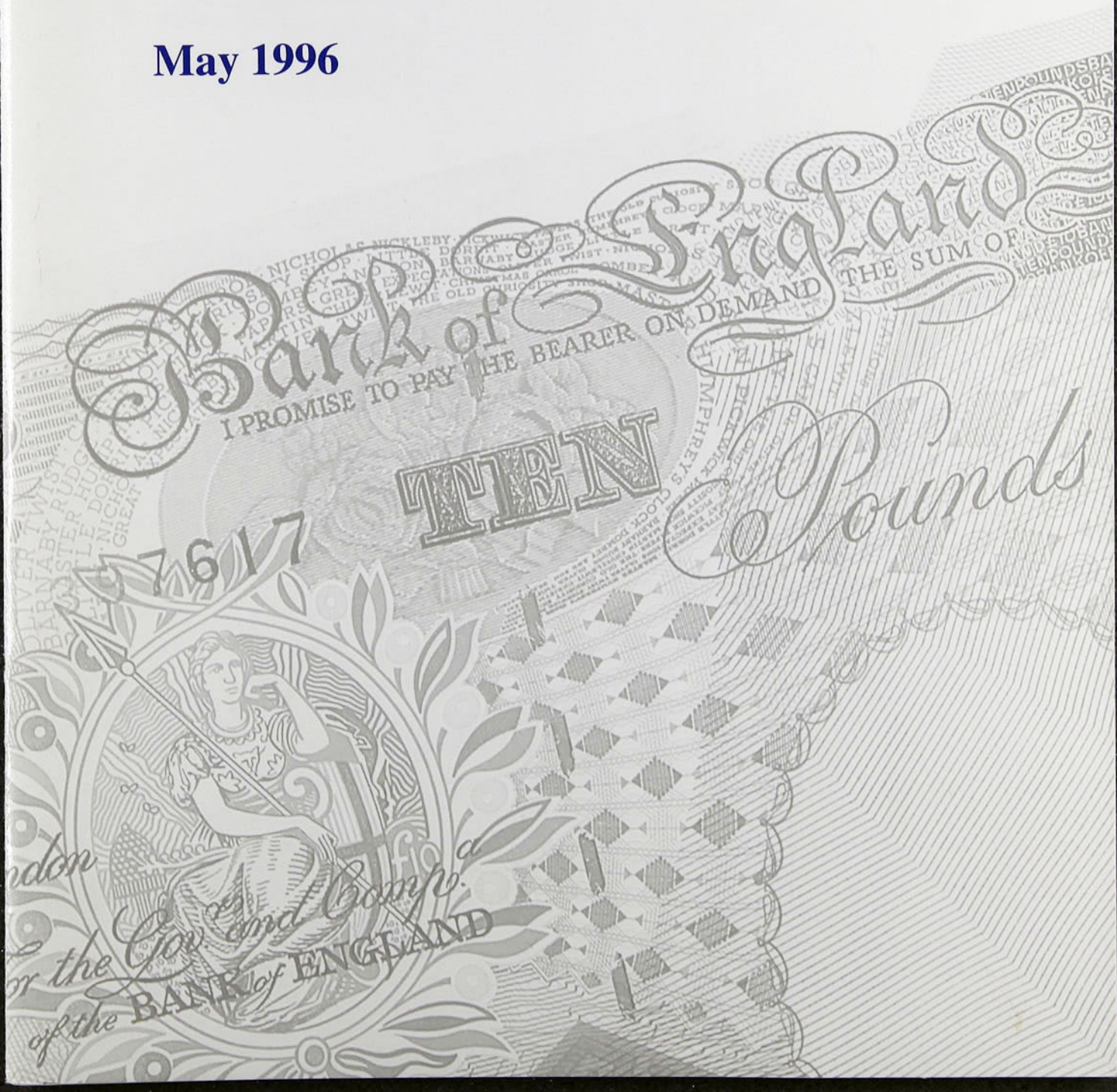
Bank of England

Inflation Report

May 1996



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May 1996

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Summary

Underlying inflation was broadly constant in the first three months of this year. Manufacturing output price inflation, in contrast, fell.

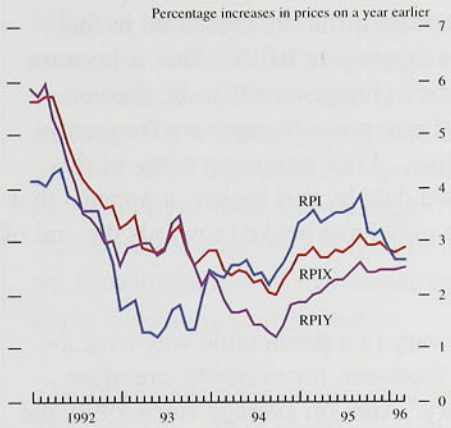
Real output growth during 1995 is now estimated to have been steady at around ½% a quarter. The economy entered 1996 with about the same demand relative to potential output as was thought at the time of the February *Report*. Until the end of last year, the dual nature of the recovery meant that growth was concentrated in sectors directed to net exports. During 1996 there is likely to be a change in the composition of demand, with a larger fraction of the total increase coming from domestic consumption rather than exports. The main short-term risk is to sectors dependent on exports to Europe where growth prospects have been significantly revised downwards. But the continuing growth of broad money suggests that domestic demand is likely to accelerate over the next year or so because of growth in personal consumption and corporate investment.

In the Bank's judgment, the most likely outcome is that the twelve-month inflation rate will fall to below 2½% over the next year. After that, it is probable that inflation will move along a rising trend, reaching 2½% some two years ahead. It is marginally more likely than not that inflation would be above 2½% in two years' time were official rates to remain unchanged throughout that period.

As in February, the risks in the short term are more on the downside, but so far neither lower stockbuilding nor lower exports have led to any noticeable fall in output growth. As a result, although those risks remain, they now seem less serious, and with the passage of time they will, if not realised, disappear from the picture. **It was precisely at this juncture—with apparent short-term weakness in some sectors masking signs of more buoyant future activity—that policy mistakes tended to be made in the past. That is why it is important that monetary policy continues to look forward and to focus on meeting the inflation target. The current projection shows that there are risks to the inflation target two years ahead, but the appropriate response depends on how the short-term downside risks evolve over the next few months.**

Recent developments in inflation 1

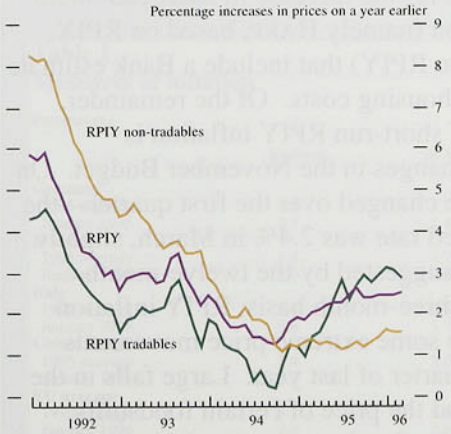
Chart 1.1
Inflation[a]



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

(a) Adjusted by the Bank of England for CSO error in underrecording aggregate price indices between February and May 1995. Other charts and tables in this *Report* that include measures of inflation are similarly adjusted.

Chart 1.2
RPIY inflation by sector



Sources: ONS and Bank calculations.

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

1.1 Retail prices measures

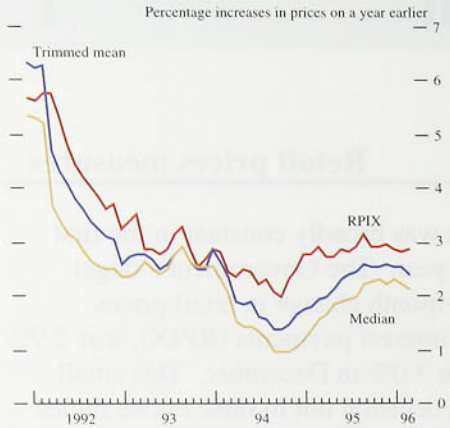
Underlying inflation was broadly constant in the first three months of this year. The Government's target measure, the twelve-month change in retail prices excluding mortgage interest payments (RPIX), was 2.9% in March, down from 3.0% in December. This small reduction reflected a decision not to raise excise duties last year by as much as in the November 1994 Budget. The twelve-month increase in RPIY, which removes all indirect taxes as well, remained at 2.5% (see Chart 1.1).

Unexpected price movements over the first quarter were offsetting. On the upside, house prices rose at an annualised rate close to 10% in the first quarter of 1996, according to the Halifax Building Society. These have had a direct impact on the RPI since February 1995, when an estimate of housing depreciation was first introduced. But this component has been erratic from month to month—in part a reflection of measurement difficulties. On the downside, the discounting of consumer durables, notably clothing and footwear, was deeper than expected over the New Year.

Within RPIY, those goods and services which are commonly traded internationally can be separated from those which are not. Chart 1.2 shows that RPIY inflation rose steadily during the first half of last year, driven almost entirely by a marked acceleration in tradables prices. Non-tradables inflation, which rose at an annual rate close to 1% for most of 1995, has picked up in recent months.

From month to month, published inflation figures are affected by large movements in a few component prices. Often, these are transitory—for example, low crop yields brought on by last summer's drought led to a sharp increase in the prices of seasonal foodstuffs, but only until October. Transitory shocks drive a wedge between recorded and underlying inflation. At other times, extreme price changes may reflect a series of earlier cost increases finally passed on by firms which review prices infrequently. Where these reviews are concentrated in particular months, further distortions can arise. To avoid making subjective judgments about such effects on a

Chart 1.3
Measures of core inflation



Sources: ONS and Bank calculations.

Table 1.A
Short-run measures of inflation(a)

	1995					1996		
	Feb.	May.	Aug.	Nov.	Dec.	Jan.	Feb.	Mar.
RPI								
Three-month	5.5	3.6	2.7	0.9	2.9	3.9	3.6	1.5
Six-month	4.0	4.5	3.1	1.8	2.7	2.5	2.2	2.2
RPIX								
Three-month	4.9	2.5	2.7	1.7	3.8	4.5	4.4	2.9
Six-month	3.2	3.7	2.6	2.2	3.0	3.2	3.1	3.3
RPIY								
Three-month	3.0	2.6	2.7	1.4	1.8	2.8	3.1	3.0
Six-month	2.2	2.8	2.7	2.1	2.2	2.4	2.3	2.4
HARP								
Three-month	3.8	1.8	1.5	2.1	3.7	4.2	4.6	3.5
Six-month	2.5	2.8	1.7	1.8	2.8	3.2	3.3	3.6
THARP								
Three-month	2.2	1.8	1.4	1.9	2.0	2.9	3.8	4.1
Six-month	1.6	2.0	1.6	1.7	2.1	2.6	2.8	3.0

Sources: ONS and Bank calculations.

(a) Three and six-month annualised percentage changes. Each price series is seasonally adjusted by the Bank. The process does not remove tax effects from RPI, RPIX or HARP.

monthly basis, the Bank applies a fixed rule to derive two indices which limit the influence of large price movements. One-month inflation rates are calculated for 77 components of RPIX. They are then weighted and ranked by size. The median is that percentage increase above which one half of the resulting distribution lies, while a 70% trimmed mean excludes just the largest and smallest 15% of price changes. Chart 1.3 shows that core inflation, measured in this way, often lies below aggregate RPIX. This is because the distribution of price changes tends to be skewed upwards, so that outlying price changes are frequently both large and positive. After removing some of the volatility in published data by this means, it appears that underlying inflation may have peaked towards the end of last year.

A number of prices vary in a predictable way over the year. Clothing and footwear, for example, are often discounted in January. And, on average since 1990, the price of unprocessed potatoes has risen by more than 40% in August. So it is customary to measure inflation on a twelve-month basis. But this obscures recent price developments. In response, the Bank seasonally adjusts a number of indices to provide short-run inflation measures, as in Table 1.A.

House prices began to rise towards the middle of last year. This accounts for the increase in short-run measures of inflation (namely HARP, based on RPIX, and THARP based on RPIY) that include a Bank estimate of owner-occupied housing costs. Of the remainder, only the analysis of short-run RPIY inflation is unaffected by tax changes in the November Budget. On balance, it was little changed over the first quarter—the six-month annualised rate was 2.4% in March, slightly below that amount suggested by the twelve-month comparison. On a three-month basis, RPIY inflation picked up, owing to some extreme price movements during the fourth quarter of last year. Large falls in the cost of insurance and the price of certain foodstuffs combined to make the October price level unusually low. They have now dropped out of the calculation.

On 20 March, the Government announced a potential link between Bovine Spongiform Encephalopathy (BSE) and the human condition known as Creutzfeldt-Jakob Disease (CJD). Subsequently, consumers bought less beef, substituting alternatives such as poultry, lamb, pork and other meats. These were in short supply, so meat prices began to rise, by as much as 5% between

Harmonised consumer price indices in the European Union

Eurostat, the statistical agency of the European Union, has been asked to produce comparable consumer price indices for each of the EU member states. These indices are being developed in order to assess the degree of inflation convergence in the approach to economic and monetary union. Because there are significant differences in the way inflation is measured by each of the member states, the production of 'harmonised' consumer price indices will be done in two stages. Eurostat published the results of Stage I of this project—the Interim Indices of Consumer Prices (IICP)—at the beginning of this year.

The IICPs have been constructed using existing national data. They simply exclude expenditure items that are not treated commonly in all of the member states' measures of inflation. Table 1 compares differences between national inflation rates and IICP inflation for the largest EU economies. Differences between the two inflation rates depend on how prices excluded from the IICP behave relative to the prices of included items.

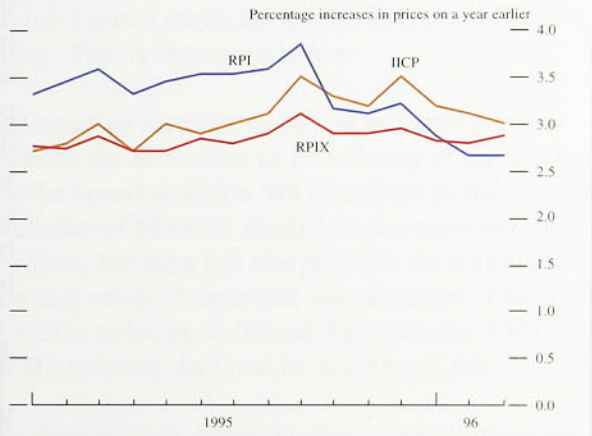
Table 1
Measures of inflation

Percentages

	National	IICP
Germany		
1995 average	1.8	1.5
January 1996	1.5	1.4
France		
1995 average	1.8	1.7
January 1996	2.0	2.0
Italy		
1995 average	5.4	5.4
January 1996	5.6	5.7
United Kingdom		
1995 average	3.4	3.0
January 1996	2.9	3.2
EU average		
1995 average	3.1	3.0
January 1996	2.8	2.8

For the United Kingdom, about 20% of the expenditure items in the RPI have been excluded from the IICP. Housing-related expenditure (such as mortgage interest payments, council charges, dwelling insurance and depreciation) account for the majority of the excluded items. Other items excluded from the IICP include education, financial services, health and foreign holidays. Chart A shows that there were only small divergences between RPIX inflation and IICP inflation between January 1995 and September 1995. Since then, IICP inflation has been higher than RPIX inflation. This largely reflects the exclusion of insurance costs, which have been increasing at a much slower rate than the included items. The differences between IICP inflation and RPI inflation have been more marked, reflecting the effect of changes in interest rates on mortgage interest payments.

Chart A
Measures of UK inflation



The IICP measures of inflation are not fully satisfactory because (i) there is no clear economic rationale for excluding a number of expenditure items, and (ii) they do not embody the changed method of construction that is required for complete harmonisation. These more fundamental changes will be undertaken as part of Stage II of the project, and relate to measurement issues—such as the frequency of rebasing, the construction of index numbers and the manner in which quality changes are accommodated—as well as the inclusion of all expenditure items. Stage II consumer price indices will not be released until early 1997.

Table 1.B
Changes in expenditure deflators (market prices)

	Consumption	Investment	Government (a)	Domestic demand (b)	Exports	Imports	GDP (c)
1994	2.5	2.2	2.7	2.5	0.9	3.2	1.7
1995	2.6	5.1	2.7	3.0	5.8	7.9	1.9
1995 Q1	2.7	4.6	2.9	3.1	4.7	8.4	1.6
Q2	2.7	4.6	2.6	2.9	5.8	7.0	2.1
Q3	2.5	5.3	2.9	2.9	5.1	7.0	1.8
Q4	2.4	6.1	2.3	2.9	7.5	9.2	2.1
Seasonally adjusted quarterly percentage changes							
Q3 on Q2	0.4	1.2	0.7	0.5	0.7	1.1	0.3
Q4 on Q3	0.5	1.5	0.4	0.5	2.3	2.2	0.4

(a) Consumption.
(b) Domestic demand also includes the value of the physical increase in stocks and work in progress, which does not appear separately in this table.
(c) At factor cost.

16 March and 13 April (according to one supermarket source). This had no impact on the March RPI data, collected before the Government's announcement.

On balance, a slight reduction in RPIX inflation is expected by mid-1996. As noted above, the price of some tradable goods rose sharply last year. This effect is set to drop out of the twelve-month comparison and is likely more than to offset rising meat prices. In April, there was additional downward pressure on annual RPI inflation, reflecting rate cuts by a number of mortgage lenders at the beginning of the month, and the fact that last year's cut in mortgage interest relief was no longer included.

1.2 Expenditure deflators

The GDP deflator and its components measure the price of domestic value added, and so provide a more comprehensive, but less timely, inflation measure than the retail prices index. The GDP deflator rose by 0.4% in 1995 Q4, compared with 0.3% in Q3. This modest acceleration was partly due to improved export profitability. Table 1.B shows that import and export deflators increased sharply in the fourth quarter of last year, as sterling depreciated by 0.9%. This response is consistent with the price of internationally traded goods being set on world markets, over which UK producers have little influence.

1.3 Summary

RPIX inflation was broadly unchanged in the six months to March at around 3% a year. But large price falls recorded towards the end of 1995 mean that a number of short-run measures edged up at the beginning of 1996. When outlying price changes are removed, the recent stability of underlying inflation is confirmed.

Money and interest rates 2

Table 2.A
Growth rates of monetary aggregates[a]

Per cent

		1 month	3 months [b]	6 months [b]	12 months
Notes and coin	Jan.	0.3	5.1	5.4	5.7
	Feb.	0.8	6.9	6.2	6.3
	Mar.	0.4	6.3	6.0	6.2
	Apr. [c]	0.4	6.7	5.9	6.2
M0	Jan.	-0.2	5.2	5.5	5.2
	Feb.	0.9	6.6	6.1	6.1
	Mar.	0.5	4.6	6.0	5.4
	Apr. [c]	0.5	7.7	6.4	5.6
M4	Dec.	0.8	10.5	9.9	9.7
	Jan.	1.3	12.9	10.0	10.4
	Feb.	0.5	10.8	9.8	10.1
	Mar.	1.1	12.1	11.3	9.8
M4 lending	Dec.	0.8	9.0	8.7	8.7
	Jan.	1.2	10.4	8.7	9.1
	Feb.	1.1	12.8	10.3	9.7
	Mar.	0.7	12.3	10.7	9.1

		1 quarter [b]	2 quarters [b]	4 quarters
Divisia 1995	Q2	8.9	7.3	5.3
	Q3	8.5	8.7	6.4
	Q4	8.9	8.7	8.0
1996	Q1	11.7	10.3	9.5

Source: Bank of England.

(a) Seasonally adjusted.
(b) Annualised.
(c) Provisional.

2.1 Money and credit[1]

Broad money

Twelve-month broad money growth (M4) was 9.8% in March, compared with 9.7% in December, the latest month for which data were available at the time of the February *Report*, so it has remained above its 3%–9% monitoring range. M4 increased at a three-month annualised rate of 12.1% in March, up from 10.5% in December (see Table 2.A): the acceleration was accounted for by gilt repos (see the box). A gilt repo is a form of deposit secured against gilts, while a reverse repo is a form of secured lending. The introduction of the gilt repo market in January was a structural change which has limited implications for future activity and inflation. This is discussed below.

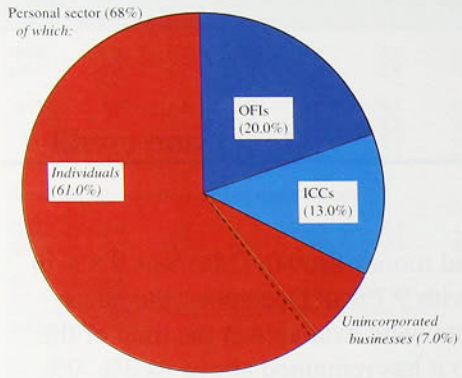
The effect of an increase in M4 on nominal demand depends on the behaviour of its velocity of circulation—that is, the speed at which M4 circulates in the economy. The velocity of M4 rose slightly in the recession of the early 1980s, but then fell sharply over the following decade as a result of financial liberalisation. During the early 1990s, velocity stabilised, but between 1994 and 1995, M4 velocity declined by a further 2.5%.

On the *demand* side, broad money is held both to buy goods and services and as a store of wealth. An increase in broad money resulting from greater planned spending by individuals or companies would signal an increase in nominal demand. But, for any given level of financial wealth, a shift towards broad money from less liquid assets could simply be a portfolio switch in response to changes in expected risk and return.

The *supply* of broad money depends on how banks and building societies increase their assets, including loans to their customers. An increase in lending could reflect increased demand for credit from customers. Or it could reflect increased willingness by banks to supply credit at any given interest rate—so allowing a subsequent increase in nominal demand. In either case, banks and

(1) Unless otherwise stated, references to bank and building society lending exclude the effect of securitisations and loan transfers; all references to growth rates of money use break-adjusted stock data.

Chart 2.1
Stock of M4 by sector[a]



£636 billion, seasonally adjusted

Source: Bank of England.

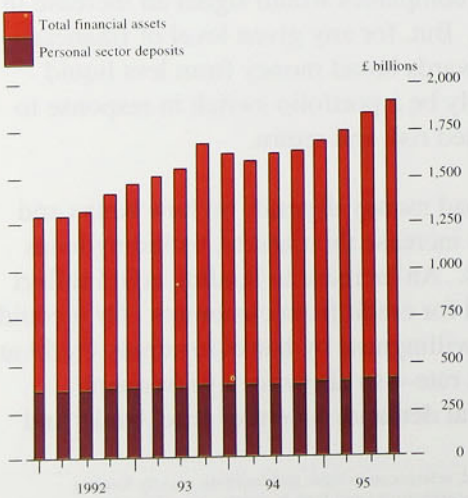
(a) As at 1996 Q1.

Table 2.B
Changes to M4

		Persons	*of which: individuals*	ICCs	OFIs	**Total**
Percentage changes on a year earlier						
1995	Q2	5.5	*5.1*	3.6	15.2	**6.8**
	Q3	6.5	*6.4*	2.8	20.6	**8.2**
	Q4	7.2	*7.0*	6.7	23.2	**9.7**
1996	Q1	7.0	*7.3*	7.2	23.3	**9.8**
Contributions to annual growth in M4 (percentage points) (a)						
		Persons	*of which: individuals*	ICCs	OFIs	**Total**
1995	Q2	3.8	*3.2*	0.5	2.5	**6.8**
	Q3	4.5	*4.0*	0.4	3.3	**8.2**
	Q4	5.0	*4.4*	0.9	3.8	**9.7**
1996	Q1	4.8	*4.5*	0.9	4.1	**9.8**

(a) Rows may not sum to totals because of rounding.

Chart 2.2
Total personal sector financial assets and deposits



Sources: Bank of England and ONS.

building societies have to attract more deposits, so their assets and liabilities increase in tandem.

Empirical evidence suggests that the determinants of the demand for both money and credit vary from sector to sector. These are analysed below.

Money demand

Individuals' deposits increased by 1.6% in the first quarter of 1996. Industrial and commercial companies' (ICCs) deposits rose by 2.2%, while the deposits of other financial institutions (OFIs) increased by 7%. Chart 2.1 shows the proportions of the stock of M4 accounted for by each sector.

Personal sector

Individuals' deposits grew faster in 1995, and deposits rose by £6.1 billion in 1996 Q1. Their four-quarter growth rate was 7.3% in 1996 Q1, up from 7.0% in 1995 Q4 (see Table 2.B). This compares with nominal income growth of 4.1% in 1995 Q4 and 4.7% growth in nominal consumer spending.

The increase in individuals' deposits in 1996 Q1 occurred despite the fact that around £17 billion of Tax Exempt Special Savings Accounts (TESSAs) matured during the quarter. Since the interest on maturing TESSAs cannot be placed in follow-up TESSAs, some of it was re-invested in non-M4 long-term savings products, such as National Savings and retail unit trusts; deposits in these also increased sharply.

The increase in personal sector deposits (which also include those of unincorporated businesses) does not appear to reflect a shift in financial portfolios towards M4. Rather it reflects faster growth in total financial assets: these increased by over 15% in the year to 1995 Q4. Bank and building society deposits have been falling as a proportion of the personal sector's total financial assets since 1992 (see Chart 2.2 and Table 2.C). The personal sector's net financial wealth was over 20% higher in 1995 Q4 than a year earlier. The risk to nominal demand is that people may use some of their increased financial wealth to buy more goods and services.

The article 'Understanding broad money' in the May 1996 *Quarterly Bulletin* explores these possible motives for increasing deposits in banks and building societies. It concludes that it is implausible to attribute the entire

The impact of gilt repo transactions on M4

The introduction of the gilt repo market in January added to bank deposits, leading to an increase in the twelve-month growth rate of M4. Much of the rise represented a structural increase in the supply of, and demand for, both broad money and credit, with few implications for nominal demand. This box explains how gilt repo transactions affect M4.(1)

What is a gilt repo? A gilt repo transaction is a sale and repurchase agreement. When a bank undertakes a gilt repo it sells a gilt to another party—usually either another bank or an OFI (other financial institution)—with an agreement to buy back equivalent gilts at a specified price on a particular date.

Although the gilts are shown unchanged on the bank's balance sheet, the title to the gilts changes hands. The counterparty can use or dispose of the gilts as it likes. The bank's repo liability is recorded as an increase in bank deposits. So the repo is, in economic terms, a form of secured deposit backed by gilts.

If a bank does a reverse repo, the position of the parties is reversed. The counterparty—usually another bank or an OFI—borrows money from the bank. The title to the gilts is transferred to the bank, which is free to use or dispose of the gilts as it chooses. The reverse repo—one of the bank's assets—is recorded as bank lending to the OFI. Thus the reverse repo is a form of secured bank lending.

How do repos and reverse repos affect broad money and credit? First, only where banks and building societies undertake repo transactions with the non-bank private sector will there be an impact on M4 and M4 lending; so far, the only non-bank institutions using the repo market have been OFIs. Second, the impact on M4 and M4 lending will depend on the extent to which those OFIs have substituted repos and reverse repos for other M4 deposits and borrowing; any additional deposits and lending will have added to M4 and M4 lending. Some deposits will have been additional, as the gilt repo market enables some OFIs and banks to mobilise gilts as collateral for secured borrowing and lending more easily and cheaply. This will have caused a *structural* increase in M4 and M4 lending as those OFIs and banks take advantage of this new means of generating liquidity.

It is difficult to disentangle the structural increase in M4 and M4 lending from the substitution effects, as it is impossible to know what would have happened in the absence of the gilt repo market. One way to estimate the structural element is to analyse each bank's balance sheet to see whether there has been a jump in the overall volume of deposits and lending. Any structural increase in bank lending to OFIs must have been funded by bidding for deposits—so a structural increase in reverse repos, for example, would be characterised by a sudden jump in the size of both the bank's assets and liabilities. Similarly, if a bank acquires deposits by undertaking repos, any deposits which did not substitute for ones which would have been taken in the absence of the gilt repo market would be matched by an increase in the amount of credit extended.

On this basis, the Bank estimates that there was a structural increase in the region of £6 billion in the volume of M4 and M4 lending in 1996 Q1. Such a substantial structural increase in broad money and credit makes the recorded growth rates of M4 and M4 lending spanning this period misleading. Further structural effects on M4 and credit are likely as other OFIs enter the repo market, continuing to make M4 growth rates difficult to interpret.

(1) See the notes on the gilt repo market in the November 1995 and May 1996 *Quarterly Bulletin*, pages 325–30 and 142–45 respectively.

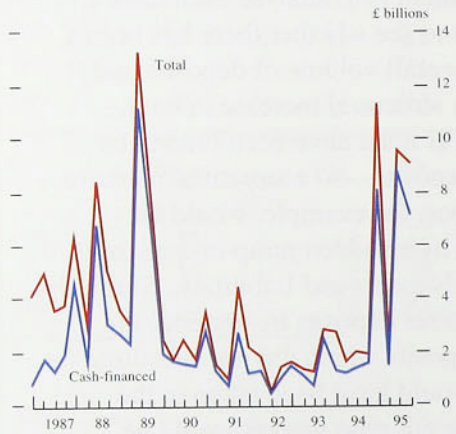
Table 2.C
Personal sector balance sheet

Percentage changes on a year earlier

	1994 Q4	1995 Q4
Bank and building society deposits	3.2	7.2
Bank and building society borrowing	6.2	5.9
Total financial assets	-1.8	15.5
Total financial liabilities	5.6	4.4
Net financial wealth	-5.0	20.8

Sources: Bank of England and *Financial Statistics*, Table 9.1J.

Chart 2.3
Acquisitions and mergers in the United Kingdom by UK companies(a)



(a) Includes financial institutions from 1995 Q1.

acceleration of personal sector M4 last year to a one-off increase in the demand for broad money resulting simply from adjustments to portfolios of financial wealth. Some of it probably also resulted from an increase in planned spending.

Industrial and commercial companies (ICCs)

After rising modestly over the first three quarters of 1995, ICCs' deposits increased sharply in 1995 Q4 and 1996 Q1, perhaps as a result of companies planning to spend more on investment. This would be consistent with Bank research, which shows that an increase in ICCs' deposits can signal a rise in investment—and hence nominal demand—with the maximum effect occurring after four to six quarters.

Alternatively, as with the personal sector, the increase in ICCs' deposits could merely reflect a one-off shift into M4 from less liquid assets, perhaps to help deter hostile takeover bids. This would have little implication for future investment and inflation. Nominal spending on mergers and acquisitions in 1995 was the highest it has been since 1989, as Chart 2.3 shows.

Other financial institutions (OFIs)

The sharpest build-up in M4 deposits in the first quarter of 1996 was by OFIs, as this non-bank sector was affected by the introduction of the gilt repo market in January. The new market reduced transaction and funding costs for holders and borrowers of gilts and led to a structural increase in the volume of OFIs' deposits and lending. The accounting effects of gilt repos are described in the box on page 11. Making a rough allowance for the structural increase, OFIs' deposits grew at a four-quarter rate of around 17% in 1996 Q1, compared with around 23% in 1995 Q4. If the structural increase is excluded from the aggregate M4 data, its four-quarter growth rate is reduced from just under 10% to about 8%.

Gilt repos and reverse repos often take place between banks, or between a bank and an OFI; only those between banks and non-banks affect M4 and M4 lending. To some extent, OFIs substituted repos and reverse repos for other M4 deposits and borrowing; but some of the increase in deposits and borrowing was structural. A broad estimate of the structural impact of gilt repos on broad money and credit can be made by looking at individual banks' returns for evidence of repos substituting for other forms of deposits or of a sudden increase in the growth of their balance sheets

Chart 2.4
OFIs' M4 deposits as a percentage of gross financial wealth

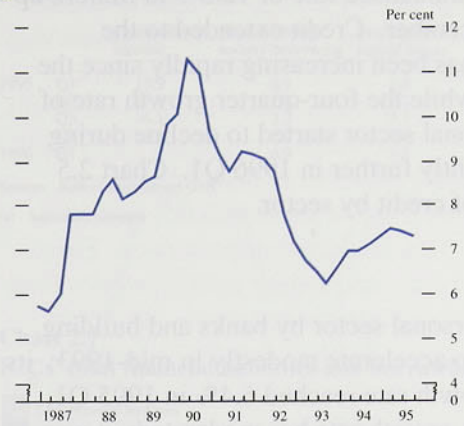


Table 2.D
OFIs' balance sheet

Percentage changes on a year earlier

	1994 Q4	1995 Q4
Bank deposits	6.6	23.2
Bank borrowing	9.1	13.1
Total financial assets	-7.1	19.7
Total financial liabilities	-7.3	22.5
Net financial wealth	-12.2	90.6

Sources: Bank of England and *Financial Statistics*, Table 9.1G and 9.1H.

above the recent trend. As the length of time from the introduction of the gilt repo market increases, it becomes more difficult to estimate the size of any structural increase in broad money and credit. In 1996 Q1, the Bank estimates that there was a structural increase of around £6 billion in M4 and M4 lending.

In 1995, OFIs' deposits also increased strongly. The article on broad money in the *Quarterly Bulletin* finds that the greater demand for money by OFIs in 1995 was primarily a response to the increase in their overall wealth caused by stronger stock and bond prices, rather than a change in relative rates of return. But differential movements in interest rates between bank and building society deposits and other forms of financial wealth may also have had some effect: OFIs' money balances rose slightly as a proportion of wealth in 1995 (see Chart 2.4 and Table 2.D). This portfolio shift has limited implications for future inflation.

Divisia money

The Bank's Divisia measure of money weights the various components of M4 according to their transaction characteristics. The Divisia measure is another way of making allowance for changes in M4 which result from shifts in financial portfolios. Divisia money rose by 2.8% in the first quarter of 1996, compared with 2.2% in the previous quarter. This gave a four-quarter growth rate of 9.5%.

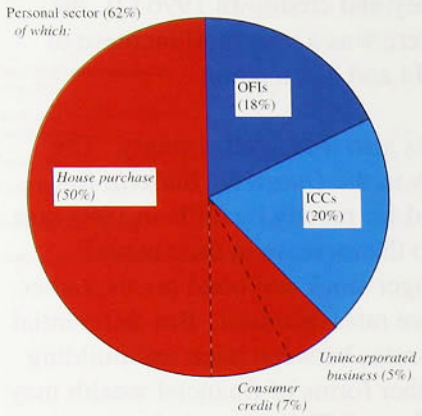
Personal sector Divisia money grew particularly strongly in 1996 Q1, with its one-quarter annualised rate of growth rising from 6.3% in 1995 Q4 to 10.6%. This partly reflected the fact that, after the first TESSAs matured in 1996 Q1, some people decided temporarily to hold the proceeds in retail deposit accounts; these are included in Divisia money, while the original TESSA funds are not. However, the strong growth of personal sector Divisia money also reflected a strong increase in individuals' non-interest bearing deposits—which are likely to be closely related to consumption.

Corporate sector Divisia increased at a one-quarter annualised rate of 16.0% in 1996 Q1, down from 19.5% in 1995 Q4. Bank research has shown that corporate sector Divisia money is closely linked to future investment spending.

Credit demand

Credit extended to the private sector by banks and building societies grew by 9.1% in the twelve months to

Chart 2.5
Stock of bank and building society credit by sector[a]



£738 billion, seasonally adjusted

Source: Bank of England.

(a) As at 1996 Q1.

Table 2.E
Changes in bank and building society lending

Percentage changes on a year earlier

	Persons		ICCs	OFIs	Total
	Secured	Unsecured			
1995 Q2	5.8	12.2	7.9	14.4	**7.7**
Q3	5.3	12.7	10.5	14.0	**8.3**
Q4	5.0	13.7	13.8	13.1	**8.7**
1996 Q1	4.8	13.8	13.9	16.2	**9.1**

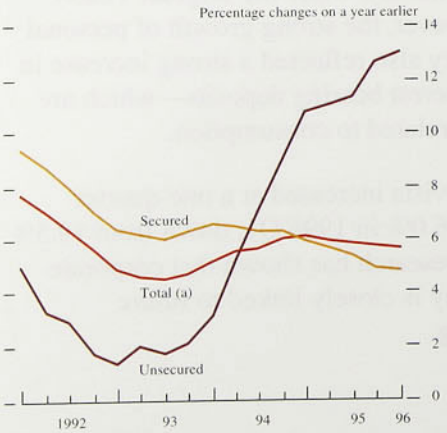
Contributions to annual growth in bank and building society lending (percentage points) (a)(b)

	Persons	ICCs	OFIs	Total
1995 Q2	3.8	1.5	2.3	**7.7**
Q3	3.7	2.0	2.6	**8.3**
Q4	3.7	2.6	2.5	**8.7**
1996 Q1	3.6	2.7	2.9	**9.1**

Source: Bank of England.

(a) Rows may not sum to totals because of rounding.
(b) Includes securitisations and loan transfers.

Chart 2.6
Growth rates of personal sector borrowing



Source: Bank of England.

(a) Total includes unincorporated businesses.

March, up from 8.7% in December. Shorter-run measures of credit growth were higher. Credit increased at a three-month annualised rate of 12.3% in March, up from 9.0% in December. Credit extended to the corporate sector has been increasing rapidly since the middle of 1994, while the four-quarter growth rate of credit to the personal sector started to decline during 1995 and fell slightly further in 1996 Q1. Chart 2.5 shows the stock of credit by sector.

Personal sector

Lending to the personal sector by banks and building societies started to accelerate modestly in mid-1993; its twelve-month growth rate reached 6.4% in 1995 Q1. But since then, its growth rate has moderated; it was 5.7% in the year to 1996 Q1. There is a marked contrast between secured lending (mainly mortgages), which makes up 80% of the total, and unsecured lending (consumer credit), which makes up most of the rest. Mortgage lending has been decelerating steadily since the beginning of 1994, while consumer credit has been accelerating (see Table 2.E and Chart 2.6). To some extent, this divergence may reflect substitution from secured to unsecured lending resulting from the weakness in the housing market—the increase in house prices over the past nine months has not yet fed through to a rise in secured lending. The divergence may also reflect the different borrowing behaviour of separate groups of consumer.

The twelve-month rate of increase of total personal borrowing—which includes specialist lenders as well as banks and building societies—fell steadily throughout 1995 and was 5.2% in March, suggesting that the deceleration in bank and building society lending was not offset by lending to the personal sector by other lenders. This compares with its recent low of 4% a year in August 1993.

Short-run measures of total personal borrowing suggest that its growth rate has started to stabilise recently. The three-month annualised growth rate was also 5.2% in March, similar to its rate over the past five months.

Industrial and commercial companies

ICCs' borrowing increased by 13.9% in the four quarters to 1996 Q1, its strongest growth rate for five years. It was not offset by any decline in capital issues (see Table 2.F). Indeed, the stock of ICCs' bank and building society borrowing has been falling relative to

Table 2.F
ICCs' sources of funds[a]

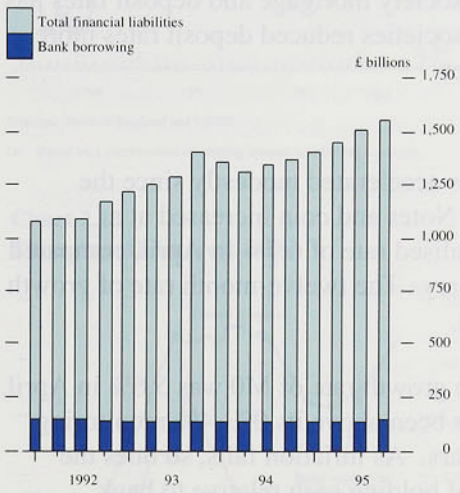
£ billions

		Undistributed income	Bank/building society borrowing	Sterling net capital issues	Total
1995	Q1	15.9	6.1	2.6	**24.6**
	Q2	17.1	2.2	2.3	**21.6**
	Q3	16.1	3.3	3.1	**22.5**
	Q4	13.8	5.9	3.5	**23.2**
1996	Q1		6.9	3.2	

Sources: Bank of England and ONS.

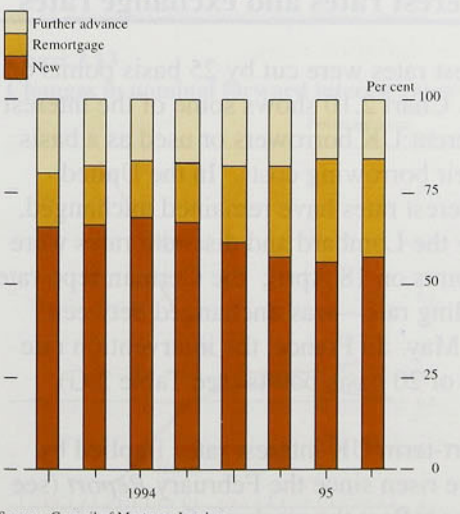
(a) Seasonally adjusted.

Chart 2.7
ICCs' total financial liabilities and borrowing



Sources: Bank of England and ONS.

Chart 2.8
Gross mortgage activity



Source: Council of Mortgage Lenders.

their total financial liabilities since the end of 1990 (see Chart 2.7). The growth of ICCs' borrowing probably reflected a one-off increase in the demand for credit to finance mergers and acquisitions. This does not necessarily imply an increase in spending on goods and services, although an increase in takeovers may itself reflect a strong stock market, which makes investment less expensive to finance. But it does imply that the growth of ICCs' borrowing should fall as mergers and acquisitions stabilise.

Other financial institutions

OFIs' borrowing from banks and building societies started to accelerate towards the end of 1992; its growth rate was 16.2% in 1996 Q1. This did not represent a portfolio shift into bank and building society borrowing: OFIs' other liabilities grew more quickly over 1995 (see Table 2.D).

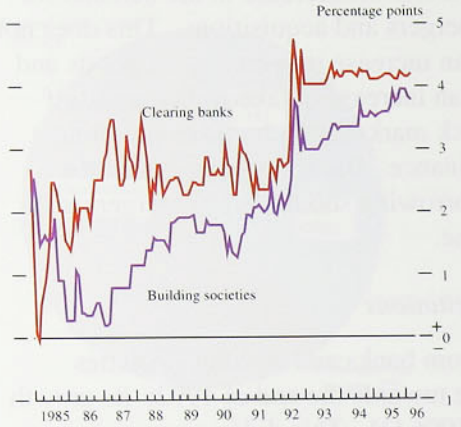
As with the asset side of the balance sheet, OFIs' borrowing was affected by the introduction of the gilt repo market in January. The box describes how OFIs can borrow from banks using gilts as collateral (banks' reverse repos). Additional borrowing by OFIs against gilts increases M4 lending. Adjusting for this structural effect in the first quarter, OFIs' borrowing rose by around 11% in the four quarters to 1996 Q1, suggesting a slowdown in its rate of increase. Total M4 lending increased by around 8½% in the year to March, once the structural effect is excluded, a little more slowly than in the year to December.

Supply of credit

Broad money growth may reflect changes in the supply of credit by banks and building societies at any given interest rate. One way of measuring competition for funds in the banking system is to examine bank spreads. Narrower spreads and margins are likely to increase the volume of intermediation undertaken by banks and building societies—and so to increase M4. Bank data on interest rates across a variety of lending and deposit institutions show that, on average, spreads stopped narrowing in 1995 Q2 and widened slightly over the following two quarters.

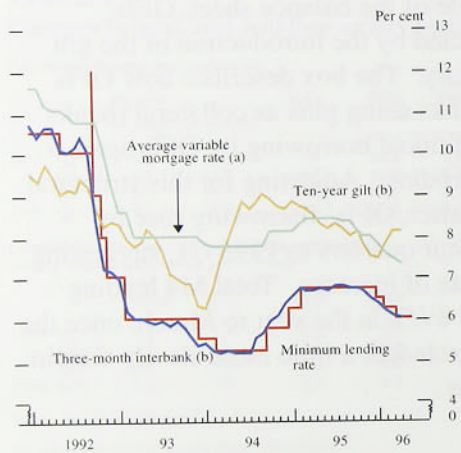
Mortgage rates have fallen further since the February *Report*. There are three main reasons why. First, official rates—and hence short-term money-market rates—were cut. Second, lenders became increasingly willing to reduce rates for new customers. Chart 2.8 shows that remortgaging increased significantly in 1995; this may

Chart 2.9
Bank and building society retail spreads(a)



(a) Average standard variable mortgage rate for existing borrowers less average instant access savings rate paid on a balance of £10,000 for a sample of the largest institutions in each sector.

Chart 2.10
Interest rates



Source: Bank of England.

(a) Average of top five banks and building societies.
(b) Calendar-month average.

Table 2.G
Changes(a) **in official and key interest rates**(b)

In chronological order

Per cent per annum

Country	Interest rate	Date	Change (basis points)	Change to:
Canada	Bank rate	14 Feb.	-20	5.19
Canada	Bank rate	21 Feb.	+22	5.41
France	5–10 day repo rate	7 Mar.	-10	5.50
	Intervention rate	7 Mar.	-10	3.80
United Kingdom	Base rate	8 Mar.	-25	6.00
Canada	Bank rate	21 Mar.	-25	5.25
France	Intervention rate	11 Apr.	-10	3.70
Canada	Bank rate	18 Apr.	-25	5.00
Germany	Lombard rate	18 Apr.	-50	4.50
	Discount rate	18 Apr.	-50	2.50
France	5–10 day repo rate	25 Apr.	-60	4.90

Sources: Datastream and Telerate.

(a) Changes greater than or equal to ten basis points since the February *Inflation Report*.
(b) In the G7 countries.

have continued in the first quarter. Third, certain building societies have sought to assert the benefits of mutuality by cutting mortgage rates for both new and existing borrowers. Building society retail deposits may have been less sensitive to rate cuts, because some societies have announced future conversion to plc status, which will result in compensating payouts. This might have allowed building societies to preserve interest spreads. In contrast, some of those building societies remaining mutual have increased deposit rates. Faced with rising deposit rates and falling mortgage rates from some competitors, bank mortgage spreads have been under pressure. Chart 2.9 shows that the differential between building society mortgage and deposit rates has risen, as building societies reduced deposit rates more than mortgage rates.

Narrow money

Narrow money has accelerated modestly since the February *Report*. Notes and coin increased at a three-month annualised rate of 6.7% in April, compared with 5.1% in January. The twelve-month rate of growth was 6.2% in April.

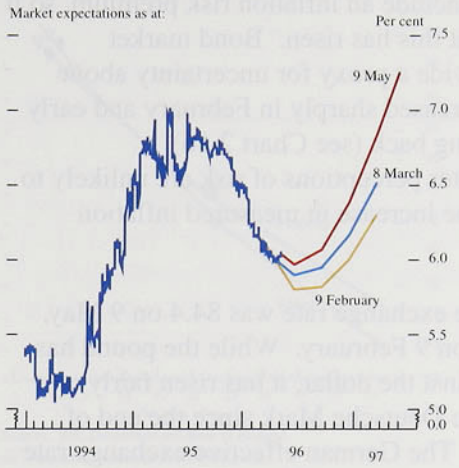
The twelve-month growth rate of M0 was 5.6% in April. Its growth rate has been above its 0%–4% monitoring range for three years. As inflation falls, so does the opportunity cost of holding cash relative to bank deposits—the bank deposit rate—increasing the demand for cash. It seems increasingly likely that the strong growth of M0 increased demand for cash relative to other forms of wealth in the low-inflation environment.

2.2 Interest rates and exchange rates

Official UK interest rates were cut by 25 basis points on 8 March to 6.0%. Chart 2.10 shows some of the interest rates paid by different UK borrowers or used as a basis for calculating their borrowing costs. In the United States, official interest rates have remained unchanged, while in Germany the Lombard and discount rates were cut by 50 basis points on 18 April; the German repo rate —the official dealing rate—was unchanged between 9 February and 9 May. In France, the intervention rate was cut by a total of 20 basis points (see Table 2.G).

The expected short-term UK interest rates implied by futures prices have risen since the February *Report* (see Chart 2.11). These reflect the market's forecast of three-month interbank rates, which are linked to the base rate. The current structure of short-sterling futures

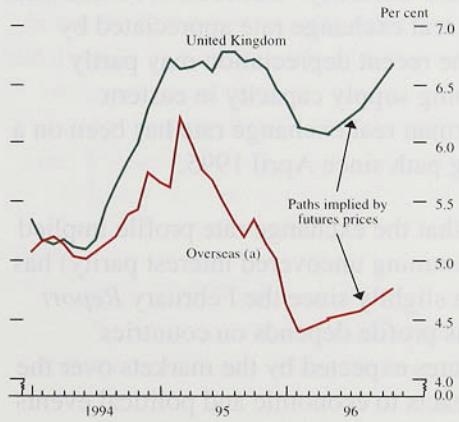
Chart 2.11
Sterling interest rate expectations(a)



Sources: Bank of England and LIFFE.

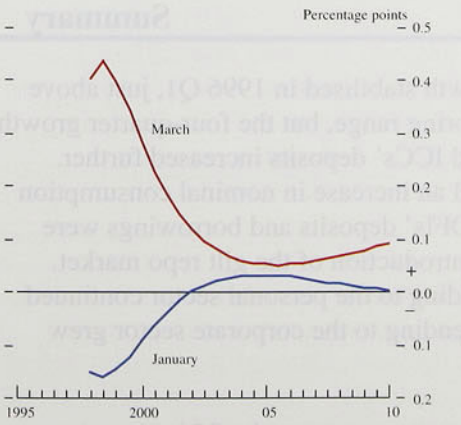
(a) Based on a combination of sterling interest rate futures contracts.

Chart 2.12
Three-month interest rates



(a) UK trade-weighted interest rates in major six overseas economies.

Chart 2.13
Changes in nominal forward interest rates(a)



Source: Bank of England.

(a) Change between the day of the UK interest rate change and the day before.

suggests that, on balance, the markets expect rates to remain broadly unchanged over the next three months, but then to increase by around 40 basis points by the end of the year and by around 130 basis points by mid-1997. At the start of the year, the markets were expecting a 25 basis-point cut in rates in the first quarter; rates were expected to rise by around 50 basis points by mid-1997.

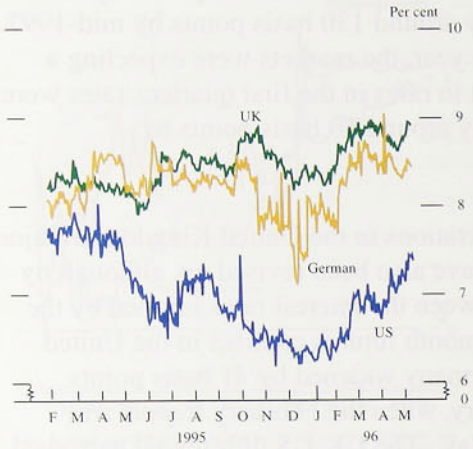
Interest rate expectations in the United Kingdom's major trading partners have also been revised up, although by less. The gap between the interest rates implied by the September three-month futures contract in the United Kingdom and Germany widened by 41 basis points between 9 February, when the February *Report* was finalised, and 9 May. The UK-US differential narrowed from 102 to 36 basis points. Chart 2.12 shows the path for the interest rate differential between the United Kingdom and its major trading partners implied by futures prices.

Chart 2.13 shows the change in expected nominal interest rates in the gilt market immediately before and after the January and March cuts in official interest rates. The profile of expected rates fell over short horizons after the 25 basis-point cut in rates in January, but was slightly higher after about ten years; but it rose following the 25 basis-point cut in rates in March.

Ten-year yields in the United Kingdom rose by 89 basis points between 18 January—when yields reached their lowest level for about two years—and 9 May. More than half of the increase occurred after the February *Report*. The article on G7 yield curves in the *Quarterly Bulletin* uses a method to measure consistently yields at different maturities across countries. Since the February *Report* was finalised on 9 February, ten-year nominal forward rates have risen by 94 basis points in Canada, 81 basis points in the United States, by 35 basis points in Germany and by 18 basis points in Japan. This compares with an increase of 18 basis points in the United Kingdom. In Italy, forward rates have fallen by 39 basis points and in France they are down 6 basis points (see Chart 2.14).

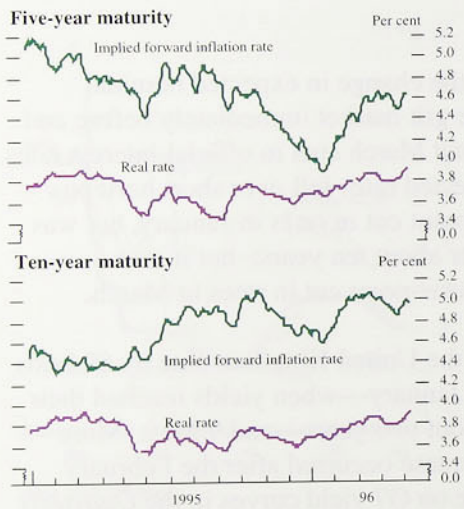
The effect of a rise in bond yields depends on whether the expected real interest rate or expected inflation has risen. In the United Kingdom, it is possible to distinguish between these alternatives by analysing the differential between conventional and index-linked bonds. Measured UK inflation expectations have risen

Chart 2.14
UK, US and German nominal ten-year forward rates



Source: Bank of England.

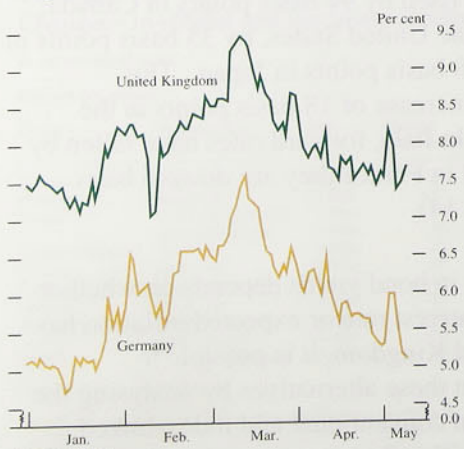
Chart 2.15
Implied forward inflation and real interest rates(a)



Source: Bank of England.

(a) Five-day moving averages.

Chart 2.16
Implied bond market volatilities in 1996



Source: LIFFE.

at both five and ten-year maturities since the beginning of the year, although implied forward real rates have also increased slightly (see Chart 2.15). Measured inflation expectations also include an inflation risk premium, so it is also possible that this has risen. Bond market volatility may provide a proxy for uncertainty about inflation. This increased sharply in February and early March before falling back (see Chart 2.16). Nevertheless, greater perceptions of risk are unlikely to explain much of the increase in measured inflation expectations.

Sterling's effective exchange rate was 84.4 on 9 May, 0.4% higher than on 9 February. While the pound has fallen slightly against the dollar, it has risen fairly steadily against the Deutsche Mark since the end of October last year. The German effective exchange rate depreciated by 4.7% between its recent peak in October 1995 and 9 May. German unification led to a nominal appreciation of the Deutsche Mark in order to facilitate the increased net inflow of real resources necessary for investment in eastern Germany. Between 1990 and mid-1995, the German real exchange rate appreciated by almost 23%. So the recent depreciation may partly reflect the developing supply capacity in eastern Germany: the German real exchange rate has been on a modestly declining path since April 1995.

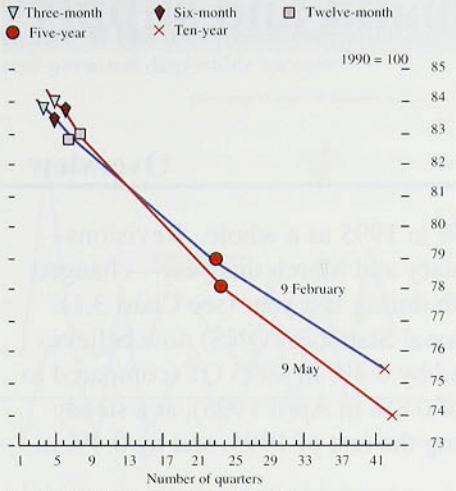
Chart 2.17 shows that the exchange rate profile implied by bond yields (assuming uncovered interest parity) has been revised down slightly since the February *Report* was finalised. This profile depends on countries' relative inflation rates expected by the markets over the long term. So it reacts to economic and political events in the United Kingdom and abroad, as market views change about relative inflation rates.

2.3 Summary

Broad money growth stabilised in 1996 Q1, just above its 3%–9% monitoring range, but the four-quarter growth of individuals' and ICCs' deposits increased further. These could signal an increase in nominal consumption and investment. OFIs' deposits and borrowings were increased by the introduction of the gilt repo market. The growth of lending to the personal sector continued to moderate, but lending to the corporate sector grew faster.

Official UK interest rates were cut by 25 basis points and mortgage interest rates were also reduced. Long

Chart 2.17
UK effective exchange rate profiles[a]



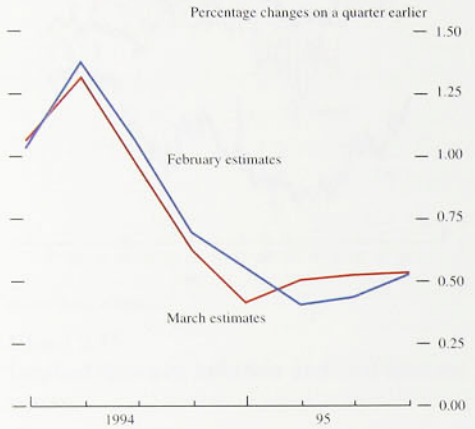
Sources: BIS, Datastream and Bank of England.

(a) Assuming uncovered interest rate parity.

bond yields rose in the United Kingdom, the United States and Germany. Short-term UK interest rate expectations were revised upwards.

3 Demand and supply

Chart 3.1
Revisions to the profile of GDP growth



3.1 Overview

Output rose by 2.5% in 1995 as a whole. Revisions—even between February and March this year—changed the profile of growth during last year (see Chart 3.1). The Office for National Statistics (ONS) now believes that output increased by 0.4% in 1995 Q1 (compared to an initial estimate of 0.8% in April 1995), at a steady 0.5% a quarter during the rest of 1995, and by 0.4% in 1996 Q1.

Export growth was lower in 1995 than 1994. Nevertheless, exports provided the main stimulus to demand for domestically produced goods last year; consumers' expenditure on goods and investment growth were subdued. Domestic demand grew by 1.6% in 1995; most of the increase was in consumers' demand for services (including the National Lottery). The strong contribution made by service expenditure to domestic demand and the reduced impetus from export volumes explain why the pattern of output growth changed from being goods based in 1994 to being service based in 1995.

Nominal GDP grew by 4.8% last year. This is close to what it would be with a real growth rate of 2%–2½%—the average over the past 40 years—and with inflation of 2½% or below.

3.2 Domestic demand

Table 3.A shows the contribution to GDP growth over the past two years made by the main expenditure components. Consumption grew at close to its long-run trend rate in 1995, but investment fell. Stockbuilding continued to boost output, although it contributed roughly half as much to growth as it had in the previous three years.

Domestic demand is likely to contribute more to growth in 1996 than in 1995. Consumption and investment should grow faster this year, although the contribution of stockbuilding is likely to fall. And overseas demand will probably weaken, with growth in the major European Union countries likely to be subdued.

Table 3.A
Contributions to GDP growth in 1994 and 1995(a)

Percentage point contribution

	1994	1995				
		Year	Q1	Q2	Q3	Q4
Consumers' expenditure	1.7	1.5	0.3	0.4	0.3	0.3
Investment	0.5	-0.1	—	-0.1	-0.1	0.2
Government consumption	0.4	0.2	—	0.1	—	—
Net exports	0.9	0.7	1.2	-0.7	-0.1	0.3
of which:						
Exports	*2.3*	*1.6*	*0.4*	*-0.1*	*0.6*	*-0.2*
Imports	*-1.4*	*-0.9*	*0.8*	*-0.6*	*-0.7*	*0.6*
Stockbuilding	0.4	0.2	-1.1	0.7	0.3	-0.4
GDP growth	3.8	2.4	0.4	0.5	0.5	0.5

(a) Measured at 1990 market prices.

Chart 3.2
Growth of real consumers' expenditure and real personal disposable income

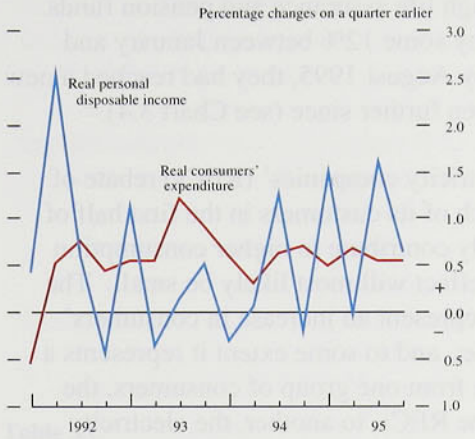
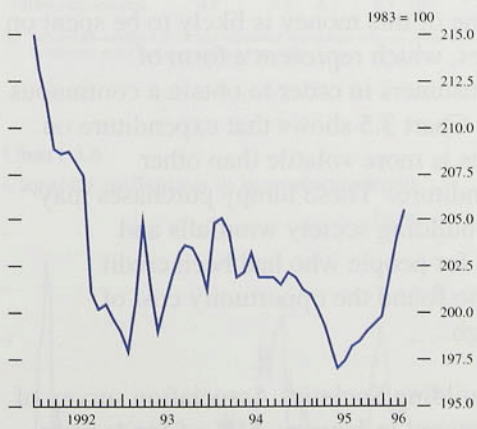


Chart 3.3
Halifax house price index(a)



Source: Halifax Building Society.

(a) Seasonally adjusted.

Personal sector demand

Over the past two years, consumers' spending has increased at around its long-run trend rate. It has grown much more smoothly than real personal disposable income (see Chart 3.2), which is consistent with the idea that consumption is influenced less by short-term changes than by expectations of disposable income over the longer term, or *permanent income*. So fluctuations in the saving ratio over the past two years were largely due to the relative stability of consumption compared with current real personal disposable income.

Among other things, permanent income depends on the level of taxation. The tax cuts announced in the November 1995 Budget (to take effect in the 1996/97 tax year), which were equivalent to around ½% of personal income, could have been regarded as an addition to permanent income by most beneficiaries. Some forward-looking consumers may have revised their estimates of future disposable income as soon as the tax cuts were announced, so that part of the impact on consumption growth could have occurred in 1996 Q1 or earlier. But many people probably did not react until April this year, when they knew the exact effect on their disposable income. Higher real earnings growth is likely in 1996 and this could further raise individuals' assessment of their income growth in the long run.

Personal sector assets and liabilities also affect consumption: together with future income, they constrain lifetime consumption. Although consumers' debt levels are still high, the asset side of the personal sector balance sheet is improving; this is a sign that consumption is likely to accelerate during 1996. The price of housing (which accounts for around 35% of personal sector assets) suggests that a recovery in the housing market is underway: according to the Halifax Building Society, house prices rose in each of the nine months to April 1996 (see Chart 3.3). This is evidence of a renewed demand for housing from consumers, and therefore an indication that many have repaired the liability side of their balance sheets. It also means an increase in imputed spending on the services derived from home ownership, so consumption of non-housing goods and services may not be stimulated directly. And there is still a risk that the housing recovery is not yet well founded: housing turnover (which is often associated with purchases of consumer durables to furnish new homes) and net lending for house purchase have yet to show a sustained increase.

Chart 3.4
FT All-Share index

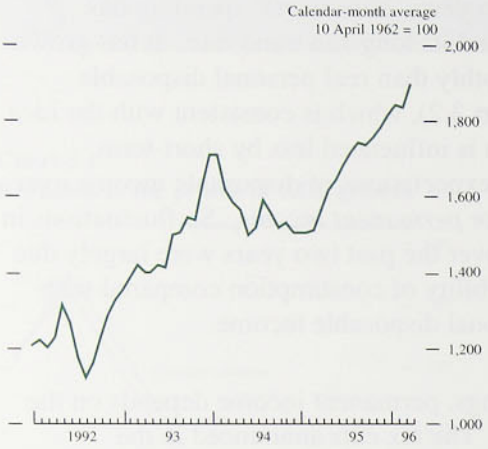
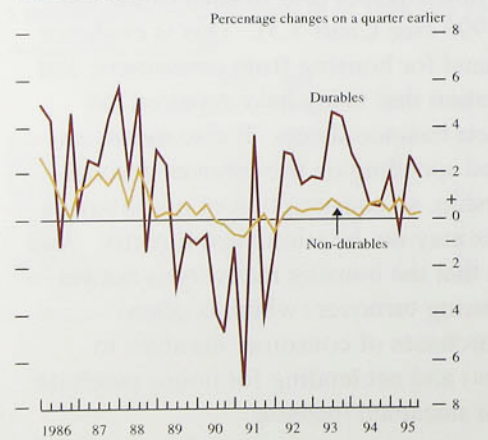


Table 3.B
Proposed building society mergers and conversions

Date effective	Event	Estimated payout £ billions (a)	Percentage of personal disposable income (b)
1996 H2	Abbey National takeover of National and Provincial Building Society	1.4	0.3
1997 H1	Halifax Building Society conversion to plc status	9.0 (c)	1.8
1997 H1	Alliance and Leicester Building Society conversion to plc status	2.5 (c)	0.5
1997 H1	Bank of Ireland takeover of Bristol and West Building Society	0.6	0.1
1997 H2	Woolwich Building Society conversion to plc status	2.5–3.0 (c)	0.5–0.6
1997 H2	Northern Rock Building Society conversion to plc status	1.0 (c)	0.2

(a) At current prices.
(b) As a percentage of annual disposable income in 1995.
(c) Figures taken from the press, actual value of payout not yet known.

Chart 3.5
The behaviour of consumers' expenditure on durables and other goods and services



Rising share prices likewise help strengthen consumers' balance sheets and are another factor likely to bolster consumption this year. Shares and other securities account for around a third of personal sector assets, held directly and through life assurance and pension funds. Share prices fell by some 12% between January and June 1994. But by August 1995, they had reached a new peak and have risen further since (see Chart 3.4).

The regional electricity companies' (RECs) rebate of around £50 to each of its customers in the first half of 1996 will probably contribute to higher consumption growth. But the effect will most likely be small. The money does not represent an increase in consumers' permanent income; and to some extent it represents a transfer of wealth from one group of consumers, the shareholders of the RECs, to another, the electricity consumers.

Higher consumption growth will probably be supported by 'windfall gains' from building society flotations and takeovers in 1996 and 1997 (see Table 3.B) and by savers gaining access to maturing TESSA accounts. Again, the impact on consumption will probably be relatively small. Neither represent an addition to consumers' net wealth. Shares in the net wealth of building societies simply become tradable (although the processes by which shares are allocated also redistribute wealth). TESSAs were more clearly already part of personal sector wealth.

Nevertheless, some of this money is likely to be spent on consumer durables, which represent a form of investment by consumers in order to obtain a continuous flow of services. Chart 3.5 shows that expenditure on consumer durables is more volatile than other consumers' expenditure. These lumpy purchases may be influenced by building society windfalls and maturing TESSAs for people who had been credit constrained or who found the opportunity cost of borrowing too high.

According to a Building Societies Association survey of TESSAs which matured in January, 51% of funds were re-invested in follow-up TESSAs with the same society, 29% were re-invested in other accounts with the same society, and 20% were paid out to investors. More money will probably go into follow-up TESSAs: people have up to six months before they have to decide whether to re-invest between £3,000 and £9,000 of their capital. Other funds have been and will be invested in other long-term savings instruments, such as unit trusts.

However, some of the money may be used to buy consumer durables.

The influence of TESSAs on consumers' behaviour should be assessed alongside that of all their M4 deposits. Personal M4 holdings grew more quickly than nominal consumer demand last year and have not slowed in 1996 Q1. To some extent, this probably reflected an increase in planned spending (see Section 2 of this *Report*). The increase in money holdings is more likely to lead to higher nominal spending on consumer durables in 1996; people do not usually build up deposits to buy non-durables, although holidays are an obvious exception.

Taking all these effects into account, consumption growth is likely to increase to above its long-run trend rate in 1996. But the overall effect is likely to be limited, because people's perceptions of their permanent income are unlikely to have increased markedly and the short-term impact on consumer spending of changes in the value of assets is usually small.

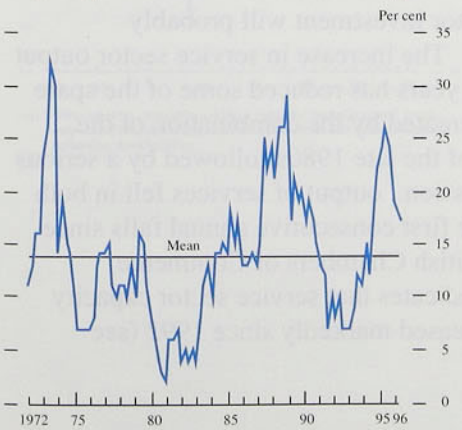
The ONS estimates that retail sales volumes grew by 0.4% in 1996 Q1, half the rate of the previous quarter. But it is difficult to distinguish underlying trends in retail sales around the Christmas period. Retail sales grew by 1.1% in the six months to the end of March compared with six months earlier. This may indicate that consumer spending on goods is beginning to grow more in line with spending on services, after falling behind earlier in 1995.

Table 3.C
Recent performance of real investment

	Percentage of total	Percentage change on previous period					
	1995	1994	1995				
			Year	Q1	Q2	Q3	Q4
Total investment	***100***	**3.0**	**-0.7**	**0.1**	**-0.8**	**-0.8**	**1.0**
By industry: (a)							
Mining and quarrying	*4.3*	-24.0	0.2	1.3	-6.5	7.4	-8.4
Manufacturing	*12.9*	6.5	7.6	-2.5	5.3	2.9	-5.0
Utilities	*4.5*	-12.7	-19.3	2.4	-22.3	3.0	24.0
Other industries	*54.7*	6.6	0.5	-1.2	1.7	-1.1	2.1
By asset:							
Vehicles, ships and aircraft	*8.7*	8.2	-6.2	-17.0	17.5	-12.4	4.7
Plant and machinery	*35.2*	4.0	3.0	1.3	0.6	0.2	0.7
Other new buildings and works	*36.2*	0.5	-1.8	1.7	-5.2	3.1	1.5
Dwellings	*19.9*	3.9	-2.4	3.4	-2.6	-3.9	-0.7
By sector:							
Private sector	*82.4*	2.8	2.1	-1.3	3.7	-1.7	2.7
General government	*12.8*	7.5	-14.1	5.6	-17.7	8.4	-9.3
Public corporations	*4.8*	-4.8	-6.1	6.9	-20.9	-7.7	0.5

(a) Industrial breakdown is for non-residential investment only, so percentages of total investment in this category do not add to 100.

Chart 3.6
Capacity utilisation in manufacturing(a)



Source: CBI.

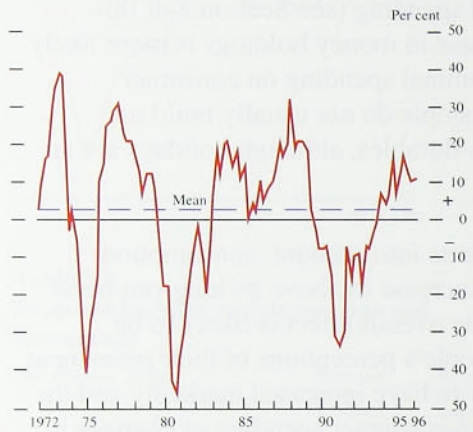
(a) Percentage expecting output to be constrained by plant capacity over the following four months.

Corporate sector demand

Overall, investment has been weak in this recovery. Real private investment grew by 2.1% last year, slower than the growth in GDP. But within that total, investment performance varied considerably across industries (see Table 3.C). Manufacturing investment grew by 7.6% in 1995 as a whole, even though it fell by 5.0% in the final quarter. The strong growth in the first three quarters of 10.3% on a year earlier probably reflected the fact that businesses viewed plant capacity as an important constraint on future output (see Chart 3.6). By contrast, utilities investment fell by 19% last year, but rose by 24% in the final quarter.

Outside the private sector, investment by general government and public corporations both fell in 1995 on a year earlier. As a result of this weakness in the public sector, whole-economy real investment fell by 0.7% in

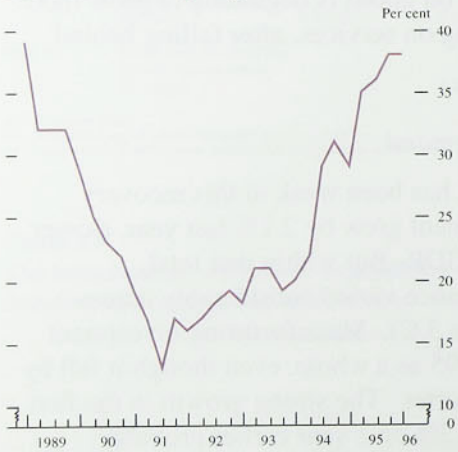
Chart 3.7
Investment intentions in manufacturing[a]



Source: CBI.

(a) Balance of respondents replying 'more' minus those replying 'less' to question 'Do you expect to authorise more or less capital expenditure in the next twelve months than you authorised in the past twelve months on plant and machinery?'.

Chart 3.8
Service sector capacity utilisation[a]



Source: British Chambers of Commerce.

(a) Percentage currently operating at full capacity.

1995 compared with 1994 (the effects of the Private Finance Initiative are discussed below).

However, the conditions are favourable for private sector investment in 1996. Profitability is still high, and rising share prices have increased the incentive to issue equity to purchase real assets. Moreover, the current strong growth in ICCs' M4 deposits could indicate higher planned fixed investment as well as more merger and acquisition activity. And leasing companies have recently increased their borrowing. The Finance Leasing Association, the trade body that represents leasing companies, suggests that this reflects a substantial increase in the purchase of investment goods. Leasing companies buy investment goods in order to lend them to the end user. For the user, leasing is an alternative to borrowing. To some extent leasing companies may be increasing their market share; but their higher borrowing could signal an upturn in investment.

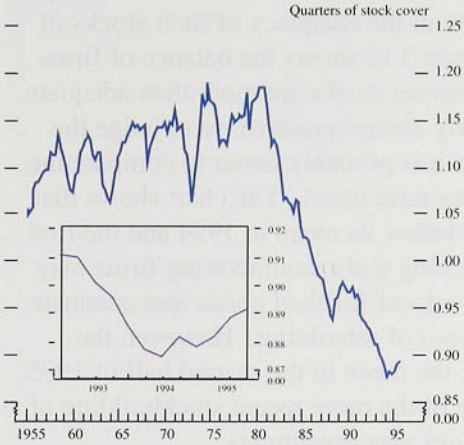
It seems likely that manufacturing investment will not grow as quickly in 1996 as it did in the first three quarters of last year; with the slowdown in manufacturing output growth in the second half of 1995, capacity utilisation fell, so that firms' need to invest is probably not as pressing as at the beginning of 1995. However, although it fell in the final quarter of 1995, manufacturing investment is likely to grow once again in 1996. The percentage of firms citing plant capacity as a potential constraint on output in the CBI survey has declined, but it is still high by historical standards (see Chart 3.6). And the balance of firms in the latest CBI survey expecting to increase their investment in plant and machinery remains above its long-term average (see Chart 3.7).

Private service sector investment will probably accelerate in 1996. The increase in service sector output over the past three years has reduced some of the spare capacity that was created by the combination of the investment boom of the late 1980s followed by a serious service sector recession: output of services fell in both 1991 and 1992, the first consecutive annual falls since the 1940s. The British Chambers of Commerce quarterly survey indicates that service sector capacity utilisation has increased markedly since 1992 (see Chart 3.8).

Stockbuilding

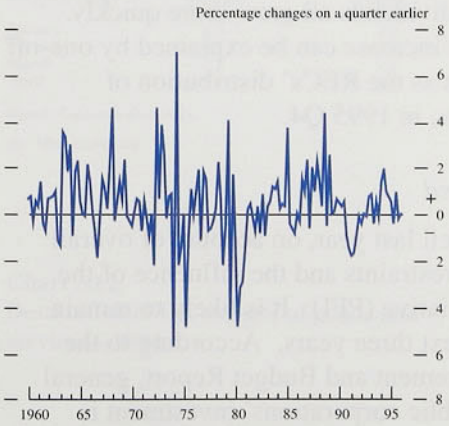
Improved stock management techniques led firms to reduce their desired level of stocks as a proportion of

Chart 3.9
UK stock-output ratio[a]



(a) Levels of stocks outstanding relative to quarterly GDP in 1990 prices; includes alignment adjustment.

Chart 3.10
Growth of manufacturers' real sales[a]



(a) 'Real sales' is created by taking a value for manufacturers' gross output in 1990, assuming it grows in line with real value added and deducting stockbuilding.

output over the 1980s and early 1990s. More recently however, the stock-output ratio has climbed (see Chart 3.9). How firms react to their current level of stocks will have an important bearing on the prospects for economic activity in 1996. A key factor will be whether increased stocks are now held voluntarily or not.

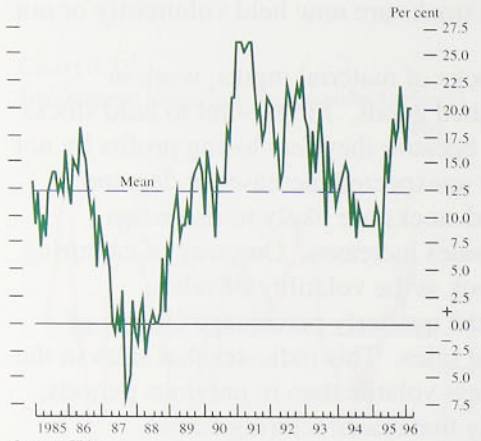
Firms can hold stocks of material inputs, work in progress, and finished goods. Firms want to hold stocks of finished goods, because they fear losing profits by not being able to meet unexpected increases in demand. Thus firms' desired stocks are likely to rise when uncertainty about sales increases. One way of capturing uncertainty is to look at the volatility of sales. Chart 3.10 shows the quarterly percentage change of manufacturers' real sales. This indicates that sales in the early 1990s were less volatile than in previous periods, so it seems unlikely that manufacturing firms' uncertainty about future sales has increased in the recent past.

Stocks of raw materials and other inputs can provide insurance against a shortage stopping or slowing the production process. The large increases in manufacturers' input prices during 1994 and in the first half of 1995 may have increased firms' desired holdings of raw materials and fuels stocks. Manufacturers may have interpreted the price rises as signalling possible supply interruptions and held higher stocks as a precaution.

Holding stocks is not costless. Firms have to pay for the physical storage space and financing: other things being equal, falls in real interest rates will cause firms to increase desired stocks. The real interest rate by which firms measure the cost of financing stocks depends on their expectations about increases in the price of those stocks. Real interest rates based on expectations of appropriate price indices for stocks are not readily available. However, the cost of financing material input stocks will have fallen in the past two years if firms anticipated some of the rise in input prices. Unless firms expected significantly higher finished-goods inflation than actually took place, any fall in the real interest rates affecting other types of stocks would have been substantially smaller.

Even if firms' desired level of stocks has not risen, 1992 and 1993 may have seen involuntary destocking or insufficient stockbuilding and firms may have tried to move back towards their equilibrium level of stocks in 1994 and 1995.

Chart 3.11
Adequacy of stocks[a]



Source: CBI.

(a) Balance of firms reporting that current stocks of finished goods are more than adequate.

Evidence for this view is provided by responses to the question in the CBI Monthly Industrial Trends Survey which asks firms about the adequacy of their stocks of finished goods. Chart 3.11 shows the balance of firms which report that current stocks are more than adequate. The balance is nearly always positive, so to judge the adequacy of stocks, it is probably better to compare the balance with its long-term mean. The chart shows that the balance dipped below its mean in 1994 and the first half of 1995, suggesting that manufacturing firms may have found their stocks of finished goods less adequate than usual and in need of rebuilding. However, the balance rose above the mean in the second half of 1995, implying that some of the more recent stockbuilding of finished manufactures was involuntary.

To the extent that there is an unwanted stock overhang, it seems unlikely that attempts to unwind it will result in falling total stocks in 1996. But there will probably be a marked slowdown in the rate of stockbuilding, which will thus make a negative contribution to GDP growth in 1996.

ICCs' overall financial position worsened in 1995, because of higher stockbuilding and investment expenditure and a fall in companies' retained income. Companies' income grew by 8% in 1995; but payments of interest, tax and dividends all grew more quickly. Part of the dividend increase can be explained by one-off special factors, such as the RECs' distribution of National Grid shares, in 1995 Q4.

Table 3.D
Public sector capital expenditure

£ billions, current prices

	Outturn			Estimated outturn	Projections		
	1992 –93	1993 –94	1994 –95	1995 –96	1996 –97	1997 –98	1998 –99
Central government	10.9	10.1	9.1	8.5	8.1	7.8	7.6
Local authorities	7.2	6.7	7.1	7.5	6.5	6.2	5.9
Public corporations (a)	3.6	4.0	4.8	5.7	5.6	5.4	5.0
Notional allocation of the reserve					0.3	0.5	0.8
Total public sector capital expenditure	**21.7**	**20.8**	**20.9**	**21.7**	**20.5**	**19.8**	**19.2**
Estimated capital expenditure under the Private Finance Initiative		0.3	0.3	0.6	1.9	2.6	2.8
Total publicly sponsored capital expenditure	**21.7**	**21.1**	**21.2**	**22.3**	**22.4**	**22.4**	**22.0**

Source: HM Treasury Financial Statement and Budget Report 1995.

(a) Excluding the capital expenditure of industries privatised or planned to be privatised before 31 March 1999.

Public sector demand

Public investment fell last year, on account of overall public expenditure restraints and the influence of the Private Finance Initiative (PFI). It is likely to remain subdued over the next three years. According to the latest Financial Statement and Budget Report, general government and public corporations' investment is planned to fall in nominal terms in each of the three financial years to 1998–99 (see Table 3.D). Even adding in the estimated outturns for the PFI, total publicly sponsored capital expenditure is likely to fall in real terms.

The PSBR in 1995/96 was £3.2 billion higher than forecast in the November 1995 Budget, largely because of unexpectedly low tax receipts given the level of activity. The general government deficit in 1995 (calendar year) was 6.0% of GDP, using the definition of the deficit specified in the Maastricht convergence

criteria. The consequences of BSE are likely to add to the fiscal deficit, other things being equal. But this should have its greatest impact in 1996.

3.3 Net external demand

The deficit on visible trade widened only slightly in 1995. Export and import values grew roughly in line, but export volumes grew faster than import volumes. Although the United Kingdom's main overseas trading partners grew slightly more slowly than the United Kingdom in 1995, the sterling effective exchange rate depreciated.

Export volumes fell in 1995 Q4. However, net external trade made a positive contribution to GDP growth, as imports fell faster. The fall in export volumes in that quarter was accounted for by weak EU demand: exports to EU countries fell by 3%, but rose by 3.2% to non-EU countries. Real domestic demand fell by 1.1% in Germany, 1.0% in France and 0.4% in Italy in 1995 Q4; GDP also fell in all three countries.

The outlook for demand in the European Union, particularly Germany, in 1996 has weakened since the beginning of 1996 (see Table 3.E). In February, forecasters were predicting German growth of around 1.5% in 1996 on average, and by April growth closer to 1% was expected. But it seems likely that many of these forecasts have not fully incorporated the recent weak data. The German government's forecast of 0.75%, announced on 26 April, is lower.

The current weakness in Europe is likely to be temporary, as growth will probably pick up in the second half of 1996. The recent cuts in interest rates, along with strong growth in money and credit, are likely to support higher demand, even though fiscal consolidation in Europe to meet the Maastricht criteria could offset this to some extent.

Domestic demand in the United States also fell in 1995 Q4, by 0.1%. But it recovered in the first quarter of this year, growing by 0.9%. The United States is the United Kingdom's biggest market outside the European Union (see Chart 3.12), and it is likely to grow faster than Europe in 1996.

The CBI Quarterly Industrial Trends Survey for April suggests that firms' optimism about export prospects has weakened further. The balance of those who are more

Table 3.E
Consensus forecasts for GDP growth in 1996 of the United Kingdom's main European trading partners(a)

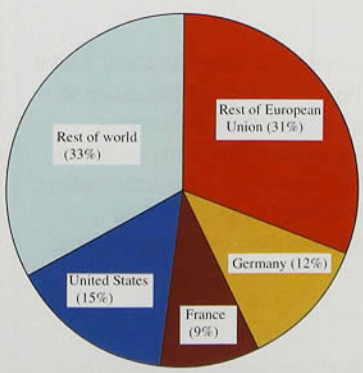
Percentage annual growth rate

Date of forecast	Germany	France
January	1.6	1.6
February	1.5	1.5
March	1.2	1.4
April	1.1	1.4

Source: Consensus Economics.

(a) Mean expectation.

Chart 3.12
Destination of UK exports of goods and services—1994(a)



(a) Current prices.

Measuring the economy

Changes in aggregate demand relative to productive potential affect inflation. So effective monetary policy advice requires a set of data that are reliable, timely and describe a broad range of economic activity. This box discusses the extent to which these criteria are met by information available to the Bank.

Naturally, attention is often focused on Gross Domestic Product (GDP), which measures the output of and expenditure on all UK-produced goods and services. Provisional data are published quarterly by the Office for National Statistics (ONS) some three weeks after the period they describe (figures for 1996 Q1 were released on 29 April). The quality of this information is high by international standards—with regard to both timeliness and the scale of revisions, the United Kingdom was ranked joint second in a comparison of 13 national statistics agencies.(1) Nevertheless, the delay before each estimate is finalised has led the Bank to monitor a range of more immediate, though less comprehensive indicators. The diagram outlines a selection of these, and provides information about their frequency, coverage, accuracy and timeliness. It is not meant to be exhaustive; many other surveys and data sources are monitored as well. The chart describes coverage of output data by industry. Alternative diagrams, based on expenditure and income categories, could be drawn, which would emphasise other sources.

Each publication is described by a horizontal bar. Official data are shown in red. A number of surveys, made available by trade organisations such as the CBI, appear in blue. The importance of the source, in terms of the proportion of value added covered, varies with the length of each bar; the space afforded to four broad industry groups—agriculture, production, construction and services—along the bottom axis is proportional to their share in GDP. Shading is used to provide a crude indication of quality; ranging from dark colours where data are obtained from all firms in a given market, to lighter colours where these are based on a small but representative sample. Monthly releases appear in the first panel, quarterly ones in the second. And data released with the shortest delay appear near the top of each section. To illustrate, every quarter the British Chambers of Commerce sample around 3% of the non-government service sector and 9% of other firms (by employees covered). Results for Q1 were published on 18 April 1996, so the relevant bar, coloured blue and lightly shaded, spans most of the horizontal axis and appears near the top of the lower panel.

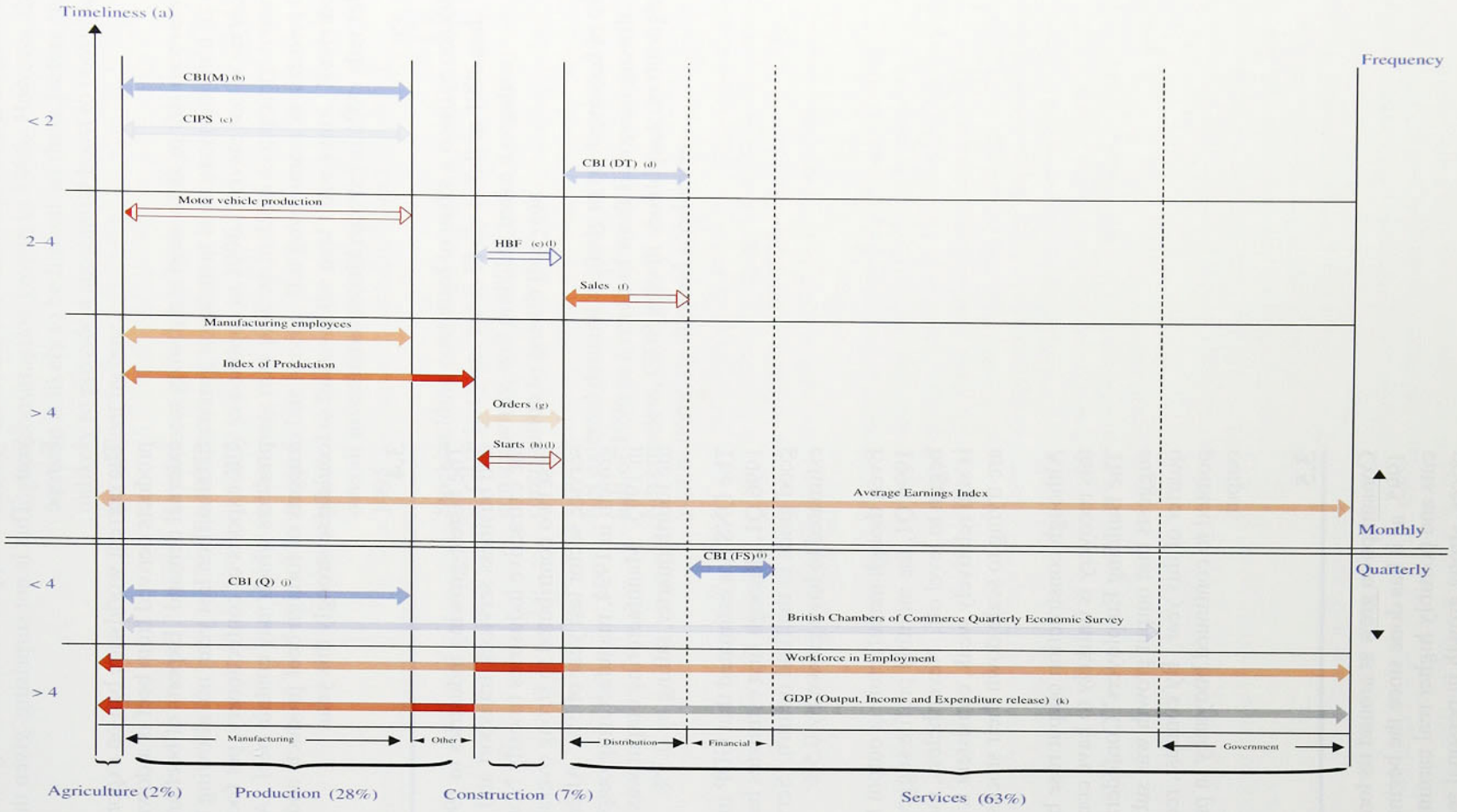
Official statistics provide only incomplete coverage of the real economy on a monthly basis. Data on service sector activity, which accounts for more than 60% of GDP, are particularly scarce—the only timely indicator being retail sales, a measure of expenditure rather than value added (see diagram).(2) The production and construction industries are well represented, but timely information on the latter is not consistent with the National Accounts framework. To illustrate, figures for new orders provide an indication of potential activity over a number of quarters, while the housing starts and completions release counts projects undertaken without reference to their value. In a recent publication,(3) the CSO described estimates of agricultural and production output as 'good'. At the other extreme, representation of banking and the public sector was just 'fair'. Varying degrees of coverage reflect the ease by which data can be collected. Because the electricity, gas and water supply industries are dominated by a handful of large firms, their output is derived from a comprehensive census—suggested by the darker shading.

The Bank receives around 30 economic surveys on a regular basis—a selection appear in the diagram. Almost without exception, these are published in advance of the official data—the CBI Monthly Trends and Distributive Trades and the Chartered Institute of Purchasing Supply Surveys are all published within two weeks of the period they describe. The information contained is often detailed. For example, questions in the CBI Quarterly Trends Survey relate not just to output, but also to employment, the adequacy of stocks and reasons for investment. And many have a forward-looking element. A clear disadvantage is that most responses are of the 'Up', 'Down' and 'No change' variety.(4) Analysis is further complicated because many surveys have a short track record—of those described in the figure, only the CBI Monthly and Quarterly Trends and Distributive Trades Surveys provide more than ten years of data. And while coverage by activity is broad, sample sizes can be small.

Additional information is obtained from the Bank's own contacts. A network of Agents in the regions, soon to be enlarged (see article on page 198 of the current *Quarterly Bulletin*), visit around 4,000 firms each year. Their monthly reports provide a timely and independent source of information on the UK economy. And a number of larger firms provide their own data directly, on a voluntary basis.

(1) 'Good statistics guide', *The Economist*, 11 September 1993, page 83.
(2) A government review of service-sector statistics is being conducted. This aims to improve both their quality and availability.
(3) 'The measurement of output in the estimation of GDP', *CSO Methodological Paper No 1*, August 1994.
(4) Alternative methods for deriving numerical estimates from these qualitative responses are reviewed in 'Using and assessing CBI data at the Bank of England', *Bank of England Discussion Paper Technical Series No 37*, January 1991.

Coverage of output data by industry



Notes: Horizontal axis records the share in total value added, using 1990 GDP weights, of four broad industry groups. Some data releases measure expenditure, rather than output. These are described in the footnotes. The shading is used to provide an estimate of market coverage, based on the ratio of employees in firms sampled to all employees in the industry.

(a) Delay between end of period covered and approximate time at which data are released, measured in weeks.
(b) CBI Monthly Trends Enquiry.
(c) Conducted on behalf of the Chartered Institute of Purchasing and Supply by NTC Research.
(d) CBI Distributive Trades Survey.
(e) Housebuilders' Federation monthly survey.
(f) ONS Retail Sales. These account for around 20% of GDP measured by expenditure.
(g) DoE construction new orders.
(h) DoE housing starts and completions.
(i) CBI Financial Services Survey, in conjunction with Coopers and Lybrand.
(j) CBI Quarterly Industrial Trends Survey.
(k) In some cases, service-sector value added is measured using proxies, including wages and salaries. Sample size is not a guide to reliability in this instance.
(l) Housebuilding accounts for a little over 10% of construction output.

optimistic dipped below its long-term mean in April this year. This is not surprising, given the downturn in Europe.

The current worldwide ban on exports of UK beef and products derived from beef is a downside risk for external demand. Exports of beef amounted to around £700 million last year, not allowing for the effects on UK exports of confectionery, pet foods and some other products which may contain beef. At the same time, imports of foreign beef products and substitute meats could rise strongly this year.

3.4 Output

The fastest-growing industries in 1995 were financial and business services, transport and communication, and the extractive industries (mostly North Sea oil). The first two contributed to strong overall growth in the service sector last year of 3%. After being the spur to growth in 1994, manufacturing output grew only by 2% in 1995. Manufacturing output was particularly weak in the fourth quarter, falling by 0.3%.

The ONS has estimated that GDP increased by 0.4% in 1996 Q1, although first estimates have not always been a good guide to the final outturn. Service sector output is estimated to have grown by 0.5%.

Even though manufacturing output fell by 0.2% in 1996 Q1, the monthly profile suggests that it may have begun to level off. Nevertheless, manufacturing output is still relatively weak, consistent with a view that firms are trying to scale down their stocks gradually.

Although construction output rose by 1.3% in 1995 Q4, this recovery is unlikely to have continued into 1996 Q1. The Building Employers' Confederation Survey suggests that output growth was subdued in the first quarter of this year. By contrast, recent survey data have pointed to continued buoyancy in private sector service output.

3.5 Summary

Consumption grew at around its long-run trend rate in 1995, as it has done since the beginning of 1994. Tax cuts and possibly higher real earnings, rising asset prices, strong growth in personal sector bank and building society deposits, the electricity rebate, building

society windfalls and maturing TESSAs all point to higher consumption growth in 1996. However, the increase is likely to be limited, as these factors are unlikely to provide a substantial boost to consumers' permanent income.

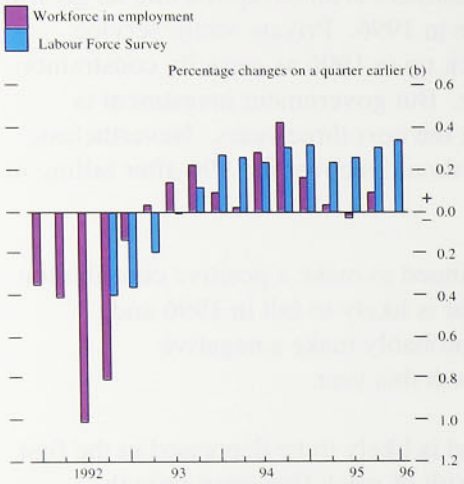
Investment growth has been weak in this recovery. Manufacturing investment is an exception and its growth is likely to continue in 1996. Private sector service investment may pick up in 1996 as capacity constraints begin to bite harder. But government investment is planned to fall over the next three years. Nevertheless, overall investment should recover in 1996 after falling in 1995.

Stockbuilding continued to make a positive contribution to GDP last year, but is likely to fall in 1996 and, consequently, will probably make a negative contribution to growth this year.

Net external demand is likely to be depressed in the first half of 1996 as a result of weak European growth. Nevertheless, GDP growth should pick up through the year as domestic demand accelerates.

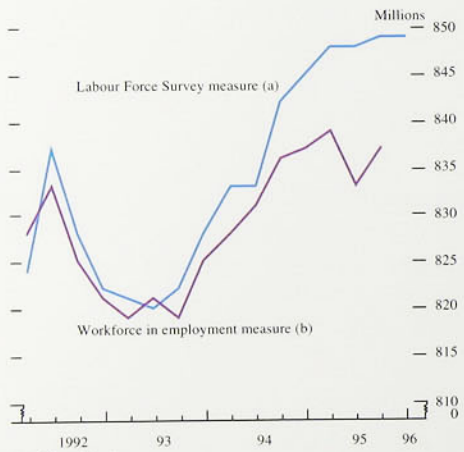
4 The labour market

Chart 4.1
Employment growth[a]



(a) In Great Britain.
(b) Two-quarter moving average.

Chart 4.2
Total hours worked per week



(a) Great Britain.
(b) United Kingdom.

Unemployment fell further in the first quarter of this year, at about the same rate as in the second half of last year. Further falls in unemployment contrast with GDP growth around its long-term trend since the beginning of last year. The puzzle is explained by the fact that total hours worked have been broadly unchanged.

4.1 Demand for labour

Employment, which reached a trough in 1993, increased further in the first few months of the year. There are two official measures of employment: the workforce in employment (WIE) survey of UK employers and the Labour Force Survey (LFS) of a sample of households in Great Britain. According to the WIE, employment continued to grow last year, but by much less than in 1994, as Chart 4.1 shows. By contrast, the LFS recorded continued growth in employment of around 0.3% or so a quarter last year, and 0.5% in the first quarter of 1996. Previous *Reports* have noted that the WIE may not record short-term contract and part-time working as comprehensively as the LFS. These types of work have increased relative to permanent full-time work over the recent past, which may help explain why the LFS has recorded stronger employment than the WIE. So the LFS may provide a more accurate measure of employment growth; it is also more timely.(1)

Total hours worked is a more comprehensive indicator of labour use. Chart 4.2 shows LFS and WIE measures of total hours worked. In contrast to the employment data, both measures show that growth in hours worked slowed down over the past year. The LFS measure recorded no change in total hours worked in the first few months of 1996. The explanation is that about three quarters of that quarter's rise in employment was in part-time work; and average hours worked by existing employees must have fallen.

The previous *Report* noted the contrast between growth in part-time and full-time work during the recovery. As

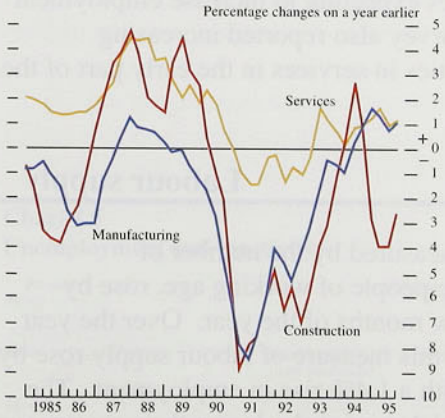
(1) The latest WIE survey is based on a group of firms which has been fixed since 1993. This fixed sample may not capture the growth of small firms in rapidly expanding sectors. An article in *Labour Market Trends*, January 1996, compared the LFS and WIE measures of employment in more detail. The WIE measure of total hours worked combines average hours data from the LFS with employment data from the WIE.

Table 4.A
Growth in full-time and part-time work over the recovery(a)

Labour Force Survey (b)		Workforce in employment (c)	
Full-time	Part-time	Full-time	Part-time
2%	12%	-3%	7%

(a) In Great Britain, figures are rounded to the nearest whole number.
(b) Changes between spring 1992, the first point at which data are available, and winter 1995–96.
(c) Changes between 1992 Q1 and 1995 Q4.

Chart 4.3
Employment growth: construction, manufacturing and services



Source: Workforce in employment.

Note: Percentage changes are spliced together because of changes to SIC classifications. Self-employed people are not included in these measures.

Table 4.A shows, full-time employment has barely increased since the recovery in output began in 1992 Q1. By contrast, part-time employment has increased further since the data available at the time of the February *Report*, according to both the LFS and the WIE. In 1996 Q1, the LFS recorded a 0.1% rise in the number of full-time employees, while part-time employment rose by 1.4%. By 1995, part-time work accounted for about 28% of total employment, compared with 25% in 1990 and 20% in 1980. The February *Report* noted that the greater flexibility which part-time and contract work provided had enhanced the flexibility of the labour market and was one of a number of factors contributing to a lower natural rate of unemployment.

Differences in productivity and output growth between sectors can help explain the relationship between aggregate employment and labour demand. The sectoral pattern of employment also provides independent information on output and demand trends. Over the past few years, the sectoral pattern of output growth has varied widely. In 1994, for example, manufacturing output rose strongly but, in 1995, the service sector grew quickly. Chart 4.3 shows employment growth in the service, manufacturing and construction sectors.(1) In 1995, the number of employees in the service sector rose by about 180,000, compared with a rise of 35,000 in manufacturing and a fall in construction.

The February *Report* noted that manufacturing employment rose during 1995, as firms adjusted employment in response to 1994's rapid output growth, and became more confident that sales would be sustained. As employment 'caught up' with output, productivity growth fell. Over the three months to February, manufacturing employment fell, suggesting that firms had begun to adjust to the slower output growth in 1995 and early 1996, and that productivity growth would recover.

Construction employment accounted for about a tenth of total employment last year. But the sector is important since capital spending on housing, buildings, and works accounts for around a half of UK investment. Construction employment growth recovered sharply in 1993, as Chart 4.3 shows, but in 1994 and 1995 firms shed employees, partly because of the renewed weakness of the housing market in the first half of 1995, as indicated by falling housing starts. The fall in

(1) The sectoral changes in employment quoted in the text and charts are from the WIE because these data are available over a longer time horizon.

construction employment last year suggests firms had little confidence in the short term.

Sectoral shifts in the relationship between output and employment can affect the relationship for the whole economy. The service sector is an illustration. Employment in transport and communications has fallen through much of the 1990s, though output grew strongly. This increase in productivity reflects the rapid technological progress in telecommunications. And the shift in demand towards this high-productivity industry could increase productivity of the whole services sector.

Survey data confirm the deceleration in labour demand last year and in the first part of 1996. The CIPS employment indicator, covering manufacturing, was below the neutral 50 level during the first quarter of the year. The latest Building Employers' Confederation report projected that construction employment would fall this year. Manpower's employment survey (covering the whole economy) was weaker in 1996 Q2 than it had been a year earlier. And reports about employment prospects to the Bank's Agents during the first four months of the year were less buoyant than through much of last year. By contrast, the April British Chambers of Commerce (BCC) survey reported a net positive balance of service companies expecting to increase employment in Q2. The BCC survey also reported increasing recruitment difficulties in services in the early part of the year.

4.2 Labour supply

The labour force, measured by the number of economically active people of working age, rose by 0.2% in the first few months of the year. Over the year to winter 1995–96, this measure of labour supply rose by 0.7%, compared with a 1.4% rise in employment. The largest increases in labour supply during the year were in those aged 16–19 and 35–49; there was a rise of around 140,000 women in the labour force and 60,000 men.

4.3 Labour market tightness

Labour market tightness is determined by the relationship between labour demand and supply. In the long run, changes in labour market tightness affect real wages. In the short run, they show up in, among other things, changes to unemployment. Unemployment fell further in the first quarter of the year, according to both the claimant count and the LFS. So according to this

Chart 4.4
Monthly changes in UK unemployment

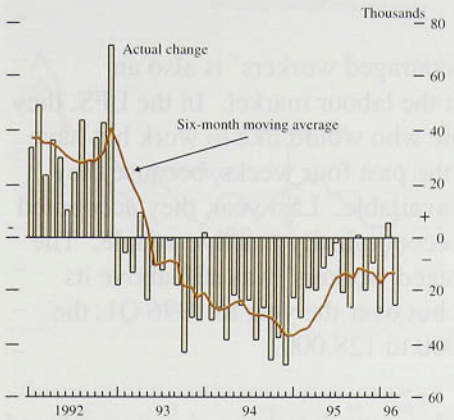
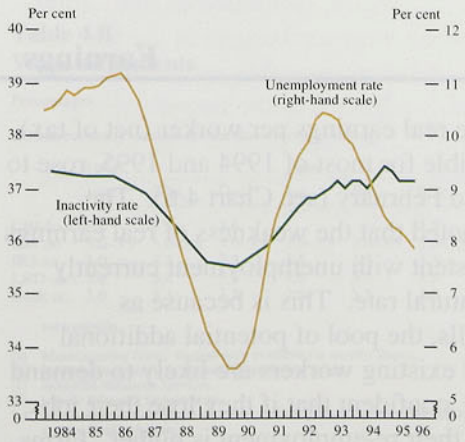


Chart 4.5
Unemployment and inactivity



measure of excess labour supply, the UK labour market has continued to tighten. And although the pace of tightening was less than at the end of 1994, Chart 4.4 shows that, on a six-month average basis, the rate of fall in unemployment has been stable since the first half of 1995.(1)

As Table 4.A shows, most of the jobs created during the recovery have so far been part time. To what extent has the rise in part-time work absorbed excess labour supply? During the 1990s, the LFS recorded that a rising proportion of part-time workers would have preferred to work full time. For example, the percentage of part-time male workers wanting full-time jobs rose from about 15% in 1990 to 25% or so in 1995. This means that, compared with previous cyclical falls in unemployment, the latest fall may have overstated the tightening of the labour market.

Measured by total hours worked, labour demand has barely changed in recent quarters. It is difficult to measure the potential supply of hours worked. But since total labour supply—measured by the number of economically active people—has continued to rise, the supply of potential hours has probably risen too. This suggests there has been little tightening in the labour market.

Inactivity rates are also a measure of labour market tightness—some people recorded as inactive can be attracted into the active labour force by economic incentives. In the LFS, people aged 16 or over who are neither in work nor actively seeking it are described as economically inactive. But Chart 4.5 shows that while unemployment has fallen since 1993, the inactivity rate has not. In the past, lower unemployment usually coincided with lower inactivity. The relationship has changed because of high and rising inactivity rates among 16–24 year olds, as more of this age group have become students. This partly reflects an expansion in the supply of higher education and perhaps also a change in younger people's preferences towards gaining further qualifications. Adverse pay and employment prospects during the 1990s have probably been another influence.(2) If employment prospects and relative pay were to improve, then some potential students would be

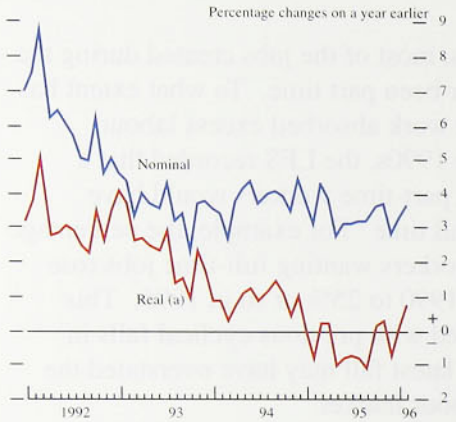
(1) Incapacity benefit replaced invalidity benefit in April 1995. Since its introduction, about 40,000 former invalidity benefit claimants have joined the unemployment count. Some of these have found work, but the net effect has been an increase in recorded unemployment.
(2) Unemployment among those aged under 25 has fallen by less than total unemployment during the recovery and, according to the New Earnings Survey, young people's pay has fallen relative to the average.

likely to join the active labour force, so keeping downward pressure on earnings.

The number of 'discouraged workers' is also an indicator of slack in the labour market. In the LFS, they are defined as people who would like to work but have not looked for it in the past four weeks, because they believe no jobs are available. Last year, they accounted for less than 1% of economically inactive people. The number of 'discouraged workers' was still above its trough in 1990–91, but over the year to 1996 Q1, the number fell by 26,000 to 128,000.

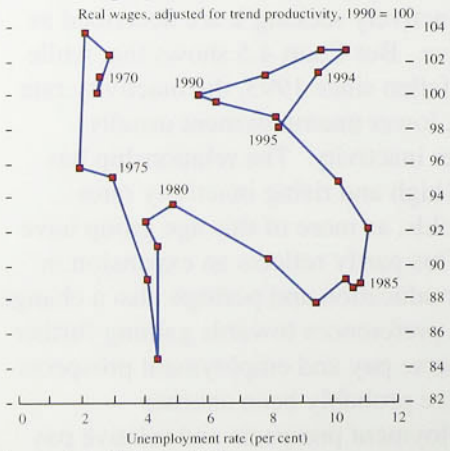
The probability workers attach to becoming unemployed is another dimension of labour market tightness. As the February *Report* noted, although the proportion of the population with experience of unemployment has not changed much over the past ten years, unemployment became more widespread across occupations during the 1990s. And, during the 1990s, the LFS recorded an increasing proportion of part-time and temporary contract workers wanting full-time or permanent work. There is also evidence that, since the 1970s, job turnover has increased and job tenure, particularly among men, has fallen. The proportion of full-time workers qualifying for statutory employment rights fell from 56% in 1975 to 36% in 1993.(1) So the limited evidence suggests that there has been a rise in 'job insecurity' or in the perceived probability of unemployment among some groups of workers. If this is interpreted as a fall in demand for workers with particular skills, then some workers may be willing to accept lower wage increases than otherwise.

Chart 4.6
Nominal and real earnings growth



(a) Average earnings per worker deflated by the tax and prices index.

Chart 4.7
Real wages, adjusted for trend productivity,(a) and unemployment



Sources: Bank of England and ONS.

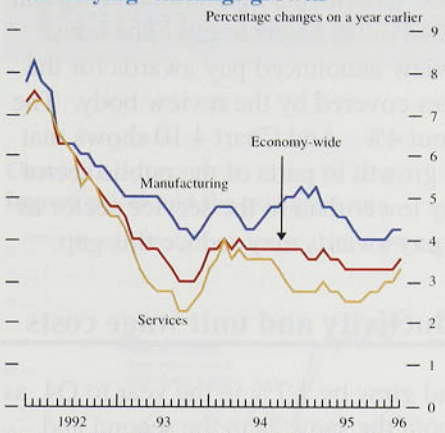
(a) Trend productivity estimated using Hodrick-Prescott filter.

4.4 Earnings

Growth in average real earnings per worker (net of tax), which was negligible for most of 1994 and 1995, rose to 0.7% in the year to February (see Chart 4.6). The previous *Report* noted that the weakness of real earnings growth was consistent with unemployment currently being above its natural rate. This is because as unemployment falls, the pool of potential additional workers falls, and existing workers are likely to demand higher real wages, confident that if they lose their jobs, the probability of their re-employment is higher. Firms, by contrast, tend to demand less labour, as real labour costs rise.

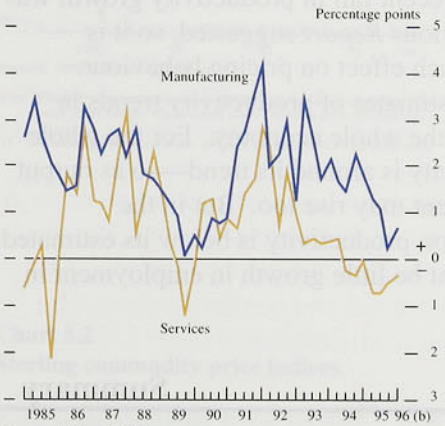
(1) See Gregg, P and Wadsworth, J, 'A short history of labour turnover, job tenure and job security, 1975–93', *Oxford Review of Economic Policy*, Vol 11, No 1, pages 73–90.

Chart 4.8
'Underlying' earnings growth[a]



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

Chart 4.9
Wage drift[a]



Sources: CBI and ONS.

(a) Annual growth in average earnings less three-month averages for settlements.
(b) Data for Q1 are an average of the first two months' data.

Table 4.B
Wage settlements

Percentages

Whole-economy median for the three months ending:

	1995			1996			
	June	Sept.	Dec.	Jan.	Feb.	Mar.	Apr.
CBI (a)	3.4	3.5	3.6	..	..	3.5	..
IDS (b)	3.0–3.9	3.0–3.9	3.0–3.9	3.0–3.9	3.0–3.9	3.0–3.9	3.0–3.9
IRS (c)	3.0	3.1	3.5	3.5	3.5	3.5	..
LRD (d)	3.0	3.4	3.6	3.6	3.5	3.5	..
Bank (e)	3.0	3.1	3.5	3.6	3.5	3.5	3.5

.. not available.

(a) Manufacturing firms; median only available for months shown.
(b) Incomes Data Services, the modal settlement range.
(c) Industrial Relations Services.
(d) Labour Research Department.
(e) An employment-weighted measure combining data from the CBI, IDS, IRS, LRD and the Bank's Agents.

In the long run, real wages are determined by productivity. Over the business cycle, as labour demand responds to changes in the demand for firms' output, unemployment and real wages—adjusted for productivity—would tend to be inversely related. But as Chart 4.7 shows, in the past two years, both unemployment and real unit wage costs have fallen. This is consistent with workers demanding lower real wages at any given level of unemployment than before, which in turn is consistent with unemployment being above its natural rate. If this interpretation is correct, real earnings growth could continue to be lower than experience of the 1970s and 1980s might suggest.

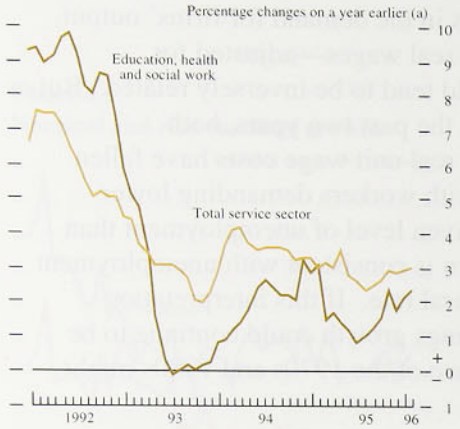
Annual growth in nominal underlying average earnings per worker increased from 3¼% to 3½% between January and February. This was the first rise in underlying average earnings since the first half of 1995. The underlying rates of growth in manufacturing and services rose in the first few months of the year.

As Chart 4.8 shows, service sector earnings have grown by less than the economy-wide average since 1993. One factor behind weak service sector earnings last year was the disappearance of wage drift, as Chart 4.9 shows. Wage drift is usually positive—earnings increase more quickly than pay settlements because elements of pay such as overtime, bonuses and grading increments, rise faster. As the previous *Report* noted, lower bonuses in the financial sector in the early part of last year partly accounted for the lower drift. This year, financial sector bonuses are likely to be higher because financial markets were strong in 1995. Bonuses are usually paid within the first four months of the year. When this *Report* was finalised, earnings data were available for January and February: in February they showed some reversal of negative drift in the service sector, which was largely bonus related.

Annual pay settlements were roughly unchanged in the first quarter of the year. Last year, about 65% of all settlements monitored by the Bank occurred in the first four months of the year, and 3.4 million employees (about half of them in the public sector) settled in April, the second largest single month after June.(1) Recent settlements data are summarised in Table 4.B. The Bank's provisional estimate of the three-month employment-weighted measure in April was 3.5%, the

(1) This year, an additional 1.4 million public sector workers covered by local authority awards settled in April rather than June.

Chart 4.10
Service sector earnings growth



(a) Three-month moving averages, for Great Britain.

Table 4.C
Unit wage costs and their components

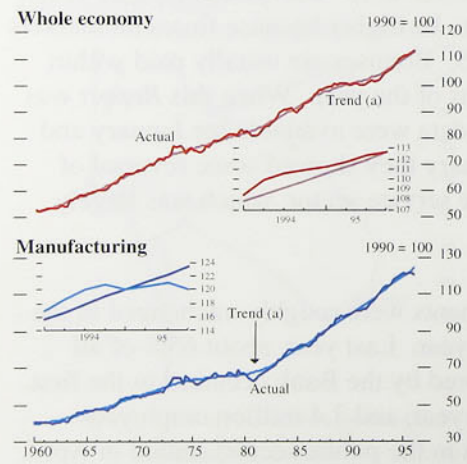
Percentage changes on same period in previous year

	Output	Employment	Labour productivity	Earnings per employee	Unit wage costs
Whole economy					
1994	4.0	0.6	3.3	3.8	-0.4
1995	2.5	0.7	1.8	3.4	1.1
1995 Q3	2.1	0.5	1.5	3.1	1.0
Q4	2.0	0.3	1.7	3.4	1.4
Manufacturing industry					
1994	4.3	-0.5	4.8	4.7	-0.1
1995	1.9	0.8	1.1	4.5	3.3
1995 Q3	1.5	0.6	0.8	4.3	3.4
Q4	0.6	1.2	-0.6	3.9	4.6
1996 Q1 (a)	0.5	0.4	0.5	4.3	3.8

Source: *Labour Market Trends*, Tables 1.8 and 5.8.

(a) Average of first two months' data, except output data.

Chart 4.11
Actual and trend productivity



Sources: Bank of England and ONS.

(a) Trend estimated using Hodrick-Prescott filter.

same as at the end of last year.(1) In April, three-month employment-weighted settlements in manufacturing and services were 3.6% and 3.2% respectively. The latest public sector pay review announced pay awards for the 1.4 million employees covered by the review body. The awards averaged about 4%. And Chart 4.10 shows that since 1993 earnings growth in parts of the public sector has been consistently lower than in the service sector as a whole. The latest pay awards may reduce this gap.

4.5 Productivity and unit wage costs

Productivity per head grew by 1.7% in the year to Q4, as Table 4.C shows, about the same as in the second and third quarters, though much less than over the previous three years. In the manufacturing sector, annual productivity growth was around 0.5% in the first two months of 1996; it was negative towards the end of last year. Much of the recent fall in productivity growth was cyclical, as the previous *Report* suggested, so it is unlikely to have much effect on pricing behaviour. Chart 4.11 shows estimates of productivity trends in manufacturing and the whole economy. For the whole economy, productivity is around its trend—so as output picks up, employment may rise too. But in the manufacturing sector, productivity is below its estimated trend, so there might be little growth in employment in the short term.

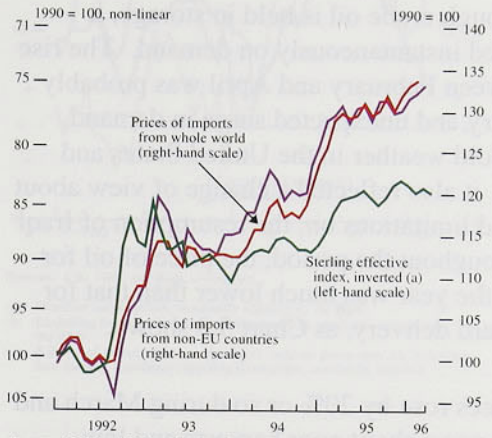
4.6 Summary

Unemployment fell further, though at a slower rate than a year ago. Employment, particularly in part-time work and parts of the service sector, continued to rise. Total hours worked per week were unchanged in the first few months of the year and manufacturing employment fell —it has now probably adjusted to the output growth earlier in the recovery. Earnings growth edged up a little in manufacturing and services. On balance, the labour market has probably not tightened much in the past few months.

(1) The Bank's measure is based on data supplied by the CBI, IDS, IRS, LRD and the Bank's Agents.

Pricing behaviour 5

Chart 5.1
Import prices and the exchange rate

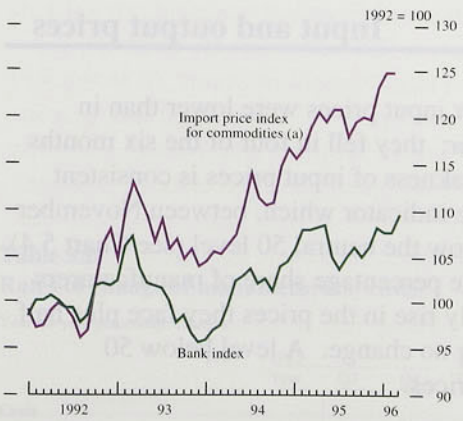


Sources: ONS and Bank of England.

Note: The ERI is measured against 20 other industrialised countries. The import price index for the whole world covers imports from all countries.

(a) The sterling ERI is inverted; a rise in the line reflects a depreciation.

Chart 5.2
Sterling commodity price indices



Sources: ONS and Bank of England.

(a) A sub-index of import price indices weighting together the indices for basic materials, fuels, food, drink and tobacco.

The sharp rises in import and input prices a year ago contributed to a small and temporary increase in output price inflation in the first half of last year. They appear neither to have led to expectations of higher future inflation, nor to have become embedded in wage and price setting.

5.1 The exchange rate and import prices

The sterling effective exchange rate appreciated by 0.4% between 9 February and 9 May, from 84.1 to 84.4. Since the fall of some 5% during the first half of last year, the effective exchange rate has been broadly unchanged (see Chart 5.1).

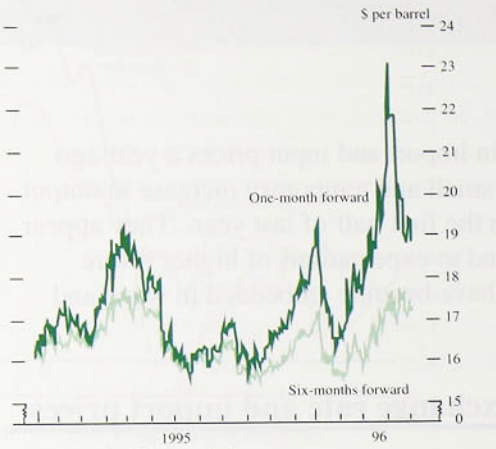
Import prices rose sharply at the beginning of last year, but have risen less quickly since then. In February, the twelve-month rate of import price inflation fell to 6.4%, from around 10% during most of last year. Import prices are often subject to large swings: since 1994, they have risen by more than the fall in the exchange rate would imply. This probably reflects earlier rises in world raw material prices. The extent to which these rises in import prices are eventually passed through to final prices depends on the monetary policy response.

5.2 Raw material and commodity prices

Commodity prices, measured by the Bank index, rose by 3.6% between December 1995 and a year earlier (see Chart 5.2).(1) In the first few months of this year, increases in most raw material prices were relatively subdued. Downward revisions to projections of world demand growth over the past few months were probably part of the explanation. Between December and April, the mean forecast for GDP growth in the world economy in 1996, reported by Consensus Economics, fell from 2.8% to 2.4%.(2) Looking forward, commodity price pressures could re-emerge if recent data indicating stronger activity in Japan and the United States lead to upward revisions to world demand projections.

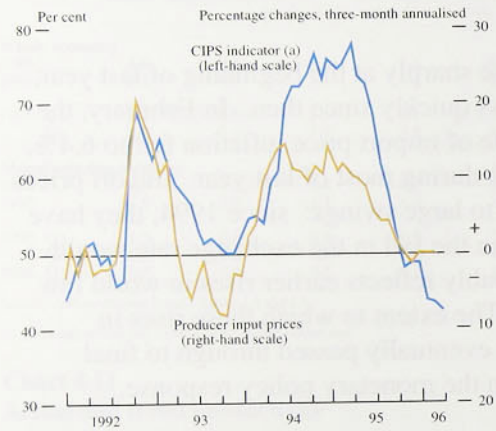
(1) The Bank's commodity index is described in more detail in an article by Andrew Logan and Lucy O'Carroll on pages 280–85 of the August 1995 *Quarterly Bulletin* and *Working Paper No 48*.
(2) Each month, Consensus Economics surveys over 200 forecasters' projections of major macroeconomic variables.

Chart 5.3
Brent crude oil prices



Source: International Petroleum Exchange.

Chart 5.4
Producer input price inflation and CIPS purchase price indicator



Sources: ONS and Chartered Institute of Purchasing and Supply.

(a) The indicator reflects respondents' comparisons of the prices of purchases in one month with those of a month earlier. A figure above 50% indicates rising prices.

Table 5.A
Input and output prices

Twelve-month percentage changes (a)

	1995	1996		
	Dec.	Jan.	Feb.	Mar.
Output prices	4.4	3.8	3.7	3.4
Core output prices (b)	4.3	3.6	3.5	3.4
Input prices	5.9	3.6	2.8	2.8
Core input prices (b)	5.2	2.0	1.6	1.0

Three-month percentage changes annualised (c)

Output prices	5.6	5.1	4.0	1.1
Core output prices (b)	2.0	2.0	1.7	1.0
Input prices	-1.4	-0.3	-0.3	—
Core input prices (b)	-4.8	-2.8	-3.5	-3.5

(a) Not seasonally adjusted.
(b) Excluding food, drink, tobacco and petroleum.
(c) All series are seasonally adjusted by the ONS except headline output prices, which are seasonally adjusted by the Bank.

Although increases in most raw materials prices were slight in the early part of the year, oil and wheat were major exceptions. Crude oil prices rose by around 35% between 9 February and their peak on 11 April, but had fallen by 18% on 9 May, to $18.80 a barrel for Brent crude (for one-month forward delivery). Crude oil accounts for about a fifth of the Bank's commodity index, so movements in oil prices are particularly important. Although crude oil is held in storage, it cannot be supplied instantaneously on demand. The rise in oil prices between February and April was probably due to a temporary and unexpected surge in demand after unusually cold weather in the United States and western Europe; it also reflected a change of view about the timing of, and limitations on, the resumption of Iraqi oil exports. Throughout the period, the price of oil for delivery later in the year was much lower than that for one-month forward delivery, as Chart 5.3 shows.

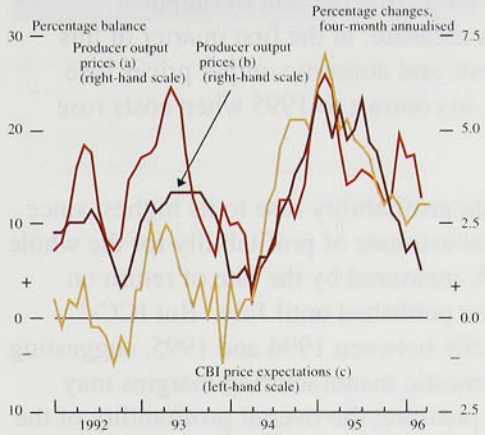
World wheat prices rose by 20% or so during March and April, following news about poor harvests and low stocks. EU prices tend to be insulated from world price movements by the Common Agricultural Policy. But the unusually strong world prices and poor weather conditions on the Continent have put upward pressure on European cereals' prices. If this pressure persists, there could be some feed through to final retail prices. And the costs faced by livestock and poultry farmers, who use cereals as animal feed, could increase.

5.3 Input and output prices

In March, producer input prices were lower than in September last year; they fell in four of the six months to March. The weakness of input prices is consistent with the CIPS price indicator which, between November and April, was below the neutral 50 level (see Chart 5.4). That measure is the percentage share of manufacturers reporting a monthly rise in the prices they face plus half the share reporting no change. A level below 50 indicates falling prices.

The twelve-month rate of producer output price inflation fell in Q1. In March, it was 3.4%, falling further toward RPIX inflation. Short-run measures of output price inflation fell too (see Table 5.A). In the first quarter, monthly increases (excluding food, drink, tobacco and petroleum) averaged 0.1%, compared with 0.4% last year.

Chart 5.5
Producer output price inflation and CBI price expectations



Sources: CBI, ONS and Bank of England.

(a) Headline output prices, seasonally adjusted by the Bank.
(b) Excluding food, drink, tobacco and petroleum, seasonally adjusted by the ONS.
(c) Balance of manufacturers expecting to increase prices over the following four months, less those expecting a reduction, seasonally adjusted.

Table 5.B
Rates of change of manufacturers' costs

Year-on-year percentage changes

	1994	1995			1996
		Year	Q3	Q4	Q1
Costs					
Unit labour costs	—	3.3	3.5	4.5	3.9 (a)
Materials and fuels (including semi-finished manufactured imports)	3.8	10.8	11.3	6.5	1.6
Imports of finished manufactures	4.3	8.4	7.5	9.5	5.6 (a)
Services	3.4	1.8	1.7	2.0	1.6
Weighted costs	2.0	5.2	5.3	5.1	3.2 (a)
Output prices (b)	2.2	4.5	5.0	4.6	3.5

Sources: ONS and Bank of England.

(a) Average of first two months' data.
(b) Domestic sales.

The CBI Quarterly Industrial Trends Survey confirmed that producer output price pressures were lower in the first four months of the year than through much of last year. And, in April, the balance of manufacturers expecting to raise prices over the coming four months was still subdued, as Chart 5.5 shows. Some of the rises in raw material prices last year have been absorbed within the manufacturing sector. Consistent with this, the measure of manufacturing output price inflation based on gross prices (which gives greater weight to the prices paid for goods within the manufacturing sector) fell below net output price inflation in the first quarter—for the first time since 1994.

Not all of the rises in raw material prices in 1995 were absorbed within the manufacturing sector. In the past, raw material food price rises have been passed through quickly from input and import prices to output prices and on to final retail prices. One reason is that food is subject to less refinement and processing than many other manufactured products. Over the past two years, the output and retail prices of food have partly responded to higher input prices—confirmed by reports from the Bank's Agents. Since August last year, the twelve-month change in the food component of the RPI has exceeded RPI inflation. In March, retail food price inflation was 4.7%, compared with RPI inflation of 2.6%; so food prices, which have a weight of around 14% in the RPI basket, accounted for about a quarter of the rise in retail prices in the year to March.

The prospects for food price inflation are affected by the reaction to the government's announcement of a potential link between BSE and CJD. Section 1 discussed the immediate effects on retail prices. Because beef and its derivatives are used as inputs into other foods, the news could have a longer and larger effect.

5.4 Weighted costs and profitability

About a half of manufacturers' variable costs are accounted for by labour, a further quarter by materials and fuels (including semi-finished manufactured imports) and about one tenth by imports of finished manufactures. Input prices are particularly volatile, so although input price pressures may have eased, it is important to look at an overall measure of manufacturing costs to assess inflation pressures accurately. Table 5.B summarises recent developments in manufacturing costs. Using input-output tables and assuming fixed

coefficients of production, it is possible to estimate the changes over time in each of these costs per unit of output, and so in total costs per unit of output. According to this measure, in the first quarter of this year weighted costs and domestic output prices rose broadly together, in contrast to 1995 when costs rose more rapidly.

In 1994, aggregate profitability rose to its highest since 1988. The official estimate of profitability for the whole economy in 1995, measured by the rate of return on capital, will not be published until July. But ICCs' profits rose by 5.6% between 1994 and 1995, suggesting that, although domestic manufacturing margins may have been under pressure, the overall profitability of the corporate sector remained high. This is consistent with the strength of the equity market in 1995: the FT-SE All-Share index rose by 19% between the first and last trading days of 1995, and by 9 May it had risen by a further 4%. And the latest BCC survey reported a rise in Q1 in manufacturing and service companies' confidence about future profitability.

5.5 Administered prices

The prices of some goods are subject to administrative rules or regulatory review. Many utility prices are reviewed yearly, with new prices effective from the beginning of April. Price changes are often linked to the RPI. This year's increases in electricity and water charges are little changed from last year and are unlikely to have much effect on RPI inflation. By contrast, the Council Tax, which has a weight of about 3% in the RPI basket, rose by an average 6¼% from April this year in England (and by more in Scotland and Wales), a slightly larger increase than last year. And the price of postage stamps is to rise by 4%–5% in July; their weight in the RPI is 0.2%. On balance however, average administered price increases are likely to remain below headline RPI inflation over the coming few months.

5.6 Summary

Short-run measures of costs and prices in the manufacturing sector have eased further. Downward revisions to world growth projections may have helped reduce industrial commodity price pressures. Oil and wheat prices rose, but this was largely due to temporary supply shortages. Costs in the manufacturing sector rose faster than domestic output prices last year but in Q1 they rose broadly together.

Prospects for inflation 6

6.1 The Bank's medium-term projection

Real output growth during 1995 is now estimated to have been steady at around ½% a quarter, close to the average growth rate of the economy of 2.4% a year since 1948 (the first year of the official series for GDP). Revisions to the data changed the apparent profile of growth during 1995, but left the estimated GDP at the end of the year more or less unaltered, so the economy entered 1996 with about the same demand relative to potential output as was thought at the time of the February *Report*.

The February *Report* identified two downside risks to activity in the short run: first, a period of destocking, and second, a deterioration in major export markets. The first risk has not yet materialised, although a reduction in stockbuilding is likely during 1996. A downturn triggered by destocking is still possible, but it now seems likely that firms will gradually use up their surplus stocks by increasing their output more slowly than any rise in demand for their products.

The second short-term risk to activity identified in the February *Report* has materialised: exports are lower as a result of a slowdown in Europe. There were further large downward revisions to prospects for demand in Germany; these have adverse implications for growth in the rest of the European Union, and for UK exports. As a result, during 1996, there is likely to be a switch from net exports to domestic demand. There are already signs of this in the trade and GDP data available for the first quarter. The medium-term prospects for net exports depend on the duration of the slowdown in Europe, particularly Germany. That slowdown should be short-lived, partly because of the easing of monetary policy in much of Europe in recent months, although its duration will depend also on the effect of fiscal tightening designed to meet the Maastricht deficit criterion.

In the medium term, the outlook for aggregate demand depends on consumption, the largest component. Consumption has been increasing at around its long-run trend rate since the beginning of 1994, but is likely to

accelerate this year. One reason for this is the strong growth of individuals' M4 balances, at an annual rate of around 7% in the first quarter of this year, compared to nominal consumption growth during last year of below 5%. Receipts treated as 'windfall' gains—which include the recent electricity rebates and building society payouts—may be spent partly on consumer durables; consumption of non-durables should be less affected. But growth rates of real earnings and personal disposable income are likely to increase this year, which will tend to raise non-durables consumption too.

Investment fell last year, accounting for about 40% of the—roughly one and a half percentage point—fall in the annual growth rate of GDP between 1994 and 1995. Even including Private Finance Initiative projects, total publicly sponsored capital investment is likely to decline in real terms in each of the next three years. However, ICCs' profitability remains high, as does the ratio of equity prices to the price of investment goods. Both factors imply that there is an incentive for firms to increase investment. Also, the rise in ICCs' M4 deposits in 1995 Q4 continued in 1996 Q1—at an annual growth rate of around 7%. In the past, such a rise has signalled an increase in ICCs' rates of investment. The February *Report* noted that strong ICCs' borrowing, if it were to continue as mergers and acquisitions activity subsided, would suggest an acceleration in firms' nominal expenditure. In 1996 Q1, takeover activity continued at a high level. The net sellers of equity in the acquired companies may purchase other financial assets, especially new equity issues, with their receipts—the central case in the projection below—but they may spend the funds instead on goods and services.

On the supply side of the UK economy, the two issues identified in the February *Report* remain relevant. First, real earnings growth continues to be surprisingly low, raising the possibility that the natural rate of unemployment is lower than in the 1980s. In February, the average earnings index, deflated by the tax and price index, was only 0.6% higher than three years ago, when unemployment had just passed its peak. The slight pick-up in real earnings at the beginning of 1996 can be explained by larger bonus payments this year than last. And preliminary data suggest that the level of settlements was unchanged at 3.5% in April, despite public sector review body pay awards above this level. If the natural rate of unemployment does turn out to have fallen, inflationary pressures throughout the forecast period will be weaker than in the central projection.

Chart 6.1
Current RPIX inflation projection

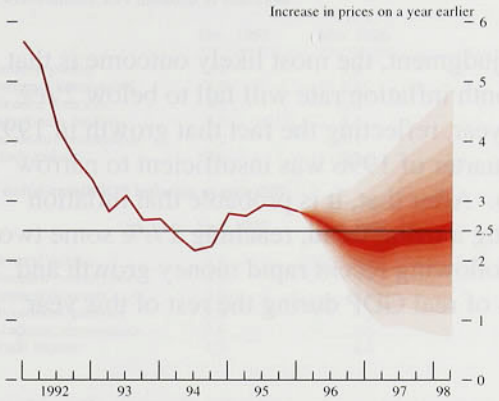
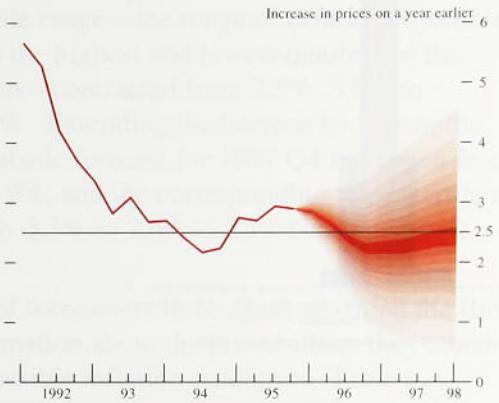


Chart 6.2
RPIX inflation projection in February

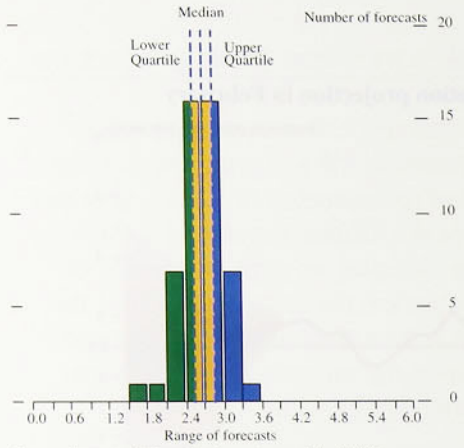


The chart shows the relative likelihood of possible outcomes. The central band, coloured deep red, includes the central projection: there is judged to be about a 10% chance that inflation will be within that central band at any date. The next deepest shade, on both sides of the central band, takes the distribution out to 20%; and so on, in steps of ten percentage points. Of course, it is impossible to assess the probabilities with any precision, but this represents the Bank's best estimate. The more uncertainty there is about the inflation outcome at any particular time horizon, the wider the bands, and the more gradually the colour fades. And, if the risks are more on one side than the other, then the remaining bands will be wider on that side of the central band.

Second, the Bank's projections assume that margins in the retail sector, which fell because of increased competition, will remain around their present level. That assumption is reasonable because retail margins do not appear in the past to have varied systematically over the business cycle.

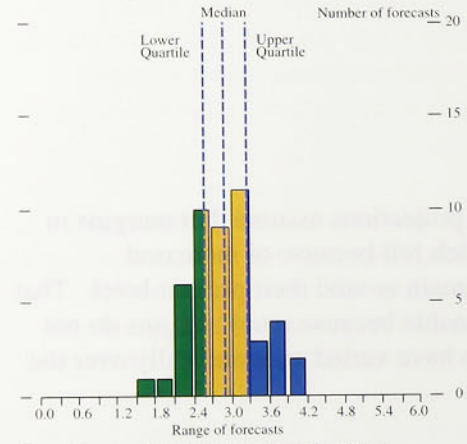
The Bank's new medium-term projection of RPIX inflation is shown in Chart 6.1; the February projection is shown in Chart 6.2. As usual, the projection is based on the assumptions that official interest rates remain unchanged over the next two years and that the effective exchange rate evolves according to differences in interest rates across countries. Public spending and tax rates are assumed to follow the profile set out in the November 1995 Budget. As explained in the February *Report*, the chart shows the Bank's view of the probability distribution for inflation outcomes. The central band in the chart, with the darkest shading, includes the central projection for inflation: there is judged to be about a 10% chance that inflation will be within that band at any date. The next deepest shades,

Chart 6.3
Distribution of RPIX inflation forecasts for 1996 Q4



Source: Forecasts of 49 outside forecasters as of April 1996.

Chart 6.4
Distribution of RPIX inflation forecasts for 1997 Q4



Source: Forecasts of 47 outside forecasters as of April 1996.

Table 6.A
Expected RPIX inflation[a]

	Range				
	less than 1.0%	1.0% to 2.5%	2.5% to 4.0%	4.0% to 5.5%	More than 5.5%
1996 Q4	3	37	50	9	2
1997 Q4	4	27	49	16	5

(a) 35 outside forecasters provided the Bank with their assessments of the likelihood, at two time horizons, of expected twelve-month RPIX inflation falling in the ranges shown above. This table presents the means of the responses for each range, for example on average, forecasters, assign a probability of 3% to inflation turning out to be less than 1% in 1996 Q4. Rows may not sum to 100, because of rounding.

on both sides of the central band, take the distribution out to 20%; and so on, in steps of ten percentage points. The width of the bands in Chart 6.1 gives an indication of the uncertainty about inflation over the next two years, while the asymmetry of the bands indicates the balance of the risks around the central projection.(1) In this way, Chart 6.1 illustrates the degree of uncertainty surrounding the central projections.

In the Bank's judgment, the most likely outcome is that the twelve-month inflation rate will fall to below 2½% over the next year, reflecting the fact that growth in 1995 and the first quarter of 1996 was insufficient to narrow the output gap. After that, it is probable that inflation will move along a rising trend, reaching 2½% some two years ahead, following recent rapid money growth and higher growth of real GDP during the rest of this year and next.

As in February, the major uncertainties surrounding the central projection are the timing and pace of that acceleration. In the short term, the risks to the projection are skewed a little towards the downside—the pick-up in growth may be slower to arrive than expected. But towards the two-year horizon, the risks of rapid consumption and investment growth are greater, and the risks are more on the upside. It is marginally more likely than not that inflation would be above 2½% in two years' time were official rates to remain unchanged throughout that period. RPIX inflation is expected to be a little higher than RPIY inflation because on balance, taxes affecting RPIX are likely to increase faster than RPIY inflation. In particular, the government has announced plans to increase the real rate of fuel taxation, and the Council Tax is assumed to rise broadly in line with local authority pay, rather than with prices.

The new central projection is similar to the one made in February, extended by one quarter (see Chart 6.2). The deterioration since February is offset by stronger domestic demand in the outlook for UK exports, partly in response to recent reductions in interest rates. As in February, the downside risks are mainly in the near term; now one quarter later, they are less likely to affect the outlook in two years' time. The upside risks apply also to 1998 Q2, to which the projection now extends. So the net effect of moving the projection forward one quarter is to give greater weight to the upside risks to inflation.

(1) The more uncertainty there is about inflation at any particular time horizon, the wider the bands and the more gradually the colour fades. If the risks are more on one side than the other, then the bands will be wider on that side.

6.2 Outside forecasts

Among the forecasts regularly monitored by the Bank, inflation expectations have fallen slightly at both the 1996 Q4 and 1997 Q4 horizons. The median outside forecast for RPIX inflation in the last quarter of this year is 2.7%, down from 2.8% in February (see Chart 6.3). Differences of view are a little narrower than before: the interquartile range—the range of central projections excluding the highest and lowest quarters of the distribution—contracted from 2.5%–3.0% to 2.5%–2.9%. Extending the horizon by a year, the median outside forecast for 1997 Q4 has fallen from 3.0% to 2.9%, and the corresponding interquartile range from 2.5%–3.3% to 2.6%–3.25% (see Chart 6.4).

A subset of forecasters have again provided the Bank with information about the probabilities they attach to various possible inflation outcomes. Table 6.A summarises their responses. As in February, the range of uncertainty around most forecasters' central projections is similar to that of the Bank. On average, they think it more likely than the Bank does that inflation will be over 2½% by 1997 Q4; but judgments vary from a probability of 19% to one of 91%.

The latest Barclays Basix Survey of inflation expectations among different groups shows a fall in mean expectations of what inflation will be at the end of 1996 (Table 6.B). So does the Merrill Lynch monthly survey of UK fund managers (Table 6.C), corroborating the findings reported in Chart 6.3. But at the end of 1997, the Barclays Basix numbers indicate a small rise in inflation expectations, while the Merrill Lynch ones point to a small fall.

There is little evidence to suggest that expectations of inflation up to the end of 1997 have increased. But prices in the markets for conventional and index-linked gilts imply that inflation expectations over the longer term have risen in the past quarter. Chart 6.5 shows calendar-month averages for estimates of inflation expected five and ten years ahead; the five-year expectation has risen by over half a percentage point. To some extent, this may reflect an increase in the risk premium paid for index-linked gilts rather than a true rise in inflation expectations, because bond market volatility generally has increased. But it is not clear that uncertainty specifically about inflation has increased, so it would be unwise to dismiss the possibility that long-term inflation expectations have risen.

Table 6.B
Barclays Basix Survey expectations

Percentage increases in prices

Twelve-month RPI inflation at end-1996

	Dec. 1995	Mar. 1996
General public	4.0	3.9
Business economists	2.9	2.8
Finance directors	3.2	3.0
Investment analysts	3.0	3.1
Academic economists	3.2	3.1
Trade unions	3.6	3.2

Twelve-month RPI inflation at end-1997

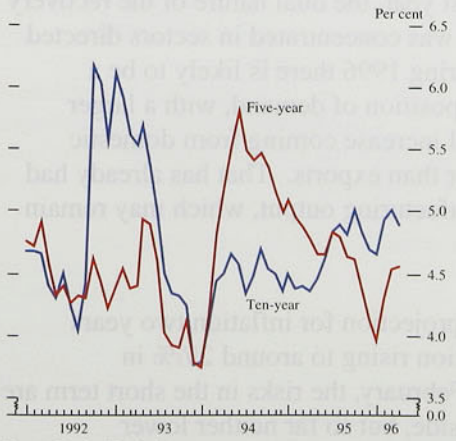
	Dec. 1995	Mar. 1996
General public	4.4	4.5
Business economists	3.3	3.6
Finance directors	3.8	4.0
Investment analysts	3.8	4.2
Academic economists	3.6	3.6
Trade unions	4.5	4.4

Table 6.C
Merrill Lynch survey of UK fund managers

Percentage increases in prices

Twelve-month RPI inflation at	1996 Jan.	Feb.	Mar.	Apr.	May
End-1996	3.1	3.1	2.8	2.9	2.9
End-1997	3.5	3.5	3.2	3.3	3.4

Chart 6.5
Implied forward inflation rates[a]



Source: Bank of England.

(a) Calendar-month average.

6.3 Conclusions

Retail price inflation was stable over the past three months. Manufacturing output price inflation, in contrast, fell to an annualised rate of about 1% over the past quarter. Company surveys, CBI and CIPS for example, report continuing weak cost pressures, and little sign of an upturn in output price inflation. A continuation of recent underlying monthly increases in retail prices would result in a modest decline of the twelve-month inflation rate over the rest of this year to below 2.5%. The main risk to that prospect is the sensitivity of food prices—which make up 14% of the RPI—to unusual seasonal or other factors (such as BSE).

Non-oil output growth has been around trend for six quarters. Over that period the output gap has, therefore, not closed and has contributed to the fall in underlying inflation. The main short-term risk is to sectors dependent on exports to Europe where growth prospects have been significantly revised downwards since the February *Report*. But the continuing growth of broad money suggests that domestic demand is likely to accelerate over the next year or so because of growth in personal consumption and corporate investment. In real terms, broad money growth increased from around 2% in 1994 to 7% in 1995 and further to 9% in the first quarter of this year. Part of the recent acceleration is accounted for by a structural break in the series following the introduction of a gilt repo market. But whatever adjustment is made for that change, the picture remains one of rapid broad money growth—consistent with the central projection of an acceleration of domestic demand from the end of this year.

Until the end of last year, the dual nature of the recovery meant that growth was concentrated in sectors directed to net exports. During 1996 there is likely to be a change in the composition of demand, with a larger fraction of the total increase coming from domestic consumption rather than exports. That has already had an impact on manufacturing output, which may remain weak for a time.

The Bank's latest projection for inflation two years ahead shows inflation rising to around 2½% in mid-1998. As in February, the risks in the short term are more on the downside, but so far neither lower stockbuilding nor lower exports have led to any noticeable fall in output growth. As a result, although those risks remain, they now seem less serious, and with

the passage of time they will, if not realised, disappear from the picture. It was precisely at this juncture—with apparent short-term weakness in some sectors masking signs of more buoyant future activity—that policy mistakes tended to be made in the past. That is why it is important that monetary policy continues to look forward and to focus on meeting the inflation target. The current projection shows that there are risks to the inflation target two years ahead, but the appropriate response depends on how the short-term downside risks evolve over the next few months.

Glossary and other information

Glossary of selected terms

RPI inflation: inflation measured by the retail prices index.
RPIX inflation: inflation measured by the RPI excluding mortgage interest payments.
RPIY inflation: inflation measured by the RPI excluding mortgage interest payments and the following indirect taxes: the Council Tax, VAT, duties, car purchase tax and vehicle excise duty, insurance tax and airport tax.
HARP index: a price index which replaces the mortgage interest payments in the RPI with a Bank estimate of the user-cost of housing.
THARP index: the HARP index excluding indirect taxes.

M0: notes and coin in circulation outside the Bank of England and bankers' operational deposits at the Bank.
M4: UK non-bank, non-building society private sector's holdings of notes and coin, together with all sterling deposits (including certificates of deposit) held with UK banks and building societies by the non-bank, non-building society private sector.
Divisia money: a measure of the money stock in which each component is weighted according to an estimate of how useful are the transaction services it provides.

ICCs: industrial and commercial companies.
OFIs: other financial institutions.

Three-month annualised: the percentage change in a series between one period and that three months earlier, expressed as an annual rate.

DoE: Department of the Environment.

Symbols and conventions

Except where otherwise stated, the source for the data used in charts and tables is the Office for National Statistics (ONS).
The measures of inflation included in this *Report* have been adjusted by the Bank for an error by the ONS' predecessor, the Central Statistical Office, in underrecording RPI and RPIX inflation between February and May 1995.
. . 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.

Other information

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The Summary of this *Report* is available at:
http://www.bankofengland.co.uk

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