

Inflation Report

February 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.

We wish to acknowledge the outstanding technical ability and dedication of staff across the Bank whose efforts combine in the production of this *Report*. Our thanks go especially to the Monetary Analysis Divisions which bear the brunt of translating our wide-ranging discussions into clear forecasts.

The Monetary Policy Committee

Eddie George (Governor)

David Clementi (Deputy Governor)

Alan Budd

Willem Buiter

Charles Goodhart

DeAnne Julius

Mervyn King

Ian Plenderleith

Overview

It is almost six years since output reached its trough in the last recession. Since then, output has risen at an average rate of 3% a year and inflation has fallen from almost 5% to below 3% a year. The combination of above-trend growth and falling inflation is unsustainable, and has probably already come to an end. At this juncture, with output growth likely to fall sharply, monetary policy is more finely balanced than at any point since the inflation target was introduced in 1992. The central issue is whether the existing policy stance will slow the economy sufficiently quickly to prevent further upward pressure on earnings growth and retail price inflation.

Monetary policy is currently being pulled in opposite directions. On the one hand, despite the one-off effect of the higher level of sterling on commodity and other import prices, inflation has remained stubbornly above the target of 2½%. Adjusting for the effects of lower import prices and changes in the terms of trade, which temporarily depress retail price inflation, domestically generated inflation is significantly above the target level. Earnings growth, especially in the private sector, has risen since November and is now at a level which is not easy to reconcile with the inflation target.

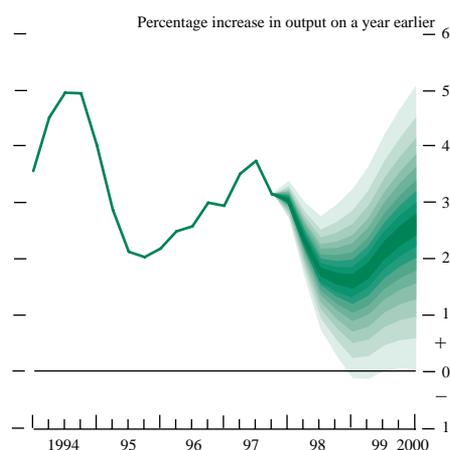
On the other hand, the delayed demand effect of the rise in the real exchange rate, accompanied by monetary and fiscal tightening, is likely to slow growth sharply over the coming year. Indeed, the preliminary estimate of GDP growth in the fourth quarter of 1997 was, at 0.5%, markedly weaker than expected in the November *Report*, and suggests that this may already be happening. The imminent slowdown in economic growth will, in due course, reduce the rates of increase of money and nominal demand and, in turn, of earnings and prices. The question is whether the timing and magnitude of the slowdown will be sufficient to prevent inflation turning up as the price level effect from the appreciation wears off.

The scale of the slowdown depends, in part, on the behaviour of net trade. There are two major depressing factors on trade. First, the effective exchange rate is about 25% higher than eighteen months ago. The impact of this appreciation on both export and import volumes is now starting to come through. This has coincided, however, with recent surveys becoming less uniformly pessimistic about future export growth. Second, the crisis in Asia is likely to depress domestic demand in that region, with significant effects on world trade and output. Taking into account the anticipated monetary policy response in the industrialised world, as reflected in the almost 50 basis point fall in market expectations of short-term interest rates, the impact on output growth in the industrialised world in 1998 is likely to be of the order of half a percentage point. The impact on growth in Europe will, if anything, be slightly smaller. Hence, the larger of the two effects on UK net trade is likely to come from the higher value of sterling.

Net trade is weakening, but domestic demand growth is projected to decline only gradually towards trend. Although consumption will not be supported by substantial windfall gains this year, and will be affected by past monetary and fiscal tightening, its main determinants—personal sector wealth and labour income—have continued to rise rapidly in real terms. Broad money growth also, despite moderating slightly, still poses upside risks to nominal demand and inflation over the next two years.

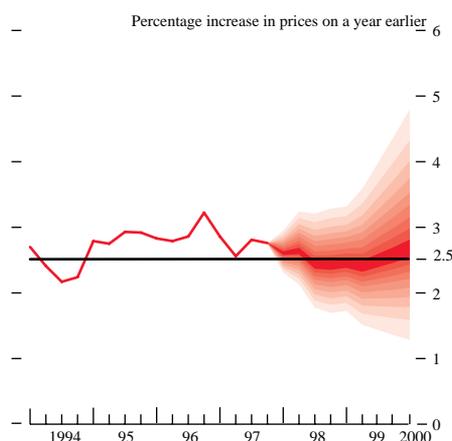
The combination of sharply weakening net trade and slowly declining, but above-trend, domestic demand growth will determine whether capacity constraints ease sufficiently rapidly to reduce inflationary pressures. Such constraints can be seen in the labour market. The substantial fall in unemployment, and high levels of reported skill shortages, are evidence of continuing tightening in the labour market. The implications for inflation depend on how far this tightening will lead to higher earnings growth and wage settlements. Earnings growth rose by half a percentage point over the past quarter, and private sector earnings growth is now over 5%. Ultimately, slower growth will ease labour market pressures and push earnings growth down. In the meantime, if the inflation target is to be met, any further rise in earnings growth would have to be absorbed by lower profits.

Chart 1 Current GDP projection



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

Chart 2 Current RPIX inflation projection



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.

The MPC's probability distribution for the four-quarter growth rate of GDP is shown in Chart 1. The central projection is that growth, having already peaked, will continue to fall, before rising again towards the end of the forecasting horizon as the contribution of net trade to GDP growth becomes less negative. That implies a large rise in the current account deficit. Domestic demand growth is expected to fall towards trend. The overall shape of the output projection is broadly similar to November. But the central case is for a somewhat lower level of output during the next two years, reflecting the recent data.

The MPC's projection of the twelve-month RPIX inflation rate is shown in Chart 2. The most likely path is for RPIX inflation to fall slightly over the next year or so, before rising to just above the target of 2½% by the end of the forecast horizon. The central projection for RPIX inflation at the two-year forecasting horizon is a little higher than in November. The recent evidence suggests that the appreciation of sterling has not reduced retail price inflation as much as anticipated in previous *Reports*. As a result, and notwithstanding the lower level of output, the current projection embodies a slightly higher profile for inflation in the next two years relative to that in the November *Report*.

Overall, the balance of risks to inflation in the projection is on the upside. The main upside risks stem from the possibility of a more rapid fall in the exchange rate than that implied by interest rate differentials, past rapid money growth and, particularly, pressures in the labour market. The downside risks to inflation stem mainly from the possibility of a larger fall in output and demand than in the central case.

Against the background of this projection, there is a case for a further rise in interest rates. Indeed, the balance of risks in the projection implies that it is more likely than not that a modest further rise in interest rates will be necessary at some point to hit the inflation target looking two years or so ahead. There are, however, very significant uncertainties about the magnitude of the slowdown in the economy that is now visible. It is still too early to be confident of how pronounced this slowdown will prove to be. In these circumstances, an immediate rise in interest rates might shortly have to be reversed. The considerations which affect monetary policy are finely balanced. At its February meeting, the MPC voted to leave interest rates unchanged.

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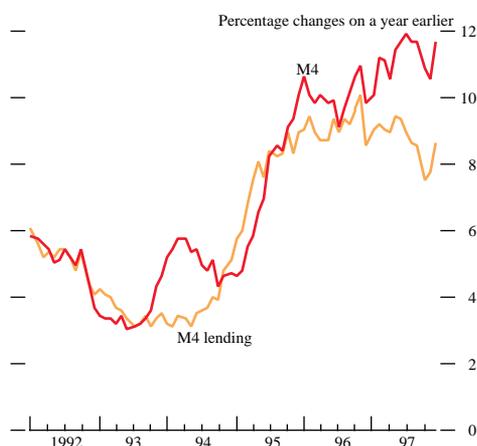
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Money, interest rates and exchange rates

1

Chart 1.1
Growth of M4 and M4 lending



Source: Bank of England.

Broad money continues to grow at double-digit rates (see Chart 1.1). But there are signs that the pace of growth has moderated since the first half of 1997. The slowdown in money growth was preceded by a slowdown in lending, particularly to the corporate sector. Official interest rates have been unchanged since the rise in the Bank's repo rate on 6 November to 7.25%. Long-term nominal interest rates have fallen by around 50 basis points in the United Kingdom and by around 40 basis points overseas during the same period. The starting-point for the nominal effective exchange rate in the inflation projection, based on its average value in the 15 working days to 4 February, was 104.9—around 2.8% higher than the starting-point used in the November *Report*.

1.1

Money

Table 1.A
Growth rates of M4 and M4 lending^(a)

Per cent

		1 month	3 month (b)	6 months (b)	12 months
M4	Sept.	0.9	10.5	10.7	11.6
	Oct.	0.5	9.1	11.0	10.8
	Nov.	0.8	9.3	9.9	10.5
	Dec.	1.0	9.8	10.2	11.6
M4 lending	Sept.	0.6	5.9	7.7	8.5
	Oct.	0.2	4.8	6.8	7.5
	Nov.	0.9	6.7	6.5	7.7
	Dec.	0.7	7.1	6.5	8.6

Source: Bank of England.

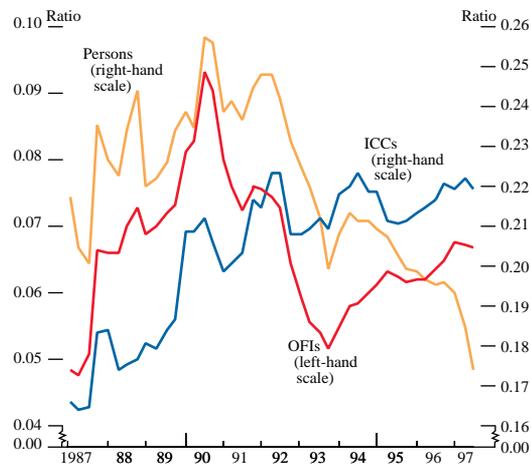
(a) Seasonally adjusted.
(b) Annualised.

The twelve-month growth rate of broad money was 11.6% in December, compared with 10.5% in November and 10.8% in October. The December figure may have been distorted by end-year balance sheet adjustments in wholesale money markets—the fall in gilt repo activity at the end of 1997 was less marked than in 1996.⁽¹⁾ Annualised shorter-term growth rates remain below the twelve-month rate, suggesting that broad money growth has slowed slightly relative to the first half of 1997 (see Table 1.A). Real broad money grew by around 8.7% in the year to 1997 Q4, well above its long-run average of 4.4%, which continues to point to strong real domestic demand growth.

Broad money velocity has been below its long-run average since 1987 and has fallen further since 1995. This may be because of reduced opportunity costs of holding broad money, for example because of lower inflation, as well as continuing financial innovation. Judgments need to be made about trends in velocity to interpret the relationship between broad money and nominal demand for use in the inflation projection. The MPC's projection for inflation assumes that aggregate M4 velocity will decline gradually during the next two

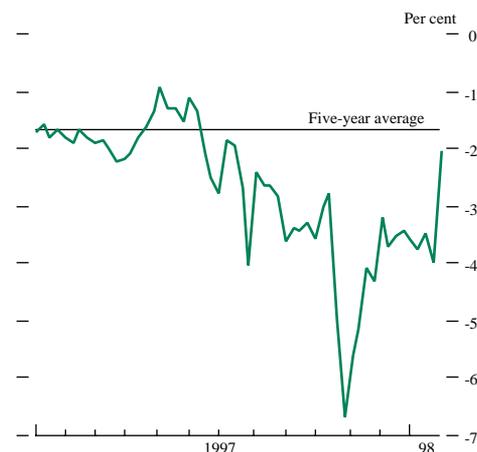
(1) A gilt repo is a sale and repurchase agreement between two parties, where one party makes a legally binding agreement to repurchase equivalent gilts at an agreed price at a specified future date. The gilt repo market is described in detail in the *Quarterly Bulletin*, May 1997, pages 187–97.

Chart 1.2
Ratio of OFIs', ICCs' and persons' M4 to total financial assets



Sources: Bank of England and ONS.

Chart 1.3
Skew in the probability distribution of equity prices^(a)



Note: Data are weekly averages.

Source: Bank of England.

(a) Measured by mean minus mode as a percentage of the mode from FT-SE 100 probability density functions. It is based on a 'synthetic' distribution with a fixed horizon of six months, and is calculated by interpolating between two LIFFE FT-SE 100 options.

years, consistent with the forecast shown in Section 6, so long as broad money growth continues to slow. But there remains a risk that the rapid and persistent monetary growth during the past two years will feed through to higher nominal demand and, in turn, into higher wages and prices. This is reflected in an upward skew to the inflation projection.

Other financial institutions (OFIs)

Within aggregate M4, financial institutions other than banks (OFIs) have built up deposits quickly since 1995. Some 40% of OFIs' money holdings are accounted for by life assurance and pension funds (LAPFs). In the year to 1997 Q4, OFIs' deposits grew by 26.5%, compared with an average yearly rate of 12.6% since the start of the current expansion in 1992. This may partly reflect attempts by OFIs to maintain the share of money balances within their total asset portfolios. But as Chart 1.2 shows, since 1994, OFIs' deposits have increased significantly as a proportion of their financial wealth. This could represent a build-up of additional money-holdings in an attempt to minimise the risk from potential future falls in asset prices. Increased mergers and acquisitions activity, along with share buybacks, could also have played a part.

Concern over the possibility of a correction in the equity market may continue to stimulate growth of OFIs' deposits. As Chart 1.3 illustrates, the weight attached by financial markets to the likelihood of a stock market correction, as measured by the skew reflected in the FT-SE 100 equity index, increased in the second half of 1997. The probability attached to a large fall increased sharply following problems in Asia. But the skew associated with the equity market turbulence in October quickly unwound. If OFIs' concern over possible falls in the value of equities lessens and they readjust their portfolios from money towards equities, this portfolio adjustment could bring an upward risk to inflation through the effects of higher asset prices on valuation ratios and wealth. The growth rate of OFIs' deposits has fallen recently: the growth rate was 4.7% in 1997 Q4, compared with an average quarterly growth rate of 6.8% in the first three quarters of the year. But OFIs' deposits tend to be volatile from quarter to quarter, so it is too soon to conclude that the sharp rise in deposits since 1995 is subsiding.

Personal sector

There is little sign of a slowdown in the personal sector's demand for broad money: personal sector M4 continues

to grow at an annual rate of around 8%. Inflows into building society deposits remain strong, particularly into share accounts still eligible for potential future windfall payments upon demutualisation. Bank deposit inflows also continue to increase, though slightly more slowly. The annual growth rate of banks' retail deposits in 1997 Q4 was 5.1%, compared with an average of 6% in the first three quarters of 1997 and 6.5% in 1996 as a whole.

Chart 1.2 shows that the ratio of the personal sector's broad money to total financial wealth has been falling as personal sector wealth has continued to increase. Increased holdings of other financial assets partly reflect rising UK equity prices. But they also reflect a continuing long-run downward trend in this ratio as the proportion of individuals' wealth held in equities, either directly or via unit trusts and pension funds, has increased over time. So changes in personal sector savings behaviour and structural changes in the financial sector explain much of the fall in the ratio. Consumption growth is expected to slow during 1998. But the increase in wealth, together with recent strong income growth, remains consistent with above-trend consumption growth.

Industrial and commercial companies (ICCs)

ICCs' holdings of broad money continued to slow, rising by 5.9% in the year to 1997 Q4, compared with 8.5% in 1997 Q3. Changes in ICCs' deposits have, in the past, tended to precede changes in investment.⁽¹⁾ As Chart 1.2 shows, the ratio of ICCs' broad money to total financial wealth has been broadly stable since 1990, but has picked up since 1996. This is consistent with a robust investment outlook, which is reflected in the central projection. But survey evidence is mixed—for example, the Confederation of British Industry (CBI) Survey in January suggested that business optimism fell sharply, to its lowest balance since the fourth quarter of 1995.

Narrow money

Despite moderating a little in 1997, narrow money growth remains strong. M0 grew by 6.7% in the year to 1997 Q4, much the same as its average annual growth rate in 1996. The underlying increase in narrow money, as measured by notes and coin, was 6.9% in the year to December. But this was exaggerated by the introduction

(1) Astley, M and Haldane, A (1997), 'The information in money', *Quarterly Bulletin*, May, pages 174–80.

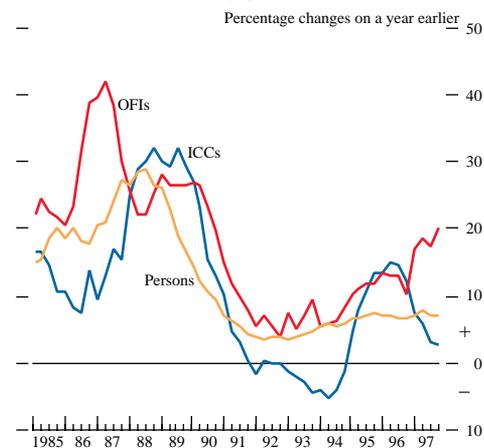
Table 1.B
Divisia and M4 annual growth rates

Percentage change in the year to 1997 Q4

	Divisia	M4
Personal sector	9.2	8.1
OFIs	29.3	26.5
ICCs	4.1	5.9
Aggregate	10.8	11.5

Source: Bank of England.

Chart 1.4
Sectoral M4 lending growth



Source: Bank of England.

Table 1.C
Sectoral comparison of lending by, and deposits with, banks and building societies

Seasonally adjusted flows (£ billions)

	OFIs	Persons	ICCs	Total
M4 lending (assets)				
1996	15.2	29.7	18.4	63.3
1997	30.1	32.9	5.5	68.5
1997 Q1	13.4	8.5	0.7	22.6
1997 Q2	7.3	8.4	3.0	18.7
1997 Q3	5.1	7.5	0.1	12.7
1997 Q4	4.3	8.5	1.8	14.5
M4 (liabilities)				
1996	26.4	25.7	7.7	59.9
1997	36.8	34.6	5.6	76.9
1997 Q1	13.1	9.7	1.4	24.2
1997 Q2	7.7	8.7	1.9	18.4
1997 Q3	9.0	6.5	2.1	17.6
1997 Q4	7.0	9.7	0.1	16.8

Source: Bank of England.

of the new 50p coin. The slower narrow money growth in the latter part of 1997 has coincided with slower nominal retail spending growth. It is also consistent with the increased opportunity cost of holding non interest bearing money balances when interest rates are higher, though the full impact of the interest rate rises since May is unlikely to have fed through yet.

Divisia money

Aggregate Divisia money, a measure that reflects the extent to which the components of broad money are used in transactions, grew by 10.8% in the year to 1997 Q4, compared with 10.1% in 1997 Q3. This was slightly slower than the growth in aggregate M4 during the period. Within the aggregate, Divisia money grew more rapidly than broad money in the personal and OFIs sectors, but more slowly in the corporate sector (see Table 1.B). The strength of Divisia money in the personal sector is consistent with the view that both transactions and nominal demand remain robust.

1.2

Credit

The growth rate of bank and building society credit to the non-bank private sector (M4 lending) has continued to fall. The twelve-month growth rate of credit in December was 8.6%, compared with an average annual growth rate of 9.1% in the first half of 1997. And annualised shorter-term growth rates have been below the twelve-month growth rate since August. The slowdown in credit preceded the moderation in broad money growth and, as Chart 1.4 shows, much of this was accounted for by ICCs.

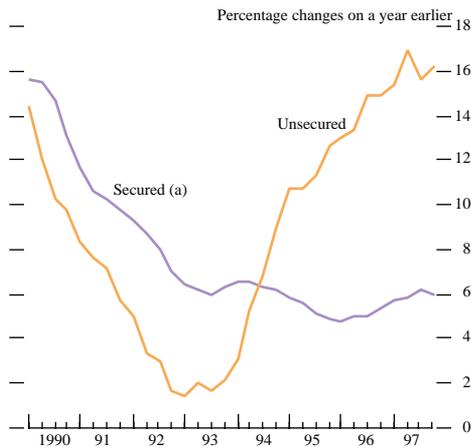
Other financial institutions

Credit growth to OFIs, which accounts for some 20% of aggregate M4 lending, remains strong, though some of this reflects a rebound in lending via reverse gilt repo. OFIs' bank borrowing outstanding was 20.8% higher in 1997 Q4 than a year earlier, compared with 19.6% in 1997 Q3. Table 1.C shows the flows of deposits into, and lending by, banks and building societies since 1995. OFIs have been net depositors during this period. This is largely because LAFs have increased their deposits, following equity price rises.

Personal sector

Chart 1.4 suggests that the growth rate of credit to the personal sector has been relatively stable since 1994, after slowing in the early 1990s. Lending to individuals

Chart 1.5
Secured and unsecured lending growth



Source: Bank of England.

(a) Secured lending accounts for around 80% of total lending to individuals.

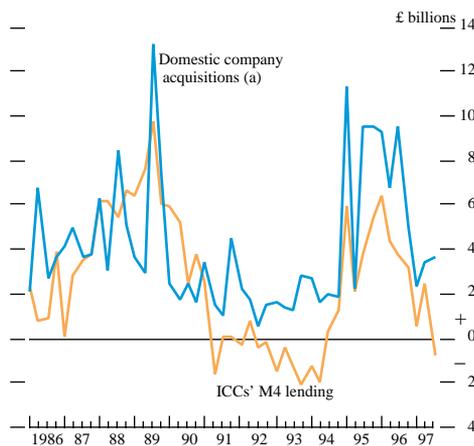
in the form of consumer credit has been strong. As Chart 1.5 shows, the growth rate of lending secured on property increased steadily during 1997. But the growth rate of other, unsecured, forms of lending has been much stronger. This may partly reflect supply-side effects induced by increased competition and the arrival of new entrants in the market for unsecured credit. Mortgage equity withdrawal as a share of disposable income also increased during 1997, in line with the recovery in the housing market.

Interest rate spreads on unsecured lending have narrowed in recent months, suggesting that the behaviour of prices and quantities is consistent with an increased supply of unsecured credit in the personal sector. Mortgage margins have remained broadly unchanged since August. Though banks have passed through the official rate rise in November, a number of building societies have yet to do so. The slower pass-through of official rates by building societies may reflect their ability to maintain lower deposit rates, as a result of speculation about possible demutualisation.

Industrial and commercial companies

Lending to ICCs has continued to weaken. In the year to 1997 Q4, ICCs' sterling borrowing from banks and building societies rose by 2.9%, compared with an average annual growth rate of around 14% in 1996. Recent evidence from the major British banks suggests that bank borrowing in both production and non-financial services slowed during 1997. It is possible that some of the weakening in ICCs' borrowing has reflected the lower level of take-over activity within the United Kingdom during 1997. ICCs' bank borrowing has recently moved closely with the value of domestic mergers and acquisitions (see Chart 1.6).

Chart 1.6
M4 lending to ICCs and company acquisitions

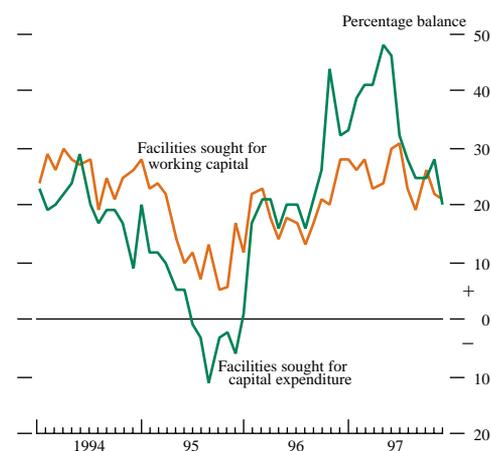


Sources: Bank of England and ONS.

(a) Total expenditure on acquisitions in the United Kingdom by UK companies.

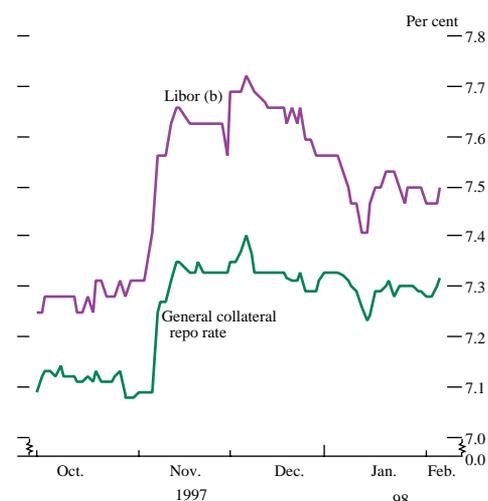
The availability of credit to ICCs also depends on firm size. Large firms are able to raise funds through bond and equity issues, whereas smaller firms are traditionally more reliant on bank finance. External finance sought by both large and small firms appears to have lessened: ICCs' net sterling capital issues weakened in 1997, down from a monthly average of around £1 billion in 1996 to £0.7 billion in 1997. And though ICCs' net foreign currency issues increased during the first three quarters of 1997, they do not represent a large proportion of the external finance available to larger firms. Though bank lending to smaller firms was flat during the first half of 1997, it has slowed since 1993. This trend may reflect a switch away from bank finance

Chart 1.7
Barclays branch managers survey results



Source: Barclays Bank.

Chart 1.8
Three-month sterling interest rates^(a) on UK government and commercial bank debt



Note: Daily data. Final observation is 4 February.

Source: Telerate.

- (a) All rates are offer rates.
- (b) London interbank offer rate.

towards other credit arrangements, such as leasing and hire-purchase agreements. Survey evidence from Barclays Bank also suggests that the balance of firms seeking bank credit facilities to finance capital expenditure fell from more than 40% in the first half of 1997 to 20% in December (see Chart 1.7).

1.3 Interest rates and exchange rates

Short-term interest rates

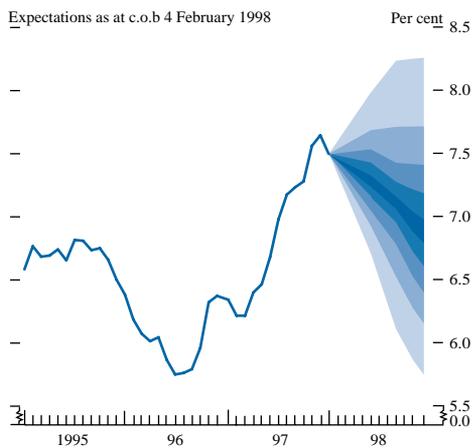
Following the rise in the Bank's repo rate on 6 November to 7.25%, rates were unchanged in December and January. At its meeting on 4–5 February, the MPC decided to leave interest rates unchanged.

Actual interest rates facing borrowers and lenders differ from official rates. This is because market rates reflect factors such as changes in credit risk at home and abroad. Chart 1.8 shows that spreads between an unsecured short-term borrowing rate, the London interbank offer rate (Libor), and a proxy for the risk-free rate, the general collateral repo rate, widened during November and December before narrowing again in January. The widening of spreads is likely to have reflected a higher premium required by lenders to issue unsecured loans, following equity market turbulence in October and the emergence of problems in Asia.

Probability distributions of expected three-month market interest rates in the United Kingdom, derived from option price data, are shown in Chart 1.9. At the time of the November *Report*, the outcome considered most likely by financial markets was that interest rates would increase slightly by the end of 1997 and then fall from early 1998. The probabilities were skewed towards rates being above the central band. On 4 February, the outcome seen as most likely—shown by the darkest blue band—was a fall in interest rates, with a higher weight being attached to interest rates lying above the central band in 1998. But it is important to note that short sterling futures prices can reflect factors other than official rates, such as the credit risk premium.⁽¹⁾ So the chart does not provide a direct measure of market expectations of official interest rates. Chart 1.10 shows implied probability distributions for German and US short-term interest rates. German interest rates are expected to rise significantly during 1998, and probabilities are skewed above the central band. By

(1) A box on page 331 of the November 1997 *Quarterly Bulletin* discusses these factors in greater depth.

Chart 1.9
Implied distributions for sterling
three-month interest rates

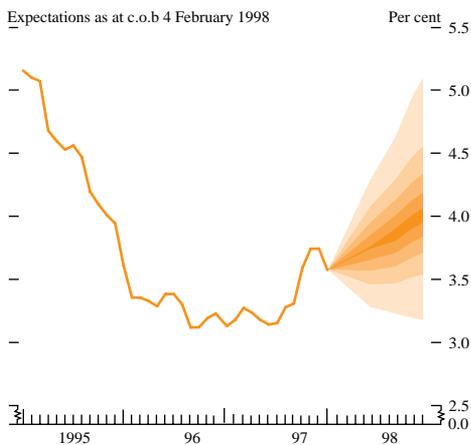


Sources: LIFFE and Bank of England.

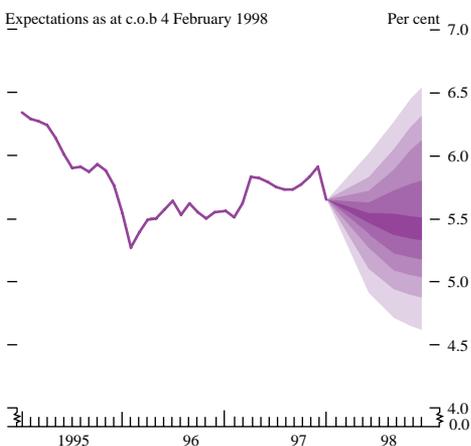
The chart shows the relative likelihood of possible outcomes. The markets judge that there is a 10% chance of interest rates being within the darkest, central band at any date. The next deepest shade (on both sides of the central band) takes the probability out to 30%, and so on in steps of 20 percentage 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 1.10
Implied distributions for German and US
three-month interest rates

Germany



United States



Sources: LIFFE and Bank of England.

contrast, the implied distribution for US short rates suggests that the outcome seen as most likely by financial markets is an easing of US monetary policy, though probabilities are skewed towards rates above the central band.

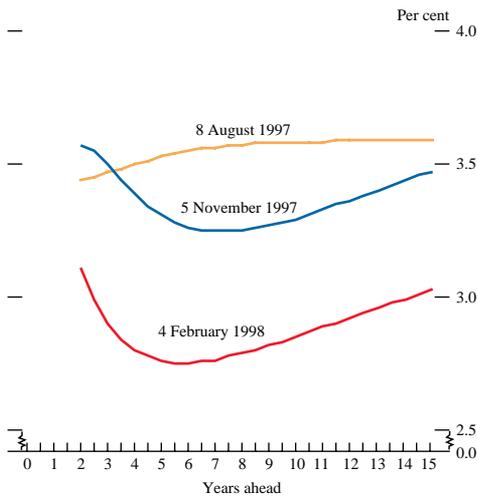
The impact of developments in Asia has probably affected short-term interest rate expectations. As the box on pages 14–15 notes, financial markets expect industrial countries to adjust macroeconomic policy in response to problems in Asia, and this has been reflected in US and German short-term interest rate expectations. So overseas interest rates are expected to rise by less during the year, relative to UK rates, than the MPC thought likely in November (by some 50 basis points).

Long-term interest rates

The long-term interest rate is determined largely by the expected path of future short rates, though it may also be affected by other factors such as changes in risk premia. The nominal yield on ten-year gilts fell by a further 50 basis points between the November and February *Reports*, continuing a two-year downward trend, and is now around 6.1%. This means that implied future short rates have fallen steadily. The change in nominal interest rates can be decomposed into changes in expected real interest rates and in inflation expectations. Medium-term inflation expectations, as derived from conventional and index-linked gilts, have fallen further since the November *Report* (see Chart 1.11). Measures of the real interest rate, calculated from sterling index-linked bonds, have also fallen, and account for some of the reduction in nominal rates. Real index-linked yields also fell in Australia and Canada, but by less than in the United Kingdom. By contrast, US real yields were little changed (see Chart 1.12), though this may partly reflect the fact that the US inflation-indexed market has only been in operation since January 1997. Real UK interest rates fell sharply in mid October and again in December, ending the year at around 3%.

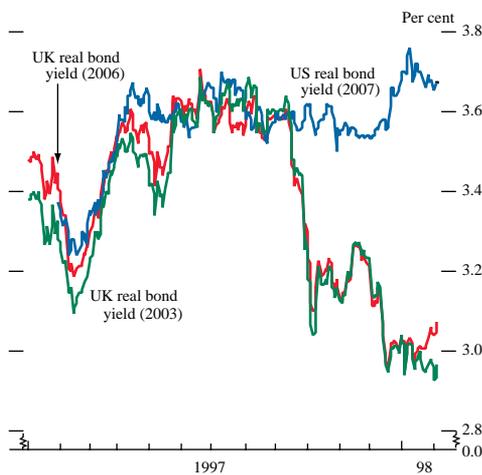
It is difficult to attribute changes in the real interest rate solely to structural factors, such as a change in productivity, or to institutional factors in domestic or overseas markets. The fall in UK real rates relative to overseas rates may reflect expectations of a real sterling appreciation. But there are few reasons to expect sterling's rise to continue, and it is unlikely that domestic factors alone account for the decline in UK real rates. So the fall in real rates may also reflect shifts in global savings and investment patterns, namely lower expected

Chart 1.11
Implied forward inflation rates



Source: Bank of England.

Chart 1.12
US and UK real index-linked yields



Note: Daily data. Final observation is 4 February.

Source: Bank of England.

Chart 1.13
Sterling effective exchange rate



Note: Daily data. Final observation is 4 February.

Source: Bank of England.

investment profitability and lower expected aggregate fiscal deficits in industrial countries as a whole.⁽¹⁾

Exchange rates

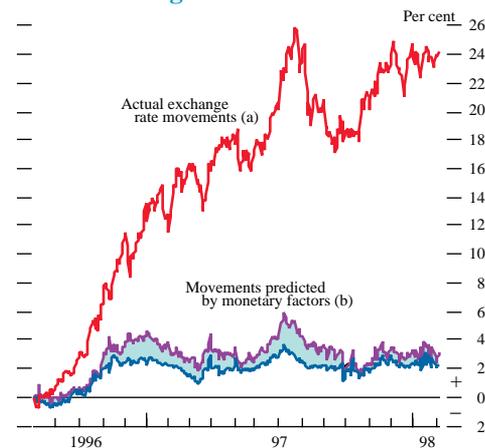
The nominal effective exchange rate used as the starting-point in the inflation projection—based on its average in the 15 working days to 4 February—was 104.9. This was 2.8% higher than the exchange rate used in the *November Report*. Sterling has appreciated by 25% since August 1996 (see Chart 1.13). In the year to January, sterling had appreciated by 12% against the Deutsche Mark and was roughly stable against the US dollar.

The rise in overseas short-term forward interest rates relative to UK rates has been smaller than market expectations in November. This implies that the nominal effective exchange rate is likely to depreciate more slowly than assumed in the *November Report*. Chart 1.14 identifies the Bank’s estimate of the contribution made by monetary policy factors to recent changes in the nominal effective exchange rate.⁽²⁾ This contribution has been relatively constant and small in recent months. But a comparison of certain bilateral interest rate differentials points to a more pronounced effect of monetary policy factors: the expected bilateral exchange rate depreciation implied by the difference between UK interest rates and German interest rates has quickened since the *November Report*. So news about overseas and domestic monetary policy has probably played an important role in explaining the recent behaviour of sterling.

Part of sterling’s appreciation since August 1996 has been ascribed to portfolio and erratic factors. This may be related to perceptions about Economic and Monetary Union, namely expectations about membership and policy uncertainty within the prospective euro area. There is still a risk that these portfolio effects could unwind rapidly, leading to a faster depreciation than implied by interest rate differentials. For the current projection, the MPC has assumed that the most likely scenario is that the exchange rate will depreciate in line with the difference implied by the constant UK interest rate and market expectations of overseas interest rates. The central projection is consistent with a bilateral

(1) For a detailed examination of the determinants of real interest rates, see Jenkinson, N (1996), ‘Saving, investment and real interest rates’, *Quarterly Bulletin*, February, pages 51–62.
(2) See Brigden, A *et al* (1997), ‘Decomposing exchange rate movements according to the uncovered interest rate parity condition’, *Quarterly Bulletin*, November, pages 377–89.

Chart 1.14
The exchange rate and monetary policy news since August 1996



Note: Daily data. Final observation is 4 February.

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.

exchange rate, two years hence, of 1.62 and 2.86 *vis à vis* the US dollar and the Deutsche Mark respectively. The level of the effective exchange rate in two years time implied by the projection is 101. The risk of the erratic factors unwinding more quickly than expected is reflected in an upward skew to the inflation projection.

1.4

Summary

Though signs of moderation are emerging, the pace of monetary growth remains rapid. Aggregate lending activity has already slowed and may foreshadow slower domestic demand growth. The MPC's projection for inflation assumes that aggregate broad money velocity will decline gradually during the next two years, consistent with the inflation forecast so long as broad money continues to slow. But the recent rapid growth of broad money remains a threat to meeting the inflation target in the medium term. The Bank's repo rate has remained unchanged since the rise in official rates on 6 November. Overseas short-term interest rates are expected to rise less relative to UK rates than the MPC thought in November, probably reflecting the impact of Asian developments since then. The nominal effective exchange rate used as the starting-point in the inflation forecast, based on the average in the 15 working days to 4 February, was 104.9—some 2.8% higher than that used as the starting-point in the November *Report*.

Real GDP grew by an estimated 3.3% in 1997, significantly faster than its long-term trend rate of growth. This was the sixth year of economic expansion in the United Kingdom. Growth was fastest during the first half of the year; it slowed during the second half of the year, leaving the estimated level of GDP below that expected by the MPC at the time of the *November Report*.

Recent developments in Asia provide the main international economic news since the *November Report*, and are likely to reduce the growth of world trade and GDP and inflation during the next two years.⁽¹⁾ Financial markets have already reacted. In Asia, currencies have depreciated, bond yields have risen and stock markets have fallen. Short-term interest rate expectations in the United States and continental Europe have fallen by almost 50 basis points, partly reflecting expectations that policy would be looser than otherwise.

Recent UK trade figures and revisions to past data provide evidence of a worsening trade performance. Net trade in goods, excluding oil and erratics, made a negative contribution of 0.5 percentage points, and trade in services made a negative contribution of 0.2 percentage points to GDP growth in 1997 Q3. There is evidence that this worsening performance continued in 1997 Q4. It appears that the effects of the exchange rate appreciation on trade flows are materialising.

2.1 External demand

Events in Asia provide the main international news since November. Problems were initially concentrated in Indonesia, Malaysia, the Philippines and Thailand (the ASEAN-4). All had experienced rapid, investment-led growth in recent years, with large capital inflows and strong credit growth. The moral hazard implied by the expectation that domestic governments were underwriting the return to domestic and international lenders, exacerbated by underdeveloped banking

(1) For a more detailed discussion of the impact of events in Asia on the world economy, see 'The international environment', *Quarterly Bulletin*, February 1998, pages 20–9. The Asian economies focused on include Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan and Thailand.

supervision, contributed to imprudent lending and overinvestment. And firms undertook large, generally unhedged, foreign currency borrowings on the assumption that the pegged exchange rate regimes would be maintained. The cyclical slowing in activity during 1996 and 1997, increasing corporate bankruptcies, falling asset prices and widening current account deficits put the exchange rate pegs against the US dollar under pressure, and they were eventually abandoned. The situation deteriorated further in mid October, when Korea became involved. Rising bankruptcies and Korean banks' difficulties in meeting short-term debt obligations led to liquidity problems, and a loss of confidence in the banking sector. The Korean won, which was linked to the US dollar, came under pressure.

The box on pages 14–15 examines three channels through which these events could affect the world economy. First, the fall in aggregate demand and the rebalancing towards net trade and lower domestic demand in Asia will reduce demand for UK goods and services. Second, Asia's economies have become much more competitive following exchange rate devaluations. The United Kingdom's share of trade with Asia is relatively small, and though UK exporters' competitiveness in third-country markets such as the United States will also be affected, the overall effect is unlikely to be large. Third, there are risks of problems spreading to other emerging markets and a global consolidation of bank balance sheets, leading to reduced availability of credit. The box also emphasises the importance of the monetary policy response in the main industrialised economies in determining the net impact of the events in Asia on the world economy.

The MPC has used the IMF and OECD projections as a baseline from which to form its views of the effects of Asian developments on the UK economy, making use of new information since publication of the IMF and OECD forecasts. On this basis, the MPC has concluded that, taking all the effects together, growth in the main industrialised economies could be reduced by around half a percentage point by 1999 in the central case. The effects in the United Kingdom are expected to be similar to those other European countries, though less than in the United States. But the uncertainties surrounding these forecasts have increased, and there are downside risks to UK activity and inflation. In particular, if interest rates turned out to be higher than the market expects, the impact on world trade, growth and inflation

Recent developments in Asia: implications for the world economy

The box outlines the three channels through which problems in Asia may affect the world economy, and discusses offsetting policy responses to the shock.

Channels of transmission

Demand and output in Asia

Net private capital inflows to East Asia are expected to fall in 1998, reflecting the increased perceived riskiness of lending to these countries. To offset this would require an increase in net exports from these countries. Net private capital inflows to Asia⁽¹⁾ were running at record levels in 1996, totalling around US \$115 billion, compared with around US \$19 billion in 1992.

Output is expected to fall in the East Asian countries affected. This reflects the adjustment to tighter economic policies introduced by the authorities to instil confidence, as well as the private sector financial restructuring currently under way. Weaker domestic demand will mean that their demand for imports will fall; but these countries will also shift resources towards exports, with firms tending to switch away from supplying domestic markets towards those overseas. The size of the expected fall in output depends on the extent to which any improvement in net trade offsets the expected fall in domestic demand.

The adjustment to net exports will move current account balances towards surplus for the affected Asian countries. The counterparties to this improvement in Asian net trade and current accounts will primarily be North America, Europe and Japan, where net trade will decline. So there will be a fall in the net demand for UK goods and services. The response of UK net trade following the adjustment in Asia is likely to be similar to that of other European economies, but smaller than in the United States.

World GDP, trade and inflation will be weaker as a result of the adjustment. The impact on some markets is likely to be greater than on others. For example, world primary commodity prices are likely to be affected more than the price of traded services, reflecting the relative importance of the Asian economies in these markets.

Shifts in real exchange rates

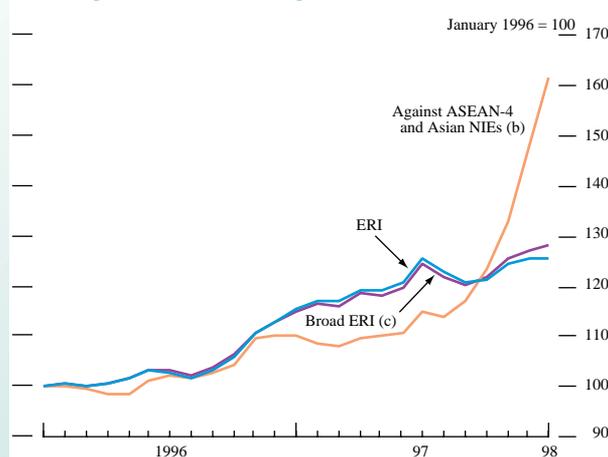
As well as the direct effect of the reduction in Asian countries' net demand for overseas goods, the sharp movements of exchange rates will also affect the world economy.

The currencies of the ASEAN-4 fell by 20%–40% between January 1997 and the end of October against the

US dollar, and the Korean won fell by around 15% during this period. But since the end of October, the situations in Korea and Indonesia in particular have deteriorated and there have been further falls in their currencies: the South Korean won and Indonesian rupiah have fallen by a further 40% and 60% respectively, while currencies in Malaysia, Thailand and the Philippines have fallen by around 20%. Much of the fall in these countries' real exchange rates is likely to be transitory. But the fall in real exchange rates represents a major shock in the short run, and will help to boost Asian net exports.

The chart shows that sterling has appreciated by around 60% between the beginning of 1996 and January 1998 against the ASEAN-4 and Asian NIEs. Sterling has risen by around 25% against currencies within the published effective exchange rate index during the same period. But the difference between the rise in a broad measure of the sterling effective exchange rate, which includes these currencies, and the published effective exchange rate index is small—2 percentage points. That is because the share of these countries in UK trade remains quite small, despite rapid growth in these markets during the past decade. And the impact on the United Kingdom will not be nearly as significant as the effect of sterling's appreciation against countries in the ERI since its trough in August 1996.

Sterling effective exchange rates^(a)



Sources: IMF and Bank of England.

- (a) Monthly averages of daily data.
- (b) The ASEAN-4 are Malaysia, Indonesia, Thailand and the Philippines, and the Asian NIEs are Hong Kong, Korea, Taiwan and Singapore. Includes third-country effects with non-Asian countries.
- (c) The broad ERI includes 49 countries, covering over 97% of UK trade.

Contagion

A third major channel is the possibility that the problems in Asia might spread to other emerging economies.

(1) These figures include the IMF's grouping of Asia, the newly industrialised Asian economies (which comprise Hong Kong, Korea, Singapore and Taiwan) and Israel.

There were signs of contagion in a number of currency and equity markets in emerging countries in 1997. Most pressures on exchange rates in these markets occurred in late October. In Brazil, pressure on the currency prompted the authorities to double interest rates and announce a tightening of fiscal policy. The Argentinian and Mexican pesos also came under pressure, as did the currencies in Greece, Russia and the Ukraine. Interest rates were increased sharply in these countries. There were also falls in a number of emerging equity markets, especially in those markets that had risen substantially earlier in the year. In Brazil, equity prices fell by around 40% between the last week in October and mid November, though the index was still around 45% higher in domestic currency terms at the end of 1997 than at the start of the year. There were also corrections in Russia and Hungary.

Another source of contagion could stem from changes in capital flows—especially bank lending. According to Bank for International Settlements (BIS) statistics on foreign bank lending to these regions, new lending to Thailand and the Czech Republic almost completely dried up between the first and second quarters of 1997.⁽²⁾ And if banks outside the affected Asian economies reassess their existing loan books and change their behaviour towards new business, there could be an impact on credit availability across the world. The impact of such reassessments will depend, in part, on how significant their exposures are. BIS statistics indicate that Japanese banks are the largest individual group of foreign creditors in Asia.⁽³⁾ But banks' reassessments of their exposures cannot be divorced from domestic considerations either. This is particularly relevant in Japan, where the restructuring of banks is likely to reduce credit availability not only in Asia but around the rest of the world.

The adjustment of these flows of credit can also be seen in the price of credit. Spreads on corporate bonds relative to comparable US treasuries have widened throughout emerging markets, as international investors have reassessed the risks in these countries. These spreads were around 100 basis points in many East Asian and Latin American countries in early 1997, but had widened to at least 200 basis points towards the end of 1997.

Assessing the impact of contagion is extremely difficult. Economic growth in Latin America, for example, is likely to slow in 1998, following increases in interest rates and tighter economic policies. Asset markets in the United States and Europe could be affected, partly through their direct exposure to Asia and other emerging markets. But stock markets in the United States and Europe have so far remained buoyant.

Policy response

The size of these potential effects on world growth may be mitigated to the extent that there is a policy loosening in the industrialised countries. There is evidence that this is expected in the reductions in future interest rate changes implied in yield curves. US short-run interest rate expectations for end 1998 and end 1999 have fallen by around 60 basis points since October. In Germany, short-run interest rate expectations have fallen by around 40 basis points for both end 1998 and end 1999. Japanese expected short-run interest rates have changed very little. The Japanese government has announced a fiscal injection during 1998. The falls in interest rates at the short end of the yield curve will already be stimulating activity.

Assessment

The IMF expects world output to slow from 4% in 1996 and 1997 to around 3½% in 1998, which is about 1 percentage point lower than the projection in May. But growth remains considerably stronger than during the global slowdown in 1990–93, when output was rising at an annual rate of around 1¾%–2¾%.

The IMF has revised down its forecast for growth in newly industrialised Asian economies (Korea, Taiwan, Hong Kong and Singapore) in 1998 by 2.5 percentage points since May. As the table shows, each of the forecasters has significantly revised down their expectations of Japanese growth in 1998. UK growth has been revised down slightly in all the forecasts. But forecasts of growth in the United States and continental Europe have been revised up, mainly because of recent faster-than-expected growth. So the overall picture is of only small downward revisions to forecasts of world trade and GDP growth in 1998. Events in Asia have continued to unfold since these forecasts were finalised, and considerable uncertainties remain.

Revisions to IMF, OECD and *Economist* GDP forecasts for 1998

	Difference between OECD December and June forecasts	Difference between IMF December and May forecasts	Difference between <i>Economist</i> January 1998 and May 1997 poll of forecasters (a)
G7	0.1	-0.3	n.a.
United States	0.7	0.2	0.7
Germany	0.1	-0.4	0.1
France	0.1	-0.3	0.0
Italy	0.3	-0.1	0.2
Japan	-1.2	-1.8	-1.6
United Kingdom	-0.5	-0.4	-0.1
Asian NIEs	n.a.	-2.5	n.a.
ASEAN-4	n.a.	n.a.	n.a.
World trade volume (goods and services)	-0.2	-0.6	n.a.

Sources: IMF, OECD and *The Economist*.

(a) Average of forecasters' responses.

(2) See *International Banking and Financial Market Developments*, BIS, November 1997. BIS data cover banks in the BIS reporting area (the G10 countries plus Austria, Denmark, Finland, Ireland, Luxembourg, Norway and Spain, and foreign affiliates of those banks).

(3) At the end of June 1997, Japanese banks held 32% of the total outstanding exposure of BIS-reporting banks to Asia, with the share varying from 54% in Thailand to 23% in South Korea.

Table 2.A
Major economies' GDP and domestic demand growth

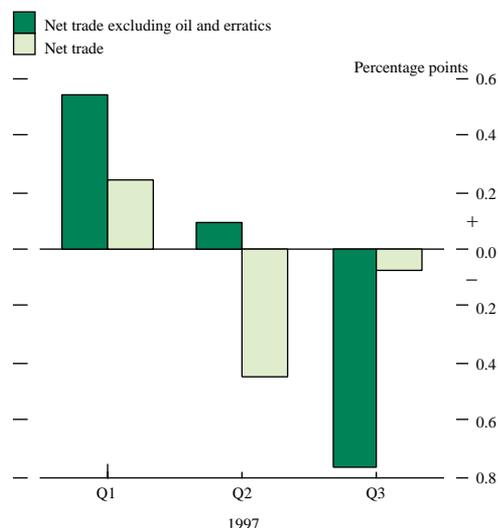
Percentage changes on a year earlier

		United States	Japan	Germany	G7 (a)	European Union
GDP						
1996	Q3	2.7	3.1	1.9	2.5	1.9
	Q4	3.3	3.4	2.1	2.7	2.2
1997	Q1	4.0	2.8	2.5	2.9	1.9
	Q2	3.4	-0.2	2.1	2.4	2.7
	Q3	3.9	1.0	2.3	3.0 (c)	n.a.
Domestic demand (b)						
1996	Q3	3.4	3.8	0.7	2.6	1.2
	Q4	3.6	3.3	1.3	2.8	1.7
1997	Q1	4.3	2.2	1.8	2.9	1.3
	Q2	3.7	-1.9	0.9	2.3	2.3
	Q3	4.2	-0.4	0.9	2.9 (c)	n.a.

Source: OECD *Main Economic Indicators*.

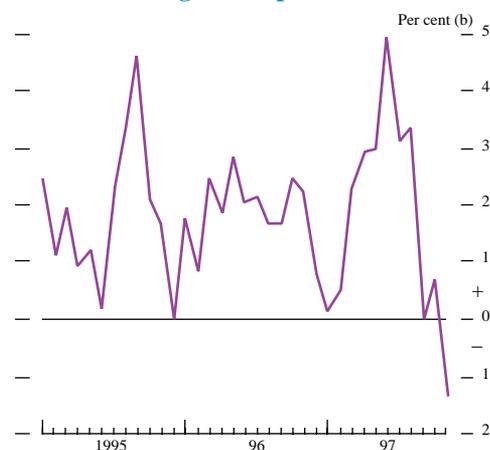
- (a) The Group of Seven economies are the United States, Japan, Germany, Canada, France, Italy and the United Kingdom.
 (b) Domestic demand = GDP – exports + imports.
 (c) Provisional data.

Chart 2.1
Estimated contributions of net trade to quarterly GDP growth



Source: Bank of England estimates based on ONS data.

Chart 2.2
Growth of UK goods export volumes^(a)



- (a) Excluding oil and erratics.
 (b) Percentage changes. Latest three months on previous three months.

could be larger than in the central case, and this is reflected in the distribution of risks. A much larger crisis resulting from contagion affecting other countries is possible, but unlikely.

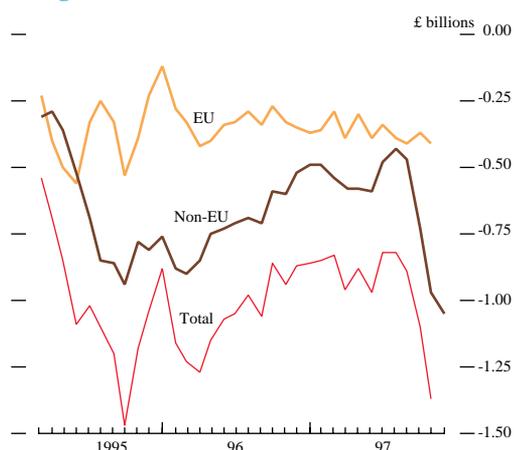
Domestic demand in the G7 picked up in 1997 Q3, as Table 2.A shows. The US economy grew more rapidly in 1997 than in the previous year, and the preliminary estimates for the year to 1997 Q4 were strong: domestic demand and GDP grew by 4.3% and 3.9% respectively. The picture in Japan was much weaker: domestic demand fell by 0.4% in the year to 1997 Q3, and GDP grew by 1% in the same period. Growth in European economies picked up in the year to 1997 Q2, partly because of stronger domestic demand growth.

Data releases and revisions to past numbers suggest that sterling's 25% appreciation since August 1996 has begun to affect UK trade. The trade deficit with non-EU countries has widened substantially in recent months. Though the deficit with EU countries has been fairly stable, this may be partly because of strong domestic demand growth in continental Europe.

Bank estimates suggest that the contribution of net trade, excluding oil and erratics, to GDP growth turned from positive to negative during 1997 (see Chart 2.1). Excluding oil and erratics, trade in goods and services made negative contributions, of 0.5 percentage points and 0.2 percentage points respectively, to GDP in 1997 Q3. More recent monthly data confirm this picture. As Chart 2.2 shows, export volumes of goods (excluding oil and erratics) fell by 1.3% in the three months to November compared with the previous three months, the first such fall since 1993, and import volumes rose during the period.

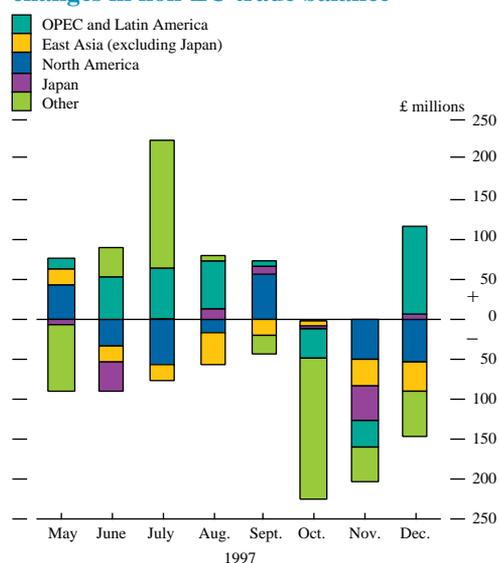
The United Kingdom's net trade position was relatively strong during the first half of 1997, but is now deteriorating. The strength came mostly from growth in exports with countries outside the European Union (EU) (see Chart 2.3). But the non-EU trade deficit for 1997 Q4 was £3.1 billion, £1.7 billion higher than in the previous quarter. Chart 2.4 shows that the downturn in net trade with non-EU countries has been spread fairly evenly across regions. The trade balance with EU countries has been broadly stable in recent months. Though exports (excluding oil and erratics) to the EU fell by 3.7% in the three months to November on the previous three months, import growth from the EU has been subdued.

Chart 2.3
UK goods trade balances^(a)



(a) Three-month moving average.

Chart 2.4
Estimated geographical composition of changes in non-EU trade balance^(a)



Source: Bank of England estimates based on overseas trade statistics.

(a) Three-month moving average of balance of trade in goods.

Table 2.B
Expenditure components of GDP

Per cent

	Percentage changes on previous quarter 1997			Contribution to quarterly GDP growth 1997 Q3 (a)
	Q1	Q2	Q3	
Private consumption	0.9	1.6	0.7	0.5
Public consumption	-0.1	0.9	1.4	0.3
Investment	-0.2	2.7	-0.5	-0.1
Final domestic demand	0.5	1.6	0.6	0.7
Stockbuilding (b)(c)	0.3	-0.2	-0.5	-0.5
Domestic demand	0.8	1.3	0.9	1.0
Exports	2.1	3.3	0.8	0.3
Imports	1.2	4.8	0.6	0.2
Net exports (b)	0.3	-0.6	0.1	0.1
GDP	0.7	1.1	0.8	0.8
<i>Memo items:</i>				
Statistical discrepancy (b)	0.0	0.0	0.0	0.0
Alignment adjustment (b)	0.1	-0.1	0.8	0.8

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

(b) Contributions to quarterly GDP growth.

(c) Excluding the alignment adjustment.

2.2

Domestic demand

Domestic demand grew at an average quarterly rate of 1% during the first three quarters of 1997, its highest since 1994. This was driven by rapid growth in personal sector wealth during the year, mainly as a result of rising equity prices. But the unwinding of windfall spending, past monetary policy tightening and the tight fiscal stance should help to reduce the inflationary pressures from this source.

Consumption

Consumers' expenditure grew rapidly during the first half of 1997 (see Table 2.B). It grew more slowly in the third quarter, partly because of a temporary fall in consumers' expenditure during the week preceding the funeral of Diana, Princess of Wales. This may have reduced consumption growth by as much as 0.5 percentage points in the quarter.

A Bank/MORI survey of windfall gains suggested that much of the effect of windfall payouts from building societies would be concentrated in 1997.⁽¹⁾ A significant proportion of windfall payouts was expected to be spent on durable goods during the year. Chart 2.5 shows that spending on durable goods rose rapidly in the first three quarters of 1997 relative to spending on non-durables; this was probably related in part to windfall spending. Though spending on durables slowed in 1997 Q3, the growth of spending on services rose.

Retail sales volumes fell by 0.1% in December, having fallen by 0.5% in the previous month. The three-month growth rate of retail sales peaked in July before falling during the second half of the year, but retail sales growth remains high (see Chart 2.6).

Several factors suggest that consumption growth will slow during 1998, but continue to grow above its historical trend. Consumption growth is expected to be driven by the rapid growth in wealth in 1997 and real wage increases, reflecting tightness in the labour market (see Section 3). Chart 2.6 shows that the GFK index of consumer confidence rose to +4.5 in January, up from +0.2 in December, and remained at historically high levels. The most recent MORI Survey gave a more subdued picture of consumer confidence, but it lags the GFK by one month: MORI reported a balance of -4 in December, unchanged on the previous month and its

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

Chart 2.5
Growth in consumers' expenditure by category

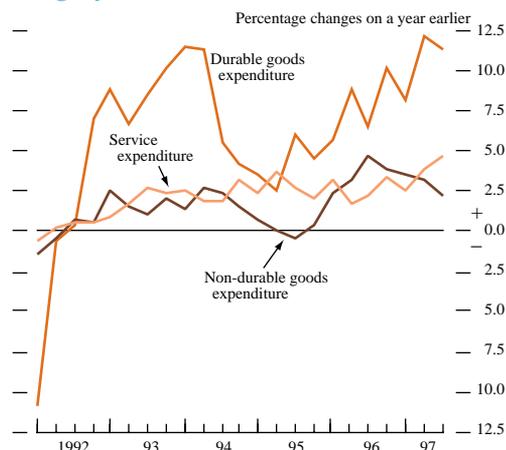
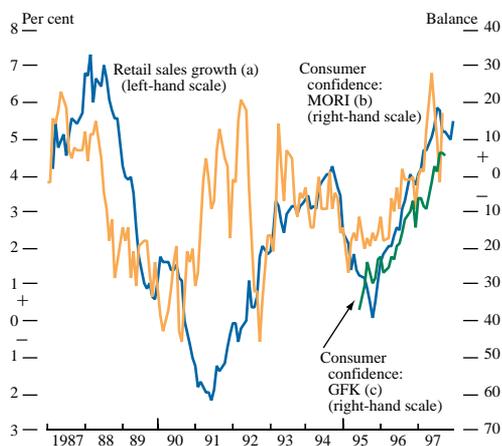


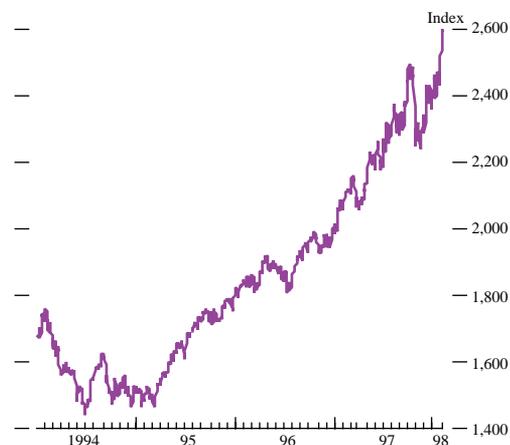
Chart 2.6
Consumer confidence and retail sales growth



Sources: ONS, MORI and GFK.

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

Chart 2.7
FT All-share index



Note: Daily data. Final observation is 4 February.

Source: *Financial Times*.

lowest in 1997. Changes in consumer confidence are linked to equity and house price developments, which influence personal sector wealth.

Equity prices have increased rapidly since 1995, as Chart 2.7 shows. Personal sector net financial wealth rose by 9.8% in 1997 Q3, mainly as a result of the 6.9% increase in equity prices during the quarter. And equity prices have risen by a further 11.7% since November. Net financial wealth data were recently revised downwards back to the beginning of 1996, following the receipt of new information from financial institutions about their balance sheets, but there was an upward revision to the personal sector's asset holdings in 1997 Q2. This raised the growth rate of net financial wealth in the second quarter to 8.3%. Overall, net financial wealth has grown more strongly since the end of 1996 than previously thought. The MPC has assumed that equity prices will grow in line with nominal GDP during the forecast period. But there is a downside risk arising from uncertainties, particularly over events in Asia.

Data from the Halifax and Nationwide give differing pictures of recent developments in house prices. The Halifax index rose by 0.6% in January, and the annual rate of house price inflation rose to 5.8%. But the Nationwide index rose by 1.2% in January, to an annual rate of 13.1%. The Bank has developed an alternative house price index, which is discussed in the box on page 19. According to this estimate, house price inflation was 7.9% in 1997 Q3, slightly above the Halifax index in the same period, but much lower than the Nationwide index. Though the ratio of house prices to earnings has been broadly stable during the past year, past interest rate increases and the reduction in mortgage interest tax relief are expected to moderate house price inflation in 1998.

Real personal disposable income fell by 1.3% in 1997 Q3. The savings ratio fell to 10.8% in the third quarter, down from 12.6% in the second quarter. This reflected exceptionally high dividend payments in 1997 Q2, which boosted income growth, rather than a change in savings behaviour.

Investment demand

Real whole-economy investment rose by an average of 0.7% in the first three quarters of 1997, above its average quarterly increase of 0.5% since the recovery began in 1992 Q1. An article in February's *Quarterly Bulletin*

An alternative estimate of house prices

The Nationwide and Halifax house price indices have been diverging since the beginning of 1997. This box outlines the construction of an estimate based on data from the Land Registry. On this measure, house price inflation was around 8% in the year to 1997 Q3, though this may be revised up.

The Halifax house price index rose by 5.8% in the year to January, compared with an increase in the Nationwide index of 13.1% in the same period. A third measure, the Department of Environment, Transport and the Regions (DETR) house price index, rose by 7.9% in the year to 1997 Q4, though it was closer to the Nationwide index for most of 1997. Possible reasons for the divergence between the Halifax and Nationwide indices include differences in the institutions' samples, in their methodologies, and in the weight they give to transactions from each region in the United Kingdom. But further investigation has discounted many of these explanations. In the absence of any clear reason for the divergence, research undertaken in the Bank has used data from the Land Registry to supplement the MPC's view of developments in the housing market.

The published Land Registry data are not mix-adjusted, so their average price may change either because of changes in the mix of houses bought and sold each quarter, or because of changes in the price of a given type of house. Land Registry data have been mix-adjusted by Bank staff to correct for changes in the proportion of houses bought and sold in each county and for different house types.

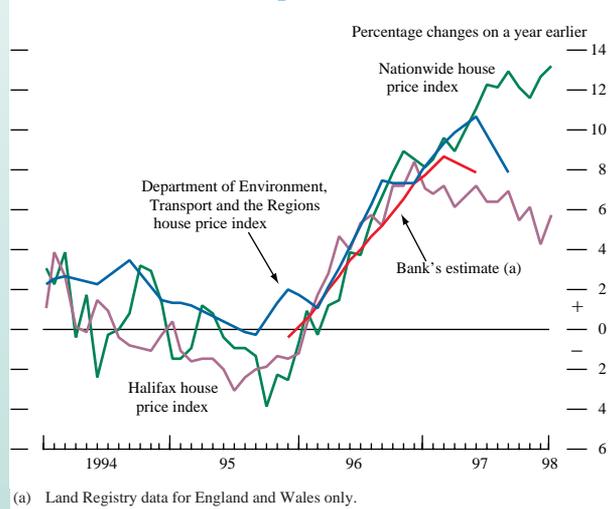
This estimate has some disadvantages. First, because of the nature of the Land Registry questionnaire, it is only possible to make a simple mix-adjustment by property type and by county. This compares with the Halifax and Nationwide's use of a broad range of mix-adjustment variables, including house size. The Land Registry are, however, extending their questionnaire to include the number of bedrooms. Second, it is less timely than the Halifax and Nationwide indices. The Land Registry records sales at the date of completion, whereas the Halifax and Nationwide use the approval date; and Land Registry data are

published two months after the end of the quarter. Third, the estimate is subject to revisions as late forms are received by the Land Registry; when house prices are increasing, these revisions are likely to be upwards. Fourth, the data only cover England and Wales, whereas the other indices measure house prices in the United Kingdom as a whole.

On the other hand, the Bank's estimate, based on the Land Registry data, is more comprehensive than either of the other indices, since it covers nearly all transactions. In 1996, for example, the Land Registry sample size was 950,000 and the Halifax's sample size was 175,000. The Land Registry sample also includes purchases of unmortgaged properties as well as mortgaged ones. These may be important advantages at a time when the other indicators are diverging.

The chart shows that in the year to 1997 Q3, house prices rose by 7.9%, according to the mix-adjusted Land Registry data. This was 0.8 percentage points higher than the rise in the Halifax index, but 3.1 percentage points lower than the Nationwide index, taking account of timing differences between the indices. And it was lower than the DETR index, which suggested that house price inflation was 10.6% in the year to 1997 Q3. It is possible, however, that the Bank's estimate will be revised upwards with the next release of Land Registry data at the end of February.

Measures of UK house price inflation



suggests that one reason why investment has not risen faster during this recovery is that firms may have begun the recovery with large amounts of spare capacity and, related to this, high levels of indebtedness.⁽¹⁾ So to assess the investment picture, it is important to look not only at rates of growth of investment flows, but also at how far firms are from their desired capital stock.

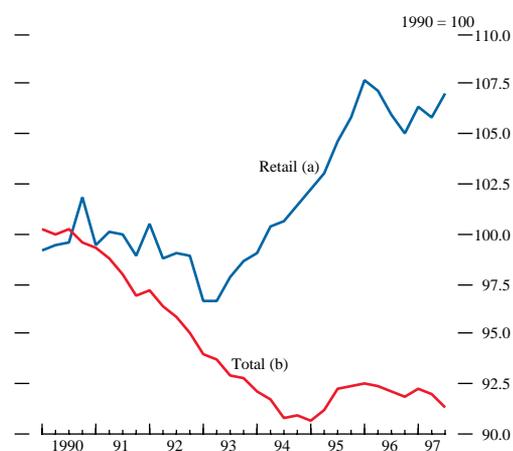
Business investment has grown more quickly than whole-economy investment since the recovery began, though the rate of growth of business investment slowed during 1997, contrary to the MPC's expectations. There are several reasons to expect a relatively strong profile for business investment, including a lower user cost of capital, high stock market valuations, high levels of profitability, increasing capacity constraints and the ready availability of finance. The apparent weakness in investment may be partly the result of incomplete recording of investment spending. For example, reports from the Bank's regional Agencies have suggested that IT equipment, because of its short economic life, may have been recorded as current rather than capital expenditure. And spending on software, which is not currently classified as investment in the National Accounts, has become more important relative to spending on machinery. In September 1998, the United Kingdom will begin to use the new European System of Accounting, which will record software expenditure as investment.

Stockbuilding

Stocks, excluding the alignment adjustment, reduced GDP growth by 0.5 percentage points in 1997 Q3, having reduced growth by 0.2 percentage points in the previous quarter. In 1990 prices, stocks rose by £260 million in 1997 Q3, the smallest quarterly increase for three 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 rose by a cumulative total of nearly £900 million in the first three quarters of 1997. Chart 2.8 shows that the retail stocks to sales ratio has been on a broadly upward trend since 1993. This reflects a corresponding downward trend in the ratio of wholesale stocks to turnover, as retailers have

Chart 2.8
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.

(1) Whitaker, S (1998), 'Investment in this recovery: an assessment', *Quarterly Bulletin*, February, pages 38–47.

increasingly taken over stockholding from wholesalers. It is perhaps more surprising that the ratio has risen during the past year, when retail sales have increased at their fastest rate for nearly a decade. This could have been because retailers were increasing their stocks in anticipation of even stronger demand: the Bank's regional Agencies have reported a stock overhang among retailers, and strong price discounting in the January sales.

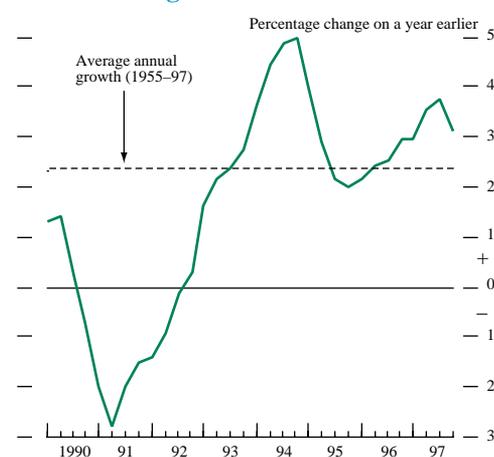
Public sector demand

The Public Sector Borrowing Requirement (PSBR) for the first nine months of fiscal year 1997/98 was £6.1 billion, compared with £16.3 billion in the first nine months of the previous fiscal year. The *Pre-Budget Report* on 25 November revised down the 1997/98 PSBR forecast by £1.4 billion to £11.9 billion (£9.5 billion when the windfall tax and associated spending are included). The largest change was to cyclical social security spending, which was revised down by £1 billion for 1997/98 in the *Pre-Budget Report*, reflecting the fall in unemployment since July.

In its assessment of the outlook for the public finances, the MPC has taken government nominal expenditure plans and effective tax rates from the July Budget and the November *Pre-Budget Report* as its central case. But the distribution of possible inflation outcomes takes account of the risks from fiscal policy, drawing on the past variance and skewness of nominal expenditure outturns compared with announced plans.

2.3 Output

Chart 2.9
Annual GDP growth^(a)

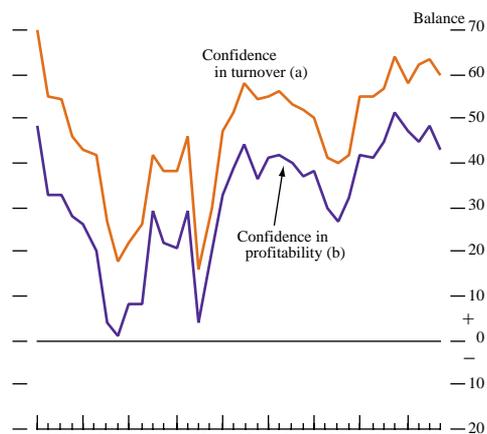


(a) GDP(A), 1990 prices.

The preliminary estimate of real GDP in 1997 Q4 was 0.5% higher than the previous quarter and 3.1% higher than a year earlier, significantly below the growth rate in the MPC's forecast in November (see Chart 2.9). Within this total, service sector output grew by 1% during the quarter.

Manufacturing output fell by 0.4% in 1997 Q4, its largest fall since 1991. These data were published after the preliminary GDP estimate. The fall may have been partly because of a weak external demand: output in the investment and intermediate goods sectors, which had been contributing to manufacturing and export growth, fell by 1.7% and 1.6% respectively in 1997 Q4. The fall in manufacturing output is consistent with recent survey evidence which suggests that the manufacturing sector is slowing down. The CBI quarterly Industrial Trends

Chart 2.10
Forward-looking indicators for the service sector: the BCC Survey



Source: BCC.

- (a) The proportion of firms expecting turnover to improve in the next twelve months.
- (b) The proportion of firms expecting profitability to improve in the next twelve months.

Survey recorded a balance of +2 for new orders expectations in January, the least positive response in the survey since 1992. Skilled labour shortages and plant capacity were cited as important factors likely to limit output in the next four months.

Service sector output grew by 4.4% in the year to 1997 Q4, faster than its trend rate of 2.4%. But there are signs that the pace of service sector activity has passed its peak and may be slowing. Most of the forward-looking indicators in the British Chambers of Commerce (BCC) Survey for 1997 Q4—including investment intentions and confidence—were lower, suggesting that firms are expecting slower growth (see Chart 2.10). The CIPS Survey recorded an increase in service sector activity in January, though it remained below levels recorded during summer 1997.

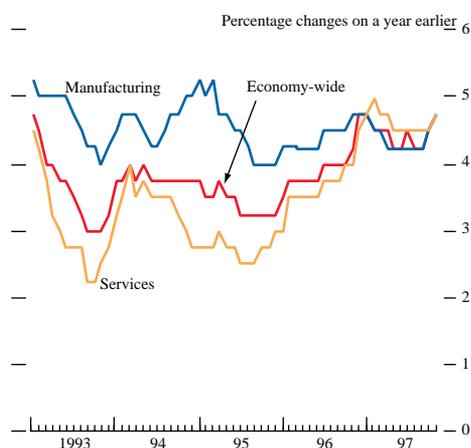
2.4

Summary

The MPC has assumed that recent developments in Asia will reduce UK output by around half a percentage point by the end of 1999, in the central case. But the uncertainties surrounding these forecasts have increased, and there are downside risks to UK activity and inflation. A much larger crisis resulting from contagion affecting other countries is possible, but unlikely.

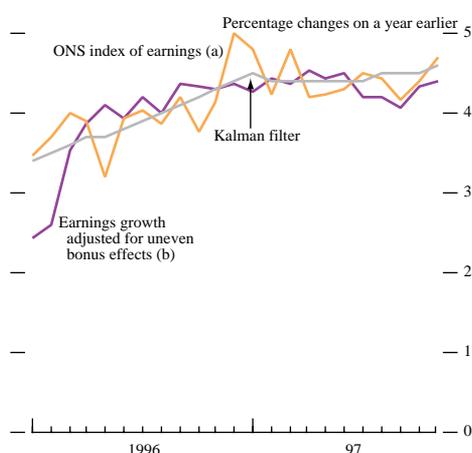
Real GDP grew by 3.3% in 1997, the sixth year of expansion in the United Kingdom. Revisions to real GDP data for 1997 Q3 and the preliminary estimate of output growth for 1997 Q4 suggest that the pace of economic activity slowed more rapidly in the second half of 1997 than expected at the time of the November *Report*. Consumption growth is expected to slow during 1998, but to remain above its historical trend.

Chart 3.1
Underlying earnings growth^(a)



(a) Underlying earnings growth for Great Britain makes allowances for temporary influences such as arrears, variations in the timing of bonuses and industrial disputes.

Chart 3.2
Whole-economy average earnings growth



Sources: ONS and Bank of England.

- (a) The underlying earnings series shown in Chart 3.1 is constructed by the ONS using a three-month centred moving average of percentage changes in this series and then rounded to the nearest $\frac{1}{4}$ percentage point.
- (b) Three-month moving average of earnings growth, adjusted by subtracting monthly bonus effects and adding back a twelve-month moving average of bonus effects.

Average earnings growth was $4\frac{3}{4}\%$ in the twelve months to November, having risen by a $\frac{1}{4}$ percentage point in both October and November. Unemployment fell by 150,000 in the autumn,⁽¹⁾ according to the Labour Force Survey (LFS). At 6.6% of the workforce, it was 1.3 percentage points lower than the previous year and at its lowest rate since the Survey began in 1984. Other indicators also suggest that the labour market continues to tighten. Employment rose by 0.4% in the autumn, slightly above its rate of growth in the summer, according to the LFS.

3.1 Nominal earnings

Whole-economy average underlying earnings grew by $4\frac{3}{4}\%$ in November 1997 compared with a year earlier— $\frac{1}{4}$ percentage point higher than in October and $\frac{1}{2}$ percentage point above that in September (see Chart 3.1). Some of the rise in November can be accounted for by bonuses. There were higher bonuses in both manufacturing, where higher overtime payments were also a factor, and services. But even after smoothing the earnings series, in an attempt to adjust for the effects of bonuses (see Chart 3.2), there was still a small increase in earnings growth in November. Unit labour costs for the whole economy rose by 2.6% in 1997 Q3 compared with a year earlier; a higher rate of increase is likely in 1997 Q4, because earnings growth has risen while GDP growth has fallen without signs of a corresponding fall yet in employment growth.

The long run can provide a useful benchmark against which to judge whether the level of earnings growth is consistent with a particular level of domestically generated inflation. Nominal earnings growth higher than $4\frac{1}{2}\%$ a year and unit labour costs rising more quickly than $2\frac{1}{2}\%$ could not be sustained in the long run, unless domestically generated inflation were higher than $2\frac{1}{2}\%$. The inflation projection assumes that the trend growth in whole-economy productivity is 2% a year, close to its long-run average. Real wages, paid by employers, cannot grow more quickly than productivity

(1) 'Autumn' covers the months September, October and November. The Survey has been published four times a year since 1992, and before that once a year since 1984. From April 1998, the ONS plans to publish results from the LFS each month in the form of a three-month rolling average.

**Table 3.A
Settlements**

Percentages

	1997					1998
	Q2	Q3	Oct.	Nov.	Dec.	Jan.(a)
Three-month employment-weighted median						
Whole-economy (IRS)	3.0	3.5	3.5	3.5	4.5	n.a
Whole-economy (Bank)	2.9	3.5	3.5	3.3	3.3	4.5
Three-month employment-weighted mean						
Whole-economy (Bank)	3.1	3.9	4.1	3.5	3.7	4.4
Twelve-month employment-weighted mean						
Whole-economy (Bank)	3.2	3.3	3.3	3.3	3.3	3.4

Sources: Bank of England and Industrial Relations Services.

(a) Provisional.

**Table 3.B
Barclays Basix Survey of inflation expectations**

Percentage increases in prices

Twelve-month RPI inflation one year ahead

	September 1997	December 1997
General public	4.4	4.5
Business economists	3.1	3.2
Finance directors	3.4	3.4
Investment analysts	3.1	3.4
Academic economists	3.2	3.1
Trade unions	3.7	3.7

Twelve-month RPI inflation two years ahead

	September 1997	December 1997
General public	5.0	5.2
Business economists	3.1	3.0
Finance directors	3.7	3.7
Investment analysts	3.8	3.4
Academic economists	3.4	3.1
Trade unions	3.9	4.7

Source: Barclays Bank.

without the profit share in national output falling, and profits cannot adjust indefinitely.

Wage settlements in the second half of 1997 were higher than in the first half, according to the Bank's database, but it is too early to say whether this represented a clear trend. The figure for average settlements was heavily influenced by a single large settlement for the construction sector in August. Between September and December, relatively few settlements were recorded, so it would be unwise to place too much weight on those figures. Table 3.A shows the most recent data; summary measures published by Industrial Relations Services are shown for comparison, even though the underlying settlements information is subsumed within the Bank's measure. The January settlements figure is likely to be a better reflection of general trends, because that is the month in which a quarter of the settlements on the Bank database have usually been agreed, covering around 10% of the workforce. So far, the Bank has received data on 66 settlements covering a third of the workers that we would expect to settle in that month. The provisional estimates shown in Table 3.A indicate a rise in settlements between December and January.

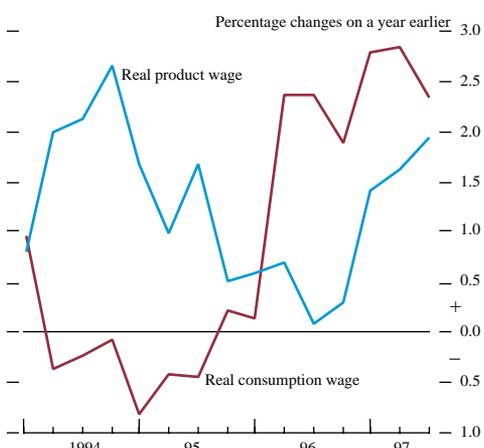
There are further indications that settlements will be higher in 1998. The Bank's regional Agencies conducted an informal survey of their contacts during December 1997, asking about pay prospects in 1998; the results were reported to the MPC in January. The Agents' contact base is predominantly private sector, and manufacturing industry is more heavily represented than in the economy as a whole. Around a half of the businesses surveyed expected higher basic pay increases for their workers in 1998 compared with 1997; only some 10% expected a lower settlement. The main reason cited for increasing settlements was fear of losing staff. The Government announced in January this year that workers covered by public sector pay review bodies would receive an average 3.9% pay increase in 1998, around $\frac{1}{2}$ percentage point higher than in 1997.

3.2

Real earnings

Wage bargainers negotiate over future real wages and are therefore interested in what will happen to prices. Bank estimates, derived from the Gallup/GFK survey of consumers, indicate that one year ahead RPI inflation expectations have remained stable at around $3\frac{1}{2}\%$ since the beginning of 1997. The Barclays Basix Survey (see Table 3.B) indicates that one year ahead inflation

Chart 3.3
Growth in real wages^(a)



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

expectations have remained broadly flat between September and December 1997. But, in wage bargaining, employers do not focus on RPI inflation; they are concerned about the real product wage, which is their total labour costs per employee relative to the prices of the goods and services they sell. Employees bargain over the real consumption wage which is the wage they receive relative to retail prices and personal taxation. Correct measures of real wages, looked at from both sides of the wage bargain, would incorporate expectations about the relevant price indices. But measures of expectations are imprecise and are not available for all appropriate price indices. In these circumstances, estimates of real wages based on actual price outturns provide an alternative.

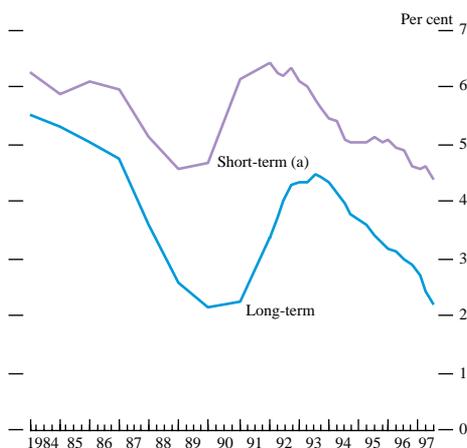
The four-quarter growth rate of the real product wage has increased over the past year (see Chart 3.3). The real consumption wage outpaced the real product wage, continuing a more general trend that dates back to the early 1980s. The relationship between these two real-wage series depends on two main factors: the terms of trade, and taxes on employment income and consumers' expenditure. The terms of trade are the ratio of export to import prices, and represent how many foreign goods and services can be exchanged for a unit of domestic goods and services. Over the past year, import prices have fallen more rapidly than export prices and boosted both the terms of trade and the real consumption wage relative to the real product wage. Lower taxes on income have also lifted the real consumption wage relative to the real product wage in recent years. A higher ratio of real consumption to real product wages should mean, other things being equal, lower overall real wage pressure, because at a given level of demand for hours worked there would be a greater effective supply.

3.3 Explaining real earnings behaviour

Labour market tightness

Labour market tightness is the key influence on real wage pressure in the short run. The labour market has continued to tighten over the past three months, according to most measures. The unemployment claimant count was 5% of the workforce in December, after falling by an average of almost 21,000 a month in 1997 Q4. A better measure of unemployment comes from the ONS's Labour Force Survey (LFS), a survey of households. The Survey asks people whether they have actively been seeking work, and the resultant measure

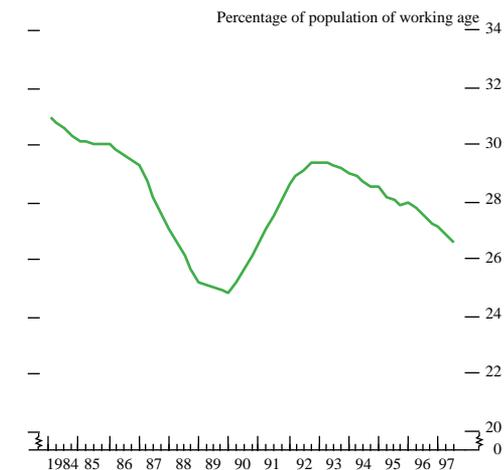
Chart 3.4
Short-term and long-term LFS
unemployment rate



Source: LFS.

(a) Short-term is less than a year, calculated by the Bank as the difference between seasonally adjusted total unemployment and non-seasonally adjusted long-term unemployment, assuming no seasonal pattern in the latter.

Chart 3.5
Non-employment^(a)



Source: LFS.

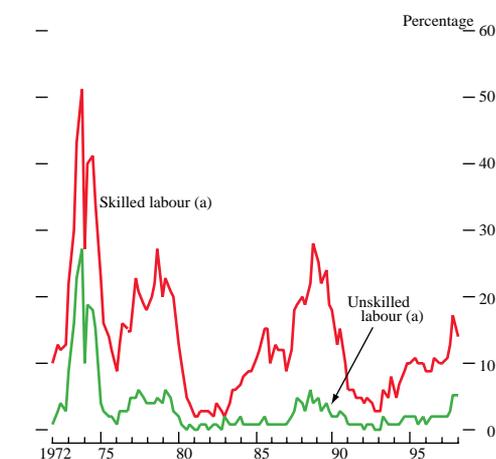
(a) The non-employment rate is the percentage of the population of working age who are not in work.

should be less affected by changes in benefit conditions. According to the LFS, unemployment fell in the autumn by 150,000 to 6.6% of the workforce; its largest fall since quarterly surveys were first conducted in 1992.

Changes in short-term unemployment (those unemployed for less than twelve months) are probably more important for gauging changes in labour market tightness than changes in long-term unemployment. It is likely that long-term unemployment exerts less downward pressure on wages, though it cannot be ignored. Short-term unemployment rose slightly in the summer, but resumed a downward path in the autumn, according to the LFS (see Chart 3.4): the fall in the total of 150,000 was evenly distributed between short-term and long-term unemployment. Another measure of labour market slack is provided by the proportion of the population of working age who are not employed. This measure, called the non-employment rate, is wider than unemployment, because it includes all those who are potentially available for work, perhaps now or with a short lag, and those who are never likely to work. It also fell in the autumn, to 26.6%, from 26.9% in the summer (see Chart 3.5). The measure of labour market tightness used in the central inflation projection is the non-employment rate relative to any likely shifts in its equilibrium level. But the risks to the central projection incorporate the view that the LFS measure of unemployment, particularly short-term unemployment, may indicate an even tighter labour market.

Employment has continued to grow strongly. According to the LFS, employment rose by 117,000 in autumn 1997 or 0.4% on the previous quarter, a slightly faster pace than in the summer. This comprised a rise of 152,000 in employees in employment, which was offset by a fall in self-employment and workers on government schemes. Although an industrial breakdown is not yet available for the autumn, at least part of the fall in self-employment was probably in construction, where there has recently been a switch out of self-employment into employee status. This reflected revised Inland Revenue treatment of sub-contractors, which reduced the attractiveness of self-employment. There was also a significant increase in employment of 73,000 (0.3%) during 1997 Q3 according to the Workforce in Employment measure (estimated by the ONS from a quarterly survey of businesses). Within this series, there was a large rise in service sector employment, where the number of employees increased by 69,000. Though the number of manufacturing employees fell by 20,000 in Q3, it rose by 9,000 in the two months to November.

Chart 3.6
Labour shortages



Source: CBI.

(a) Percentage of firms expecting output to be constrained over next four months by these factors.

Evidence on recruitment intentions suggests that employment growth will remain at around its current level in early 1998. In their January surveys, both the CBI and the British Chambers of Commerce (BCC) showed manufacturers' employment intentions strengthening,⁽¹⁾ for the first few months of 1998. Though the unadjusted BCC Survey indicated a fall in service sector intentions, analysis by the Bank suggests that this was largely seasonal and that the balance of companies expecting to increase employment was little different from the October survey.

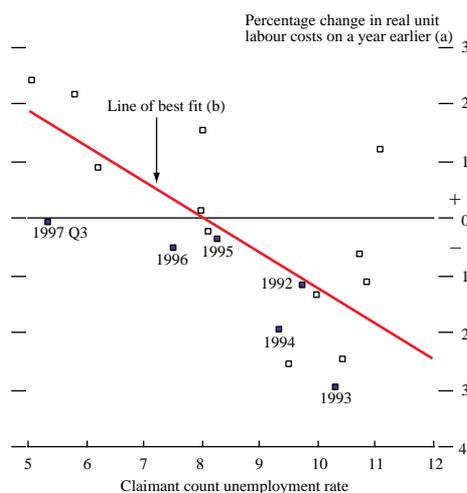
Total hours worked per week are a better measure of labour usage than employment, since they reflect changes in overtime and the balance between full-time and part-time workers. According to the LFS, these rose by 0.6% in the autumn, the same rate of increase as in the summer but more than the rise in employment.

Indications of increasing labour market tightness are also evident from survey measures of labour shortages. There was a marked rise in perceived labour shortages during 1997, according to the CBI Industrial Trends Survey. This was true of unskilled labour as well as skilled. Though skilled labour shortages fell back slightly in the latest January Survey, they remained high (see Chart 3.6). Furthermore, the shortages of unskilled labour in the January Survey stayed close to their previous cyclical peak in 1988. The CBI Survey only covers manufacturing, but the labour market from which its respondents recruit probably has a high overlap with other industries. The British Chambers of Commerce indicated that more firms in both manufacturing and services were experiencing recruitment difficulties in their January survey compared with the October one. But the trend appears to be flat over the past year, albeit at a high level.

Evidence from unfilled vacancies data, however, does not indicate more labour market tightening. The stock of vacancies was virtually the same in the final three months of the year, after several months of significant increases. Though the reported numbers showed a fall of 22,000 in November and 10,000 in December, 30,000 of the cumulative fall was caused by the Employment Service removing an overstatement in the stock; a residual error in the stock of some 10,000 remains.

(1) Both these series have been seasonally adjusted by the Bank.

Chart 3.7
Real unit labour cost growth and unemployment



Sources: ONS and Bank calculations.

- (a) Real product wage divided by productivity.
 (b) Based on annual observations 1980 to 1996.

Other factors affecting real earnings

The growth of real unit labour costs (the real product wage relative to productivity) tends to rise as unemployment falls. In each year of this recovery, the percentage increase in real unit labour costs has been lower than would have been expected based on the average relationship since 1980 (see Chart 3.7). The most likely reason for the shift in this trade-off is that the equilibrium, or natural rate, of unemployment is lower now than it was in the 1980s—an assumption which underlies the inflation projection. There are many possible reasons why the natural rate may have fallen, which have been reviewed extensively in previous *Reports* and other journals. These include institutional and regulatory reforms which have promoted flexibility in the labour market and a lower level of unemployment benefit relative to the earnings of those in work (the replacement ratio).

The Government's New Deal for unemployed people (see box on page 29) will probably affect the responsiveness of real earnings to unemployment. The 'New Deal' began to be introduced in January this year. It focuses on groups who have become, or who risk becoming, marginalised from the labour market: those aged under 25 who have been unemployed for more than six months and those aged 25 and over who have been unemployed for more than two years. If successful, the policy should help to increase the effective supply of labour and thereby reduce pressure on wages.

The impact of the scheme on measured unemployment, compared with a situation of unchanged policy, will be affected by three factors. Unemployment levels for people covered by the New Deal might have fallen anyway. Both categories of unemployment fell between July and October 1997 by around 30,000 for the under-25 year olds and 45,000 for the over-25 long-term unemployed. But unemployment would most likely stop falling during 1998, without the schemes, hence this factor should be less important when the New Deal has been fully introduced. 'Displacement' and 'churning' are the two other factors that could limit the impact of the scheme. 'Displacement' means that the targeted groups will, to some extent, be taking jobs that other potential workers would have taken. 'Churning' means that the scheme may not improve participants' employability, so that when they leave the programme they simply become unemployed again. The importance of displacement and churning, however, should not be exaggerated. If workers on the New Deal displace

The Government's New Deal for unemployed people

The Government's 'New Deal' for unemployed people is targeted at: people under 25 who have been unemployed for over six months; and people over 25 who have been unemployed for more than two years.

The New Deal for young people covers all those aged 18–24 who have claimed the Jobseeker's Allowance for six months or more. For these people, the New Deal will begin with a period of counselling, advice and guidance, 'the Gateway', which may be enough to help some into work. Thereafter, four options will be available: an employment subsidy of £60 per week for up to 26 weeks; a job for six months on the Government's Environment Task Force; a job for six months with a voluntary sector employer; or the opportunity to take up full-time education or

training for twelve months (all the employment options include one day per week release for education and training to reach an accredited qualification). Candidates who refuse a place on the scheme may lose benefits. The New Deal for 18–24 year olds was introduced in January this year in a number of 'pathfinder' areas covering 10%–15% of the target group; it will be introduced nationwide in April.

From June 1998, all those aged 25 and over who have been unemployed for two years or more will be able to benefit from one of two options: an employment subsidy of £75 per week for 26 weeks; or opportunities to study for up to twelve months in full-time employment-related courses designed to reach an accredited qualification.

employable people not covered by the scheme, then many from this latter group should be able to find other jobs at a slightly lower real wage. The training and experience gained as part of the New Deal should reduce the chances of churning, by helping the targeted groups to compete more effectively for jobs.

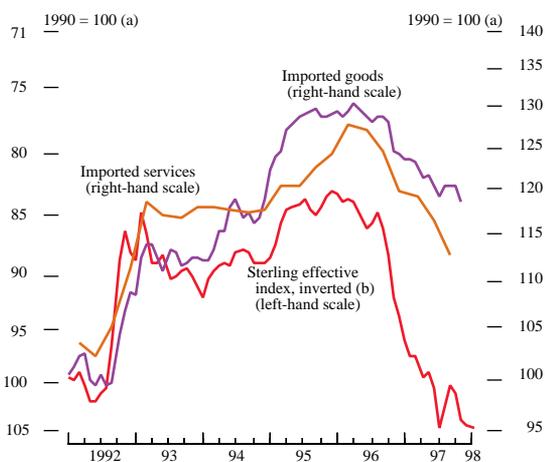
3.4

Summary

Data published in the past three months have indicated that nominal earnings growth rose and that the labour market continued to tighten: unemployment has fallen rapidly, employment growth has remained strong, and skill shortages remain high.

Lower levels of unemployment now appear consistent with a given level of short-term real wage pressure compared with the early 1980s; this shift in the trade-off is an assumption underlying the inflation projection. More falls in unemployment are likely in the first half of 1998. But its decline will probably begin to slow and the level may stop falling towards the middle of the year, excluding the effects of the New Deal. As a result of this further tightening, a rise in the growth of real earnings in the first half of 1998 is likely.

Chart 4.1
Import prices and the exchange rate



Note: The sterling effective index is measured against 20 other industrialised countries. Import prices cover imports from all countries.

Sources: ONS and Bank of England.

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

Table 4.A
Price changes of imports between August 1996 and November 1997^(a)

Per cent

Consumer goods	-6.3
<i>of which:</i>	
Cars	-7.0
Consumer goods, excluding cars	-6.0
Intermediate finished manufactures	-8.0
Capital goods	-8.3
Semi-finished manufactures	-8.3
Non-manufactures (b)	-8.6
Services (c)	-11.5

Note: The sterling effective exchange rate rose by 22.5% during this period, and the inverse exchange rate fell by 18.4%.

(a) The table does not show prices of erratic items, defined as ships, North Sea installation, aircraft, precious stones and silver.
(b) Weighted average of food, drinks and tobacco, basic materials and fuels.
(c) Quarterly data available only. Change shown between 1996 Q2 and 1997 Q3.

Import prices have fallen during the past year and a half, but by less than the sterling effective exchange rate has appreciated in the same period. The price of oil fell significantly in December and January. Cost pressures in the goods sector have fallen, but these have not been passed on fully to retail goods prices. Cost pressures have been less subdued in the service sector, partly because it is less exposed to exchange rate changes. RPIX annual inflation was 2.7% in December, compared with the target of 2½% set for the MPC by the Government.

4.1 Import prices and the exchange rate

The prices of imported goods in the three months to November were around 6% lower than in the same period a year earlier. Since the middle of 1996, when sterling started to appreciate significantly, the prices of imported goods and services have fallen by much less than sterling has risen (see Chart 4.1). A small part of this difference reflects world inflation. The prices of goods and services have increased in the global market, resulting in a rise in import prices for a given exchange rate.

Foreign exporters have used sterling's appreciation as an opportunity to widen their margins on exports to the United Kingdom. This was possibly because UK demand has been growing more strongly than demand in most continental European economies. Since consumption has been the main impetus to recent UK demand growth (see Section 2), the prices of imported consumer goods have reacted less than other import prices to the appreciation (see Table 4.A). This could have reduced the initial impact of sterling's appreciation on retail prices, since changes to the prices of imports that are not for direct consumption take time to feed through to retail prices.

The MPC's inflation projection assumes that further adjustment of import prices to sterling's appreciation will occur during 1998. That would be twice as long as import prices have previously taken to react to a change in the exchange rate. But there is great uncertainty

The interaction of costs and prices

This section of the *Report* discusses a wide range of data on costs and prices. The diagram below shows how these various costs and prices relate to the retail price index. The emphasis on goods prices in the diagram reflects the greater availability of cost data on goods than on services.

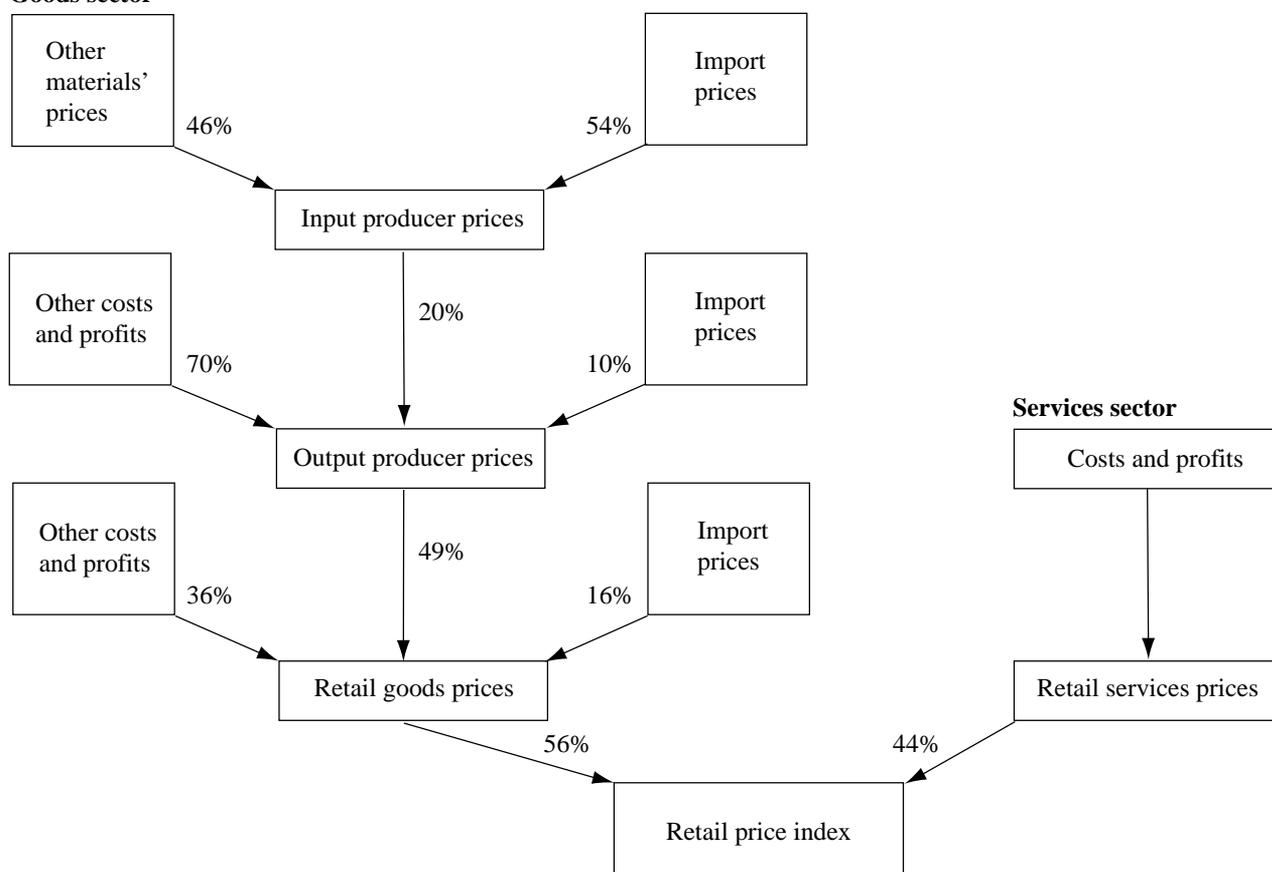
The diagram is a simplification. For example, housing services do not fit into this ‘pipeline’ approach. And ‘other costs’ refer to a variety of factors, such as taxes, rental costs, bought-in services and labour costs. Some costs feed into the pipeline at many different points. For example, fresh food prices feed directly into the retail price index, but other food is processed first and enters higher up the pipeline. Even though imported services are nearly one quarter of total imports, these are almost exclusively purchased by the corporate sector. So they do not feed directly into

the retail services price index, though they will affect retail prices indirectly. For example, foreign holidays are priced by domestic firms, but will reflect the cost of purchasing overseas services.

This illustration does not imply that retail prices are determined by weighting together various costs. This is because shocks that affect the economy can feed up or down the pipeline. A supply shock, such as a fall in oil prices, might first show up as a decrease in input prices, then feed down the pipeline until it affects retail prices. But a shock to demand, such as the recent windfall payouts, which have boosted consumption, might first be noticed at the point of consumption as an increase in retail prices. Increased demand for goods might put pressure on scarce resources, feeding up the pipeline as higher costs. So changes in costs are not always a lead indicator of changes in retail prices.

Retail and producer prices^(a)

Goods sector

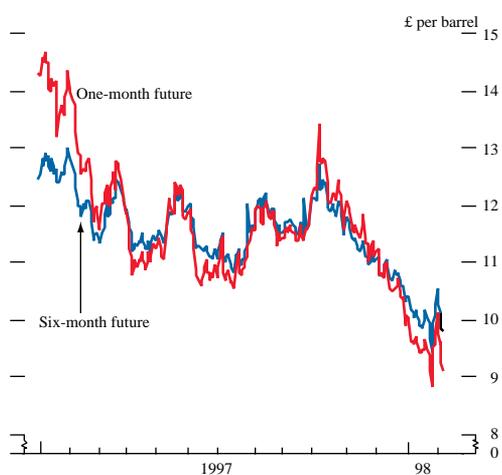


(a) Weights indicated are based on Bank estimates and ONS data, and may not sum to 100 because of rounding.

about the speed and magnitude of the response, partly because there are few previous illustrative episodes when sterling has appreciated on this scale for such a sustained period. And the response of import prices will depend on whether the rise in sterling is viewed as temporary or permanent.

4.2 Raw material and commodity prices

Chart 4.2
Price of Brent crude



Note: Daily data. Final observation is 4 February.

Source: International Petroleum Exchange.

The sterling price of Brent crude oil fell sharply between October and January (see Chart 4.2). The one-month future price fell to below £9 per barrel in January, its lowest since 1994. On 4 February, the date on which data for this *Report* were finalised, the oil price had risen slightly to £9.10 per barrel, around 20% lower than at the time of the previous *Report*. The six-month future price fell by nearly as much as the one-month future price, suggesting that the market expects this lower price to persist in the first half of 1998. A number of factors led to the reduction in price. In December, OPEC agreed to raise its production ceiling by around 10% to 27½ million barrels per day with effect from 1 January. The turmoil in Asia has led to expectations of lower world output growth, and hence demand for oil, in 1998. The possibility that Iraq's oil exports would be increased under the UN food-for-oil deal also pushed the oil price lower.

Other commodity prices have also been affected by the Asian disturbance. Metals prices, for example, fell by around 12% (in sterling) between October and January. As the box on page 31 shows, more than half of UK manufacturers' inputs are imported, so the fall in world industrial commodity prices should reduce UK input prices either directly, or indirectly through imports of finished or semi-finished manufactures that use raw materials in their production. The El Niño weather system is affecting agricultural production, but its overall effect on prices is unclear. The prices of some foods (such as soya beans) have fallen while the prices of others (such as coffee) have risen. And *The Economist's* non-food agricultural prices index in sterling terms was around 11% lower in January than October.

The Bank's commodity price index was 12% lower in December than a year earlier. Though most of this fall occurred at the start of 1997, all of the sub-components fell in November and December.⁽¹⁾ The index weights

(1) Agricultural price data relevant to the United Kingdom are not yet available for December, and are assumed flat for the purposes of calculating the Bank's commodity price index.

together prices of different commodities according to UK demand for them. It includes domestic commodities, and takes account of the effect of the Common Agricultural Policy on the UK price of agricultural commodities.

4.3 Costs and prices in the service sector

Cost pressures in the service sector have fallen, but price inflation has not slowed. The Chartered Institute of Purchasing and Supply (CIPS) Survey showed that cost pressures have fallen since the first half of 1997. The index of average input prices (including labour costs) fell from a peak of 60.1 in April last year to 56.0 in January (see Table 4.B). And service sector capacity constraints have lessened since the end of 1996, according to the British Chambers of Commerce Survey. The CIPS index of average prices charged was 51.3 in January. This was much higher than in the previous three months (when it was around its neutral level of 50), but about the same as in the summer. The ONS has constructed some corporate services price indices, analogous to the producer price series, though their coverage is limited at present. These suggest that corporate services price inflation picked up during 1997.

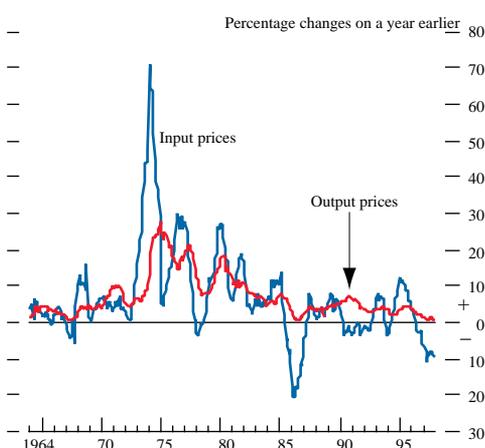
Table 4.B
Cost pressures in the service sector

	1996 Q4	1997 Q1	Q2	Q3	Q4	1998 Jan.
CIPS average input prices (a)	56.4	56.6	59.1	57.0	56.9	56.0
BCC full capacity (b)	47.0	41.0	39.0	39.0	38.0	n.a.

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

(b) Percentage of companies reporting that they are operating at full capacity.

Chart 4.3
Input and output price inflation



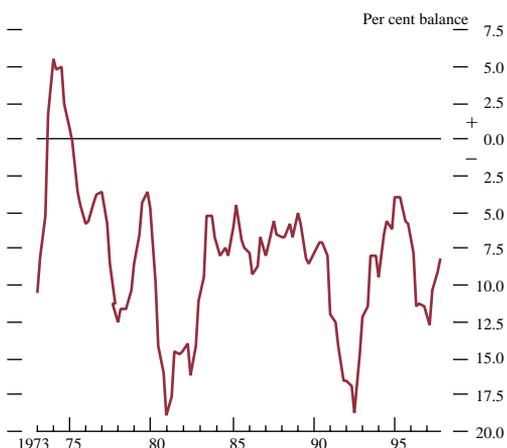
4.4 Costs and prices in manufacturing

Input prices in the manufacturing sector fell sharply in 1997 Q4, and were 9½% lower in December than a year earlier. This reflected falls in the prices of both imported inputs (see Section 4.1) and domestic inputs. The prices of many domestically produced inputs (such as crude oil, which has a 10% weight in the producer price index) are set on world markets, so these too will have been affected by sterling's appreciation since August 1996.

Annual output price inflation has been below 1½% since the start of 1997, only the third time it has been this low since the series began in 1963 (see Chart 4.3). Most of the small rise in prices during 1997 was caused by tax increases. Annual inflation measured by the output prices index excluding excise duties was only 0.2% in December.

The CBI Industrial Trends Survey asks firms whether or not they have raised prices during the past four months, and whether or not they expect to raise prices during the next four months. A comparison of outturns with prior

Chart 4.4
CBI survey measure of price outturns
relative to prior expectations^(a)



(a) Four-quarter moving average of the balance of firms reporting increased prices during the past four months, minus the balance of firms in the previous survey expecting to increase prices during the next four months.

Table 4.C
Rates of change of manufacturers' costs and prices

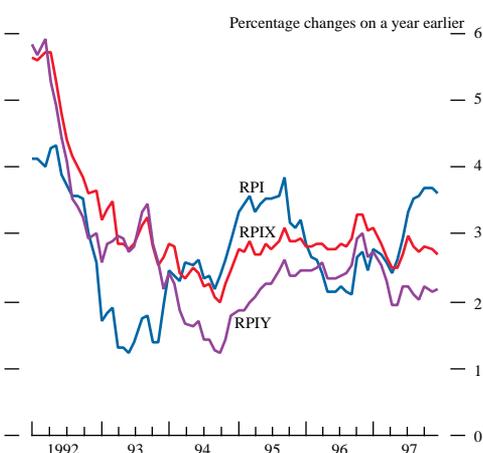
Percentage changes in the periods shown, except where noted

	1996	1997	1997			
			Q1	Q2	Q3	Q4
Unit costs						
Unit labour costs	5.6	2.3	0.0	0.3	0.2	2.3
Materials and fuels (including semi-finished manufactured imports)	3.9	-6.7	-2.2	-1.6	-0.8	-1.0
Imports of finished manufactures	0.8	-4.9	-1.6	-2.2	-1.2	0.1
Services	2.7	2.6	0.3	0.7	0.8	0.6
Weighted costs	2.3	-0.4	-0.6	-0.3	0.0	1.1
Output prices (a)	1.9	0.6	0.1	0.2	0.2	0.3

Sources: ONS and Bank of England.

(a) Domestic sales.

Chart 4.5
Inflation^(a)



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

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

expectations reveals whether or not firms have been disappointed with their pricing outcome. Chart 4.4 shows that manufacturing firms are almost always disappointed, suggesting that they have unrealistic expectations. This measure of 'price disappointment' also tends to vary with the cycle, with disappointment rising during downturns. This happened in 1996, when manufacturing output growth was very slow. But price disappointment seems to have fallen during 1997, despite lower output price inflation. This may be a reflection of lower cost pressures in 1997 as the price of inputs and imported components fell. The balance of firms expecting to increase prices during the next four months in the latest CBI Survey was the lowest ever in a January survey.

Pricing in the manufacturing sector

Manufacturers' margins on domestic sales probably widened in 1997, as weighted costs fell while output prices rose (see Table 4.C). By contrast, margins on export sales appear to have narrowed significantly since the start of 1996, as export prices have been cut by more than the fall in costs during this period. This reduction in margins on export sales partly explains why export volumes have held up during the past 18 months while sterling has risen (see Section 2). Following sterling's exit from the ERM in 1992, export margins widened considerably, and these wider margins were maintained until 1996. So it is difficult to know whether the recent cuts in export margins are sustainable.

4.5 Retail prices

Retail prices excluding mortgage interest payments (RPIX) rose by 2.7% in the twelve months to December (see Chart 4.5). Since the start of 1995, annual RPIX inflation has averaged 2.8%, and has never been more than 1/2 percentage point away from its average rate. Annual RPIX service price inflation was 2.9% in December, compared with goods price inflation of 2.1%.

RPIY annual inflation, which also excludes excise duties, was 2.2% in December. The headline inflation rate (RPI) was 3.6% in the twelve months to December. Mortgage interest payments have risen more quickly than other prices in the retail price index following the MPC's decisions to increase the Bank's repo rate during 1997.

Annual RPIX inflation in 1997 Q4 was slightly higher than expected in the November *Report* central projection. And the outturn for RPIX inflation in 1997 Q4 was much higher than envisaged a year ago, in the February 1997 *Report*, when the central projection was around 2¹/₄%. This was partly because import prices, particularly of consumer goods, fell by less than earlier projected. Though the weighted costs of retail goods fell during 1997, retailers have not fully passed on these cost reductions as lower prices. It is difficult to tell whether this delayed response reflects strong demand, or simply that retailers often delay pass-through of lower costs to prices.⁽¹⁾ In the light of the higher-than-expected outturns during the past year, the MPC is reviewing the relationship between retail prices, costs and prices of domestically produced output, and import prices. The current projection incorporates a smaller overall effect of lower import prices on retail prices, and a faster feed-through of changes in domestically generated costs to retail prices than previously estimated. As a result, the current projection embodies a slightly higher profile for inflation in the next two years, relative to that in the November *Report*.

The pricing behaviour of retailers in the next two years will be affected by three main factors: first, any delayed response of retailers to the falls in import prices that have already occurred; second, the further falls in import prices that are assumed in the MPC's central projection; and third, the growth rate of domestically generated inflation. Adjusting for the effect of lower import prices and changes in the terms of trade, which temporarily depress retail price inflation, domestically generated inflation is currently above the target level.

4.6 Other price indices

The UK Harmonised Index of Consumer Prices (HICP) rose by 1.8% in the twelve months to December. HICP annual inflation fluctuated between 1¹/₂%–2% throughout 1997, about ³/₄ percentage point lower than RPIX inflation during that period (because of differences in the coverage and construction of the indices). The HICP inflation rate, the most directly comparable measure, was very similar in the United Kingdom to other EU Member States' inflation rates, though UK inflation was generally

(1) The Bank's survey on price-setting behaviour by UK firms found that twice as many retailers cited changes in material costs as a reason for raising prices as cited them as a reason for lowering prices. See 'How do UK companies set prices?', Hall, S, Walsh, M, and Yates, T in the *Quarterly Bulletin*, May 1996, pages 180–92.

Table 4.D
Measures of annual inflation

Percentage changes in November 1997 on a year earlier

	Consumer price inflation (a)	HICP
Austria	1.1	1.1
Belgium	1.4	1.3
Denmark	2.1	1.7
Finland	1.9	1.7
France	1.3	1.4
Germany	1.9	1.4
Greece	5.2	5.0
Irish Republic	1.6	1.1
Italy	1.6	1.8
Luxembourg	n.a.	1.5
Netherlands	2.5	2.6
Portugal	2.1	1.9
Spain	2.1	1.9
Sweden	1.6	2.7
United Kingdom	2.8 (b)	2.0
Mean (unweighted)	2.1	1.9
Median (unweighted)	1.9	1.7

Sources: Eurostat, EMI and ONS.

(a) Headline national measures.
(b) RPIX.

Table 4.E
Annual inflation

Percentage increases in prices on a year earlier

	1997				
	Aug.	Sept.	Oct.	Nov.	Dec.
HARP (a)	3.4	3.3	3.2	3.3	2.8
THARP (a)	2.9	3.0	2.8	2.9	2.6
Trimmed mean	2.5	2.4	2.2	2.2	2.2
Median	2.2	2.2	2.4	2.3	2.3

Sources: ONS and Bank calculations.

(a) These measures use the Halifax house price index. HARP and THARP using either the Nationwide house price index or the Bank's new house price index would show higher inflation rates.

higher using headline national measures (see Table 4.D). HARP and THARP inflation, which contain a measure of owner-occupied costs, continue to exceed their counterparts of RPIX and RPIY (see Table 4.E).

The GDP deflator measures the price of domestic value added. Measured at factor cost, it rose by 2.4% in the year to 1997 Q3, slightly lower than the equivalent RPIX inflation rate. The ONS has started to publish an experimental final expenditure price index (FEPI). Unlike the GDP deflator, it is affected by import price changes. Because import prices fell in the past year, the FEPI rose by less than the GDP deflator (2.1%, compared with 2.4%, in the year to 1997 Q3).

4.7

Summary

Since mid 1996, import prices have fallen by less than sterling has appreciated, but adjustment still seems to be taking place. Commodity prices have fallen in the past three months, and these have been reflected in lower input prices to the manufacturing sector. Retail price inflation in 1997 was higher than expected in previous *Reports*, reflecting the lower-than-expected falls in import prices and a rise in retail goods prices relative to costs. Both of these were probably related to the strong growth of UK demand last year. Price pressures in the service sector are stronger than in the goods sector.

The central projection assumes that import prices fall further during 1998, and that this feeds through to retail goods prices after a delay. This effect is assumed to outweigh the influence of domestically generated inflation in 1998, so RPIX inflation is projected to fall.

Monetary policy since the November Report 5

This section provides a summary of the economic news and the monetary policy decisions taken by the MPC since the November *Report*, and leads in to the new projection for inflation in Section 6. The minutes of the November, December and January MPC meetings are attached as an Annex to this *Report*. The Bank of England's official dealing rate—the repo rate—has remained unchanged since the November *Report* was published, at 7.25%.

At the time of the November *Report*, the MPC concluded that inflation and output growth had both turned out higher than projected. Net exports had held up surprisingly well in the face of the appreciation of sterling, and the expected reduction in output growth had not materialised. The most likely interpretation was that the impact on net trade had been deferred, and that output growth would be lower in 1998. There was still uncertainty about the output gap and thus about the rate of demand growth that could be sustained without leading to a rise in inflation. But the continued rapid growth of broad money, domestic demand and output meant that the balance of risks to inflation was still on the upside. For those reasons, the Committee decided in November to raise interest rates by $\frac{1}{4}$ percentage point.

At its meeting on 3–4 December, the Committee discussed the first estimate by the ONS of the expenditure breakdown of the Q3 GDP figures (see Table 5.A). This showed some signs that net exports were weakening, once allowance had been made for erratic items (see Section 2). The implications of the financial crisis in East Asia were considered. Asian countries had been an important source of growth in G7 exports in recent years, and it was possible that a slowdown in Asia would, together with sterling's continuing appreciation, bring about a fall in the United Kingdom's net exports in 1998—possibly more than expected at the time of the November *Report*.

Asian turbulence also raised the threat of global financial instability. Some of the affected countries had implemented major changes of economic policy, and the IMF appeared to have reached agreement with Korea on

Table 5.A
Contributions to GDP growth in 1997 Q3^(a)

Percentage points, unless stated

	December MPC	January MPC
Domestic demand	0.7	1.0
Private consumption	0.9	0.5
Public consumption	0.0	0.3
Investment	-0.2	-0.1
Stockbuilding	0.1	0.3
Net exports	0.2	0.1
GDP^(b)	0.9	0.8

(a) Numbers in this table relate to data available at the time of the December and January MPC meetings. Contributions may not sum to total because of rounding, and because the statistical discrepancy and the factor cost adjustment have been omitted from the table.

(b) Percentage change on previous quarter.

the conditions for its support. The situation needed careful monitoring, but at that time the Committee judged that the changing external environment did not of itself require or prevent a change in UK monetary policy.

The first estimate for UK consumption growth in Q3 was below the central projection in the November *Report*. The Committee noted two developments that might suggest consumption growth had peaked. First, consumer confidence had fallen back, albeit from a relatively high level. Second, the three-month growth rate of retail sales had slowed. But the Committee agreed that they would need to see further evidence of lower consumption growth in order to conclude that policy was on course to achieve the inflation target.

The Committee identified a range of possible views on the outlook for inflation. One was that the level of activity was already above trend. In that case, output growth would need to slow sharply to avoid a marked increase in inflation, and policy might need to be tightened soon if there were no clear evidence of a slowdown in the economy. Another view was that the economy was close to but not clearly above capacity, though still growing above trend. The economy was therefore delicately poised. Retail price inflation remained stubbornly high. But domestic demand should slow, given the tightening of monetary and fiscal policy. A further view was that recent data were encouraging for the inflation outlook. Growth could peak in Q4, as the MPC had projected. Recent developments in Asia could mean that the slowdown in 1998 was more pronounced than assumed in the November projections. And sterling might not depreciate in line with interest rate differentials as assumed in November.

The MPC agreed that such uncertainty about where the economy was in relation to capacity made the policy judgment very difficult. There had been relatively little news in the last month's data that helped resolve this question, given that the Committee had already expected a strong fourth quarter. So there was a case for waiting to see further developments. The Committee voted unanimously to leave the Bank's official dealing rate unchanged.

At its meeting on 7–8 January, the MPC considered the revisions to GDP (see Table 5.A). Some components of the third-quarter National Accounts were difficult to understand, for example the rise in government final

consumption was difficult to reconcile with data on total government outlays. And private consumption was revised down significantly. Retail sales had bounced back in October, which was likely to support consumption in the fourth quarter. The Bank's regional Agencies suggested that retail sales had been below expectation in the first three weeks of December, but reports of sales immediately before Christmas suggested that demand had strengthened.

Output growth in Q3 had been revised down to 0.8%, compared with the 1.0% figure published prior to the release of the November *Report*. The central projection in that *Report* had been for further strong growth in the fourth quarter before a marked slowdown to below trend in 1998 Q1. It was not clear whether the Q3 data represented an earlier-than-expected slowdown, or a temporary fall in growth influenced by the death of Diana, Princess of Wales.

The MPC discussed the likely impact of Asian turbulence. Overall, the downside risks seemed to have increased during the past month. It was agreed that Asian developments would need to be considered carefully in the preparation of the February *Report*.

In discussion of the output gap, the MPC noted the difficulties in estimating potential output. Surveys of capacity utilisation and skill shortages were of great value as indicators of the output gap. Because of the uncertainty of output gap estimates, it was important to monitor cost and price indices, even though they were lagging indicators of the gap. The underlying rate of inflation might be well above the inflation target. The exchange rate appreciation could have been passed through, but its effect offset by upward pressure on inflation resulting from the strength of domestic demand.

Views about the appropriate level of interest rates ranged across a spectrum. At one end was the view that interest rates should be raised immediately for four reasons. First, it seemed likely that the relationship between output growth and inflation during the next two years would be less favourable than had been assumed in the November projection. Second, it seemed implausible that any substantial output gap remained. Third, recent wage settlements and reports of skill shortages were a matter of concern, and an immediate move in interest rates would send a clear and early signal to the labour market of the MPC's determination to achieve the

inflation target. Fourth, concerns were expressed about the buoyancy of asset prices.

Another view was that, though those arguments had much force, there was still considerable uncertainty about their implications for future inflation. There was, therefore, a strong case for waiting another month until a full analysis could be made of the extent of any required rise in interest rates in the context of the February *Report*.

A third view was that there was little or no presumption that interest rates should rise. Developments in Asia, as well as slowing domestic demand, suggested the possibility of an earlier turning-point in GDP growth than implied by the central projection in the November *Report*. The risks from developments in Asia appeared to be on the downside. The output gap was difficult to measure and did not provide a clear signal to policy.

On the balance of arguments set out above, a majority of the MPC voted to leave the repo rate unchanged, with a minority preferring an immediate increase in interest rates.

At the time of the February MPC meeting, the first estimate of GDP growth in the fourth quarter showed a rise of only 0.5%. This was substantially weaker than expected at the time of the November *Report*. No breakdown of the expenditure components would be available until late February, but monthly data suggested a strong negative contribution from net exports.

The Labour Force Survey (LFS) suggested that the labour market had continued to tighten in the autumn. The LFS measures of both short and long-term unemployment had fallen significantly, and hours worked had increased. Whole-economy underlying average earnings growth had picked up to 4³/₄% in November. The increase was broadly in line with that expected at the time of the November *Report*. RPIX inflation in December was higher than anticipated. But input and output price inflation were, if anything, lower than expected.

There were some tentative signs in the latest data that broad money and credit growth was slowing down, particularly borrowing by industrial and commercial companies. The nominal effective exchange rate had risen further since the previous MPC. But asset prices had also risen further.

At the February MPC meeting, which took place on 4–5 February, the Committee decided to leave the repo rate unchanged at 7.25%.

6.1 The inflation projection assumptions

The projection for inflation is based on the assumption that official interest rates will remain unchanged at 7.25% during the next two years. The projection was agreed by the Monetary Policy Committee (MPC) on 5 February. In addition, for the first time, a new projection is presented under the assumption that official interest rates follow market expectations over the next two years.

A key feature of the projections in the November *Report* was the marked slowdown in GDP growth. That reflected two main factors. First, the central projection implied a slowdown in domestic demand because of earlier monetary and fiscal policy tightening, and slower consumption growth once the initial impact of windfall gains had worn off. Second, and more importantly, the projection implied a slowdown in external demand following sterling's appreciation. There are now signs that both factors are beginning to materialise. And since the November *Report* there have been further developments in Asia, which are likely to lead to a greater slowdown in external trade.

The MPC's assumptions about activity and inflation in overseas economies—and the impact of the Asian turbulence on the world economy—start from the projections made by the OECD and IMF (see Section 2). The central projection assumes that the impact of the Asian crisis will be to reduce the level of world GDP by up to 1 percentage point, and the level of GDP in the major six overseas economies by around half a percentage point. Those estimates reflect both direct and indirect effects, as well as the policy response in other countries. The impact on UK net exports is expected to be just under half a percentage point of GDP during the next two years, broadly similar to that expected in other European economies, but slightly less than in the United States and much less than in Japan. Uncertainty about the prospects for world trade is greater than usual, and that has been reflected in the projections. The weaker level of world activity will result in lower world prices which, in turn, will be reflected in the prices of goods and services imported into the United Kingdom and, eventually, in RPIX.

The projection takes account of the anticipated monetary policy accommodation in the industrialised world. The market expectation of short-term interest rates in the G3 at the end of 1998 has fallen by almost 50 basis points during the past three months. This fall at the short end of the yield curve will be expansionary. Once the effects of the Asian crisis have been taken into account, the central projection for GDP growth in the major six overseas economies⁽¹⁾ in 1998 and 1999 is broadly the same as in 1997.

There is a risk, however, that policy overseas will be tighter than expected by the markets in the next year or so, which would lead to weaker world activity than assumed in the central case. There is also a risk that developments in Asia will have a larger negative impact on world demand, especially in 1998, than implied by the central projection, though there could be a stronger bounce-back in 1999. The probability of a major depression in the world economy is thought to be extremely small, and has not been allowed for in the inflation projections. In that event, the MPC's inflation projection and policy stance would be revised.

The sterling effective exchange rate index averaged 104.9 in the 15 working days up to 4 February, and this is the starting-point used for the projection. It compares with an average of 102.0 prior to the November MPC meeting—a rise of just under 3%. The MPC considers the most likely profile for sterling is that it depreciates from its starting-point at a rate implied by the difference between the constant UK interest rate assumed in the projection and expected overseas interest rates, reaching an index level of around 101 by the end of the forecast period, which is consistent with a rate of around 1.62 against the dollar and 2.86 against the Deutsche Mark. However, the MPC believes that there is a risk of a larger depreciation through unwinding of the portfolio and erratic factors discussed in previous *Reports*. Hence, the expected value of the exchange rate at the end of the forecast period (the mean of the distribution) is lower, at around 95, than the central case (the mode of the distribution).

6.2 The medium-term inflation projection

Domestic demand in the third quarter was weaker than expected at the time of the November *Report*. That weakness was surprising, and was reflected in both

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

consumption and investment, though government expenditure was strong. But it is always possible that GDP and its components could be revised. Although consumption growth has slowed, it will be underpinned this year by the rapid rise in wealth in 1997 and continuing real growth of employment income. The central projection assumes that equity prices grow in line with nominal GDP. But there is a risk of a marked fall in UK equity prices, particularly given their rapid rise in 1997 and the prospective effect on UK profits from the adjustments in Asia. Such a fall would lead to weaker domestic demand than in the central case.

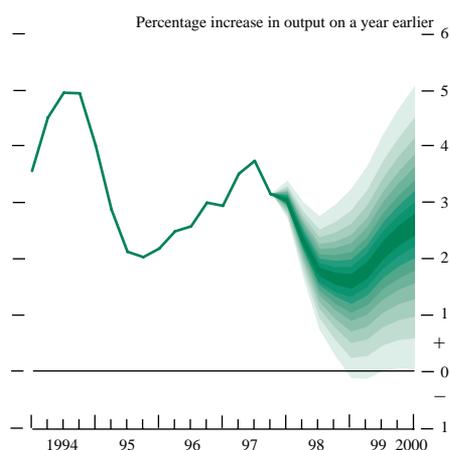
The monthly trade figures suggest that net exports fell sharply in the fourth quarter, consistent with an increasing effect from sterling's cumulative 25% appreciation since its trough in August 1996. Net exports are likely to fall further during coming quarters, particularly with the effects of weaker demand in Asia.

Taking domestic demand and net exports together, overall output growth has slowed by more than was envisaged in the November projections. It is difficult to predict turning-points precisely, and the weaker output figure in Q4 may reflect an earlier turning-point, rather than a deeper slowdown. But, as always, there is a high degree of uncertainty about the latest output data.

Broad money now shows signs of slowing, but only gradually. Recent movements in broad money velocity have been difficult to explain. The MPC judges that the most likely scenario is that money velocity will continue to decline more gradually in 1998 than in the past few years. So broad money growth would need to slow further if the nominal income projections are not to be exceeded. But there are clear risks from the increase in money in the past two years, if it feeds through to higher nominal demand and, in turn, to a faster rate of increase in earnings and prices.

Chart 6.1 shows the MPC's probability distribution for the four-quarter growth rate of GDP.⁽¹⁾ The single most likely outcome for GDP growth is within the central band (with the darkest shading), which is judged to contain 10% of the probability distribution. The central projection is that growth, having already peaked, will continue to fall, before rising again towards the end of the forecasting horizon as the contribution of net trade to GDP growth becomes less negative. A large rise in the current account deficit is expected. Domestic demand

Chart 6.1
Current GDP projection



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

(1) Shown as Chart 1 in the Overview.

growth is expected to fall towards trend. The overall shape of the output projection is broadly similar to November. But the central case is for a somewhat lower level of output during the next two years, reflecting the recent data.

Nominal earnings growth has increased, and is currently around the rate implied by the November central projection. But earnings growth is above 5% in the private sector, and pay settlements showed signs of edging up in January. Real earnings growth has increased. The projection assumes that growth in real earnings is lower for any given level of unemployment than in the 1980s, and that there has been a fall in the natural rate of unemployment. There is a risk of a more marked rise in earnings growth if the short-term trade-off between labour market tightness and real earnings is steeper than assumed.

A crucial issue is which observable indicator most accurately measures labour market tightness. The labour market continues to tighten on almost all indicators, but the extent of the tightening on each of the measures differs. Skill shortages remain high, and unemployment continues to fall. It is likely that short-term unemployment has more of an influence than long-term unemployment on real earnings behaviour; the former is currently below the trough reached in the late 1980s. But there is likely to be some downward pressure on wages from the long-term unemployed and the inactive. Those indicators have yet to fall below the levels reached in earlier periods of strong GDP growth. The central projection uses a broad measure of labour market tightness, the non-employment rate, so there is an upside risk to the inflation projection if, in particular, the short-term unemployment measure is more appropriate.

RPIX inflation fell slightly in December, but was above the November *Report* central projection. Despite the sharp, and largely unanticipated, appreciation of sterling, RPIX inflation has remained at, or above, the inflation target of 2½%. That reflects the strength of domestic demand. The short-term profile for inflation continues to be affected by the assumption on import price pass-through. The central projection assumes that sterling's appreciation will have some additional effect on retail prices during 1998. The delay reflects both the strength of UK demand and market uncertainty about the persistence of sterling's appreciation.

The fall in import prices continues to offset developments in domestically generated price pressures.

Whole-economy unit labour costs were probably rising in real terms in 1997 Q4, unlike most of the 1990s when they had been falling. And as the annual rate of output growth is projected to continue falling over the next few quarters, productivity growth is also likely to fall. That would cause unit labour costs to rise cyclically in both nominal and real terms, although this might be offset by a similar cyclical fall in profit margins. Adjusting for the effects of lower import prices and changes in the terms of trade, which temporarily depress retail price inflation, domestically generated inflation is significantly above the target level. When the price-level effect from the appreciation of sterling on retail prices wears off, there is likely to be a rise in inflation.

The MPC's projection of the twelve-month RPIX inflation rate is shown in Chart 6.2.⁽¹⁾ It is shown next to the November projection (see Chart 6.3). The most likely path for RPIX inflation is to fall slightly over the next year or so, before rising to just above 2½% by the end of the forecast horizon. The quarterly profile of RPIX inflation, particularly during 1998, is affected by changes in Council Tax and indirect taxes.

The central projection for RPIX inflation at the two-year forecasting horizon is a little higher than in November. Recent evidence suggests that the appreciation of sterling has not reduced retail price inflation by as much as anticipated in previous *Reports*. In the light of this evidence, the MPC is reviewing the relationship between retail prices, costs and prices of domestically produced output, and import prices. The current projection incorporates a smaller overall effect of lower import prices on retail prices, and a faster feed-through of changes in domestically generated costs to retail prices than previously estimated. As a result, and notwithstanding the lower level of output, the current projection embodies a slightly higher profile for inflation in the next two years, relative to that in the November *Report*.

Overall, the balance of risks to inflation is on the upside. The main upside risks stem from the possibility of a more rapid fall in the exchange rate than that implied by interest rate differentials, past rapid money growth and, particularly, pressures in the labour market. The downside risks to inflation stem mainly from the possibility of a larger fall in output and demand than in the central case.

(1) Shown as Chart 2 in the Overview.

Chart 6.2
Current RPIX inflation projection

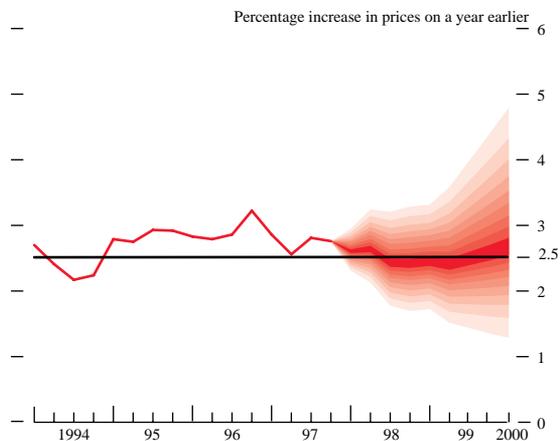
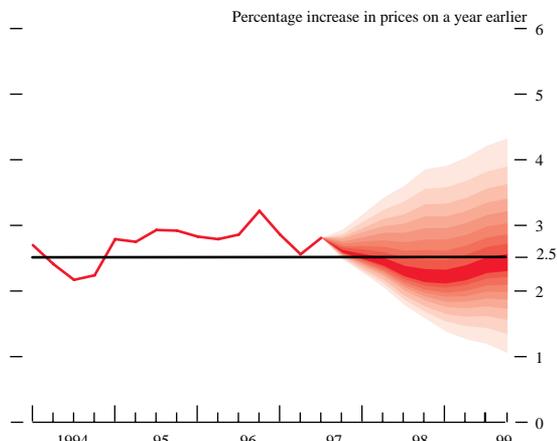


Chart 6.3
RPIX inflation projection in November



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 Q1

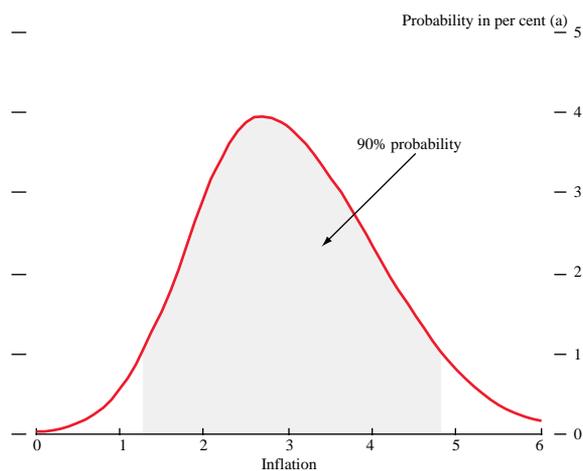
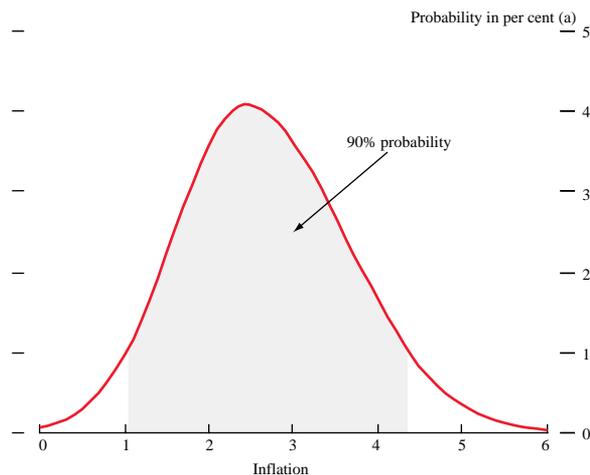


Chart 6.5
November projection for the percentage increase in RPIX in the year to 1999 Q4



Source: Bank of England.

(a) Probability of inflation being within ± 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%.

Table 6.A
The MPC's expectations for RPIX inflation^(a)

Probability, per cent

	Range:			
	Less than 1.5%	1.5% to 2.5%	2.5% to 3.5%	More than 3.5%
1998 Q4	5	48	42	5
1999 Q4	7	34	40	19
2000 Q1	7	28	35	30

(a) These figures are from the same distribution as the inflation fan chart, Chart 6.2.

The inflation projection charts are complemented by Charts 6.4 and 6.5. These are produced from the same distributions as the inflation fan charts, and highlight the overall balance of risks at the end of the forecast period. Table 6.A shows the probabilities of inflation turning out to be above or below the target, compared with similar estimates made by outside forecasters (described in Section 6.3).

Chart 6.6 shows an alternative projection, based on the assumption that official interest rates follow market expectations. As Chart 1.9 showed, the central market expectation is that UK interest rates will fall to around 7% by the end of 1998 and to below 6½% by the end of 1999. This alternative assumption gives rise to a stronger profile for demand and output, and consequently a higher central projection for inflation at the two-year horizon. Chart 6.7 shows the corresponding output projection made under the market interest rate assumption.

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

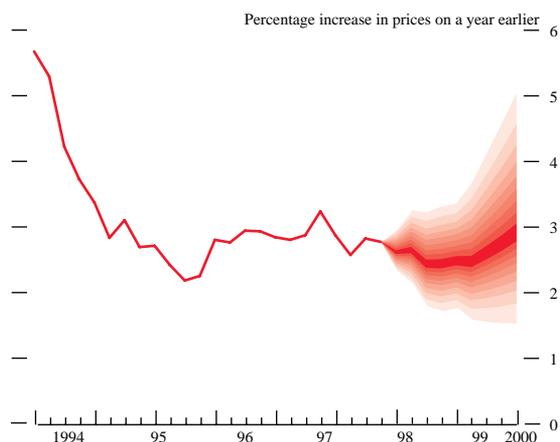


Chart 6.7
Current GDP projection based on market interest rate expectations

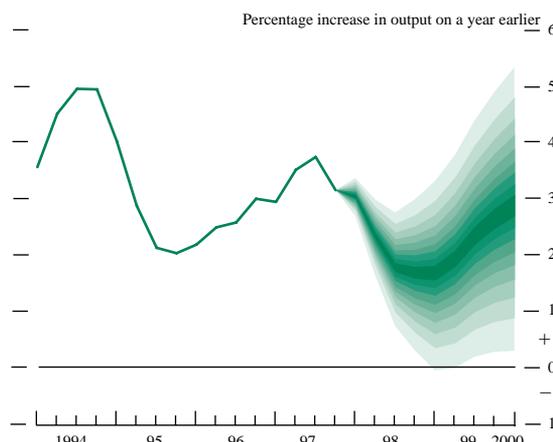
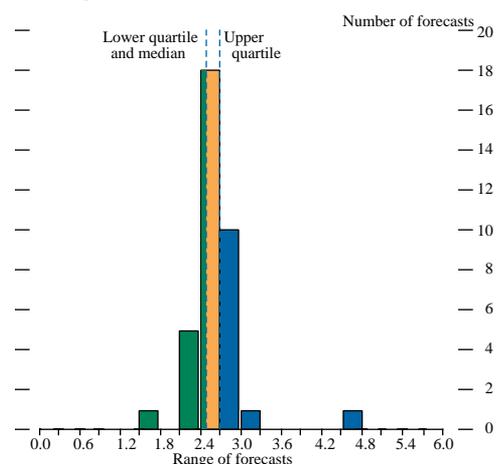


Chart 6.8
Distribution of RPIX inflation forecasts for 2000 Q1



Source: Forecasts of 36 other forecasters as of January 1998.

Table 6.B
Expected RPIX inflation^(a)

Probability, per cent

	Range:			
	Less than 1.5%	1.5% to 2.5%	2.5% to 3.5%	More than 3.5%
1998 Q4	8	36	44	12
1999 Q4	10	37	39	14
2000 Q1 (b)	11	39	37	14

(a) 38 other forecasters provided the Bank with their assessments of the likelihood, at three time horizons, of expected twelve-month RPIX inflation falling in the ranges shown above. This table represents the means of the responses of each range. For example, on average, forecasters assign a probability of 11% to inflation turning out to be less than 1.5% in 2000 Q1. Rows may not sum to 100 because of rounding.

(b) 36 forecasters.

Table 6.C
Expected GDP growth^(a)

Probability, per cent

	Range:					
	less than 0%	0% to 1%	1% to 2%	2% to 3%	3% to 4%	More than 4%
1998 Q4	4	15	38	32	8	2
1999 Q4	5	13	32	34	12	4
2000 Q1 (b)	5	11	30	36	13	6

(a) 37 other forecasters provided the Bank with their assessments of the likelihood, at three time horizons, of expected annual GDP growth falling in the ranges shown above. This table represents the means of responses of each range. For example, on average, forecasters assign a probability of 5% to annual GDP growth turning out to be less than 0% in 2000 Q1. Rows may not sum to 100 because of rounding.

(b) 34 forecasters.

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

Percentage increases in prices

Twelve-month RPI inflation in:	Month of survey				
	1997 Sept.	Oct.	Nov.	Dec.	Jan.
December 1998	3.2	3.2	3.2	3.2	3.2
December 1999	n.a.	n.a.	n.a.	n.a.	2.9

6.3 Other forecasts

To assist comparisons, some changes have been made to the Bank's survey of other forecasts to align the findings more closely with the MPC's projections. Hence, the focus is on projections for 2000 Q1, as this is the end of the MPC's forecast period. Chart 6.8 shows the distribution of central forecasts for twelve-month RPIX inflation in 2000 Q1. The median expectation is around 2.5%, which is in line with the inflation target.

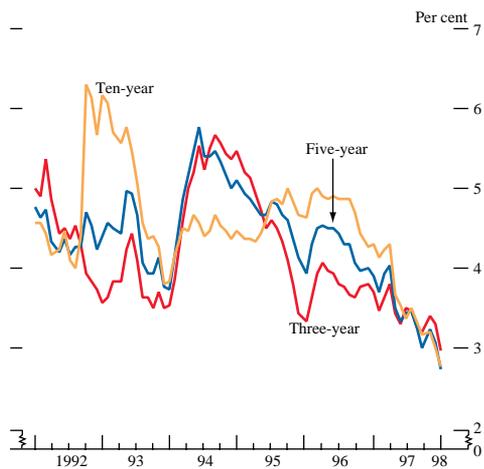
Other forecasters have also provided the Bank with their assessments of the probabilities that they attach to various possible inflation outcomes (see Table 6.B). Overall, outside forecasters assign a 50% probability to inflation being above the target in the first quarter of 2000, and a 50% probability to it being below. These figures are slightly different from the MPC's projections, summarised in Table 6.A, which attach a somewhat higher probability to inflation being above 2½% than below.

For the first time, other forecasters have provided the Bank with their assessment of the prospects for output. Their average central projection for GDP growth in the year to 1998 Q4 is for growth of around 1¾%, rising to 2¼% in the year to 1999 Q4. These figures are similar to the MPC's central projection during the next two years. The forecasters' distribution of possible outcomes for GDP growth in 1998 and 1999 (see Table 6.C) shows a broadly symmetrical distribution.

The Merrill Lynch-Gallup Survey of fund managers suggests that inflation expectations for December 1998 have not, at 3.2%, changed during the past three months (see Table 6.D). They expect inflation to fall to 2.9% by December 1999, but those expectations relate to RPI inflation, which is affected by anticipated changes in interest rates. Table 3.B (see Section 3) shows that according to the Barclays Basix Survey, inflation expectations were broadly flat between September and December.

Longer-term market expectations of RPI inflation, derived by comparing conventional with index-linked government bond prices, have fallen below 3% at maturities of five and ten years (see Chart 6.9). Longer-term inflation expectations can also be gleaned

Chart 6.9
Implied forward inflation rates^(a)



Source: Bank of England.

(a) Calendar-month average.

from the biannual survey of forecasts by Consensus Economics, which indicates that the average rate of inflation expected in the next five years fell between the first and second half of 1997.

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

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



Minutes of the Monetary Policy Committee meeting on 5–6 November 1997

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 November 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 to the Monetary Policy Committee before its meeting. The November *Inflation Report* was published on Wednesday, 12 November.

2 The Committee began by discussing issues raised by recent economic developments—monetary growth, the balance of demand and supply in the goods and labour markets, including the latest retail sales data and retail margins, and the impact of the exchange rate on net trade. It then reviewed the possible implications of developments in the Asian economies and recent financial market volatility.

Monetary growth

3 M4 lending had slowed slightly over the quarter, driven by a fall in the growth of company borrowing. But otherwise the picture was much the same as in August. In particular, Divisia money had grown more than expected and the broad money balances of Other Financial Institutions (OFIs) had continued to grow at a very fast rate. Analysis by Bank staff using models of sectoral demand for money suggested that there probably remained a liquidity overhang in the OFI sector, and in particular amongst Life Assurance companies and Pension Funds (LAPFs). Staff work also suggested that the level of M4 velocity was below trend, supporting the picture from sectoral analysis that there was probably an aggregate money overhang. It seemed possible though that much of the decline in M4 velocity in recent years could be explained by the rise in the wealth/income ratio.

4 There were various possible interpretations of the implications of the monetary situation for future demand and inflationary pressures. There was an argument that the large cumulative growth in broad money over recent years did not represent a clear inflationary threat, given the possibility that much of it could be explained by the increase in the wealth/income ratio. However, it was not clear that this increase represented a sustained change; it might alternatively be transitory, caused by asset price appreciation in a loose monetary environment. And even if it were sustained, it still left a material overhang in the OFI sector.

5 Another possible view was that it was important to look at both aggregate and sectoral money developments. Real broad money balances had been growing at a fast rate, pointing to strong real demand and inflationary pressures. Rapid growth in total OFI money balances could lead increases in wealth, as had been the case in the late 1980s when it was a clear symptom of inflationary conditions. Furthermore, there were identified ways in which OFI money growth could enter the transmission mechanism. It could feed through to asset prices or directly into spending if it was passed to the personal or company sectors and not used to repay bank loans. A variant of this was that, within OFIs, the focus should be on LAPF money growth, on the view that growth in OFI balances reflecting increased intermediation via repo markets should not be a concern.

6 Another interpretation was that the focus should not be on aggregate M4, but more on Divisia, as an indicator of transactions money, and on total financial wealth. This would be on the grounds that the non-transactions element of broad money could not be distinguished conceptually from other wealth holdings. This approach did, however, lead to much the same concern about the outlook for demand and inflation on account of

higher-than-expected Divisia growth and the rapid growth of financial wealth.

7 It was agreed that the monetary data continued to create upside risks to the inflation outlook.

Demand and output

8 There was an extensive debate on capacity and labour market pressures. The key issues were (i) the rate at which pressures on productive capacity were building up; (ii) whether there was any slack left and in particular at what point pressures of demand relative to supply would feed into inflation; and (iii) how quickly demand pressures would abate given the policy tightening already implemented.

9 At 1%, GDP growth had been faster in Q3 than expected at the time of the August *Inflation Report*, and was well above trend. The labour market had continued to tighten on most measures; for example, claimant count unemployment (excluding Jobseeker's Allowance effects) had been falling by around 25–30,000 per month, taking short-term unemployment to levels not seen since the period of unsustainable growth in the late 1980s. There was clear agreement that, with growth in Q3 continuing well above any plausible estimate of trend, the degree of slack was lower than anticipated in August. But there could be no certainty about where output was in relation to trend.

10 There was some evidence that pressures on capacity might not be immediately threatening and might in fact be declining. The Q3 British Chamber of Commerce (BCC) survey suggested that the number of manufacturing firms operating at full capacity was, at 30%, around the long-run average; and recruitment intentions, while still positive, had fallen since Q2. The number of service sector firms at full capacity remained above the long-run average but had declined from the 1996 peak. It was suggested that pressures in the service sector were easing as extra capacity came on stream; the BCC survey balance of service sector firms investing in plant and machinery was higher than at any point since the survey began in 1989. Firms were also reporting increased levels of training.

11 But there was also opposing evidence. The BCC survey recorded a balance of nearly 70% of manufacturing firms experiencing recruitment difficulties, compared with a long-run average balance of around 50%; and a balance of over 60% of service sector firms in that position, compared with a long-run average of around 45%. In the October CBI Industrial Trends survey, which gave a more recent reading than the Q3 BCC survey, the balance of manufacturing firms not working below capacity had recently risen sharply, to above 50%. Skilled labour shortages were reported as increasing in the manufacturing sector. The Bank's regional Agents supported this picture for the economy more widely and were warning of increased wage pressures in 1998. But it was suggested that the absence of any recent increases in economy-wide earnings growth might point to sectoral variations in labour market tightening; any premium having to be paid in especially tight sectors might be being offset by lower earnings growth in other sectors.

12 There was agreement that the important question was at which point the pressure of demand on supply would feed into higher inflation and inflation expectations. In an arithmetic sense, earnings growth of around 4¹/₄%–4¹/₂% could be regarded as either the maximum or the minimum consistent with the 2¹/₂% inflation target given trend productivity growth of around 2% a year. It

could be argued that, at the current juncture falling unemployment and rising employment should be viewed as a clear warning sign; earnings growth was much more likely to rise and feed into higher retail price increases. Alternatively the last step of this argument might not be axiomatic. Some US commentators were saying that even if wages accelerated, prices need not follow in line, but instead profit margins could fall for a time. That might also happen in the United Kingdom.

13 The assessment turned on whether there had been a material reduction in the natural rate of unemployment—the rate consistent with stable inflation. It was possible that the natural rate had fallen not only during the 1980s but also again, materially, during the 1990s on account of continuing labour market reforms, such as the introduction of the Jobseeker's Allowance. On the other hand, it was possible that the natural rate had fallen but that unemployment was nevertheless now close to or at the natural rate. There was agreement that there was enormous uncertainty about the natural rate and also, as discussed at the October meeting, that there could be 'speed limit' pressures on inflation as any remaining gap closed.

14 In summary, all agreed that output growth was still well above trend, that the labour market continued to tighten, and that, if any slack remained, it was being 'used up' quickly.

Retail sales and retail margins

15 The Committee discussed what weight it should give to retail sales having fallen by 1.9% in September. This had widely been attributed to the funeral of Diana, Princess of Wales and also to unusually warm weather depressing sales of clothing and footwear. It had followed eight consecutive monthly rises, the longest such sequence since 1987, suggesting considerable underlying strength. The most recent consumer confidence surveys from MORI and GFK were both strong, and there was an expectation that spending of the windfalls from the summer's building society and insurance company demutualisations would continue in Q4, especially around Christmas. The Committee agreed that the September retail sales figure was not, taken on its own, evidence of a slowdown.

16 The outlook for retail margins was highly uncertain. They had widened during Q3, reflecting the modest pass-through of sterling's appreciation into retail prices. On one view, the rise in margins was not surprising and might not unwind, given the strength of current and prospective consumption. Cyclically, this was a time to rebuild margins. Moreover, if sterling's appreciation was causing valuation losses on overseas earnings, there was a strong incentive to protect overall profitability by not cutting domestic margins.

17 On another view, it would be surprising if retail profit margins fell back from current levels, given the lack of clear statistical evidence of any past cyclical component in their behaviour.

18 A third view would be that there were structural reasons to expect a fall. Competition in the retail sector remained intense. The main force behind the recent rise in retail margins had been weak input prices rather than increases in retail prices. As demand and output slowed and firms' growth forecasts were revised down, margins should fall.

19 It was agreed that the assumption in the *Inflation Report* forecast should be that it was most likely that part of the recent rise in retail margins would unwind, but with the balance of risks for the next year weighted towards their being stronger than in the central case.

Net trade

20 The Committee regarded the outlook for net trade as a very important area of uncertainty. So far the impact of sterling's

appreciation had been much less than expected; for example, preliminary data suggested that, excluding oil and erratics, the three month on previous three month growth rate of export volumes had risen to 4½% in August from 3.7% in July. The key issue was whether the lags were simply longer than had been thought or whether there would be less of an effect.

21 One possible explanation was the strength of external demand. OECD data suggested that in the first half of 1997 the United Kingdom's export markets for goods had grown strongly, which may have helped to sustain export volumes in spite of the appreciation. There had also been a striking growth in exports outside Europe. It was possible that UK exporters had responded by increasing their efforts to penetrate new markets, against which sterling's appreciation had been smaller than against continental Europe.

22 A second contributory factor might be that exporters had initially cut margins in order to maintain market share, in which case they might eventually have to cut costs to rebuild profitability. There was some support for this from anecdotal evidence that managements were taking further measures to cut costs.

23 It was possible that the real exchange rate had appreciated because of supply-side improvements, or quality enhancements. It was noted that a recent CBI study suggested that a large proportion of UK manufacturing firms fell short of 'best practice' in terms of productivity, so that there was scope for such improvements. This was consistent with the assumption about the path of the exchange rate in the central projection of the November *Inflation Report*; some of the portfolio or erratic factors contributing to sterling's appreciation had unwound faster than assumed in August, and it was now assumed that the most likely course was that there would be no further unwind of these factors, leading to a slower rate of depreciation in the central case than in August. The possibility of a further unwind was instead reflected in a skewed balance of risks around the central projection.

24 A further possibility was that, against a history of relatively high exchange rate volatility, firms had originally thought the appreciation would be temporary, and had thus accepted what they regarded as temporary falls in export margins. If true, as the appreciation persisted, firms would increasingly regard sterling's higher level as permanent, and the volume effects on net trade would bite. However, it could be argued that, if this were so, surveys of expected export volumes should be showing a continuing deterioration, whereas the latest CIPS monthly survey had shown renewed growth and the CBI survey had shown a slightly less negative balance. Against this, the slightly less up-to-date quarterly BCC survey reported manufactured export sales at a five-year low.

25 The Committee agreed that the picture on net trade was difficult to assess. Notwithstanding the limited impact so far, the most likely effect of a 20% appreciation over a year was that net exports would make a marked negative contribution to GDP growth next year, so that the impact was delayed. But as time passed without concrete evidence of this, the possibility of a smaller effect increased. To the extent that a reduced sensitivity of exports to worsening competitiveness reflected supply-side improvements (such as higher productivity and efficiency), a smaller-than-expected effect from sterling's appreciation on exports need not signal increased inflationary pressure.

Developments in Asia and financial market volatility

26 In a discussion of the Asian situation, it was noted that circumstances had moved on since the summer when the IMF view had been relatively optimistic. More countries were now affected, creating a risk of weaker net exports to and profits from the region.

However, Asia accounted for a small part of UK trade directly, and there had been an offsetting improvement in short-run growth prospects in continental Europe. The more important question, therefore, was the potential for knock-on effects in other regions, for example Latin America, or for the emergence of other financial fragility concerns.

27 The Committee thought that, as yet, there were no obviously new fragility issues. The fall in the UK equity markets was modest set against the rise over the past year, so there was little impact on wealth. Other European and North American markets had also so far fared better than emerging markets. The Committee concluded that the recent financial market volatility did not of itself require an easing of policy or inhibit a tightening of policy. But the situation should be monitored carefully, and policy would need to be reassessed if any future financial market developments were to threaten a sharp deterioration in the economic outlook.

Policy conclusions

28 The Committee discussed the implications of the inflation forecast prepared for the November *Inflation Report*. On the basis of unchanged interest rates at 7%, output growth was initially expected to decline, reflecting past policy tightening, the weakening of the windfall effect, and also a delayed effect on net trade from sterling's appreciation. It then rose again as the net trade effect on the twelve-month growth rate passed. The range of uncertainty was large. At the two-year horizon, the central projection for inflation was above the target of 2½% and gently rising, with the risks clearly weighted towards the upside. The issue therefore was whether an interest rate increase was needed. A 25 basis point rise would take the central projection to more or less where it had been in August, around 2½% two years hence, and move the mass of the probability distribution downwards. The risks would remain skewed on the upside. The probability of inflation falling below the target in the short run would be lower than in August, reflecting a higher starting-point for inflation.

29 The Committee discussed three possible interpretations of the evidence. One was that, tactical considerations aside, there was a case for not changing interest rates this month. There had been both good and bad news about the inflation outlook since the Committee's October meeting. There were signs that service sector growth had peaked; survey evidence suggested the net trade effect of sterling's appreciation would still come through; and monetary and fiscal policy had both already been tightened, with inevitably lagged effects, so patience was needed. While domestic demand remained strong, it was likely that output growth was now peaking and there were clear downside risks to output next year. Also robust growth would bring with it capacity increases and could raise activity and employment amongst groups of workers that had become detached from the labour force. This would contribute to offsetting inflationary pressures. On this view there was a case for waiting to see how the slowdown developed before increasing rates again.

30 A second placed greater emphasis on the continuing strength of demand notwithstanding the existing policy tightening and sterling's appreciation. The majority of evidence since the August *Inflation Report* pointed to continuing inflationary pressures. The

risks of net trade not slowing, and so relieving pressure on capacity, increased as time passed with no concrete evidence that it was happening. The updated central projection on unchanged rates did not itself require an immediate increase but, given the upside balance of risks, it was important to act now to meet the target.

31 A third was that a ¼% step was needed now, and indeed that some further increases might be necessary. Growth remained unsustainably strong and the labour market continued to tighten. Since the Committee's August decision to pause to observe accumulating evidence on the balance of risks, most of the data had been stronger than expected, and sterling had fallen back by more than was expected. Though a slowdown was already likely next year, this was too uncertain and risked being too late to prevent inflation and inflation expectations rising. The money numbers underlined this. It was argued that the balance of risks between raising and not raising rates was asymmetric. There was a high probability that, as well as growing at an above-trend rate, the level of output was now higher than potential. A policy tightening would bring output back to its trend level more quickly, and if necessary interest rates could be cut if new evidence emerged that the economy was weaker than expected. If, on the other hand, policy was not tightened, there was a risk that inflation expectations would rise as strong demand pressures persisted. The Committee might then find itself having to tighten sharply, increasing the risk of a recession, to bring things back on course. The predominance of upside risks to inflation therefore required an early move.

32 Turning to tactical considerations, the Committee noted that, although a rise would probably come as a surprise to some, any initial impact on financial markets might be reassessed once the *Inflation Report* was published. The Committee considered whether the recent disturbed conditions in financial markets should inhibit it from raising rates. It judged that conditions in the domestic UK markets were not sufficiently fragile for a delay to be necessary and a tightening was unlikely to have a significant effect on worldwide financial markets. There were attractions in moving before the publication of some of the data due out in the next month, given the possibility of a rebound in retail sales growth from the September dip and a likely strong RPIX outturn for October. The Committee might then find itself increasing rates in an environment where it was wrongly perceived as reacting to specific bad data.

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

34 The following members of the Committee were present:

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

35 Sir Terence Burns was also present as the Treasury's 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 31 October 1997, in advance of its meeting. At the start of the Committee meeting itself, members were made aware of information that had subsequently become available, and that information is included in this Annex.

I Monetary conditions

2 The growth of notes and coin was still being affected by the introduction of the new 50p coin. The new coins had been introduced, but the banks had not yet been able to surrender all of the old ones. This effect added 0.1 percentage point on October's monthly growth rate in notes and coin of 0.8% and 0.5 percentage point to the twelve-month growth rate of 6.5%.

3 The one-month and twelve-month growth rates of M4 increased by 0.2 percentage point in September to 1.0% and 11.8% respectively. Retail M4 growth had been modest, reflecting a small increase in bank deposits. But there was continued strong growth in building society deposits—probably in expectation of future demutualisations; the three-month annualised rate of growth in building society deposits had reached 20.8% in September. These substantial increases in deposits had enabled building societies to reduce their deposit account rates relative to rates paid by banks. By contrast, the demutualised former societies had in recent months raised their rates relative to other banks, perhaps in order to keep their deposit-customers or attract new ones. Wholesale M4 continued to grow strongly in September, increasing by 2.1% on the previous month and 21.9% on a year earlier. Overall real broad money balances grew by just under 9% in the year to September.

4 Sectoral money numbers for Q3 were now available. Four-quarter growth of personal sector money holdings had slowed slightly from 7.8% to 7.5%, but ICCs' deposits had grown by 11.2%, up from 7.7% in 1997 Q2. The reduced flow into personal sector M4 and the increased flow into ICCs' deposits were roughly equal. OFIs' deposits were 25.7% higher than a year earlier. Within OFIs, figures for Q2 (the latest available) suggested that deposits from life assurance and pension funds (LAPFs) had again grown strongly. According to Bank research, the LAPFs continued to hold excess money balances. ICCs' money holdings were also estimated to be above long-run equilibrium. Estimates of aggregate trend velocity suggested that the actual level was slightly below long-run equilibrium confirming the sectoral picture of a liquidity overhang.

5 Divisia growth had been over 10%. Sectoral Divisia numbers showed similar trends to the sectoral M4 numbers.

6 On the other side of banks' balance sheets, the monthly numbers again suggested that M4 lending growth might be slowing. However, as with deposits, there was a sharp divergence between building societies and banks, with the former lending at a much faster rate. This could also have been caused by expectations of future windfalls; or alternatively lower deposit rates feeding through to lower mortgage rates, attracting custom to building societies.

7 There had been a slight fall in the growth of lending to persons in Q3. This was due to slower growth in unsecured lending, possibly as a result of repayments financed out of windfalls in July. Within mortgage lending there had been a shift of new business towards fixed-rate business as medium-term maturity yields had fallen.

8 The slowdown in aggregate M4 lending between Q2 and Q3 was driven by lower corporate borrowing. Company borrowing

from capital markets had also weakened slightly, suggesting their demand for external funds had fallen.

9 Lending to OFIs had continued to grow at a rapid rate of 20% in the year to Q3. Borrowing by financial leasing companies seemed likely to have remained a relatively significant factor.

10 A slowdown in M4 lending would typically lead to slower growth of M4 deposits. But examination of M4 counterparts showed strong bank lending overseas (not part of M4 lending), which could provide a continuing impetus to M4 deposits in the future if it continued and if, when the money flowed back to the United Kingdom, the non-bank private sector chose to hold it in M4 assets.

11 Turning to the price element of monetary conditions, estimates of short-term real rates, derived from index-linked gilts, had risen over the last month and were now again above longer-maturity real rates derived from the same source. Inflation expectations, calculated by comparing conventional and index-linked gilts yield curves and making no allowance for risk premia, suggested the market expected inflation to be above 2.5% throughout the next 20 years; but the gap from the inflation target was around 1% or below, within estimates of the inflation risk premium.

12 The sterling effective exchange rate index had initially depreciated rather more quickly than the August *Inflation Report* forecast had anticipated. But since the MPC's October meeting, sterling had increased by 2.1% (on an effective basis) and was now broadly in line with the August forecast.

13 The UIP decomposition of exchange rate movements suggested that around 1.5 percentage point of the depreciation since August could be explained by changes in the market expectations of future monetary policy in the United Kingdom and overseas. In particular financial markets now anticipated tighter monetary policy in the main continental European economies.

II Demand and output

14 October saw the first release of GDP output for Q3, but there were no new national accounts expenditure numbers published. Consumers' confidence remained high according to both GFK and MORI, even though the latter measure had fallen back slightly from record highs earlier in the year. Retail sales volumes fell by 1.9% in September. But it was a volatile series; and unusually volumes had grown continuously for eight months in a row. On past behaviour, a fall at some point would have been expected despite any underlying strength. There was likely to have been a big negative effect on sales associated with the funeral of Diana, Princess of Wales. A further factor was the unusually warm weather in September which had depressed sales of autumn clothing and footwear.

15 The twelve-month rate of house price inflation on the Nationwide and Halifax measures both fell in October, but the divergence between the two series continued to widen. In Q2 the differences had mainly been accounted for by sections of the Midlands and the North, the numbers in Q3 had been consistently dissimilar across the whole country. Nevertheless, on both series house price inflation was still fastest in Greater London.

16 The PSBR undershoot of the Budget forecast continued to grow. The undershoot was expected largely to unwind before the end of the financial year, although lower unemployment would create an end-year shortfall on social security expenditure. October

would be an important month, as it was one of four months during the year in which ACT was paid.

17 Net trade continued to be robust. Export volume growth was stronger than expected, although there may have been some early signs of weakness from September's non-EU data.

18 The ONS's preliminary estimate of GDP for 1997 Q3 showed a 1.0% increase on the previous quarter. This was a little lower than the Bank's expectation. Nevertheless 1.0% was still strong. Within the total, manufacturing output had grown by 0.6% compared to an average of 0.4% since the beginning of the recovery. The latest monthly survey from the Chartered Institute of Purchasing and Supply (CIPS) had shown a pick-up in manufacturing output and export orders. But recent quarterly survey results from the CBI and British Chambers of Commerce had shown a less robust picture. Industrial production growth overall in the United Kingdom was lower than in other European countries and was not as strong as it might be given the United Kingdom's GDP growth rate—perhaps evidence of an appreciation effect.

19 However, there were many factors supporting manufacturing exports and output in the face of the appreciation. World trade growth was strong. And the United Kingdom was managing to maintain its share of world trade partly by diverting exports to markets where the effect of the appreciation had been less severe. Even in Europe where economies were enjoying export-led growth, UK exporters appeared to have been able to sell capital and intermediate goods. Manufacturing productivity in the United Kingdom had begun to rise as firms had reacted to the appreciation by cutting costs.

20 Despite the overall resilience of manufacturing, some sectors had experienced problems. Clothing and footwear output had fallen, with strong retail demand being met by imports.

21 The quarterly growth rate of services appeared to be weakening slightly, having peaked in 1996 Q4. Slower service sector exports could be a cause.

22 More general indicators of the service sector's position were presented to the Committee. Service sector inflation had picked up in early 1996 from 2% to over 3%, despite regulatory restraint on utilities' prices. But it appeared that service sector inflation might have peaked as more capacity had come on stream, following strong past investment. Activity had been strong throughout the private service sector, but especially so in transport, finance and communications.

23 The Bank's regional agencies had conducted a survey of 132 of their contacts to examine developments in the service sector. On balance, respondents had said that growth had been higher in Q3 than in the first half of the year. Further, more expected growth to increase in the fourth quarter and 1998 Q1 than expected it to fall, although financial services and hotels expected some moderation. One consequence of strong output growth was that labour supply problems were affecting a third of the contacts surveyed, in terms of both quality and quantity of potential recruits.

24 The potential effects on the real economy of events in Asia were considered. Asian countries account for just over 8½% of UK exports, but close to 20% of US exports. Thus part of the risk to the United Kingdom may come via the United States and other industrial countries. Asia is also the source of 10% of UK imports, where the initial effect will be downward price pressure on import-competing firms and lower input costs for import-using firms. The OECD had undertaken some simulations on the effects of developments in Asia on the world economy. These indicated lower GDP growth of 0.1 percentage point this year and 0.2 percentage point next year in the EU together with 0.2 percentage point lower inflation in 1998. These simulations

had been undertaken at the end of September before the most recent stock market turbulence and therefore might be considered a lower bound to the likely effects.

III Labour market

25 The results of the ONS Labour Force Survey for summer 1997 had been published in October. These showed an 86,000 rise in employment during the summer months (0.3%) and a 440,000 increase on a year earlier (1.7%), which was broadly in line with the ONS's Workforce in Employment numbers—available last month. The rise in employees in employment was even stronger, as the numbers of self-employed fell. Unlike the earlier stages of the recovery, most net new jobs were now full time. A wider measure of labour demand was hours worked, and this had grown more quickly than the head count during the summer, by 0.6%. But over the year it had grown by 1.7%, the same rate as employment.

26 Looking ahead, the Q3 British Chambers of Commerce (BCC) Survey showed a further rise in employment intentions for the service sector, from an already buoyant level. The picture for manufacturing was more mixed. The BCC survey showed employers still expecting to recruit more staff on balance, but at a lower rate—a view supported by the Bank's Agents; while the CBI survey showed employers expecting a fall in employment during the final quarter of 1997. Indeed, ONS data for manufacturing employees in employment had already shown a decline in July and August of 12,000 a month, although the series was volatile.

27 There had been a marked increase in skill shortages, according to the October CBI Industrial Trends Survey for manufacturing, although it was still well below its late 1980s peak. The Bank's Agents had also noted this trend and that it was leading to substantial pay rises for particular groups of workers, such as IT, bricklayers and HGV drivers.

28 The claimant count unemployment numbers had fallen by 28,000 in September, so that the unemployment rate stood at 5.2%. There had also been a further rise in notified vacancies at job centres of almost 9,000 to a reported level of just over 300,000. But this stock level was probably overstated, perhaps by some 40,000.

29 The LFS measure of unemployment had fallen from 7.2% to 7.1% over the summer. There had been different movements in short-term and long-term unemployment as measured by the LFS. Short-term unemployment had risen slightly and was no longer below the trough of the late 1980s.

30 The fall in total LFS unemployment between the spring and the summer was 40,000, much less than the claimant count drop of some 115,000 over the same period. Moreover there was now a record gap between the two measures of just over 500,000. The LFS measure, the Bank's preferred one, recorded people who were actively searching for work. It thus differed from the claimant count because non-claimants, who were ineligible for benefit, searched for work and because some claimants were not actively seeking employment. Three months ago the Bank had expected the number of claimant searchers to fall by 75,000–90,000 over the summer (an average of 25,000–30,000 each month). The Bank had also expected the number of claimant non-searchers to be little changed, as it was thought that the deterrent effect of the Jobseeker's Allowance (JSA) should have come to end. The number of searching non-claimants had been expected to remain the same, or perhaps increase slightly in line with the trend of the previous year (an encouraged worker effect).

31 In the event, Bank estimates suggested that the number of claimant searchers fell broadly in line with expectations. But the number of claimants not searching continued to fall. This possibly reflected further deterrent effects of the JSA, as students may have been discouraged from signing on for benefit during the vacation—

an effect on the claimant count which could unwind in the autumn when fewer students than normal leave the register. Also the number of non-claimant searchers rose more strongly, as more women entered the job market, but were unable to find jobs immediately.

32 Over the autumn, a further fall in claimant searchers of 75,000–90,000 is expected. The student effect may lead to a slight rise in the claimants who are not searching, but equally there may be some further JSA effects pushing this number down as checks on continued eligibility for the allowance are carried out after six, twelve and twenty-four months. It was also possible that there may be a further small rise in searching non-claimants as more people are encouraged back into the labour market.

33 This raised the question as to whether the possibility of more people joining the labour market increased the level of potential labour market slack. Inactivity rates (ie those who were neither employed nor looking for work as a percentage of the population of working age) were still well above the trough in the late 1980s. However, since the 1980s there had been significant increases in the numbers of students and long-term sick and disabled. These were two categories that were relatively unlikely to be drawn back into the labour force by strong demand. The inactivity rate excluding these two groups was below its previous trough in the late 1980s.

34 There was little news on earnings this month. There had been no change in the headline underlying earnings growth in August, which remained at 4½%. Although the actual growth rate of earnings had increased from 4.3% to 4.6%, this had been due to arrears, the timing of settlements and back-pay. After smoothing bonus payments over the whole year, the trend in average earnings growth remained at just below 4½% in the whole economy.

35 There had been few wage settlements in September; the autumn was a very fallow period on this front—only 8% of employees covered by the Bank's settlements database had settled between September and December 1996. January was the next key month. The Committee was warned that the Bank's Agents expected increased wage pressure in 1998. This was partly due to the tightness in the labour market; another factor was that the first stage of the phasing out of profit-related pay would probably put upward pressure on basic settlements.

IV Prices

36 There was no sign of upward pressure on non-oil commodity prices currently: the Bank index had fallen in September, according to latest estimates, although it might be revised upwards modestly when hard data on food prices have been incorporated. Oil prices had risen in October, to around \$20 per barrel. They were expected to stabilise at or just below this level into next year as supply kept pace with demand.

37 Input prices rose in the two months to September, but they were still 7.8% lower than a year earlier. Moreover, the most recent CIPS survey had suggested that there was still a downward impetus.

38 Output prices were showing some signs of an upturn, however. Producer prices (excluding duties) had risen by 0.2% in September; and there had been no monthly fall since March. The CBI Survey balance had increased slightly and the Bank's Agents reported expectations of higher price rises in 1998 than this year. Also margins on domestic sales seemed to have risen.

39 Export prices appeared to have bottomed out although margins did appear to have fallen further. Import prices had also risen in August. RPIX inflation had been 2.7% in September, compared with 2.8% in August.

40 The wedge between RPIX goods and RPIX service inflation had narrowed, but this was largely due to tax effects: higher taxes on petrol and reduced VAT on domestic energy bills. Rent and utility prices had been affected by special factors; excluding these components would have given underlying service sector inflation of around 4½%. Goods price inflation had continued to moderate, but by less than expected given sterling's appreciation.

41 A gap had opened up between the United Kingdom and the main EU economies on local measures of consumer price inflation, with the former above the latter. But the United Kingdom was close to the EU average on a harmonised basis. Lower 'harmonised' inflation in the United Kingdom was largely due to the exclusion of housing from the index and its construction as a geometric rather than an arithmetic mean.

42 The effect of the appreciation on RPIX inflation had been less than might have been expected. Some sectors had felt the effect of the exchange rate more than others: the appreciation had held down prices of leisure goods and to some extent household goods, but there was no sign of any effect on clothing and footwear prices. Retailers' margins appeared to have been significantly boosted by the appreciation: it had reversed much of the narrowing which margins had experienced from 1992 to 1995.

V Financial markets

43 It had been a turbulent month in the financial markets. The main developments had been in the equity markets, and they had had an important influence on the foreign exchanges. There had been an increase in volatility for the major currencies rather than any major shifts in the levels over the month as a whole. The dollar was little changed in October; the Deutsche Mark strengthened at the beginning of the month following the unexpected size of the rise in the Bundesbank repo rate, but ended the month slightly down. The yen strengthened temporarily in mid October on rumours of a package to stimulate the economy. Sterling moved within a narrow channel in the first half of the month, until news that the United Kingdom would not join EMU in 1999 pushed the pound up. Sterling had appreciated by 2.0% since the October MPC, but had depreciated by 2.6% since the August *Inflation Report* was finalised. However, the depreciation was small compared to the appreciation which had preceded it. (Details of changes in the value of sterling between MPC meetings are given in the table below.) There were increasing signs of convergence among the ERM currencies and expected future short-term interest rates, reflecting confidence that EMU would go ahead.

Sterling exchange rates

	8 October 1997	5 November 1997
£ ERI	100.39	102.41
£/\$	1.62	1.68
£/DM	2.85	2.89

44 As a general rule the correlations of the £/DM and \$/DM rates was fairly strong. But there had been a break in this relationship during October: sterling had not depreciated against the Deutsche Mark at a time when the dollar had. It seemed possible that expectations of a rate rise in the United States before the year end had ebbed, more so than in the United Kingdom.

45 Even so, in domestic financial markets, short-term interest rate expectations had fallen slightly between 8 and 28 October at maturities out as far as September 1998. But there had been an increase in expected rates for the period from next September onwards.

46 Longer-term UK real yields had declined since mid September in contrast to the United States, where they had remained flat. This could have been due to several factors. Pension and investment fund managers had moved into the UK market; in the case of pension funds, because of new regulations causing them to favour holding more UK index-linked gilts. Low PSBR numbers may have caused the market to expect a reduced supply of index-linked gilts. The flight from volatile equities had been a modest support to index-linked gilts as well as conventionals in late October. This was in contrast to the United States where the 'flight to quality' had been predominantly towards non index linked government stock. There may also have been a fall in UK inflation expectations.

47 There was some talk in the market of the possibility of an interest rate rise this month but no general expectation, in contrast with a month ago when a rise in November had been expected. But the expectation of a possible rate rise in December remained. The market's assessment that a rise was not likely in November seemed to rest on labour market data which were more modest than expected; the unanimity of the September MPC decision for no change; stronger sterling after EMU reversals; possible concern for systemic stability after the equity market volatility; and the need to see data on retail sales which were unaffected by the death of Princess Diana. Some market participants had commented on the positive gap between RPI and RPIX, which they thought might make further interest rate rises counter-productive by fuelling higher wage demands. Those who expected an increase in the near term pointed to strong economic data; and the suggestion of a

possible lower inflation target in the Chancellor's recent EMU speech.

48 Equity markets had fallen worldwide. The biggest falls had been in the perceived riskier developing markets like Brazil and in those markets that had risen most rapidly, eg Germany. There was little clear correlation between movements in G7 stock market indices and trade exposure to Asia.

49 One reason for the fall in UK and US equity prices recently may have been an increase in the equity risk premium. Equity prices reflect discounted future earnings. The rate at which expected profits are discounted includes a risk premium, because equities are riskier than other assets such as government bonds. A rise in the risk premium would cause a rise in the rate of discount and hence a fall in equity prices. Staff research suggested that risk premia in the United Kingdom and United States were not unusually low prior to the downturn. Price-earnings ratios had also been high by historic standards before the equity price falls.

40 Inspection of implied volatilities derived from options prices suggested that the market uncertainty about future equity prices was most evident in the short term; it declined over the next twelve months. Nevertheless, there appeared to be a much more pronounced negative skew in the implied probability distributions than there had been before the recent turbulence, suggesting that the markets believed a large fall over the coming months was more likely.

Minutes of the Monetary Policy Committee meeting on 3–4 December 1997

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

2 The Committee began by discussing the importance to its assessment of the inflation outlook of levels of economic variables as well as their growth rates. It then discussed monetary growth, consumption, external developments and the prospects for net trade, and the labour market. After reviewing key differences between the Bank's November inflation forecast and other forecasts, it turned to the immediate policy decision.

Levels versus growth rates

3 The Committee discussed the importance of focusing not only on growth rates of economic variables but also on their levels. Above-trend growth rates of output and employment need not entail short-run inflationary pressures when there was plenty of spare capacity, as was typically the case when the economy was coming out of a prolonged recession. But as spare capacity was used up, underlying inflationary pressures would increase. Once the level of economic activity was above trend and/or the level of unemployment below the natural rate, increasing inflation would generally result. If the levels of output and employment then remained above trend, inflationary pressures would be exacerbated, requiring a more severe or prolonged slowdown to bring them back to trend levels.

4 The Committee agreed with the importance of this general analysis. It was particularly relevant at the current stage of the cycle given the need to judge whether the economy was already above full capacity after the prolonged period of above-trend growth rates. The costs of an over-expansionary monetary policy were likely to be greater than when the economy had been coming out of recession in the early to mid 1990s.

5 It was, however, very difficult to assess whether levels of activity were currently at, above or below the sustainable trend. Some collateral evidence was provided by surveys of capacity constraints, skill shortages etc, but it was inevitably inconclusive. There was, for example, considerable uncertainty about the effect of continuing labour market reform on the natural rate of unemployment. Thus while it seemed clear that the economy was close to capacity, it was difficult to be confident about the crucial question for policy of whether activity levels were already above trend.

6 The same general principles could be applied to the monetary data, but the conclusions were not clear. Cumulatively strong money growth would in general be a cause for concern unless reasons for a change in the velocity of circulation could be identified, as for example had been the case with financial sector liberalisation in the 1980s.

7 On one view, it was also important to look at levels of money demand relative to long-run equilibrium. On another interpretation, assessing the monetary data along these lines was difficult. The monetary authorities operated by setting interest rates, so that monetary growth was endogenous. And, in contrast to goods and labour markets, financial markets probably cleared more or less continuously. On this view, there was no reason why the economy in aggregate or any sector should hold more money than desired; if so, then as a matter of principle there could not be a monetary overhang. Against this it could be argued that the costs

of monitoring and adjusting money holdings might lead individuals or companies temporarily to hold more (or less) than their desired level of money balances, to which in principle they would eventually seek to return. But even if this view of the process were correct, it left open the important issue of how quickly economic agents adjusted their money holdings and how they did so, whether by spending on goods or services, investment in financial assets, or repayment of bank loans.

8 The Committee agreed that money growth needed to slow considerably if inflationary pressures were to abate.

Recent developments in monetary conditions

9 Turning to the most recent monetary data, the Committee observed that the growth of notes and coin had picked up again after the dip earlier in the year. Taken together with continuing rapid, albeit slightly lower, growth in consumer credit, there was not much comfort from this source for the short-run outlook for consumption.

10 However, aggregate M4 bank lending had continued to slow, and there were tentative signs of a slowdown in broad money growth, although the twelve-month rate of 10.7% remained high.

11 The slowdown in bank lending in October was attributable largely to a fall in reverse repo activity with OFIs, which was volatile from month to month. There had also been a progressive slowdown over the year in bank lending to non-financial companies. Even here, however, the picture was not completely clear, as up to Q3 ICC's foreign currency borrowing from UK banks and via capital markets had been increasing and the proceeds might have been swapped into sterling for domestic spending.

Consumption

12 The Committee discussed the ONS's first estimate for consumption growth in Q3 which, at 1.2%, was below the Bank's central projection in the November *Inflation Report*. This figure, however, might be revised. The ONS had only incomplete data and, as normal, had had to estimate a part of the services sector. They had assumed that service sector sales had been affected by the death of Diana, Princess of Wales to a similar extent as spending on goods.

13 The Committee noted two developments that might suggest consumption growth was peaking. First, consumer confidence had fallen back, albeit from a relatively high level. Secondly, the Nationwide and Land Registry measures of house price increases had fallen slightly, and the Bank's regional Agents had also reported cooling in the housing market.

14 The Committee agreed that consumption growth needed to moderate further for policy to be on course to achieve the inflation target.

External developments and the outlook for net trade

15 The ONS's first estimate of the breakdown of the Q3 GDP statistics had contained some signs that net trade was beginning to slow, once erratic items were excluded. The Committee noted that since its previous meeting sterling had appreciated further. Analysis by Bank staff suggested that changed expectations for monetary policy in the United Kingdom or overseas were not the

prime cause of the appreciation. A possible explanation of the recent appreciation against continental European currencies was a further 'safe haven' effect brought about by continuing uncertainty about EMU, including about the level of interest rates on which the EMU 'ins' would converge in late 1998/early 1999. Sterling may also have been affected, alongside the dollar, by a 'safe haven' effect in relation to East Asian currencies.

16 The Committee discussed the implications of the East Asian developments. The world economic outlook was plainly different from six months ago. Improved prospects in the US and continental Europe might to some extent offset reduced demand from Asia, but it was too early to judge. There was anecdotal evidence that returns from the growth of markets in Asia and other developing regions had helped UK exporters to maintain trade with continental Europe by cutting margins following sterling's appreciation in 1996. Demand from Asia had also been an important source of growth in exports for the G7 as a whole in recent years. It was possible that a slowdown in Asian markets would combine with sterling's continuing appreciation to bring about a fall in net exports in 1998, as expected—or possibly more than expected—in the November *Inflation Report*.

17 A second question was whether Asian problems threatened a more global financial crisis. Recent news had, on balance, offered encouragement on this score. Some countries outside Asia had implemented austerity packages as a protective measure; and the IMF appeared to have reached agreement with Korea on the conditions for support. Nevertheless the situation needed to be monitored carefully. The Committee's judgment remained that on the evidence so far the changing external environment did not of itself either require or prevent a change in UK monetary policy.

Labour market developments

18 The Committee agreed that there was not much news on the labour market. Underlying earnings growth had ticked down slightly, but unemployment continued to fall, concerns about skill shortages persisted, and the Agents reported concerns around the country of emerging wage pressures. The reported settlement at Ford seemed high and would be a source of concern if, as in the 1970s and early 1980s, it set an economy-wide norm, but it had not done so in recent years.

Comparison of the Bank's forecast with outside forecasts

19 The Committee discussed the main reasons why the November *Inflation Report* central projection for inflation in the year to 1998 Q4 was below virtually all outside forecasts even though its forecast for output growth was around their mean. These related to the effects of sterling's appreciation. The Bank's central projection assumed that some of the fall in import prices would be passed through to retail prices, unwinding some of the recent increase in retail margins; and that although delayed, there would still be a significant, and in 1998 quite sharp, slowdown in net trade. The Committee agreed that qualitatively this was the most likely outcome but, as reflected in the November forecast, there was considerable uncertainty about its timing and magnitude. The slower the net trade effect was to come through, the greater the risks to the inflation target. It was also the case that recent inflation outturns had been above the Bank's recent forecasts.

Policy conclusions

20 The Committee identified a range of possible views on the outlook for inflation. One was that the level of activity was already above trend, perhaps materially so. In that case output growth would need to slow sharply in order to avoid a marked increase in inflation. If instead growth slowed gradually so that activity levels remained above trend, it would prove necessary to tighten policy while output growth was falling. On such a view, policy might need to be tightened again quite soon if there were not clear evidence in the early part of the New Year that the economy was slowing sharply.

21 Another possibility was that the economy was close to but not clearly above capacity, although still growing above trend. The economy was therefore delicately poised. Retail price inflation was higher than had been expected in the summer, remained stubbornly high, and increased wage pressures were widely expected. On the other hand, domestic demand growth should slow given the tightening of monetary and fiscal policy. And the effects of sterling's appreciation on inflation was still expected to come through, via a slowdown in net trade and greater pass-through into retail prices.

22 A further possible view was to take encouragement for the inflation outlook from the most recent data. There were signs that output would peak in Q4, as the Bank had forecast, and that the economy would slow in the first half of 1998. Developments in Asia could mean that the slowdown in net trade would be more pronounced than forecast in the November *Inflation Report*. If uncertainty over EMU and other external developments continued, sterling might not depreciate in line with uncovered interest parity as had been assumed in the November forecast, which could improve the inflation outlook. And while the pace of slowdown needed to avert a pick-up in inflation depended on whether there was any slack in the economy, some encouragement on this score might be taken from the persistence of muted producer input and output prices.

23 The Committee agreed that there was uncertainty about where the economy was in relation to capacity and that this made the policy judgment very difficult. There had been relatively little news in the last month's data that helped to resolve this question, given that the Committee had already been expecting a strong Q4. That being so, there was a case for waiting to see further developments. It was also possible that the exchange rate would prove especially sensitive to an interest rate move at a time of unusual uncertainty in global financial markets.

24 The Committee then voted unanimously in favour of leaving the Bank's repo rate unchanged.

25 The following members of the Committee were present:

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

26 Sir Terence Burns was also present as the Treasury's 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 28 November 1997, in advance of its meeting. At the start of the Committee meeting itself, members were made aware of information that had subsequently become available, and that information is included in the Annex

I Monetary conditions

2 The introduction of the new 50p coin had again affected the monthly notes and coins numbers in November. But whereas in previous months it had inflated the growth rate, in the latest month there had been a net return of old 50p coins, depressing the monthly growth rate by an estimated 0.1 percentage point. After adjustment for the 50p coin effect, the growth rate had been 0.8%.

3 Monthly M4 growth fell in October to 0.5%, considerably below the rate of growth seen in the previous five months. October's data included for the first time an estimate of the monthly sectoral breakdown of M4; the weakness in the aggregate had been due to ICCs and OFIs, possibly reflecting strong tax payments and also probably OFIs drawing down deposits in order to buy shares from members of Northern Rock, which had been demutualised earlier in the month.

4 Personal sector M4 rose more rapidly in October, possibly due to the Northern Rock and Scottish Amicable windfalls. The underlying strength of persons' M4 in the month did not appear to be a function of a reallocation within savings portfolios, as PEP holdings had also grown relatively strongly in October. The estimated rise in personal sector M4 in Q3 had been revised up slightly, because of a reallocation of deposits from ICCs to unincorporated businesses, which are part of the personal sector. Strong flows into unincorporated businesses had in fact been behind the growth in personal sector deposits in Q3; the quarterly growth rate of individuals' deposits slowed from 1.5% to 0.7%.

5 Looking at a split of retail M4 deposits in October, bank deposit inflows had been stronger than for some time, possibly reflecting deposits made by individuals who had sold shares from the Northern Rock demutualisation and payments made when Scottish Amicable demutualised. But the flow into building society deposits had remained strong, perhaps reflecting speculation on future windfalls. (The Nationwide's decision to prevent new members benefiting from a possible future demutualisation had not come into effect until 3 November.)

6 Although OFIs' deposits had fallen in October, they had risen considerably between 1995 Q1 and 1997 Q3. Was this purely a function of structural changes in OFIs' desired asset portfolios or did it represent a possible accumulation of excess money balances? Several institutional or regulatory changes over recent years might have affected pension funds' portfolio behaviour. These included: the increasing number of closed or maturing occupational pension schemes, which needed to match their liabilities with less risky assets of similar maturities; the Minimum Funding Requirement (introduced by the Pensions Act of 1995) which encouraged pension funds, close to their solvency margins, to switch out of equities; and the abolition of ACT rebates in the July Budget, which lowered the after-tax return on pension funds' UK equity holdings. These factors might have encouraged pension funds to hold more assets which were capital-certain in nominal terms, with the choice between bonds and M4 deposits depending on expected returns. Pension funds had, in fact, made an unprecedented switch out of UK equities over the past three years, but had moved into gilts as well as M4 balances. And the rise in

OFIs' M4 holdings was due not only to pension funds but also to life assurance funds, which had not been affected by the institutional changes described above.

7 A number of other developments could have influenced both life assurance and pension fund portfolios. During 1995 and 1996, cash-financed mergers and acquisition activity, together with share buy-backs, might have contributed directly to higher holdings of M4. The downward slope of the yield curve may also have induced a substitution from bonds to bank deposits. And fears of a stockmarket downturn might have led some LAPFs to switch into M4 deposits.

8 A further factor affecting OFIs' M4 was the introduction of the gilt repo market in January 1996, and the more recent pick-up of activity in other types of repo business. Gilt repos had enabled OFIs and banks to mobilise gilts more easily as collateral for secured borrowing and lending, causing an increase in M4 and M4 lending. But repo business could simply be substituting for other forms of wholesale money market transactions. Even excluding repo activity, OFIs' M4 growth had still been high.

9 M4 lending increased by only 0.1% in October. The weakness was more than accounted for by a fall in reverse repos. Nevertheless, there did appear to be a weakening trend in M4 lending, with the six-month and three-month annualised rates of increase below the twelve-month rate since July.

10 The sectoral breakdown showed that the twelve-month growth rate of M4 lending to persons in October was steady. Unsecured lending remained robust, although the twelve-month rate fell back slightly in October; secured lending had continued to grow at around 6%.

11 M4 lending to ICCs grew by 0.3% in October, after a small fall in Q3, but this was not enough to boost the twelve-month growth rate, which fell further in October to 2.4%. The general weakness of M4 lending to ICCs did not simply reflect their greater use of the sterling capital markets: the total flow of sterling borrowing by ICCs was falling. The flow of ICCs' internally generated finance had been broadly stable. However, there had been a build-up in foreign currency capital issues during 1997, although these had fallen back in October. ICCs' foreign currency borrowing from UK banks had also increased in Q3 after slowing in Q2. M4 lending to OFIs fell in October, on account of a fall in reverse repo activity: there were anecdotal suggestions that some OFIs had unwound positions financed by reverse repos, possibly because of developments in financial markets.

12 Net sterling and foreign currency lending overseas by UK banks had continued to drive a wedge between M4 and M4 lending in October. A slowdown in M4 lending would not inevitably bring M4 growth down if lending overseas remained strong and flowed back into the UK as sterling deposits in the future.

13 Since the previous MPC meeting, the short end of the yield curve had moved up as a result of the rise in the official repo rate. Estimated real rates had also risen at the short end. Short real rates had remained above the ten-year real forward rate, which was a possible proxy for an equilibrium short real rate.

14 There had been little pass-through of the latest official rate change to the retail market, except on unsecured loans. The opposite was true of the cumulative increases since May. Excluding the last rise, there had been almost complete pass-through of official rates into deposit accounts and standard

variable rate mortgages, but little into unsecured lending. Around a quarter of mortgages had their rates reviewed annually, most of these were due at the year end. Five-year fixed mortgage rates had fallen as the yield curve had inverted, and reports suggested that new fixed-rate mortgage business was strong.

15 An examination of earlier interest rate cycles showed that pass-through had been quicker this time, but that the spread of retail rates over the official rate was lower now than it had been at the peaks of previous official interest rate cycles. (The comparisons were made between June 1988—October 1989, September 1994—February 1995 and May 1997—November 1997.) Further comparisons showed that the two-year real spot rate was roughly the same now as it had been at the peak of previous interest rate cycles; but ten-year real forward rates were lower: it was difficult to judge whether the ten-year forward rate had been affected by some of the institutional factors affecting pension funds referred to above.

16 As at 3 December, the nominal effective exchange rate index had appreciated by 2.8% since the previous MPC meeting and by 3.2% from the level used in the projections in the November *Inflation Report* forecast. The change could not be explained by reference to the uncovered interest parity condition using forward interest rate differentials. Nor could it be explained by unexpected shifts in UK monetary policy relative to the rest of the world. This left other unforeseen shocks: important among which were events in Japan; the appreciation of sterling against the yen had accounted for around 0.6 percentage points of the appreciation in the sterling exchange rate index since the November *Inflation Report*, and might be explained by a change in the foreign currency risk premium in sterling's favour given the financial fragility concerns there.

II Demand and output

17 The second estimate of GDP for 1997 Q3 had been published in November. This provided the first estimates of GDP expenditure components. It was not clear how much weight to put on these components, as they were often revised significantly before the third GDP estimate—the main revisions to GDP growth tended to occur after the third estimate had been published. The new data showed domestic demand weakening considerably in Q3 as private consumption growth slowed and investment fell. Offsetting this, net trade made a positive contribution to GDP growth. The CIPS survey suggested that services output was continuing to grow rapidly, though less rapidly than in the spring, and that manufacturing output was continuing to grow.

18 Consumption, particularly of services, now seemed likely to have been weaker than Bank staff had expected. The death of Diana, Princess of Wales, might have affected spending by more than Bank staff had assumed, and there might not have been as much windfall-related spending as Bank staff had expected on services such as foreign holidays. At this stage, the data on both effects were probably incomplete.

19 Retail sales increased by 2.8% in October—the largest monthly rise since April 1987. The increase was largely driven by sectors where sales had fallen most during September (household goods' sales had been affected by the death of Diana, Princess of Wales and sales of clothing and footwear had also been depressed by the unusually warm September). Nevertheless, the large increase was probably an indication that goods consumption would grow strongly in Q4. Consumer confidence, though falling, remained high. The CBI distributive trades survey suggested some softening of retail sales in November, though it was not expected to last.

20 Investment fell by 1.2% in 1997 Q3, but rose by 0.5% excluding the volatile vehicle, ships and aircraft component.

Excluding vehicle, ships and aircraft, private service sector investment was essentially flat; manufacturing investment fell; and construction investment, though a small part of the total, remained strong. But upward revisions to total investment were likely.

21 Stocks rose by £1.1 billion at 1990 prices in Q3, including the ONS's alignment adjustment—the largest rise since 1996 Q1. Nevertheless, the Bank's estimate of the stock-output ratio continued to fall.

22 There was no clear trend in the aggregate trade numbers; but once erratic items were stripped away, there were signs of an underlying deterioration in Q3. In Q2, oil and erratics had more than offset the positive contribution to GDP from net trade in other goods; this picture had been entirely reversed in Q3. The weakness of trade in Q3 was mostly an export story, as import growth was still surprisingly subdued given the strength of domestic demand. The recent revisions to the trade numbers had not yet been incorporated into GDP. But as exports and imports had both been revised, the net trade contribution to GDP had probably not changed much. The CIPS manufacturing survey suggested that export orders had been little changed in November, after having risen in October.

23 Was there a threat to net trade from the Asian crisis? A comparison was drawn with the United States, where there had not been a substantial deterioration in the trade deficit since the dollar had started to rise in 1995 Q2. As in the United Kingdom until recently, US export volume growth had remained strong, because exporters had lowered their prices to offset the appreciation of the currency. Additionally, as in the United Kingdom, US exporters had benefited from strong demand in the non-OECD area. Around one fifth of US export growth since 1995 Q2 had been accounted for by East Asia, while Mexico and Brazil had accounted for another third—much larger than their respective shares of US exports. This meant that the Asian crisis and its contagion effects on Latin America could have a more damaging impact on the US trade balance than the simple shares of these countries in US exports would suggest. This also applied to the United Kingdom and, to a lesser extent, Germany and France.

24 The Bank's Agents reported on a survey of their contacts, which had asked about the impact of sterling's appreciation on orders and output. There had been a significant downward impact on sterling export prices. But this effect was likely to be smaller in the future, and if sterling remained unchanged, the future effect should come through quickly. A small number of contacts had commented that they would be prepared to raise prices in the future to restore their margins at the expense of reduced volumes.

25 But the effect on overseas sales so far had mostly been moderate or non-existent, and contacts expected this to continue into the future. Some smaller companies had been surprisingly resilient, probably because they were more flexible in adapting to the higher exchange rate. In a range of industries, particularly in the service sector, non-price factors had supported orders.

26 The appreciation had not passed through fully into domestic prices. There had been some effect from cheaper import competition and imported inputs. But many overseas suppliers were taking advantage of the appreciation to build up margins and were not significantly reducing their sterling prices.

27 The impact on domestic sales had been mostly invisible or moderate so far and this was expected to continue. The tourist industry had reported little effect to date, but it was concerned about prospects for 1998.

28 The overwhelming response to the appreciation had been to cut export margins or costs, as maintaining market share had

ERRATA

Page 64, paragraph 39

Replace ‘Whole-economy underlying earnings growth, smoothed for the effects of bonusus, probably remained in the range of 43% to 42%.

with ‘Whole-economy underlying earnings growth, smoothed for the effects of bonusus, probably remained in the range of 4¹/₄% to 4¹/₂%.

Page 71, paragraph 27

Replace ‘Whole-economy underlying earnings growth, according to the ONS, remained at 43% in October: 42% in services and 43% in manufacturing.’

with ‘Whole-economy underlying earnings growth, according to the ONS, remained at 4¹/₄% in October: 4¹/₂% in services and 4¹/₄% in manufacturing.’

been perceived to be important. Cutting margins would continue, but would become increasingly difficult, and more companies would turn to cutting costs; reduced overtime and shedding labour would become more likely. Exploring new markets had been and would continue to be a response. Increased sourcing of raw materials and components abroad was likely as was the location of new investment abroad, particularly by multinationals.

29 For those respondents who believed that their output growth had slowed as a result of the appreciation, the main channel had been exports rather than import competition.

30 House price inflation slowed in October according to both the Halifax and Nationwide indices to 5.4% and 12.2% respectively. But the divergence between the two indices had widened to its largest ever. The gap narrowed in November: the Nationwide showed twelve month house price inflation falling to 11.6%, but the Halifax estimate increased to 6.1%.

31 It was difficult to explain the difference between the two series. The Department of the Environment (DoE) index, based on a 5% sample of mortgage transactions across all lenders had shown a rise of 10.6% in the year to 1997 Q3. Land Registry data, which covered all transactions in England and Wales, indicated a rise of 7.7% in Q3. But the Land Registry did not adjust its series to allow for the composition of the houses sold, in the way that the Halifax, Nationwide and DoE did. Bank economists had made such an adjustment to the Land Registry data. This showed that house prices had risen by 7.9% in the year to 1997 Q3. Late returns to the Land Registry meant that this number could be revised; and in a rising market the revision was likely to be upwards.

32 The Chancellor had introduced his Pre-Budget Report in November. There had been little change from the July Budget in the fiscal stance, though no account had been taken in the Pre-Budget Report of any possible tax changes. The Control Total for public expenditure had remained unchanged, once reclassifications of some items had been taken into account. Central government tax revenues were expected to be marginally weaker than at Budget time, but the tax burden continued to rise—a combination of previous tax measures and real fiscal drag.

33 Over the medium term, the ‘golden rule’ was expected to be achieved by 1998/99; the headline and structural PSBR were expected to balance by 1999/00 and, on a more cautious assumption about the output gap, structural balance was expected in 2000/01. Net debt was expected to fall and net public sector wealth to increase, reflecting the outlook for the PSBR. But the improvement in the public sector balance sheet was small compared with the preceding deterioration.

34 In the report, the Chancellor had announced proposals for a fiscal policy framework, which aimed to improve the transparency and credibility of fiscal policy, in parallel with the improvements in monetary policy. The government intended to introduce a ‘Code for Fiscal Stability’. This would require the government to state and adhere to fiscal principles; to adopt best-practice public sector accounting; and to supply detailed reports and information on the fiscal outlook. Proposals to promote investment and improve the operation of the labour market had also been included in the Chancellor’s statement.

III Labour market

35 There had been a small seasonally adjusted fall in the unemployment claimant count in October of 9,500—the smallest decline since April 1996. But the seasonal adjustment had not allowed for fewer students than normal leaving the claimant count. The ONS estimated that around 20,000 fewer students entered the claimant count in July than in previous years, probably because of tighter eligibility rules following the introduction of the Jobseeker’s

Allowance. So 20,000 fewer may have left the count in October. This meant that the underlying fall in unemployment was still probably around 25–30,000 per month.

26 Unfilled vacancies rose by 12,000 in October, to 312,000. One reason why the stock had risen in recent months was that placings had fallen, perhaps suggesting that vacancies were becoming harder to fill. The ONS had reduced the overstatement of the stock from 40,000 to 25,000.

37 According to the Bank’s Agents, there had been a few more signs of manufacturing job cuts in November, though they were still reporting a marginal net rise overall. Set against this, the ONS had reported a fall in manufacturing employees of 5,000 in September, taking the decline in 1997 Q3 to 30,000. But this was a preliminary figure which might be revised.

38 Agents’ reports suggested that service sector firms were still actively recruiting, though they were finding it increasingly difficult to find staff with suitable qualifications and skills. In some of the tighter labour market areas, such as the South, firms were looking to recruit from outside the region. Skill shortages were becoming increasingly widespread, which led to more concerns from businesses about the forthcoming pay round.

39 Underlying earnings growth on a year earlier fell in September to 4¹/₄% from 4¹/₂%. This was caused by the manufacturing sector, where underlying growth fell from 4¹/₄% to 4%. Slower earnings growth was fairly widespread across the sector: earnings growth fell in eight out of thirteen industries. Lower overtime payments seem to have been a factor. Whole-economy earnings growth, smoothed for the effects of bonuses, probably remained in the range of 43% to 42%.

40 There had been little news on settlements in October, which was in any case a quiet month. The twelve-month whole-economy mean had remained at 3.3%.

41 The relationship between unemployment and earnings was then considered: in particular, did short-term unemployment exert more downward pressure on earnings than long-term unemployment?

42 According to the British Household Panel Survey, the short-term unemployed were more than twice as likely as the long-term unemployed to be employed a year later. There were two possible reasons why the probability of employment declined with unemployment duration. First, from any pool of unemployed workers, employers would tend to select those with the strongest skills and most relevant experience first. The long-term unemployed were thus less likely to have the most appropriate qualifications and skills and were less likely to find a job. Second, the length of the unemployment spell reduced the chances of becoming employed, because search effort fell; or because skills, morale and motivation deteriorated; or because employers used duration as a screening device to discriminate unfairly against the long-term unemployed.

43 Whatever the reason, the implications for the effect of long-term unemployment on wage pressure were the same: when the proportion of long-term jobless was high, for a given level of total unemployment, workers would probably realise that they could not be replaced so easily, and hence that their bargaining strength was higher.

44 The empirical evidence in general supported a more powerful role for short-term unemployment in putting downward pressure on wages. Some studies suggested that only short-term unemployment mattered. But recent Bank research had suggested that, although short-term unemployment was more important, the potential downward effect of long-term unemployment on wages should not be disregarded.

IV Prices

45 There were no signs of any upward pressure from commodity prices: provisional estimates suggested that commodity prices rose by 1.1% in October, but this had been entirely because of oil. Oil prices had been stable in November, although there had been some recent signs of softening as the Iraqi crisis had eased.

46 Input price deflation continued in October. Output price inflation was barely positive, and there were few signs of it turning up. The CBI price expectations balance had turned negative and the Agents were reporting increased pressure from import competition.

47 Domestic manufacturers' margins still appeared to be rising, because of subdued costs, although export margins were still under pressure, despite rising export prices in September. Retailers' margins were continuing to rise.

48 RPIX had risen unexpectedly in October to 2.8%, from 2.7% in September. A 0.9 percentage point wedge had opened up between RPI and RPIX, reflecting the recent mortgage rate rises.

49 Looking back over a longer period, RPIX had fluctuated in a very narrow channel since 1993 Q2, and its volatility was at a record low. There was a clear positive correlation between the standard deviation of inflation and its level. There was a possible behavioural link: at lower inflation levels, retailers may have had more incentive to keep prices stable, because any change would lead to a more obvious movement in relative prices. But if this simple behavioural link were the answer, other countries with low inflation would have had similarly low volatility; yet they did not, apart from the United States. Also previous episodes of low UK inflation had not been accompanied by similarly low volatility.

50 Another possibility was that the determinants of prices, such as demand and costs, were less variable now than in the past. Comparing now with previous periods of low inflation, suggested that this might be part of the story. But volatility had not been consistently lower across the determinants, and the reduction in volatility of factors such as output growth, had been much less than for RPIX inflation.

51 Another explanation was increased credibility or better anti-inflation policy. Simulations, using a stylised model of the Phillips curve suggested that greater policy credibility would lead to lower volatility.

V Financial markets

52 Leaving aside the direct effect from the depreciation of the yen, the impact of the Asian crisis on many of the major currencies (particularly those in Europe) had been muted. But sterling was firmer overall.

53 The downward trend in the dollar exchange rate against the Deutsche Mark had been reversed in the latter half of November, probably as a result of a turnaround in expected US-German interest rate differentials. Lower-than-expected M3 and inflation numbers in Germany had caused markets to revise down their expectation about interest rates. In contrast, the continued strength in the US economy, and a belief that the FOMC had a bias towards tightening, had firmed interest rate expectations in the United States.

54 Concerns in the market about the Japanese banking system had increased during November, as the fourth-biggest dealing house, Yamaichi Securities, and a number of (mostly regional) banks had failed. The extent of this concern was shown by the premium being demanded from high-quality Japanese banks, which were seeking to borrow funds in the market. This premium had risen from ¼% at the beginning of the month to around 1% at the end.

55 The problems in Asia had increased the market's perception of risk in other emerging economies. The yield spread over US Treasuries of these countries' bonds had increased markedly in late October. It rose again in the middle of November, but had since come down to its level at the beginning of that month.

56 The rise in the United Kingdom's base rate in early November had been mostly unexpected. Moreover, the market had not just been surprised by the timing, because three-month rates implied by future contracts went up by 25 basis points along much of the curve into the next millennium. In other words, the market had changed its view of the MPC's future stance. Interest rate expectations had continued to be revised up, although they had settled back more recently.

57 What lay behind these market reactions? Whenever rates were put up unexpectedly, outsiders were unsure as to whether the MPC members were doughtier inflation-fighters than previously thought, or whether the MPC had information about the future that was not available to the market. Initially, inflation expectations did not react to the rise, but they came down subsequently, around the time that the *Inflation Report* was published, indicating that the market was reassured that the MPC was being tougher on inflation.

58 There was some evidence that the widening of credit spreads in Japan and developing countries had affected spreads in the United Kingdom, albeit in a minor way. There had been a 10 basis point increase in the spread of corporate bonds over government debt and a 15 basis point rise in Libor over the market gilt repo rate. Although these changes were small, they were not insignificant when compared with the 25 basis point changes in official rates.

59 The market expected no change in official rates over the next two weeks, according to forward interest rates derived from the gilt repo market. Indeed there seemed to be little expected change even by February. Looking slightly further out over the next two years, it was more difficult to say what the market expected about official rates. Information came from three-month Libor rates implied in the futures markets, which incorporated a spread over official rates. But with greater concerns over credit risk arising out of the East Asia crisis, it was difficult to know how large this spread was. On reasonable assumptions it would be possible to conclude either that the market expected one more rise in the late spring or summer of next year, or that there would be no more rises before rates started to come down in the second half of next year.

60 There had been only modest changes in most G7 stockmarket indices since the previous MPC meeting. Equity market uncertainty in the United States and United Kingdom (as measured from options prices) had trended down since the turbulence of late October, but remained above the levels seen in September and August. Implied volatility in Japan's equity markets had continued to rise sharply in the period since the previous MPC meeting. The negative skew in the implied probability distributions for the FT-SE 100 had reduced somewhat since the previous meeting, but remained more pronounced than before the global equity market turbulence of October.

61 Stock market uncertainty had possible implications for real activity. It could reduce investment through higher risk premia and a higher notional option value in postponing potentially profitable investment. It could also reduce consumption by making the level of financial wealth uncertain and, given that stock market uncertainty was prevalent around the world, it could also reduce demand from overseas. But analysis suggested that uncertainty about UK equity prices might now be increasingly concentrated in financial and mineral extraction companies, which could limit its impact on the real economy compared with the situation where it was more broad based.

Text of Bank of England press notice of 4 December 1997

Bank of England leaves interest rates unchanged

The Bank of England's Monetary Policy Committee today voted to leave the Bank's repo rate unchanged at 7.25%.

The minutes of today's Monetary Policy Committee meeting will be published on Wednesday, 14 January 1998. Minutes of the meeting held in November will be published on Wednesday, 10 December.

Minutes of the Monetary Policy Committee meeting on 7–8 January 1998

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

Is the economy slowing in line with the November central projection?

2 The Committee began by discussing recent economic indicators and comparing them with the central projection in the November *Inflation Report*.

3 Members noted tentative signs of deceleration in broad money, and the rather clearer signs of deceleration in credit. The slowdown in credit to ICCs had been particularly clear, even if the most recent figures proved to be erratically low. By contrast unsecured personal credit growth had moderated only slightly and remained strong. The Committee thought that there was not much news in the latest money and credit data.

4 The Committee turned next to domestic demand. The ONS had revised the estimated growth rate of consumer spending in 1997 Q3 downwards from 1.2% to 0.7%. Spending in September had been depressed after the death of Diana, Princess of Wales, but retail sales had bounced back in October and that would support consumer spending in Q4. The Agents' reports suggested that retail sales had been below expectations in the first three weeks of December; and that unwanted stocks had been building up, which could depress retail prices and perhaps output in 1998. Reports of sales since immediately before Christmas suggested that demand had strengthened, however. Consumer confidence had fallen since the summer, though it was still high. In the housing market, activity indicators remained fairly flat. The divergence between the Nationwide and Halifax measures of house price inflation had widened further still in December: the Bank's index, based on Land Registry data which were available only up to 1997 Q3, did not indicate a rising rate of house price increase in Q3. The investment figure for Q3 (a fall of 0.5%) seemed surprisingly weak but the Committee noted that revisions to this estimate were often large.

5 Some other aspects of the third quarter national accounts were difficult to understand—for example the rise of 1.4% in government consumption in Q3 seemed hard to reconcile with the increase of only 0.2% in the output of government and other services.

6 The Committee discussed external trade next. Net exports had increased slightly in 1997 Q3, though the increase was more than accounted for by oil and erratic items. Net exports had changed very little between 1996 Q3 and 1997 Q3. Monthly figures showed a widening of the deficit on trade in goods since September: it was curious, given relative exchange rate movements, that the widening was concentrated in trade with non-EU countries.

7 As to output, GDP growth in Q3, which had been revised down to 0.8%, had been a little lower than the November central projection. The central projection was for an increase in the rate of growth in Q4, followed by a sharp slowdown to below-trend growth in 1998 Q1. Members discussed the likely pattern of growth in the light of the latest information. One view was that growth in Q4 would be higher than in Q3, influenced by a rebound in consumer spending following the death of Diana, Princess of

Wales. Another was that growth might have reached a peak in 1997 Q2, and that, with none of the major demand components accelerating, the economy had begun to slow down earlier than expected. Some members doubted whether growth would slow down as sharply at the beginning of 1998 as the central projection indicated, citing business surveys which did not suggest that such a sharp slowdown was imminent.

8 The Committee discussed labour market developments. The quantity indicators showed continued tightening, though there were some signs that the pace of tightening had fallen. Surveys suggested that demand for labour was continuing to grow. The welfare-to-work programme was unlikely to enlarge the supply of labour much in 1998 H1. Some members were concerned about the outlook for earnings. They drew attention to the Agents' survey which pointed to higher settlements this year than last; they also suggested that, as the economy slowed down, productivity growth was likely to fall, and unit labour costs to accelerate.

9 A number of other views were expressed. One was that the latest information on pay was consistent with the November central projection, which had incorporated some acceleration in earnings during 1998. A second was that it was not clear that unemployment had yet fallen to the natural rate. Many quantitative labour market indicators, such as hours worked and the activity rate, were still well below the levels they had reached at the previous cyclical peak though it was admitted that those levels had been too high to be compatible with stable inflation. Some members commented that the participation rate was relatively low, suggesting that employment could increase further without inflationary consequences, but others, who thought that unemployment had fallen to a level close to the natural rate, drew attention to the negative short-run effects that the expansion of higher education had had on the supply of labour. The much lower regional dispersion of unemployment suggested that the economy might have become more efficient at using labour, and labour market reforms were likely to have led to a fall in the natural rate of unemployment.

10 Members discussed the effect of increases in interest rates on headline RPI inflation and hence on pay bargaining. They recognised that in the short term an increase in interest rates could perversely have a positive effect on pay. Members did not think that effect should affect policy decisions, though interest rates might have to rise further to achieve a given reduction in inflation, thus increasing the transitional cost in forgone output.

11 In sum, there seemed to be some tentative evidence that the economy was slowing down and that it might have grown a little less fast than expected at the time of the November *Inflation Report*.

Why is inflation not falling?

12 The Committee noted that over the last six months or so, inflation outturns had been consistently higher than the short-term forecasts in successive *Inflation Reports*; there had been no significant moderation in RPIX inflation. As discussed at previous meetings, it appeared that the effects of the exchange rate appreciation on domestic prices thus far had been weaker than expected: pass-through had been incomplete in import prices, producer prices and retail prices.

13 This meant that margins had widened, including retail margins, and members discussed why that might have occurred. One possible explanation was that it reflected the strength of

consumer demand. If that explanation was correct, margins would be likely to narrow as demand growth slackened. Another possible explanation was price stickiness—ie slowness in adjusting prices in the face of changes in costs in either direction. And another was the extent of competition among retailers, which was perhaps lower than in the United States, where consumer price inflation had recently fallen, despite strong consumer demand. Some members, while recognising that higher margins would have only a temporary direct effect on price inflation, were nevertheless concerned that they might influence labour costs through the effect on the RPI.

14 It was possible that the incompleteness of pass-through was partly explained by a belief that the exchange rate appreciation would not persist. If that belief proved accurate and the exchange rate appreciation were to be partly or fully reversed, prices would not rise as a result. If it proved inaccurate and the current exchange rate level was sustained, then the pass-through would eventually be completed.

15 A gloomier possible interpretation of recent inflation behaviour was that the underlying rate of inflation was well above the inflation target—say in the range 3%–4%. On this view, the exchange rate appreciation had been passed through, but its effect had been offset by the upward pressure on inflation resulting from the recovery of output back to or above trend. Members noted that, despite the appreciation of sterling, the United Kingdom had the highest inflation rate in the G7, based on national indices. Based on the Harmonised Index of Consumer Prices the United Kingdom's inflation rate (2.0% in November) did not stand out among EU countries, however, even though the United Kingdom was at a different phase of the economic cycle.

What is the likely impact of the Asian crisis?

16 The Committee discussed the Asian crisis and its likely effect on the United Kingdom. Recent forecasts from the IMF and the OECD suggested that Asian developments might depress GDP in Europe by around 1/4%–1/2% in 1998. Developments since the forecasts were finalised in mid December (IMF) and mid November (OECD), suggested that the contractionary effect might turn out to be larger than that.

17 One view expressed in the Committee's discussion was that the degree of weakening in domestic demand which the forecasts had assumed in the Asian countries immediately affected by the crisis was markedly less than that which Mexico had experienced in comparable circumstances in 1995. It would be surprising if demand in the immediately-affected countries grew as fast as the forecasts suggested. Moreover it was easy to imagine that GDP growth in Japan this year might be much weaker than the IMF and OECD forecasts of 1.1% and 1.7% respectively.

18 Members commented that the very large recent depreciations of real exchange rates in the Asian countries most affected by the crisis were unlikely to be sustained: either inflation would rise or nominal exchange rates would recover.

19 The Committee noted that bond yields in industrial countries had fallen over the last month and that UK equity prices had risen sharply. These developments might reflect 'safe-haven' effects, which could include lower discount rates. Financial markets seemed to believe that the Asian crisis, by dampening world demand, would reduce the likelihood of increases in interest rates in industrial countries, and increase the likelihood of decreases.

20 The Committee discussed how developments in Asia might affect the Bank's central projection. It noted that a broader measure of the sterling exchange rate index, incorporating 49 countries accounting for 97% of IMF member countries' total trade, had appreciated since August 1996 by only 1.5% more than the standard measure, which incorporates 20 countries accounting for 83% of IMF members' total trade. The Committee considered

whether developments in Asia made it more likely that UK net exports would fall as indicated in the November central projection, or whether they suggested that the fall would be larger or more prolonged than indicated in November. Asian developments would need to be considered carefully in the preparation of the February *Inflation Report*.

21 Members discussed the various risks created by the Asian crisis. Official assistance to Korea had thus far not restored confidence, and the longer a very weak exchange rate and high interest rates persisted, the greater the risk of a flow of bankruptcies and serious economic dislocation. Another risk was that official encouragement for banks to roll over loans to Korea could have the side-effect of inducing banks to reduce lending to other emerging markets: there were signs that that was happening. And there was a risk that increasing net exports from emerging markets could strengthen protectionist sentiment in industrial countries. Overall, the downside risks arising from Asian developments had increased over the last month.

The output gap

22 Members discussed the concept of the output gap, and of its labour market analogue, the difference between unemployment and its natural rate. Its usefulness rested on the belief that if the output gap was positive (ie output greater than potential output) then inflation would rise, other things being equal, but that there were lags in the inflation response. Thus the evolution of the output gap could convey information about future inflation.

23 However estimates of the output gap based on estimates of potential output were very sensitive to the assumptions that had to be made in estimating potential output. For example, plausible reductions in the natural rate of unemployment could be associated with significant increases in the level of potential output which are not necessarily captured by conventional estimation techniques. In the light of these factors, direct indicators of the output gap, such as surveys of capacity utilisation and skill shortages, were clearly of great value, since they did not depend on fragile estimates of potential output.

24 Because of the uncertainty of output gap estimates, it was also important to monitor cost and price indicators closely, even though they are lagging indicators of the output gap.

25 Members noted that the rate of inflation might change in the absence of any change in the output gap, and that it was likely to be particularly sensitive to longer-run inflationary expectations. The current rate of inflation was lower than most measures of inflationary expectations, and this could imply that the output gap was negative.

26 Members discussed recent experience in the United States, where in the past year continued above-trend growth had been accompanied by declining inflation, posing a challenge to the output gap approach. Possible explanations suggested by members included the success of the Federal Reserve in maintaining its credibility and thus restraining inflationary expectations and the weakness of world prices.

Policy conclusions

27 Members agreed that developments in Asia presented serious risks. One view was that it would be possible to respond quickly to financial market contagion if and when the risks crystallised, but another was that even a quick response would not offset an adverse shock to real activity immediately.

28 The Committee discussed whether there was any merit in the idea of reducing UK short-term interest rates (which were the highest in the G7) as a clear signal of concern about the Asian

crisis, or, conversely, whether, if there were to be a rise in UK interest rates, it would aggravate the Asian crisis. It was agreed that the United Kingdom on its own was too small for the MPC's actions to have a significant global impact, and that in any case the MPC's objectives are domestic in nature.

29 Views about the appropriate level of interest rates ranged across a spectrum. At one end was the view that it was desirable for interest rates to be raised now. Four reasons were advanced for this view. First, doubts had arisen about the forecast for inflation published in the November *Inflation Report*. Inflation outturns in recent months had been above the Bank's central projections, and the central projection contained in the November *Report* had been significantly below the average of independent forecasts. It seemed likely that the relationship between output growth and inflation over the next two years would be less favourable than had been assumed in the November forecast. The economy was likely to slow down, but not quickly enough to hit the inflation target two years or so ahead. Second, it seemed implausible that any substantial output gap remained to be closed and it was possible that output was already significantly above trend. Third, recent pay settlements and reports of skill shortages were a matter of concern, and suggested that earnings growth might rise to a level incompatible with the inflation target before capacity pressures had eased. An immediate move in interest rates would send a clear and early signal to the labour market of the MPC's determination to achieve the inflation target. Fourth, concerns were expressed about the buoyancy of asset prices.

30 Another view was that, although those arguments had much force, there was still considerable uncertainty about their implications for future inflation and therefore a strong case for waiting another month until a full analysis could be made of the extent of any required rise in interest rates. That analysis would be better carried out in the context of the forecast round for the February *Inflation Report*.

31 A third view was that there was little or no presumption that interest rates should rise. Recent developments in Asia, as well as signs of slowing demand growth at home, suggested the possibility of an earlier turning-point in GDP growth than that implied by the central projection in the November *Inflation Report*. It was difficult to measure the size of the output gap and, in any case, its calculated sign did not represent a clear policy signal for an open and slowing economy when its level was low. Moreover, there were clearly risks in both directions. The developments in Asia, in particular, might have significantly more serious downside effects than those projected by either the IMF or the OECD.

32 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 29–31, a majority of the Committee (comprising the Governor, David Clementi, DeAnne Julius, Mervyn King and Ian Plenderleith) voted for the proposition, and a minority (comprising Alan Budd, Willem Buiter and Charles Goodhart) voted against, preferring an immediate increase in interest rates. The repo rate was thus left unchanged.

33 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

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

Annex: Summary of data presented by Bank staff

1 This note summarises the analysis presented by Bank staff to the Monetary Policy Committee on 5 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 Notes and coin rose sharply by 1% on the month in December and by almost 7% on a year earlier. But the numbers were very difficult to interpret as the seasonal adjustment would not be updated until the effects of Christmas had unwound.

3 Monthly M4 growth rose in November to 0.9% compared with 0.5% in October. This stronger outturn was partly accounted for by increased repo-market activity. Three-month and six-month growth rates continued to suggest some modest deceleration compared with the first half of the year. Nevertheless, the growth rate of real broad money remained high, at just under 8%, and continued to point to robust real domestic demand growth.

4 Personal sector M4 continued to grow at an annual rate of around 8%. This had changed little in the past five months, though it had weakened slightly in November after being boosted by windfall deposits in October. More robust estimates of the personal sector's holdings of broad money would be available upon the release of figures for Q4 on 30 January. A breakdown of personal sector M4 between unincorporated businesses and individuals would be available a month after that; individuals' deposits had grown more slowly than total personal sector deposits earlier in the year.

5 Looking at the split of retail M4 deposits in November, inflows into building society deposits had continued to be strong. As in the recent past, it was understood that the inflows were widely spread across building societies and that the flows were into share, rather than deposit accounts—only the former qualify for windfall payments upon demutualisation. This lent support to the view that the strong rise in building society deposits was partly due to speculation on the possibility of further demutualisations.

6 Deposits held by ICCs fell for the second consecutive month in November. The growth of ICCs' deposits had slowed to an annual rate of around 6% in 1997 Q3 from 11% in 1996 Q3. By contrast, OFIs' holdings of broad money increased in November after a weak October, largely on account of repo activity. Taking October and November together, the average monthly growth of OFIs' deposits was 1.4%, somewhat lower than the average of 2.4% for the rest of 1997. Figures for the third quarter suggested that LAFs continued to increase their deposits, albeit at a slower rate than in 1996.

7 M4 lending rose more strongly in November pushing the twelve-month rate up slightly to 7.8%. This followed a period in which the annual rate fell from 9.4% in June to 7.6% in October. The strength reflected a rebound on the month in lending via reverse gilt repo. But taking October and November together, the average monthly growth rate was broadly in line with the average of the previous three months at around 0.6%, compared with 0.9% in the first half of 1997. Overall, it appeared that M4 lending growth had been slower in recent months than in the first half of 1997 and 1996.

8 The sectoral breakdown showed that the twelve-month growth rate of M4 lending to persons was proceeding at a similar rate to the previous four years. Unsecured lending remained robust,

partly reflecting a supply effect induced by increased competition in the consumer credit market. Secured lending by banks and building societies continued to grow steadily at an annual rate of 6.2%.

9 The major contribution to the slowdown in aggregate M4 lending had come from ICCs. In the year to November, ICCs' sterling borrowing from UK banks and building societies rose by 2.9%, the same as in October. Growth in October and November together was 5.8% at an annualised rate. These recent rates of growth compared with an average annual growth of around 14% in 1996. Net sterling capital issues had also weakened in 1997. Foreign currency capital issues had increased significantly in the first three quarters of the year before weakening in October and November. The earlier strength in foreign currency capital issues represented a small proportion of total ICCs' external finance and appeared to be related to a few large take-overs. Evidence from the Bank's Agents and from surveys was consistent with a picture of weakening credit demand. The overall implications for activity were difficult to assess; internal funds remained stable and had in fact risen during the third quarter, although the effects of dividend payments being brought forward to the second quarter on account of the ACT changes were unclear. Investment intentions also remained firm.

10 M4 lending to OFIs rose strongly in November (2.1%) after a sharp fall in October (-1.2%). The November rise reflected a rebound in reverse repo activity. The twelve-month growth rate of M4 lending to OFIs was 17.0% in November, compared with an average of 19.9% in the first nine months of 1997.

11 Inflation expectations derived from the gilt market had fallen for the second consecutive month. This appeared to be due to weaker UK data as well as global developments. Estimated short-term real rates had fallen in the early part of the month and the spread between two-year and ten-year real forward interest rates had narrowed. The fall in short-term real rates might, perhaps, have been in response to the fall in inflation expectations.

12 The most recent rise in official interest rates had now been passed through by most banks into deposit accounts and standard variable-rate mortgages, but typically not by building societies. There had been little pass-through of the official rate rises since May to unsecured lending. This, and the entry of new firms, was consistent with increased competition in the consumer credit market.

13 The nominal effective exchange rate index had depreciated by 0.8% since the previous MPC, but was 2% higher than the level assumed for the purposes of the projection in the November *Inflation Report*. Yields had fallen in most industrial countries during the month, perhaps partly in response to developments in Asia. But UK yields had fallen by slightly more, which was consistent with the depreciation of sterling. However the UIP decomposition suggested that only a small part of the recent depreciation was explained by news about monetary policy in the UK relative to that overseas.

II Demand and output

14 The ONS had published full National Accounts data for 1997 Q3 in December. GDP growth in 1997 Q3 had been revised down to 0.8% (from 0.9%). There had been small but extensive revisions to the data back to the beginning of 1996. And the output and expenditure measures of GDP had begun to diverge.

15 Domestic demand growth had been revised up to 0.9%, reflecting upward revisions to government consumption, investment and stockbuilding. Strong government consumption growth was difficult to reconcile with the low PSBR numbers and a small rise of 0.2% in government and 'other services' output in the third quarter. Investment data had again been influenced by erratic transport factors; excluding these, investment would have grown by 0.7% in 1997 Q3, rather than falling by 0.5%. Surveys of investment intentions continued to show a reasonably robust picture for both manufacturing and services.

16 Private consumption had been revised down to 0.7% (from 1.2%). This was in part the result of a weak energy consumption estimate which was difficult to reconcile with strong energy output growth. And it may also have reflected a temporary fall in consumption following the death of Diana, Princess of Wales, which could have depressed consumption by as much as half a percentage point. Retail sales fell by 0.4% in November. Abstracting from September's data, the pace of retail sales growth had moderated, but remained strong.

17 The Halifax house price index had fallen by 0.2% in December, and the annual rate of house price inflation had fallen to 4.3%. The divergence between the Halifax and Nationwide annual rates of house price inflation had increased to its widest yet: the Nationwide rate had risen 1 percentage point to 12.6% in the year to December. Housing activity had been fairly stable in 1997 across a range of measures such as lending secured on dwellings and the Royal Institute of Chartered Surveyors survey.

18 The estimated positive contribution of net exports to GDP in the third quarter had been revised down slightly. The underlying picture was of a negative impact from trade in goods and services, but this had been more than offset by a positive effect on GDP from oil and erratic items. On monthly goods data, the non-EU trade balance had been deteriorating. Trade with the European Union had remained relatively robust. The OECD and IMF had both forecast a cyclical recovery in domestic demand in the three major European economies during 1998, though the negative effect of sterling's appreciation on the UK trade balance with the European Union was yet to come through.

19 The OECD and IMF had both estimated that the UK output gap was around zero in 1997. Both organisations had also forecast lower growth for the United Kingdom in 1998 than the central projection in the November *Inflation Report*. Industrial production and manufacturing output growth had slowed recently, though their annual rates of growth had remained close to their historical averages. The latest monthly surveys from the Chartered Institute of Purchasing and Supply (CIPS) had indicated that manufacturing and services output growth continued to rise. Growth in new manufacturing orders had slowed down in December but in services the rate of incoming new business had increased. The Confederation of British Industry (CBI) Monthly Trends Survey had suggested that manufacturers' optimism about future output and prices remained weak.

20 The OECD and IMF had both estimated, as a 'central case', that events in Asia would lead to a reduction in EU and North American countries' growth rates of around $\frac{1}{4}$ - $\frac{1}{2}$ percentage point in 1998, with a rebound in growth in 1999. But the IMF had noted that there were downside risks to their estimate, and the situation in Asia had deteriorated further since these estimates were published.

III Labour market

There had been a significant increase of 73,000 (0.3%) in the workforce in employment numbers during 1997 Q3, according to ONS data published in December. The increase was more than accounted for by employees in employment; the numbers of

self-employed fell by 15,000. The largest rise was in the service sector where the number of employees increased by 69,000. The number of manufacturing employees fell by 20,000 in Q3, although monthly data indicated that the number may have risen by 5,000 in October. There had been a further significant rise in the number of employees in 'other' industries of 34,000 after a 47,000 rise in the second quarter. This had largely been in construction, where there had been a switch out of self-employment into employee status, without any net increase in employment. This reflected revised Inland Revenue guidance on the treatment of sub-contractors, which had reduced the attractiveness of self-employment.

22 The Manpower survey of recruitment intentions into 1998 had been published towards the end of December. It was highly seasonal and so had to be adjusted before interpretation. Subject to that, it suggested that recruitment intentions, although down slightly on the quarter, remained strong; with manufacturing stronger than services. On this last point it contrasted with reports from the Bank's Agents and other surveys, which suggested a stronger employment outlook in services than manufacturing.

23 The unemployment claimant count fell by 21,000 in November. Although the pace of reduction in recent months was slower than in the summer, the underlying fall remained in line with the Bank staff's benchmark of a decline of some 25,000-30,000 a month.

24 The number of reported vacancies fell by 21,000 in November, after several months of significant increases. But 20,000 of the fall was due to the removal by the Employment Service of an overstatement in the stock. The Employment Service estimated that there remained a residual overstatement in the stock of some 20,000. The gross number of new vacancies notified to job centres, another measure of labour market demand, was little changed over the past six months.

25 The dispersion of regional unemployment rates had fallen in the 1990s. Although the unemployment rate, on the claimant count basis, was now below the previous trough in 1990, the rates in the regions with the tightest labour markets remained above their previous lows. Had this lower dispersion affected aggregate wage inflation? There were two cases where it might. One was where national pay rates were determined in a leading region and where that region's unemployment rate had changed relative to the national average. The second was where the regional relationships between unemployment and wage pressure were non-linear, so that wage pressure in each region increased more than proportionately as regional unemployment fell. In this latter case the fall in dispersion would lead to lower wage pressure for a given level of national unemployment.

26 There appeared to be little empirical support for a 'leading region' hypothesis in the United Kingdom. There was some evidence supporting non-linear regional relationships between wages and unemployment, implying that regional dispersion mattered for aggregate wage inflation. But academic research had not found a significant role for regional dispersion in aggregate wage equations.

27 Whole-economy underlying earnings growth, according to the ONS, remained at 43% in October: 42% in services and 43% in manufacturing. But the bonus season was about to begin in earnest, and this could change the picture. Press coverage of a recent survey by a City recruitment firm had suggested that City bonuses could be 20%-30% higher this year than in the previous one. Calculations by Bank staff suggested that a 30% increase in City bonuses could add a quarter percentage point to whole-economy earnings growth on average between November 1997 and April 1998.

28 There had been some high profile wage settlements in Q4: Fire Service, 4.8%; Rover, 4.5%; and Ford 4.5%. Moreover, the

level of settlements had risen in Q4. But there were relatively few settlements at that time of year, and settlements had risen in Q4 in the previous two years. More information would be available when January settlements, which accounted for a quarter of settlements on the Bank database and around 10% of the workforce, were agreed.

29 The Bank's Agents reported the results of an informal survey of their contacts, which had asked about pay prospects in 1998. 49% of the sample, which was weighted towards manufacturing, expected to grant a higher basic pay increase in 1998 compared with 1997; only 9% expected a lower settlement. The estimated mean expected settlement was 3.8%. The main reason cited for increasing settlements had been fear of losing staff. Certain types of staff were singled out as requiring higher increases than others: information technology specialists, engineers, construction workers and hotel and catering staff. There was little evidence that other forms of remuneration were increasing by more than basic pay. The modal expected increase in the pay bill per worker was in the 3%–4% range. It had been too early to see any effect of the phasing out of profit related pay tax allowances, as the reduction in relief applied to profit periods beginning on 1 January 1998.

IV Prices

30 There had been no signs of any upward price pressures from commodities. Provisional estimates suggested that non-oil commodity prices fell for the fifth consecutive month in November. Oil prices had fallen in December; the price level had been affected recently by news of the possible resumption of Iraqi oil exports.

31 Manufacturers' input prices had fallen sharply in November to a level 8.3% lower than a year earlier. Imported input prices had fallen by much less than the change in the value of sterling since the start of 1996 would have implied. That could have reflected the predominance of dollar-priced commodities, since sterling has appreciated less against the dollar than other currencies over the past two years. Output price inflation had remained very low in November. Survey evidence suggested a continued subdued outlook for output prices in the short term: the balance of manufacturing firms expecting to increase prices over the next four months in the December CBI survey had been -1. This was unusually low for the time for the time of the year.

32 Latest calculations showed that manufacturers' weighted costs continued to fall in November. So despite low output price inflation margins on domestic sales appeared to be still rising. In contrast, margins on export sales were estimated to be falling sharply: export prices fell by 5% in the twelve months to October.

33 Although UK producer price inflation was lower than in the rest of the G7 economies except the United States, UK consumer price inflation was nevertheless the highest in the G7.

34 RPIX inflation had been 2.8% in November. Outturns since the start of 1997 had generally been higher than the near-term central projections published in successive *Inflation Reports*. That partly reflected the changed timing of Budget measures. But the higher outturns also reflected unexpectedly weak pass-through from the appreciation of sterling since August 1996 to retail prices; for example, in the clothing and footwear sector, which was relatively import-intensive.

35 Monthly changes in retail prices, particularly retail goods prices, were highly seasonal. And for some components the seasonal pattern had been changing; for example, monthly changes in consumer durables' prices had become more volatile during the past ten years. So seasonal adjustment was difficult. It would therefore be difficult to disentangle the seasonal changes in the monthly retail price data at the start of 1998 from any possible delayed pass-through of sterling's appreciation.

V Financial markets

36 Trading during December, as usual, had been thin. So care had to be taken in interpreting movements in financial market data during this month. Most major exchange rate movements had not been very large since the previous MPC meeting. The sterling effective exchange rate was 0.8% lower at the time of the January MPC meeting than at the time of the December meeting, having been 2½% lower by mid December. The dollar effective exchange rate had risen slightly during the month despite the FOMC's decision to leave interest rates unchanged at its mid December meeting.

37 Asian turmoil and concerns about financial fragility had affected exchange rates during December. The Japanese yen had been volatile and during the month had reached its lowest level against the dollar for over five years. The Korean won, too, had been volatile in December. Overall it had depreciated, falling from just under 1,200 won to the US dollar to around 1,745 on 7 January.

38 Expectations of a further official interest rate rise in the UK during the next three months seemed to have diminished. Forward interest rates derived from the gilt repo market were now flat at around 7¼%, the current level of the Bank's repo rate. Between 3 December and 7 January, the interest rate implied by the March 1998 sterling future had fallen by more than the current three-month Libor, and the former had been below the latter for most of December. Short-term interest rates implied by futures contracts further out had also fallen, both in the United Kingdom and in Germany.

39 The spread between non-collateralised three-month rates (such as interbank rates or certificates of deposit) and general collateral repo rates had risen from around 20 basis points before the financial market turmoil in October to about 35 basis points in December, but had fallen back to 15–20 basis points early in January.

40 Spot interest rates had fallen between 3 December and 7 January—by about 45 basis points at 3 years and about 30 basis points at 20 years. During the month as a whole, the fall in short-term rates had reflected both lower expected inflation and lower real interest rates.

41 What information could be gained from financial markets about the likely future impact of the Far East crisis on the United Kingdom? UK equity prices were now higher than at the time of the previous MPC meeting, reflecting a continued recovery from the fall at the end of October. Movements in other major economies varied, though the 10% fall in Japanese equities stood out. There had been a large increase in implied stock market volatility at the end of October which had been reversed almost completely for the United Kingdom and the United States, but only partially in Japan. Implied probability distributions for the FT-SE 100 showed that the downward skewness had reduced since the turmoil in October, but remained above its five-year average. So the perceived effect of the Asian crisis on the UK economy, as judged by equities, may have dissipated.

42 An alternative perspective on the impact of the Asian crisis could be gained from an examination of credit spreads. The spread between government ten-year bonds and private sector bonds of similar maturity had increased in October in the United Kingdom, and had persisted. That had also happened, to a lesser extent, in the United States. There were two possible scenarios that could underlie this. First, increased uncertainty over future firm values could increase the yield on debt with an offsetting effect on the yield on equity. In this case there need not be any net effect on the cost of capital, except possibly for firms with restricted access to equity. But the fact that equity market volatility itself had fallen back since October argued against this explanation. Second, the increase in credit spreads could reflect an increase in risk aversion on the part of investors. In this case, the increase in credit spreads

since October (roughly 15 basis points) could reflect higher risk premia which would lead to lower investment. Such a rise in risk premia would also depress the equity market. Although equity prices had not fallen, the second scenario could not be ruled out since other developments might have offset the effect of the rise in risk premia.

Text of Bank of England press notice of 8 January 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, 11 February. Minutes of the meeting held in December will be published on Wednesday, 14 January.

Text of Bank of England press notice of 5 February 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, 11 March. Minutes of the meeting held in January will be published on Wednesday, 11 February.

Glossary and other information

Glossary of selected terms

RPI inflation: inflation measured by the retail price index.

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

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

HARP index: a price index that replaces the mortgage interest payments component of the RPI with a Bank estimate of the user-cost of housing.

THARP index: the HARP index excluding indirect taxes.

M0: notes and coin in circulation outside the Bank of England and bankers' operational deposits at the Bank.

M4: UK non-bank, non building society private sector's holdings of notes and coin, together with all sterling deposits (including certificates of deposit) held at UK banks and building societies by the non-bank, non building society private sector.

Divisia money: a measure of the money stock in which each component is weighted according to an estimate of its likely use for transactions.

GDP(E): the expenditure measure of GDP.

GDP(I): the income measure of GDP.

GDP(O): the output measure of GDP.

ASEAN-4: Indonesia, Malaysia, the Philippines and Thailand.

Asian NIEs: newly industrialised Asian economies.

BCC: British Chambers of Commerce.

CBI: Confederation of British Industry.

CIPS: Chartered Institute of Purchasing and Supply.

DETR: Department of Environment, Transport and the Regions.

EMU: Economic and Monetary Union.

ERI: exchange rate index.

FT-SE: Financial Times Stock Exchange.

GFK: Gesellschaft Für Konsum, Great Britain Ltd.

ICCs: industrial and commercial companies.

JSA: Jobseeker's Allowance.

HICP: Harmonised Index of Consumer Prices.

LAPF: life assurance and pension funds.

LFS: Labour Force Survey.

MoD: Ministry of Defence.

MORI: Market Opinion Research International.

MPC: Monetary Policy Committee.

OFIs: other financial institutions.

PSBR: Public Sector Borrowing Requirement.

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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Destination	1998				1997			
	<i>Quarterly Bulletin and Inflation Report package</i>		<i>Inflation Report only (1)</i>		<i>Quarterly Bulletin and Inflation Report package</i>		<i>Inflation Report only (1)</i>	
	Annual	Single	Annual	Single	Annual	Single	Annual	Single
United Kingdom by first class mail (2)	£40.00	£10.00	£12.00	£3.00	£40.00	£10.00	£12.00	£3.00
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European countries including the Republic of Ireland, by letter service	£48.00	£12.00	£14.00	£3.50	£48.00	£12.00	£14.00	£3.50
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