.7
	July	0.7	3.2	5.6	5.7
M4	Mar.	1.4	10.3	7.8	5.4
	Apr.	0.4	10.1	8.6	5.4
	May	0.9	11.3	8.8	6.3
	June	0.6	7.9	9.1	6.7
M4 lending	Mar.	1.2	10.6	9.2	6.8
	Apr.	0.7	10.5	10.0	7.4
	May	0.8	11.5	9.8	8.0
	June	0.2	7.2	8.9	7.6

	1994 Q3	1994 Q4	1995 Q1	1995 Q2
Divisia				
3 months (b)	5.1	2.3	7.6	6.5
12 months	4.6	3.5	3.7	5.4

Source: Bank of England.

(a) Seasonally adjusted.
(b) Annualised.

Money can be used both as a store of value and as a means of payment. Increases in broad money presage inflation if they signal rising nominal spending. In the short run, however, the implications of an increase in broad money are less clear. An acceleration in M4 could reflect either an acceleration of planned spending, or—since other financial assets excluded from M4 are close substitutes for bank and building society deposits—no more than a reshuffling of funds between assets, with no particular implications for inflation. Even though the acceleration in M4 must have been consistent with changes in rates of return on different financial assets and liabilities, it is nevertheless important to understand and explain why those rates of return have changed. The 1980s experience of financial liberalisation demonstrated how banks could generate liquidity if they thought that lending opportunities had improved, and a shift in rates of return in favour of bank deposits may itself be a precursor of more buoyant corporate activity, financed in part by bank lending.

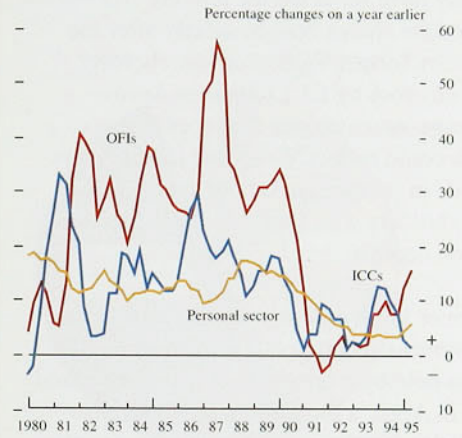
There are three main facts to consider: the acceleration in deposits, the acceleration in credit and the behaviour of the banking system.

Broad money

Broad money, M4, grew by 6.7% in the year to June, compared with 5.4% in the year to March. In May, broad money growth reached the upper half of its 3%–9% monitoring range for the first time since September 1991. Short-run measures suggest broad money has been increasing more rapidly in recent months. However, its behaviour has been harder to interpret since Glaxo's take-over of Wellcome at the end of March, which inflated both M4 deposits and bank and building society lending. In particular, the fact that the

(1) Unless otherwise stated, references to bank and building society lending exclude the effect of securitisations and loan transfers.

Chart 2.1
Growth rates of M4 deposits



Source: Bank of England.

take-over occurred at the end of the month meant that Glaxo and Wellcome shareholders had insufficient time to rebalance their portfolios before the end-March data were collected. As a result, the March money data were artificially high. The box on page 10 suggests that Wellcome shareholders are likely to have adjusted their portfolios relatively quickly, however, and that there is little reason to exclude the deposits from the Glaxo take-over from the April and May M4 data. M4 grew at an annualised rate of 11.3% in the three months to May, the strongest growth recorded since November 1990 and more than double that recorded towards the end of 1994. A better guide to the growth of broad money in June is probably the four-month annualised rate, as it excluded the end-March data; this showed that M4 increased at 10.4%.

Empirical evidence suggests that the characteristics of the demand for both money and credit vary according to the type of economic agent, so it is useful to split the aggregate M4 and bank and building society lending data by sector. Chart 2.1 shows that the growth of M4 deposits by other financial institutions (OFIs) has been rising since the end of 1992, but until recently this has been offset by weak deposit growth by the personal sector and by industrial and commercial companies.

Consider the personal sector. The short-run growth rate of personal sector deposits has been increasing steadily over the past year and they picked up by £5.2 billion in 1995 Q2, accounting for around half the total increase in M4 deposits. However, the increase in personal sector deposits in the first quarter was boosted by a £3.3 billion contribution from unincorporated businesses—largely as a result of the payments to Wellcome shareholders—so individuals' deposits give a better guide to the underlying trend. These have accelerated over the past year and rose by a further £6 billion (1.8%) in 1995 Q2—a three-month annualised rate of 7.2%. (They would have risen even faster had it not been for the fact that the data were collected on a Friday, after people had withdrawn money from deposit accounts for the weekend period.)

The relative stability of the growth in personal sector deposits in the past suggests that the recent acceleration should give added cause for concern, as it may anticipate an acceleration in planned spending. But there are other reasons why deposits may have increased. A one-off increase in individuals' deposits could simply be the result of higher precautionary savings in response to worsening employment prospects and the downturn in

Broad money and the 'Glaxo effect'

Broad money plays a key role in the monetary transmission process, with an acceleration in broad money leading, other things being equal, to an increase in the growth of nominal domestic demand. The recent acceleration in broad money has taken place, however, at the same time as Glaxo's take-over of Wellcome inflated both sides of banks' balance sheets by £5½ billion. So should the 'Glaxo effect' be stripped out of the calculation of broad money growth?

Not necessarily. Although Wellcome shareholders paid their proceeds from the take-over into bank accounts on 31 March, distorting the March data, there is no reason to suppose that they did not subsequently reshuffle their portfolios fairly quickly.

The table below presents the flows of retail deposits—which tend to be made by smaller investors—and wholesale deposits—which tend to be made by larger investors—to banks and building societies in recent months. It shows that wholesale bank and building society deposits increased by £5.9 billion in March, before being reduced by £1.1 billion in April. This suggests that most of the money paid by Glaxo to Wellcome shareholders was placed on wholesale deposit at the end of March. And given that wholesale deposits had risen by an average of more than £1 billion a month in the preceding three months, it is likely that a significant proportion of the additional wholesale deposits were run down in April—with some of them being lodged as retail deposits.

Recent increases in M4

£ millions; *percentages in italics*

1995	M4	3 month (a)	Retail component	Wholesale component
Jan.	+2,339	*7.1*	+1,334	+1,004
Feb.	+3,733	*6.4*	+1,720	+2,013
Mar.	+8,020	*10.3*	+2,114	+5,905
Apr.	+2,177	*10.1*	+3,247	-1,070
May	+5,384	*11.3*	+1,879	+3,505
June	+3,623	*7.9*	+2,942	+681

Source: Bank of England.

(a) Annualised.

The increase in wholesale deposits in May cannot be explained by the Glaxo take-over; if anything, if some of the former Wellcome shareholders with Glaxo payments on wholesale deposits were still adjusting, this would have depressed the net increase. This is circumstantial evidence that the Glaxo money had already been unwound—or had been voluntarily left on deposit. And, indeed, this is what one would expect, given that around four fifths of Wellcome shares were held by large institutional investors, who would tend to reallocate their portfolio holdings relatively quickly.

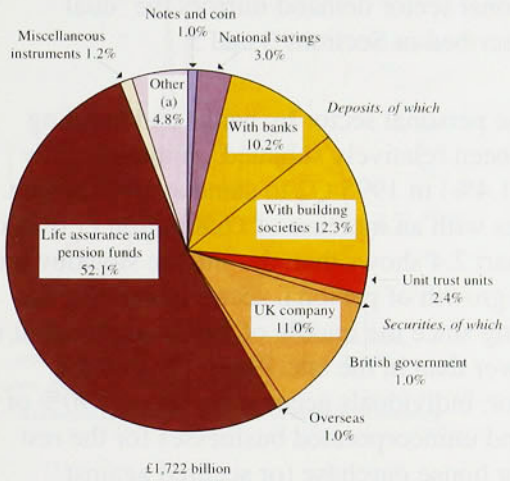
Other evidence supports this interpretation. Wholesale deposits fell strongly in the middle of April, which may have reflected the ten-day settlement period for shares bought shortly after the Glaxo take-over by former Wellcome shareholders. And retail deposits rose by £3.2 billion in April—double the average increase over the preceding six months—which could reflect Wellcome shareholders reinvesting funds in smaller packets of shares, with small shareholders who sold the shares placing their proceeds on deposit.

In addition, former Wellcome shareholders may have bought more overseas securities. The data show that sterling deposits held by overseas non-banks increased by £2.3 billion in April, a month in which they also repaid £0.5 billion of net sterling debt, suggesting that sterling may have been paid to foreign shareholders in exchange for overseas securities.

The fact that most of the shareholder money may have been unwound by the end of May, or was voluntarily retained in retail deposits, suggests that there is little cause for excluding the impact of the Glaxo take-over from the end-May M4 data. Nor will June M4 deposits have been affected; however, the shorter-run growth rate which compares the level in June with that in March will, of course, be distorted by the artificially high figure recorded for March. So for June the four-month annualised rate is probably a better measure of short-run growth than the three-month annualised rate.

On the other side of the balance sheet, the arguments for including or excluding the £3½ billion increase in sterling bank lending resulting from the Glaxo take-over are less clear. According to one interpretation, some of the lending was transitional—that is, money was borrowed from banks as a temporary measure until Glaxo had time to restructure its liabilities. There is evidence that this is at least partly true: Glaxo issued bonds to the value of just under £1 billion in the second quarter, suggesting that it was diversifying away from bank borrowing. However, much of the increase in lending probably represented an increase in planned bank borrowing and not a disequilibrium. This suggests that the Glaxo-related increase in credit should not be excluded from the data, although the interpretation of the growth rate may be difficult for some months.

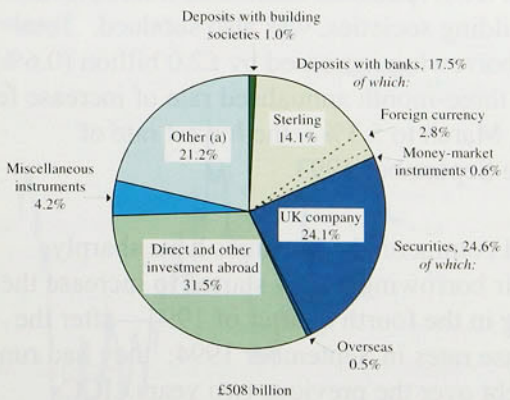
Chart 2.2
Personal sector financial assets at the end of 1995 Q1



Source: Bank of England.

(a) Includes tax instruments, local authority debt, Northern Ireland central government debt, identified trade credit, direct and other investment abroad, and accruals adjustments.

Chart 2.3
Corporate sector financial assets at the end of 1995 Q1



Source: Bank of England.

(a) Includes notes and coin, British government securities, tax instruments, local authority debt, credit extended by retailers, identified trade credit, and accruals adjustments.

the housing market, or a 'windfall gain' from the 2% rise in real personal disposable income in 1995 Q1 (see Section 3). It could also be a response to rates of return on bank deposits: in 1995 Q2, around 70% of total deposits were held by individuals and unincorporated businesses, suggesting there were considerable funds at the personal sector's disposal (see Chart 2.2). The key rate of return facing the personal sector is the interest rate on short-term deposits, which is linked to the official base rate: an increase in UK base rates increases the relative attractiveness of deposits in the short run.

Deposits from industrial and commercial companies (ICCs) have been more subdued. They rose by £325 million (0.4%) in the first quarter—they would have declined had it not been for the Glaxo take-over of Wellcome; in the second quarter, deposits fell by £375 million. Although ICCs' deposits constitute less than 15% of total bank and building society deposits, they are much more volatile than the personal sector's share, because large firms find it easier and cheaper than the personal sector to switch between assets. In particular, the corporate sector holds a greater proportion of its assets than does the personal sector in the form of bonds and short-term market instruments—such as Treasury bills, commercial paper and CDs (see Chart 2.3). Despite the volatility of ICCs' deposits, it is clear from Chart 2.1 that their growth has been relatively subdued over the past four years; Bank research has shown that reductions in ICCs' deposits have in the past been associated with lower planned investment.(1)

Increases in deposits from other financial institutions (OFIs) have been particularly large recently, but they have fluctuated sharply in the past. The growth of OFIs' deposits fell from a peak of over 50% a year in the mid-1980s, and deposits fell in absolute terms in 1991; deposits from OFIs have since picked up and increased at an annual rate of 15.2% in 1995 Q2, more than double the rate recorded towards the end of last year. There is little reason to suppose that an increase in OFIs' deposits represents an increase in their planned nominal spending, as the financial sector's holdings of assets depend largely on relative rates of return.

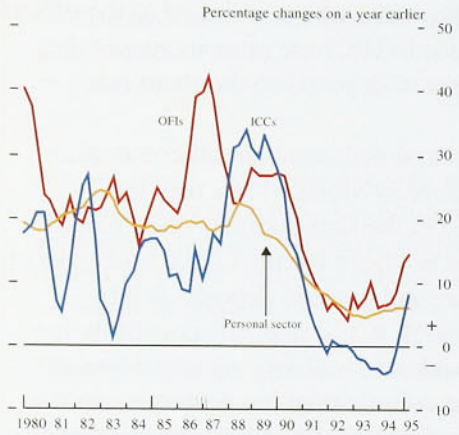
Credit

Bank and building society lending has also increased rapidly. Comparing June with February—the month before the Glaxo take-over—it rose at a four-month

(1) See Haldane, A G and Astley, M S, 'Money as an indicator', *Bank of England Working Paper No 35*, July 1995.

annualised rate of 9.3%. The acceleration in credit since November has been driven by strong corporate sector borrowing. Despite the fact that the corporate sector accounts for only one third of all credit advanced by banks and building societies, the pick-up in ICCs' and OFIs' borrowing has more than compensated for the moderate growth of personal sector borrowing. This contrast between strong corporate demand for funds and subdued personal sector demand mirrors the 'dual economy' described in Sections 3 and 5.

Chart 2.4
Growth rates of credit[a]

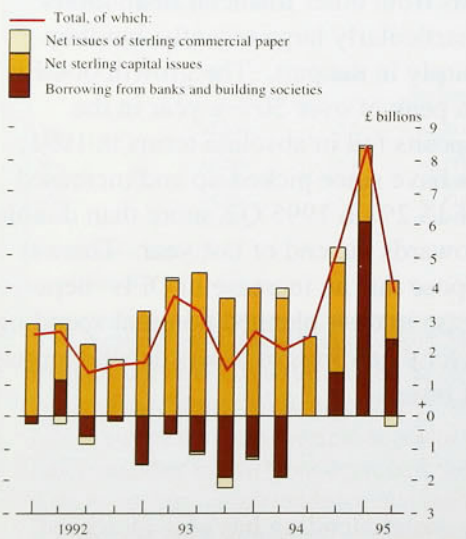


Source: Bank of England.

(a) Bank and building society lending to the private sector.

Lending to the personal sector by banks and building societies has been relatively subdued. It increased by £6.2 billion (1.4%) in 1995 Q2 to stand at £440 billion. This compares with an increase of £6.8 billion (1.6%) in 1995 Q1. Chart 2.4 shows that, despite the slowdown in 1995 Q2, the growth of personal sector borrowing has been increasing since the middle of 1993—although it is still much lower than in the late 1980s. Within the personal sector, individuals account for around 90% of borrowing, and unincorporated businesses for the rest. Borrowing for house purchase (or secured against housing)—which accounts for around 90% of individuals' borrowing—rose by £4.4 billion in 1995 Q2, compared with £4.8 billion in the first quarter; it stood at £355.2 billion in June. Consumer credit remained at a high level in the second quarter; it rose by £1.3 billion, only slightly lower than the £1.5 billion increase seen in the first quarter.

Chart 2.5
Total quarterly sterling financing by ICCs[a]



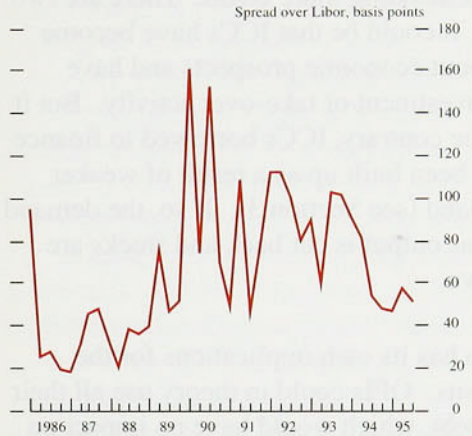
Source: Bank of England.

(a) Seasonally adjusted.

A broader measure of borrowing by the personal sector, including that from specialist lenders as well as from banks and building societies, was also subdued. Total net personal borrowing increased by £2.0 billion (0.6%) in June. The three-month annualised rate of increase fell from 5.9% in March to 5.3%—the lowest rate of increase since September 1993.

Industrial and commercial companies have sharply increased their borrowing. They started to increase their net borrowing in the fourth quarter of 1994—after the first rise in base rates in September 1994; they had run down their debt over the previous two years. ICCs borrowed £2.4 billion in the second quarter of 1995, compared with £6.1 billion in 1995 Q1. But Glaxo borrowed around £3½ billion at the end of March and repaid a significant proportion of that debt in the second quarter, so the non-Glaxo demand for funds increased significantly. Chart 2.5 shows that ICCs' borrowing has not been substituting for other forms of external financing. Bank research has shown that, in the past,

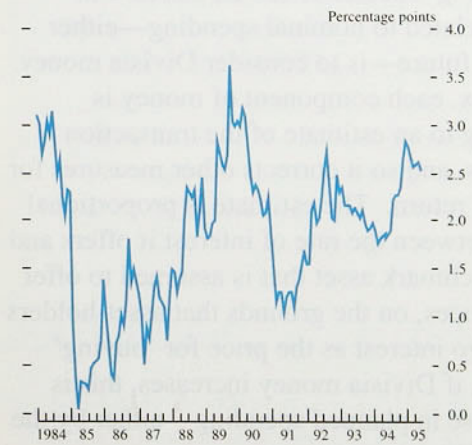
Chart 2.6
Spreads on syndicated credits to UK companies[a]



Sources: Bank of England and ICMS database.

(a) International syndicated credits to UK ICCs and financial institutions.

Chart 2.7
Difference between wholesale and retail rates[a]



Source: Bank of England.

(a) Three-month interbank rate less average bank deposit rate.

higher ICCs' borrowing has been linked with an increase in take-over activity.

Lending to OFIs increased rapidly in the fourth quarter of 1994 and the first quarter of 1995, and the twelve-month growth rate more than doubled, from 6.7% in 1994 Q3 to 14.0% in 1995 Q2. Some of the lending in 1995 Q1 was to securities dealers—a sector whose borrowing requirements are highly volatile—but there was negligible lending to securities dealers in the second quarter.

Banking system

There is some evidence that over the past couple of years banks have become keener to lend money. One way of measuring competition for funds in the banking system is by examining bank spreads. Information on the spreads between loan and deposit rates offered to bank customers is not readily available. But Chart 2.6 shows one measure of loan spreads—the margin above Libor on syndicated loans to large UK corporate borrowers. Although spreads were volatile in the mid-1980s, it is clear that they have narrowed recently. Of course, these are spreads on loans made by banks from a wide range of countries, not just the United Kingdom. However, anecdotal evidence also suggests that bank margins have been squeezed recently. The June CBI Financial Services Survey noted, for example, that margins had fallen further over the previous three months.

Banks have also attempted to attract more retail deposits—predominantly from the personal sector. Chart 2.7 shows the spread between wholesale deposit rates, which are approximated by the three-month interbank rate, and average retail deposit rates. Over the past six months, as retail rates rose towards wholesale rates, the spread narrowed, after widening during the previous year.

How can all these facts be explained? The evidence from the banking sector suggests that banks have become more willing to lend money—at least to large, creditworthy customers—and have reduced the price of banking intermediation; at the same time, the quantity of credit advanced to the corporate sector has increased. The increase in OFIs' deposits at banks and building societies in the first quarter might be explained by banks bidding for wholesale deposits to fund strong corporate borrowing.

The implications for inflation will depend on whether the acceleration in credit will be sustained and how the deposits built up at banks and building societies over the past six months will be used. Since OFIs tend to move wealth between assets with little effect on the real economy, future credit growth will depend in particular on why ICCs are demanding more credit. There are two main possibilities. It could be that ICCs have become more optimistic about economic prospects and have sought funds for investment or take-over activity. But it could be that, on the contrary, ICCs borrowed to finance stocks which have been built up as a result of weaker than expected demand (see Section 3). If so, the demand for credit will fall as output is cut back and stocks are allowed to run down.

Each interpretation has its own implications for the behaviour of deposits. OFIs could in theory use all their deposits to repay debt, which would have no impact on aggregate demand—or could use them to invest in other assets, such as equities and bonds, which would be the case if, for instance, the increase in deposits were merely due to capital restructuring. And personal sector deposits may not lead to higher nominal spending if individuals choose to repay debt or are content to hold higher deposits as precautionary savings. But strong corporate sector activity driven by ICCs' demand for credit—if it were to continue—would suggest that banks will be successful in attracting future deposits and nominal spending will increase.

Divisia money

One way of assessing whether or not an increase in money growth is related to nominal spending—either now or in the near future—is to consider Divisia money. In the Divisia index, each component of money is weighted according to an estimate of the transaction services it provides, and so it corrects other measures for changes in rates of return. The estimate is proportional to the difference between the rate of interest it offers and the return on a benchmark asset that is assumed to offer no transaction services, on the grounds that asset-holders are willing to forego interest as the price for 'buying' these services. So, if Divisia money increases, this is likely to signal a rise in planned spending—either by the personal or the corporate sector.

The Bank's Divisia index rose at an annualised rate of 6.5% in 1995 Q2. As with deposit and credit data, however, it is more informative if Divisia is split by

sector. Personal sector Divisia money increased sharply in the second quarter—by 5.9% on an annualised basis, the highest rate since 1990 Q2. And growth in 1995 Q1 has been revised up to 5.1%—although this was distorted by Glaxo effects. Corporate sector Divisia money has also increased sharply relative to 1994; it grew at an annualised rate of 8.1% in 1995 Q2, much faster than in the second half of last year.

In practice, Divisia money need not be an accurate guide to future inflation if increased holdings of some non-M4 assets, such as Treasury bills, are followed by higher transactions.

Narrow money

Twelve-month M0 growth slowed from 6.3% in April to 5.7% in July, but it remained outside its 0%–4% monitoring range. On a three-month annualised basis, M0 growth was 3.2% in July, down from 8.0% in April. Part of the slowdown was the result of a drop in bankers' balances in May. Although notes and coin constitute more than 99% of M0, the high volatility of bankers' balances—which are determined by day-to-day developments in the money market—means they contribute disproportionately to the monthly variation of narrow money. Notes and coin provide a better guide to the underlying increase in narrow money. The growth of notes and coin in circulation continued to increase sharply on short-run measures, suggesting that the demand for narrow money has picked up. On a three-month annualised basis, notes and coin increased at a rate of 7.1% in July, up from 6.1% in April.

In the past, narrow money—in particular notes and coin—has been a good statistical leading indicator of future inflation, probably because it can be a good measure of consumer spending. The demand for narrow money depends not only on desired transactions but also on the opportunity cost of holding cash. This opportunity cost is captured reasonably accurately by the bank deposit rate, which is linked to the UK base rate. And much of the behaviour of narrow money over the past 18 months could be explained by the changes in short-term interest rates. The cuts in interest rates between September 1992 and February 1994 pushed the rate of growth of notes and coin up to a peak of 8.2% on a three-month annualised basis in January 1994. As the effect of lower interest rates began to wear off, the rate of increase of notes and coin slowed to reach a trough of 3.5% in January 1995. The recent faster growth of

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

In chronological order

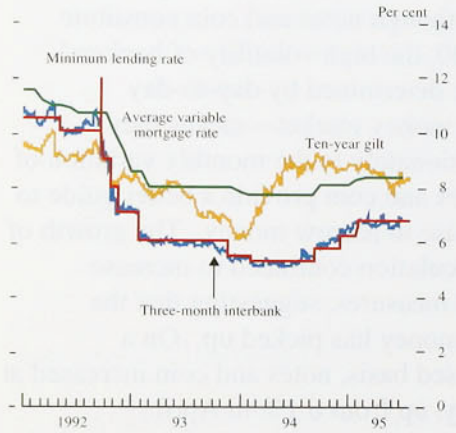
Per cent per annum

Country	Interest rate	Date	Change (basis points)	Current level
Netherlands	Special advances rate	10 May	-10	4.30
Belgium	Central rate	15 May	-25	4.50
	Overnight rate	15 May	-25	6.00
Italy	Discount rate	29 May	+75	9.00
	Advances rate	29 May	+75	10.50
Netherlands	Special advances rate	31 May	-10	4.20
Belgium	Overnight rate	8 June	-25	5.75
Netherlands	Special advances rate	8 June	-10	4.10
	Secured advances rate	8 June	-25	3.75
France [d]	5-10 day repo rate	22 June		7.50
Sweden	Deposit rate	29 June	+50	8.00
	Lending rates	29 June	+50	9.50
France	5-10 day repo rate	6 July	-25	7.25
United States	Federal funds rate	6 July	-25	5.75
Canada	Bank rate	12 July	-47	6.58
Switzerland	Discount rate	14 July	-50	2.50
France	5-10 day repo rate	20 July	-25	7.00

Sources: Datastream and Telerate.

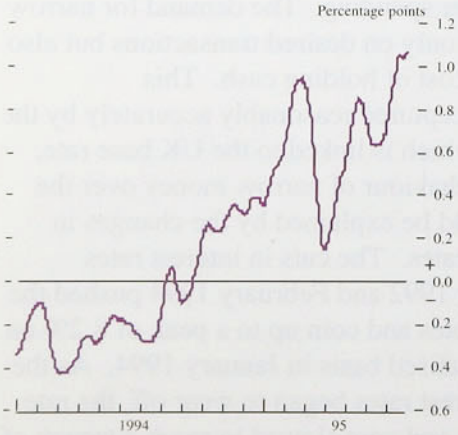
(a) Changes since the May *Inflation Report*.
(b) In the G10 countries.
(c) Japanese market interest rates were allowed to fall below their official discount rate (ODR), which currently stands at 1%, on 7 July.
(d) The 24-hour repo rate (previously 7.75%) was suspended and replaced with the 5–10 day rate.

Chart 2.8
Interest rates



Source: Bank of England.

Chart 2.9
Differences between UK and trade-weighted world interest rates[a]



Sources: BIS and Bank of England.

(a) Three-month eurocurrency rates; a 20-day moving average.

narrow money is more difficult to explain. Notes and coin have accelerated since the beginning of 1995, a time when the opportunity cost of holding cash has been rising.

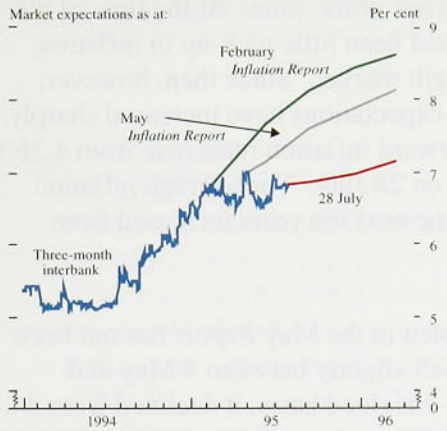
Notes and coin grew by 0.8% in May—the strongest one-month rise for almost a year—but by a more modest 0.3% in June and 0.6% in July. This need not suggest that consumers' nominal demand is increasing, if the relationship between cash in circulation and total consumer spending has changed recently—perhaps as a result of the introduction of the National Lottery. Since National Lottery sales are predominantly cash-financed, more cash will be held for any given level of total consumer spending. (The average transaction is worth only £2.15, according to Camelot, suggesting that tickets would normally be bought with cash.) It is possible to make a rough estimate of the National Lottery's impact on notes and coin growth. If ticket sales were financed from savings, and notes and coin changed hands around once a month, excluding National Lottery ticket sales would halve the six-month annualised growth rate of notes and coin of 6.6%. Since tickets will not be wholly financed from savings, and notes and coin may turn over faster than once a month, this is an overestimate of the impact of the Lottery; as such, it represents an extreme case.

There are two other reasons why the increase in narrow money growth is probably not a strong signal of future inflation. First, any spending on National Lottery tickets will put few pressures on resources and, therefore, have fewer implications for inflation than other forms of consumer spending. Second, it may also be the case that a reduction in inflation expectations has lowered the rate at which notes and coin change hands, increasing measured money growth with no implication for future prices—in other words, there may have been a long-run shift in the *velocity* of narrow money. In such circumstances, the increase in narrow money growth is probably not a strong signal of future inflation.

2.2 Interest rates and exchange rates

Since the May *Report*, official UK interest rates have remained unchanged at 6.75%, the US authorities have cut the federal funds rate by 0.25 percentage points and Japan has eased its money-market rates. France has cut its 5–10 day repo rate by 50 basis points, and Sweden and Italy have tightened monetary policy (see Table 2.B). Chart 2.8 shows some of the interest rates

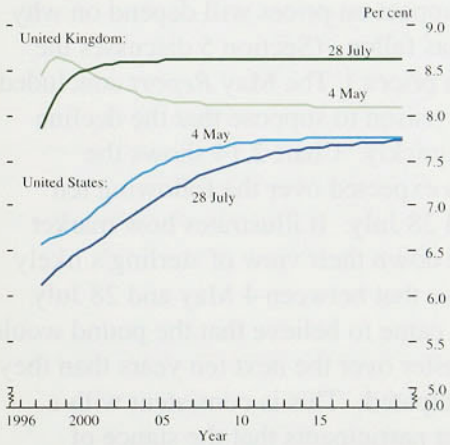
Chart 2.10
Sterling interest rates expectations[a]



Sources: Bank of England and LIFFE.

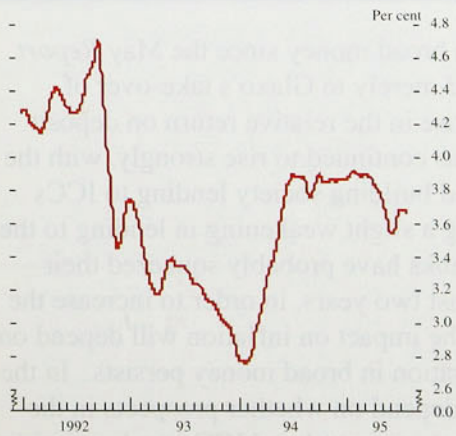
(a) Based on a combination of sterling interest rate futures contracts.

Chart 2.11
Implied forward interest rates



Source: Bank of England.

Chart 2.12
Expected real interest rates[a]



Source: Bank of England.

(a) Average annual real interest rates expected over the next ten years, derived from the par yield curve using the Svensson method; a 20-day moving average.

paid by different borrowers or used as a basis for calculating their borrowing costs.

Three-month interest rates in the United Kingdom fell slightly from 6.94% on 4 May to 6.81% on 28 July; but short-term interest rates in other major countries also fell. Chart 2.9 shows that, as a result, the interest rate differential between the United Kingdom and its trading partners has increased.

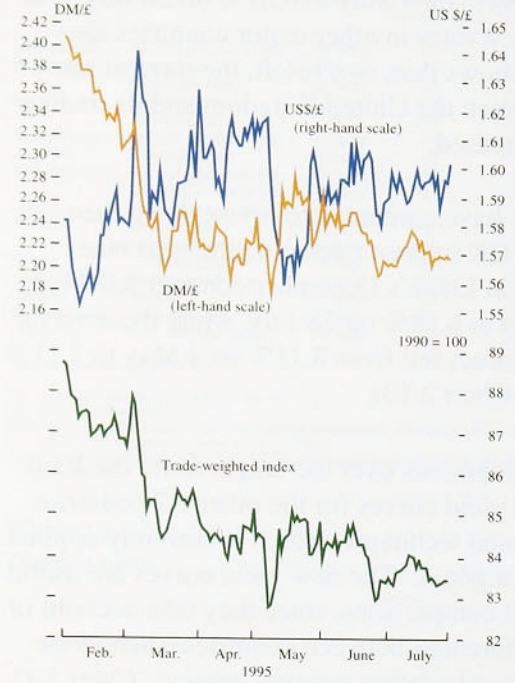
Futures markets have continued to revise down their expectations of UK interest rates over the next nine months. Rates on LIFFE's December contract fell from 7.90% on 4 May to 6.98% on 28 July, while those on the March 1996 contract fell from 8.11% on 4 May to 7.11% on 28 July (see Chart 2.10).

To look at developments over the longer term, the Bank has constructed yield curves for the other G7 countries using the Svensson technique, which is currently applied to the United Kingdom. The new yield curves are useful for international comparisons, since they take account of institutional differences between countries, such as the method used for calculating accrued interest. Chart 2.11 compares the fitted yield curves in the United States and the United Kingdom on 4 May and 28 July; it shows that while US bond yields fell at every maturity, short yields were down in the United Kingdom, but longer yields rose.

These movements were also reflected in the unadjusted ten-year bond data. Although government long bond yields fell significantly in the United Kingdom between the beginning of 1995 and the beginning of May, they fell further in the United States, Japan and Canada. Since then, however, yields have risen in the United Kingdom and Germany, while they have remained low in the United States. As a result, UK ten-year bond yields were down only three basis points between 4 May and 28 July. The differential between German and UK ten-year bond yields increased from 131 basis points on 4 May to 146 basis points on 28 July, while the differential between UK and US bonds widened from 139 to 176 basis points.

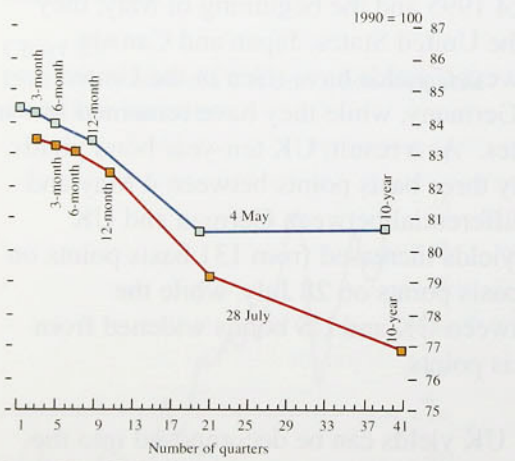
The decline in UK yields can be decomposed into the changes in expected real interest rates and in expected inflation. Chart 2.12 shows that the average real interest rate expected over the following ten years fell significantly after 4 May, but the decline was almost completely reversed by 28 July.

Chart 2.13
Sterling exchange rates



Source: Bank of England.

Chart 2.14
UK effective exchange rate profiles(a)



Sources: BIS and Bank of England.

(a) Assuming uncovered interest rate parity.

Ten-year inflation expectations are relevant when analysing market participants' view of the likely value of the exchange rate in ten years' time. At the time of the May *Report*, there had been little pick-up in inflation expectations in the gilt market. Since then, however, long-term inflation expectations have increased sharply. Implied ten-year forward inflation rates rose from 4.36% on 4 May to 4.94% on 28 July. The average inflation rate expected over the next ten years increased from 4.50% to 4.58%.

The depreciation noted in the May *Report* has not been reversed. Sterling fell slightly between 4 May and 28 July. On a trade-weighted basis, it declined from 84.4 to 83.4 (see Chart 2.13), and was 6.3% lower on 28 July than on 24 January, when the depreciation started.

As explained in the May *Report*, there is no mechanical link between a fall in the exchange rate and inflation in the long run. The impact on prices will depend on why the exchange rate has fallen. (Section 5 discusses the short-run impact on prices.) The May *Report* concluded that there was little reason to suppose that the decline would be reversed quickly. Chart 2.14 shows the exchange rate paths expected over the following ten years on 4 May and 28 July. It illustrates how market participants revised down their view of sterling's likely future path. It shows that between 4 May and 28 July market participants came to believe that the pound would depreciate a little faster over the next ten years than they had previously anticipated. This is consistent with a belief among market participants that the stance of monetary policy had eased.

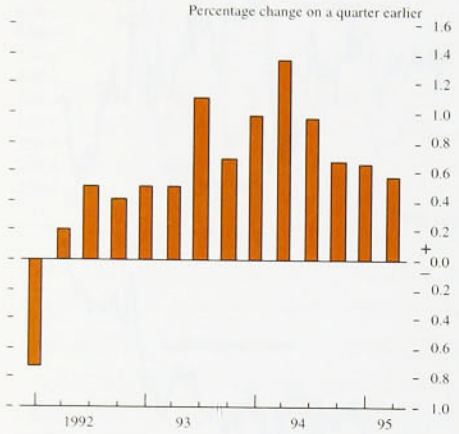
2.3 Summary

The acceleration in broad money since the May *Report* cannot be attributed merely to Glaxo's take-over of Wellcome, or to a rise in the relative return on deposit accounts. Credit has continued to rise strongly, with the increase in bank and building society lending to ICCs more than offsetting a slight weakening in lending to the personal sector. Banks have probably squeezed their margins over the past two years, in order to increase the supply of credit. The impact on inflation will depend on whether the acceleration in broad money persists. In the short run, this will depend on whether prospects in the corporate sector have improved and ICCs are borrowing to fund investment and take-over activity, or whether ICCs are borrowing to finance involuntary

stockbuilding. The demand for notes and coin in circulation has increased strongly. But much of the increase may be accounted for by special factors, and therefore may not presage future inflation.

3 Demand and supply

Chart 3.1
GDP[a]



(a) At factor cost.

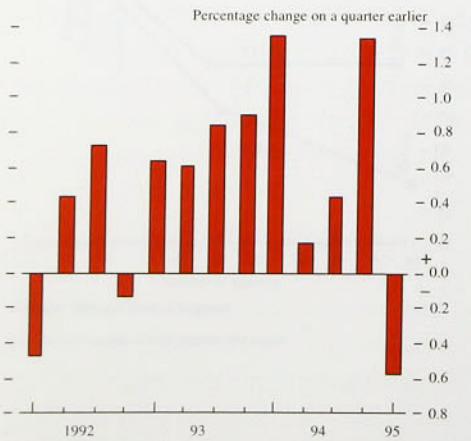
Table 3.A
Contributions to GDP growth[a]

Percentage points

	1993 Year	1994 Year	1994 Q4	1995 Q1
Consumption	1.9	2.2	0.6	-0.1
Business investment	-0.1	0.3	—	-0.1
Residential investment	0.1	0.2	0.1	0.1
Government	0.1	0.7	0.2	-0.1
Stockbuilding	0.4	0.5	0.7	-0.5
Domestic demand	**2.5**	**3.9**	**1.6**	**-0.7**
Net trade	0.1	0.5	-0.8	1.4
Factor cost adjustment	-0.4	-0.5	-0.1	-0.1
GDP	**2.2**	**3.9**	**0.7**	**0.7**

(a) Quarterly contributions are relative to the previous quarter. Components may not sum to total because of rounding.

Chart 3.2
Domestic demand



3.1 Total demand

The UK economy grew by an estimated 0.6% in the second quarter, compared with 0.7% in the first. In the year to the second quarter, GDP rose by 2.9%. As Chart 3.1 shows, quarterly growth was lower in the first half of this year than in most of 1994; the profile was similar for non-oil GDP, which rose by 0.7% in the second quarter, compared with 0.6% in the first. Since the May *Report*, revisions have raised estimated growth in the third quarter of last year by 0.1 percentage point and lowered it by the same amount in both the fourth and first quarters.

Nominal GDP rose by 0.6% in the first quarter and was 4.5% higher than in the same period last year. Over the past 40 years, real GDP has grown, on average, by 2%–2½% a year. With the inflation target of 2½% or less, this suggests that nominal GDP should rise by around 5% a year over the long run; in the first quarter, it was growing at below that rate.

3.2 Domestic demand

Domestic demand fell sharply in the first quarter, and GDP growth was entirely accounted for by the strength of net external demand. (Table 3.A shows recent contributions to GDP growth. A full breakdown of GDP is not yet available for Q2.) The erratic pattern of domestic demand in the fourth and first quarters (shown in Chart 3.2) is explained mainly by high spending by UK residents abroad in the fourth quarter (particularly in December) and also by the strength of stockbuilding in Q4. Excluding stocks—which incorporated a large alignment adjustment in Q4—domestic demand was roughly flat in the first quarter. Because of the erratic profile of stockbuilding and tourist spending at the turn of the year, it is better to look at the fourth and first quarters together: Table 3.B shows that the six-month growth rate of domestic demand slowed in the second half of last year, but since then has been broadly flat.

Personal sector demand

Consumption fell by 0.1% in 1995 Q1, its first quarterly fall since the recovery in GDP began three years earlier.

Table 3.B
GDP and domestic demand growth

Percentage change (a)

		GDP	Non-oil GDP	Domestic demand	Domestic demand excluding stockbuilding
1994	Q1	1.8	1.4	2.0	2.1
	Q2	2.0	1.8	1.9	1.8
	Q3	2.4	2.2	1.1	0.8
	Q4	2.0	2.0	1.2	0.8
1995	Q1	1.5	1.5	1.3	0.9
	Q2	1.3	1.3	..	..

.. not available.

(a) Latest six months on previous six months.

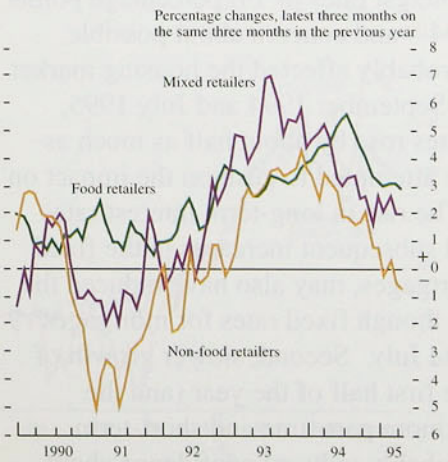
Table 3.C
Contributions to consumption growth (a)

Percentage points

	1993	1994		1995
	Year	Year	Q4	Q1
Durable goods	0.9	1.1	0.1	—
Non-durable goods	0.8	0.9	—	—
Services	0.9	1.0	0.7	-0.2
Total consumption	**2.6**	**3.0**	**0.8**	**-0.1**

(a) Quarterly contributions are relative to the previous quarter. Components may not sum to total because of rounding.

Chart 3.3
Growth in components of retail sales volumes



Spending rose strongly in the fourth quarter (driven by unusually high tourist expenditure), so some fall in growth was probably to be expected in the first part of this year. But growth rates averaged over a longer period have also fallen: taking the four quarters to Q1, consumer spending rose by an average of 0.5% a quarter, compared with 0.8% in the four quarters to 1994 Q1.

Consumption accounts for about two thirds of GDP; if growth in consumption slowed significantly, it would therefore have important consequences for the economic outlook. Table 3.C shows that consumption growth was broadly based in 1993 and 1994. But growth in durable goods spending, which tends to fluctuate more than other types of consumption, fell throughout 1994 and in 1995 Q1. Spending on non-durable goods was also weak in the fourth and first quarters. The fall in housing market activity probably affected spending on housing-related goods. And increases in taxation from April 1994, and further rises from April of this year, may also have slowed consumption growth.

Subdued consumption of goods in the first quarter was consistent with the fall in retail sales volumes, but it contrasted with a rise in real personal disposable income of nearly 2%. Nominal income from employment rose by 1.5% in Q1 while the rest of pre-tax personal income rose by 3.2%—including a sharp, though by no means unprecedented, rise in investment income. Because consumption fell and income rose, the saving ratio, which fell last year, increased by 1.8 percentage points in Q1, to 10.6%.

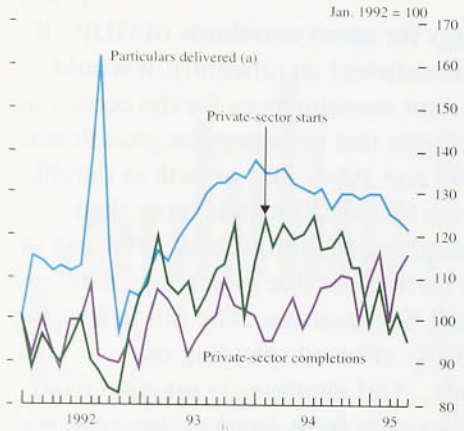
Spending on services fell in the first quarter. This reflected the fall in UK residents' spending abroad from its high at the end of 1994; spending on the rest of services increased. The strength of the latter accords with the strong growth in service-sector output, which probably reflected both personal and corporate sector activity.

Retail sales rose by 0.4% in the second quarter of 1995, suggesting that consumption may have recovered (retail sales account for around 40% of consumption). And the strong growth of consumer credit in Q2 (see Section 2) also suggests a stronger outlook. But the main components of retail sales reveal an interesting divergence, as Chart 3.3 shows. In the second quarter, the volume of household-good and other non-food sales (mainly by small traders, such as newsagents and chemists) were lower than a year earlier. The weakness

of household-good sales is consistent with relatively subdued consumer confidence and lower housing turnover, and supports the view that consumers remain highly price-sensitive, awaiting the summer sales before buying bigger-ticket household goods.

The new car market also illustrates the reluctance of consumers to buy expensive items. New private passenger car registrations were around 7% lower in the first six months of this year than in the same period of 1994, while anecdotal evidence suggests that sales of nearly-new cars were strong. This contrast, however, is typical of periods of weak domestic demand. (A box in the May *Report* reviewed recent developments in the UK vehicle industry.) Lower falls in unemployment, and flat employment in the first half of this year, help to explain consumers' price sensitivity and spending caution.

Chart 3.4
Housing market activity



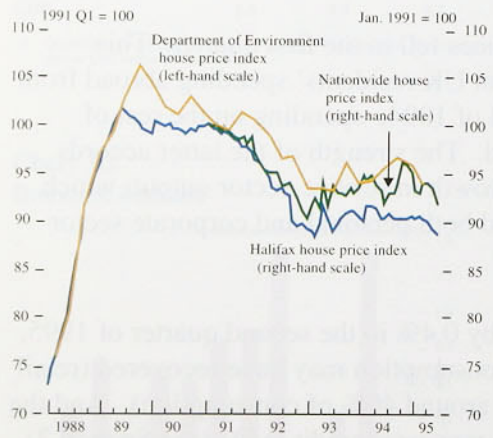
Sources: CSO and Department of the Environment.

(a) Particulars delivered data refer to activity in the previous month.

Housing market

Taken together, housing market activity, lending and price data suggest that the demand for housing weakened in the first half of this year. Housing turnover, as measured by particulars delivered, fell in the first and second quarters. Private-sector housing starts, shown in Chart 3.4, fell by around 3% between the three months ending in May and the previous three. Chart 3.5 shows that house prices fell in each month of the second quarter, according to the Halifax Building Society's index. Bank and building society new lending for house purchase rose in May, but was still lower than in December.

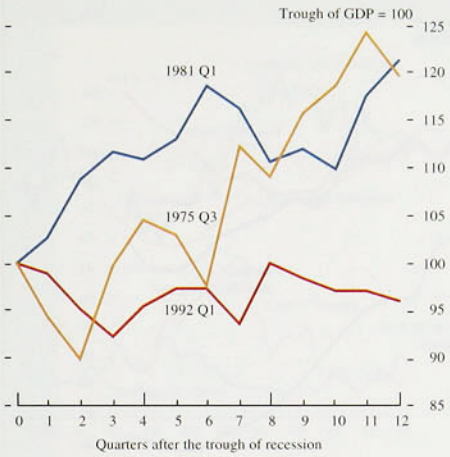
Chart 3.5
House prices



Sources: Department of the Environment and Halifax and Nationwide Building Societies.

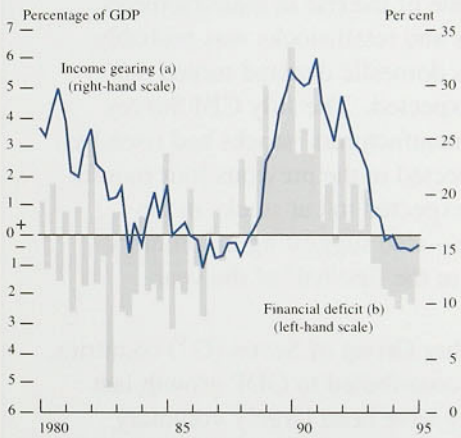
Two cyclical factors help to explain the downturn in the housing market in the first half of the year. First, the increase in official interest rates of 1½ percentage points since September 1994—and concern about possible further increases—probably affected the housing market adversely. Between September 1994 and July 1995, variable mortgage rates rose by about half as much as base rates, as lenders attempted to cushion the impact on mortgage lending. The rise in long-term interest rates from early 1994, and subsequent increases in the fixed rates charged for mortgages, may also have reduced the demand for housing, though fixed rates for mortgages fell a little in June and July. Second, slower growth of labour demand in the first half of the year (and the secular trend toward more part-time and short-term contract working) probably reduced confidence about employment prospects.

Chart 3.6
Business investment[a] over the cycle[b]



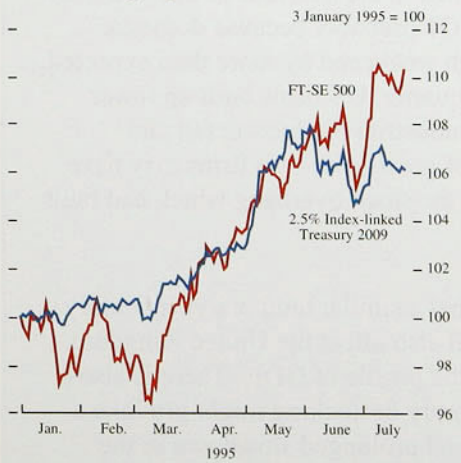
(a) Business investment = private non-residential fixed investment.
(b) Dates shown indicate the quarter in which the trough in output was reached.

Chart 3.7
ICCs' gearing and financial deficit



(a) Ratio of net interest payments to post-tax income.
(b) Financial deficit as a proportion of GDP (+ indicates deficit/- indicates surplus).

Chart 3.8
Share and gilt prices



Sources: Bank of England and Financial Times.

The housing market is probably still adjusting to the shocks it has suffered, such as changes to the tax treatment of interest payments, reductions in income support for homeowners (to take effect later this year), and a re-evaluation of the risks of investing in housing. An environment of lower actual and expected inflation means that the demand for housing as an inflation hedge will also be reduced. An article on pages 260–69 of the August *Quarterly Bulletin* develops some of these themes in more detail.

Corporate sector demand

Gross investment fell by 0.2% in the first quarter; as Chart 3.6 shows, business investment has been subdued during the recovery. By the first quarter, it had fallen, compared with a rise at the same point in the previous two recoveries. This profile partly reflects low investment by utilities and mining companies (which had invested strongly before the trough of the recession). But although investment by the rest of the business sector grew, by the first quarter it had risen by much less than in the previous recovery—and by less than investment in the United States at the same point in the recovery there. Manufacturing investment, which rose last year, fell in the first quarter.

The relative weakness of business investment contrasts with the significant strengthening of corporate sector balance sheets over the past three years (see Chart 3.7), as companies used rising profits to pay off existing debt. Firms' income and capital gearing probably stopped falling last year. In the fourth quarter of 1994, ICCs were net bank borrowers for the first time in about three years (see Section 2); they continued to borrow in the first half of this year. The buoyancy of UK equity prices, shown in Chart 3.8, probably reflects the fall in real interest rates earlier this year (which pushed up the price of index-linked gilts) and in the real exchange rate, but also suggests some market confidence in the outlook for corporate profits (though there might also have been a change in the risk premium in holding equities relative to bonds).

This increase in corporate borrowing, which accompanied high industrial capacity utilisation, may foreshadow an increase in investment. The CBI Survey in July, for instance, showed that over the previous year the need to expand capacity had become a more important reason for prospective investment. It also reported a balance of 17% of firms expecting to increase

Stock cycles

A key factor affecting the future of the UK recovery will be whether companies will want to maintain the stocks built up in recent quarters. If firms deliberately increased stocks to meet rising demand and their confidence is justified, output will grow quickly, augmented by stockbuilding; if not, and stocks have built up as a result of weaker than expected demand, companies may reduce output over the rest of this year—indeed, the recent slowdown in the United States has been attributed to the unwinding of just such a 'stock cycle'.

Although the evidence on stocks is complicated by the 'alignment adjustment' to the national accounts which is included in the CSO's estimate of stockbuilding, it is clear that stocks have increased sharply. According to the national accounts, stocks increased by £0.8 billion (at 1990 prices) in the first quarter of 1995 following a rise of £1.4 billion in 1994 Q4. Figures excluding the alignment adjustment show that stocks grew by around ½% of GDP a quarter throughout 1994 and in 1995 Q1.

Stocks are probably less important to firms now than in the 1970s and 1980s—the ratio of stocks to output has fallen since about 1980, perhaps because of improvements to inventory control, such as just-in-time production and delivery. But by the first quarter of 1995, stockbuilding had, on average, made about the same contribution to GDP growth as it did in the previous two recoveries, as the table shows.

Contributions of stocks to GDP growth[a]

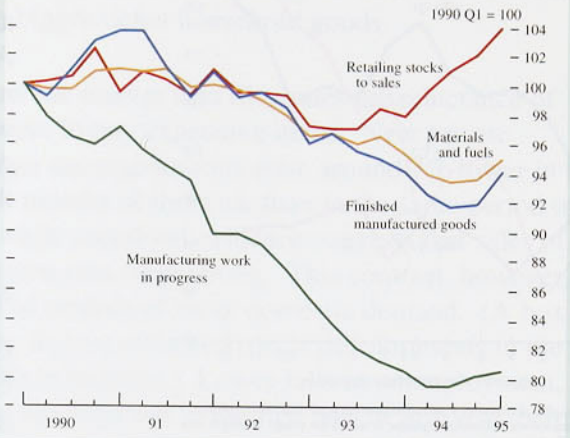
Percentage points in italics

	Average quarterly percentage change in GDP	Contribution of stockbuilding
1975 Q3	0.8	*0.1*
1981 Q1	0.7	*0.2*
1992 Q1	0.7	*0.1*

(a) Dates shown indicate the quarter in which the trough in output was reached. Figures are averages for the three years following the trough in GDP.

The chart shows how stock-output ratios in manufacturing and retailing had increased by the end of the first quarter. Unlike the national accounts data, they record physical increases in stocks only, and do not include alignment adjustments. Some of the stockbuilding of

Stock-output ratios

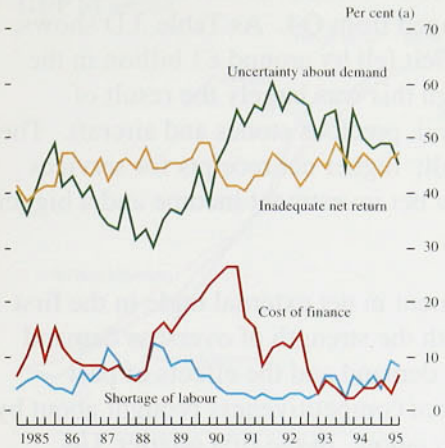


materials and fuels may have been voluntary, reflecting precaution against supply and price pressures at the early stages of the production chain. But some of the rise in manufacturers' finished goods and retail stocks was probably involuntary, as domestic demand turned out weaker than expected. The July CBI Survey showed that manufacturers' stocks had risen by more than expected in the previous four months and that they expected to cut stocks in the following four—also suggesting involuntary stockbuilding in the first half of the year.

In all of the other Group of Seven (G7) countries, stockbuilding contributed to GDP growth last year. This may have been largely voluntary because of expectations of rising demand. But in the United States, some of this year's stockbuilding was probably involuntary, as in the United Kingdom. US industrial production growth weakened in the first half of this year, but stocks rose in Q1 probably because domestic demand growth weakened by more than expected. In the second quarter, US firms built up fewer stocks, while industrial production fell and consumption of goods rose—so firms may have been reducing the stock overhang which had built up in Q1.

It is possible that a similar temporary 'inventory correction' will also affect the United Kingdom, and therefore the profile of GDP. There is also a risk that temporary destocking might provoke a more general and prolonged slowdown in the second half of this year.

Chart 3.9
Factors limiting capital expenditure



Source: CBI Industrial Trends Survey.

(a) Percentage of firms reporting factors limiting capital expenditure authorisations over the following twelve months.

investment in plant and machinery over the coming twelve months, compared with 6% a year earlier. Nevertheless, it showed that uncertainty about future demand was still an important factor limiting capital spending (see Chart 3.9). Foreign demand remained strong in the first quarter, but firms may be more reluctant to increase investment if domestic demand is much weaker (particularly because exports are more volatile than domestic demand); the outlook for overseas demand (particularly from the United States) became less certain in Q2.

Stockbuilding

Firms continued to build up stocks in the first quarter. But because estimated stockbuilding was even higher in the fourth quarter of last year, the contribution of stocks to growth was negative in 1995 Q1. Stockbuilding is the most volatile component of domestic demand; in the fourth quarter, it also included a large 'alignment adjustment'.(1) Excluding the alignment adjustment, stockbuilding fell by much less in the first quarter. The box on page 24 looks at stock cycles in more detail, and assesses the implications of the high stockbuilding in 1994 and the first quarter of 1995. It concludes that there may be some destocking over the rest of the year, affecting the profile of GDP, and that this could lead to a more general slowdown in the second half of this year.

Public sector demand

In the first quarter, government spending fell by 0.2%. Public-sector investment (which, together with general government consumption, makes up government spending) also fell; it had risen strongly in the second half of last year. In 1994, government spending rose by 2.6%, contributing about a fifth of the rise in GDP—more than the contribution of net external demand (see Table 3.A). In 1993/94 and 1994/95, general government spending (as a percentage of GDP, excluding privatisation receipts) was less than original Budget projections.

3.3 Net external trade

Net external trade accounted for all of the rise in GDP in the first quarter. The volume of goods and services exports rose by 0.8%, while import volumes fell very sharply. The latter largely reflected a fall in imports of services as fewer UK residents travelled abroad.

(1) Alignment adjustments ensure that expenditure and income measures of GDP equal the output measure. For further details, see the box on page 24 of the May *Report*.

Despite the strength of net external trade, the current account deficit—at 0.2% of GDP in the first quarter—was broadly unchanged from Q4. As Table 3.D shows, the visible trade deficit fell by around £1 billion in the first quarter, although this was largely the result of changes in trade in oil, precious stones and aircraft. The invisibles surplus fell; higher net receipts for services were offset by lower net investment income and a bigger deficit on transfers.

The sharp improvement in net external trade in the first quarter reflected both the strength of overseas demand relative to domestic demand and the effects of past improvements in price competitiveness brought about by exchange rate depreciation. In the first quarter, UK domestic demand fell, contrasting with a rise in the rest of the G7 countries. But there has been increased concern since the May *Report* that growth in the rest of the world will slow sharply, affecting UK net external demand adversely, as a result of a previously unexpected slowdown in the United States. Consistent with this view, non-oil export volumes (to non-EU countries) fell in the second quarter.

US GDP rose by 0.7% in the first quarter (compared with 1.2% in Q4), and by 0.1% in the second. In Japan, GDP rose by 0.1% in the first quarter, after a large fall in the fourth. However, there is less evidence that European growth slowed in the first part of the year: in France, Italy and Spain, GDP in Q1 rose by more than most commentators had expected. And it is probable that US demand will rise in the second half of the year, as the effect of lower long-term interest rates and high business investment feed through. Some forecasters have revised down their projections for world growth, but the OECD's June *Economic Outlook* projected that EU GDP growth would rise to 3% this year, similar to its December projections. Overall, although the probability that world growth will be significantly weaker for the rest of this year has increased—reducing the strength of UK net external demand and of more widespread world inflation pressures—it is still low.

The UK real exchange rate, which fell sharply in 1992, also depreciated in the first half of this year. Chart 3.10 shows measures of real exchange rates based on relative consumer prices. The strength of export volume growth and of surveys of export orders suggests that UK exporters have benefited from improved price competitiveness brought about by depreciation of the nominal exchange rate.

Table 3.D
External accounts

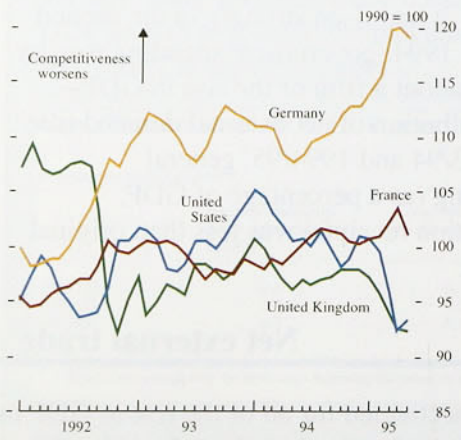
£ billions

	1993	1994		1995	
	Year	Year	Q4	Q1	Q2
Visible balance (a)	-13.4	-10.6	-3.0	-2.0	..
of which:					
Non-EU	*-8.0*	*-5.0*	*-1.3*	*-0.8*	*-1.9*
EU	*-5.4*	*-5.6*	*-1.7*	*-1.1*	..
Invisible balance (a)	*2.3*	*8.9*	*2.5*	*1.6*	..
of which:					
Services	*5.7*	*3.8*	*0.9*	*1.4*	..
Interest, profits and dividends	*1.9*	*10.5*	*2.5*	*1.4*	..
Transfers	*-5.2*	*-5.4*	*-0.9*	*-1.2*	..
Current account balance	*-11.0*	*-1.7*	*-0.5*	*-0.4*	..
as a percentage of GDP	*-1.8*	*-0.3*	*-0.3*	*-0.2*	..

.. not available.

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

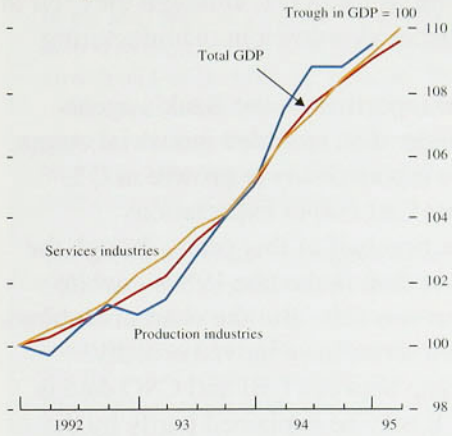
Chart 3.10
Real effective exchange rates(a)



Source: *International Financial Statistics*, IMF.

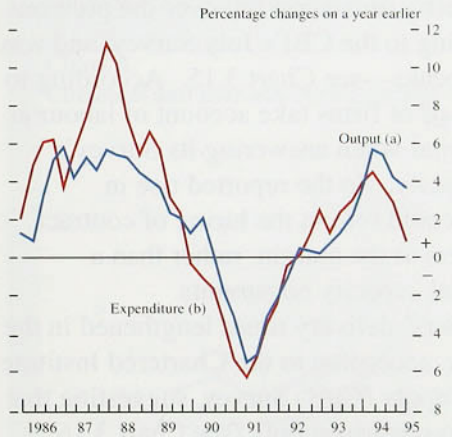
(a) Nominal effective exchange rates adjusted for changes in relative consumer prices.

Chart 3.11[a]
GDP by sector



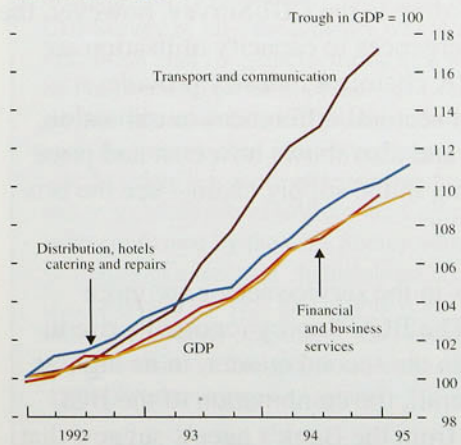
(a) Agriculture and construction are not shown in the chart.

Chart 3.12
Output and expenditure on goods



(a) A weighted average of output of agriculture, construction and the production industries.
(b) Expenditure on consumer and investment goods.

Chart 3.13
Services output



The strength of exports over the past two or three years has led to suggestions that the United Kingdom's trade performance may have improved permanently—perhaps as a result of earlier inward investment or higher productivity. But the rise in export volumes last year was not unprecedented and, by the first quarter, the contribution of net exports to this recovery was less than in the 1970s recovery (though higher than in the 1980s). And according to the OECD, the United Kingdom's share of world export values, at 5% in 1994, was about the same as five years earlier. It is difficult to explain the rise in export volumes in 1994 solely by the strength of world demand and improved UK price competitiveness. But while higher investment—or other non-price improvements—may have played a role, it is too early to conclude that UK trade performance has improved fundamentally.[1]

3.4 Output

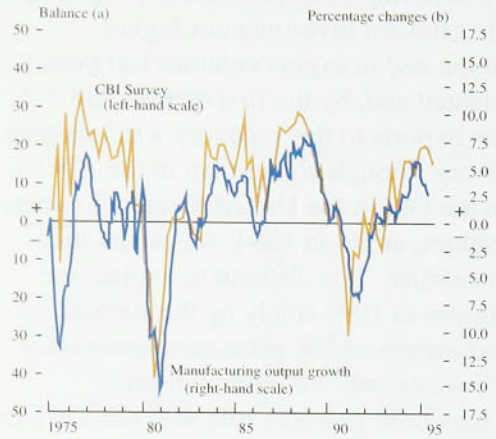
Output rose by 0.6% in the second quarter. Non-oil output rose 0.7%, compared with average quarterly growth of 1% in 1994. Manufacturing output was broadly flat in the first five months of the year, compared with a rise of around 1½% in service-sector output in the first half of the year.

In the first three quarters of 1994, the output of production industries rose more strongly than service-sector output (see Chart 3.11); its recent weakness may be a response to weaker than expected domestic demand. Supporting this view, Chart 3.12 shows how the growth in spending on goods slowed in 1994 and the first quarter of 1995, while growth in output of goods fell by less.

The growth in service-sector output in the first quarter was broadly based. Chart 3.13 shows that output in the transport and communication industries grew particularly strongly from mid-1993. These services are complementary to tradable goods; business spending on transport and communication may have increased in response to the strength of industrial production and export demand. So the divergence between strong exports and weak domestic demand can affect the services sector as well as manufacturing. Buoyant spending on corporate services probably also reflected expectations of relatively strong corporate demand, following the post-recession improvement in business profitability. High growth in service-sector output also

(1) An article on pages 223–31 of the August 1994 *Quarterly Bulletin* described and assessed long-run developments in UK trade in more detail.

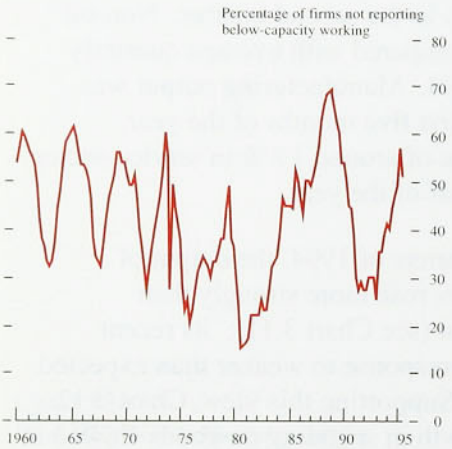
Chart 3.14
Manufacturing output growth and CBI Survey



Sources: CBI and CSO.

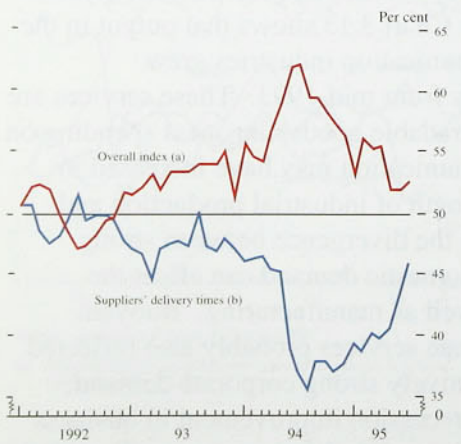
(a) Percentage balance of firms expecting volume of output to rise over following four months.
(b) Latest three months on the same period a year earlier.

Chart 3.15
Capacity utilisation



Source: CBI.

Chart 3.16
Purchasing Managers' Index



Source: The Chartered Institute of Purchasing and Supply.

(a) Weighted average of activity questions; above 50% indicates an expanding manufacturing sector.
(b) Below 50% indicates lengthening delivery times.

accorded with the British Chambers of Commerce (BCC) Survey, which showed that confidence and orders remained strong in the sector in Q1, although they fell in Q2, following the earlier slowdown in manufacturing.

Survey evidence and reports from the Bank's agents continued to be stronger than recorded industrial output, though most surveys reported slower growth in Q2. Chart 3.14 shows that CBI output expectations remained high in the first half of this year—though the net balance was lower than in the late 1980s—while manufacturing output was flat. But the chart also shows that, although the two series have moved broadly together, the recent gap between CBI and CSO data is not unprecedented. It may be explained partly by the nature of the recovery, as around two thirds of CBI respondents are exporters—a much higher proportion than in the CSO's survey.

Manufacturing capacity utilisation fell over the previous four months according to the CBI's July Survey, and was below its previous peaks—see Chart 3.15. According to the CBI, around a half of firms take account of labour as well as physical capital when answering its Survey's questions about capacity. So the reported rise in capacity utilisation could reflect the hiring of contract and part-time workers at the margin, rather than a tightening of physical capacity constraints. Nevertheless, suppliers' delivery times lengthened in the first half of this year, according to the Chartered Institute of Purchasing and Supply (CIPS) Survey, suggesting that demand continued to outstrip supply (see Chart 3.16).

Pressures on capacity differ among industries: in the chemical sector, utilisation rose sharply in 1994 and has remained above the economy-wide average, whereas in the motor vehicle sector it was below average in the first half of 1995. According to the CBI Survey, however, the current sectoral divergences in capacity utilisation are not unusual. The UK chemical industry provides a useful illustration of sectoral differences in utilisation, exports and output, and also shows how cost and price pressures are building in the supply chain—see the box on page 29.

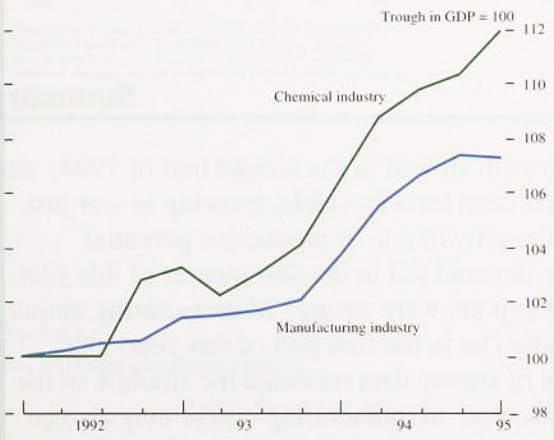
Capacity constraints in the service sector are more difficult to gauge. The BCC Survey reported a rise in capacity utilisation in the second quarter, to its highest since 1989 Q1. Overall, the combination of the BCC surveys and reports from the Bank's agents suggest that capacity constraints in the service sector are not widespread.

The UK chemical industry

In the May *Report*, a box on the UK vehicle industry helped to illustrate the divergence between strong export growth and weak domestic demand. The UK chemical industry provides a further example of this divergence, and also shows how cost and price pressures are building in the supply chain. This box reports and assesses some of these themes.

The chemical industry accounted for around 2½% of GDP last year, about as much as the vehicle industry. By the first quarter, chemical output had risen by 12% since the trough in GDP, compared with a rise of around 7% for manufacturing industry as a whole (see Chart A). Most of the output of the chemical industry is supplied to other manufacturing industries, many of which are experiencing strong export growth. The buoyancy of chemical output thus owes much to the strength of exports by other sectors: between the trough in GDP and the first quarter of 1995, chemical export volumes had risen by less than total non-oil export volumes.

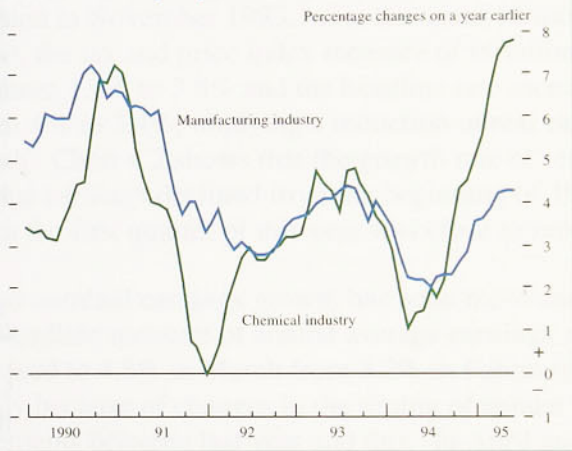
Chart A
Chemical and manufacturing output



Strong output growth led to a sharp rise in capacity utilisation in 1993 and early 1994 and, according to the CBI Survey in July, the industry was at a higher level of utilisation than for manufacturing as a whole. However, this has been so for most of the past twenty years, perhaps because chemical production is generally more capital intensive than some other manufacturing sectors and therefore it is more efficient for chemical plants to run at higher levels of utilisation. Capacity constraints were confirmed by the CIPS Survey which reported shortages of a range of chemicals and chemical derivatives in the first half of this year. Overall, although capacity constraints have increased, they are lower than in the late 1980s—which is also true for the manufacturing sector as a whole.

Around three quarters of chemical output is consumed by other industries, so the sector provides a useful illustration of cost and price developments at the intermediate supply stage. The price of imported chemical inputs rose by more than 20% in the year to June, accounting for about a quarter of the rise in manufacturers' input prices. And although overall input price inflation fell in Q2, chemical input price inflation did not. This reflected high capacity utilisation and also exchange rate depreciation: around 70% of chemical imports are from the European Union, many of which are priced in Deutsche Marks; the Deutsche Mark appreciated by around 5% against sterling between Q1 and Q2. In the twelve months to June, chemical output price inflation was 7.8% and, as Chart B shows, it has

Chart B
Producer output price inflation



been higher than aggregate manufacturing output price inflation since the fourth quarter. This suggests that earlier input price rises are now being passed through the intermediate stage of supply and that, in the short term at least, manufacturers closer to the consumer have absorbed some of these price rises.

Rising capacity constraints, and higher prices within the sector, did not affect chemical industry investment much last year; it fell, compared with a rise in investment by the rest of the manufacturing sector. In part, however, weak investment by the chemical industry reflected the strength of investment a few years earlier, particularly investment in environmental projects, following legislation. This year, chemical investment intentions have increased by more than the manufacturing sector as a whole. In the July CBI Survey, of those chemical firms expecting to increase investment, a balance of 69% cited capacity constraints as the reason—a higher proportion than in the rest of manufacturing, though that has not been unusual over the past five years. Overall, chemical investment will probably increase this year, relieving some of the pressures on capacity.

Capacity utilisation rose further in the economy as a whole in the first half of the year. And, as output grows relative to the capital stock, firms are likely, in the short run at least, to react to higher nominal demand by raising prices. It is difficult to measure the amount of spare capacity across the economy which could be used without generating inflationary pressures, since it depends partly on the pattern of demand and supply—which differs between cycles—and in any case measurement of output gaps is highly sensitive to the assumptions used to define potential output. When demand for tradable goods and services is much stronger than for non-tradables (as at present), the output gap also depends on how easily resources can be shifted to the production of tradables. So estimates of the output gap can vary widely and are subject to large margins of error.(1) Nevertheless, as discussed in Section 4, whatever the precise level of the natural rate of unemployment, it has probably fallen and, on most estimates, actual unemployment is above it. Consistent with this, the IMF and OECD estimate that the United Kingdom's aggregate output gap will average around 2% in 1995.

3.5 Summary

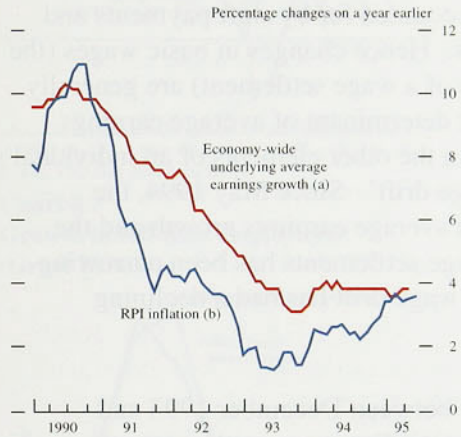
Output growth slowed in the second half of 1994; since then, it has been broadly stable, growing at—or just above—the growth rate of productive potential. Domestic demand fell in the first quarter of this year, while net exports were strong. Manufacturing output was broadly flat in the first part of this year; the buoyancy of survey data reflected the strength of the tradables sector. Manufacturing output may also be hitting capacity constraints, although this is restricted to certain sectors, and it is likely that there is more spare capacity than simple measures of utilisation suggest. Service-sector output, particularly of transport and communication services, grew strongly in the year to Q1, linked to earlier strong growth of export demand and perhaps expectations of rising demand in the future. The strength of the equity market in the first seven months of this year also suggested some market confidence in future corporate profitability. On balance, although demand and output growth weakened in the second half of 1994, since then growth has been roughly constant, and it is unlikely that it will slow much further in the second half of the year. The main danger is a downturn due to destocking.

(1) See page 310 of the August 1993 *Quarterly Bulletin* and pages 25–27 of the August 1994 *Report*.

The labour market 4

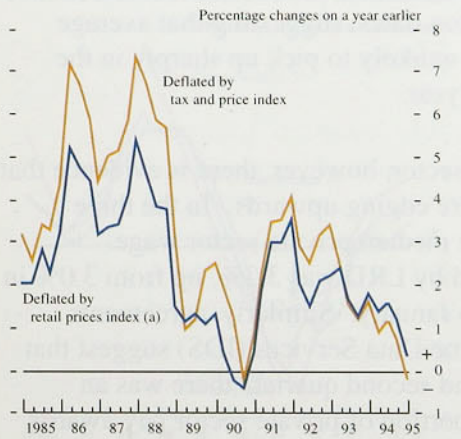
4.1 Earnings

Chart 4.1
Earnings growth and RPI inflation



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

Chart 4.2
Real average earnings growth



Sources: CSO and *Employment Gazette*.

(a) Adjusted for CSO error.

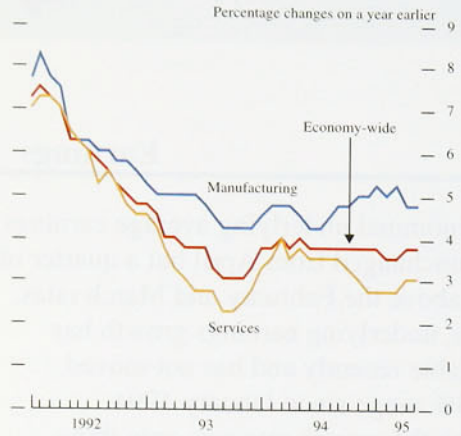
The growth rate of nominal underlying average earnings was 3¾% in May, unchanged from April but a quarter of a percentage point above the February and March rates. As Chart 4.1 shows, underlying earnings growth has been remarkably stable recently and has not moved outside the 3½%–4% range since January 1994. Furthermore, in May the growth rate was only three quarters of a percentage point above the trough of 3% recorded in November 1993; over the same 18-month period, the tax and price index measure of inflation(1) rose from 1.4% to 3.8% and the headline rate increased from 1.4% to 3.4%, implying a reduction in real earnings growth. Chart 4.2 shows that the growth rate of real average earnings declined from the beginning of 1992, and in the first quarter of this year was close to zero.

Actual nominal earnings growth has been more uneven. The headline measure of annual average earnings growth increased to 4.3% in March from 3.2% in February, largely because of changes in the timing of annual wage settlements between last year and this. In April and May, there were fewer such distortions and the growth rate fell back to 3.8% and 2.9% respectively. In producing the underlying series, the Employment Department adjusts the headline data to allow for temporary influences such as the effects of back-dated pay, industrial disputes and changes in the timing of settlements.

The strongest wage pressures in recent months have been in manufacturing, where underlying average earnings increased at a twelve-month rate of 4¾% in May, unchanged from the previous month. In the services sector, average earnings growth has been much lower, at 3% (see Chart 4.3), largely because of the weakness of the two largest sub-sectors: retail trade and repairs, and education, health and social work—the latter of which is dominated by the public sector. Each of these categories accounts for about 19% of the services sector. Comparing the five months to May with the same

(1) The tax and price index takes account of changes both in direct taxes (including national insurance contributions) and in retail prices for a representative cross-section of taxpayers. The index measures the change in gross taxable income which would maintain after-tax income in real terms.

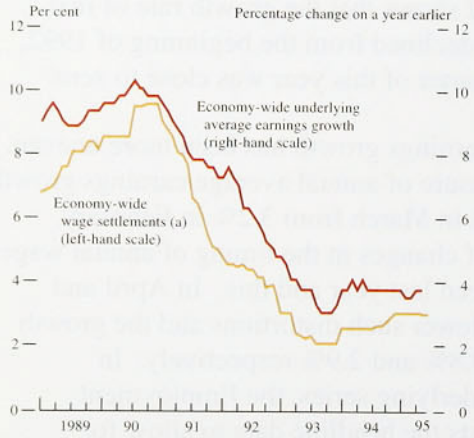
Chart 4.3
'Underlying' earnings growth(a)



Source: *Employment Gazette*.

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

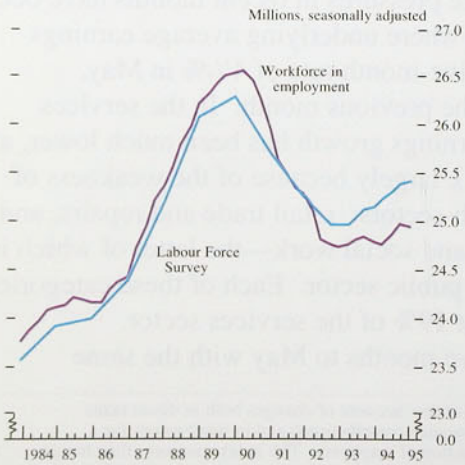
Chart 4.4
Average earnings and wage settlements



Sources: IRS and *Employment Gazette*.

(a) IRS three-month median settlement.

Chart 4.5
Comparison of employment measures (Great Britain)



Source: *Employment Gazette*.

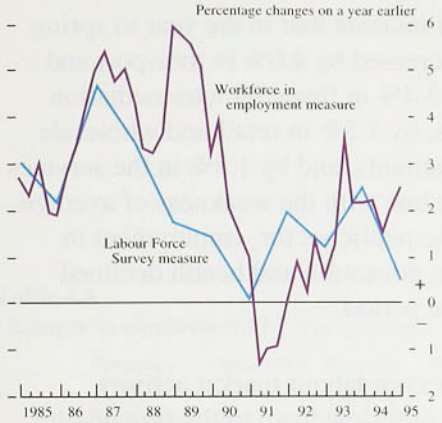
period in 1994, average earnings in these two sub-sectors increased by just 1.5%, while average earnings growth in the rest of the services sector rose by 4.0%, with increases of 4.4% and 9.3% in the financial intermediation and 'other' services categories.

Average earnings figures relate to an individual's gross pay. Data from the New Earnings Survey suggest that, for the economy as a whole, basic wages constitute about 75% of gross pay, overtime pay 14% and bonus pay 7%; the remainder is accounted for by shift payments and grading increments. Hence changes in basic wages (the standard definition of a wage settlement) are generally the most important determinant of average earnings growth. Changes in the other elements of an individual's pay are called 'wage drift'. Since May 1994, the difference between average earnings growth and the median level of wage settlements has been narrowing (see Chart 4.4), so wage drift has had a declining influence on pay.

After rising slowly between December 1993 and December 1994, the median wage settlement was broadly unchanged during the first six months of this year. Both Industrial Relations Services (IRS) and the Labour Research Department (LRD) report that, in the three months to April, the median wage agreement across all industries was 3.0%, unchanged from November. IRS report that there was no change in this position for the three months to May and June, and LRD data suggested only a slight increase to 3.1% in May. This recent stability is particularly important because roughly half of all collective wage agreements have either January or April implementation dates, suggesting that average earnings growth is unlikely to pick up sharply in the second half of this year.

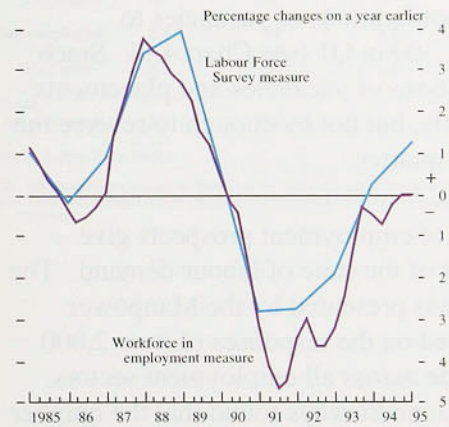
Within the private sector, however, there is evidence that wage agreements are edging upwards. In the three months to May, the median private sector wage agreement recorded by LRD was 3.3%, up from 3.0% in the three months to January. Similarly, agreements monitored by Income Data Services (IDS) suggest that between the first and second quarters there was an increase in the proportion of private sector pay awards worth more than 3.0%. The Bank's agents have also noted more firms agreeing wage claims in excess of 3.0%. Public sector wage agreements are falling behind those in the private sector, as a result of the Government's policy of freezing the nominal value of the public sector pay bill. IDS note that most increases in

Chart 4.6
Growth in part-time employment (Great Britain)



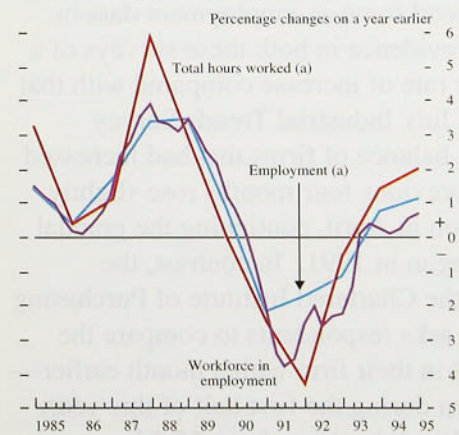
Sources: CSO and Labour Force Survey.

Chart 4.7
Growth in full-time employment (Great Britain)



Sources: CSO and Labour Force Survey.

Chart 4.8
Growth in labour demand (Great Britain)



Sources: CSO and Labour Force Survey.

(a) Labour Force Survey measure.

the public sector effective in the second quarter have been less than 3%.

4.2 Labour demand

Data released since the May *Report* suggest that growth in the demand for labour slowed in the first half of this year. Following two quarters of strong increases, the estimated workforce in employment (based on a survey of employers) fell by 12,000 in 1995 Q1. Similarly, although the Labour Force Survey (LFS) measure of employment (based on a survey of households) increased by 25,000 between winter 1994/95 and spring 1995,(1) the rise was significantly smaller than was recorded in any of the previous seven quarters (see Chart 4.5). Will this slowdown in demand be temporary or sustained?

There are a number of reasons for expecting it to be temporary. Foremost among these is the fact that the figure for total hours worked—the most comprehensive measure of labour demand—has increased faster than employment growth. The explanation for this can be found in the composition of employment growth. Although there continue to be some discrepancies between the two data sources, the LFS data strongly suggest that over the past year there has been a switch out of part-time employment into full-time employment, and away from self-employment into positions as employees (see Charts 4.6 and 4.7). Over the year to spring 1995, this shift in the composition of employment was consistent with the 0.7% increase in average hours worked and the larger 1.9% rise in total hours worked (see Chart 4.8).

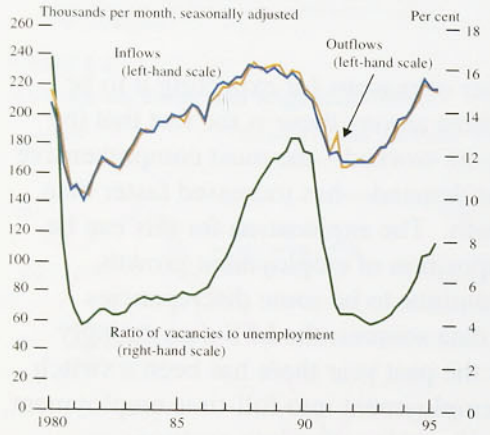
Looking at employment growth by industry, the latest LFS has partly resolved some of the differences between the two sources of data. Despite the weakness of industrial production in Q4 and Q1, both now suggest that manufacturing employment has increased. In the year to this spring, the employer-based survey showed a rise in manufacturing employment of 0.9% and the LFS recorded 0.6% growth. As mentioned in the May *Report*, this modest increase represents a very strong performance relative to the sector's trend decline over the past 20 years, helping to explain the strength of

(1) Quarterly changes in the workforce in employment and LFS employment measures are not strictly comparable; for example, the latest figure for the former relates to the difference between a point estimate taken in December and another taken in March, and for the latter is calculated as the difference between two three-month averages, for December to February and March to May.

average earnings growth in manufacturing. The service sector, however, has continued to show the strongest employment growth (consistent with output—see Section 3). LFS data indicate that in the year to spring 1995 employment increased by 4.0% in transport and communications, by 3.4% in financial intermediation and business services, by 1.5% in retail and wholesale trade, hotels and restaurants, and by 1.8% in the services sector as a whole. In line with the weakness of average earnings growth in the public sector, employment in public administration, education and health declined slightly over the same period.

Most indirect indicators of labour market activity support the evidence of a slowdown in the first quarter of this year. The monthly number of placements made by Jobcentres fell by 7,700 between December and March—the largest quarterly decline in four years. Similarly, monthly notifications of vacancies to Jobcentres fell by 11,300 in Q1 (see Chart 4.9). Since March, both notifications of vacancies and placements have increased slightly, but not by enough to reverse the falls seen in the first quarter.

Chart 4.9
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.

The various surveys of employment prospects give different impressions of the state of labour demand. The most buoyant picture is presented by the Manpower Survey, which is based on the responses of over 2,000 companies nationwide across all employment sectors. Both the March and June Surveys found that the number of employers planning to take on staff over the following three months exceeded the number who expected to reduce employment. Although not consistent with the decline seen in the workforce-in-employment data in 1995 Q1, there was evidence in both these surveys of a slowdown in the net rate of increase compared with that in 1994. The CBI's July Industrial Trends Survey reported that the net balance of firms that had increased employment in the previous four months rose slightly relative to the position in April, continuing the gradual improvement that began in 1991. In contrast, the monthly Survey by the Chartered Institute of Purchasing and Supply—which asks respondents to compare the level of employment in their firm with a month earlier—indicated a slowdown during the first half of this year: the balance was 52.3 in July, down from 55.3 in January.

Taking a longer-term perspective, the type of employment growth that has taken place could be an important indicator of labour market flexibility. On the

demand side, the greater availability of certain types of work—such as temporary contracts, part-time work and self-employment—may make it easier for firms to match labour demand and supply. Self-employment may improve flexibility by enabling firms to enter into a contract for services rather than a contract for employment; and part-time jobs and temporary working arrangements are easier to match to specific production requirements. And on the supply side, the greater availability of different working arrangements may increase flexibility by drawing people into the labour market who would be unable or unwilling to undertake full-time, permanent work.

Table 4.A
Changes in employment by work status[a]

	Percentage change over year to winter 1994/95	Change (000s)	Percentage change over year to spring 1995	Change (000s)
Employees	**1.2**	**252**	**1.3**	**270**
Full-time	1.1	185	1.3	209
Part-time	1.3	66	1.2	65
Temporary	*7.6*	*106*	*9.1*	*126*
Permanent	*0.7*	*146*	*0.7*	*143*
Self-employed	**2.9**	**94**	**1.8**	**58**
Full-time	1.5	39	1.6	41
Part-time	9.2	54	2.9	17
Total employment (b)	**1.2**	**294**	**1.1**	**270**

Souce: Labour Force Survey.

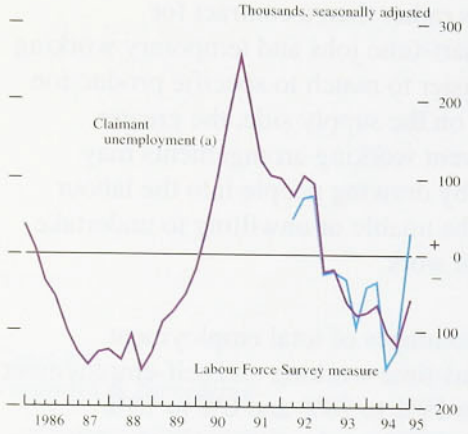
(a) Respondents are classed as 'part-time' or 'full-time' according to self-assessment.
(b) Total also includes people on government training schemes and unpaid family workers.

Since 1979, the percentages of total employment accounted for by part-time working and self-employment have increased from 19% to 28% and 8% to 13% respectively. Consistent data about temporary work are available only from 1984 and indicate only a modest rise in the period to 1991. However, over the three years to spring 1995, the fraction of jobs accounted for by temporary workers increased sharply, rising from 5.5% to 6.9% (see Table 4.A). Unfortunately, since the data do not adequately cover the previous recession, it is difficult to know whether this type of hiring pattern is normal in the first few years of a recovery.

These changes in the composition of employment over the past decade are likely to have improved labour market flexibility and may have lowered the United Kingdom's natural rate of unemployment. As discussed in Section 3, more flexible employment patterns should improve the ability of firms to work at—or close to—full capacity, and hence firms should be better able to meet increases in demand for goods and services without coming up against capacity constraints. Other things being equal, this would imply a greater degree of downward pressure on wages at any given unemployment rate. So the economy's natural rate of unemployment may be lower today than it was in the early 1980s, even though its level remains uncertain.

Consistent with these developments in the labour market, there is some evidence that employment has been more responsive to changes in demand during the most recent economic cycle than it was in the previous one. In particular, total employment began to rise only four quarters after the 1992 trough in GDP, whereas output increased for eight quarters following the 1981 trough before employment started to rise.

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 = March, April and May.

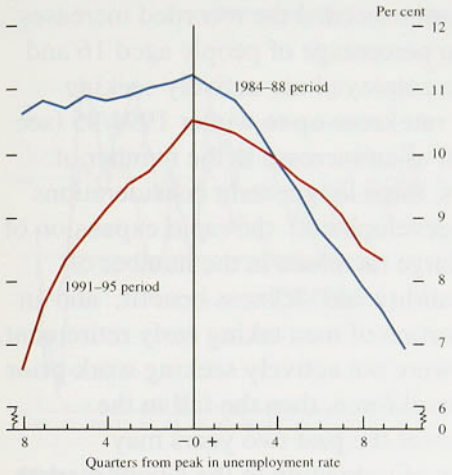
4.3 Unemployment

In line with the above indications of a weakening in labour demand, the LFS measure of unemployment increased by 28,000 between winter 1994/95 and spring 1995—its first quarterly rise for over two years. The claimant-count measure of unemployment has, however, continued to fall; but the speed of decline has slowed markedly (see Chart 4.10). In the second quarter of this year, claimant unemployment fell by just 33,600, one quarter the size of the fall in 1994 Q4 and about half as much as the reduction in 1995 Q1. There is also evidence that the most recent declines in claimant unemployment have been less widespread: in June, both male and female unemployment rose in a number of regions. The national unemployment rate remained at 8.3% in June, unchanged for the third month in succession.

The slowdown in employment demand has coincided with a reduction in the rate at which people have left unemployment. The number of people joining the count as a proportion of total employment (the inflow rate) has fallen at a fairly steady pace since 1992 Q4, whereas the number of people leaving the count as a proportion of total unemployment (the outflow rate) fell slightly in the second quarter of 1995, after rising during 1993 and 1994. According to the CSO, the changes in the criteria for eligibility for incapacity benefit, which were mentioned in the May *Report,* have not yet had a sizable impact on claimant unemployment numbers. The new medical test for incapacity benefit, introduced in April, is likely to boost the claimant count towards the end of the year, as some people lose entitlement to the benefit and switch to claiming unemployment benefit.

This switch will have important implications for the interpretation of wage pressures. Any such increases in the claimant unemployment count, where the individuals continue to consider themselves as being unable to work, will tend to exaggerate the extent of downward pressure on wages. Given such distortions, the LFS is likely to provide a better impression of actual changes in unemployment, since it is based on a survey of households, not people claiming unemployment benefit. The LFS defines people as unemployed if they are without a job, available to start work in the two weeks following their LFS interview, and if they have either looked for work in the four weeks prior to interview or are waiting to start a job they have already obtained.

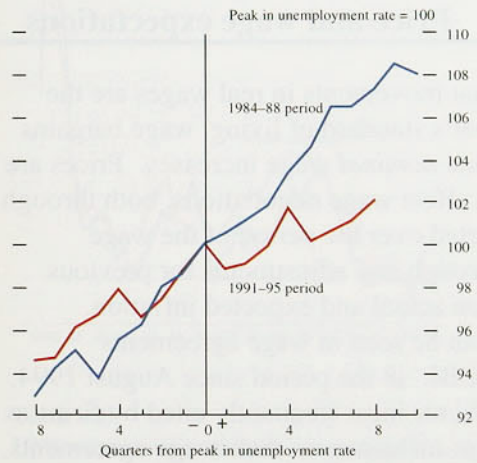
Chart 4.11
Unemployment peaks[a]



Source: *Employment Gazette*.

(a) The peaks in unemployment rates were in 1986 Q3 and 1993 Q1.

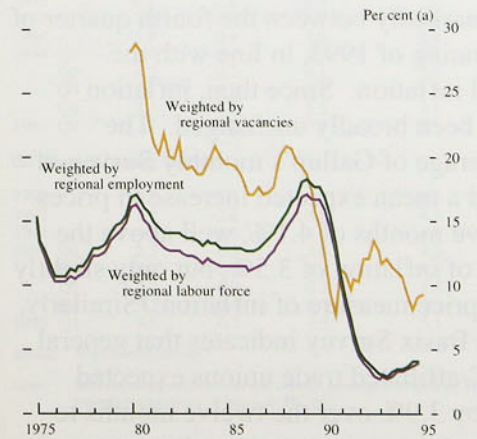
Chart 4.12
Real average earnings[a]



Sources: CSO and *Employment Gazette*.

(a) Nominal average earnings deflated by the RPI.

Chart 4.13
Mismatch in the labour market



Sources: CSO and Bank of England.

(a) Proportion of unemployed people who would need to move to eliminate mismatch.

4.4 Unemployment and wages

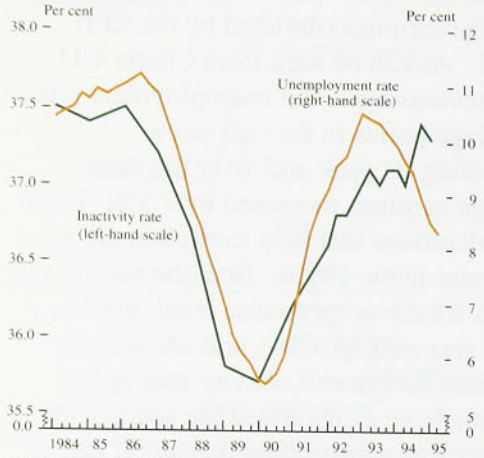
Between 1993 Q1 and the first quarter of this year, the unemployment rate fell by 2.0 percentage points and the level of real average earnings (deflated by the RPI) increased by 2.1%. As can be seen from Charts 4.11 and 4.12, in the previous cycle the unemployment rate fell by 3.3 percentage points in the two years immediately following its peak and, over the same period, real average earnings increased by 7.3%. There are two key considerations that help to explain the more muted wage response in the 1990s: first, the natural rate of unemployment, whatever its precise level, may be lower now than it was in the 1980s; and second, the decline in the United Kingdom's activity rate up to winter 1994/95 may have exaggerated the speed with which the economy was approaching its natural rate.

There are a number of reasons for expecting the United Kingdom's natural rate of unemployment to have fallen over the past ten years, although it is impossible to observe directly. As well as the impact of changes in the composition of employment in the UK labour market discussed in Section 4.2, there is some evidence that the degree of mismatch between potential employees and employers seeking to fill vacancies (in terms of both geographic distribution and skill requirements) has diminished since the 1980s. As jobs and potential employees become better matched, there will be greater competition between applicants to fill advertised jobs and hence, at any given level of unemployment, there will be greater downward pressure on wages. Although mismatch cannot be monitored directly, there are a number of regional indicators that can be used as proxy measures. Chart 4.13 shows that the regional dispersion of unemployment fell sharply in 1989 and 1990, and is now at its lowest level for more than two decades. These measures suggest that the degree of regional mismatch in the labour market has lessened.

Another factor that may influence wages is the speed with which an economy approaches its natural rate. If an economy is rapidly falling towards its natural rate of unemployment, upward pressure on wages may develop before the actual rate of unemployment moves below the natural rate. Chart 4.11 indicates that unemployment has fallen at similar rates in the most recent two recoveries.

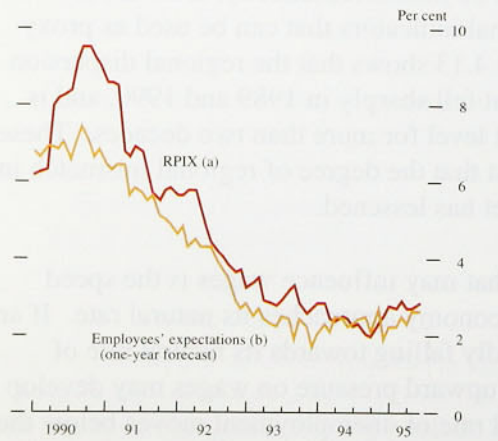
The falls in the unemployment rate over the past two years may give a misleading indication of the speed with which the United Kingdom is currently approaching its

Chart 4.14
Unemployment and inactivity



Source: *Employment Gazette*.

Chart 4.15
RPIX inflation and employees' expectations of wage increases



(a) Percentage changes on a year earlier, adjusted for CSO error in underrecording RPI and RPIX inflation.
(b) Based on Gallup Survey of Employees.

natural rate. Between winter 1992/93 and spring 1995, the declines in both the LFS measure of unemployment and the claimant count exceeded the recorded increases in employment. The percentage of people aged 16 and over who are neither employed nor actively seeking work (the inactivity rate) rose up to winter 1994/95 (see Chart 4.14). As well as an increase in the number of discouraged workers, three longer-term considerations help to explain this development: the rapid expansion of tertiary education; large increases in the number of people claiming invalidity and sickness benefit; and an increase in the proportion of men taking early retirement. If these individuals were not actively seeking work prior to their leaving the workforce, then the fall in the unemployment rate over the past two years may exaggerate the extent of tightening in the labour market and, hence, lead to an overestimation of the extent of upward pressure on real wages.

4.5 Price and wage expectations

Despite the fact that movements in real wages are the key to an individual's standard of living, wage bargains in general determine *nominal* wage increases. Prices are therefore likely to affect wage negotiations, both through the inflation expected over the period of the wage agreement, and through any adjustments for previous differences between actual and expected inflation. Evidence of this can be seen in wage agreements monitored by the CBI: in the period since August 1994, inflation was the factor most frequently cited by firms as having an important influence on their wage agreements. Hence, in considering the pressures on wages, it is essential to monitor inflation expectations.

All of the available surveys suggest that inflation expectations fell markedly between the fourth quarter of 1990 and the beginning of 1993, in line with the downturn in actual inflation. Since then, inflation expectations have been broadly unchanged. The second-quarter average of Gallup's monthly Survey of employees showed a mean expected increase in prices over the next twelve months of 4.1%, well above the June headline rate of inflation of 3.5%, but only slightly above the tax and price measure of inflation. Similarly, the latest Barclays Basix Survey indicates that general secretaries of TUC-affiliated trade unions expected prices to increase by 3.9% over the twelve months to June 1996. Workers' wage expectations, however, were below their expectations of price increases, implying that they are projecting real wages to fall; wage expectations

Chart 4.16
Productivity growth

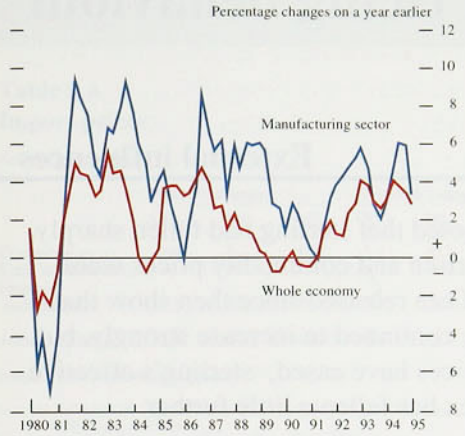


Chart 4.17
Unit wage cost growth

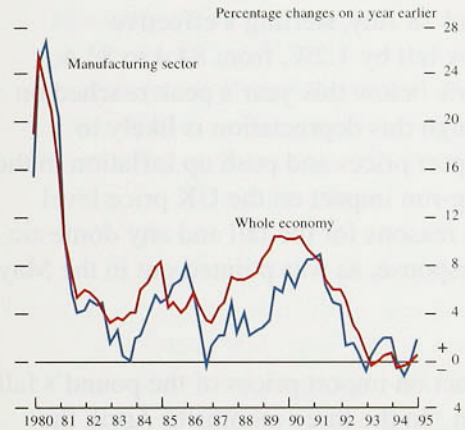


Table 4.B
Unit wage costs and their components

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	-2.4	1.9	5.9	4.0
1993	2.3	-1.0	3.3	3.1	0.1
1994	3.9	0.4	3.5	3.4	-0.2
1994 Q1	3.4	0.4	2.9	3.6	0.5
Q2	4.2	0.2	4.1	3.4	-0.7
Q3	4.1	0.3	3.8	3.4	-0.4
Q4	4.1	0.5	3.5	3.1	-0.3
1995 Q1	3.7	0.7	3.0	3.3	0.4
(b) Manufacturing industry					
1992	-0.7	-5.3	4.5	6.6	1.9
1993	1.3	-2.6	3.8	4.5	0.7
1994	4.2	-0.6	4.8	4.8	-0.1
1994 Q1	2.3	-0.5	2.8	4.8	1.9
Q2	4.0	-0.7	4.8	4.4	-0.2
Q3	5.2	-0.9	6.3	4.5	-1.4
Q4	5.2	-0.4	6.1	5.3	-0.5
1995 Q1	3.5	0.7	3.5	5.1	1.7

Source: *Employment Gazette*.

Note: Manufacturing employment and average earnings are based on SIC (80); manufacturing output is based on SIC (92).

averaged 2.5% in the second quarter, up from 2.3% in Q1 (see Chart 4.15).

4.6 Productivity and unit wage costs

Part of the explanation for the limited pass-through of higher import prices to retail prices over the past twelve months is that increases in the costs of physical inputs have been offset by strong productivity growth and relatively small increases in average earnings. The extent of these offsetting cost developments appears to be diminishing. Manufacturing productivity increased by 3.5% in the year to 1995 Q1, down from 6.1% in the year to 1994 Q4; and underlying average earnings growth in manufacturing rose to 5%. As a result, unit wage costs rose by 1.7% over the year to 1995 Q1, following a fall of 0.5% over the year to 1994 Q4. Furthermore, data for April and May indicate that the growth rate of unit wage costs continued to rise, with annual increases of 2.4% and 3.0% respectively.

The turnaround in productivity performance and average earnings growth has been less marked at an economy-wide level. Figures based on employment data from the workforce-in-employment series suggest that productivity growth slowed to 3.0% in the first quarter of this year, down from 4.1% in 1994 Q2 (see Chart 4.16). Since average earnings growth has been stable, unit wage costs increased by only 0.5% over the year to 1995 Q1 (see Chart 4.17 and Table 4.B). Figures derived from the LFS employment data present a similar picture: productivity growth fell to 2.7% in 1995 Q1 and unit wage cost growth increased to 0.9%.

4.7 Summary

The growth rate of the demand for labour fell in the first half of this year. Evidence from total hours worked and the composition of hiring suggests, however, that this deterioration will be temporary. Reflecting the weakening in labour demand, the size of monthly declines in unemployment has diminished sharply. There are still very few indications of upward pressure on wages, implying that unemployment is still above its natural rate. Past changes in the composition of employment suggest that the United Kingdom's natural rate of unemployment may be lower today than it was in the previous recovery, so downward pressure on wages could persist for some time.

5 Pricing behaviour

5.1 External influences

The May *Report* noted that sterling had fallen sharply, import prices had risen and commodity prices were edging upwards. Data released since then show that import prices have continued to increase strongly, but that commodity prices have eased; sterling's effective exchange rate index has fallen a little further.

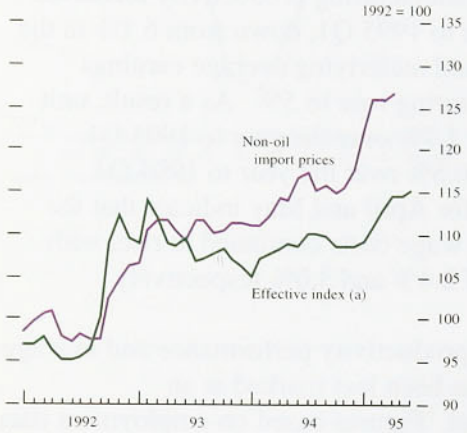
The exchange rate and import prices

Between 4 May and 28 July, sterling's effective exchange rate index fell by 1.2%, from 84.4 to 83.4, leaving it around 6% below this year's peak reached on 24 January. Although this depreciation is likely to produce higher import prices and push up inflation in the short term, the long-run impact on the UK price level will depend on the reasons for the fall and any domestic monetary policy response, as was pointed out in the May *Report*.

The short-run impact on import prices of the pound's fall can already be seen. In the three months to April, the sterling effective exchange rate index depreciated by 4.6% and non-oil import prices rose by 3.3%. Taking a slightly longer-term perspective, the pound depreciated by 5.3% over the twelve months to April, while non-oil import prices increased by 10.7% (see Chart 5.1). Although trade data are often revised, so that the figures can only be used as a rough guide, the fact that over the twelve months import prices went up by more than sterling fell reflects the increase in the price of tradable goods relative to that of non-tradables. Consistent with the picture of rising relative prices for traded goods, producer output price inflation in the G7 countries (other than the United Kingdom) increased from -0.2% to 2.5% over the year to March 1995.

Import price data can be broken down by category of goods; Chart 5.2 shows that prices for all three sub-groups increased by more in 1994 than in 1993. In particular, the prices of imported commodities (a weighted average of basic materials, fuels, and food, beverages and tobacco) increased by 10.6% in the year to December 1994, after falling by 3.7% in 1993. More

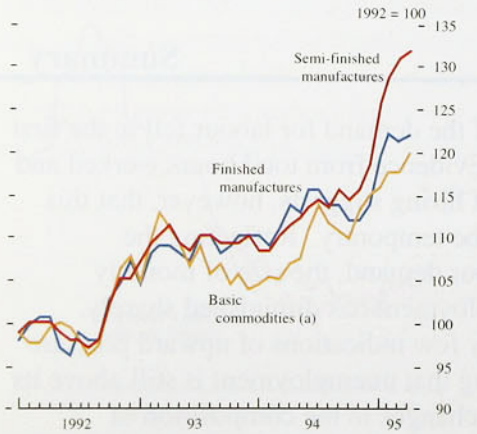
Chart 5.1
Import prices and the sterling ERI



Sources: CSO and Bank of England.

(a) The sterling ERI has been inverted, hence a depreciation of the pound is associated with an increase in the index.

Chart 5.2
Import price indices



(a) The definition of commodities used here includes basic materials, fuels, and food, beverages and tobacco.

Table 5.A
Import prices

Percentage changes

	3-month changes			12-month changes		
	Oct.	Jan.	Apr.	Oct.	Jan.	Apr.
Commodities (a)	-3.4	5.2	3.7	5.1	10.7	12.4
Semi-manufactures	—	9.9	4.9	4.7	16.2	18.5
Finished manufactures	-3.2	6.7	2.3	2.6	8.5	7.4
Memo: £ ERI (b)	1.3	-0.6	-4.6	-0.3	-3.8	-5.3

Sources: CSO and Bank of England.

(a) The definition of commodities used here includes basic materials, fuels, and food, beverages and tobacco.
(b) Figures relate to percentage changes between month averages.

recently, there has been growing evidence that the strength of world commodity prices has fed through into higher prices for imported semi-finished manufactures, which make up about a quarter of UK imports. As can be seen from Table 5.A, in the year to April the prices of these goods increased by 18.5%, well above the rise in commodity prices over the same period. This implies either that other input costs have also risen strongly or that the exporters of these goods have taken advantage of the improvement in demand conditions to increase their margins.

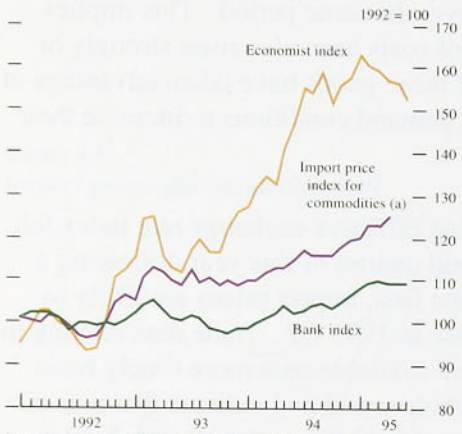
Given that the sterling effective exchange rate index fell by 3.3% in the second quarter of this year, following a decline of 2.1% in the first, import prices are likely to have continued to rise in 1995 Q2. Trade data relating to non-EU countries are available on a more timely basis than those for the whole world and indicate that non-oil import prices increased by 2.0% in the second quarter. Are import prices likely to continue to rise? Leaving aside the prospects for the pound, this question is probably best answered by dividing imports into two categories: basic commodities and manufactures.

The percentage of UK visible imports accounted for by basic commodities fell from around 45% in 1970 to 17% in 1994. Commodity prices nevertheless continue to have significant direct and indirect effects on import prices, as they affect the prices of semi-finished and finished manufactures. As a result, movements in commodity prices contribute to short-run cost pressures in the supply chain.

World commodity prices fell in the first six months of 1995. The Economist index—which uses a set of weights derived from OECD imports—indicates that sterling-denominated non-oil commodity prices fell by 6.4% between January and June, following a 28% rise in the twelve months to January. However, because of differences between the OECD as a whole and the United Kingdom in the composition of imports and use of commodities, the Economist index does not accurately reflect the way in which commodity price changes affect the UK economy. In particular, it has exaggerated the impact both of the rise in commodity prices in 1994 and the fall in 1995. To gain a better view, the Bank has developed its own demand-weighted commodity price index,(1) which takes account of the fact that UK inflationary pressure is affected by changes to the prices

(1) For further details of this index, see the article, 'The Bank's new UK commodity price index', on pages 280–85 of the August 1995 *Quarterly Bulletin*.

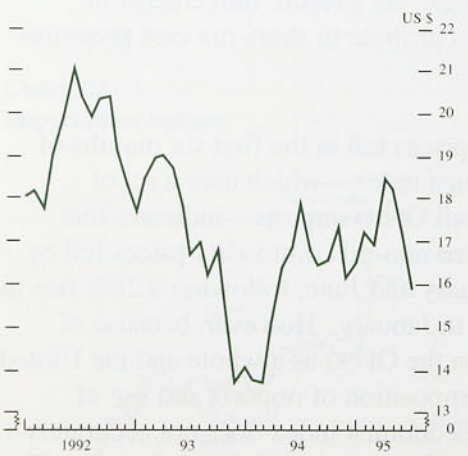
Chart 5.3
Sterling non-oil commodity price indices



Sources: *Economist*, Bank of England and CSO.

(a) Includes import prices for basic materials and food, beverages and tobacco.

Chart 5.4
Crude oil price(a)



(a) Price per barrel of Brent crude oil, for delivery in one month's time.

of commodities produced domestically as well as price changes of commodities that are imported.

Agricultural products, which make up around 40% of the Bank's index, are one of the most important categories of domestically produced commodities. Because of the price support system within the Common Agricultural Policy, the prices of these agricultural goods have also increased as the pound has depreciated. This has occurred because price support payments are determined in Ecu and then converted to a Member State's currency using the so-called 'green' rates of exchange. As was mentioned in the previous *Report*, this system has had an inflationary impact on European agricultural prices as a whole, since weak-currency economies have devalued—leading to an increase in their support prices—more often than strong-currency countries have revalued. This inflationary bias may now have come to an end; a reform package agreed among EU agriculture ministers on 23 June led to five EU countries revaluing their green rates of exchange, on the understanding that farmers in those countries would receive transitional relief to help offset any reductions in support prices.

The Bank's index indicates that the growth rate of sterling-denominated non-oil commodity prices fell back in the second quarter, after rising quite sharply in 1995 Q1 (see Chart 5.3). When oil prices are included, the Bank's index increased by 3.8% in 1995 Q1 and by less than this in Q2. After rising nearly 9% in April, dollar-denominated oil prices fell back in May and June (see Chart 5.4) and futures contracts suggest that prices are expected to fall slightly over the rest of the year. In addition, futures markets suggest that the prices of most base metals are expected to rise by less in 1995 than they did in 1994. Although much of the recent fall in the price of oil has been caused by OPEC countries exceeding their production quotas, the weakening of other commodity prices—particularly metal prices—probably reflects downward revisions to forecasts of world growth, following signs of weaker than expected output in the United States and Japan in 1995 Q1.

Although import prices for semi-finished and finished manufactures show some correlation with movements in commodity prices, the association is not strong, since the value added at each stage of additional processing—together with the costs of distribution and sale to the final consumers—increasingly outweighs the prices of the original raw materials. As a result, movements in the import prices of semi-finished and finished

manufactures are generally less volatile than commodity prices. Recent research using data from the United States and the United Kingdom indicates that producer price margins tend to rise during economic recoveries and fall during recessions. Given this evidence, and the fact that G7 real GDP increased by 1.3% in the year to 1993 Q4 and by 3.3% in the year to 1994 Q4, it seems likely that the prices of semi-finished and finished manufactures will continue to rise during the rest of the year, even if commodity prices fall.

The pass-through of higher import prices to retail prices

As was pointed out in the May *Report*, if monetary policy is not tightened in response to an exchange rate depreciation, there will be two channels by which higher import prices feed through to higher retail prices. First, there will be a direct impact on the prices of imported finished consumption goods and second, there will be an impact from more expensive inputs, which will eventually be passed along the supply chain to producer output prices and then to retail prices. But neither of these channels is as rapid as the change in import prices in response to movements in the exchange rate.

Since the non-traded goods sector adds value to imports of finished consumption goods in the process of distribution and sale, the retail import is, in effect, a different good to that which lands at the dock. In consequence, its price should be expected to change by an amount proportional to the share of the imported component in total unit costs. Furthermore, importers' mark-ups are sometimes varied in order to insulate consumers from changes in the cost of the import (if, for example, it is expected to be temporary), thereby dissipating the impact of currency depreciation on retail prices. Hence, although around 15% of the goods and services included in the RPI consists of imports sold direct to the consumer, a 1% rise in import prices will be associated with a rise of less than 0.15% in the RPI, unless mark-ups are increased.

The pass-through of higher import prices along the supply chain will be even slower and proportionately smaller, since the share of imported inputs in total costs is likely to be less for goods manufactured in the United Kingdom than for imported finished consumption goods. This suggests that, over the short term, any rise in retail price inflation will reflect only higher prices of finished consumption goods, unless the import price increases trigger second-round wage and price increases straight away. Hence, sterling's 6% depreciation in the first half

of 1995 is unlikely to increase the retail prices index by more than 0.9% (15% of 6%) over the short term, abstracting from second-round effects. The fact that UK domestic inflation is low gives added weight to this argument, since retailers' scope for altering their mark-ups depends on their scope for changing the relative prices of final goods. When the prices of domestically produced goods are increasing rapidly, it is fairly easy to raise the retail prices of imported goods; when domestic inflation is low, however, relative price changes are conspicuous. So if the price of a domestic substitute has not changed, the scope for altering the retail import price is limited.

Higher import prices will also affect the prices of domestically produced goods that use imported raw materials or semi-finished manufactures as inputs. In the United Kingdom, about a quarter of domestic demand is accounted for by imported materials, and therefore the maximum impact of this year's 6% depreciation of the pound would be a 1.5% increase in the level of the RPI, before taking account of second-round wage and price effects. However, even without a tightening of monetary policy, it could take several years before the increase in import prices is fully reflected in retail prices.

5.2 Profitability

In an accounting sense, a firm's profitability—its return on capital—is jointly determined by its ratio of output to capital and its price margin. Nominal gross trading profits of companies in the economy as a whole fell by 3.8% between 1994 Q4 and 1995 Q1, following four successive quarterly increases, but were 9.4% higher than in 1994 Q1. Although it is possible to draw inferences about movements in margins for manufacturing and retailing, there are very few data relating to the rest of the economy. Those there are suggest that the fall in profitability in the first quarter was the result of strong increases in costs (particularly import prices) which were not matched by similar increases in domestic output prices. Capacity utilisation rates—which may have an influence on both firms' investment plans and their setting of margins—have continued to rise.

Manufacturing

Domestic manufacturing input prices (materials and fuel) increased by 12.1% in the twelve months to January, largely reflecting the rise in commodity prices

Chart 5.5
Producer prices and import prices

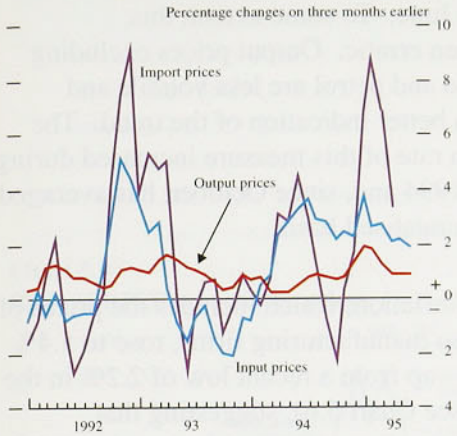


Table 5.B
Rates of change of manufacturers' costs

Year-on-year percentage changes

	1994			1995
	Q2	Q3	Q4	Q1
Costs				
Unit wage costs	-0.2	-1.4	-0.5	1.7
Materials and fuels (including semi-finished manufactured imports)	0.6	4.5	8.4	11.6
Imports of finished manufactures	5.5	4.5	2.5	9.9
Services	2.1	1.6	1.5	0.5
Output prices	**2.2**	**2.1**	**2.5**	**3.6**

Sources: CSO and Bank of England.

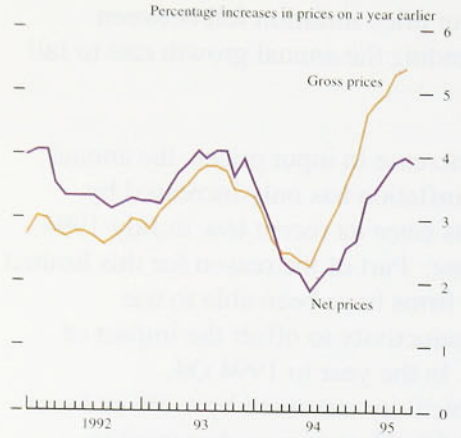
in 1994. Since then, there has been a slight reduction in input price pressures. As can be seen from Chart 5.5, the rate of short-run input price inflation fell between January and June, leading the annual growth rate to fall to 10.2%.

Despite the strong increase in input prices, the annual rate of output price inflation has only increased by 2.3 percentage points since its recent low in July 1994, reaching 4.2% in June. Part of the reason for this limited pass-through is that firms have been able to use improvements in productivity to offset the impact of higher input prices. In the year to 1994 Q4, manufacturing productivity increased by 6.1% and unit wage costs fell by 0.5%. However, as discussed in Section 4, this cyclical improvement may be coming to an end: productivity growth fell to 3.5% in 1995 Q1 and unit wage cost growth increased to 1.7%.

Input-output data suggest that, for manufacturing industry as a whole, unit labour costs account for around a half of total variable costs; materials and fuels (including semi-finished manufactured imports) constitute approximately a quarter; imports of finished manufactures represent a tenth; and the remainder is accounted for by services. These weights can be used to provide a rough guide to movements in total costs: Table 5.B shows how the costs of these inputs have changed in recent quarters. The principal source of price pressures has been the cost of physical inputs to manufacturing: in 1995 Q1, material and fuel prices were 11.6% higher than a year earlier, and the prices of imported finished manufactures were up by 9.9%. After including contributions from unit labour costs and service inputs, a simple measure of total manufacturing costs shows an increase of just under 5% in the year to Q1, up sharply from around 2% in the year to 1994 Q4. In contrast, output prices rose by 3.6% over the four quarters to 1995 Q1, implying that the mark-up of manufacturing output prices over input prices fell over the year. This fall followed five quarters in which output price inflation exceeded the annual change in costs.

Will margins continue to be squeezed? On the costs side, it seems unlikely that pressures will ease significantly in the short term. Although commodity prices have fallen recently, this is likely to be offset by the continuing effects of sterling's depreciation and the slackening of productivity growth. So the key to how margins develop will be movements in output prices. Somewhat surprisingly, short-term inflation indicators suggest that output price pressures have moderated this

Chart 5.6
Manufacturers' output price inflation



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

Chart 5.7
Ratio of input prices to output prices

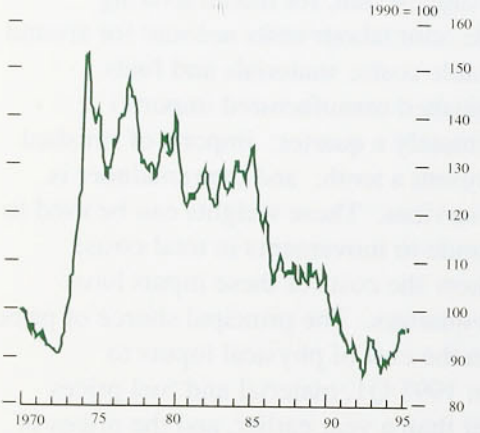
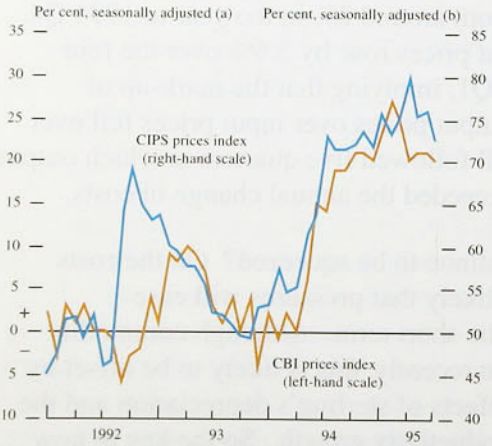


Chart 5.8
Survey indicators of producer output prices



Sources: CBI and Chartered Institute of Purchasing and Supply.

(a) CBI Monthly Trends Enquiry: balance of firms expecting to increase prices in following four months less those expecting a reduction.
(b) Purchasing Managers' Index: balance of firms increasing prices in the previous month (50.0 associated with no change).

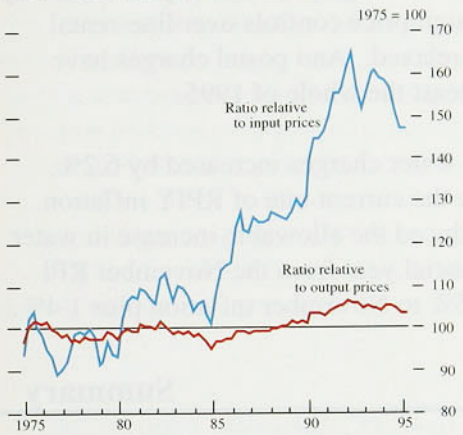
year. The three-month annualised rate of change in seasonally adjusted output prices fell from 7.6% in January to 3.5% in June. To some extent, this 'slowdown' has been erratic. Output prices excluding food, drink, tobacco and petrol are less volatile and generally provide a better indication of the trend. The short-term inflation rate of this measure increased during the second half of 1994 and, since October, has averaged around 5% on an annualised basis.

Gross output price inflation, which includes the prices of transactions between manufacturing firms, rose to 5.4% in the year to May—up from a recent low of 2.2% in the year to July 1994 (see Chart 5.6), suggesting that pressures at the intermediate stages of the supply chain have intensified. Evidence of increasing price pressures in the manufacturing sector can also be seen in the ratio of input to output prices which, although historically quite low, has risen to its highest level for four years (see Chart 5.7).

Survey evidence is mixed. The strongest suggestion that output price inflation will continue to rise is given by the Chartered Institute of Purchasing and Supply (CIPS) Survey. This asks about the prices of purchases each month compared with one month earlier and should, therefore, move in line with gross output price inflation. In July, the index was 72.0, well above the 50.0 level that is associated with no change in prices (see Chart 5.8), indicating that price pressures remain strong. Purchasing managers also continue to report that delivery times are lengthening, which may indicate some inflation pressure. Similarly, the CBI's July Survey reported that the number of firms expecting to increase prices exceeded those expecting to reduce them. However, the CBI Survey pointed to a reduction in price pressures since its January Survey. In July, the positive balance of firms expecting to increase domestic prices over the following four months was 18%—in line with the balance recorded in April, but well below February's 27%.

Chart 5.9 shows the relationship between RPIX and the two producer price indices; RPIX has shown a trend increase relative to producer input prices but has generally moved in line with producer output prices. Taken at face value, these relationships suggest that, if the current levels of input and output price inflation were sustained, it would be likely that RPIX inflation would exceed its target range. The chart, however, also illustrates that RPIX increased relative to producer

Chart 5.9
Ratio of RPIX to producer prices



Sources: Bank of England and CSO.

output prices between 1985 and 1992, and that the recent strength of output prices has not yet restored the ratio between the two indices to its long-run trend. Hence, it seems likely that not all of the increase in producer output price inflation will be replicated in higher RPIX inflation.

A firm's profitability may also be influenced by its degree of capacity utilisation. Increases in aggregate capacity utilisation imply that more and more firms are operating at or near their full capacity, bringing forward the point when margins are raised. According to the latest CBI Quarterly Trends Survey, the proportion of manufacturing firms working below capacity increased slightly between April and July but remained close to its lowest level for more than five years, suggesting that any squeeze in margins brought about by higher costs is likely to be temporary and will probably be offset by higher output prices.

Manufacturing exporters have fared better, since profitability has been supported by the fall in the pound. Over the year to 1995 Q1, non-oil export prices increased by 6.6%, well above the estimated increase in costs that UK manufacturers have faced. Export margins, therefore, probably increased over the year. Combined with the previously noted high capacity utilisation, this suggests that profitability among UK exporters increased sharply over the period.

Retailing

Differences between the unit wage cost increases in manufacturing and retailing are relatively small at present. As a result, the rise in the price of physical inputs—through higher manufacturing output prices and higher prices for imported goods—has dominated increases in retailers' costs. In the year to 1995 Q1, RPIY inflation averaged 1.9%, while retailers' costs are estimated to have increased by just under 4%, suggesting that their margins fell over the year, continuing the downward trend seen over the past two and a half years.

Utilities

Unlike other sectors, where the degree of competition determines each firm's pricing strategy and profitability, utilities generally have to charge prices within limits set by official regulators. Hence the profitability of utilities is determined by their ability to keep their cost increases below their allowable price change. The latest available information suggests that utility price increases may have less of an impact on RPIX inflation this year than

last. The contribution made by both electricity and gas fell in April, as the effects of the introduction of VAT on domestic fuel and power dropped out of the twelve-month calculation. In addition, under the new price formula set by OFFER, electricity distribution charges are to fall by 11%–17% in 1995–96, and by 10%–13% in 1996–97. British Gas is proposing to introduce a slightly lower tariff for those customers who pay their bill within a few days of receiving it. In order to comply with OFTEL's pricing formula, British Telecom must cut the average price of telephone calls by 3.5% this year, though price controls over line-rental charges have been relaxed. And postal charges have been frozen for at least the whole of 1995.

However, in April, water charges increased by 6.2%, considerably above the current rate of RPIY inflation. But OFWAT has reduced the allowable increase in water charges in this financial year from the November RPI inflation rate plus 5% to November inflation plus 1.4%.

5.3 Summary

Import prices rose strongly in the first quarter of this year, both in response to the depreciation of the pound and as a result of higher world export prices. In the second quarter, import prices are likely to have increased further, as sterling continued to depreciate. However, the speed of the pass-through of higher import prices into higher retail price inflation will vary from product to product, depending on the extent of processing in the supply chain and the degree of price competition. As expected, there is growing evidence that firms have chosen to absorb some of the rise in import costs in their profit margins. However, other costs in the manufacturing sector also appear to be increasing, suggesting that twelve-month output price inflation will continue to edge upwards. But the extent to which higher output prices feed through to retail prices will depend on the stance of UK monetary policy and, in the long run, on the reasons behind sterling's depreciation.

Prospects for inflation 6

6.1 The economic news

The Bank's assessment of the inflation outlook takes account of the main economic news reported in previous sections:

- RPIX inflation has been broadly stable since the May *Inflation Report*, but RPIY inflation has edged up, from 2.0% in March to 2.3% in June, in line with projections in the May *Report* (Section 1).

- Narrow money (measured by notes and coin), broad money and credit have all grown strongly. Bank spreads have narrowed. Corporate sector borrowing increased rapidly in the first half of 1995 (Section 2).

- The exchange rate is slightly lower than at the time of the May *Report*. Futures prices do not imply a recovery; indeed, bond yields suggest sterling is expected to fall a little further over the next ten years. Comparing conventional and index-linked gilts, expectations of inflation in five and ten years' time have increased, but they have fallen for shorter horizons (Section 2).

- Most activity indicators have been weak since the May *Report*. Estimated GDP growth in the fourth and first quarters was revised down; retail sales volumes in the second quarter were broadly flat and so probably was industrial production. There were signs of an involuntary build-up of stocks of finished goods in Q1 and domestic demand fell. Both the housing and construction markets weakened, too. But non-oil GDP expanded at a rate a little above trend in the second quarter, as the output of services more than made up for the weakness of industrial production (Section 3).

- Trade performance was strong in the first quarter, and the outlook continues to be good, because of the lower real exchange rate. Overseas demand may be lower than previously expected, but this is unlikely to outweigh the exchange rate effect (Section 3).

- Excess labour supply continues to put downward pressure on real wages. Since the beginning of 1994, nominal underlying earnings growth has been broadly flat, while the headline rate of inflation has increased. Also, both employment and unemployment data indicate that labour demand weakened in the first half of this year, suggesting that the speed at which the labour market is tightening has slowed (Section 4).

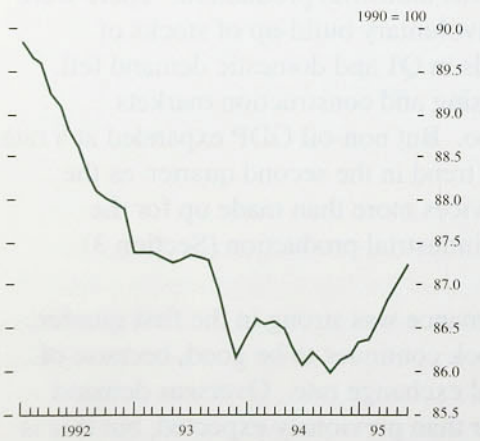
- Price pressures at the early stages of the supply chain have increased since the May *Report*, largely as a result of higher prices for imports. This has not had a major impact upon domestic producer output prices as yet, because firms have absorbed some of the rise in costs in their domestic profit margins. However, other cost pressures in the manufacturing sector also appear to be increasing, suggesting that output price inflation will rise further, leading to higher retail price inflation at least in the short term (Section 5).

6.2 The current economic conjuncture

The economic news reveals a marked 'dual economy'. Since last autumn, the output of services has grown strongly, but the output of goods has not. Yet the May *Report* stressed the dichotomy between the sectors producing internationally tradable and non-tradable goods and services. How are these two pictures to be reconciled?

Two facts suggest a resolution to the puzzle. First, domestic demand for manufactured goods—for both consumption and investment—is more sensitive to changes in total domestic demand than is domestic demand for services. Second, domestic demand for and domestic output of services move closely together, so that the direct contribution of services to net exports is small. Hence the interpretation of recent output data is that in manufacturing, and industry more generally, a fall in domestic demand has offset a rise in export demand. In the services sector, domestic demand has continued to grow, bolstered by an indirect demand for those services related to the export of goods, such as transport and communications. The persistence of the exchange rate fall, combined with continuing weakness in consumption and the housing market, suggests that the 'dual economy' is likely to continue. The price of tradables relative to non-tradables has increased (Chart 6.1); so has the price of goods relative to services. This helps to

Chart 6.1
Tradables prices relative to non-tradables prices[(a)]



Source: Bank of England.

(a) Seasonally adjusted.

explain the change in the composition of consumption towards services and the divergence between retail sales and total consumer spending, as do other factors such as the National Lottery and the impact of low housing turnover on the demand for durable goods. In the short run, output growth may moderate further as firms adjust to the involuntary stockbuilding indicated by the Q1 national accounts and the July CBI Quarterly Industrial Trends Survey. By next year, however, this disinvestment in stocks should have run its course, and personal consumption is likely to return closer to trend growth.

At first sight, the strength of employment and pay in manufacturing relative to services does not fit comfortably with the other evidence. But the growth in employment may be a delayed reaction to the increase in demand last year. The relative pay of workers in manufacturing has gone up largely because average service-sector pay has been held back by small pay increases in the retail industry and limits on public sector pay bills.

The inflation outlook depends on the answers to three questions:

(i) will output growth continue at its recent pace?

(ii) will inflationary pressures in the tradables sectors have a second-round effect on domestically generated inflation?

(iii) will the more rapid growth of the money supply and credit lead to more rapid increases in aggregate nominal demand?

The conditions for increased business investment—high profits, emerging capacity constraints, forecasts of continued demand growth—are still in place in many industries, although the 'dual economy' means that some parts of manufacturing, construction and the utilities are unlikely to see much of a pick-up. Consumers may already have adjusted their spending in the light of tax increases in the spring, and trade flows are still adjusting to the lower real exchange rate. But it is important to acknowledge the downside risk to activity, particularly given the weakness of domestic demand in the first half of this year. The possibility of a pause in growth led by the continuation of destocking cannot be ruled out, especially if there turns out to have been further involuntary stockbuilding in the second quarter. Business confidence about future sales has fallen.

Cost increases, derived directly and indirectly from import prices, are at levels which, if they continued, would be inconsistent with the inflation target in the long run. With the impact of higher import prices now beginning to be seen in retail prices, and more cost pressures in the supply chain, there is a risk of second-round effects from the adverse supply shock brought about by the exchange rate depreciation. Firms may try to restore domestic margins by increasing prices instead of bearing down harder on costs, and employees may seek compensation for an adverse shift in the terms of trade. If this were to happen, transmitting price pressures from the buoyant sector of the 'dual economy' to the weak sector, there would be a danger of higher inflation in the very short run—and in the medium term, too, if second-round effects were expected to be accommodated by monetary policy for fear of the consequences for output and employment. This would be aggravated if there were a further fall in the exchange rate, which would be a risk in such circumstances.

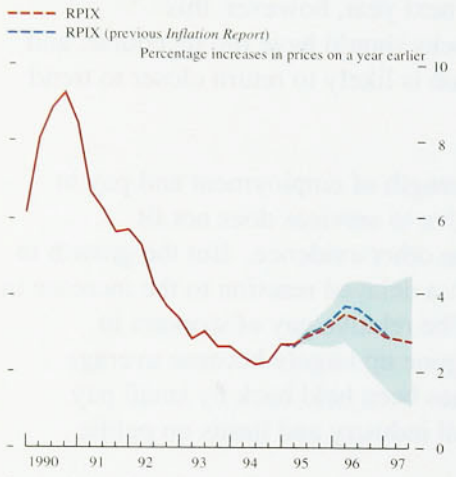
Such a situation would arise only if money were allowed to grow too rapidly. The recent faster growth of the monetary aggregates suggests a pick-up in the growth of nominal demand, although the increased demand for M4 and M4 credit seen so far may reflect no more than a reshuffling of portfolios. It is whether the faster growth persists which is important. A temporary increase in monetary growth could reflect borrowing by the corporate sector to finance unintended accumulation of stocks and higher precautionary saving by individuals.

6.3 The Bank's medium-term projection

The Bank's medium-term projections for annual RPIX and RPIY inflation are shown in Charts 6.2 and 6.3. As usual, they reflect the Bank's judgment about the most likely, or modal, outcome, given the assumptions of (a) unchanged official UK interest rates and (b) an exchange rate determined by uncovered interest parity. The forecast horizon has been extended from eight quarters to nine, so that the projection goes out to the quarter two years from this *Report's* publication date. The Bank's central projection is that RPIX inflation will still be somewhat above 2½% in two years' time, although there is a wide margin of error around any such central projection. The RPIY measure of underlying inflation is likely to be a little lower.

Chart 6.2 shows that the projected peak in the inflation rate, reached around the middle of 1996, is lower than it

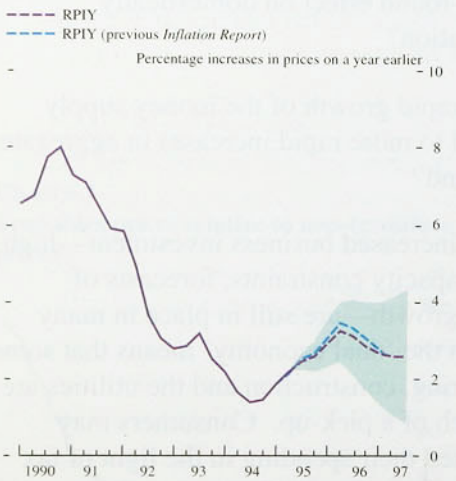
Chart 6.2
RPIX inflation outturns and projections



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 6.3
RPIY inflation outturns and projections

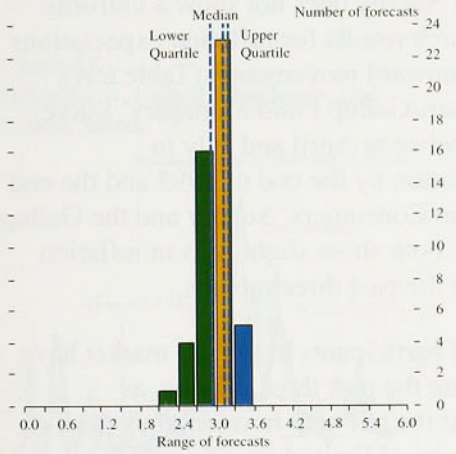


Sources: CSO and Bank of England.

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.

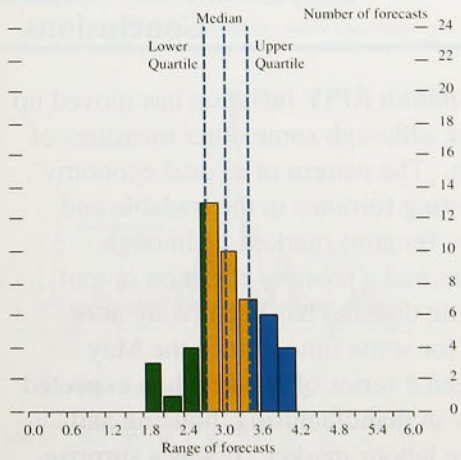
was in the May *Report*, largely because of the downward revision to estimated domestic demand in the first half of this year and lower than expected nominal earnings growth. The projected path of inflation is influenced by the exchange rate depreciation this year, including the small fall since the May *Report*. Price increases for tradable goods and services are expected to push up retail price inflation over the next twelve months, but the rise in the price of tradables relative to non-tradables should have taken place by 1997. The precise profile for annual inflation rates will depend on how quickly the increase affects retail prices. If the pass-through is spread through several quarters, the peak inflation rate is likely to be lower, but the subsequent decline in the rate is likely to be slower. Because of the assumption of unchanged official interest rates, the projection entails some accommodation of price increases in the parts of the economy making non-tradables, but the projected total increase in the retail price level due to the exchange rate depreciation is considerably less than the depreciation itself.

Chart 6.4
Distribution of RPIX inflation forecasts for 1995 Q4



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

Chart 6.5
Distribution of RPIX inflation forecasts for 1996 Q4



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

6.4 Outside inflation expectations

The inflation expectations of all sorts of economic agents are an important aspect of the monetary transmission mechanism. If expectations are too high in the short run, agents will set nominal wages and prices higher than is consistent with the current monetary stance. In the short run, this will counteract the downward pressure of excess unemployment and capacity on inflation. If this behaviour persists in the long run and there is no monetary accommodation, it will result in higher unemployment. This is why the Bank monitors indicators of inflation expectations; such indicators are not treated as intermediate targets for policy or alternatives to the Bank's own projections.

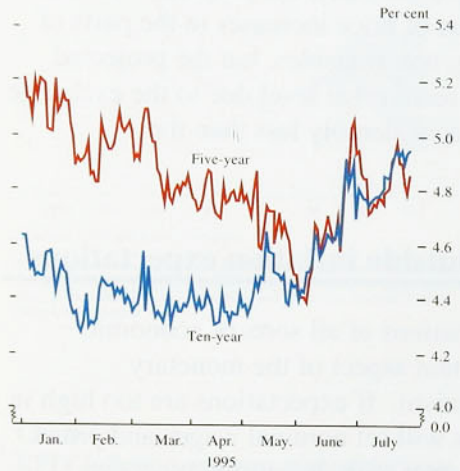
The distributions of outside forecasts of RPIX inflation for 1995 Q4 and 1996 Q4 are shown in Charts 6.4 and 6.5. The median forecast for 1995 Q4 has changed from 2.9% to 3.1%, and that for 1996 Q4 from 3.1% to 3.2%, both rising slightly (as the former did in the May *Report)*. Both distributions have narrowed, as expected given the passage of time. For 1996 Q4, the lower quartile has moved up but the upper quartile has not fallen. Out of 48 forecasters, only five forecast inflation to be at or below 2½% by 1996 Q4, and two of them assume interest rates will be above 6¾% by then.

Table 6.A
Barclays Basix Survey of inflation expectations

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

Source: Barclays Bank.

Chart 6.6
Implied forward inflation rates



Source: Bank of England.

Chart 6.7
Average inflation expectations over the following three years

Source: Bank of England.

Bank projections have tended to be below those of outside forecasters, despite the fact that the latter are not constrained by the Bank's constant interest rate assumption. Most outside forecasters assumed that interest rates would rise. Hence, if the Bank's projections had been made on the same basis, the Bank would have appeared even more optimistic about inflation.

The Barclays Basix Survey does not show a uniform change from its March results for inflation expectations (which had shown upward movements) (Table 6.A). The Smith New Court/Gallup Fund Managers' Survey reports no change between April and July in expectations of inflation by the end of 1995 and the end of 1996. The Gallup Consumers' Survey and the Gallup Employees' Survey both show slight falls in inflation expectations during the past three months.

The expectations of participants in the gilt market have moved around during the past three months, as Chart 6.6 shows. At the ten-year horizon, they have increased; this may be of limited significance for current price and wage-setting behaviour, but it suggests that the long-term credibility of monetary policy has been eroded a little. At a horizon of five years, there has been little net change. Averaging over the next three years, expectations have dropped (Chart 6.7), reflecting a re-assessment of the economic conjuncture as well as the stance of policy. But at all horizons, expectations remain in excess of 2½%.

6.5 Conclusions

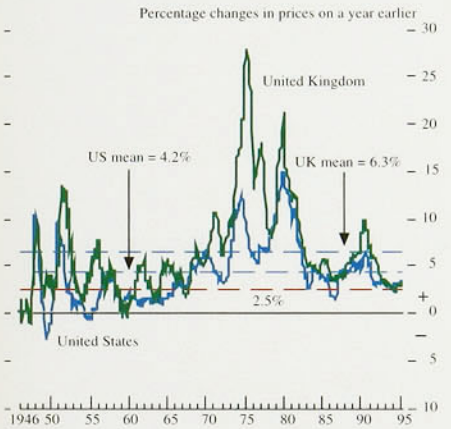
Underlying twelve-month RPIY inflation has moved up over the past quarter, although some other measures of inflation have fallen. The pattern of a 'dual economy', with sharply contrasting fortunes in the tradable and non-tradable sectors, remains marked. Although volatile, net trade has had a positive effect on output growth. But domestic demand has been rising at or below its trend rate for some time. Since the May *Report,* there has been a series of weaker than expected statistics for activity in manufacturing, housing and construction, and the labour market. It was a surprise, therefore, when the national accounts reported that, because of strong growth in the services sector, non-oil output as a whole grew slightly faster in the second quarter than in the first.

But the recent indicators do not alter the underlying prospects for the next two years. A combination of

Table 6.B
Relative post-war inflation performance

Country	Period	Proportion of time at or below 2½%	Proportion of time between 1% and 4%
United Kingdom	Jan. 1946–June 95	21%	34%
United States	Jan. 1948–May 95	34%	47%
Italy	Jan. 1948–Feb 95	21%	26%
Germany	June 1949–June 95	43%	58%
France	Dec. 1951–June 95	24%	40%
Canada	Jan. 1961–May 95	25%	37%
Japan	Jan. 1964–May 95	34%	40%

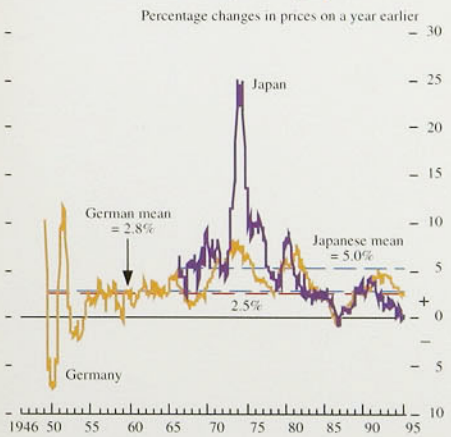
Chart 6.8
Inflation:[a] United Kingdom[b] and United States



Sources: CSO and Datastream.

(a) Consumer prices.
(b) Prior to 1975, RPI data are used; subsequently RPIX data are used, adjusted for CSO error.

Chart 6.9
Inflation:[a] Germany and Japan



Sources: OECD and Datastream.

(a) Consumer prices.

fiscal and monetary restraint, and a fall in the real exchange rate, has enabled resources to be switched from domestic consumption to net exports. Looking ahead, net trade should continue to benefit from the lower real exchange rate, and consumption and investment are likely to grow at a faster rate. Indeed, if the recent acceleration in broad money were to continue, nominal domestic demand could pick up rapidly.

In his Mansion House speech on 14 June, the Chancellor of the Exchequer made it clear that the Government's target for inflation is for the twelve-month rate of increase of RPIX to be at or below 2½%. The Government's target is a demanding one. Inflation has only been 2½% or lower about a fifth of the time since the Second World War in this country. Other major countries have a better track record (see Table 6.B and Charts 6.8 and 6.9). While aiming consistently for 2½% or less, the Chancellor acknowledged that, because of shocks, inflation would vary, staying within the range of 1%–4% most of the time. This, too, is a demanding standard, which even Germany has met only just over half the time (see Table 6.B). It represents a considerable improvement over the United Kingdom's past experience, but is attainable with the appropriate monetary policy stance.

The Bank's central projection for inflation two years ahead is similar to that in May, although the pass-through of higher import prices to retail prices is expected to be slightly less rapid because of slower than expected growth in manufacturing output and retail spending. It remains the case that it is more likely than not that RPIX inflation will be above 2½% in the middle of 1997. There are, of course, significant uncertainties about this judgment. On the upside, the risk is that expectations of an accommodation of second-round effects of the fall in the exchange rate—now some 6% since the beginning of the year—will lead to upward pressure on domestically generated inflation. That is why it is so important that monetary policy is seen to be directed at meeting the inflation target. On the downside, a reversal of the recent rise in stockbuilding might lead to a slowdown of growth and downward pressure on already subdued domestic inflation.

The dual nature of the economic recovery makes the dilemma for monetary policy more acute than before. Time will resolve the puzzles about the strength in activity, money growth and domestic inflation. But the lags between changes in monetary policy and

their impact on inflation mean that decisions must be made before the puzzles are fully resolved. The familiar danger is that delay in taking action could ultimately result in interest rates having to go higher than would otherwise be the case.

Price £4.00