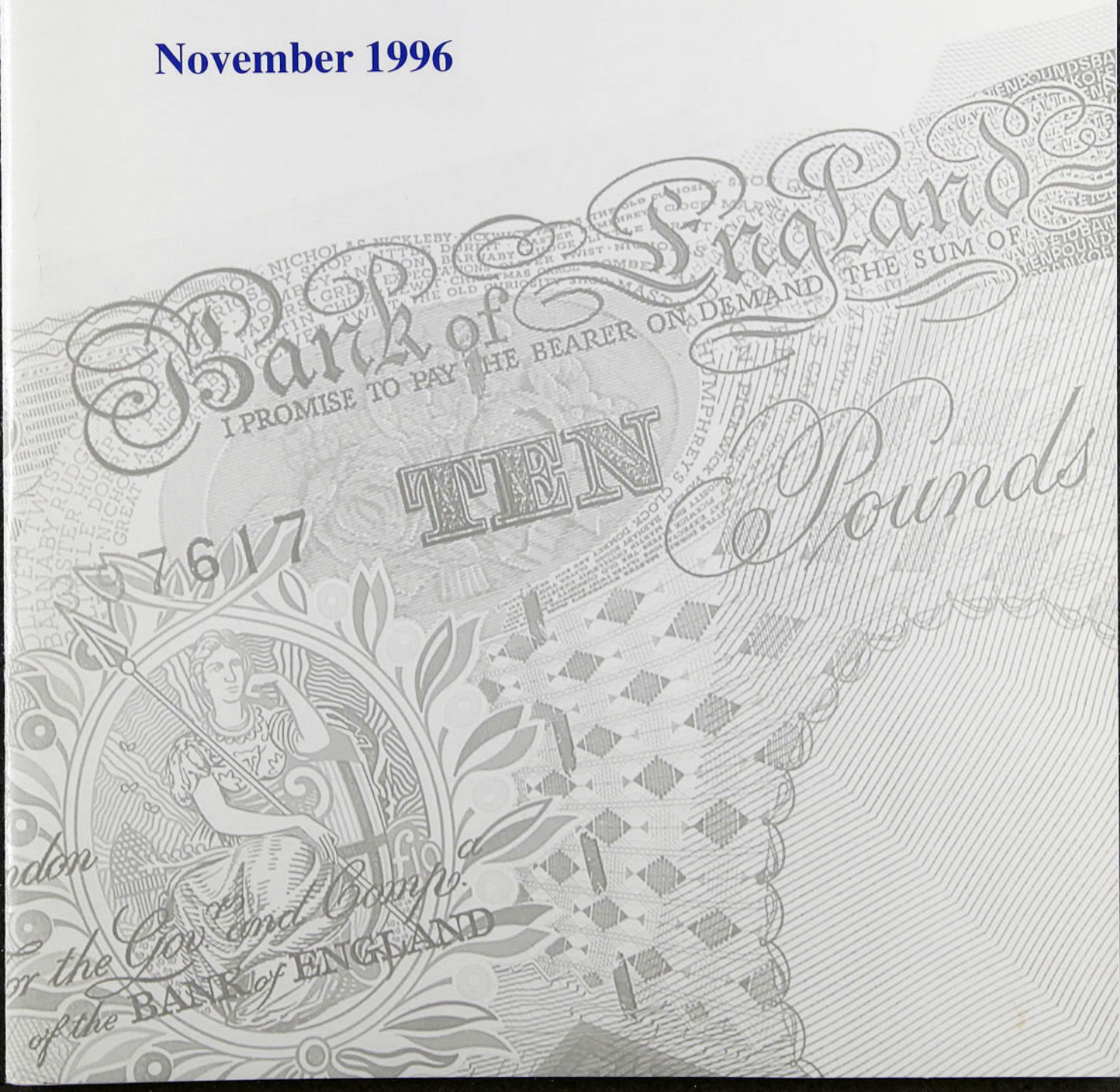
Bank of England

Inflation Report

November 1996



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Summary

Since the August *Inflation Report*, there have been three important pieces of news. First, the short-run outlook for inflation has deteriorated. Second, the effective exchange rate has risen by 8%. Third, the estimate of GDP growth in the first half of the year has been revised up, and for the third quarter is above trend.

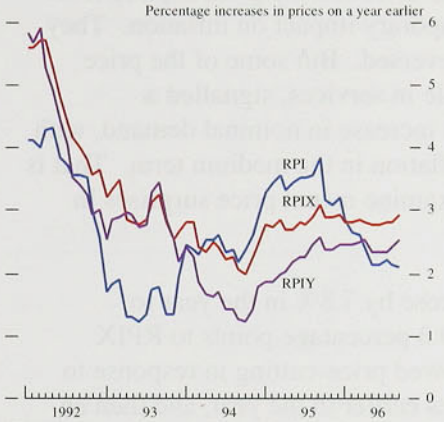
During the course of this year the balance of the recovery shifted from net exports to growth of domestic demand, especially consumption. That trend is likely to be reinforced by the appreciation of sterling since the August *Inflation Report*. It would be a mistake, however, to try to alter the balance of the recovery by pursuing an easier monetary policy in order to offset the rise in the exchange rate. That would do nothing to control the growth of domestic demand. An appropriate fiscal policy can help to restrain the growth of either public or private consumption. But if monetary policy fails to counteract the potential inflationary consequences of growth of domestic demand then, as in the late 1980s, the problem could become a weak rather than a strong exchange rate.

Even after the recent increase in official interest rates of ¼ percentage point, it remains more likely than not that inflation will be above the target at the end of the forecast horizon. And the short-run rise in inflation means that there is now much less chance of inflation being below 2½% during 1997. Achievement of the inflation target remains elusive.

The recent rise in rates should help to reinforce credibility. But what matters most is the continuous pursuit of a monetary policy which is consistent with achieving the target in the medium term. To ensure this outcome, some further rise in interest rates is likely to become necessary in due course.

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 duty.

(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 retail price inflation are similarly adjusted.

Table 1.A
Headline inflation in the G7[a]

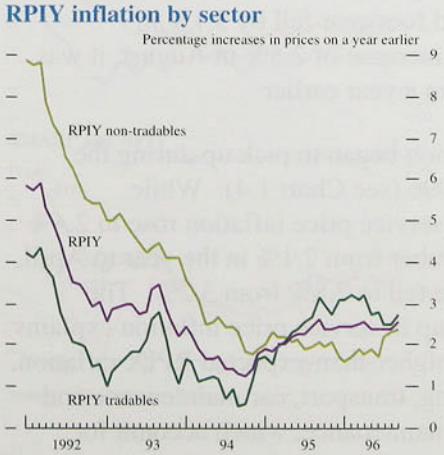
Average twelve-month percentage changes over the period shown

	Canada	France	Germany (b)	Italy	Japan	United Kingdom (c)	United States
1970s	7.4	8.9	4.9	12.7	9.1	12.8	7.1
1980s	6.5	7.4	2.9	11.3	2.5	7.0	5.6
1990s (d)	2.5	2.4	1.7	5.1	1.5	4.4	3.4
Twelve months to Sept. 1996	1.5	1.6	1.4	3.4	0.0	2.9	3.0

Sources: ONS and Bank for International Settlements.

(a) Group of seven largest industrialised economies.
(b) Pan-German prices used after January 1991.
(c) RPIX.
(d) From January 1990 to September 1996.

Chart 1.2
RPIY inflation by sector



Sources: ONS and Bank of England.

1.1 Retail price measures

The twelve-month inflation rate targeted by the Government, the change in RPIX—retail prices excluding mortgage interest payments—rose to 2.9% in September, following five consecutive months around 2.8% (see Chart 1.1). Inflation has persisted at just under 3% since October 1995.

RPIY inflation, which excludes the effect of indirect tax changes as well as mortgage interest payments, rose to 2.5% in the year to September, from 2.3% in the year to June. The twelve-month headline (RPI) rate was stable around 2.1% between June and September.

Inflation has also been low in most other major industrialised countries in recent years, as Table 1.A shows. Indeed, inflation in the 1990s has, on average, been lower in Canada, France, Germany, Japan and the United States than in the United Kingdom.

Goods and services each fall into two broad categories—those which are internationally tradable and those which are not. Exchange rate movements can affect the prices of tradables directly, while domestic market conditions are more important for the prices of non-tradable goods and services. The tradables component of RPIY inflation was on a downward trend during the first half of the year, as the effects of commodity price increases and last year's sterling depreciation fell out of the twelve-month rate of inflation (see Chart 1.2). More recently, tradables inflation has picked up as a result of the rise in petrol prices. Although non-tradables inflation was fairly subdued during the first half of 1996, there was evidence of a pick-up more recently.

Measuring changes in price indices over less than twelve months gives a better indication of more recent developments in inflation, although temporary price surprises make such measures volatile. On a seasonally adjusted, three-month annualised basis, both RPIX and RPIY inflation had fallen below 2.5% by June of this year. But, by September, as Table 1.B shows, the three-month rates had picked up again to 2.8% for RPIX and 3.2% for RPIY.

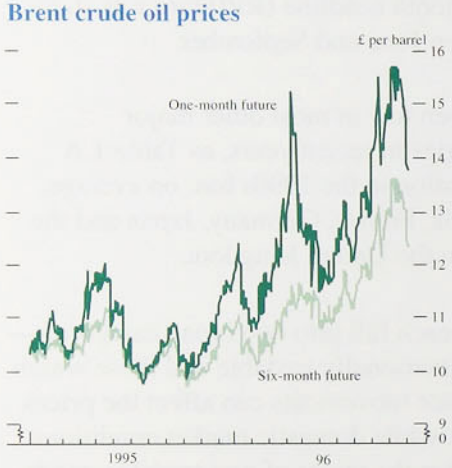
Table 1.B
Short-run measures of inflation[a]

	1995			1996				
	June	Aug.	Nov.	Feb.	Mar.	June	Aug.	Sept.
RPI								
Three-month	3.7	2.6	0.8	3.6	1.5	1.7	2.5	2.3
Six-month	3.8	3.1	1.7	2.2	2.2	1.6	2.1	2.0
RPIX								
Three-month	2.6	2.6	1.6	4.4	2.9	2.3	2.8	2.8
Six-month	3.0	2.6	2.1	3.0	3.3	2.6	2.6	2.5
RPIY								
Three-month	2.8	2.7	1.4	3.1	3.0	2.1	2.8	3.2
Six-month	2.8	2.7	2.0	2.2	2.4	2.5	2.6	2.6
HARP								
Three-month	1.7	1.7	2.3	4.3	3.6	2.8	2.1	2.5
Six-month	2.0	1.7	2.0	3.3	3.5	3.2	3.0	2.7
THARP								
Three-month	1.4	1.6	2.1	4.2	4.3	2.7	2.1	2.5
Six-month	1.7	1.6	1.8	3.1	3.4	3.5	3.0	2.6

Sources: ONS and Bank of England.

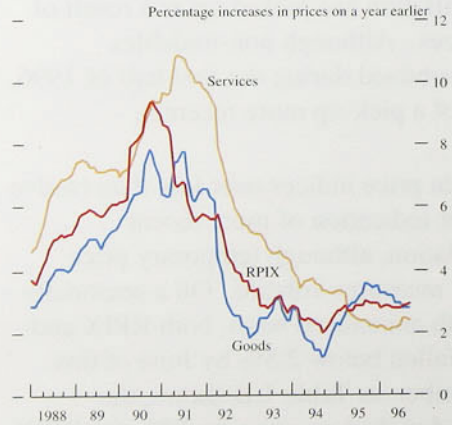
(a) All series are seasonally adjusted and annualised by the Bank. The seasonal adjustment of RPI and RPIX excludes taxes by multiplying the ratios of RPI to RPIY, and RPIX to RPIY by seasonally adjusted RPIY. HARP and THARP are calculated by combining seasonally adjusted RPIX and RPIY respectively, with the Bank's estimate of the user cost of housing.

Chart 1.3
Brent crude oil prices



Source: International Petroleum Exchange.

Chart 1.4
Goods and services



Sources: ONS and Bank of England.

Note: Data are seasonally adjusted by the Bank.

Twelve-month RPIX inflation outturns have been higher than expected over the three months since the August *Report*. That was despite downward pressure from seasonal food prices, which fell 5.8% in September. But there were a number of unexpectedly large price increases. Some were the result of adverse supply conditions, for example in the world oil market. Such shocks have a one-off effect on the general price level and, therefore, a temporary impact on inflation. They may eventually be reversed. But some of the price surprises, for example in services, signalled a faster-than-expected increase in nominal demand, with consequences for inflation in the medium term. That is why it is useful to examine recent price surprises in some detail.

Retail petrol prices rose by 7.8% in the year to September, adding 0.3 percentage points to RPIX inflation. That followed price-cutting in response to competitive pressures earlier in the year, and then an increase in oil prices in response to the indefinite suspension of Iraqi oil exports in September. But that effect is expected to be largely temporary. The price of oil for delivery in six months' time, although it has risen, is much lower than the price for one-month future delivery, as Chart 1.3 shows. And the difference between the two prices has increased recently, from an average of £0.38 a barrel over the 1990s to around £1.70 a barrel since the August *Report*. Once the oil market has stabilised, competitive pressures are likely to re-emerge, partly reversing recent retail price increases.

Clothing and footwear prices rose by 5.2% in September, the largest monthly rise since records began in 1947. That increase followed low prices earlier in the year. Manufacturers may have been 'testing the market', seeing whether demand had increased enough to support higher prices. Although the volume of retail sales of textiles, clothing and footwear fell by 3.1% in September, after an increase of 2.5% in August, it was still 5.5% higher than a year earlier.

Service sector inflation began to pick up during the second quarter of 1996 (see Chart 1.4). While seasonally adjusted service price inflation rose to 2.4% in the year to September from 2.1% in the year to April, goods price inflation fell to 2.8% from 3.2%. The broadly based pick-up in service price inflation explains much of the recent higher-than-expected RPIX inflation. The prices of catering, transport, car maintenance and housing repair and maintenance, which account for almost a third of the service sector component of the

retail prices index, increased on average by 4.5% in the year to September, up from 3.8% in April. And the prices of dwelling and car insurance rose by 1.4% and 0.9% respectively in July (the latest well-founded data available), in contrast to last year's sharp falls.(1) Those rises were consistent with stronger demand for, and output of, services than goods over the past year or so, increasing the pressures on capacity in the service sector. Consumption of all services (excluding the volatile 'other services' component) grew by more than 1.0% between the first and second quarters of 1996. So the recent increase in service sector price inflation is likely to be in part the result of faster demand growth, with implications for inflation over the medium term. Reports from the Bank's Agents corroborate that view.

The housing depreciation component of RPIX rose by 1.1% in September, following an increase of 1.2% in the previous month. That reflects the recent pick-up in house prices.

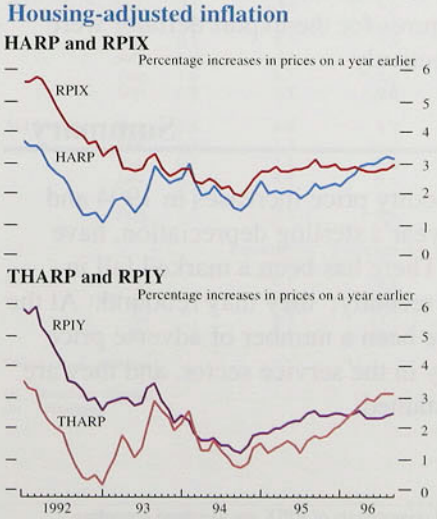
Higher-than-expected price levels will result in higher twelve-month inflation over the next year. Some of the surprises, such as that to the oil price, are likely to be partly reversed. But some are a sign that nominal demand may be increasing faster than expected, or that the trade-off between increases in prices and in volumes has worsened. In either case, aggregate inflation will be higher than expected, even after the one-off price effects drop out of the twelve-month rates.

1.2 Other price indices

The Bank has constructed housing-adjusted versions of RPIX and RPIY which include a measure of owner-occupied housing costs in place of mortgage interest payments: HARP and THARP, respectively. HARP and THARP rates have been consistently above RPIX and RPIY since the spring of 1996 because of the recovery in house prices which began last year (see Chart 1.5).

Several prices that enter the retail prices index change relatively infrequently and by large amounts. Such movements may reflect cost increases that have built up over time. Although it is appropriate to include those increases in measures of the cost of living, they may distort measures of underlying inflation. So the Bank monitors two alternative indices, constructed to limit the

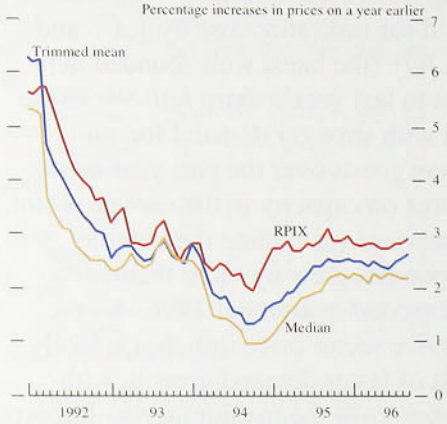
Chart 1.5
Housing-adjusted inflation



Sources: ONS and Bank of England.

(1) The majority of data for these components are obtained from quarterly surveys.

Chart 1.6
Measures of underlying inflation



Sources: ONS and Bank of England.

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

Percentage changes on a year earlier

	Consumption	Investment	Government	Domestic demand (a)	Exports	Imports	GDP (b)
1994	2.5	2.2	2.5	2.5	0.8	2.9	1.6
1995	2.6	6.3	2.5	3.1	4.7	7.3	1.8
1996 Q1	2.5	6.0	1.4	2.8	3.0	4.7	2.0
Q2	2.5	2.3	1.8	2.2	2.0	2.4	1.7

Seasonally adjusted quarterly percentage changes

Q1 on Q4	0.8	-0.1	0.1	0.5	-0.1	0.0	0.5
Q2 on Q1	0.5	0.5	0.9	0.6	0.7	0.2	0.7

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

effects of extreme price movements: the median and trimmed mean indices.(1)

As Chart 1.6 shows, those measures of underlying inflation tend to be less volatile than RPIX. And they are often lower, because the outlying price changes have tended to be large and positive. The twelve-month trimmed mean inflation rate rose in recent months, while the twelve-month median inflation rate was stable at around 2.2%. So, even after stripping out the largest price surprises, positive price shocks to a particular sector—services—were important in explaining recent movements in RPIX.

1.3 Expenditure deflators

The GDP deflator and its components measure the price of domestic value added. In principle, therefore, they are a better measure of domestically generated inflation than RPIX. But the GDP deflator is less timely than RPIX and is prone to revision. Inflation as measured by the GDP deflator has been lower than RPIX inflation in recent years. The annual increase in the GDP deflator was 1.6% in 1994 and 1.8% in 1995, compared with increases in RPIX of 2.3% and 2.9% respectively; in 1996 Q2 the GDP deflator was 1.7% higher than a year earlier, compared with RPIX inflation of 2.8%. That implies imports were an important source of inflationary pressures. The rises in the import and export deflators were smaller in 1996 Q2 than in 1996 Q1, in line with a 1.5% strengthening of sterling between the first and second quarters. Table 1.C shows that the import deflator increased by 2.4% in the year to the second quarter, having risen 4.7% in the year to the first quarter; the corresponding figures for the export deflator were 2.0% and 3.0% respectively.

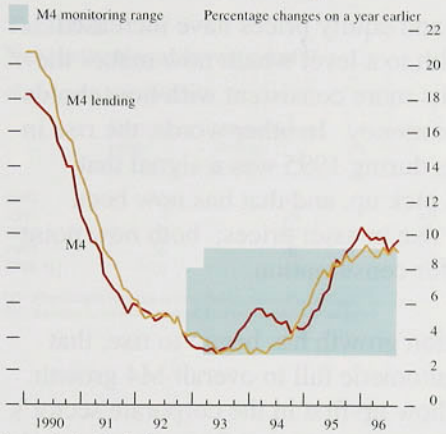
1.4 Summary

The effects of commodity price increases in 1994 and early 1995, and last year's sterling depreciation, have gradually worn off. There has been a marked fall in seasonal food prices recently; they may rebound. At the same time, there have been a number of adverse price surprises, particularly in the service sector, and they are more likely to be sustained.

(1) The monthly changes in all components of RPIX are weighted according to their importance in the expenditure of a 'typical' household and are then ranked by size. The median is the rate above which half of the resulting distribution lies. The trimmed mean removes the largest and smallest 15% of price changes.

Money and interest rates 2

Chart 2.1
Growth of M4 and M4 lending



Source: Bank of England.

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

Per cent

		1 month	3 months (b)	6 months (b)	12 months
Notes and coin	Dec.	0.7	8.0	6.8	6.0
	Mar.	0.5	6.7	7.3	6.4
	June	1.0	8.3	7.5	7.1
	July	0.6	8.6	8.2	7.2
	Aug.	0.6	9.1	7.7	7.6
	Sept.	0.4	6.8	7.6	7.5
	Oct.	0.4	6.2	7.4	7.4
M0	Dec.	1.1	9.6	8.4	5.9
	Mar.	0.5	5.0	7.3	5.6
	June	1.1	8.1	6.5	7.5
	July	0.4	7.1	8.0	7.1
	Aug.	0.8	9.4	7.5	7.5
	Sept.	0.2	5.5	6.8	7.0
	Oct.	0.7	7.0	7.1	7.5
M4	Dec.	0.7	10.2	9.9	9.8
	Mar.	1.0	11.4	10.8	9.8
	June	0.6	8.5	9.9	9.9
	July	0.6	8.1	8.4	9.1
	Aug.	1.0	8.7	9.6	9.5
	Sept.	0.8	9.5	9.0	9.9
M4 lending	Dec.	0.8	8.8	8.7	8.7
	Mar.	0.7	11.7	10.2	9.0
	June	0.7	8.4	10.0	9.3
	July	0.7	8.9	9.1	8.9
	Aug.	0.7	8.5	8.5	9.3
	Sept.	0.5	7.8	8.1	9.1
			1 quarter (b)	2 quarters (b)	4 quarters
Divisia	1995 Q4		9.3	9.5	8.4
	1996 Q1		11.3	10.3	9.5
	Q2		9.3	10.3	9.9
	Q3		7.4	8.3	9.3

Source: Bank of England.

(a) Seasonally adjusted.
(b) Annualised.

Broad money and lending growth remained high in the third quarter. As Chart 2.1 shows, broad money growth was low between 1992 and 1994, rose sharply during 1995 and remained high during 1996. Borrowing by the personal sector continued to grow steadily in the third quarter, in line with the recovery in the housing market. Monetary data continue to suggest that the outlook for consumer spending is robust.

2.1 The demand for money

The twelve-month growth rate of broad money (M4) was 9.9% in September, above the Government's monitoring range of 3%–9% (see Table 2.A). Chart 2.2 shows that the personal and corporate sectors accounted almost equally for the strength of M4 during 1995 and 1996.

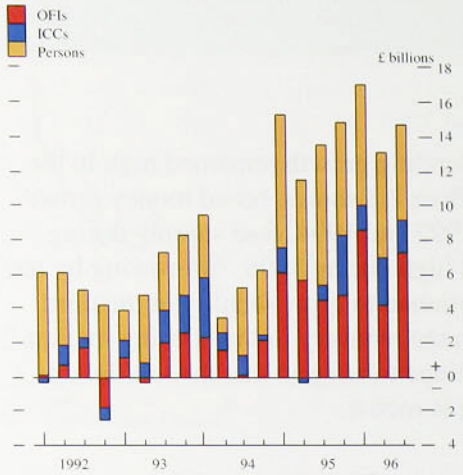
The introduction of the gilt repo market in January led to a rise in the demand for, and supply of, broad money, which will have boosted the twelve-month growth rate during 1996, perhaps by around one percentage point. Adjusting for that, the twelve-month growth rate has been around 8%–9% for most of the year. If such a growth rate is to be consistent with the inflation target, then the velocity of money will need to fall by 3%–4% a year, whereas over the past four years it fell by less than 1% a year. So the current growth rate is most unlikely to be compatible with the inflation target in the medium term.

Personal sector

Although there is no simple relationship between personal sector deposits and consumer spending, rising deposits have in the past generally coincided with strengthening consumer spending. Previous *Reports* and an article in the May *Quarterly Bulletin* argued that, based on past relationships between personal sector deposits and their main determinants (consumption, income, wealth and interest rates), deposits were higher and spending was lower than usual in 1995.(1) Nominal spending was expected to rise during 1996, bringing money holdings more into line with one of their main determinants, consumption. That now seems to be

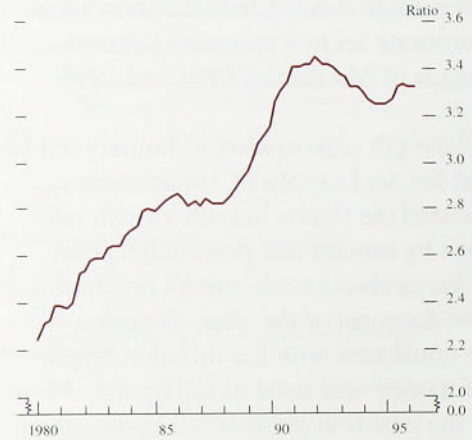
(1) See Thomas, R (1996), 'Understanding broad money', *Bank of England Quarterly Bulletin*, May, pages 163–79.

Chart 2.2
M4: quarterly flow, by sector



Source: Bank of England.

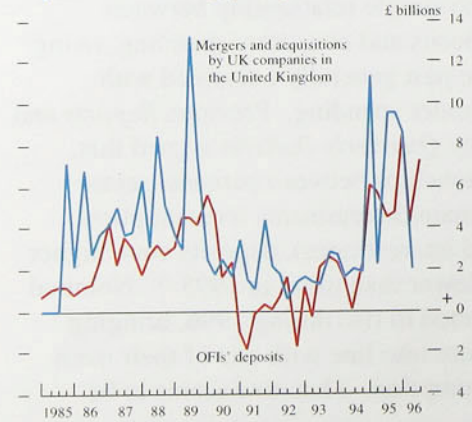
Chart 2.3
Individuals' deposits relative to consumption[a]



Sources: ONS and Bank of England.

(a) Stock of individuals' deposits divided by quarterly nominal consumption.

Chart 2.4
The flow of OFIs' deposits and merger and acquisitions activity per quarter



Sources: ONS and Bank of England.

happening: nominal consumption growth averaged 1.1% a quarter last year, compared with 1.5% in the first half of this year; by contrast, deposit growth fell from 1.8% to 1.6%, and fell further to 1.3% in Q3. Put another way, the ratio of individuals' money holdings to consumption rose in 1995, but has now flattened out as nominal spending has accelerated, as shown in Chart 2.3.

Rising house prices and equity prices have increased personal sector wealth to a level which now makes the earlier rise in deposits more consistent with households' long-run demand for money. In other words, the rise in individuals' deposits during 1995 was a signal that consumption would pick up, and that has now been corroborated by the rise in asset prices; both now point to a robust outlook for consumption.

Although consumption growth has begun to rise, that will not lead to an automatic fall in overall M4 growth. The spending will show up first in the corporate sector's accounts as deposits are 'transferred' from the personal sector. Broad money growth would begin to fall only if a sector began to use money balances to repay bank debt. So while sectoral explanations of broad money growth are useful, it is still important to consider the overall broad money aggregate.

Industrial and commercial companies (ICCs)

Deposits held by ICCs rose 2.1% in Q3, in line with the average increase over the past year. Changes in ICCs' deposits have often preceded changes in investment. During the first half of this year, ICCs' nominal investment grew by nearly 5% a quarter, broadly consistent with previous rises in deposits. The further rise in deposits in Q3 is consistent with the Bank's view that investment will continue to grow (see Section 3).

Other financial institutions (OFIs)

The deposits of OFIs are volatile from quarter to quarter: OFIs switch quickly between deposits and other forms of liquid assets as expected returns change. Despite the volatility, there was a clear rise in OFIs' deposits during 1995 and the first three quarters of 1996. Chart 2.4 suggests that it may have been linked to the strength of merger and acquisition activity over that period. Payouts to shareholders following a takeover might lead OFIs, such as life assurance and pension funds and securities dealers, to hold higher money balances, at least temporarily, until portfolios are rebalanced. In the second quarter, merger and acquisition activity and

OFIs' deposits growth fell. In the third quarter, deposits rose sharply; data for third-quarter mergers and acquisitions were not available when this *Report* was finalised, but early indications suggest a rise.(1)

In part, the rise in OFIs' deposits may have reflected a portfolio shift to shorter-term assets. In 1995, institutional investment in short-term assets (including bank deposits) rose, as Table 2.B shows, while investment in UK company securities fell. That general pattern persisted in the first half of 1996. Increased investment in short-term assets occurred despite the rise in the UK equity market during 1995 and 1996, and lower interest rates on deposits in the first half of 1996.

Table 2.B
Net institutional investment(a)

Percentage of investment in:

	Short-term assets	UK government sterling securities	UK company securities	Other (b)
1992	12	42	22	23
1993	4	28	40	28
1994	5	41	42	11
1995	26	42	10	22
1996 H1	26	35	7	32

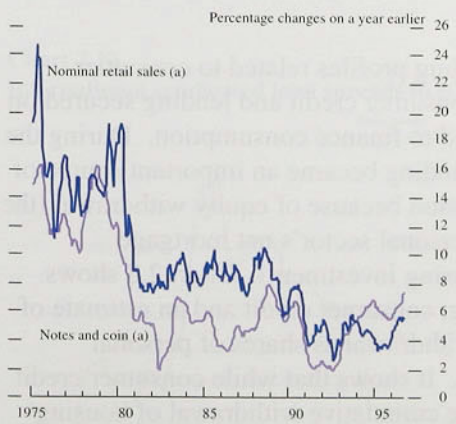
(a) Percentages may not sum to 100 because of rounding.
(b) Includes overseas securities, unit trusts, land and property.

Divisia money

The Bank's Divisia measure of money adds together various monetary assets weighted according to their transactions characteristics. The more liquid a particular asset, the more likely it is to be used for transactions purposes, giving it a higher weight. As an article in the *Quarterly Bulletin* argues, Divisia measures are therefore likely to be more closely related to nominal spending than other measures of money.(2)

In the third quarter, Divisia money grew by 1.8%, its lowest growth for about a year. Personal sector Divisia growth fell a little, while corporate Divisia growth rose. The rise in personal sector liquidity over the past year—in the form of Divisia money balances—is likely to be feeding through to higher consumption growth.

Chart 2.5
Growth of notes and coin and retail sales



Sources: ONS and Bank of England.

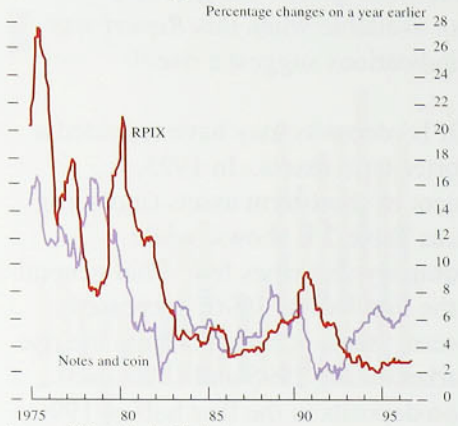
(a) Three-month moving average.

Narrow money

Narrow money growth has increased since the August *Report*. In October, the twelve-month growth rate of notes and coin was 7.4%, up from an average of around 6% during 1995 and the early part of 1996. Narrow money growth has been above the Government's monitoring range of 0%–4% for nearly four years. The pick-up in narrow money growth during the summer coincided with higher retail spending growth. Chart 2.5 shows the relationship between growth of notes and coin and retail sales: over the past 20 years, the correlation between twelve-month growth of notes and coin and retail sales was around 0.9, but it fell to less than half that in the past ten years, partly because of more widespread use of credit and debit cards.

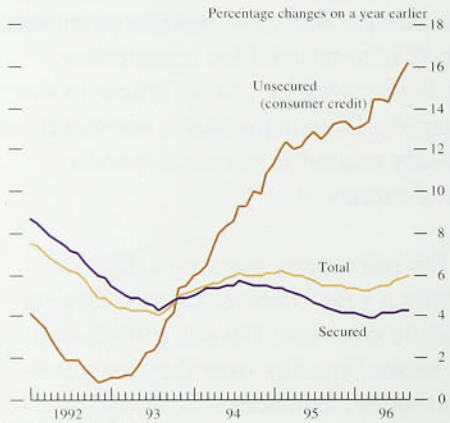
(1) The rise in OFIs' deposits in 1996 Q1 was also boosted significantly by the introduction of the gilt repo market.
(2) Janssen, N (1996), 'The demand for Divisia money by the personal sector and by industrial and commercial companies', *Bank of England Quarterly Bulletin*, November, pages 405–11.

Chart 2.6
Notes and coin growth and RPIX inflation



Sources: ONS and Bank of England.

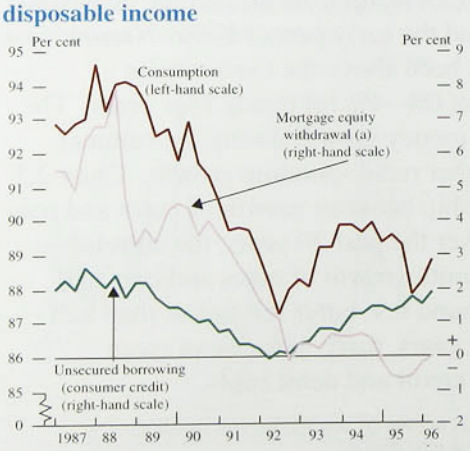
Chart 2.7
Growth of individuals' borrowing



Source: Bank of England.

Note: Includes borrowing from institutions other than banks and building societies.

Chart 2.8
Mortgage equity withdrawal, unsecured borrowing and consumption as shares of disposable income



Sources: ONS and Bank of England.

(a) Loans and grants less investment in houses and the value of sales by local authorities. Data for 1996 are estimated.

In the past, changes in narrow money growth have often preceded changes in inflation, as Chart 2.6 shows: rising narrow money growth has, on average, been followed by rising RPIX inflation over the subsequent year. But the relationship is imprecise and has changed over time. As people have got used to low inflation during the 1990s, they may have become more willing to hold cash and less willing to find ways to economise on its use, for any given level of spending. If that were the case, as seems probable, then low inflation would be consistent with a higher rate of narrow money growth than before.

2.2 Credit demand

Bank and building society lending to the non-bank private sector (M4 lending) continued to grow at a similar rate to that in the first half of the year. The twelve-month growth rate was 9.1% in September.

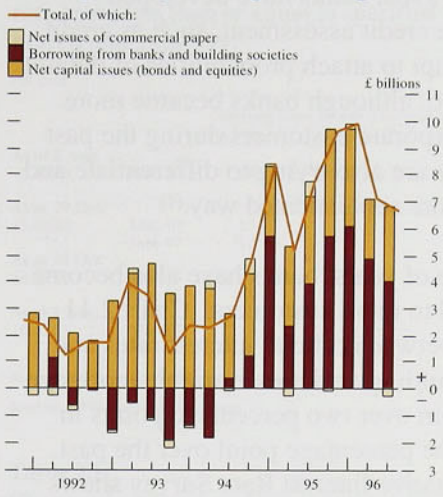
Personal sector

Total lending to individuals, which includes lending by institutions other than banks and building societies, has gathered pace. Its twelve-month growth rate rose from 5.5% to 5.9% over the year to September 1996.

Chart 2.7 shows individuals' borrowing split between that secured on property and that which is not explicitly secured (consumer credit). Lending secured on property makes up about 85% of total lending to individuals. As the chart shows, consumer credit growth increased further over the latest three months, taking the twelve-month growth rate to 16.2%. Lending for house purchase has also started to recover over the past six months or so, in line with rising housing turnover and prices.

How are these lending profiles related to consumer spending? Both consumer credit and lending secured on housing can be used to finance consumption. During the 1980s, mortgage lending became an important source of credit for consumption because of equity withdrawal (the gap between the personal sector's net mortgage borrowing and housing investment). Chart 2.8 shows consumer spending, consumer credit and an estimate of mortgage equity withdrawal as shares of personal disposable income. It shows that while consumer credit has accelerated, the cumulative withdrawal of housing equity since around 1992 has been negligible (because of the weakness of the housing market). So total consumption lending, including that secured on property, has not grown particularly quickly relative to consumer spending (as shown in Chart 2.7).

Chart 2.9
ICCs' quarterly sterling financing



Source: Bank of England.

Table 2.C
Growth in bank and building society lending

Percentage changes on a year earlier

	Persons (a)		ICCs	OFIs	Total
	Secured	Unsecured			
1995 Q3	5.3	11.4	10.5	15.8	**8.3**
Q4	4.9	12.8	13.9	14.6	**8.7**
1996 Q1	4.8	13.0	13.7	16.3	**9.0**
Q2	5.0	13.6	15.4	15.9	**9.3**
Q3	4.9	15.0	15.1	14.1	**9.1**

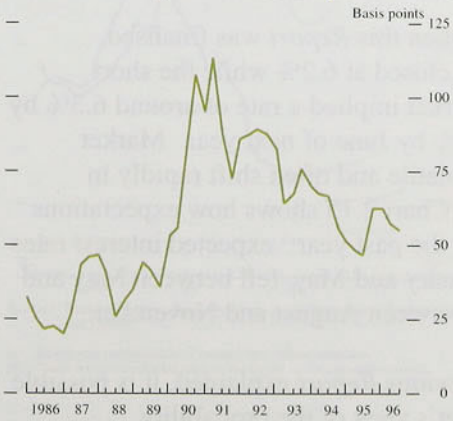
Contributions to annual growth in bank and building society lending (percentage points) (b)

	Persons	ICCs	OFIs	Total
1995 Q3	3.7	2.0	2.5	**8.3**
Q4	3.6	2.7	2.4	**8.7**
1996 Q1	3.6	2.7	2.7	**9.0**
Q2	3.6	3.0	2.7	**9.3**
Q3	3.7	3.0	2.4	**9.1**

Source: Bank of England.

(a) Excludes unincorporated businesses.
(b) Rows may not sum to totals because of rounding.

Chart 2.10
International syndicated loan spreads to ICCs(a)



Sources: ONS and Bank of England.

(a) Spreads over Libor weighted by loan size. Four-quarter moving average.

Industrial and commercial companies

ICCs continued to borrow strongly, from banks and capital markets, in the latest three months. Chart 2.9 shows that ICCs' sterling funding (debt and equity) began to rise sharply at the beginning of 1995 after a period in which firms repaid bank debt. In the first three quarters of this year, ICCs' sterling financing was more than 10% higher than in the same period last year. The strength of ICCs' borrowing is linked partly to higher merger and acquisition activity, much of which is cash-financed, either through bank borrowing or drawing down deposits.

Other financial institutions

Borrowing by OFIs accounted for nearly a fifth of the stock of bank and building society lending at the end of September. OFIs' borrowing rose during 1994 and has remained high since then. Table 2.C shows that, over the past year, their borrowing contributed only a little less than that of ICCs to overall M4 lending growth.

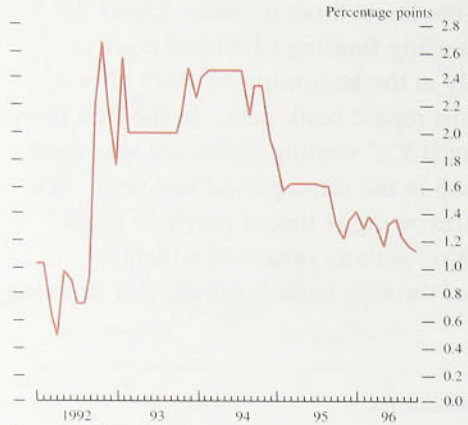
The August *Report* noted that part of the rise in OFIs' borrowing was linked to borrowing by leasing companies. During the first three quarters of this year bank lending to leasing companies was about three times higher than in the same period last year. The Finance and Leasing Association reported that gross lending by leasing companies to finance plant and machinery spending rose by around 45% between the first half of last year and the same period this year. So part of the borrowing by OFIs is linked to higher planned investment by ICCs.

2.3 Supply of credit

The supply of credit responds to the demand for it and is also determined by banks' and other lenders' willingness to lend. Banks' lending spreads are one indicator of their willingness to lend. The Bank's Representative Interest Rate Survey indicates that the gap between ICCs' loan and deposit rates fell over the two years to 1996 Q2. Chart 2.10 shows an alternative measure (for which a longer run of data is available)—the spread over Libor paid by ICCs on loans from international bank syndicates.(1) From a peak in 1991, spreads had approximately halved by 1996, but were not as low as

(1) Spreads on loans from international bank syndicates probably follow a similar trend to spreads on loans made solely by UK banks; foreign-currency borrowing by ICCs accounted for about a fifth of their total bank borrowing last year. Libor is the London interbank offer rate—the rate of interest at which banks, in London, offer to lend to other banks.

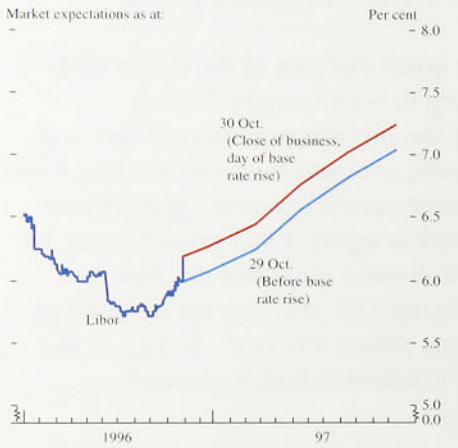
Chart 2.11
Variable mortgage rate[a] minus official interest rate



Source: Bank of England.

(a) Average variable mortgage interest rate charged by major banks and building societies; calendar month averages.

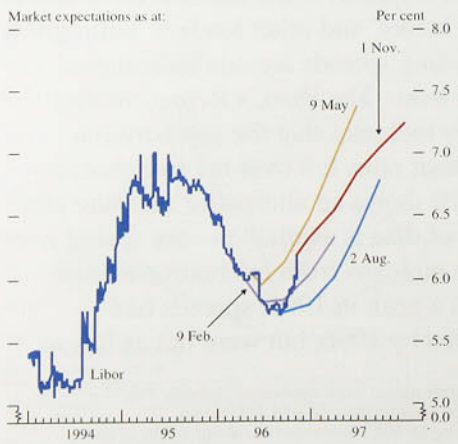
Chart 2.12
Sterling three-month interest rate expectations before and after the rise in official interest rates[a]



Sources: LIFFE and Bank of England.

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

Chart 2.13
Sterling three-month interest rate expectations[a]



Sources: LIFFE and Bank of England.

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

during the period of rapid economic growth in the late 1980s. During the 1990s, banks have developed measures to improve credit assessment, such as credit scoring, which attempt to attach probabilities of default to different loans. So, although banks became more willing to lend to corporate customers during the past couple of years, they are also trying to differentiate and to price risks in a more sophisticated way.(1)

Over the past couple of years, banks have also become more willing to lend to retail customers. Chart 2.11 shows that the gap between official interest rates and major banks' and building societies' variable mortgage rates has halved, from over two percentage points in 1994, to just over one percentage point over the past year. The Representative Interest Rate Survey shows that the gap between retail lending and deposit rates narrowed between 1993 and 1995 but rose a little over the past year. Because retail loan demand has risen steadily this year, banks and building societies probably felt less need to cut their retail lending spreads further.

2.4 Interest rates and the exchange rate

Short-term interest rates

Official short-term interest rates in the United Kingdom were increased from 5¾% to 6% on 30 October, the first change since the ¼ percentage point reduction on 6 June. The three-month sterling Libor rate is closely related to official interest rates; expectations of three-month Libor, derived from futures prices, have increased since the August *Report*. More than half of that increase occurred after the rise in official interest rates—as Chart 2.12 shows, the level of three-month interest rates expected over the next year or so increased by about a quarter of a percentage point on 30 October.

On 1 November, when this *Report* was finalised, three-month Libor closed at 6.2% while the short sterling futures market implied a rate of around 6.3% by December and 6.8% by June of next year. Market expectations are volatile and often shift rapidly in response to news. Chart 2.13 shows how expectations have changed over the past year: expected interest rates rose between February and May, fell between May and August, and rose between August and November.

As a box in the previous *Report* explained, it is possible to derive the market's view of the probability

(1) See, for example, the *Banking Act Report 1995/96*, Bank of England, page 21.

Table 2.D
Probability of sterling three-month interbank rate being less than or equal to specified rate in March and June 1997

Per cent

		Sterling three-month interbank rate		
		5.75%	6.00%	6.25%
As at 2 Aug. (5.73%)	Mar. 97	38	53	66
As at 29 Oct. (5.98%)	Mar. 97	13	32	56
	June 97	12	23	39
As at 30 Oct. (6.19%)	Mar. 97	5	16	37
	June 97	8	16	28
As at 1 Nov. (6.22%)	Mar. 97	3	9	25
	June 97	6	12	23

Note: Actual three-month Libor rate shown in brackets.

Sources: LIFFE and Bank of England.

Table 2.E
Changes in official and key interest rates[a]

In chronological order

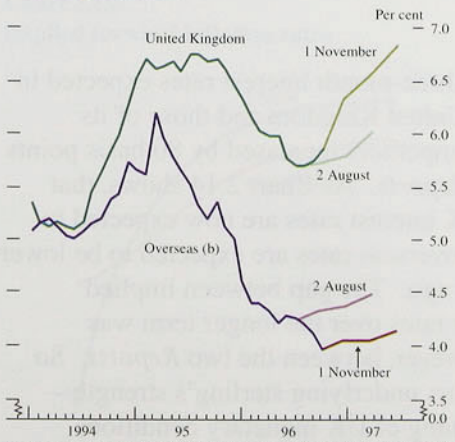
Per cent per annum

Country	Interest rate	Date	Change (basis points)	Change to
Canada	Bank rate	7 August	-25	4.50
Canada	Bank rate	22 August	-25	4.25
France	Intervention rate	22 August	-20	3.35
Germany	14-day repo rate (variable)	22 August	-30	3.00
France	Intervention rate	19 September	-10	3.25
Canada	Bank rate	2 October	-25	4.00
Canada	Bank rate	16 October	-25	3.75
Italy	Discount rate	24 October	-75	7.50
Italy	Advances rate	24 October	-75	9.00
Canada	Bank rate	28 October	-25	3.50
United Kingdom	Base rate	30 October	+25	6.00
France	Intervention rate	31 October	-5	3.20

Sources: Datastream and Telerate.

(a) Changes in the G7 countries greater than or equal to five basis points since the August *Inflation Report*.

Chart 2.14
Sterling and overseas three-month interest rate expectations[a]



Sources: Bank of England, Bank for International Settlements, *Financial Times* and LIFFE.

(a) Based on a combination of interest rate futures contracts.
(b) Trade-weighted interest rates in the major six overseas economies.

distribution for future three-month interest rates implied by options prices. So, for example, between the August and November *Reports*, the balance of probabilities shifted in favour of higher rates. Table 2.D shows how the perceived probabilities have changed over the past three months. Between the August and November *Reports* the probability that three-month rates will be 6.25% or less by next March fell from around 65% to 25%. As the table shows, the increased likelihood of higher rates mainly occurred after the rise in official interest rates on 30 October.

Short-term interest rates in the United Kingdom have mostly been higher than the trade-weighted average of rates in the other G7 countries since 1985. Over the past three months, official short-term interest rates were cut further in Canada, France, Germany and Italy (see Table 2.E). That partly reflected different cyclical positions: over the past two years, growth in the United Kingdom has been higher than in most other industrialised countries and, as Section 1 showed, headline inflation was lower in Canada, France, Germany and Japan in September. Chart 2.14 shows the path of UK and overseas short-term interest rates and expectations, derived from futures markets, to June next year. The gap between UK and overseas rates is expected to widen, with UK rates rising and overseas rates broadly flat.

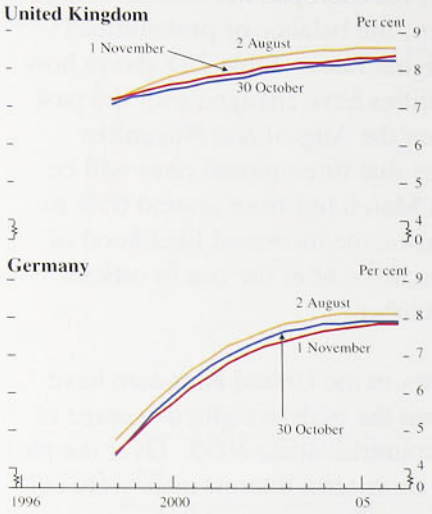
Long-term interest rates

Long-term interest rates in the United Kingdom fell between August and November. Bond yields in Germany fell by more. Overall, the gap between UK bond yields and those overseas, weighted by trade, increased by about 35 basis points between the two *Reports*.

Long-term interest rates reflect the expected path of short-term rates and the risk premia associated with the uncertainty about future inflation and real interest rates. It is possible to work out the implied level of short-term interest rates, at different points in the future, from the current maturity structure of interest rates. For example, comparing five-year interest rates to those at five and a half years it is possible to calculate a six-month annualised interest rate five years ahead. Chart 2.15 calculates six-month annualised interest rates in that way, from 1998 to 2006.[1] On 1 November, UK

(1) Reliable estimates of expectations for short-term interest rates over the next two years cannot yet be derived from the yield curve. The expectations of short-term interest rates over the next twelve months, described in the previous sub-section, were derived from futures prices.

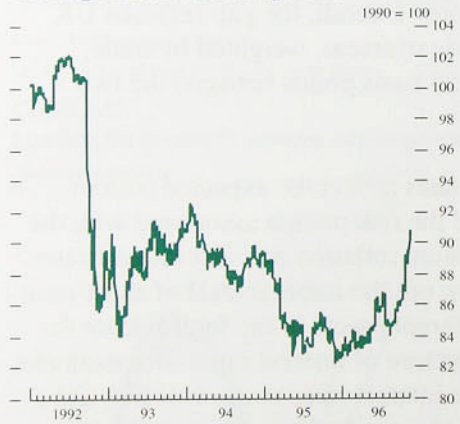
Chart 2.15
Implied nominal forward interest rates[a]



Source: Bank of England.

(a) Six-month annualised interest rates implied from the yield curve.

Chart 2.16
Sterling effective exchange rate



Note: Daily data.

Source: Bank of England.

short-term interest rates were about three percentage points higher than German rates. In ten years' time, the gap is expected to be about 0.5 percentage points, having fallen a little since the August *Report*. So the gap between UK and German ten-year bond yields, about 1.8 percentage points, mostly reflects divergent expectations of short-term interest rates over the next few years, due to different cyclical positions.

The exchange rate

The sterling effective exchange rate has appreciated by 8% from 84.1, at the time of the August *Report*, to 90.9 on 1 November. Chart 2.16 shows how the exchange rate has changed since the beginning of 1992.

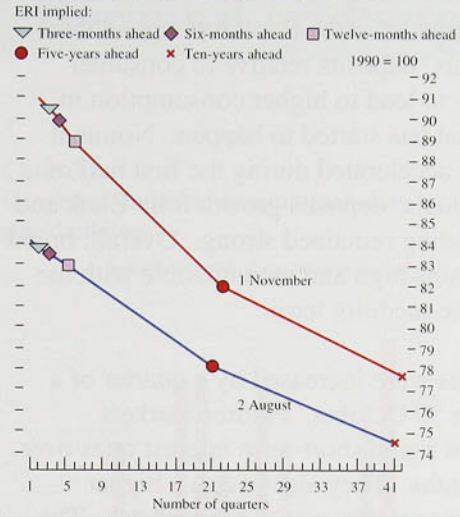
In principle the appreciation of sterling over the past three months can be accounted for by a combination of three factors—a perceived tightening of monetary policy in the United Kingdom, a perceived easing of monetary policy in other countries, or an appreciation of the equilibrium real exchange rate.

Insofar as sterling's strength reflects a perceived tightening of UK policy relative to three months ago, it could be unwound if policy were not adjusted in line with those expectations. To the extent that sterling's appreciation reflects a loosening of overseas monetary policies, it has no implications for domestic inflation in the medium term. The loosening in overseas monetary conditions would lead to a rise in foreign prices which, in the long run, would exactly match the fall in UK prices brought about by the higher exchange rate.(1)

The gap between three-month interest rates expected in December in the United Kingdom and those of its trade-weighted competitors increased by 80 basis points between the two *Reports*. As Chart 2.14 shows, that is because: (a) UK interest rates are now expected to be higher and (b) overseas rates are expected to be lower than three months ago. The gap between implied short-term interest rates over the longer term was little changed, however, between the two *Reports*. So the monetary factors underlying sterling's strength—a perceived tightening of UK monetary conditions and a perceived loosening of overseas monetary conditions relative to three months ago—are probably temporary.

(1) See Dornbusch, R (1976), 'Expectations and exchange rate dynamics' *Journal of Political Economy*, December; and May 1995 *Inflation Report* pages 16–17.

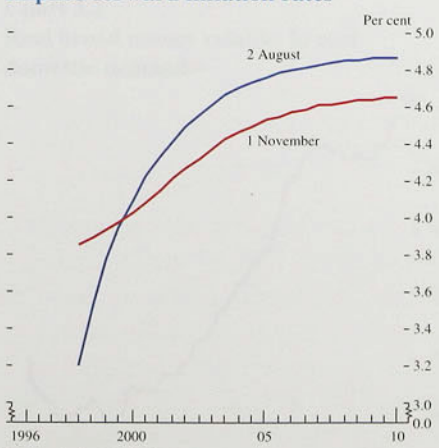
Chart 2.17
UK effective exchange rate profiles(a)



Sources: Bank for International Settlements, Datastream and Bank of England.

(a) Assuming uncovered interest rate parity.

Chart 2.18
Implied forward inflation rates



Source: Bank of England.

Some 2% of the appreciation occurred on 30 October, when the rise in interest rates was announced, and on the following two days, so it seems likely that perceived tighter UK monetary policy accounts for at least some of the appreciation.

Sterling's rise probably also reflects real factors. The 15% or so rise in the dollar oil price since the August *Report* could be one such factor. Because the United Kingdom is a significant oil exporter, higher oil prices require a rise in the real exchange rate.(1) Looking at other countries' exchange rates lends some support to the oil explanation. Canada is also a significant oil exporter and its effective exchange rate has appreciated by 3% since August, even though the exchange rate of its main trading partner, the United States, also appreciated. Japan is a net oil importer and its effective exchange rate depreciated by 6% between the two *Reports*. Oil, however, probably cannot provide a complete explanation since oil futures prices suggest that part of the recent rise in the spot price is temporary.

By comparing UK interest rates to those overseas, it is possible to calculate the implied path for the exchange rate, assuming exchange rates change to equalise expected returns (uncovered interest rate parity, or UIP). Because UK interest rates are higher than those overseas (weighted by trade), UIP implies that the exchange rate is expected to fall over the next ten years. Chart 2.17 shows that implied exchange rate path.

As the chart shows, despite the recent rise in the exchange rate, the structure of long-term interest rates implies a depreciation of 15% or so over ten years—a little more than at the time of the August *Report*. The implied exchange rate paths are more or less parallel from five years out which suggests that there has not been much change in overall UK inflation expectations relative to those abroad in the longer term, even though the behaviour of the exchange rate suggests that UK monetary policy is perceived to have tightened in the shorter term. Estimates of UK inflation expectations, derived by analysing conventional and index-linked gilt yields, have increased since the August *Report* over the short term, but have fallen at longer maturities, as Chart 2.18 shows.

(1) An article in the *Quarterly Bulletin* discusses the sources of fluctuations in sterling's real exchange rate between 1973 and 1994—see Astley, M S and Garratt, A (1996), 'Interpreting sterling exchange rate movements', November, pages 394–404.

2.5 Summary

For the past 18 months or so the Bank has argued that the rise in individuals' deposits relative to consumer spending was likely to lead to higher consumption in 1996 and 1997. That has started to happen. Nominal consumer spending accelerated during the first half of the year and individuals' deposits growth fell. Bank and building society lending remained strong. Overall, broad money growth remains high and incompatible with the inflation target in the medium term.

Official interest rates were increased by a quarter of a percentage point on 30 October. Futures markets continue to discount rising short-term interest rates over the next twelve months. They also assign a higher probability than three months ago to higher rates. The exchange rate has appreciated, probably because UK monetary policy is now expected to be temporarily tighter than that overseas and also because of higher oil prices.

Demand and supply 3

Chart 3.1
Growth of domestic demand excluding stockbuilding

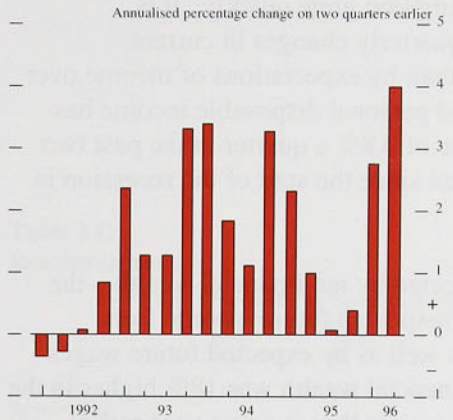


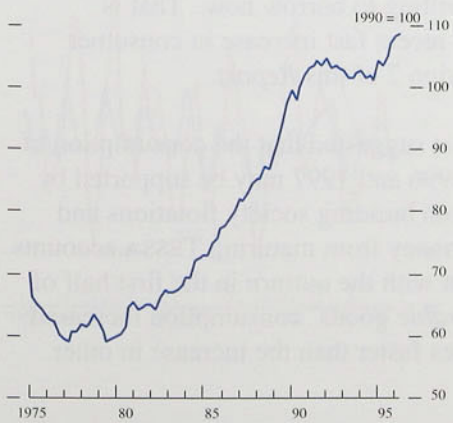
Table 3.A
Contributions to domestic demand growth[a]

Percentage point contribution

	1994	1995		1996	
	Year	Year	Q4	Q1	Q2
Consumers' expenditure	1.6	1.2	0.4	0.6	0.5
Investment	0.5	0.0	0.0	0.3	0.5
Government consumption	0.3	0.2	0.0	0.1	0.0
Stockbuilding	0.5	0.1	-0.1	0.0	-0.7
Domestic demand growth	2.9	1.5	0.3	0.9	0.3

(a) Measured at 1990 market prices.

Chart 3.2
Real broad money relative to real domestic demand[a]



Sources: ONS and Bank of England.

(a) Real broad money is defined as M4 deflated by RPIX.

Real domestic demand, excluding stockbuilding, grew at an annualised rate of 4% in the first half of this year (see Chart 3.1), its fastest rate since the second half of 1988. A fall in stockbuilding meant that the acceleration in demand was not accompanied by faster output growth. But that did occur in the third quarter: real GDP at factor cost grew by 0.8%, its fastest rate since the end of 1994. The estimate of GDP growth in the first half of this year has been revised up to around its long-run average of 2%–2½% a year. There were also revisions to output in the past three years. The net effect of all those revisions was to raise the estimated level of output in 1996 Q2 by 0.2%, compared with that at the time of the previous *Report*. Net external demand, which had boosted output growth in 1994 and 1995, did not do so in the first half of this year.

Annualised growth of both nominal GDP and nominal domestic demand averaged 4¾% in the first two quarters of this year but is likely to have risen above 5% in the third quarter. If real output and demand were growing at their 40-year average rates, and inflation was at the Government's target of 2½% a year or less, that would imply nominal growth of around 4%–5% a year.

3.1 Domestic demand

Real domestic demand increased by 0.3% in the second quarter of this year, after rising by 0.9% in the previous quarter. That slowdown was accounted for by lower stockbuilding, which reduced domestic demand growth by nearly ¾ percentage point in 1996 Q2, as shown in Table 3.A. Real M4—broad money deflated by the increase in retail prices excluding mortgage interest payments—grew by nearly 7% in the four quarters to 1996 Q3. Chart 3.2 shows that in the 1980s real M4 rose relative to real demand, partly because financial liberalisation increased both the supply of, and demand for, M4 assets. Now, real M4 is again growing more quickly than real demand, but it is less easy to identify financial innovations which could be responsible. It is more likely to be signalling a rise in real domestic demand growth over the next year or so (see Section 2).

Personal sector demand

Real consumer spending grew by 0.8% in 1996 Q2, the third consecutive quarter in which it grew at a rate above its 40-year average. Growth of real personal disposable income—held back by the absence of the special payouts, such as the regional electricity companies' rebate to customers, which had boosted income in the previous quarter—was only 0.1% in the second quarter. Nevertheless, consumption grew quickly. It is influenced less by quarterly changes in current disposable income than by expectations of income over longer periods. Real personal disposable income has grown by an average of 0.8% a quarter in the past two years—its fastest rate since the start of the recession in 1990.

Consumption is affected by net financial wealth—the discounted value of expected future income from financial assets—as well as by expected future wages and salaries. Net financial wealth was 18% higher in the second quarter of this year than it was a year earlier. Gross financial liabilities rose, but gross financial assets increased more rapidly.

House prices respond more quickly to changes in expectations than do consumer prices. So the recent increase in house prices—shown in Table 3.B—is an indication that people have probably revised up their expected future spending.

Some assets, such as homes, pension or life assurance funds, can be difficult to liquidate, but liquid assets can help households overcome short-term financial difficulties. Chart 3.3 shows that personal sector debt was very low relative to liquid assets in 1996 Q2 compared with the previous ten years: consumers are likely to be more willing to borrow now. That is consistent with the recent fast increase in consumer credit noted in Section 2 of this *Report*.

The previous *Report* suggested that the consumption of *durable* goods in 1996 and 1997 may be supported by 'windfall gains' from building society flotations and takeovers and by money from maturing TESSA accounts. That was consistent with the outturn in the first half of this year, when *durable* goods' consumption increased by 4½%, three times faster than the increase in other consumption.

Retail sales volumes grew by 0.8% in 1996 Q3, after rising by 1.4% in 1996 Q2. But that slowdown may not

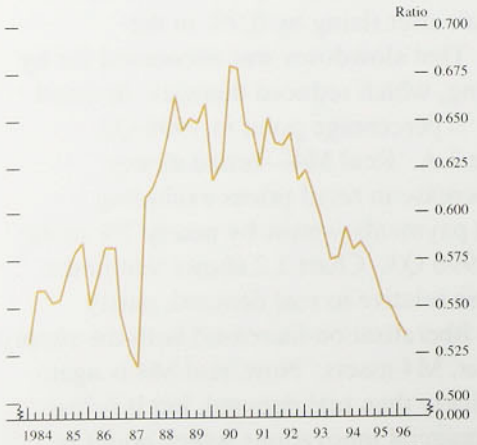
Table 3.B
House price inflation

Percentage changes on a year earlier

	1995	1996		
	Year	Q1	Q2	Oct.
Halifax	-1.7	0.3	3.8	7.1
Nationwide	-1.2	-0.1	2.1	7.9
Department of Environment	0.7	2.1	1.1	n.a.

Sources: Halifax Building Society, Nationwide Building Society and The Department of the Environment.

Chart 3.3
Ratio of personal sector debt to liquid assets[(a)]



(a) Liquid assets defined as total financial assets minus assets in life assurance and pension funds.

indicate slower consumption growth, for two reasons. First, retail sales represent only about 40% of consumption. And second, sales in the second quarter were boosted by tourists' spending during Euro '96, reducing retail sales growth in 1996 Q3. Tourists' spending, because it is assigned to exports, would not have affected consumption in the national accounts data. The introduction of the National Lottery at the end of 1994 reduced retail sales growth relative to consumption growth last year. That distortion has now largely disappeared.

Corporate sector demand

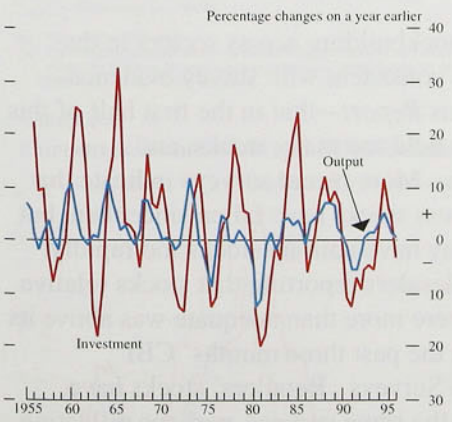
Real private investment grew by nearly 3% in the second quarter of this year, after even stronger growth in the previous quarter. Growth in Q2 was entirely due to the purchase of aircraft. Table 3.C shows investment growth in different sectors of the economy. Investment in the ONS' 'other industries' category—mainly the service sector—grew quickly in the first half of this year. Faster investment growth in the service sector than in manufacturing was consistent with stronger growth in the demand for, and output of, services than goods over the past year or so. The British Chambers of Commerce Survey suggested that investment intentions in the service sector were higher in the third quarter than their average since the survey began in 1989.

Table 3.C
Real investment

	Percentage of total	Percentage change on a half year earlier		
	1995	1995		1996
	Year	H1	H2	H1
Total investment	100	0.6	-2.3	3.3
By industry: (a)				
Mining and quarrying	4.5	-2.3	8.7	-10.1
Manufacturing	12.7	-0.3	5.0	-8.0
Utilities	4.5	-9.2	-4.2	19.7
Residential construction	18.9	4.3	-6.2	0.0
Other industries	54.4	0.7	-2.7	6.1

(a) Excludes transfer costs, so percentages of total investment do not add up to 100. The ONS do not include residential construction in their breakdown of investment by industry.

Chart 3.4
Annual growth of manufacturing output and investment



In the first half of this year, manufacturing investment fell sharply, after a large rise in the second half of last year. Over the past 40 years, changes in the output of manufacturers have often preceded changes in their investment expenditure, as Chart 3.4 shows. That could be because firms are not very good at anticipating future changes in demand. The fall in investment in the first half of this year was consistent with the slowdown in output growth last year. And the expected increase in manufacturing output in the second half of this year may take some time to stimulate more investment. Despite that, investment intentions were above their long-run average in the third quarter, according to the CBI Industrial Trends Survey.

As well as survey evidence, there are other indicators that total private investment is likely to continue growing quickly. The market valuation of capital exceeds its replacement cost. That means it should be profitable for firms to issue new equity to finance the purchase of capital goods. The price of new investment goods, relative to other goods, was very low in 1996 Q2

Chart 3.5
Annual growth of housing turnover and private sector dwelling investment

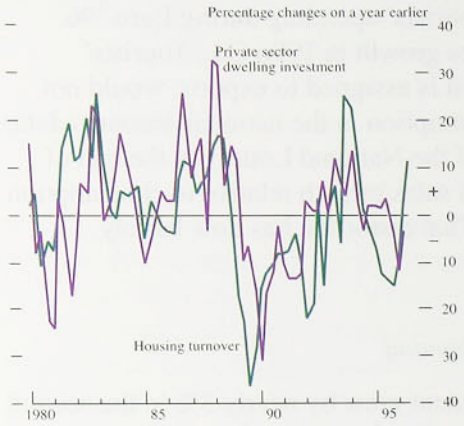


Table 3.D
Changes in stocks[a]

£ billions, 1990 prices

		Total stocks	of which: Manufacturing	Retailing	Wholesaling	Other industries
1995	Q1	0.1	0.5	0.1	-0.2	-0.4
	Q2	0.8	0.5	0.2	0.0	0.1
	Q3	1.4	0.9	0.2	0.2	0.1
	Q4	0.9	0.6	0.2	0.0	0.1
1996	Q1	0.8	0.2	0.4	0.3	0.0
	Q2	0.2	-0.2	0.0	0.3	0.2

Note: Components may not sum to total because of rounding.

(a) Excluding the statistical alignment adjustment made by the ONS. Retailing and wholesaling make up the distribution industries.

compared with the previous 25 years. That too should be an incentive for firms to increase their investment.

Private housing starts have risen considerably since the start of the year. And turnover in the housing market has risen over the past twelve months: in the three months to September, it was 12% higher than a year earlier. Chart 3.5 shows that, over the past 15 years, changes in turnover have tended to coincide with changes in investment in private dwellings. So recent falls in that category of investment are likely to be reversed soon if the recovery in the housing market continues.

Stockbuilding

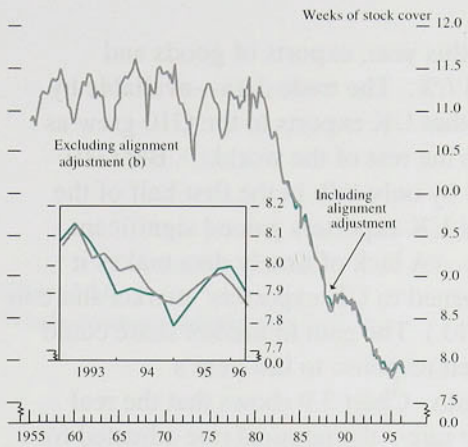
The August 1995 *Report* suggested that lower stockbuilding might lead to a slowdown in output growth. The effect was significant in the second quarter of this year. Excluding the alignment adjustment, stockbuilding was £0.2 billion in 1996 Q2 (at 1990 prices) compared with £1.0 billion in the previous quarter.(1)

Table 3.D shows changes in direct measures of stocks in various sectors. Manufacturing stocks, which accounted for nearly a half of all stocks at the end of last year, fell in 1996 Q2 for the first time in almost three years. They probably also fell in the third quarter, judging by evidence from the Chartered Institute of Purchasing and Supply (CIPS) Survey. Stocks in the distribution industries—the second largest holders of stocks—increased at around their long-run average last year, but in the first half of this year rose twice as quickly.

The difference in stockbuilding across sectors in the second quarter was consistent with survey evidence—noted in the previous *Report*—that in the first half of this year manufacturers held too many stocks, and wholesalers too few. More recent surveys indicate that manufacturers' excess stocks have fallen since then, but that wholesalers may have built up stocks too rapidly: the balance of wholesalers reporting that stocks relative to expected sales were more than adequate was above its ten-year average in the past three months' CBI Distributive Trades Surveys. Retailers' stocks have fallen according to the same surveys, perhaps reflecting strong growth in retail sales over the summer.

(1) The previous *Report* argued that it was best to analyse stocks data excluding the statistical alignment. That adjustment is made by the ONS to the expenditure measure of GDP so as to make it tally with the output measure. See page 23 of the August 1996 *Inflation Report*, and page 24 of the May 1995 *Inflation Report*.

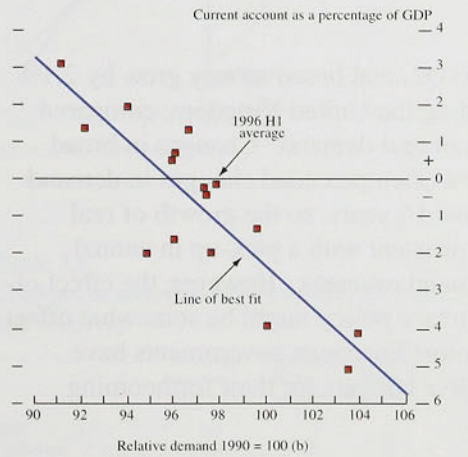
Chart 3.6
Stock-to-sales ratio[a]



Sources: ONS and Bank of England.

(a) Level of stocks outstanding relative to quarterly total final sales in 1990 prices. Total final sales are defined as domestic expenditure plus UK exports minus stockbuilding.
(b) Before 1983, alignment adjustment is zero.

Chart 3.7
Current account and relative demand[a]



Sources: ONS, Bank of England, Datastream, Bank for International Settlements and OECD.

(a) Data are for 1980–96.
(b) UK domestic demand relative to export-weighted demand in the G10 excluding Belgium for which quarterly domestic demand data are not available, and the United Kingdom.

Chart 3.8
Current account deficit and RPIX inflation

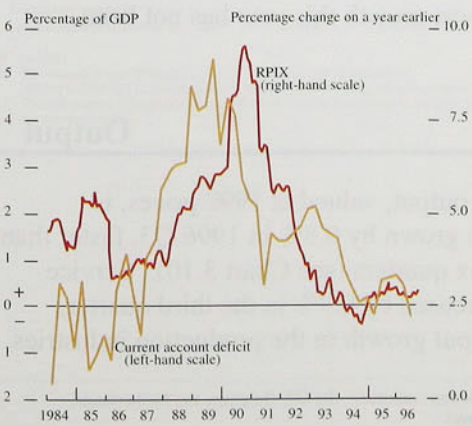


Chart 3.6 shows that the ratio of stocks to sales has fallen since 1980, reflecting improved stock-management techniques. Stocks rose relative to sales in the first half of last year, then stabilised, and fell in the first half of 1996. Last year's rise was not unusual: over the past 40 years, there were ten occasions when the stock-to-sales ratio rose more quickly. It seems unlikely that improvements in stock-management techniques have come to a sudden end. The stock-to-sales ratio should continue to fall: in the short run, as firms reduce their stock overhang; and in the long run, as further improvements in stock management reduce the desired ratio.

Public sector demand

In constant prices, overall public sector demand rose by 0.5% in 1996 Q2: public investment increased by 3%, while general government consumption rose by 0.2%. General government expenditure will fall relative to GDP over the next two financial years, according to HM Treasury's Summer Economic Forecast (SEF). The projected large falls in government investment are planned to be partly offset by private investment under the Private Finance Initiative. So far this financial year, cumulative central government receipts and outlays have been broadly in line with the projections for the whole year set out in the SEF.

3.2 Net external demand

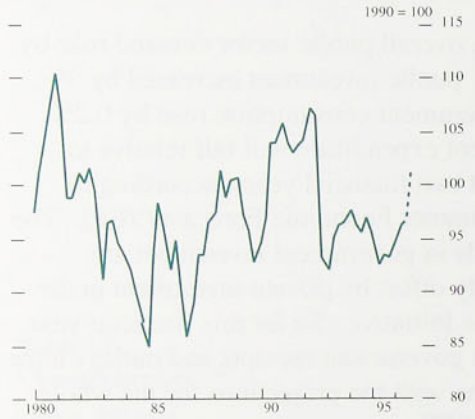
The external current account was £0.5 billion in surplus in the second quarter of 1996—only the second quarterly surplus since 1987—compared with deficits of around £1 billion in the previous four quarters. That improvement was largely due to increased surpluses on trade in services—partly related to Euro '96—and on investment income. In the first half of the year, export volumes grew a little less quickly than import volumes. Domestic demand in the United Kingdom, relative to demand in its major trading partners, rose. The current account was slightly stronger than expected given relative demand, as shown in Chart 3.7.

When domestic demand grows more quickly than the potential supply of an economy, excess demand can be met initially by overseas supply but ultimately must be dampened through price increases. An early signal of excess demand building up in the second half of the 1980s was the large increase in the current account deficit which occurred before the rise in retail price inflation (see Chart 3.8). The current account has been

broadly flat over the past two years, suggesting that there has not yet been a build-up of excess demand.

In the first half of this year, exports of goods and services grew by 3½%. The trade data—available by country—suggest that UK exports to the G10 grew as quickly as those to the rest of the world.(1) But G10 total imports grew by only ¾% in the first half of the year, implying that UK exporters gained significant market share there. (A lack of timely data makes it unclear what happened to UK exporters' market share in the rest of the world.) The gain in market share could have been a delayed response to last year's competitiveness gain. Chart 3.9 shows that the real effective exchange rate—the nominal rate adjusted for changes in relative producer prices—was low last year. But it rose in the first half of this year, and will have risen further since then because of the large nominal exchange rate appreciation. That suggests a risk to UK exports: the recent gains in market share may not be sustained.

Chart 3.9
Real effective exchange rate(a)



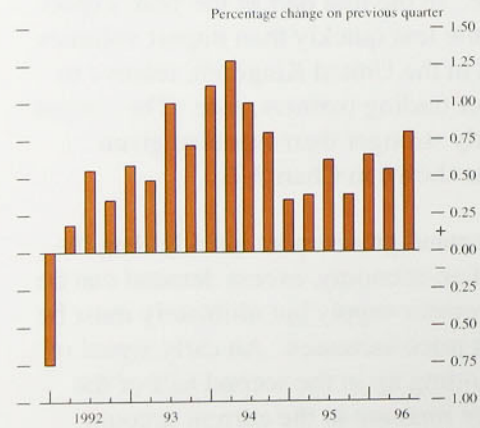
Sources: ONS and Bank of England.

(a) Nominal effective exchange rate adjusted for changes in relative producer prices in 21 countries. Data for the first half of 1996 are based on relative producer prices in the G7. Data for the second half of 1996 are based on an assumption of unchanged relative producer prices, and that the nominal effective exchange rate remains unchanged in November and December from its level on 1 November.

In the year to 1996 Q2, real broad money grew by 2.1% in the G10, excluding the United Kingdom, compared with 1.2% growth of real demand. Changes in broad money growth have often preceded changes in demand growth over the past 15 years, so the growth of real broad money is consistent with a pick-up in annual growth of real demand overseas. However, the effect of expansionary monetary policy might be somewhat offset by fiscal policy: most European governments have announced restrictive budgets for their forthcoming financial years.

UK import volumes grew quickly in the first half of this year—by around 2¼% in each quarter—compared with growth in total final expenditure of about 1% a quarter. In the past ten years, imports have tended to grow about twice as fast as total final expenditure in the United Kingdom, so import growth this year has not been unusually fast.

Chart 3.10
Quarterly growth of real GDP



3.3 Output

Whole-economy output, valued at 1990 prices, is estimated to have grown by 0.8% in 1996 Q3, faster than in the previous six quarters (see Chart 3.10). Service sector output increased by 0.9% in the third quarter, stronger than output growth in the production industries.

(1) The G10 comprises eleven countries: the G7, Belgium, the Netherlands, Sweden and Switzerland.

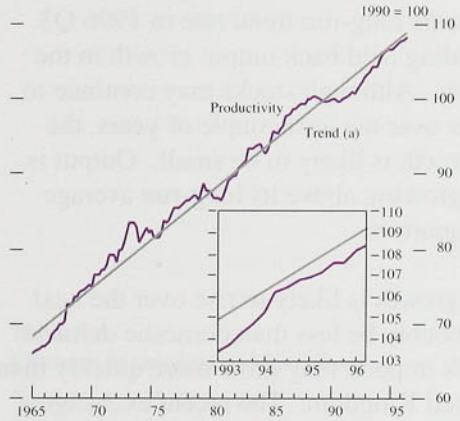
Manufacturing firms' output fell between the third quarter of last year and 1996 Q2 as manufacturers sought to reduce their stocks. But manufacturers increased their output in 1996 Q3, and in October, manufacturing new orders increased at their fastest rate since September 1994, according to the CIPS survey.

Following the measures taken to control the spread of BSE, such as the culling of cattle, agricultural output fell sharply in 1996 Q2: it reduced GDP growth by about 0.1 percentage points. According to the ONS, agricultural output rose markedly in the third quarter.

Output depends on the amount of labour employed and how much each worker produces. Section 4 of this *Report* looks at the demand for, and supply of, labour. Because productivity tends to increase over time due to technological advances, it is useful to look at the level of productivity relative to its long-run trend. Chart 3.11 shows that productivity was slightly below trend in 1996 Q2. That suggests output could grow more quickly over the next few quarters without increasing the demand for labour.

Sectors of the economy grow at different rates as the relative demand for various goods and services changes. Table 3.E shows that the output of the service sector, for example, has grown more quickly than most others in this recovery, and contracted by less in the recession. The transport, storage and communications industry has grown particularly quickly in this recovery, boosted by the development of mobile telephones and satellite communications. If resources cannot be shifted into an industry quickly enough to match growing demand, price pressures may occur even if there is spare capacity in another part of the economy. That would only affect aggregate price inflation if spare capacity exerted less downward pressure than the upward pressure exerted by equivalent capacity constraints. Measures of the dispersion in growth rates can be calculated to assess the degree of sectoral change. They suggest that the reallocation of resources needed last year was not unusually high.(1)

Chart 3.11
Whole-economy labour productivity



Sources: ONS and Bank of England.

(a) Log-linear trend since 1965.

Table 3.E
Changes in sectoral output during the recession and recovery

	Percentage share of GDP (a)	Percentage change: During recession (b)	During recovery (b)	1996 Q2/ 1995 Q2
GDP	100	-3.8	11.6	2.3
Agriculture	1.9	4.8	-10.4	-8.0
Manufacturing production	23.2	-7.3	8.2	-0.1
of which:				
Chemicals and man-made fibres (c)	2.4	2.6	16.0	2.6
Metals (c)	2.7	-15.1	-1.8	-1.5
Other production industries	4.6	2.4	25.3	5.8
Construction	7.2	-12.3	0.9	0.1
Services	63.1	-2.3	13.5	3.2
of which:				
Transport storage and communications (c)	8.4	-1.4	24.1	4.4

(a) In 1990.
(b) The recession was 1990 Q2–1992 Q1. The recovery is defined as 1992 Q1–1996 Q2 (a full breakdown of GDP in 1996 Q3 is not yet available).
(c) The sub-sectors of manufacturing and service sector production listed here are not comprehensive.

(1) One such 'dispersion' index can be calculated as $\sum_{i=1}^{n}(w_i \, |g_i - g|)/2$ where $|g_i - g|$ is the absolute difference between the growth of sector i and the growth of GDP, and w_i is the size of sector i relative to total output. The higher the value of the index, the greater the dispersion of sectoral growth rates. Such an index based on four broad sectors was only 0.25 in 1995, compared with a 25-year average of 0.63. An index based on 14 narrower sectors shows a similar result.

3.4 Summary

Domestic demand, excluding stockbuilding, grew at its fastest rate for seven years in the first half of 1996. Consumption growth should remain high. Consumers have probably revised up their expected future income, and their debt burdens have fallen further. Survey evidence suggests investment will grow strongly, consistent with incentives from relative prices. And the housing market recovery should boost construction-related investment.

GDP grew at above its long-run trend rate in 1996 Q3. Reduced stockbuilding held back output growth in the first half of this year. Although stocks may continue to fall relative to sales over the next couple of years, the effect on output growth is likely to be small. Output is likely to continue growing above its long-run average over the next few quarters.

Overseas demand growth is likely to rise over the next year, but it will probably be less than domestic demand growth. As a result imports may grow more quickly than exports in the United Kingdom. The recent exchange rate appreciation will probably reduce net exports too, at least in the short run.

The labour market 4

The labour market tightened in recent months: claimant unemployment fell faster in the third quarter and there was a significant fall in unemployment on the international standardised definition during the summer. An estimate of the gap between total hours worked in the economy and those people are prepared to offer narrowed.

Nominal earnings growth is increasing. Underlying nominal earnings growth rose from a low of 3¼% in December to 4% in July and August.

4.1 Demand for labour

Employment rose by 35,000 in the second quarter, after falling by 41,000 in the first, according to the Workforce in Employment (WIE) data (see Table 4.A). The Labour Force Survey (LFS) showed a 70,000 rise in employment in the summer, reversing a 34,000 fall in the spring.

Most job surveys suggest that employment continued to grow in the second half of the year—particularly in the service sector (see Table 4.B). The September Manpower Survey of employment prospects showed a balance of +17% intending to take on staff over the following quarter, compared with +12% a year earlier. The latest British Chambers of Commerce (BCC) Quarterly Survey reported that the demand for labour had increased rapidly in the third quarter in both the service sector and in manufacturing. The Bank's Agents also reported increasing demand for labour in the third quarter. The latest Confederation of British Industry (CBI) Industrial Trends Survey was more pessimistic about manufacturing, reporting that manufacturers have been shedding jobs and continued to do so in the second half of the year.

All the net new jobs created during the recovery were part-time, according to the LFS; full-time employment fell by 69,000 between spring 1992 and summer 1996. So the total number of hours worked in the economy—which has fluctuated around a more or less constant level over the past 25 years—is a more comprehensive measure of labour use. Total hours worked have risen by 3.9% since the recovery started in 1992, according to the

Table 4.A
Changes in the demand for labour

Thousands

	1996 Q1	Q2	Q3
Unemployment			
Claimant count	-49	-36	-77
LFS (a) unemployment	11	-50	n.a
Non-employment			
WIE measure	84	7	n.a
LFS measure	77	-27	n.a
Employment			
WIE measure	-41	35	n.a
LFS (a) measure	-34	70	n.a
ONS manufacturing	0	-17	n.a
Hours worked per week (b)			
New ONS measure	-1.0	0.5	n.a
LFS (a) measure	0.1	0.8	n.a
Vacancies	7	24	35

(a) Labour Force Survey is conducted in Great Britain on a seasonal basis. For example, Q3 data cover the autumn period, defined as September, October, and November.
(b) Percentage changes.

Table 4.B
Job surveys

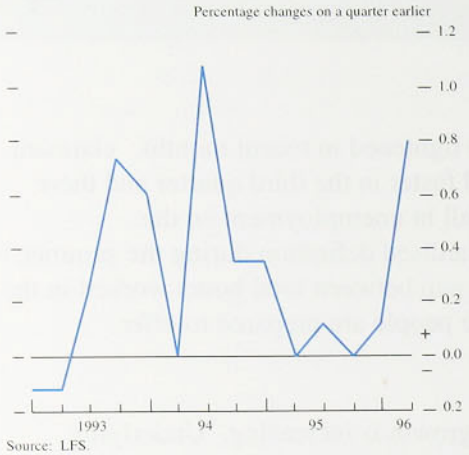
Percentage balance of employers planning to recruit staff

		1995 Q1	Q2	Q3	Q4	1996 Q1	Q2	Q3	Q4
BCC (a)	Services	16	13	13	9	17	18	22	n.a
	Manufacturing	14	10	9	8	13	11	19	n.a
CBI (b)	Manufacturing	-13	-4	-10	-17	-10	-17	-13	n.a
Manpower (a)	Total	2	12	16	12	3	9	15	17

Sources: British Chambers of Commerce, CBI and Manpower.

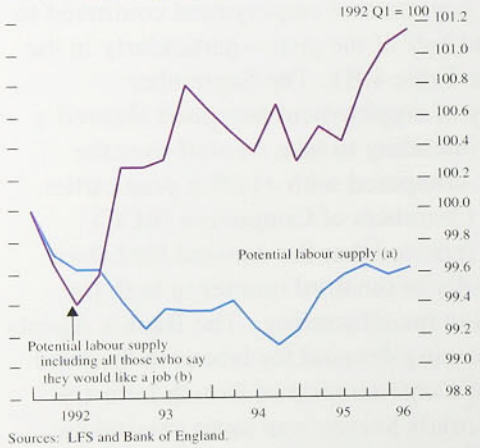
(a) Next three months.
(b) Next four months.

Chart 4.1
Changes in total hours worked



Source: LFS.

Chart 4.2
Potential supply of hours



Sources: LFS and Bank of England.

(a) Estimated potential hours on offer, defined as hours worked plus additional hours part-timers would like to work and the hours those who are actively seeking work would be willing to work.
(b) Estimated potential hours on offer, also including hours of people who would like to work but have not looked for a job in the past four weeks or are not available to start in the next two weeks.

LFS. There was a slowdown last year: hours worked were virtually flat between spring 1995 and spring 1996, before rising sharply over the summer (see Chart 4.1).

4.2 Supply of labour

The number of people willing to work exceeds the number currently employed, as it includes those who are registered as unemployed and others who are not officially counted as unemployed but who say they would take a job if they were offered one.(1) As when measuring labour demand, the total potential supply of *hours* is more relevant than the number of workers available, and some people with jobs are willing to work longer hours. For example, the LFS shows that, in 1995, 25% of men and 10% of women who worked part-time would have preferred full-time work. In Chart 4.2, actual hours supplied are added to estimates of the additional hours part-timers would like to work and the hours which those who are actively seeking work would be willing to work (assuming their preferences as to hours are similar to those of the currently employed).(2) The chart shows that the number of hours on offer increased during most of 1995, before flattening off over the past few quarters.

A broader definition of potential hours people would be prepared to offer includes those who are not actively seeking work but who would like a job—such as some of those in full-time education, those discouraged by the state of the labour market, and others who would like to work but are not available to start immediately. The LFS provides estimates of the number of people who fall into that category. Chart 4.2 includes that broader estimate of the potential supply of labour; it rose during 1995 and in the first half of 1996.

Demographic trends also influence labour supply. The population of working age is estimated by the Government Actuary's Department to have risen by 1.1% in the first four years of the recovery, compared with an increase of 2.7% in the first four years of the previous recovery; it is projected to increase by a further 0.9% over 1996 and 1997, compared with a rise of 1.1% at the same stage in the previous cycle.

(1) It is reasonable to assume that part-timers who say they want to work longer hours are willing to work at prevailing pay rates. That is less clear for the unemployed, particularly those not actively seeking work.
(2) In 1995, according to LFS data, 92% of employed men, and 55% of employed women, worked full-time with the rest part-time. Some 25% of male part-timers and 10% of women part-timers said they would prefer to work full-time. The rough estimate of the potential supply of hours attributes the average length of a full working week (39 hours) to these, and 15 hours a week to the remaining part-timers; other people willing to accept a job are counted as willing to supply hours in similar proportions.

4.3 Measures of labour market tightness

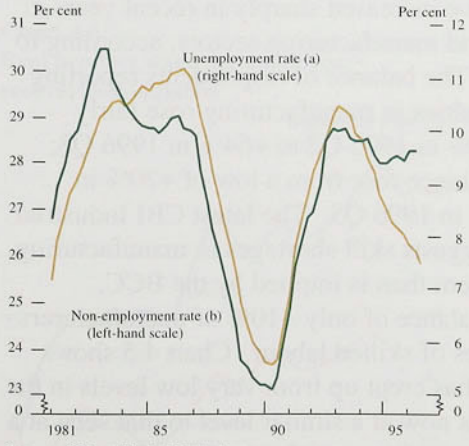
In the short run, the interaction between the demand for, and supply of, labour determines labour market tightness. The most common measure of labour market tightness is the number of unemployed claimants.

Claimant unemployment fell by an average of 25,700 a month in the three months to September. In the three months to June, unemployment declined by an average of 12,100 a month. In October, the claimant unemployment figures will start to be reduced by the Jobseeker's Allowance.(1) That will cut the period of non-means-tested benefits for the unemployed from twelve to six months. The immediate effect will be to remove only 35,000 people from the claimant count over the next six months, according to the ONS, because those unemployed for more than six months will remain on the claimant count unless they choose not to sign on in order to continue their National Insurance contribution record. Over time more people may be removed from the count, if it improves their incentive to look for work.

The international standardised definition of unemployment, measured by the LFS, is unaffected by administrative changes: the LFS asks individuals directly whether they have been looking for a job in the past four weeks. The total fell by 50,000 in summer 1996.

Another measure of labour market tightness is the non-employment rate.(2) Indeed, non-employment may be more appropriate than claimant unemployment as an indicator of labour market tightness across cycles, because unemployment was reduced in the early 1990s by people withdrawing from the labour force—some of whom may be discouraged workers.(3) The UK non-employment rate fell from a peak of 28.8% in 1993 Q2 to 28.1% in 1995 Q4; it rose slightly in the first half of 1996 to 28.3%. That overall decline was smaller than the fall from 30.5% in 1983 Q2 to 29.0% in 1986 Q2—a similar stage of the previous cycle in non-employment (see Chart 4.3).

Chart 4.3
Unemployment and non-employment rates

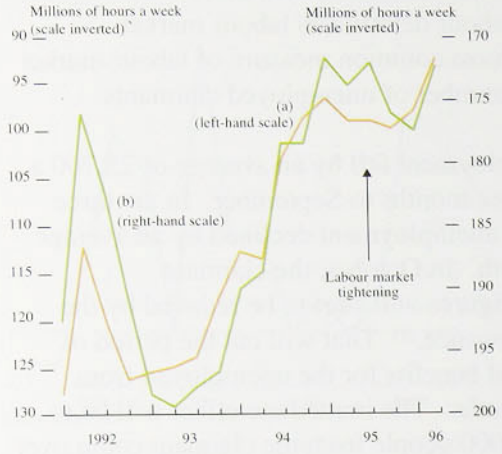


Sources: ONS and Bank of England.

(a) Claimant unemployment rate.
(b) Defined as the population of working age without employment in the United Kingdom divided by the population of working age, expressed as a percentage.

(1) The Jobseeker's Allowance has affected people joining the unemployment count since April of this year. The first cohort was means-tested in October—only those who fail the means test and do not sign on in order to continue their National Insurance contribution record will drop off the count. The effect on the count is likely to be spread fairly evenly over six months.
(2) Defined as the population of working age without employment in the United Kingdom divided by the population of working age. The measure of employment used is the WIE measure, as this covers both periods of recovery.
(3) See August 1996 *Inflation Report*, pages 31–33.

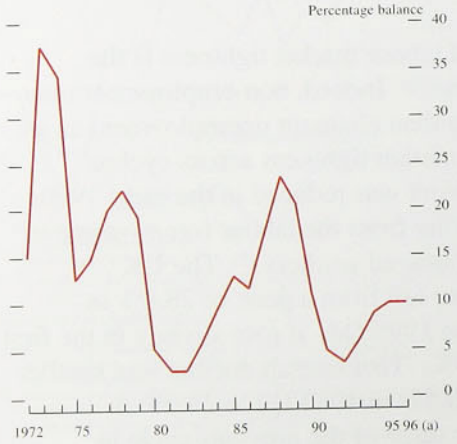
Chart 4.4
Gap between potential hours on offer and hours demanded



Sources: LFS and Bank of England.

(a) Potential hours on offer defined as hours worked plus hours those actively seeking employment would like to work, plus additional hours part-timers would like to work.
(b) Potential hours on offer defined as above, but additionally including all those who say they would like a job.

Chart 4.5
Skill shortages



Source: CBI Quarterly Industrial Trends Survey.

Question: What factors are likely to limit your output over the next four months?
Answer: Skilled labour.

(a) 1996 is the average of the first three quarters.

In principle, the most comprehensive measure of the state of the labour market is the estimated balance between the potential number of hours people are prepared to work and those hours actually worked (see Chart 4.4). If the potential supply of hours is defined as those offered by people currently actively seeking work and part-timers who say they would like to work full-time, the labour market tightened between the winter of 1992 and spring 1995 and then stabilised, before tightening further in the summer of 1996. If all those who say they would like a job are included in potential labour supply—whether or not they are officially classified as unemployed—the profile is similar.

The stock of vacancies advertised at Jobcentres rose by an average of 11,600 a month in the three months to September, up from 7,900 in the three months to June; vacancies are now at their highest level since May 1988. But the stock of vacancies has been inflated by the introduction of the Labour Market Software system, designed to deal with the Jobseeker's Allowance. That has depressed the number of people placed in jobs since the beginning of this year.(1) According to the ONS, the effect is likely to persist over the next few months, so vacancies are not currently a good indicator of labour market tightness.

Skill shortages have increased sharply in recent years in both the service and manufacturing sectors, according to the BCC Survey. The balance of respondents reporting recruitment difficulties in manufacturing rose fairly steadily from +23% in 1992 Q2 to +64% in 1996 Q3; in services, the balance rose from a low of +20% in 1991 Q3 to +57% in 1996 Q3. The latest CBI Industrial Trends Survey suggests skill shortages in manufacturing are less of a problem than is implied by the BCC, however, with a balance of only +10% of manufacturers reporting shortages of skilled labour. Chart 4.5 shows that this measure has crept up from very low levels in the early 1990s, and is now at a similar level to that seen at a similar stage of the previous cycle.

In conclusion, the most comprehensive indicator of labour market tightness—the balance between hours demanded and those potentially available to employers—suggests that the labour market tightened in the second quarter, after being fairly stable over the preceding year. Other evidence corroborates this picture of a tightening

(1) Inflows to vacancies have not been affected, but outflows have fallen significantly, as staff at Jobcentres have turned their attention to the new software.

labour market: in particular, there were signs of rising skill shortages.

4.4 Nominal earnings

Underlying nominal earnings growth picked up from 3¾% in May, at the time of the previous *Inflation Report*, to 4% in August. Both manufacturing and service sector earnings growth increased, and there were signs that private sector nominal earnings accelerated.

Wage settlements have also risen over the past few months, after falling in the first few months of the year. The Bank's three-month employment-weighted mean settlement—which includes data from the CBI, Industrial Relations Services and Incomes Data Services—was 3.5% in September, up from 3.2% in June but the same as in January. The same pattern was true of public and private sector settlements, which were both 3.5% in September, the same as at the beginning of the year.

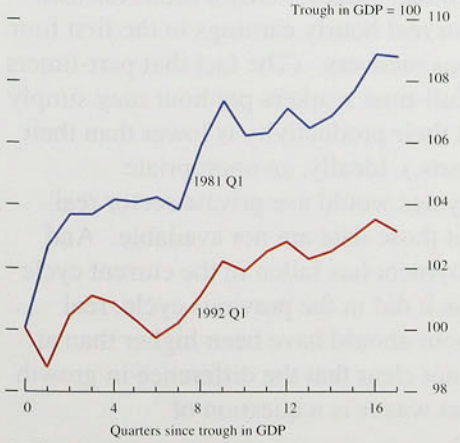
Nominal earnings depend both on real earnings bargained over by employers and employees and by the inflation rate they expect. Each of these are examined in turn below.

4.5 Real earnings

Real product wages per employee[1]—calculated using the quarterly GDP deflator—have grown more slowly over the current recovery than over the previous upturn (see Chart 4.6). Indeed, the real product wage, measured in this way, increased by 3.1% in the first four years of the current recovery, compared with 8.8% in the first four years of the upturn in the early 1980s.

There are three main possible explanations. First, real wages may not be appropriately measured: the real cost to a firm of employing labour depends on the wage *per hour* rather than per week; and *private* sector wages may be a better guide to labour market pressure on wages, as wages in the public sector are subject to public pay policy. Second, real wages may have been temporarily subdued, and may be about to accelerate. Third, there may have been a step reduction during this recovery in the level of real wages workers were prepared to accept for any given level of unemployment and labour productivity. If so, that would have entailed a

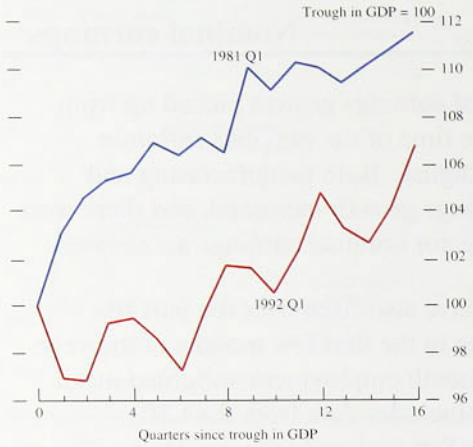
Chart 4.6
Real product wage per employee:[a] recoveries compared



(a) The real product wage is defined as income from employment plus employers' contributions divided by the GDP deflator at factor cost. That is then divided by UK employees in employment plus HM Forces.

(1) Real product wages per employee are defined as UK income from employment plus employers' National Insurance contributions divided by the number of UK employees in employment plus HM forces, and deflated by the GDP deflator.

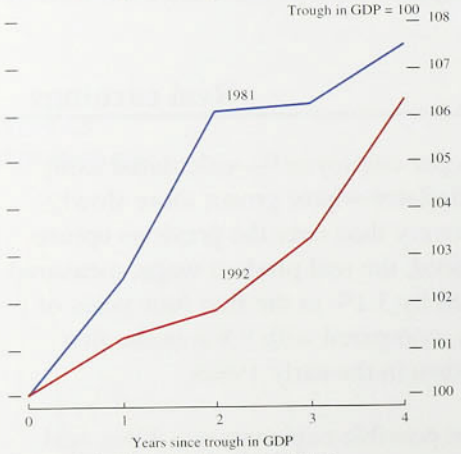
Chart 4.7
Real private sector wages:[a] recoveries compared



Sources: Bank of England and ONS.

(a) Deflated by the GDP deflator.

Chart 4.8
Real hourly earnings:[a] recoveries compared



Sources: Bank of England and New Earnings Survey.

(a) In Great Britain NES data are for April each year. They have been deflated by a weighted GDP deflator for Q1 and Q2.

shift of the effective supply of labour, increasing the demand for labour by reducing its cost, and resulting in a lower natural rate of unemployment.

Measurement

One possibility is that *private sector* wages have been increasing at similar rates over the two recoveries. That does not seem to have been the case, however. The split between earnings in the public and the private sector is not available, but it is possible to provide an indication of the different trends by weighting together earnings in education, health and social work and public administration as a rough estimate of public sector earnings, and taking the rest to be privately negotiated. Chart 4.7 plots this measure for the private sector; it shows that private sector real wages per worker were much more subdued during the recent recovery than during the early 1980s. The reason is that public sector real wage growth was even more subdued in the recovery of the early 1980s, following the sharp rise in public sector earnings in 1980.(1)

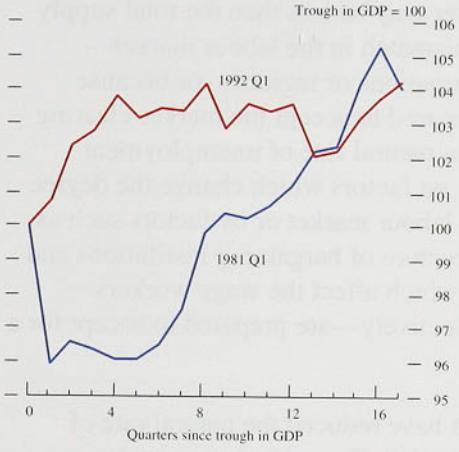
An alternative is that the growth of part-time work in recent years reduced the growth of real wages per worker, but that real wages *per hour* have been rising at a rate closer to that in previous cycles. That seems to be the case, judging by hourly pay data for full-time employees from the New Earnings Survey. Chart 4.8 shows that real hourly earnings of full-time workers rose by 6.4% in the first four years of the recovery—faster than overall real product wages—only a little less than the 7.5% increase in real hourly earnings in the first four years of the previous recovery. (The fact that part-timers are paid less than full-time workers per hour may simply reflect the fact that their productivity is lower than their full-time counterparts.) Ideally, an appropriate comparison over cycles would use private sector real wages per hour, but those data are not available. And given that unemployment has fallen in the current cycle rather than rising as it did in the previous cycle, real wage growth per hour should have been higher than at that time. So it is not clear that the difference in growth rates of real product wages is a question of measurement.

Temporary effects on wages

The real product wage per hour is a measure of the cost of the labour to employers compared with the price paid

(1) This resulted from the Clegg commission public sector pay recommendations, which proposed a two-stage rise of up to 25.8% over 1979 and 1980.

Chart 4.9
Real consumption wage per employee: recoveries compared



for their products—that is why it includes employers' social security contributions and is deflated by the GDP deflator, a measure of economy-wide prices. But employees are concerned not with the real product wage per hour, but the real take-home pay per hour—the real hourly consumption wage. The real consumption wage excludes employers' social security contributions and is deflated by the tax and price index, which takes account of changes in direct and indirect taxes as well as prices.

The tax and price index rose by 6% relative to the GDP deflator in the first four and a half years of the early 1980s recovery, while it did not rise as quickly as the GDP deflator in the current recovery. So, whereas the real product wage per week grew much less rapidly in the early 1990s than in the early 1980s, the real consumption wage per week increased much in line with the 3.8% rise over the first four and a half years in the previous recovery (see Chart 4.9). That meant that greater labour supply was forthcoming at any real product wage in the 1990s, so allowing employment to grow faster.

What factors allowed real consumption wages to rise during this recovery, while real product wage growth was relatively slow? There were three main factors: the terms of trade, indirect taxes and direct taxes. First, the effect of the terms of trade—the prices people pay for imported goods compared with the prices of goods produced in the United Kingdom—can be examined by considering the ratio of RPIY and the GDP deflator. That measure rose by around 1% in the early 1980s, but was broadly flat in the early 1990s' recovery, so the terms of trade had a slightly greater effect on the tax and price index during the early 1980s.

Second, the impact of indirect taxes can be seen in changes in the ratio of the RPIX to RPIY. That rose by three and a half percentage points in the recovery of the early 1980s, but only two percentage points over the 1990s' recovery, suggesting that indirect taxes had a larger effect on the tax and price index in the earlier upturn.

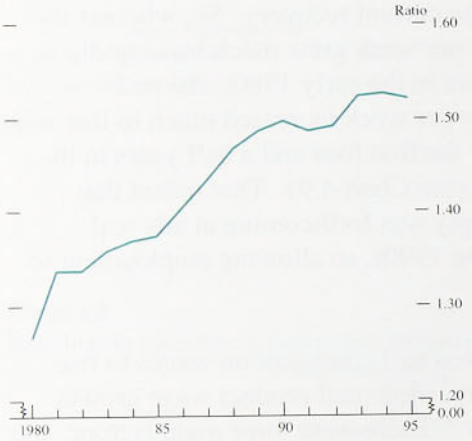
Lastly, the effect of direct taxes can be seen in changes in the ratio of the tax and price index to the retail price index. That rose by just over half a percentage point in the early 1980s, but fell more than one percentage point in the early 1990s' recovery, suggesting that direct taxes rose faster than prices in the earlier recovery, pushing up the tax and price index as well. So the terms of trade,

direct and indirect taxes all had roughly equal effects creating a larger 'wedge' between the consumption and product wages in the 1980s than in the 1990s' recovery.

The natural rate of unemployment

Structural changes in the 1980s may have lowered the natural rate of unemployment. The pool of labour firms believe to be on offer may be less than the total supply either because of mismatch in the labour market—between skills, occupations or regions—or because workers are not prepared to accept the market-clearing wage. The long-run natural rate of unemployment depends, therefore, on factors which change the degree of mismatch in the labour market or by factors such as job security, the structure of bargaining institutions and the benefit system which affect the wage workers—individually or collectively—are prepared to accept for a given job.

Chart 4.10
Ratio of male non-manual weekly wages to manual wages



Source: New Earnings Survey.

What factors might have reduced the natural rate of unemployment recently? First, the change in the qualification period for employment rights from one year to two years in the mid-1980s and the reduction in trade union power probably reduced the bargaining power of those in jobs. These labour market changes may have had a delayed effect on wages—possibly because their impact in the 1980s was offset by the relative increase in demand for skilled workers. A shift in demand away from unskilled workers, reflecting the characteristics of recent technical progress, would increase the relative wages of skilled workers; overall unemployment and overall real wages would rise if wages did not fall sufficiently in the unskilled sector to absorb the excess labour supply. Male non-manual wages stabilised relative to manual wages in 1990, however (see Chart 4.10), suggesting that the relative demand shock may have come to an end at that time, so that the shock to supply began to dominate.

Second, there may have been an increase in the perceived costs of job insecurity in the early 1990s, if the changing composition of job creation from full-time to part-time temporary employment meant that the penalty attached to losing a full-time job had increased.(1) Seven out of eight net new jobs created during the recovery were temporary, with one in three both part-time and temporary.

In either case, the current rate of unemployment is still probably above the natural rate of unemployment, and

(1) See August 1996 *Inflation Report* page 36.

there is probably scope for claimant unemployment to continue to fall somewhat before generating significant pressure on earnings.

The introduction of the Jobseeker's Allowance could have a further effect on real wages, if it increases the attractiveness of work relative to unemployment. That would tend to lead to a one-off reduction in real wages for any given level of productivity, and so presents an additional downside risk to real earnings growth.

4.6 Inflation expectations

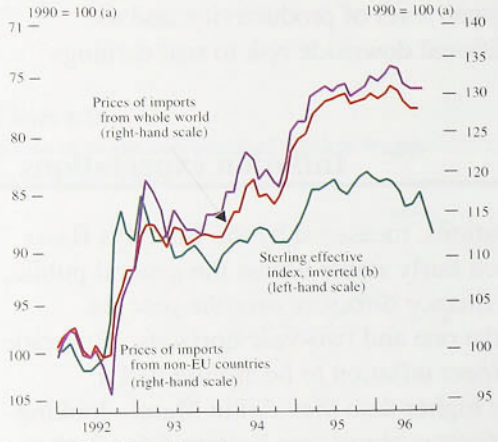
Inflation expectations, measured by the Barclays Basix Survey, have been fairly stable across the general public, economists and finance directors over the past six months both at the one and two-year horizons. But trade union leaders expect inflation to be around half a percentage point higher than they did in March, looking both one and two years ahead (see Section 6 for further discussion).

4.7 Summary

The labour market tightened over the past few months, after being fairly stable during the preceding year. Nominal earnings growth picked up. Real wages *per hour* probably increased at similar rates in the current and previous recoveries, although real wages *per employee* increased much more slowly in the recent recovery. There appears to have been a fall in the natural rate of unemployment. The introduction of the Jobseeker's Allowance is expected to remove around 35,000 people from the claimant count over the next six months. It is possible that if it improves the incentives of the unemployed to look for work, real wage growth may stay low for some time.

5 Pricing behaviour

Chart 5.1
Import prices and the exchange rate

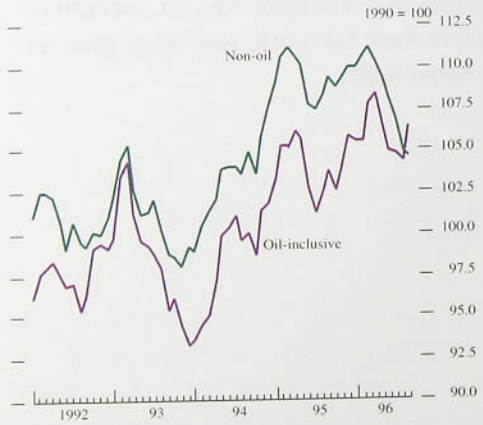


Sources: ONS and Bank of England.

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

(a) Each scale is logarithmic.
(b) A rise in the line reflects a depreciation.

Chart 5.2
Bank sterling commodity price index(a)



Source: Bank of England.

(a) Prices of primary commodities, weighted by their importance in UK demand.

Output price inflation has remained subdued since the August *Report*, as have import prices. But input prices picked up, and a number of unexpected price increases helped to maintain retail price inflation at just under 3% over the past three months.

5.1 Import prices and the exchange rate

Non-oil import prices fell by 1.8% in the three months to August, and were 2.0% below their level a year earlier (see Chart 5.1). More recently, movements in the exchange rate may have put downward pressure on import price inflation. The sterling effective exchange rate index rose from 84.1 on 2 August to 90.9 on 1 November, an appreciation of 8.1%.

5.2 Raw material and commodity prices

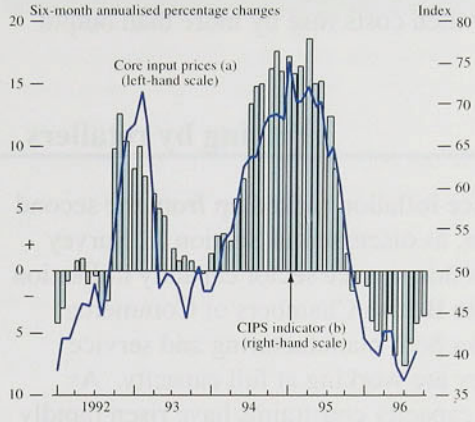
The Bank's UK demand-weighted commodity price index rose 2.1% in September, to 2.7% above its level a year earlier. That pick-up was caused by higher oil prices: Chart 5.2 shows that the non-oil index fell in September. Oil accounts for about a fifth of the Bank's commodity price index.

A number of commodity prices have fallen recently. The prices of imported foodstuffs (such as cocoa and coffee) fell by 1.4% in September, reflecting sterling's appreciation. Metals' prices, which account for nearly a tenth of the Bank's index, fell by 4.4% in September in response to stock build-ups. Agricultural prices, which account for more than a third of the index, fell by 4.2% in August (the latest month for which data are available). That was driven in part by falling wheat prices following a good harvest, reversing price rises earlier in the year. And a 3% revaluation of the 'green' exchange rate on 1 November will reduce the minimum prices farmers are guaranteed for their products. But the effect on retail food prices will be small, in part because the range of products covered by minimum prices is limited.

5.3 Pricing by production industries

The rate of decline in manufacturers' input costs slowed in recent months. Input prices were unchanged in July

Chart 5.3
Input price inflation and the CIPS purchase price indicator



Sources: Chartered Institute of Purchasing and Supply and ONS.

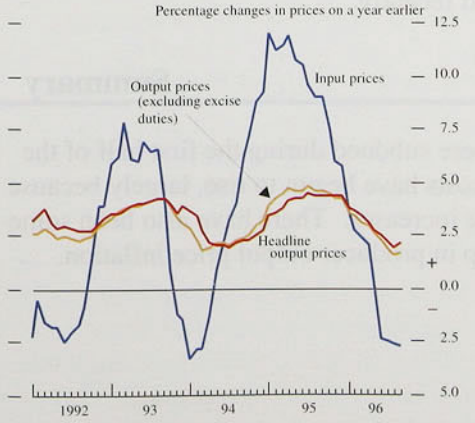
(a) Excludes purchases by the food, drink, tobacco and petroleum industries.
(b) Respondents are asked to compare the prices of purchases in the current month with those in the previous month. A figure above 50 indicates rising prices.

Table 5.A
Short-run measures of producer price inflation(a)

	1996 Apr.	May	June	July	Aug.	Sept.
Three-month annualised percentage changes						
Input prices	2.5	-1.0	-8.1	-10.3	-5.8	1.4
- excluding FDTP (b)	-4.5	-4.9	-9.3	-12.6	-9.7	-3.3
Output prices (c)	1.3	1.3	0.3	0.0	0.7	2.3
- excluding FDTP (b)	1.3	1.0	0.7	0.0	0.0	0.0
- excluding excise duties (PPIY)	2.0	1.7	0.7	0.0	0.0	1.7
One-month percentage changes						
Input prices	0.6	-1.1	-1.6	0.0	0.1	0.3
- excluding FDTP (b)	-0.2	-0.6	-1.6	-1.1	0.2	0.1
Output prices (c)	0.1	0.0	0.0	0.0	0.2	0.4
- excluding FDTP (b)	0.1	0.0	0.1	-0.1	0.0	0.1
- excluding excise duties (PPIY)	0.2	0.1	-0.1	0.0	0.1	0.3

(a) Seasonally adjusted by the ONS, except where noted.
(b) FDTP are food, drink, tobacco and petroleum.
(c) The ONS does not publish a seasonally adjusted headline output price series. To retain excise duty effects, these data are based on the seasonally adjusted tax-exclusive output price series multiplied by the ratio of unadjusted tax-inclusive to tax-exclusive prices.

Chart 5.4
Producer price inflation



and increased in the following two months, mainly because of oil prices: in September, oil prices rose by 7.0%, adding 0.8% to the producer input price index. The change in trend was confirmed by other data. First, the input price index which excludes food, drink, tobacco and petroleum rose by 0.1% in September, the second monthly increase in a row. That followed twelve consecutive monthly falls. Second, the Chartered Institute of Purchasing and Supply (CIPS) price index rose by 1.1 index points to 44.8 in October, its third consecutive monthly increase (see Chart 5.3). Although the CIPS index did not reach the neutral 50 level, above which manufacturers' input prices are generally rising, the increase in October suggests that the official input price index may have risen faster in October than in September.

Output price inflation has been very subdued over the past six months, as the short-run inflation measures in Table 5.A show. But there are some signs of a change in trend. Output prices rose by 0.4% in September, and were 2.2% above their level a year earlier (see Chart 5.4). And a balance of +9% of manufacturers in the October CBI Industrial Trends Survey expected to increase their prices over the next four months, up from +2% in July.

The ONS has constructed PPIY, a new output price series that excludes excise duties and is therefore analogous to the RPIY measure of retail price inflation (see Section 1). The index has risen more slowly than the headline output price index since the beginning of the year (see Chart 5.4). The short-run inflation measures of PPIY have tended to be even more subdued than the headline rate over the past six months, because taxes have increased faster than the prices charged by manufacturers for their output.

Unit costs in manufacturing

About a half of manufacturing industry's variable costs are accounted for by labour, a further quarter by materials and fuels (including semi-finished manufactured imports), and the remainder by imports of finished manufactures and bought-in services (such as transport). Table 5.B shows that domestic output prices rose more than estimated unit costs in 1996 Q1. In 1996 Q2 output price increases slowed and unit costs were unchanged. And in the three months to August, costs and output prices rose at the same rate. Downward pressure on manufacturers' costs from materials and fuels and from imports of finished manufactures

Table 5.B
Rates of change of manufacturers' costs and prices

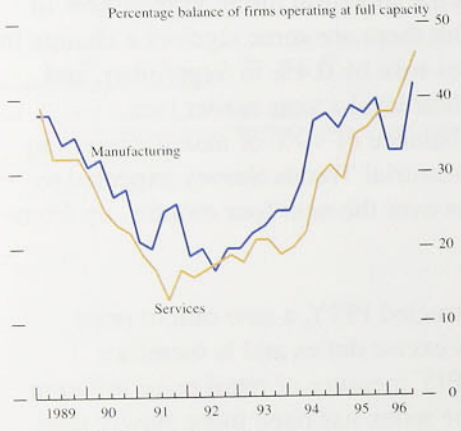
Percentage changes over the period shown

	1994 Year	1995 Year	1996 Q1	1996 Q2	1996 June-Aug. (a)
Unit costs					
Unit labour costs	0.3	2.6	0.9	0.6	1.3
of which: (b)					
Average earnings	4.7	4.5	1.6	0.7	1.0
Productivity	4.7	1.3	0.5	0.2	-0.3
Materials and fuels (including semi-finished manufactured imports)	3.8	10.8	-1.3	-1.6	-2.8
Imports of finished manufactures	4.1	8.7	-0.4	-0.7	-0.5
Services	3.4	1.7	0.5	0.7	0.6
Weighted costs	**2.1**	**4.9**	**0.2**	**0.0**	**0.1**
Output prices (c)	**2.3**	**4.5**	**0.3**	**0.2**	**0.1**

Sources: ONS and Bank of England.

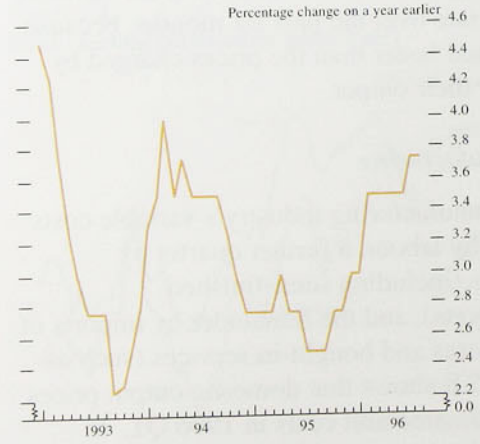
(a) Compared with previous three months.
(b) Unit labour costs also include employers' National Insurance Contributions. These do not appear separately in the table.
(c) Domestic sales.

Chart 5.5
Firms operating at full capacity



Source: British Chambers of Commerce.

Chart 5.6
Service sector earnings growth(a)



(a) Seasonally adjusted by the ONS.

probably outweighed increases in the costs of services over the period. That suggests there may have been an increase in manufacturers' margins so far this year, in contrast to 1995, when costs rose by more than output prices.

5.4 Pricing by retailers

Service sector price inflation picked up from the second quarter of the year, as discussed in Section 1. Survey evidence suggests that service sector capacity utilisation has increased. The British Chambers of Commerce (BCC) Survey asks both manufacturing and service sector firms if they are working at full capacity. As Chart 5.5 shows, capacity constraints have risen rapidly over the past 2½ years in the service sector. In the third quarter of the year, they reached their highest level since the series began in 1989. At the same time, the balance of manufacturing firms operating at full capacity rose to its highest level since 1989. The more firms that are working at full capacity, the more likely it is that firms will respond to an increase in demand by increasing prices in the short run.

The BCC Survey also suggests that there have been recruitment difficulties in the service sector, with the balance of firms experiencing recruitment problems rising in 1996 Q3 to its highest since 1990. Chart 5.6 shows that service sector earnings growth has increased steadily since the beginning of 1996, from 3.0% in the year to January to 3.8% in the year to August (see Section 4).

RPIX goods price inflation currently exceeds output price inflation. That is unusual. RPIX inflation had been below output price inflation from the third quarter of 1992 to April of this year. But the signs are that retail margins increased recently.

5.5 Summary

Cost pressures were subdued during the first half of the year. But input costs have begun to rise, largely because of recent oil price increases. There have also been some signs of a pick-up in producer output price inflation.

Prospects for inflation 6

6.1 Developments in prices, aggregate demand and supply

Economic growth has risen during the year. Estimated quarterly real GDP growth was 0.8% in the third quarter, compared with a revised estimated average of 0.6% in the first half of the year and 0.4% during 1995. But the growth of real domestic demand excluding stockbuilding rose by more. It increased from an average quarterly rate of 0.2% in 1995 to 1.0% in the first half of 1996. Nominal demand has also accelerated over the past year.

Both consumption and investment accelerated in the first half of 1996 (see Table 6.A). Information about the third quarter is incomplete, but the signs are that consumption grew rapidly. Household goods sales—an indicator of the demand for durable goods—were particularly strong. Retail sales growth as a whole slowed, but the Q2 figures, boosted by Euro '96, reflected spending in the United Kingdom by foreigners rather than domestic consumption. Consumer confidence improved over the quarter. The Halifax and Nationwide house price indices both increased in the third quarter, to give annual rates of increase of some 5%, reinforcing the view that consumption is likely to continue to grow rapidly. The increases in housing turnover, loan approvals and private housing starts are consistent with those prospects, too, as is the continuing growth of personal sector M4 deposits.

Investment accelerated in the first half of 1996, growing at an annualised rate of 6.6%. Both the British Chambers of Commerce and the CBI Surveys reported that investment intentions remained strong in the third quarter. And the market valuation of assets in the corporate sector increased further above their replacement cost, which suggests that it would be profitable for firms to issue equity or borrow funds to buy capital goods. M4 deposits held by industrial and commercial companies (ICCs) continued to rise strongly, increasing by 11.9% over the year to the third quarter—which in the past has been a sign that ICCs' investment was about to pick up.

The signals from the labour market are consistent with strengthening output growth. The more comprehensive

Table 6.A
Growth rates of components of real spending

Per cent; measured at 1990 market prices except where noted

Annualised growth rates over the period:

	1995	1996 H1
Domestic demand	0.7	2.4
Domestic demand excluding stockbuilding	0.7	4.0
Consumption	1.6	3.6
Private investment	-0.6	13.4
Public investment	-11.9	-7.6
Government expenditure	0.8	0.9
Exports	5.1	9.3
Imports	2.1	9.4
GDP (a)	**1.7**	**2.4**

(a) At factor cost.

indicators of labour demand, such as total hours worked reported in the Labour Force Survey, were fairly stable throughout 1995 and into spring 1996. But total hours worked picked up by 0.8% between the spring and summer LFS, and employment also grew strongly, suggesting that the labour market started to tighten then. That was followed during the third quarter by faster declines in claimant unemployment and an acceleration of underlying earnings, so the growth rate of labour demand may have increased further. Private sector earnings, unconstrained by pay-bill caps, have been growing faster than those in the public sector. The rate of increase of earnings in service sector industries started to catch up with the rate of increase in manufacturing in the middle of last year, and survey evidence suggests that recruitment difficulties are emerging in the service sector.

The pattern of demand has been changing over the past year, with a switch from net exports to domestic demand. Net exports fell slightly in the first half of 1996. Nevertheless, gross export volumes held up surprisingly well, given the weakness of demand in most of the United Kingdom's main trading partners. Export volumes increased by 3.6% between the second half of 1995 and the first half of 1996, but appear to have been almost flat since then.

Overall, there has been little news over the past quarter to change the prospect that the faster pace of output growth will be maintained. As the output gap closes, the downward pressure on domestically generated inflation will be reduced. How quickly that happens will depend on two factors, stocks and net exports, identified in earlier *Reports* as downside risks to output in the near term. First, there is still a downside risk to output from stocks, as firms probably wish to reduce stock-to-sales ratios further. The main issue is what aggregate stock-to-sales ratio is implied by firms' individual targets, and hence the size of the overhang. Stocks fell relative to output in 1996 Q2 and output accelerated in Q3, so it now looks more likely that the stock-to-sales ratio will be brought down gradually, mainly by increases in sales rather than reductions in stocks. The risk of a sharp fall in output growth from this source has fallen.

Second, uncertainty about future net exports remains. Prospects for demand growth in continental Europe remain unclear, not least because it is difficult to assess the impact that fiscal consolidation programmes will have. In the first half of 1996, net exports held up better than expected, probably because UK exporters gained

market share and imports may have been reduced by lower stockbuilding. But those factors are unlikely to persist, particularly given sterling's 8% appreciation between 2 August and 1 November. UK competitiveness is likely to worsen in the short run. The appreciation of sterling is likely to accentuate the emerging imbalance between domestic demand and net exports.

The strength of underlying domestic demand suggests that higher output growth will be sustained. Hence inflationary pressure is expected to mount as unemployment approaches its natural rate and firms' unit costs are driven up. Output price inflation has been very subdued so far this year, but survey evidence suggests that it is close to a turning point. The October CBI Industrial Trends Survey found that more manufacturers expected to increase their prices over the next four months than did in July. Output prices rose in September. Similarly, the three-month rate of change of input prices became positive in September.

The uncertainty surrounding the outlook for inflation is greater this quarter because of the difficulty in interpreting two unexpected developments: first, the failure of RPIX inflation to fall over the past quarter and, second, the sharp appreciation of sterling.

Some of the specific price increases that contributed to higher-than-expected RPIX—for example, those for petrol—may have arisen because of adverse 'supply shocks', which, provided they do not influence wage and price expectations, are unlikely to affect the two-year-ahead inflation rate. But it is difficult to identify many such shocks. Some of the unexpected price increases could be the result of retailers 'testing the market' to see what it will bear. Some of those price increases may be unwound. But many of the price increases, such as those for services such as catering, transport, and insurance and for cars, are more likely to be the result of stronger nominal demand growth, and may therefore signal that inflation is picking up sooner than forecast.

How does the appreciation of the exchange rate affect the inflation outlook? Section 2 concluded that the most likely explanations for the rise in sterling were (i) a perceived temporary loosening of monetary policies overseas (ii) a perceived temporary tightening of monetary policy in the United Kingdom and (iii) a rise in the real exchange rate, perhaps because of the higher oil price.

First, to the extent that a perceived temporary loosening of monetary policies overseas was responsible, the reduction in import prices will be unwound gradually as overseas prices rise more than they otherwise would have done. In that case, the nominal appreciation of sterling will have only a temporary effect on the real exchange rate. There will be no lasting impact on the overall price level—a good example of a case where mixing together exchange rate and interest rate changes to assess the stance of monetary policy makes no sense. Inflation will be lower in the short run. Then, as prices start to rise faster abroad, UK import prices will start to increase, too, and the UK retail price inflation rate will go up. Second, if a perceived temporary tightening of UK monetary policy—signalled by the rise in interest rates implied by short-sterling futures to levels significantly above 6%—is responsible for the appreciation, its persistence will depend on whether interest rates do indeed rise further. Third, if the equilibrium real exchange rate has risen, the price of tradables will decline relative to non-tradables and, if monetary policy does not offset the first-round effect, there will be a one-off reduction in the aggregate price level. The twelve-month rate of inflation will decline temporarily.

All three explanations entail at least a temporary fall in import prices (relative to the path they would have followed) and a temporary decline in the twelve-month rate of inflation, although only the second—a perceived tightening of monetary policy in the United Kingdom, as reflected in the upward shift of the yield curve at the short end—would imply lower inflation in the long run. The Bank's central projection is based on a judgment that a rise in the real exchange rate accounts for about one half of the appreciation of sterling, the rest being due to the two monetary explanations in roughly equal measure. Because the projection is based on unchanged official interest rates, that part of the appreciation due to recent perceived UK tightening is assumed to unwind.

6.2 The Bank's medium-term inflation projection

The Bank's medium-term projection of the twelve-month inflation rate is shown in Chart 6.1, next to August's projection, shown in Chart 6.2. Official interest rates are assumed to remain unchanged at 6% over the next two years, and the sterling effective exchange rate is projected to evolve according to differences between nominal interest rates in other countries on the one hand and the constant UK interest rate assumed on the other. Real public spending and effective tax rates are assumed

Chart 6.1
Current RPIX inflation projection

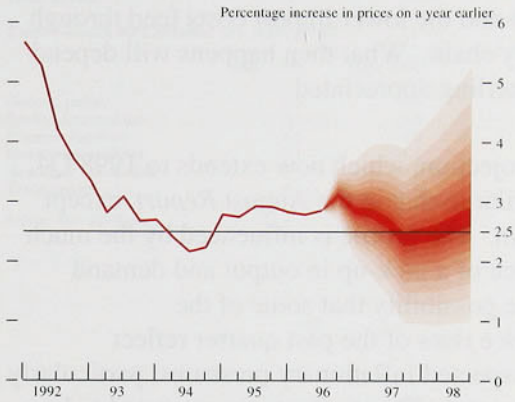
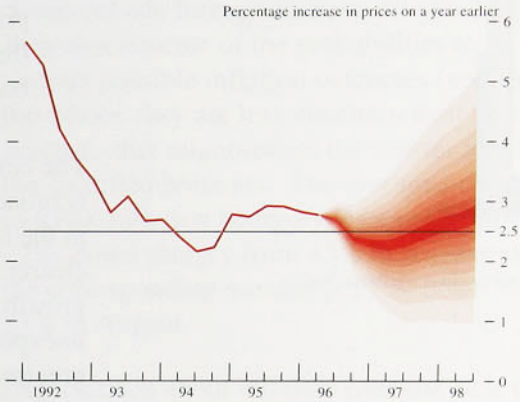


Chart 6.2
RPIX inflation projection in August



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.

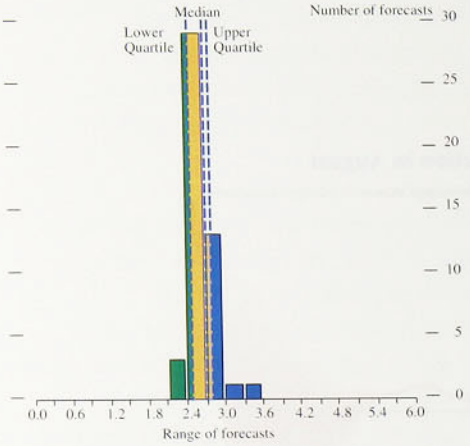
to follow the profile set out in HM Treasury's Summer Forecast.

The Bank's assessment is that twelve-month RPIX inflation is likely to fall next year after a rise in the final quarter of 1996, reaching a rate around 2½% towards the end of 1997. Then it is likely to turn up again, and rise to the end of the forecasting period. This profile reflects the following three considerations:

(i) there probably remains some margin of underutilised resources in the economy. As a result, there is some downward pressure on inflation. But that is expected to diminish and then reverse as output growth continues above its long-run trend;

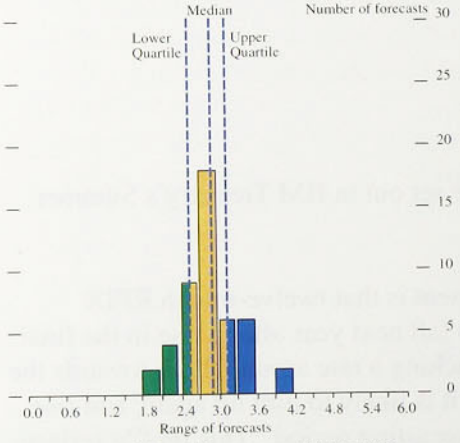
(ii) the higher-than-expected outturns for inflation in the third quarter did not simply reflect one-off adverse supply developments. It is not yet clear why inflation was higher. Some of the unexpected price increases are likely to be unwound, at least in part. But it is likely that some of them (for

Chart 6.3
Distribution of RPIX inflation forecasts for 1996 Q4



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

Chart 6.4
Distribution of RPIX inflation forecasts for 1997 Q4



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

Table 6.B
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	1	21	75	3	1
1997 Q4	2	25	57	13	3

(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 21% to inflation turning out to be between 1% and 2.5% in 1996 Q4. Rows may not sum to 100, because of rounding.

example, those for services) reflect an increase in nominal demand growth, which is likely to push up prices further in the future; and

(iii) the appreciation of sterling will reduce the overall price level in the short run by making imports cheaper. That will tend to reduce inflation, the effect increasing over the next year as firms review price lists and the lower import costs feed through the supply chain. What then happens will depend on why sterling appreciated.

The central projection, which now extends to 1998 Q4, is broadly similar to that in the August *Report*, except in the near term. The profile is influenced by the much clearer evidence of a pick-up in output and demand growth and the possibility that some of the unexpected price rises of the past quarter reflect greater-than-expected inflationary pressures, particularly in the service sector. Those effects are expected to be offset by the ¼ percentage point rise in official rates and weaker export demand, which will dampen output growth.

The uncertainty surrounding the current central projection is greater than it was in August, and that is reflected in the wider spread of the shading in Chart 6.1. The uncertainty about inflation over the next year or so has increased more than at the two-year horizon. Alternative explanations of the change in the short-run inflation outlook and of why sterling appreciated have very different implications for inflation over the next year, but much less so for inflation in two years' time. For example, if the price of oil fell significantly, measured inflation over the next year—but not two years out—would be lower. The risks of an inflation outcome different from the central projection are more on the upside than the downside, as they were in August, reflecting the skewed distribution of possible outturns for activity over the next year or so. As in August, it is more likely than not that the inflation target will be missed in two years' time.

6.3 Other inflation projections

Among the economic forecasts monitored by the Bank, the median projections for twelve-month inflation in 1996 Q4 and 1997 Q4 are 2.7% and 2.9%, unchanged from August (see Charts 6.3 and 6.4). The median projection for 1996 Q4 is lower than the Bank's central projection, while that for 1997 Q4 is higher. The spread

Table 6.C
Barclays Basix Survey expectations

Percentage increases in prices

Twelve-month RPI inflation one year ahead

	June 1996	Sept. 1996
General public	3.8	3.8
Business economists	2.9	3.0
Finance directors	3.0	3.2
Investment analysts	3.1	3.2
Academic economists	3.0	3.0
Trade unions	3.1	3.6

Twelve-month RPI inflation two years ahead

	June 1996	Sept. 1996
General public	4.6	4.5
Business economists	3.6	3.6
Finance directors	4.0	4.0
Investment analysts	4.1	4.1
Academic economists	3.6	3.6
Trade unions	4.1	4.8

Source: Barclays Bank.

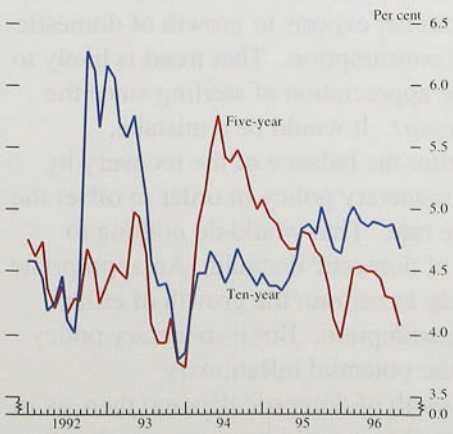
Table 6.D
Merrill Lynch-Gallup Survey of UK fund managers

Percentage increases in prices

Twelve-month RPI inflation at	1996 June	July	Aug.	Sept.	Oct.
End-1996	2.8	2.8	2.8	2.6	2.6
End-1997	3.4	3.4	3.3	3.2	3.2

Source: Merrill Lynch-Gallup.

Chart 6.5
Implied forward inflation rates[a]



Source: Bank of England

(a) Calendar-month average.

of central projections can be measured by the interquartile range: that is, the range of projections excluding the top and bottom quarters of the distribution. The range has narrowed a little at the longer horizon, but not at the shorter one. The forecasts were collected before the change in official interest rates was announced.

Some outside forecasters have provided the Bank with their assessments of the probabilities to be attached to various possible inflation outcomes (see Table 6.B). On the whole, they are less uncertain than they were in August; that might reflect the shorter lengths of time to the specified horizons. The average probability attached to RPIX inflation being 2½% or below in 1996 Q4 is 22%, down sharply from 45% in August; for 1997 Q4, the corresponding number is 27%, down slightly from 33% in August.

Expectations about inflation over the next year or so reported by the Barclays Basix and the Merrill Lynch-Gallup Surveys have changed very little on the whole, as Tables 6.C and 6.D show.

Longer-term inflation expectations, derived by comparing conventional and index-linked gilt prices, have fallen at both the five-year and ten-year horizons (see Chart 6.5). The credibility of the monetary policy framework is increasing, but both measures still reflect some scepticism about achievement of price stability in the long run.

6.4 Conclusions

Since the August *Inflation Report*, there have been three important pieces of news. First, the short-run outlook for inflation has deteriorated. Second, the effective exchange rate has risen by 8%. Third, the estimate of GDP growth in the first half of the year has been revised up, and for the third quarter is above trend.

Retail price inflation has been somewhat higher than expected in recent months despite weak cost pressures. That can partly be attributed to higher oil prices and does not in itself mean higher domestically generated inflation. But in some sectors of the economy, especially services, there is evidence that increasing capacity utilisation is putting pressure on retail prices. Despite the sharp rise in the exchange rate, it is likely that inflation will rise further before weak cost pressures, as reflected in continuing low rates of increase of producer output prices, lead to a further decline.

There is now clear evidence that the pick-up in domestic demand has fed through to output growth. A reduction in stockbuilding kept manufacturing output broadly flat over the past year, but total output grew at above trend during the third quarter, having grown at about trend for the first half of the year. Real broad money growth—at an annual rate of more than 5% for well over a year—continues to signal above-trend growth in demand and output. The main upside risk remains higher consumer spending, and the main downside risk is of weaker exports. Survey data are consistent with that central view of continuing growth in the domestic economy.

Both the observed rise in inflation and the appreciation of sterling increase significantly the short-run uncertainty about RPIX inflation. There is likely to be a rise in the fourth quarter of this year followed by a slow decline in response to low producer and import price inflation. But inflation is likely to pick up over the next year or so as capacity is used up and demand pressures result increasingly in higher inflation rather than real activity. Already earnings growth has risen by about one percentage point during this year.

Although there is a good deal of uncertainty about where inflation will be in the short term, the prospect of above-trend growth of demand and output for some time poses a threat to the inflation target some two years ahead. Even after the recent increase in official interest rates of ¼ percentage point, it remains more likely than not that inflation will be above the target at the end of the forecast horizon. And the short-run rise in inflation means that there is now much less chance of inflation being below 2½% during 1997. Achievement of the inflation target remains elusive.

During the course of this year the balance of the recovery shifted from net exports to growth of domestic demand, especially consumption. That trend is likely to be reinforced by the appreciation of sterling since the August *Inflation Report*. It would be a mistake, however, to try to alter the balance of the recovery by pursuing an easier monetary policy in order to offset the rise in the exchange rate. That would do nothing to control the growth of domestic demand. An appropriate fiscal policy can help to restrain the growth of either public or private consumption. But if monetary policy fails to counteract the potential inflationary consequences of growth of domestic demand then, as in the late 1980s, the problem could become a weak rather than a strong exchange rate.

A further rise in inflation in the next month or two could pose questions about the credibility of the commitment to the inflation target. The recent rise in rates should help to reinforce credibility. But what matters most is the continuous pursuit of a monetary policy which is consistent with achieving the target in the medium term. To ensure this outcome, some further rise in interest rates is likely to become necessary in due course.

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: 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 component of 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.

BCC: British Chambers of Commerce.
BSE: bovine spongiform encephalopathy.
CIPS: Chartered Institute of Purchasing and Supply.
ICCs: industrial and commercial companies.
LFS: Labour Force Survey.
OFIs: other financial institutions.
TESSA: tax-exempt special savings account.
WIE: Workforce in Employment.

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

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 a ONS error in underrecording RPI and RPIX inflation between February and May 1995.
n.a. = not available.
Because of rounding, the sum of the separate items may sometimes differ from the total shown.
On the horizontal axes of graphs, larger ticks denote the first observation within the relevant period, eg data for the first quarter of the year.

Other information

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

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