

Inflation Report

November 1997

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The operational target for monetary policy is an underlying inflation rate, measured by the twelve-month increase in retail prices excluding mortgage interest payments (RPIX), of 2½%. Because of the lags in the effects of monetary policy on the economy, the Monetary Policy Committee (MPC) sets interest rates with respect to the prospects for inflation over the next two years or so. This section summarises the rest of the *Report*, which analyses the current state of the economy in order to assess the prospects for inflation.

Section 2 begins with an assessment of the latest monetary trends. Broad money appears to be continuing to grow too quickly to be compatible with the inflation target in the medium term, unless there is a further decline in its velocity. The box on page 8 discusses monitoring ranges for money growth. Although the MPC has decided not to reinstate such ranges, money remains central in its view of the determinants of inflation in the long run. This section also analyses recent movements in interest rates and the exchange rate. Sterling has risen significantly in nominal effective terms since last year, but over the 15 working days to 5 November, sterling was 3% lower than that used as the starting point in the *August Inflation Report* projection.

Section 3 considers demand and output: real GDP grew by 1% in the third quarter and by 3.9% on a year earlier. There is some evidence in both the Q3 GDP data and surveys that the pace of activity in the service sector may be slowing. The impetus for the current fast growth is from domestic demand, especially consumption. The box on page 20 discusses the results of the recent Bank/MORI survey on windfall gains, which suggest that most of the boost to consumption growth will have occurred by the end of this year. This section also examines possible reasons why net exports have not fallen as much as expected in the light of sterling's appreciation since August last year.

Section 4 assesses evidence from the labour market. Employment is growing strongly and unemployment continues to fall, according to the recent Labour Force Survey. Despite this tightening of the labour market, annual nominal earnings growth, adjusting for the

temporary effects of bonuses, remains at just under 4½%. Section 5 considers manufacturing costs and prices, which are subdued but have stopped falling. Import prices and retail prices have not fallen as much as expected, given sterling's appreciation since last year.

Section 6 provides a summary of the economic news since the *August Report* and a short account of the decisions made by the MPC since August. The MPC concluded at the August meeting that policy had reached a position at which it should be possible to pause to assess the direction in which the risks to inflation were likely to materialise. At the September and October MPC meetings, the Committee maintained this view and left interest rates unchanged. At the November meeting, the MPC agreed to raise the Bank's repo rate by 0.25 percentage points to 7.25%. The minutes of the August, September and October meetings are published as an Annex to this *Report*. The analysis and conclusions in this *Report* reflect the outcome of the November MPC meeting.

Section 7 assesses the prospects for inflation during the next two years or so. Output has grown at an annual rate of about 4% for some time, driven by the strength of domestic demand, and most measures of the labour market suggest considerable tightening. Nevertheless, earnings growth has been broadly flat during 1997. The issue is whether, in the tighter labour market, there will be upward pressure on earnings during the course of next year. There is survey evidence of growing skill shortages, and the Bank's regional Agencies report concern about the effect of this on the prospects for pay settlements in the coming pay round. As yet, however, that concern has not shown up in either settlements or earnings figures. But if earnings growth were to rise, then unless some of the increase in costs was absorbed in lower margins, that would pose a clear threat to the inflation target.

Despite sterling's appreciation of some 20% since August 1996, there has been little reduction in the volume of exports. But the higher exchange rate is likely to affect export volumes during the coming year. Weaker net exports, combined with the monetary and fiscal policy tightening earlier this year, and the tailing-off of the effect on consumption of windfall gains, mean that output growth is likely to slow to slightly below trend for a short period. There have been few signs to date of the effect of sterling's appreciation on exports, which indicates how difficult it is to identify

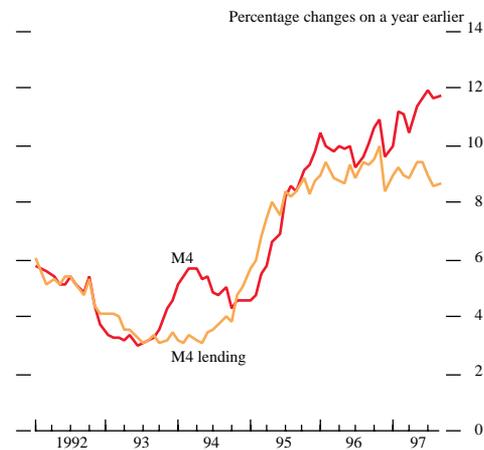
the timing and magnitude of any reduction in output growth.

Both inflation and output growth have turned out to be about $\frac{1}{2}$ percentage point higher than the central projection in August. Profit margins on domestic sales have risen to offset lower import prices, thus reducing the impact of the higher exchange rate on the domestic price level. The impact of the exchange rate on net trade has been surprisingly muted so far, and the anticipated reduction in the rate of output growth has not materialised. Although the most likely interpretation is that the impact on net trade has been deferred and that output growth will slow during 1998, there is uncertainty about the extent to which the pressure of demand relative to supply can continue without leading to a rise in inflation. But the continued rapid growth in broad money, domestic demand and output, meant that the balance of risks to inflation remained on the upside. For these reasons, the Committee decided in November to raise interest rates by a further $\frac{1}{4}$ percentage point in order to meet the inflation target.

2

Money, interest rates and exchange rates

Chart 2.1
Growth of M4 and M4 lending



Source: Bank of England.

Table 2.A
Growth rates of M4 and M4 lending^(a)

Per cent		1 month	3 months (b)	6 months (b)	12 months
M4	June	0.9	11.0	14.0	11.6
	July	0.9	13.2	12.3	11.9
	Aug.	0.8	10.7	11.1	11.6
	Sept.	1.0	11.3	11.1	11.8
M4 lending	June	0.7	9.6	11.6	9.4
	July	0.5	9.1	9.0	9.0
	Aug.	0.5	6.6	8.0	8.6
	Sept.	0.7	6.6	8.1	8.7

Source: Bank of England.

(a) Seasonally adjusted.
(b) Annualised.

Broad money has continued to grow at double-digit rates. Real broad money grew by 9.1% in the year to 1997 Q3, its fastest rise since 1990. Narrow money growth has slowed in recent months, compared with the second half of last year. Following the rise in the Bank's repo rate on 7 August, rates were unchanged in September and October and were then raised by 0.25 percentage points on 6 November to 7.25%. Long-term interest rates have fallen by around 50 basis points in the United Kingdom and by around 20 basis points overseas. The nominal effective exchange rate used in the inflation forecast—based on its average in the 15 working days to 5 November—was 102.0, around 3% lower than the exchange rate used in the inflation projection in the *August Report*.

2.1

Money

Annual broad money (M4) grew by 11.8% in September, compared with 11.6% in August and 11.9% in July (see Chart 2.1). In August and September, as Table 2.A shows, shorter-term growth rates were all below the annual rate; this was for the first time since July 1996, excluding the gilt repo-distorted outturn in December. Broad money has continued to grow faster than the rates of around 8%–10% from mid 1995 to the end of 1996.

The current rate of broad money growth—and the continuing fall in velocity—remains a threat to meeting the inflation target in the medium term. Previous *Reports* have noted that, though velocity might be expected to rise or fall for one or two years during the cycle, a sustained fall would tend to occur only during periods of change such as rapid financial liberalisation, innovation, or an upward shift in the desired wealth to income ratio. To the extent that some of the fall in broad money velocity since the early 1990s could be explained by these factors, the current rate of M4 growth may be less of an immediate threat. But there is no way of knowing whether this is the case, and that is why money growth is a risk to the inflation outlook. Since the recent rapid growth of financial wealth cannot be expected to continue indefinitely, money growth must also slow if the inflation target is to be met. The tightening of fiscal

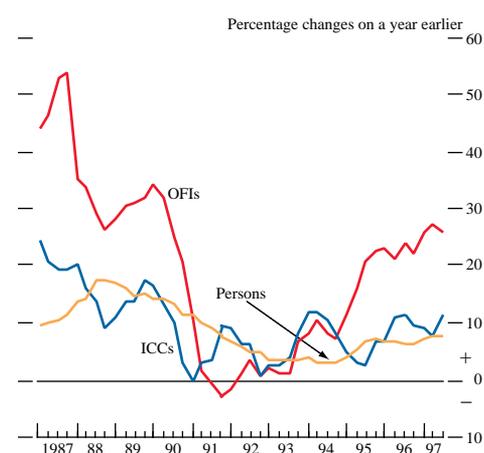
and monetary policies since May should go some way towards achieving this objective.

As part of the decision to make the Bank operationally independent, the Government has given the Monetary Policy Committee (MPC) discretion over whether or not to employ intermediate targets or monitoring ranges. The MPC has decided that it will not at present reinstate monitoring ranges, which lapsed in May, though the monetary aggregates are an integral part of its assessment of monetary conditions. The box on pages 8–9 sets out the reasons for the MPC's decision.

Real broad money grew by 9.1% in the year to 1997 Q3, its fastest rise since 1990. The *August Report* noted that real broad money growth tends to lead domestic demand growth, so the strength of real broad money growth is likely to be reflected in current and future consumption and investment decisions.

Within the aggregate, broad money growth was not uniformly strong. Deposits held by other financial institutions and the corporate sector grew strongly in 1997 Q3, but the growth rate of deposits held by the personal sector fell.⁽¹⁾ An increase in M4 resulting from an increase in planned spending by individuals or companies could be a signal of higher nominal demand. But for a given level of financial wealth, a shift towards broad money from other assets could also be the result of a portfolio shift in response to changes in expected risks and returns.

Chart 2.2
Sectoral M4



Source: Bank of England.

Other financial institutions

OFIs' deposits have grown quickly during the past few years, as Chart 2.2 shows. In the year to 1997 Q3, OFIs' deposits grew by 25.7%. The average quarterly rise in OFIs' deposits so far this year, 26.3%, was the fastest increase since 1990. Though OFIs' deposits are only one fifth of all bank and building society deposits, their increase during the past year, of £35.4 billion, accounted for almost half of the rise in total M4.

OFIs' demand for broad money is determined largely by portfolio considerations, rather than transactions demand. The value of OFIs' holdings of securities has risen rapidly since the beginning of 1995, as asset prices

(1) New banking statistics returns were introduced at the end of September, bringing UK statistics into line with European System of Accounts standards. The coverage of returns and definitions of economic sectors both changed. Details of the changes were published in the September issue of *Bank of England: Monetary and Financial Statistics*. Adjustments have been made to minimise breaks in the time series of financial flows, but caution is needed in interpreting data for the latest quarter, because of the scale of changes.

Monetary monitoring ranges and the UK monetary framework

Money plays a fundamental role in the Bank's assessment of the outlook for inflation. This is because inflation is a monetary phenomenon in the long run. And the growth of monetary aggregates is a guide to actual and prospective demand in the medium and longer term.

Monetary targets and monitoring ranges for M0 and M4

Outturns at end of fiscal year in italics

Fiscal years	Date of announcement	M0	M4
1984/85 (a)	March	4–8	<i>5.6</i>
1985/86 (a)	March	3–7	<i>3.9</i>
1986/87 (a)	March	2–6	<i>4.0</i>
1987/88	March	2–6	<i>5.5</i>
1988/89	March	1–5	<i>6.8</i>
1989/90	March	1–5	<i>6.5</i>
1990/91	March	1–5	<i>2.7</i>
1991/92	March	0–4	<i>1.9</i>
1992/93	March	0–4	<i>4.6</i>
1993/94	March	0–4	<i>5.5</i>
1994/95	November	0–4	<i>6.3</i>
1995/96	November	0–4	<i>6.3</i>
1996/97	November	0–4	<i>6.4</i>
1997/98 (c)	November	0–4	<i>6.4</i> (d)

(a) Targets were also set for £M3 for 1984/85–1986/87.

(b) The monitoring range for M4 was introduced in the Chancellor of the Exchequer's *Autumn Statement* in October 1992.

(c) The monitoring ranges for M0 and M4 lapsed in May 1997.

(d) Outturns for October and September 1997 respectively.

The role of money in the UK monetary framework has varied considerably. In the early 1980s, monetary targets were set. More recently, following the introduction of the inflation-targeting framework in October 1992, monitoring ranges were set for M0 (0%–4%) and M4 (3%–9%), designed to show what growth rates would or would not be regarded as a cause for concern.⁽¹⁾ But as the table shows, monetary growth has more often than not fallen outside the target or monitoring range since 1988/89.

As part of the decision to make the Bank operationally independent, the Government has given the Monetary Policy Committee (MPC) discretion over whether to employ intermediate targets or monitoring ranges. The MPC has decided that, at present, it will not reinstate monitoring ranges, which lapsed in May.

Money differs from other variables, in that sustained increases in the growth rate of money are invariably associated with sustained increases in inflation, whereas other variables affect inflation only in the short run. But velocity has behaved erratically in recent years. As the table shows, M4 growth has been above 9% and M0 growth has also been persistently above 4%, reflecting falling velocity. In the case of M0, this may have been caused by adjustment to a low-inflation environment, where individuals want to hold a higher level of cash. If so, positive velocity growth could resume in due course when the adjustment is completed, because of the continuing incentive to economise on non interest bearing currency holdings.⁽²⁾

So although there is a clear conceptual link between money and inflation, there is currently no simple numerical link in the United Kingdom, because of uncertainty about the path of velocity. Germany focuses on a target range for the M3 measure of money and, as the chart shows, its velocity has been more stable than M4 velocity in the United Kingdom. In the United States, erratic movements in velocity led the Federal Reserve Board to abandon monetary targeting. But Alan Greenspan, in his Humphrey Hawkins testimony in July, noted that the velocity of M2 had fluctuated in a relatively narrow range in recent years, and that 'at some point in the future, the Federal Open Market Committee might elect to put more weight on such monetary quantities in the conduct of policy'.

The inflation-targeting approach used in the United Kingdom does, however, encompass the information from money; the monetary aggregates play an important role in the MPC's inflation forecast. Indeed, monitoring ranges could be confusing if, because of unpredicted changes in trend velocity, the ranges chosen turned out to be inconsistent with

(1) See *Financial Statement and Budget Report* for the years 1993/94 to 1997/98 (November 1996 edition).

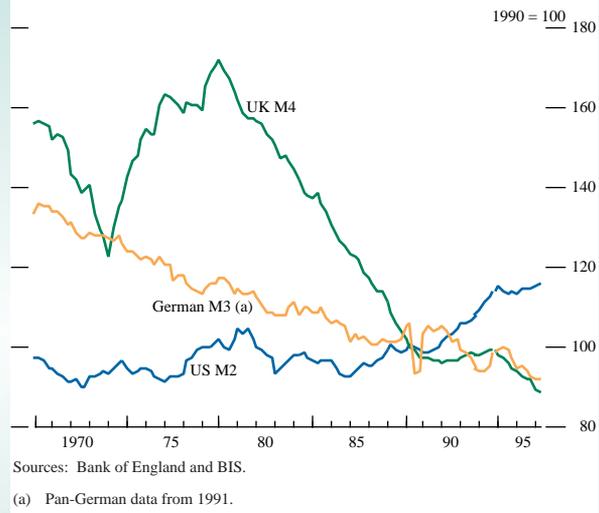
(2) The uncertainty of narrow money velocity is discussed in Janssen, N (1996), 'Can we explain the shift in M0 velocity? Some time-series and cross-section evidence', *Quarterly Bulletin*, February, pages 39–50.

the inflation target because of structural changes.

Instead of using monitoring ranges, the MPC interprets the monetary aggregates in the context of a continuing assessment of the determinants of money demand. Recent research undertaken in the Bank has analysed personal sector M4,⁽³⁾ corporate sector M4,⁽⁴⁾ Divisia M4 (aggregate and sectoral),⁽⁵⁾ and M0. The Bank is also conducting research on the demand for credit.

So though the MPC is not at present reinstating the use of monitoring ranges, it regards the monetary aggregates as an integral part of its assessment of monetary conditions. Its analysis of the monetary aggregates will continue to be set out in Section 2 of the *Inflation Report*. And

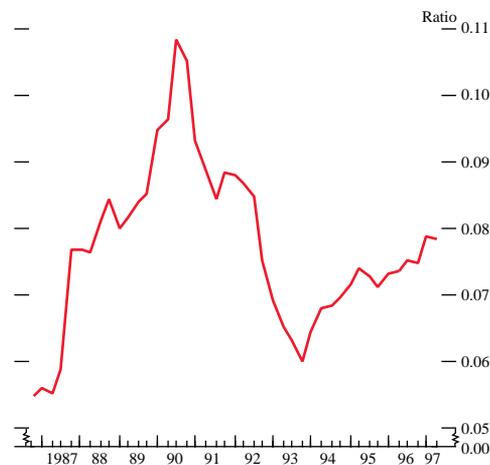
Broad money velocity in the United Kingdom, Germany and the United States



if the velocity of money in the United Kingdom were to stabilise, the MPC could reconsider the use of monitoring ranges.

(3) Thomas, R (1997), 'The demand for M4: A sectoral analysis part 1—the personal sector', *Bank of England Working Paper*, No 61.
(4) Thomas, R (1997), 'The demand for M4: A sectoral analysis part 2—the corporate sector', *Bank of England Working Paper*, No 62.
(5) Fisher, P, Hudson, S and Pradhan, M (1993), 'Divisia indices for money: An appraisal of theory and practice', *Bank of England Working Paper*, No 9.

Chart 2.3
Ratio of OFIs' M4 to total financial assets



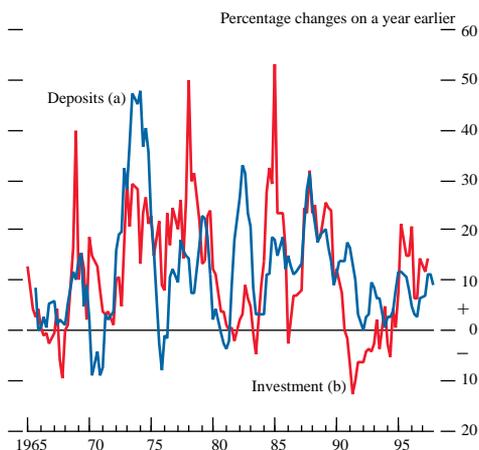
have risen. So financial intermediaries may have built up money holdings to maintain the share of broad money in their portfolio of assets. But Chart 2.3 shows that OFIs' deposits have increased as a proportion of their financial wealth, suggesting that they may have built up additional money holdings to minimise the risk from potential future falls in asset prices.

OFIs could use their deposits to buy financial assets from persons and companies. So the implications for inflation of rapidly growing OFIs' deposits depend partly on the behaviour of the personal sector and companies. These sectors could use deposits transferred from OFIs to repay debt, without inflationary implications. But fast growth of OFIs' deposits could signal inflationary pressures if these sectors use such additional deposits to increase consumption and investment spending. And increased OFIs' demand for assets may have contributed to higher asset prices, which in turn stimulate consumption and investment.

Personal sector

The personal sector's demand for broad money depends largely on its income, wealth, consumption and relative rates of return. The personal sector's deposits and holdings of broad money have continued growing strongly. They rose by 7.5% in the year to 1997 Q3,

Chart 2.4
Annual growth in ICCs' deposits and investment



Sources: ONS and Bank of England.
(a) ICCs' deposit growth lagged by four quarters.
(b) At current market prices.

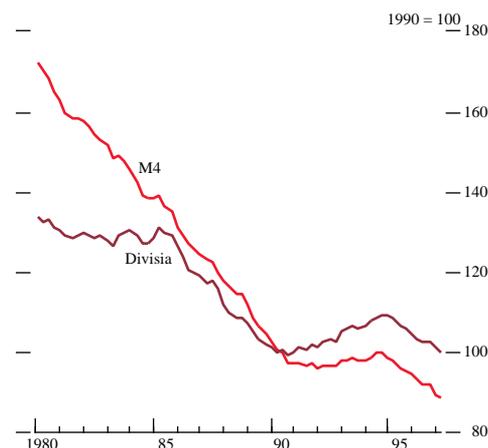
Table 2.B
Divisia and M4 annual growth rates

Percentage change in the year to 1997 Q3

	Divisia	M4
Personal sector	7.9	7.5
OFIs	33.8	25.7
ICCs	10.6	11.2
Aggregate	10.9	11.7

Source: Bank of England.

Chart 2.5
M4 and Divisia money velocity^(a)



Sources: ONS and Bank of England.

(a) Defined as the ratio of nominal GDP to the stock of money.

following an increase of 7.8% in the year to 1997 Q2, which was their highest rate of growth for six years. Slower growth of deposits might be expected following building society conversions, because savers in former building societies would no longer have an incentive to hold high balances to maximise their allocation of shares. But retail deposits held in building society accounts have continued to grow rapidly, suggesting that there may have been speculative inflows in anticipation of future building society conversions.⁽¹⁾

Personal sector wealth has risen rapidly recently: in the year to 1997 Q2, gross financial wealth rose by 13% and was nearly 30% higher than two years earlier. Rising equity and house prices have contributed to the increase in personal sector wealth. Despite recent equity price volatility, the FT-SE 100 index was only 0.5% below its average level in 1997 Q3 on 5 November and remains around 8% above its level in 1997 Q2. Insofar as the rise in equity prices reflects higher profit expectations, the rapid growth in wealth is consistent with robust consumption growth (see Section 3).

Industrial and commercial companies (ICCs)

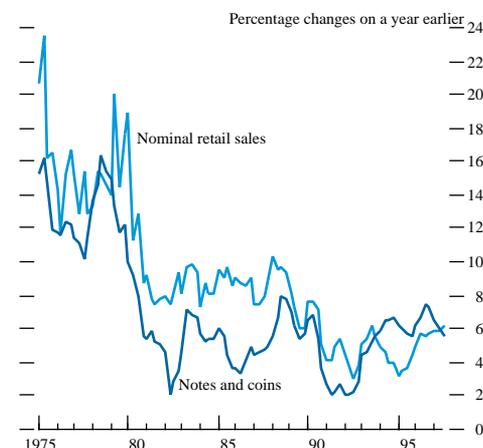
Deposits held by ICCs rose by 11.2% in the year to 1997 Q3, their highest rate of growth for more than a year. Changes in ICCs' deposits tend to precede changes in investment. Chart 2.4 shows that, following strong deposit growth in the first half of 1996, ICCs' nominal investment spending rose by 14.2% in the year to 1997 Q2, compared with an average annual growth rate of 9.7% each quarter in the previous year.

Divisia money

The Divisia measure of money weights the components of M4 to reflect how much they are used in transactions, and so can help to distinguish transactions from portfolio effects of money growth.⁽²⁾ In the year to 1997 Q3, aggregate Divisia money grew by 10.9%, as Table 2.B shows, and its annual growth rate has been above 6% for the past two years. Chart 2.5 shows that the velocity of Divisia money has behaved like M4 velocity, though it has tended to be more stable. The continuation of current rates of Divisia money growth is also unlikely to

(1) The majority of retail deposits are held by the personal sector, so changes in retail deposits largely reflect changes in personal sector deposits. Though retail deposits will include some placed by the corporate sector (including the newly reclassified unlimited liability partnerships), most companies hold wholesale rather than retail deposits.
(2) The Divisia index of money weights the components of money according to their liquidity, proxied by the inverse of their relative interest rates. Current accounts, for example, have a high weight in Divisia money because they pay lower interest rates than other accounts which have restrictions on withdrawals.

Chart 2.6
Growth of notes and coins and nominal retail sales



Sources: ONS and Bank of England.

be compatible with the inflation target in the medium term.

Narrow money

M0 grew by 6.4% in the year to October. This was below the annual rates of around 7% recorded in the second half of last year, but above its growth rate in the previous two months.⁽¹⁾ Though bankers' balances are less than 1% of total M0, their high volatility greatly increases M0's monthly variation, and so the growth of notes and coins is a better guide to the underlying increase in narrow money. Notes and coins grew by 6.5% in the year to October, again below annual rates of more than 7% during the second half of 1996, but above the growth rate in August and September. Chart 2.6 shows that while narrow money has grown more slowly this year than in 1996, nominal retail spending has continued growing steadily. The relatively weak relationship between narrow money and retail sales growth at present may reflect cyclical changes in velocity, such as the adjustment to higher levels of interest rates.

2.2

Credit

The growth rate of bank and building society lending to the non-bank private sector (M4 lending) has slowed in recent months. M4 lending grew at a three-month annualised rate of 6.6% in both August and September, its lowest rate for almost three years, excluding the December 1996 gilt repo-distorted outturn. The demand for credit depends on the interest rate charged relative to other forms of borrowing, and on current and future expected activity. The supply of credit—banks' willingness to lend—will depend, among other things, on the capital base of lenders. The interaction of the demand for and supply of credit will determine its price, the rate of interest charged.

Other financial institutions (OFIs)

OFIs' bank borrowing was 20.5% higher in 1997 Q3 than a year earlier. Lending to OFIs has accounted for more than one third of the rise in total M4 lending in the past two years, and the stock of OFIs' lending rose to 20.4% of total M4 lending by 1997 Q3.

Borrowing by OFIs is often thought to be linked to economic activity less directly than borrowing by the

(1) The new 50 pence coin was issued in September, increasing the rate of narrow money growth by 0.4 percentage points that month, and by 0.1 percentage points in October.

Table 2.C
Sectoral comparison of lending by and deposits with banks and building societies

Seasonally adjusted flows (£ billions)

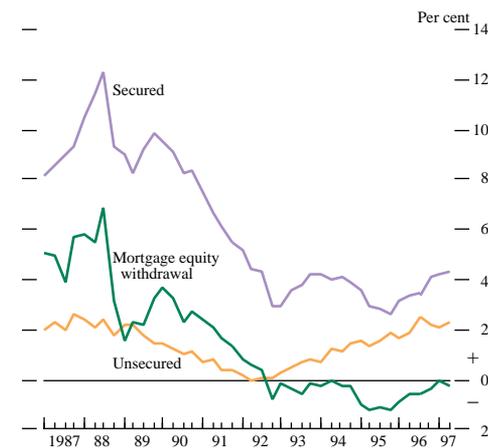
	OFIs	Persons	ICCs	Total
M4 lending (assets)				
1995	14.9	24.8	17.3	57.0
1996	14.4	29.7	18.3	62.4
1997 Q1	16.1	8.5	0.4	25.1
Q2	7.9	8.5	2.8	19.1
Q3	6.3	7.8	0.1	14.2
M4 (liabilities)				
1995	21.1	29.2	5.3	55.5
1996	25.1	26.6	8.1	59.8
1997 Q1	15.4	10.2	1.8	27.4
Q2	7.9	8.8	2.1	18.8
Q3	9.4	6.1	4.2	19.7
Other counterparts to M4 (a)				
1995	n/a	n/a	n/a	1.3
1996	n/a	n/a	n/a	2.7
1997 Q1	n/a	n/a	n/a	-2.4
Q2	n/a	n/a	n/a	0.3
Q3	n/a	n/a	n/a	-5.5

n/a = not applicable.

Source: Bank of England.

(a) Net non-deposit liabilities, minus the public sector contribution and total external counterparts.

Chart 2.7
Secured and unsecured borrowing, and mortgage equity withdrawal, as shares of disposable income



Sources: ONS and Bank of England.

personal sector or companies but, as noted in the August 1996 *Report*, this need not be the case. Leasing companies, for example, may borrow to finance purchases of new capital goods. According to the Finance and Leasing Association, the annual growth rates of business finance and hire purchase, excluding high-value items, which can be volatile, remained strong in recent months.

Table 2.C shows the flows of deposits into, and lending by, banks and building societies since 1995. OFIs deposited more than they borrowed in 1995 and 1996. And though they were net borrowers from the banking sector in the first half of 1997, in 1997 Q3 they deposited more money overall. Different types of OFI tend to be depositors or borrowers. For example, leasing companies have tended to borrow from the banking sector, but life assurance and pension funds (LAPFs) and insurance companies have generally been depositing funds. This is because the activities of LAPFs and insurance companies are more closely linked to equity markets, and equity prices have risen rapidly in recent years.

Personal sector

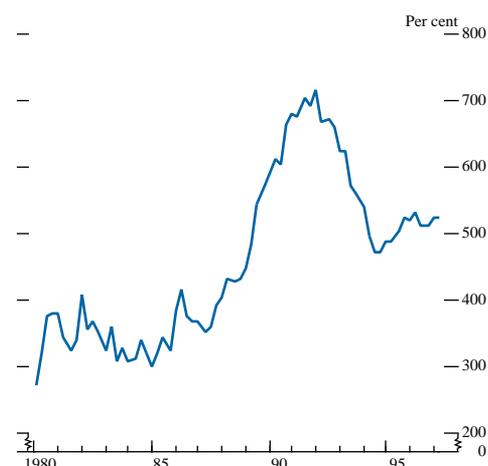
Lending to individuals—including lending by institutions other than banks and building societies, net of loan repayments and interest charges—grew by 7.3% in the year to September, its fastest for almost five years, having grown at annual rates of around 7% since the beginning of 1997. Lending to individuals consists of lending secured on property (mortgages) and other lending ('consumer credit'). Mortgage borrowing has risen in the past 18 months as the housing market has recovered, but remains much lower than in the second half of the 1980s (see Chart 2.7).

Mortgage lending can also be used to finance consumption through equity withdrawal. Since 1992, however, households have made equity repayments overall. If the housing market recovery were to lead to equity withdrawal being used to finance consumption again, this could reduce consumer credit growth. But there are no signs of this happening yet: consumer credit growth has remained strong in the past few years.

Industrial and commercial companies

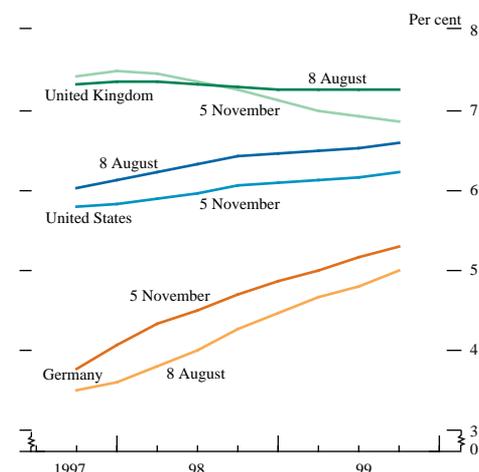
The growth of ICCs' borrowing from banks and building societies slowed this year, having increased in 1995 and 1996. It rose by 4.4% in the year to 1997 Q3, excluding the effect of securitisations, compared with an average

Chart 2.8
ICCs' bank borrowing as a share of gross profits



Sources: ONS and Bank of England.

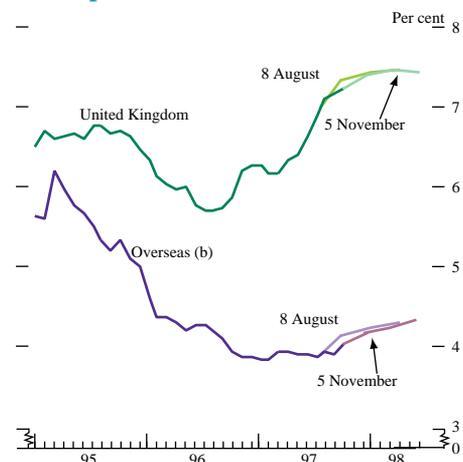
Chart 2.9
UK, US and German three-month interest rate expectations



Sources: LIFFE and Bloomberg.

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

Chart 2.10
Sterling and overseas three-month interest rate expectations^(a)



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

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

(b) Trade-weighted interest rates in the major six overseas economies.

annual growth rate of 11.6% each quarter in 1995 and 1996. Despite the rise in ICCs' borrowing during the past couple of years, Chart 2.8 shows that ICCs' bank borrowing as a proportion of income remains much lower than in the early 1990s, when ICCs increased their borrowing to historically high levels.

2.3 Interest rates and the exchange rate

Short-term interest rates

Following the rise in the Bank's repo rate on 7 August, rates were unchanged in September and October and were then raised by 0.25 percentage points on 6 November to 7.25%.

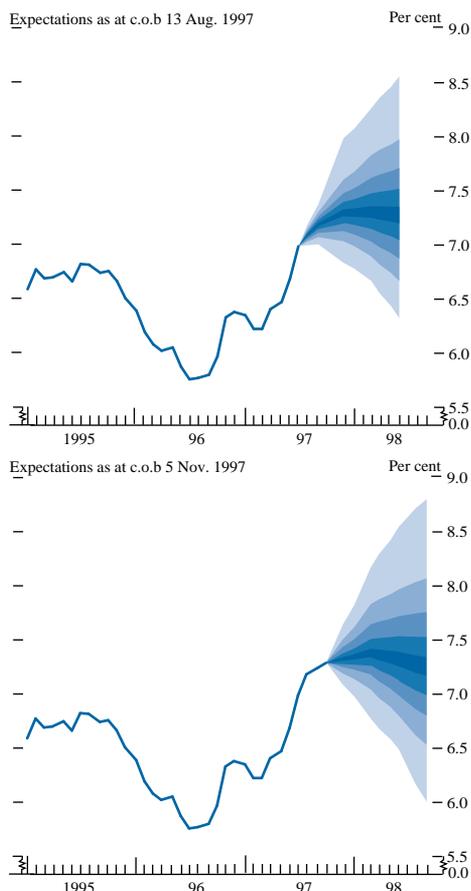
The expected path of UK three-month interest rates is around 10 basis points above the path in August until mid 1998, when it falls below, as Chart 2.9 shows. It reaches 6.9% at the end of 1999, 40 basis points below the expected rate in August. The expected path of German three-month interest rates rises by the end of 1999 by around 150 basis points, as it did in August. But it is around 40 basis points above the path in August, reaching 5.3% by the end of 1999. Though the expected path of US rates also rises by the end of 1999, to 6.2%, this is around 40 basis points below the path in August. Chart 2.10 shows that though the expected path of a weighted average of overseas short-term interest rates is slightly lower than in August, overseas rates are expected to rise relative to UK interest rates during the next year, with the gap between UK and overseas rates expected to narrow.

Distributions of expected three-month interest rates in the United Kingdom, derived from data on options prices, are shown in Chart 2.11. On 13 August, the date of publication of the previous *Report*, markets expected short-term interest rates to rise slightly by the end of the year, with a higher probability attached to interest rates being above the central band than below it. Further out, the central band was fairly flat in the first half of 1998. On 5 November, markets continued to expect a slight increase in interest rates from their current level. But rates were expected to fall from early 1998, though probabilities were skewed towards rates above the central band.

Long-term interest rates

The yield on ten-year gilts fell by around 50 basis points between the August and November *Reports*, having

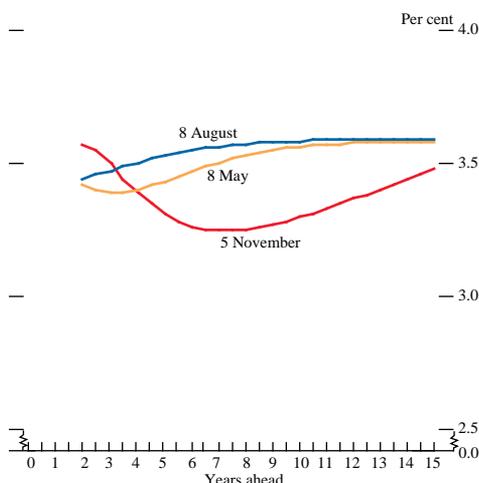
Chart 2.11
Implied distributions for sterling three-month interest rates



Sources: LIFFE and Bank of England.

The chart shows the relative likelihood of possible outcomes. The markets judge that there is a 10% chance of interest rates being within the darkest, central band at any date. The next deepest shade (on both sides of the central band) takes the probability out to 30%, and so on in steps of 20 percentage points. The more uncertainty there is about the interest rate outcome at any particular time horizon, the wider the bands. And if the risks are more on one side than the other, then the bands will be wider on that side of the central band.

Chart 2.12
Implied forward inflation rates



Source: Bank of England.

fallen by an average of around 15 basis points each quarter for the previous two years.⁽¹⁾ The yield on ten-year gilts is now around 6.6%, compared with around 7.6% a year ago. The yield on a trade-weighted average of overseas government bonds fell by around 20 basis points. On 5 November, the yield on UK gilts was about 140 basis points higher than the average yield on overseas bonds, a smaller margin than at the time of the *August Report*.

Implied forward rates for the United Kingdom suggest that expected short-term interest rates have fallen since the *August Report*, by more than bond yields at longer maturities. Expected short-term interest rates are around 40 basis points lower than in August at a three-year horizon, and around 70 basis points lower at both five and ten years. Rates are currently expected to be around 6.6% at a three-year horizon, falling to around 6.4% at a ten-year horizon, compared with around 7.4% a year ago at a three-year horizon, rising to around 8.3% at a ten-year horizon. Changes in nominal interest rates reflect changes in expected inflation and real interest rate expectations.

Chart 2.12 shows that UK inflation expectations, derived by analysing conventional and index-linked gilt yields, have risen since August at short horizons, but have fallen at medium and longer horizons, particularly around six and seven years ahead. And index-linked gilt yields suggest that expected short-term real rates may have fallen since the previous *Report*, as Chart 2.13 shows.

Nominal forward rates have also fallen overseas. Chart 2.14 shows that rates at a five-year maturity have generally fallen in European countries, perhaps because of greater confidence about EMU taking place and about its potential sustainability. But nominal rates have also fallen in the United States. US real rates, derived by comparing conventional and index-linked yields for five and ten-year gilts, have fallen, though by less than UK real rates. And US inflation expectations have fallen further than UK inflation expectations.

Exchange rates

The nominal effective exchange rate used in the inflation forecast—based on its average in the 15 working days to

(1) 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. The implied level of short-term interest rates at different points in the future can be estimated from the current maturity structure of interest rates.

Chart 2.13
Average annual real interest rates expected
in the next ten years^(a)

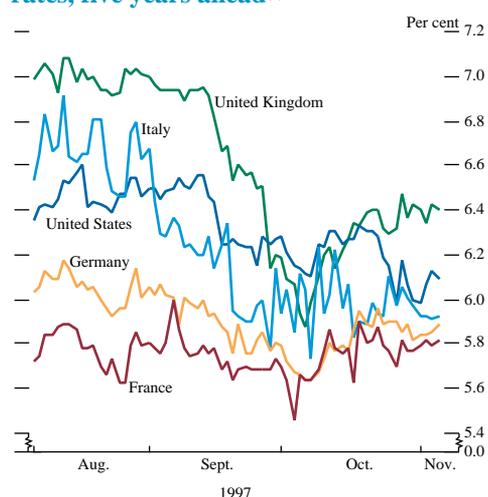


Note: Daily data. Final observation is 5 November.

Source: Bank of England.

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

Chart 2.14
International nominal forward interest
rates, five years ahead^(a)



Note: Daily data. Final observation is 5 November.

Source: Bank of England.

(a) Implied six-month interest rates.

Chart 2.15
Sterling effective exchange rate



Note: Daily data. Final observation is 5 November.

Source: Bank of England.

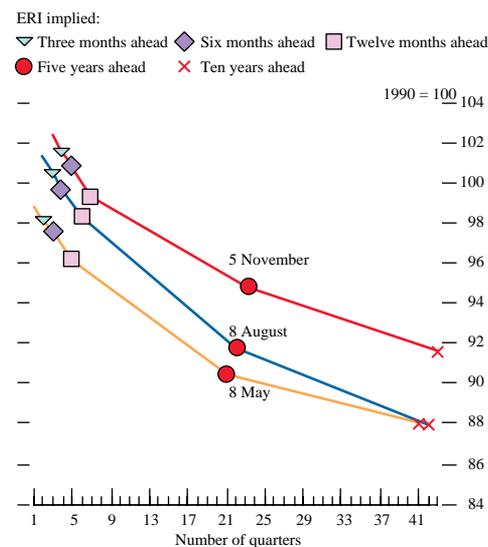
5 November—was 102.0. This was 3% lower than the exchange rate used in the inflation projection in the *August Report*, having fluctuated in response to press reports on the likelihood of the United Kingdom joining EMU. Sterling remains around 20% higher than at the time of the *August 1996 Report*, when sterling reached its trough (see Chart 2.15).

Sterling rose by 18% against the Deutsche Mark and by 11% against the Japanese yen in the year to October. Though it has fallen by 3% against the Deutsche Mark since August, it has risen by 5% against the Japanese yen in the same period. Against the US dollar, sterling rose by 3% in the year to October, with an increase of 2% since August. The Bundesbank raised its 14-day repo rate on 9 October by 30 basis points to 3.3%, the first increase since August 1996. It explained that this was because ‘import prices, producer prices and consumer prices have all risen . . . due in large part to exchange rate movements against the US dollar and to increases in administered prices’. There had been speculation that the Bundesbank would raise rates during the past few months, and forward rates had risen.

Chart 2.16 shows the path for sterling implied by uncovered interest parity. In common currency terms, assets with similar liquidity and risk characteristics should have the same expected return; differences imply that the exchange rate is expected to change to equalise returns in common currency terms. So the path the exchange rate has to follow if expected returns are to be equalised can be calculated by comparing UK interest rates at different maturities with overseas rates. UK interest rates are higher than average interest rates overseas, so UIP implies that sterling is expected to depreciate. The expected rate of depreciation has slowed since the *August Report*—the path in Chart 2.16 has become less steep. This is because overseas implied forward interest rates have risen relative to UK rates. Sterling’s actual path since May is shown by joining the starting points of the three profile lines in Chart 2.16; it is clear that UIP alone has not been a good predictor of actual exchange rate movements.

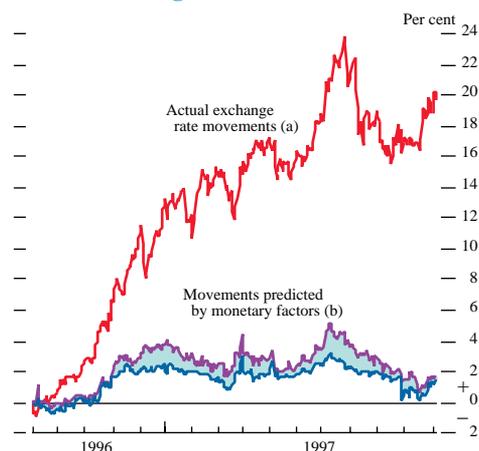
News about overseas and UK monetary policy could have contributed to the rise in sterling since August 1996. An article in November’s *Quarterly Bulletin* describes how the UIP condition can be employed to help identify the contribution of monetary policy news to

Chart 2.16
UK effective exchange rate profiles^(a)



Sources: Bank for International Settlements, Datastream and Bank of England.
(a) Assuming uncovered interest rate parity.

Chart 2.17
The exchange rate and monetary policy news since August 1996



Note: Daily data. Final observation is 5 November.

Source: Bank of England.

- (a) The effective exchange rate index for sterling against the G7 economies.
- (b) The band shows the estimated range as the time from which it is assumed monetary policy no longer influences real interest rates varies from four to eight years.

exchange rate changes.⁽¹⁾ Chart 2.17 shows that monetary policy news was at its most important towards the end of 1996 in explaining sterling's appreciation. But at no time since August 1996 has monetary policy news explained more than half of the appreciation of sterling, and in recent months its estimated contribution has been considerably smaller.

The exchange rate may also be influenced by perceptions about Economic and Monetary Union (EMU). A number of 'EMU calculators' have been developed to assess market expectations of the likelihood of particular countries joining EMU. An article in November's *Quarterly Bulletin* describes one of these measures, based on the expected correlation between currencies implicit within foreign exchange options prices.⁽²⁾ The probability the market attaches to two currencies joining EMU in 1999 is assumed to be reflected in the implied correlation between their exchange rates against the US dollar. The higher the probability, the closer the implied correlation will be to one. Chart 2.18 shows that the implied correlation between the Italian lira and the Deutsche Mark has risen steadily since the beginning of 1996, suggesting that the market has attached an increasing probability to Italy joining EMU. By comparison, the implied correlation between sterling and the Deutsche Mark has been lower since the beginning of this year and generally more volatile, particularly following recent press reports on the likelihood of the United Kingdom joining EMU.

Part of sterling's appreciation since August 1996 may have been purely erratic, and may have been responsible for some of the fluctuations in the exchange rate since the previous *Report*. The MPC's assumption about erratic factors is discussed in Section 7.

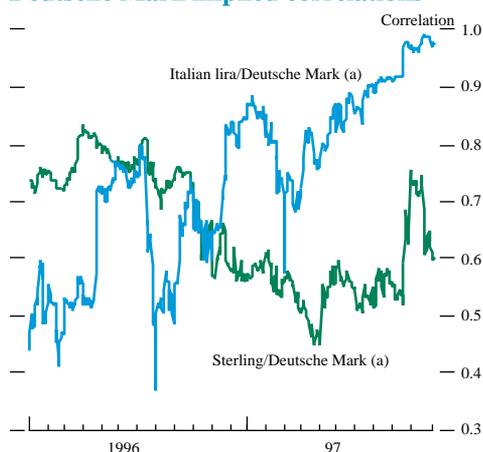
2.4

Summary

There has been little change in the growth rates of broad money and Divisia money since the August *Report*. They remain a threat to meeting the inflation target in the medium term, though the tightening of fiscal and monetary policies since May should go some way towards achieving that objective. Narrow money growth has slowed, compared with the second half of last year. And M4 lending growth has also slowed in recent

(1) Brigden, A, Martin, B and Salmon C K (1997), 'Decomposing exchange rate movements according to the uncovered interest rate parity condition' *Quarterly Bulletin*, November, pages 377–89.
(2) Butler, C and Cooper, N (1997), 'Implied exchange rate correlations and market perceptions of European Monetary Union', *Quarterly Bulletin*, November, pages 413–23.

Chart 2.18
Sterling/Deutsche Mark and Italian lira/
Deutsche Mark implied correlations



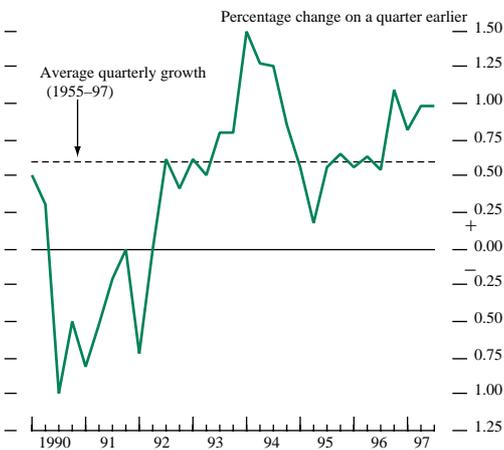
Note: Daily data. Final observation is 5 November.

Source: Citibank FX options.

(a) Twelve-month implied correlation, using the US dollar as a numeraire.

months. Following the rise in the Bank’s repo rate on 7 August, rates were unchanged in September and October and were then raised by 0.25 percentage points on 6 November to 7.25%. UK expected short-term interest rates are broadly unchanged since August, and overseas short-term interest rates are expected to rise relative to UK rates during the next year. The nominal effective exchange rate used in the inflation forecast—based on its average in the 15 working days to 5 November—was 102.0, around 3% lower than the exchange rate used in the inflation projection in the *August Report*.

Chart 3.1
Quarterly GDP growth^(a)



(a) GDP (output measure), 1990 prices.

Table 3.A
Expenditure components of GDP

	Percentage change on previous quarter				Contribution to quarterly GDP growth 1997 Q2 (a)
	1996		1997		
	Q3	Q4	Q1	Q2	
Private consumption	0.7	1.3	0.8	1.5	1.1
Public consumption	0.2	0.4	-0.1	0.2	0.0
Investment	-2.4	2.5	0.5	2.0	0.4
of which:					
Business fixed investment	-0.5	2.4	6.2	-1.0	-0.1
Final domestic demand	0.1	1.3	0.6	1.3	1.5
Stockbuilding (b)(c)	0.1	0.2	0.3	-0.3	-0.3
Domestic demand	0.7	1.1	0.7	1.4	1.7
Exports	0.6	2.4	1.2	2.8	1.0
Imports	1.2	2.5	0.6	4.2	1.5
Net exports (b)	-0.2	-0.1	0.2	-0.5	-0.5
GDP	0.5	1.1	0.8	1.0	1.0
<i>Memo items:</i>					
Statistical discrepancy (b)	0.0	0.0	0.0	0.0	0.0
Alignment adjustment (b)	0.7	-0.4	-0.2	0.4	0.4

(a) Percentage point contributions. Contributions may not sum to GDP growth as the table does not include the factor cost adjustment.

(b) Contributions to quarterly GDP growth.

(c) Excluding the alignment adjustment.

Real GDP continues to grow more quickly than any reasonable estimate of trend. The preliminary estimate of real GDP in 1997 Q3 was up by 1% compared with the previous quarter and 3.9% compared with a year earlier. Real GDP has now grown by about 1% in each of the past four quarters (see Chart 3.1). Nominal GDP grew by 6.3% in the year to 1997 Q2. Such rates, if sustained, would be inconsistent with inflation at its target level.

Domestic demand continues to provide the main impetus to growth. It has been supported by increased financial wealth, as a result of rising equity prices and windfall gains from building society conversions. Though net exports have fallen, the effects of the exchange rate appreciation on trade flows have so far been smaller than might have been expected.

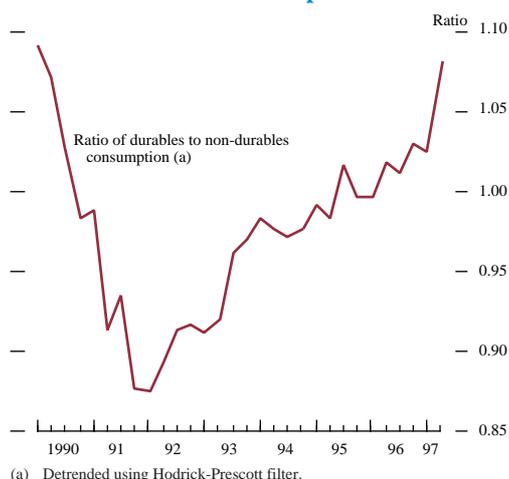
3.1 Domestic demand

Domestic demand increased at an annualised rate of 4.4% in the first half of the year, compared with 3.7% in the second half of 1996. Though the output measure of GDP is regarded as the most accurate measure of the strength of activity and an estimate is available for 1997 Q3, data for the expenditure components of GDP are only available to 1997 Q2 (see Table 3.A). As Section 2 notes, real money balances have been growing strongly. This strength may well be reflected in current and prospective consumption and investment decisions. On the other hand, the unwinding of the initial impact of windfall spending, the tight fiscal stance and the effects of past monetary policy tightening should slow future domestic demand growth.

Consumption

Consumers' expenditure continued to grow very rapidly in the second quarter of 1997, rising by 1.5%, its highest quarterly rise since 1988. Durables consumption was particularly strong, up by 6.8% in the quarter and by 11.4% on the same quarter a year ago. Durables consumption is generally more volatile than non-durables spending, and has a more pronounced pro-cyclical pattern. But even allowing for cyclical

Chart 3.2
Relative durables consumption

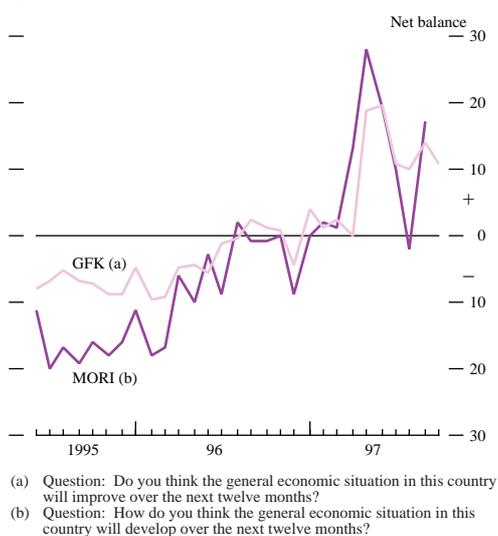


effects and adjusting for its tendency to rise over time, durables spending relative to non-durables rose sharply in 1997 Q2 (see Chart 3.2).

Some of this increase was probably spending from the proceeds of building society share sales. The Bank/MORI survey conducted at the end of August suggested that spending out of windfall gains, particularly on large-ticket items, would be concentrated in 1997 (see the box on page 20).

Other data support the Bank/MORI results. Motor registration data, together with the CBI Distributive Trades Survey, suggested strong motor vehicle sales between August and October. Spending on vehicles comprises about one half of total durables expenditure. And the balance of respondents to the GFK Survey in August expecting to make a major purchase in the next twelve months was the highest since the survey began in June 1995, but fell back sharply in September and October, consistent with the concentration of windfall spending in 1997.

Chart 3.3
Consumer confidence indicators



Total consumption also seems to have remained strong in the second half of the year. Retail sales, particularly by household goods retailers, continued to grow quickly in the three months to August. Sales in September fell sharply, but ONS estimates suggest that most of this fall was caused by the closure of high-street shops and generally subdued retail activity in the first week of September, following the death of Diana, Princess of Wales. The CBI Distributive Trades Survey reported that retail sales recovered in October. The two main consumer confidence surveys, which usually track retail sales and consumption quite closely, also suggest strong consumption in the third quarter (see Chart 3.3). And further windfall spending should ensure that consumption remains strong in the fourth quarter. But as the short-term concentrated element of the windfall spending unwinds in 1998, quarterly consumption growth will probably ease back from the high rates in 1997.

Factors identified in the *August Report* as supporting strong consumption growth have largely persisted. Continued rises in equity and house prices suggested that personal sector wealth rose rapidly in the second and third quarters of 1997. And as Section 2 explains, despite recent equity market volatility, equity prices on 5 November were still well above the levels of the second quarter. If equity prices rose because of

The Bank of England/MORI survey and domestic demand

The Bank of England commissioned MORI to survey individuals who received special ‘windfall’ payouts in 1997.⁽¹⁾ The survey was conducted at the end of August, when nearly 90% of the windfalls had been paid out. The survey asked individuals how many shares they had sold, how much of the proceeds they had spent, and how much of that spending would have occurred anyway.

By the end of August, 35% of the value of free shares had been sold. 47% of the proceeds from these sales was reported as already spent, with a similar proportion saved; 6% was used to repay debt. Around 60% of the spending was additional to that which would have occurred anyway. Of the proceeds saved, most were placed in instant access or deposit accounts; respondents planned to spend 27% (by value) of these in the twelve months from August 1997.

Of the shares kept, 5% will be sold in the twelve months from August; 38% will be sold subject to stock market conditions; and 57% will be held as a long-term investment. More than half of the proceeds of future (unconditional) share sales will be spent. A very small proportion of individuals who plan to keep their shares will borrow (or run down savings) as a result of their higher wealth.

These results suggest that a relatively high proportion of respondents had already sold their shares by the end of August, and many of those

had spent the proceeds or planned to do so in the near future. So the survey implied that much of the effect of windfalls on domestic demand will be concentrated in 1997.

The table shows estimates of spending out of windfalls. The survey suggests that, excluding spending that would have occurred anyway, windfalls could add around £6 billion to domestic demand between 1997–99.

MORI advised the Bank that a survey of this nature would probably pick up only short-term spending on large-ticket items. The total effect is likely to be larger. Consumers tend to smooth their consumption over time, unless they are liquidity constrained (unable to lend and borrow as they would wish). There will probably be an additional long-term windfall effect on spending by unconstrained consumers.

Two facts support this view. First, only 5% of respondents reported increasing their spending in advance of actually receiving shares. Consumption-smoothing consumers would tend to increase spending as soon as they learnt the probable size of their windfall. Second, the average amount of reported additional short-term spending was a large proportion of the average payout. Consumption-smoothing consumers would spread their spending over time.

Bank estimates of the additional spending by consumption-smoothing consumers suggest that there could be an extra effect of up to £1.8 billion a year on domestic demand. So the total effect of windfalls on domestic demand between 1997–99 will probably be somewhere between £6–12 billion (0.8% to 1.6% of domestic demand in 1996), most likely towards the top of this range.⁽²⁾ This is close to the estimate for additional windfall-financed spending incorporated into the *August Report* projection.

Survey results and estimates of total spending from windfalls

	Percentage of total 1997 windfalls	Estimated value (a) (£ billions)
Spending undertaken of which:	20	7.5
Pre-windfall spending	4	1.6
Spending out of share proceeds	16	5.9
Planned spending in next twelve months	6	2.2
Total spending	26	9.7
of which:		
Additional spending	16	6.0

(a) Estimates based on applying the survey results in the first column to the total payout of £36.3 billion. This total is slightly higher than the estimate in the *August Inflation Report* because of an increase in the share price of Northern Rock from its projected value.

(1) The survey was carried out by telephone interviews in the last week of August. There were 764 respondents, each of whom received at least one windfall payment from either the Alliance & Leicester, Halifax, Norwich Union or Woolwich building societies. Full survey results are available in a MORI press release dated 5 September.

(2) Most of this will be recorded as consumers' expenditure in the National Accounts, though a small proportion spent on contracted-out home improvements will count as investment.

expectations of higher future activity and dividends, current consumption will increase. The most recent data showed that, even excluding the building society share allocations in April and June, net financial wealth rose by nearly 5% in the second quarter. This was much higher than the average quarterly rise in the present recovery.

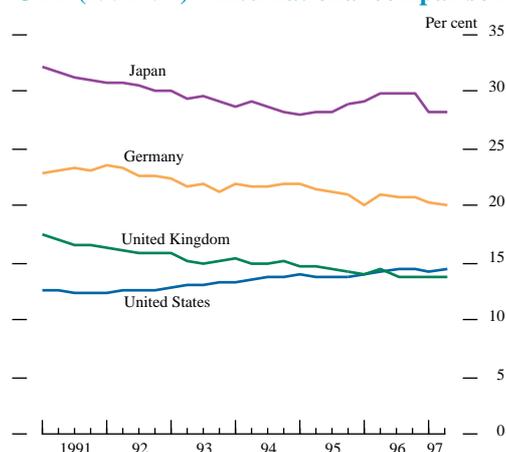
Consumer confidence has also remained high. The Q3 average of the GFK Survey balance of respondents expecting their households' financial situations to improve during the next twelve months was the highest since the survey began in 1995. Real personal disposable income rose by 3% in the second quarter, the fastest quarterly rise for nearly 20 years. Some of this may have been caused by the one-off effects of large company dividend payments, brought forward to avoid the expected loss of tax credits in the July Budget, and the income tax cut announced in the 1996 Budget, which took effect in April. But even excluding these effects, real personal disposable income would still have grown by nearly 1.5%, twice its long-run average.

The savings ratio rose sharply to 11.7% in the second quarter, well above its long-term average and slightly above its average during the present recovery. Since consumers tend to smooth consumption over time, short-term changes in the saving ratio often relate to movements in income. So the rise in the ratio in the second quarter probably reflects the unusually large increase in personal income, rather than a change in saving behaviour.

Investment demand

Real whole-economy investment rose by 2% in the second quarter of 1997, contributing 0.4 percentage points to GDP growth. This is a stronger contribution to growth than earlier in the recovery—investment contributed 0.1 percentage points per quarter, on average, since 1992 Q1. As noted in previous *Reports*, investment has fallen as a share of GDP and has been weaker than in the previous recovery. Chart 3.4 compares the share of investment relative to output in the United Kingdom with that of other major economies. It shows that since 1991, the share of investment in GDP fell in the United Kingdom, Germany and Japan, but rose in the United States. But the recovery in US investment has been from a lower base relative to UK investment, and the degree of capacity utilisation in the US manufacturing sector may also be higher.

Chart 3.4
Whole-economy investment as a share of GDP (1991–97)—international comparisons^(a)



Sources: ONS and Bank for International Settlements (BIS).

(a) At current prices.

Table 3.B
Change in investment as a share of GDP in the recovery (1992–96)

Percentage points

By sector

Total	-0.6
<i>of which:</i>	
Government (a)	-0.7
Private (a)(b)	0.1
<i>of which:</i>	
Private dwellings (a)	0.1
Business (b)	0.0
<i>of which:</i>	
Services	1.1
Manufacturing	-0.1
Mining, oil, utilities	-1.0

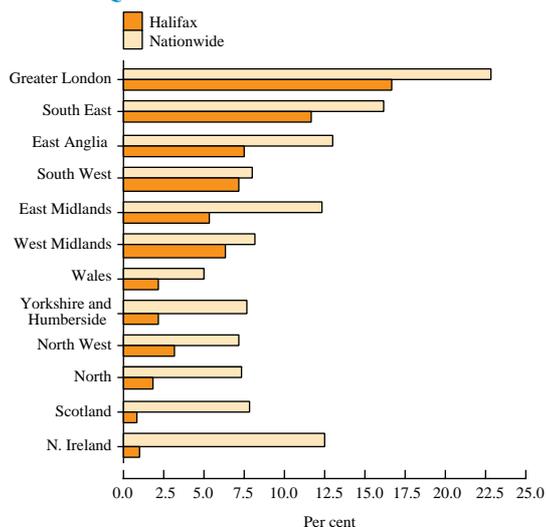
By asset

Vehicles, ships and aircraft	0.2
Plant and machinery	0.1
Dwellings	-0.1
Other buildings and infrastructure	-0.7

Source: Bank calculations based on annual data (constant prices). Figures may not sum because of rounding.

- (a) Includes purchases less sales of land and existing buildings.
 (b) Includes public corporations (except NHS trusts).

Chart 3.5
Regional house price inflation from 1996 Q3 to 1997 Q3



Sources: Nationwide and Halifax.

Table 3.B examines in detail the change in investment as a share of GDP during the recovery. Much of the decline in the investment/GDP ratio has been due to reduced public sector investment. Business investment as a share of GDP changed little during the period, largely because stronger service sector investment was offset by declines in mining, oil and utilities investment. By asset, the fall in investment as a share of GDP has reflected weakness in non-dwelling construction activity. But recent upward trends in new orders are likely to signal continued growth in construction investment. The box on page 23 explores the role of construction in economic activity.

Private residential investment rose by 4.1% in 1997 Q2 and was 8.3% higher than a year earlier. The major house price indices offer different impressions of the strength of activity. The Halifax index increased by 0.4% in October, implying an annual rate of house price inflation of 5.4%. By contrast, the Nationwide index showed an annual rate of house price inflation of 12.2%. Chart 3.5 shows that the Nationwide measure is higher than the Halifax for all regions. A third measure, the Department of Environment (DoE) index, suggests that house price inflation was 9.4% in 1997 Q2, more in line with the Nationwide estimate. In all three cases, aggregate house prices have risen faster than retail prices and labour costs. This will probably encourage further residential construction.

A feature of this recovery has been the high level of corporate mergers and acquisitions, similar to that during the late 1980s. Chart 3.6 shows that the value of total and cash-financed mergers and acquisitions both rose to record levels in 1995 and remained strong in 1996. Part of this increase represents the first inclusion in the data of mergers and acquisitions in the financial sector. The average share of cash expenditure in total mergers and acquisitions expenditure has been around 71% since 1992, compared with an average of 57% during the period 1985–91. It is possible that firms may be using ‘excess’ money holdings to engage in merger activity, bidding up asset prices and driving down the cost of capital.⁽¹⁾ This in turn may increase investment in the long run.

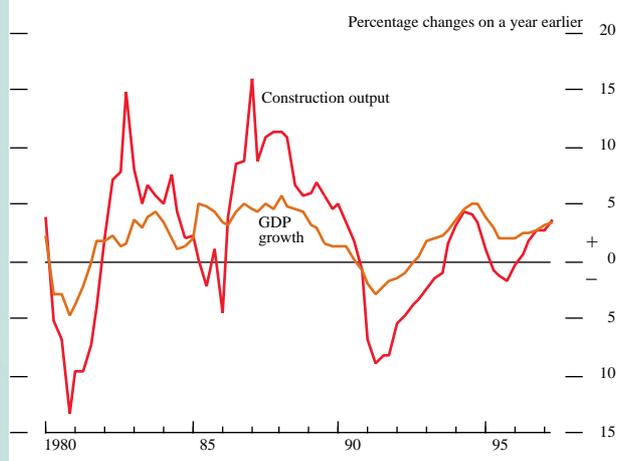
Recent *Reports* have set out other reasons to expect a stronger profile for business investment, which may also have contributed to the strength in investment in 1997 Q2. These include increasing capacity constraints,

(1) Thomas, R (1996), ‘Understanding broad money’, *Quarterly Bulletin*, May, pages 163–79.

The UK construction industry

Construction output constitutes about 7% of GDP, and more than half of total investment is construction-related. As Chart A illustrates, cycles in the construction industry are typically more pronounced than in the economy as a whole. Section 3.1 noted that weakness in construction investment has been a feature of the present recovery. Recently, however, there have been signs of a pick-up, with construction output rising 3.5% on a year earlier in 1997 Q2, compared with 2.7% on a year earlier in 1997 Q1.

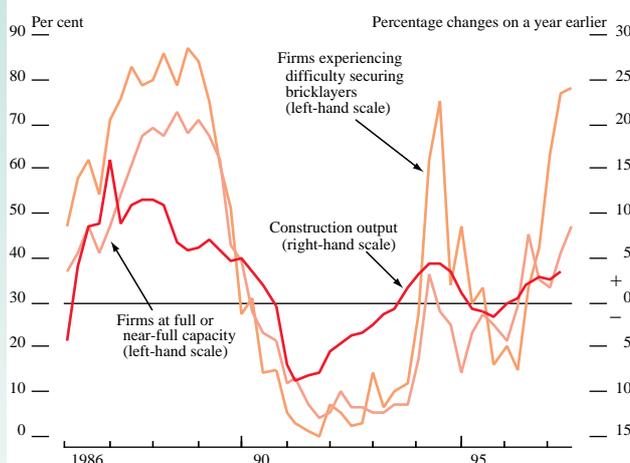
Chart A
Construction output and GDP growth



The weakness of construction activity was mainly accounted for by a weak housing market, low levels of business investment in new buildings and weak public sector demand. The low level of private sector investment was partly due to the build-up of a large stock of commercial and industrial property during the late 1980s. The fall in demand in the early 1990s led to a marked rise in spare capacity, and was reflected in falling rental values (price paid per square foot) during much of this recovery.

But rental values have now begun to pick up in all sectors, and construction output is growing quickly. For instance, in 1997 Q3, office rental values increased by 9.7% on a year earlier, compared with 6.9% in 1997 Q2.⁽¹⁾ And the recovery in the housing market (though uneven across the country) should also spur further residential construction.

Chart B
Capacity constraints in the construction industry



Sources: *Construction Trends Survey*, Construction Confederation, October 1997 and ONS.

Chart B notes that capacity utilisation in the industry has already increased, and there are signs that shortages of some types of labour, for example bricklayers, are emerging.⁽²⁾ Wages are also picking up. Average earnings in the construction sector increased by 4% in 1997 Q2 compared with a year earlier. And a recent wage settlement, covering almost two thirds of the industry, increased basic pay from August this year and allows for further large pay increases in 1998 and 1999. Section 4 examines the implications of this wage rise in the context of growing skills shortages.

On past evidence, the construction sector is likely to be more sensitive than most other sectors to interest rate changes. Chart 3.10 on page 28 suggests that the largest absolute response to an unexpected monetary policy tightening occurs in the construction industry. But survey evidence and the recent high wage settlement suggest that firms in the sector appear confident about future developments in demand.

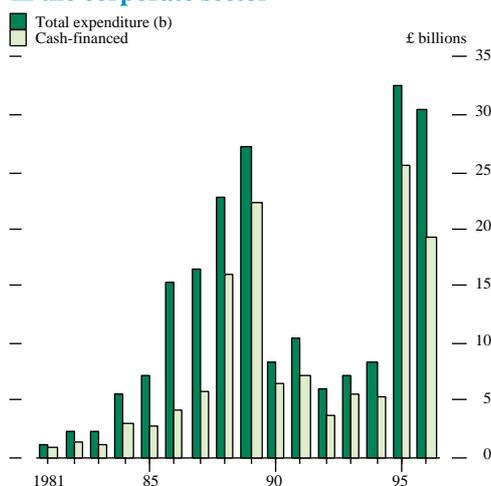
Factors that are not cyclically sensitive, such as the Private Finance Initiative (PFI) and Millennium projects,⁽³⁾ will also support the sector in the coming years. The future release of local authority capital receipts from the sale of council houses, announced in the July Budget, will also encourage activity in construction.

(1) Source: Richard Ellis (property consultants).

(2) See *Construction Trends Survey*, Construction Confederation, October 1997.

(3) These include the Greenwich Dome and Lottery-financed projects such as the Cardiff Millennium Stadium.

Chart 3.6
Value of mergers and acquisitions activity
in the corporate sector^(a)



(a) 1995 includes financial institutions.
 (b) Includes deferred payments.

a lower burden of taxation on the corporate sector than in the 1980s, the ready availability of internal and external finance, and the fall in the relative price of investment goods since 1990. The lower relative price of capital, which largely reflects falling machinery and electrical equipment prices, should have acted as an incentive to invest and accumulate capital. Recent survey evidence from both the British Chambers of Commerce (BCC) and the CBI is consistent with this. They report that the balance of manufacturers planning investment in plant and machinery remains positive, despite moderating in October. And the BCC Survey observes that the balance of service sector firms investing in plant and machinery has risen to its highest level since the survey began.

An alternative approach to analysing investment behaviour is to examine whether returns from the marginal investment exceed its cost. A proxy for this measure is the valuation ratio, the market valuation of a firm's productive assets relative to the replacement cost of its tangible assets. This ratio suggests that the incentives to invest have increased in recent quarters. But factors such as the degree of market power and the growing importance of human capital in firms' production decisions means that the measure might exaggerate the extent to which firms have an incentive to invest in physical capital. If a rising proportion of the market value of a firm is accounted for by intangible assets such as specialised skills, patents and brand loyalty, the valuation ratio will be an increasingly biased estimate of the incentive to invest in tangible assets. For example, valuation ratios for companies such as Microsoft and Zeneca far exceed typical economy-wide measures of the valuation ratio. Estimates based on company accounts suggest that in the United States, the approximate value of the ratio for Microsoft was in excess of 15 at the end of 1996, compared with an aggregate US ratio of 1.5. Likewise, in the United Kingdom, the valuation ratio for Zeneca at the end of 1996 was approximately 6, compared with an aggregate ratio of 1.3.⁽¹⁾

Stockbuilding

Stocks, excluding the alignment adjustment, reduced GDP growth by 0.3 percentage points in 1997 Q2, compared with a quarterly average positive contribution

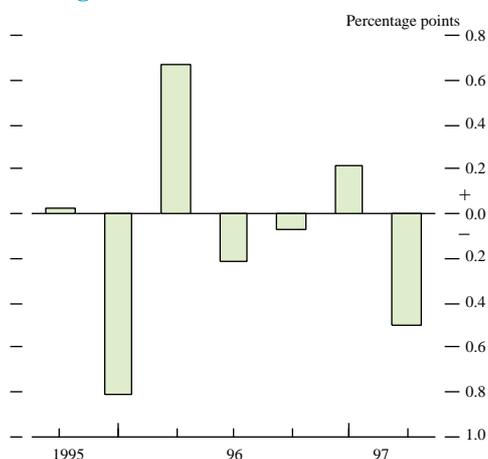
(1) See also Poterba, J and Samwick, A (1995), 'Stock Ownership Patterns, Stock Market Fluctuations and Consumption', *Brookings Papers on Economic Activity*, Vol 2, pages 295–371, who cite estimates of the ratio for a number of American high-technology stocks in the 1980s. Valuation ratios for Compaq, Intel and Coca Cola were in excess of 2.5, compared with an economy-wide estimate of 0.57 at the end of 1987.

of 0.1 percentage points since the beginning of the recovery. In 1990 prices, stocks (excluding the alignment adjustment) rose by £900 million in 1997 Q2, compared with a rise of £440 million in 1996 Q2. As noted in the *August Report*, retail stocks may have been built up involuntarily since the start of the year. The fall in retail sales in September following the death of Diana, Princess of Wales may have led to a further, unintended, increase in retail stocks. But this is likely to be temporary and retail stock positions should unwind.

Public sector demand

The Public Sector Borrowing Requirement (PSBR) for the first six months of 1997/98 was £8.6 billion, compared with £15.7 billion in 1996/97. Since the Budget in July, aggregate borrowing has been lower than average City expectations. The timing of receipts has been affected by announcements in the July Budget. Tax receipts were boosted by levies on tobacco and ACT; tax receipts from ACT probably reflect special dividend payments made in anticipation of Budget measures. Net departmental outlays have also been weak. So far this year, outlays have fallen by 1.0% from a year earlier, compared with Budget projections of a rise of 1.8% in the year as a whole. These falls in outlays are likely to reflect special factors such as the sale of MoD married quarters and timing effects, which should unwind. Nevertheless, the overall stance of fiscal policy remains tight, which will help to restrain the future pressure of private sector domestic demand.

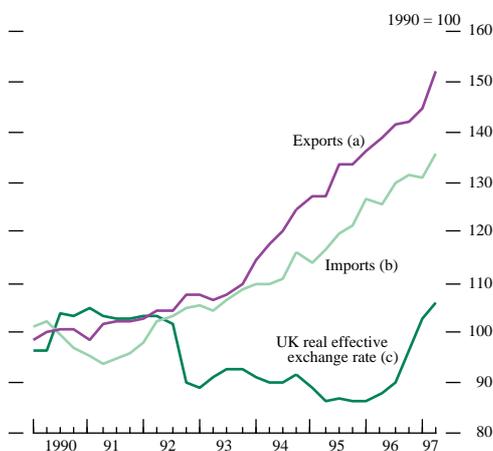
Chart 3.7
Contributions of net trade to quarterly GDP growth



3.2 Net external demand

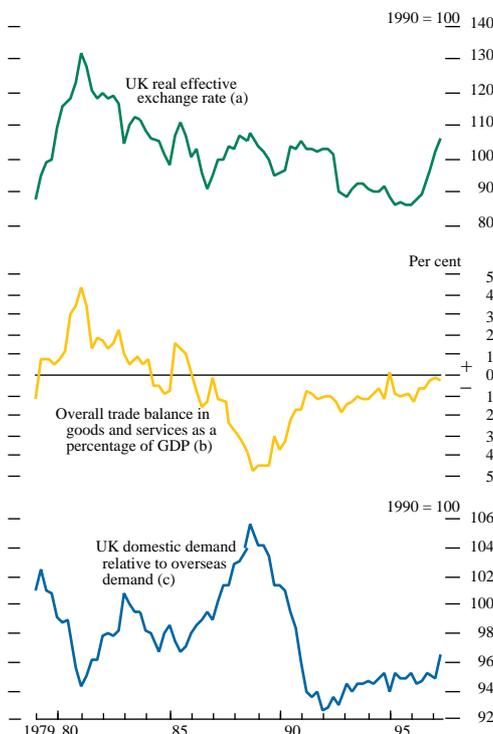
A puzzling feature of the present economic situation has been the limited response of trade flows to the appreciation of the exchange rate. As Chart 3.7 shows, the appreciation has continued for nearly a year without significantly affecting the net trade position, though it is difficult to know what would have happened in the absence of the appreciation. Preliminary trade data suggest that, excluding oil and erratics, the three-month growth rate of export volumes rose to 4.5% in August from 3.7% in July. The three-month growth rate of import volumes in August also rose after slowing in July. Business surveys and reports from the Bank's Agencies suggested a large effect—the CBI Quarterly Trends Survey in October noted that the average balance of firms reporting normal export orders in 1997 Q3 was -23%, well below the average for the present cycle. And the BCC Survey suggested that manufacturers' export

Chart 3.8
Trade volumes and the real exchange rate



- (a) Total export volumes of goods excluding oil and erratics.
- (b) Total import volumes of goods excluding oil and erratics.
- (c) Based on relative normalised unit labour costs in the manufacturing sector.

Chart 3.9
The real exchange rate, net trade and relative demand



- (a) Based on relative normalised unit labour costs in the manufacturing sector.
- (b) GDP at market prices.
- (c) Overseas domestic demand proxied by demand in the major six overseas economies weighted by GDP.

orders have continued to fall. But other surveys imply less trade deterioration. The Chartered Institute of Purchasing and Supply (CIPS) report in October observed that export orders had increased as a result of stronger growth abroad. The report also noted a focus on cost-cutting by manufacturers, which may have helped to offset some of the effects of the appreciation.

Chart 3.8 presents a measure of the real exchange rate together with import and export volumes (excluding oil and erratics) since 1980. Export and import volumes have risen during the recent appreciation, growing at the same average annual rate of 7.3% between 1995 Q4 and 1997 Q2. Export volumes have, however, risen noticeably faster since the start of the year—they grew at an annualised rate of around 15% in the first half of 1997 compared with around 5% in the second half of 1996. The subdued response of trade volumes to the appreciation so far may be due to a number of factors, including fixed short-term contracts, slow adjustment of relative prices, and perceptions that recent exchange rate movements have been partly temporary. Foreign exporters, in particular, may have used the appreciation to achieve a sustained increase in margins, limiting pass-through to import prices and lengthening the adjustment process. The Agents' Summary of Business Conditions also reports that UK exporters of manufactured goods are continuing to reduce margins in order to retain market share.⁽¹⁾ As the relatively high value of sterling has persisted since the last *Report*, some of these delaying factors may start to unwind. Section 5 examines recent developments in exchange rate pass-through.

Broadly speaking, the more price elastic import and export demand are, the more the trade balance will respond to exchange rate changes. There are, however, no theoretical reasons to expect an appreciation to have a particular effect on the trade balance. The trade balance is not determined solely by the exchange rate—it reflects world trade and domestic demand as well as relative prices. As Chart 3.9 illustrates, though the sharp appreciation during 1979–80 led to a subsequent deterioration in the trade balance, it coincided with a marked decline in relative domestic demand. In the late 1980s, a sharp rise in relative domestic demand accounted for much of the trade deterioration: though the exchange rate also appreciated during the period, it may have been of secondary importance.

(1) An article in the November *Quarterly Bulletin* describes the work of the Bank's Agencies in more detail.

Table 3.C
Estimated geographical contributions to export volume growth 1996 Q2–1997 Q2^(a)

	Contribution (percentage points)	Percentage change in bilateral exchange rate (b)	1996 export weights (per cent)
United States	1.34	7.4	11.9
Netherlands	0.69	21.5	8.0
Spain	0.36	21.9	4.0
Italy	0.31	16.7	4.8
Ireland	0.30	10.6	5.1
Hong Kong	0.28	7.5	1.8
China	0.17	6.9	0.4
Singapore	0.14	9.4	1.3
Malaysia	0.12	7.7	0.7
France	0.11	20.2	10.1
Japan	0.11	19.5	2.6
Canada	0.08	9.0	1.2
Sweden	0.03	22.9	2.6
Belgium/ Luxembourg	-0.01	21.3	5.1
Germany	-0.01	20.8	12.3
OPEC	0.87	n/a	4.8
Latin America	0.34	n/a	1.6
Eastern Europe	0.21	n/a	1.4
Other	1.2	n/a	20.3
Total	6.6	17.5 (c)	100

n/a = not applicable.

Sources: Bank calculations and Datastream.

- (a) Overseas Trade Statistics (OTS) values deflated by EU or non-EU balance of payments price indices.
 (b) A rise denotes an appreciation of sterling.
 (c) Change in nominal effective exchange rate index.

A second explanation for the resilience of net trade hinges on overseas demand. Domestic demand in the major six overseas economies increased at an annual rate of 2.2%, compared with 1.8% a year earlier. Indications are that strong demand from overseas will continue. The IMF *World Economic Outlook* noted that world output is expected to expand by 4½% in both 1997 and 1998—the strongest pace for a decade. And though activity in a number of countries in continental Europe has been driven more by net exports than by domestic demand, this masks strong import demand in some of these countries.

In June, estimates based on OECD data suggested that UK export markets for goods grew by 3.9% in the first half of 1997. But recent estimates for import volume growth in the major economies could cause this figure to be revised upwards. UK export volumes grew by 4.7% during the first half of 1997, implying that the United Kingdom's share of world trade may have been largely maintained despite the appreciation. UK exporters may have sought to offset the effects of the appreciation by promoting sales to markets, such as the United States, where domestic demand has been stronger and where sterling's appreciation has been less pronounced. Table 3.C shows the geographical contributions to UK export volume growth and the changes in the bilateral exchange rates between 1996 Q2 and 1997 Q2. It suggests that a significant contribution to the recent strength in UK exports has come from the United States, as well as from historically smaller markets, such as OPEC, Latin America, Asia-Pacific and Eastern Europe. But export volume growth to other EU countries such as the Netherlands and Italy has also been strong, despite the appreciation.

3.3

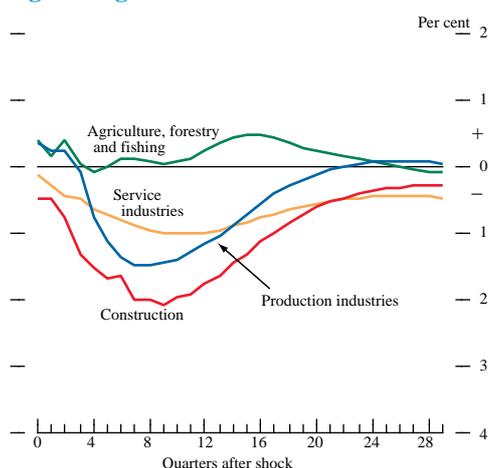
Output

The preliminary estimate of real GDP in 1997 Q3 was 1% higher than the previous quarter and 3.9% higher than a year earlier. Excluding oil and gas extraction, the estimate was up by 0.9% on the quarter and by 4% on a year earlier. Service sector output grew by 4.9% on a year earlier. According to the ONS, this reflects strong growth in the business services and communications sectors.

But there are signs that the pace of service sector activity may be slowing—service sector output grew by 1% in 1997 Q3 compared with 1.4% in 1996 Q4. This is borne out by recent survey evidence. The BCC Quarterly

Economic Survey in 1997 Q3 noted that the peak of service sector activity may have passed, with the balance of firms reporting improved sales and orders falling below the peak recorded earlier in the year. The CIPS survey also reported signs of slower service sector activity, but noted that there was some evidence of acceleration in October. The Bank’s regional Agencies conducted a small survey in November for the Monetary Policy Committee to examine developments in the service sector. The findings suggested that growth had been higher in 1997 Q3 than in the first half of the year. More respondents expected growth to increase in the coming quarters than expected it to fall, though some parts of the sector, notably financial services and hotels, anticipated some moderation.

Chart 3.10
Output responses of the major industrial groups to an unexpected monetary tightening



Source: Ganley, J and Salmon, C (1996).

It is useful to place the latest output data in the context of the tightening of monetary policy that began six months ago. Chart 3.10 draws out the likely effects of monetary policy on output. It offers a stylised sense of the speed and magnitude of firms’ reactions to monetary policy by examining the responsiveness of the major sectors to an unexpected increase in interest rates.⁽¹⁾ The chart shows that monetary policy has its maximum impact at a horizon of some two years ahead and that different sectors respond differently and at different speeds. In particular, the largest absolute responses occur in the construction and production sectors. This is because the construction sector, which is closely linked to housing activity, is more sensitive to interest rate changes than, say, agriculture, which has long lags in its production cycle. The reaction of the service sector to an interest rate increase is also quite swift. So some early signs of the recent monetary policy tightening should emerge in the construction and service sectors. But while there are some indications of growth slowing in the service sector, the construction sector shows no such signs as yet, as noted in the box on page 23.

3.4

Summary

Real GDP continued to grow quickly in the third quarter of 1997. Domestically, private demand provided the momentum for above-average growth and reflected strong broad money growth and increased financial wealth from rising asset prices and windfall gains. Windfall-related spending has boosted consumption, and

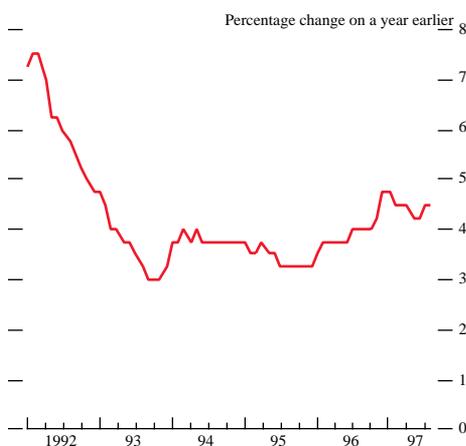
(1) Ganley, J and Salmon, C (1996), ‘The industrial impact of monetary policy’, *Quarterly Bulletin*, August, pages 288–98. They estimate a set of four equations for official interest rates, real GDP, the GDP deflator and industry output. The response of industry output to an unexpected increase in official interest rates of around 1 percentage point is then examined.

a survey conducted by MORI on behalf of the Bank suggests that this effect will be concentrated in 1997. Evidence from GDP data in 1997 Q3 and recent surveys suggests that the pace of activity in the service sector may be slowing. A central issue, therefore, is how far the unwinding of the initial impact of windfall spending and the cumulative effect of recent interest rate increases will slow demand growth in 1998.

On the external side, the exchange rate appreciation has had a smaller-than-expected effect on net exports. This largely reflects the limited pass-through to relative prices, as firms absorb the impact of the appreciation on their margins, and the strength of overseas demand. Nevertheless, it remains likely that net trade will continue to make negative contributions to GDP growth in the coming quarters.

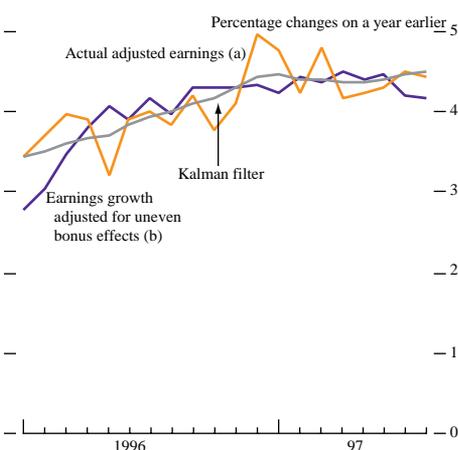
Unemployment fell by around 40,000 and employment rose by around 90,000 during the summer, according to the Labour Force Survey. Despite this tightening of the labour market, annual nominal earnings growth, adjusting for the temporary effects of bonuses, has been just under 4½% since the start of 1997.

Chart 4.1
Underlying earnings growth^(a)



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

Chart 4.2
Whole-economy average earnings growth



Sources: ONS and Bank of England.

- (a) Three-month moving average.
(b) Three-month moving average of earnings growth, adjusted by subtracting monthly bonus effect and adding back a twelve-month moving average of bonus effects.

4.1 Nominal earnings

Whole-economy underlying average earnings growth in the twelve months to August was 4½% (see Chart 4.1). This was ¼ percentage point higher than in May, the latest figure available at the time of the *August Report*. Earnings in July were distorted by large bonus payments in the telecommunications sector. A box in the previous *Report* suggested two methods for smoothing such effects to reduce distortions to earnings growth.⁽¹⁾ Annual earnings growth, after smoothing of bonuses, has not picked up during the past few months, and remains just under 4½%, as shown in Chart 4.2. This is around 1 percentage point higher than at the start of 1996. Whole-economy productivity growth has averaged just above 2% per year in the past 40 years. So if real earnings grow in line with productivity, any increase in the current growth rate of nominal earnings would be difficult to reconcile with the inflation target of 2½%. Though higher earnings growth might be absorbed by falling margins, this could not continue indefinitely.

The measures described above are of weekly earnings, which are likely to depend on the number of hours worked per week (hours worked are discussed later in this section). Variations in these measures would not necessarily reflect labour market tightness; a better measure might be hourly earnings. The New Earnings Survey obtains detailed information on the gross pay (ie before tax or other deductions) of a sample of 1% of workers in April of each year. According to this survey, average gross hourly earnings, excluding overtime, rose by 4.9% in the twelve months to April 1997. Weekly wages and salaries increased by 4.4% in the same period.

(1) In one method, monthly bonus effects are identified by looking for large changes in earnings in individual sectors. The estimated bonus effects are removed from actual earnings and a twelve-month moving average of such effects is added back. The other method uses a statistical technique such as the Kalman filter. See the box 'Adjusting earnings for temporary bonus effects' on page 27 of the *August 1997 Report*.

So earnings per hour rose more quickly than earnings per week.

Settlements in the private sector averaged 3.6% in the twelve months to September, according to the Bank's employment-weighted settlements database, about $\frac{1}{4}$ percentage point higher than three months earlier. Part of the reason for the pick-up was a settlement in August of around 5.5% in the construction sector, covering 600,000 employees. This followed increasing recruitment difficulties in the industry in the first half of the year, according to the Building Employers' Confederation. But it also reflected the withdrawal of some allowances for construction workers, so the actual pay bill effect was only around 3.5%. This settlement also included double-digit increases in craft-workers' pay for 1998 and 1999. Settlements in the public sector, at 2.8% in September, remained lower than in the private sector. This was also true of earnings: in the twelve months to August, public sector earnings grew much less quickly than earnings in the private sector.

4.2 Real earnings

Employers wish to preserve their prices relative to costs, and employees their real income. Expectations about inflation for the next year or so are an important part of the wage-bargaining process, as earnings are often agreed in nominal terms. According to the Merrill Lynch-Gallup and Barclays Basix Surveys, short-term inflation expectations have risen slightly during the past few months (see Tables 7.B and 7.C). This could feed through to higher settlements. Inflation outturns often differ from expectations, so it is useful to estimate real earnings based on actual price changes. Employers are concerned about the real product wage; employees are concerned about the real consumption wage. Table 4.A shows that both measures of real earnings growth have picked up during the past year or so to around their 20-year averages.

Table 4.A
Growth in the real product and real consumption wage^(a)

Percentage change on a year earlier

	20-year average	1995 Q2	1996 Q2	1997 Q2
Real product wage	1.7	1.0	0.5	1.6
Real consumption wage	2.6	-0.4	1.8	2.6

(a) The real product wage, which includes both wages and salaries and employers' social security contributions and deflates these by the GDP deflator at factor cost, measures the real cost of labour to employers. The real consumption wage deflates earnings by the tax and price index (TPI). The TPI measures changes in both retail prices and direct taxes. So the real consumption wage is a measure of the purchasing power of post-tax income.

4.3 Explaining real earnings behaviour

Labour market tightness

There are several indicators of tightness, including unemployment, the non-participation rate, employment, the gap between hours offered and hours worked, vacancies, and skill shortages. Almost all suggest that the labour market has continued to tighten since the previous *Report*.

Table 4.B
Unemployment rates^(a)

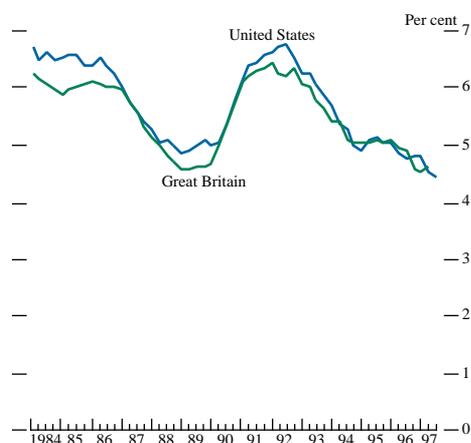
Per cent

	1996	1997		
	Year	Spring	Summer	September
LFS GB unemployment	8.0	7.2	7.1	n.a.
UK claimant count	7.3	5.9	5.5	5.2

Sources: LFS and ONS.

(a) Claimant unemployment constructed to align with LFS periods (eg summer = June, July and August).

Chart 4.3
Short-term unemployment in Great Britain and the United States^(a)



Sources: LFS, US Bureau of Labour Statistics and Bank of England.

(a) Those unemployed for less than a year. A seasonally adjusted estimate is calculated as the difference between the official seasonally adjusted measures of total unemployment and non-seasonally adjusted long-term unemployment, assuming there is no seasonal pattern in the latter. A measure of short-term unemployment seasonally adjusted by the Bank shows a similar pattern.

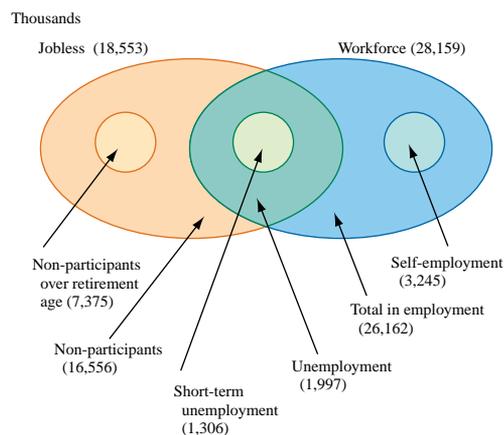
The claimant count for unemployment benefits fell by 28,000 in September, to 5.2% of the workforce (see Table 4.B). During the past year, the claimant unemployment rate has fallen by around 2¼ percentage points. But the claimant count has been affected by the introduction of the Jobseeker's Allowance (JSA) in October 1996.⁽¹⁾ The less timely Labour Force Survey measure of unemployment should not be affected as much as the claimant count by the JSA. LFS unemployment fell by 40,000 in summer 1997, around 80,000 less than the corresponding fall in the claimant count. The LFS unemployment rate was 7.1% in summer 1997. Since most of the direct effects of the JSA on the claimant count should have happened in the first six months of its introduction, why are the two measures of unemployment still diverging?

An ONS study analysed the difference between the claimant count and LFS unemployment.⁽²⁾ The claimant count can fall more quickly than LFS unemployment when there is an increase in the number of people looking for a job, but not claiming. The rise in LFS female unemployment in the summer is consistent with this effect. But this does not seem large enough to account for all of the difference in measured unemployment falls. It seems that there was also a large fall in the number of people claiming benefit who were not previously actively seeking work, consistent with a continued deterrent effect from the JSA.

Those who have been unemployed for fewer than twelve months are more likely than other unemployed people to have the skills and experience that employers are seeking. So the short-term unemployment rate may be a better indicator than total unemployment of labour market tightness. Short-term unemployment in the first half of 1997 was lower than at any point since the LFS was introduced in 1984. Chart 4.3 shows that short-term unemployment rates in Great Britain and the United States have been very similar during the past 13 years. Since 1992, short-term unemployment in both countries has fallen by around 2 percentage points. And

- (1) Previous *Reports* discussed the likely effects of the JSA on claimant unemployment. These include small one-off administrative effects, such as the introduction of means testing after six rather than twelve months. The JSA has also affected incentives: deterring some former claimants; and increasing the efficiency with which the unemployed search for work. The overall result is likely to have been a fall in the rate of claimant unemployment consistent with the long-run equilibrium—or natural—rate.
- (2) See 'LFS estimates of unemployed claimants: results of an ONS record linkage study' in *Labour Market Trends*, November 1997. That study was conducted in summer 1996; the introduction of the JSA in October last year means that the results may not apply beyond October 1996. Though the precise numbers may be affected, the qualitative results of using that study through to summer 1997 seem to be robust.

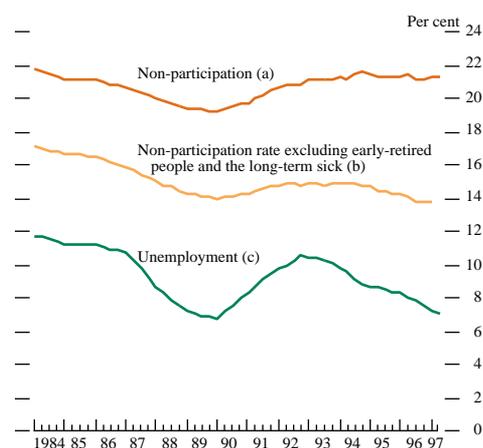
Chart 4.4
Labour force^(a)



Source: LFS.

(a) Figures in brackets refer to data for Great Britain in summer 1997.

Chart 4.5
Non-participation and unemployment



Source: LFS.

- (a) Percentage of population of working age.
 (b) Percentage of population of working age. Assumes early-retired people and long-term sick are non-seasonal.
 (c) Percentage of economically active population.

Table 4.C
Survey of employment intentions

Percentage balance of employers planning to recruit staff

		1996		1997		
		Q3	Q4	Q1	Q2	Q3
BCC (a)	Services	20.9	20.8	23.0	25.2	25.9
	Manufacturing	17.4	9.9	13.3	13.7	8.9
CBI (b)	Manufacturing	-8.8	-10.9	-1.1	-2.0	-7.5
Manpower (a)	Services	10.1	16.5	16.1	18.3	23.6
	Manufacturing	17.2	17.7	19.1	18.8	22.7

Note: Survey balances are determined by subtracting the percentage of companies reporting decreases from the percentage of companies reporting increases, and for the first time are shown seasonally adjusted by the Bank.

Sources: British Chambers of Commerce, CBI and Manpower.

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

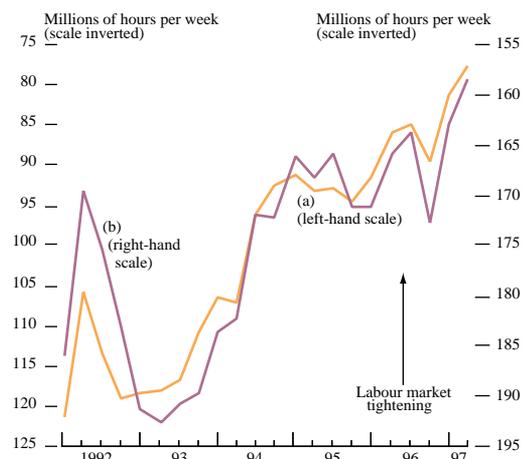
in 1997, real hourly earnings growth in both countries was higher than in 1994, reflecting the tightening labour markets.

Chart 4.4 shows how various groups within the labour force are related. The non-participation rate refers to people of working age who are neither working nor actively seeking work. They include people looking for work, but not available to start within the next two weeks, such as final-year students and people on short-term training courses. They could enter the labour market after a lag. Discouraged workers are also included in the non-participation rate; they could rejoin the labour force if employment prospects improve. So the non-participation rate is another indicator of labour market tightness. The overall non-participation rate is still above the low level it reached in the 1980s. But some non-participants, such as early-retired people or the long-term sick, are less likely to re-enter the labour force. The non-participation rate, excluding these people, was lower at the start of 1997 than in the late 1980s, suggesting that the labour market is as tight now as it was then (see Chart 4.5).

Total employment rose by around 440,000 in the year to summer 1997, according to the LFS, compared with a fall of around 260,000 in unemployment. The rise in the population of working age (around 130,000) accounts for most of the difference. The Workforce in Employment measure of employment rose by 470,000 in the year to 1997 Q2, close to the LFS estimate. The estimated level of employment from 1996 onwards was revised up—by nearly 1% in 1997 Q1—and, correspondingly, productivity was revised down. But unit wage costs (total wages divided by output) were not affected, because total wages are estimated from Inland Revenue statistics that do not rely on employment data. The estimated level of GDP has not yet been revised to reflect the employment revisions. The likely effect is unclear. Output is estimated by employment in some sectors of the economy, where it is hard to measure output directly. So the output measure of GDP may be revised up a little. But the income measure of GDP may not be affected, because the Inland Revenue data used by this measure have not been revised.

According to survey evidence, employment is likely to continue rising. The British Chambers of Commerce and the Manpower Surveys cover both manufacturing and services; the CBI Survey covers only manufacturing. Table 4.C shows recent results of these

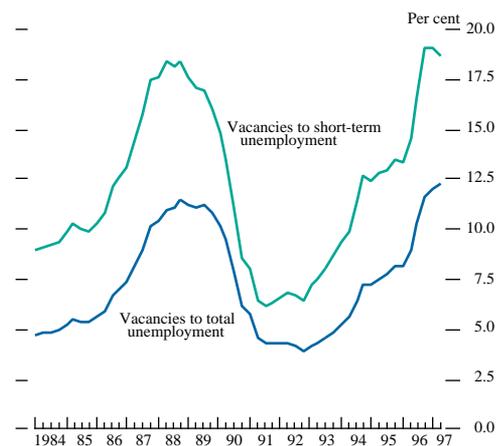
Chart 4.6
Two measures of the gap between potential hours on offer and actual hours worked



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 also including all those who say they would like a job.

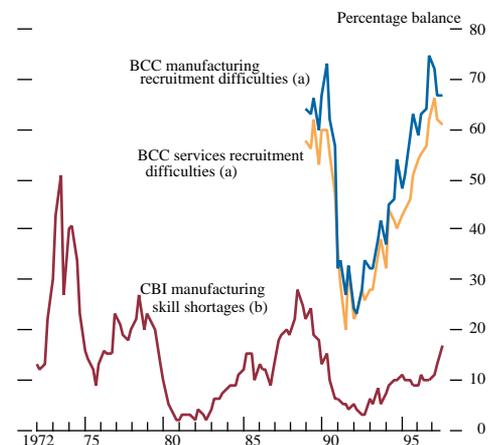
Chart 4.7
Ratio of vacancies to LFS unemployment^(a)



Sources: ONS, LFS and Bank of England.

- (a) Approximately adjusted for overstated stock of vacancies from 1996 Q2 onwards.

Chart 4.8
Skill shortages and recruitment difficulties



Sources: British Chambers of Commerce and CBI.

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

surveys. The balances in the service sector, which were already high a year ago, are generally even higher now, suggesting that the demand for labour there is rising more quickly than last year. But there is a conflict of evidence about demand for labour in the manufacturing sector.

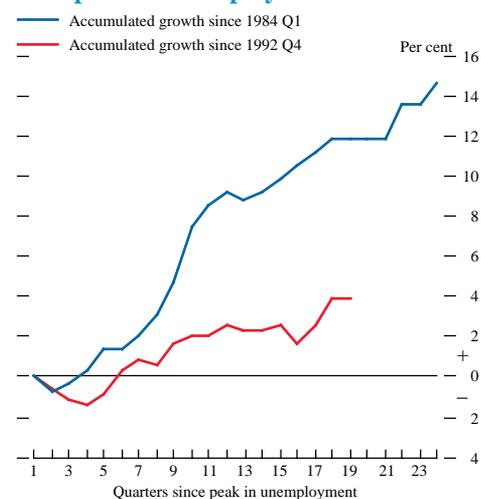
Total hours worked per week are a better measure than employment of labour usage, since they reflect changes in overtime and in the balance between full-time and part-time workers. Labour usage measured by total hours worked rose by 0.6% in summer 1997, according to the LFS, more than the increase of 0.3% in total employment. The potential hours on offer include extra hours from part-time workers who would be willing to increase their hours worked, and from the unemployed. The gap between potential hours on offer and total hours worked was significantly smaller this summer than a year earlier, providing further evidence that the labour market has been tightening (see Chart 4.6).

Unfilled vacancies advertised at Jobcentres—about one third of all vacancies in the economy—are about as high now as they were in the late 1980s. The published ONS data for vacancies from April 1996 onwards are biased up by around 40,000, because of difficulties with the Jobcentres' new computer system. The ratio of reported vacancies to total unemployment, or to short-term unemployment, is a crude measure of the demand for labour relative to its supply. Chart 4.7 shows that these ratios—even after adjustment for the overstated stock of vacancies—have been rising quickly since the beginning of 1996.

Surveys suggest that recruitment difficulties and skill shortages have risen in the past few years. In part, this reflects the shrinking pool of unemployed people seeking jobs. But it is not clear whether recruitment difficulties and skill shortages are as acute now as in the late 1980s (see Chart 4.8). Skill shortages or recruitment difficulties in one particular industry or sector could reflect a shift in relative demand for labour. This might signal a rise in relative wages for the skill groups in short supply, without necessarily causing a rise in aggregate wages. So the consequences of reported skill shortages and recruitment difficulties for overall earnings pressure are difficult to predict.⁽¹⁾

(1) Other problems with such survey evidence include differences in respondents' interpretation of shortages and difficulties. For further discussion see Robinson, P, 'Skill shortages and full employment: how serious a constraint?' in *Creating Industrial Capacity*, edited by Michie, J and Grieve-Smith, J, Oxford University Press, 1996.

Chart 4.9
Real product wage, accumulated growth since peak in unemployment^(a)



(a) The real product wage includes both wages and salaries and employers' social security contributions and deflates these by the GDP deflator at factor cost.

Other factors affecting real earnings

The labour market seems to be as tight now as it was in the late 1980s, according to most measures. But the growth of real earnings per week in this recovery has been much lower than in the previous recovery, when unemployment fell at a slower rate than during the past few years (see Chart 4.9). This is also true of real earnings per hour: between 1993 and 1997, real earnings per hour grew by around 7%, compared with 14% in the equivalent period of the previous recovery. Previous *Reports* have discussed possible reasons for the slower growth of real earnings during the 1990s. The cost of losing a job seems to be higher in the 1990s than the 1980s, partly because unemployment benefit has fallen in value relative to earnings. And union membership has fallen considerably during the past 15 years, which might have reduced employees' bargaining power.

4.4

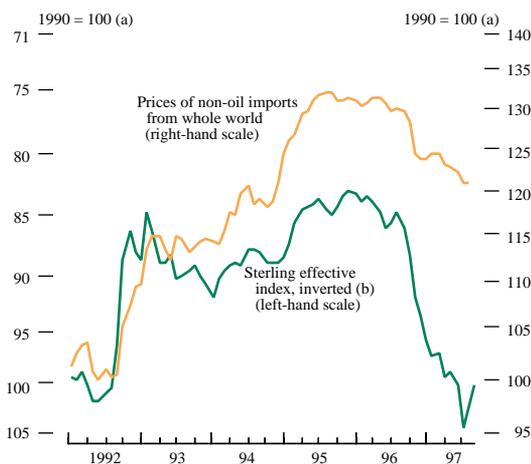
Summary

Annual nominal earnings growth picked up during 1996, but has remained flat at just under 4½% since the start of 1997, close to the rate consistent with the inflation target. Any increase in the current growth rate of nominal earnings would be difficult to reconcile with the inflation target of 2½%. Though higher earnings growth might be absorbed by falling margins, this could not continue indefinitely. Employment has grown more than unemployment has fallen, as both the population of working age and participation in the labour market have increased. A number of indicators, such as unemployment and hours worked, suggest that the labour market is at least as tight now as in the late 1980s. It is difficult to predict how much further unemployment can fall before there is increased economy-wide pressure on real earnings.

Import prices have continued only partly to reflect the appreciation of sterling since it began to rise in August 1996. The divergence between costs and price pressures in the service sector and those in manufacturing may have narrowed. Many world commodity prices rose at the end of 1996 and in the first half of 1997. Some cost and price changes, such as supply-driven commodity price changes, should have only a short-term effect on the general price level. But others may affect or reflect real activity in the short and medium term.

5.1 Import prices and the exchange rate

Chart 5.1
Import prices and the exchange rate



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

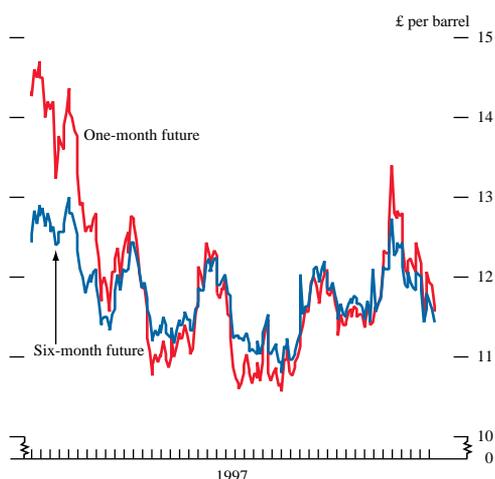
- (a) Both scales are logarithmic.
(b) Monthly average of daily data. A rise in the line reflects a depreciation.

The import prices of non-oil goods rose by 0.2% in August 1997 after falling by 1.1% in July. The index in August 1997 was only 6.8% below its level in August 1996, whereas the monthly average of sterling's effective rate rose by more than 21% during the same period (see Chart 5.1). Since many retail goods are imported, the speed and extent of pass-through from an appreciation to import prices will affect RPIX inflation in the short term. And since it determines the degree of import price competition that UK producers face, pass-through may also affect the United Kingdom's real net exports or UK companies' profitability in the medium term. This will in turn influence demand and output. So import price pass-through affects both the short and medium-term prospects for inflation.

Import prices will probably fall further in the United Kingdom, especially if the strength of sterling is thought likely to persist. But they may not fall by as much as sterling has risen since August 1996. Import prices do not always fully reflect movements in exchange rates in the short and medium term, in the United Kingdom and elsewhere. Import prices in other European countries have generally fallen after appreciations. But there are few consistent patterns between countries concerning the speed and extent of pass-through.

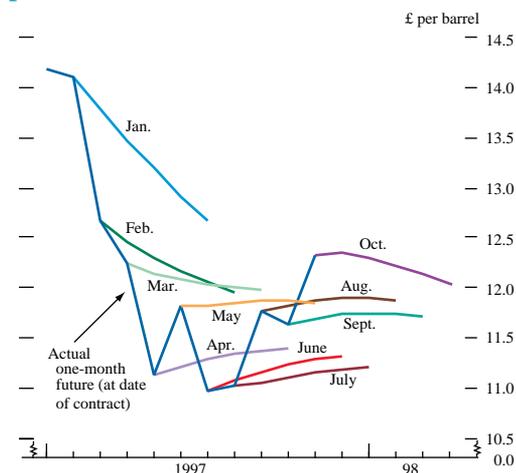
In the previous *Report*, it was noted that recent changes to the way in which import prices are recorded made the comparison with previous periods of exchange rate pass-through difficult. The new method may also

Chart 5.2
Price of Brent crude



Note: Daily data. Final observation is 5 November.
Source: International Petroleum Exchange.

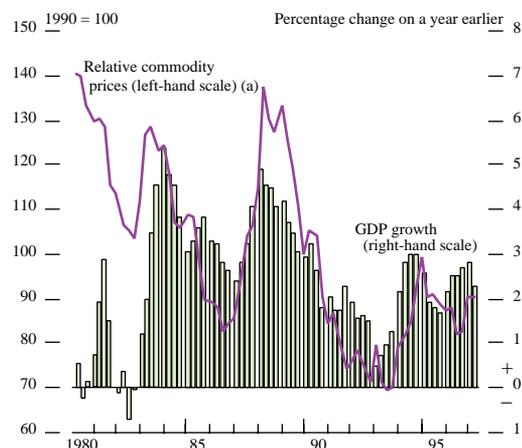
Chart 5.3
Forward curves of Brent crude sterling oil prices^(a)



Source: International Petroleum Exchange.

(a) Derived from futures prices. All prices are monthly averages of daily data.

Chart 5.4
Relative commodity prices and GDP growth in the G7



Sources: Bank for International Settlements, *The Economist* and the Bank of England.

(a) Based on *The Economist* All-Industries Index and priced in Special Drawing Rights (SDRs). GDP deflators for each of the five economies whose currencies appear in the SDR basket are used to derive a relative price series.

slightly bias the recording of certain import prices. Import price data for basic goods and semi-finished manufactures are collected directly from importers. But those for finished manufactures—more than half of the total—are estimated from the prices of domestically produced finished manufactures, using an adjustment factor derived from the observed relationship between semi-finished import prices and domestic prices. If this relationship differs for finished and semi-finished manufactures, the estimation of finished manufacture import prices, which have fallen slightly less since August 1996 than those of semi-manufactures, may be inaccurate.

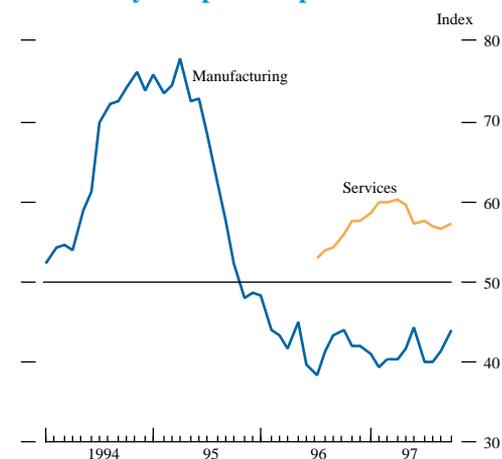
Some of the uncertainty may be resolved by using other data. The Bank’s Agencies conducted a survey of their contacts in September regarding imports and import prices. The results broadly supported the picture given by the ONS data. Most contacts reported that the cost of imports had fallen by 5% or less in the previous twelve months, and that cheaper imported inputs had not led them to cut their domestic prices. And the survey was also consistent with the disaggregated ONS import price data; contacts reported a larger appreciation effect on the import prices of homogeneous commodities than on more complex finished goods.

5.2 Raw material and commodity prices

The sterling Brent crude oil price rose rapidly in the first week of October to more than £13 per barrel, before falling back to around £11–12 (see Chart 5.2). It rose primarily because of further uncertainty over future supplies of Iraqi oil, and short-term supply shortages caused by rising world demand. Prices on longer-term contracts rose by less than the one-month price, implying that the market expected the rises to be reversed. In the past few months, expectations of future price movements have generally remained within the £11–12 range (see Chart 5.3).

Many non-oil world commodity prices, which rose rapidly at the end of 1996, were broadly unchanged or rose again in the first three quarters of 1997. Such prices—especially those of ‘hard’ commodities such as timber and metals—often follow movements in world GDP growth (see Chart 5.4). So the rise in GDP growth in the major economies in late 1996 and early 1997 may explain this increase. World commodity prices often affect UK manufacturers’ input prices. The sterling price

Chart 5.5
CIPS surveys: input cost price indicators^(a)



Source: Chartered Institute of Purchasing and Supply.

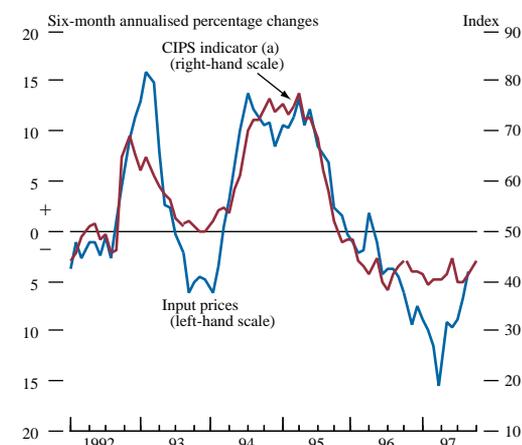
(a) Respondents are asked to compare the prices of inputs in the current month with those in the previous month. A figure above 50 indicates rising input costs.

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

	1997				
	May	June	July	Aug.	Sept.
<i>Three-month annualised percentage changes</i>					
Input prices	-10.4	-9.5	-2.3	-3.0	1.6
- excluding FDTP industries (b)	-6.0	-6.8	-5.0	-1.9	-0.8
Output prices (c)	0.3	0.3	2.3	2.6	3.3
- excluding FDTP industries (b)	1.3	0.7	1.0	0.7	1.0
- excluding excise duties (PIIY)	0.7	1.0	1.3	0.7	1.3
<i>One-month percentage changes</i>					
Input prices	0.4	-0.7	-0.3	0.2	0.5
- excluding FDTP industries (b)	-0.1	-0.2	-1.0	0.7	0.1
Output prices (c)	0.2	0.0	0.4	0.2	0.2
- excluding FDTP industries (b)	0.2	0.0	0.1	0.1	0.1
- excluding excise duties (PIIY)	0.2	0.1	0.0	0.1	0.2

(a) Seasonally adjusted by the ONS, except where noted.
 (b) FDTP is 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 5.6
Input price inflation and the CIPS purchase price indicator



Sources: Chartered Institute of Purchasing and Supply and ONS.

(a) 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.

of most imported inputs fell during that period in the United Kingdom, implying that the rise in commodity prices was more than offset by the appreciation of sterling.

Futures prices imply that the prices of various foods, and some non-food agricultural commodities such as cotton, are expected to rise on world markets at the end of 1997 and in 1998. Some of this probably reflects the expected disruption to agricultural production, mainly in the southern hemisphere and parts of north America, caused by the El Niño weather system. But the effects on most food prices in the United Kingdom will probably be muted, because the Common Agricultural Policy tends to insulate Europe from the effects of agricultural price movements elsewhere.

5.3 Costs and prices in the service sector

The Chartered Institute of Purchasing and Supply (CIPS) survey of the service sector showed the input cost indicator (including labour costs) falling from a peak of 60.1 in April to 56.5 in September, though it rose slightly to 57.4 in October (see Chart 5.5). This implies that the rise in service sector costs slowed in the second and third quarters. Service sector capacity constraints reported in the BCC Survey fell in the second quarter and were unchanged in the third. And the CIPS service sector output price indicator fell almost to its neutral level of 50 in September and October, with fewer than one in twelve firms reporting higher output prices in October. Lower overall service sector price inflation may help to moderate retail service price inflation towards the end of 1997.

5.4 Costs and prices in manufacturing

Input prices in the manufacturing sector rose in recent months. The index excluding the food, drink, tobacco and petroleum industries also rose, for the first time since October 1996. And manufacturing output prices continued to edge up.

Input prices rose in both August and September (see Table 5.A), and the CIPS manufacturing input price indicator, though below its neutral level of 50, rose in the three months to October (see Chart 5.6). Most imported input prices rose between July and September. This may partly have been caused by the depreciation of sterling during those months.

Chart 5.7
Producer price inflation

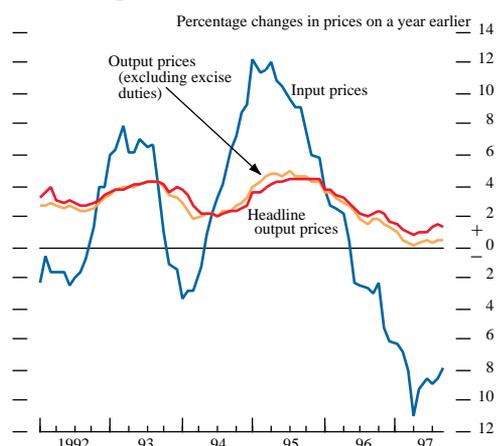


Table 5.B
Rates of change of manufacturers' costs and prices

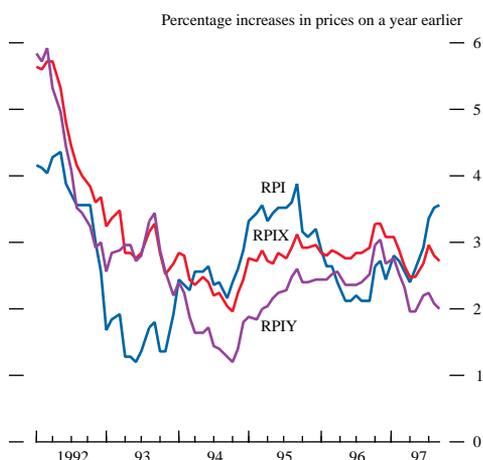
Percentage changes in the periods shown, except where noted

	1995	1996	1997		
	Year	Year	Q1	Q2	Q3
Unit costs					
Unit labour costs (a)	3.5	5.8	0.3	0.7	-0.2
Materials and fuels (including semi-finished manufactured imports)	10.8	-4.0	-2.2	-1.7	-0.7
Imports of finished manufactures	8.6	0.7	-1.9	-2.1	-1.2
Services	2.0	2.8	0.5	0.4	0.8
Weighted costs	5.3	2.4	-0.4	-0.2	-0.2
Output prices (b)	4.5	1.9	0.1	0.2	0.2

Sources: ONS and Bank of England.

(a) 1997 Q3 figure includes estimate for September.
(b) Domestic sales.

Chart 5.8
Inflation^(a)



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

(a) Adjusted by the Bank of England for ONS error in under-recording 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.

The twelve-month headline rate of manufacturing output price inflation and the rate for output prices excluding excise duties (PPIY) both fell by 0.1 percentage points in September, to 1.4% and 0.4% respectively (see Chart 5.7). But after falling between November 1996 and April 1997, PPIY output prices rose between May and September. This suggests that output prices may have passed a turning point. The CBI Industrial Trends Surveys between July and October showed small rises in the seasonally adjusted balance of firms expecting to increase prices in the next four months, though the quarterly October survey reported that prices had fallen in the previous four months.

Pricing in the manufacturing sector

Manufacturers' domestic margins probably continued to widen in the third quarter, as unit labour costs and input prices fell while output prices continued to rise slowly (see Table 5.B). But output price inflation tends to be less volatile than input price inflation; if input prices start to rise, manufacturers' domestic margins may be squeezed. Exporters' margins probably narrowed further in the third quarter as falls in total input costs were outweighed by larger falls in manufacture export prices in July and August.

5.5

Retail prices

Retail prices excluding mortgage interest payments (RPIX) rose by 2.7% in the twelve months to September (see Chart 5.8). Annual RPIX inflation in September was around half a percentage point higher than envisaged in the *August Report* central projection. Most of this difference was caused by higher-than-expected retail goods prices (see below).

RPIY inflation, which also excludes excise duties, was unchanged at 2.2% in July and then fell to 2.1% in August and 2% in September. Short-run measures of inflation show the headline inflation rate (RPI) rising further above RPIX and RPIY inflation in the months after June, because of rises in the Bank's repo rate which pushed up mortgage interest payments (see Table 5.C).

Twelve-month RPIX retail goods price inflation was 2.3% in September. It was higher in the third quarter than in the second, partly because of the effect of excise duty changes in the July Budget on petrol and other goods prices. Sterling's appreciation does not appear greatly to have affected most goods prices. Components

Table 5.C
Three-month measures of inflation^(a)

Percentage changes

	1997					
	Apr.	May	June	July	Aug.	Sept.
RPI	1.3	1.7	3.2	5.3	5.9	5.0
RPIX	1.3	1.5	2.4	3.8	3.8	3.2
RPIY	0.4	0.6	1.7	2.7	3.0	2.5

Sources: ONS and Bank calculations.

(a) RPIY data are seasonally adjusted and annualised by the Bank. RPI and RPIX are obtained by multiplying the ratios of RPI to RPIY, and of RPIX to RPIY, by seasonally adjusted RPIY. This removes most seasonal effects, but not those induced by tax changes. RPI and RPIX are also annualised.

of the RPI basket with high proportions of imports—such as clothing and footwear, household goods and leisure goods—are in most cases still showing positive rates of twelve-month price inflation. This may be because retailers may have taken advantage of strong spending, particularly on durables, in the second and third quarters (see Section 3) to maintain or raise their prices.

Estimates suggest that retailers' margins widened in the second quarter, as retail goods prices rose while most input costs fell. The further rises in goods prices in Q3 may mean that retailers have taken advantage of the strength of nominal demand to widen their margins. If retailers expected further strong spending in the fourth quarter, there is a risk that this may continue.

Retail service price annual inflation excluding mortgage interest payments fell by 0.2 percentage points to 2.8% in September. The cut in VAT on fuel from 8% to 5% announced in the July Budget further depressed—already very low—utilities inflation. The twelve-month change in RPI utilities prices fell from -1.4% in August to -2.6% in September. Excluding utilities and rent, service price inflation was unchanged at 4.5% in September. The moderation in service sector cost and price pressures will probably restrain service price inflation from rising much more above goods price inflation during the fourth quarter.

Chart 5.D
Annual inflation^(a)

Percentage increase in prices on a year earlier

	1997					
	Apr.	May	June	July	Aug.	Sept.
HARP	3.2	3.2	3.4	3.5	3.4	3.3
THARP	2.9	2.9	3.1	2.9	2.9	3.0
Trimmed mean	2.4	2.5	2.5	2.5	2.5	2.4
Median	2.0	2.1	2.1	2.1	2.2	2.2
HICP (b)	1.6	1.6	1.7	2.0	2.0	1.8

Sources: ONS and Bank calculations.

(a) Data are seasonally adjusted by the Bank.
(b) Harmonised index of consumer prices.

5.6 Other price indices

The Bank's median and trimmed mean inflation measures provide a guide to underlying inflation by stripping out the largest changes in prices at both ends of the distribution. Neither measure rose by as much as RPIX inflation in July and August, mainly because the large rises in petrol prices were stripped out (see Table 5.D). But both measures confirm that underlying inflation in the third quarter, though as high or higher than in the second quarter, was no higher than at the beginning of 1997.

HARP and THARP inflation, which contain a measure of owner-occupied housing costs, continued to exceed their counterparts of RPIX and RPIY throughout the third quarter of 1997. This was because house prices in the previous twelve months rose relatively fast. The Halifax house price index is used in the HARP and THARP estimates to proxy housing costs. The Halifax index has

recently been showing lower rates of house price inflation than other measures, such as the Nationwide index (see Section 3). So other house price indices imply even higher rates for HARP and THARP inflation.

The UK Harmonised Index of Consumer Prices (HICP) rose by 1.8% in the twelve months to September, down from a rate of 2% in August (see Table 5.D). HICP inflation has consistently been lower than RPIX inflation in the United Kingdom, for three main reasons. First, it uses a geometric rather than an arithmetic mean to weight together sub-components, which often produces a lower aggregate. Second, it excludes all housing costs, which tend to rise quickly. Third, it includes items such as new cars and airfares, which are not included in the RPI basket and whose prices have tended to rise slowly or fall.

5.7 **GDP deflator and final expenditure price index**

The GDP deflator is the price of value added in the economy and so is a measure of domestically generated inflation. But it is less timely than the retail price index, and is frequently revised. The GDP deflator at factor cost rose by 2.3% in the four quarters to 1997 Q2, slightly lower than its upwardly revised rate of 2.4% in the first quarter. The ONS has started to publish an experimental monthly final expenditure price index based on the market prices of consumption, investment and government expenditure. This is a much wider measure of the general price level than the retail price index. And unlike the GDP deflator, the direct effect of import price changes on general prices is implicitly included. The index is currently being developed and is subject to revision, but initial estimates suggest that consumer price inflation has been higher than investment and government expenditure price inflation since the beginning of 1997.

5.8 **Summary**

Import prices have still fallen by less than sterling has appreciated since August 1996. This contributed to higher-than-expected retail goods and overall RPIX inflation in the third quarter, though both were lower than at the beginning of 1997. Inflationary pressures in the manufacturing sector may have risen slightly from historically low levels, while those in services seem to be moderating.

6

Monetary policy since the *August Report*

This section provides a summary of the economic news and of the monetary policy decisions since the *August Report*, and leads up to the new projection for inflation in Section 7. The minutes of the August, September and October MPC meetings are attached as an Annex to this *Report*. The Bank of England's official dealing rate—the repo rate—was unchanged at the September and October MPC meetings, and was raised by 0.25 percentage points to 7.25% at the meeting in November.

At the time of the *August Report*, the MPC concluded that the risks to the central projection for inflation appeared more on the upside. These risks derived particularly from the impact of money and credit on the pace of domestic demand growth, and from the impact on consumption of windfall gains. The Bank subsequently commissioned MORI to conduct a survey on windfall gains. The upside risks were partly offset by the possibility that unemployment remained above the point at which inflationary pressures would emerge. In the short run, the Committee was particularly concerned about the uncertainties related to volatile asset prices such as equity prices and the exchange rate. The possibility of a correction to equity prices represented a downside risk to inflation, while a possible sharp fall in sterling represented an upside risk. The MPC concluded that monetary policy had reached a position where it should be possible to pause to assess the direction in which the risks were likely to materialise.

At its meeting on 10–11 September, the MPC reviewed the data released since the *August Report*. The expenditure breakdown of Q2 GDP (see Table 6.A) showed that consumption grew by 1.5%, well above its historic average, in line with earlier expectations. This reflected the underlying strength of income and wealth, and the temporary effect of windfalls. The results of the Bank/MORI survey on windfall gains, discussed on page 20, suggested a more concentrated impact on consumption growth than was assumed in the *August Report*. But the overall level of spending out of windfall gains appeared broadly in line with the assumptions made then. The fall in net exports in 1997 Q2 was less than expected at the time of the *August Report*. But

Table 6.A
Contributions to GDP growth in 1997 Q2^(a)

Percentage points, unless stated

Domestic demand	1.4
Private consumption	1.1
Public consumption	0.0
Investment	0.0
Stockbuilding	0.3
Net exports	-0.4
GDP (b)	0.9

(a) Numbers in this table relate to data available at the time of the September MPC meeting. These data have been subsequently revised and are reflected in Section 3. Contributions may not sum to total because of rounding, and because the statistical discrepancy and the factor cost adjustment have been omitted from the table.

(b) Percentage change on previous quarter.

most surveys of export orders suggested a further deterioration in exports, so the puzzle over the limited effect of sterling's appreciation remained.

Sterling depreciated by around 5% between the 15 working days before the August MPC meeting, the starting-point for the August inflation projection, and the first day of the September meeting. It seemed possible that the part of sterling's previous appreciation unexplained by expected domestic and overseas interest rates, and by any fiscal policy effects, was unwinding quickly. High and rising stock-market prices continued to be a concern, both because of their immediate contribution to consumption and because, if they proved unsustainable, they might create a shock to the real economy.

At the September meeting, the MPC agreed that the evidence since the August meeting did not point conclusively in either direction, nor did it resolve the main uncertainties. The Committee voted unanimously to leave interest rates unchanged.

By the time of the meeting on 8–9 October, there were signs that GDP growth in Q3 had been considerably stronger than expected at the time of the *August Report*. There was no evidence that domestic demand had been substantially stronger than expected, so it seemed likely that the unexpected strength of output reflected net exports. There was another large fall in claimant unemployment; and earnings growth and settlements appeared to pick up in July. But the pick-up in earnings was related to bonuses, and if bonus payments were spread out over the full year, earnings growth was around $4\frac{1}{4}\%$ – $4\frac{1}{2}\%$, and had not increased during the past few months.

RPIX inflation fell to 2.7% in September, compared with 3.0% in July (the latest data at the time of the *August Report*). The fall was less than envisaged in the August projection, and implied a higher starting-point for the short-term projection.

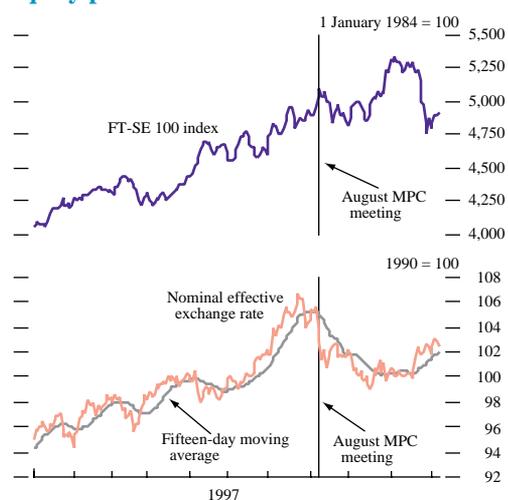
Broad money growth now appeared slightly slower than in previous months and earnings growth remained quite low, given the tightening labour market. While many of the developments that the Committee surveyed at the October meeting pointed to faster growth and higher inflation than expected, it remained possible that economic growth was about to slow down, one or two quarters later than expected.

The Committee considered whether a rise in interest rates was needed in order to meet the inflation target. It was possible that the impact on domestic demand of the monetary and fiscal tightening earlier this year would be sufficient to slow the economy. On this interpretation, the need for a further rise in interest rates was not yet clear. Earnings growth, which had not picked up this year (after adjusting for the timing of bonuses), supported that proposition. A second interpretation was that the early indications of strong growth in the third quarter meant that a slowdown had at least been deferred, and so the risks to the inflation outlook were clearly on the upside. The Committee agreed that it did not, as yet, have sufficient information to feel confident in choosing between these two interpretations. Though there were arguments for an immediate move, the Members preferred to wait another month to see how the evidence on the balance of risks accumulated. By then, work on the November *Report* would have enabled the Committee to make a new inflation forecast. In light of the discussion, the Committee voted unanimously to leave interest rates unchanged in October.

At the time of the November MPC meeting, the first estimate of GDP in the third quarter showed a 1% quarterly increase. This was substantially stronger than expected at the time of the August *Report*. Though no breakdown of the expenditure components was yet available, the recent monthly indicators suggested a strong contribution from domestic demand and stronger-than-expected net exports. But there were some indications in the Q3 GDP data and in recent surveys to suggest that the rate of growth in the service sector might be slowing. RPIX inflation in September was about $\frac{1}{2}$ percentage point higher than expected at the time of the August *Report*.

The Labour Force Survey (LFS) suggested continued tightening of the labour market through the summer. The LFS measure of unemployment fell by less than the claimant count, but the short-term unemployment rate remained around its lowest level since the survey began in 1984. Hours worked continued to increase. Earnings growth had remained broadly flat at just under $4\frac{1}{2}\%$ after smoothing the effects of bonuses. This was a little surprising, given the tightening in the labour market. Any increase in the current growth rate of nominal earnings would be difficult to reconcile with the inflation target of $2\frac{1}{2}\%$. Though higher earnings growth might be absorbed by falling margins, this could not continue indefinitely.

Chart 6.1
The nominal effective exchange rate and equity prices



Note: Daily data. Final observation is 5 November.

Sources: Bank of England and *Financial Times*.

In the 15 days before the November meeting, the nominal effective exchange rate was around 3% lower than at the time of the August MPC meeting, but significantly higher than at the start of 1997 (see Chart 6.1). And equity prices, which were very volatile towards the end of October, were around 2% lower on 5 November than at the time of August meeting, but around 20% higher than at the start of the year.

Broad money growth in September was stronger than in the preceding three months and suggested that though the growth rate may have stabilised, it was yet to show firm signs of slowing. The sectoral breakdown for 1997 Q3 showed that OFIs' deposits still provided the main impetus to broad money growth, which would have been of greater concern if individuals' or ICCs' deposits had provided the main impetus.

At the November MPC meeting, which took place on 5–6 November, the Committee decided to raise the Bank's repo rate by 0.25 percentage points to 7.25%. The outcome of this meeting reflected the prospects for inflation discussed in Section 7. The press notice released following the meeting is contained in the Annex to this *Report*.

7.1 The medium-term inflation projection

The Monetary Policy Committee's projection for inflation is based on the assumption that official interest rates will remain unchanged at 7¼% during the next two years. The projection was agreed by the Monetary Policy Committee (MPC) on 6 November.

The sterling effective exchange rate index averaged 102.0 in the 15 working days to 5 November, and this is the starting point used in the projection. It compares with an average of 105.1 prior to the August MPC meeting—a fall of 3%. The exchange rate is assumed to depreciate from its starting-point at the rate implied by the difference between the constant UK interest rate and market expectations of overseas interest rates, reaching an index level of around 98 by the end of the forecast period. In August, the Committee assumed that some of the portfolio or erratic factors that contributed to sterling's appreciation during the past fifteen months would unwind, and therefore that the exchange rate would depreciate faster than implied by the difference in UK and overseas interest rates alone. Since then, some of those factors have unwound, and for the current projection the MPC has assumed that the most likely scenario is that the exchange rate will depreciate only in line with the difference in interest rates. This assumption implies a lower rate of depreciation than in the *August Report*, and reflects a reassessment of the short-term uncertainties surrounding EMU following the Government's statement in October. But the MPC thought there was a risk of a larger depreciation through a further unwinding of the portfolio and erratic factors.

Government nominal expenditure plans and effective tax rates have been taken from the July Budget. Though this assumption is used in the central case, the distribution of possible inflation outcomes takes account of the risks from fiscal policy, based on the past variance and skewness of nominal expenditure outturns compared with announced plans, which have been small in recent years.

The prospects for world demand and trade are less certain following the volatility of world equity markets

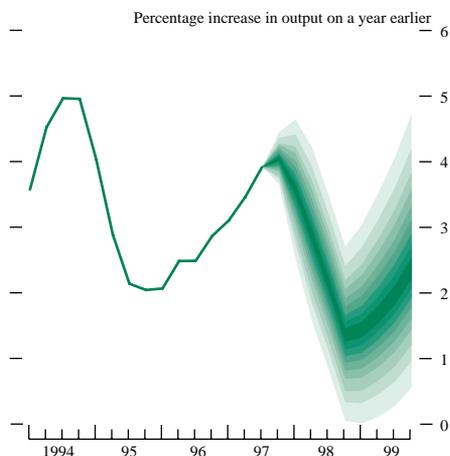
and the disturbances in Asia. The falls recorded in North American and European stock markets on 27–28 October were subsequently largely reversed, leaving equity prices still well above their levels a year earlier, and there are assumed to be no significant implications for the United Kingdom. But the projections for UK net exports, and the profits earned abroad by UK companies, reflect a downside risk from weaker activity in Asia following the recent developments there. With recovery in continental Europe, demand prospects in UK export markets seem relatively bright, despite the likely fall in Asian activity. But UK net exports are still expected to fall further during the coming quarters, as the effects of sterling's appreciation continue to feed through.

Broad money growth rates have shown few signs of moderating since the *August Report*. As well as being an important factor in the central projection, monetary growth continues to be a particular source of upside risk. Broad money has been growing faster than was expected at the time of the *August Report*. Moreover, the continued build-up of OFIs' deposits remains a risk to the central projection, as they may raise expenditure either if they flow through to households or firms, or if they raise asset prices. Narrow money growth has not changed much in the course of this year, but is nevertheless lower than last year, in line with the expected impact of higher interest rates on the demand for money.

Domestic demand has continued to expand at a robust rate. Consumption, boosted by windfalls from demutualisations, was especially strong. It is likely that at least some of that strength continued into the fourth quarter. Domestic demand growth is expected to slow as the past tightening of monetary and fiscal policy takes increasing effect and as the initial impact of windfall spending on consumption drops out, leaving just the permanent (annuity) effect. Assessing the impact of a possible fall in domestic equity prices on the projections is difficult. As at 5 November, the FT-SE 100 had fallen by less than 1% compared with its average 1997 Q3 level, and was around 25% above its level a year earlier. The rise in UK equity prices in the past year contributed to rapid growth in households' net financial wealth, and is likely to underpin continued growth in consumers' expenditure. Options prices indicate that the markets think it more likely than not that equity prices will fall during the next few months.

GDP grew at an annual rate of around 4% in 1997 Q3, well above any reasonable estimate of the sustainable

Chart 7.1
Current GDP projection



The chart shows the relative likelihood of possible outcomes. The central band, coloured deep green, includes the central projection: there is judged to be a 10% chance that output growth 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 10 percentage points. Of course, it is impossible to assess the probabilities with any precision, but this represents the MPC's best estimate. The more uncertainty there is about the output growth 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.

trend, and faster than expected at the time of the August *Report*. Survey evidence suggests that at least some of this strength will continue into the fourth quarter.

Chart 7.1 shows the Bank's probability distribution for the four-quarter growth rate of GDP. This chart, which is shown in the *Report* for the first time, provides more information on the MPC's view of the possible outcomes for GDP, which underpins its projection for inflation. But there is no simple relationship between GDP and inflation. The inflationary implications of a given path of output growth depend on the uncertain relationship between aggregate demand and potential supply. So even if the path of GDP were known and there were no other shocks, there would still be a distribution of possible outcomes for inflation. The chart does not imply that there is a target for output growth. But the prospects for output are assessed by the MPC when considering the appropriate level of interest rates.

The single most likely outcome for GDP growth is contained within the central band (with the darkest shading). As in the inflation chart, the central band is judged to contain 10% of the probability distribution. The central projection envisages that the rate of growth of GDP will moderate after peaking at around 4% in the second half of this year. Output growth is expected to slow to slightly below trend for a short period, but to pick up in 1999 as the effect of sterling's appreciation on net exports comes to an end. Under the assumption of constant nominal interest rates, the central projection for inflation is rising towards the end of the period (see below), and hence real interest rates are falling, leading to a gradual pick-up in demand and output.

The Bank's medium-term projection of the twelve-month RPIX inflation rate is shown in Chart 7.2. It is shown next to the August projection (see Chart 7.3). The most likely path of RPIX inflation is a gradual decline during 1998, dipping slightly below the target of 2½%, and then rising back towards it during 1999.

The projection continues to be influenced by the one-off impact on inflation of sterling's appreciation since August 1996, though in the short term this is now thought to be less marked than was expected at the time of the August *Report*. And the recent strength of nominal demand may have allowed retailers to widen their margins. The starting-point for the projection is higher than three months ago, and the probability attached to inflation falling below 2½% in the short term is lower.

Chart 7.2
Current RPIX inflation projection

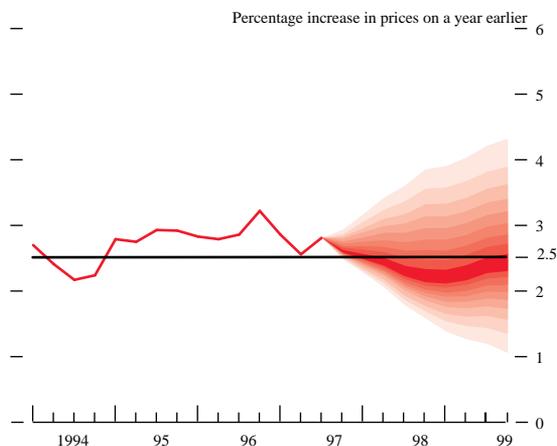
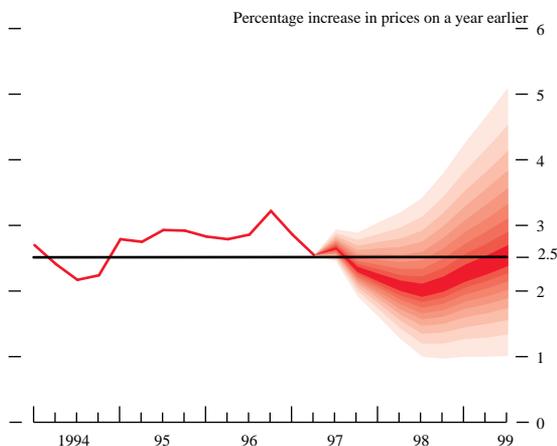


Chart 7.3
RPIX inflation projection in August



The chart shows the relative likelihood of possible outcomes. The central band, coloured deep red, includes the central projection: there is judged to be 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 10 percentage points. Of course, it is impossible to assess the probabilities with any precision, but this represents the MPC'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.

Chart 7.4
Current projection for the percentage increase in RPIX in the year to 1999 Q4

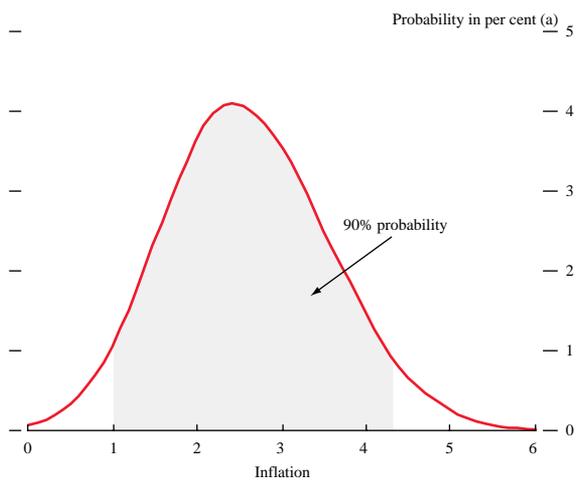
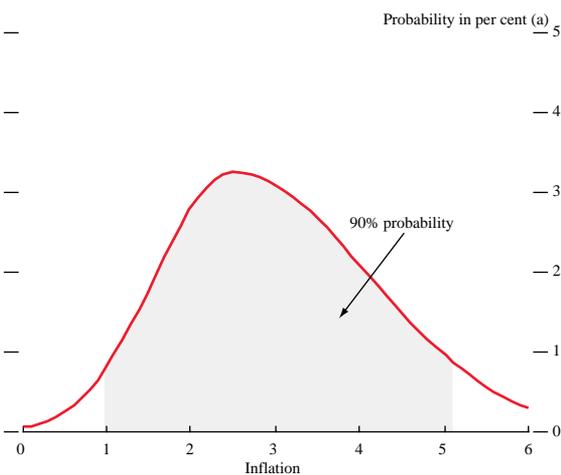


Chart 7.5
August projection for the percentage increase in RPIX in the year to 1999 Q3



Source: Bank of England.

(a) Probability of inflation being within ± 0.5 percentage point of any given inflation rate, specified to one decimal place. For example, the probability of inflation being 2.5% (between 2.45% and 2.55%) in the current projection is around 4%.

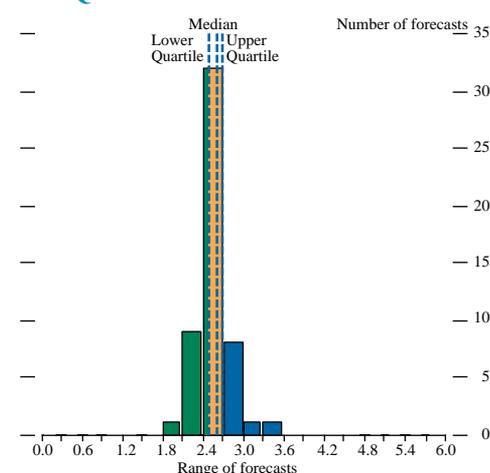
The central projection for inflation at the end of the forecasting horizon is similar to that in the *August Report*, at around 2½%. This reflects several broadly offsetting factors. The Committee's decision to raise official interest rates by 0.25 percentage points in November lowered the central projection, as did the change in the exchange rate assumption since August. The recent Bank/MORI survey—which indicated that much of the boost to consumption growth from windfalls will have occurred by the end of this year—also suggests slightly lower inflation two years ahead than in August. These factors were offset by higher-than-expected initial levels of both activity and prices which, together with rapid money growth and a reassessment of the likely profile of net exports, have tended to raise the central projection.

As always, there is considerable uncertainty about the paths of both output and inflation, with a wide range of possible outcomes on both the upside and downside of the central projection. The risks around the central projection are more on the upside, but less so than in August. During the next year, there is a risk that retail profit margins could be stronger than assumed in the central case—a significantly bigger risk than in the August projection. Throughout the forecast period, an important upside risk stems from money, as in August. Overall, the outlook two years ahead is judged to be somewhat less uncertain than at the time of the *August Report*. In particular, more information is now available from the Bank/MORI survey on how windfalls have been spent. Trade data continue to point to stronger net exports than might have been expected, and with the passage of time the downside risks are thought to have diminished.

In this *Report*, the inflation projection charts are complemented by two new charts (see Charts 7.4 and 7.5). These charts come from the same distributions as the inflation fan charts, and highlight the overall balance of risks at the end of the forecast period for both the November and August projections. They show that the November distribution has become narrower than in August, while there remains a substantial degree of skewness.

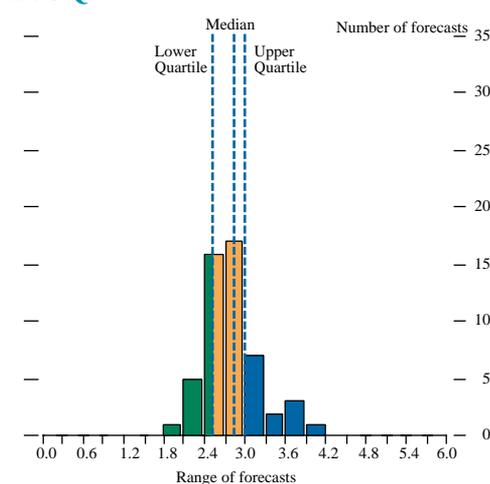
The inflation projections discussed above assume unchanged UK interest rates. An alternative projection could be derived by using the assumption that interest rates evolve according to market expectations. On this occasion, little extra is to be learned from such a

Chart 7.6
Distribution of RPIX inflation forecasts for 1997 Q4



Source: Forecasts of 52 outside forecasters as of October 1997.

Chart 7.7
Distribution of RPIX inflation forecasts for 1998 Q4



Source: Forecasts of 52 outside forecasters as of October 1997.

Table 7.A
Expected RPIX inflation^(a)

Probability, per cent

	Range:				
	Less than 1.0%	1.0% to 2.5%	2.5% to 4.0%	4.0% to 5.5%	More than 5.5%
1997 Q4	1	38	58	2	1
1998 Q4	4	32	50	12	2

(a) 36 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 of each range. For example, on average, forecasters assign a probability of 4% to inflation turning out to be less than 1% in 1998 Q4. Rows may not sum to 100, because of rounding.

projection, because interest rates during the next two years implied by futures markets on 5 November were broadly constant (see Chart 2.10 on page 13). So the probability distributions for inflation and GDP growth would be very similar to those shown in Chart 7.2 and Chart 7.1.

7.2 Other forecasters

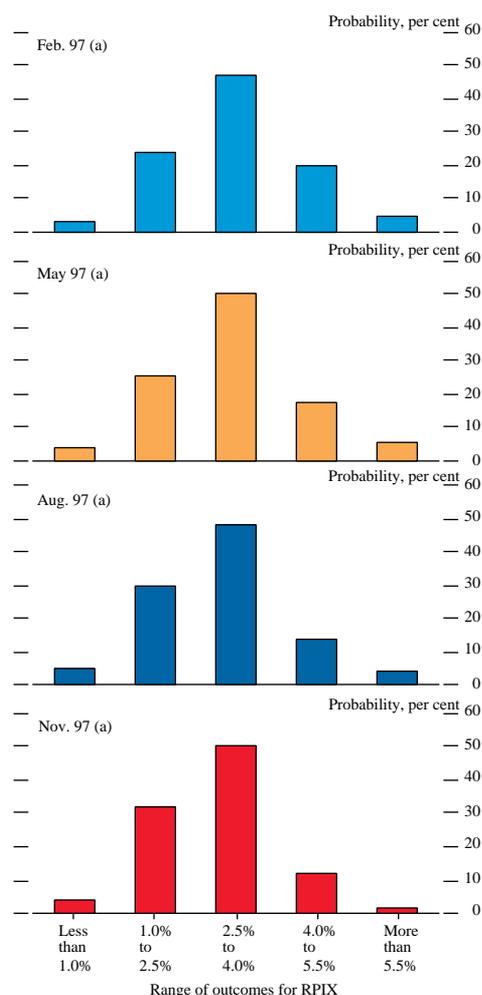
Chart 7.6 shows the distribution of central forecasts for twelve-month RPIX inflation in 1997 Q4 among the 52 outside forecasters surveyed by the Bank. The median forecast was 2.6% in October, a little higher than in July. Chart 7.7 shows that the median forecast for inflation for 1998 Q4 was 2.8%. This is a little lower than in the April or July surveys, when the median was close to 3%. The median forecast for inflation for Q4 1998 has fallen a little during the past three months, partly reflecting weaker projections for activity during the next two years. The distribution remains slightly skewed to the upside. Although the median of outside forecasts has fallen since the *August Report*, it remains above the Bank's central projection.

Thirty-six outside forecasters have provided the Bank with their assessments of the probabilities that they attach to various possible inflation outcomes (see Table 7.A). Overall, outside forecasters now assign a 64% probability to inflation being above the target in the fourth quarter of 1998, and a 36% probability to it being below. This is little changed since the time of the *August Report*. Chart 7.8 shows how the outside forecasters' distributions for inflation outcomes in 1998 Q4 have evolved during the past year. Not surprisingly, the distribution has become slightly narrower as 1998 Q4 approaches, and shifted to the left as the outside forecasters' central projections fell slightly through the first half of 1997.

The Merrill Lynch-Gallup Survey of inflation expectations (see Table 7.B) shows slightly higher expectations for inflation at the end of 1997 than at the time of the *August Report*, and slightly lower expectations for inflation in December 1998. This seems broadly consistent with the outside forecasts surveyed by the Bank. The evidence from the Barclays Basix Survey (see Table 7.C) suggests slightly higher inflation both one and two years ahead.

As discussed in Section 2, longer-term market inflation expectations, derived by comparing conventional and

Chart 7.8
Expected RPIX inflation for 1998 Q4



(a) Date of Inflation Report survey.

Table 7.B
Merrill Lynch-Gallup Survey of UK fund managers' inflation expectations

Percentage increases in prices

Twelve-month RPI inflation in:	Month of survey				
	1997				
	June	July	Aug.	Sept.	Oct.
December 1997	3.0	2.9	3.0	3.0	3.1
December 1998	3.3	3.3	3.3	3.2	3.2

Source: Merrill Lynch-Gallup.

index-linked government bond prices, have fallen at maturities of three, five and ten years since the August *Report* (see Chart 7.9). Nonetheless, these expectations remain above the inflation target.⁽¹⁾

7.3

Conclusions

There are three factors complicating monetary policy at present. First, there is considerable uncertainty as to how close activity is to the point at which the pressure of demand relative to supply would lead to a pick-up in inflation. Second, although output growth is likely to slow in 1998, the timing and degree of the slowdown is uncertain. Third, the imbalance between continuing buoyant domestic demand and prospective weak net exports, described in previous *Reports*, remains.

Output has grown at an annual rate of about 4% for some time, driven by the strength of domestic demand, and most measures of the labour market suggest considerable tightening. Nevertheless, earnings growth has been broadly flat during 1997. The issue is whether, in the tighter labour market, there will be upward pressure on earnings during the course of next year. There is survey evidence of growing skill shortages, and the Bank's regional Agencies report concern about the effect of this on the prospects for pay settlements in the coming pay round. As yet, however, that concern has not shown up in either settlements or earnings figures. But if earnings growth were to rise, then unless some of the increase in costs was absorbed in lower margins, that would pose a clear threat to the inflation target.

Despite sterling's appreciation of some 20% since August 1996, there has been little reduction in the volume of exports. But the higher exchange rate is likely to affect export volumes during the coming year. Weaker net exports, combined with the monetary and fiscal policy tightening earlier this year, and the tailing-off of the effect on consumption of windfall gains, mean that output growth is likely to slow to slightly below trend for a short period. There have been few signs to date of the effect of sterling's appreciation on exports, which indicates how difficult it is to identify the timing and magnitude of any reduction in output growth.

Buoyant domestic demand, fuelled by rapid growth of wealth, money and credit, has led to faster output

(1) How far above depends on the size of the inflation risk premium, which is difficult to estimate.

Table 7.C
Barclays Basix Survey of inflation expectations

Percentage increases in prices

Twelve-month RPI inflation one year ahead

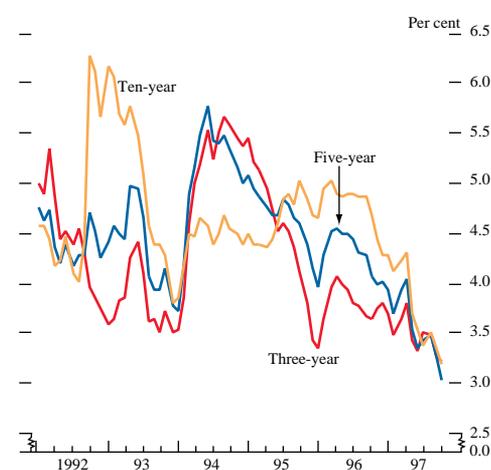
	June 1997	September 1997
General public	4.2	4.4
Business economists	3.0	3.2
Finance directors	3.1	3.4
Investment analysts	3.1	3.1
Academic economists	3.0	3.2
Trade unions	3.4	3.7

Twelve-month RPI inflation two years ahead

	June 1997	September 1997
General public	4.7	5.0
Business economists	3.2	3.4
Finance directors	3.6	3.7
Investment analysts	3.5	3.8
Academic economists	3.2	3.1
Trade unions	4.1	3.9

Source: Barclays Bank.

Chart 7.9
Implied forward inflation rates^(a)



Source: Bank of England.

(a) Calendar-month average.

growth. At the same time, the large rise in the effective exchange rate during the past fifteen months is now leading to severe pressures on some sectors. Profit margins of exporters have fallen quite substantially, in response to the appreciation of sterling. So the sectoral incidence of monetary policy has remained uneven.

In August, following the 1 percentage point rise in interest rates since May, the MPC decided to pause in order to assess the direction in which the risks to inflation might materialise. Both inflation and output growth have turned out to be about $\frac{1}{2}$ percentage point higher than the central projection in August. Profit margins on domestic sales have risen to offset lower import prices, thus reducing the impact of the higher exchange rate on the domestic price level. The impact of the exchange rate on net trade has been surprisingly muted so far, and the anticipated reduction in the rate of output growth has not materialised. Although the most likely interpretation is that the impact on net trade has been deferred and that output growth will slow during 1998, there is uncertainty about the extent to which the pressure of demand relative to supply can continue without leading to a rise in inflation. But the continued rapid growth in broad money, domestic demand and output, meant that the balance of risks to inflation remained on the upside. For these reasons, the Committee decided in November to raise interest rates by a further $\frac{1}{4}$ percentage point in order to meet the inflation target.

Glossary and other information

Glossary of selected terms

RPI inflation: inflation measured by the retail price index.

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

RPIY inflation: inflation measured by the RPI excluding mortgage interest payments and the following indirect taxes: council tax, VAT, duties, car purchase tax and vehicle excise duty, insurance tax and airport tax.

HARP index: a price index that 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 at 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 its likely use for transactions.

GDP(E): the expenditure measure of GDP.

GDP(I): the income measure of GDP.

GDP(O): the output measure of GDP.

ACT: Advance Corporation Tax.

BCC: British Chambers of Commerce.

CBI: Confederation of British Industry.

CIPS: Chartered Institute of Purchasing and Supply.

EMU: Economic and Monetary Union.

ERI: exchange rate index.

FT-SE: Financial Times Stock Exchange

GFK: Gesellschaft Für Konsum, Great Britain Ltd.

ICCs: industrial and commercial companies.

JSA: Jobseeker's Allowance.

HICP: Harmonised Index of Consumer Prices.

LAPF: Life assurance and pension funds.

LFS: Labour Force Survey.

MoD: Ministry of Defence.

MORI: Market Opinion Research International.

MPC: Monetary Policy Committee.

OFIs: other financial institutions.

PSBR: Public Sector Borrowing Requirement.

SDR: Special Drawing Rights.

Three-month annualised: the percentage change in a series over three months, 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 an ONS error in under-recording 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

email: mapublications@bankofengland.co.uk

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<http://www.bankofengland.co.uk/>

**Annex:
Minutes and Press Notices
of the monthly
Monetary Policy Committee
meetings**



Minutes of the Monetary Policy Committee meeting on 6–7 August 1997

1 Section I of this minute summarises the analysis presented to the Monetary Policy Committee by Bank staff, and also incorporates information that became available to the Committee after the presentation but before the decision-taking meeting. Section II summarises the Monetary Policy Committee's discussion of the policy implications of the analysis.

I Monetary conditions

2 Notes and coin, having increased by 0.8% in June, appeared to have decelerated in July to an increase of around 0.2%. That would reduce the twelve-month growth rate to 5.6% from 6.1% in June.

3 Broad money growth remained strong in June. M4 increased by 0.9%, and the three, seven and twelve-month growth rates were all in the range 11.6%–11.7% (the seven-month growth rate was calculated because the six-month rate was distorted by the effect of the temporary contraction of the gilt repo market at the end of 1996). Retail M4 grew particularly strongly in June (1.2%) whereas the rise in wholesale M4 was unusually low (0.4%). That pattern may have reflected sales of Halifax shares by individuals to financial institutions following demutualisation.

4 The twelve-month growth rates of real money balances (deflated by RPIX) in June were 3.5% for M0 and 8.8% for M4.

5 The sectoral analysis of monetary growth in Q2 showed that individuals' M4 holdings increased by 1.8%, and their four-quarter growth rate went up from 7% to 7.3%. During the first half of the year they increased by around 4%, compared with 3% in the second half of 1996. The four-quarter growth rate of ICCs' M4 holdings in 1997 Q2 was 7.9%, down from the peak of 11.4% reached in 1996 Q3. ICCs' M4 holdings increased by 3.8% in the first half of 1997, much the same as in the second half of 1996.

6 However, by far the fastest-growing component of M4 had been OFIs' holdings. These had grown much faster than individuals' or ICCs' holdings during the last 2–3 years, and accounted for about one half of the 5 percentage point rise in the four-quarter growth rate of total M4 since 1995 Q2. They increased by 4.7% in Q2 and their four-quarter growth rate had risen to 26.6%. The OFI sector contains a wide variety of types of financial intermediary, the money holdings of which might be affected by different factors. Overall, the growth of OFIs' money had been dominated by life assurance and pension funds and, to a lesser extent, securities dealers.

7 Divisia money aims to identify balances held for transactions purposes. The four-quarter growth rate of aggregate Divisia money was 10.2% in 1997 Q2; that of personal Divisia money was 7.8% (up from 7.4% in Q1) and that of ICCs' Divisia money was 7.3% (down from 8.6% in Q1), and that of OFIs' Divisia money was 29.4% (up from 23.6% in Q1).

8 M4 lending (adjusted to exclude the effect of loan securitisations) rose by 0.7% in June, and its twelve-month growth rate was unchanged at 9.5%. The quarterly sectoral data showed that the four-quarter growth rate of lending was 7.2% for both persons and ICCs, and 20.2% for OFIs. Within personal lending, unsecured lending continued to accelerate: the twelve-month increase in June was 18.3%. The credit card component of unsecured lending (about 20% of the total) had been growing at around 20% for the last year or so. The residual component of unsecured lending (about 80% of the total) had grown by 17.8% in the twelve months to June, and its twelve-month growth rate had

been rising in recent months. Although gross mortgage lending by banks and building societies had increased quite sharply over the last couple of years, the recent acceleration in net mortgage lending (to a twelve-month increase of 6.2% in June) was more modest.

9 M4 lending to ICCs bounced back in Q2 when it rose by 2.0%, after an unusually small increase of 0.3% in Q1. Its four-quarter growth rate continued to edge down to 7.2% compared with the recent peak of 15.2% reached in 1996 Q2. M4 lending to OFIs had risen sharply, by 5.3%, in 1997 Q2.

10 Real forward interest rates derived from index-linked gilt yields suggested that real yields at maturities of two years or so had risen slightly in recent months, as did Bank estimates based on surveys of inflation expectations.

(i) Demand and output

11 Retail sales volumes increased further (by 0.6%) in June after May's strong rise, and their twelve-month growth rate was 5.4%. The annualised growth rate since the start of the year was 8.2%. Though the twelve-month increase in volumes had continued to rise this year, the twelve-month increase in the value of retail sales had levelled out late in 1996 at a little below 6%.

12 Spending on durables had been growing faster than spending on non-durable goods and services, and in June purchases from household goods stores rose by 7.5%, or £140 million. Industry contacts expected that car sales would be very strong in August, and demand for holidays abroad was also reported to be strong. A standard consumption function used by Bank staff did not suggest that up to Q1 there had been any unusual strength in consumer spending (given wealth, income, interest rates and employment), of the kind that might have been caused by anticipation of windfall gains—though the standard error of the equation (around 0.6%) was large enough to absorb any such effects. Nor had the share of durables in total consumer spending been unusual up to Q1. It seemed likely that consumer spending in Q2 had been supported to some degree by windfall gains (some of which might have been anticipated). A survey by the British Retail Consortium of 1,200 recipients of windfalls reported that of the 32% who planned to sell some or all of their shares, 33% were spending money on holidays; 26% were spending on new kitchens, bathrooms or other home improvements; 17% were spending the proceeds in the high street, particularly on goods for the home (eg carpets, furniture); and 11% were buying cars.

13 It seemed likely that consumer demand had also been supported by rising financial wealth. Gross financial wealth rose by 10% (£208 billion) in the year to 1997 Q1; 90% of the increase was the consequence of rising asset prices.

14 The Nationwide house price index for July showed its largest monthly increase for three years (1.8%), (and its twelve month growth rate had gone up to 12.2% from 11.0% in June). The Halifax index, however, rose by only 0.1% in that month, taking the twelve-month growth rate down to 6.4% from 7.1% in June. The recent divergence between the Nationwide and Halifax estimates of house price inflation was puzzling (the indices are mix-adjusted, so as to exclude the influence of the types and locations of the houses which the two institutions were financing). The ratio of house prices to average earnings continued to be lower than in the early to mid 1980s, on either measure. The data on housing market activity were generally flat. An exception was mortgage loan approvals, which had been rising, but that could reflect remortgaging activity as well as net lending.

15 Investment intentions, as indicated by surveys and by reports from the Bank's regional Agencies, remained strong in both manufacturing and services, even though recorded manufacturing investment (which accounted for about 12% of total investment) was lower in 1997 Q1 than a year earlier.

16 The monthly external trade figures continued to be surprisingly strong in the face of the appreciation of sterling. Import volumes from non-EU countries had risen by 7.2% in the second quarter (export volumes had risen by 5.2%); and there had been a very strong rise in imports of consumer goods, including cars. This was consistent with the recent and prospective pattern of consumer spending. Imports of services might be boosted by spending of windfall gains on holidays abroad.

17 Recent surveys (CBI, BCC, CIPS) suggested that orders for manufactured exports had fallen sharply, and Bank research based on analysis of the relationship between responses to the CBI survey and recorded exports suggested that the four-quarter growth rate of manufactured exports might have fallen in Q2, while remaining positive; there was a possibility that it might be negative in Q3. There also appeared from the BCC surveys to have been a slowdown in services exports.

18 The initial estimate of GDP growth in 1997 Q2 was 0.9% (non-oil 1.0%), and the estimated four-quarter growth rate had risen to 3.4% (non-oil 3.6%). Manufacturing output had fallen by 0.1% in Q2, having risen by 0.5% in Q1. Its four-quarter growth rate was 1.6%, notwithstanding weakening export demand, and surveys suggested that growth was likely to continue. Construction activity appeared to be rising erratically. Services output was estimated by the ONS to have risen by 1.3% in Q2 and by 4.6% over the year to Q2; the BCC survey for Q2 suggested some moderation in the annual rate of growth.

(ii) Labour market

19 Demand for labour continued to rise. The Labour Force Survey (LFS) reported a rise of 91,000 in employment between winter and spring, of which just under two thirds represented full-time jobs. Total hours worked rose by 1%, and were up by 1.7% on a year earlier. According to surveys and the Agencies' reports, recruitment intentions were exceptionally strong in service industries but had moderated in manufacturing.

20 The LFS showed a fall of 74,000 in unemployment between winter and spring to 7.2% (on the ILO definition). Short-term unemployment had fallen below its low point of spring 1989. On the claimant count measure, unemployment fell by 36,500 in June to a rate of 5.7%.

21 Analysis of the latest LFS suggested that the labour market had tightened slightly less since autumn 1996 than had previously been thought, and that the Jobseekers' Allowance had had a slightly more powerful effect than previously thought on claims from those not searching for a job. The underlying rate of tightening was now thought to be the equivalent of a monthly fall of 25,000–30,000 in the claimant count.

22 The number of unfilled vacancies reported to jobcentres rose by 8,000 in June to a new record level of 282,000, but the rise reflected a fall in placings (of 22,000) which exceeded the fall in new notifications (14,000).

23 The recorded twelve-month growth rate of underlying average earnings fell to 4 $\frac{1}{4}$ % in May: this was the first month since November in which the figure had not been affected by bonuses. Calculations by Bank staff based on analysis of sectoral earnings trends and statistical smoothing techniques suggested that the underlying growth rate of earnings including bonuses was just under 4 $\frac{1}{2}$ %.

24 Since the previous MPC meeting the local authority workers' settlement, covering 1.4 million people, for a 2.5% basic increase plus the introduction of a minimum wage of £4 per hour, had been agreed. The total cost of the settlement was likely to amount to 2.8% of the pay bill. The twelve-month employment-weighted mean of settlements was just over 3%, with the private sector at 3.4% and the public sector at 2.7%. Within the private sector, the service sector was at 3.6% and the production sector at 3.2%. A proposed settlement covering 600,000 construction workers could lead to a jump in the three-month employment-weighted mean of settlements in June.

25 The Bank's regional Agencies had conducted a survey of labour demand in 136 companies in July. 40% of those surveyed reported that staff numbers had risen over the previous six months, while 24% reported that they had fallen. 47% expected staff numbers to rise during the next six months, and 16% expected them to fall. Recruitment intentions were particularly strong in service industries, where 66% of respondents expected staff numbers to rise and 7% expected them to fall; in manufacturing 29% of respondents expected staff numbers to rise and 25% expected them to fall. Staff reductions during the previous six months had been mainly in large companies (ie companies with more than 500 employees).

26 Of those surveyed, 34% reported that staff turnover had increased in the past six months and nearly all of the others reported no change. 26% of all respondents (34% in services) reported a shortage of skilled workers and 24% quoted skill shortages as a reason for adjusting wages. 48% said that skill shortages had intensified in the past six months (57% in London and the South East). 23% reported a deterioration in the quality of applicants for jobs, while 8% reported an improvement: 32% said that skill shortages were inhibiting their ability to meet demand.

27 On pay, 40% of companies surveyed thought that their settlement would be higher than in 1996, while 10% thought it would be lower. For those expecting higher settlements, the main causes were staff turnover and recruitment problems. 53% of respondents (and 61% in the service sector) said that they would pay premium rates to key groups of skilled workers.

28 A summary of the recent OECD Employment Outlook evidence on job insecurity was presented to the Committee. The OECD drew heavily on surveys conducted by International Survey Research (ISR), which suggested that perceived job insecurity had increased internationally over the past five years, and that it was relatively high in the United Kingdom. The causes of job insecurity might be structural as well as cyclical: ISR surveys suggested that insecurity had increased in each year since 1987 in the United Kingdom. Greater job insecurity might lead to lower wage pressure and to higher precautionary savings.

29 Evidence assembled by the OECD showed little change in job instability—for example average job tenure had changed little on balance between 1985 and 1995. Rates of staff retention had not changed much in most countries, and had actually risen a little in the United Kingdom between the late 1980s and early 1990s. Layoff rates in the United Kingdom had been similar in the 1990s recession to those in the 1980s recession, and were now lower than elsewhere in the European Union. The OECD had found little evidence of a statistically significant link between rates of temporary employment (eg on fixed-term contracts) or changes in statutory employment protection and perceptions of job insecurity across countries.

30 The British Household Panel survey corroborated a rise in job insecurity in the United Kingdom in the early 1990s. The British Social Attitudes Survey, however, suggested no trend in the fear of redundancy in recent years. But it also suggested that in the early to mid 1990s a relatively low percentage of respondents had

thought it would take them less than three months to find an acceptable job, though the percentage had risen in 1995.

31 The OECD concluded that there had been a sharp rise in perceived job insecurity across many countries, mainly because the consequences of job loss had worsened: benefits paid to those out of work had become less generous and eligibility had been tightened, and entry wages into new jobs had fallen relative to average earnings. Institutional factors affecting the degree of centralised bargaining might also play a role. According to ISR data, though job insecurity in the United Kingdom appeared to have been increasing steadily during the current economic recovery, the United States showed a recent recovery in job security, presumably in response to the continued strength of the labour market.

(iii) Prices

32 The Bank's commodity price index fell by 1.6% (provisional figure) in June, having risen by 1.1% (revised figure) in May. These variations were partly explained by volatility in oil prices.

33 Non-oil import prices fell by a further 0.2% in May, and prices of non-oil imports from non-EU countries rose by 0.1% in June. Producer input prices fell by 0.8% in June and by a further 0.4% in July, when they were 9.0% lower than a year earlier. Producer output prices did not change in June or July, and in July they were 0.6% higher than a year earlier. The index excluding excise duties (PPIY) rose by 0.1% in June but did not change in July, when it was 0.4% higher than a year earlier. The CBI industrial trends survey did not suggest that producer output prices were likely to accelerate significantly. Non-oil export prices fell by a further 0.2% in May, though prices of non-oil exports to non-EU countries rose by 0.1% in June.

34 Twelve-month RPIX inflation rose from 2.5% in May to 2.7% in June, with the increase largely accounted for by seasonal food prices. RPI inflation rose from 2.6% in May to 2.9% in June, partly because of rises in mortgage rates. The EU Harmonised Consumer Price Index in June was 1.7% higher than a year earlier.

35 Food price inflation had been falling during the last twelve months and accounted for half of the fall in RPIX inflation from 3.3% to 2.5% between November 1996 and May 1997. This reflected both favourable supply conditions in 1996 and sterling's appreciation, which had had a much greater effect on food prices than on most other goods prices. Looking ahead, supply conditions in 1997 were likely to be less favourable and the effect of sterling's appreciation on the rate of food price inflation would at some point begin to wear off.

(iv) Information from financial markets

36 The sterling ERI stood at 103.9 (1990 average = 100) at the close of business on 6 August. It had fallen by around $\frac{1}{4}$ % since 9 July but had risen by nearly 24% since 2 August 1996. Since 9 July, sterling was up by 1.1% against the Deutsche Mark and down by 5% against the dollar. It had fallen by over 1.5% on the ERI on 6 August itself.

37 The main feature of foreign exchange markets during the last month had been the global strength of the dollar, reflecting optimistic assessments of the US economy and the perceived increased likelihood of EMU going ahead on schedule following the French budget package. Sterling fell slightly after the $\frac{1}{4}$ percentage point rise in interest rates had been announced on 10 July, which suggested that some in the market had seen a larger rise in interest rates at that time as a possibility. Thereafter, for much of July sterling had moved up in parallel with the dollar, but it had weakened after the Bundesbank had announced fixed rate repos for the coming two weeks rather than the expected four, which had encouraged market expectations of higher interest rates in Germany. Analysis of options prices gave no reason to think

that the market attached an unusually high probability to the prospect of a fall in sterling, though uncertainty had increased as sterling had appreciated. Likewise, chart analysis suggested no reason to think that sterling had peaked.

38 In the domestic money market, the announcement of a rise in interest rates on 10 July had very little effect, except for a slight fall in one-month rates, which suggested (like the small fall in sterling) that a larger rise had been seen as possible. Three-month LIBOR on 6 August was 7.13%; the levels implied by futures markets for September 1997, December 1997 and December 1998 were 7.28%, 7.45% and 7.33% respectively. The rates implied for December 1998 had fallen by 21 basis points during the month, and rates were now expected to peak in the spring. This appeared to reflect a perception that a slowdown in economic growth next year was possible, influenced in particular by the strength of sterling, by the fiscal tightening in the Budget, and by the vote not to demutualise the Nationwide Building Society. Analysis of option prices suggested that the fall in the level of short-term interest rates implied for March 1998 was accompanied by a fall in the probability attached to the prospect of sharply higher rates, while the probability attached to sharply lower rates was little changed.

39 Short-term interest rates implied by gilt prices for periods further in the future had also fallen since the last meeting: the implied profile was gently falling for periods up to 10 years, at which point the implied short-term interest rate was around 7.0%. This rate was broadly similar to comparable rates implied for the United States and Germany. Short-term market uncertainty about long-term interest rates (as measured from short term options on the long gilt future and interest rate swaps) had decreased during the last month.

40 Future short-term interest rates implied for the average of large overseas industrial countries had risen for periods up to two years since 9 July, but had fallen for longer periods. There was no clear relationship between relative yield curve movements and changes in sterling's exchange rate during the month.

41 Analysis of money-market rates suggested that the market saw a material likelihood of a further increase in interest rates in August, and of a further rise later this year. Expectations of a rise in August rather than September had been growing in the last few days. It appeared that the market had not regarded substantial movements in sterling as a constraint on interest rate changes in the immediate future, though they perhaps had affected the market view of the longer-term outlook for interest rates.

42 In equity markets, the FT-SE 100 index had risen by 5.5% to 5026 since 9 July, and the FT-SE 250 index by 2.8% to 4517, but the FT-SE Small Capitalisation index had fallen by 0.9% to 2189. These indices account for around 75%, 20% and 5% of total market capitalisation respectively. During the last three months, during which the FT-SE 100 index had risen from 4436 to 5026, the probabilities attached by the market to high absolute levels of the FT-SE 100 share index in the future had increased, while the probabilities attached to low absolute levels were little changed. In conjunction with this, the probability attached to a large fall from current levels had increased.

II Policy implications

43 This section of the minutes summarises the Monetary Policy Committee's analysis of the data and its policy implications, which it assessed together with the inflation forecast and analysis to be published the following week in the Bank's August *Inflation Report*.

44 The Committee reviewed the current position of the economy. Non-oil GDP was growing at an annual rate of around 4%, well above any plausible estimate of capacity growth. Most

commentators now estimated that the output gap was close to zero. If that were so, it followed that, unless output growth fell back fairly rapidly towards trend, a period of below—trend output growth would eventually prove inevitable if the consequent upward pressures on inflation were to be relieved. It was however very difficult to judge the size of the output gap, and important to examine direct evidence about the extent of unused resources.

45 Important evidence was to be found in the labour market. The rate of short-term unemployment, at 4.5% according to the LFS, was lower than at any point since the early 1980s, and was close to the rate in the United States, while earnings growth was surprisingly low. It was possible that the natural rate of unemployment—the rate of unemployment consistent with a stable rate of inflation—had fallen, perhaps reflecting the cumulative effects of almost two decades of labour market reforms. The labour market had continued to tighten as the current upswing progressed, with gathering concerns throughout the economy about skill shortages, as reported by the Bank's Agencies and others. The Committee recalled its discussion at the previous month's meeting about earnings growth. Having been around 3³/₄% in spring 1996, earnings growth had recently been in a range of 4¹/₄%–4¹/₂%, broadly consistent with the inflation target. It remained surprising that earnings had not accelerated more. The Committee agreed that the possibility of faster earnings growth should be treated as an upside risk to the Bank's central projection of inflation.

46 The Committee turned to other key elements of the quarter's data bearing on the outlook for inflation.

47 July's narrow money growth had been weak compared with the past year. Put together with the low May figure, it was possible that a lasting deceleration was occurring. It was, however, difficult to interpret the significance of such a change. On the one hand, it might reflect the flatter growth in retail sales values during 1997: lower retail price inflation had partly offset robust growth in retail sales volumes. On the other hand, if the earlier rapid growth had been caused by adjustment to a low-inflation environment in which individuals wanted to hold higher levels of cash in relation to income or wealth, some deceleration might be expected. Once the adjustment to low inflation was completed, velocity could begin to rise again, and the growth rate of narrow money could decline, given the continuing incentive to economise on cash holdings. It was not possible to conclude from just a few months' data that this was now happening. Narrow money data were therefore difficult to interpret, at least for the moment.

48 Broad money and credit growth also posed important and difficult questions about the outlook for inflation. Much of the recent growth related to the OFI sector of the economy. There had also been a long-term trend decline in broad money velocity. Allowing for these factors, could current broad money growth in real terms of 8¹/₂% be reconciled with the widely-shared expectations of a slowdown in consumption and activity growth over the next year or so? Put another way, did nominal M4 growth of between 11% and 12%, an increase from the second half of 1996, indicate a rise in inflation two years or so ahead once potentially temporary downward pressures on inflation, including sterling's appreciation, had abated or unwound?

49 The Committee noted that the rates of growth of the various sectoral components of M4 were different, although all were high. In addition, Divisia money—a measure of transaction balances, largely accounted for by personal sector money holdings—had grown by 10.2% in the year to second quarter, a modest increase in the growth rate during the last year. The growth of personal sector and company sector money could put upward pressure on inflation via effects on consumption and investment. The Committee concluded that both represented upside risks to the inflation outlook given the lack of supportive evidence for a permanent velocity shift.

50 The Committee discussed the possible implications for future demand and output of the recent rapid growth of OFIs' money, which accounted for about half of the increase in M4 in 1997 Q2. One possibility was that the sector was temporarily holding a high level of balances compared with long-run demand, perhaps partly as a result of the strength of cash-financed merger and acquisition activity and corporate share repurchases during 1995 and 1996. Intermediaries might have deliberately built up money holdings on a view that the rise in financial asset prices would not be sustained. If so, that money could eventually find its way back into asset markets if intermediaries eventually concluded that financial market valuations were robust after all, and so reinvested part of their money holdings. Some of the money would then pass to the company sector (for example via share issues) or to the personal sector (for example as demutualisation shares were sold). In either case, demand for consumption goods and services could be fuelled and a stimulus provided to investment if the cost of capital were reduced by further rises in financial asset prices. Alternatively, OFIs' demand for money might have increased because portfolios had been adjusted to achieve desired asset allocations following the sharp rise in equity prices. In that case, intermediaries would not seek to reduce their money holdings unless financial asset prices fell, changing the value of their portfolios and relative prices. The Committee's view was that because so much of the recent acceleration in M4 was attributable to OFIs' holdings, it was perhaps less alarming than if the acceleration had been concentrated in either the personal or company sectors, but it represented an upside risk to the inflation outlook nevertheless.

51 The Committee discussed the outlook for consumption and the effect of windfall gains to the personal sector via demutualisation, reviewing its analysis at earlier meetings. On the basis of half-yearly growth rates, consumption had been growing at over 4% per annum for more than a year. A number of factors could plausibly explain this. Household wealth had increased rapidly, via the asset price appreciation discussed in the context of money demand. Consumer confidence remained at almost record levels. Short-maturity real interest rates had, during 1996 and early 1997, been relatively low for that point in the cycle. Strong consumption was not therefore a surprise even in the absence of the windfalls.

52 The effect of the windfalls on consumption depended upon the circumstances of households and the pattern of spending. The Committee's assessment was based on a view that households which were not constrained in their access to credit would treat the windfalls as providing an annuity income. Nevertheless, in the short run spending on durable goods—for example cars, furniture, major household appliances—might be boosted. This was a form of investment since durable goods were not instantly consumed, but were paid for upfront, increasing measured consumption expenditure. A minority of households were, however, judged likely to be credit-constrained. They would be more likely to increase consumption by more than the annuity value when windfall share allocations were sold for cash or used as newly available collateral for loans. Once these initial effects had worked their way through, growth in consumption should revert to a rate unaltered by windfalls, though the level of consumption would be higher because of the annuity effect. The emerging evidence was broadly consistent with this story. Retail sales had been strong again in June after a very strong May. The less timely data on sales of durable goods did not show a marked pick-up, but there was a lot of anecdotal evidence suggesting strength. Though the Bank's analysis seemed consistent with developments so far and with survey evidence, substantial uncertainties remained and the Committee agreed that Bank staff should encourage further surveys designed to find out how people had in fact used the windfalls once they had been received.

53 The Committee noted that developments in consumer borrowing might also be linked to the windfalls. Unsecured

consumer borrowing had been very strong and continued to accelerate. These loans might have been taken out in anticipation of the prospective increase in realisable wealth, with growth in unsecured borrowing accelerating as equity prices—and so the value of windfalls—rose. It would therefore be important to monitor future patterns of consumer credit.

54 The Committee agreed that the windfalls were most likely to have their largest effect on consumption during 1997, and that this should be reflected in the central projection incorporated in the *Inflation Report*. There was in addition an upside risk from the possibility that there are more credit-constrained households than the Bank had assumed and, separately, from the possibility that behaviour would be affected by expectations of further demutualisations in the future; this risk remained even after the vote of members of the Nationwide Building Society against demutualisation. A more important upside risk to the longer-run inflation outlook stemmed from the rise in wealth brought about by the rise in financial asset prices.

55 The Committee reviewed their July discussion of the effect of the fiscal position. Fiscal contraction had been in place for some time as a result of Budgets in 1993 and later years, including the most recent Budget in July. The general government deficit was expected by the Government to fall from 4% of GDP in 1996/97, to 1½% in 1997/98, and to virtual balance the next financial year. It was likely to restrain demand, although the incidence of some of the recent measures was delayed. The precise effect, including its timing, was also uncertain. The assumption made in the Bank's inflation forecast would be that the nominal spending control total was met.

56 The Committee reviewed the recent behaviour of sterling. At the close of business on 6 August it had appreciated by about 5% in effective terms since the May *Inflation Report*, and so by around nearly 24% during the previous twelve months. There had been, in comparison, relatively little change since the Committee's last meeting, though the Committee noted that sterling had been volatile in the immediate run-up to the meeting on account of speculation about what it would decide. Looking at the period since May, the Committee observed that around half of the appreciation was consistent with changes in UK and overseas yield curves (assuming no change in any exchange rate risk premium and in the long run no change in the real exchange rate) and so did not reflect any extra tightening of monetary conditions beyond what was already implied by the yield curves themselves. This element of the pound's appreciation could be expected to unwind gradually on the assumption of uncovered interest parity. Explanations of the remainder of the appreciation since May were difficult to identify and assess. It was widely suggested by commentators that it partly reflected portfolio shifts associated with uncertainty about EMU, possibly reducing any risk premium on sterling relative to some other European currencies. Some corroboration for this explanation was offered by the weakness of the Deutsche Mark against other currencies, including notably the US dollar. It was possible that the EMU outlook would become clearer during the coming months, in which case some of the upward pressure on sterling might be alleviated. However, this could not be counted on. If EMU did not lie behind much of sterling's appreciation, it was even less obvious what kind of news would affect its level. The Committee agreed that the central projection in the *Inflation Report* should be based on the assumption that sterling would depreciate by slightly more than would be implied by uncovered interest parity (based on the assumption of constant UK interest rates), reflecting a gradual and partial unwinding of that element of the appreciation over the last year that was not associated with changes in relative yield curves.

57 The Committee noted that surveys of business opinion were now showing consistently that export orders were suffering significantly from sterling's rise. The trade performance so far this year had been a puzzle, but the Committee thought it likely that the

effects of the appreciation would soon be evident in the data. It was agreed that the forecast should incorporate a significant impact from net trade on output during the coming year, and that this should feed primarily into the central projection rather than just as a downside risk to inflation. On the other hand, the possibility of a rapid unwinding of sterling's appreciation represented an upside risk for inflation.

58 The Committee expressed considerable concern about sterling's level and its unbalancing effects on the economy. While members viewed estimates of equilibrium real exchange rates as highly uncertain, it seemed likely that sterling was overvalued.

59 This was at the heart of the dilemma discussed at the Committee's previous two meetings and really had two aspects. First, sterling's appreciation was leading to unbalanced activity, with business judgements about how to react made very difficult by the uncertainty over how long the appreciation would persist. Secondly, it posed a dilemma for monetary policy. As discussed in previous *Inflation Reports*, the appreciation would have a 'one-off' effect on the price level via import prices and the impact on external demand, and so only a temporary effect on inflation, assuming that sterling stopped rising and gradually declined. But meanwhile there were powerful forces fuelling underlying nominal demand which, if left unchecked, would eventually emerge in higher inflation and inflation expectations.

60 Some action to alleviate underlying inflationary pressures had already been taken in the form of the 75 basis points increase in official interest rates since May. The Committee reviewed whether it needed to make any further changes now in the light of the inflation forecast. Without a further tightening in monetary conditions, the Committee agreed that the most likely outcome was that inflation would be above the Government's inflation target of 2½% at the Bank's forecast horizon of two years. In addition, the risks to inflation were skewed on the upside, and inflation was likely to be on an upward trend at the end of the period covered by the forecast. A 25 basis points increase in rates would reduce the central projection to broadly in line with the target but leave the risks skewed on the upside.

61 The Committee agreed that a further tightening of monetary conditions was, on current evidence, needed to put the economy on a course consistent with the inflation target. Before reaching its immediate decision, however, the Committee felt that the policy dilemma was sufficiently acute that it should consider whether there were, as is sometimes suggested, alternative policy instruments that might help to resolve the dilemma without introducing unacceptable distortions. Apart from quantitative credit controls, these were of three main types: (i) variable reserve requirements on the banking system; (ii) changes to debt management; (iii) foreign exchange market intervention.

62 Under the first heading, Bank staff had examined the circumstances in which a call for special deposits from the banking system, which would need to be unremunerated and so act as a tax, would be passed on as an increase in loan rates, while limiting upward pressure on the exchange rate. Borrowers who did not have alternative sources of credit—notably individuals and small businesses—would then be likely to choose to borrow less, and that could restrain spending. But the staff analysis pointed out that in the current financial environment measures of this kind were most unlikely to be effective. If temporary, the cost might well be absorbed by banks rather than passed on to their customers. Alternatively, if the cost of credit was increased, credit flows were likely to be diverted heavily into unaffected channels given the financial liberalisations of the past twenty years. In addition, any expectation of future use of the instrument would create market uncertainty and have serious disincentive and inefficiency effects. The Committee agreed with the analysis and rejected this course.

63 Nor did the Committee see much attraction in recommending to the Government a change in government debt management policy objectives towards restraining broad monetary growth, either by selling more debt than needed to finance the Government's deficit, ie overfunding, or by skewing the pattern of issuance to stocks likely to appeal to domestic institutional investors, so possibly absorbing OFI liquidity. The Committee was not confident that such a change would contribute usefully to addressing the current policy dilemma.

64 The Committee discussed the possible merits of intervention in the foreign exchange markets. There was a consensus that intervention was worth contemplating but only if it was accompanied by credible actions to put the economy on a course consistent with the inflation target. In those circumstances, it could help to bring about an adjustment in the exchange rate, which might otherwise be more protracted.

65 Having concluded that monetary policy would need to be tightened again, the Committee considered whether to raise interest rates immediately. Arguments for not doing so were the advantages of waiting to gather more information and of avoiding the risk of putting further upward pressure on the exchange rate. The main argument for moving immediately was the need to hit the inflation target. There was also the potential impact on expectations of publishing an *Inflation Report* that, on unchanged rates, would combine a view that the most likely outcome at the two

year forecast horizon was that RPIX inflation would be above the 2½% target with the risks to inflation clearly skewed on the upside. That would create a clear risk of damaging credibility and so increasing inflationary expectations, and of putting further upward pressure on the exchange rate by causing the market to revise upwards their expected path of interest rates. By tightening by an extra ¼ percentage point immediately and so publishing an *Inflation Report* showing a central projection around 2½% at the two year horizon, the Bank might be able to reduce inflation pressures and so affect market expectations that some of the upward pressure on sterling would be alleviated. This was the tactical judgement. The Committee agreed that, on balance, it was the better course and that the press notice announcing the move should reflect the nature of the judgement.

66 The Committee then voted unanimously in favour of a ¼ percentage point rise in the Bank's repo rate, to be announced immediately.

67 The following members of the Committee were present:

Eddie George (Governor)
Charles Goodhart
Ian Plenderleith

Willem Buiter
Mervyn King

Sir Alan Budd was also present as the Treasury's representative.

Minutes of the Monetary Policy Committee meeting on 10–11 September 1997

1 The meeting took place against the background of an earlier presentation by Bank staff of the most recent data on monetary and economic conditions. The presentation is summarised in the Annex, updated for the data which subsequently became available before the Monetary Policy Committee meeting.

2 The Committee began its meeting by recalling the statement in the August *Inflation Report* that: "... the MPC concluded that monetary policy has now reached a position at which it should be possible to pause in order to assess the direction in which the risks are likely to materialise." An overview of the subsequent data suggested a mixed picture. Domestic demand continued to grow strongly and, whilst the exchange rate had fallen back from its peak, it remained some 20% above the level in August 1996. The latest revision of the manufacturing output data had eliminated the slowdown signalled earlier; but survey evidence still warned of a slowing in activity ahead. The financial market price movements following the August announcement of the 25 basis points rate rise showed a fall and subsequent partial reversal in short-term interest rate expectations, but a more sustained fall in sterling.

3 The Committee went on to examine this overview under three headings: demand and output, including the impact of asset price developments; monetary aggregates; and the labour market.

Demand and output

4 The Committee discussed the implications of the new MORI survey on demutualisation windfalls. The survey results broadly confirmed the assumptions used in the August *Inflation Report*. However, the survey suggested that the time profile would show a more concentrated impact in mid-1997 when the payments were made, arising from the immediate impact on those freed from their liquidity constraint; and a smaller impact next year and the year after.

5 The latest BRC survey indicated a slowdown in retail sales in August. This was consistent with suggestions that the immediate effect of the windfalls had begun to tail off, although it was also noted that much of the windfall expenditure, for example on cars and foreign holidays, would not be captured by the retail sales measure. It was also pointed out that other survey and anecdotal evidence, and the data from some retail groups, pointed to a weaker August than July; and that this would be consistent with the M0 data.

6 Overall the Committee thought that the MORI survey results, taken on their own, suggested that windfalls posed a smaller upside risk to the central projection in the *Inflation Report* than had earlier been thought. The MORI survey had not confirmed some of the more extreme estimates which had been suggested.

7 Moving on to fixed investment, Committee members discussed the preliminary aggregate data which showed investment barely rising. By contrast some sectoral data showed investment rising robustly in the second quarter, and it seemed unlikely that those sectors for which data were not yet available—private residential and public sector investment—would have fallen sufficiently sharply to validate the aggregate data. The Committee therefore thought that the aggregate figure might be revised upwards.

8 As for external trade, the Committee noted the suggestions by Bank staff that import prices for the European Union might have been overestimated and import volumes commensurately underestimated. If this proved true, it would imply that the

domestic value added component of UK inflation would have been correspondingly higher, since there was no evidence of distortions to the RPI, and a higher level of domestically generated inflation would be a cause for concern.

9 The Committee reviewed the puzzling relationship between the rising exchange rate and robust trade volumes. It was agreed that modelling trade was problematic, in other countries as in the United Kingdom, with income and relative price effects rarely providing a complete explanation of the data. Time trends to capture other influences were frequently used but were not informative. One possible view was that there had been a fundamental improvement in the United Kingdom's underlying trade performance which had led to, and to some extent offset, sterling appreciation. Another view was that the lags in transmitting exchange rate movements were longer than expected. Firms would try to maintain export market share in the face of uncertainty about how long sterling's appreciation would be sustained. For at least some firms, the strength of domestic margins would have helped them absorb the squeeze on export margins. On this view the impact of the appreciation would eventually come through, although sterling's recent retreat might moderate its scale.

10 Committee members noted that the survey evidence continued to point to a deteriorating export outlook. Whilst the most recent data for continental economies suggested that economic growth was picking up, much of this was export rather than domestic demand led. The recent financial crises in Asia would tend to reduce external demand but, unless the problems became more widespread, probably not by a significant amount or for very long. Overall the Committee saw no reason to change the central projection of the August *Inflation Report*, that the appreciation of sterling since August would cause net exports to make a significant negative contribution to GDP over the next two years.

11 The Committee noted the evidence, including the latest CIPS survey, that service sector output, whilst still growing strongly, had decelerated a bit in Q3, following strong recorded growth in Q2. Meanwhile the latest industrial production data contained significant back revisions, suggesting that Q2 GDP growth might be revised upwards slightly. Manufacturing output looked less weak in recent months than had previously been the case.

Asset prices

12 The Committee turned its attention to asset prices, particularly equities and the housing market, noting that recent rises had been dominated by particular sectors (in the equity market) and particular regions (in the housing market). Even at the aggregate level not all asset prices had been growing strongly. For example, although Tobin's Q, which is the ratio of the market valuation of ICCs to the replacement cost of their capital stock, is estimated to have been exceptionally strong in the 1990s, the prices of industrial, retail and office property had been growing this year by only 3%–4% per annum, after falling by between 5%–10% during 1995.

13 As regards house prices, it was hard to interpret the latest data, given the increasing divergence between the Halifax index, with its longer track record and bigger sample, and the Nationwide index, which was showing faster growth in line with DoE data. Part of the rapid rise in house prices may have represented a bounceback from the low levels associated with debt deflation in the late 1980s and early 1990s. On this view, house price inflation

should moderate as debt:income ratios fall back to more normal levels. This could explain the recent moderation in the Halifax index. However the Nationwide and DoE indices were less reassuring. The Committee noted that rising house prices would have contributed to the rise in consumer confidence reported by surveys. These surveys were regarded as corroborative, rather than independent, evidence of strong consumer demand.

14 High and rising stock market prices were a concern both because of their immediate contribution to the rapid growth of consumption and because, if they proved unsustainable and fell abruptly, they might create a shock to the real economy. Some comfort on the latter point could be taken from the relatively small percentages of loans collateralised against stocks and shares.

15 The Committee considered the proposition that the impact of equity price movements could have been increased by wider share ownership. The number of individuals holding shares had been increased both by the recent demutualisations and by the earlier privatisations, but the aggregate value of direct holdings remained small. The value of equity held indirectly through pensions had significantly increased during the past decade. If equity prices fell sharply, future pensions paid out of defined-contribution schemes might be lower, and companies with defined-benefit pension schemes might have to make larger contributions, so that their shareholders might suffer. The Committee concluded that there was no simple relationship between asset prices and future inflation but it was essential to continue to review asset price developments.

Money

16 The Committee discussed how to interpret the divergent money data: narrow money had decelerated but broad money, whether measured by M4 or Divisia money, had accelerated. The rise in narrow money velocity might be explained by the period of adjustment to a low inflation environment coming to an end, but it might also reflect a slowdown in consumer spending.

17 The Committee noted the divergence between the bank and building society components of retail M4. If the strong inflows into building societies had been encouraged by speculation about future demutualisations, then the resulting balances could perhaps be regarded as temporary investment rather than transaction balances. Bank staff were continuing to analyse the significance within M4 of OFIs' holdings but no new information had come to hand.

Labour market

18 Discussion turned to the state of the labour market. The falls in unemployment continued to indicate tightening, although the pace had been exaggerated by the impact of the Jobseeker's Allowance (JSA) on the claimant count figures. This distinction did not directly affect unemployment as measured by the Labour Force Survey. Measured in this way, short-term unemployment was now lower than at any time since the Survey was first published in the early 1980s. Business surveys and the Bank Agents' contacts continued to indicate tightening and skill shortages.

19 This evidence, together with stable earnings growth, could be taken to imply that the rate of unemployment consistent with a stable rate of inflation was lower than previously thought. Job insecurity might have been a stronger factor; or inflation expectations might have been more subdued. But it was also possible that the growth in average earnings could suddenly increase as in the late 1980s after a long period of stability. This remained an upside risk to the central projection for inflation.

20 The Committee considered the alternative proposition that a significant degree of slack remained in the labour market. Hours worked per week, although rising over the last few years, remained below the peak of the late 1980s; employment as a percentage of the working population showed a similar picture; and the inactivity rate had changed little since the recovery began. Such indicators might suggest that there was still potential to increase employment without reducing unemployment, in which case upward pressure on wages would be deferred.

21 The Committee concluded that uncertainties remained about how much further tightening of the labour market could be tolerated without generating upward pressure on wages. It would be unwise in the current state of knowledge to take a strong view about the level of the natural rate of unemployment; but it remained essential to monitor closely wage settlements and average earnings.

Financial markets

22 The Committee discussed the main market movements since the August meeting. The exchange rate had fallen, particularly against the Deutsche Mark, but the fall in the UK yield curve relative to that abroad immediately following the August meeting had since been reversed, so that changes in relative monetary conditions did not appear to have contributed significantly to the fall in sterling. The Committee discussed whether sterling's fall could be explained by changed views about the prospect for EMU. The chances of countries meeting the fiscal convergence criteria were perceived by the market to have increased, as continental economies recovered. Bond market data showed no evidence of a prospective high-inflation euro, but nor had they for some time. A more confident market view towards the euro may have lessened the attraction of sterling as a safe haven currency.

Summary and policy conclusion

23 The Committee agreed that the evidence over the last month did not point conclusively in either direction, nor resolve the main uncertainties. The upward revisions to industrial production suggested that GDP might have been a little higher in Q2 than earlier thought. The survey evidence on windfalls provided some reassurance that one of the upside risks to the Bank's central projection for inflation might prove less serious than earlier thought. There were uncertainties about the trend in house prices; whilst equity prices remained an upside risk although no more so than last month. There was no new evidence on the pace and impact of fiscal consolidation. The trade data continued to be stronger than expected, and their future deterioration remained uncertain. M4 remained a clear upside risk. The possibility that labour costs might suddenly accelerate sharply, as in the 1980s, could not be excluded but equally some remaining degree of slack in the labour market could not be ruled out.

24 In the light of the conclusion of the August *Inflation Report*, and the fact that the subsequent evidence did not point conclusively in either direction, the Committee voted unanimously to leave interest rates unchanged.

25 The following members of the Committee were present:

Eddie George (Governor)
David Clementi (Deputy Governor)
Willem Buiter
Charles Goodhart
DeAnne Julius
Mervyn King
Ian Plenderleith

Sir Alan Budd was also present as the Treasury's representative.

Annex: Summary of data presented by Bank staff

1 This Annex summarises the data and analysis presented by Bank staff to the Monetary Policy Committee ahead of its meeting. At the start of the Committee meeting itself, members were made aware of subsequent information that had become available, and this is reflected in this Annex.

I Monetary conditions

2 Notes and coin grew by 0.4% in August so that the twelve-month growth rate continued to fall, to 5.1% from 5.5% in June and 7.6% a year ago. Some of this deceleration might have been associated with a decline over this period of tourist spending in the United Kingdom, as the strength of sterling and demutualisation windfalls encouraged people to take holidays abroad. But some was probably also explained by structural influences: narrow money growth had in recent years exceeded that of retail spending, as individuals had adjusted their portfolios to accommodate higher transactions balances to a low inflation environment, but this adjustment could be coming to an end.

3 However broad money grew strongly again in July. M4 increased by 1%, raising the three-month annualised growth rate to 13.7% and the twelve-month rate to 12%, higher than the broadly 10% rate observed for much of last year.

4 Retail M4 grew by 0.6% in July, down from the exceptionally strong rise of 1.1% in June. In part this reflected the drawdown of Halifax deposits as the proceeds of sales of Halifax shares, which had been placed temporarily on deposit in June, were subsequently withdrawn. Retail bank deposits were unchanged in July whereas building society deposits grew exceptionally strongly, at 1.8%, and it seemed plausible that at least part of the funds withdrawn from Halifax were transferred to building societies, perhaps in the hope of gaining from subsequent demutualisation windfalls. Reflecting this, the growth of individuals' underlying M4 holdings had continued to rise, with the three-month annualised rate at 10.5%, causing the twelve-month rate to rise to 7.8%.

5 Wholesale M4, which had grown only slowly in June, accelerated in July, though its monthly growth of 1.7% was not out of line with the average this year.

6 There had been no new data on the sectoral composition of M4 growth. OFIs' deposits were thus still estimated to have contributed almost half of the growth in M4 over the past year. Rising asset prices and values would, under well-established portfolio theory, have been expected to lead OFIs to hold higher money balances. But there may also have been causality in the other direction; money balances in excess of some equilibrium might have been spent and helped to drive up asset prices. Tentative analysis by Bank staff of life assurance and pension funds' M4 holdings, which had accounted for some 40% of the rise in OFIs' M4 since 1995, appeared to indicate that LAPFs' M4 balances may currently exceed equilibrium levels, with the risk that they could be run down, contributing to higher asset prices in the process. But this analysis was obviously sensitive to the measurement of equilibrium money holdings, which would in practice depend crucially on expected returns from equities and other assets, and these were inevitably hard to model.

7 M4 lending grew by 0.5% in July, rather slower than the average monthly rate during 1997, possibly because of a share redemption by a single company without which M4 lending might have grown by up to 0.7%.

8 Although M4 growth had now reached 12%, M4 lending growth had not kept pace but rather remained steady, at around 9%. The flows of M4 and M4 lending had been broadly comparable in money value, as the contribution from other M4 counterparts had been roughly offsetting. In particular, banks' capital had risen with increased profitability, while banks' net external outflows had risen with increased sterling lending overseas. But the relative sizes of the outstanding stocks of M4 lending and M4 meant that M4 growth had exceeded M4 lending when expressed in percentage terms.

9 Within the (rather slower) growth in M4 lending in July, net secured borrowing by persons continued its gradual pick-up but gross borrowing rose more, reflecting remortgage activity and/or a greater rate of repayments. Persons' net unsecured borrowing was much more subdued in July than in recent months, with a very sharp rise of around £1 billion in repayments of consumer credit almost certainly as a result of windfall receipts. But unsecured consumer credit continued to grow strongly, at around 17% per annum, and whilst some part of this may have been due to borrowing in anticipation of receiving windfalls, this effect could well have been largely unwound in July. The underlying strength of consumer borrowing reflected both higher personal wealth and reduced interest costs, as credit card and unsecured personal loan spreads over market rates had fallen; it could therefore persist.

10 As for asset prices, changes in monetary conditions at home and abroad over the past month did not seem to have contributed to sterling's depreciation, measured on an effective-rate basis; but changed market perceptions about prospects for monetary policy in Germany did, by contrast, seem to have played a role in sterling's depreciation against the Deutsche Mark.

11 Bank staff also noted that an analysis of recent movements in the interest rates applicable to standard variable mortgages and to typical low-balance instant access deposit accounts showed that recent increases in official rates had already been more than fully passed on into mortgage rates, an unusually rapid response in relation to historical experience. Experience of deposit rates, however, differed significantly. Whilst bank deposit rates had fully adjusted, building society rates had not kept pace, not surprisingly given the scale of speculative inflows to this sector, whereas institutions converting into banks had more than matched increases in official rates perhaps to try to stem outflows following conversion.

II Demand and output

12 The first full, but provisional, estimates of GDP and its expenditure components in Q2 confirmed overall growth at 0.9% with non North Sea GDP revised down slightly also to this rate. But, revisions to the level of manufacturing output had led to upward revisions of 0.2 percentage points to the level of industrial production. That was likely to lead to a small upward revision to GDP in Q2, assuming no other offsetting revisions. Domestic demand growth was very strong (1.2%), although not quite as strong as had been expected, with private consumption showing the most rapid growth (1.5%), broadly in line with Bank staff's expectation. Net trade exerted a negative contribution (-0.4%), but this was less than had been expected and was in any event more than accounted for by oil and erratic items. Fixed investment growth was surprisingly low, at 0.1%, which taken together with other available data would imply weak government and private housing sectors.

13 Retail sales volumes grew by 0.3% in July, more slowly than the 0.7% monthly average in the first half of the year, but this was nevertheless sufficient in combination with the strong growth in May and June to keep the three-month (on previous three months) growth rate on a rising trend. Compared with a year ago, retail sales volumes were 6.5% higher in July and 5.8% up in the latest three months as a whole. Within retail sales, household goods were much less robust than in the previous two months, but nevertheless the ONS estimated that some £100 million of retail sales in household goods stores in July were exceptional and indicative of windfall-related spending; and Bank staff calculated an equivalent figure of some £300–£400 million using a deviation from trend method, over the three months to July, a figure much lower than some other estimates but consistent with the MORI survey (see below).

14 In contrast to the official retail sales data, which were consistent with continuing strong consumer confidence data, the CBI distributive trades survey suggested slowing retail sales growth. The survey nevertheless interestingly showed a sharp increase in retail import penetration to the highest level since May 1990.

15 There were record car registrations in August, up 10% from last August, with business and fleet sales rather surprisingly stronger than private. Some 68% of sales were imported, up from 63% last August, helping to explain why domestic car output was significantly less buoyant.

16 An assessment of developments in the housing market continued to be clouded by the divergent Halifax and Nationwide house price data: the Halifax index was decelerating, to 6.4% in the year to August, whereas the Nationwide index had continued to accelerate, to just over 12% in August. Analysis of their regional components showed that most of the difference lies in parts of the Midlands, North of England and Northern Ireland; both indices confirmed the strength of the market in London and the South East. Overall housing market indicators gave a mixed picture of both house price inflation and activity.

17 Finally in the personal sector, Bank staff focused on the results, published on 5 September, of the MORI survey of the response of consumers to the windfall receipts from the demutualisations in the building society and insurance sectors, and provided a preliminary assessment of their implications. The survey was conducted in late August, with telephone interviews of 764 individuals all of whom had received at least one of the four largest windfalls (which accounted for just under £31 billion of total windfalls of nearly £36 billion).

18 The main findings were that:

- by value, some 35% of free shares had already been sold, implying additional sales beyond those who had pre-registered to sell;
- of which some 47% of the proceeds had been spent and the same proportion saved, with 6% used to repay debt;
- home improvements had been the biggest expenditure category, with holidays, cars and household goods receiving rather smaller proportions;
- nearly 40% of the reported spending would have occurred anyway, financed in other ways, giving additional spending on household goods around the time of the flotations, for example, of around £450 million, not inconsistent with an ONS estimate of some £300 million in June and July together;
- only a small amount of the windfall receipts were used to bring forward consumption in anticipation; and

- the proceeds were used to repay some £800 million of borrowing, suggesting this as a major explanation for the July consumer credit data.

19 Taking the survey results at face value, total spending from windfalls were estimated at around £10 billion, of which around £6 billion was additional (see below).

MORI survey on consumer windfalls: amount of windfalls identified as spent

	Percentage of estimated total 1997 windfalls	Value (£ billions)
Spending undertaken	20	7.5
<i>of which:</i>		
Pre-windfall spending	4	1.6
Spending out of share proceeds	16	5.9
Planned spending in next 12 months	6	2.2
<i>of which:</i>		
Financed by:		
Proceeds from share sales placed on short term deposit	3	1.2
Future share sales	2	0.7
Borrowing (dissaving) against share collateral	1	0.4
Total spending	26	9.7
<i>of which:</i>		
Additional spending	16	6.0

20 However, the relaxation of financing constraints on consumers could give rise to further spending which was more difficult to quantify, so the survey alone was likely to provide a lower bound for estimated additional spending. It was questionable whether the survey had captured accurately the incremental spending by individuals who were not liquidity constrained. Theory suggested that these individuals would smooth their additional consumption, spending the annuity value in each year: for example, the annuity value of a windfall of £2,000 spread over 30 years with a real interest rate of 4% was a little over £100. It was not clear that these individuals would identify a relatively small increase in spending as a “windfall effect”: in responding to the survey, a large proportion may well have answered that their spending had not increased—ie as if they had saved their windfall. If an adjustment was added to the survey results for such an annuity effect, the total impact on domestic demand over 1997 to 1998 would be close to the estimate embodied in the August *Inflation Report* forecast, although the survey suggested a more concentrated impact than previously thought.

21 The preliminary Q2 figure for aggregate investment, which barely showed an increase, was hard to square with the available partial sectoral data. Manufacturing investment continued to recover from the sharp falls in 1996 whilst investment in the services sector continued to grow strongly; and overall the trends in investment were unchanged despite a weak aggregate figure. To assist an assessment of the prospects for investment, the Bank’s Agents had undertaken in mid-to-late-August a survey of 113 diverse UK companies in manufacturing and services. The survey had confirmed the rather greater readiness to invest of the service sector—driven in particular by capacity shortages—than manufacturing—where cost and efficiency considerations were judged more influential. The survey suggested that overall there may be a slowdown next year, reflecting to some extent uncertainties about demand. The strength of sterling did not appear to be a significant deterrent for most companies (although a more important factor than two years ago), perhaps because of the proportion of capital goods imported. Companies with overseas investment programmes on balance expected to increase the proportion spent overseas.

22 Stockbuilding was estimated to have contributed positively to GDP in Q2 but the data were particularly subject to revision.

23 The latest public sector data, for July, were encouraging, with rather greater tax revenues than expected contributing to a reduced PSBR, but much of this may simply have reflected the timing of payments.

24 The external trade volume data remained surprisingly strong in the face of sterling's appreciation. More than all of the estimated negative (0.4%) contribution of net trade to GDP growth in Q2 could be explained by oil and erratics. Robust growth in overseas markets, especially in the United States in Q2, may have had a stronger than expected offsetting effect. Disaggregated data suggested that there might be a positive correlation between those sectors most exposed externally, as measured by the contribution of exports and degree of import penetration, and a weakening in output growth. It was possible that sterling's appreciation may have had a greater impact on trade volumes than the aggregate data indicated, and this could also help to explain a growing puzzle in trying to equate the supply of and demand for manufactured goods. A large gap had opened up between the strong growth in retail sales and much weaker manufactured consumer goods output, which could be at least partly explained by a more rapid growth than so far identified in manufactured import volumes. Upward revisions to the level of manufacturing output, published with the July data, still left a significant gap.

25 Industrial production had risen by 0.6% in July; and manufacturing production by 0.4%. Large upward revisions to the level of manufacturing output in the first six months of 1997 were also published. These had had the effect of raising the level of the June index by 0.7 percentage points from that previously estimated.

26 The latest survey evidence for manufacturing, from CIPS and other surveys, showed further weakening in export orders; and there were suggestions in a number of recent surveys (BCC, CIPS and CBI financial services) that sterling's appreciation might have been beginning also to affect services.

III Labour market

27 There was little news in the labour market data this month. Claimant count unemployment fell by 50,000 in July to 1.55 million, the lowest level for 17 years, representing 5.5% of the workforce. Some 20,000 of the fall was explained by rather fewer students than normal registering, possibly deterred by the tighter JSA rules.

28 The number of notified vacancies increased by 1,500, less than the recent monthly average of around 3,500. Whilst the inflow of notified vacancies was declining, placings were declining even faster, perhaps reflecting skill shortages.

29 Underlying average earnings growth was estimated to have remained unchanged at 4 $\frac{1}{4}$ % in June, with services unchanged at 4 $\frac{1}{2}$ % and manufacturing unchanged at 4 $\frac{1}{4}$ %. As a result, average earnings growth in Q2 was lower than in Q1 when bonuses inflated the data: after smoothing for bonuses, average earnings were currently estimated by Bank staff to be growing at a little under 4 $\frac{1}{2}$ %.

30 There was no significant change in wage settlements in the twelve months to July, with whole economy settlements continuing to grow at 3.1%, with private and public sector components at 3.5% and 2.7% respectively. Within the private sector, services—at 3.6%—were running ahead of the production industries—at 3.2%. The Bank's Agents continued to corroborate reports of quite widespread skill shortages in specific sectors and evidence of pay premia to retain key staff. The 5% construction workers' settlement would affect the August data, significantly raising the three-month rate then.

IV Prices

31 The Bank's index of sterling commodity prices (weighted by UK usage) showed a further small fall in July, to 7.3% below a year ago. By contrast the Economist index showed a small rise in dollar commodity prices in recent months, particularly because of the rather bigger weight attached to metals prices. Oil prices had risen in early August on uncertainties over Iraqi supplies, but had since fallen back to their July level.

32 Although producer input prices fell again in July, under the influence of sterling appreciation and favourable supply conditions, they rather unexpectedly increased in August, by 0.6% to stand 7.8% below a year ago, under the impact particularly of higher oil and zinc prices. Producer output prices showed a modest rise in July, accounted for by higher excise duties, and again in August, when there were small increases spread across a range of industries. Output prices were now 1.4% above a year ago. Difficulties in raising prices of goods for domestic consumption in the face of competition from imports were widely reported.

33 Export prices had been slow to react to sterling's appreciation but there was evidence of an increasing impact: in Q2, excluding oil and erratics, sterling export prices were 1.7% lower than in Q1, on a non-annualised basis, with prices to the non-EU falling faster than to the European Union.

34 Import prices continued to fall steadily, to a level in June some 6% lower than last August when sterling began to appreciate, but nevertheless the pace of the pass-through had been slow. The partial non-EU data indicated a further fall in July. Bank staff pointed out that the ONS did not collect import prices for distinct EU and non-EU goods, but used trade value weights to derive different price indices. This could explain why import volumes appeared, oddly, to have been growing much faster from non-EU countries. It is conceivable that, within the growing value data, import prices from the European Union might have been overestimated and volumes commensurately underestimated. Moreover the method for estimating total import prices left open the possibility that they may have been overstated (particularly for finished manufactures); and even quite a small measurement error could have had significant effects, through import volumes, on the GDP expenditure estimates (and hence on the reconciliation with GDP on an output basis).

35 Manufacturers' domestic margins were estimated to be widening only slowly despite falling input prices, and export margins were narrowing as export prices fell. By contrast estimates of retailers' margins showed a marked further rise in Q2, as retail prices continued to rise in the face of strong retail sales volumes whilst weighted costs decelerated and began to fall, with falling fuel costs recently and bought-in goods prices, notably foods, over the last year.

36 RPIX inflation fell back a little in August, to 2.8% from 3% in July, following the unwinding of recent increases in seasonal food prices. RPIY inflation moderated slightly, to 2.1% in August. By contrast, headline RPI inflation increased to 3.5%, from 3.3% in July and 2.9% in June, under the influence of mortgage interest rate changes this year and last.

37 On an international comparison, UK inflation clearly stood above many other major countries: within Europe on the harmonised CPI measure, where the United Kingdom stood in July at 2%, only Denmark and Greece had higher inflation (on the latest comprehensive data for June).

38 Looking ahead, with cost pressures remaining weak and as sterling's appreciation continued to have an impact, RPIX inflation was expected to moderate, although the risks remained on the upside.

V Information from financial markets

39 The sterling ERI stood at 99.9 (1990 average = 100) at the close of business on 10 September, 4% lower than the level (103.9) on 6 August, the eve of the final part of the August Committee. Over this period sterling had fallen by 5% against the Deutsche Mark, although by only 1% against the dollar. Since its peak on 23 July, sterling had fallen back by 6.8% on its ERI, and by 7.5% and 5.9% against the Deutsche Mark and dollar respectively.

40 The foreign exchange markets had been volatile in August, even more so than normal. The Deutsche Mark had recovered some of its recent losses, particularly against the US dollar and sterling, on a belief that the strengthening German economy could lead the Bundesbank to begin raising interest rates later this year, earlier than previously thought. But the yen had weakened, as the large depreciations in many SE Asian currencies encouraged the view that the Japanese authorities would be less hostile to a lower value for the yen in order to alleviate some of the competitive losses which Japan would otherwise suffer.

41 Sterling had fallen sharply, against the dollar, Deutsche Mark and on the ERI, in the aftermath of the Committee announcement accompanying the $\frac{1}{4}$ % rise in interest rates on 7 August. It had fallen further on 13 August, as the *Inflation Report* had confirmed the message that the central projection for inflation two years ahead was in line with the inflation target, although with the risks skewed on the upside, and as the Bundesbank had published its monthly report which had led to speculation about a possible rise in German interest rates. Sterling might also have been affected by market rumours, subsequently denied by HM Treasury, that the Government would take the United Kingdom into the single currency.

42 In the middle of August sterling had briefly rallied as the dollar had begun to move up, but towards end-August and in early September it had subsequently softened again. It was noteworthy that in this latest period sterling had not generally moved up on those occasions when the dollar had rallied, so that the sterling:dollar rate had fallen back below 1.60 and indeed below technical support levels, which had encouraged further selling. Some part of this may have been due to renewed market discussion of a possible postponement of EMU, which some believe would increase the possibility of sterling's inclusion.

43 Not surprisingly, sterling's sharp downward adjustment against the Deutsche Mark, but also to a lesser extent against the dollar, had increased market uncertainty about particularly the

immediate future prospect for sterling. Options prices revealed that since the last Committee meeting the market had come to attach a higher probability to sterling falling further, particularly against the Deutsche Mark. Whereas on 6 August the probability of the £:DM rate being at or below 2.80 one month ahead had been calculated at under 5%, this probability had increased to nearly 25% by 4 September (when the one month forward rate stood at DM 2.87).

44 In the domestic markets, interest rate expectations were immediately moderated by the Committee announcement on 7 August, falling by as much as 12 basis points in 1998. But expectations had subsequently firmed through much of August, both on the perceived greater prospect of higher international interest rates and on the release of strong UK economic data, particularly for retail sales and M4; although they had eased back again most recently. Overall market expectations of interest rate prospects over the next eighteen months were a little lower than on the first day of the last Committee meeting, by up to 15 basis points 18 months ahead. The markets expected rates to peak early in 1998, $\frac{1}{4}$ % higher than current levels. Following the last Committee statement, there was virtually no market expectation of any rise in official rate in September. It was noteworthy from options prices that implied volatility of short-term interest rates had fallen sharply in the wake of the August Committee announcement, as expectations had hardened around the central view; but subsequent data releases later in August had led to renewed uncertainty.

45 The gilt market had been relatively thin and quiet in August, and overall less volatile than other international bond markets. In the early part of the month, the nominal yield curve, which had previously been virtually flat around 7%, had appeared to tilt upwards, with short yields falling and long yields rising. But by early September the yield curve had again become effectively flat, close to 7%.

46 Equity markets had been dominated by the sharp falls in the SE Asian markets but Western markets had remained relatively insulated. There had nevertheless been increased volatility, particularly in the United States and United Kingdom, as doubts continued about whether the recent strength in equity prices could be sustained. The FT-SE 100 had fallen back since the August Committee meeting, under the influence particularly of financial stocks, but the FT-SE 250 and FT-SE small cap indices were higher. Closer analysis indicated that the five largest stocks (by capitalisation) had accounted for a disproportionate share of recent large daily movements in the FT-SE 100 index and, given the international orientation of these companies, it was hard to read into them any message about prospects for the UK economy.

Text of Bank of England press notice of 11 September 1997

Bank of England leaves interest rates unchanged

The Bank of England's Monetary Policy Committee today voted to leave the Bank's repo rate unchanged at 7%.

Minutes of today's Monetary Policy Committee meeting will be published on Wednesday, 15 October. Minutes of the meeting held on 7 August will be published on Wednesday, 17 September.

Minutes of the Monetary Policy Committee meeting on 8–9 October 1997

1 The meeting was preceded by a presentation by Bank staff of the most recent data on monetary and economic conditions. The presentation is summarised in the Annex to these minutes; it has been updated to incorporate data that subsequently became available before the Monetary Policy Committee meeting.

2 The Committee began by discussing the issues raised by recent economic developments—demand and output (and in particular, the effect of the exchange rate appreciation on net exports and output) the labour market, prices, monetary growth and financial market developments.

Demand and output

3 The Committee reviewed recent developments in demand and output. The appreciation of the exchange rate had had much less effect on the reported data on external trade in goods up to August (non-EU) and July (EU), and in services (up to Q2) than had been expected. Business surveys and reports from the Bank's Agencies had suggested that there would be a large effect (and most were continuing to do so), but some surveys, eg the September CIPS survey, were now suggesting that the export outlook had become less gloomy. Meanwhile, the indications available to date were that output growth in Q3 had been considerably stronger than the central projection in the August *Inflation Report*.

4 There was relatively little news on domestic demand. Consumer spending had been growing fairly fast. It was not accelerating, but the CBI Distributive Trades Survey—which might have been depressed as a consequence of public reaction to the death of Diana, Princess of Wales—had shown greater optimism among retailers. Though the GFK index of consumer confidence had been rising steadily, the MORI index had fallen back sharply, partly reversing a large rise that had probably been the result of demutualisation windfalls. In the housing market, the divergence between the Nationwide and Halifax price indices had widened further, but the other indicators of housing demand did not suggest rapidly growing demand, and therefore seemed more easily reconciled with the Halifax view of more moderate growth. There was no evidence that domestic demand had been substantially stronger than expected in Q3, so it seemed likely that the unexpected strength of output reflected net exports.

5 The Committee discussed the significance of stronger-than-expected output, and four points were made. First, the manufacturing output figures combined with the newly released Workforce In Employment survey implied, if taken at face value, that manufacturing productivity had been static in the last two years, during which the economy had been in a cyclical upswing. Some members thought that the manufacturing output figures would be revised upwards. To the extent that higher output reflected higher productivity and higher capacity output this would not necessarily imply that there was more pressure on productive capacity than currently thought.

6 Second, the depreciation of the exchange rate since its peak in late July would have relieved part of the pressure on exporters' margins. Moreover, it might have encouraged exporters to believe that the earlier appreciation was partly transitory, and thus to persist in selling at unattractive margins to maintain their presence in overseas markets. The Committee considered whether recent reports that the United Kingdom was more likely to join EMU would have encouraged exporters further, by reducing uncertainty about future exchange rates.

7 Third, it was possible that the effects of sterling appreciation on net exports had simply been delayed. It was notoriously difficult to predict the timing of peaks in economic growth rates, and the peak might come a little later than had been projected in the August *Inflation Report*. There were signs in business surveys that growth might now be slowing and important questions for policy were whether the labour market was at the point at which earnings would begin to accelerate and whether the policy tightening that had taken place already would be enough to bring GDP growth back towards trend. If the peak in growth were to be later than in the *Inflation Report* projection, but the profile of growth after the peak were to be the same as in the projection, the level of output after the peak would be higher than in the projection by a constant amount. Inflation would be higher than in the projection, unless potential output was also higher than assumed.

8 Fourth, it was possible that there had been a supply-side improvement in the non-price competitiveness of internationally tradeable goods and services produced in the United Kingdom, or that the relevant price elasticities were smaller than had been thought, so that the long-run effect of the appreciation on net exports would be smaller than had been projected.

9 Taken as a whole, the evidence suggested that net exports could remain stronger than had been projected in August, and the net effect of this on total demand and hence on domestic costs would need to be carefully watched.

Labour market

10 The tightening of the labour market had continued, and the fall in claimant unemployment of 49,000 in August had been higher than the staff estimate of the trend fall of 25,000–30,000 a month. According to the most recent Labour Force Survey, short-term unemployment was at its lowest since the early 1980s. The inactivity rate, however, was not unusually low: the counterpart of rising employment during this recovery had been falling unemployment rather than a falling inactivity rate, and total employment was still well below its late-1980s levels. The higher inactivity rate, and its persistence, might be a one-off consequence of the expansion of tertiary education. Indications of skill shortages were becoming more widespread. More information on the extent of labour market tightening would be provided in the quarterly Labour Force Survey, which would be available before the Committee's next meeting.

11 Notwithstanding the tightening of the labour market, earnings growth had remained lower than projected in the August *Inflation Report*. The staff analysis had showed that the reported increase in underlying average earnings growth in July had been the result of bonus payments. Spreading these payments over the full year put underlying average earnings growth in the range 4¹/₄%–4¹/₂%; these calculations did not show any acceleration in earnings during the last few months.

12 Members discussed the recent three-year pay settlement in the construction industry. It appeared that the first-year award included the consolidation of a number of special payments and in aggregate terms was equivalent to around 3¹/₂%. But the larger increases in later years appeared to reflect both shortages of skilled labour and an expectation of rising inflation.

13 Members discussed the current combination of rapid tightening and surprisingly low earnings growth, and made a number of points. First, the level of the natural rate of unemployment was uncertain, but it was plausible that it was lower

than in the 1980s, because of the structural changes that had taken place since then. Second, even if the natural rate of unemployment were below the current level, there might be a 'speed limit effect'—ie the faster unemployment fell towards the natural rate, the higher the rate of inflation. Third, some of the payments that were recorded as bonuses represented profit-sharing payments to staff, which would automatically decrease if profits fell. Such payments were akin in some respects to equity returns.

Prices

14 The Committee discussed recent price data. RPIX inflation was stronger than had been projected in the August *Inflation Report*, and the staff analysis suggested that import prices had fallen by less than was expected given the rise in the exchange rate, and that retail prices had risen by more than was expected. In other words, the pass-through from exchange rate appreciation had been unexpectedly weak.

15 The Committee emphasised that policy decisions had to be based on forecast inflation, rather than on current inflation, because of the lag between an interest rate change and its effect on output and prices. The unexpectedly small fall in RPIX inflation during the last few months had been accompanied by a widening of retailers' margins, which members thought reflected the strength of domestic demand. Members discussed whether the depreciation of sterling since August would have an upward effect on the domestic price level, but concluded that since the pass-through from the earlier much larger appreciation seemed to be incomplete, there was a good chance that the recent depreciation would have little effect.

16 The dip in the twelve-month rate of inflation that had been expected in the August *Inflation Report* now seemed likely to be shallower, so that RPIX inflation might prove to be below 2½% for a shorter period than expected. Members noted that recent experience had been of above-trend growth accompanied by flat or declining inflation, but it was suggested that had it not been for the appreciation of sterling, the inflation profile would have been considerably less reassuring.

Monetary growth

17 There was little new information. The Committee noted that, on the latest month's data, monetary growth, both narrow and broad, and M4 lending now seemed a little slower. It was acknowledged that the policy implications of recent monetary growth depended on the comparison with the earlier expectation of a gradual deceleration in the monetary aggregates as demand slowed.

Financial market developments

18 The Committee discussed the impact of the perceived increased likelihood of the United Kingdom joining EMU on the yield curve. Implied future short-term interest rates were slightly higher at the March 1998 maturity but much lower at 1999 and 2000 maturities.

19 The Committee noted that *ex ante* real interest rates at the two-year maturity appeared to have fallen sharply in the last month. Moreover, equity prices had risen and bond yields had fallen, and the exchange rate had depreciated after the *Financial Times* story suggesting that the United Kingdom was likely to join EMU had appeared on 26 September. While acknowledging that markets were currently more than usually volatile, the Committee felt that the changes that had taken place during the month were likely to have a positive effect on aggregate demand.

Summary and policy conclusion

20 Though the monetary data now looked a little more encouraging than in previous months and earnings growth had not accelerated, a number of the developments that the Committee had surveyed pointed to somewhat faster output growth than had been expected. It remained probable that economic growth was about to slow down, although one or two quarters later than expected.

21 Members discussed how recent developments affected the inflation outlook. Output and demand were stronger in Q3 than had been expected, and it was possible that net exports would remain stronger than projected. Taken together with the effects of changes in asset prices and the exchange rate, this suggested that the level of output might be higher than expected in relation to the productive capacity of the economy, so that inflation might be higher than the August projection. The absence of much reduction in RPIX inflation in the past few months suggested that the expected dip in the twelve-month rate of inflation might be shallower than previously thought, and that when inflation began to increase it would do so from a higher starting rate.

22 Members discussed how policy should react to this situation, bearing in mind the statement in the August *Inflation Report* that '... the Monetary Policy Committee concluded that monetary policy has now reached a position at which it should be possible to pause in order to assess the direction in which the risks are likely to materialise'.

23 Members considered whether a rise in interest rates was needed in order to meet the inflation target. The prospects for weaker net trade—supported by survey evidence of lower exports in the near term—suggested that output growth was likely to fall. Two possible interpretations of this outlook were discussed. The first was that the impact on domestic demand of the monetary and fiscal tightening earlier this year would be sufficient to slow down the economy, and so the need for a further rise in interest rates was not yet clear. One argument in support of that proposition was the failure of earnings growth, adjusting for the timing of bonuses, to rise this year. The second interpretation was that the early indications of strong growth in the third quarter meant that the slowdown had at least been deferred, and so the risks to the inflation outlook were clearly on the upside. On that interpretation, there would need to be a further significant rise in interest rates in order to meet the inflation target. The Committee agreed that it did not, as yet, have sufficient information to feel confident in choosing between these two interpretations.

24 The Committee considered whether, if a rise in interest rates were needed, it would be better to implement it immediately, or to make no change this month but with the expectation of an increase in November. The arguments for an immediate move were that any delay would carry the risk that the eventual increase might need to be larger than would otherwise have been the case. Moreover, if there was an inhibition about moving other than in steps of ¼%, and the necessary increase was more than ¼%, then it would be better to start the process of increasing rates immediately. The arguments for waiting a month before raising interest rates were as follows. First, in practice it was unlikely that a delay of a month would make a significant difference to the economic impact of a rise in interest rates, should a rise prove necessary. Second, there was no reason why interest rates should not move in steps of more than ¼%, or indeed less, if circumstances warranted it. Third, a large amount of quarterly information would become available before the next meeting—the CBI Quarterly Survey, the preliminary estimate of GDP in Q3, the Labour Force Survey, the money figures for Q3, including sectoral money holdings and estimates of Divisia money. Moreover, work on the November *Inflation Report*, which would take place before the next meeting, would enable the Committee to make a new inflation forecast. Members preferred to wait another month to see how the evidence on the balance of risks accumulated.

25 In the light of the discussion, the Committee voted unanimously to leave interest rates unchanged this month.

26 The following members of the Committee were present:

Eddie George (Governor)
David Clementi (Deputy Governor)
Willem Buiter
Charles Goodhart
DeAnne Julius
Mervyn King
Ian Plenderleith

27 The Treasury representative, Sir Alan Budd, was also present.

Annex: Summary of data presented by Bank staff

1 This annex summarises the analysis presented by Bank staff to the Monetary Policy Committee on 3 October 1997, in advance of its meeting. At the start of the Committee meeting itself, members were made aware of information that had subsequently become available, and that information is included in the Annex.

I Monetary conditions

2 Notes and coins had decelerated during the summer and their twelve-month growth rate had fallen from 6.1% in June to 5.1% in August. There had been bounce-back in September, when notes and coin had risen by 1.0% and the twelve-month growth rate had gone back up to 5.9%. It seemed likely, however, that the September outturn had been affected by the introduction of the new 50p coin on 1 September. The amount issued during the month was equivalent to 0.4% of notes and coin. The banks were not yet able to surrender all of their old 50p coins, but would be able to do so during the remainder of this financial year. It therefore seemed likely that the introduction of the new coin had inflated both the month-to-month and the twelve-month growth rate of notes and coin by about 0.4% in September, and that the effect on the level of notes and coin would unwind by the end of the financial year, though the statistical effect on the twelve-month growth rate would last longer. Abstracting from the 50p coin effect, it was not clear whether the deceleration in notes and coin during recent months reflected the re-establishment of a rising trend in velocity, or whether it indicated a slowing-down in demand.

3 The estimated increase in M4 in July had been revised downwards from 1.0% to 0.9%, and the estimated August increase was 0.8%. In August, the annualised three and six-month growth rates (10.4% and 11.0% respectively) were lower than the twelve-month rate (11.6%). Real M4 (ie M4 deflated by RPIX) grew by around 8½% in the twelve months to August, but its annualised growth rate in the latest three months was around 6½%. Since the trough of the recession in 1992 Q1, M4 had risen by 44%; two thirds of this increase had occurred since 1995 Q1. It was not easy to explain the fall in the velocity of M4 since 1995 Q1 by reference to structural changes of the kind that had led to falling velocity throughout the 1980s.

4 Retail M4 went up by 0.4% in August, and its twelve-month growth rate fell to 7.0%. There were strong indications of speculative flows into the remaining building societies: in July and August retail flows into societies had been unusually large, while there had been only a very small rise in retail bank deposits, even though the rates offered by building societies were generally materially lower than deposit rates offered by banks.

5 Wholesale M4 had risen by 1.4% in August. There had been a strong public sector contribution, including a gilt redemption, but no gilt auction.

6 The signs of a slowdown since the spring were clearer in M4 lending than in M4. The annualised three, six and twelve-month growth rates were 6.5%, 8.0% and 8.7% respectively. In August, steady growth in net secured lending to individuals continued (up 6.4% on a year earlier). Net unsecured lending to individuals by banks and building societies had been unusually low in July, probably because people had made extra repayments out of windfalls from demutualisations, but it had rebounded in August and its twelve-month growth rate was 17.6%. Its continued growth might reflect the narrowing of interest rate spreads since the end of 1995.

7 The preliminary estimate of lending to OFIs was unusually low in August (only £0.2 billion); the slowdown was entirely accounted for by a fall in reverse repos included in M4 lending.

But lending to leasing companies (which represented about one third of the stock of bank lending to OFIs) had grown. Though it appeared to have picked up somewhat in August, lending to ICCs had slowed down over a longer period. Its twelve-month growth rate had fallen from 13.1% at the end of 1996 to 7.2% at the end of 1997 Q2.

8 Estimates of *ex ante* real interest rates at the two-year maturity can be derived either from the short end of the index-linked zero-coupon gilt yield curve or from the nominal yield curve and a survey-based estimate of inflationary expectations. Both techniques indicated a rise in *ex ante* real interest rates between early June and early September: the indexed yield curve showed a rise from 3.7% to 4.2% and the survey-based method from 4.1% to 4.4%. At the same time, the ten-year forward real yield (ie the short-term real yield implicit in the yield curve for a date ten years in the future), which might give some indication of equilibrium, had fallen from 3.7% to 3.5%. In other words, monetary conditions on this measure had become tighter. Between early September and 1 October, however, index-linked yields in the United Kingdom had fallen sharply, and the estimated two-year zero coupon real yield had fallen from 4.2% to 3.3%, while the ten-year forward real yield had fallen more modestly, from 3.5% to 3.3%. These latest moves in both short and long-term real interest rates seemed likely to have a positive effect on aggregate demand.

II Demand and output

9 The full national accounts for Q2 incorporated a downward revision of estimated GDP growth in Q1 from 0.9% to 0.8%, compensated by an upward revision of estimated growth in Q2 from 0.9% to 1.0%. The estimated fall in net exports in Q2 was revised from 0.4% to 0.5% of GDP, and estimated growth in investment was revised upwards from 0.1% to 2.0%. The estimated increase in consumption of 1.5% was unchanged.

10 The estimated savings ratio increased to 11.7% in Q2. This might partly have reflected unusually large corporate dividend payments ahead of the Budget.

11 Retail sales volumes increased by a further 0.4% in August, when they were up by 5%–6% on a year earlier. The picture of accelerating retail sales in the ONS data was not consistent with the survey data from the CBI and the BRC, which were more subdued. The survey data fitted more closely with the ONS retail sales values data, which had accelerated by less than the volume data as goods price inflation had slowed. Moreover, the surveys were mainly of large retailers, which had been gaining market share particularly fast in 1995–96. This had affected the relationship between the surveys and the comprehensive ONS data. Large retailers were now gaining share at a somewhat slower rate than in 1995–96; this could help explain the apparent relative strength of the ONS data. The BRC survey showed ‘like-for-like’ percentage increases in sales, but these figures did not allow for the effect of increasing floorspace, and typically showed lower growth in retail sales values than the ONS data.

12 How much of recent spending had been windfall-related? The ONS, using a simple technique based on comparison of outturns with an extrapolated trend, estimated that windfall-related spending on household and other goods had been around £500 million between May and August. On this basis, retail sales volumes excluding windfall effects had been growing at around 5% during the last year, but were not accelerating rapidly.

13 Spending on consumer durables had been unusually strong in Q2—up by 6.8% on the quarter. Although spending on durables was normally volatile, the Q2 increase was consistent with other

evidence of spending of windfalls from demutualisations. Car registrations in August were the highest for 16 years, and there was no solid evidence that pre-registrations had been higher than in August 1996; registrations in September had been the highest since 1989.

14 The divergence between the Nationwide and Halifax estimates of house price inflation had widened further: their estimates for the year to September were 12.9% and 6.9% respectively. Housing market turnover, as measured by particulars delivered, fell in August, but there had been an increase in housing starts.

15 Manufacturing investment had grown strongly in Q2, and the ONS data were now more consistent with indications from business surveys. Investment in service industries as recorded in the national accounts had fallen: the ONS had adjusted the results of the capital expenditure survey (which had shown a large increase) in order to achieve consistency with other parts of the national accounts. The adjustments in Q1 and Q2 had been large and in opposite directions. Surveys continued to indicate quite strong investment intentions in service industries.

16 Stockbuilding had made a small positive contribution to GDP growth in Q2.

17 The external current account had recorded its third consecutive quarterly surplus in Q2. Though net exports of goods and services had fallen in Q2 by the equivalent of 0.5% of GDP, the fall was entirely accounted for by oil and erratic items, and net exports of goods other than oil and erratic items had increased. The CIPS survey showed only a small decrease in orders for manufactured exports in September. There were reports from the Agencies that demand in Europe was recovering and that there had been some switching of exports to markets where demand was stronger.

18 Notwithstanding recent ONS data revisions, output was growing much faster in services (up by 1.2% in Q2) than in manufacturing (up by 0.3% in Q2). But recent CIPS surveys were indicating a slowdown in services output and perhaps some acceleration in manufacturing, and ONS data suggested that manufacturing output had strengthened in July and August. Moreover, CBI surveys suggested consistently that manufacturing output was stronger than the ONS data indicated, and there was a wide gap between the growth rate of retail sales of manufactured goods and output of manufactured consumer goods, which was much lower.

19 Bank research showed that the construction industry was very sensitive to interest rates. Construction output had increased by 1.0% in Q2 and had been up by 3.5% on 1996 Q2. Indicators of capacity utilisation from BEC surveys had risen during the last year or so. The recent building industry wage settlement increased basic pay by 5.5% from August this year, with larger increases agreed for 1998 and 1999. Tender price inflation had increased. There had been an upward trend in orders.

20 The unexpectedly low PSBR in the first five months of the financial year (April-August) appeared to be mainly the result of unexpectedly low outlays. The shortfall in outlays was larger than could be accounted for by the fact that unemployment was lower than had been assumed in making the projection.

21 The Bank's regional Agencies had conducted a survey of 144 contacts on the recent behaviour of imports. Of those surveyed, 90 were manufacturers, 25 retailers and 15 service providers. 39 were large (turnover of £100 million), 42 were medium-sized (turnover £25–100 million) and 63 were small. Most respondents (55%, including 72% of retailers) thought that the market share of imports of goods and services had increased during the last twelve months, and 57% expected it to increase during the

next twelve months. The impact of imports had been greatest in homogenous products; niche markets were easier to defend but even there, profitability had been affected. Long-standing partnership arrangements between suppliers and customers had helped to delay the effect of the exchange rate appreciation on sourcing. There was some limited evidence of a reduction in foreign visitors to the United Kingdom and a rise in holidays abroad.

22 The fall in the cost of imports was much smaller than the appreciation of the exchange rate. 17% of respondents said that the cost of imports to them had not fallen at all during the past twelve months; 45% said it had fallen by less than 5%, and only 38% said it had fallen by more than 5%. Only 13% of respondents said they had cut their own prices by more than 5% because of cheaper imported imports in relation to a year ago; 27% said they had cut prices by less than 5%; and 60% said they had not cut prices.

23 There had been somewhat more price-cutting to maintain market share against cheaper imports. 23% of respondents (including 29% of manufacturers) had cut prices by more than 5% for that reason, 34% had cut prices by less than 5%, and 42% had not cut at all. Some respondents said that foreign cars were gaining market share: their prices had not been cut, but more extras were being offered.

24 51% of respondents said the appreciation of sterling had damaged their profitability—chiefly on account of exports, but also partly because of competition from imports. 28% reported no change in profitability, and 20% (notably retailers) reported an improvement resulting from lower input costs.

25 Asked whether the exchange rate appreciation had led to a transfer of production overseas, 55% of respondents (notably small companies) said 'no'. 13% said 'yes' and a further 14% said that it was likely to do so in the future.

III Labour market

26 Claimant unemployment fell by 49,000 in August to a rate of 5.3%, the lowest since August 1980. This was a larger fall than Bank staff had expected and followed a large fall in July (now revised up to 55,000), which was thought to reflect a lower-than-usual flow of students into the claimant count. There were three possible explanations for the surprising August figure—continuing adjustment to the Jobseekers' Allowance, month-to-month volatility, and a faster rate of labour market tightening than previously thought. The next Labour Force Survey should help distinguish among these explanations. The stock of vacancies rose by 7,000 in August.

27 The Workforce In Employment Survey showed a rise in employment of 64,000 in 1997 Q2; the number of employees had risen by 95,000. There had been a strong rise in employment in 'other industries'—largely construction (45,000 in Q2), but overall the number of employees had risen by a little less than earlier surveys of employment intentions had suggested.

28 The annual benchmarking survey led to large upward revisions to earlier estimates of the workforce in employment. The estimated total in September 1996 had been revised upwards by some 200,000, or 0.8%. The revisions brought the changes in employment during the last year estimated by the Workforce in Employment and the Labour Force Surveys closer together. The revision implied a downward revision to whole-economy productivity growth, which was estimated at 1.6% in the year to Q2; unit wage costs rose by 2.7% in the same period.

29 The Manpower Survey conducted in September indicated the highest recruitment intentions for the next three months since 1988. The Bank's Agencies reported continuing strength in employment in manufacturing and services, and the CIPS surveys reported that

employment in manufacturing and services had increased modestly in September.

30 Reported underlying average earnings growth increased from 4 $\frac{1}{4}$ % in June to 4 $\frac{1}{2}$ % in July. The figures for manufacturing and services had been unchanged at 4 $\frac{1}{4}$ % and 4 $\frac{1}{2}$ % respectively, but the unrounded rate had fallen slightly in manufacturing and risen slightly in services. Moreover, there had been a significant increase in construction earnings.

31 The underlying average earnings growth figure for July had been affected by large bonus payments in the transport and communication sector, where earnings growth rose from 4% in June to 9% in July. After adjustment to smooth out bonus payments using the technique described in the August *Report*, average earnings growth appeared either unchanged or even slightly lower in July than in June.

32 The twelve-month employment-weighted mean of pay settlements rose from 3.1% in July to 3.3% in August. The private sector component rose from 3.4% to 3.7%, while the public sector component was unchanged at 2.8%. The major influence was the construction workers' settlement, covering 600,000 people. It provides for a pay increase of 5.5% this year; craft-workers receive a further 13.9% next year and 10% in 1999; labourers receive 5.7% next year and 7.6% in 1999.

33 Reports from the Bank's Agencies and business surveys indicate growing skill shortages, particularly of IT staff but also of engineering and construction workers, lawyers and accountants. A recent survey by Reed personnel suggested that 76% of firms were experiencing shortages of skilled applicants for jobs—8% up from six months earlier. Perhaps surprisingly, the shortages were most acute in manufacturing. The CBI reported that 13% of manufacturers were citing a shortage of skilled labour as a constraint on future output, compared with 10% at the beginning of this year. The BCC reported that 60%–70% of firms in both manufacturing and services were experiencing recruitment difficulties. The BEC reported a rise in the number of construction firms reporting difficulties in recruiting specialised skills. And though the data are suspect, the stock of unskilled vacancies at Jobcentres has continued to increase.

34 The CBI indicator (the percentage of manufacturing firms citing shortage of skilled labour as a constraint on future output) has risen since 1992, but at 13% remains well below its late-1980s peak of more than 25%. If skills were portable across industrial sectors, this could indicate that skill shortages across the whole economy remained much less serious than in the late 1980s. But other indicators suggested a different conclusion—the BCC indicators of recruitment difficulties were back to their late-1980s levels, and the ratio of vacancies reported to Jobcentres (corrected as far as possible to remove known errors) to short-term unemployment was if anything higher than in the late 1980s.

IV Prices

35 The Bank's commodity price index (weighted by UK usage) rose by 1.7% (provisional) in August, to a level 6.0% lower than in August 1996. The index excluding oil rose by 0.5% in August, mainly reflecting higher prices of zinc and rubber. The price of oil, which had risen in August, fell back modestly in September.

36 Producer input prices rose by 0.6% in August to a level 7.9% lower than in August 1996. The CIPS survey suggested that input prices were continuing to fall sharply. Producer output prices had risen very slightly since April. The Bank's Agencies reported that manufacturers might try to secure price increases next January, but such attempts had generally not succeeded in recent years.

37 Consistent with the Agencies' survey reported in paragraph 22 above, ONS data continued to show that import prices had fallen

by much less than the exchange rate had appreciated: in July they were down by 6.9% compared with a year earlier; the corresponding fall for export prices was 5.9%. Prices of exports of services were little changed in the year to Q2, while imports of services had fallen a little more in price than imports of goods.

38 RPIX inflation fell from 2.8% in August to 2.7% in September. The fall, which could be entirely accounted for by the reduction in VAT on fuel, was smaller than might have been expected, reflecting wider domestic profit margins. For example, margins on petrol had been widened after the Budget tax increase, and there had been less pass-through from lower import prices to clothing, footwear and durables than might have been expected.

39 Consumer price inflation in Germany rose to 2.1% in August, an increase of more than 0.5% in four months, though there were signs of a possible fall in inflation in September. Most of the recent increase appeared to reflect external or temporary factors—higher import prices (including oil) and administered prices (in some cases a consequence of fiscal consolidation). Measures of domestically generated inflation were lower—for example, the increase in the GDP deflator in the year to Q2 was 0.8%—and with wage settlements remaining low and broad money growth having fallen back to within the target range, the scope for second-round inflationary effects from higher import and administered prices seemed limited.

40 The IMF forecast of an acceleration of world output growth—and of a convergence of growth rates—suggested that there might be a risk of a rise in commodity prices. And the El Niño weather system might put upward pressure on food prices. The IMF themselves expected prices to remain weak on account of good supply conditions, but commodity prices were inherently volatile and any changes could be sharp, though the effect on retail prices would be heavily damped.

V Financial markets

41 The sterling ERI stood at 100.4 (1990 average = 100) at the close of business on 8 October, 0.5% higher than on 10 September, on the eve of the final part of the September meeting. Since its peak on 23 July, sterling had fallen by 5.8% on the ERI, and by 7.4% and 3.5% against the Deutsche Mark and the dollar respectively.

42 During the course of the month, sterling had strengthened after the release of strong retail sales and labour market data on 17 September, but it had fallen sharply on 26 September, when a *Financial Times* article suggested that the Government was planning to join European Monetary Union. Although the spot £/DM rate had fallen after this article had appeared, the five-year forward rate had risen slightly, reflecting the fall in the UK yield curve. Chart analysis suggested no near-term trend in sterling, but it was vulnerable to further EMU-related developments.

43 The implied one and twelve-month volatility in £/DM options prices had fallen sharply in the month since the previous MPC meeting, and the implied one and twelve-month correlations between £/\$ and \$/DM spot rates had increased. Part of the change took place in mid September, and part after the publication of the *Financial Times* article on 26 September. These changes were consistent with a higher probability being attached by the market to the prospect of the United Kingdom joining EMU.

44 In the domestic money markets, with the Bank's repo rate at 7%, on 8 October three-month Libor had been 7.28%, compared with 7.22% on 10 September; the three-month Libor for December 1997, March 1998 and March 1999 implied by futures prices were 7.46%, 7.50% and 7.07% respectively, compared with 7.37%, 7.38% and 7.15% on 10 September. Implied volatility in option

contracts on three-month sterling interest rates in the next nine months had not changed much during the last month.

45 A number of factors had influenced the market in a turbulent month: some UK data (notably on the labour market and retail sales) had been stronger than expected, but US data (the CPI, the NAPM survey and the labour market figures) had been generally reassuring about inflation; the PSBR figures and market comments on them had led to expectations of a reduced supply of gilts; and the perceived probability of UK entry into EMU had increased.

46 Market rates suggested that during the last month, there had been a slight increase in interest rate expectations for early 1998, but a large fall in expectations for 1999 and 2000. Three-month rates were now expected to peak early in 1998 at about 7½% and to fall by more than 1% in the following two years.

47 On 16 September, the release of the smaller-than-expected PSBR for August and the unexpectedly low US CPI figure had led to falls of 10–15 basis points in futures rates, with larger falls in longer-dated futures. On 17 September, the strong UK labour market and retail sales data caused futures rates to rise modestly.

48 The *Financial Times* article on 26 September led to heavy falls in futures rates for 1999 and 2000, though there was little change in the March 1998 rate. These developments were likely to have reflected an increased probability attached to the prospect of UK and German interest rates converging.

49 The implied two-week repo rate for two weeks forward was very close to where it had been a month ago, and there was no real market expectation that the Bank's repo rate would be increased in October. This reflected the market reaction to the pause in

monetary policy mentioned in the August *Report*, and the belief that US and German interest rates were 'on hold'. Rates implied for November were about 1/8% above their current level: a substantial probability was attached to a rise in November, reflecting strong recent UK data, the upside risks mentioned in the August *Report*, and the belief that a new *Report* could provide an opportunity to raise interest rates.

50 In the gilt market, yields had fallen at all maturities during the last month, particularly in the five-ten year area. The main change had come after the *Financial Times* article. It was curious that though implied future nominal short-term interest rates had generally fallen, at long maturities of 20 years or so they had risen. This pattern was also seen in implied inflationary expectations. A possible technical explanation was that yield curve movements had been temporarily distorted by the need of the gilt-edged market makers to adjust the positions they had taken in the auction held earlier that week, after the appearance of the *Financial Times* article. If this had been the case, the surprising pattern of forward yields might prove temporary. There had indeed been some adjustment the following week, but it could also have reflected official denials of the *Financial Times* story, as well as domestic and foreign data releases favourable to long gilts.

51 The implied volatility of gilts rose during the past month, in contrast to that of Bunds, which continued to fall. One possible explanation was that greater uncertainty over UK membership of EMU had led to greater uncertainty about future UK interest rates.

52 Equity prices rose since the September MPC meeting: the FT-SE 100 index rose from 4,905 on 10 September to 5,262 on 8 October, the FT-SE 250 index from 4,665 to 4,882 and the FT-SE Small Cap from 2,281 to 2,380.

Text of Bank of England press notice of 9 October 1997

Bank of England leaves interest rate unchanged

The Bank of England's Monetary Policy Committee today voted to leave the Bank's repo rate unchanged at 7%.

Minutes of today's Monetary Policy Committee meeting will be published on Wednesday, 12 November. Minutes of the meeting which concluded on 11 September will be published on Wednesday, 15 October.

Text of Bank of England press notice of 6 November 1997

Bank of England raises interest rates by 0.25% to 7.25%

The Bank of England's Monetary Policy Committee has today voted to raise the Bank's repo rate by 0.25% to 7.25%. The increase takes immediate effect.

The Committee reviewed the latest monetary and economic data and discussed the analysis and inflation projection to be incorporated in the Bank's *Inflation Report* which will be published on 12 November. It also considered the possible impact of recent financial market volatility.

Inflation has not moderated as much as expected in the light of sterling's appreciation since the autumn of 1996. Domestic demand has remained robust, and the expected impact on external trade, lowering export volumes and raising import volumes, has yet to materialise, so that GDP has continued to grow at an unsustainable rate. The labour market has tightened further, with skill shortages increasingly reported.

Looking ahead, the economy is expected to slow down next year as both domestic demand and net external trade moderate, under the combined impact of past tightening in monetary and fiscal policy, the strength of sterling, and a smaller impact of windfalls on consumption. This will help to reduce inflationary pressures. But, in the Committee's judgment, the balance of risks implies that a modest further increase in interest rates is necessary to meet the inflation target of 2½% in the medium term.

The Committee therefore voted to raise interest rates by 0.25%. The last change in interest rates was a rise of 0.25% on 7 August.

The minutes of today's Monetary Policy Committee Meeting will be published on 10 December. Minutes of the meeting held in October will be published on 12 November.

Quarterly Bulletin and Inflation Report subscription details

Copies of the *Bulletin* and *Inflation Report* are available from the Bank as a **combined** package: the *Inflation Report* is also available separately. The prices are set out below:

Destination	1998				1997			
	<i>Quarterly Bulletin and Inflation Report package</i>		<i>Inflation Report only (1)</i>		<i>Quarterly Bulletin and Inflation Report package</i>		<i>Inflation Report only (1)</i>	
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