

# Inflation Report

## May 1998

The *Inflation Report* is produced quarterly by Bank staff under the guidance of the members of the Monetary Policy Committee. It serves a dual purpose. First, its preparation provides a comprehensive and forward-looking framework for discussion among MPC members as an aide to our decision making. Second, its publication allows us to share our thinking and explain the reasons for our decisions to those whom they affect.

The forecasts incorporate MPC views on the assumptions that shape the medium-term outlook for the UK economy and on the uncertainties and risks that surround it. Not every MPC member will agree with every assumption, but the ‘fan charts’ that result from this process encompass the views of all members.

### **The Monetary Policy Committee**

Eddie George (Governor)

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## Overview

Inflation, as measured by RPIX, is projected to remain close to its target of 2½% for some time—apart from a temporary rise to about 3% over the next quarter because Budget changes to excise duties were implemented earlier this year than last. This reflects the changing balance over time between two offsetting forces. On the external side, lower world oil and commodity prices, and the lagged effect of sterling's rise on import prices, are exerting downward pressure on UK inflation. At the same time, strong domestic demand and rising unit labour costs are producing a rate of domestically generated inflation significantly above the target level. Over the next two years, both domestic and external forces are expected to moderate, and although there is considerable uncertainty about the timing and magnitude of this, the central projection for inflation is close to the target. Towards the end of the forecast period, however, as the external effects wear off, the projected slowdown in domestic demand is insufficient to prevent inflation starting to rise again.

Net exports are now a major drag on economic growth. The impact of sterling's appreciation on export and import volumes, much delayed in both official and survey data, is clear. Output growth has fallen back since its peak of around 3½% a year in the third quarter of 1997 to around trend and is expected to fall further later in the year. The latest data suggest that the level of output in the first quarter was 0.4% lower than projected at the time of the *February Report*. Domestic demand, however, has continued to expand at rates well above trend—close to 4% a year. The burden of slowing output growth has fallen disproportionately on the traded goods sector and especially on manufacturing.

The pace of slowdown in economic activity will depend upon the balance between weakening net trade and strong domestic demand. The former is particularly sensitive to the exchange rate. Over the past quarter, sterling has continued to be volatile. In the two months following publication of the *February Inflation Report*, sterling's effective exchange rate rose by 3.5%, before falling back over the past month, quite sharply in the days before this *Report* was finalised. Most of the

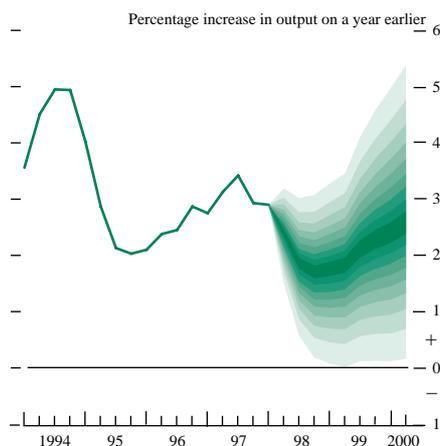
movements were against the Deutsche Mark and other euro currencies, probably reflecting news about continental Europe.

The recent strong growth of domestic demand has been supported largely by private consumption. Retail sales grew in volume terms by 0.9% in the first quarter of 1998, and were up 5% on a year earlier. Consumer confidence rose slightly. House price inflation has moderated. But asset prices more generally remain at historically high levels, and the ratio of net financial wealth to income is at an all-time high. Those factors would normally support continuing rapid consumption growth, but the monetary and fiscal tightening made over the past year should in time reduce the growth of consumption, and domestic demand more generally, to around trend. Over the past quarter, there have been clearer signs of a slowdown in the broad money aggregates.

The implications for inflation of this gradual slowing in domestic demand depend on developments in the labour market. Most measures of labour market tightness indicate that the pace of tightening in the labour market has now eased, but are at levels well above their historical average. Earnings growth over the last year was lower than might have been expected given the tightness in the labour market during that period. That may imply that the relationship between unemployment and nominal earnings growth is more benign in the present recovery than was the case in the past, perhaps because of a reduction in inflation expectations. But two factors suggest that part of the improvement in the short-run trade-off between earnings and unemployment may be only temporary. First, the aggregate earnings data mask a growing divergence between public and private sector earnings. Private sector earnings, which are perhaps more indicative of labour market pressures than the public sector, grew by 5.2% in January compared with a year ago. Second, the improvement to the terms of trade following sterling's appreciation may have moderated wage claims over this period.

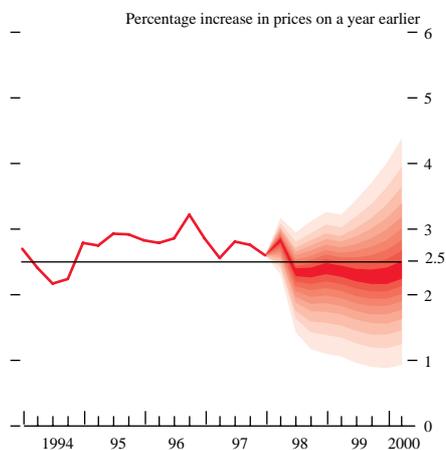
The latest MPC projection for the growth rate of GDP—based on the assumption of constant short-term official interest rates—is shown in Chart 1. The central projection is that output growth (measured on a year earlier) will continue to fall over the next year, before picking up in 1999 as the negative contribution of net trade to GDP growth disappears once exports and imports have adjusted to the change in the exchange rate.

**Chart 1**  
**Current GDP projection based on constant nominal interest rates**



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.

**Chart 2**  
**Current RPIX inflation projection based on constant nominal interest rates**



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.

From the middle of 1997 to the end of 1998 the swing in the current account from surplus to deficit is, in the central projection, almost 3% of GDP.

The corresponding projection for RPIX inflation is shown in Chart 2. The most likely path for RPIX inflation is that, after a temporary increase in 1998 Q2, it will fall slightly below 2½% in the second half of 1998 and during 1999, before rising towards the target by the end of the forecast period. The central projection for inflation is slightly lower than at the time of the *February Report*. That reflects four factors. First, the level of output throughout the forecast period is about half a percentage point lower than in the February projection, and leads to less upward pressure on inflation. Second, inflation expectations appear to have fallen since the start of the year, and are assumed to be lower throughout the forecast period than in the February projection. Third, the 15 working day average for sterling's effective index used as the starting-point in the projection was 2% higher than projected in February, although the exchange rate had fallen back by the time the *Report* was finalised. Fourth, and partly offsetting those factors, is the MPC's decision to use the LFS unemployment rate to measure labour market tightness, rather than the broader non-employment measure used previously. This change implies a somewhat tighter labour market than was assumed in the central projection in February.

In the near term, the balance of risks to output is on the downside, reflecting uncertainties about the world economy and the speed of domestic demand moderation. Those uncertainties imply corresponding downside risks to inflation. By the two-year forecast horizon, however, the overall balance of risks to inflation is, as in February, on the upside. In large part this stems from the possibility that the exchange rate may fall more sharply than implied by interest rate differentials.

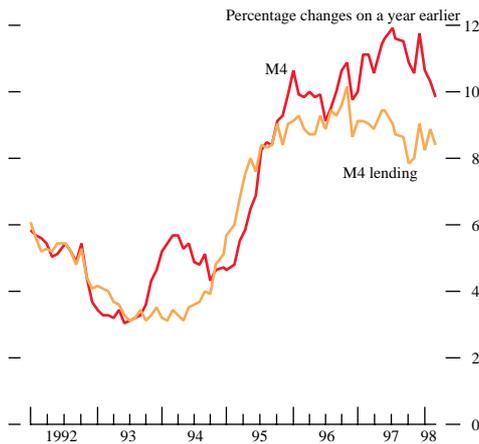
In the central projection, inflation is expected to remain close to its target throughout the forecast period after the temporary increase in the second quarter of this year. But there are major uncertainties which mean that the outlook for monetary policy remains finely balanced. The central projection does not reflect the fall in the exchange rate in the days before the *Report* was finalised, nor the potential effects of the minimum wage. Those factors, together with the strength of domestic demand and the future path of the exchange rate, will be crucially important to the prospects for interest rates.

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**Chart 1.1**  
**Growth of M4 and M4 lending**



Source: Bank of England.

**Table 1.A**  
**Growth rates of M4 and M4 lending<sup>(a)</sup>**

Per cent		1 month	3 months (b)	6 months (b)	12 months
M4	Dec.	1.0	9.8	10.0	11.7
	Jan.	0.5	9.5	9.3	10.6
	Feb.	1.0	10.4	9.8	10.3
	Mar.	0.6	8.4	9.1	9.8
M4 lending	Dec.	0.7	8.1	7.2	9.0
	Jan.	0.6	9.4	7.5	8.2
	Feb.	1.2	10.9	9.2	8.9
	Mar.	0.3	9.1	8.6	8.4

Source: Bank of England.

(a) Seasonally adjusted.  
(b) Annualised.

Broad money growth has continued to show signs of moderating from its rapid pace in recent quarters (see Chart 1.1). The demand for broad money nevertheless remains strong. Aggregate credit growth has fallen slightly, though lending to industrial and commercial companies has increased. Official interest rates have remained unchanged since November. Long-term nominal interest rates have continued to fall since the February *Report*—by around 30 basis points in the United Kingdom and by less than 10 basis points overseas. The starting-point for the nominal effective exchange rate in the inflation projection, based on its average value in the 15 working days to 6 May, was 106.2.

## 1.1

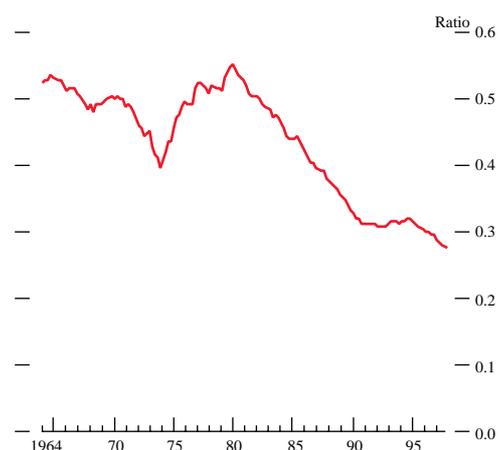
## Money

The twelve-month growth rate of broad money was 9.8% in March, compared with 10.3% in February and 10.6% in January. This is the first time since December 1996 that annual broad money growth rates have fallen below 10%. Annualised shorter-term growth rates have been generally below the twelve-month rate since August 1997, suggesting that broad money growth has been slowing gradually relative to the fast pace recorded in the first half of 1997 (see Table 1.A). But aggregate real broad money<sup>(1)</sup> growth remains rapid—7.1% in the year to March, compared with its long-run average of 4.4%.

The private sector may have been accumulating real money balances as a short-run buffer against shocks to income or financial wealth. The effect on domestic demand depends on how far the accumulation of real money balances exceeds the private sector's long-run desired levels of real money holdings. The recent high levels of money holdings may contribute to future inflationary pressures if the private sector subsequently adjusts its holdings of real money balances by purchasing goods and financial assets, thereby affecting aggregate demand. However, Bank estimates of desired money holdings for the personal and company sectors do not imply that there is excess liquidity at present.

(1) Defined as M4 deflated by RPIX.

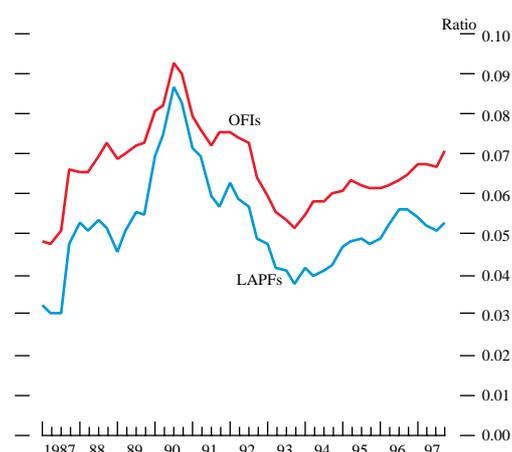
**Chart 1.2**  
Broad money velocity<sup>(a)</sup>



Source: Bank of England.

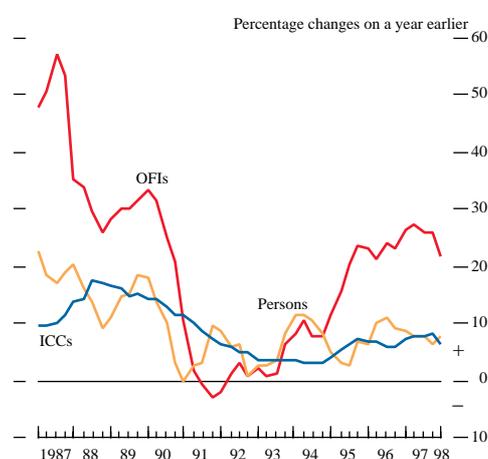
(a) Nominal GDP at an annual rate divided by stock of M4.

**Chart 1.3**  
Ratio of OFIs' and LAPFs' M4 to their total financial assets



Source: Bank of England.

**Chart 1.4**  
Sectoral M4 growth



Source: Bank of England.

Chart 1.2 shows that, apart from a period in the mid to late 1970s, broad money velocity has fallen steadily during the past three decades. This downward trend reflects the reduced opportunity cost of holding broad money arising from lower inflation, as well as from continuing financial innovation. The MPC's projection for inflation assumes that aggregate M4 velocity will decline gradually during the next two years. There is a risk that past rapid money growth could presage faster nominal demand and, in turn, faster rates of increase of earnings and prices than in the central case. But this risk has lessened since the February *Report*.

### *Other financial institutions (OFIs)*

OFIs' deposits are still growing quickly. In the year to 1998 Q1, OFIs' deposits grew by 21.8%, compared with 26.1% in 1997 Q4. The average annual rate of growth of OFIs' deposits since the start of the expansion in 1992 has been 12.6%. This build-up of money holdings may reflect attempts to maintain the share of money balances within portfolios, and minimise the risk from potential future falls in asset prices.

Some 40% of OFIs' broad money holdings is accounted for by life assurance and pension funds (LAPFs). As Chart 1.3 shows, though OFIs' holdings of broad money as a proportion of their gross financial assets have continued to rise, the proportion of broad money held by the LAPF sub-sector has fallen since the middle of 1996. Though LAPF's holdings of broad money picked up slightly in 1997 Q4, pension funds may be considering rebalancing their portfolios towards other financial assets. The box on pages 6–7 discusses this issue and examines evidence from survey data on pension fund managers' intentions. Rebalancing of portfolios could bring an upward risk to inflation through the effects of higher asset prices on valuation ratios and wealth.

### *Industrial and commercial companies (ICCs)*

ICCs' holdings of broad money rose by 7.7% in the year to 1998 Q1, compared with 6.5% in 1997 Q4 and 7.9% in 1997 Q3 (see Chart 1.4). Changes in ICCs' deposits typically precede changes in investment, so the moderation in ICCs' broad money holdings since the second half of 1996 may foreshadow slower investment growth. Reduced holdings of broad money by ICCs could also reflect weaker cash flow positions. And as noted in Section 1.2 below, company borrowing also increased sharply during 1998 Q1. The outlook for investment is considered in detail in Section 2.

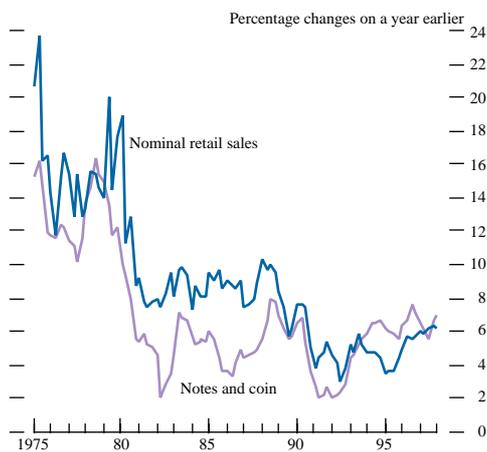
*Personal sector*

The demand for broad money in the personal sector has shown some signs of moderating (see Chart 1.4). Personal sector M4 grew at an annual rate of 6.3% in 1998 Q1, below its average annual growth rate in 1997. The annual growth rate of building society deposits has been above 10% since August 1997. This strength may reflect an expectation of windfall gains from future building society demutualisation. Bank deposits have also been increasing, albeit at a slower rate. The annual growth of banks' retail deposits in March was 5%, compared with an average annual rate of 6.2% in the second half of 1997.

*Narrow money*

M0 grew by 6.8% in the year to April, slightly above its average annual growth rate during 1997. In real terms, M0 has been growing strongly since the second half of 1997. The underlying increase in narrow money, as measured by notes and coin, was 6.6% in the year to April, compared with an average twelve-month rate of 6.2% during 1997. Chart 1.5 highlights the relationship between notes and coin and retail sales growth. The increased growth of notes and coin at the start of the year coincided with strong nominal retail spending growth. The strength of narrow money growth is consistent with the view that nominal demand remains robust. The interest rate increases since May 1997 are likely to have increased the opportunity cost of holding non interest bearing money balances. So it is likely that narrow money growth will slow as the impact of the recent monetary tightening feeds through.

**Chart 1.5**  
**Growth of notes and coin and nominal retail sales**



Sources: ONS and Bank of England.

**Table 1.B**  
**Divisia and M4 annual growth rates**

Percentage change in the year to 1998 Q1

	<u>Divisia</u>	<u>M4</u>
Personal sector	6.6	6.3
OFIs	23.0	21.8
ICCs	6.9	7.7
<b>Aggregate</b>	<b>8.5</b>	<b>9.7</b>

Source: Bank of England.

*Divisia money*

Table 1.B presents estimates of the growth of Divisia money, which reflects the components of broad money that are used in transactions. Aggregate Divisia money grew by 8.5% in the year to 1998 Q1, compared with 10.8% in 1997 Q4. As the table shows, this was slightly slower than the growth in aggregate M4. A sectoral breakdown of the measure reveals that Divisia money grew more rapidly than broad money in the personal sector, and has done so since 1996 Q1. The annual growth rate of personal sector Divisia money was 6.6% in 1998 Q1, compared with an average annual growth rate of 8.5% in 1997. This corroborates the information in the M0 and M4 measures suggesting that though nominal demand remains robust, there are signs of a deceleration.

## Developments in the OFI sector—implications for inflation

OFIs (other financial institutions) are non-bank financial intermediaries, which arrange financing facilities by managing issues of debt and equity on behalf of their clients. As such, they specialise in the activities of buying and selling financial contracts and securities, and have little demand for goods and services in product markets. So OFIs' demand for money depends largely on portfolio considerations and on the relative rates of return in the money market, equity and bond markets, and on real assets, such as physical capital or land.

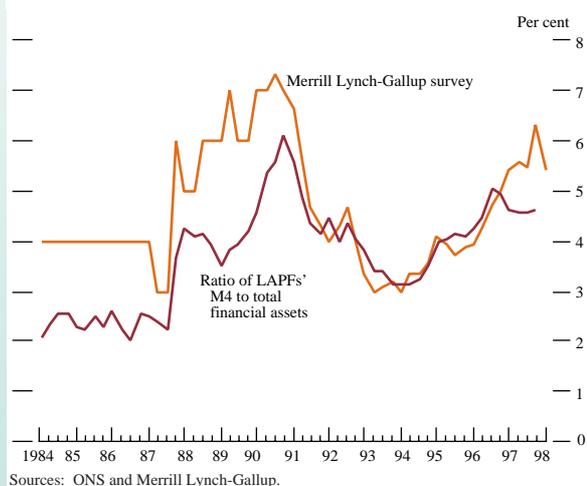
Some 40% of the rise in aggregate M4 since 1995 can be accounted for by increased money holdings by OFIs. As a percentage of the stock of aggregate M4, OFI's money holdings have risen to 22.1% in 1998 Q1 from 17.4% in 1995 Q1. OFIs' portfolio behaviour in the face of rising asset prices explains some of this: desired money holdings are based on the overall value of OFIs' balance sheets and the rate of return on money holdings relative to the returns on other financial assets. So a rise in asset prices, by raising the overall value of portfolios, is associated with a rise in money holdings, as OFIs attempt to maintain the share of broad money within their portfolios. But as Chart 1.3 shows, OFIs' ratio of broad money to financial wealth has increased since 1994, suggesting either that their actual level of money holdings may have exceeded desired long-run holdings, or that their desired level of holdings has increased. The former explanation raises the possibility that OFIs' could reduce their holdings of money in favour of other financial assets at some stage, bidding up asset prices, thereby raising financial wealth and stimulating domestic demand in the process.

An important class of financial intermediary in the OFI sector is life assurance and pension funds (LAPFs).<sup>(1)</sup> LAPFs' holdings of broad money have grown at an average annual rate of

around 25% since 1995. LAPFs may have shifted into money balances because of lower expected future returns on equities, possibly because of expectations of a stock market correction. But since mid 1996, the ratio of LAPFs' M4 to gross financial assets has been falling, suggesting that portfolio readjustment towards other financial assets may have begun. And evidence from option prices suggests that the increased negative skew embodied in stock prices following the events in Asia has largely unwound. If LAPFs are indeed in the process of rebalancing their portfolios, then there may be some risks from further rises in asset prices.

Survey evidence from fund managers offers some support for this view. The Merrill Lynch-Gallup survey of major UK fund managers suggests that, as a proportion of total pension fund assets, M4 fell from 7.6% in December 1997 to 5.4% in April.<sup>(2)</sup> The share of cash in pension funds' portfolios for transactions purposes has averaged some 5% over the past ten years. As Chart 1.A shows, the survey suggests that the share of cash held in portfolios rose sharply in the mid 1990s, consistent with the rise in LAPFs' ratio of broad money to financial wealth. But this was reversed in 1998, and the balance of fund

**Chart 1.A**  
The share of broad money in pension fund portfolios



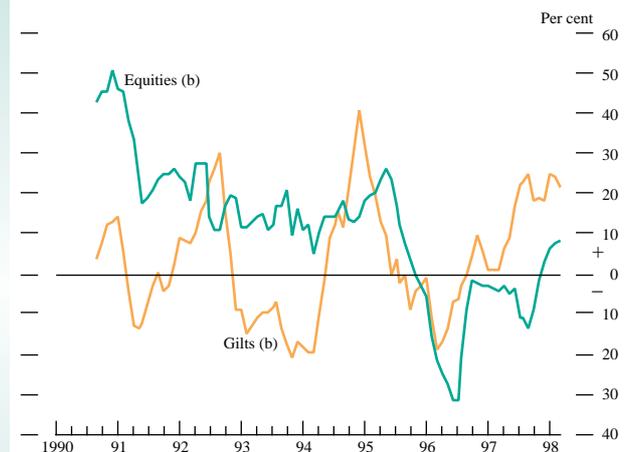
(1) The OFI sector also comprises securities dealers and institutions such as unit trusts. But their holdings of money balances are either extremely volatile or regulated. So an analysis of these sub-sectors is unlikely to shed light on the linkages between OFIs' money holdings, asset prices and activity.

(2) The Merrill Lynch-Gallup survey is based on an unweighted average of 72 UK fund managers.

managers expecting to increase their cash holdings has been strongly negative since the start of the year.

Chart 1.B shows the balance of fund managers planning to increase their holdings of UK gilts and equities. The balance planning to invest in gilts turned strongly positive during the middle of last year and has remained at a higher level since. The balance intending to invest in equities also turned positive during 1997 Q4 and 1998 Q1, after being consistently negative since the latter part of 1995—though the balance again became negative in April. Portfolio rebalancing may have contributed to the bidding up of asset prices not only in the United Kingdom but also in continental Europe, where equity values have risen even more sharply. The implications of rising financial wealth for

**Chart 1.B**  
Pension fund managers' investment intentions<sup>(a)</sup>



Source: Merrill Lynch-Gallup.

(a) Three-month moving average of survey results.  
(b) Balance of fund managers planning to increase holdings of gilts and equities.

consumption and investment behaviour are discussed in Section 2.

**Table 1.C**  
Sectoral M4 lending<sup>(a)</sup>

		1997		1998
		Q3	Q4	Q1
<b>OFIs</b>	Flows (£ billions)	5.2	6.8	6.7
	Annual growth rate (per cent)	19.5	23.0	17.2
<b>ICCs</b>	Flows (£ billions)	1.0	1.1	4.1
	Annual growth rate (per cent)	5.1	3.2	5.6
<b>Persons</b>	Flows (£ billions)	7.5	8.2	8.2
	Annual growth rate (per cent)	6.9	7.0	6.9

Source: Bank of England.

(a) Excluding securitisations and other loan transfers.

**Table 1.D**  
Sectoral comparison of lending by and deposits with banks and building societies

Seasonally adjusted flows (£ billions)

	OFIs	Persons	ICCs	Total
<b>M4 lending (assets)</b>				
1996	15.2	29.7	18.8	63.7
1997	33.2	32.6	5.2	71.1
1997 Q2	8.0	8.5	3.1	19.6
1997 Q3	5.2	7.5	1.0	13.7
1997 Q4	6.8	8.2	1.1	16.2
1998 Q1	6.7	8.2	4.1	19.0
<b>M4 (liabilities)</b>				
1996	26.5	25.1	7.9	59.6
1997	36.2	35.2	6.2	77.5
1997 Q2	7.8	8.8	2.1	18.7
1997 Q3	8.7	6.9	1.8	17.5
1997 Q4	6.8	8.7	1.0	16.5
1998 Q1	8.3	3.3	2.7	14.3

Source: Bank of England.

## 1.2

## Credit

The growth rate of bank and building society credit to the non-bank private sector (M4 lending) has fallen slightly since the *February Report*. The twelve-month growth rate of credit in March was 8.4%, compared with an average annual rate of around 9% during 1997. Shorter-term annualised growth rates have generally been above twelve-month rates since the start of the year, suggesting that credit growth may have quickened slightly relative to the second half of 1997. As Table 1.C shows, much of this can be accounted for by increased lending to industrial and commercial companies (ICCs). The slowdown in credit recorded in the latter half of 1997 was also accounted for by ICCs.

### Other financial institutions

Credit growth to OFIs remains strong. OFIs' bank and building society borrowing outstanding was 17.2% higher in 1998 Q1 than a year earlier, compared with 23% in 1997 Q4. Table 1.D shows flows of deposits into, and lending by, banks and building societies since 1996. Different types of OFI tend to be depositors or borrowers. Leasing companies, for example, tend to borrow from the banking sector. But OFIs have, on aggregate, been net depositors during this period, largely because of increased deposits by LAFs as equity prices have risen.

Borrowing by OFIs is typically thought to be linked to economic activity less directly than borrowing by the personal and corporate sectors. But some of this borrowing, such as to finance new capital goods, has a direct effect on nominal expenditure. Evidence from the Finance and Leasing Association suggests that the annual growth rates of leasing and business finance, excluding high-value items, have been strong in recent months.

### *Industrial and commercial companies*

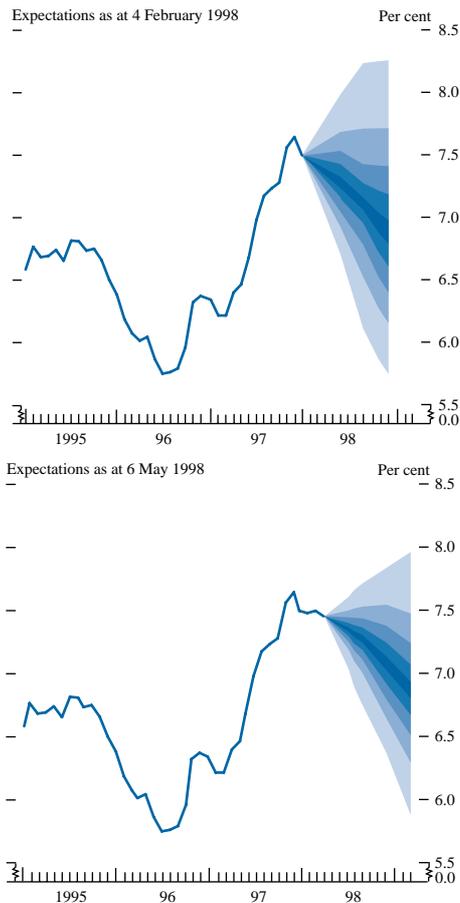
Lending to ICCs has shown signs of strengthening, following a marked slowdown during 1997. In the year to 1998 Q1, ICCs' sterling borrowing from banks and building societies rose by 5.1%, compared with an annual growth rate of 2.8% in 1997 Q4. Shorter-term annualised growth rates have also been above the twelve-month rate since the start of the year.

The increase in company borrowing may reflect attempts by firms to smooth shocks to cashflows. As Section 2 notes, ICCs' financial balance has moved into deficit for the first time since 1992. This may be because profits have been lower than expected or because tax payments have been higher. The resulting reduction in net cashflows may lead firms to seek external finance. The increase in borrowing is also consistent with the view that the monetary policy tightening since the summer has begun to have a direct effect on business cashflows. Many firms rely on short-term debt to finance inventories and working capital, and a rise in interest rates will weaken cashflow positions, necessitating further borrowing in the short run. Evidence from major British banks suggests that the sharpest pick-up in lending has been in the sectors regarded as more sensitive to interest rate changes, such as construction and other non-financial services. But activity in the construction and service sectors remains strong. So some company borrowing may stem from increased corporate sector confidence and a desire to maintain investment plans.

### *Personal sector*

The growth rate of credit to the personal sector, which accounts for nearly 60% of aggregate M4 lending, has remained relatively stable since 1994. The annual growth rate of credit to the personal sector in 1998 Q1, excluding the effect of securitisations and other loan transfers, was 6.9%, compared with 7% in 1997 Q4. Lending to individuals in the form of consumer credit

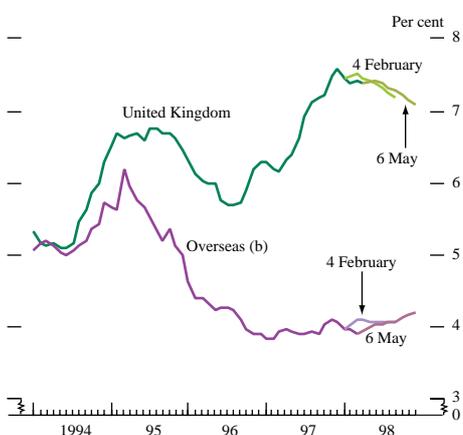
**Chart 1.6**  
**Implied distributions for sterling**  
**three-month interest rates**



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 1.7**  
**Sterling and overseas three-month**  
**interest rate expectations<sup>(a)</sup>**



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

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

has remained strong—unsecured credit continued to grow at an annual rate of 17.9%. The annual rate of growth of secured credit, at 5.8%, was weaker than its average annual rate during 1997. The strong growth in personal sector wealth and disposable income have been important driving forces behind the continued strength in personal sector credit growth. But supply-side factors—particularly the arrival of new entrants in the market for unsecured credit and more competitive interest rates—have also helped to sustain growth.

### 1.3 Interest rates and exchange rates

#### Short-term interest rates

The Bank’s repo rate has remained unchanged since the MPC voted to raise it to 7.25% on 6 November.

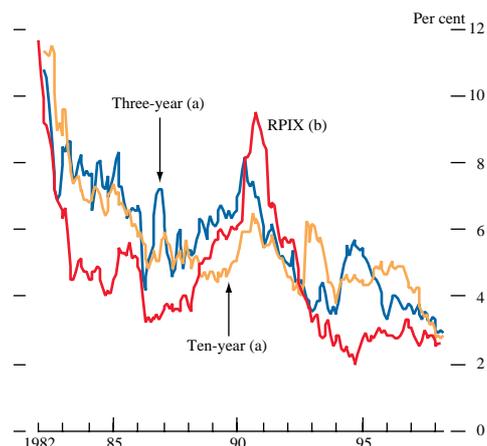
Probability distributions of expected three-month market interest rates in the United Kingdom, derived from option price data, are shown in Chart 1.6. At the time of the *February Report*, the outcome thought most likely by financial markets, shown in the darkest blue band, was a fall in interest rates during 1998. The probabilities were skewed towards rates being above the central band. On 6 May, the markets continued to expect a fall in interest rates in 1998, and placed a broadly equal weight on the prospect of interest rates lying above and below the band. But it is important to note that the chart does not provide a direct measure of market expectations of official interest rates. Short sterling futures prices can reflect influences other than official rates, such as credit risk premia.<sup>(1)</sup> Chart 1.7 shows the expected path of UK short-term nominal interest rates implied by futures markets, together with the expected path of a trade-weighted average of overseas nominal short-term interest rates. As can be seen, overseas rates are expected to rise relative to UK rates during 1998, narrowing the short-term interest rate differential. To some extent, this is likely to reflect market expectations of a rise in German interest rates during 1998. Short-term German forward interest rates based on futures contracts in September 1999 were around 4.5%, compared with a three-month spot rate of around 3.5% on 6 May.

(1) For example, the *February Report* noted that spreads between unsecured market borrowing rates and proxies for the risk-free rate had widened towards the end of 1997, as a result of equity market volatility and the emergence of problems in Asia. The box on page 331 of the November 1997 *Quarterly Bulletin* discussed factors influencing short sterling futures prices in greater depth.

### Long-term interest rates

The downward trend in long-term nominal yields has continued. The nominal yield on ten-year gilts fell by a further 30 basis points between the February and May Reports, and was around 5.8% on 6 May. The change in nominal interest rates can be decomposed into changes in inflation expectations and changes in expected real interest rates, though risk premia may also influence movements in nominal bond yields. Measures of inflation expectations and real interest rates derived from the index-linked bond market have both fallen during the past year. Possible reasons for this are considered below.

**Chart 1.8**  
RPIX inflation and three and ten-year implied forward inflation rates



Sources: Bank of England and ONS.

(a) Calendar-month average.  
(b) 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.

Chart 1.8 shows the evolution of medium (three-year) and long-term (ten-year) measures of inflation expectations since 1982 by comparing forward rates, as derived from conventional and index-linked bond markets, with actual inflation as measured by RPIX.<sup>(1)</sup> Expected inflation has fallen gradually as the private sector has responded to disinflationary policy, past recessions, and to declines in the observed inflation rate. More recently, expected inflation has converged towards the inflation target, as private sector expectations have adjusted to changes in the regime and stance of monetary policy, and to declines in observed inflation in the United Kingdom and other major economies.

**Table 1.E**  
Fiscal deficits in industrial economies<sup>(a)</sup>

Per cent of GDP

	Average 1990-95	1996	1997	1998	1999
United States	3.0	1.1	0.2	-0.1	-0.4
Japan	0.0	4.3	3.5	3.7	2.7
Germany	2.9	3.4	2.7	2.7	2.5
France	3.9	4.1	3.0	3.0	2.8
Italy	9.6	6.7	2.7	2.8	2.5
United Kingdom	5.1	4.7	1.9	0.5	-0.2
Canada	5.8	1.7	-0.3	-1.0	-1.4
G7 (total)	3.3	2.8	1.5	1.3	0.9
EU	5.1	4.3	2.4	2.1	1.7

Source: IMF World Economic Outlook, May 1998.

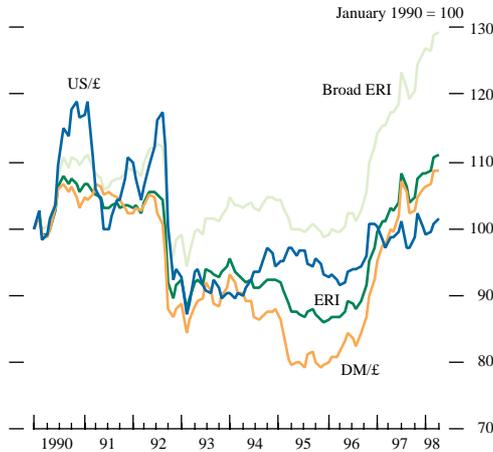
(a) General government fiscal deficits/surpluses in the major industrial countries as a percentage of GDP on a national income accounts basis. A minus sign denotes a surplus. Data for the United Kingdom exclude asset sales.

The recent fall in current and expected future long-term real rates, both in the United Kingdom and overseas, is likely to reflect shifts in global savings and investment patterns. Expectations of lower aggregate fiscal deficits in industrial countries play an important role in this regard. As Table 1.E shows, fiscal deficits as a percentage of GDP have declined steadily in G7 and EU countries throughout the 1990s, and are expected to fall further in the next two years. The IMF *World Economic Outlook* in May noted that private sector savings as a percentage of GDP in the advanced economies were expected to remain broadly stable during the next two years. So the rise in government saving is likely to lead to a rise in aggregate industrial world savings and lower real interest rates. Estimates suggest that a 1 percentage point reduction in the aggregate deficit to GDP ratio could result in as much as a 15 basis point fall in long-term interest rates.<sup>(2)</sup> The fall in real yields is also likely to have contributed to some of the rise in equity prices, both in the United Kingdom and overseas. The

(1) The measures of inflation expectations derived from bond markets are, strictly speaking, estimates of RPI inflation expectations rather than RPIX inflation expectations.

(2) Report of the Deputies of the Group of 10, 'Savings, Investment and Real Interest Rates', October 1995.

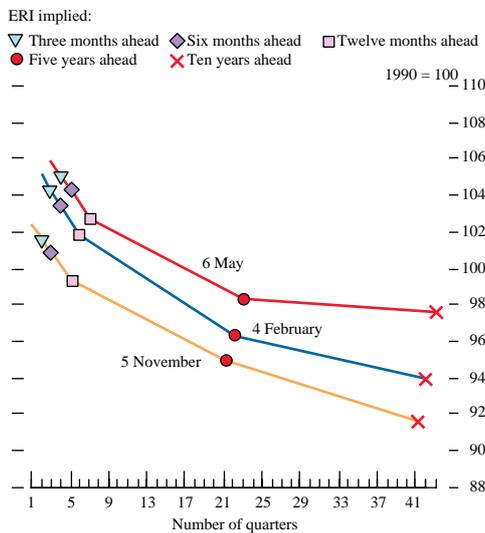
**Chart 1.9**  
Sterling bilateral exchange rates and ERI<sup>(a)</sup>



Sources: Bank of England, IMF and Datastream.

(a) Calendar-month averages of daily data.

**Chart 1.10**  
UK effective exchange rate profiles<sup>(a)</sup>



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

(a) Assuming uncovered interest rate parity.

associated increase in household and corporate sector wealth has helped to spur domestic demand growth. Section 2 considers the implications of rising financial wealth for domestic demand in greater detail.

*Exchange rates*

Sterling has appreciated substantially in both nominal and real terms during the past eighteen months. Sterling has appreciated by 24.1% in nominal effective terms between the August 1996 *Report* and the MPC meeting on 6 May, and by 28.7% and 7.7% against the Deutsche Mark and the US dollar respectively (see Chart 1.9). A broader measure of the nominal effective exchange rate, which includes the currencies of 49 countries and covers 97% of UK trade, appreciated by around 27%.<sup>(1)</sup> The real exchange rate<sup>(2)</sup>—the rate most relevant to the competitiveness of UK products in world markets—has appreciated by more than 30% since August 1996, on the latest available data.

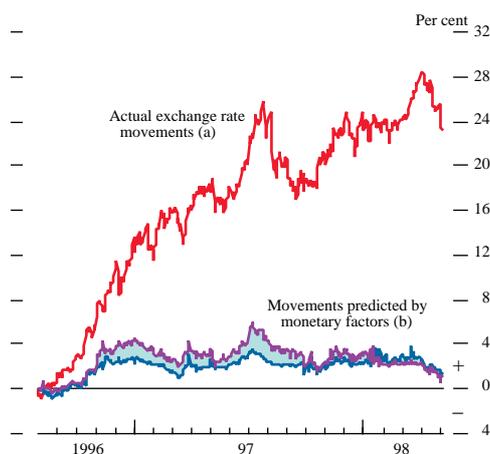
Short-run changes in exchange rates reflect temporary portfolio shifts and cyclical interest rate differentials. Investors in the foreign exchange market make their portfolio decisions mainly on the basis of expected rates of return, including expected exchange rate changes, adjusted for risk and other special factors. So to understand recent developments in foreign exchange markets, it is useful to compare expected interest rates on sterling and non-sterling assets.

Chart 1.10 illustrates the path for the nominal exchange rate implied by nominal interest rate differentials, calculated by comparing UK interest rates at different maturities with overseas rates. As UK interest rates are higher than average interest rates overseas, sterling is expected to depreciate in nominal as well as real terms. The expected rate of depreciation has fallen slightly since the February *Report*—the path shown in the chart has become less steep. Chart 1.11 identifies the Bank’s estimate of the contribution made by monetary policy factors to recent changes in the nominal effective exchange rate. Changes in market expectations of interest rates have continued to make only a small contribution towards the exchange rate appreciation since August 1996.

To the extent that financial assets are imperfect substitutes in investors’ portfolios, this can give rise to

(1) This broader index has fallen slightly, by 0.6%, since the February *Report*.  
 (2) The real exchange rate is calculated using the nominal effective exchange rate and a cost indicator of relative normalised unit labour costs in manufacturing.

**Chart 1.11**  
**The exchange rate and monetary policy news since August 1996**



Note: Daily data. Final observation is 6 May.

Source: Bank of England.

- (a) The effective exchange rate index for sterling against the G7 economies.  
 (b) The band shows the estimated range of exchange rate movement predicted by monetary factors. The range is calculated by varying the time from which it is assumed that monetary policy no longer influences real interest rates. This is taken to vary between four and eight years.

changes in risk premia that depend on portfolio preferences and relative asset supplies. This may cause the exchange rate to follow a path different from that implied by interest rate differentials. Part of the initial appreciation of sterling may have been due to investors shifting their portfolios into sterling assets in response to increased riskiness of other currencies, in particular related to uncertainty about the future policies of the European Central Bank. Some of sterling's appreciation since August 1996 may also have been due to other real factors, such as actual or expected productivity improvements.

The sterling effective exchange rate index averaged 106.2 in the 15 working days up to and including 6 May and this information, as in earlier *Reports*, is the starting-point used for the projection. This compares with an average of 104.9 at the time of the February MPC meeting, and around 104 assumed for May on the basis of interest rate differentials at the time of the February *Report*. The starting-point for the exchange rate is therefore just over 2% higher than assumed in February. The MPC considers that the most likely profile for sterling is that it depreciates from its starting-point at a rate implied by the difference between constant UK interest rates and expected overseas interest rates as implied by the market, reaching an index level of around 103 by the end of the forecast period. The central projection is consistent with a bilateral exchange rate, two years hence, of 1.67 and 2.91 against the US dollar and the Deutsche Mark respectively. The MPC has maintained its assumption that there is an asymmetric risk of the exchange rate depreciating more than in the central case as portfolio and erratic factors unwind. So the mean, or expected, value of the effective exchange rate at the end of the forecast period is around 96, some 7% lower than in the central case.

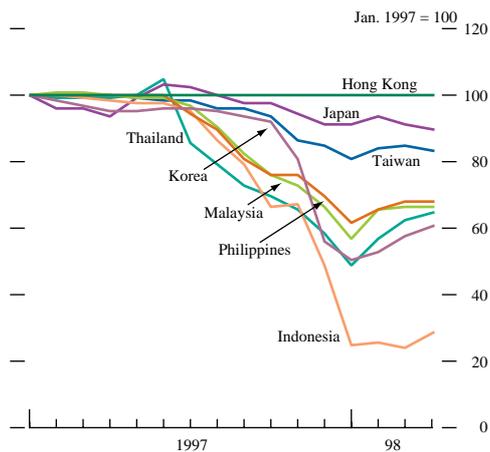
## 1.4

## Summary

The pace of aggregate monetary growth remains rapid, but shows signs of moderating. Within the aggregate, personal sector broad money also shows signs of moderating, and there are signs that OFIs have begun to readjust their portfolios away from money holdings towards other financial assets. Aggregate lending activity has continued to slow. The MPC's projection for inflation assumes that aggregate broad money velocity will decline gradually during the next two years. There is a risk that past rapid money growth could lead to faster nominal demand and, in turn, to faster rates of increase

of earnings and prices than in the central case. The Bank's repo rate has remained unchanged at 7.25% since the November *Report*. The nominal effective exchange rate used as the starting-point in the inflation forecast, based on the average in the 15 working days to 6 May, was 106.2—and implies a profile for the exchange rate that is some 2% higher than that used in the February *Report*.

**Chart 2.1**  
Selected Asian exchange rates against the US dollar<sup>(a)</sup>



Source: Datastream.

(a) Nominal exchange rates based on calendar-month averages.

**Table 2.A**  
East Asian net trade balances

Average monthly balance for the quarter, US\$ billions (a)

	1997				1998
	Q1	Q2	Q3	Q4	Q1 (b)
Hong Kong	-2.1	-2.0	-1.3	-1.4	-1.3
Indonesia	0.5	0.8	1.2	1.3	n.a.
Japan	4.2	7.2	7.5	9.8	8.4
Korea	-2.5	-0.7	-0.5	-0.7	2.8
Malaysia	0.2	-0.6	0.2	0.1	0.5
Philippines	-1.0	-0.9	-0.9	-0.7	n.a.

Source: Datastream.

(a) Based on monthly exchange rate averages. The data may be subject to rounding errors.

(b) The three months to February for Hong Kong and Malaysia.

The preliminary estimate of real GDP in 1998 Q1 was 0.4% higher than in the previous quarter and 2.8% above a year earlier. Excluding oil and gas extraction, the estimate was 0.5% higher than in the previous quarter and 2.9% higher than a year earlier. Service sector output grew by 0.8% during the quarter, and was 4.2% higher than a year earlier. In contrast, manufacturing output fell by 0.5% in the three months to February, and was only 0.3% higher than a year earlier.

Following data revisions, GDP grew by 3.1% in 1997, 0.2 percentage points below the rate estimated at the time of the February *Report*. The composition of growth was also revised. Private consumption and investment grew more rapidly than previously estimated, whereas government spending and the contribution from net trade to GDP growth were weaker. Overall, the level of GDP was 0.3% lower at the end of 1997 than estimated at the time of the February *Report*.

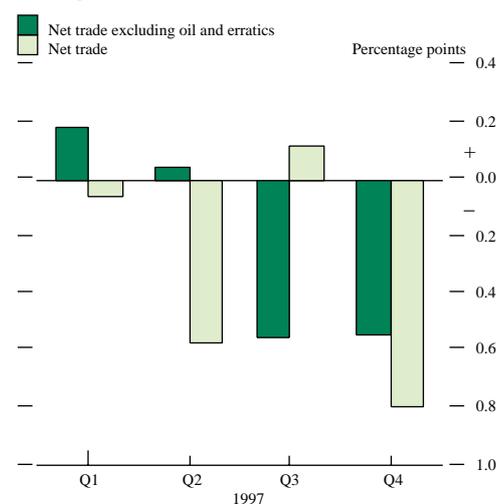
The UK trade performance continued to worsen during the first quarter of 1998. But the trade data have been puzzling. Almost all of the net goods trade deterioration has come from trade with non-EU countries, despite sterling's much greater appreciation against EU currencies. Falling export growth to Asia has accounted for part of the deterioration.

## 2.1 External demand

The February *Report* noted three channels through which events in Asia could affect the world economy. First, the fall in Asian aggregate demand and rebalancing towards net trade and lower domestic demand were expected to reduce demand for other countries' goods and services. Second, Asia's economies had become much more competitive following exchange rate devaluations. Third, there was a risk of problems spreading to other emerging markets.

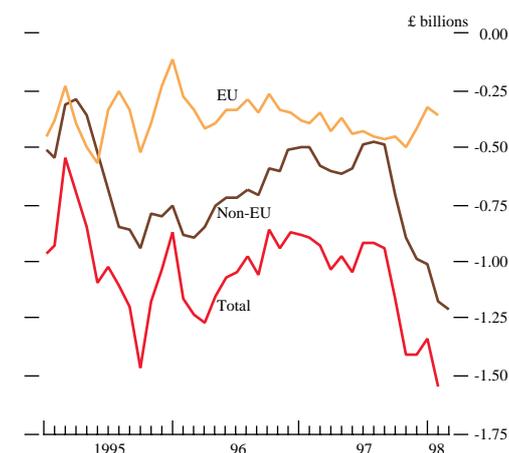
Asian currencies have generally appreciated since the February *Report*, though they have remained low relative to the beginning of 1997 (see Chart 2.1). Table 2.A shows that Asian countries' trade balances have

**Chart 2.2**  
Contributions of net trade to quarterly GDP growth



Sources: Bank of England and estimates based on ONS data.

**Chart 2.3**  
UK goods trade balances<sup>(a)</sup>



(a) Three-month moving average.

**Table 2.B**  
Estimated breakdown of nominal non-EU goods trade balances<sup>(a)</sup>

Totals for the specified period in £ billions

	1997		Change
	Apr.-Sept.	Oct.-Mar.	
Non-EU	-3.2	-6.6	-3.3
of which:			
East Asia (b)	-3.4	-4.5	-1.1
North America	-1.9	-2.6	-0.7
Japan	-2.6	-2.9	-0.3
Eastern Europe	0.1	0.0	-0.1
Other America	0.1	0.0	-0.1
Oil exporters	2.8	2.9	0.1
Other	1.6	0.5	-1.1

(a) Geographical breakdowns are estimated using Overseas Trade Statistics data.

(b) Excluding Indonesia, Japan and the Philippines.

strengthened, but so far this is mainly because of a fall in their imports. Asian exports have risen less rapidly than their imports from the major industrialised countries have fallen. This could be partly the result of a shortage in the availability of credit to exporters in the region. Following developments in East Asia since the February *Report*, the MPC has maintained its central assumption that UK output could be reduced by around half a percentage point by the end of 1999.

The currencies of Brazil, Mexico and Russia have remained stable, and there have been some small reductions in interest rates. Spreads on emerging market debt have generally stabilised, though they have remained wider than in the first half of 1997. Equity markets in some East Asian economies recovered sharply in February, but have since fallen back. As a note in the *Quarterly Bulletin* suggests, recent problems in Japan could have a critical influence on the recovery of the Asian economies.<sup>(1)</sup>

UK net trade, excluding oil and erratics, made a significant negative contribution to quarterly GDP growth in the second half of 1997, as Chart 2.2 shows. More recent monthly data confirm this picture. The headline balance of trade in goods fell from -£1.1 billion to -£2.2 billion in February, its lowest since March 1990, though this was influenced by trade in oil and erratics. Export volumes of goods (excluding oil and erratics) rose by 1.8% in the six months to February on the previous six months, and import volumes rose by 3.7% in the same period.

The UK trade data have been puzzling. As Chart 2.3 shows, almost all of the deterioration in goods trade has come from non-EU countries. The EU trade balance has been much more stable, despite sterling's greater appreciation against EU currencies (see Section 1). Trade with East Asia (excluding Indonesia, Japan and the Philippines) has accounted for around one third of the decline in the non-EU trade balance, with North America the other main contributor (see Table 2.B).<sup>(2)</sup> Much of the decline in the trade balance with East Asia reflects lower UK exports to the region. Export values to East Asia fell by around 14% in the six months to March, compared with an average six-month increase of around 7% between 1990–96. South Korea, Malaysia and

(1) For a more detailed discussion of events in Asia since the February *Report*, see the note in 'The international environment', *Quarterly Bulletin*, May 1998, pages 133–35.

(2) A price/volume split of these value data is not available at this level of geographical disaggregation.

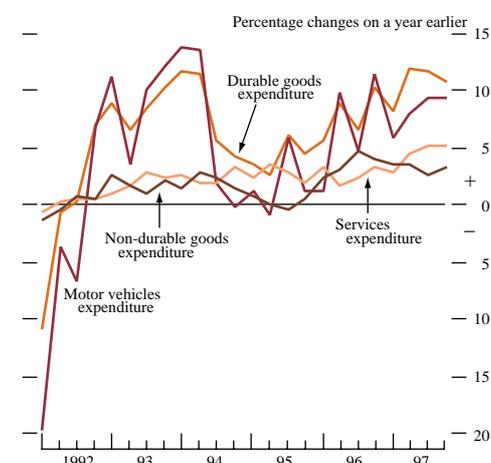
**Table 2.C**  
**Expenditure components of GDP**

Per cent

	Percentage change on previous quarter 1997				Contribution to quarterly GDP growth 1997 Q4 (a)
	Q1	Q2	Q3	Q4	
Private consumption	1.0	1.8	0.7	1.4	1.0
Public consumption	-0.4	-1.8	1.2	0.2	0.0
Investment	1.6	2.6	0.5	1.0	0.2
Final domestic demand	0.8	1.2	0.8	1.1	1.3
Stockbuilding (b)(c)	0.0	0.1	-0.2	-0.2	-0.2
Domestic demand	0.8	1.3	0.6	1.0	1.1
Exports	1.9	3.2	1.4	0.0	0.0
Imports	1.9	4.8	1.0	2.0	0.8
Net exports (b)	0.0	-0.6	0.1	-0.8	-0.8
<b>GDP</b>	<b>0.5</b>	<b>0.9</b>	<b>0.9</b>	<b>0.6</b>	<b>0.6</b>
<i>Memo items:</i>					
Statistical discrepancy (b)	0.1	0.0	0.0	0.0	0.0
Alignment adjustment (b)	-0.3	0.3	0.3	-0.1	-0.1

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

**Chart 2.4**  
**Growth in consumers' expenditure by category**



Thailand accounted for most of the fall: export values to this group fell by around 30% during the past six months. But the growth in imports from East Asia has been lower than usual, perhaps reflecting the credit difficulties of Asian exporters. The value of imports from the region rose by around 4% in the six months to March, compared with an average six-month increase of around 8% between 1990–96.

## 2.2 Domestic demand

Domestic demand grew by 3.5% in 1997, its fastest rate for nine years. But the rate of growth slowed slightly during the second half of the year, and the MPC has assumed that it will fall further during 1998 as the unwinding of windfall spending, past monetary policy tightening and the tight fiscal stance take effect.

### Consumption

Consumers' expenditure grew by 5.1% in the year to 1997 Q4, its fastest rise since 1988 (see Table 2.C). The Bank/MORI survey of windfall gains suggested that spending of windfall payouts from building societies was expected to be concentrated in 1997.<sup>(1)</sup> A significant proportion of windfall payouts was expected to be spent on durable goods, including cars, during the year. Consistent with this, spending on durable goods rose rapidly in 1997 relative to spending on non-durables, as Chart 2.4 shows. Though the growth of durables' spending slowed during the second half of the year, spending on cars and services continued to grow rapidly. The MPC has assumed that the liquidity effects of windfall payouts will drop out during 1998, but that annuity spending will continue to affect the level of consumption.

Data on vehicle registrations suggest that car sales grew more rapidly during 1998 Q1. Consumer spending on vehicles accounts for around 5% of total spending, but car sales are not included in the retail sales data. Private car registrations, which account for nearly half of total registrations, rose by 20% in 1998 Q1, their fastest increase since records began in 1990. The box on page 17 suggests that spending out of windfall gains may have partly accounted for this rise.

Retail sales data suggest that consumer spending growth slowed in the first quarter of 1998. Retail sales grew by 5% in the three months to March on a year earlier,

(1) This survey was discussed in the box on page 20 of the November 1997 Report.

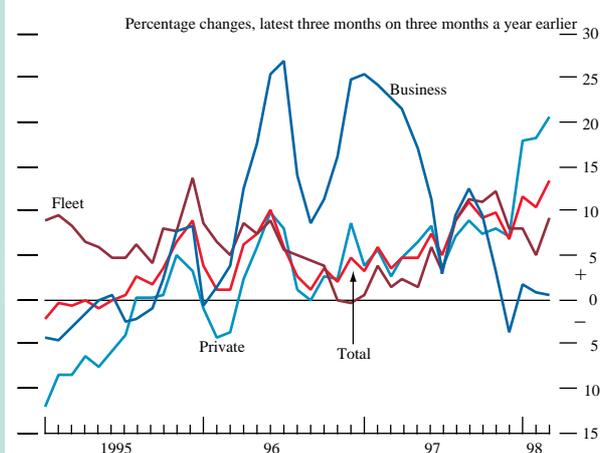
## The UK car market

Recent developments in the UK car market illustrate the current divergence between external and domestic demand. The strength of private and commercial registrations in 1998 so far suggests that consumer demand has been maintained at historically high levels. Imports and domestic production for the home market have grown rapidly, but there are signs that the latter has slowed. The strength of demand for cars in 1998 Q1 could have been windfall-related.

### The domestic picture

More than £20 billion was spent on vehicles in 1997, accounting for around 9% of the rise in total consumer spending. Vehicle registrations have risen rapidly since 1996 H1, and in 1998 Q1 grew at their fastest rate since 1989 (see Chart A).

**Chart A**  
Car registration



Source: Society of Motor Manufacturers and Traders.

Private registrations may have been boosted by spending from building society windfalls. A survey by the British Retail Consortium in December 1997 suggested that a significant proportion of consumers were waiting until the Christmas and New Year period to make major purchases out of windfall gains. Stocks held by the car industry rose in value by £758 million in 1997, their largest increase for four years. This may have been partly because of anticipated spending of windfalls. 2.24 million cars have been registered in 1998 so far, more than the Society of Motor Manufacturers and Traders' forecast of 2.15 million for 1998 as a whole.

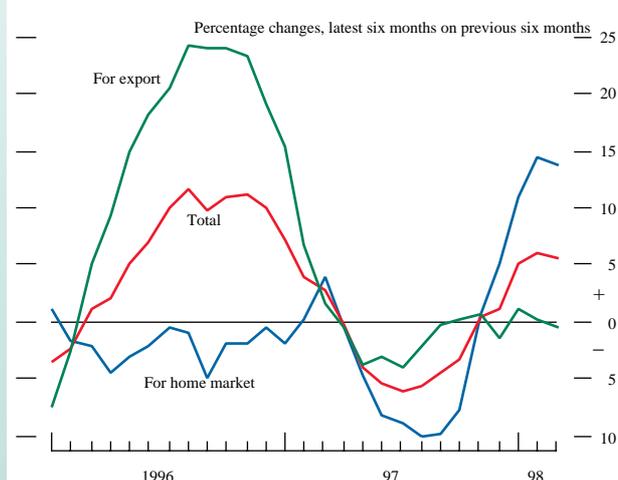
The rapid rise in total registrations in the year to 1998 Q1 also reflected a 16% increase in registrations of commercial vehicles (mainly fleet sales), including a 28% rise in heavy goods vehicles' registrations. Such sales could reflect increased activity in the economy, and will contribute to investment spending in 1998 Q1.

### Trade in cars

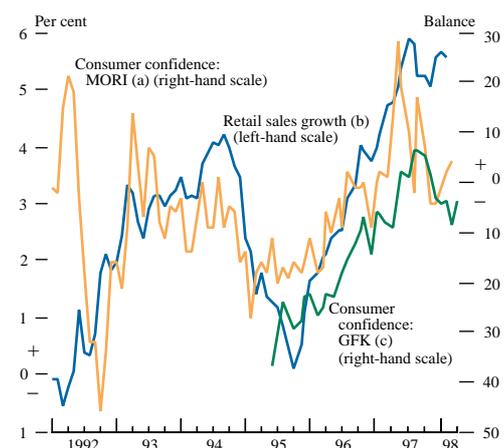
Car import volumes have risen rapidly since sterling's appreciation began in August 1996. Imports rose by 35% between 1996 Q3 and 1997 Q4, and accounted for two thirds of UK car sales in 1997. Developments in Asia may have had an effect, though it is hard to distinguish this from firms' strategic behaviour. Registrations of South Korean cars rose sharply in the past year, and registrations of Japanese cars also increased.

Domestic producers may also have taken advantage of the strength of UK demand for cars, by switching production to the domestic market and away from exports. Production of cars for the home market was 14% higher in the six months to March than in the previous six months, whereas export production fell by 0.5% in the same period (see Chart B). This reversed the picture in 1996. And it was reflected in export volumes, which rose rapidly during 1996 and most of 1997, but fell by 11.6% in 1997 Q4. But there are signs that the growth in domestic production has slowed: it rose by 4.9% in the three months to March on the previous three months, down from an increase of 17.8% in the three months to January.

**Chart B**  
Car production



**Chart 2.5**  
**Consumer confidence and retail sales growth**



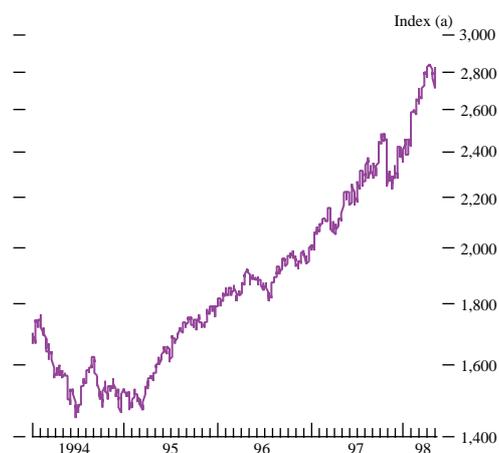
Sources: ONS, MORI and GFK.

- (a) Question: Do you think the general economic situation in this country will improve over the next twelve months?
- (b) Latest three months on the same three months a year earlier.
- (c) Question: How do you think the general economic situation in this country has changed over the last twelve months?

compared with increases of 5.7% and 5.5% respectively in the three months to January and February on a year earlier. As Chart 2.5 shows, retail sales growth has been slower than in summer 1997. According to the Confederation of British Industry (CBI) Distributive Trades Survey, retail sales growth picked up in the year to April. But this was partly because of Easter trading. Retail sales growth in the three months to April on the previous three months was the slowest since December 1995, and expectations about future sales have fallen since the beginning of the year.

The MPC has assumed that consumption growth will slow during 1998. Consumption is influenced by expectations of future income and wealth. This is because people prefer to smooth their consumption when they are faced with short-term income fluctuations. Some individuals are credit-constrained, however, and may not be able to smooth their consumption; current income will be an important factor in their consumption decisions.

**Chart 2.6**  
**FT All-Share index**



Note: Daily data. Final observation is 6 May.

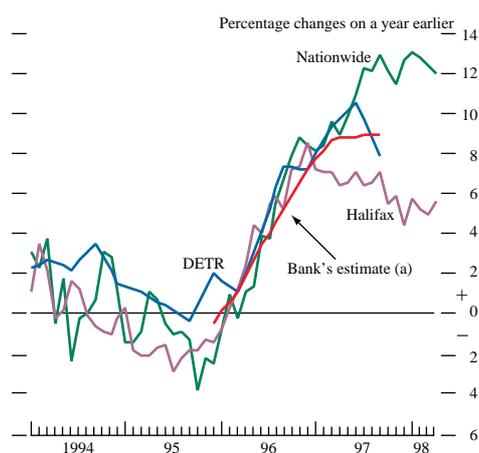
Source: *Financial Times*.

(a) Scale is logarithmic.

Personal sector net financial wealth increased by 25% in 1997. This was mainly as a result of equity prices, which rose rapidly during the period (see Chart 2.6). Part of the rise in wealth may have been because of the fall in real long-term interest rates (see Section 1). Falling real interest rates reduce the returns on assets, which reduces consumption—the income effect of lower real interest rates. But the returns on saving are also lower, so individuals will tend to save less and consume more—the substitution effect. The overall effect on consumption of lower real interest rates will depend on the balance between the income, substitution and wealth effects.

The rise in UK and overseas equity prices during the past few years has been hard to explain in terms of observable economic fundamentals. The central assumption is that the rise in equity prices persists, and is a factor supporting robust consumption growth. It is assumed that the level of equity prices rises in line with nominal GDP growth during the forecast period. This assumption may imply a lower rate of increase in equity prices than markets are currently anticipating. Equity prices have already risen by 50% in the two years to 6 May. As in February, the MPC has continued to assume that on balance there is a greater risk of a fall in equity prices than of a further rise, relative to the central case.

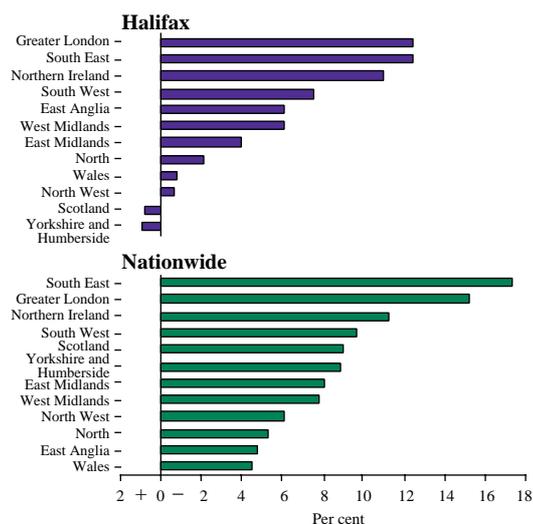
**Chart 2.7**  
Measures of UK house price inflation



Sources: Bank of England, The Department of Environment, Transport and the Regions (DETR), Halifax plc and Nationwide Building Society.

(a) Land Registry data for England and Wales only.

**Chart 2.8**  
Regional house price inflation from 1997 Q1 to 1998 Q1



Sources: Halifax plc and Nationwide Building Society.

Income from employment rose by 4.2% in real terms in 1997, its fastest rise for seven years. Real personal disposable income also grew by 4.2% in 1997.

Various indices give differing pictures of recent developments in house prices (see Chart 2.7). The Halifax index increased by 0.8% in April, and the annual rate of house price inflation rose to 5.6%. The Nationwide index rose by 0.3% in April, but the annual rate fell to 12%. The Department of Environment, Transport and the Regions (DETR) house price index rose by 7.9% in the year to 1997 Q4, down from an annual rate of 10.6% in the previous quarter. And the Bank's estimate of house price inflation, based on Land Registry data, rose by 9% in the year to 1997 Q4, broadly unchanged on the previous quarter.<sup>(1)</sup>

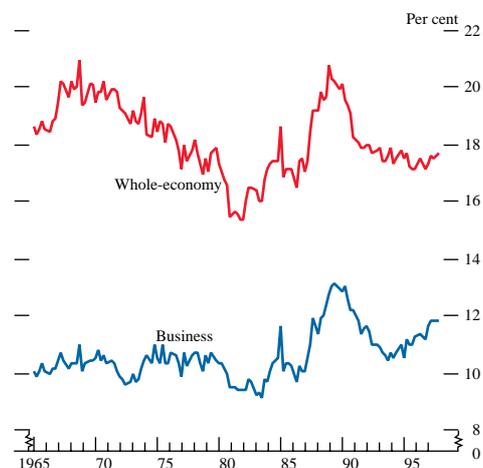
Chart 2.8 shows that house prices rose rapidly in the South East and Greater London in the year to 1998 Q1 on both the Halifax and Nationwide measures. But there are regional differences between the indices. For example, house prices rose by around 9% in Scotland and Yorkshire and Humberside in the year to 1998 Q1 according to the Nationwide index, whereas the Halifax index suggest that house prices fell in both regions during the period. And house prices rose more rapidly in East Anglia on the Halifax measure than the Nationwide. The reasons for the differences between the two indices were discussed in a box on page 19 of the February *Report*.

Surveys suggest that consumer confidence has been fairly stable in recent months. Confidence has moderated since summer 1997, however, when the majority of building society windfalls were paid out. The GFK index rose to +3.8 in April, up from +1.8 in March. This was below the level of +9.4 recorded in August 1997, but above its average of -1.3 since the survey began in 1995.<sup>(2)</sup> The decline in confidence since last summer has been attributed to falling optimism about household finances and the general economic situation. The most recent MORI survey, which lags the GFK by one month, reported a balance of +4 in March,

(1) The method for deriving this estimate was discussed in the box on page 19 of the February 1998 *Report*. The increase in house prices in 1997 Q3, measured on this basis, was revised up to 8.9%, from 7.9% at the time of the February *Report*.

(2) Respondents to the GFK survey are asked how the financial situation of their household compares with twelve months ago, and how they think it will change in the next twelve months; how they think the general economic situation has changed in the past twelve months, and how it is likely to develop in the next twelve months; and whether they think it is a good time to make major purchases. The weighted responses to each question are then summed, and the balance is obtained by taking the average over the total number of questions.

**Chart 2.9**  
Investment as a share of GDP<sup>(a)</sup>



(a) At constant prices.

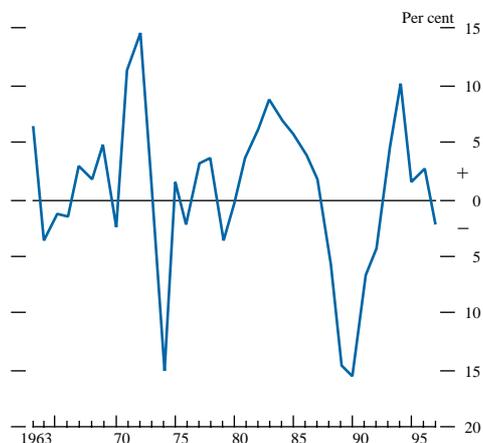
up from +2 in February. This was well below its peak of +28 in May 1997, but above its average of -6.5 since the recovery began in 1992.<sup>(1)</sup>

*Investment demand*

The 1997 Q4 National Accounts contained substantial upward revisions to investment in 1997. Annual real whole-economy investment growth was revised up to 4.8% from 2.7% in the previous data release, and was above the rate of growth expected by the MPC in the February *Report*. The ratio of business investment to GDP has risen more rapidly than the ratio of whole-economy investment to GDP since 1995 (see Chart 2.9). But the quarterly rate of growth of business investment slowed during 1997. Following the investment revisions, the MPC has taken the view that the economy is closer to its desired ratio of capital to output than previously thought. So the MPC expects that investment growth will be slightly slower than forecast at the time of the February *Report*, and that it is most likely to increase at broadly the same rate as in 1997.

One factor influencing investment behaviour is the return that the marginal investment needs to achieve to cover its costs. 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. The aggregate ratio was 1.4 in 1997, its highest since the late 1960s. But this measure may exaggerate the extent to which firms have an incentive to invest in physical capital, because it does not take into account factors such as the value of ideas and patents.

**Chart 2.10**  
ICCs’ financial surplus as a proportion of income



Investment is also influenced by firms’ profitability and real interest rates. The latter operate with a lag, and it is expected that the interest rate increases of last year will have a depressing effect on investment in 1998 and 1999. In addition, industrial and commercial companies (ICCs) were in financial deficit in 1997, for the first time in five years, as Chart 2.10 shows. This may explain weakening investment intentions. Firms generally finance investment from their retained earnings. A financial deficit suggests that savings are not sufficient to cover investment spending, and future spending plans may be cut back. Manufacturers’ plant and machinery investment intentions for the year ahead were negative for the first time in nearly five years, according to the CBI Quarterly Industrial Trends Survey in April. But the

(1) Respondents to the MORI survey are asked ‘Do you think general economic conditions will improve, stay the same or worsen in the next twelve months?’ The balance is calculated by subtracting the number of ‘worsen’ responses from the number of ‘will improve’ responses.

British Chambers of Commerce (BCC) survey suggested that service sector investment intentions rose slightly in 1998 Q1, and have been stronger than manufacturing sector intentions for the past six quarters.

### Stockbuilding

Stockbuilding, including raw materials, work in progress and holdings of finished goods, increased in 1997 Q4, though at a slower rate than in the previous quarter. This reduced GDP growth by 0.2 percentage points in 1997 Q4, and by 0.1 percentage points overall in 1997 (excluding the alignment adjustment). In 1990 prices, stocks rose by £2.2 billion in 1997, their smallest annual increase for four years (excluding the alignment adjustment). In making its projections, the MPC has assumed that the fall in the ratio of stocks to output since the early 1980s will continue at a moderate pace during the next two years, as stock-management techniques continue to improve.

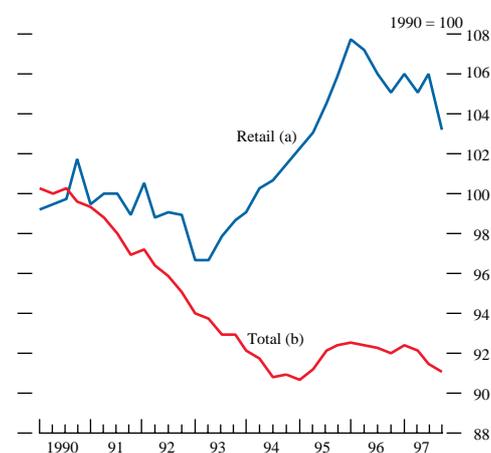
Retail stocks fell by around £170 million in 1997 Q4, the largest quarterly fall for more than six years. This contrasted with a cumulative increase in retail stocks during the first three quarters of the year of nearly £750 million, which followed the broadly upward trend in the ratio of retail stocks to sales since 1993 (see Chart 2.11). The significant price reductions in the January sales suggest that retailers had expected stronger sales and an even larger fall in retail stocks than actually occurred in 1997 Q4.

### Public sector demand

The PSBR for 1997/98 was £0.9 billion, compared with £22.7 billion in the previous fiscal year. This was the lowest borrowing requirement for six years. The PSBR outturn was £10 billion below the July 1997 Budget forecast. Revenues have been higher and spending lower than expected. Increased economic activity and asset price increases may have raised revenues. Some of the increase may also have reflected greater compliance following the introduction of tax self-assessment. Cyclical social security spending has been significantly lower than forecast in the July 1997 Budget, reflecting the subsequent fall in unemployment.

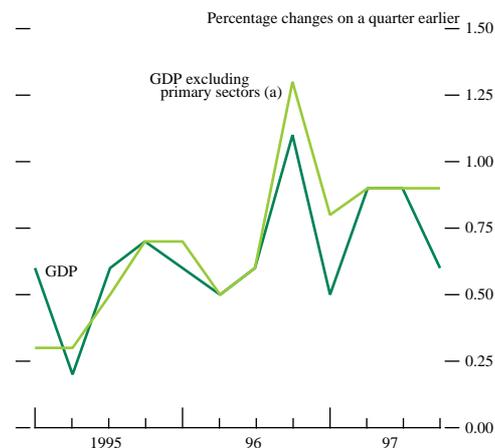
The Chancellor of the Exchequer introduced a Code for Fiscal Stability and fiscal rules in his March 1998 Budget to 'complement the openness, transparency and accountability that now characterises the framework for monetary policy'. The PSBR forecast for 1998/99 is

**Chart 2.11**  
Stock to sales ratio



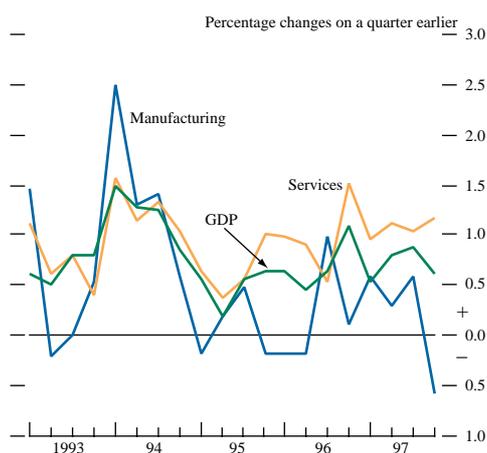
- (a) Level of retail stocks outstanding relative to quarterly retail sales. Excludes motor trades.  
 (b) Level of total stocks outstanding relative to quarterly total final sales. Total final sales are defined as domestic expenditure plus UK exports minus stockbuilding. Excludes alignment adjustment.

**Chart 2.12**  
**Quarterly growth of GDP and GDP excluding primary sectors<sup>(a)</sup>**



(a) Excludes agriculture, mining and utilities, with a total weight in GDP of 6.5%.

**Chart 2.13**  
**Quarterly growth of GDP by sector**



£2.3 billion, which has also been revised down. Pending the results of the Comprehensive Spending Review in July, the Chancellor has outlined three illustrative projections for 1999/2000. The MPC has incorporated the Chancellor’s spending projections into its forecast, including the central illustrative projection for 1999/2000. Effective tax rates are taken from the Chancellor’s Financial Statement and Budget Report projections.

## 2.3 Output

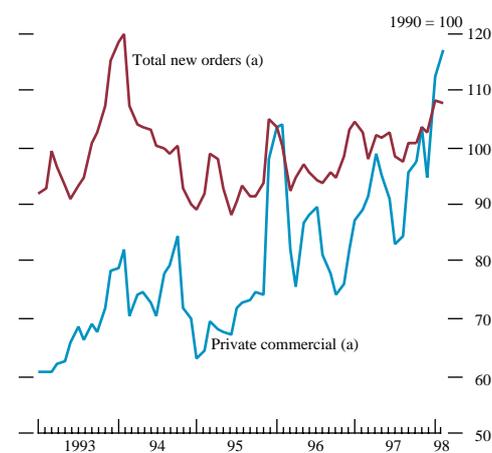
The preliminary estimate of real GDP in 1998 Q1 was 0.4% higher than the previous quarter and 2.8% higher than a year earlier, 0.2 percentage points below the MPC’s forecast in February. The MPC has considered the possibility that the output estimate for 1998 Q1 might be revised, especially given the evidence from surveys, and that the starting-point for the forecast might be higher than current estimates suggest.

As Chart 2.12 shows, when the primary sectors—agriculture, mining and utilities—are excluded, GDP grew more rapidly in the second half of 1997. The negative contribution of the primary sectors was partly related to the effects of mild weather on the energy sector. More rapid growth of GDP excluding the primary sectors is likely to have continued in 1998 Q1, partly because output of the energy extraction and supply industries fell in the first two months of the year.

The slowdown in GDP growth has come mainly from the manufacturing sector, whereas the service sector has continued to grow fairly rapidly (see Chart 2.13). Manufacturing output growth was flat in February, following a small rise in January, and the level of manufacturing output in February was the same as in June 1997. Recent survey evidence has confirmed this weak picture. The BCC survey showed a further weakening in manufacturing orders and deliveries in 1998 Q1, particularly for exports. The CBI Quarterly Industrial Trends Survey in April showed the weakest expectations for growth in manufacturing output since July 1993. And the CIPS manufacturing survey indicated a slight contraction in activity in April, for the first time since May 1996, mainly as a result of falling export orders.

Service sector output grew by 0.8% in 1998 Q1, and was 4.2% higher than a year earlier. This was slower than the rate of growth during the previous year, but much faster

**Chart 2.14**  
**Volume of construction new orders**



(a) Three-month moving averages.

than its historical trend. Survey evidence has pointed to continuing strong service sector growth. The CBI Financial Trends Survey showed a sharp increase in the volume of business in the three months to March, and improved expectations for the next three months. Though growth in service sector domestic activity and export sales slowed in 1998 Q1, according to the BCC survey, order books suggested continuing strong activity, and expectations of future job creation were high. And the CIPS survey recorded a further increase in service sector activity in April, reflecting a sharp rise in new business orders.

Construction sector output rose by 1.4% in 1997 Q4, following a fall of 0.2% in the previous quarter. The volume of new orders rose by 4% in the three months to February. The growth in new orders during the past year has been driven mainly by the private commercial sector, as Chart 2.14 shows. The CIPS survey of the construction industry indicated an increase in activity in April, for the thirteenth consecutive month, reflecting a further improvement in order books, though activity increased at a slightly slower rate than in the previous two months. More than half the firms surveyed expected their workloads to increase during the next twelve months. The strength in construction activity may partly reflect the pre-Millennium increase in projects funded by the National Lottery.

## 2.4

## Summary

The level of output in 1997 has been revised down since the February *Report*, and growth in 1998 Q1 was weaker than expected, at 0.4%. The MPC has assumed that domestic demand will moderate during 1998 and 1999. Consumption growth is expected to slow, as the unwinding of windfall spending, past monetary policy tightening and the tight fiscal stance take effect. Investment is expected to grow more slowly than forecast at the time of the February *Report*, following data revisions.

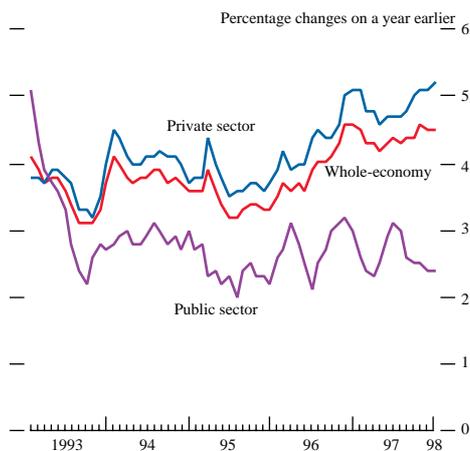
Sterling's appreciation is expected to weaken the net trade picture further during 1998. The MPC has maintained its assumption that developments in Asia will reduce UK output by around half a percentage point by the end of 1999 in the central case, though there remains some risk of contagion affecting other countries.

Earnings grew by 4.5% in the year to January 1998, broadly the same rate of growth as through much of 1997. The Workforce jobs series indicates that employment growth remained strong to the end of 1997. Private sector surveys suggest that this may have continued into 1998, at least in the service sector. But data from the Labour Force Survey (LFS) show that employment growth may have slowed in the first few months of 1998. The fall in unemployment has also been slower in the first few months of 1998 than at the end of 1997, according to both the claimant count and LFS measures.

### 3.1

### Nominal earnings

**Chart 3.1**  
Headline earnings growth



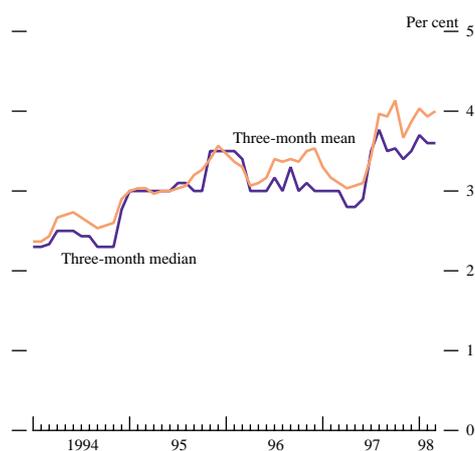
The headline rate for whole-economy average earnings growth was 4.5% in January 1998.<sup>(1)</sup> Though the rate of increase dipped temporarily in the middle of 1997, the trend has probably been flat for the past year (see Chart 3.1). A rate of around 4.5% is just about consistent with the current inflation target in the long run.<sup>(2)</sup> Public sector pay, which grew by 2.4% in January on an annual basis, has restrained aggregate growth; private sector earnings, by contrast, grew by 5.2% in the same period—the highest since 1992.

Unit wage costs accelerated in 1997 Q4, rising by 3.6% on a year earlier, compared with 3.2% in 1997 Q3. This is because output growth slowed, while employment growth remained strong and earnings growth was roughly constant. The 3.6% rise was faster than the rate of increase in both RPIX and the GDP deflator. When unit wage costs rise more quickly than prices, employment income rises as a share of GDP. This is unsustainable in the long run. But a rise in the labour share of income is usual at this stage of the cycle, as GDP growth slows and the labour market continues to tighten.

(1) The ONS has changed the way it presents average earnings data. A new headline rate replaces the underlying rate of change. Data for annual growth rates are now published to the nearest decimal place rather than the nearest quarter point. The latest monthly number for January is a centred moving average of actual data; before, it had incorporated a one month ahead forecast. In its April press release, the ONS also published private and public sector earnings separately for the first time.

(2) The MPC assumes that trend productivity grows at 2% a year, in line with its long-run average. Real wages must grow in line with productivity in the long run. So an inflation target of 2.5% implies average nominal earnings growth of 4.5% in the long run.

**Chart 3.2**  
**Employment-weighted wage settlements**



Source: Bank of England.

Wage settlements were higher in the first three months of 1998 than in the same period in 1997 (see Chart 3.2). Wage settlements contain some predictive power about future earnings growth. So nominal wage growth is likely to be higher in 1998 than in 1997. But settlements may also reflect past earnings growth. Earnings growth can be divided into two components: the increase accounted for by the basic settlement, and the change in the level of wage drift. Wage drift incorporates factors such as overtime payments, shift premia, bonuses, merit increases, profit-related pay and regrading of staff. The contribution of wage drift to earnings growth rose during 1996, but has been reasonably steady during 1997. Wage bargainers probably succeed in incorporating elements of past wage drift into basic pay at the time of the settlement. So some of the pick-up in settlements might reflect past wage drift.

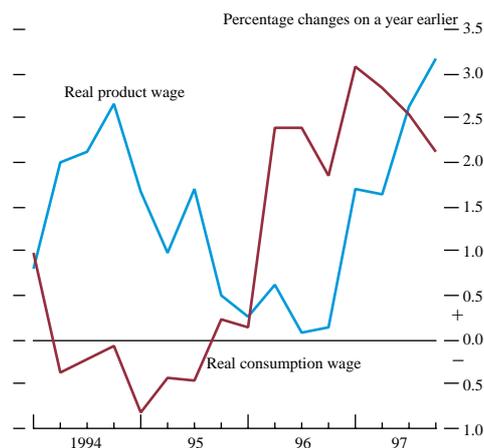
### 3.2 Real earnings

Wage bargainers negotiate future real wages and so need to form expectations about future price increases. Movements in these expectations will thus influence the growth of nominal earnings. Employees focus on what they expect to happen to retail prices, because these will determine the volume of goods and services they can buy with their nominal wages. Employers form expectations about the prices they will charge for the goods and services they produce, because it is those prices that affect how much firms can afford to pay their workers. If the prices of goods and services charged by domestic producers net of tax were expected to rise at a different rate from the prices of goods and services bought by workers, this could drive a wedge between the real wage employers pay (the real product wage) and the real wage employees receive (the real consumption wage). This might happen because of changes in indirect taxes or changes in export prices relative to import prices, for example. Changes in direct taxation, such as income tax or national insurance contributions, can also change the size of the wedge. An increase in the wedge, caused by a fall in the terms of trade<sup>(1)</sup> or an increase in taxation, would tend to reduce labour supply relative to demand, and so raise the level of real wage pressure in the economy. A smaller wedge would have the opposite effect.

Though measures of appropriate inflation expectations are imprecise or unavailable, calculations based on actual

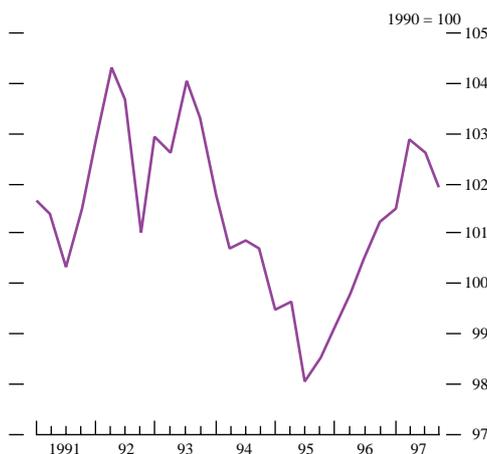
(1) The ratio of export prices to import prices, in sterling terms.

**Chart 3.3**  
Growth in real wages<sup>(a)</sup>



(a) The real product wage includes wages and salaries and employers' social security contributions per employee, and these are deflated by the GDP deflator at factor cost. The real consumption wage is wages and salaries per employee deflated by the tax and price index (TPI). The TPI measures changes in both retail prices and direct taxes.

**Chart 3.4**  
Terms of trade



**Table 3.A**  
Growth in number of employees by industry  
1997 Q4

	Percentage change on quarter	Percentage change on year
Agriculture and fishing	2.7	3.1
Mining, energy and water	-1.2	0.2
Manufacturing	0.0	0.0
Construction (a)	5.0	16.7
Services	0.7	2.1
<b>Total</b>	<b>0.7</b>	<b>2.3</b>

(a) These growth rates have been distorted in 1997 by reclassification of jobs from self-employment to employee status, which reflected revised guidance by the Inland Revenue on the treatment of sub-contractors.

inflation show that the wedge between the real product wage and the real consumption wage became smaller through 1996 and much of 1997 (see Chart 3.3). This was probably as a result of the reduction in the basic rate of tax from 25p to 24p from April 1996; and the increase in the terms of trade during 1996 may also have contributed. But in the second half of 1997, the wedge became bigger, as the growth in the real product wage outpaced the growth in the real consumption wage; though the basic tax rate was cut by a further 1p in April 1997, the terms of trade fell (see Chart 3.4). So changes in the wedge were probably first a downward influence and then an upward one on real wage pressure during 1997.

### 3.3 Explaining real earnings behaviour

#### Labour market tightness

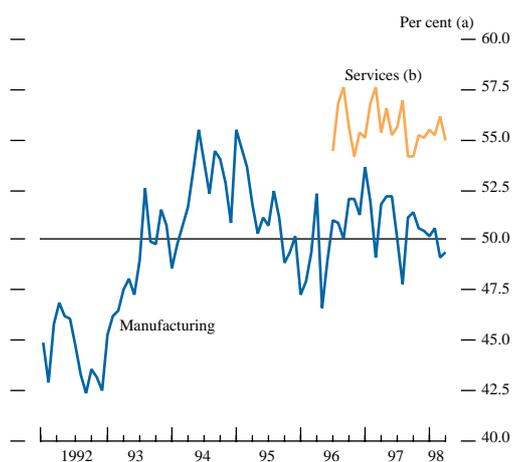
In the long run, changes in real wages are determined by changes in productivity. But in the short run, real wages are also influenced by the degree of labour market tightness. The labour market has continued to tighten, according to most data published in the past three months. Employment grew by 0.5% or 121,000 in 1997 Q4, compared with 0.4% or 110,000 in 1997 Q3, according to the ONS's Workforce jobs measure.<sup>(1)</sup>

The employment data present the same picture of a two-speed economy in 1997 as the output data (see Section 2). The number of manufacturing employees was essentially the same at the end of 1997 as at the end of 1996. But the number of service sector employees was 2.1% higher (see Table 3.A). Recent survey information indicates that these trends may have continued into 1998. The CBI Industrial Trends Survey for April indicated little change in manufacturing employment during the past four months. The Chartered Institute of Purchasing and Supply (CIPS) suggests that manufacturing employment has been broadly flat for the six months to April (see Chart 3.5). But the CIPS survey for the service sector is consistent with continuous strong employment growth since the survey began in 1996.

Employment intentions have also remained strong, according to the British Chambers of Commerce and the recruitment company Manpower. The British Chambers

(1) This series replaces the ONS's 'Workforce in Employment' series. The main difference is that the Workforce jobs measure includes second jobs where the worker is categorised as an employee in the main job and as self-employed in the second.

**Chart 3.5**  
CIPS survey



Source: The Chartered Institute of Purchasing and Supply.

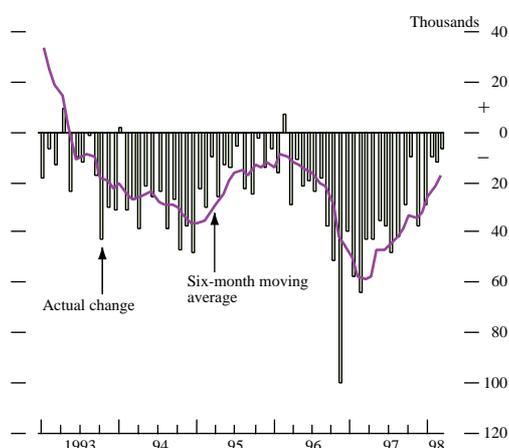
- (a) Respondents were asked to compare the level of employment at their unit with the situation one month ago. A result greater than 50 indicates an increase in employment.  
 (b) The services series began in July 1996.

**Table 3.B**  
Labour Force Survey data

Percentage change on previous three months, unless otherwise stated

	Sept.-Nov. 1997 Autumn	Dec.-Feb. 1998 Winter
Total employment	0.4	0.2
Employees	0.6	0.3
Self-employed	-0.5	0.2
Total hours	0.9	-0.7
Unemployment (000s)	1,913	1,861
Change on previous three months (000s)	-129	-52
Unemployment rate (percentage of workforce)	6.6	6.4

**Chart 3.6**  
Monthly changes in UK claimant count unemployment

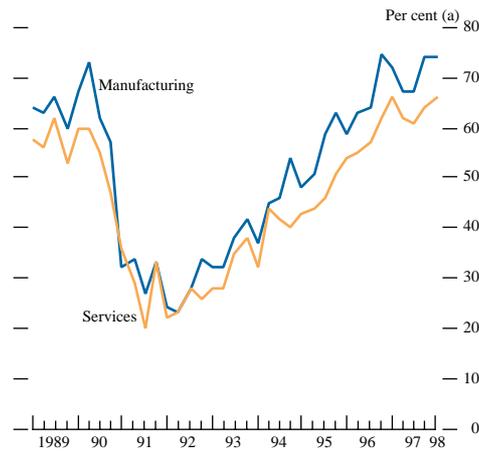


of Commerce survey for 1998 Q1 showed a rise in the balance of service sector respondents expecting to increase employment in the second quarter. But this series has a seasonal pattern, and allowing for this, the series has probably been roughly flat for the past two quarters, albeit at a high level. This implies strong expected service sector employment growth in 1998 Q2. Manufacturing companies' balance of responses to the same question continued to decline, even after taking account of seasonal variation. CBI members expected a fall in manufacturing employment in the next four months, according to the April Industrial Trends Survey. The balance of responses to the Manpower survey also has a pronounced seasonal pattern, but the latest observation, which records intentions in the whole economy for the three months to the end of June 1998, was above the figure for the same period last year, and was the highest Q2 figure since 1989.

In contrast with other surveys, LFS data suggest that employment growth may have slowed in the first few months of 1998 (see Table 3.B). The LFS also contains information on total hours worked. In principle, hours data are a better measure of labour usage than employment, because they reflect changes in overtime and the balance between full-time and part-time workers. Total hours worked fell by 0.7% in December to February 1998, compared with the previous three months. But it is probably premature to infer from this that labour market tightening has come to an end, as the number fell slightly in the same months one year earlier and subsequently rose over the following nine months.

Unemployment data from both the LFS (see Table 3.B) and the claimant count (see Chart 3.6) also suggest that the labour market tightening may be slowing. Claimant unemployment fell by an average of 9,000 a month in 1998 Q1, to 4.9% of the workforce in March. This was much less than the average fall in the second half of 1997 (see Chart 3.6). LFS unemployment fell by 52,000 in the winter. This was a smaller fall than in the autumn months (see Table 3.B). The MPC has decided that the LFS measure of unemployment is a better measure of labour market tightness to guide its central projection for inflation than the non-employment rate (the proportion of the population of working age not in employment), which it used for the February *Report*. This change means that one of the upside risks to inflation in the February projection has now been included in the central case.

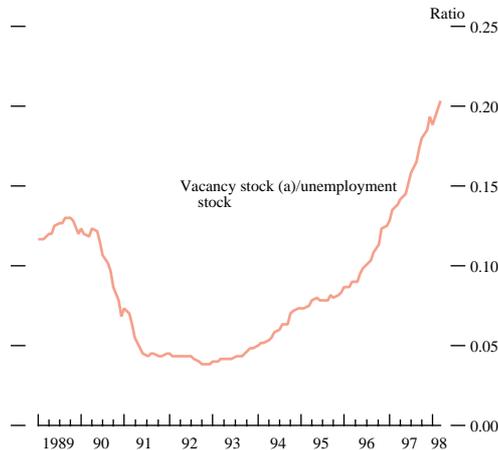
**Chart 3.7**  
**Recruitment difficulties**



Source: BCC.

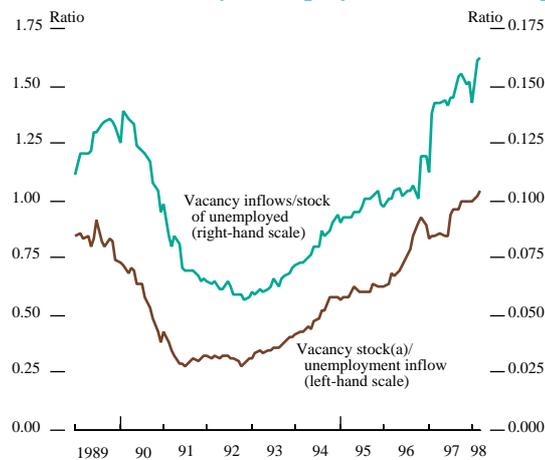
(a) Percentage of respondents answering 'yes' when asked whether they have experienced recruitment difficulties.

**Chart 3.8**  
**Vacancy/unemployment ratio**



(a) Adjusted to allow for the overstatement in the stock and the ONS's subsequent correction.

**Chart 3.9**  
**Stock-flow vacancy/unemployment relationships**



(a) Adjusted to allow for the overstatement in the stock and the ONS's subsequent correction.

Surveys of skill shortages show that the labour market remains tight. The BCC survey for 1998 Q1 suggests that recruitment difficulties have worsened during the past two quarters in the service sector, but are at a similar level as the same time last year (see Chart 3.7). Manufacturing recruitment difficulties have remained flat during the past two quarters. The CBI data on skill shortages in manufacturing showed little change between the January and April surveys, though shortages of 'other labour' fell markedly. The CIPS construction report for May said that skill shortages were again apparent, and that the availability of sub-contractors had declined; but the rate of decline had slowed during the past four months.

The introduction of new computer software at job centres in 1996 led to an overstatement in the measured stock of vacancies; more recently, the profile of the data has been distorted by the ONS's attempts to correct for this. Moreover, the 8,000 fall in January and the subsequent 9,000 rise in February were probably caused by the early count in January, which temporarily depressed the number of newly notified vacancies. Abstracting from these problems, the underlying level of vacancies probably rose by around 25,000 during the past six months, a slightly faster rate of increase than over the previous six months.

The stock of vacancies is typically expressed as a ratio to unemployment in order to gauge labour market tightness. This ratio can be interpreted as a comparison of the unsatisfied demand for labour with the available supply. On this interpretation, Chart 3.8 shows that the labour market tightened sharply during 1996 and 1997, and is much tighter now than in the late 1980s. The problem with this measure, however, is that it implicitly assumes that unfilled vacancies from the existing stock are mainly taken by the existing stock of unemployed people. It can be argued that the vacancies from the existing stock are more usually taken by people who have become unemployed in the past month, while those unemployed for more than a month are more likely to find jobs from newly notified vacancies than from the existing stock.<sup>(1)</sup> This suggests some alternative measures of labour market tightness: the stock of vacancies as a ratio of the inflow into unemployment, and the vacancy inflow as a ratio of the stock of unemployment. They also show (see Chart 3.9) that the

(1) See for example, Coles M G and E Smith (1994) 'Marketplaces and Matching', Centre for Economic Policy Research Discussion Paper, No 1048.

## Reforms affecting the labour market

The Government is introducing a number of measures affecting the labour market.

### Welfare to Work

The March Budget extended the Welfare to Work scheme, designed to bring the unemployed and other disadvantaged people into employment. Additionally, policies will be introduced in 1999 to make employment more financially attractive, by reducing the effective marginal tax rates of some income groups: a Working Families Tax Credit was announced, to replace Family Credit; and step changes in the incidence of National Insurance will be smoothed out.

### Minimum wage

The Low Pay Commission (LPC) is due to recommend a level or levels for the minimum wage to the Government by the end of May. The Government is likely to announce its decision shortly afterwards. The LPC can recommend one national rate or a series of rates for people of different ages or training status. But the Government has explicitly ruled out different minimum wages by regions or industries. It expects to introduce a national minimum wage in April 1999.

Tables A and B set out estimates of the number of people affected by hypothetical levels of the minimum wage, how this would change if different age groups were excluded, and the impact on the wage bill assuming no employment effects or differential restoration. They show that the effect of the minimum wage is likely to be sensitive to its level and the groups to which it applies. For example, if the minimum wage were set at £3.30 for

**Table A**  
Number of employees directly affected by the minimum wage<sup>(a)</sup>

	Ages covered by the minimum wage	Coverage per cent of employees	Coverage millions
£3.85	All	14	3.1
	20+	10	2.3
	25+	8	1.8
£3.50	All	10	2.2
	20+	7	1.6
	25+	6	1.2
£3.30	All	8	1.8
	20+	6	1.3
	25+	4	1.0

(a) The distribution of earnings for these calculations has been derived using LFS data for 1997, adjusted for expected wage inflation up to the introduction of the minimum wage in April 1999, and for estimates of downward bias in LFS earnings data.

**Table B**  
The direct effect of the minimum wage on the wage bill<sup>(a)</sup>

	Ages covered by the minimum wage	Percentage point effect on earnings growth
£3.85	All	1.2
	20+	0.9
	25+	0.7
£3.50	All	0.9
	20+	0.6
	25+	0.5
£3.30	All	0.7
	20+	0.5
	25+	0.4

(a) See footnote on Table A above.

people 25 and over (with no rate for the under 25s), it would affect 4% of employees directly and add 0.4% to the wage bill. But a minimum wage of £3.85 for all would affect 14% of employees and add 1.2% to the wage bill directly.

labour market is tighter now than in the late 1980s, but not to the same degree as the vacancy/unemployment ratio in Chart 3.8.

### Other factors affecting real earnings

The Government has announced a number of reforms affecting the labour market (see the box). These reforms will have important long-run implications for the structure of the economy, including the natural rate of unemployment.

The national minimum wage is likely to be the most significant of these measures in respect of inflationary pressure in the short to medium term. Though the details of the policy are crucial for determining the scale of the impact, the minimum wage is likely to increase the

inflationary pressure in the economy by raising wages directly and also indirectly as other workers try to restore differentials, and as firms seek to mitigate the effect by raising prices. To the extent that inflationary pressure is increased, monetary policy will have to be tighter than would otherwise be the case to meet the prescribed inflation target of 2½%.

The MPC has decided that the Government's reforms affecting the labour market should be considered together. However, the MPC has deferred a quantitative assessment of their likely impact on inflation until an announcement of the level and coverage of the national minimum wage has been made by the Government. The MPC's central projection for inflation in this *Report*, and the risks surrounding it, therefore do not allow for possible effects arising from the introduction of the national minimum wage and other reforms affecting the labour market.

### 3.4

### Summary

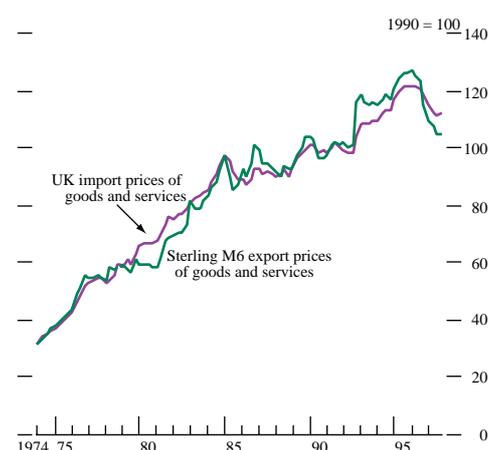
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The labour market continues to tighten, according to data published during the past three months. But it is likely that the pace of tightening has slowed: this is suggested by the results of the Labour Force Survey, the unemployment claimant count and skill shortages. Other interpretations of the recent past are possible, but less likely. Some data, such as the 'hours worked' series, could be interpreted as showing that the labour market has begun to loosen. But information from vacancies, private sector surveys and the less timely Workforce jobs series suggests that the speed of tightening has not diminished.

The labour market is unlikely to tighten much further, according to the MPC's central projection, but nor is there expected to be a substantial rise in unemployment over the next two years. Nominal earnings growth is expected to rise. But the projected depressing effect of sterling's appreciation on import prices and hence retail prices is likely to lower inflation expectations and partly offset the effects of labour market pressures on nominal earnings growth during the next twelve months.

Cost pressures in the goods sector remained subdued during the past three months, because of falling import and commodity prices. But cost pressures in the service sector were stronger and appear to be rising. Annual retail price inflation fell in 1998 Q1, as expected at the time of the February *Report*. Because there have been two Budgets within nine months, indirect tax changes will distort RPIX inflation upwards between April and July this year. RPIY inflation, which adjusts for indirect tax changes, is likely to fall in 1998 as lower import prices feed through to retail prices.

**Chart 4.1**  
UK import prices and export prices of the major six overseas economies<sup>(a)</sup>



Sources: ONS and Bank for International Settlements.

(a) The major six overseas economies (M6) are the G7 excluding the United Kingdom. Export prices of goods and services are derived from the National Accounts. Prices are expressed in sterling terms and are UK trade-weighted.

## 4.1 Import prices and the exchange rate

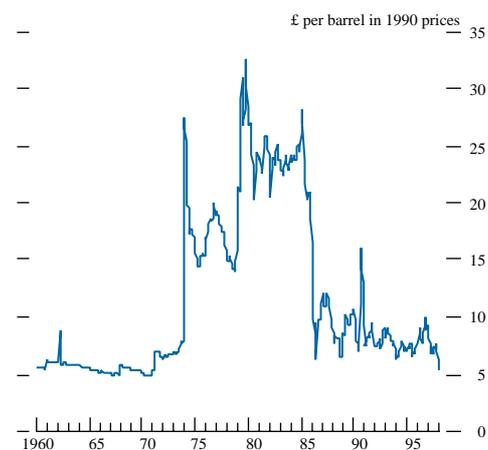
The prices of imported goods and services were 5.6% lower in 1997 Q4 than a year earlier. More recent monthly data for imported goods show that their prices were broadly flat between December and February. UK import prices of goods and services tend to be closely related to the prices of goods and services that the other G7 countries<sup>(1)</sup> export worldwide, expressed in a common currency. Though divergences are common, they do not tend to persist.<sup>(2)</sup> In 1997, however, UK import prices fell by much less than overseas export prices (see Chart 4.1). If the explanation for this divergence were lower export prices from the non-G7, the other G7 countries would probably have experienced the same phenomenon as the United Kingdom, which does not seem to be the case.

Foreign exporters to the United Kingdom appear to have used sterling's appreciation as an opportunity to widen their margins, possibly reflecting the strength of UK demand. This has reduced the initial impact of sterling's appreciation on retail prices. The MPC's inflation projection assumes that import prices will fall further during 1998 as the lagged effect of sterling's appreciation feeds through. The timing and extent of this adjustment are uncertain. This is partly because there are few previous episodes when sterling has

(1) The G7 are Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

(2) There was a persistent divergence in the early 1980s, when the oil price was high. The recent fall in the oil price, other things being equal, would have reduced UK import prices relative to export prices in the other G7 countries (because they do not export oil). So the recent divergence shown in Chart 4.1 is even harder to explain.

**Chart 4.2**  
**Price of oil relative to the RPI<sup>(a)</sup>**



Sources: International Petroleum Exchange and ONS.

(a) One-month future price of Brent crude.

appreciated by so much and for so long. The response of import prices will depend on whether the rise in sterling is viewed by price-setters as temporary or permanent. For example, if the appreciation is viewed as temporary, exporters to the United Kingdom might leave their sterling prices unchanged while sterling is temporarily high, though this seems increasingly unlikely the longer sterling's appreciation persists.

## 4.2 Raw material and commodity prices

The sterling price of Brent crude oil fell between January and April. The one-month future price reached a nine-year low of around £7½ a barrel in mid March, and then rose after agreements by some of the major oil-exporting countries to reduce production. But relative to the retail price index, the sterling price of Brent crude oil in March was back to its level prior to the first oil shock in 1974 (see Chart 4.2). The recent fall reflects the turmoil in Asia, the unusually warm Northern-hemisphere winter, and the increase in Iraq's oil export allowance under the UN food-for-oil deal.

Other commodity prices have also fallen this year. The Bank's non-oil commodity price index, which weights together commodities according to UK demand, fell by around 1½% between December and March. Since its peak in March 1996, the index has fallen by 15%. In part, this reflects sterling's appreciation, but it also reflects lower world prices of commodities. The Economist non-oil commodity price index in dollars has fallen by 12% since March 1996.<sup>(1)</sup>

The European Commission's proposed Agenda 2000 package, if accepted, will reduce the market support price for a number of commodities under the Common Agricultural Policy. Some press reports may have overestimated the likely effect on retail food prices, which will be smaller than the reduction in the market support prices because of four factors. First, not all produce is purchased at the intervention price. Second, a reduction in European surpluses of agricultural products may raise world prices of these products. Third, food raw material costs are a small proportion of the retail value of food items (because of processing and packaging costs), so the effect on retail food prices will be reduced further. And fourth, not all agricultural products are covered by the Common Agricultural Policy. According to the Ministry of Agriculture,

(1) The Economist index's weights are not based on UK demand, and its coverage is more restricted than the Bank's commodity price index. So changes in these indices cannot be directly compared.

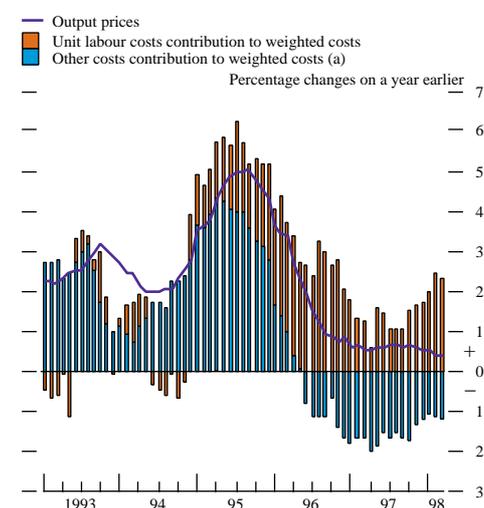
**Table 4.A**  
CIPS service sector balances<sup>(a)</sup>

	1997	1998			
	Q4 average	Jan.	Feb.	Mar.	Apr.
Input prices	58.0	58.8	58.3	58.2	58.9
Outstanding business	52.9	53.3	54.8	53.7	52.3
Prices charged	50.8	51.8	52.2	52.5	51.7

Source: CIPS.

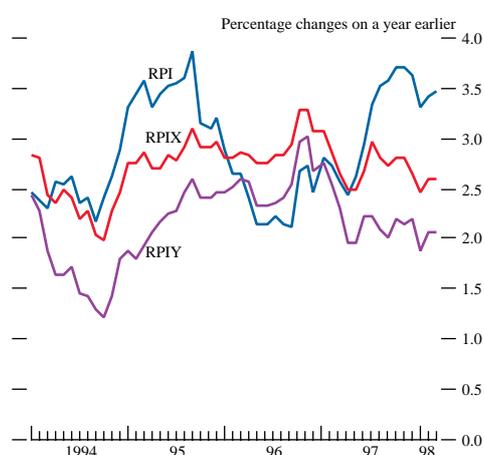
(a) A reading of above 50 denotes positive growth on the month.

**Chart 4.3**  
Manufacturers' weighted costs and prices



(a) Other costs include bought-in services and physical imports.

**Chart 4.4**  
Inflation<sup>(a)</sup>



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.

Fisheries and Food, the direct effect of the Commission's proposals would reduce the RPI by 0.3% over several years, starting in 2000.

### 4.3 Costs and prices in the service sector

In the service sector, cost pressures have probably risen during the past three months. The British Chambers of Commerce survey reported a slight increase in the balance of service sector firms operating at full capacity in 1998 Q1. And the amount of business not immediately fulfilled continued to rise in the past three months, according to the Chartered Institute of Purchasing and Supply (CIPS) survey. The CIPS survey's index of average input prices (which includes labour costs) and the index of prices charged were virtually unchanged between January and April (see Table 4.A).

### 4.4 Costs and prices in manufacturing

Input prices in the manufacturing sector fell in 1998 Q1, reflecting the falls in commodity prices already discussed. Input prices have fallen by 16% during the past two years, largely because of sterling's appreciation. Output prices (excluding excise duties) have also started to fall: they were 0.3% lower in March than at the end of 1997. In January, the annual inflation rate was its lowest since the series began in 1974. Survey data suggest that manufacturing prices will fall further. The CBI Industrial Trends Survey in April reported that the balance of firms expecting to increase prices during the next four months was its lowest since the survey began in 1959.

Despite the fall in manufacturers' input prices, their weighted costs rose in 1998 Q1. This was largely because unit labour costs rose significantly (see Section 3 and Chart 4.3). This implies that manufacturers' profit margins on domestic sales narrowed in 1998 Q1. And their profit margins on export sales have fallen significantly during the past two years as sterling has appreciated.

### 4.5 Retail prices

Retail prices excluding mortgage interest payments (RPIX) rose by 2.6% in the twelve months to March (see Chart 4.4). The outturn for 1998 Q1 was lower than in 1997 Q4, in line with the central projection in the February Report. The difference between goods and services price inflation persists: in March, RPIX goods

price inflation was 2.0%, compared with 2.9% for services price inflation. This difference is even wider excluding excise duties.

Because of the changed timing of the Budget this year, the increase in fuel duties in March will temporarily add around 0.3 percentage points to RPIX inflation in April, if passed on in full to the consumer. That rise should be reversed in July, when the effect of last July's Budget increase in fuel duties drops out of the annual inflation rate. The March measures were not anticipated in the February projection, so the latest projection for RPIX inflation is higher between April and July. The headline inflation rate (RPI) will increase by even more than RPIX inflation in April, because of the reduction in mortgage interest relief at source. But that will be counteracted as the effect of last year's interest rate increases drops out of the RPI annual inflation rate.

These factors will not directly affect RPIY inflation, because it excludes taxes and mortgage interest payments (though RPIY might be affected if retailers do not fully pass on the tax changes at once). So any changes in RPIY inflation during the next few months will be a better indicator than changes in RPIX or RPI inflation of underlying inflationary pressure. RPIY inflation fell by around  $\frac{3}{4}$  percentage point in the first half of 1997, but has since been flat at around 2%; it was 2.1% in March 1998. Shorter-run measures of inflation suggest that RPIY might fall during the next few months (see Table 4.B).

The MPC's assumption on pricing behaviour affects the short-run profile of the inflation projection. Import prices continue to fall during 1998 in the projection. And the current projection assumes that changes in import prices take some time to feed through fully to retail price inflation, with the majority of the effect in the first year. So inflation is likely to be reduced by the continued effects of sterling's appreciation throughout the projection period, though the effect is largest in 1998.

**Table 4.B**  
**RPIY inflation**

Percentage changes

	1997			1998		
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Three-month annualised (a)	3.1	3.2	2.7	1.5	1.3	1.3
Six-month annualised (a)	2.9	3.0	2.7	2.3	2.2	2.0
Twelve-month	2.2	2.1	2.2	1.9	2.1	2.1

Sources: ONS and Bank calculations.

(a) Seasonally adjusted by the Bank.

**Table 4.C**  
**Annual inflation**

Percentage increase in prices on a year earlier

	1996	1997				1998
	Dec.	Mar.	June	Sept.	Dec.	Mar.
HARP (a)	3.8	3.4	3.3	3.3	2.8	2.9
THARP (a)	3.6	3.1	3.1	3.0	2.6	2.5
Trimmed mean (b)	2.8	2.6	2.5	2.4	2.3	2.3
Median (b)	2.3	2.2	2.1	2.1	2.2	2.0
HICP (c)	n.a.	1.7	1.7	1.8	1.8	1.6

Sources: ONS and Bank calculations.

(a) These measures, which contain a measure of owner-occupied costs, use the Halifax house price index. HARP and THARP would show higher inflation rates using either the Nationwide house price index or the estimate of house prices based on Land Registry data.

(b) These measures provide a guide to underlying inflation by stripping out the most extreme changes in prices at both ends of the distribution.

(c) Harmonised index of consumer prices.

## 4.6

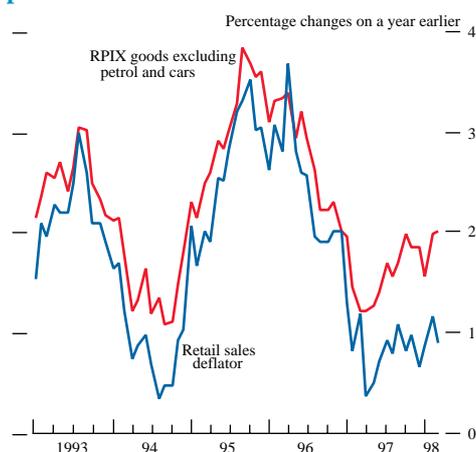
## Other price indices

Other measures of inflation have broadly followed RPIY inflation during the past year or so (see Table 4.C). Most of them fell in the first half of 1997, and have been flat during the past nine months. Inflation measured by the GDP deflator at factor cost fell sharply during 1997, from 3.5% at the end of 1996 to 1.3% in 1997 Q4. This was much lower than the annual RPIX inflation rate in

1997 Q4, partly because of the increase in taxes and the low rate of investment goods inflation.

The Harmonised Index of Consumer Prices (HICP) inflation rates are the most directly comparable across EU Member States. The UK HICP inflation rate has been broadly stable at around 1<sup>3</sup>/<sub>4</sub>% during the past year (see Table 4.C). The average HICP inflation rate across the 15 EU Member States was similarly flat at around 1<sup>3</sup>/<sub>4</sub>% during 1997, but fell to 1.3% in March.

**Chart 4.5**  
Retail sales deflator and RPIX goods excluding petrol and cars



The goods component of RPIX, excluding petrol and cars, corresponds very closely to the basket of goods in the retail sales deflator. Inflation measured by these two indices tends to be very similar. But during the past couple of years, the retail sales deflator has suggested much lower inflation (see Chart 4.5). Part of the reason for the recent divergence is the lower weight of food in the RPIX; food prices fell, or rose slowly during 1997. Because the RPIX weights are based on more recent expenditure patterns, this suggests that inflation measured by the retail sales deflator is biased downwards; its weights are based on 1992 data.<sup>(1)</sup>

## 4.7

## Summary

Import prices have not yet fully reflected the appreciation of sterling since mid 1996, but adjustment still seems to be taking place. Commodity prices have continued to fall in the past three months, and this has been reflected in lower input prices to the manufacturing sector. Cost pressures appear to be rising in the service sector, which is less exposed than the goods sector to international competition. Retail price inflation in 1998 Q1 was lower than in 1997 Q4, as expected at the time of the February *Report*. RPI and RPIX inflation are likely to rise between April and July, because of the changed timing of the consecutive Budgets' increases in excise duties. Adjusting for that, inflation is likely to fall gradually during 1998 as lower import prices are passed through to retail prices.

(1) Out-of-date weights would tend to bias inflation upwards, because expenditure would probably switch towards goods with lower inflation. But expenditure on food, as a proportion of total consumption, has been on a downward trend since 1955.

# 5 Monetary policy since the February Report

This section summarises the economic news and the monetary policy decisions taken by the MPC since the February Report. The minutes of the February, March and April MPC meetings are attached as an Annex to this Report. The Bank of England's official dealing rate—the repo rate—has remained at 7.25% since the February Report.

At the time of the February Report, the balance of risks in the projection implied that it was more likely than not that a modest further rise in interest rates would be necessary at some point to hit the inflation target, looking two years or so ahead. There were, however, very significant uncertainties about the magnitude of the slowdown in the economy. The considerations that affected monetary policy were finely balanced, and the Committee voted to leave rates unchanged.

At its meeting on 4–5 March, the Committee discussed the most recent broad money data, which showed signs of a deceleration. The three and six-month annualised rates were both around 8%, and the twelve-month growth rate had fallen since the middle of 1997 (see Section 1). A slowdown was to be expected given the earlier policy tightening, but it was unclear whether the degree of tightening was sufficient for inflation to hit the target.

**Table 5.A**  
**Real consumption growth**

Percentage change on previous half year

	1995		1996		1997	
	H1	H2	H1	H2	H1	H2
Real consumption	0.8	0.8	2.3	1.7	2.5	2.3

The trend in consumption growth since the middle of 1997 was difficult to identify, because of distortions caused by the funeral of Diana, Princess of Wales. Smoothing over the third and fourth quarters suggested a gradual slowdown (see Table 5.A). December and January retail sales showed the strongest Christmas/New Year period growth since 1989. But January's strength in volumes had partly reflected aggressive price discounting by stores. Income from employment and financial asset prices continued to rise strongly, and consumer confidence remained high. This suggested continuing robust consumption growth.

The Committee noted that the divergence between ONS data and surveys of manufacturing output had become more pronounced. ONS data recorded a fall of 0.4% in

Q4 manufacturing output. Surveys, however, indicated positive, but weakening, growth.

The MPC thought that there had not been much news since it had finalised the February *Report*, and so the considerations were broadly the same as at its 4–5 February meeting. The Committee voted to leave rates unchanged.

At its meeting on 8–9 April, the Committee discussed the latest asset price movements. The FT-SE 100 had risen by 6% during March, and wider indices, such as the FT-SE 250, had also risen. Part of the rise in share prices was probably related to the fall in real interest rates in March. The higher share prices would clearly increase consumption, but it was unclear by how much (see Section 2).

Sterling had appreciated by 2% since the March meeting. It was difficult to explain this by changes in interest rate expectations; the Committee considered other possibilities. These included: uncertainty surrounding future monetary policy of the European Central Bank; diversification away from currencies within prospective Economic and Monetary Union; and a re-rating of the UK economy. But it was difficult to see what news might have led to a rise in sterling since the previous meeting.

The third release of National Accounts data for 1997 Q4 included a number of revisions, going back as far as 1996 Q1. These had brought the numbers more into line with projections contained in earlier *Reports*, with upward revisions to consumption and investment and downward revisions to government spending and net trade (see Section 2). But the level of GDP in 1997 Q4 was now thought to be 0.2% lower than previously estimated.

The Committee discussed the March Budget. The Budget measures had been broadly neutral in macroeconomic terms. The PSBR undershoot in 1997/98 was equivalent to about 1% of GDP. This might have reflected a higher effective tax rate than previously expected, which would continue to depress aggregate demand in 1998/99. Or the fiscal outturn might signal higher activity than had been recorded in the official data.

Underlying average earnings growth for November and December had been revised down from 4<sup>3</sup>/<sub>4</sub>% to 4<sup>1</sup>/<sub>2</sub>%,

and remained at that rate in January. This was somewhat surprising given the continued tightening of the labour market, though it might take time for tightening to be reflected in earnings. In the late 1980s, earnings growth had not been an early indicator of a pick-up in inflation, so waiting for earnings to accelerate would mean reacting too late. Or the latest data could suggest a more benign conjuncture, and be consistent with a lower natural rate of unemployment. It was also possible that the better-than-expected combination of unemployment and earnings reflected a fall in inflation expectations.

A detailed discussion of the arguments for and against an interest rate rise in April are in the minutes of that meeting, contained in the Annex to this *Report*. The Committee again decided to leave interest rates unchanged.

At the time of the May MPC meeting, the first estimate of GDP growth in 1998 Q1 was 0.4%, slightly lower than projected at the time of the February *Report*. The slowdown in Q1 was largely due to slower service sector growth. Output of the energy and extraction industries was depressed by the mild weather.

**Table 5.B**  
**Changes in the labour market<sup>(a)</sup>**

Changes on previous quarter in thousands

	1996	1997			
	Winter	Spring	Summer	Autumn	Winter
LFS employment	148	104	98	107	41
LFS unemployment	-115	-97	-41	-129	-52

(a) The winter LFS data cover December, January and February.

The Labour Force Survey (LFS) suggested that the pace of labour market tightening had slowed. The rise in LFS employment in the three months to February was 41,000, compared with 107,000 in the previous three months. And the latest fall in LFS unemployment was also smaller than in previous quarters (see Table 5.B).

At its meeting on 6–7 May, the Committee decided to leave the repo rate unchanged at 7.25%.

## 6.1 The inflation projection assumptions

The Monetary Policy Committee's projection for inflation is based on the assumption that official rates will remain unchanged at 7.25% during the next two years. The projections were agreed by the Monetary Policy Committee (MPC) on 7 May.

New projections from the IMF and OECD have been published since the February *Report*, and entered the assumptions about overseas activity and inflation made by the MPC. The MPC retained the central assumption used in the February projection about the likely effect of Asian turbulence on the UK economy. The impact on UK net exports is expected to reduce the level of GDP by just under half a percentage point by 1999, taking into account the anticipated monetary policy response in the industrialised world. Once the effects of the Asian crisis have been allowed for, the central projection for GDP growth in the UK trade-weighted major six overseas economies<sup>(1)</sup> is around 2½% in both 1998 and 1999.

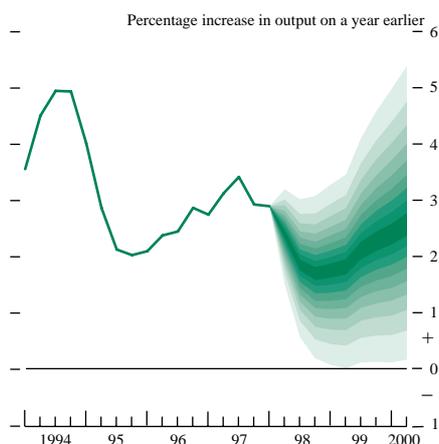
The sterling effective exchange rate index averaged 106.2 in the 15 working days up to and including 6 May and this formulation, as in earlier *Reports*, is the starting-point used for the projection (the rate had fallen to around 104 on 7 May). That compares with an average of 104.9 at the time of the February MPC meeting, and around 104 assumed for May on the basis of interest rate differentials at the time of the February *Report*. The starting-point for the exchange rate is therefore just over 2% higher than assumed in February. The discussion in Section 1 of the *Report* highlights the continuing difficulty in explaining the appreciation of sterling since its trough in August 1996 in terms of movements in yield curves. The forecast assumes that the most likely profile for sterling is that it depreciates from its starting-point at a rate implied by the difference between constant UK interest rates and expected overseas interest rates as implied by the market, reaching an index level of around 103 by the end of the forecast period. That level would be consistent with a rate of

(1) The G7 excluding the United Kingdom (Canada, the United States, Japan, France, Germany and Italy).

around 1.67 against the dollar and 2.91 against the Deutsche Mark. The MPC has maintained its assumption that there is an asymmetric risk of the exchange rate depreciating more than in the central case, as portfolio and erratic factors unwind. So the mean, or expected value, of the effective exchange rate at the end of the forecast period is around 96, some 7% lower than in the central case.

The rise in UK and overseas equity prices during the past few years, like the appreciation of sterling, has been hard to explain in terms of observable economic fundamentals. The central assumption is that the rise in equity prices persists, and is a factor supporting robust consumption growth. It is assumed that the level of equity prices rises in line with nominal GDP growth over the forecast period. This assumption may imply a lower rate of increase in equity prices than markets are currently anticipating. As in February, the MPC continues to assume that on balance there is a greater risk of a fall in equity prices than of a further rise, relative to the central case.

**Chart 6.1**  
Current GDP projection based on constant nominal interest rates



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.

## 6.2 The medium-term inflation projection

Chart 6.1 shows the MPC's probability distribution, assuming constant nominal interest rates, for the four-quarter growth rate of GDP during the next two years.<sup>(1)</sup> The outcome for GDP growth regarded as most likely by the MPC is shown by the central band (with the darkest shading), which contains 10% of the probability distribution. The central projection is that the annual rate of growth will continue to decline through the remainder of 1998, before rising again towards the end of the forecast horizon. As usual, the probability distribution for output growth reflects a great deal of uncertainty (including uncertainty that exists at the start of the forecast period, because published data for output and expenditure are subject to further revision by the ONS).

The level of GDP throughout the forecast period is about half a percent lower than in the February projection, partly reflecting the National Accounts revisions to GDP and weaker-than-expected reported growth in the first quarter. The lower output profile also reflects weaker investment and exports than projected at the time of the February *Report*. There is no evidence so far to suggest that consumption growth is likely to be different from the rate expected three months ago.

(1) Shown as Chart 1 in the Overview.

Domestic demand growth is expected to moderate through 1998 and 1999, partly reflecting the effects of past monetary and fiscal tightening. Consumption growth is likely to remain robust in 1998, though slower than in 1997, supported by rises in wealth and in real labour incomes. Investment is most likely to increase at broadly the same rate as in 1997, boosted by construction expenditure, part of which is Millennium-related. Despite the carrying forward of the shortfall of public expenditure from the previous financial year, government consumption is projected to grow less rapidly than the rest of domestic demand over the next two years. That is implied by the Government's published nominal expenditure plans and the central projection for inflation.

Money growth has continued to show signs of slowing since the February *Report*, albeit from a high rate. The MPC continues to assume that the most likely scenario is that broad money velocity will decline more gradually through the remainder of 1998 than during the past couple of years. This implies that broad money growth needs to slow further if the nominal income projections are not to be exceeded. There is a risk that past rapid money growth could presage faster nominal demand and, in turn, faster rates of increase of earnings and prices than in the central case, but this risk has lessened since the February *Report*.

Industrial output has been falling during recent months, whereas service sector output has continued to grow strongly, though at a slightly slower rate than a year ago. As one would expect in view of sterling's behaviour, the present situation is in marked contrast with 1994–95, when the output of the traded goods sector was strong. Now, the sectors most heavily dependent on trade are weaker following the appreciation of sterling since August 1996. In the central projection, most of the rise in the real exchange rate is assumed to be permanent, and is leading to a switch in resources from the external to the domestic sector.

Net trade is expected to make a substantial negative contribution to GDP growth in 1998 and 1999. The current account surplus of  $\frac{3}{4}\%$  of GDP in 1997 is expected to move into a deficit of almost 2% of GDP during the forecast period. A rising current account deficit is consistent with the view that the rise in the sterling exchange rate was, for the most part, not caused by factors such as higher overseas demand for UK goods and services, or a change in export supply performance.

The deterioration in the current account in the central case of almost 3% of GDP was taken into account by the MPC when judging the risks to the exchange rate.

There have been signs of a slower rate of decline of unemployment on both the claimant and LFS measures, but the labour market continues to tighten. The central projection envisages a period of output growth at or below trend, and so the fall in unemployment is likely to come to a halt. Unemployment is unlikely to change much in the next two years, given the central projection for GDP growth.

The MPC decided to defer a quantitative assessment of the impact of the minimum wage on inflation until an announcement of its level and coverage has been made by the Government. Moreover, the effects of the minimum wage on the labour market need to be considered alongside the Government's New Deal and employment-related tax reforms. So neither the central projection nor the risks allow for the effect of the minimum wage. But the introduction of the minimum wage, in itself, is likely to put upward pressure on inflation, and so may have implications for monetary policy in the near future.

The MPC has changed its assumption on the best measure of labour market tightness. In assessing pressure on real wages, it now uses the LFS unemployment measure rather than a broader non-employment rate. This change means that one of the upside risks to inflation in the February projection has now been included in the central case. That has raised the central projection for real earnings growth relative to February. Although there remain considerable uncertainties about the degree of labour market tightness, the central projection is that real earnings growth will be somewhat higher than the rate of productivity growth up to the forecast horizon, while the profit share of GDP declines towards historical levels. This factor was taken into account by the MPC when judging the risks to equity prices.

Real consumption wage growth has also been influenced recently by changes in the terms of trade and factors, such as direct and indirect taxes, that change the wedge between the real wage received by employees and that paid by employers (see Section 3). In the short run, this has eased bargaining between employees and employers, and has temporarily boosted consumption wage growth, and moderated wage claims. But in the long run, this is

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

Percentage increases in prices

	Twelve-month RPI inflation one year ahead	
	December 1997	March 1998
General public	4.5	4.3
Business economists	3.2	3.0
Finance directors	3.4	3.3
Investment analysts	3.4	3.1
Academic economists	3.1	3.0
Trade unions	3.7	3.5

	Twelve-month RPI inflation two years ahead	
	December 1997	March 1998
General public	5.2	5.1
Business economists	3.0	2.9
Finance directors	3.7	3.3
Investment analysts	3.4	3.3
Academic economists	3.1	3.1
Trade unions	4.7	3.9

Source: Barclays Bank.

**Table 6.B**  
**Merrill Lynch-Gallup Survey of UK fund managers' inflation expectations**

Percentage increases in prices

Twelve-month RPI inflation in:	Month of survey				
	Dec. 1997	Jan. 1998	Feb.	Mar.	Apr.
December 1998	3.2	3.2	3.1	3.0	3.0
December 1999	n.a.	2.9	2.7	2.8	2.7

not sustainable and, given the degree of labour market tightness, upward pressure on wages is likely to re-emerge.

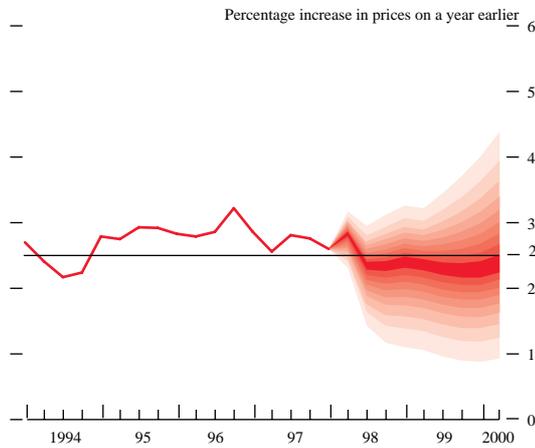
The determination of inflation expectations is particularly important for earnings behaviour. There is a range of survey-based estimates of inflation expectations, but the range is quite wide and does not give a clear guide to the level of expectations. For example, the Barclays Basix Survey continues to show wide divergence between the expectations of the various groups surveyed (see Table 6.A), though overall expectations appear to have fallen slightly during the past three months. That slight fall is also shown in the Merrill Lynch-Gallup Survey of UK fund managers (see Table 6.B). The MPC has considered the sensitivity of the inflation projection to alternative assumptions about inflation expectations. The central assumption is that after starting the forecast period above both target and actual inflation, expectations moderate slightly through the first year of the forecast, as recent inflation outcomes are built into future expectations.

The MPC's projection for the twelve-month RPIX inflation rate—again assuming constant nominal interest rates—is shown in Chart 6.2.<sup>(1)</sup> It is shown next to the February projection (see Chart 6.3). The most likely path for RPIX inflation is that, after a temporary increase in 1998 Q2, it will fall slightly below 2½% in the second half of 1998 and during 1999, before rising slightly towards the target by the end of the forecast period.

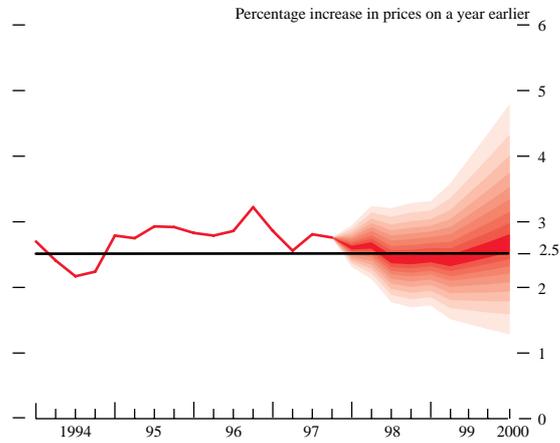
The Budget announcement on fuel duties will mean that the short-run profile for RPIX inflation in the second quarter will be around 0.3 percentage points higher than assumed in the February *Report*. This reflects solely a change of timing of indirect tax increases, and by Q3 the projection has returned to its original path. As in recent projections, the short-term inflation forecast is heavily influenced by the extent of the pass-through of the exchange rate appreciation to retail prices. The fall in import prices projected in 1998, and the lagged effects of past falls, continue to offset developments in domestically generated inflationary pressures, and this is expected to persist for much of the forecast period. Towards the end of the forecast period, the lagged exchange rate effects have begun to wear off, leaving inflation just below the target in the central case. But at that point, inflation is picking up quite rapidly.

(1) Also shown as Chart 2 in the Overview.

**Chart 6.2**  
Current RPIX inflation projection based on constant nominal interest rates

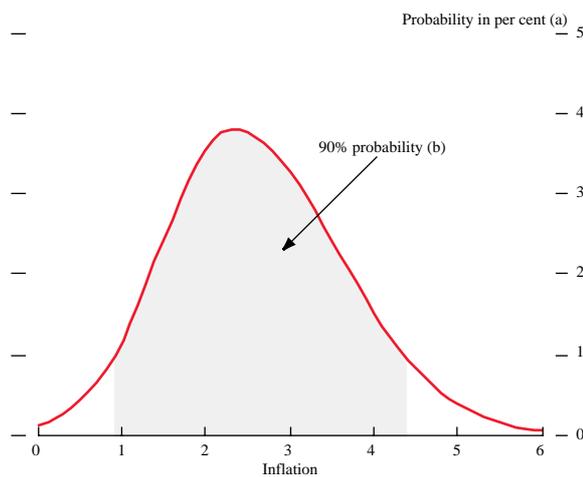


**Chart 6.3**  
RPIX inflation projection in February based on constant nominal interest rates

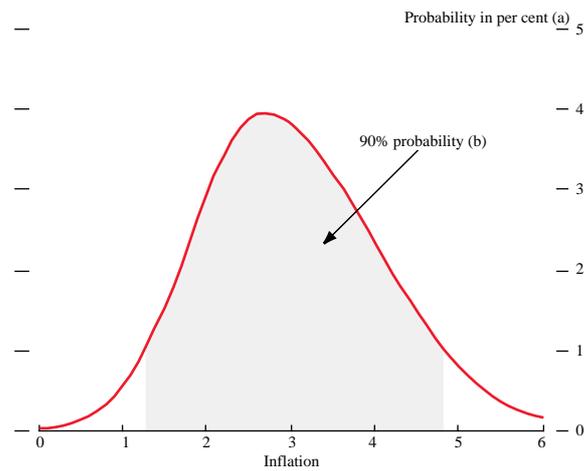


The chart shows the relative likelihood of possible outcomes. The central band, coloured deep red, includes the central projection: there is judged to be a 10% chance that inflation will be within that central band at any date. The next deepest shade, on both sides of the central band, takes the distribution 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 6.4**  
Current projection for the percentage increase in RPIX in the year to 2000 Q2



**Chart 6.5**  
February projection for the percentage increase in RPIX in the year to 2000 Q1



Source: Bank of England.

- (a) Probability of inflation being within  $\pm 0.05$  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%.
- (b) The areas shaded light grey contain 90% of the probability, and are consistent with the widest bands shown in Charts 6.2 and 6.3. For further details see 'The *Inflation Report* projections: understanding the fan chart', February 1998 *Quarterly Bulletin*, pages 30–37.

The central projection for inflation is slightly lower than at the time of the February *Report*. That reflects four factors. First, the level of output throughout the forecast period is about half a percentage point lower than in the February projection, and leads to less upward pressure on inflation. Second, inflation expectations appear to have fallen since the start of the year, and are assumed to be lower throughout the forecast period than in the February projection. Third, the 15 working day average for sterling used in the projection was 2% higher than projected in February, although the exchange rate had fallen back by the time the *Report* was finalised. Fourth, and partly offsetting these factors, is the MPC's decision to measure labour market tightness by LFS unemployment, rather than by the broader non-employment rate used previously. This change implies a somewhat tighter labour market than was assumed in the central projection in February.

**Table 6.C**  
**The MPC's expectations for RPIX inflation and GDP growth based on constant nominal interest rates<sup>(a)</sup>**

**RPIX inflation**

Probability, per cent	Range:			
	less than 1.5%	1.5% to 2.5%	2.5% to 3.5%	more than 3.5%
1998 Q4	14	57	28	1
1999 Q4	16	44	33	7
2000 Q2	13	34	32	21

**GDP growth**

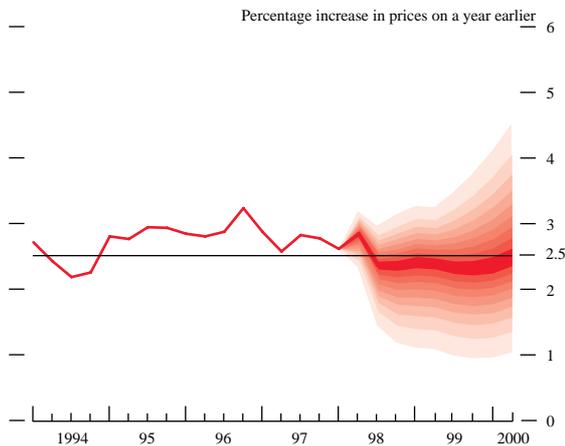
Probability, per cent	Range:					
	less than 0%	0% to 1%	1% to 2%	2% to 3%	3% to 4%	more than 4%
1998 Q4	3	20	43	28	6	0
1999 Q4	4	12	24	29	20	11
2000 Q2	4	9	19	25	21	22

(a) These figures are from the same distributions as the GDP and inflation fan charts, Charts 6.1 and 6.2.

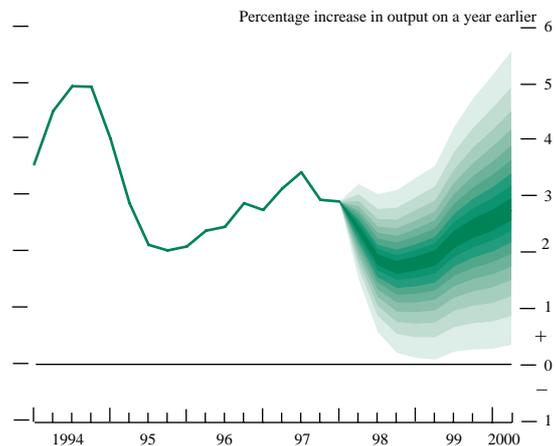
In the near term, the balance of risks to output is on the downside, reflecting uncertainties about the world economy and the speed of domestic demand moderation. Those uncertainties imply corresponding downside risks to inflation. By the two-year forecast horizon, however, the overall balance of risks to inflation is, as in February, on the upside. In large part this stems from the possibility that the exchange rate may fall more sharply than implied by interest rate differentials.

The inflation projection charts are complemented by Charts 6.4 and 6.5, which give probability distributions for inflation at the end of the forecast period. These are produced from the same distributions as the inflation fan charts, and highlight the overall balance of risks. The summary Table 6.C shows the MPC's assessment of the probabilities of various outcomes for inflation and output.

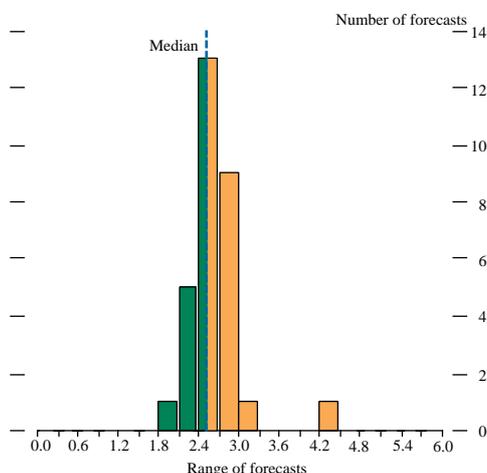
**Chart 6.6**  
Current RPIX inflation projection based on market interest rate expectations



**Chart 6.7**  
Current GDP projection based on market interest rate expectations



**Chart 6.8**  
Distribution of RPIX inflation forecasts for 2000 Q2



Source: Forecasts of 30 outside forecasters as of April 1998.

The market’s central expectation is that rates have peaked, and will decline slowly from the current level of 7¼% to about 6½% by mid 1999 and 6¼% by mid 2000. The MPC’s projections for inflation and output under the assumption that official interest rates follow market expectations look similar to Charts 6.1 and 6.2. However, the pick-up in GDP and inflation is faster towards the end of the forecast period (see Chart 6.6 and 6.7).

### 6.3

### Other forecasts

Chart 6.8 shows the distribution of central forecasts for twelve-month RPIX inflation in 2000 Q2 produced by the 30 other forecasters surveyed by the Bank. The median forecast was 2.5% in April, the same as in January. The median of other forecasters’ projections remains in line with the inflation target.

Other forecasters surveyed by the Bank have also provided the Bank with their assessments of the probabilities that they attach to various possible inflation and growth outcomes (see Table 6.D). Overall, other forecasters assign a 53% probability to inflation being

**Table 6.D**  
**Other forecasters' expectations of RPIX inflation and GDP growth<sup>(a)</sup>**

<b>RPIX inflation</b>						
Probability, per cent	Range:					
	less than 1.5%	1.5% to 2.5%	2.5% to 3.5%	more than 3.5%		
1998 Q4	6	39	45	10		
1999 Q4	10	39	39	12		
2000 Q2 (b)	10	37	39	14		

<b>GDP growth</b>						
Probability, per cent	Range:					
	less than 0%	0% to 1%	1% to 2%	2% to 3%	3% to 4%	more than 4%
1998 Q4	5	19	42	28	6	1
1999 Q4	5	18	34	31	9	3
2000 Q2 (c)	5	15	28	34	13	5

(a) 33 other forecasters provided the Bank with their assessments of the likelihood, at three time horizons, of expected twelve-month RPIX inflation and four-quarter output growth falling in the ranges shown above. This table represents the means of the responses for each range. For example, on average, forecasters assign a probability of 10% to inflation turning out to be less than 1.5% in 2000 Q2. Rows may not sum to 100 because of rounding.

(b) 31 forecasters.  
(c) 30 forecasters.

above the inflation target in the second quarter of 2000, and a 47% probability to it being below. These estimates are broadly comparable to the figures for 2000 Q1 provided to the Bank by the forecasters at the time of the February *Report*, when the probabilities were assessed as 50% on either side. The average projection for GDP growth in the year to 1998 Q4 made by the forecasters is around 1<sup>3</sup>/<sub>4</sub>%, rising to just over 2% in the year to 1999 Q4. These estimates are only marginally lower than at the time of the previous survey.

**The implications of the latest projection for the stance of monetary policy are discussed in the Overview at the beginning of the *Report*.**

## 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.

**ACT:** Advanced Corporation Tax.

**BCC:** British Chambers of Commerce.

**BRC:** British Retail Consortium.

**CBI:** Confederation of British Industry.

**CIPS:** Chartered Institute of Purchasing and Supply.

**DETR:** Department of Environment, Transport and the Regions.

**ECB:** European Central Bank.

**EMU:** Economic and Monetary Union.

**ERI:** exchange rate index.

**ERM:** Exchange Rate Mechanism.

**FT-SE:** Financial Times Stock Exchange.

**GFK:** Gesellschaft Für Konsum, Great Britain Ltd.

**ICCs:** industrial and commercial companies.

**IMF:** International Monetary Fund.

**HICP:** Harmonised Index of Consumer Prices.

**LAPF:** life assurance and pension funds.

**LFS:** Labour Force Survey.

**MORI:** Market Opinion Research International.

**MPC:** Monetary Policy Committee.

**OFIs:** other financial institutions.

**OPEC:** Organisation of Petroleum Exporting Countries.

**PPI:** Producer Price Index.

**PPIY:** Producer Price Index excluding excise duties.

**PRP:** Profit Related Pay.

**PSBR:** Public Sector Borrowing Requirement.

**PSDR:** Public Sector Debt Repayment.

**RICS:** Royal Institute of Chartered Surveyors.

**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

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This *Report* is available at:

<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 4–5 February 1998

1 The meeting was preceded by a presentation by Bank staff of the most recent data on monetary and economic conditions, and also by discussions on the February inflation forecast and analysis. The staff 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. The February *Inflation Report* was published on Wednesday 11 February.

2 The Committee discussed recent developments in Asia and their implications, the current state of the UK economy and the risks to the outlook, other forecasts of the UK economy and the policy implications of the outlook.

### Recent developments in Asia and their implications

3 Members agreed that the financial crisis in Asia would lead to a sharp contraction of domestic demand in the countries that were immediately affected. Their net exports would rise, and there would be downward pressure on their export prices and on world commodity prices. For countries that were not immediately affected there would be a weakening of external demand and a fall in import prices.

4 In countries that were not immediately affected, the likely response to these developments would be to adopt an easier policy stance than otherwise, to strengthen domestic demand and offset the weakening of external demand. Such a response had been assumed in projections of the effects of the Asian crisis, and the fall in market interest rates in industrial countries suggested that market participants were anticipating such a response. It would involve accommodating higher than otherwise domestic demand growth for a period. External trade surpluses (eg in continental European countries) would fall, and deficits (eg in the United States) would rise. The adverse effects of the crisis on global output would be larger if the countries not immediately affected were unwilling or unable to allow domestic demand to expand faster.

5 There was a risk that countries not immediately affected would not respond in this way. For example some countries might think themselves too small to make any significant difference to the world economy, and others might be concerned that any policy easing would make them vulnerable to financial disturbance.

6 The Committee discussed the likely scale of the effects. Recent external estimates were that the *ex ante* effect on GDP in industrial countries (ie before allowing for the effects of policy accommodation in the countries not immediately affected) might be of the order of 0.75% of GDP in 1998—rather less in Europe and rather more in the United States and Japan. After allowing for policy accommodation, the residual effect would be substantially lower. The central projection in the February *Inflation Report* assumed that the impact of the Asian crisis would be to reduce the level of world GDP by up to 1 percentage point by the end of 1999, and the level of GDP in the major six overseas economies by around half a percentage point. Those estimates reflected both direct and indirect effects, as well as the policy response in countries other than the United Kingdom. The impact on UK net exports was expected to be approaching half a percentage point of GDP during the next two years. Some members thought that an adverse affect on the United Kingdom of this size might easily be offset if, for example, demand in continental Europe proved stronger than expected as the single currency approached. According to IMF projections published in December, the current account balances of the Asian countries immediately affected by the crisis might be around \$40 billion stronger in 1998 than had

been thought likely before the crisis, and it now seemed that the effect might be larger, with much of it coming initially from lower imports.

7 Members discussed how the world economy might develop. They noted that business and consumer confidence in Japan were already very weak, partly on account of financial fragility, and discussed the possibility of further action to stimulate domestic demand in Japan. They also noted that domestic demand growth in Germany had been surprisingly slow. The US current account deficit would be affected by the Asian crisis and that could threaten to aggravate tensions over international trade over the next year or so. Members also noted that market interest rates at medium and longer maturities in countries not immediately affected had generally fallen, even though they would have larger current account deficits to finance.

8 Members discussed the risk that the impact of the Asian crisis might be much more severe than recent estimates suggested. One possibility was that the crisis could spread as a result of financial contagion, but that risk seemed to have become smaller during the past month. Another possibility was that industrial confidence in the countries not immediately affected could be set back to a much greater extent than might be expected. It was suggested that the Gulf War had had such an effect in 1990 and 1991. The recent unexpected weakness of UK economic data such as GDP, manufacturing production and the external trade balance, together with the weakening of the CBI Financial Services Survey and a number of profit warnings, were possible symptoms of such a confidence effect. A contrary indicator was the recent strength of the UK equity market. Members noted that the FT-SE 100 index contained a very large component which was dependent on overseas rather than UK earnings, and that in any case its recent strength owed much to projected mergers and acquisitions. The FT-SE 250 and Small Capitalisation indices, which were much more UK-dependent, had performed much less strongly recently. Members acknowledged that rising equity prices, whatever their origin, would add to wealth, and noted that the risk of a fall in equity prices was taken account of in the projection in the February *Inflation Report*.

### The current state of the UK economy and risks to the outlook

9 The Committee noted that the first estimate of GDP growth in 1997 Q4 was 0.5%. This figure, which was subject to revision, was lower than the central projection in the November *Inflation Report* by an unusually large margin. Moreover, the newly available index of production for December was also weaker than expected. Members agreed that it was clear from the external trade figures that net exports had fallen sharply in 1997 Q4.

10 A range of views was expressed on the trend in domestic demand, in particular consumer spending. Domestic demand had increased by 1.0% in 1997 Q3, compared with 1.5% in Q2 and 1.0% in Q1, according to the ONS' current estimate, but consumer spending in Q3 had been restrained as a result of the death of Diana, Princess of Wales, and the unusually warm weather. Retail sales had bounced back in October after a weak September but had fallen in both November and December. There were two possible interpretations. One was that the slowdown in recorded retail sales was temporary, perhaps partly reflecting difficulties with seasonal adjustment over the Christmas period. The other was that there had been a longer-lasting slowdown in retail sales growth: it was noted that consumer confidence had weakened in the latter part of 1997.

11 As to output, members agreed that there were clear signs of a slowdown in manufacturing. Industrial and manufacturing production had fallen in 1997 Q4. On their own, the latest industrial production data would imply a downward revision of perhaps 0.1% to estimated GDP in Q4. The latest manufacturing survey responses were generally weaker than earlier. A range of views was expressed about whether service sector activity was slowing down. According to the ONS data, output of services had slowed down modestly after mid 1997, but the CIPS survey suggested some modest acceleration in January.

12 Members debated the current behaviour of total output in the light of recent data. One view was that it seemed possible that the economy had reached a turning point in output and demand earlier than had been expected, and that the near-term outlook for output was unusually uncertain. The recent large downside discrepancies between estimated outturns and earlier central projections represented evidence in support of that view. Members recalled that the statistics had been very slow to reveal the downturn in 1990. Another view was that the behaviour of the economy was always highly irregular and that these discrepancies were not unusual. There was accordingly no reason to think that the near-term outlook for output was more uncertain than usual.

13 Members expressed a range of views about the information content of the output data. One view was that they provided a valuable guide to the state of the economy and important information for policy purposes. Another view was that the problems of measuring output, particularly output of services, were so serious that it was difficult to place much reliance on the output figures and safer to base policy judgments on more firmly based statistics, such as the labour market data.

14 The Committee discussed the current state of the labour market. The earlier presentation by Bank staff (summarised in the Annex) had reported that labour demand remained strong, as measured by quantity indicators of employment and unemployment. The Agencies were reporting growing skill shortages and the British Chambers of Commerce survey for Q4 reported rising recruitment difficulties. But the CBI Quarterly Survey suggested that shortage of skilled labour had been slightly less widely cited as a factor likely to limit output in January than in October, and substantially less widely than in the late 1980s.

15 Members discussed earnings growth. One view was that the rise in underlying average earnings growth to 4.75% in November might be temporary and related to annual bonus payments, as had been the case when average earnings growth increased in late 1996. Another view was that these figures, along with the recent settlements data reported in the Annex, were clear signs of an acceleration in earnings.

16 Members agreed that earnings growth depended on the difference between the current level of unemployment and the natural rate of unemployment, and that the natural rate was very uncertain and subject to change. Members suggested a number of reasons why it might have fallen, including deregulation, lower unionisation, the removal of obstacles to women working, the growing incidence of part-time work, and the adoption of new approaches to getting people off benefits. It was agreed that the impact of the last of these factors on the natural rate of unemployment depended on how many of those displaced from benefits became active in the labour market.

17 Members discussed the timing relationship between output and the demand for labour. They agreed that the prospective downturn in output growth would affect the demand for labour, and thus the prospects for earnings, after some delay.

18 The Committee discussed the current rate of inflation. RPIX inflation had been persistently at or above the 2½% target

throughout 1997 despite the temporary downward pressures resulting from sterling's appreciation. That suggested that the domestically generated components of inflation had been and remained substantially above 2½%. It was not straightforward either to calculate domestically generated inflation or to interpret the results—it was necessary, for example, to take account of the fact that domestic labour costs would be affected by changes in import prices—but it was possible to get an impression of domestically generated inflation fairly readily from available statistics. For example one estimate of the domestically produced component of RPIY was rising at a rate of 3½%–4% a year. Moreover private sector average earnings were rising at around 5% a year, compared with productivity growth which had averaged around 2% a year for a long period.

19 It was suggested that an additional factor likely to put upward pressure on inflation was that sterling was overvalued in real terms, so that a real depreciation was to be expected. During the period of real depreciation, it was to be expected that RPIX inflation would be higher than domestically generated inflation. So it was very important to get domestically generated inflation down sufficiently to meet the target for RPIX inflation, and it was not clear that the necessary reduction could be achieved simply through compression of profit margins: unit labour cost growth would need to fall.

20 Another view was that inflationary expectations were falling steadily. Producers were feeling significant pressures on margins and orders and in some cases were reconsidering their strategies. Leading indicators, fallible though they were, were pointing to a slowdown in output. This was not an environment in which inflation was likely to increase.

21 The Committee took note of the developments in the monetary aggregates and in financial markets reported in the Annex. Members recognised that the cumulative effect of past broad money growth represented an upside risk to the projection. In financial markets, the possibility of the exchange rate depreciating faster than the rate implied by interest rate differentials represented an additional upside risk, but the possibility of a sharp fall in equity prices represented a downside risk.

## Other forecasts of the UK economy

22 Members noted that the average of outside forecasts of RPIX inflation in the year to 2000 Q1 was 2.6%, close to the central projection that would appear in the February *Inflation Report*. The Bank's forecast of output growth was slightly lower than the average of outside forecasts for 1998 but slightly higher for 1999. This meant that the central projection that would appear in the February *Inflation Report* would be close to the average of outside forecasts, whereas the November central projection had been an outlier.

## Policy implications of the outlook

23 The Committee discussed its decision about interest rates.

24 A number of arguments were put forward in favour of an immediate increase in interest rates. First, the rate of domestically generated inflation was well above 2½%, and RPIX inflation was being temporarily depressed by the one-off effect of a lower level of import and commodity prices. At the current level of interest rates, domestically generated inflation would not fall sufficiently fast to enable the inflation target to be hit. Second, the labour market had continued to tighten rapidly and there were clear signs of an acceleration in earnings. The risks to the outlook for earnings were mainly on the upside, notwithstanding the projected slowdown in activity. Third, with the current account of the balance of payments projected to move rapidly into deficit, the risks to the outlook for the exchange rate were mainly on the downside, implying an upside risk to inflation. Fourth, on some

views the level of output was already above trend, implying upward pressure on inflation. As a result, the central projection for inflation to be published in the February *Inflation Report*, based on the assumption that official interest rates remained at 7.25%, showed RPIX inflation below 2½% in the second half of 1998 and the first half of 1999, but rising to above the 2½% target in the first quarter of 2000. The risks to the projection were predominantly on the upside. This represented the Committee's best view of the outlook, uncertain as it was, and it would be right to act on it by raising interest rates now.

25 A number of arguments against an immediate rise were also put forward. First, there were now clear signs that the economy had slowed down. Although there were upside risks to the projection arising from the foreign exchange market, the labour market and the effects of past monetary growth, there were also downside risks from the possibility of weaker world activity following the Asian crisis and from the possibility of a marked fall in UK equity prices. Indicators other than the *Inflation Report* projection—for example some cyclical leading indicators—suggested a gloomier outlook: on that view, and looking 1½–2 years ahead, the question was not whether to raise interest rates but whether to reduce them. It was however too soon to contemplate a reduction: the data were not clear enough. Second, the projection was based on a range of assumptions about economic parameters that were highly uncertain. For example a small and plausible change in the assumption made about the growth rate of productive capacity during the current recovery would, other things being equal, bring the central projection of RPIX inflation down to slightly below target in 2000 Q1. Compared with the uncertainties, the excess of the central projection of RPIX inflation in 2000 Q1 above the 2½% target did not warrant a movement now.

26 Three further arguments were put forward for delaying any rise in interest rates, even if a rise were necessary. First, it was argued that an immediate increase in interest rates would aggravate the downturn in output projected for 1998; an increase delayed for a few months, even if it had to be larger than 0.25%, might have its main effect on output during the course of 1999, when some acceleration of output was projected. Thus delaying a rise in interest rates could lead to a smoother output path. Second, the central projection was for inflation to be below or close to target from mid 1998 until late 1999, so that a few months' delay might not entail a serious risk to the inflation target. Third, it was argued that an immediate increase in interest rates would raise the headline RPI, which could lead to higher pay settlements in the short term, even if not in the longer term.

27 The Committee debated a further argument for waiting before making a decision to raise interest rates, namely the uncertainties surrounding the projection to be published in the February *Inflation Report*. Although the February projection was the MPC's best collective view of the outlook, the recent large discrepancies between the emerging output data and the November central projection suggested that it was possible that a much sharper downturn had begun than was envisaged in the current projection. The near-term uncertainties, including those resulting from the Asian crisis, were unusually large and mainly on the downside. Given those uncertainties, it was not possible to feel very confident about the outlook and it would not necessarily be right to draw policy conclusions mechanically from the projection. In these circumstances there was a case for delay so as to allow a judgment to be made later in the light of more information. If the downturn proved to be much sharper than currently expected, then an immediate increase in interest rates might have a larger negative effect on output than in other circumstances and would have to be

quickly reversed. Such a reversal could impair confidence in the economy and damage the credibility of the MPC process at this stage of its development by creating confusion about monetary policy and by encouraging the mistaken impression that the Committee had been indifferent to the course of output. Such an outcome would be more damaging than if an increase in interest rates which proved to be necessary were delayed, so that a larger increase was needed later. There was thus a strong case for waiting to get a clearer impression of the extent of the slowdown in the economy before taking policy action.

28 The arguments against waiting were, first, that the sheer degree of uncertainty did not represent a proper justification for delay. Uncertainty was a normal state of affairs in economic policy-making and there was no particular reason to believe that uncertainty would be any less in a few months' time. Nor was there any reason to believe that the near-term uncertainties were concentrated on the downside. Second, failing to raise interest rates at a time when the central projection of inflation two years ahead was above the target would risk damaging the credibility of the MPC process. It could raise the expected rate of inflation, and thereby increase the output cost of achieving the inflation target. Third, even if it could be assumed that inflationary expectations were unaffected, delaying a necessary increase in interest rates, without making the delayed increase larger, would mean delaying the time at which the inflation target would be achieved, though it would not affect the output cost of achieving the target. Fourth, if a necessary increase in interest rates were delayed, it would need to be larger when it took place if the inflation target were to be achieved on the same timetable, and the resulting output path would be less rather than more smooth. Fifth, it was argued that if an increase in interest rates that was widely acknowledged to be necessary were delayed, that could lead to an appreciation of the exchange rate and thus to weaker external demand, but there might be little immediate effect on domestic demand. If by contrast the increase were implemented without delay, it might not need to be so large and its immediate effect would be better balanced, in that it would fall proportionately more on domestic demand. Sixth, it was argued that delaying an increase would mean forgoing the opportunity to exert a necessary restraining influence on the current round of pay negotiations.

29 The Governor invited members of the Committee to vote on the proposition that the Bank's repo rate be left unchanged this month. On the balance of the arguments set out in paragraphs 24–28, four members of the Committee (the Governor, David Clementi, DeAnne Julius and Ian Plenderleith) voted for the proposition, and four (Alan Budd, Willem Buiter, Charles Goodhart and Mervyn King) voted against, preferring an immediate increase in interest rates. The Governor exercised his casting vote in favour of the proposition and the repo rate was thus left unchanged.

30 The following members of the Committee were present:

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

53 Sir Terence Burns was also present as the Treasury representative.

## Annex: Summary of data presented by Bank staff

1 This Annex summarises the analysis presented by Bank staff to the Monetary Policy Committee on 30 January 1998, 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 this Annex.

### I Monetary conditions

2 After updating of the seasonal adjustments, it was estimated that notes and coin rose more slowly in December (0.5%) than the previous estimate of 1%. Provisional figures for January indicated stronger monthly growth (0.7%), which may have been consistent with anecdotal evidence of strong post-Christmas retail sales. The introduction of the new 50p piece in September continued to inflate the annual rate of growth of notes and coin. There had been a net return of 50p coins to the Royal Mint in January, taking 0.1% off the monthly growth rate of notes and coin, so that the 50p-adjusted growth rate of notes and coin in the year to January was 6.7%. This was only marginally higher than the comparable figure in December, but still well above the figures observed during Q3. The Royal Mint predicts that the bulk of the old 50p pieces will have been returned by the end of February. Thereafter, the one-month numbers should not be distorted, although the twelve-month statistics would be distorted again in the autumn and winter.

3 M4 growth was likely to have been affected in December by end-year balance sheet adjustments in repo activity. The fall in repo activity at the end of 1997 was smaller than at the end of 1996, which had been the first year of the gilt repo market. In these circumstances the seasonal adjustments were more uncertain than usual. Monthly growth of M4 was 1.0%; the twelve-month growth rate rose from 10.5% to 11.6% as the very small rise in M4 in December 1996 dropped out of the calculation. The annualised three and six-month growth rates of M4 were both below the twelve-month rate.

4 Sectoral data for Q4 showed that the rate of growth in personal sector M4 picked up slightly to 8.1% on a year earlier. Monthly data for December were consistent with the average for Q4 as a whole. The quarterly figures might have been boosted by the demutualisation of Northern Rock and by the take-over of Scottish Amicable in October. Staff estimates suggested that long-run real personal sector money demand continued to grow rapidly in Q3—up by around 1½% on the quarter and 8% on the year—driven largely by an increase in gross financial and tangible assets of the personal sector, mostly reflecting rising equity prices. In the year to 1997 Q3, real personal sector M4 holdings rose by 5.2%.

5 M4 in the industrial and commercial company sector rose by only £0.2 billion in Q4 overall, the smallest rise since 1995 Q2. The twelve-month growth rate dropped to 5.9% from 8.5% in Q3. But a strong increase was recorded in December. ICCs' real M4 holdings rose by 1.3% in Q3, compared with a rise of 1.1% in staff estimates of long-run demand.

6 The twelve-month growth rate of OFIs' M4 in Q4, which was 26.5%, was affected by the end-year contraction of activity in the repo market. However, taking account of the repo effect, the December data for OFIs' M4 were broadly in line with developments in recent quarters, and provided little evidence of a slowdown in growth. Real M4 holdings by LAPFs rose by 6%, in 1997 Q3, while, according to staff estimates, the long-run real demand for M4 by LAPFs grew by 5.3% in Q3 1997, driven in large part again by rising equity wealth.

7 The velocity of circulation of broad money had for a long period been closely and negatively correlated with the wealth/income ratio. In the 1980s, this had reflected financial deregulation, which led to a fall in velocity. More recently, although there had been few regulatory changes, velocity had continued to fall.

8 In the year to Q4, personal sector Divisia money rose by 9.2%. Given the continued speculation about further demutualisation among building societies, interest rates on building society accounts may not have adequately captured any expected capital gains upon demutualisation. Consequently, the Divisia measure may currently overstate the growth in funds held for transactions purposes. There was, however, little evidence overall of a slowdown in Divisia growth.

9 M4 lending in December might also have been affected by the end-year contraction in reverse repos. Lending rose by 0.7% in the month; the twelve-month growth rate rose from 7.7% to 8.6% as the fall in lending in December 1996 dropped out. The six-month annualised growth rate of M4 lending was 6.5% compared to 8.9% in July 1997.

10 M4 lending to the personal sector grew by 7% in the year to 1997 Q4, close to its annual growth rate in previous quarters. Within the total, steady secured lending growth continued in December: the three-month annualised growth rate was 5.7%, slightly lower than the rate for Q3. Mortgage approvals rose in December to 111,000, from 103,000 in November. Total unsecured lending was strong in December, rising by 17.9% on a three-month annualised basis, following windfall-related debt repayments in Q3. Consumer credit card lending picked up sharply in the three months to December, to an annualised rate of more than 30%. This might have reflected increased supply, with greater competition among providers of consumer credit leading to some reductions in interest rates charged. But figures for Q3 suggested that this was accompanied by only slight growth in mortgage equity withdrawals.

11 M4 lending to ICCs rose by 1.0% in 1997 Q4, compared with 0.1% in Q3, but the twelve-month growth rate fell to 3.4% from 4.4%. Sterling capital issues were lower in Q4 than Q3. M4 lending to OFIs rose by 2.5% in Q4, a little less than in Q3, but the twelve-month growth rate rose from 19.6% to 20.8%.

12 Turning to prices, three-month sterling Libor rates were little changed since the last MPC meeting. The expected three-month sterling interbank interest rate implied by the March futures contracts fell slightly. Two and fifteen-year nominal forward rates were also little changed.

13 Inflationary expectations derived from the gilt-edged market were little changed from the time of the last MPC meeting. Inflation ten years hence was expected to be 2.9%, which was some 40 basis points lower than at the time of the November *Inflation Report*, and some 130 basis points lower than on 2 May. Longer-term inflationary expectations were also available twice yearly from a Consensus Economics survey of forecasters. Data for October suggested that the average inflation rate expected to prevail over the period between five and ten years in the future was 2.7%. Expectations of average inflation over the next two years derived from both financial markets and opinion surveys ranged between 3%–5%: surveys suggested that the inflationary expectations of the general public were considerably higher than those of economists and financial business.

14 Estimates of short-run real interest rates derived by combining market nominal interest rates with estimates of inflation expectations drawn from opinion surveys suggested that UK real rates may have risen during recent months to 4.5% in December. By contrast, short-run real interest rates derived from index-linked gilt prices had fallen in the second half of 1997.

15 The sterling ERI had risen by 0.7% since the January MPC meeting, while the broader measure, incorporating exchange rates against 49 foreign currencies, rose by 0.4%. Since the November *Report*, these measures had risen by 3.1% and 3.8% respectively. There had been little movement since the last MPC meeting in the forward path of the ERI implied by uncovered interest rate parity. The change in nominal forward rate differentials with the five largest overseas economies was consistent with a small relative monetary policy tightening in the United Kingdom and a minor appreciation of sterling. The ERI was 3% higher than had been assumed in the November *Report*. Roughly a fifth of that could plausibly be explained by monetary factors, in particular a fall in expected future interest rates in France and Germany.

## II Demand and output

16 GDP was provisionally estimated to have increased by 0.5% in Q4 1997, to a level 3.1% higher than a year earlier. This was considerably weaker than the central projection in the November *Inflation Report*. The annual rate had fallen for the first time in two years, from 3.7% in the previous quarter. Output in the service sector continued to grow above trend, rising by 1% in Q4. The only individual sector identified in the preliminary release was distribution, hotels and catering, and repairs, where output rose by only 0.3% on the previous quarter (3.1% on a year earlier). This was surprisingly weak, given the rise in retail sales in Q4, perhaps because it was a value-added measure, unlike retail sales, which was a gross measure.

17 Industrial production was weaker than was envisaged at the time of the preliminary GDP release. Revisions to past data, reflecting updated seasonal adjustment, lowered the estimated level of total industrial production and manufacturing output in November by 0.3 and 0.2 percentage points respectively. Total industrial production fell by 0.2% in December, when manufacturing output fell by 0.5%, more than offsetting a rise in utilities output. In the fourth quarter, industrial production fell by 1.1% and manufacturing output fell by 0.4%. Assuming no further revisions, these data would reduce GDP growth in Q4 by 0.1 percentage points. The outturn for manufacturing output was weaker than recent survey evidence had suggested. For example, the balance reporting a rise in manufacturing output in the January CBI Quarterly Survey remained at its highest for two years. However, the export orders balance remained negative, suggesting that the weakness in production data may have indicated a fall-off in exports. This seemed to be backed up by the CIPS Purchasing Managers Index (PMI) of manufacturing output, which fell to 51.3 in January from 52.7 in the previous month. Since it remained above the 50 'no change' level, it signalled further expansion in manufacturing activity, but the export orders balance fell below the 50 threshold for the first time since September, indicating a slowdown in export orders.

18 A weakening on the external side had been evident in trade data for the fourth quarter released so far, which showed an increasing deficit in the goods balance, while services remained quite firm. The net trade deterioration was mainly due to trade with non-EU countries. Sectoral data on finished manufactured exports indicated that intermediate goods exports had held up, but there had been a fall in capital goods exports and a sharp fall in car exports. Though cars account for only 3% of goods exports, their decline has accounted for nearly one third of the 2.3% decline in export volumes in the three months to November relative to the previous three months. Yet data on domestic production of cars had been strong, rising by 2.8% in the three months to December, suggesting

that producers may have switched to producing for the home market.

19 On the basis of the trade data for October and November, and making crude assumptions about December's EU trade data, net trade could have subtracted up to 1 percentage point from GDP growth in the fourth quarter. This suggested that domestic demand remained strong. How likely was this?

20 The volume of retail sales rose by 1.4% in Q4 on a quarter earlier, driven by a strong rise in October. However, they were weak in both November and December, falling by 0.1% in December. This was puzzling, and difficult to reconcile with other evidence, such as surveys, Agents' reports and the majority of company returns data, all of which suggested that sales were very strong towards the end of December and the beginning of January. For example, the BRC and the CBI surveys for December both reported strong sales of clothing and footwear in the final weeks of 1997. This could partly have reflected the seasonal adjustment factor for the December month, which was larger and more uncertain than in other months. The seasonal adjustment factor in December 1997 was larger than in the previous year. Although retail sales data were rarely revised significantly, December was one of the months most prone to revision, because of the volume of sales returns. In the light of this, it was probably wise to take December and January together.

21 The CBI Distributive Trades survey for January reported continuing strong growth in retail sales in January. Corroborative evidence on the strength of consumption was provided by consumer confidence. The GFK consumer confidence indicator rose in January, driven largely by a rise in the proportion considering that this was a good time to make a major purchase. The wealth-income ratio had also been rising rapidly.

22 The Halifax house price index rose by 0.6% in January, to a level 5.8% higher than a year earlier. The Nationwide index continues to increase more rapidly, rising by 1.2% in January and by 13.1% in the year to January. The main discrepancy between the indices appeared to be in the North and West regions.

23 Outturns for the PSBR suggested there would be a modest undershoot for this financial year.

24 Had there been any further evidence of an 'Asia effect' on the major economies? International data indicated a weakening in Japan, where industrial production had been weak, and there was evidence of a falling net exports from Japan to the ASEAN-4 (Thailand, the Philippines, Malaysia and Indonesia). In the United States, there was also some evidence of a slowdown in exports to East Asia, which was consistent with the expected deterioration in trade recorded in the National Association of Purchasing Managers' Survey.

## III The labour market

25 Labour demand remained strong. According to the Labour Force Survey (LFS), employment rose by 117,000 (0.4%) in the autumn quarter (September to November) 1997, and by 428,000 (1.7%) during the year. This was slightly stronger than the Workforce In Employment measure, which rose by 0.3% in Q3 and by 1.3% in the past year.

26 All of the increase in the LFS measure in the autumn quarter was in full-time employment. Total hours worked in the economy, a wider measure of labour demand, rose by 0.6% in the autumn quarter. This was a faster growth rate than employment, suggesting that hours per person employed rose. In the past year, total hours rose by 1.7%, in line with the increase in employment.

27 Indicators of labour demand in early 1998 showed continuing buoyancy. Demand for labour in the service sector

remained strong according to BCC data, seasonally adjusted by Bank staff, though the non seasonally adjusted numbers published by BCC indicated a slowdown in recruitment intentions. The Bank's Agents suggested that continued quite strong increases in service sector employment were likely. The BCC and CBI employment intentions surveys both suggested that there would be an improvement in the manufacturing sector, after allowing for seasonal variation. In the CBI survey, the expectation was for no further decline in manufacturing employment, while the BCC survey suggested a net increase, as did most of the Bank's Agents.

28 Turning to measures of labour market tightness, there had been no slowdown in the rate of fall of unemployment. The claimant count measure of unemployment fell by 29,000 in December, taking the unemployment rate to 5%. Since this was in line with recent monthly falls, there was little news in the data. By contrast, LFS unemployment fell by a larger-than-expected 150,000 (0.5 percentage points) in the autumn quarter, following a fall of 40,000 in the previous quarter. The fall in autumn was the steepest since the quarterly LFS series was started in 1992. Some of the autumn fall could be explained by the exceptional increase in the number of students this year. Beyond this, there was an additional increase in total inactivity of 30,000. This could be compared with the small fall in inactivity recorded in the previous quarter, which might have been interpreted as an 'encouraged worker' effect and expected to continue.

29 The LFS unemployment rate fell to 6.6% in the autumn quarter, which was below the previous trough of 6.8% and was the lowest rate since the LFS was started in 1984. The fall in the recent quarter was evenly distributed between short-term and long-term unemployment, taking the short-term unemployment rate to a record low (4.4%), and the long-term unemployment rate extremely close to its previous low (2.2%).

30 The stock of vacancies notified to job centres fell by 10,000 in December, but the decline was entirely accounted for by a statistical adjustment of 10,000 to reduce the overstatement of the stock. In underlying terms, the stock appeared to be no longer rising, though the ratio of vacancies to short-term unemployment was at historically high levels.

31 Skill shortages provided additional information on labour market tightness. These remained high, but there was mixed evidence about how much further they had intensified further in recent months. According to the Bank's Agents, there had been a steady increase in skill shortages during 1997. And the BCC Survey in January reported that recruitment difficulties had intensified again in both manufacturing and services in recent months. There was also a record number of service sector firms reporting difficulties in hiring both semi-skilled and unskilled staff. But in contrast with these trends, the quarterly CBI Survey in January showed a fall in the extent to which a shortage of skilled labour was acting as a constraint on manufacturing output.

32 There was some evidence that earnings growth was picking up. Whole-economy underlying average earnings growth in the year to November was 4<sup>3</sup>/<sub>4</sub>%, following an upwardly revised 4<sup>1</sup>/<sub>2</sub>% in October. The main factors explaining the increase were increased overtime and bonus payments in the manufacturing sector, and higher bonuses in the service sector. But smoothed estimates of earnings, which attempt to adjust for uneven bonuses, also increased slightly in November.

33 These were all nominal estimates, but trends in real wages were also clearly important. From the perspective of firms, the relevant concept was the real product wage (defined as labour costs deflated by the GDP deflator), which had accelerated during the past year to an annual growth rate of around 2%, in line with its historical average. Growth in the real consumption wage (earnings deflated by the tax and price index) continued to outpace growth in

the real product wage, reflecting higher terms of trade and, until recently, slower growth in the tax and price index than the GDP deflator.

34 Productivity growth had been broadly in line with its historical average, at 2.2% in the year to Q3. Unit labour costs rose by 2.6% in the same period. But unit labour cost growth was likely to have increased in Q4, since earnings growth had already picked up and productivity was likely to have slowed. After falling for several years, real unit labour costs were starting to rise.

35 Turning to wage settlements, the twelve-month whole-economy mean was unchanged in December at 3.3%, but early indicators for January suggested that this could edge up to 3.4%. A provisional estimate, based on data covering one third of the workers expected to settle in January 1998, suggested that the median settlement was around 1 percentage point higher than in January 1997. There was some evidence that the 'floor' for settlements had risen in recent months. But higher settlements were not uniform across all firms: a number of early 1998 settlements were lower than in the previous year.

36 The fall in female unemployment was then considered. It was striking that, in a pure accounting sense, the lower level of aggregate LFS unemployment relative to the previous trough could be more than accounted for by the fall in female unemployment, which had fallen to 1 percentage point below its previous trough, whereas the male rate remained above its previous trough. And the relative improvement in female unemployment rates is also apparent by comparing the cyclical peaks in unemployment in 1984 and 1993.

37 Unemployment rates for various groups of women showed that the most striking reduction was for women with children aged 0-4 years. This group accounted for only 10% of the female labour force in 1984, but for some 45% of the fall in female unemployment between 1984 and 1993. This trend may partly be explained by the marked rise in the numbers of firms offering flexible workplace arrangements and by improvements in the availability of childcare. These structural changes may indicate an improvement in the ability of young mothers to compete for jobs.

## IV Prices

38 The latest data indicated further input price deflation. The Bank's sterling commodity price index fell in December by a provisional 1.3% on a month earlier, increasing the annual rate of deflation to -12%. The index was provisional, as it did not yet include agricultural prices, which had also been falling sharply, suggesting that commodity price deflation might be even more rapid. The fall in the index in December mainly reflected the impact of the Asian crisis on metals and other commodity prices, and falling oil prices. The price of Brent crude fell in January to as low as \$14.7 per barrel, its lowest for four years. Higher OPEC quotas, the mild northern hemisphere winter and the Asian crisis have all tended to put downward pressure on oil prices.

39 Producer input prices fell in December by 1.4%, increasing the annual rate of deflation to -9.5%. The CIPS Survey of Manufacturing in January indicated further falls in input prices. Output prices have been basically flat, rising by 0.1% in December on a month earlier (0.2% on a year earlier). The CBI Quarterly Trends Survey indicated little expected change.

40 Goods export prices fell by 1.1% in November before seasonal adjustment, but import prices fell by more (-1.3%). Provisional calculations indicated that according to the Bank's measure, manufacturers' export margins would have been squeezed further in Q4.

41 RPIX fell by 0.1 percentage points in December. But RPIX in Q4 1997 was unchanged from Q3. Goods price inflation fell to

an annual rate of 2.1% in December, from 2.3% in the previous month, reflecting sharp falls in petrol prices and falls in clothes prices. Services price inflation fell to 2.9% in December, from 3% in November, influenced by foreign holiday prices and fuel and light.

42 The retail sales deflator showed a significantly lower rate of inflation than implied by the RPIX goods series, allowing for known differences in coverage.

43 There was little obvious correlation between input prices and retail prices. However, input prices were correlated with producer output prices, though the former were considerably more volatile. Recent input price data suggested a benign outlook for producer output prices. In turn, output prices were strongly correlated with retail goods prices. But there has recently been a large differential (similar in size to that in the United States), with producer output price inflation remaining below retail goods price inflation. The divergence in inflation rates may reflect the fact that the appreciation of sterling had a greater impact on producers than retailers, which would be consistent with retailing being a less 'tradable' activity than manufacturing. Alternatively, the divergence may reflect catch-up for the bulk of the recovery in 1992–96, when output prices rose faster than retail goods prices.

44 The Bank's Agents had surveyed the impact of the appreciation on retailers, in terms of what they had done to prices and margins, and what they were likely to do. The responses were mixed. The majority of firms surveyed reported some fall in imported goods prices due to the appreciation. Many felt that wholesalers were holding on to some of the appreciation benefits. Some firms surveyed had increased margins, while others had passed on the benefits of cheaper imported goods. Many had done both. Responses seemed to depend on the state of competition in the particular sector surveyed, as well as preferences for stability in prices. Looking ahead, fewer firms expected to be cutting prices than had done so to date, as further reductions in imported goods prices from sterling's appreciation were expected to be small.

## V Financial markets

45 On the foreign exchanges, the largest change in the period since the last MPC was in the yen, which appreciated by 6% against the dollar, 5% against sterling and 6% in effective terms. The majority of the appreciation occurred during the middle of January on expectations of an additional fiscal stimulus by the Japanese authorities, and paralleled a strong recovery in Japanese equity prices. The Deutsche Mark was little changed in effective terms. In part, this reflected reduced expectations of an increase in interest rates by the Bundesbank, following the release of soft German inflation data for January. The dollar slipped during the period by more than 1% in effective terms, partly reflecting uncertainties about the political situation.

46 In the Far East, the Indonesian rupiah fell by approximately 30%, amid continuing uncertainty about the government's commitment to the IMF programme. Other currencies in the region, on the other hand, were more stable than in recent months, with signs of recovery in some cases.

47 Events in Asia continued to have little effect within the exchange rate mechanism. The process of convergence continued for those currencies most likely to participate in EMU: implied correlations between the core European currencies remained at nearly 100% at a twelve-month horizon. The divergence of the Irish punt from its central rate within the ERM fell to 3%–4% by the end of the period, compared with 8%–10% during 1997, and market expectations of a revaluation of the central rate diminished. The divergences between three-month forward rates and current central rates were negligible for all other ERM currencies, except for the Irish punt and, to a lesser extent, the Italian lira.

48 The sterling ERI was little changed in the period since the last MPC meeting. Sterling weakened at the start of January, particularly against the Deutsche Mark, partly reflecting market positioning influenced by the forecasts that sterling would depreciate during the course of the year. The average of a panel of more than 30 forecasts predicted a fall in the ERI of 7% by the end of 1998. But sterling recovered after mid January. This was partly because of the release of stronger-than-expected data from the British Retail Consortium and the labour market on 13 January. It may also have reflected strong corporate demand for sterling, related to take-over and merger activity.

49 Expectations of short-term interest rates fell in January, both in the United Kingdom and overseas. Much of this movement occurred on 5 January, in response to Chairman Greenspan's speech referring to the possibility of deflation. In the United Kingdom, there was little further change overall, apart from a modest easing at the shortest maturities. The spread between three-month interbank rates and the general collateral repo rate narrowed to levels similar to those before late October. Implied volatilities derived from options contracts rose temporarily after the last MPC meeting, particularly for the March 1998 contract, suggesting greater uncertainty about the outlook for short-term interest rates in the very short run. US short-term interest rates were also little changed since the last MPC meeting. Rates in Germany fell comparatively further, as a result of the publication of weaker-than-expected economic data and growing confidence that interest rates in the EMU area would converge on the rates of the lowest countries.

50 In the government bond markets, nominal interest rates in the United Kingdom fell by between 15 and 20 basis points since the start of 1998 at all maturities, and reached their low point on 12 January. Concerns about the impact of Asia and weaker-than-expected PPI and industrial production data initially pushed forward rates down at both ends of the maturity spectrum. The impact of these factors was later offset by the labour market data. Subsequently, the weaker-than-expected retail sales and GDP data pushed gilt prices higher. Much of the movement in nominal forward rates during the period was driven by corresponding changes in forward inflation rates. Real interest rates have been relatively stable for both short and long maturities since the last MPC meeting. Real yields on ten-year index-linked gilts, for example, have remained at just below 3.2% since the start of 1998. Ten-year break-even inflation rates—the rates above which it was profitable to buy index-linked debt—fell steadily in the United Kingdom and United States during much of 1997. During the past year, the much larger fall in break-even rates in the United States than in the United Kingdom might have reflected the fact that actual US inflation had fallen relative to UK inflation. While these rates were constant in the United Kingdom in January, they fell in the United States in early January but then rose temporarily by around 30 basis points, possibly influenced by the auction of index-linked stock by the US Treasury on 8 January.

51 In the equities markets, the FT-SE 100 had returned to the levels it had reached in mid October. Implied volatilities derived from options prices traded on the FT-SE 100 index also indicated that market uncertainty about future stock prices was now approaching the levels that had prevailed before the start of the Asia crisis. The sectoral indices, however, had diverged sharply. In particular, sectors with a high degree of exposure to international markets, such as the General Industrials sector—which included manufacturing—and Resources, fell sharply during the market turbulence of late October and subsequently fell further. This may partly have reflected, respectively, further news on the impact of the appreciation of sterling, and the fall in the oil price. The Asia crisis was nevertheless also likely to have contributed to their underperformance. The share price of companies with sales exposure to Asia of more than 10% of total sales had underperformed the FT-SE All-Share Index on average by around 15% since mid October.

52 The possible impact of events in Asia upon the outlook for UK corporate profitability overall might, however, have been offset at the aggregate level by a fall in real yields. Real yields on index linked gilts had fallen and this alone might have accounted for part of the rise in equity prices—for example a fall in yields of 0.2 percentage points could account for a 6% rise in the FT-SE 100 index, other things being equal. Though the outlook for most UK companies might have been a little better by the end of the period than it was in December, much of the recent rise in equity prices might have been due to lower real interest rates.

53 Disaggregated data from corporate bond markets provided further indications that firms with relatively high exposure to Asia

might have been more affected by the crisis than those without. Real yields for corporate borrowers with high Asian exposure ended the period approximately 30 basis points higher than mid-October, whereas real yields for other corporate borrowers rose sharply but then gradually returned to mid October levels by mid December. Adjusting for the effect of the fall in real interest rates, the credit spread of real yields over index-linked gilts was around 40–50 basis points wider than in October for selected companies with high exposure to Asia and around 15–20 basis points wider for a selection of those without. This general widening of credit spreads was consistent with either greater uncertainty about the future value of the firms, or a rise in the risk premia demanded by investors.

## Minutes of the Monetary Policy Committee meeting on 4–5 March 1998

1 The Committee discussed the implications of the slowdown in broad monetary growth; puzzles regarding domestic demand, net trade and output; fiscal developments; the tightness of the labour market; recent international developments; and indicators of cost pressures, before turning to what general considerations should bear on the preferred path of interest rates to achieve the inflation target. The Committee were also given a short briefing by the Treasury representative outside its formal meeting on the provisional net fiscal effect of the Budget.

### Monetary and financial developments

2 The Committee agreed that the signs of a deceleration in broad money were now apparent. The three and six-month annualised growth rates were both around 8%, bringing the twelve-month growth rate down to around 10% from 11%–12% in mid-1997.

3 The sectoral data were, however, telling diverse stories. On the one hand, personal sector M4 growth seemed, if anything, to have been picking up slightly. Together with a slight rebound in M0 growth, to around 7%, and continuing strong consumer credit growth, this suggested that personal sector demand growth might have remained strong. That was consistent with the apparent recent strength in retail sales.

4 By contrast, the position in the ICC sector seemed very different. The level of money holdings was barely changed over five months, and bank lending growth to ICCs had been weak. It was possible that this reflected the downturn in the externally exposed sectors of the economy. If so, the money and credit numbers were illustrating the different pressures on different parts of the economy. Staff analysis suggested that the effects of a monetary tightening were typically seen in the ICC sector before the personal sector.

5 On another view, the money numbers did not provide much information. Given the inflation target of 2½% and trend real GDP growth of about 2¼%, M4 growth above 5% or so needed to be accompanied by falling velocity. Velocity trends were, however, very difficult to explain or predict. The slowdown in broad money growth was in the right direction, and was implied by the central projection in the February *Inflation Report*, but the money numbers could not confirm whether the degree of policy tightening was sufficient to hit the inflation target. Slower money growth was to be expected given the interest rate increases during 1997, especially in M0 and in deposit accounts which paid no or low rates of interest, although it was noted that the slowdown was not in fact in zero or low interest bearing money (M0 and personal sector M4) and so was apparently not based on agents substituting out of money because the Bank had increased the cost of holding it.

6 A further view, while agreeing that money growth should be expected to fall as the economy slowed, also placed weight on cumulative past rapid money growth, and the possibility that there remained a liquidity overhang in the OFI sector which could sustain asset price inflation.

7 This led to a discussion of asset markets. Some members were concerned that, as in some previous cycles, cumulative rapid broad money growth might be associated with unsustainable asset price appreciation and domestic demand growth. Others were less sure. There was uncertainty about the degree to which asset price changes affected the demand for goods and services. The connection between money growth and asset prices was also

unclear, not just in the United Kingdom but even more so in the United States.

8 Overall, the Committee agreed that the recent money and credit numbers suggested a slowing economy, but there was a range of views about how much weight to attach to them.

9 Another aspect of monetary conditions debated by the Committee was the information potentially available from the yield curve. It was possible that the current inverted conventional gilt yield curve (with long maturity nominal rates below short maturity nominal rates) indicated an impending slowdown; the role of the yield curve slope as a leading indicator was supported by some (mostly US) academic research. On the other hand, the results in the literature could be explained by the influence on activity coming from movements in real rates. In particular the gap between short-term real interest rates, as effectively set by the central bank given sticky prices, and the equilibrium real rate should be the better leading indicator of activity. Indeed the nominal yield curve slope could be misleading, because it might change on account of developments in the monetary regime, as had occurred over the past year; the emergence of an inverted nominal yield curve might have been associated with the announcement of operational independence for the Bank, since this had caused a fall in long-run inflation expectations and thus in long-maturity nominal rates relative to short-maturity nominal rates. On this view, there was in principle no additional forward-looking information available from the slope of the conventional yield curve beyond that available from short-term real interest rates. But it was argued that, even if this were true, the conventional yield curve slope might be of some practical assistance given the technical difficulties associated with estimating the ex ante short real rate and the equilibrium real rate, neither of which could be observed directly.

10 The Committee noted that, although there had been no change in the Bank's repo rate, the short end of the yield curve had risen by about 20 basis points since its previous meeting, apparently in response to the *Inflation Report*. And sterling had strengthened in the immediate run-up to the current MPC meeting. While it was possible that an immediate rise in the Bank's repo rate would be accompanied by an offsetting fall in market expectations of future interest rates, the Committee took the view that it would be more likely than not to prompt a further appreciation in sterling.

### Real side puzzles

11 The Committee recalled its assessment at earlier meetings that the short-to-medium run path for output and inflation, would in the absence of shocks be determined largely by the balance of influence of domestic demand and net trade. There was a series of puzzles in the data, making it difficult to assess this balance.

#### (a) Consumption

12 The trend in consumption growth was difficult to identify due to the distortions caused by the funeral of Diana, Princess of Wales. Smoothing over the third and fourth quarters suggested a gradual slowdown in consumption growth. But recent data on car registrations and retail sales suggested that strong personal sector demand growth had in fact continued into 1998. Consumer confidence, as measured in surveys, had fallen, but from exceptionally high levels in mid-1997 associated with the windfall payments, so that the balances were still high compared with past cycles. Income from employment continued to grow strongly; house prices were up, on the Bank's estimate based on Land

Registry data, by 9% in Q4 over the previous year, although other indicators suggested that the rate of increase was slowing; and financial asset prices had continued to rise rapidly, as already discussed. The background was therefore suggestive of a continuing impetus to robust consumption growth (and strong imports). Arguably this was apparent in the January retail sales figures, which taken together with December, recorded the strongest Christmas/New Year period growth since 1989.

13 Interpretation was not, however, straightforward. This was always the case for the Christmas/New Year period, given the strength of the seasonal pattern—spending was much higher in December than in January on an unadjusted basis. In addition, in this particular year, a pre-Christmas BRC survey had indicated that consumers had waited to make some major purchases out of windfall gains until the Christmas/New Year period, and that this had been planned last summer, so that the recent data should not be a surprise. January's strength had also been accompanied by aggressive discounting by stores, which some commentators attributed to retailers carrying higher-than-expected inventories at the end of 1997. Reports from the Bank's regional Agents and surveys suggested that while buoyant retail business had continued into early February, it had since slowed. Finally, there had been profit warnings from some retail companies, perhaps suggesting that the underlying position was not as strong as the sales volume numbers implied.

#### (b) *Net trade*

14 The GDP figures for Q4 implied a sharp fall in the trade balance. However, the monthly trade data recorded a small increase between Q3 and Q4 in export volumes of goods excluding oil and erratics, suggesting that the net trade weakness stemmed more from strong import growth than falling exports.

15 The Committee discussed the significance of the growth of gross imports and exports compared with that of the overall trade balance. Net trade was not exogenous. Part of the explanation was related to relative income growth in the United Kingdom and overseas. Import volumes would be affected by the strength of domestic demand and exports would be affected by external demand, while both would reflect any domestic capacity constraints. Less comfort could be taken for the inflation outlook if the contribution of net trade to slowing aggregate demand growth came from rises in imports, since this might signal that domestic demand was not slowing fast enough.

16 Another part of the explanation for strong import growth was the greater price competitiveness of imported goods and services caused by the strength of sterling. With this effect, import demand would be expected to be strong even in the face of slowing domestic demand, as home producers lost market share to importers. This effect put direct downward pressure on retail price inflation and indirectly added to the slowdown in domestic demand as home producers were forced either to cut costs or output. To the extent that import growth was a result of such price, rather than income, effects it did not signal the need to tighten monetary policy further.

17 A declining trade balance could help to subdue inflationary pressures when domestic demand was above trend, since the economy could in effect borrow capacity from overseas. Domestic demand growth could then be reduced more gradually. There would be longer run effects since the current account deficits entailed would reduce the United Kingdom's net external assets and thus future levels of consumption. It was noted, however, that in the past strong domestic demand sucking in imports had been an indicator of masked inflationary pressures; that had been so in the mid-to-late 1980s, when taking comfort from the ability of the external deficit to accommodate strong domestic demand had led to delays in taking necessary domestic policy action.

#### (c) *Output growth*

18 The divergence between the ONS data and surveys of manufacturing had become more pronounced. The ONS data recorded a fall of 0.4% in manufacturing output in Q4 over Q3. Surveys, however, indicated positive, albeit weakening, growth; Bank staff estimated that the CBI survey responses implied above trend manufacturing growth in Q4.

19 There was a range of views on whether the official statistics or surveys should be given greater weight. On one view, the ONS's first estimate of GDP growth should, as a general rule, be given very little weight given the size of revisions. It would be better to treat the early ONS releases as forecasts rather than hard data.

20 Another view was that the surveys did not track the finally revised official output numbers very well, and thus greater weight should be placed on the ONS data and in particular on the direction of revisions. The output growth data for Q4 had been revised down by 0.1 of a percentage point; this was news since the general expectation had been that there would be upward revisions.

21 The Committee agreed that recent developments in activity were unclear. It was possible that the path of future output, and inflation, was more uncertain in the short run than suggested in the Bank's fan charts since the considerable uncertainty about recent past data—and hence the starting point—was not reflected. It was agreed that this issue should be investigated further for the May *Inflation Report*.

22 There was also a range of views on the implications of the contrast between the manufacturing and service sectors. On one view, the slowdown in manufacturing growth was likely to have knock-on effects for services, directly through the dependence of business services on the production industries, and indirectly via slower personal sector income growth if wage growth and employment fell in manufacturing. On the other hand, it was argued that continued buoyancy in the services sector could help to sustain the demand for UK manufactures.

#### **Fiscal developments**

23 The Committee noted the strong PSDR in January, which some commentators had attributed to higher than expected Inland Revenue receipts from personal tax self assessment, for the tax years 1995/96 and 1996/97. When more data were available it would be important to assess whether this was likely to mean that measures of past national income—and so past output levels—would be revised upwards. It would also be necessary to assess whether the effect was cyclical, on account of the cyclical-sensitivity of income from investment and self-employment.

24 Preliminary analysis by Bank staff suggested, however, that in terms of the current year's fiscal position, any extra revenue in January and possibly February from the introduction of self assessment was less material than the PSBR shortfall which had accumulated over previous months. The Committee noted that the July 1997 Budget had expected to tighten fiscal policy, on a cyclically adjusted basis, by around 1% of GDP. The PSBR numbers since the Budget suggested that that might prove to be an underestimate, but it was too early to judge whether or not any difference was significant. If it were, the key question was whether any extra revenue was being generated by an increase in the tax base or the effective tax yield (or both). The former seemed unlikely judging by the GDP numbers published so far, but the National Accounts might be revised if any unexpected strength in tax revenues suggested that income or expenditure was stronger than previously thought. On the other hand, if the explanation lay in the effective tax yield, fiscal policy would be exerting a stronger future contractionary effect than expected. These were potentially

important questions, to which the Committee agreed it would need to return as more information became available.

## Labour market developments

25 Unemployment had fallen again in January. This too was difficult to interpret. On the one hand, the twelve thousand fall in the claimant count was significantly below the average monthly fall during 1997, suggesting that the pace of labour market tightening might be moderating. On the other hand, the Department of Employment thought the true fall might be greater as their statistics had been collected unusually early in the month, and very soon after the Christmas/New Year holidays.

26 Other indicators were mixed. Whole economy underlying average earnings growth was unchanged at 4<sup>3</sup>/<sub>4</sub>%. Wage settlements were still rising faster than a year ago; the three-month employment-weighted median was +3.6% compared with +3.0% in January 1997, and the three-month employment-weighted mean had risen from +3.3% to +4.0% over the same period.

27 Wage and earnings data were, however, backward-looking indicators of tightness. As in earlier months the Committee therefore discussed survey measures of tightness. Skilled labour shortages were apparently still increasing, as were recruitment intentions. The one exception was the CBI's measure of shortages of skilled labour in the manufacturing sector, which was consistent with other indicators of a slowdown in manufacturing growth.

28 There was a range of views of what the latest data implied. One interpretation was that, although labour market conditions were still tightening, there were few signs that this was feeding into wages and earnings; after the upturn last summer, growth in settlements had been broadly flat. Since there was now evidence that the economy was slowing, the risks of continued earnings acceleration had diminished.

29 Another interpretation recalled the advice of Bank staff last summer that great weight should not be put on the upturn in settlements that had been recorded then as there were relatively few settlements during the summer. In that case, there was news in the recent data since it covered a period when there were many settlements, and the best comparison was with the position a year ago.

30 The Committee discussed the possible implications of the planned introduction of the Minimum Wage in April 1999, observing that on its own it would be an adverse supply shock at the aggregate level, which would increase the natural rate of unemployment. It noted recent accounts that some employers were awarding wage increases to the low paid in anticipation of the Minimum Wage. The Bank's regional Agents were reporting various reasons why this might be so. One was that some firms making annual payment settlements that spanned the Minimum Wage's introduction preferred to increase pay now rather than go through a second pay round once the Government had responded to the Low Pay Commission report due in May. A second reason being aired was that some firms felt there would be a stigma attached to having to raise pay once the Minimum Wage was a formal requirement. A third possible explanation was that some firms were simultaneously increasing pay and trying to raise the quality/skills of their employees, with the goal of reducing employment levels. A fourth was that employers were consolidating other parts of remuneration into basic pay so as to minimise the effect of the minimum wage on the total wage bill.

31 The Committee concluded that it was not yet in a position to judge whether these effects, if true, would be significant. The

important thing at this stage were the signs that the Minimum Wage might be affecting labour market conditions earlier than had been expected. The Committee agreed that this needed to be analysed carefully in time for its *May Inflation Report*.

## International developments

32 Recalling its earlier discussions of the Asian situation, the Committee agreed that there had been relatively few developments since its 4–5 February meeting. Indonesia looked worse, but other countries in Asia appeared to be making progress with their IMF programmes. The risks to activity had, however, possibly increased slightly, partly on account of the perception that the Japanese position was not improving. But this might be offset by a marginally better outlook for activity in the European Union and the United States. The Committee agreed that recent data were broadly in line with its expectations at the time of the February *Inflation Report*.

## Cost pressures

33 The Committee agreed that developments in Asia had contributed to very benign cost pressures. In particular, commodity prices were down 13% on a year ago. Manufacturing output prices (excluding excise duties) had also registered their first ever fall over a twelve-month period (on data constructed back to 1974).

34 On one view this was encouraging for the inflation outlook; it took time for lower input prices to feed through to retail prices. The current cost picture could therefore help to sustain low inflation for some time to come. Another view emphasised that, notwithstanding falling commodity prices and sterling's appreciation, inflation had remained above the target for most of the past year. Strong domestic demand conditions had largely offset favourable cost developments. Looking forwards, there was no reason to expect that commodity prices would continue to fall, or that sterling would continue to appreciate, making the accumulated underlying domestic inflationary pressures more important to the medium-term outlook.

## What has changed since the February *Inflation Report*?

35 Drawing together its discussion of recent developments, the Committee reviewed what had changed since it finalised its February *Inflation Report*.

36 That broad money growth had slowed now seemed reasonably clear and offered some reassurance, but the sectoral differences were striking. Unchanged personal sector M4 growth combined with 7% M0 growth and continued strong growth in consumer credit contrasted markedly with weak ICC deposit and bank lending growth. Financial asset price growth had persisted, and the exchange rate had appreciated rather than depreciating in line with expectations. Money-market conditions had also tightened, with the money-market yield curve about 20–25 basis points higher out to 1999.

37 In the labour market, developments had not so far been as bad as some had feared. But pay settlements had now been quite high for a prolonged period, and earnings growth was only just consistent with the inflation target. Other cost pressures and price developments were more benign than expected. Given the PSBR numbers, the current fiscal position might be tighter than earlier expected.

38 But little had happened to help clarify the outlook for demand and output. Domestic demand and the productive capacity of the economy remained the key issues. Given past monetary and fiscal tightenings, sterling's level, and the fading effect of windfall

gains, Members agreed domestic demand was likely to slow. But the pace and extent of the slowdown remained highly uncertain.

### General considerations bearing on interest rate setting

39 Given that the Committee's assessment of the economic outlook and appropriate policy stance was finely balanced, the Committee reviewed some of the general considerations bearing on its choices before turning to its immediate policy decision.

40 First, in any given circumstances, a variety of different interest rate paths could in principle achieve the inflation target. What factors were relevant to the preferred profile of rates? One element of this was the role that the projected path of output should play. There was a broad consensus that the Committee should in principle be concerned about deviations of the level of output from capacity. If the economy operated below capacity, productive resources would be underutilised and inflation would be tending to fall; on the other hand, attempting to operate the economy at above capacity levels of output would be unsustainable and lead to increasing inflation. The desirable rate of growth of output was itself affected by whether the economy was running at or below capacity. In circumstances where the actual level of output was above its capacity level, actual growth would need to be below the growth rate of capacity output for a period in order to bring the economy back to equilibrium. While the Committee agreed that in principle it should be concerned about minimising deviations from capacity rather than smoothing growth rates per se, the practical difficulty was that the trend rate of growth could not be observed with sufficient precision for estimated deviations from capacity output to serve as a clear guide to policy.

41 The Committee considered the way in which uncertainty entered into the forecast, and the implications of that for the determination of interest rates. Three distinct issues were discussed. The first concerned the meaning of the fan charts published in the *Inflation Report*. The MPC is committed to publishing forecasts in the form of fan charts because they emphasise the fact that forecasts are statements about probabilities of different outcomes. The charts seek to represent the quantifiable uncertainties about the future paths of inflation and output. The bands in the charts reflect the Committee's judgment about the risks to the central projection, and can encompass minor differences of view about those risks. But there might be circumstances where the differences among the Committee members about the nature and magnitude of the risks were more significant. In such circumstances, it would be necessary to publish fan charts corresponding to more than one forecast.

42 A second issue was the relationship between the forecast for inflation over the next two years or so and the decision on the current level of short-term interest rates. Although the fan chart sought to capture all the relevant issues, it could not be used as a mechanical determinant of the policy decision. Since the fan charts were conditioned on particular paths for interest rates over the next two years (for example, constant rates or the path of rates implied by futures markets), the fan charts could indicate no more than the prospects for inflation were one of those paths to be followed. They could imply the need for policy action, but did not in themselves dictate mechanically precisely by how much or when official interest rates should change.

43 The third issue was whether the existence of uncertainty, or the nature of the uncertainty surrounding inflation, was a reason for delay in taking action that might otherwise seem warranted. Two views were expressed on this. The first was that policy should reflect the latest news and that uncertainty in itself was no reason for delay. The second was that there might be particular cases, where the implied need was for only a small interest rate change, when the cost of a short delay would be small and new information

might give more confidence about the need for the change, or not. In those circumstances a delay could be warranted to reduce the risk of unnecessary reversals of policy.

44 A further issue was the optimal frequency of changes in interest rates. In particular, members discussed whether there were costs to rapid reversals of policy; eg cutting rates very shortly after having raised them. On one view such reversals could be misunderstood, creating uncertainty both in financial markets and in the wider economy and damaging the credibility of the MPC process. An alternative view was that this position was irrational. So long as any policy reversals could be properly explained by new developments or improved analysis of the outlook, they need not create confusion about policy goals or the MPC's approach. On that view, there were no benefits in delaying changes in rates to reduce the risk of reversals, and it was better to make changes as soon as they appeared necessary. Also, the desire to minimise the risk of policy reversals was likely to mean that interest rate changes would, on average, be made too late.

### The immediate policy decision

45 The Committee discussed its immediate decision about interest rates. Against the background of the Committee's assessment that there had been only a modest amount of news since it finalised the February *Inflation Report*, the considerations were broadly the same as at its 4–5 February meeting.

46 A number of arguments were advanced for an interest rate increase now. First, on one view it was more likely than not that the level of output was above trend, and the level of unemployment below the natural rate. While earnings growth was still just about consistent with the inflation target, earnings were a lagging indicator of tightness. It was necessary—however difficult—to take a view on where the economy was in relation to trend. Personal sector demand seemed to remain robust, so there was little sign of the level of output returning to trend quickly. On the view that the level of activity was above its capacity level, steps therefore needed to be taken to reduce output growth below trend for a period. The current policy setting should bring output back in line with trend over a period but the slowdown was unlikely to be sufficient to avoid inflation rising above the target in two years time.

47 If output were above trend, there were greater risks involved in delaying a rate increase than in acting early. If policy were tightened now but this was later reversed on account of news that the slowdown was sharper than currently expected, the net effect would be that output had been brought back to trend earlier than expected. But this needed to happen anyway, so it would simply have accelerated the process. On the other hand, if policy action was delayed but growth continued in line with the central projection, the gap between the level of actual output and trend output would increase. The Committee would then have to tighten policy more sharply in due course, perhaps at a time when output growth was already falling, increasing the risk of aggravating the slowdown. Thus, on the view that the level of output was above trend, the risks run by acting early were small and certainly lower than the risks run by delaying.

48 Second, surveys strongly suggested that the general public's expectations of inflation over the next couple of years were materially above the inflation target, even after adjusting for the fact that most surveys covered the RPI rather than the targeted RPIX. It was the public's expectations that were relevant to wage bargaining. Early policy tightening was needed to bring core inflation, as measured by the public's expectations, into line with the target. This would require below-trend growth for a period.

49 Third, as indicated in the February *Inflation Report*, the risks were clearly on the upside, with the mean inflation rate two or so years ahead materially above the 2½% target, and a 30% chance of

being above 3½% in Q1 2000, on the assumption that the Bank's repo rate remained at 7.25%.

50 A number of arguments were advanced against a rise in rates, at least immediately. First, arguments for an immediate tightening placed great weight on the level of output having been above trend since last summer, but this was a highly uncertain judgment. There were major uncertainties about both trend output and the current actual level of output. These uncertainties about the current position of the economy—and in particular about short-term downside risks to output—were perhaps not fully captured in the February *Inflation Report*.

51 Second, the central projection was below the target until the latter part of the forecast horizon. This partly reflected the assumption of constant interest rates throughout the forecast period. Both these arguments pointed to avoiding using the forecast fan chart mechanically.

52 Third, even assuming that a tightening would be needed at some point to achieve the target, the best profile over time might involve a delay in raising interest rates. The economy was projected to slow from the effects on net trade of sterling's appreciation and the Asian developments. A later tightening might affect domestic demand when the dampening effects of sterling's appreciation and Asia were wearing off. This could potentially avoid exacerbating the incipient slowdown in activity while nevertheless achieving the inflation target.

53 Fourth, while there were clear upside risks to inflation, how to react to some of them—such as sterling depreciating more rapidly than implied by uncovered interest parity—was better assessed if and when the risk started to emerge. It was also possible that the downside risks—for example, from Asia—had increased somewhat.

54 Taking these four arguments together, the benefits of waiting to gather information to help resolve the particular uncertainty about the current position of the economy could outweigh the costs. Responding immediately also ran the risk of having to incur what

some members saw as the costs entailed by a quick reversal of policy.

55 Members of the Committee agreed, however, that the gap between the differing points of view had probably narrowed slightly since the February meeting. On the one hand, although the Christmas period seasonal adjustments were difficult to interpret, the most recent data did not offer much support for an immediate slowdown in consumption. On the other hand, monetary growth had started to slow, the fiscal position might be tighter than earlier expected, the labour market position had not deteriorated at the rate feared by some, and sterling had not fallen in line with the assumption in central projection. The Committee agreed that the development of the labour market data over the next few months would be especially important to assessing the position of the economy and the inflation outlook.

56 The Governor invited members of the Committee to vote on the proposition that the Bank's repo rate be left unchanged this month. Four members of the Committee (the Governor, David Clementi, DeAnne Julius and Ian Plenderleith) voted for the proposition, and four (Alan Budd, Willem Buiter, Charles Goodhart and Mervyn King) voted against, preferring an immediate increase in interest rates. The Governor exercised his casting vote in favour of the proposition and the repo rate was thus left unchanged.

57 The following members of the Committee were present:

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

58 Gus O'Donnell was also present as the Treasury representative.

## Annex: Summary of data presented by Bank staff

1 This Annex summarises the analysis presented by Bank staff to the Monetary Policy Committee on 27 February 1998, in advance of its meeting. It has been updated to incorporate data that subsequently became available to the Committee.

### I Monetary conditions

2 Notes and coin grew by 0.6% on the month in January, and preliminary estimates suggested that growth in February was 0.4%. The twelve-month growth rate rose to 7.1% in February, although the introduction of the new 50p coin was still adding 0.2 percentage points to this figure. The Royal Mint had reported that around 20% of the old 50p coins were still outstanding. This meant that the upward distortion to the twelve-month rate would continue beyond February.

3 The one-month and period growth rates were now indicating a slowdown in M4 growth. M4 rose by 0.2% in January, while three-month and six-month annualised rates fell to 7.8% and 8.1% respectively, down from rates in the 11%–12% range in mid 1997. The slowdown had become more apparent after revisions to the 1997 data, reflecting the normal re-estimation of the seasonal adjustments. Real M4 grew by just under 8% in the year to January, but the six-month annualised rate had fallen below 6%.

4 The slowdown in M4 growth appeared to be largely accounted for by wholesale deposits. Although still high, the six-month annualised growth rate of wholesale money had fallen to 12.1% in January, down from rates in excess of 20% in the first half of 1997. This was consistent with a ‘liability management’ description of banks’ recent behaviour, with the slowdown in M4 lending requiring banks to bid for fewer deposits.

5 The sectoral data for January showed the twelve-month growth of personal sector money holdings remaining steady at 8.1%. Revisions to the data had also brought individuals’ M4 growth more into line with that for the personal sector. By contrast, ICCs’ deposits fell for the fourth time in five months. The twelve-month growth rate came down to 5% in January, continuing the steady fall in this rate recorded through 1997. There were signs that the growth of OFIs’ M4 holdings might be slowing as well; the twelve-month growth rate fell to 20.7% in January, down from rates above 25% in mid 1997. However, the fall in January’s annual figure reflected the large rebound in repo transactions between banks and the M4 private sector that occurred in January 1997 dropping out of the twelve-month calculation.

6 Previous analysis by Bank staff had suggested that, within the OFI sector, life assurance and pension funds (LAPFs) were holding excess money balances. While money holdings would be expected to rise rapidly with increases in portfolio values, industry surveys suggested holdings of ‘cash’ had been higher than normal during 1997. It was possible that the accumulation of money balances could have been reinforced by the practice in parts of the fund management industry of reaching asset allocation decisions on the basis of the desired position relative to a ‘benchmark’ based on average asset holdings. This might have contributed to the growth in OFI money holdings. In fact, *ex post* returns from asset markets had for a while been greater than returns from money. There had recently been reports of ‘cash-rich’ funds underperforming the median. A recent Merrill Lynch survey of funds’ asset allocation intentions had indicated plans to move out of money holdings into, among other things, UK equities.

7 M4 lending growth continued to show signs of slowing. In January it rose by 0.4% and by 6.3% at a six-month annualised rate. Lending to persons remained steady at 6.9% in the year to January.

Including lending by institutions other than banks and building societies, the three-month annualised growth of secured lending slowed slightly to 5.5%, but unsecured lending growth continued to rise quickly, by 18.9%. Unsecured credit comprised about 17% of total personal sector credit, but had been growing in importance. Mortgage equity withdrawal had turned positive again in recent quarters, although it was still much lower than in the late 1980s.

8 Lending to ICCs was strong in January, rising by 0.8% on the month. The flow of £1.4 billion compared with a monthly average of £0.2 billion during the second half of 1997. A fall in the six-month annualised growth rate of lending to OFIs provided tentative evidence that a slowdown was underway in that sector’s money holdings.

9 January’s higher-than-expected public sector debt repayment made it more likely that the Government would be overfinanced in fiscal year 1997. The effect would be to depress M4 growth during FY 1997.

10 Longer-term RPI inflation expectations, as derived from nominal and index-linked gilts, were broadly unchanged since the previous MPC meeting, standing at 2.8% and 2.9% at the five and ten-year horizons respectively. This was only slightly above the measure of long-run inflation expectations taken from the Consensus Economics survey.

11 The sterling effective exchange rate index had risen by 0.2% between 4 February and 4 March. There had been little movement in the UK forward interest rate curve relative to the rest of the G7, suggesting that there had not been much monetary ‘news’ during the period.

### II Demand and output

12 GDP growth was revised down from 0.5% to 0.4% in 1997 Q4 to stand 3.0% higher than a year earlier. There were other revisions back to the first quarter of 1997 but the estimated level of GDP in Q3 was unchanged. The first expenditure breakdown of GDP in 1997 Q4 showed a growing divergence between domestic and external demand. Net trade made a -1.1 percentage point contribution to GDP growth in Q4. Domestic demand grew strongly, at 1.3% slightly more than expected in the February *Inflation Report*. Private consumption also grew by 1.3% in Q4, a little less than expected in the February *Inflation Report*. The increase in growth of consumption in Q4 was consistent with an unwinding of the effect from Princess Diana’s funeral, but it was difficult to know what would have happened otherwise, and thus to determine the underlying strength of spending.

13 Retail sales were strong at the beginning of 1998 Q1, growing by 1.8% in January, and taking annual growth to 6.9%—its highest since June 1988. The less volatile three-month annual rate was 5.7% in the three months to January compared with 5.6% to December. Car registrations also continued to grow strongly in January—11.6% up on a year earlier—particularly by the personal sector. Both retail spending and car sales growth may reflect some further ‘windfall’ spending. But equally, some of the recorded strength in January’s retail sales numbers may simply have been substitution from spending in December which showed no growth on November’s level after seasonal adjustment. Sales were likely to have been boosted by the extent of price discounting in January as retailers cleared excess stocks (especially in clothing and footwear). Seasonal adjustment in the period is always substantial; nonetheless, seasonally adjusted growth in December and January, taken together, was the strongest since 1989/90. The Bank’s

Agents suggested that there had been a fall back in growth in the first few weeks of February.

14 Consumer confidence—as measured by the GFK survey—fell in February to +3.6% (+4.5% in January). It remained at lower levels than mid 1997, but was still historically high. The balance of consumers thinking that there is an advantage in making major purchases at this time—at 19.6%—was not too different from the balance over the summer months when many ‘windfall’ payments were made. There were signs that growth in housing market activity might be moderating. Particulars delivered fell again in January and the RICS survey pointed to a further fall in the number of properties sold over the previous three months compared with 1997 levels. Alongside this possible easing in activity, house price inflation was still moderating according to the Halifax index: the annual rate of increase was 5.1% in February, compared to 12.9% for the Nationwide index. Bank estimates of house price inflation, based on Land Registry data, grew at 9% in the year to 1997 Q4, similar to the previous two quarters.

15 Total investment grew by 0.8% in 1997 Q4, to be 2.9% higher than a year earlier. Data on investment spending showed a sharp fall of -9.2% in manufacturing investment in Q4 compared with Q3. Surveys of investment intentions suggest this weakness will continue. Given the overall rise in investment in Q4, service sector investment probably increased significantly.

16 Stockbuilding contributed 0.3 percentage points to GDP growth in Q4, with stocks rising by £1,006 million at 1990 prices. But disaggregated stocks data implied that much of the overall increase reflected a positive quarterly alignment adjustment (measured expenditure rose by less than measured output). Retailers ran down stocks in Q4 (and revisions show less of a build-up through 1997) resulting in a fall in the retail stock to sales ratio to its lowest level since 1995 Q2.

17 There was large public sector debt repayment of £10.4 billion in January, partly due to higher than expected receipts under the new self-assessment tax system. Although there are always uncertainties about expenditure at the year end, the full-year PSBR seemed likely to undershoot the Government’s November 1997/98 forecast. The cumulative effects of higher receipts and lower expenditure over a number of months was likely to be a larger effect in determining the 97/98 undershoot than the effects of self-assessment tax system.

18 Trade data for goods showed a sharp deterioration in the trade balance in 1997 Q4, despite a rebound in exports in December. This deterioration resulted entirely from non-EU trade, partly reflecting an impact from East Asia. Revisions also resulted in a larger deficit through 1997, which has not yet been reflected in the GDP data. It is not clear yet what the implications will be for GDP growth in Q4. The monthly data are consistent with a -0.7 percentage point contribution from trade in goods in Q4, compared to an overall net trade contribution of -1.1 percentage points in the latest GDP expenditure breakdown.

19 On the output side, the contrast between domestic demand and net trade is reflected in continued strong growth in services output (+1.1%) and a fall in manufacturing output (-0.4%) in Q4, the largest quarterly fall since 1991 Q4. Total industrial production fell even more sharply, by 1.1%, reflecting falling energy output. Manufacturing output was some 1% lower in December than its peak in the summer of 1997 and had fallen in each of the previous three months. The recent weakness was widespread but most noticeable in investment and intermediate goods.

20 Falling manufacturing output contrasted with survey evidence and Agents’ reports that, while growth was slowing, it remained positive. This was true across a range of surveys. But the surveys did point to a worsening outlook for manufacturing: output expectations balances have fallen back in the CBI Industrial

Trends survey (+9 in January) and the CIPS survey suggested orders growth was almost zero (index of 50.7 in January). But there remained a large discrepancy between ONS and survey data about whether this future deterioration would follow a period when output had been rising or falling.

21 Recent data relating to the situation in Asia were considered. The effects of the crisis were beginning to be evident. Exports to the region had been falling sharply, though imports from the region had been less responsive. G7 trade balances with East Asia were deteriorating (Japan, Germany, France, United Kingdom). The Agents undertook a special inquiry in February into the effects of the Asia crisis on UK companies. Recent Agents’ reports had mentioned export difficulties amongst some companies, worries about dumping and the impact on inward direct investment. The survey was focused on firms which were expected to be sensitive to the East Asia situation, three quarters of whom were manufacturers. Around 60% said that the situation had already had an impact, two thirds in terms of lost export orders, and a half mentioned some reduction in export prices. Around a quarter had seen a rise in imports from the region; and around a third are benefiting from a fall in their import costs. But around one half had seen a fall in the price of competing imports. Some mentioned the likely wider impact on world commodity prices. Of those who had not yet seen an impact, over three quarters did not expect that to change. In general, a number of respondents and Agents felt it was still too soon to gauge the overall effect on UK business.

### III The labour market

22 Service sector demand for labour remained quite strong: the CIPS survey for January showed the largest increase in employment since August, and there was only a marginal slowdown in February. Information from the Bank’s Agents supported the broad picture, although there were some indications employment growth was beginning to fall. There was mixed evidence on manufacturing. ONS data indicated a fall of 17,000 in manufacturing employees in employment in December after two small increases in October and November; the monthly data were, however, quite volatile and were often revised when the quarterly Workforce in Employment survey was released. In contrast, the CIPS survey was consistent with a small increase in employment levels in each of the six months to February. The Agents were reporting a flat position overall with small rises in some regions and small falls in others; this was a slightly weaker position than in the autumn. A broadly flat position was the best assessment of the short-term trend.

23 Claimant unemployment fell by just over 12,000 in January, leaving the rate unchanged at 5%. The decline was less than in previous months. But the small fall could at least partly reflect the early date for the count: the Employment Service had less time than usual in the New Year to close down the claims of those who had found work. There was a small rise in claimant unemployment in the North East, Scotland and Northern Ireland in January. But looking back over the past six months, the fall in unemployment across the regions had been remarkably uniform outside Northern Ireland.

24 The stock of vacancies fell by 12,400 in January and was back to the level of early 1997. In contrast to November and December, the decline was not due to the removal of the statistical overcount. But the early count date might have had an influence. Notifications of new vacancies were very weak and were thought to have been affected more than the outflow. A bounce-back in February was quite likely.

25 There was mixed evidence on skill shortages. The February Reed survey reported that 71% of firms were reporting shortages of suitably skilled applicants, down 6 percentage points from the previous survey. Skill shortages were more prevalent in the service sector and indeed had increased since the previous survey; the easing of shortages in manufacturing was sufficient to pull down

the overall average. The Reed data suggesting fewer shortages in manufacturing was in line with the CBI quarterly survey reported in the previous month. But the most recent BCC survey had reported increased recruitment difficulties in both services and manufacturing and the February CIPS survey reported that skill shortages had contributed to a further rise in work outstanding in the service sector. Construction firms were reporting increasing difficulty in attracting suitable applicants. The Agents reported high levels of shortages across a range of skills, but no further intensification in the most recent month.

26 Whole-economy underlying average earnings growth was unchanged at 4¾% in December. Earnings in manufacturing and services were both rising at this rate; the rise in the private sector remained above 5%. High bonuses had pushed earnings growth up; earnings in the financial intermediation sector were 9.6% higher than in December 1996. But there had also been a modest pick-up in recent months in the earnings measures which smoothed out the effect of bonus payments: the Kalman filter estimate was up 4.7% in the year to December and the estimate which smoothed erratic movements at the industrial level had increased to 4.55%.

27 Further information confirmed that wage settlements had increased in January, though by a smaller amount than the provisional estimate known at the time of the February *Inflation Report*. Based on 125 settlements covering 74% of the employees expected to settle in January, the three month employment-weighted median settlement in the Bank's database was 3.6% in January, up from 3% a year earlier. The twelve-month mean settlement had risen to 3.4% in January from 3.3%, and in the private sector had increased to 3.8%. The one-month weighted median was 0.5% points higher than in January 1997. Longitudinal analysis of companies settling in January in both years confirmed the general trend but also revealed some exceptions: just under a quarter of firms had achieved a lower settlement in 1998 than in 1997.

28 The staff presented an analysis of wage drift—the difference between earnings growth and settlements. Previous Bank analysis had suggested that settlements do not necessarily lead wage drift; if anything the reverse tends to be the case. But the rise in performance-related pay systems meant that there was a risk of a permanent gap emerging between basic pay settlements and total earnings. This might have been offset in recent years by the structural decline in more traditional forms of non-basic pay such as overtime and piece-work. But in the short term such payments might rise as a result of labour market tightness. Several special factors such as the phasing out of tax relief on PRP and the prospect of a national minimum wage might also be affecting settlements.

29 Although higher settlements would underpin the basic component of pay in 1998, the outlook for earnings would also depend on the various factors affecting the different components of wage drift. The pace and extent of the slowdown in activity would also be a major element.

## IV Prices

30 The latest data showed a further fall in commodity prices in January. The Bank index fell provisionally by 1.7%, largely accounted for by falling oil and metal prices, taking the annual rate to -13.3% (-8.2% excluding oil). Domestic agricultural prices—assumed flat in the provisional estimate—were likely to have fallen again in January, based on producer price data covering food manufacturing materials. UK agricultural prices fell by 14.5% over the year to December 1997.

31 Oil prices fell further in February—the fourth consecutive monthly fall—to below \$14 per barrel by the end of the month. Higher OPEC quotas and the UN/Iraq deal, alongside lower demand due to a relatively mild northern hemisphere winter, had resulted in rising stocks and falling prices.

32 Manufacturers' input prices fell by 0.9% in January—taking the annual rate to -9.7%—reflecting falls in oil, food and imported material prices. The CIPS PMI survey for February indicated further falls in material prices. Manufacturers output price inflation remained low. Output prices excluding excise duties (PPIY) fell by 0.2% in January reflecting falling petroleum product prices. Annual PPIY inflation was negative (0.1%) for the first time since 1974 (the start of the series). The CBI Industrial Trends survey suggested a continuation of the recent trend—the balance of firms expecting to raise prices over the next four months remained negative (-7) in January. Overall, UK producer output price inflation was the lowest of the main European economies. But it was above US producer price inflation (-1.9%) which, like the United Kingdom, had been influenced by currency appreciation.

33 Corporate service sector price indices published by the ONS, covering services such as road freight transport and industrial cleaning, suggested that inflation in the business service sector was higher than in the manufacturing sector (measured by producer price indices). Survey evidence and the Bank's Agents suggested a similar contrast between the different sectors.

34 Trade prices fell further in December. Export prices fell by 0.5% (excluding oil and seasonally unadjusted); and import prices by 0.2%. Annual rates stood at -4.2% and -4.3% respectively (excluding oil). Revisions to trade prices meant import prices had fallen a little more since the start of the appreciation than previously recorded. But the overall fall remained only a little more than half that expected on the basis of past behaviour.

35 A number of factors may have accounted for the sluggish response of import prices to sterling's appreciation in 1997. In sterling terms, export prices in the major six overseas economies had deviated significantly from UK import prices since the appreciation. But other factors were more in line with the behaviour of import prices so far. Expectations in 1997 that the appreciation would be temporary and reversed may have delayed the response of prices. And strong relative demand in the United Kingdom may also have enabled import prices to remain above world prices in the short term. Furthermore, the dollar—against which sterling has appreciated by considerably less than the ERI as a whole—may account for a greater volume of UK trade than is implied by its ERI weight (16%). Developing countries and particular sectors—for example commodities and aerospace—traded worldwide in dollars. Evidence suggests that this may increase the dollar's significance in UK trade to around 20%–25%. So using the ERI to estimate the expected fall in import prices may underweight the dollar's influence, at least on shorter-run import price movements.

36 The implications of the analysis were that the factors which might have accounted for the slow response of import prices in 1997 were unlikely to persist. While some depreciation of sterling was still anticipated, market exchange rate expectations were now much closer to current levels. And relatively strong demand growth in the United Kingdom was likely to moderate as the economy slowed this year. The dollar effect was unlikely to persist as competitive pressures require firms to adjust dollar prices. So further downward pressure on import prices—and in turn retail prices—seemed likely in 1998, as was assumed in the February *Inflation Report* forecast.

37 Retail price inflation fell in January. RPIX fell to 2.5% from 2.7% in December. The fall was consistent with the central projection in the February *Inflation Report*. RPIX goods price inflation was lower in January, falling to 1.7% from 2.1%. RPIX services price inflation fell to 2.8% from 2.9%. The sharp fall in goods inflation reflected record discounting in the January sales and lower food prices. In both cases, it is not clear whether these effects will persist. Typically the larger the discounts in January, the larger the subsequent price increases in February. So it was not clear whether some of the fall in goods price inflation in

January reflected further pass-through from lower import prices. February and March would be important months to note this effect in the post 'sales' period. The fall in services inflation was due mainly to a smaller rise in repair and maintenance charges than last year, and falling gas prices. Car insurance premiums increased in January and a range of services prices were still rising at an annual rate of over 4%. The differential between goods and services inflation was 1.1% on an RPIX basis, but over 2% on a RPIY basis.

38 Other inflation measures also moderated. HARP and THARP inflation rates were closer to RPIX inflation as house price inflation moderated. And the UK EU harmonised price index rose by 1.5% in the year to January (1.8% in December) compared to the EU average rate of 1.6% (December).

39 The short-term outlook for RPIX inflation would depend significantly on the scale and timing of any Budget changes to excise duties.

## V Financial markets

40 On the whole it had been a quiet month in the foreign exchange markets, despite quite a lot of news (eg from the Gulf and the G7 meeting). Sterling and the US dollar had traded in narrow ranges. The Deutsche Mark had also been stable. Of the major currencies, the yen had been the most volatile. Early in the month it had rallied on the prospect of a meaningful fiscal package and some abatement of concerns in Asia, but it weakened subsequently as hopes of a fiscal stimulus proved unfounded with the announcement of no new tax cuts either before or at the G7 meeting. With renewed weakness in the Nikkei in the second half of the month and downgrades of three more Japanese banks, the yen was 1.9% lower against the dollar and 1.4% lower against the DM compared with the position at the previous month's MPC meeting. Elsewhere in Asia conditions had been a little more stable.

41 Over the month as a whole, the sterling effective exchange rate had risen very slightly. Using a simplified definition of the ERI based on the Deutsche Mark, US dollar and yen and implied volatilities from options on bilateral exchange rates, it appeared that one-month and twelve-month uncertainty on sterling had declined since the previous MPC meeting, though longer-term uncertainty remained greater than short-term uncertainty.

42 In Europe spot exchange rates were, in general, approaching their ERM parities. In the case of forward exchange rates, the apparent divergence with central rates was smaller. The implied twelve-month correlation between the DM and the French franc remained very close to unity and correlations between the DM and the Spanish peseta and between the DM and the Italian lira were at or above 0.98.

43 Short-term UK interest rate expectations were higher than a month ago. The interest rates implied by the June, September and December 1998 sterling futures contracts this year had risen by around 20 basis points, but a downward trend in the level of rates was still foreseen later in the year. Market participants who believed the MPC would not raise rates at its 4–5 March meeting pointed to doubts about the strength of retail sales, the weak international outlook, the lower-than-expected RPI figures and the

imminence of the Budget. Those who expected a rise pointed to the finely balanced January MPC vote, the warning in the *Inflation Report* over the need for a further rate rise and continuing wage pressures. There appeared to be a spread of views on the strong Public Sector Debt Repayment figures announced during the month; some in the market suggesting it was a negative windfall for the personal sector and others thinking it a backward-looking reflection of strong economic growth.

44 The yield curve had become slightly more inverted. Zero coupon gilt yields had fallen over the first part of the month, by close to 20 basis points from ten years out. The peak had come on the day that the unexpectedly large PSDR was announced, opening up the prospect of reduced gilt supply, but over half of these gains had subsequently been lost.

45 Zero coupon yields on indexed gilts had fallen again in February, by around 10 basis points at 10 years and by more at shorter maturities. Part of the parallel fall in redemption yields appeared to have been a statistical artefact, reflecting the fact that the month-on-month RPI inflation number was different from the 3% annual assumption the market conventionally uses in calculating IG yields. But this was not an explanation for the fall in real yields over the year as a whole, where annualised RPI outturns had been reasonably close to the 3% assumption. Long-dated real redemption yields in the United Kingdom had fallen by some 60 basis points since the start of September, while US real redemption yields had risen by 10 around basis points. There were three possible reasons why UK long-term real redemption rates had fallen over this period. One possibility was that it might reflect microeconomic changes associated with the Minimum Funding Requirement (MFR), introduced as part of the Pensions Act, which meant that pension fund managers were willing to accept a lower real return on index-linked debt. Another possible cause was the impact of the Asia crisis, which could have led investors to expect a looser monetary stance and possibly increased the relative attractiveness of index-linked bonds against riskier equities and conventionals. However, it was not clear why this should affect the United Kingdom more than the United States. The third possibility was that the fall in real yields reflected the increased probability of the United Kingdom joining EMU, since EMU membership would imply convergence in nominal yields but not necessarily initially in inflation performance. While the EMU story did not have any implications for risk or scarcity premia on index-linked debt, the MFR explanation might do so; to the extent that this was material, the Bank's measures of implied inflation rates from the bond market might be biased upwards.

46 The All Share Index had risen 3% since the previous month's MPC meeting. Industry sectors continued to diverge. Relative to the All Share Index, General Industrials—the closest match to the manufacturing sector—had performed poorly since last year, perhaps reflecting the weakness of manufacturing output, but there had been no further deterioration since the Committee's February meeting. By contrast, Financials had continued to outperform. The negative skew (measured by the difference between mean and mode) in the probabilities attached to future levels of the FT-SE 100, which had worsened dramatically with the outbreak of the Asian crisis, had returned to its five-year average level over the month. One possible explanation was that this reflected reduced concern over Asia, since the fall had in part coincided with a decline in spreads on Korean corporate debt.

## **Text of Bank of England press notice of 5 March 1998**

### **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 7.25%.

The minutes of today's Monetary Policy Committee meeting will be published on Wednesday, 15 April. Minutes of the meeting held in February will be published on Wednesday, 11 March.

## Minutes of the Monetary Policy Committee meeting on 8–9 April 1998

1 The Committee discussed recent developments with particular emphasis on the continuing rise in equity prices, the recent further appreciation of the exchange rate, the growth rate of consumer demand and the contrast between quantity and price signals in the labour market.

### Monetary developments and the implications of rising equity markets

2 Indicators of both broad and narrow money growth had shown signs of slowing down. The twelve-month growth rate of M4 in March had fallen to 9.8% from a recent peak of 11.9% in July 1997 and that of M0 had fallen to 6.8% in March from a peak of 7.2% the previous month. Estimates of Divisia money growth in Q1 would become available during April.

3 M4 lending to Industrial and Commercial Companies (ICCs) had accelerated in January and February. Bank staff had raised the question of whether ICCs demand for credit was being driven by a need for working capital in the face of a slowdown in activity. The Committee concluded that supporting evidence for this hypothesis seemed to be weak as yet, but that it would be worth watching.

4 Taken together, the money growth data over three months were consistent with a slower rate of growth of nominal income in the economy more widely, but were not conclusive. On the other hand, the evidence from share prices clearly went in the opposite direction. Not only had the FT-SE 100 index risen by a further 6% during March, but the upward movement had also been reflected in a wider variety of stocks than during 1997, with similar rises in the FT-SE 250 and FT-SE Small Capitalisation indices. The increase in share prices over the previous twelve months or so had contributed to a significant rise in personal sector net financial wealth. The problem was to gauge the implications for consumption of the increase in wealth held in equities.

5 The size of the wealth effect on consumption from rising equity prices would depend, on a number of factors. Although direct share ownership had become more widespread, it was not clear whether this would lead to a weaker impact on consumption (if the large number of individuals with small holdings did not react) or to a stronger impact (if the gains were more widely perceived).

6 The rise in equity markets was clearly a global phenomenon. The strength of UK markets was less marked than in countries such as the United States, Germany, Italy or Spain, although measurement in a common currency boosted the UK market's relative performance. A fall in real interest rates had occurred in most of these countries and probably contributed at least a part of the rise in equity prices. Corporate mergers in the United States may also have been an influence.

7 The Committee concluded that the medium-term implications of the rise in the equity market would have to be addressed in the forecast for the *May Inflation Report*. Meanwhile the direction of the effect this month was to support consumption growth.

### The further appreciation of sterling

8 The exchange rate had appreciated over the month but had fallen back on the first day of the Monetary Policy Committee (MPC) meeting leaving a net appreciation of 2% since the previous meeting. The initial appreciation in the month might have been

partly a reaction to the Budget—which might have strengthened a perception of sound government policy in the United Kingdom—and partly arising from continuing uncertainty about monetary developments.

10 The Committee debated whether some of the strength in sterling could be due to a re-rating of the UK economy. Market perceptions of the sustainable rate for sterling appeared to have strengthened, perhaps reflecting the United Kingdom's continuing strong economic performance. On one view, as a result, a greater proportion of sterling's appreciation might persist, and this would not necessarily have adverse effects on trade or output.

11 It was also possible that uncertainty surrounding the future monetary policy of the European Central Bank (ECB) was contributing to the strength of sterling. In this case, although some uncertainty might be removed by the announcement of appointments to the executive board of the ECB, it was likely to be fully resolved only as the market learnt about the ECB's approach to setting interest rates from 1999 onwards. The bond markets did not, however, seem to share any concerns about future European monetary policy: bond yields had generally fallen, converging on the lower German level. One possible explanation for different reactions in the foreign exchange and the bond markets was that the stability pact might have given credibility to expectations of tight fiscal policy in Europe—which might be balanced by looser monetary policy.

12 Other influences related to the creation of the single currency could not be ruled out. One was the diversification motive—as the number of currencies was reduced, those seeking to spread their portfolio might be more inclined to buy sterling, along with other non-euro currencies.

13 To the extent that the persistence of a high exchange rate was caused by these EMU-related factors then the short-run effect, via the impact on prices and net trade, would be broadly equivalent to a tightening of monetary conditions. It was therefore possible that downward pressures on inflation had been increased, without a further rise in interest rates.

14 On a further possible view, the variation in sterling was just normal volatility and the most recent movement had been downwards. Such fluctuations were unlikely to have any significant impact.

### Demand and output

15 Retail sales fell in February but earlier erratic factors were making it difficult to assess the underlying trend. In particular, the funeral of Diana, Princess of Wales, had affected spending in September and October 1997 and was still affecting estimates of the three-month growth rate. Seasonal adjustments over the Christmas period and record price discounting in January also made assessment difficult. There had been thirteen profit warnings from retailers since January 1998 compared with three in the same period in 1997. The Confederation of British Industry (CBI) Distributive Trades Survey for March showed a marked weakening in retail sales growth, but this survey could have been affected by the timing of Easter this year compared to last.

16 Looking at other components of consumption, private car registrations data were buoyant in Q1 and the CBI Financial Services Survey was strong. Surveys of consumer confidence continued to show positive balances, although well below the historically high levels in mid-1997 associated with the largest

building society conversion payouts. Taking all the evidence together, consumption growth seemed likely to have remained robust in Q1, but some of the indicators supported the February *Inflation Report* projection that, after a strong first quarter, consumption would decelerate over the course of 1998.

17 The Office for National Statistics (ONS) revisions to the composition of expenditure in 1997 had brought the numbers more into line with what had been assumed for domestic demand growth for 1997 in the February *Inflation Report*. However, the ONS estimate of the level of GDP in 1997 had been revised down by 0.3% and the level in Q4 by 0.2%. This left the level of GDP below that assumed as the starting point for the *Inflation Report* projections.

18 The path of GDP growth through 1997 had also altered: it now looked smoother, with less pick-up in H1 and less slowdown in H2. The growth rate in the fourth quarter was now estimated to have been 0.2 percentage points higher than previously, despite the downward revision to the estimated level in that quarter. Evidence on GDP growth in Q1 seemed to be consistent so far with the central projection in the February *Inflation Report*.

19 The output measure of GDP in 1997 H2 had been significantly depressed by the primary sectors—agriculture, energy extraction and supply—and the same might happen in 1998 Q1. The mild winter had led to weak energy demand. A measure of GDP which excluded these volatile sectors (which account for around 6% of GDP) showed growth continuing at above trend rates of around 0.8% per quarter in 1997 H2. It was not obvious how to react to this divergence. Weak production in any sector affected incomes from that sector, and recent weaker earnings data were linked to lower overtime payments for workers in the utility industries. But to the extent that such fluctuations were due to temporary climatic factors, primary sector output was likely to return to normal, boosting GDP growth in due course.

20 According to the ONS data, manufacturing output remained weak and continued to show a weaker picture than the majority of surveys. The monthly CBI and Chartered Industry of Purchasing and Supply (CIPS) manufacturing surveys were stronger, the British Chambers of Commerce (BCC) quarterly survey less so. The CIPS survey even appeared to indicate a strengthening of manufacturing growth.

21 The indicators of service sector output were more uniformly strong, despite the fact that elements of the service sector were exposed to the exchange rate appreciation, either directly through final demand or indirectly via services supplied to manufacturing. Details of the CIPS services survey suggested that the balance remained strong, with increased numbers reporting growth higher and increased numbers reporting a weakening. This suggested that the service sector was subject to diverse demand conditions in different sub-sectors. This more complicated picture was supported by the weaker surveys of retailing.

22 Capacity utilisation measures for both services and manufacturing remained above average and robust, on both the CBI and BCC surveys. The strength of manufacturing output in the CBI survey seemed consistent with the capacity utilisation measures.

23 Overall, the Committee considered that recent domestic activity data were broadly consistent with the February *Inflation Report*. Despite the remaining data puzzles, it was fairly clear that the externally exposed sectors of the economy were suffering while the less-exposed remained relatively buoyant.

24 International news had shown the European economies continuing to recover slightly faster than previously expected and a robust US outlook, offset by a deteriorating Japanese conjuncture. The concern about a general financial crisis seemed to be receding. Recovery in Asia was now thought likely to take longer than earlier

predictions but otherwise was not likely to be any more severe. Overall, there seemed to be little net change in demand conditions in UK export markets, although there was a general concern about the difficulties facing Japan.

## The corporate sector

25 The Committee discussed the combined evidence on the position of the corporate sector, which generally reacts to interest rate changes sooner than the household sector. One possible view was that the corporate position was weakening rather sharply. Manufacturing output was falling and exports were flat. M4 growth for ICCs had turned negative in the fourth quarter of 1997, while M4 lending to ICCs had recently risen, which could indicate cash-flow problems. The National Accounts revisions showed a downward adjustment to gross profits of almost £6 billion in 1997 and the ICCs' financial balance in 1997 was negative for the first time since 1992. Retailers' margins had started to fall as unit labour costs had picked up and the exchange rate was clearly squeezing manufacturing margins. One side-effect of the Asian crisis would be to reduce income from overseas operations, partly because of lower profits in foreign currency terms and partly because of a lower sterling value of those profits. Overall there were signs of a significant squeeze on the corporate sector, which could have greater knock-on consequences for investment and employment than are currently foreseen in the *Inflation Report* forecast.

26 Counter to this was the continuing strength of the stock market to the extent that, in addition to the fall in real yields, it reflected expectations of strong future dividend growth. Furthermore, analysis of movements in import prices, unit labour costs and retail prices implied that a reduction in profits would be a necessary consequence of hitting the inflation target unless there were a fall back in unit labour cost growth.

## The fiscal position

27 The Committee had been given a short briefing on the provisional net fiscal effect of the Budget at the March MPC meeting, so there was relatively little news to the Committee on the fiscal position. The main issue for the Committee was the implication of the PSBR undershoot in 1997/98—equivalent to about 1% of GDP on current estimates—for domestic demand. It was not clear how much of the smaller PSBR was due to a higher effective tax rate and how much might indicate stronger than recorded activity in the past. If higher tax revenue was due to the introduction of self-assessment (and not just from the self-employed), some of the improvement was likely to be permanent. The unexpected strength of other components—such as VAT and corporation tax receipts—suggested stronger past expenditure or incomes. The expenditure undershoot in 1997/98 was to be made up in 1998/99 so this was a less important factor.

28 On one view there had been a significant, and partly unanticipated tightening of fiscal policy in 1997/98, which would continue to affect aggregate demand in 1998/99. On another view, the fiscal outturn could be signalling the possibility of higher activity levels than had been recorded in past data.

29 The March PSBR numbers would reveal whether the normal upsurge in government expenditure at the end of the financial year had happened.

## Quantity versus price signals in the labour market

30 The labour market data on quantities were signalling a tighter position than the price data. The Committee reviewed each in turn and the conclusions that could be drawn.

31 Manufacturing employment showed a surprising rise of 20,000 in January and employment intentions indicated by the

Manpower survey remained well above the long-term average. The BCC survey and the Bank's Agents recorded high and rising skill shortages. The CIPS surveys showed a flat trend for current manufacturing employment, but continuing strong growth in services employment.

32 The claimant count measure of unemployment had continued to fall in 1998, albeit more slowly than in 1997. The Labour Force Survey (LFS) data due next month would be important additional evidence on this apparent moderation of the fall in unemployment. The LFS data should also help to reconcile the claimant unemployment and employment data.

33 Price indicators gave less sign of a tightening labour market than the quantity data. Underlying average earnings growth for November and December had been revised down from 4<sup>3</sup>/<sub>4</sub>% to 4<sup>1</sup>/<sub>2</sub>% and the rate of earnings growth was estimated to have been stable at 4<sup>1</sup>/<sub>2</sub>% over the four months to January. Although earnings growth remained at a high level, the situation had not deteriorated as might have been expected from the quantity data. Several possible explanations were discussed.

34 On one view it took time for labour market tightening to be reflected in earnings or settlements and recent growth in employment would feed through in due course. The Committee could not afford to wait for earnings to accelerate—that would mean reacting too late. In the late eighties earnings growth had not been an early indicator of the pick-up in inflation. One had to form a judgment about inflationary pressures and that meant forming a view about unobservable variables such as the natural rate of unemployment.

35 On another view, it was significant that settlements had not picked up during the important New Year settlement period when lagged pressures from past labour market tightening might have been expected to be felt.

36 An important question was how much the natural rate of unemployment might have fallen. The short-term unemployment rate was below the level seen during the late-eighties (at the peak of the previous cycle). Current quantity indicators would be extremely worrying if the natural rate had not fallen at all. Although earnings growth over the previous twelve months had been close to the Bank's forecast in the February 1997 *Inflation Report*, unemployment had fallen faster than predicted, suggesting a more benign conjuncture, perhaps consistent with a lower natural rate of unemployment. It seemed likely that the long series of labour market reforms, particularly during the eighties, had led to a fall in the natural rate of unemployment, though it was difficult to identify what particular reforms could have caused it to fall during the last year.

37 There was no reliable estimate of the natural rate of unemployment, but some Committee members placed greater weight on the survey data relating to skill shortages or recruitment difficulties as direct estimates of the balance of supply and demand in the labour market. These indicators suggested that the labour market was already very tight.

38 The Committee went on to discuss a number of other factors which might be influencing the labour market. The appreciation of sterling might have been holding back earnings growth if labour markets were not fully integrated. As profits were squeezed in the externally exposed part of the economy so wage bargainers in those sectors would reflect this in settlements. If sterling's appreciation was expected to persist then this would result both in lower wage increases and in corporate re-structuring to improve labour productivity.

39 Another contributing factor to the restraint of earnings growth might have been the lower settlements rate in the public

sector. It was not clear how long this could persist. The competitive pressure raised by contracting out previously public sector work to private sector firms might be a restraining factor on some public sector pay deals. In this case differential growth rates of earnings might be sustained for some time. Contracting out to private companies—with lower levels of earnings but faster growth rates—might widen the recorded gap between private and public sector earnings growth.

40 Shifts in employment patterns might also have contributed to a fall in the natural rate of unemployment. Employment in manufacturing had been flat or falling and there had been a huge shake-out in the privatised utilities. The rise in employment had come in the less unionised parts of the service sector. The move to more part-time and temporary jobs would also have been an influence. There was no longer any sign of large manufacturing companies—such as car manufacturers—setting a pay-round 'norm'. Services settlements tended to be more related to the firm's own profits and, in some cases, could be influenced more by public sector comparisons rather than by manufacturing settlements. And even in manufacturing, unions were now more aware of the competitive pressure on companies and anecdotal evidence reported that this was being reflected in negotiations.

41 In the United States, the benign labour market conditions seemed to have been supported by strong productivity growth, especially in manufacturing. That may have reflected a lagged effect from new technology—especially Information Technology. In the United Kingdom there was no evidence yet of strong productivity growth. Indeed, weak measured productivity growth during the upswing implied higher unit labour costs.

42 Finally, it was possible that the better-than-expected combination of unemployment and earnings reflected a fall in inflation expectations. This was consistent across various surveys, although the general public's inflation expectations were still significantly above the Bank's inflation target of 2<sup>1</sup>/<sub>2</sub>%.

43 Taken together, the quantity signals appeared to indicate a tightening of the labour market and some surveys suggested that the tightening would continue. The problem was in judging where the natural rate of unemployment lay. On one view, the subdued behaviour of earnings was encouraging evidence that the natural rate of unemployment might be lower than had previously been thought, though this could be affected, as noted at the March MPC meeting, by the prospect of a National Minimum Wage.

## Prices

44 The news on prices remained benign. The oil price had fallen further and world commodity prices generally remained weak. UK producer price inflation was flat. Retail prices had been much as expected, showing a bounce back from January's record discounting.

45 Looking forward, changes in petrol duties announced in the Budget and implemented immediately meant that the level of retail prices would be temporarily boosted by as much as 0.3 percentage points. This would remain in the twelve-month inflation figures from April to June, until the previous duty increase dropped out in July. In the interim it was possible that the RPIX inflation rate could reach 3% and the RPI inflation rate 4%. The Committee was clear that it should not try to offset such short-term fluctuations reflecting the timing of indirect tax changes associated with the fact that the 1998 Budget was in March and the 1997 Budget was in July. The MPC's inflation forecasts incorporated the Government's plans for increasing duties on alcohol and tobacco every year in real terms as detailed in previous *Financial Statement and Budget Reports*. The March Budget announcements on excise duties affected the expected timing of tax effects, but did not alter the Committee's views of the inflation rate in two years time.

## The immediate policy decision

46 The Committee started its discussions on the policy decision by reviewing the possible impact on financial markets of various choices. The markets were expecting no change this month with a small probability attached to an increase. A decision to leave rates unchanged might therefore have a small effect. It was thought that a rise would be a surprise to the markets but there were differing views as to the impact this would have on the exchange rate. A decision to cut would be regarded as a big surprise given the February *Inflation Report* and would require strong justification to be accepted as being consistent with the inflation target.

47 Moving to the immediate question of whether to change rates this month, the economy appeared to be broadly on track with the central projection published in the February *Inflation Report*. The weakening of the net trade position seemed to be firmly established and the main issue had been the projected path of a slowdown in consumer demand after a robust first quarter. The available information on Q1 seemed to broadly support the projections. Quantity indicators of activity in the labour market and in the money data were also reasonably consistent with the central projection. The main news on the month concerned the continuing rise in share prices, the appreciation of the exchange rate, the implications of the Budget and the slightly better-than-expected earnings data.

48 Given that the February *Inflation Report* suggested that it was more likely than not that interest rates would need to rise in order to hit the inflation target, on one view the arguments for an increase had not diminished. On this view, the economy was still operating at a level above that consistent with hitting the inflation target. Domestic demand was growing too rapidly to achieve the necessary slowdown in activity. Inflation had been temporarily depressed by the appreciation of the exchange rate but it ought to have fallen further. It was most likely that inflation would start rising once the effect of the appreciation wore off. The balance of risks was still on the upside and there remained particular risks from cumulative strong money growth and possible depreciation of the exchange rate.

49 On this view, the news on the month did not significantly alter the case for a rise in rates. The continuing rise in equity prices was likely to support robust consumption growth, even if the precise magnitude of its influence was unclear. The Budget had not contained much news for the Committee and the variation in the exchange rate was no more than usual month-to-month volatility. And to the extent that the rise in the exchange rate reflected an improvement in UK competitiveness or a shift in demand for UK goods, this would not have the effect of tightening monetary conditions. The quantity data and direct indicators all suggested that the labour market was continuing to tighten. On this view, if one waited for the earnings data to show signs of clear inflationary signals then the appropriate policy response would be delayed too long.

50 Further evidence in favour of a rise in rates was the robust picture of GDP growth excluding the more variable primary sectors. In particular, to the extent that a mild winter had temporarily depressed (seasonally adjusted) energy output, a rebound would boost GDP growth in due course.

51 An alternative view was that the need for a rise in rates had been offset by the news over the month. The further appreciation of the exchange rate could have delivered a tightening, possibly in excess of that yielded by a quarter percentage point rise in interest rates. And some members concluded that the Budget implied a tighter fiscal position—certainly for 1997/98 and possibly spilling

over into 1998/99—than perceived at the time of the February *Inflation Report*.

52 In addition, the weaker-than-expected earnings growth had helped to offset concerns about inflationary pressures in the labour market, although earnings growth remained at a level which was only just consistent with hitting the inflation target. The upside risks to the central projection identified in the February *Inflation Report* had not so far materialised and leading activity indicators suggested that the expected slowing down of the economy was taking place. Furthermore, the level of GDP in 1997 had been revised downwards so that any output gap above trend was less than previously thought.

53 The central projection for inflation in the February *Inflation Report* had only just been above 2½%. On one possible view given subsequent developments, particularly the Budget and the rise in the exchange rate, a case could be made for a cut in interest rates to rebalance the overall policy setting. But the evidence on the pace of the domestic slowdown in demand was not yet sufficiently clear to persuade any members of the Committee to advocate a cut this month.

54 Members discussed the timing of any interest rate move. On one view it was a bad time to raise rates. Sterling was strong, creating an unbalanced economy, and this would be exacerbated by a further move now. Retail prices would show a spike from excise duties in the second quarter and the RPI would be further boosted by a rate rise now. The February *Inflation Report* central projection was for growth in the UK economy to slow during 1998. Against this background and given current projections, it could be argued that the costs of waiting a few months, in terms of any additional tightening that proved necessary, would be small. Finally, the May *Inflation Report* round was just about to start and that would provide a fresh opportunity to assess medium-term inflationary pressures and the attendant risks.

55 An alternative view in favour of an immediate rise was that the data were broadly confirming the outlook published in the February *Report* and that a failure to move sufficiently rapidly would require a larger correction in due course—perhaps at a time when growth in the economy was already slowing. On this view, the cost of reversing policy, should that prove necessary, would simply be to accelerate the return to a sustainable growth path. It was also possible to argue that a delayed increase could add more to the imbalance in the economy than an immediate move.

56 The Governor invited members of the Committee to vote on the proposition that the Bank's repo rate be left unchanged this month. Five members of the Committee (the Governor, David Clementi, Charles Goodhart, DeAnne Julius and Ian Plenderleith) voted for the proposition and three (Alan Budd, Willem Buiter and Mervyn King) voted against, preferring an immediate increase in interest rates.

57 The following members of the Committee were present:

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

58 Gus O'Donnell was also present as the Treasury representative.

## 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 April 1998, 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 The annual rate of notes and coin growth had slowed slightly in March to 6.7%. Narrow money had broadly been growing in line with nominal consumption during 1997 and into 1998, at a rate of 6%–7%. This followed a period of negative notes and coin velocity growth.

3 M4 rose by 0.8% in February, compared with 0.3% in January. This increase reflected a bounceback in repo activity. But the annual rate had nevertheless edged down from around 12% in mid 1997 to less than 10% in February.

4 Personal sector M4 growth of 0.3% in February was slightly weaker than in previous months. Unusually large income tax payments in January and February, in particular due to the new self-assessment scheme, may have accounted for some of the recent weakness.

5 ICCs' M4 annual growth rate had fallen further in February, to 5.1%, but the three-month annualised rate (3.5%) and the six-month annualised rate (-1.7%) were both lower. As a result, staff estimates of the liquidity gap in the corporate sector had become more negative in the last quarter of 1997. The sharp fall in ICCs' M4 growth since the autumn of 1997 had been in line with behaviour in previous cycles.

6 OFIs' M4 had grown strongly in February (by 2.8%), largely as a result of repo activity. Staff estimates of the liquidity overhang for a subset of OFIs—the life assurance and pension fund sector (LAPFs)—remained large and positive in 1997 Q4. But survey evidence suggested that LAPFs had started to run down cash balances relative to their total portfolio during 1998, perhaps providing an upward impetus to asset prices.

7 M4 lending had risen strongly in February, partly reflecting stronger reverse repo activity. Total personal sector lending growth, at 7%, had been in line with recent months. Since October 1997, growth in secured lending to the personal sector had slowed slightly, in line with a gradual slowing in some indicators of housing market activity (eg the RICS indicator of property sales) and prices. Council of Mortgage Lenders data suggested that remortgaging had picked up slightly in 1997 Q4. Through 1997, remortgagees had switched to fixed-rate mortgages, probably reflecting the inversion of the yield curve. Total unsecured lending to individuals had risen by 1.2% in February, a little lower than in December and January but broadly in line with the average for 1997. Annual growth remained around 16%. Rates charged on credit cards and in particular on personal loans had fallen relative to official rates during 1997, perhaps reflecting extra supply as new firms entered the market.

8 ICCs' M4 lending had risen sharply by 1.7% in February. It had been higher in the first two months of 1998 than in 1997 as a whole. One possible explanation was that ICCs' cashflows might have tailed off (which was consistent with survey evidence), prompting an increase in borrowing to finance working capital requirements or maintain planned investment (again, consistent with some recent survey evidence). Other possible explanations included borrowing to pay corporation tax payments, although they

had largely been made in January; borrowing to finance merger and acquisition activity, which seemed to have picked up in 1998 but mainly affected financial and overseas firms; and borrowing to repurchase equity.

9 On price developments, there had been little change on the month in bank savings rates and secured loan rates. Credit card and overdraft rates had also been unchanged, but personal loan rates had fallen slightly on average. In the past year, savings rates and variable mortgage rates had risen broadly in line with the repo rate. But overdraft and personal loan rates had fallen, which, together with the entry of new firms, was consistent with increased competition in the unsecured lending market. Changes to mortgage interest tax relief had increased effective mortgage rates from April 1.

10 In the money markets, expected three-month interbank rates implied by sterling futures contracts had changed little since the previous MPC meeting. A profile of falling rates remained priced into short sterling futures, with the December 1999 contract implying nominal rates of around  $6\frac{1}{4}$ – $6\frac{1}{2}$ %.

11 Long-term inflation expectations derived from the gilt-edged market had also changed little from the previous MPC meeting. Inflation expectations had been on a downward trend since May 1997, but appeared to have stabilised at around 2.7% in recent months. Short-term inflation expectations derived from opinion surveys had nudged down in March, and were around 20–30 basis points lower than in December. Evidence from the Consensus survey suggested that inflation expectations of business economists had fallen during 1997, but this fall was less clear in other survey measures and in short-term expectations derived from the gilt-edged market. Recent falls in price expectations of the general public derived from the BASIX and GFK surveys did not show a clear downward trend, and they remained well above those of business economists.

12 Estimates of short-run real interest rates, derived by combining nominal interest rates with survey estimates of inflation expectations, suggested that real rates had fallen by around 20 basis points since December, following rises during 1997. Short-run real rates derived from index-linked gilt prices had fallen by a similar amount since December, despite a slight rise since the previous MPC. Australian and Canadian real yields had also fallen. US real yields had not, although the US index-linked market was set up recently and the liquidity premium attached to the initial issue of index-linked debt might now be diminishing.

13 The sterling ERI had risen by 1.9% since the March MPC meeting, and the broader measure, incorporating exchange rates against 49 foreign currencies, had risen by 1.4%. The forward path of the ERI implied by uncovered interest parity had been broadly unchanged, but was at a higher level than assumed in the February *Inflation Report*. Estimates by Bank staff suggested that the fundamental equilibrium exchange rate had risen slightly between August 1996 and end 1997, but the appreciation in the real effective exchange rate had been considerably larger.

### II Demand and output

14 The quarterly National Accounts for 1997 Q4 had included a number of revisions as far back as 1996 Q1. The revisions affected the expenditure and income composition of GDP more than the output measure. The main upward revisions to expenditure in 1997 had been to consumption and investment, by £1.5 billion and £1.7 billion respectively. But downward revisions to government

consumption and to net trade in goods and services left the level of GDP in 1997 0.3% lower than before. The most notable revisions to income had been to gross trading profits of companies in 1997, which were now £5.7 billion lower. That had resulted in the first annual financial deficit for industrial and commercial companies since 1992, partly reflecting the introduction of the windfall tax in 1997.

15 The revisions to GDP had reduced the pick-up in activity in 1997 H1 and the subsequent slowdown in the second half of the year. The growth rate of GDP in 1997 Q4 had been revised up from 0.4% to 0.6%, though this still left the level of GDP in 1997 Q4 0.2% lower than previously estimated. The upward revisions to investment had led to a rise in the investment/GDP ratio, though it remained below its historical average. Business investment (around  $\frac{2}{3}$  of the total) had accelerated in 1997 and was now significantly above its historical share of GDP. Overall, the National Accounts picture was closer to what had been expected at the time of February *Inflation Report*. The data continued to show a clear divergence between external and domestic demand.

16 The 4.6% rise in consumers' expenditure in 1997 had been the strongest since 1988, and had been similar to the rise in real personal disposable income. Most notably, expenditure on durable goods had risen by 11%.

17 The 1.2% fall in retail sales volumes in February had supported the view that January's 1.8% rise reflected historically sharp price discounting. Private car registrations had grown very strongly in the first two months of 1998 Q1, and were 20% higher in the three months to March than in the same period in 1997.

18 Consumer confidence had slipped further in March, according to the GFK survey, to a balance of 1.8%, above the average in the last few years, but lower than the windfall-boosted balances in mid 1997. But the balance of consumers who thought that it was advantageous to make a major purchase remained high. Net consumer credit was still rising as a proportion of disposable income. The annual rate of increase in both the Halifax and the Nationwide house prices indices had declined in March, and particulars delivered had fallen for the fourth consecutive month.

19 Total investment grew by 1.0% in 1997 Q4, and was 5.9% higher than a year earlier. Service sector investment continued to grow strongly, but manufacturing investment had fallen by 3.6% over the quarter. By asset, purchases of aircraft had played a significant role in the rise in service sector investment in 1997 as a whole, but property-related investment had also risen strongly.

20 The current account had remained in surplus throughout 1997, and had recorded the first annual surplus since 1985. But the balance of trade in goods and services had deteriorated sharply in the second half of 1997 in real terms, detracting 0.8 percentage points from GDP growth in 1997 Q4. Excluding oil and erratics, there had been a fall of 2.9% in UK export volumes in January, but import volumes had fallen by 3.5%, implying a positive contribution from net trade. The level of underlying export volumes in January was no higher than in June 1997, despite growth in the UK export markets of more than 4% in 1997 H2.

21 The deterioration in the UK balance of trade in goods was entirely due to a worsening in the deficit with non-EU countries, with one third accounted for by a widening deficit with East Asia (excluding Japan). Trade balances with EU countries were either stable or had been improving, with a narrowing of the aggregate deficit with the EU countries in the second half of 1997. This was largely accounted for by a fall in import volumes towards the end of 1997 and the beginning of 1998. Notwithstanding concerns about the validity of the EU/non-EU price-volume split, the drop in imports from the EU countries was hard to understand, given the size of the appreciation of sterling against EU currencies and the relative buoyancy of UK domestic demand. The US experience

had been similar, showing a slight improvement in its trade balance with the EU countries (excluding the United Kingdom).

22 Revisions to the 1997 Q4 output data had further increased the split between above-trend growth in service sector output and falling manufacturing output. Manufacturing output had fallen by 0.5% in Q4 and total industrial production fell even more sharply, by 1.1%, reflecting weak energy output. The split had continued in 1998 Q1: manufacturing output had grown slowly in January and was virtually flat in February, making a second successive quarterly fall likely. That contrasted with the relatively buoyant survey evidence, which had continued to suggest slowing but positive output growth. CBI output expectations had picked up during 1998 Q1, and the Chartered Institute of Purchasing and Supply (CIPS) survey for March had reported the strongest rise in manufacturing output since May 1997. The CIPS survey for the service sector had shown no sign of deceleration in output growth. The British Chambers of Commerce survey also suggested continued strong service sector growth in Q1.

23 The National Institute of Economic and Social Research had begun to publish a monthly estimate of GDP. That had shown a projection for GDP growth of 0.5% for 1998 Q1. Much of the recent slowdown in GDP had been accounted for by falling energy and agricultural output. Excluding these more volatile primary sectors, there had been very little slowdown in GDP growth in 1997 H2. Construction output rose by 1.4% in 1997 Q4, and rising new orders data suggested that the recovery had continued so far in 1998. That was supported by the results of a new CIPS survey on construction, and reports from the Bank's Agents.

24 In March, the Agents undertook a special inquiry into investment intentions. The survey covered 128 firms from the manufacturing, services, agricultural and construction sectors. The results showed that investment intentions for 1998 were generally positive. A balance of around 20% of service sector firms said that they intended to increase investment, and a significant proportion had strengthened their intentions in the past six months. Manufacturing firms were less optimistic, though the balance expecting to raise investment in 1998 was (perhaps surprisingly) positive. The need to spend more on training and skills was a key reason given for increasing investment. There was a more mixed emphasis on investment to increase cost efficiency, and noticeably less need for investment in plant and machinery.

25 There was a short summary of the Budget. Successive forecasts for the PSBR (excluding the windfall tax) in 1997/98 had been revised down from 1.7% of GDP in the July 1997 Budget to 0.6% of GDP in the March 1998 Budget. The largest component of the Budget undershoot for 1997/98 had been higher-than-expected revenue, which contributed £5 billion of the £7 billion undershoot from the November 1997 *Pre-Budget Report*. Further fiscal tightening was in the pipeline: a structural surplus was expected by 1999/2000; the 'Golden Rule' might be met in 1997/98, and would definitely be met in 1998/99; and the ratio of debt to GDP was falling. The Code for Fiscal Stability had been designed to lock in the gains.

26 The Budget measures had been broadly neutral in macroeconomic terms. The thrust of the Budget was to improve supply-side performance through microeconomic reforms, with changes to National Insurance; the introduction of the Working Families Tax Credit; abolition of ACT; lower corporation tax; and reforms to Capital Gains Tax

### III Labour market

27 Indicators of labour demand had continued to show strong growth. Total employment growth (based on the ONS Workforce in Employment measure) increased by 150,000 (0.6%) in 1997 Q4. And the increase for 1997 Q3 had also been revised up, from 73,000 to 107,000. In the whole year, the employed workforce

increased by 438,000 (1.7%). The number of employees in employment rose more quickly than total employment: an increase of 171,000 in 1997 Q4, and 513,000 in the whole of 1997. The fall in self-employment during 1997 was at least partly caused by a change in the employment status of construction workers for tax purposes.

28 The majority of new jobs had been created in the service industry, where employees in employment had increased by more than 2% (367,000) in 1997, a similar figure to 1996. The number of production sector employees had been virtually unchanged in the past two years. More recent data for manufacturing had shown a large increase (21,000) in the number of employees in January. But this series was erratic and prone to revision. The trend in manufacturing employment was probably flat.

29 The CIPS survey data suggested that manufacturing employment might have fallen marginally in March. But its service sector survey suggested strong employment growth; the index in March was the highest since August 1997. The CIPS construction report also showed an increase in employment: its March number was the highest since May 1997. This sectoral picture was broadly confirmed by reports from the Bank's Agents.

30 Recruitment intentions had also remained strong, according to the recruitment company Manpower. Manpower's survey of companies, which looked ahead to the second quarter of 1998, showed that recruitment intentions were at their highest level for nine years. Intentions were particularly strong in consumer-led industries (leisure, retail, transport and other distribution). Perhaps surprisingly, manufacturing intentions had also remained strong.

31 Claimant unemployment fell by 14,000 in February, to 4.9%. There was a similar fall in January, when the claimant count was thought to have been artificially low owing to an early count date. So it appeared that the pace of decline in the claimant count was slowing.

32 But there had been clearer signs of a bounceback in the stock of unfilled vacancies, which had been similarly affected by an early count in January. After the sharp decline in January, new notifications of vacancies had increased in February to 224,000, similar to the average level in the second half of 1997. But the increase was probably related to the artificially low January figure, so the trend was probably downwards.

33 There was a contrast between the strong growth in employment and the falls in the numbers of claimant unemployed. In 1997 Q4, the Workforce in Employment measure had increased by 150,000, but the claimant count had only fallen by 63,000. The apparent paradox had continued into 1998: surveys suggested that employment growth was still strong, but the decline in claimant unemployment had slowed further. Some possible explanations were considered. The increase in the population of working age could account for some 32,000 each quarter of the extra employment. Another possibility was that the Workforce in Employment measure exaggerated employment growth, though this seemed unlikely given that the surveys corroborated the strong numbers. A further possibility was that the claimant count might be underestimating the degree of labour market tightening. If many non-claimant searchers were finding jobs, this would reduce the Labour Force Survey measure of unemployment by more than the claimant count. The new Labour Force Survey data to be released in April would clarify this. The final possibility was that previously inactive people were being encouraged to seek work and taking the additional jobs.

34 Reports from the Bank's Agents suggested that skill shortages among their contacts had remained high. Other surveys also suggested that skill shortages remained a problem. The Enterprise Barometer, published this month by the investment

company 3i, asked firms about their largest problems. From a sample of 450 respondents, skill shortages came top of the list, with 22% of respondents citing it as their biggest problem. More than half the firms responding said they were facing skill shortages, and of these, 61% reported them as a real barrier to growth. CIPS surveys suggested that skill shortages might be intensifying. The service sector survey noted that firms were having difficulties filling low-skilled as well as high-skilled vacancies. And despite the strongest rise in employment for eight months, labour shortages had added to a backlog of work. According to this survey, higher rates of pay were increasingly needed to retain and recruit staff. The CIPS construction survey noted a further fall in the availability and quality of subcontractors in recent months.

35 Whole-economy underlying earnings growth had been flat at 4½% for the four months to January; November and December having been revised down by a ¼ percentage point since the March MPC meeting. Smoothing the series to allow for the effects of bonuses gave two results. The Kalman Filter method showed earnings growth unchanged at 4.5% between December and January. Adjusting for large sectoral movements, the estimates rose to 4.7% from 4.5%, probably because bonus payments were higher last year.

36 Bank calculations, based on National Accounts data for 1997 Q4, revealed a sharp pick-up in real product wages; the four-quarter growth rate was faster than that of the real consumption wage, reversing a recent trend. If this were sustained and not revised, it could be a factor pushing up overall real wage pressure, because at a given demand for hours worked there would be lower effective supply. But much of the recent movement in real product and real consumption wages was caused by a marked slowing in the rate of increase of the GDP deflator relative to the Tax and Price Index. The GDP deflator had recently been revised down significantly, and was prone to further revision.

37 Productivity growth in the year to 1997 Q4 slowed, as GDP growth fell and employment continued to grow strongly. Slower productivity growth was leading to higher increases in unit wage costs: 3.8% in 1997 Q4, the highest since 1992. Unit wage costs were growing faster than prices, which implied a falling profit share.

38 The Bank database now included wage settlements for January, covering 80% of employees who normally settle in that month. The level of settlements had been flat in recent months, but was ½-¾ percentage point higher than a year ago.

## IV Prices

39 The Bank's commodity price index had fallen again in February, largely because of lower oil prices (down by more than 6% in February). Oil prices had subsequently recovered slightly following the OPEC deal to cut production with effect from 1 April. But relative to the RPI, oil prices were around the same as in 1972, before the first oil price shock.

40 UK input prices had continued to fall in February, reflecting the weakness in commodity prices. And the CIPS survey suggested another fall in March. Output prices remained flat: annual inflation measured by producer prices excluding taxes had been 0.2% in February. And the balance of firms in the CBI Survey expecting to raise prices in the next four months had fallen from -6 in February to -11 in March. Despite falling input prices, Bank estimates of manufacturers' domestic margins had narrowed recently, because of rising unit labour costs. Exporters' margins had fallen for around two years because of lower export prices. But prices of exported goods had risen by 0.5% in January (non-oil, not seasonally adjusted), and the annual deflation rate appeared to be moderating. Import prices had also risen, by 0.3% in January (non-oil, not seasonally adjusted).

41 RPIX annual inflation had risen to 2.6% in February from 2.5% in the previous month. Goods inflation had picked up to 2% in February as the effects of discounting in the January sales wore off, but service price inflation remained much higher, at 2.8%. Bank estimates of retailers' margins had fallen slightly in 1997 Q4 because of higher unit labour costs. But margins were still estimated to be wider than a year earlier.

42 There had been a large differential in annual inflation as measured by the retail sales deflator and inflation measured by RPIX goods excluding petrol and cars. The retail sales deflator is constructed using RPI data but is based on 1992 weights, whereas the RPI weights are updated and fixed for each year, which might account for some of the difference. The retail sales deflator appeared to have placed higher weight on low food prices in 1997.

43 There was also an increasing differential (around 1½ percentage points in February 1998) between goods inflation as measured by RPIX and by the Harmonised Index of Consumer Prices (HICP). That had been mostly because of the use of a geometric mean for averaging prices in the HICP, whereas RPIX used an arithmetic mean. This effect was probably exaggerated by the variance of prices during the post-Christmas sales. The annual inflation rate of the GDP deflator had been revised down to 1.3% per annum in 1997 Q4, from 2.1%.

44 Looking ahead, the increase in petrol duties in the recent Budget was likely to add around 0.3 percentage points to RPIX inflation in April. In July, last year's rise in petrol duties would drop out, which was likely to reduce RPIX by a similar amount. And a number of other tax effects on RPIX inflation during the next few months meant that RPIY inflation would be a better indicator of the trend in price changes in this period.

## V Financial markets

### *Foreign exchange*

45 March was busier than February in the foreign exchange markets. Sterling strengthened by 3% during the month (but against a background of declining volatility until late in the period). By 31 March, the appreciation of sterling had taken it to its highest for ten years in effective terms.

46 A range of factors had been cited by the market to explain sterling's rise in the month: a perception that the Budget had done little to take pressure off monetary policy; further 'safe-haven' EMU flows; occasional rises in the oil price as OPEC attempted to reach agreement; and the dismissal of the Russian government. Much of the activity in sterling had occurred around the Budget; sterling strengthened sharply during the speech as short-term interest rate expectations were also revised up sharply. The next day, short-term interest rate expectations had fallen in response to weak data, but sterling continued to strengthen. From that point on, there had been more talk of a re-rating of sterling.

47 Uncertainty measured by implied volatility on sterling currency options had been trending down against both the dollar and the Deutsche Mark until 30 March, after which it picked up slightly. And the implied volatility for a simplified sterling ERI had also been trending down until 30 March. Risk reversals showed that the probability attached to the prospect of future sharp falls in sterling against the Deutsche Mark had fallen relative to the probability of future sharp rises up to a one-month horizon. Meanwhile, the market's 90% confidence band for the £/DM exchange rate one month ahead was now 23 pfennigs, compared with 33 pfennigs when sterling peaked in the summer. The implied correlation between £/\$ and DM/\$ had not changed much during

the past two months but, at 0.65, had recovered a substantial part of the decline during sterling's appreciation from August 1996 to April 1997.

### *Bond and money markets*

48 Money-market rates were little changed over the month. Par gilt yields had fallen during the month, by about 30 basis points at ten years.

49 Short-term interest rate expectations derived from futures prices had changed little on the month in the United Kingdom, United States or Germany. In the United Kingdom, much of the news had occurred around the middle of the month at the time of the Budget, when short-rate expectations were revised up by about 10–15 basis points, though much of that was unwound on the following day given weaker-than-expected data and the Chancellor's comments to the effect that the MPC had been told the broad stance of the Budget at its March meeting. The money-market yield curve had remained downward-sloping. Anecdote suggested that many in the market expected rates to be left unchanged through the summer and early autumn, and cut towards the end of the year. The recent flattening of the money-market yield curve had been unexceptional by past standards, but had been more marked than in the United States.

50 Gilts outperformed most international markets during the month. The continued benign outlook in the United States helped the UK market. Towards the end of the month, continued sterling strength was thought to have supported gilts relative to foreign markets. Real yields on index-linked bonds were little changed during the month, with a slight fall at the longer end.

### *Equity markets*

51 The UK equity market had tracked the US market closely in local currency terms since the previous MPC meeting. The Nikkei 225 had fallen during the month, with apparent attempts to support the market before the financial year-end proving unsuccessful. Price/earnings ratios were at historically high levels in most of the major equity markets, except Japan.

52 Since July 1997, the UK equity market had risen by about 27%, while 20-year real spot yields had fallen by about 80 basis points. So much of the rise in the UK equity market might be 'explained' by the fall in the real rate at which future profits were discounted, assuming that everything else was unchanged. In the United States, there had been little change in real yields on index-linked bonds in that period. But in Europe, falling real yields did seem to have been a factor alongside accelerating growth. If a falling real discount rate explained the rise in the UK market since July, then it was possible that the strength of the UK equity market during this period might not be saying much about the strength of the economy. Also, the implication of increased equity wealth for consumption would be uncertain.

53 The general retailers' sector of the FT-SE All Share index had fallen by 10% relative to the total index since the start of the year. The underperformance had been accompanied by a number of profit warnings (out of 50 firms in the sector, 13 had issued warnings in the current year, compared with 3 last year) and a bias towards downward revisions in analysts' earnings forecasts for 1998/99 in the past three months. But only five companies cited consumer demand as a reason for their profits warnings; other reasons given included sterling's strength; unseasonal weather; expenditure switching and firm specific factors. Overall, therefore, the underperformance of the retailers' sector could not be clearly linked at this stage to an earlier-than-expected slowdown in consumer demand.

## **Text of Bank of England press notice of 9 April 1998**

### **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 7.25%.

The minutes of today's Monetary Policy Committee meeting will be published on Wednesday, 13 May. Minutes of the meeting held in March will be published on Wednesday, 15 April.

## **Text of Bank of England press notice of 7 May 1998**

### **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 7.25%.

The minutes of today's Monetary Policy Committee meeting will be published on Wednesday, 10 June. Minutes of the meeting held in April will be published on Wednesday, 13 May.