Inflation Report

February 2000

The *Inflation Report* is produced quarterly by Bank staff under the guidance of the members of the Monetary Policy Committee. It serves two purposes. First, its preparation provides a comprehensive and forward-looking framework for discussion among MPC members as an aid 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.

Although not every member will agree with every assumption on which our projections are based, the fan charts represent the MPC's best collective judgment about the most likely path for inflation and output, and the uncertainties surrounding those central projections.

This *Report* has been prepared and published by the Bank of England in accordance with section 18 of the Bank of England Act 1998.

The Monetary Policy Committee:

Eddie George, Governor Mervyn King, Deputy Governor responsible for monetary policy David Clementi, Deputy Governor responsible for financial stability Willem Buiter Charles Goodhart DeAnne Julius Ian Plenderleith John Vickers Sushil Wadhwani

The Overview of this *Inflation Report* is available on the Bank's web site: www.bankofengland.co.uk/infrep.htm The entire *Report* is available in PDF format on www.bankofengland.co.uk/ir.htm

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Overview

Growth with low inflation has continued in the UK economy. Output in the final quarter of 1999 was 2.7% higher than a year earlier, while inflation remained slightly below the $2^{1}/_{2}$ % target. The growth of final domestic demand moderated during the year, but external demand picked up as world activity and trade strengthened. Output growth resumed in manufacturing, but the outlook for net trade and for producers in internationally exposed sectors is affected by the strength of sterling. The further rise in the exchange rate brings downward pressure on inflation in the near term. The labour market may have tightened a little in recent months. Competitive and regulatory pressures on prices and margins are evident in some sectors, but their extent, duration and implications for overall inflation prospects are uncertain.

The world economic outlook has improved further. Demand and output in the United States exceeded expectations throughout 1999, and the prospect is for continued expansion. Activity in the euro area has picked up more rapidly than expected three months ago, and forward-looking indicators point to strengthening recovery. However, the euro has declined and the sterling effective exchange rate has correspondingly risen. There are few signs yet of self-sustaining domestic demand growth in Japan, but activity and trade flows in Asia have risen sharply, and prospects for emerging market economies have generally improved. A number of commodity prices have risen since the autumn, the oil price to its highest level since 1991. In view of the stronger outlook for demand and potentially for inflation, a number of central banks, including the Federal Reserve and the European Central Bank, have tightened monetary policy since the New Year.

Output in the UK economy is estimated to have grown by 0.8%—above trend—in both the third and fourth quarters of 1999. Growth over the year was more balanced sectorally than for some time, though service sector output, which was 2.9% higher in Q4 than a year earlier, continues to grow faster than manufacturing output, which rose by 1.9% over the same period. Recent survey indicators and reports from the Bank's regional Agents point to continuing firm output growth in the near term. The annual growth rate of final domestic demand, which was around 4% in the first half of 1999, appears to have eased somewhat. Business investment slowed markedly, but this may partly reflect a 'millennium pause' in IT-related spending. And household expenditure on cars may have been depressed temporarily by expectations of price reductions. However, rises in incomes, borrowing and wealth are likely to support firm household consumption going forward. Inventory levels, which declined in the first half of 1999, subsequently picked up, perhaps in part for reasons relating to the turn of the millennium.

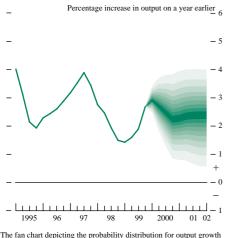
With the recovery in world trade, UK exports in the middle part of last year grew sharply—perhaps surprisingly so in view of the continued appreciation of sterling—and survey measures of export prospects have held up. But the trade figures in recent months present a weaker picture, and the high exchange rate—if maintained—is likely to lead to renewed deterioration in UK net trade.

Narrow money growth has fallen back from an unusually large year-end surge, but is probably still robust in an underlying sense. Household and non-financial corporate broad money deposits continue to grow steadily, but overall M4 growth remains subdued on account of further reductions in the sterling deposits of non-bank financial corporations. Credit growth is strong. Lending to households was 9.4% higher in Q4 than a year before. This growth in borrowing, which has been associated with buoyant housing market activity, includes rising flows of mortgage equity withdrawal. The Bank's official interest rate was increased by 0.25% in January, and by a further 0.25% to 6% in February. Market interest rate expectations have risen in the United Kingdom and elsewhere since the autumn.

Labour market conditions may have tightened somewhat since the November *Report*. Employment has continued to grow, although at a slower rate. The rate of claimant count unemployment has fallen slightly to 4.0%, its lowest level for 20 years. On the broader Labour Force Survey measure, the unemployment rate has remained constant. Survey measures of employment intentions remain firm, and reports of skilled labour shortages have become more widespread.

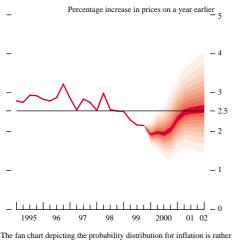
Annual pay growth, as measured by the Average Earnings Index, was 4.9% in the three months to November—significantly more than expected at the time

Chart 1 Current GDP projection based on constant nominal interest rates at 6%



The fan chart depicting the probability distribution for output growth is rather like a contour map. At any given point during the forecast period, the depth of shading represents the height of the probability density function over a range of outcomes for output. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of the probability, until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating increasing uncertainty about outcomes.

Chart 2 Current RPIX inflation projection based on constant nominal interest rates at 6%



The Fan chart depicting the probability distribution for inflation is rather like a contour map. At any given point during the forecast period, the depth of shading represents the height of the probability density function over a range of outcomes for inflation. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of the probability, until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating increasing uncertainty about outcomes. of the last *Report*. Relatively few wage settlements have been reported so far this year, but those available are if anything a little lower on average than last year. The consequences for firms' costs of pay growth depend on labour productivity. Recent data suggest that whole-economy productivity growth is recovering after several years below trend, and manufacturing productivity has picked up sharply.

Sterling has risen further since the autumn, particularly in relation to the euro. This exchange rate movement cannot readily be explained in terms of recent news about relative cyclical positions. The starting-point for the projections in this *Report* is a sterling effective exchange rate index of 109.4, which is about 4% above the central path assumed in the November *Report*. There is, as always, great uncertainty about exchange rate prospects. The projections below assume, in the central case, that sterling's ERI declines to 107.1 at the two-year forecast horizon.

The MPC's best collective judgment of the prospects for GDP growth—assuming that the official interest rate remains at 6%—is shown in Chart 1. In the central projection, annual growth rises towards 3% before easing to a little below $2^{1/2}$ %—near trend—for most of the forecast period. The profile is similar to, but a little softer than, that in the November *Report*. This is largely because the negative effects of the stronger exchange rate on net trade and of higher interest rates on the economy as a whole outweigh the positive effect on consumer demand of increases in income and wealth.

The Committee's best collective judgment of the prospects for RPIX inflation is shown in Chart 2. The most likely outcome is for inflation to decline to around 2% during this year, and then to rise to around the 2¹/₂% target in the second year of the projection. Relative to the November profile, the principal upward influences on inflation are a higher path for nominal earnings growth and stronger determinants of consumer demand. The higher exchange rate and the interest rate rises since November are the main downward influences. As the fan charts show, considerable uncertainties surround these projections. The balance of risks to inflation is judged to be slightly on the upside; the risks to output growth are thought to be broadly balanced.

Some Committee members prefer to base their assessment of inflation prospects on assumptions that differ in part from those embodied in the fan chart projections. Particular uncertainties exist about the future path of the exchange rate, and about the degree to which technological and competitive developments are likely to reduce inflation in the medium term. Alternative judgments on these issues led some Committee members to favour inflation profiles that would be higher or lower than that shown in Chart 2 by up to 1/2% at the two-year forecast horizon.

The UK economy remains on course for steady growth. The high exchange rate means, however, that the prospect is one of continuing imbalance between domestic demand and external demand, and further pressure on the internationally exposed sectors of the economy. Interest rates will continue to be set to achieve the $2^{1}/_{2}$ % inflation target. Inflation is at present on track to meet the target.

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Sterling wholesale markets: developments in 1999 Quarterly Bulletin, February 2000, pages 38-49.

New estimates of the UK real and nominal yield curves Quarterly Bulletin, November 1999, pages 384–92.

Recent developments in extracting information from options markets Quarterly Bulletin, February 2000, pages 50-60.

Section 2

The international environment Quarterly Bulletin, February 2000, pages 23–37.

Section 4

Recent developments in extracting information from options markets Quarterly Bulletin, February 2000, pages 50-60.

Money and financial markets

Narrow money growth remains strong, but unusually erratic movements around the turn of the millennium have obscured the underlying position. Annual broad money growth picked up slightly in 1999 Q4, but has remained slow, owing to further reductions in deposits held by non-bank financial corporations. However, deposits held by households and private non-financial corporations have grown more steadily over the past year. Secured lending growth has strengthened, in line with robust housing market activity, and has included rising flows of mortgage equity withdrawal.

Since the November *Report*, short-term interest rate expectations have risen in UK, euro-area and US financial markets, perhaps in response to stronger-than-expected global economic data and the absence of significant economic disruption associated with the century date change. Official interest rates have also increased. In the United Kingdom, the MPC voted to raise the Bank of England's official reporte by 0.25 percentage points to 5.75% at its January meeting. And at its February meeting, the MPC voted to raise the Bank's reported by a further 0.25 percentage points to 6%. Since the November *Report*, ten-year nominal government bond yields have risen slightly in the United Kingdom, the euro area and the United States.

The sterling exchange rate has strengthened appreciably since the November *Report*, largely reflecting further rises against the euro. Robust house price inflation and higher equity prices have increased household sector wealth, supporting the outlook for consumption.

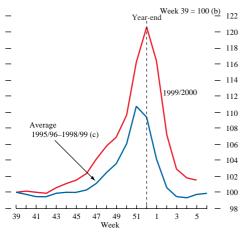
Money and credit

Narrow money

1.1

Since the November *Report*, there has been an unusually large fluctuation in the value of notes and coin in circulation in the United Kingdom (see Chart 1.1). The level of notes and coin in circulation typically rises sharply each year over the Christmas and New Year period before falling back in January, reflecting seasonal transactions-based demand (the value of retail sales is typically about 40% higher in December than in the rest





Source: Bank of England.

Not seasonally adjusted.

Not seasonally adjusted. Week 39 typically corresponds to the start of October. In 1996/97 the series starts at week 40 owing to the leap year.

Chart 1.2 Growth of notes and coin and retail sales values



Sources: ONS and Bank of England.

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

Per cent

	1999	3 months (b)	6 months (b)	12 months
Notes and coin (c)	Nov.	7.9	8.8	8.7
	Dec.	23.8	15.0	12.1
	Jan.	30.2	17.5	13.0
M4	Q1	3.7	4.1	7.0
	Q2	3.7	3.7	5.5
	Q3	0.4	2.0	3.0
	Q4	6.6	3.4	3.6
M4 lending	Q1	7.2	5.9	7.3
	Q2	8.6	7.9	7.7
	Q3	7.5	8.0	7.0
	Q4	10.9	9.2	8.5

Source: Bank of England.

(a) Seasonally adjusted.

(b) Annualised.(c) Growth rates based on an average of weekly observations in the month.

of the year). However, the rise in currency in December 1999 was considerably larger than in previous years. After adjusting for estimated seasonal effects, notes and coin in circulation increased by 3.5% in December, the largest one-month rise since decimalisation in 1971. Despite indications of strong retail spending in December, particularly on items often paid for with cash such as food and drink, increased demand for notes and coin by the general public is unlikely to explain such sharp fluctuations. It appears likely that a large proportion of the rise in December reflected efforts by banks and building societies to ensure that their automatic teller machine cash stockswhich count as notes in circulation—were sufficient to satisfy potential peak demand over the unusually long Christmas and new millennium holiday period.

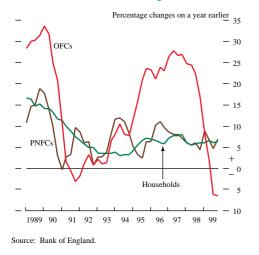
Narrow money growth is calculated using an average of weekly observations of the level of notes and coin in circulation over the course of a month. The unusually high level of notes and coin in circulation persisted well into the New Year, affecting the average weekly level in January proportionately more than in December, before returning to more normal levels later in the month (see Chart 1.1). As a result, monthly growth in notes and coin in circulation remained strong, at 2.0% in January.

Abstracting from these distortions to the underlying pattern, notes and coin growth has nevertheless risen sharply over the past year. Weekly data from the end of January and start of February, when the distortions had largely unwound, suggested annual growth of about 8%–9%, broadly in line with the annual rate in November 1999 and considerably higher than in early 1999. In the past, increases in narrow money growth have often been associated with higher nominal retail spending growth, although the relationship has been far from perfect (see Chart 1.2). In 1999, retail spending growth rose, but by considerably less than narrow money growth, implying a decline in velocity. Some of this fall in velocity might be explained by the reduced opportunity cost of holding cash, owing to the lower level of nominal interest rates in 1999. However, this downward influence on velocity may weaken this year, given recent rises in nominal interest rates.

Broad money

Total M4 grew by 3.6% in the year to 1999 Q4, slightly higher than annual growth in the previous quarter (see Table 1.A). But broad money growth remains subdued,

Chart 1.3 Growth in sectoral M4 deposits





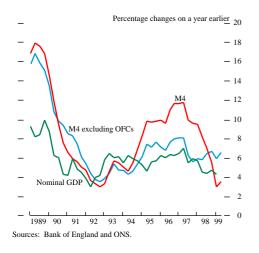


Table 1.B Sectoral M4 lending growth^{(a)(b)}

Percentage changes on a year earlier, unless noted otherwise

	Per cent of total lending stock (1999 Q4) (c)	<u>1999</u> Q1	Q2	Q3	Q4
OFCs	22	8.6	10.2	5.8	11.6
PNFCs	21	5.7	4.8	4.3	5.4
Households	58	7.7	8.1	8.6	9.4

Source: Bank of England.

Seasonally adjusted. Excluding the effects of securitisations and other loan transfers. Sums to more than 100 because of rounding.

largely reflecting a continued decline in sterling deposits held by non-bank financial corporations (OFCs) (see Chart 1.3). In recent years, OFCs' deposit holdings and total M4 have fluctuated much more sharply than nominal demand, making it hard to draw inferences about activity from aggregate broad money. The deposit holdings of households and private non-financial corporations (PNFCs) have grown more steadily (see Chart 1.3). Chart 1.4 shows that growth in broad money, excluding OFCs' deposits, has been stable at around 6.5% over the past year, which is more consistent with the recent path of nominal demand growth.

Divisia money provides an alternative indicator of deposits likely to be used in nominal spending. The Divisia index is constructed as a weighted sum of broad money deposits, with more liquid deposit balances given larger weights. The liquidity of a deposit balance is assumed to be inversely related to the interest rate paid on it. So the higher the interest rate, the more likely the deposit is being held as savings rather than for use in transactions, and so the lower the weight given to the deposit in the index. Annual growth in total Divisia slowed by less than M4 growth in the first half of 1999, and picked up slightly, to 4.9%, in the fourth quarter. Growth in household Divisia, which may provide a better indicator of near-term nominal consumer spending, picked up strongly in 1999 Q4 on a quarter earlier, but annual growth remained steady at 6.6%.

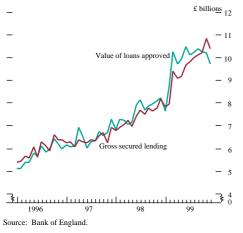
On the asset side of the banking sector's balance sheet, annual growth in bank and building society lending increased to 8.5% in 1999 Q4, from 7.0% in the previous quarter (see Table 1.A). Higher bank borrowing by OFCs was a significant factor in the pick-up in lending growth in 1999 Q4 (see Table 1.B). But over the past year as a whole, robust lending to the household sector has accounted for most of the rise in total lending growth; growth in lending to PNFCs has been steady and lending to OFCs has been volatile.

Household sector

Annual growth in household sector deposits has been broadly stable for several years and was 6.5% in 1999 Q4. By contrast, annual growth in bank and building society lending to households picked up in 1999, reaching 9.4% in 1999 Q4, its highest rate since 1991.⁽¹⁾ A wider measure of lending to individuals, which also includes lending by institutions other than

(1) Excluding the effects of securitisations and other loan transfers.

Chart 1.5 Secured lending to individuals and loan approvals^(a)



(a) The definition of the value of bank approvals was revised in October 1997 to bring it into line with that for the building societies.

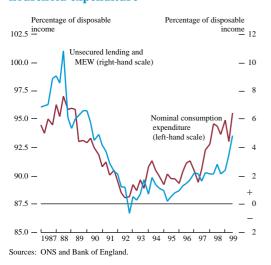




Source: Bank of England

(a) Defined as gross approvals net of cancellations and gross lending.

Chart 1.7 Total lending for consumption and household expenditure



banks and building societies, increased by 9.3% over the same period.

About 80% of the stock of lending to individuals is secured on assets such as houses, with unsecured lending accounting for the rest. Annual secured lending growth rose to 8.3% in 1999 Q4, from 5.8% in the same quarter a year earlier, more than accounting for the pick-up in total borrowing growth. Annual growth in unsecured lending to individuals has fallen slightly over the past year, but remained high, at 13.8%, in 1999 Q4.

The rise in secured lending growth in 1999 was consistent with increasing housing market activity. Early in the year, approvals of new secured loans rose sharply (see Chart 1.5). Many of these approved loan facilities subsequently flowed into net lending or provided finance for remortgaging activity. But there was also a substantial build-up in the stock of unused approvals (see Chart 1.6). In recent months, new loan approvals have at first stabilised and then fallen, suggesting slower secured lending growth in the near future. But the existing stock of approved loan facilities, if it continues to be drawn down as in recent months, will tend to support secured lending in coming months, unless approval cancellations or mortgage repayments rise.

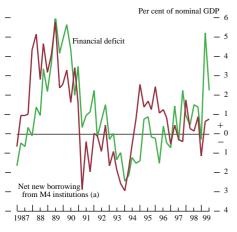
Recent secured lending has also included a rising element of mortgage equity withdrawal (MEW), as individuals have increased borrowing over and above that required for home purchase or improvements.⁽¹⁾ The Bank estimate of MEW rose to £3.8 billion in 1999 Q3, from £2.3 billion in 1999 Q2. One possibility is that households are turning increasingly to MEW, rather than more expensive unsecured debt, when raising new funds. However, as Chart 1.7 shows, total lending for consumption (defined as the sum of MEW and unsecured lending) rose in 1999 Q3 to its highest share in household disposable income since 1990, providing additional resources to finance current spending or the acquisition of financial assets.

Private non-financial corporations

Annual growth in PNFCs' M4 deposits picked up to 7.3% in 1999 Q4, from weaker growth in the previous two quarters. On the other side of their balance sheet, PNFCs' borrowing from banks and building societies

⁽¹⁾ The Bank has made a minor modification to its method of calculating mortgage equity withdrawal to fit better with National Accounts data. The new measure follows a comparable pattern to the old and in recent quarters the numbers have been very similar. Data and further details of the new approach are available at www.bankofengland.co.uk/mew.htm

Chart 1.8 PNFCs' financial deficit and net new borrowing from M4 institutions



Sources: ONS and Bank of England.

Chart 1.9 Selected life assurance and pension fund asset acquisitions and PNFCs' bond issuance

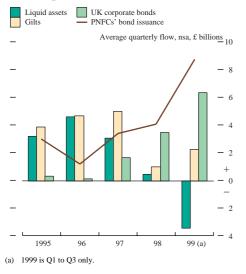
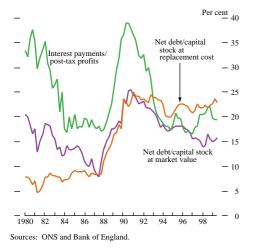


Chart 1.10

PNFCs' capital and income gearing



grew by 5.4% over the same period. M4 borrowing by PNFCs has been subdued over the past year relative to the growing imbalance between corporate investment and saving (see Chart 1.8). Instead, the PNFCs sector has met its rising financial deficit using funds raised in capital markets. Part of this shift in the source of new corporate finance may be temporary. Bond issuance was particularly high in early 1999, perhaps as companies reopened capital market borrowing programmes or placed new issues that had been delayed by the turbulence in financial markets in the second half of 1998. But there has also been a longer-term decline in the relative importance to PNFCs of borrowing from the banking sector. Over the past ten years, UK companies have gradually moved away from traditional bank borrowing towards marketable debt and equity finance. In recent years, as government debt issuance has fallen, increased institutional demand for corporate debt might have provided added impetus to this trend (see Chart 1.9).(1)

Financial deficits in recent years have slightly raised the stock of outstanding debt of the PNFCs sector relative to fixed assets valued at replacement cost (see Chart 1.10). But other indicators of PNFCs' financial positions appear more favourable. Income gearing, measured by corporate interest payments relative to current post-tax profits, is near historic lows. And total debt remains low relative to current equity market valuations of corporate capital, which incorporate expectations of future profits.

Other financial corporations

Sterling deposits held by OFCs at UK banks and building societies have continued to contract (see Chart 1.3). In the year to 1999 Q4, the M4 deposits of OFCs fell by 6.3% to levels last seen in 1998 Q2. However, shorter-term comparisons suggest some easing in rates of decline. In contrast to the weakness in deposit growth, sterling lending to OFCs by M4 institutions rose by 11.6% in the year to 1999 Q4, although growth has been particularly volatile in recent quarters (see Table 1.B).

1.2 Interest rates and asset prices

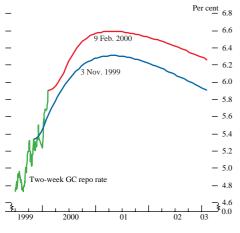
Short-term interest rates

The MPC voted to raise the Bank's official reported by 0.25 percentage points on 13 January. At its meeting on

⁽a) Defined as the change in PNFCs' M4 borrowing minus the change in PNFCs' M4 deposits.

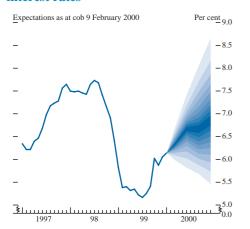
Recent trends in sterling bond issuance are discussed in 'Sterling wholesale markets: developments in 1999', *Bank of England Quarterly Bulletin*, February 2000, pages 38–49.

Chart 1.11 Two-week forward rates



Source: Bank of England

Chart 1.12 Implied distribution for sterling three-month interest rates



Sources: LIFFE and Bank of England.

9–10 February the MPC voted to raise the official reportate by a further 0.25 percentage points to 6%. Official rates have also risen in the euro area and the United States since the previous *Report*. The European Central Bank raised its official rate by 0.25 percentage points on 3 February. And the US Federal Open Market Committee has increased the Federal funds target rate on two separate occasions, by a total of 0.50 percentage points, since the previous *Report*.

The impact of official interest rate decisions on aggregate demand depends partly on the extent to which wholesale markets anticipate these decisions. Chart 1.11 shows two-week forward rates for the United Kingdom derived from government bond and gilt repo rates on 3 November 1999 and 9 February 2000, using the Bank's new yield curve estimation technique.⁽¹⁾ Since 3 November, forward rates have risen by around a quarter of a percentage point at the short end of the yield curve. Technical factors mean that two-week market gilt repo rates tend to lie slightly below the official repo rate. So market expectations of future official interest rates are probably a little above those shown in Chart 1.11. Short-term interest rate expectations also rose in the euro area and the United States over this period, consistent with increasing market confidence about stronger global activity and concurrent rising inflationary concerns. International short-term interest rate expectations increased particularly sharply in early January, perhaps as market fears of possible economic disruption associated with the century date change subsided.

Changes in nominal interest rates reflect the combined effect of revisions to inflation expectations, real interest rates and risk premia. In the United Kingdom, quarterly survey evidence for 1999 Q4 suggests that changes in inflation expectations have been small in recent months. That suggests that much of the rise in nominal rates has been reflected in higher real rates and/or risk premia.

Chart 1.12 shows the risk-neutral probability distribution of expected three-month market interest rates derived from options prices on 9 February 2000. Expectations for the market rate in question—the three-month interbank rate—will generally exceed expectations of the official repo rate. The total width of the distribution at any point in time shows market uncertainty about the path of UK interest rates. The width of the fan above

The fan chart depicting the probability distribution for short-term interest rates is rather like a contour map. At any given point, the depth of shading represents the height of the probability density function implied by the markets over a range of outcomes for short-term interest rates. The markets judge that there is 10% chance of interest rates being within the darkest, central band at any date. Each successive pair of bands covers a further 10% of the probability distribution until 90% of the distribution is covered. The bands widen as the time horizon is extended, indicating increased uncertainty about interest rate outcomes.

⁽¹⁾ This technique is explained by Anderson, N and Sleath, J, 'New estimates of the UK real and nominal yield curves', *Bank of England Quarterly Bulletin*, November 1999, pages 384–92.

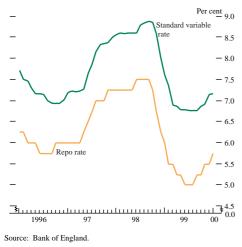
Chart 1.13 Standard deviation and skewness of expected three-month interbank rates, six months ahead



Sources: LIFFE and Bank of England

⁽a) Defined here as the third central moment of a probability distribution, normalised by the third power of standard deviation.





(a) Data to January 2000. The reportate was raised to 6% on 10 February.

Chart 1.15 Five-year fixed mortgage and swap interest rates^(a)



(a) Data to January 2000.

and below the darkest band illustrates market views about the balance of risks to interest rates. The chart indicates that the market places more weight on upside risks to short-term rates over the next two years. A new technique developed by the Bank can be used to estimate changes over time in market perceptions of risk and uncertainty about the near-term path of interest rates over a constant six-month horizon in the future. These estimates suggest that upside risk and market uncertainty rose in the middle of last year but have changed little since the November *Report* (see Chart 1.13).⁽¹⁾

One of the channels through which official and expected interest rates affect aggregate demand is their impact on mortgage rates. Over the past year, standard variable mortgage rates have moved broadly in line with official interest rates (see Chart 1.14). Fixed mortgage rates tend to be set in relation to interest rates in the swaps market, at which lenders can exchange fixed-rate income from mortgages for floating-rate income. Fixed mortgage rates have risen since mid-1999, but by somewhat less than swap rates of comparable maturity (see Chart 1.15).

Long-term interest rates

Since the November *Report*, ten-year nominal bond yields have risen in the United Kingdom, the euro area and the United States (see Chart 1.16). The UK ten-year nominal spot rate stood at 5.5% on 9 February, about 0.30 percentage points above its level on 3 November (see Table 1.C), although it remains low by recent historical standards. UK corporate bond rates have also risen since the previous *Report*. The continued low level of long-term corporate bond rates relative to shorter-term yields may partly have explained the pick-up in long-maturity sterling corporate bond issuance since mid-1999.

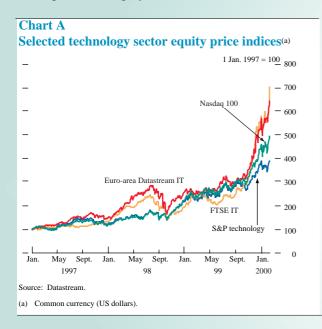
Equity prices

Equity prices have risen in the United Kingdom, the euro area and the United States since the November *Report* (see Table 1.D). In particular, there have been substantial increases in the valuations of IT stocks. The box on page 10 discusses the contribution of these stocks to rises in international aggregate equity indices. In the

⁽¹⁾ For a discussion of the technique, see Clews, R, Panigirtzoglou, N and Proudman, J, 'Recent developments in extracting information from options markets', *Bank of England Quarterly Bulletin*, February 2000, pages 50–60.

High technology shares

Share prices in the United Kingdom, the United States and the euro area have risen since the November Report (see Table 1.D opposite). Within the totals, there have been particularly sharp increases in the share prices of companies operating in high technology sectors (see Chart A). The valuation of the information technology (IT) sector of the FTSE All-Share index in the 15 days up to and including 9 February was double its level in the equivalent period three months ago. The IT sector of the Datastream (DS) euro-area index is about 80% higher on the same basis. Technology share prices in the United States rose by less than in Europe over this period, with the S&P 500 technology sector about 35% higher and the Nasdaq 100 index up by around 50%.



Aggregate share price indices are typically constructed as weighted averages of individual share prices, where the weights are derived from the market values (or capitalisations) of each company. So the impact on the headline index of price rises in any sector will depend on the share of the sector in total market capitalisation.

The table shows that technology sectors vary substantially in size across aggregate indices. In the United States, the technology sector of the S&P 500 index accounts for a considerably larger proportion of total market capitalisation than the IT sectors of the FTSE All-Share and DS euro-area indices. However, there are definitional difficulties in the allocation of companies to sectors, which make it hard to draw inferences from these data about structural variations across countries in the share of IT production in total output, or in IT companies' use of equity finance. Companies are classified to sectors on the basis of their primary activity. So there will

Sizes of technology sectors in aggregate equity indices

Per cent of total market capitalisation

	1 Jan. 1997	3 Nov. 1999 (a)	9 Feb. 2000 (a)
US S&P 500 technology index	15.9 (b)	23.5	30.1
UK FTSE All-Share IT index (c)	0.7	2.0	4.4
Euro-area Datastream IT index	3.5	6.7	9.7

Sources: Datastream and Bank of England.

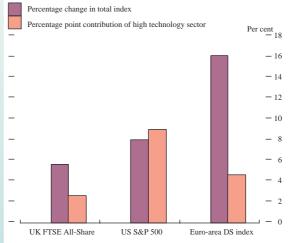
15-day average. Bank estimate based on Datastream data. Excluding Marconi (formerly GEC) as it was reclassified to the IT sector only at the end of November. (c)

inevitably be some companies that are not placed in the IT sector, but which still operate in high-technology areas, such as communications or electronics. So the IT sectors of these indices can only provide partial coverage of economy-wide IT-based production.

Notwithstanding these definitional issues, variations in the size of technology sectors across indices imply differing contributions of technology sector share price changes to total equity price movements. For example, the relatively high weight of the technology sector in the S&P 500 index means that it is much more sensitive to technology sector share price changes than the FTSE All-Share and DS euro-area indices. As such, the sector has more than accounted for the 8% rise in the S&P 500 since the previous *Report* (see Chart B), despite a smaller rise in technology share prices than in the European IT indices. In the United Kingdom, the IT sector has accounted for almost half of the 5.7% increase in the FTSE All-Share index. In the euro area, IT explains around a quarter of the 16% rise in the DS euro-area index.

Chart B

Contribution of technology sectors to changes in equity indices(a)(b)



Source: Datastream

Quoted currency terms. The DS euro-area index is quoted in US dollars. Contribution of technology sectors to changes in total indices from 3 November 1999 to 9 February 2000 on a 15-day average basis. (a) (b)

Money and financial markets

Chart 1.16 Ten-year nominal spot interest rates

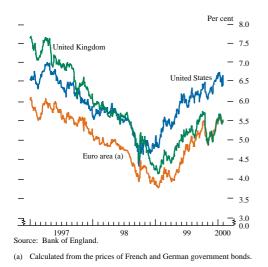


Table 1.CSelected sterling nominal spot bond yields

Per cent

	3 Nov. 1999	9 Feb. 2000	Basis points change since 3 Nov. 1999
Spot nominal government bond yields 3 year 5 year 10 year 25 year	6.08 5.92 5.22 3.94	6.42 6.24 5.52 4.24	34 32 30 30
Spot nominal corporate bond yields (A-rated) 5 year 10 year 25 year	7.08 6.66 6.06	7.43 7.13 6.55	35 47 49

Sources: Bloomberg and Bank of England.

Table 1.D Changes in selected world equity indices to 9 February^{(a)(b)}

Percentage changes from specified dates

	1999				
	1 Jan.	3 Nov.			
FTSE 100	10.1	3.8			
FTSE All-Share	14.9	5.7			
S&P 500	17.7	8.0			
Nikkei 225	37.4	10.3			
Euro Stoxx	45.8	28.1			

Sources: Bloomberg and Datastream.

(a) 15-working day average basis(b) In domestic currency terms.

(b) In domestic currency terms.

United Kingdom, the FTSE All-Share index averaged 2996 in the 15 working days up to and including 9 February, 5.7% above the 15 working day average used as the starting-point for the projection in the November *Report*.

Property prices

Annual house price inflation has strengthened further in recent months. The Halifax index rose by 16.0% in the year to January 2000, its highest rate of increase since July 1989 (see Chart 1.17), and the Nationwide index rose by 13.1% over the same period. Sharp increases in house prices over the past year have led to substantial rises in household sector housing wealth (see Section 2).

Evidence points to strengthening activity in the commercial property market. Higher property rents and capital values have raised annual growth in total commercial property returns, as measured by the Investment Property Databank Ltd Index, to 14.2% in December 1999.

Exchange rates

The sterling effective exchange rate index (ERI) appreciated through most of 1999 and has risen by 2.4% on a trade-weighted basis between 3 November and 9 February (see Chart 1.18). The 15 working day average of the ERI up to and including 9 February, used as the starting-point for the current projection, is 109.4, 3.6% higher than in the equivalent period three months ago and about 4.1% above the central projection for February implied in the November *Report*.

Most of the rise in the ERI has reflected continued appreciation of sterling against the euro (see Chart 1.18). On a 15 day average basis, sterling has risen by 5.5% against the euro since the November *Report*, and by nearly 16% since the start of 1999. These movements do not appear to be explained by changes in expected relative interest rate differentials between the United Kingdom and euro area, as reflected in yield curves. Against the US dollar, sterling has depreciated by 2.0% since the November *Report* on the same basis.

UK trade flows partly depend on the level of the real exchange rate. By combining consumer price inflation and nominal exchange rate expectations from Consensus Economics surveys, it is possible to construct a proxy expected real ERI for the United Kingdom. Chart 1.19 shows that in November 1997, following the real appreciation of sterling in 1996, respondents expected

Chart 1.17 House price inflation

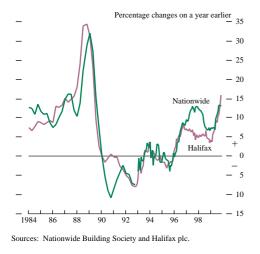


Chart 1.18 Selected sterling exchange rates

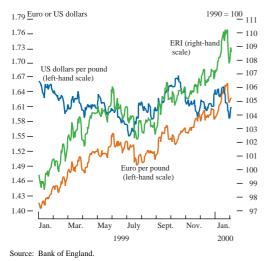
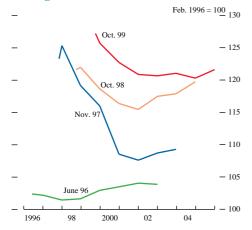


Chart 1.19

Consensus survey for the real sterling exchange rate vs M6 currencies^(a)



Note: The M6 countries are: Canada, France, Germany, Italy, Japan and the United States.

Source: Consensus Economics.

(a) Derived from a combination of nominal exchange rate and consumer price inflation forecasts for the major six economies.

much of the appreciation to be unwound. More recent surveys suggest that agents came to expect less depreciation in the real sterling exchange rate than at that time.

1.3

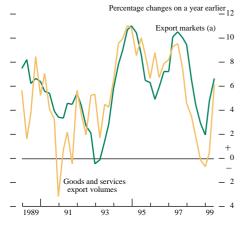
Summary

Narrow money has continued to grow strongly in recent months. Exceptionally high growth over the year-end appears largely to reflect a temporary surge associated with the turn of the millennium, rather than any discernible change in trend. Annual broad money growth has risen slightly but remains subdued, reflecting a continued rundown in deposits held by non-bank financial corporations. Secured lending has picked up further and has included rising flows of mortgage equity withdrawal. Equity prices have risen further and house price inflation has strengthened since the November *Report*. Substantial increases in equity and house prices over the past year have raised household sector wealth.

The sterling effective exchange rate has strengthened appreciably, particularly against the euro. Short-term interest rates have risen in the United Kingdom. Longer-term interest rates have also increased but remain low by recent historical standards.

Demand and output

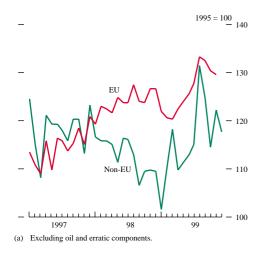
Chart 2.1 Growth of UK exports and export markets



Sources: ONS, NIESR and Bank of England.

(a) The UK export market is defined as the volume of goods and services imported by the rest of the world, weighted by each country's share in UK trade. Recent values for imports by the emerging market economies were derived from local trade data by the Bank of England.

Chart 2.2 Volumes of UK goods exports to EU and non-EU countries^(a)



Output growth strengthened in the second half of 1999. GDP rose by 0.8% in both the third and fourth quarters of the year, broadly in line with the projections in the November *Report*. In terms of demand components, there was particularly strong growth in Q3 in non-vehicle consumption, exports and imports. By contrast, investment demand continued to slow, though that may have reflected temporary factors. The balance of growth across different sectors of the economy has improved somewhat, as the pace of expansion has quickened in manufacturing and construction. And the outlook for overseas demand growth has strengthened since November, reflecting developments both in industrialised economies and in the emerging markets.

2.1

External demand

The outlook for growth in UK export markets has strengthened since the November *Report*.⁽¹⁾ The pace of expansion in the United States has remained remarkably robust, with GDP growth of 1.4% in both the third and fourth quarters of 1999. In addition, recent revisions to estimated productivity growth suggest that the trend output growth rate in the United States may be higher than previously thought. Demand growth in the euro area strengthened during 1999, and GDP rose by 1.0% in the third quarter of the year. The outlook for continued growth in the region is supported by euro-area consumer and industrial confidence, which remain at high levels. Prospects for growth in Japan are broadly unchanged since November, but the outlook for the emerging Asian economies appears stronger, owing both to the improved economic outturns in China and Korea and to the significant recovery of output and trade growth in 1999 for most other countries in the region.

Reflecting expanding demand in the United Kingdom's export markets, growth in the volume of goods and services exported by the United Kingdom has recovered since the beginning of 1999, having slowed sharply in 1998 (see Chart 2.1). Exports grew particularly rapidly in 1999 Q3, even excluding oil and erratic components: the volume of exports rose by 6.0%, compared with

2

⁽¹⁾ For a detailed discussion of international economic developments, see 'The international environment' article in the *Bank of England Quarterly Bulletin*, February 2000, pages 23–37.

Table 2.AUK export outlook(a)

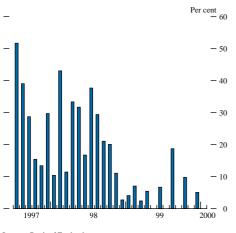
	1998	3			19	99		
	Q1	Q2	<u>Q</u> 3	_ Q4	Q1	_ Q2	Q3	Q4
BCC export orders								
Services	+4	+3	-6	-8	+1	+4	+15	+5
Manufacturing	-12	-24	-43	-24	-9	-3	+10	+11
CIPS export orders (b)								
Manufacturing	45.3	43.1	40.4	38.9	47.1	50.5	55.0	53.0
CBI industrial trends								
Optimism about export	s -48	-50	-41	-18	-17	-9	-5	+2
Sources: BCC_CBI and CIPS								

Sources: BCC, CBI and CIPS.

(a) Numbers reported are survey balances, unless otherwise shown. An increase suggests a rise in the proportion of respondents reporting 'higher' relative to those

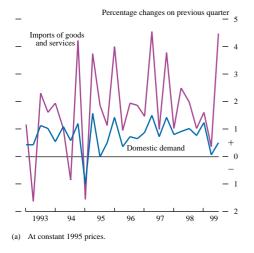
reporting 'lower'.(b) A reading below 50 suggests contraction, a reading above 50 suggests expansion.

Chart 2.3 Proportion of firms' 'profit warnings' citing exchange rate factors^(a)



Source: Bank of England.

Chart 2.4 Imports and domestic demand^(a)



growth of 2.6% in Q2, with a steep increase in goods exports outweighing a small decline in services exports. That exceptionally sharp increase was partly reversed in the autumn, and monthly data suggest that total exports were weaker in Q4. However, exports strengthened over 1999 as a whole (see Chart 2.2). The pick-up in UK goods exports in 1999 occurred across a broad range of countries, though the strong growth in exports in July and August was most marked in sales to countries outside the European Union.

As Chart 2.1 shows, the improvement in the United Kingdom's export performance in recent quarters has broadly matched the growth of UK export markets, despite the continued appreciation of sterling, particularly against the euro. Survey data also suggest that firms remain more optimistic about their export prospects than in the first half of 1999 (see Table 2.A). Some producers may have sought to retain their share of export markets in the face of the exchange rate appreciation by not passing on its effects to their foreign-currency export prices. Consistent with this, sterling prices of UK non-oil exports fell by around 2% in the first three quarters of 1999. A recent survey by the Bank's regional Agents also suggested that exporters' acceptance of lower profit margins was an important influence on recent export growth. However, the proportion of firms citing the exchange rate as a causal factor in weaker-than-expected profits appears to have decreased since the end of 1998 (see Chart 2.3). Furthermore, manufacturing productivity growth has risen substantially since the beginning of 1999, as output growth has strengthened and firms have shed labour. So some firms may have found efficiencies in production techniques that have helped them to adapt to the higher exchange rate.

Net trade contributed 0.3 percentage points to GDP growth in 1999 Q3. Despite the robust growth of exports in 1999 Q3, this contribution to GDP growth was smaller than in Q2, as import growth also picked up strongly. Changes in import growth tend to reflect movements in domestic demand growth, which was stronger in Q3 than in Q2 (see Chart 2.4), largely on account of the rebuilding of inventories in Q3. Previous *Reports* have noted that the slowdown in import growth during early 1999 might correspondingly have reflected reductions in inventory levels by UK firms at that time. The appreciation of sterling during 1999 could also have tended to increase import penetration in recent quarters.

⁽a) Proportion of UK-listed companies reporting profit warnings to shareholders, citing sterling's appreciation as a cause of the weaker profits.

GDP and expenditure components^(a)

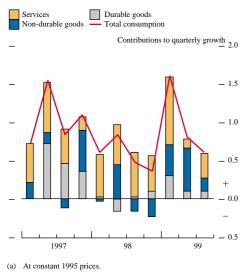
Percentage changes on a quarter earlier

Table 2.B

	1998	1999		
	Q4	Q1	Q2	Q3
Consumption:				
Households (b)	0.4	1.7	0.8	0.6
Government	0.5	1.1	0.9	0.7
Investment	2.0	0.3	0.6	0.1
of which, business investment	3.4	0.4	3.0	-1.0
Final domestic demand	0.7	1.2	0.8	0.4
Change in inventories (c)	0.1	0.0	-0.8	0.1
excluding alignment adjustment	(c) 0.3	-0.6	-0.6	0.7
Domestic demand	0.8	1.2	0.1	0.5
Net trade (c)	-0.8	-0.9	0.7	0.3
GDP at market prices	0.0	0.4	0.7	0.8

At constant 1995 market prices. Includes non profit making institutions serving households Contribution to quarterly growth.

Chart 2.5 Consumers' expenditure growth(a)



The particularly marked strength of recent import growth may exaggerate the trend. Survey data indicate weaker inventory investment in early 2000, as firms run down any precautionary holdings built up before the new millennium, and this may weaken demand for imports. But underlying growth in imports is likely to remain strong over the next two years, as domestic demand growth continues above trend. Reflecting the positive outlook for prospective overseas demand, the MPC judges that exports will grow steadily throughout the forecast period, although the recent appreciation of sterling has lowered the projection relative to the November *Report*. On balance, the MPC's central assumptions imply that the contribution of net trade to GDP growth will be significantly negative during the forecast period. While the overall prospects for the world economy have continued to improve, the MPC also judges that the balance of risks around the central projection for world activity remains on the downside. One risk identified by the Committee was the possibility of a sharper-than-expected slowdown in the United States.

2.2

Domestic demand

Domestic demand grew by 0.5% in the third quarter of 1999, compared with growth of 0.1% in the previous quarter, largely owing to a recovery in inventory investment in Q3. Growth of final domestic demandwhich excludes inventory investment-remained moderate, although it was slower than in the first half of the year. That reflected slightly weaker growth in both public and private sector consumption, as well as a marked slowdown in business investment growth (see Table 2.B).

Revisions to the National Accounts, which were published in December, have affected the estimated pattern of expenditure growth in 1998 and the first three quarters of 1999. Domestic demand growth was revised up in 1998, and revised down in 1999. On balance, the level of domestic demand in 1999 Q3 is slightly lower than previously reported, as an upward revision to the level of business investment was more than offset by reductions in the levels of public and private consumption.

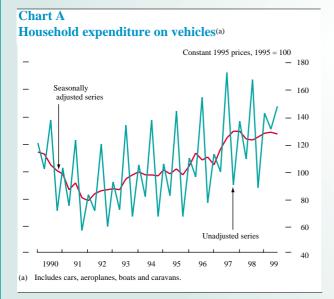
Consumption

Consumers' expenditure remained robust in 1999 Q3, though growth was slower than at the beginning of 1999 (see Chart 2.5). One category of expenditure where

Consumer spending on cars in the United Kingdom

Household expenditure on vehicles in the United Kingdom totalled more than £28 billion in 1998. That accounted for half of consumer spending on durable goods, and around 5% of total household consumption.

Before 1999, a clear seasonal pattern in this expenditure had been observed. The 'letter' prefix to car registration numbers was changed each year in August, and there was a preference amongst buyers of new cars for models with registration plates displaying the new prefix. As a result, vehicle spending typically rose sharply in the third quarter of each year, before falling back in the fourth quarter. Seasonal adjustment of consumption data in the National Accounts took account of this well-established pattern, smoothing the profile of vehicle spending over the year (see Chart A).

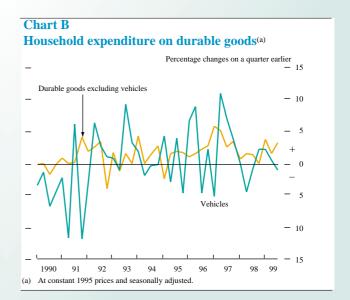


However, the timing of registration plate changes was altered in 1999, with new prefixes introduced twice a year, in March and September. Correspondingly, unadjusted vehicle expenditure rose markedly in the first as well as the third quarter of 1999, rendering the old pattern of seasonal adjustments inappropriate. The introduction of new seasonal adjustment factors for vehicles in the December 1999 National Accounts accounted for a significant proportion of the downward

(1) Source: Society of Motor Manufacturers and Traders.

revision made to household consumption data in the first half of 1999. In real terms, the revisions left the seasonally adjusted level of spending on vehicles 8% lower in 1999 Q2 than had been previously estimated.

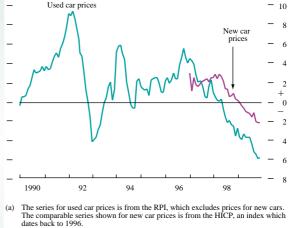
As the economic upturn and consumer confidence have strengthened since the end of 1998, spending on durable goods other than cars has picked up. Historically, purchases of cars move broadly in line with the economic cycle. However, sales of cars to households did not strengthen in the first three quarters of 1999 (see Chart B), and more recent data suggest that consumer demand for cars weakened markedly in 1999 Q4. Private new car registrations were 2.5% lower in 1999 than in 1998, and in Q4 they were 11% lower than a year earlier.⁽¹⁾ In each month between October 1999 and January 2000, the CBI distributive trades survey suggested that a substantial majority of motor traders were experiencing 'poor' unit sales given the time of year.



The recent weakness of car sales may partly reflect the effects of an inquiry into UK car retailing which is currently being undertaken by the Competition Commission. The Commission has not yet published its final conclusions, but it has expressed the view that the present system of distribution in the United Kingdom has led

'prices of new cars in the United Kingdom [to be] higher than they would be in a less restrictive environment...pre-tax list prices for many models are significantly higher in the United Kingdom than in other [EU] member states'.⁽¹⁾ The Consumers' Association has also published estimates which suggest that car prices in the United Kingdom are higher than in other large European countries.⁽²⁾ Retail prices for cars in the United Kingdom have fallen throughout 1999 (see Chart C). In the year to December, new car prices fell by 2.1% and used car prices-which are included in the RPI-fell by 5.8%. It is possible that the prospect of changes in the competitive structure of the car market has played a role in depressing car prices in recent months, and might also be perceived by consumers as likely to lead to further price declines. That might be dampening current retail sales, as households may be deferring purchases in the expectation that prices will fall

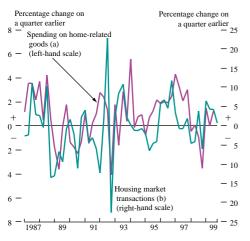




further. Hence some of the particular weakness of household expenditure on vehicles in late 1999 might not persist, particularly once the Competition Commission's report is published and its implications become clear.

Competition Commission press release No 21–99, 'New cars inquiry: statement of possible remedies', 5 October 1999.
 'The forecourt revolution: the future of the car industry', *Consumers' Association Policy Report*, January 2000.

Chart 2.6 Housing market transactions and spending on home-related goods



Sources: ONS and Inland Revenue

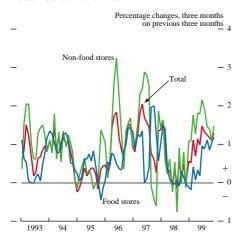
growth has eased since the beginning of 1999 is spending on durable goods. However, that partly reflects developments in the UK car market, which may have depressed consumer spending on vehicles in recent months, perhaps temporarily. Excluding vehicles, spending on durable goods accelerated in 1999 Q3. That was consistent with higher levels of activity in the housing market (see Chart 2.6)—home-related items account for close to two thirds of non-vehicle durable goods spending.

Data on new car registrations suggest that vehicle sales were particularly weak between October 1999 and January 2000, perhaps in anticipation of the outcome of the Competition Commission's investigation into car retailing (see the box opposite). By contrast, non-vehicle consumption growth appears to have remained strong in 1999 Q4. Retail sales volumes in the three months to December were 1.3% higher than in the previous three months (see Chart 2.7), and 4.7% above their level in the same period a year earlier. As noted in Section 1, that is consistent with recent movements in household borrowing for consumption, which grew rapidly in earlier quarters and accelerated further in Q4. The particular strength of consumer expenditure towards the end of 1999 may have partly reflected

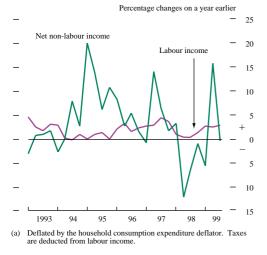
⁽a) At constant 1995 prices. Home-related goods are defined as furniture,

floor coverings and major appliances.(b) Particulars delivered to estate agents in England and Wales.

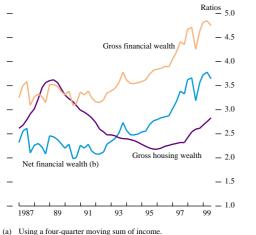
Chart 2.7 Retail sales volumes











 ⁽a) Using a four-quarter moving sum of income.
 (b) Total household financial assets minus total household financial liabilities, including mortgage debt.

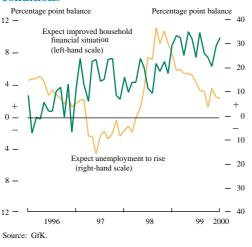
millennium-related purchases. However, the most recent CBI distributive trades survey gave little sign that the strength of retail sales had unwound after the new year, as the seasonally adjusted retail sales balance for January was higher than in any month since October 1996.

Consumption expenditure is related, among other things, to households' real incomes. Real post-tax labour income grew strongly in 1999 Q3, and was 3% higher than a year earlier—the fastest annual growth rate since 1997 Q4. By contrast, non-labour income, such as dividend payments, fell sharply in 1999 Q3. But this component tends to be much more volatile from quarter to quarter than labour income (see Chart 2.8), and the recent pattern of non-labour income has been affected by the abolition of Advance Corporation Tax (ACT). That led many companies to switch the timing of their dividend payments in 1999 from Q1 to Q2, with a subsequent fall back in Q3. Non-labour income growth is expected to recover once the effects of these distortions have passed, and the MPC has revised up its projections for labour income over the forecast period, reflecting expectations of faster earnings growth.

Household income is, however, only one of several determinants of consumption. For example, an increase in households' wealth tends to raise their consumption relative to income. One way that this can occur is if households use this wealth as collateral for secured borrowing, as is the case in mortgage equity withdrawal. Consistent with robust consumption growth in recent quarters and the upturn in secured lending to households noted in Section 1, increases in household wealth in Q2 and Q3 were indeed stronger than had been assumed in earlier Reports. The increase in housing wealth was particularly marked: the ratio of gross housing wealth to post-tax income rose from 2.6 in 1999 Q1 to 2.9 in 1999 Q3 (see Chart 2.9). Significant rises in house prices and equity prices since then will have raised household wealth further in recent months.

Households' assessment of their likely future financial position may also affect their consumption relative to current income. The more confident that households are about the economic factors that are likely to affect them in the future, the higher current consumption is likely to be, since households will tend to save a smaller share of their current income as a precaution against any potential adverse economic developments. Such economic factors

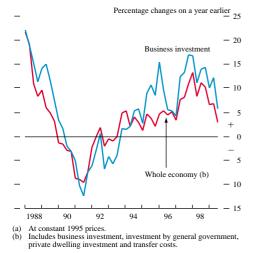
Chart 2.10 Consumer confidence about future economic conditions(a)



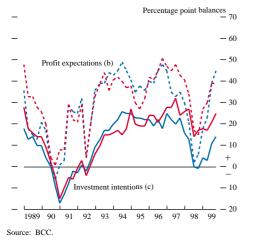
(a) Expectations relate to the year ahead

Chart 2.11

Gross fixed capital formation(a)







- Manufacturing sector responses shown in blue, service sector responses
- (b)
- Manufacturing sector responses snown in 'Do you believe that over the next shown in red. Balance of responses to the question: 'Do you believe that over the next twelve months profitability will improve/remain the same/worsen?' Balance of responses to the question: 'Over the past three months, which changes have you made in your investment plans for plant and machinery: revise upwards/no change/revise downwards?' (c)

might include households' expectations of unemployment, which would affect consumer confidence about future labour income. Fears of rising unemployment have receded since the end of 1998 and measures of consumer confidence about households' future financial situation stabilised at high levels in the second half of 1999 (see Chart 2.10), consistent with continued strength in the outlook for consumption in 2000. Correspondingly, the GfK index of households' expected future spending reached its highest level in January since the survey began in mid-1995.

Given the strength of current and prospective household income, wealth, confidence and borrowing, the MPC judges that consumption growth is likely to remain well above trend in the coming quarters. Somewhat slower consumption growth is projected towards the end of the forecast period, partly reflecting the lagged effects of recent rises in interest rates. There may be some continued softness of total expenditure on durable goods owing to developments in the UK car market, but this is expected to be temporary.

Investment demand

Revisions to the National Accounts have raised estimates of investment in 1998, reinforcing the picture of strong investment growth between 1996 and 1998. By contrast, business investment growth in 1999 slowed markedly (see Chart 2.11). In 1999 Q3, total gross fixed capital formation rose by 0.1% on the previous quarter but, within this, business investment fell by 1.0%, the first quarterly decline since 1996 Q4. The recent weakness of investment has been concentrated in the manufacturing sector, but the fall in business investment in Q3 was also reported in the service sector.

The slowdown in business investment growth is likely to have reflected the lagged effects of a sharp decline in firms' profit expectations in 1998 (see Chart 2.12), which was followed by a fall in actual corporate profits in late 1998 and early 1999. Weaker investment growth in mid-1999 could also have reflected millennium-related influences on the timing of business investment decisions. For example, concerns about the 'millennium bug' might have brought forward some planned investment in information technology (IT) equipment that would otherwise have taken place at a later time, in order to ensure 'Y2K compliance'. Caution about the possible effects of any 'bug' might also have delayed some planned IT investment until after

Chart 2.13 Business sector capital stock and investment as a share of GDP^(a)

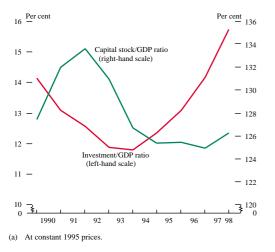
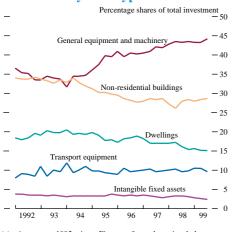


Chart 2.14 Investment by asset type^(a)



 ⁽a) At constant 1995 prices. Figures refer to shares in whole-economy investment

the turn of the millennium. Reports from the Bank's regional Agents support the hypothesis that the decline in business investment in 1999 was influenced by these considerations.

The ONS has released new calculations of the capital stock for 1998, together with revisions extending back over a number of years. The level of the business sector's capital stock since 1994 is lower than previously estimated, and although the ratio of business investment to GDP has risen to historically high levels, the ratio of the capital stock to GDP has been broadly flat over that period (see Chart 2.13).⁽¹⁾ The revision reflects an assessment by the ONS that the rate of depreciation applicable to investment goods in recent years is higher than was previously thought. That primarily reflects a view that a growing proportion of UK investment has been directed towards capital goods with shorter life-spans, such as IT equipment. Spending on IT is included in ONS figures for investment in general equipment and machinery, whose share in total investment has indeed been rising since 1994 (see Chart 2.14).⁽²⁾ A rise in the share of IT equipment in total business investment is consistent with the decline in prices of IT goods relative to other investment goods throughout the 1990s.

Forward-looking indicators tend to support a stronger outlook for business investment growth in the near term. Following several quarters of negative growth, the gross operating surplus of UK companies rose by 3.5% in 1999 Q3, and was 1.6% higher than a year earlier. Oil companies accounted for much of that increase, but a recovery in corporate profits was also reported in the non-oil sector. Survey evidence for both the manufacturing and service sectors suggests that profit expectations and investment intentions have risen (see Chart 2.12), and that capacity utilisation increased in these sectors in 1999. Consistent with these indicators, the MPC has assumed in its central projection that some of the slowdown in investment in 1999 reflects a temporary 'pause' owing to the impact of the millennium. The Committee projects a modest recovery in investment growth in 2000 from its current low rates,

⁽¹⁾ These estimates are provisional and final figures will be published in the 2000 edition of the National Accounts *Blue Book*. The ONS reassessment of the capital stock and depreciation rate is detailed in two articles by West, P and Clifton-Fearnside, A: 'The capital stock of the United Kingdom—some new developments in coverage and methodology', *Economic Trends*, No 544, March 1999, pages 39–48, and 'Improving the non-financial balance sheets and capital stocks estimates', *Economic Trends*, No 552, November 1999, pages 53–67.

⁽²⁾ National Accounts data do not provide a more disaggregated measure of investment in types of capital asset within the class of 'general equipment and machinery'.

with the strength of recent survey data suggesting a possible upside risk to this central projection.

Inventories

Changes in inventory levels contributed 0.7 percentage points to GDP growth in 1999 Q3 (excluding the National Accounts alignment adjustment), following a decline in whole-economy inventories during the first half of 1999. The outturn in Q3 was consistent with the MPC's expectations of stockbuilding ahead of the turn of the millennium, for precautionary and celebratory purposes.

Both the decline in stocks in the first half of 1999 and the rise in stock levels since then have largely reflected movements in manufacturers' inventories (see Chart 2.15). Survey evidence for the manufacturing sector is broadly consistent with this observed pattern, and tends to suggest further reductions in stock levels in early 2000. For example, the CBI quarterly industrial trends survey reported that the proportion of manufacturers regarding their stocks of finished goods as 'more than adequate' fell between the middle and the end of 1999, but that manufacturers expected to run down their stocks at a faster rate in the coming months. Similarly, CIPS surveys have indicated that purchases of materials by manufacturers picked up in the second half of 1999, partly to guard against possible 'Y2K' disruptions to the supply chain. These precautionary purchases were reported to have fallen back after the New Year as firms ran down their excess stocks. The CIPS manufacturing output index also fell in January, as both manufacturers and their customers reduced stocks of finished goods which they had built up before the new millennium.

Public sector demand

Estimates of nominal government consumption of goods and services in the first three quarters of 1999 were revised up in the December 1999 release of the National Accounts. However, the real government consumption profile over that period was lower, owing to upward revisions to the government expenditure deflator. In assessing the outlook for the public finances, the MPC has taken as its central case the nominal government expenditure plans and effective tax rates from the pre-Budget Report (PBR) published on 9 November 1999. Given the MPC's new forecast for inflation, these PBR projections now imply a somewhat weaker profile for real government consumption over the forecast period than in the November *Report*.

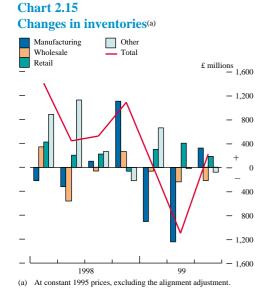


Chart 2.16 GDP at constant market prices

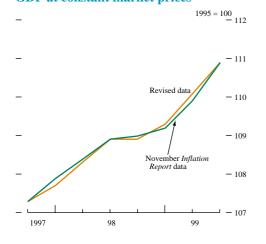


Chart 2.17 GDP growth^(a)

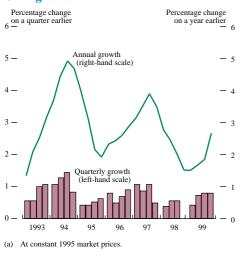


Chart 2.18 Sectoral output growth^(a)

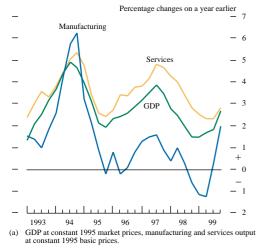
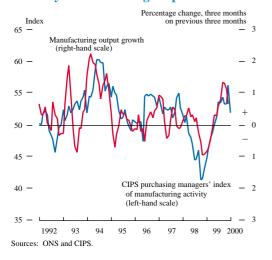


Chart 2.19 Monthly manufacturing output indicators



2.3

Output

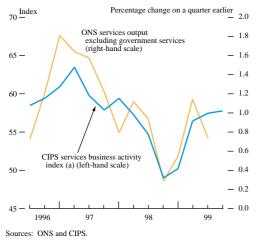
Revisions to the National Accounts published in December left the level of GDP in 1999 Q3 unchanged (see Chart 2.16), as a downward revision to domestic demand was offset by an upward revision to net trade. However, the estimated growth profile is a little different. The data now show a more marked pause in growth in 1998 Q4, followed by faster growth in the first half of 1999 than in earlier estimates. GDP at constant market prices grew by 0.8% in each of the third and fourth quarters of 1999, and in Q4 was 2.7% higher than a year earlier (see Chart 2.17).

Manufacturing output grew by 0.7% in 1999 Q4, the third consecutive quarter of expansion, and was 1.9% higher than a year earlier (see Chart 2.18). The annual growth rate was the highest since mid-1995, although the quarterly growth rate was slower than in the previous quarter, when manufacturing output rose by 1.4%. The CIPS purchasing managers' index rose sharply in Q4 (see Chart 2.19), which was reported to have reflected an increase in manufacturers' stock positions before the year-end, as a precaution against possible supply disruptions related to the 'millennium bug'. Some of the rise in the CIPS index at the end of 1999 was correspondingly reversed in January, as manufacturers ran down these stocks. But the index remains at a level suggesting steady expansion of manufacturing output, in line with reports from the Bank's regional Agents and other survey evidence. For example, the CBI reported that manufacturers' output expectations were positive for the sixth successive month in January, with expectations of future export orders in December and January at their highest for two years.

The recovery in manufacturing observed in 1999 was particularly concentrated in the engineering, metals and chemicals sectors. Growth in other sectors remained more subdued, and output was flat or falling in some industries, such as textiles and paper products. The non-manufacturing components of industrial production were also weaker than manufacturing as a whole; output in both the mining and quarrying sector and the utilities sector declined in Q4.

Preliminary estimates suggest that service sector output rose by 0.9% in 1999 Q4, following an increase of 0.6% in the previous quarter, with the level of output 2.9% higher than a year earlier (see Chart 2.18). Growth was reported to have been particularly strong in the transport,

Chart 2.20 Measures of services output



(a) The CIPS services survey excludes government services



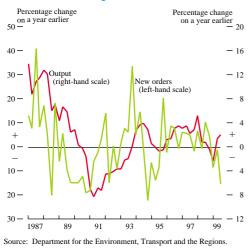
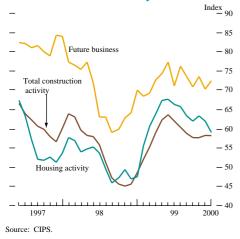


Chart 2.22 CIPS construction survey^(a)



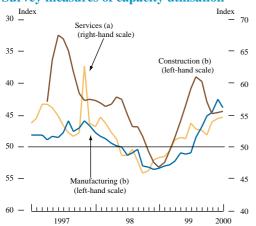
⁽a) A reading below 50 suggests contraction, a reading above 50 suggests expansion.

storage and communications sectors in the second half of 1999. Survey data indicate that the outlook for service sector growth remains firm. The BCC survey suggested that service sector sales and orders, both domestic and exported, continued to rise in 1999 Q4, though export order growth slowed compared with Q3. The CIPS services business activity index in Q4 rose to its highest level since 1998 Q1 (see Chart 2.20), and reported new business continued to grow strongly, though at a slightly slower rate than in the previous two quarters. Recent CIPS reports suggest that one service industry experiencing weaker growth in late 1999 was IT and computing. However, activity in that sector rebounded in January, as the earlier slowdown was reported to have reflected some customers' deferral of new IT orders until the effects of any 'millennium bug' were known.

There are signs that the modest recovery in the construction sector, which began in the first half of 1999, gathered pace in the second half of the year. Construction output increased by 0.6% in 1999 Q3 and was 1.4% higher than a year earlier. New construction orders were weaker than the sector's output indicators in 1999 Q3 (see Chart 2.21). However, new orders data tend to be rather volatile, and survey indicators continue to suggest that robust growth is expected over the coming year (see Chart 2.22). Construction output in the housing sector has been particularly buoyant, reflecting high levels of transactions activity in the private housing market, though the CIPS survey suggests that growth in the sector has slowed somewhat in recent months.

Survey measures suggested that production capacity became somewhat scarcer during 1999, as the economic recovery strengthened (see Chart 2.23). The CIPS index of 'outstanding business' in the service sector rose throughout 1999, and in December reached its highest level since February 1998, indicating that capacity constraints may have become more significant in recent months. The BCC measure of service sector capacity utilisation also rose markedly in 1999, particularly in the last quarter of the year. Consistent with reports from the Bank's regional Agents, the CBI quarterly industrial trends survey reported that most manufacturing firms continue to operate with spare capacity. However, the CBI survey suggested that the proportion of manufacturing firms with spare capacity was slightly lower in the second half of 1999 than in the first half of the year, and the number reporting that plant capacity

Chart 2.23 Survey measures of capacity utilisation



Source: CIPS.

- (a) Survey responses to question asking how much work is outstanding in the sector. Readings above 50 suggest a greater backlog of work and increasing capacity utilisation in the service sector.
- b) Survey responses to question asking about supplier delivery times. Readings below 50 suggest longer delivery times. The scale is inverted so that a rise represents longer delivery times and increasing capacity utilisation in the manufacturing or construction sectors.

was likely to limit future output rose throughout 1999. Similarly, the CIPS manufacturing survey suggested that supply conditions within the sector have tightened over the past year. The BCC measure of capacity utilisation in the manufacturing sector also rose during 1999, to a level last reported in the second half of 1996. In the construction sector, CIPS reports suggested that supplier delivery times continued to lengthen, though at a less marked pace than in mid-1999.

2.4

Summary

Prospects for continued economic growth in the United Kingdom have remained favourable since the November Report. Household wealth, labour income, borrowing and confidence have grown strongly, supporting the outlook for consumption. Survey data on profit expectations, capacity utilisation and investment intentions suggest that the slowdown in investment growth in 1999 may have been partly a temporary phenomenon. The pattern of exports in the second half of 1999 was rather volatile, but the immediate outlook for international growth is somewhat stronger than at the time of the last Report. However, the appreciation of sterling and the rise in interest rates are likely to dampen output growth. Reflecting the balance of these considerations, the MPC expects annual growth of GDP to slow from above-trend rates to a little below $2^{1/2}$ % in the coming quarters.

The labour market

Table 3.AThe quantity of labour

Per cent, unless otherwise stated

1	Dec. 1998 to Feb. 1999	<u>1999</u> Mar. to May	June to Aug.	Sept. to Nov.
Total weekly hours worked (millions)	901.1	900.8	904.8	903.7
Change in total weekly hours work since previous three-month period of which: change in employment change in average hours	1 0.0 0.3	0.0 0.1	0.4 0.4	-0.1 0.2
worked	-0.2	0.0	0.1	-0.4

3

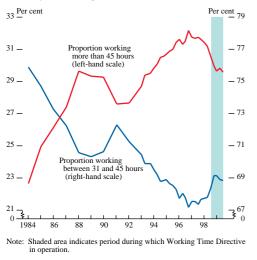
Labour market conditions may have tightened a little since the November Report. Employment growth remains firm, though total hours worked have fallen. There has been a small rise in LFS unemployment, perhaps because previously inactive people have been encouraged to look for work again, though the claimant count measure continues to fall. Labour shortages have increased. They remain more acute in some regions, and in some sectors, than in others. Average earnings growth has been stronger than expected. If anything, settlements have edged down. So components of pay not covered by wage settlements appear to have risen further. Firms may have needed to pay higher wages to attract new recruits, or to make larger payments to retain staff. In addition, employers may have chosen to increase the proportion of the total pay bill that reflects individual productivity and performance.

3.1 Employment, non-employment and labour market tightness

Total hours worked, often regarded as the broadest measure of labour supplied, fell by 0.1% in the three months to November, but remained above levels seen during the first half of last year. The change in total hours worked depends on the change in the number of employed people, and the change in the average number of hours that each employed person works. Table 3.A shows that the number of employed people rose steadily between autumn 1998 and autumn 1999, but the average number of hours that each employed person worked tended to fall. This fall was not caused by a switch from full-time to part-time work, as the number of full-time workers grew more rapidly than the number of part-time workers during the period. Compliance with the Working Time Directive (WTD) may have been a factor.

The WTD came into force in October 1998. It places restrictions on working more than 48 hours a week, as well as limiting shift work patterns and broadening statutory holiday entitlements. Limited information on the distribution of hours worked is available from the Labour Force Survey (LFS). This shows that, since the beginning of 1998, there has been a fall in the percentage of full-time employees in the highest hours-worked

Chart 3.1 Distribution of full-time employees' usual weekly working hours^(a)



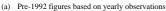


Chart 3.2



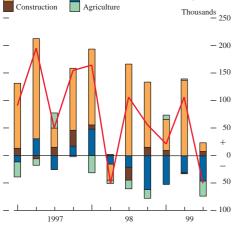


Chart 3.3 Annual growth in labour productivity



Sources: ONS and Bank of England.

- (a) Productivity defined as GDP at constant basic prices divided by
- (b) Productivity defined as GDP at constant basic prices divided by LFS employment.

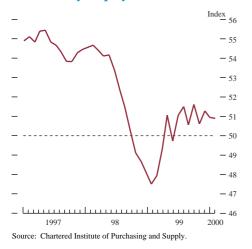
category (those working more than 45 hours per week), and a corresponding rise in the percentage of full-time employees in the next highest hours-worked category (those working between 31 and 45 hours per week). These movements represent a reversal of the trend seen during much of the early 1990s (see Chart 3.1).

The measures of employment outlined above count employed people. Like most data from the LFS, they are based on responses to a rolling three-month survey. Another source of employment data, the Workforce Jobs survey, provides estimates of the number of jobs in different industries on a single day towards the end of each quarter. In 1999 Q3, the number of jobs in the production industries fell for the sixth consecutive quarter. There was a large fall in the number of agricultural jobs, and the number of construction and service sector jobs rose only moderately, so the total number of Workforce Jobs fell for the first time in more than a year (see Chart 3.2). Because of the way they are measured, Workforce Jobs data tend to be more variable than data from the LFS.

The two different sources of data on employment provide two different measures of labour productivity: output per person employed (based on the LFS); and output per job (based on Workforce Jobs). Chart 3.3 shows that measured productivity growth has in the past varied substantially over the economic cycle. Since the mid-1990s it has been more stable, partly because the cycle has been less marked, and partly because labour market reforms over the past two decades have made it possible for firms to adjust labour input more rapidly in response to changes in demand. Productivity growth has been below its long-run average rate, which is close to 2%, for the past four or five years. With no good reason to believe that a shift in the trend rate had occurred, the MPC has for some time assumed that labour productivity growth will return to more normal rates. There is some evidence of a rise in labour productivity growth towards the end of last year.

Employment growth has probably continued into the New Year. The CIPS employment index, a weighted average of responses to their services, manufacturing and construction sector surveys, was 50.9 in January. This index, which provides a more timely indicator of employment trends than the official data, has remained above the no-change level of 50 since June (see Chart 3.4). And the latest CBI/PricewaterhouseCoopers survey found that employment growth in the financial

Chart 3.4 CIPS survey employment index^(a)



Weighted index of data on manufacturing, services and construction. A result of 50 indicates no change on the previous month.

Table 3.B Surveys of employment intentions^(a)

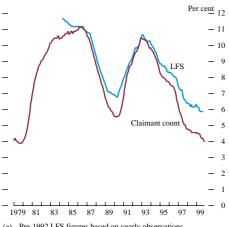
Percentage balance of employers planning to recruit in next period (b)

	Series average (c)	$\frac{1998}{Q4}$	<u>1999</u> Q1	<u>Q2</u>	<u>Q3</u>	_Q4
Services BCC Manufacturing	12	15	12	16	21	21
BCC CBI	3 -17	-7 -31	-6 -26	2 -22	6 -15	12 -10

Seasonally adjusted by the Bank. Next three months for BCC: nex next four months for CBI

CBI from 1972: BCC from 1989





⁽a) Pre-1992 LFS figures based on yearly observations

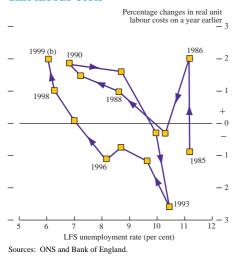
services sector, one part of the economy not covered by the CIPS, remained strong in Q4. Turning to forward-looking indicators, Table 3.B shows that the balances of respondents to both the BCC and CBI surveys of manufacturing firms, and to the BCC survey of service sector firms, who planned to recruit during the next few months were all above their sample averages in 1999 Q4. Recent Bank work has found that, historically, these survey balances have provided incremental information about changes in employment over the subsequent quarter. On that basis, employment might be expected to increase further in 2000 Q1.

An important determinant of wage pressure is the balance between the demand for, and the supply of, labour. One measure of this balance is the number of people who are searching for work, and are currently available to start. This is captured by LFS unemployment, which rose by 11,000 during the three months to November compared with the previous three months. It is possible that some individuals have been encouraged to search for work again as the expansion of output has continued. These individuals would not necessarily be included in the other, narrower measure of unemployment, the claimant count, which fell by 29,000 in the three months to November, and by a further 22,000 in December. While recent evidence on unemployment is mixed, it is clear that the unemployment rate is considerably lower than it was at the trough that occurred in the second quarter of 1990 (see Chart 3.5). That does not necessarily mean that the labour market is tighter now than it was then. To make a full comparison, it is important to consider whether, and to what extent, the structural performance of the labour market has changed during the intervening period.

The locus of points in Chart 3.6 shows how the change in real unit labour costs, ie the change in the real cost to firms of hiring the labour necessary to produce a given quantity of output, has varied with LFS unemployment. Over the past decade there has been a leftward shift in this locus. That is consistent with the equilibrium rate of unemployment (the rate at which there is no change in real unit labour costs in the medium-to-long term, and hence no upward or downward pressure on inflation from the labour market) having fallen.

Over the past two decades there have been a number of reforms-for example to employment legislation, and to the tax and benefit system—that might have contributed to a reduction in the equilibrium rate of unemployment.

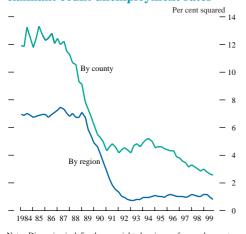
Chart 3.6 Unemployment and the change in real unit labour costs(a)



Real unit labour costs are defined here as the Average Earnings (a) Index adjusted for the employers' tax rate and deflated by the product of the GDP deflator and a productivity measure base on LFS employment data. Year to 1999 Q3. (b)

Chart 3.7

Absolute geographical dispersion of claimant count unemployment rates

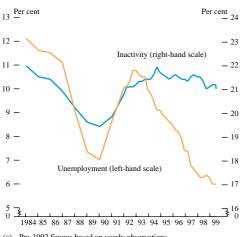


Note: Dispersion is defined as a weighted variance of unemployment rates across geographical areas. The weights are based on labour force shares.

Sources: ONS and Bank of England.

Chart 3.8

Unemployment and inactivity rates(a)





Structural changes in the economy may have played a part too. One example would be the reduction in the number of young people entering the labour market, the effects of which were considered in the November *Report.* Another structural change that could reduce the amount of wage pressure for a given national unemployment rate is a reduction in the geographical dispersion of unemployment.

To see why dispersion might be important, consider a country with two equally-sized geographical areas, A and B. Assume that the unemployment rate is 3% in area A and 7% in area B. Now the situation changes so that unemployment is 5% in both areas. If the downward pressure on wages following the rise in unemployment in area A more than offsets the upward pressure on wages following the fall in unemployment in area B, then the reduction in unemployment dispersion would reduce pressure on average wage rates across the country, even though the national unemployment rate had remained the same. Two common measures of dispersion are absolute and relative dispersion. The former is a weighted variance of local unemployment rates. The latter is a weighted variance of the ratio of local unemployment rates to the national average. Chart 3.7 shows that absolute dispersion has always been higher, the higher the level of disaggregation, reflecting the dispersion within regions as well as between regions. Whether we look at regional or county data, absolute dispersion is lower now than during the late 1980s. This is true also of the relative measure, though relative dispersion has tended to increase during the past few years.

The unemployment rate is lower now than during the late 1980s, but the employment rate is lower too. That is because the inactivity rate, defined as the percentage of the working-age population who are either not searching for work, or are searching for work but not currently available to start, is much higher (see Chart 3.8). This could be relevant for the interpretation of the current level of unemployment, because many of the inactive are loosely attached to the labour market and can, to a degree, be considered as part of the available labour supply. They may, as a result, exert some downward pressure on wage rates, though perhaps to a lesser extent than those who are recorded as unemployed.

Table 3.C shows the proportion of individuals who moved from one of seven different categories of non-employment during the spring quarter (March to

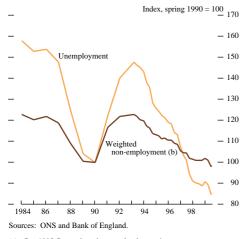
Table 3.C Movements from unemployment and inactivity into employment(a)

	emplo	ortion who oyed durin months		
	Average (1993–99) (b) (per cent)		Range (1993–99) (b) (per cent)	Number in category in autumn 1999 (thousands)
Unemployment				
Unemployed less than six months Unemployed six to twelve months Unemployed more than twelve months		34.6 23.0 11.3	30.2–37.9 19.0–27.7 10.1–13.4	954 258 493
Inactivity				
Searching for work, but unavai to start Discouraged (wants a job but n	ot	28.1	23.9–32.0	213
searching because believes none available) (c) Wants a job but not searching for some other reason Does not want a job		5.3	4.0-7.1	61
		7.1 6.5	6.6–7.6 5.5–7.3	2,011 5,282

Sources: ONS and Bank of England

(a) It is possible that the proportion changing category in a three-month period is overstated because of response error bias.
(b) Averages and ranges are calculated for spring/summer quarters only, a time when many students move from inactivity into employment. Since the data are not seasonally adjusted, the averages and ranges for certain categories of the inactive may appear higher than they would do over a full year.
(c) The spring 1999 observation for the discouraged is excluded, as the sample size was too small to be reliable.

Chart 3.9 Measures of labour market tightness^(a)



Pre-1993 figures based on yearly observations. The weighted non-employment series is a weighted average of the number of people in the seven different categories of non-employment listed in Table 3.C. The weights are based on the average proportion in each category who found employment in the cost due to the properties of the terms of the due to the term. (b) next three months, relative to the proportion of the short-term unemployed who found employment in the next three months

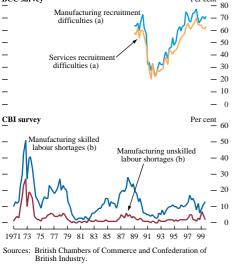
May) to employment during the summer quarter (June to August). The information is provided as an average and as a range, for the period 1993 to 1999. It appears that the group of people most likely to find work were those who had been unemployed for less than six months, and that the likelihood of finding work falls as the time for which the person has been unemployed increases.

As a group, the unemployed move more readily into employment than the inactive. But a proportion of individuals in all forms of inactivity have found work in the subsequent quarter, even some of those who were not searching because they believed that no work was available. As the economy continues to expand and more jobs become available, the discouraged may start to search for work again. And those people looking after the family home, but who would work if the ideal job became available, may find it profitable to seek employment as job opportunities and wage rates rise. So a wide range of people classified as inactive may have some influence on pay pressures.

Chart 3.9 compares an index of LFS unemployment with an index of weighted non-employment, based on the number of individuals in each of the seven categories of non-employment listed in Table 3.C, weighted together according to the average frequency at which they have entered employment. Weighted non-employment is less cyclical than unemployment. It has fallen much less rapidly than unemployment during the present expansion, so that, during the three months to November, weighted non-employment was close to its level at the time of the most recent trough in 1990 O2, while unemployment itself was much lower. The difference in the behaviour of the two series is explained partly by the fact that inactivity has risen, and partly by the fact that a greater proportion of those who are unemployed are short-term unemployed.

An alternative approach to the assessment of labour market tightness is to ask firms directly about their own experience. The British Chambers of Commerce reported that recruitment difficulties last year were higher than on average during the ten-year lifetime of the survey, though lower than they had been in the middle of 1998. A longer run of data is available, for the manufacturing sector alone, from the Confederation of British Industry. They found that, while skilled labour shortages rose last year, they remained well below the historic peaks of the early 1970s and the mid to late





⁽a) Question: 'Did you experience any difficulties over the past three months in finding staff in the following categories: skilled manual, technical/professional, managerial/clerical and un/semi-skilled?'.
(b) Question: 'Are shortages of skilled/unskilled labour likely to limit output during the next four months?'.



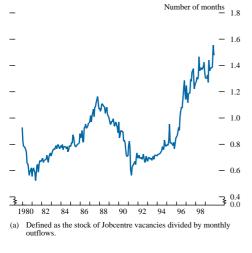
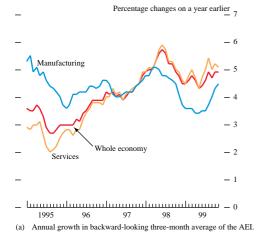


Chart 3.12 Headline growth in nominal earnings^(a)



1980s (see Chart 3.10). According to the Recruitment and Employment Confederation (REC),⁽¹⁾ the availability of both permanent and temporary (or contract) staff has been falling since last June. Reports from the Bank's regional Agents, based on discussions with a range of business contacts, paint a similar picture. There was an increase in skill shortages across much of the country during the second half of last year. Shortages remain more acute in the South than elsewhere, and there is some variation by industrial sector, with vacancies in IT, engineering and construction particularly hard to fill.

Chart 3.11 shows that the average time taken to fill Jobcentre vacancies rose further in 1999 Q4. It is possible that some of the rise in average duration could have occurred if a greater proportion of people now find work in other ways, by responding to newspaper advertisements for example, or by visiting private recruitment agencies. Nevertheless, some of the rise is likely to reflect a general increase in the difficulty faced by firms in filling vacancies by whatever means.

Earnings and settlements

3.2

Earnings growth, as measured by the Average Earnings Index (AEI), has been stronger than expected. In the November central projection for inflation, the Committee had assumed that growth in the AEI would fall during the fourth quarter, partly because it was thought that some of the strength in the third quarter was erratic. However, in November the headline annual increase in the AEI was still 4.9%, the same as the August figure (which had been the latest available when the previous Report was published). So high rates of earnings growth have persisted. Chart 3.12 shows that, since last summer, earnings growth has risen in both manufacturing and service sector firms. However, the breakdown by public and private sectors is not so even. All of the recent increase in earnings growth was accounted for by the private sector, with public sector earnings growth falling from 4.8% in June to 3.9% in November.

The AEI provides a comprehensive measure of employees' earnings, but other measures of earnings are available. Information on wages and salaries paid to the households sector is published quarterly with the National Accounts. While the AEI is based on a sample of employers, final estimates of wages and salaries data

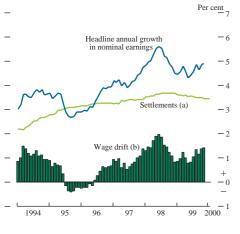
⁽¹⁾ Formed by the merger of the Federation of Recruitment and Employment Services and the Institute of Employment Consultants.

are derived from tax returns (though early estimates use information from both the AEI and the New Earnings Survey). At the beginning of last year, annual earnings growth as measured by wages and salaries per head was a little higher than as measured by the AEI. In 1999 Q3, the two measures gave identical readings of 4.7%. Private sector indicators of earnings growth, which are based on much smaller samples, offer conflicting evidence. According to the REC, salaries for permanent staff rose in January at the fastest rate for more than a year, while growth in pay rates for temporary (or contract) staff fell for the second consecutive month. The Reward index of annual earnings growth remains close to 3.5%, well below the official measures.

The change in the AEI is an estimate of the change in total pay per worker. It can be helpful to think of this change as the sum of two parts: an across-the-board change in pay that all workers in a firm receive for doing a standard day's work, more usually called the settlement; and a second component, 'wage drift', that will reflect, among other things, changes in overtime payments, profit-related pay, bonuses, and the size of individual merit awards. Chart 3.13 plots a measure of the average settlement recorded during the past twelve months, taken from the Bank of England's database, against the headline annual increase in total pay as measured by the AEI. Despite a slight edging down of settlements since the beginning of last year, the rate of increase of total pay has gone up. The mean AEI-weighted settlement over the twelve months to November 1999 was 3.5%. The corresponding increase in headline average earnings was 4.9%. By implication wage drift was 1.4 percentage points (see Chart 3.13).

Overtime hours worked appear to have stabilised, having fallen quite sharply during the early part of last year. This could account for at least part of the increase in wage drift. But another part is perhaps explained by the fact that the labour market turned out to be considerably tighter in 1999 than had been expected early in the year when most settlements were announced. Indeed, unemployment continued to fall during the year, contrary to widespread expectations that it would increase. This also led to a downward revision of forecasts for unemployment in 2000 (see Table 3.D). There is some evidence from the Bank's regional Agents that, rather than wait until the next settlement round, a number of firms responded by making larger bonus payments, by taking on some new staff at higher wage rates, and by





Sources: ONS and Bank of England

 (a) Twelve-month AEI-weighted mean settlement from the Bank of England database, which draws on information from the CBI, Incomes Data Services, Industrial Relations Services, Labour Research Department and the Bank's regional Agents.
 (b) Difference between earnings growth and settlements.

Table 3.DForecasts and outturns for claimant countunemployment

Millions

	1999 Q4	2000 Q4	
Forecast made: January 1999 (a) January 2000 (a)	1.6 n.a	1.8 1.1	
Outturn	1.2	n.a.	

Sources: ONS and HM Treasury.

(a) Average of around 30 independent forecasts made over the previous three months, as reported in HM Treasury, *Forecasts for the UK economy*. retaining only the more productive and more highly paid staff in those industries where employment was falling. There has also been a tendency for employers to increase the proportion of an individual's pay which depends on his or her own productivity and performance. Any combination of these four options would have led to increased wage drift, as measured by the difference between AEI growth and settlements.

In January, the Bank's regional Agents asked around 270 of their business contacts to comment on the prospects for pay in 2000. Among the 85% of those questioned who had a company-wide settlement policy, the most commonly held view was that the settlement would be about the same as last year, though more thought it would be lower than thought it would be higher. The same was not true of the percentage change in total pay: on balance, respondents felt this was more likely to be higher this year. The single most important influence on pay was reported to be the need to recruit and retain staff.

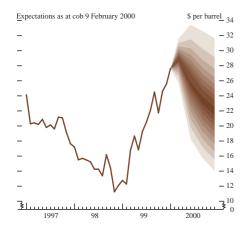
3.3

Summary

Employment has continued to rise, but not as rapidly as output. Evidence on unemployment is mixed, but the trend is probably flat to falling. These changes in quantities have been associated with some increase in reported skill shortages across most regions. Earnings growth is still around 5%, which is stronger than had been expected three months ago. Settlements, an important part of earnings growth, have fallen slightly, to around $3^{1}/_{2}$ %. So estimated wage drift is substantial. The first few months of any year are an important time for pay settlements. A number of firms report that these could be lower this year than last year. Nevertheless, the necessity to recruit and retain staff is likely to remain a significant factor in determining growth in total pay.

Costs and prices

Chart 4.1 Implied distribution for oil prices^{(a)(b)}



Sources: NYMEX and Bank of England

- (a) Derived from option prices for West Texas Intermediate oil (WTI). Prices for WTI tend to be around \$1 per barrel higher than those for Brent crude oil
- Brent crude oil.
 (b) The chart depicts the probability distributions for oil prices, and is rather like a contour map. At any given point, the depth of shading represents the height of the probability density function implied by the markets over a range of outcomes for oil prices being within the darkest, central band at any date. Each successive pair of bands covers a further 10% of the distribution until 90% of the distribution is covered. The bands widen as the time horizon is extended, indicating increased uncertainty about oil price outcomes.

RPIX inflation remained constant at 2.2% in the last three months of 1999, below the government's $2^{1/2}$ % target. Retail goods and services price inflation have diverged further: services price inflation has risen to 3.9%, while goods price inflation has fallen to 0.3%. Commodity price rises, notably for oil, have put upward pressure on producer input prices, which have increased sharply in recent months. Producer output price inflation has also risen but remains low. Strong competitive pressures and the appreciation of the sterling effective exchange rate have continued to put downward pressure on producer and retail goods price inflation. Measures of domestically generated inflation have fallen, but remain in the $2^{1}/_{2}$ %–4% range.

4.1 Raw materials and commodity prices

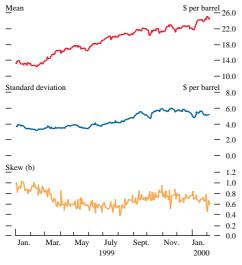
World prices for crude oil have risen further since the November *Report* to their highest level since 1991. The one-month forward price of Brent crude oil averaged more than \$25 per barrel in January. Oil prices have been underpinned by restrictions on production, which were renewed by the Organisation of Petroleum Exporting Countries (OPEC) in September. These are due to be reviewed at the end of March. Oil prices have also been supported by the improved prospects for world demand, particularly the strong recovery in Asia, which is a relatively intensive user of primary commodities.

Oil futures prices may contain useful information about the expected future spot price.⁽¹⁾ Futures prices indicate that the price of oil is expected to decline over the course of this year. That may partly reflect expectations that non-OPEC oil producers will increase supplies. But a range of outcomes is possible, as illustrated by the risk-neutral probability distribution of oil prices derived from futures prices, shown in Chart 4.1. The increasing width of the distribution illustrates that the market is more uncertain about prospects for oil prices further ahead in time. But it is possible to abstract from this 'time-to-maturity' effect and see how the implied distribution for oil prices a fixed number of months

4

⁽¹⁾ See for example, Fama, E, and French, K, 'Commodity futures prices: some evidence on forecast power, premiums, and the theory of storage', *Journal of Business*, January 1987, pages 55–73.

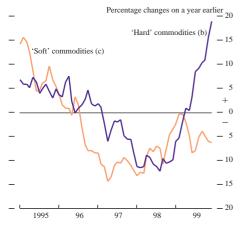
Chart 4.2 Information from futures prices about the oil price six months ahead^(a)



Sources: NYMEX and Bank of England

Derived from option prices for West Texas Intermediate oil (WTI). Prices for WTI tend to be around \$1 per barrel higher than those fo Brent crude oil

Chart 4.3 Bank sterling non-oil commodity price index(a)



(a) Monthly average of prices of primary commodities, weighted by their shares in UK demand.

Includes prices of non-oil fuels and metals. Includes prices of domestically produced and imported foodstuffs and non-food agricultural products. (b) (c)

ahead has changed over time.⁽¹⁾ Chart 4.2 shows features of those distributions. During the second half of 1999, uncertainty about the oil price six months ahead increased, but has since stabilised. The positive skew indicates that the market assesses the balance of risks to future oil prices to be on the upside, but slightly less so than at the beginning of 1999, before oil prices rose. Consistent with the information from oil futures prices, the MPC has assumed in its central projection that the Brent oil price will decline to around \$18 per barrel by the start of 2002.

Non-oil commodity prices are also higher than expected at the time of the November Report. In December the Bank's index of sterling non-oil commodity prices was 3.7% higher than a year earlier. The prices of hard commodities such as metals and non-oil fuels have risen since the beginning of 1999, as world industrial production has picked up (see Chart 4.3). The prices of soft commodities such as food and other agricultural products remain well below their levels a year earlier, although they rose slightly in November and December. Soft commodity prices are also likely to have been affected by stronger world economic activity, but in addition they have been affected by weather-related supply shocks. Reflecting the stronger outlook for world growth, the Committee now assumes a faster increase in non-oil commodity prices in 2000, with some slowdown thereafter.

4.2 **Import prices and the exchange rate**

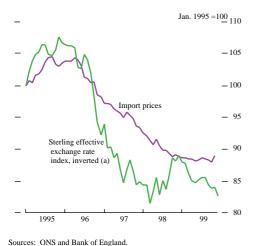
Sterling import prices of goods and services in 1999 Q3 were 0.3% lower than in the previous quarter, and 1.9% lower than a year earlier. Within the total, services import prices fell by 0.8% in Q3, whereas goods import prices were flat. Even excluding oil, import prices for goods have stabilised, despite the appreciation of the sterling effective exchange rate in 1999 (see Chart 4.4). Higher oil and other commodity prices are beginning to push up world producer prices. But world export prices were weaker than expected in Q3, as a sharp decline in Japanese export prices offset increases in other countries. Japanese manufacturers have reduced local currency prices in response to the appreciation of the yen.

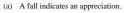
Consistent with the upturn in global activity, the MPC's central projection assumes that world export price

A positive skew indicates that the market assesses the balance of risks (b) to be on the upside

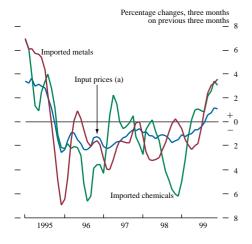
⁽¹⁾ For a discussion of the technique, see Clews, R, Panigirtzoglou, N and Proudman, J, 'Recent developments in extracting information from options markets', Bank of England Quarterly Bulletin, February 2000, pages 50-60.

Chart 4.4 UK sterling non-oil goods import prices and the exchange rate









(a) Excluding the food, beverages, tobacco and petroleum industries.

Table 4.A Manufacturers' costs and prices

Percentage changes on a year earlier

	<u>1999</u> July	Aug.	Sept.	Oct.	Nov.
Weighted costs (a)	1.1	1.1	$\begin{array}{c} 1.4 \\ -0.6 \\ 6.2 \\ 0.0 \\ 1.8 \\ 0.7 \end{array}$	1.5	2.1
Unit labour costs (46.8%)	0.3	-0.2		-0.5	-0.8
Materials and fuels (30.1%) (b)	2.9	4.2		6.7	10.0
Imports of finished goods (6.9%)	-1.1	-1.1		-1.2	-0.6
Bought-in services (16.2%)	1.9	1.8		1.8	1.8
Output prices	-0.1	0.3		0.9	1.2

Sources: ONS and Bank of England.

(a) Percentages shown in brackets reflect weights of components, derived from 1990 input-output tables for the United Kingdom.
(b) Includes imports of semi-finished goods.

inflation increases over the forecast period. However, the weaker-than-expected outturn in 1999 Q3 and further appreciation of the sterling effective exchange rate mean that the profile of sterling import prices is somewhat lower than assumed in November.

4.3 Costs and prices in manufacturing

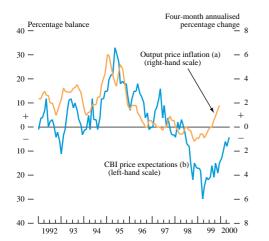
Manufacturers' input prices have continued to rise sharply. The annual rate of inflation reached 12.0% in December. A year earlier prices had fallen by 8.9%. That turnaround mainly reflects the direct pass-through to manufacturers of the rise in crude oil prices, which more than doubled in the year to December. But more recently there has also been an increase in the price of imported metals and chemicals, in particular of plastics (see Chart 4.5), reflecting the increase in hard commodity prices and the importance of oil as an input to the chemicals sector. The CIPS manufacturing survey continued to indicate rising input prices: the input price index rose from an average of 51.5 in Q3 to 55.7 in Q4, well above the no-change level of 50. The survey suggested that the rate of increase had been moderated by the appreciation of sterling.

Manufacturers' unit labour costs have fallen since the beginning of 1999. In November, unit labour costs were estimated to be 0.8% lower than a year before: measured productivity growth has risen sharply in recent months, as output growth has risen, more than outweighing a rise in wage growth. But this has not been sufficient to offset the effect of higher material and fuel prices: overall cost inflation in the manufacturing sector has increased in recent months (see Table 4.A).

Manufacturers' domestic output prices have also risen recently, even excluding petroleum products: excluding food, beverages, tobacco and petroleum, the three-month annualised rate of output price inflation reached 1.6% in December. The CBI monthly industrial trends survey still suggests that most manufacturing firms expect to reduce their prices in the coming months, but the balance has become less negative since February 1999 (see Chart 4.6).

Though domestic output prices have risen, the rate of increase has remained below that in weighted costs. That suggests that manufacturers have continued to reduce their domestic margins. The outlook for manufacturers' output prices will partly depend on how firms adjust their margins. Empirical work has found

Chart 4.6 Producer output price inflation and CBI average price expectations



Sources: ONS and CBI.

(a) Excluding food, beverages, tobacco and petroleum.
 (b) Balance of manufacturers expecting to increase prices over the following four months minus those expecting to reduce prices, adjusted for seasonal variation. This series has been advanced by four months, as it relates to producers' expectations of future prices.

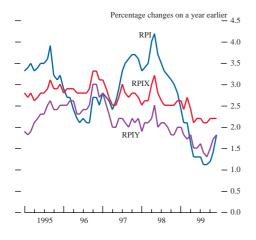
Table 4.BSurveys of service sector prices(a)

	<u>1998</u> Q3	<u>Q4</u>	<u>1999</u> <u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>
BCC service prices balance CIPS service input prices CIPS service prices charged	57.8	54.6	54.9	11.0 55.5 50.9	22.0 54.5 49.2	24.0 57.9 52.3

Sources: CIPS and BCC.

(a) The CIPS survey is a monthly series; the quarterly values shown are averages over the relevant three months. 4.5

Chart 4.7 Retail price inflation^(a)



RPIX = Retail price index excluding mortgage interest payments. RPIY = RPIX excluding VAT, local authorities' taxes and excise duties.

that UK manufacturers' margins are positively related to the strength of demand.⁽¹⁾ The CBI quarterly industrial trends survey indicates that capacity utilisation has increased, as demand has recovered in recent quarters. And the January CIPS survey indicated that suppliers' delivery times had lengthened for the sixth successive month. The Bank's regional Agents have, however, continued to report downward pressure on manufacturers' margins in recent months.

4.4 Costs and prices in the service sector

In contrast to the decline in the manufacturing sector, unit labour costs in the service sector are estimated to have risen by more than 4% in the year to 1999 Q3. And the CIPS service sector survey indicated that input cost inflation had increased in recent months: the input price index rose from an average of 54.5 in Q3 to 57.9 in Q4, with firms citing higher wage inflation as a significant factor. While competitive pressures were reported to have been important in containing selling prices, the survey's measure of prices charged also increased in Q4, rising above the no-change index level of 50 (see Table 4.B). The BCC survey also indicated that services output price inflation picked up in 1999 Q4.

Retail prices

The rate of retail price inflation excluding mortgage interest payments (RPIX) has remained below the government's $2^{1/2}$ % target since the November *Report* (see Chart 4.7). But RPI inflation has risen, to 1.8% in December, as the effects of earlier declines in mortgage interest rates have dropped out of the calculation. The most recent rises in official interest rates will also tend to raise RPI inflation relative to RPIX inflation.

While RPIX inflation remained constant at 2.2% in the last three months of 1999, the gap between goods and services price inflation increased (see Chart 4.8). In December this gap was at its widest since September 1992. Retail services price inflation rose from 3.6% in September to 3.9% in December. Annual inflation in the cost of car insurance rose, and contributed 0.3 percentage points to annual RPIX inflation in December. But, consistent with survey evidence on service sector output prices, other components of retail services price inflation also rose.

⁽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.

⁽¹⁾ See 'The cyclicality of mark-ups and profit margins: some evidence for manufacturing and services', Small, I, *Bank of England Working Paper*, No 72, December 1997.

Chart 4.8 Goods and services price inflation

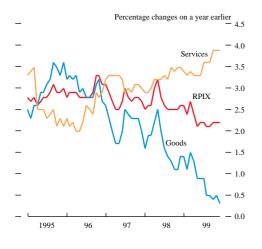


Chart 4.9 **Contributions to RPIX inflation**

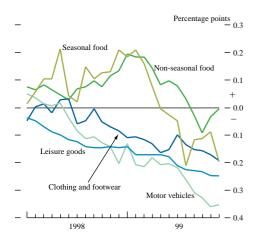
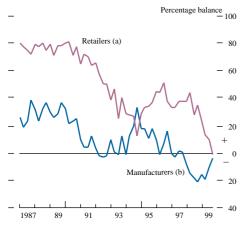


Chart 4.10 Retailers' and manufacturers' selling price expectations



Source: CBI

(a) Balance of retailers expecting to raise prices over the next month Bulance of manufacturers expecting to reduce prices. Balance of manufacturers expecting to raise prices over the next four months minus those expecting to reduce prices. (b)

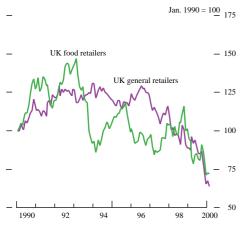
Retail goods price inflation fell to 0.3% in December, the lowest rate since 1975. Over the past year the price of road fuel has risen sharply, contributing 0.7 percentage points to annual RPIX inflation in December, but the prices of many other retail goods are falling. There are some important sector-specific effects. The decline of 6% in the price of motor vehicles made the largest negative contribution (0.35 percentage points) to annual RPIX inflation in December (see Chart 4.9). That reflects a fall in second-hand car prices, as new car prices do not enter the RPI. But second-hand car prices may have been affected by expectations about the consequences of the Competition Commission inquiry into new car retailing (see the box on pages 16–17). The contribution of non-seasonal food price inflation fell between March and October 1999, possibly reflecting an increase in the degree of competition between supermarkets. But non-seasonal food prices rose slightly in November and December.

The decline in retail goods price inflation could also be indicative of an increase in the degree of price competition in the retail sector more broadly. New technology, such as the Internet, may be enabling new firms with lower unit costs to enter the retail market. That technology may also have lowered the cost to consumers of searching across different retailers to obtain alternative prices. If, as a result, consumer demand has become more price-sensitive, then we might expect to see a decline in retailers' margins. During the period of adjustment to a lower level of unit costs, or margins, retail price inflation may decline temporarily.

It is extremely difficult to assess movements in aggregate retailers' margins. Bank estimates suggest that retailers' weighted costs in 1999 Q3 were almost unchanged relative to a year ago, while retail goods prices (excluding indirect taxes) have fallen. That suggests that aggregate retailers' margins may have declined relative to a year ago. But at present it is not possible to identify from official data a significant structural change in the relationship between retail prices and costs.

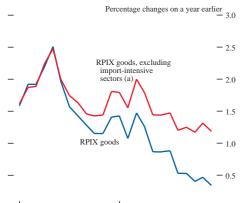
Surveys may contain some information about the prospects for retail margins. The balance of retailers in the CBI distributive trades survey expecting to raise prices fell to -1 in November, the lowest since the survey began in 1983 (see Chart 4.10). By contrast, the CBI quarterly industrial trends survey indicates that fewer manufacturers are expecting to reduce prices. That may indicate downward pressure on retail margins in the near

Chart 4.11 Retailers' relative share prices^(a)



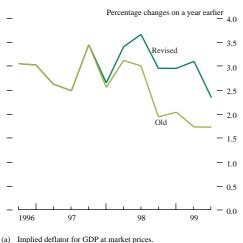
(a) Indices are relative to the FTSE All-Share. End-month data

Chart 4.12 Retail goods price inflation



^{-0.0} 1998 99

Chart 4.13 GDP deflator(a)





term. Looking forward, if the impact of lower retail margins on profits is expected to be significant, we might see some effect on retailers' share prices. Chart 4.11 shows that in recent months, retailers' share prices have fallen considerably relative to the market as a whole and, indeed, in absolute terms as well.

The MPC has maintained its assumption that the prospective increase in competitive pressures is rather more widespread than has been observed in the past. The Committee has therefore assumed that there will be some overall compression of retailers' margins over the forecast period, which will put downward pressure on retail prices. The Committee has also maintained the assumption that there will be substantial reductions in the prices of some services provided by utilities following decisions by the relevant regulatory bodies.

4.6 **Other price indices**

Retail price inflation can be thought of as a weighted average of domestically generated inflation (DGI) and imported inflation. It is apparent from Chart 4.12 that the weakness of import prices, especially in sterling terms following the appreciation of the exchange rate, has continued to exert downward pressure on retail price inflation. DGI provides some information on the pressure being exerted on prices by domestic demand.

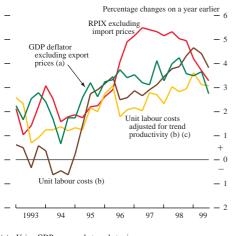
One measure of DGI is based on the GDP deflator. Annual inflation of the GDP deflator was revised up significantly in the latest set of National Accounts, from 1.7% to 2.4% in 1999 Q3 (see Chart 4.13). That largely reflected upward revisions to the household and government consumption deflators. The revisions to the household consumption deflator were mainly accounted for by new data on rents. Data on rents are used by the ONS to estimate the imputed rents for owner-occupied housing, a component of nominal consumer spending.

The revisions aligned the GDP deflator measure of DGI (excluding export prices) more closely with the other measures (see Chart 4.14). These suggest that domestic inflationary pressures eased during the first three quarters of 1999, but remain in the $2^{1/2}$ %–4% range.

The economy is not only subject to external shocks: individual products and services are continually affected by changes in technology and consumer preferences. These will cause relative prices to change. Sharp

⁽a) Import-intensive sectors are defined as those non-food sectors Import-intensive sectors are defined as those non-food sectors producing consumer goods and services where 1990 input-output tables suggest that more than two thirds of the sector's inputs originate as imports. They correspond to the following components of the RPI: electrical appliances, other household equipment, clothing and footwear, chemists' goods, motor vehicles, audio-visual equipment, CDs and tapes, toys, photographic equipment and sports goods.

Chart 4.14 Measures of domestically generated inflation

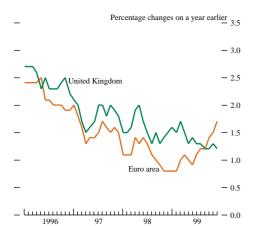


(a) (b)

Using GDP measured at market prices. Using National Accounts measures of employee compensation and productivity growth. Adjusted using long-run trend productivity growth of 2%. (c)







movements in relative prices may obscure underlying developments in inflation. It is therefore useful to look at measures of inflation that remove such large price changes from the sample. The Bank calculates a measure of inflation that excludes the largest and smallest 15% of weighted price changes in the individual components of the retail price index. This trimmed mean measure of RPIX inflation has remained at 1.6% for the past five months.

Annual inflation in the UK Harmonised Index of Consumer Prices (HICP) is now below that in the euro area, standing at 1.2% in December (see Chart 4.15). HICP inflation in the United Kingdom was above that in the euro area over the past three years, but consumer price inflation in the euro area has risen in recent months. The increase partly reflects the depreciation of the euro effective exchange rate in 1999, as well as higher oil and non-oil commodity prices.

4.7

Summary

Oil and non-oil commodity prices have risen further, putting upward pressure on producers' input costs, but the appreciation of the sterling effective exchange rate has continued to moderate the impact on UK producer and retail goods price inflation. An increase in the degree of competition between firms may have added to downward pressure on goods price inflation. Retail goods and services price inflation have diverged further in recent months: a decline in retail goods price inflation has been offset by a rise in retail services price inflation. RPIX inflation remained at 2.2% in the last three months of 1999, below the government's $2^{1/2}$ % target.

5 Monetary policy since the November *Report*

This section summarises the economic developments and monetary policy decisions taken by the MPC since the November *Report*. The minutes of the November, December and January meetings are attached as an Annex to this *Report*. The Bank of England's repo rate was maintained at 5.5% in December, and was raised to 5.75% in January. In February it was raised to 6%.

In the November *Report*, the MPC's central projection was for annual real GDP growth in the 2.5%-3% range during 2000 and 2001, higher than in 1999. The Committee's best collective judgment of the prospects for RPIX inflation was that it was most likely to decline to just below 2% by the end of 2000, before rising to the $2^{1/2}$ % target level in late 2001. Changes relative to the August projection reflected upward pressure on inflation from stronger domestic demand and higher earnings, and downward pressure from the higher exchange rate and declining price-cost margins. There were considerable uncertainties surrounding inflation prospects, for example about the future course of the exchange rate, earnings and margins. Alternative judgments on these issues led some Committee members to prefer profiles for inflation that would be up to $\frac{1}{2}$ % higher or lower at the two-year forecast horizon than the central projection representing the best collective judgment.

At its meeting on 8–9 December, the Committee discussed new information relating to the world economy. US output growth continued to appear robust, with a major contribution coming from strong consumption growth. This was supported partly by strong equity prices, though there was a continued downside risk of an equity market correction. Data revisions had made the recent GDP trend in Japan hard to discern, but the level of output in Q3 appeared to be broadly as expected at the time of the November *Report*. Activity in the rest of the industrial world, including the euro area, was either as expected or slightly firmer, as was news from emerging market economies.

UK final domestic demand in Q3 had turned out to be broadly as expected at the time of the November *Report*, though consumption had been stronger and investment weaker than expected. The interpretation of the

consumption data was made more difficult by the changing seasonal pattern of car purchases resulting from changes in the timing of the introduction of new registration letters. Data for money and household credit suggested that consumer spending would remain robust. Notes and coin growth was particularly strong, but temporary special factors relating to the millennium date change were probably at work. Asset prices were also likely to underpin consumption growth: the FTSE All-Share index was up by 9% since the November *Report* and annual house price inflation was above 10% on most measures. With regard to investment, it was considered likely that the data might be revised up, but there was also a possibility that the recent slowdown partly reflected a 'millennium pause' in IT-related investment spending.

There was little news in UK labour market data since the November meeting. However, the Bank's regional Agents reported that there was more widespread evidence of skill shortages. Some of the Agents' contacts had also expressed concern about prospects for the coming pay round. But such reports were not yet supported by evidence from other sources. The Committee had insufficient new evidence to determine whether earnings growth was diverging markedly from the November central projection. There were, however, signs that productivity in manufacturing had picked up, though this rise in productivity would need to be more widespread if potential higher earnings growth and demand pressures were not to lead eventually to higher inflation.

The main news on commodity prices was a sharp rise in the price of oil in November. This came on top of rises earlier in the year, which were contributing to a substantial rise in producer input prices. However, the short-term prospects for UK retail price inflation seemed little changed, owing to offsetting effects from the higher exchange rate, lower margins (partly associated with greater competition) and lower utility prices. Downward pressures on goods price inflation were especially strong, and the gap between goods price and service price inflation had widened further.

The Committee discussed whether there were any special tactical considerations affecting monetary policy arising from Y2K considerations. Uncertainties about the size of millennium-related effects might make it more difficult than usual to interpret economic data. However, it was considered that the year-end 'fog' might not be that much thicker than usual, and that millennium factors should not rule out an interest rate change in December or January if that were warranted.

With regard to the immediate policy decision, there were two broad views within the Committee. Proponents of one view favoured no change, while supporters of the other favoured an immediate rise of 25 basis points. Those who favoured no change in rates took the view that there was insufficient news to change the stance adopted in November, or thought that although medium-term risks might have increased slightly, the short-term prospects for inflation were at least as weak as in the November projection, so that further tightening could not be justified. It was thought sensible to wait for more information to emerge before taking any further action. The case for a rise was partly based on the assessment that the news over the month increased the likelihood of higher inflation beyond the short run. World demand prospects had improved and UK consumption was looking stronger than expected. The November projection had anyway been for a rising inflation profile at the two-year horizon. On this view, the risks of a monetary policy mistake were mainly on the upside. The Committee voted to maintain the Bank's repo rate at 5.5%.

At its meeting on 12–13 January, the Committee again discussed news about the progress of the world economy since the November Report. Activity in Asia (other than Japan) and the euro area had strengthened perceptibly, and the euro area was the single most important market for UK exports. US GDP growth had remained very strong in Q3 and consumer confidence had risen to a 30-year high. The US labour market continued to be tight, but there were few signs that higher oil and other commodity prices had been passed through to US retail prices. Higher equity prices may have been reflecting assessments of higher growth prospects, but it remained possible that the stock market was overvalued. The downside risks from a potential stock market correction and from a disorderly adjustment to the growing US trade deficit, for example via a potential fall in the dollar, remained significant. But these risks had been present for some time, and there was not much new information on these issues. Overall, the outlook for world economic growth was now stronger than it had been at the time of the November Report.

In the December National Accounts release, the level of UK GDP in 1999 Q3 was much as expected in the November *Report*, but the pattern and composition of

growth in the previous quarters had altered a little. Growth in 1998 O4 had been revised down, but figures for the first two quarters of 1999 had been revised up. Manufacturing and industrial production grew faster in Q3 than service sector output, but it was possible that the relative slowdown in service sector growth-observed particularly in financial and business services-was partly millennium-related. Final domestic demand growth had slowed somewhat in Q3, but net external demand had picked up considerably in Q2 and Q3. Consumer spending prospects—as indicated by disposable income growth, wealth increases and consumer confidence-seemed to be for robust growth. This assessment was also supported by data on lending for consumption (unsecured lending to individuals plus mortgage equity withdrawal), which had shown a sharp rise. Narrow money had also grown strongly, very probably on account of abnormal millennium-related effects at the year-end, which the Committee expected to unwind during January with no implications for activity or inflation.

UK employment had continued to increase and unemployment had fallen further, but most of the accounting counterpart of the increase in employment seemed to have come from a fall in inactivity. The Bank's regional Agents continued to report increases in skill shortages in some areas, but the Committee recalled that the October CBI survey indicated that skilled labour shortages in manufacturing remained below historical averages. Forward-looking survey evidence suggested further moderate growth in employment in the near term. Overall, the evidence seemed to be of continued tightness and perhaps further tightening of the labour market. The headline measure of whole-economy earnings growth had risen to 4.9% in the year to October, above the level expected, hence the Committee considered that the earnings profile projected in November might need to be raised. It was possible that there were some erratic influences on the latest data, but continued high levels of earnings growth would tend to put upward pressure on inflation if not matched by a significant pick-up in productivity growth.

RPIX growth had remained below target in November, despite the growth in earnings and higher commodity prices (especially oil). Part of the explanation was the strength of sterling, but downward pressure on prices due to greater competitive forces might also have been a factor. There was a range of views about how large and how long-lasting such effects might be. The Committee returned to the issue of whether millennium considerations should influence the monetary policy decision. It was noted that it might be some time before all the distortions to the data were unwound. But such distortions as there were did not seem to be that large relative to normal data uncertainty around the year-end, and there was no strong argument for avoiding a change in monetary policy stance if new information pointed to the need for such a change.

On the immediate policy decision, it seemed clear that the balance of news for prospective medium-term inflation over the past month was on the upside, even though final domestic demand growth had recently slowed and RPIX inflation was below target and seemed likely to remain so for some time. Growth prospects had improved for the United Kingdom's main trading partners, and the determinants of domestic demand, such as wealth, labour income and consumer borrowing, were also looking buoyant. The deterioration in medium-term inflation prospects reflected developing pressures in the labour market and on productive capacity. All members of the Committee were of the view that higher interest rates were now needed. The Committee voted to increase the Bank's repo rate from 5.5% to 5.75%.

At its meeting on 9–10 February, the Committee voted to raise the Bank's reporte from 5.75% to 6%.

Prospects for inflation

6.1 The inflation projection assumptions

The Committee approved this *Report* on 11 February. It contains the Committee's assessment of developments in the economy since November and prospects for the medium term. Charts 6.1 and 6.2 below show projections for GDP growth and RPIX inflation up to two years ahead, and the uncertainties surrounding them. The projections assume that the Bank's repo interest rate will remain unchanged at 6% during the next two years, and are conditioned on the assumptions described below.

There has been a further improvement in the prospects for world activity since the November Report. Output growth in the United States in the second half of 1999 exceeded expectations, and the near-term outlook remains strong. The Committee continues to expect a slowdown in US output growth over the next two years, although there remains considerable uncertainty on its timing and magnitude. Output growth in the euro area has picked up more quickly than expected in November. Forward-looking indicators, such as business confidence and orders, have risen further, supporting the recovery built into the projection. Recent indicators on the Japanese economy have been mixed, but have not significantly altered the broad outlook. There has been a further pick-up in activity in a number of emerging market economies, and prospects have improved over the past three months. Trade flows, within Asia in particular, have risen sharply in recent months. Taking these developments together, the MPC has made a further upward revision to its central projection for world output and trade. The most likely outcome is that growth in UK-weighted export markets will rise from around $5^{1/2}$ % in 1999 to around $7^{1/2}$ % this year, before falling back a little in 2001.

There remain a number of risks to the world outlook and, while the central projection for world activity has been raised since November, the Committee continues to judge that the risks around this projection are weighted to the downside. A sharper-than-expected slowdown in the United States poses the largest risk. Commodity prices have, on balance, been higher than projected at the time of the November *Report*. Oil prices have been higher than assumed earlier, as market conditions have tightened further. The pick-up in non-oil commodity prices in the final quarter of last year was also somewhat stronger than projected in November, as food prices rose for the first time in more than two years. However, stronger-than-expected commodity prices have not been translated into a larger-than-expected increase in output prices. Indeed, reflecting a continuation of strong competition in global markets, prices of manufactured goods and traded services in the third quarter of 1999 were slightly weaker in local currency terms than projected in November.

The Committee expects these competitive pressures to persist, and the outlook for world inflation is little changed from November, despite the improved outlook for world activity and higher oil prices. The projected oil price profile for the next two years has been raised, reflecting recent higher outturns, although the central assumption is that the oil price gradually falls back from current levels to around \$18 per barrel for Brent crude oil-the same level as at the end of the November projection—by the first quarter of 2002. Reflecting the stronger outlook for world growth, the Committee now assumes a faster rise in non-oil commodity prices this year. Rising commodity prices are likely to feed through to higher world prices of manufactured goods and traded services, which are expected to rise in line with the rates of increase projected at the time of the November *Report.* But, reflecting the lower starting-point, the projected level of world export prices is lower than assumed in November. The risks around the projection for world prices are broadly neutral. There is a downside risk given the risk of weaker world activity. But this is counterbalanced by an upside risk should the recent unexpected weakness in world export prices prove to be temporary.

The outlook for UK import prices will be affected by the sterling exchange rate, as well as by the prospects for world prices. The sterling exchange rate has strengthened appreciably over the past three months. The effective exchange rate index (ERI) averaged 109.4 in the 15 working days up to and including 9 February. This forms the starting-point for the exchange rate profile assumed in the projection. It compares with a starting-point of 105.6 at the time of the November *Report* and an implied level of 105.1 for February in the November central projection.

All Committee members agree that there is considerable uncertainty about the outlook for the exchange rate.⁽¹⁾ As in the November *Report*, the Committee agreed to take the average of a constant nominal rate and a path related to the pattern of market interest rate differentials as the basis for the central projection. On this assumption, and adjusting for the conditioning assumption of constant interest rates, the sterling ERI declines to 107.1 by the end of the two-year forecast period, consistent with bilateral sterling exchange rates of \$1.63 and 0.63 against the euro (equivalent to DM3.05). That is a more gradual decline than in November. Some members took comfort that a forecast implied by a recently estimated econometric model of the exchange rate gave a broadly similar profile to the central projection. If, alternatively, the central projection were based on the assumption that the exchange rate moves in line with interest rate differentials, inflation at the two-year horizon would be some 0.3 percentage points higher than in the central projection. GDP growth would also be rather stronger. On the other hand, basing the projection on a constant nominal exchange rate would lower inflation by some 0.3 percentage points at the two-year horizon, and growth would be weaker.

Changes in equity prices affect households' wealth and companies' cost of capital. Equity prices have risen further in the past three months. In the 15 working days up to 9 February, the FTSE All-Share index was some 6% higher than in the equivalent period three months ago. The Committee has maintained the central assumption that equity prices will rise in line with nominal GDP over the forecast period.

Household wealth is also affected by changes in house prices. Over the past three months, house prices nationally have risen more rapidly than previously expected, although there are some tentative signs in the activity data that the market may be stabilising. House price inflation is likely to slow, as recent increases in interest rates feed through. The Committee has revised up slightly the assumption for house price inflation. The central assumption is that house price inflation moderates to below 10% this year, and eases further in 2001.

The fiscal plans announced by the Chancellor in the autumn pre-Budget statement on 9 November have been

⁽¹⁾ See the box on page 48 of the November 1999 *Inflation Report* for a discussion of alternative benchmarks for assessing exchange rate prospects.

incorporated into the latest projection. Given the Government's announced plans for nominal spending and the Committee's latest central projection for inflation, the likely growth rate for real government consumption is a little lower than assumed by the Committee in November.

Previous projections have already incorporated assumptions about the effects of the National Minimum Wage, the New Deal and the Working Time Directive. There is no change to the assumptions about the effects of these labour market reforms.

6.2 The output and inflation projections

Output growth strengthened in the second half of 1999. According to the preliminary ONS estimate, GDP rose by 0.8% in the fourth quarter—a similar pace to the third quarter. The four-quarter growth rate quickened to 2.7%, a little above most estimates of the sustainable rise in supply capacity. The pick-up in growth was broadly in line with expectations in the November *Report*, although there have been revisions to the pattern of output and to the composition of demand which may convey information on the near-term outlook. RPIX inflation has remained below target in recent months. Inflation averaged 2.2% in the fourth quarter, in line with the central projection in the November *Report*. The Committee reviewed the medium-term prospects for output and inflation against this background.

The full National Accounts release published in December indicated that the level of GDP in the third quarter was in line with the preliminary estimate incorporated in the November projections. The pattern of growth over the previous year was revised, however, with the new data indicating a more pronounced pause in activity at the end of 1998, followed by a rather stronger recovery in early 1999. The data release also incorporated revisions to the composition of demand. In particular, final domestic demand was revised down as new information suggested that consumer spending had grown somewhat less robustly than previously estimated, and this outweighed an upward revision to the level of business investment. The downward revision to final domestic demand was offset by a rather stronger net trade position than previously estimated and by an upward revision to inventories.

The National Accounts release also signalled some improvement in the balance of demand and activity in recent months. The annual growth of final domestic demand now appears to be in the $3\%-3^{1/2}\%$ range, still above a sustainable pace, but slower than the $4\% - 4^{1/2}\%$ rate suggested in previous estimates for the first half-year. The deterioration in the net trade position has, perhaps temporarily, slowed-indeed, in the second and third quarters net trade made a positive contribution to growth. Moreover, the run-down of inventories, which had dampened growth in the first half of the year, has ended. The balance of output growth has also improved somewhat. Aggregate manufacturing output picked up in the second half of 1999, and may now be rising close to rates in the service sector. Nonetheless, the overall picture masks significant differences across industrial sectors, and the further strengthening of sterling in recent months will dampen prospective growth in those industries most heavily exposed to international competition.

Consumer spending remains robust. Although the level of spending was revised down in the latest release, expenditure was $3^{1/2}$ % higher in the third quarter than a year earlier. The underlying strength may be greater if consumers are deferring spending on cars until the outcome of the Competition Commission report on the car market is known. New car registrations have been very weak in recent months, although the underlying trend is also obscured by the new pattern of registration letter changes. Spending on other consumer goods remains firm. Retail sales rose by well over 1% in the fourth quarter. Moreover, indicators of prospective spending are buoyant. Real income growth is strong, household wealth has risen sharply in recent months, consumer confidence has improved further, and the money and credit data support a robust spending outlook.

In reviewing the outlook for consumption, the Committee assigned weight to evidence suggesting that changes in wealth had a larger short-term impact on spending than previously thought. Drawing on this evidence, and given the higher-than-expected increases in wealth and labour income, the Committee has revised up the near-term profile for consumer spending relative to the November *Report*. Annual growth rates may remain in the $3\%-3^{1/2}\%$ range for much of 2000. But spending growth is then expected to lose momentum, as wealth and labour income growth slow in response to the recent increases in interest rates and to the impact of the higher real exchange rate on activity and employment. Consumer expenditure growth may consequently be rather weaker in 2001 than in the November projection.

There was a marked slowdown in the growth of business investment in 1999, although the level of spending has been revised up over the past two years. Indeed, business investment spending fell in the third quarter, for the first time since 1996. The slowdown follows several years of very rapid growth, partly linked to heavy investment in IT-related equipment. The recent slower growth of investment may signal that the gap between firms' actual capital stock and desired levels has narrowed. In that event, and in the absence of a major change in prospective growth or in the cost of capital, the ratio of business investment volumes to GDP might level off at around current levels. This assumption is consistent with the recent investment pattern and is incorporated in the central projection. Around this broad trend, the Committee also attached weight to reports from the Bank's Agents that part of the recent slowdown might reflect a temporary pause in IT-related spending in 1999, if companies were cautious about making new investment before the year-end once systems had been tested as year-2000 compliant. There could be something of a rebound in 2000 as deferred investment comes on-stream. But, overall, business investment growth is likely to be rather softer than in the November projection, reflecting the weaker recent momentum and slower overall activity growth. Risks to business investment are weighted to the upside. That reflects various factors. Surveys suggest rather stronger short-term growth. More rapid investment in systems to support electronic commerce could stimulate faster growth in business investment than in the central case. Another risk is that growth in housing and industrial construction could be faster. No change has been made to the government investment projection: nominal public sector investment is assumed to rise in line with announced public spending plans.

Inventory levels were revised upwards in the latest National Accounts release, but there was no significant change to the previous quarterly pattern. Following a substantial run-down in inventories in the first half of 1999 as firms shed excess stocks, the data for the third quarter and recent surveys suggest that stock levels are now closer to firms' desired levels, although some inventories may have been built up for precautionary reasons prior to the millennium date change. The Agents suggest that any such build-up was small, and that additional inventories should be quickly run off. The Committee continues to expect that firms will economise further on inventory holdings—for example by taking additional advantage of IT developments to control stock levels—and that the ratio of inventories to output will fall gradually over time.

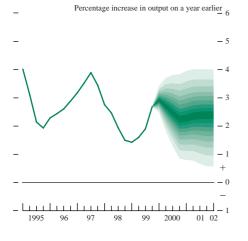
Export growth strengthened in 1999 as world trade growth recovered. The trend in exports is hard to gauge as the data have been quite volatile. There was a remarkable rise of 6% in export volumes in the third quarter, but recent monthly data indicate some fall back in the fourth quarter. Surveys of export trends indicate that there has been some improvement in short-term prospects. Exports may continue to rise more rapidly in the near term than was assumed in the November *Report*, stimulated by the stronger growth in UK export markets. But faster growth in exports is likely to be temporary. Sterling has appreciated significantly in recent months. Moreover, overseas competitors' export prices in local currency terms are lower than assumed in November, adding to competitive pressures on UK exporters. Export growth is likely to slow as sales adjust to the higher real exchange rate. The medium-term outlook for exports is weaker than in November as a result.

Import volumes also strengthened markedly in the third quarter. It is possible that weaker import growth earlier in the year was associated with the inventory cycle: firms may have temporarily reduced demand for imports in order to meet a proportion of final demand by running down stocks. Import growth has recovered as the inventory correction came to an end. Import volume growth is likely to remain strong over the next two years, supported by robust consumer spending growth in the near term and by the higher sterling exchange rate.

Taking exports and imports together, the outlook for net trade is weaker than in the November projection. The further rise in the sterling exchange rate, together with the lower profile for competitors' export prices, outweighs the upward revision to UK export market growth. The current account deficit is likely to widen as import growth outstrips that of exports.

Business surveys and information from contacts of the Bank's regional Agents are consistent with a continuing improvement in output in the near term. Demand for labour remains firm, although employment growth has slowed a little. Unemployment is at its lowest for 20 years. Some of the recent growth in employment has been accounted for by a reduction in inactivity, as an improving labour market has encouraged greater numbers to seek work. There are signs in both surveys

Chart 6.1 Current GDP projection based on constant nominal interest rates at 6%



The fan chart depicting the probability distribution for output growth is rather like a contour map. At any given point during the forecast period, the depth of shading represents the height of the probability density function over a range of outcomes for output. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of the probability until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating increasing uncertainty about outcomes.

and Agents' reports that skilled labour shortages have increased over the past quarter, although in the case of the CBI survey for manufacturing the rise is only to the long-run historical average.

Drawing these elements together, the central projection for four-quarter GDP growth is shown in Chart 6.1.⁽¹⁾ The momentum in growth is fuelled by buoyant final domestic demand. Nonetheless, the pace of overall GDP growth may slow a little from above-trend rates in the coming quarters, as the effects of the higher real exchange rate and monetary policy tightening work through. Four-quarter growth is likely to settle in the $2^{1/4}\%-2^{1/2}\%$ range over the next two years. The outlook is a little softer than in the November projection. Although higher income and wealth will spur more rapid consumer spending growth in the near term, the stimulus will be more than outweighed over the next two years by the impact of the higher exchange rate and past interest rate increases.

Recent Inflation Reports have highlighted the considerable uncertainty surrounding the short-term links between activity and inflation. It was noted in both the August and November Reports that output growth had strengthened more quickly in early 1999 than previously estimated by the Committee, while at the same time RPIX inflation outturns had been lower than earlier projected. Interpreting the evidence on the links between activity and inflation remains difficult. Over the past three months, output growth and inflation have been broadly in line with the November central projection, but this has provided little information on the likely relationship over the next two years. A wide range of factors can influence the link, for example: global price trends; exchange rate prospects; labour cost pressures; and developments in profit margins and pricing behaviour more generally, as well as the likely path for output and demand pressure. And, of course, central to the projections is an assessment of the monetary policy stance, which ultimately determines the rate of inflation in the medium term. The Committee reviewed the recent evidence on these various influences and reconsidered the forecast assumptions.

Monetary indicators provide mixed signals on the outlook. Aggregate broad money growth remains weak. But that probably conveys little information on overall prospects: recent movements in the aggregate continue to be dominated by falls in deposits held by other

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

financial corporations which have little direct link with nominal spending. Excluding this component, annual broad money growth appears stable. Household credit data show greater strength, and corroborate the buoyant near-term outlook for consumer spending. Total lending to individuals has risen by more than 9% in the past year, the fastest increase since the early 1990s. Narrow money growth also picked up in 1999, consistent with a pick-up in retail sales growth: recent data have, however, been distorted by swings in cash holdings over the millennium date change. Monetary policy has tightened since November, with the Bank's reporte up by 50 basis points. The increase in short-term rates was a little above market expectations three months ago, and longer-term yields have increased a little since the November Report.

Although pay settlements are fairly stable and if anything drifting down, nominal earnings growth has edged up in recent months, and the latest outturns for earnings are stronger than expected three months ago. A number of factors may account for the rise in wage drift, including higher merit awards and bonuses as firms pay more to retain and recruit staff, a change in the overtime trend as activity recovers, and a change in the composition of the labour force towards higher-skilled workers. There are some indications from contacts of the Bank's regional Agents that job losses in manufacturing industry over the past year have been disproportionately weighted towards lower-skilled and lower-paid workers, and also that firms taking on new staff have sometimes had to pay a premium over existing pay rates.

The Committee has revised up the path for nominal earnings growth since the November forecast. The stronger-than-expected outturns in recent months suggest rather greater momentum than previously envisaged. Future nominal earnings growth may also be supported by a rather stronger profits position than expected three months ago. Since the November *Report* there has been a significant upward revision to estimates of the share of profits in national income in recent quarters. The stronger profit position could indicate that firms will be less resistant to upward pressure on real wages than expected in November.

There are signs in the latest data that labour productivity growth is strengthening, especially in manufacturing. The improvement is in line with the cyclical recovery projected in November. The Committee continues to expect that labour productivity growth will return to its long-run historical average trend over the next two years. Stronger productivity growth acts to dampen upward pressures on costs, for example from faster growth in earnings.

Productivity growth is a key determinant of the supply potential of the economy. Faster productivity growth on a sustained basis would raise the trend growth rate. Estimating the long-term trend growth rate is difficult. Productivity growth varies over the economic cycle and is hard to measure. It is difficult to separate changes in the long-run trend from variations over the cycle and from normal random fluctuations and measurement error. The Committee consequently places emphasis on empirical trends as the best guide to estimating long-term productive potential, but is alert to any evidence of structural change. Over the past 40 years, labour productivity in the United Kingdom has risen by around 2% per annum. That remains the central projection for the long-term trend.

The November projection incorporated a number of adjustments to the inflation outlook, reflecting the possibility that there may be a further compression of price-cost margins in a number of sectors, which could have a temporary impact on inflation as the adjustment to a lower level of margins takes place. Although equity prices overall have risen, the share prices of UK retailers have fallen sharply over the past year, consistent with a weaker outlook for retail profitability and the possibility of a compression of price-cost margins. The share prices of utilities have also declined substantially, as regulators have announced substantial cuts in prospective prices.

The best collective judgment is that these adjustments should be increased a little in the February projection. Competitive pressures in some sectors, such as cars, appear to be intensifying more rapidly than judged three months ago. Although there is considerable uncertainty surrounding both the magnitude and duration of the potential impact of such developments on aggregate inflation, the adjustment in the central projection assumes that these effects take place throughout the forecast period, reducing inflation by around 0.25 percentage points in the first year and by 0.3 percentage points in the second. The latest evidence on utilities prices is consistent with the November *Report* and so the previous adjustments have been maintained in the central projection. Different Committee members prefer alternative assumptions for margins adjustments, reflecting different views on the intensification of competitive pressures and on the impact of these pressures on inflation. Some Committee members consider that the adjustments should only affect aggregate inflation for a short period, reflecting the stickiness of prices. These Committee members prefer a smaller adjustment to inflation on account of margin adjustments, especially in the second year. On this view, inflation at the two-year horizon could be up to 0.3 percentage points higher than in the central projection. Other Committee members consider that the central projection attaches insufficient weight to the possible second-round effects of lower margins on costs, with further consequent effects on prices. They also judge that downward pressures on car prices and from expanding use of the Internet could be larger. These Committee members prefer alternative assumptions on margin pressure that would lower inflation further in the first year of the forecast, building up in the second year to leave inflation at the two-year horizon up to 0.4 percentage points lower than in the central projection.

Putting the above assumptions together, the Committee's best collective projection for the twelve-month RPIX inflation rate—based on the assumption that nominal interest rates are held constant at 6%—is shown in Chart 6.2.⁽¹⁾ Alongside is the projection from the

Percentage increase in prices on a year earlier 5

Chart 6.2 Current RPIX inflation projection based on constant nominal interest rates at 6%

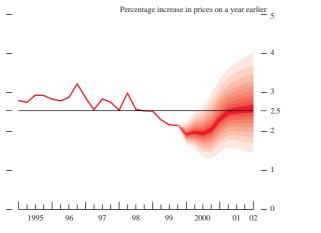
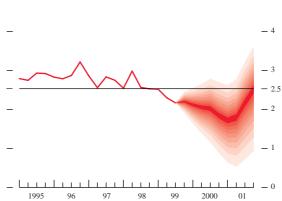


Chart 6.3 RPIX inflation projection in November based on constant nominal interest rates at 5.5%



The fan chart depicting the probability distribution for inflation is rather like a contour map. At any given point during the forecast period, the depth of shading represents the height of the probability density function over a range of outcomes for inflation. The darkest band includes the central (single most likely) projection and covers 10% of the probability. Each successive pair of bands is drawn to cover a further 10% of the probability, until 90% of the probability distribution is covered. The bands widen as the time horizon is extended, indicating increasing uncertainty about outcomes. See the box 'How fan charts are drawn' on page 52 of the February 1999 *Inflation Report*.

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

November *Report*, which was based on constant interest rates at 5.5% (see Chart 6.3).

There are some changes to the shape of the inflation profile. The central projection is for inflation to edge down a little further over the next few months as pressures on margins intensify and cuts in domestic utilities prices take effect. The recent appreciation of the exchange rate will also press down on prices. Inflation then starts to rise towards the target as pressures from the labour market build and as the temporary effects on measured inflation from lower domestic water and electricity prices unwind. Inflation rises to around the target level by the middle of 2001 and then remains at around that level. The trough in inflation is rather shallower and occurs rather earlier than in the November projection, and the rise in inflation from the trough is less steep than before. A combination of factors accounts for this outcome. In the near term, the impact of higher nominal earnings and unit labour cost growth is partly offset by the higher exchange rate. But by the end of this year, stronger labour cost pressures dominate and put upward pressure on inflation relative to the November projection. The rise is less steep thereafter as activity growth is rather softer, helping to dissipate earnings pressure, and as the effects of structural pressures on profit margins are stronger than assumed in November.

Risks around the central projection for activity are weighted slightly to the upside in the first year, reflecting the possibilities of faster business investment growth, and of overseas competitors raising their export prices more quickly than projected, which would improve UK export prospects. These more than outweigh the downside risk from a weaker world growth outlook. But the latter risk builds over time, and implies that the overall risk to UK activity growth is weighted slightly to the downside in the second year. Inflation risks are weighted slightly to the upside in both years. The prospect of faster activity growth in the first year would push up inflation, and the momentum would tend to keep inflation higher in the second year, even though the risks to output growth gradually shift towards the downside. Charts 6.4 and 6.5 show the overall balance of risks to inflation at the two-year horizon. Table 6.A presents the Committee's best collective judgment of the probabilities of various outcomes for inflation and GDP growth.

There remain a number of major uncertainties in the outlook. On some key issues, certain Committee members prefer to make a different assumption to that

Table 6.A

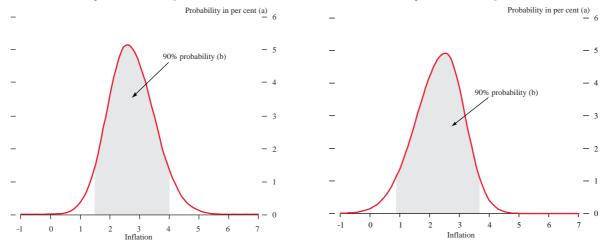
The MPC's expectations for RPIX inflation and GDP growth based on constant nominal interest rates at 6%^(a)

RPIX inflation

Probability, per cent	Range:					
	less than	1.5% to	2.0% to	2.5% to	3.0% to	more than
	1.5%	2.0%	2.5%	3.0%	3.5%	3.5%
2000 Q4	10	30	35	19	5	1
2001 Q4	5	12	24	26	19	14
2002 Q1	5	12	22	25	19	17
GDP growth						
Probability, per cent	Range:					
Probability, per cent	Range: less	0%	1%	2%	3%	more
Probability, per cent		0% to	1% to	2% to	3% to	more than
Probability, per cent	less					
Probability, per cent 2000 Q4	less than	to	to	to	to	$\frac{4\%}{4}$
	less than 0% <1	to 1%	to 2%	to 3%	to 4%	$\frac{4\%}{4}$
2000 Q4	less than 0%	to 1%6	$\frac{to}{2\%}$	to <u>3%</u> 41	to 4% 19	than 4%

Chart 6.4 Current projection for the percentage increase in RPIX in the year to 2002 Q1

Chart 6.5 November projection for the percentage increase in RPIX in the year to 2001 Q4



Source: Bank of England.

(a) Probability of inflation being within ±0.05 percentage points of any given inflation rate, specified to one decimal place. For example, the

probability of inflation being 2.5% (between 2.45%) in the current projection is around 5%. The areas shaded light grey contain 90% of the probability, and are consistent with the widest bands shown in Charts 6.2 and 6.3. For further details see 'The *Inflation Report* projections: understanding the fan chart', February 1998 *Quarterly Bulletin*, pages 30–37, and the (b) box on page 52 of the February 1999 Report.

Table 6.B Possible effects on RPIX inflation and GDP growth of the alternative assumptions

Difference from central projection, percentage points

-0.2

RPIX	inflation

	-0.1	0.1	-0.2	0.1
	-0.3	0.3	-0.4	0.3
e 11	Constant exchange ate	UIP exchange rate (a)	Additional downward pressure on margins	$\frac{\text{Weaker}}{\text{downward}}_{\text{pressure}}$

0.2 Assumes the exchange rate moves in line with interest rate differentials (uncovered interest parity), adjusted for the conditioning assumption of constant interest rates in the United Kingdom.

0.1

-0.1

Table 6.C Market expectations of the Bank's official interest rate(a)

Per cent

2001 Q1 2002 Q1

2000				2001				2002
Q1	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	Q1
5.9	6.3	6.6	6.8	6.8	6.8	6.8	6.7	6.7

(a) Based on the interest rate available on gilt-edged securities, including those used as collateral in short-term repurchase contracts, plus a small upward adjustment to allow for the average difference between this rate and the Bank's official interest rate. The data are 15-day averages to 9 February.

incorporated in the central projection in forming their best estimate of the most likely outcome. These judgments are not incorporated explicitly in the fan charts or in Table 6.A, but are shown in Table 6.B, which presents illustrative calibrations of the possible effects of the alternative assumptions.

The alternative assumptions shown in Table 6.B are viewed by the Committee as a series of separate judgments. The net effect of the alternative assumptions preferred by different Committee members leads to a range of views about inflation prospects, emphasising the uncertainties and difficulties in forming judgments on the outlook. These varying assumptions could either raise or lower the inflation profile at the two-year horizon by up to a 1/2 percentage point.

Market expectations of the likely future path of official interest rates are a little higher than in November. Estimates of prospective official rates based on the government bond and gilt repo curve indicate that market expectations are for official rates to rise over the next year to a peak of around $6^{3}/_{4}$ % before drifting down slightly (see Table 6.C). As a consequence, the Committee's projections based on the assumption that official rates move in line with market expectations are for significantly weaker output growth and lower inflation than in the projections based on constant nominal rates (see Charts 6.6 and 6.7). These projections are based on the assumption that, relative to

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

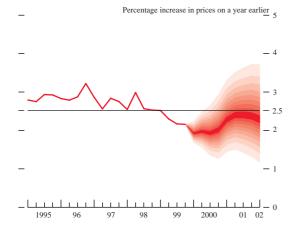
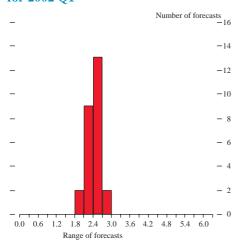


Chart 6.8 **Distribution of RPIX inflation forecasts** for 2002 Q1



Source: Forecasts of 26 outside forecasters as at 28 January 2000.

Table 6.D Other forecasters' expectations of RPIX inflation and GDP growth(a)

RPIX inflation

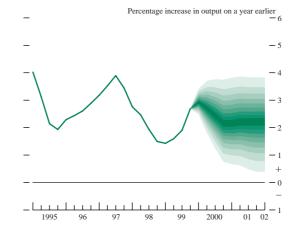
Probability, per cent	Range:					
	less than 1.5%	1.5% to 2.0%	2.0% to 2.5%	2.5% to 3.0%	3.0% to 3.5%	more than 3.5%
2000 Q4 2001 Q4 2002 Q1 (b)	10 7 7	26 18 15	34 35 36	18 25 27	9 11 11	4 5 5
GDP growth						
Probability, per cent	Range:					
	less than	0% to	1% to	2%	3%	more

	0%	1%	2%	3%	4%	4%
2000 Q4	2	5	14	40	31	9
2001 Q4	3	8	23	44	17	5
2002 Q1 (c)	4	9	25	41	15	5

27 other forecasters provided the Bank with their assessment of the likelihood, at three time horizons, of expected twelve-month RPIX inflation and four-quarter output growth falling in the ranges shown above. This table represents the means of the responses for each range. For example, on average, forecasters assign a probability of 7% to inflation turning out to be less than 1.5% in 2002 Q1. Rows may not sum to 100 because of rounding. 26 forecasters. 25 forecasters. (a)

26 forecasters. 25 forecasters. (c)

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



the constant interest rate projection, the exchange rate changes fully in line with the revised path for interest rate differentials. That is uncertain. Should the exchange rate move by less, as some Committee members judged more likely, the path for output growth and inflation would be rather higher than in Charts 6.6 and 6.7.

6.3

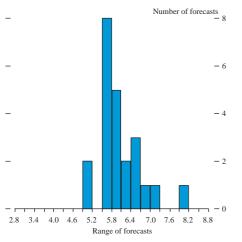
Other forecasts

The Bank asked a sample of external forecasters for their latest projections of inflation and output. Based on information from external forecasters surveyed in late January, the mean forecast for the twelve-month rate of RPIX inflation in 2000 Q4 was 2.2% (with a range of 1.3% to 3.6%), rising to 2.4% in 2001 Q4 (with a range of 1.7% to 3.0%), and remaining at 2.4% in 2002 Q1 (with a range of 1.9% to 2.7%). The distribution of central projections in 2002 Q1 is shown in Chart 6.8. The estimates for 2000 and 2001 are slightly lower than the projections made at the time of the October survey. The forecasters assign a probability of around 43% to inflation being above target in the first quarter of 2002, and a probability of around 57% to it being below (see Table 6.D). A little more weight is placed on lower outturns for inflation than in the November Report.

The forecasters' average projection for GDP growth in the year to 2000 Q4 is $2^{3}/4\%$ (with a range of 2% to $3^{3/4}$ %), falling to $2^{1/4}$ % in the year to 2002 Q1 (with a range of $1^{1/2}$ % to $3^{1/2}$ %). The estimates for GDP growth are little changed from the November Report.

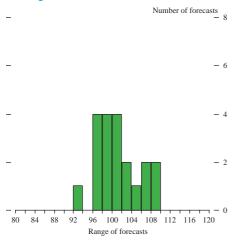
The forecasters' average projection for the official interest rate in 2000 Q4 is $6^{1/2}$ % (with a range of $5^{3/4}$ % to

Chart 6.9 Distribution of repo rate forecasts for 2002 Q1



Source: Forecasts of 23 outside forecasters as at 28 January 2000.

Chart 6.10 Distribution of sterling ERI forecasts for 2002 Q1



Source: Forecasts of 20 outside forecasters as at 28 January 2000.

7%), falling to 6% by 2002 Q1 (with a range of 5% to 8%). The estimates are a little higher on average than in November. Assumptions for the level of the sterling exchange rate have also been raised, reflecting the recent appreciation. On average, the forecasters assume that the sterling ERI will fall to 104.4 by 2000 Q4 (with a range of 93.0 to 110.9), and to 101.2 by 2002 Q1 (with a range of 93.0 to 110.0)—a steeper fall than assumed in the MPC's central projection in this *Report*. Charts 6.9 and 6.10 show the distribution of the forecasters' assumptions about the repo rate and the sterling ERI respectively.

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

BANK OF ENGLAND AGENTS' SUMMARY OF BUSINESS CONDITIONS

This publication is a summary of monthly reports compiled by the Bank of England's Agents,⁽¹⁾ following discussions with around 1,700 businesses in the period between mid-October and mid-January. It provides information on the state of business conditions, from firms across all sectors of the economy. The report does not represent the Bank's own views, nor does it represent the views of any particular firm or region. The Bank's Monetary Policy Committee uses the intelligence provided by the Agents, in conjunction with information from other sources, to assist its understanding and assessment of current economic conditions.

- Manufacturing output growth improved further during the period in almost all regions. But strong growth in some sectors masked continued weak growth or contraction in others.
- Service sector growth remained strong at a steady rate during the period, in almost all regions. The fastest growth was recorded in professional services.
- While the rate of construction growth varied considerably between locations, most Agents noted that growth had remained broadly stable in recent months. Growth was supported by both commercial and residential activity.
- Retail spending growth strengthened, with a noticeable pick-up in annual growth reported during the Christmas period. Sales of new and used car sales slowed further during the period.
- Export demand continued to increase, though moderately. There was little evidence to suggest any slowing in demand from the United States, while the recoveries in Europe and East Asia progressed further. However, contacts continued to report further import penetration.
- Investment trends in the manufacturing and service sectors diverged further during the period. Service sector investment intentions remained strong, with most plans focused on IT development. But manufacturing investment intentions were weaker, with further pressure on margins reducing the ability of companies to invest. In addition, there were increased reports of firms investing in capacity overseas.
- There were widespread reports of increased materials prices, although these were generally confined to a few commodities. Downward price pressure on manufacturing output prices continued, with most firms suggesting that it remained difficult to pass on any increases in costs. There was little change in retail prices trends, with flat or falling goods prices still being reported and service price inflation remaining relatively high. House price growth was broadly stable.
- Pay pressures in the manufacturing sector remained subdued in most regions, with most settlements similar to or lower than a year ago. Settlements in the services sector were similar to or slightly stronger than in the previous period, although there was much more variability. Agents noted that the use of bonus payments and non-pay rewards, such as share options, to remunerate staff had increased compared with the previous period.
- Labour market conditions tightened further, with skill shortages noted as a serious concern in the southern
 regions of the United Kingdom. Moderate service sector employment growth continued in most regions.
 Employment conditions in the manufacturing sector remained fragile, with further declines reported, though
 perhaps at a slower pace.

⁽¹⁾ The Bank of England has Agencies for Central Southern England, the East Midlands, Greater London, the North East & Cumbria, the North West, Northern Ireland, Scotland, the South East & East Anglia, the South West, Wales, the West Midlands, and Yorkshire & the Humber.

OUTPUT

Agriculture

Activity in the agricultural sector remained weak during the period, with no evidence of an improvement in confidence. Pig and poultry farming were reported as the areas of most serious weakness, reflecting increased import penetration. Dairy farming was also reported as particularly subdued. Knock-on effects to ancillary sectors had increased (for example, animal feed and fertiliser producers). Structural adjustment within the sector had become more evident—there were further reports of consolidation and restructuring of farms. Moreover, banks in many regions reported increased cash-flow problems for farmers.

Manufacturing

The recovery in manufacturing output continued during the period—reportedly driven by stronger demand in both domestic and external markets. But most Agents stressed that strong growth in some sectors masked subdued growth or contraction in others. The high-tech and communications sectors experienced the strongest growth, as well as chemicals (particularly pharmaceuticals). Contacts continued to note that the textile and clothing industry remained in decline, as did the automotive components sector.

Most manufacturing contacts continued to report that increased volumes were often associated with reduced margins, reflecting the relatively high level of sterling and increased competitive pressures (see Output prices).

Despite the improvement in activity, capacity constraints were not an issue and much spare capacity remains in many sectors. The underlying trend for many sectors (particularly at the lower value-added end) remains fragile. There were further reports of firms, particularly those with overseas parent companies, moving production to outside the United Kingdom.

Despite anticipated millennium-related consumer demand, there was widespread consensus that manufacturing output was not greatly affected by this. Moreover, there was little evidence of increased stockbuilding, with most contacts suggesting that stocks of finished goods were at low levels and would continue to be gradually reduced.

Construction and housing

While the rate of construction growth varied considerably between locations, most Agents noted that growth had remained broadly stable in recent months. Activity remained strongest in the south and south-east of England.

Growth was supported by both residential and commercial activity, with increased public spending on education and health boosting non-residential construction in some regions. However, some Agents noted a reduction in housing demand for letting purposes. Given continued weakness in some areas of the manufacturing sector, industrial construction growth remained relatively more subdued in most regions.

Services

Service sector growth was sustained at a strong rate during the period. Business services growth was reported to be stronger than consumer services growth. The strongest growth had been recorded in professional services—particularly legal, accountancy and property-related services. The only exception to continued strong growth was the IT sector, where a pause in activity occurred in late 1999—related to Y2K caution. As expected, IT output slowed significantly prior to the new year, but activity was expected to pick up again strongly in coming months—particularly in development projects such as the Internet and e-commerce. Growth of financial services more generally remained strong, boosted by continued mergers and acquisitions activity, as well as company restructurings.

Increased capacity constraints had been reported by many Agents—mostly reflecting difficulties in recruiting suitably skilled staff (see Employment).

DEMAND

Consumption

Retail sales growth continued to pick up during the period. There was widespread confirmation of stronger annual sales growth over the Christmas period. Even department stores, many of which had been recording negative growth, reported positive growth compared with a year earlier. But contacts in many regions were cautious about expectations of the future pace of growth, with most expecting an easing in coming months. In addition, most Agents continued to emphasise that sales volume growth still exceeded growth in the overall value of sales.

There was evidence of strong housing activity feeding through to household good sales in some regions. But most Agents continued to report the strongest sales growth in PCs, mobile phones and electrical goods. Clothing sales remained one of the weakest sectors, although branded items in specialist stores remained relatively strong.

There was some evidence of retailers increasing stocks prior to the new millennium, but this had been limited to a few areas—notably food, alcohol and pharmaceuticals.

Sales of new cars to individuals slowed considerably during the period, with consumers reported to have been awaiting the resolution of the review of car price differentials between the United Kingdom and continental Europe. Annual growth in used car sales also declined further.

Exports

The recovery in export demand noted in previous *Agents' Summaries* continued during the period. There was little evidence to suggest any slowing in demand from the United States. Most Agencies continued to report an improvement in East Asia. Contacts' reports of European demand were varied but, overall, were more positive. Several contacts also reported improvement from the Middle East.

But reports of import penetration, particularly from Europe, intensified during the period. Contacts in the manufacturing and agricultural sectors continued to stress the negative impact of the relatively high level of sterling on domestic and overseas orders. In addition, there had been further reports of UK manufacturers switching to cheaper overseas material and component suppliers, also boosting the demand for imports.

Investment

Investment trends in the manufacturing and service sectors diverged further during the period. Investment intentions in the manufacturing sector remained particularly weak. Investment in the sector continued to be focused on productivity improvements, with more firms investing in capacity overseas. There had been increased reports from firms about the difficulty of generating the rate of return required to justify investment in the United Kingdom given the attraction of lower-cost countries. There was also concern that continued downward pressure on margins would further reduce the ability of companies to invest.

In contrast, service sector investment continued to strengthen compared with the previous period, with most plans focused on IT development. Leisure investment remained strong, as did retail investment, especially for increased floor space in discount stores. Capacity constraints in many professional services businesses led to increased demand for commercial office space. In addition, increased skill shortages had prompted several firms to increase investment in staff training.

Although IT investment in both sectors was reported to have slowed significantly in the last few months of 1999, it was expected to resume again strongly in the new year—particularly for development projects relating to the Internet and e-commerce.

COSTS AND PRICES

Input prices

Following reports of broadly flat materials prices in the previous *Agents' Summary*, there had been widespread reports of increased prices in recent months and further increases were expected. However, these reports had been confined to a few specific commodities (for example, oil and related products, some metals, plastics, paper and pulp).

Most contacts reported that the increased prices had not been a major concern as several factors had helped to constrain the effects. Contacts had been successful at keeping prices down because of more effective purchasing techniques, such as centralised purchasing. In addition, sterling's relatively high level enabled companies to source components and raw materials from relatively cheaper overseas suppliers.

Pay

Pay pressures in manufacturing varied between sectors but, overall, pay settlements were equal to or lower than a year earlier (around 2%–3%). But examples of deferrals remained. Agents noted that in almost all cases, some 'adjustments' had been made to the base settlement making the assessment of underlying trends difficult. Some contacts reported that pay settlements were becoming less industry-related and more firm-related such that profit-based bonus payments and other non-pay rewards such as share options were an increasingly important component of overall remuneration.

The picture of the services sector was reported to have been even more complex, with a wider range of pay increases reported. Overall, settlements had been stronger than in the manufacturing sector, but were around the same as a year earlier—although there are many exceptions of much higher payments. For example, areas of skill shortage such as professional services had recorded rates well above those of a year earlier—higher by 10% or more. Due to more evident skill shortages (see Employment), the southern regions of England reported stronger service sector pay rises—particularly for new employees.

Output prices

The picture of output prices remained similar to that in previous *Agents' Summaries*—widespread downward pressure on manufacturing output prices, with most contacts still reporting flat or falling prices. Despite a clear hardening in input prices, there continued to be only limited evidence of price increases being passed up the supply chain, resulting in further pressure on manufacturers' margins. More recently, there had been isolated examples of price increases, but most firms suggested that they had been unable to pass on the full extent of cost increases.

Persistent domestic and overseas price competition meant that only those producing niche or specialist products were able to increase their prices. Pressure from large supermarket chains had been cited as a factor by many manufacturing and agricultural contacts. The significant buying power of the supermarkets forced many producers to lower their selling prices. Contacts' margins were eroded further by increased overheads, brought about by tighter regulatory requirements-for example, health and safety legislation and environmental standards. Downward price pressure was also reported in the services sector, but there was greater variability in the ability of firms to increase prices. Overall, price pressures remained stronger than in manufacturing. Professional service fees were cited as increasing more recently, but many Agents reported downward pressure on travel costs (eg low-cost airlines).

Retail prices

The trend of flat or falling retail goods prices, reported in previous *Agents' Summaries*, continued during the period. Consumers were reported to have remained very price-sensitive. In addition, department stores and traditional high-street stores faced increasing competition from discount stores and Internet purchasing. The majority of contacts do not foresee any changes to this trend in coming months. Food and clothing continued to be noted as the areas of greatest competitive pressure. In addition, significant price declines occurred in telecommunications and PC prices. Where goods prices had not fallen, Agents suggest that quality improvements had occurred.

Service price inflation remained relatively high, although some contacts noted a moderation in growth of some consumer services prices (for example, package holidays, mobile phone charges). In contrast, many professional service fees (for example, legal fees, recruitment consultancies) rose further. In addition, contacts also noted increases in the price of insurance premiums and car servicing.

The rate of annual decline in new car prices quickened during the period, ahead of the outcome of the review of car prices in the United Kingdom. Contacts in most regions also noted further falls in the price of used cars.

Overall, house price growth in most regions appears to have been similar to or slightly slower than in recent periods. But much disparity exists between locations. On balance, house price growth remained stronger in the south and around city-centres.

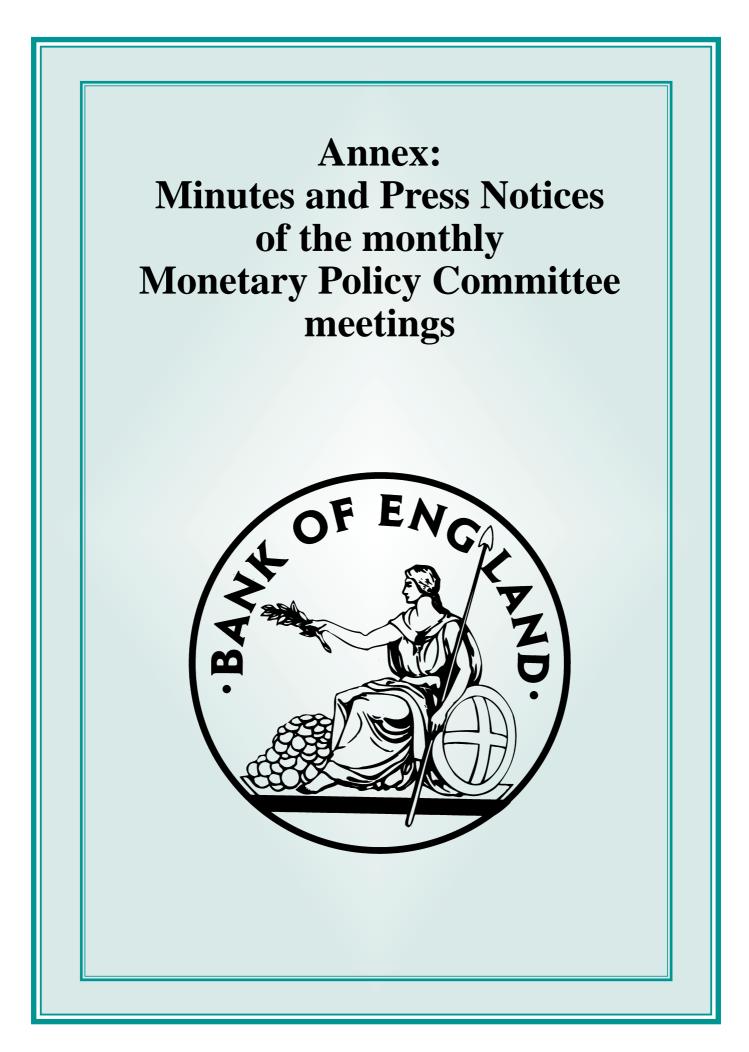
EMPLOYMENT

The labour market picture had tightened further compared with the previous *Agents' Summary*, particularly in the southern regions of the United Kingdom, where skill shortages were reported as a major concern. Skill shortages continued to be reported in IT, engineering, managerial and professional positions. In addition, the availability of staff had become an increasing problem in construction, retailing and call-centres. And some contacts cited difficulties in obtaining unskilled staff. Difficulties were also reported in obtaining staff from other areas because of the relatively higher cost of housing in the southern regions.

Skill shortages remained less of a concern outside the southern regions, although shortages became more evident during the period—almost entirely in the service sector.

Service sector employment continued to grow moderately, at broadly similar rates to the previous period. Growth was reported as being fairly widespread across the sector, although the financial sector was reported as an area of weakness—reflecting bank branch closures and consolidation. However, increased employment in call-centre positions had offset this to some extent.

There had been widespread confirmation of the continued fragility of manufacturing employment, despite the recovery in activity. Employment levels continued to decline in almost all regions, although the pace of decline may have moderated. In addition, examples of further expected job losses from restructuring had been cited.



Minutes of the Monetary Policy Committee meeting on 3–4 November 1999

1 Before completing their November inflation and output growth projections and turning to their immediate policy decision, the Committee discussed demand and output; the labour market; prices and costs; money, credit and asset prices; and the world economic outlook. Prior to the meeting, the Committee was briefed by Treasury officials on the Chancellor's latest projections for economic activity and the public finances.

Demand and output

2 Output was estimated to have increased by 0.9% between Q2 and Q3, significantly higher than projected in the Committee's August Inflation Report; and growth in the first half of the year had been revised upwards, so that the level of activity was also higher than expected. The quarterly rate of manufacturing output growth had been 1% in Q3. The recovery seemed to be spreading both regionally and, with some exceptions such as agriculture, sectorally. The twelve-month growth rate of final domestic demand in Q2, the latest period for which data were available, had been 4.5%, well above trend. Strong domestic demand had to some extent been offset in the first part of the year by destocking and, over a longer period, by weak net trade, reflecting the rise in sterling's exchange rate and shocks to world economic growth. Aggregate demand had therefore grown more slowly than final domestic demand, and this had contained pressures on the economy's supply capacity. More recently, however, net trade had been stronger than expected, and in Q2 had even made a positive contribution to GDP growth. Against this background, the Committee discussed whether the growth in demand was sustainable, and if not whether it would slow spontaneously, ie without a further policy tightening.

3 Within final domestic demand, consumption growth had been especially buoyant. A number of possible special factors were identified. First, strong growth in real earnings, and so real personal disposable income, might have reflected not just tight labour market conditions, but also inflation outturns that had been lower than expected when pay bargains were struck. Other things being equal, any such effect was unlikely to continue as inflation expectations had come down over the past few years, and were now broadly in line with the $2^{1}/_{2}$ % target. However, the Committee had built into its latest central projection for inflation a number of particular downward influences on prices-such as utility price cuts and the effects of increased competition on retailers' marginswhich would tend to reduce RPIX inflation, and it was unclear to what extent these were incorporated into wage bargainers' inflation expectations.

Second, the rapid growth in consumption in Q1 and Q2 4 partly reflected recovery from the slowdown last autumn, when confidence had been hit by the shocks to the world economy and international financial markets. Third, consumer spending growth earlier in the year had partly been accounted for by an earlier-than-usual spike in car sales, reflecting changes in the timing of new registrations. That was expected to unwind in the second half of the year. Retail sales growth appeared, however, to have strengthened during the year according to data for Q3 and some surveys, so that overall consumption growth might not slow much. Moreover, strong output growth in Q3, evidence of strong tax receipts (including corporate taxes), and the relative strength of household money and credit growth and of the housing market suggested that strong final domestic demand growth might have continued beyond the first half of the year.

5 There were, though, some possible indications that consumption growth had steadied. Indicators of retail sales in Q4

appeared firm, but probably not more so than during Q3. Both the CBI Distributive Trades Survey and the CIPS Services Index pointed to a moderation of activity. Consumer confidence measures were positive but had been steady for about eight months, and in particular had not been driven upwards along with the rapid rise in house prices. And some indicators of housing market activity, such as particulars delivered, had ticked down slightly over the past two months. The Committee judged, however, that the recent strength in house prices would tend to support continuing buoyant consumption growth. House prices were generally expected to continue rising over the next year or so at an annual rate which was higher than mortgage interest rates. In the view of some members, the resulting negative own-real rate of interest should, other things being equal, make house purchase attractive. This could alternatively be thought of as expected real capital gains more than offsetting the real cost of borrowing (measured by mortgage interest rates less expected consumer price inflation).

6 Other parts of the economy were, however, facing quite different own-real interest rates. In particular, the nominal cost of borrowing for companies was still considerably higher than manufacturing output price inflation, which might hold back investment spending.

7 More generally, since August the sterling yield curve had steepened, with rates in the two-to-five year range up by at least 50 basis points and the gap between fixed and variable mortgage rates having closed. This had increased the cost of borrowing for both companies and fixed rate mortgage borrowers. This would help to restrain demand in the medium term, and on one view was not fully reflected in the forecast. Others felt that the effects were likely to be small. (The Committee's discussion of whether the shift in market interest rate expectations had more general implications for policy setting is summarised below under 'Tactical considerations'.)

8 The Committee agreed that final domestic demand could not continue to grow at the current rate without jeopardizing achievement of the inflation target in the medium term. Even without further monetary tightening some of the factors mentioned above were likely to restrain domestic demand growth. The Committee's latest projection incorporated a slowdown to around 3% by the end of the two-year forecast horizon, but that would probably still place pressures on supply capacity unless the contribution to GDP growth from stockbuilding and net trade was negative.

9 Stocks had been reduced in the first part of the year, consistent with reports of excess inventory holdings at the end of 1998. More recent reports suggested that there was little reason to expect a continuing negative contribution to GDP growth from this source in the short run.

10 The principal influences on net trade pointed in different directions. On the one hand, sterling continued to be strong, and was higher than in August. On the other hand, the world economy was recovering more quickly than expected. Exports of goods (excluding oil and erratics) to countries outside the EU had grown at an annual rate of 11% between Q2 and Q3; and total goods exports grew by 6% in the three months to August compared with the previous three months. Surveys suggested that manufacturers' expectations of export volume growth were higher than for around three years.

11 While it was possible that the strength of the recent exports data partly reflected temporary factors, it was also possible that

exporters had to some extent adjusted to a level of sterling that they now expected to persist. If so, the equilibrium real exchange rate might have risen, but it was too early to be at all confident about that possibility.

12 To the extent that export strength were to persist, a negative contribution to GDP growth from net trade would have to come from a relatively faster increase in imports, so that the UK would in effect be relying on spare capacity abroad to contain incipient inflationary pressures from strong domestic demand growth. But while there was probably still spare capacity abroad, some members felt that it would be eroded as the world economy recovered, tending to put upward pressure on import prices.

13 On balance, the Committee had assumed that net trade would make a negative contribution to GDP throughout the forecast period, reflecting the further rise in the sterling exchange rate and a likely increase in imports.

The labour market

14 There was some evidence that the labour market had tightened further. Over the quarter, claimant count unemployment had fallen to 4.2%, and the Labour Force Survey (LFS) measure to 5.9%. Employment had continued to rise, as had total hours worked. Some forward-looking indicators suggested continued tightening. Employment intentions, as measured by surveys, were up in all sectors and were above average historical levels. Skill shortages persisted according to the Bank's regional Agents and surveys, but with differences across regions and different types of skill. The picture from surveys was mixed. The BCC measure of recruitment difficulties had fallen slightly in both manufacturing and services. The CBI survey showed skill shortages rising slightly but with the level still below its historical average.

15 Real earnings growth calculated on the basis of the Average Earnings Index (AEI) had been rising for some time, with the recent rate faster than would have been expected on the basis of the changes in unemployment and employment. As noted above, one possible explanation for this was that a greater-than-generally-expected decline in inflation had boosted ex post real earnings. Another possible explanation was that the 'natural' rate of unemployment, the rate consistent with stable inflation, was higher than the Committee had assumed in its August projections. Some members thought it unlikely that the 'natural' rate was below the current actual rate or that it was continuing to fall at the same rate as actual unemployment, so that there was good reason to think that labour market pressures had been increasing. Other members noted that the Reward Index showed earnings growth still trending lower and the New Earnings Survey also gave a more benign picture of earnings growth than the AEI. Although there were different interpretations of the latest data, the Committee agreed to take as its central projection a higher assumption for real earnings growth than in August.

16 The recent nominal pay data presented a second puzzle. On the one hand, settlements had remained around 3.5%. On the other hand, the AEI had risen at an annual rate of 4.9% in the three months to August. Allowing for month-to-month volatility, the AEI series had been edging upwards in recent months. If the difference was a good guide to wage drift, it was possible that the recent rise in nominal earnings would be consolidated in forthcoming settlements. A survey by Industrial Relations Services pointed in the opposite direction, however. In its latest survey, 43% of respondents had expected to make lower settlements than last year, 46% the same, and 11% higher. Last year, only 23% had expected lower settlements than the previous year, and 26% had expected higher. It was suggested that the apparent fall in expected settlements this year might reflect the low recent RPI outturns (1.1% in August and September) and expectations that RPIX would remain below the $2^{1\!/_2}\!\%$ target for a while. Anecdotal evidence on this, based partly on Committee members' own regional visits,

varied. There were suggestions both that RPI was the starting point in negotiations, and that the benchmark was the higher of RPI or RPIX. Some employers had suggested that the recent outturn of around 1% was not a feasible starting point; before allowing for productivity improvements, it was easier to argue either for zero if necessary on the basis of a particular company's circumstances, or alternatively for $2^{1}/2\%$ reflecting the inflation target and so medium-term inflation expectations. The Committee noted that there would not be much hard data on settlements until the new year, although the Bank's regional Agents would monitor, through their contacts, the emerging evidence.

17 Whatever the position, it was possible that settlements—both backward-looking data and forward-looking surveys—were now less reliable indicators of labour market conditions given the decline in collective bargaining, and the increase in personalised remuneration, over recent years. If so, relatively more weight needed to be placed on the path of broader measures of earnings.

18 The Committee as a whole agreed that its assessment of labour market conditions was highly uncertain. Structural changes and the new monetary regime meant that behaviour may have changed, but it was impossible to know by how much. Looking forward, the quantity data, particularly the LFS series, would be important indicators of whether there were any further tightening, and possibly of its speed. But what mattered was the extent of pressure on labour supply, for which there was no direct measure, and the extent to which this was translated into nominal earnings growth and settlements.

Prices and costs

19 The main issue concerning prices was the prospective effect on the aggregate price level, and thus on measured inflation in the short-to-medium term, of various expected developments. In particular, the Committee had made allowance in its *Inflation Report* projections for falls in price-cost margins reflecting an increase in competition; utility prices changes; and the Government's intention, announced in its pre-Budget Report published on 9 November, of removing the automatic over-indexation of duties on tobacco and fuel. Taken together, on the agreed assumptions these reduced the central projection for RPIX inflation by around half a percentage point at the two-year horizon (and more before that).

20 Some members were content with the assumed effects for the first year but preferred a smaller effect in the second year. This was for two reasons. First, they were concerned that the Committee had focused on some one-off price falls, whereas there might be some one-off upward pressures as well; for example, it was conceivable that, as real incomes and wealth rose, consumers were switching from cheaper, standard goods to higher-margin, customised or designer products. Second, there were doubts about reflecting expected changes in relative prices in the aggregate nominal price level at longer horizons given that, by targeting inflation, the Committee influenced nominal, not real, demand growth over the medium term. While the particular downward pressures might plausibly be unanticipated in the near-term, they would more likely be anticipated as time passed. In that case, the effects of relative price changes might not show up as a decline in the overall rate of inflation over the medium run.

21 While agreeing that this analysis applied in the medium to long run, those members who supported the central assumption in the forecast argued that there was sufficiently clear evidence that the downward influences on prices would increase during at least the next two years. They agreed that it was difficult to calibrate the short-run impact of longer-term structural changes such as intensified competition. The Committee agreed that the size and persistence of the specific effects were inevitably uncertain, making it important to monitor the specific effects reflected in the published projections.

Money, credit and asset prices

22 M4 growth had continued to fall, the twelve-month rate reaching 2.8% in Q3, the slowest growth rate since 1963 (when the series began). But this reflected continued falls in the money holdings of non-bank financial institutions (OFCs). OFC money and credit were generally regarded as being most relevant to analysis of monetary conditions during periods of financial market instability.

23 Excluding OFCs, annual broad money growth had been 6.1% in Q3. Within this, household M4 growth was 6.4%. M0 and household Divisia growth were each around 7%. Growth in net credit to households was 8.6% in Q3, the highest rate since 1991. These data were broadly corroborative of the real-side evidence of continuing robust consumption growth.

24 The FT All-Share Index had risen by about $2^{1/2}$ % over the past month, and was at about the same level as in August. House prices continued to rise rapidly, with the twelve month rate on both the Halifax and Nationwide indices above 10%. As already noted, since the August *Inflation Report* the sterling yield curve had steepened out to medium maturities.

25 The sterling exchange rate index had risen by over half a percentage point since the Committee's October meeting and was about three percentage points above the path assumed in the August fan chart projections. The Committee agreed to incorporate in its published November projections an assumption that sterling would be half way between its current rate and a path related to market interest rate differentials, with the sensitivity of the projections to both shown in the *Inflation Report*. Some members inclined towards the former, and some preferred the latter.

The world economic outlook

26 The Committee noted the assumptions it had made in its latest projections. The outlook in each of the US, the euro area and Japan was somewhat better, and prospects among the emerging market economies had generally improved. The overall picture was therefore slightly stronger than assumed in the Committee's August projection, although there remained clear downside risks from the possibility of an equity price correction in the USA and persistent current account imbalances.

27 Against this background, Committee members agreed that the outlook for world prices looked less benign than at the time of the August *Inflation Report*. While there was still spare capacity in parts of the world economy, this was being utilised as a generalised recovery progressed. Imported price inflation had been weak (or negative) over the past few years, but had recently begun to rise.

The November inflation and output growth projections

28 The Committee agreed the projections to be published in the *Inflation Report* on 10 November.

29 On the assumption of constant official interest rates of 5.5%, the central projection in the published fan chart for activity was for slightly more rapid growth in the short term than in August, levelling off to slightly above trend. The level of activity was higher than projected in August for almost all of the forecast period on account of the recent stronger-than-expected outturns. The balance of risks was on the downside, mainly reflecting risks to the world economic outlook.

30 The Committee's best collective judgment of the prospects for inflation was for RPIX to remain below the $2^{1/2}$ % target for nearly all of the forecast period, dropping just below 2% for a while, before increasing quite sharply to end up at around the target at the two-year horizon, when it was still rising. This acceleration in prices reflected the accumulating pressures on supply capacity from the period of above-trend demand growth and the unwinding of the various temporary downward influences on the price level and so on measured inflation. The trough was lower than in August. The projection at the end of the forecast period was almost the same as in August, but with a higher sterling exchange rate and with the official interest rate at 5.5% rather than 5.0%. For the same reasons as for the output projection, the balance of risks to inflation was on the downside.

31 As already described, there was considerable uncertainty in the Committee about the inflation outlook, and also a range of preferred assumptions for the path of the nominal exchange rate, earnings growth, and price-cost margins; these were presented in Table 6.B on page 58 of the *Inflation Report* published on 10 November. Different members preferred different combinations of these assumptions, either raising or lowering the inflation projection at the two-year horizon by $\frac{1}{4}$ to $\frac{1}{2}$ percentage points, so that there was a range of approaching one percentage point between the lowest and highest preferred central projections of individual Committee members.

Tactical considerations

32 The Committee discussed three other issues potentially relevant to its policy decision: the significance of the steepening in the sterling yield curve; the relevance of ECB and FOMC policy decisions; and the implications of the shape of the inflation projection.

33 On one view, the rise over recent months in short and medium-maturity market interest rates, as evidenced by for example short sterling futures contracts and the gilt yield curve, meant that monetary conditions were materially tighter than reflected in the fan chart projections. In consequence, the market was doing some of the Committee's work for it, so that other things being equal the Committee could operate with a lower official repo rate than would otherwise be the case. Against this, it was argued that the Committee would take material risks with its credibility if it failed to tighten in line with market expectations, where it regarded those expectations as well based. If demand were restrained by higher market rates but the Committee then failed to raise rates, the market's view of the Committee's reaction function would change, storing up trouble for the future.

34 The Committee agreed that it should not place great weight on expectations of what the ECB and FOMC might do at their meetings on 4 November (the same day as the MPC's meeting) and 16 November respectively. It was noted that a clear majority of market participants expected the MPC to raise its rate by 25 basis points, in which case a move of that size would probably not have much effect on market prices.

35 The shape of the inflation projection had changed materially over the past year. A year ago, it had been humped; in May and August it had had a gentle saucer shape; now inflation was projected to fall further below the target, before rising more steeply towards the end of the forecast period. This reflected the view that accumulating inflationary pressures would surface after a period in which measured inflation was held back by a series of specific price level changes. In particular, after falling back in the short run earnings growth was likely to pick up further out in the forecast period. On the one hand, the degree of uncertainty about the outlook was considerably greater at the two year horizon, so that the Committee could be less sure about the projected steep rise than it could be about the nearer-term prospect of inflation remaining below target. On the other hand, monetary policy changes would have a greater effect on inflation at around two years than on nearer-term prospects. The Committee agreed that, other things being equal, the shape of the projection meant that, compared with a profile in which inflation rose steadily, there was more time to

tighten policy in order further to restrain demand growth if that still proved necessary.

The immediate policy decision

The Committee agreed that the analysis of the outlook for 36 inflation had changed over the past few months. The news on demand and activity had been stronger than expected, whereas RPIX inflation had been weaker than expected. The short-term relationship between output and prices had for some time been uncertain, and if anything that uncertainty had increased. For a long time strong domestically-generated inflationary pressures had been offset by strongly benign external influences: the price and net trade effects of the rising pound and of the shocks to world activity. Those external influences were now smaller. Sterling had recently risen slightly, but by less than during 1997 and 1998, and the world economy was recovering, with consequent rises in some input costs, for example oil. The key issues were now on the one hand the size and persistence of various downward influences on prices, and on the other hand the more-rapid-than-expected pick up in output growth and the extent to which domestic demand growth would slow without further monetary policy tightening. Members' analysis of the immediate policy choice varied according to how they viewed those factors.

37 A variety of arguments were identified in favour of an immediate increase in interest rates. Activity had recovered faster than expected, and confidence indicators had remained strong despite the September tightening of monetary policy and sterling's recent strength. A further decline in the velocity of circulation was needed for narrow money, household Divisia and household M4 growth to be consistent with the inflation target. Final domestic demand growth was projected to slow but still to be above trend at the forecast horizon, supported amongst other things by a strong housing market. A significant negative contribution to GDP growth from net trade was effectively being relied upon to avoid aggregate demand exceeding the economy's supply capacity. The labour market seemed again to be tightening, and there was consequently a risk that unit labour cost growth would not in fact moderate. AEI earnings growth had risen over recent months, and the Bank's regional Agents had reported greater concerns about skill shortages increasing wage growth. Although there was particular uncertainty about the relationship between output growth and inflation, members were influenced by the rise in wage pressures and the pick up in survey-based measures of pricing intentions. Input price pressures were gathering. The inflation projection was still rising at the forecast horizon so that, assuming no news in the meantime, the February projection for 2002 Q1 would be higher than the target. While RPIX inflation was likely to be contained for a while by the various downward pressures on prices, a further tightening of policy was needed to restrain the medium-term inflationary implications of continued strong domestic demand. The risks from tightening and not tightening were not symmetric. An immediate 25 basis point increase would not carry many risks to output as growth was above trend and the level of activity was already probably not much, if at all, below the trend level. But there would be risks in not increasing interest rates now. The news on activity had been significantly stronger than expected since the Committee tightened pre-emptively in September, so that not tightening again risked increasing inflation expectations, entailing a larger tightening later than would otherwise have been necessary.

As well as weighing the considerations set out in paragraph 37, those members of the Committee who favoured a higher central projection than that assumed—whether because of different preferred assumptions on the path of the exchange rate or price-cost margins, or on both—regarded the risks of overshooting the target as correspondingly greater. The choice for them now was between 25 and 50 basis points. While a case could be made for 50 basis points in order to counter the strength of underlying inflationary pressures, the following considerations led them to prefer a smaller rise. As the Committee had discussed, there were signs, for example in surveys, that there might be some slowing in demand growth. There was time to wait to gather evidence on this as inflation was projected to be below the $2^{1}/_{2}$ % target for nearly all of the forecast period. Separately, given market expectations, an increase of more than 25 basis points risked putting undue upward pressure on the exchange rate, which would tend to restrain net trade and import prices whereas policy action was needed to address domestically-generated inflationary pressures.

39 One member explored the arguments for an interest rate increase of less than 25 basis points. The profile for inflation implied that the pressures on the economy's supply capacity needed to be restrained in the medium term but that there was time to do this, particularly given the uncertainties about the outlook. An increase of less than 25 basis points would assist that process and would, in particular, provide a clear signal of the Committee's resolve in addressing those medium-term concerns, while recognising the downward pressures on inflation in the near term, when it was projected to drop materially below the $2^{1/2}$ % target. It would be easier for the Committee to introduce smaller-than-25 basis point changes now having already tightened policy in September. However, as this would be the first time rates changed by less than 25 basis points, there was a significant risk that the reasons would be misunderstood. The better course was, therefore, to raise rates by 25 basis points.

40 Various arguments were advanced for maintaining the official interest rate at 5.25%. Inflation was below target and was set to remain so over the next two years. The outlook depended to a significant degree on two material factors: the exchange rate, and the balance of aggregate demand and the economy's supply capacity. Recent export outturns added weight to the view that sterling would be stronger than the path assumed as the best collective judgment; and survey measures showed capacity utilisation falling slightly, perhaps because investment during this upswing had been strong. There were significant downward pressures on prices, reflecting not only one-off regulatory measures but also an ongoing intensification of competition throughout the economy. This would help to restrain earnings growth below the path assumed as the best collective judgment. Monetary conditions, as reflected in the yield curve, had tightened significantly in recent months, and were probably bearing down on demand by rather more than had been assumed in the published fan charts. Taking these considerations together, the steep rise in the central projection of inflation 18 months hence was highly uncertain and there were clear downside risks to it. With a symmetric inflation target, a further tightening was not yet needed.

41 The Governor invited members of the Committee to vote on the proposition that the Bank repo rate be increased by 25 basis points to 5.50%. Eight members of the Committee (the Governor, Mervyn King, David Clementi, Willem Buiter, Charles Goodhart, Ian Plenderleith, John Vickers and Sushil Wadhwani) voted for the proposition. DeAnne Julius voted against, preferring to maintain interest rates at 5.25%.

42 The following members of the Committee were present:

Eddie George, Governor

Mervyn King, Deputy Governor responsible for monetary policy David Clementi, Deputy Governor responsible for financial stability Willem Buiter Charles Goodhart DeAnne Julius Ian Plenderleith John Vickers Sushil Wadhwani

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

Annex: Summary of data presented by Bank staff

1 This Annex summarises the analysis presented by Bank staff to the Monetary Policy Committee on 29 October, in advance of its meeting on 3–4 November 1999. 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 The international environment

2 US GDP had risen by 1.2% in Q3, according to the provisional estimate. Consumption and investment had remained strong, while inventories had made a positive contribution to GDP growth, following a negative contribution in Q2. Net exports had continued to fall in Q3, albeit by less than in Q2. Definitional and statistical changes to the National Accounts had raised the average annual GDP growth rate by 0.4 percentage points between 1992 and 1998. The National Association of Purchasing Managers' (NAPM) Index had fallen slightly in September, but had remained at a level consistent with an expansion of manufacturing output.

3 The quarterly growth in the Employment Cost Index measure of labour costs had declined slightly in Q3. Annual producer price inflation had increased to 3.1% in September, and annual consumer price inflation to 2.6%.

4 GDP growth in the euro area had been revised up to 0.5% in Q2. Both consumption and investment growth had been revised up. Industrial production had risen by 2.5% in the year to August, reflecting improving business confidence, particularly in France. M3 had risen by 6.1% in the year to September. Private sector credit growth had been higher. Annual inflation had remained unchanged in September, at 1.2%. Excluding energy, food, alcohol and tobacco, inflation had continued to fall.

5 Despite a decline in September, industrial production in Japan had risen by 3.8% in Q3. However, the September Tankan survey indicated that companies were continuing to cut fixed investment. Volumes of imports and exports had continued to strengthen, particularly to other Asian countries. Consumption indicators had been mixed and retail sales growth had remained negative. Base money had risen by 6.1% in the year to September, but broad measures of money growth had been lower. Survey evidence had suggested that banks were becoming more willing to lend, but the stock of outstanding loans (adjusting for write-offs and securitisations) had continued to fall. The rate of unemployment had fallen to 4.6% in September, although this had partly reflected a fall in the participation rate. The consumer price index had fallen by 0.2% in the year to September.

6 Trade volumes had risen in the United States, Japan and the euro area. Non-oil commodity prices had remained stable. Oil prices had fallen very slightly, despite the most recently available evidence suggesting a higher degree of compliance among OPEC members with the agreement to limit supply. However, the continued strength in oil prices had contributed to an increase in petrol and producer prices in all countries.

7 There had been little movement in the main dollar, yen and euro exchange rates. Equity markets in the main economies had recovered slightly from falls earlier in the month. There had been a further increase in euro-area interest rates implied by Euribor futures contracts, with markets expecting around 50 basis points of tightening by next summer.

8 The trend in industrial production growth in most emerging market economies had been positive. It had remained negative in Latin America.

II Monetary and financial conditions

9 Provisional figures had suggested that narrow money growth had rebounded in October. The one-month growth rate of notes and coin had risen to 0.8%, compared with an upwardly revised 0.1% in September. The twelve-month growth rate (after adjusting for the introduction of the new 50 pence and £2 coins) had risen to 7.6% in October from 7.0% in September.

10 M4 had fallen by £2.9 billion (0.4%) in September, with the annual growth rate falling back to 2.8%, the lowest since the series began in 1963. M4 lending (excluding the effects of securitisations) had risen by £4.2 billion (0.4%) in September.

11 Households' M4 deposits had risen by 1.3% in Q3. In real terms, households' M4 deposits were estimated to have increased by 4.8% in the twelve months to Q3. And households' real Divisia growth was estimated to have picked up to 5.3%, consistent with strong consumption growth. Households' M4 lending had grown strongly in Q3. Annual growth had been 8.6%, the highest since 1991. Within total lending to individuals, the annual growth rate of secured lending had been 7.5%, reflecting strength in the housing market. Loan approvals had also been strong. Total unsecured lending had increased by 3.3% in Q3, in line with its increases over the year. Credit card lending had continued to grow in excess of 20% per annum.

12 Private non-financial corporations' (PNFCs) deposits had remained broadly flat in Q3, though deposits had risen by \pounds 1.4 billion (1.2%) in September. The twelve-month growth rate had fallen from 7.4% in Q2 to 4.9% in Q3. PNFCs' M4 lending had picked up in Q3. Lending had been particularly strong in September, increasing by £1.8 billion (0.9%). But the annual growth rate had fallen from 4.7% in Q2 to 4.2% in Q3, compared with an average annual rate of 5.8% in 1998. A broader measure of PNFCs' borrowing (that also included all bond and equity issues as well as non-sterling lending by banks) had been weaker in Q3 than in Q2: the average monthly flow had increased by £3.3 billion compared with £5.9 billion in Q2.

13 Other financial corporations' (OFCs') M4 deposits had fallen sharply in Q3, and the annual growth rate had continued the downward trend since 1998 Q1. The average monthly flow had been -£2.7 billion in Q3, compared with -£1.3 billion in Q2. The monthly flow in September had been particularly weak (-£7.0 billion). OFCs' M4 lending had increased slightly in Q3, but the flow in September had been -£2.1 billion.

14 Short-term interest rate expectations implied by short sterling futures contracts had fallen since the previous MPC meeting. The falls had been between 20 and 30 basis points in the September 2002–March 2003 contracts (less at shorter maturities). Nominal forward rates at broadly comparable maturities had also decreased (by 40–50 basis points after 3 to 3.5 years).

15 Short sterling futures and nominal forward rates derived from the gilts market had pointed to different profiles for the expected level of interest rates. In particular, short sterling futures had pointed to a peak of 7.3% in interbank rates in December 2001, around 100 basis points greater than the peak of 6.3% for gilt yields in the forward curve in the second half of 2001. The three-month Libor/general collateral interest rate spread had picked up sharply at the beginning of October as the date for year-end Libor delivery had passed. But spreads further out along the curve had not looked unusual given recent experience. 16 There had also been falls in nominal yields at the long end of the forward curve during October. This had been mirrored in falls in long corporate bond yields. Since the beginning of the year, the yield on 25 year corporate bonds had also fallen relative to yields on shorter maturity bonds, reflecting movements in similar maturity gilt yields. And it was noticeable that there had been a sharp pick up in issuance of very long corporate bonds (with a maturity in excess of 15 years) over this period. So any technical factors that may have helped to explain the fall in relative gilt yields at the long end appeared to have reduced the funding costs for some firms.

17 The pass-through of September's base rate rise to retail savings rates had remained incomplete in October. Interest rates on fixed-rate mortgages had increased, following continued increases in swap rates at all maturities. But the narrowing in the spread of five-year fixed mortgage rates over five-year swap rates observed this year had continued in October.

18 Implied inflation expectations had fallen by around 15–30 basis points out to fifteen years. The fall had been smaller at longer maturities. The October biannual Consensus Economics survey had pointed to a fall in inflation expectations over the medium to long term (four years and further out) between April and October. By contrast, over the same period, inflation expectations implied using index-linked gilts had risen out to eight years, though they had fallen further out.

19 The sterling effective exchange rate index (ERI) had appreciated, by 0.7% over the month. Within this, sterling had appreciated by 1.4% against the euro, but had depreciated by 0.7% against the US dollar and by 3.0% against the yen. Real exchange rate expectations calculated using the biannual Consensus Economics survey of long-run inflation and nominal exchange rate expectations had suggested that the markets increasingly expected the strength of sterling to be sustained. The real exchange rate expected at end-2003 had increased by 2.8% between the October 1998 and 1999 surveys. The FT All-Share index had risen by 2.4% on the month. As in recent months the index for smaller capitalisation stocks had performed more poorly, falling by 0.8% on the month.

III Demand and output

20 The preliminary ONS estimate of GDP growth in 1999 Q3 had been 0.9%, the strongest for two years. The annual growth rate had risen to 1.8%. Service sector output had grown by 1.0% in Q3 and had been 2.6% up on a year earlier—close to its long run average. Within services, the distribution, hotels and catering sector had grown by 0.9%. Manufacturing output had risen by 1.0% in Q3, following revisions to data in July and August.

21 Construction new orders had fallen by 5.0% in the three months to September but the CIPS index of construction activity had indicated strong growth since January 1999.

22 Retail sales volumes had risen by 0.1% in September. Growth in Q3 had been 1.2%. The GfK consumer confidence index had been flat in October, but remained above its historical average. The new quarterly Consumers' Association Consumer Trends Survey consumer confidence index had been +34 in October, compared with +33 in July. According to this survey, households expected house prices to rise by 4% over the next year.

23 Both the Halifax and Nationwide house price indices had shown rises in annual house price inflation in October, to 10.8% and 11.6% respectively. The Halifax index had grown particularly sharply in October, rising by 2.8%, following zero growth in September. Particulars delivered had fallen to 122,000 in September—the second consecutive monthly fall—but remained 7% higher than a year earlier. The Royal Institute of Chartered Surveyors (RICS) survey had shown a similar picture of housing transactions. Housing starts had risen by 2.9% in Q3.

Vehicle sales had been very volatile, given the change to the registration letter system. Private car registrations in Q3 had fallen by 16.6% on a year earlier. In the first 9 months of 1999, they had been 0.8% lower than the same period a year earlier.

The change in inventories had contributed negatively to GDP growth in Q2. The CIPS survey of manufacturing had shown that stocks of finished goods had risen in October for the first time since July 1998. The CBI Quarterly Industrial Trends Survey had shown that the balance of finished goods inventories had risen to -10 in October from -20 in July.

The BCC and CBI surveys had shown a pick-up of manufacturing investment intentions in Q3 compared to very low levels a year ago, though the CBI measure had fallen slightly to -11 in Q3 from -8 in Q2. The BCC survey had shown an increase in investment intentions (plant and machinery), to 11 in Q3 from 3 in Q2. But as investment intentions are forward-looking it seemed likely that actual investment would not strengthen until 2000.

27 The public sector net cash requirement had been £2.0 billion in September—with cumulative cash borrowing for 1999/2000 similar to the previous year.

28 The deficit on trade in goods had narrowed to £1.9 billion in August from £2.2 billion in July. The EU deficit had widened slightly to £0.4 billion, but the non-EU goods deficit had narrowed to £1.5 billion. The non-EU deficit had narrowed further to £1.2 billion in September. Excluding oil and erratics, export volumes had risen by 5.8% in the three months to August and imports had risen by 3.8%. Although export growth over the past half-year had been partly driven by erratic items, underlying export growth (excluding oil and erratics) had also been positive. Based on monthly data, the 1999 Q3 net trade contribution to GDP seemed likely to be positive.

Looking ahead to Q4, survey evidence had suggested 29 continuing strong growth. The CIPS purchasing managers' survey of manufacturing showed a slight improvement in the headline index, to 54.2 in October, with the output index above its no-change point of 50 for the seventh consecutive month. The CBI Quarterly Industrial Trends Survey had shown a sharp improvement of manufacturing sector confidence in Q3. The BCC survey for Q3 had shown a marked improvement in domestic and overseas orders, in both the manufacturing and services sectors. Domestic and overseas orders balances had appeared to be moving in line over recent quarters-though growth in domestic orders remained stronger. The CIPS Services Survey had shown an increase in activity in October (though the rate of growth had been the slowest since March). The CBI Distributive Trades Survey had shown a rise in retail sales in October (though with growth slowing, and sales considered to be slightly below average for the time of year). The improved outlook had also been broadly consistent with other surveys such as those by the Institute of Directors and the Engineers' Employers Federation. The latest surveys when taken together suggested quarterly growth in GDP continuing in Q4 at broadly the same rate as in Q3.

IV The labour market

30 LFS employment had increased by 99,000 (0.4%) in the three months to August compared with the previous three months up sharply on the increase in the three months to May. In full-time equivalent terms, growth had been the strongest since the summer of 1998. Total hours worked had risen by 0.4% during the three months to August over the previous three months. Average hours worked had risen by 0.1%, although they had remained weaker than in the same period the previous year. 31 According to the CIPS survey, manufacturing employment had stopped falling, employment growth in services had eased, while employment growth in the construction sector had been broadly stable. Looking ahead, surveys of employment intentions had all indicated further employment expansion.

32 Surveys of skill shortages and recruitment difficulties had provided a more mixed picture of the degree of labour market tightness. The CBI Industrial Trends Survey had reported that skill shortages had increased in the September quarter, but remained below their historical average. The BCC Quarterly Economic Survey had reported that recruitment difficulties had lessened over this period, but remained high by historical standards. The stock of unfilled vacancies in job centres had remained high in September. However, the National Press Recruitment Advertising Index had continued its downward trend.

33 Unemployment levels had fallen on both the LFS and claimant count measures. LFS unemployment had fallen by 83,000 to 5.9% in June-August compared with the previous three months. The claimant count had fallen by 5,400 in September, with the rate unchanged at 4.2%, the lowest since the early 1980s. But the participation rate had still not exceeded its peak in the early 1990s.

34 Inactivity had risen by 23,000 in June-August compared with the previous three months, with the inactivity rate unchanged at 21.2%. However, it remained about 30,000 below its level at the same time the previous year.

35 August's average earnings data had included returns from a new sample, implementing a recommendation of the Turnbull-King report following the suspension of the index in late 1998. Headline average earnings growth in August had risen by 0.3 percentage points to 4.9%. Stronger growth in private sector earnings had more than offset a fall in public sector earnings growth. Earnings growth had in recent months been affected by changes in the timing of bonus payments, though the latest month's figure had appeared to be free from such distortions. The implementation of the National Minimum Wage (NMW) may also have had an impact on recent AEI outturns. The New Earnings Survey had shown that gross weekly pay had grown by 3.6% in the year to April 1999, slightly lower than the AEI over the same period (4.0%).

36 Other evidence on earnings growth had been mixed. The Reward Index had risen by 0.1 percentage points in September to 3.4%, but it remained well below the AEI. The FRES survey in October had shown stronger earnings growth for temporary staff, but little change in salary growth for permanent staff. The Bank's regional Agents reported that overall pay pressures had remained subdued. There had been little new information on settlements in September, because relatively few settlements were made at this time of year. The Bank's AEI-weighted twelve-month mean settlement had remained at 3.5% in September. After allowing for inflation, settlements appeared to have stopped growing, but remained at a high level.

37 Wage drift, on the basis of these data, had increased in recent months, particularly in the service sector. Service sector wage drift was now around 1 percentage point above its average level since 1994. Drift in the production sector had, however, been more subdued.

38 The Bank's regional Agents had conducted a survey of their contacts to help assess the nature of the skill shortages that firms were facing. A sample of firms thought likely to be experiencing skill shortages had been selected. Of the 123 firms included in the survey, 84% had reported that shortages had worsened since last year, primarily in specialist areas. A similar proportion of firms expected skill shortages to persist both in specialist areas and more generally. Comments had included reference to poor general educational standards, as well as the legacy of the past run-down in vocational training, the erosion of work culture in some areas, and constraints on the mobility of labour.

39 Around 80% of firms sampled had expected to have to pay higher wages to obtain the skills they required, including more than two-thirds of the group for whom skills recruitment had become no worse in the past year. More than a quarter had said there would be an increased focus on training by management. Just under 10% had mentioned an impact on output, either via a constraint on output levels, or on the development of their business (both from their own skill shortages and shortages of IT services), or via poorer levels of service to customers. A number had also mentioned increased pressure on existing staff, leading to higher staff turnover.

V Prices

40 The Bank's oil-inclusive commodity price index had risen by 2.1% in September and by 13.5% on a year earlier, mainly as a result of continued strengthening in crude oil prices. Excluding oil, commodity prices had been flat over the month and had been 3% higher compared with the previous year. The contrast between different types of commodities had continued: metal prices had risen further, whereas domestic food prices had fallen again.

41 Seasonally adjusted manufacturing input prices had risen by 0.7% in September to give 5.8% annual inflation. This had largely reflected higher oil prices. The latest CIPS survey input price index had risen to 56.2 in September, the highest for four years. The CBI Quarterly Industrial Trends output price expectations balance had strengthened further in Q3. Although cost pressures from materials had been mounting since early this year, output price inflation had remained subdued.

42 The latest CIPS services survey had shown a sharp rise in input prices in October, with the index rising to 59.2, its highest since May 1997. The survey had also indicated that average prices charged had risen for the first time in four months.

43 Export and import prices had risen by 1% and 0.6 % respectively in the three months to August. Stripping out the oil component, export prices had fallen and import prices had remained unchanged.

44 Comparing price inflation with weighted costs had suggested that retailers' and manufacturers' margins had fallen over the past year. The Euler Trade Indemnity Survey had indicated that competitive pressures had somewhat reduced respondents' profitability since early 1999.

45 RPIX inflation had remained at 2.1% in September. Whereas harvest-related seasonal food prices had risen on the month, non-seasonal food prices had fallen. The annual rate of change of the retail sales deflator had remained at -0.5% in September. This had mainly reflected falls in food and non-food store prices earlier in the year.

VI Reports by the Bank's Agents

46 The Bank's regional Agents had reported a continued recovery in economic activity. Growth had continued to be driven mainly by domestic demand, although many firms had also reported a pick-up in export orders. However, although manufacturing output continued to rise, the recovery had been far from universal. Construction activity had remained strong. The service sector continued to record strong growth, although it had not increased further. IT activity had remained strong, as Y2K work had been replaced by firms investing in more developmental projects, such as Internet sites. Agricultural production had remained weak in all regions. 47 Retail spending had improved further, although growth had been moderate. The pattern of consumer spending had remained similar to previous months, with department store sales weaker than in discount and out-of-town stores.

48 There had been evidence of further tightening in the labour market. Most regions had reported increased skill shortages, with particular concern reported in the south and south-east of England. Many contacts had noted that unskilled labour had also become more difficult to recruit, especially for retail positions. Pay pressures had remained subdued, with most settlements lower than a year ago. However, pressures had appeared slightly stronger than in previous months, especially in southern regions.

49 Input prices had picked up further, particularly for oil-related products and some metals, although overall prices remained broadly flat. Many manufacturers had continued to find it difficult to raise prices, and retail prices remained flat or falling. Furthermore, a number of firms thought that consumers had become more sensitive to price differences within each sector, and had begun to bargain over price to an increasing extent.

50 Growth in house prices had remained more pronounced in the southern regions, although there had been evidence that growth here had peaked. The buy-to-let market had slowed. In the northern regions of the United Kingdom, growth in housing activity had continued to increase steadily.

VII Market intelligence

51 The effective exchange rate index for sterling had been little changed since the October MPC meeting, but sterling had appreciated against the euro from the middle of the month. This strengthening had coincided with the announcement of merger and acquisition activity. It was possible that anticipation of potential sterling purchases had encouraged others to bring forward their purchases of sterling. Such influences on sterling's exchange rate were expected to be temporary.

52 Market participants had continued to comment that movements in US equities were an influence on the dollar's exchange rate against sterling and other currencies. There had been some evidence of a greater correlation between the Dow Jones Industrial Average and dollar exchange rates, including that between the dollar and sterling. However, the wider implications for sterling's effective exchange rate had been less clear.

53 The difference between interest rates implied by futures and economists' interest rate forecasts had widened over the three months to October. This was more likely to be related to increased risk-aversion, the unwinding of long-standing trading positions and mortgage-related swap market activity, rather than a genuine difference of view between traders and economists. In terms of the immediate rate decision, market commentators on balance attached a high probability to a 25 basis point increase in the Bank's repo rate but did not expect changes in rates in December or January.

Minutes of the Monetary Policy Committee meeting on 8–9 December 1999

1 Before turning to the immediate policy decision, the Committee discussed demand and output; money and asset prices; prices and costs; the world economy; the labour market; and other considerations relevant to the decision.

Demand and output

Final domestic demand in Q3 had turned out as expected at 2 the time of the November Inflation Report. However, consumption had been a little stronger than expected, while investment was a little weaker. On the basis of the pattern of revisions over recent years, it was quite possible that the Q3 investment figures could be revised up. However, it was also possible that the weaker figures partly reflected a 'millennium pause' in IT-related investment spending. The slightly stronger-than-expected consumption numbers reflected the ONS' attempts to capture the changing seasonal pattern of car registrations. The figures for consumption growth in the first half of the year could therefore be revised down, reflecting the latest estimates of the seasonal factors, when the National Accounts for Q3 were published. Abstracting from these seasonal effects, the underlying picture for consumption growth in Q3 appeared broadly in line with expectations at the time of the November Inflation Report. Looking beyond Q3, the latest evidence suggested that car registrations were turning out quite weak-possibly reflecting expectations of reductions in car prices in the near future, in which case car sales, and hence consumption, might subsequently pick up at some point.

3 The Committee discussed other recent indicators of household consumption. Retail sales growth had remained strong at the beginning of the fourth quarter, though the three-month on three-month growth rate for October was slightly lower than it had been a few months ago. The Bank's regional Agents' contacts were reporting some strengthening of retail activity, but the picture seemed somewhat weaker than the official data. There were several possible explanations. First, sales values were rising less quickly than volumes, since the retail sales deflator was falling, and this might be affecting contacts' responses. Second, retail floor space was probably still rising-and this was reflected in the difference between total sales and like-for-like sales in the British Retail Consortium survey. Third, it was possible that the Agents' retail contacts were weighted more towards those sectors that were losing market share, such as department stores, and less towards discount stores.

4 Consumer confidence, as measured by the GfK survey, had fallen in November but remained above its long-run average. The MORI survey had risen, but this series was usually more volatile than the GfK measure. While the recent fall in the GfK survey might reflect monthly volatility, the rises in interest rates since the beginning of September might have had some dampening effect on confidence. The disaggregated responses to the individual questions in the survey showed that respondents thought that the general level of unemployment would rise. This seemed at odds with the recent evidence that employment had continued to grow. It was possible that, although employment remained high, the pace of job creation and job destruction was higher now than in the past and that this had heightened individuals' feelings about their job insecurity in an existing job. If so, that uncertainty could in turn have a dampening effect on consumption growth. But looking beyond the latest movements in consumer confidence and retail sales, the fundamental determinants of consumption such as housing and financial wealth and real incomes seemed to be strengthening.

5 Turning to net trade, both exports and imports had turned out a little stronger than expected at the time of the November *Inflation Report.* The UK share of world export markets probably increased in Q3, but was much lower than it had been prior to the appreciation of sterling from August 1996. The export orders index in the latest CIPS survey had remained above 50 for the seventh successive month, while the CBI monthly trends survey balance for export orders was negative, but less so than a year ago. There were, however, some signs that export optimism had deteriorated in recent months, for example in the DHL survey.

6 There had also been slightly stronger-than-expected import growth in Q3, so that the contribution of net trade to GDP growth in Q3 was only slightly more positive than had been expected. Strong growth in imports could be linked to re-exporting, and it seemed stronger than was consistent with recently observed domestic demand growth.

7 Looking forward, the central projection for activity in the published fan chart assumed that net trade would make negative contributions to GDP growth in the forecast period. The net trade contributions in the central projection were somewhat more negative than projected by the average of other forecasters, and that largely reflected a steeper assumed sterling depreciation by other forecasters. The sterling effective exchange rate had strengthened since the November *Report* and other things being equal that would tend to depress net exports relative to the projection made then.

8 The latest data for non-EU trade in October showed a marked fall in exports but September had been strong. That evidence seemed broadly consistent with the projections so far. The Agents' special survey tried to shed light on the recent export puzzle. The picture that emerged was of very considerable price and market pressures. This was particularly marked for exports to the EU, which was to be expected given the movements in sterling against the euro compared with the dollar. Overall, the export picture in the survey seemed weaker than that suggested by recent official data.

9 On output, the latest estimate of GDP growth in Q3 was still in line with the 0.9% first estimate available at the time of the November Report. The latest manufacturing data showed a slight upward revision to Q3, although growth in October had been lower than the average monthly rate in Q3. The CBI Industrial Trends survey for November recorded a positive balance for output expectations, though less positive than in October. The latest construction survey indicators also seemed quite buoyant, more so than the official data on new orders. The monthly CIPS services survey had shown a marked increase in the activity index. This index looked particularly strong when compared with the average since the survey began in 1996, which itself reflected a period of strong service sector output growth. The latest CBI/Deloitte & Touche survey however pointed to some recent weakening of consumer services volumes. There were some suggestions that the latest rise in the CIPS survey might be millennium-related rather than a more sustained acceleration in service sector activity. There was however little evidence from the Bank's regional Agents of strong millennium-related effects on demand or output, apart from the possible pause in IT investment noted above and some isolated examples of increasing inventories. The latest National Institute of Economic and Social Research projection of GDP growth in the three months to November was 0.8%, down slightly on the outturn for October. The staff's latest survey-based estimate of GDP growth in Q4 was broadly at the same rate as in the third quarter, but higher than in November's central projection.

10 Overall there was not much evidence, on balance, that demand and output were turning out differently from what had been expected in November. If anything, the risks were of slightly stronger outturns in Q4 than thought a month ago.

Money, credit and asset prices

Broad money growth, excluding Other Financial 11 Corporations, remained fairly stable. The most striking monetary indicator over the past month had been the marked increase in narrow money in November. Notes and coin were growing at the fastest annual rate since 1980, with a particularly rapid rise in November. The seasonal adjustment updated the seasonal factors each month using a three-year window. This meant that one third of the rapid increase in November had already been attributed as a seasonal effect-the headline increase was even larger than the seasonally adjusted figures suggested. The staff had tried to make allowance for the possible effects of the millennium and the Government's Winter Allowance, but it seemed likely to explain only part of the total increase in November, though there was great uncertainty over the magnitude of these effects. An increase in money balances ahead of the year-end might occur for several reasons. For example, it might be precautionary on account of concerns about computer-related Y2K problems, or it might be to spend on millennium-related celebrations. Even in the latter case, the effects might only be temporary if spending was transferred from other months. It might have no effect on aggregate spending if it reflected a shift from other types of spending to more cash-based items. In any event, it seemed unclear why households should withdraw substantial balances in November, so far from the year-end. There was no anecdotal evidence to support a large effect. Although there was a link between retail sales and narrow money, it had not been particularly close from month to month recently. There was, however, a risk that higher money balances would eventually feed through to consumption, even if the balances were not spent immediately. There was a range of views on how much weight to attach to the risk of higher spending. For some, the risk was mitigated by the fact that the large monthly increase came just before the year end, when interpretation of month-on-month changes was usually difficult and was made more so by any potential millennium-related effects.

Asset prices had risen in the UK and overseas. The FTSE 12 100 had risen by 5% over the past month and the FTSE All-Share index was now more than 6% up, and over 9% above the fifteen day average used as the starting assumption in the November Inflation Report projections. There had been rises in Japan, continental Europe and the United States too. The FT Small-Capitalisation index had outperformed the FTSE 100 index over the past month. Some of the rise in share price indices was accounted for by high-tech IT stocks, but this did not account for the entire rise. Nor was it clear that the rise in IT stocks should be excluded in any event, because it was necessary to look at the aggregate. However, fluctuations in these stocks might be contributing to greater volatility. The rise in indices both here and abroad seemed broadly consistent with a general rise in market confidence about the strength of world activity.

13 For the UK the rise in equity wealth, coupled with the strength of borrowing for consumption, suggested a robust outlook for consumption growth. House prices had again been volatile, with the Nationwide index recording a strong rise on the month, while the Halifax index had fallen. Annual percentage rates of increase in house prices, and hence gross housing wealth, were in double digits, and many short-run growth rates were at least as fast as the annual rates. Activity indicators in the housing market had been mixed over the month, but on balance showed activity broadly stable over the past few months and stronger than at the beginning of the year. The staff's provisional estimate of the increase in mortgage equity withdrawal in the third quarter, though well below the levels of the late 1980s as a share of personal income, was quite marked, and appeared to be closely

correlated with recent growth rates in household consumption spending.

Prices and costs

14 The Bank's commodity price index had fallen in October, reflecting both the fall in oil prices and a fall in metals and food prices. However oil prices had risen again in November. Producer input prices continued to reflect higher oil prices. At the retail level, oil prices had been reflected in higher inflation in continental Europe. But despite higher petrol prices in the UK too contributing around 0.5 percentage points to annual inflation in the year to October—inflation as measured by the harmonised consumer price index in the UK was now below the European average. This was not too surprising given the past strengthening of sterling.

Retail price inflation on the targeted RPIX measure had risen 15 to 2.2% in October. This was in line with expectations at the time of the Committee's November meeting. The latest CBI Distributive Trades survey balance for retail prices had turned negative in November, and was well below its historical average, which might point to further weakness in retail prices. However, the historical average reflected periods of much higher inflation, so it was difficult to interpret the recent data. Anecdotal evidence suggested wider discounting than in the past, even of some luxury brands. It was difficult to tell if the lower-than-expected outturns for some of the components of the retail prices index provided evidence of a larger-than-expected squeeze on retail margins than had been assumed in the fan chart published in the November Inflation Report. It might simply reflect a different timing for the reduction in margins than had been assumed. Alternatively, it could be due to other cost factors that had yet to be observed in the data or simply month-to-month volatility with no implications for the short-term profile of inflation.

16 The weakness of goods prices was clearly reflected in the retail sales deflator, which was based on the same data. The CBI/Deloitte & Touche survey balance for prices of consumer services had also fallen recently, but this survey had only been running for a few quarters. However, the CIPS services prices index had risen on the month.

The continuing pressure on retail margins did not seem to 17 reflect weak demand, but other factors such as increased competition. If so, increased competition and reduction in retail margins might spread along the supply chain. Even given the recent rise in input prices, it might be difficult for manufacturers to pass on higher costs, at least in the short term. It was possible that aggregate supply had become more elastic for reasons other than a structural increase in competition in the UK, such as increased investment elsewhere by international companies and a corresponding increase in world supply. More efficient and cheaper access to information about domestic and overseas production and prices, and associated scope for cost savings on inputs, might also have an effect on UK prices. For example, the more widespread use of the Internet might affect UK productivity growth and pricing behaviour. There was little evidence that this was, as yet, having a big effect, though its use could grow rapidly. In the first instance one might see greater effects on inter-firm trade than at the retail level. One much quoted example of Internet activity was in books, but recent movements in prices looked small when compared with the impact of the ending of the Net Book Agreement some time ago. It was therefore important not automatically to assume that the effects of the Internet would be bigger than previous shocks.

18 Most of the evidence of weaker prices related to goods prices; indeed the gap between service and goods price inflation was as large as at any time since 1992. That gap was much larger than could be explained by differences in trend productivity growth between the sectors. 19 Within the RPI there were large rises in a few components of the services index—notably insurance and foreign holidays. Some members thought it was useful to gauge the underlying behaviour of RPIX by looking at sub-indices which excluded volatile items, such as fuel prices, or possibly other 'exogenous' items such as seasonal foods and taxes. Other members thought that similar arguments could be applied to changes in prices resulting from exchange rate movements; and that other than in the very near-term, when nominal rigidities existed, it was not useful to exclude items from the index.

20 There had been some recent announcements on water, electricity and gas pricing. Taken together the effect on the short-term profile for retail prices was broadly in line with what had been assumed in the November *Inflation Report* projections.

The world economy

21 The likely pace of growth in the United States remained subject to various uncertainties. The latest stock market rise added weight to the factors underpinning strong consumption growth, but had also added to the risks of a sharper slowdown if equity prices were to fall. Inflation had risen somewhat over recent months, although not on the core measure. In any event, the US situation appeared to be rather different from the conjuncture of events in the UK, because of the much stronger recent productivity growth there.

22 The Japanese GDP data had been heavily revised on release of the Q3 estimate. GDP was recorded to have fallen by 1% in the third quarter, but this followed an upward revision to the second quarter. Overall the new data and revisions back to 1997 left the level of GDP broadly in line with what had been expected at the time of the November *Inflation Report*. The markets had seemingly taken the view that as much weight should be placed on the upward revisions to the earlier data, as on the weaker Q3 growth number (which was subject to future revision). But if one placed more weight on the momentum implied by the recent numbers, then that would imply a less sanguine view of prospects for the Japanese economy.

23 The news on activity in the rest of the industrial world, including the euro area, was either in line with or slightly more positive than expected over the past month. There seemed little news in emerging markets over the past month that would materially affect the prospects for UK inflation.

24 Turning to the pattern of exchange rates, the recent German data had contributed to a slight rise in the euro over the days leading up to the Committee's meeting, though over the past month as a whole the euro had weakened further against the dollar. Sterling's effective exchange rate had not changed much since the time of the November meeting, but was around 1% above the fifteen-day average used as a starting point for the projections. That strength was primarily against the euro, rather than against other currencies, reflecting more buoyant views of prospects for activity in the US and UK. Relative movements in yield curves over the period could account for some of sterling's appreciation against the euro. Markets had now had a chance to adjust to the interest rate increases in the United States, the euro area and the United Kingdom over the past few months. There had been no immediate major effects on financial markets. Compared with some people's prior expectations, market activity still seemed to be quite well sustained as the end of the year approached.

The labour market

25 The latest labour market data had by and large been as expected. There was, however, some concern among some of the Bank's regional Agents' contacts about prospects for the coming pay round. The Agents were also finding more widespread evidence of skill shortages, which had been building since the spring. But neither this nor any of the other survey evidence on skill shortages had yet fed through to the observed earnings data. It was possible that the sentiment being picked up by the Agents was rather more about a general desire for more highly trained and educated workers rather than a cyclical point about tightness in the labour market.

Some data presented by Bank staff on employment transition probabilities—flows out of various categories of inactivity—had highlighted a large number of people flowing from the category of 'not wanting a job' into employment within a short period of time. At first sight this was rather surprising, but might be explained by people seeing new job opportunities become available which they had not previously expected. More research was needed in this area, but so far it suggested that the pool of people who could move into employment was greater than might be thought based on more traditional and more narrowly focused measures of potential labour supply. It might help to explain why labour tightness had not fed through to earnings as fully as might have been expected.

27 No new official whole economy productivity or unit labour cost data were yet available for Q3, but manufacturing productivity had shown signs of picking up and had consequently begun to reduce the rate of increase of unit labour costs in that sector. The latest GDP data suggested that productivity growth for the whole economy might have risen to around 2% at an annualised rate in the third quarter, which would be close to its long run average. This was important, as the central projection in the November Report had assumed a recovery in whole economy productivity growth over the forecast period. The fall in profit margins could not go on forever, and required a continuing intensification of competitive pressures. Unless there was an even stronger recovery in productivity growth than had been assumed, earnings growth would need to turn out as low as assumed for the central projection of inflation to hold. Even then, unless productivity growth improved further, inflation would tend to rise at some point in the future, as the short-run downward price effects-of lower margins and a strengthening exchange rate-wore off and the effect of the underlying strength of demand began to dominate.

28 Members of the Committee reflected on the November central projection for real earnings growth. The earnings profile in the central projection was somewhat lower than the average of outside forecasts made for 2000, and given the evidence of skill shortages it was possible that the risks to this projection were more clearly on the upside. But some members retained doubts about the interpretation of the data, and as yet there was no firm evidence that the outturn for earnings growth was diverging markedly from the central projection made in November. This question would need to be re-examined in the context of the February forecast round.

Tactical considerations

29 There were several tactical considerations discussed this month. First, the Committee concluded that there was no reason to change the view outlined in the minutes of the September meeting that the Y2K period should not constrain UK monetary policy setting. However, there was a related consideration concerning the data. The uncertainties about the size of millennium-related effects might make it more than usually difficult to interpret the data relating to the period covering the year-end; particular examples were for consumer spending, investment, money and earnings. In each case there would be difficulty in reaching a clear interpretation of the data immediately after the turn of the year. But it was always difficult to interpret the data for, say, retail sales around Christmas and the New Year. It was not clear that this fog would be that much thicker than usual, and it would not preclude making a change in interest rates in either December or January.

The immediate policy decision

30 Some members thought that the balance of arguments was in favour of a rise in interest rates of 25 basis points this month, but

attached different weights to the various supporting factors. First, for those members who had contemplated voting for a 50 basis point increase in interest rates in November (rather than 25), there did not need to be much news on the month to justify a further 25 basis point rise in rates now. Second, and related to this, the latest data did on balance suggest the central projection for inflation would be a little higher than thought a month ago. The latest evidence on activity was at least as strong as expected a month ago, and suggested that the pace of output growth might not slow as envisaged in the central case. In particular, world demand now seemed to be strengthening, and some of the influences on UK consumption growth-wealth, real incomes and borrowingseemed to have remained strong or to have strengthened over the past month. On prices, there had been signs of a compression of retail margins, and sterling had strengthened which would put further downward pressure on the price level. But the oil price had risen further. Third, the position of the UK economy looked very different from when the last reduction in interest rates had been made in June. It was unclear whether the 50 basis point rise in rates since the summer would be sufficient to slow the economy to a more sustainable pace, and a rise in rates now might helpfully affect expectations. Fourth, the projection for inflation made in November had an upward slope at the two-year horizon. The passage of each month meant that other things being equal the projection for inflation would be higher two years ahead. So even if there were no news on the month there could be a case for a rise in interest rates. Fifth, in the view of some members, the risks of making a big monetary policy mistake were greater on the upside, and stemmed from the potential for the tightening labour market to begin to feed through rapidly to wages and prices, which suggested raising rates sooner rather than later. Overall, the case for raising rates this month, rather than delaying, was not a matter of urgency, but on balance the evidence pointed to the need for a further rise in the repo rate of 25 basis points.

31 A second view was that there was no need for a change in interest rates this month. On this view, the news on demand and output was broadly as expected at the time of the Inflation Report, albeit with the risks perhaps now slightly more on the upside. The news on labour market quantities was also slightly tighter than expected. However, the likely short-term profile for inflation was if anything a little lower than thought a month ago. Indeed, the downward effects on prices from reductions in utilities prices, removal of fuel and tobacco escalators and increasing competition could well be larger than had been built into the published central projection in November. Overall, neither the news on demand nor that on prices this month was conclusive. The data continued to highlight the same short-run trade-off puzzle between output and prices discussed last month in the *Report* and the minutes of the Committee's previous meeting. Looking forward, the prospects were still for rising inflation at the two-year horizon, so a further

tightening would probably be needed at some stage if the economy continued along the path outlined in the published November central projection. In particular, given the latest news on labour market quantities and skill shortages, it was possible that the central projection for earnings growth in 2000 made at the time of the November *Inflation Report* was now too low. But there would be more hard evidence on earnings fairly soon as many settlements were agreed early in the New Year, and the risk of waiting another month or two would be unlikely to give rise to a big policy mistake given the saucer-shaped projection for inflation. There was time to wait and see if signs of earnings and price pressures emerged. There was therefore no need to change interest rates this month.

A third view also led to a conclusion that no change in 32 interest rates was needed this month. On this view, the latest indicators were consistent with a slowdown in the rate of growth of domestic demand and output through the fourth quarter of 1999 and beyond, and the short-term profile for inflation was at least as weak as in the central projection in the Inflation Report. The exchange rate had appreciated compared with the central assumption, and was closest to the constant exchange rate profile described in the November Inflation Report (see pages 48 and 58). A higher exchange rate would put more downward pressure on prices than implied by the November central projection. On this view it was prudent to wait and gauge the impact of the two previous increases in interest rates since the summer, and to see whether there would be a further intensification of competitive pressures. A rise in interest rates now would risk pushing inflation further below the target.

33 The Governor invited members to vote on the proposition that the Bank's repo rate be maintained at 5.5%. Six members of the Committee (the Governor, David Clementi, Charles Goodhart, DeAnne Julius, Ian Plenderleith and Sushil Wadhwani) voted for the proposition. Mervyn King, Willem Buiter and John Vickers voted against, preferring a rise in rates of 25 basis points.

34 The following members of the Committee were present:

Eddie George, Governor

Mervyn King, Deputy Governor responsible for monetary policy David Clementi, Deputy Governor responsible for financial stability Willem Buiter Charles Goodhart DeAnne Julius Ian Plenderleith John Vickers Sushil Wadhwani

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

Annex: Summary of data presented by Bank staff

1 This Annex summarises the analysis presented by the Bank staff to the Monetary Policy Committee on 3 December, in advance of its meeting on 8–9 December 1999. 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 The international environment

2 Growth in the United States in Q3 had been stronger than expected, but GDP had fallen in Japan, and there had been a mixed picture in the euro area, with activity stronger in France than in Germany. The latest data from the US and Japan had suggested that growth in gross trade volumes had remained at relatively high levels, though might have fallen back slightly in recent months. Oil prices had risen again in November, reflecting stronger global demand prospects, high compliance rates with the agreement among OPEC members to limit supply, and lower oil stocks in OECD countries. World food prices had fallen.

3 US GDP growth in Q3 had been revised upwards to 1.4%, largely reflecting higher contributions from net trade and stockbuilding. Annual growth in industrial production had risen to 3.3% in October. Although the index of capacity utilisation in the National Association of Purchasing Managers' survey had been stable over the last year, the survey had been pointing to lengthening delivery times and a rising backlog of orders, consistent with a rather stronger outlook for activity. Consumer confidence had risen in November, on the back of strong income expectations. Unemployment had continued to fall, reaching 4.1% in October, and had remained unchanged in November. Producer prices had fallen by 0.1% in October, reflecting falls in food and energy prices. Annual consumer price inflation had remained unchanged in October, at 2.6%.

German GDP had risen by 0.7% in Q3, and growth rates in 4 Q1 and Q2 had been revised upwards. French industrial and consumer confidence indicators had grown by considerably more than those in Germany in October and November. Annual growth in industrial production in the major three euro area economies had fallen slightly to 0.9% in September, reflecting growth of 3.1% in France, 0.3% in Germany and -0.7% in Italy. But a strong rise in German manufacturing orders in October and a rise of industrial production of 1.4% in the year to October had suggested a possible future pick up in German activity. The euro area broad money measure M3 had risen by 6.0% in the year to October. Annual inflation in the euro area had risen slightly in October to 1.4%, mainly reflecting the rise in energy prices over the year. Survey measures had suggested that inflation was expected to rise further in coming months.

5 Japanese GDP had fallen by 1% in Q3, a steeper fall than market expectations, although the level of GDP in the previous quarter had been revised up substantially. Industrial production had fallen by 2.3% in the month to October, but it had still been 1.7% higher than a year ago, and overtime hours had risen in recent months. Inventories had continued to decline, falling by 8.8% in the year to October. The unemployment rate had remained unchanged at 4.6% in October. Base money growth had slowed to 5.5% in the year to October, but growth in broader measures had picked up slightly, and bank lending had continued to recover from the low in August. The consumer price index had fallen by 0.7% in the year to October, but excluding food had fallen by only 0.1%. The Economic Planning Authority had released details of a further ¥18 trillion economic revival package.

II Monetary and financial conditions

Narrow money had grown strongly in November. After 6 adjustment for seasonality and the introduction of the new 50p and £2 coins, notes and coin had increased by 1.4% on the month, and the twelve-month growth rate had risen to 8.9%, the highest since 1980. The usual practice of current updating of seasonal adjustment meant that part of the rise in the seasonally unadjusted data in November had been treated as a seasonal effect, depressing the seasonally adjusted figure relative to an alternative measure based on non-updated seasonal factors. Part of the pick up in November had reflected special effects, such as a temporary increase in cash holdings relating to government Winter Allowance payments. But even after adjusting for an estimate of the quantitative impact of these factors, narrow money growth had still been unusually strong, consistent with evidence from other sources of robust growth in retail sales.

7 The stock of M4 had risen by £4.2 billion (0.5%) in October. The twelve-month rate had picked up slightly to 3.0%. M4 lending (excluding securitisations) had grown by £7.6 billion (0.8%) in October, and the twelve-month rate had risen to 7.2%. Robust lending growth had been driven by the continuing strength in lending to households and a rise of some £3 billion in lending to other financial corporations (OFCs) on the month.

Households' M4 deposits had risen by £2.2 billion (0.4%) in 8 October. M4 lending to households (excluding securitisations) had remained strong, rising by £4.1 billion (0.8%) in October. The twelve-month rate had picked up to 8.8%, the highest rate since 1991 Q3, as net secured lending had continued to grow strongly. Within total lending to individuals, net secured lending had risen by ± 3.6 billion (0.8%) in October, and the twelve-month growth rate had increased to 7.9%. The value of loan approvals had also been strong (at £10.4 billion). October's net secured lending and loan approvals data, combined with the historically high level of the stock of loan approvals, were consistent with continued housing market strength. Total unsecured lending had also been strong, growing by £1.0 billion (0.9%) in October, but growth had weakened over the past year. According to provisional Bank estimates, mortgage equity withdrawal had risen sharply to £2.4 billion in Q3, leaving 'total borrowing for consumption' (defined as mortgage equity withdrawal plus unsecured lending) at its highest level as a percentage of disposable income since 1990.

9 The M4 deposits of private non-financial corporations (PNFCs) had risen by £1.7 billion (1.4%) in October, and the twelve-month rate had risen sharply to 6.9%. M4 lending to PNFCs had grown more slowly, rising by £0.4 billion (0.2%) in October. But PNFCs' total borrowing, including foreign currency borrowing and capital market finance, had remained strong.

10 OFCs' M4 deposits had risen by £0.3 billion (0.2%) in October, although the twelve-month rate had remained very weak at -7.2%, reflecting the sharp rundown earlier in the year. OFCs' M4 borrowing had been much stronger in October, rising by £3.1 billion (1.6%) on a month earlier, and by 6.0% on a year earlier.

11 Short-term nominal forward rates at maturities up to five years had fallen following the 25 basis point rise in the repo rate and the publication of the *Inflation Report* in November. But market rates had risen again following the release of the MPC minutes, most markedly at maturities of around one year. The falls in long nominal rates seen in late October had continued in the first week of November. This had partly reflected a global bond rally, but the fall in UK gilt yields had been greater than in other countries. Corporate bond yields at comparable maturities had also fallen. Long real interest rates derived from the index-linked gilt market had shown a similar pattern to long nominal rates. Although market expectations of inflation in the short to medium term (derived from nominal and index-linked gilts) had fallen immediately after November's MPC meeting, the decline had largely been unwound later in the month. Survey measures of inflation expectations for 2000 had been broadly unchanged on the month.

12 Quoted retail rates data had suggested that the November rate rise had been almost fully passed through to standard variable mortgage rates. Fixed-rate mortgages had risen by less, reflecting movements in swap rates.

13 The FTSE All-Share index had risen by 6.2% since the November meeting. Small capitalisation stocks had outperformed the FTSE 100 and All-Share indices, rising by 12.2%.

14 The sterling effective exchange rate index had appreciated by 0.3% since the November MPC meeting, and by 0.8% compared with the starting point for the November *Inflation Report* projection. Over the month, sterling had appreciated against the euro, but had fallen against the dollar and yen. Monetary news had appeared to explain much of the move in the euro-sterling bilateral rate.

III Demand and output

15 Quarterly GDP growth at constant market prices had been unrevised, at 0.9%, in Q3. The annual growth rate had also been unchanged at 1.8%. Total industrial production had risen by 1.2% in Q3 and by 0.3% on a year earlier. Manufacturing output had grown by 1.0% in Q3, the first time since 1995 Q2 that manufacturing output growth had been higher than services, though the level of manufacturing output had still been 0.2% lower than a year earlier. Services output had grown by 0.9% in Q3, revised down from 1.0% in the first release, with annual growth at 2.4%. Construction output had grown by 0.5% in Q3.

16 The expenditure breakdown of GDP had shown domestic demand growing by 0.7% in Q3. Changes in inventories had contributed 0.2 percentage points to growth, so final domestic demand had grown by 0.5%.

17 Private consumption had grown by 0.6% in 1999 Q3, and annual growth had been 4.4%. This had been stronger than expected at the time of the November *Inflation Report*, partly because of an unexpectedly small fall in vehicle expenditure. The seasonal pattern of vehicle expenditure in 1999 had been affected by the change in registration dates for new cars. The ONS had included an estimate of the size of this seasonal shift in their estimate of total Q3 spending. But a similar adjustment had not yet been made to Q1 or Q2 in light of the latest data. Total new car registrations over the first eleven months of the year had been 1.8% lower than a year earlier. A complete breakdown of consumption growth had not yet been published, but retail sales had grown by 1.2% in Q3. Government consumption had risen by 0.5% in Q3, down from 0.6% in Q2.

18 Total investment had grown by 0.2% in Q3. Business investment had fallen by 1.3%, though it had remained 4.3% higher than a year earlier. Within this, manufacturing investment had fallen by 5.2% in Q3, and service sector investment had fallen by 0.6%. The fall in business investment had been puzzling, but the investment data had tended to be revised upwards in recent years. The gross operating surplus of corporations had risen by 2.3% in Q2, and the annual rate of decline had moderated to -5.0%.

19 Inventories had made a positive contribution to GDP growth in Q3, reflecting a slowdown in the pace of decline. Including the alignment adjustment, inventories had fallen by £0.7 billion in Q3, compared with a fall of $\pounds 1.2$ billion in Q2. The CBI monthly survey in November had reported that manufacturers still perceived their stocks to be more than adequate.

20 Net trade had contributed 0.2 percentage points to GDP growth in Q3, the second consecutive positive quarterly contribution. Total exports of goods and services had grown by 6.2%, and imports had grown by 4.9%. The rise in goods exports had been more broadly based than in Q2, with exports to non-EU countries growing by 10.1% and exports to the EU rising by 7.0%.

21 The Bank's regional Agents had conducted a survey of their contacts to help assess the nature of the export recovery. A sample of mostly manufacturing firms with export-related business had been selected. Of the 121 firms responding to the survey, slightly more than half had indicated that their export volumes had not grown over the past six months. Demand had been reported to be strongest in North America, followed by Asia and other markets. Europe remained the weakest market, but had been recovering slowly. A large number of exporters to Europe had noted that lower profit margins had been a factor affecting export volumes in the past six months.

22 On the assumption that the exchange rate remained unchanged, the expected growth in export volumes over the next six months had varied across regions. Around 40% of respondents exporting to Europe expected volumes to fall, with an additional 30% expecting growth to slow but remain positive. Those exporting to regions outside Europe had been more optimistic, with around three-quarters expecting positive export growth.

23 Turning to indicators of Q4 activity, manufacturing output had risen by 0.1% in October and retail sales volumes had risen by 0.5%. Retail sales volumes had grown by 1.2% in the three months to October compared with the previous three months, and by 4% compared with a year earlier. Growth in retail sales volumes had continued to exceed that of retail sales values. The CBI Distributive Trades survey had shown a balance of +24 respondents reporting higher activity in November, and further growth had been expected in December. The MORI measure of consumer confidence had risen to +4 in November, but the GfK confidence index (which was less volatile and had a bigger sample) had fallen to -1.5.

Housing data had been mixed in November, with the Halifax house price index falling by 0.5%, but the Nationwide measure rising by 1.9%. Indicators of housing activity had also been mixed, but generally pointed to continued high levels of activity. Particulars delivered had risen by 4.1% in October and had been 17.4% up on a year earlier. But the seasonally adjusted net balance of respondents reporting an increase in net reservations compared to a year ago had fallen to +29 in the October House Builders' Federation survey, from +45 in September. The Royal Institute of Chartered Surveyors seasonally adjusted sales balance had remained high at +32. Private housing starts had risen by 4.5% in the three months to October compared to the previous three months, and by 9.0% compared to a year earlier.

25 The latest survey-based estimate produced by Bank staff had suggested GDP growth of 0.8%–0.9% in Q4. The estimate of three-month on three-month GDP growth produced by the National Institute of Economic and Social Research had been 0.9% in October and projected to be 0.8% in November. Turning to the individual surveys, the output expectations balance in the CBI Monthly Trends survey had fallen back a little to +6 in November from +12 in October. The total orders balance had been above its average at -16, but export order books had been at -33, below their long run average. The October CBI Industrial Trends survey had shown that manufacturing investment intentions had weakened as the balance of expected capital expenditure on plant and machinery had fallen to -11 in Q3 from -8 in Q2, well below the long-run average. 26 The headline index of the Chartered Institute of Purchasing and Supply (CIPS) manufacturing survey had risen slightly to 54.2 in November. The output index had been 57.4, above the no-change value of 50 for the ninth consecutive month, and the highest level since February 1997. The survey had suggested rather less buoyant export growth than the official data, with the index at 53.1. Stocks of finished goods had fallen in November, after rising in October for the first time since July 1998. The CIPS services survey had strengthened to 59.5 in November, the highest level since June 1997, with business activity rising throughout the sector. The CIPS construction index had also been strong at 57.5 in November, with housing and commercial orders remaining robust. But construction new orders had fallen by 5% in the three months to September compared with the previous three months, and had been 16% below their level in the same period in 1998.

27 In its latest Pre-Budget Report, published on 9 November, HM Treasury had revised down its forecast of Public Sector Net Borrowing in 1999/00 by around £6 billion. Forecast receipts had been revised upwards, reflecting an improved cyclical outlook. Projections for total public sector spending out to 2001/02 had been little changed, although a £0.7 billion underspend in 1998/99 had been carried forward into 1999/00.

28 The Chancellor had announced that the automatic road fuel and tobacco duty escalators would no longer be applied: decisions on any real increases in these duties would be made by the Chancellor in subsequent Budgets. Removing the escalators from the fiscal projections had reduced projected receipts by $\pounds 1^{1/4}$ billion in 2000/01, rising to $\pounds 6$ billion in 2003/04.

29 The lower overall projections for borrowing had not reflected a tightening of the Government's desired fiscal stance, which would only be reassessed in the next Budget. Projections for the structural deficit over the next three years had been little changed. The Treasury had published a separate document prior to the Pre-Budget Report assessing the outlook for trend output growth over the next five years. This had suggested that trend growth could be $2^{1}/_{2}$ % per annum compared with the $2^{1}/_{4}$ % per annum assumed in recent Treasury fiscal forecasts. Nevertheless, the fiscal forecasts in the Pre-Budget Report had continued to assume trend growth of $2^{1}/_{4}$ % per annum, as would those in the next Budget.

IV The labour market

According to the Labour Force Survey (LFS), there had been a sharp increase in employment of 110,000 (0.4%) in Q3, following growth of 0.2% in Q2. After making an adjustment for the difference in average hours worked by full and part-time staff, employment growth in full-time equivalent terms had been the strongest for more than a year. Total hours worked had risen by 0.3% during the quarter. The proportion of the working-age population in employment had risen slightly in Q3, but had remained below the spring 1990 peak.

31 CIPS survey measures of employment growth had been little changed in November. The surveys suggested that manufacturing employment had again remained stable, services employment had continued to rise moderately, and growth in construction sector employment had remained robust.

32 Unemployment had continued to fall in Q3, by 38,000 on the LFS measure and by 57,000 on the claimant count measure. Almost the entire fall in the LFS measure had been accounted for by a reduction in the number of short-term unemployed (those unemployed for fewer than six months). The pace of decline in claimant count unemployment had appeared to slow in the most recent data (the claimant count had fallen by 11,000 during September and October, compared with a total of 54,000 in the preceding two months). However, the ONS were reviewing the seasonal adjustment of these data. 33 According to the Federation of Recruitment and Employment Services (FRES) survey of recruitment agencies, staff shortages had continued to intensify in November. The Bank's regional Agents had also reported evidence of rising shortages of both skilled and unskilled staff, particularly in the South.

The headline measure of annual growth in average earnings per head, a three-month moving average, had fallen from 4.9% in August to 4.7% in September. Within the total, the service sector headline measure had fallen by 0.4 percentage points to 5.0%, while the manufacturing measure had risen 0.3 percentage points to 4.0%. The Reward index had risen by 0.1 percentage points to 3.5% in October. According to the FRES survey, there had been little change in the rate of earnings growth of either permanent or temporary staff in November.

35 There had been little new information on settlements. The Bank's AEI-weighted twelve-month mean settlement had remained at 3.5% in October. Further details had become available on the proposed three-year deal at Ford. It had been reported that the first year would combine a pay increase of 4.0% with a cut in basic hours worked. This would be above the average rate of recent manufacturing settlements in the Bank's database.

36 Historically, much of the variation in nominal earnings growth had reflected changes in inflation expectations. The latest data had suggested that real average earnings growth, after adjustment for the surveyed inflation expectations of trade union leaders, might have levelled off at around 2%.

V Prices

The Bank's oil-inclusive commodity price index had fallen by 1.0% in October, taking the annual inflation rate from 13.2% to 12.9%. The monthly fall had reflected price falls in crude oil and all the other major components of the index. The non-oil index had fallen by 1.3% in October, but had risen by 1.5% on a year earlier. Metal prices had fallen for the first time since June, and domestic food price inflation had remained weak.

38 Seasonally adjusted manufacturing input prices had fallen by 0.1% in October, but the annual inflation rate had increased to 6.3% from 5.8%. The latest CIPS manufacturing survey input price index had risen to 57.1 in November, the highest for four years. Seasonally adjusted total output prices excluding excise duties (PPIY) had risen by 0.1% in October, to give an annual inflation rate of 0.9%. The seasonally adjusted CBI output price expectations balance had risen to -7 in November, the highest since February 1998. In November's CIPS services survey, the average prices charged index had risen to 53.2, the highest for two and a half years.

39 Prices of exports and imports of goods had risen by 1.5% and 1.0% respectively in the three months to September. Stripping out the oil component, export prices had fallen by 0.7% and import prices had risen by 0.2% over the same period.

40 The annual rate of change of the GDP deflator had been 1.8% in Q3, the same as in Q2. Larger rises in the household expenditure and investment deflators had been offset by smaller increases in the government consumption deflator. The retail sales deflator had fallen by 0.9% in the year to October, the lowest inflation rate in this series on record. The stronger decline in recent months had reflected slower food price inflation.

41 RPIX inflation had risen by 0.1 percentage points to 2.2% in October. The gap between services and goods inflation had widened to its highest level since September 1992. RPIX service price inflation had risen to 3.9%, largely as a result of higher insurance premiums. RPIX goods price inflation had fallen to 0.4%, mainly reflecting lower food prices. In the latest CBI Distributive Trades survey, the balance of retailers' expected prices had fallen substantially to -1, the lowest figure since the survey had begun in 1983.

VI Reports by the Bank's regional Agents

42 The Bank's regional Agents had reported a continued moderate recovery in retail sales, though not as strong as the official data had indicated. Strong demand had continued for computers and mobile phones, and sales of household and electrical goods had risen, reflecting stronger housing activity. But turnover in the clothing sector had remained weak, and demand for new and used car sales had been below expectations. It had been reported that customers might be delaying purchases because of expected price reductions in the new year. Millennium-related stockbuilding had been only moderate, with the exception of food and drink, and pharmaceutical goods. Consumer demand for millennium events had also been weaker than had earlier been expected by contacts.

43 Manufacturing investment had continued to be targeted at productivity improvements and opportunities for overseas production. There had been mixed reports regarding IT investment. Some firms had reported a pause ahead of the New Year, but it was widely expected that IT investment would pick-up strongly from January. Reports of increases in input prices had become more widespread, but manufacturers had continued to find it difficult to pass these price increases on, and margins had been squeezed further. This had been particularly true for export-orientated firms. Downward price pressure had continued in most parts of the retail sector.

44 There had been evidence of a further tightening in the labour market. Skill shortages had continued to increase, particularly in the southern regions of England. In many service sector industries, forthcoming settlements and other pay awards were expected to be higher than a year ago, reflecting skill shortages and greater profitability. But in other sectors, such as engineering, where profits had been relatively weak, settlements were expected to be rather lower than in services. It was widely expected that any upward pressures on wages would have to be absorbed by the employer.

VII Market intelligence

45 Market expectations of, and uncertainty over, future interest rates in the UK, the US and the euro area—as measured by the implied rates and implied volatilities on short term interest rate futures respectively—had fallen in early November, following the rises in official interest rates. The fall in implied volatilities had been greater than that usually seen following monetary policy announcements. A number of possible reasons for these declines had been suggested in the markets, including a view that interest rates may not be changed again until the New Year, and improved confidence that liquidity needs across the millennium would be met.

46 Interest rates implied by UK short sterling futures had risen again later in the month. This had reflected renewed uncertainty about near-term rate prospects following the publication of the MPC minutes, reported rises in house prices, upward revisions to international growth forecasts, and a growing view that the millennium date change need not deter the MPC from changing policy in December. Market prices, surveys and anecdote had suggested some expectation of a December rate rise, although it was seen in the market as less than an even chance.

47 Merger and acquisition news had been supportive for sterling at some points during the month. Changes in risk reversals traded in the foreign exchange options market had been small over the month, but had suggested that the markets perceived some risk that sterling would rise further against the euro, but fall against the dollar.

Text of Bank of England press notice of 9 December 1999 Bank of England maintains interest rates at 5.5%

The Bank of England's Monetary Policy Committee today voted to maintain the Bank's repo rate at 5.5%.

The minutes of the meeting will be published at 9.30 am on Wednesday 22 December.

Minutes of the Monetary Policy Committee meeting on 12–13 January 2000

1 Before turning to its immediate policy decision, the Committee discussed the world economy; money and asset prices; demand and output; the labour market; prices and costs; and other considerations relevant to its decision.

The world economy

2 The Committee considered developments in the world economy since the publication of the November *Inflation Report*. Outside Japan activity in Asia had strengthened perceptibly, as it had in the euro area, which was the single most important market for UK exporters. According to the most recent estimates, euro-area GDP had increased by 1% on a quarterly basis in 1999 Q3, with growth in the previous quarter revised up to 0.6%. The recovery now seemed to be spreading to Italy and Germany, in the latter case confirming the more buoyant picture shown by business confidence indicators and orders data, both of which had risen further in recent months.

3 GDP growth in the US in 1999 Q3 had been very strong, at 1.4% on a quarterly basis. More recently, in December US consumer confidence, as measured by the Conference Board, had risen to its highest level for over 30 years, and non-farm payrolls had continued to increase rapidly. While labour market data suggested considerable pressure on resources, this was not reflected in the capacity utilisation measures themselves.

4 Although both oil and non-oil commodity prices were rather stronger than had been expected in November, there had as yet been limited pass-through into prices further along the supply chain, particularly at the retail level. This might reflect lags, or the persistence of spare capacity in the world economy, putting downward pressure on margins. Alternatively, it might be related to stronger productivity growth, especially in the US. Following the extensive revisions to past data, most estimates of trend GDP growth in the US had been revised up. Equity prices might also suggest that expectations of sustainable growth were stronger than previously, but it was too soon to be sure whether such a rerating was valid, or whether stock markets had overshot on the upside.

5 To the extent that the rise in the price of technology stocks reflected expectations of rapid improvements in productivity, the boost to demand associated with the rise in share prices might be greater, at least in the short run, than the supply-side effects from higher future productivity. The extent to which the rise in the price of technology stocks may have affected consumption was unclear, although increases in wealth more generally helped to explain the low US personal savings ratio.

6 The Committee discussed the implications of these developments for the US balance of payments. If trend growth in the US were indeed higher, the present current account deficit might narrow once the improvements on the supply side, which were perhaps already being anticipated by higher demand, began to feed through. If these improvements did not materialise, portfolio investment and capital flows linked to mergers and acquisition business could rapidly reverse, especially if stock markets fell back, with a risk that the dollar might decline sharply.

7 The Committee concluded that while the risks from a fall in stock markets and from current account imbalances remained significant, these had been present for some time and had not changed in degree over the past month or so. These risks aside, the outlook for world economic growth was now stronger than it had been, and the recovery in Continental Europe, which seemed to have become more firmly based over the past month, was of particular importance to the UK through its prospective effects on net trade.

Money and asset prices

8 Narrow money had surged in December, with notes and coin increasing by more than $4^{1/2}$ % in the month, and with the twelve-month growth rate (of $12^{1/2}$ %) at its highest for twenty years. This appeared to reflect end-year or end-millennium effects, including greater-than-normal stocking of ATMs and higher cash holdings by the public. A sharp reversal in the level of notes and coin now seemed to be under way in January. The Committee agreed that these movements were unlikely to have wider implications for the rest of the economy; both these and the pattern of retail sales around the turn of the year might be examples of seasonal or millennium 'fog' which obscured the underlying position. By contrast, once allowance was made for the weak growth of deposits by Other Financial Corporations (OFCs), the underlying growth in broad money was rather stable, at around 6%.

9 M4 lending to households had again been strong, with the twelve-month growth rate the highest for eight years, and the Bank's estimate for mortgage equity withdrawal had been revised up to £3.8 billion in 1999 Q3. 'Borrowing for consumption'—a measure which combined estimates of mortgage equity withdrawal and unsecured lending—was at nearly 5% of disposable income in Q3, its highest level since late 1990.

10 The housing market remained buoyant, with prices rising some $13^{1/2}$ % over the last year on both the Halifax and Nationwide measures, and with house price strength now more widely spread across the UK than before, although significant regional differences remained. Measures of turnover and housing activity showed a less clear trend, however, and a survey of house prices by the Royal Institute of Chartered Surveyors (RICS) for December recorded a rather lower figure for the balance of estate agents reporting a rise in house prices.

11 Two-year interest rates had risen by around 30 basis points since the December meeting. The rise in interest rates had not been offset by a rise in inflation expectations. Other things being equal, the rise in real interest rates along the yield curve would tend to dampen demand, including via its effect on new fixed-rate mortgages. So monetary conditions in the UK had clearly tightened over the past month. This might in part reflect the stronger prospects for world economic activity.

12 In addition, the effective exchange rate index had risen by around $1^{1}/_{4}$ % over the month. This would exacerbate the impact on net trade of the earlier appreciation, although it would be offset at least in part by the pick-up in world demand. Meanwhile equity prices in the UK had been rather volatile, rising during December and then falling back, but on balance were little changed over the month, and remained well above the central projection in the November *Inflation Report*.

Demand and output

13 The latest National Accounts data included revisions for the period from 1998 Q1. While estimates of the level of GDP in 1999 Q3 were little changed, growth in 1998 Q4 had been revised down, with more of a recovery in the following two quarters. GDP at constant market prices was now estimated to have grown by 0.8% in 1999 Q3 (as against the previous figure of 0.9%) but the year-on-year figure had been revised up to 1.9% (from 1.8%).

14 Household consumption was still estimated to have risen by 0.6% in 1999 Q3, but the level of consumption was now 0.6% lower than previously estimated, in part reflecting a downward revision to expenditure on cars earlier in 1999 following the changes in the seasonal pattern for vehicle registration. Business investment had fallen in Q3, and growth in investment as a whole in the quarter was barely positive. Within the total, manufacturing investment continued to fall, perhaps reflecting past pressure on margins, and there had also been a slight decline in investment by the services sector, after previous estimates had been revised up to show more rapid growth over the previous year. It was possible that some of the weakness in business investment reflected a pause in IT spending ahead of the new millennium. Government investment had increased sharply in Q3, although it remained well below planned levels. The level of government consumption expenditure had been revised down, though growth in Q3 was stronger than previous estimates.

15 Final domestic demand in Q3 was now estimated to be 3.2% above its level of a year earlier, compared with 4.1% in Q2, a figure which had itself been revised down from 4.5% in the previous estimate. Moreover, it seemed unlikely on present indications that year-on-year growth would pick up significantly from the $3\%-3^{1}/_{2}\%$ range either in 1999 Q4 or the present quarter. While such growth was likely to be too high to be sustainable in the long run, it was significantly lower than the $4\%-4^{1}/_{2}\%$ rates reported earlier in 1999, before the latest revisions had been made. The quarterly growth rate of final domestic demand had slowed more sharply, from 1.2% in 1999 Q1 to 0.4% in Q3, which if it persisted would no longer be above its sustainable rate. However, surveys and other evidence suggested that it could pickup in Q4.

16 While final domestic demand growth had fallen back, net external demand had been stronger in Q2 and Q3, making a positive contribution to GDP growth on a quarterly basis (though this might not continue into Q4). As a result growth in GDP on a year ago was only 0.7 percentage points lower in Q3 than growth in domestic demand, compared with a gap of 2.6 percentage points in 1999 Q1. To that extent the recovery was now better balanced. The stronger performance of net exports might, if sustained, tend to put pressure on resources unless domestic demand growth continued to moderate. However, there was spare capacity in many export and manufacturing sectors following their recent downturns.

17 There was also some evidence of better balance in the economy from the output data, with both manufacturing and industrial output up 1.2% over the previous quarter in Q3, while the services sector had grown by 0.6%. Such a recovery in industrial output was consistent with the upturn in external demand from Continental Europe; but the slowdown in services, which was in part due to lower growth in the financial and business services category, was less easy to explain, unless it reflected a pause ahead of the new millennium.

18 Growth in retail sales volumes (which excluded spending on vehicles) continued to slow on a three month on three month basis, while still running at around 4% at an annual rate. As always, it was difficult to gauge the underlying pattern of sales over the Christmas and New Year period, and it would be sensible to look at data for December and January together when these became available. This was even truer this year, given the uncertainties over the impact of the millennium date change. However, most of the determinants and indicators of consumption (such as real labour incomes, financial and non-financial wealth and household borrowing, as well as consumer confidence) appeared either to be strengthening or to have remained strong, suggesting that consumer spending might continue to grow relatively rapidly in the near future; this was in line with survey data on retail sales for December. But car sales seemed to be weak, with some consumers apparently delaying purchases in the hope that prices might fall sharply in the near future.

The labour market

19 Whole-economy headline earnings had risen by 4.9% in the year to October, with private sector earnings up by 5.1%. The headline figures represented a three-month average; taking the data for October alone, whole-economy earnings were up 5.1% on a year earlier, even though October was not a month in which bonus payments were typically large. There could be further upwards pressure on the Average Earnings Index in the next few months, if bonus payments were unusually high, for instance for millennium-related reasons. In any case, the figures for October suggested an upward revision to the profile for earnings contained in the central projection in the November *Inflation Report*.

20 There was some evidence of a recovery in labour productivity in the most recent data, at least part of which was expected for cyclical reasons. The *Inflation Report* had built in a recovery in productivity growth, and the increase seen in Q3 provided some support for that assumption. But unless productivity continued to improve, or pressure on margins intensified further, or the exchange rate continued to strengthen, stronger nominal earnings growth would lead to higher inflation in the medium term. Other indicators of wage pressure were more mixed, and as usual for the time of year there was little new information on settlements.

21 Employment had continued to increase, but at a rather slower pace than in the previous two months, with Labour Force Survey (LFS) employment up 0.2% in the three months to October compared with the previous three months, and other survey data also pointing to slower growth. Unemployment had fallen again, but on the LFS measure had remained at 5.9%, with some of the rise in employment reflecting, in an accounting sense, a reduction in the numbers of those previously inactive who wanted a job. The Bank's regional Agents continued to report that skills shortages had-at least in some areas-increased further but evidence the previous month from both the CBI Industrial Trends survey and the recently introduced CBI/Deloitte Services survey had suggested that skilled labour shortages were still below historical averages. Figures for turnover in the labour market, constructed from P45 job separation data, suggested that job creation might be increasing in gross terms. A weighted index of employment in manufacturing, services and construction based on data from the Chartered Institute of Purchasing and Supply (CIPS) suggested continuing, but rather modest, growth in employment in December, in line with other surveys, such as that by the Recruitment and Employment Confederation.

22 The Committee agreed that the labour market remained tight, and that in underlying terms earnings growth was becoming uncomfortably high, particularly if productivity growth did not pick up further. This strength might be exaggerated by erratic factors (such as unusually large one-off bonuses) in the coming months, part of which might be millennium-related.

Prices and costs

23 Despite the path of labour costs and oil and other commodity prices, retail price inflation remained subdued, with RPIX growing at 2.2% in November, below the $2^{1/2}$ % target for the eighth month in succession. The strength of the exchange rate was one possible cause; another was the impact of competition (including via the Internet) which might act to restrain prices. Such 'e-tailing' was now being talked about as increasingly important not just for goods such as books and CDs, but was also seen as likely to become more important for other sectors such as electrical equipment and cars. By shortening the supply chain e-tailing might drive down costs for consumers who bypassed the distributors, and depress margins for the more traditional retailers and other intermediaries. An overall reduction in distribution costs through greater business-to-business e-commerce might show up as higher productivity in coming years. Alternatively, the effects of such competition might prove either to be transitory or merely to redistribute profits between retailers; and reports of squeezes on margins at retailers might suggest that some of these adjustments had already occurred.

24 The Committee noted that the inflation expectations of the general public, as measured in the latest Barclays BASIX survey, had increased in Q4, the first increase since 1998 Q3. However, since the inflation measure was not specified, this might be no more than a reflection of the widely-expected rise in the RPI measure of inflation, which included mortgage interest payments.

Other considerations

25 The Committee discussed whether the change of millennium had given rise to problems of data interpretation, over and above the normal difficulties in identifying underlying developments over the Christmas and New Year period.

At its previous meeting, the Committee had reaffirmed that there was no reason for the Y2K period to constrain monetary policy setting in the UK, and had also noted that it was unclear whether any 'fog' around the year-end would be much thicker than usual. So far any Y2K uncertainties had indeed appeared to be rather limited. While some figures had clearly been affected, such as the narrow money data, adjustments could be made to take account of the distortions. The pattern of retail sales was not yet clear, but this was typical at this time of year. The prospect of the new millennium might have had some impact on investment, for instance in IT, though this remained unclear. That said, many of the backward-looking data were still for periods before the turn of the year, so further distortions in the data might perhaps be expected.

27 The Committee also noted that during the next month it would carry out a new quarterly forecast for the February *Inflation Report.* This would allow it to analyse some of the puzzles in the data in more detail, such as the continuing coexistence of relatively subdued retail price inflation, above-trend growth in demand, and a pick-up in earnings growth and commodity prices. To the extent that uncertainties surrounding some of these issues might soon diminish in a way which informed the policy decision, there was a case for waiting until this had been done. But to the extent that the news since the previous meeting warranted an increase in rates, there was no reason for a delay, and some members of the Committee had felt that a rise in rates had been needed already in December.

The immediate policy decision

28 The external environment for the UK had strengthened over the past month, as had most of the determinants of domestic demand, including wealth, labour income and household borrowing. At the same time, final domestic demand in Q3 had slowed, and inflation remained below the $2^{1}/_{2}$ % target. The Committee discussed the implications of these developments.

29 On one view, the repo rate should be increased by 25 basis points this month. Various considerations were advanced to support this view, with different members of the Committee placing differing weights on the factors identified.

30 For some, the choice this month was between raising rates by 25 or 50 basis points, but on balance there was no need to move by more than 25 basis points now. Since the previous meeting, the change in the economy had not been dramatic. The strengthening in the outlook for the world economy, especially in the euro area, had produced better balanced growth in the UK, but meant that domestic demand growth would need to slow further from its present $3\%-3^{1/2}\%$ annual rate if it were to be sustainable. In addition, a more generalised pick-up in world activity might place further upward pressure on commodity prices. While the very fast growth in narrow money in December seemed largely to reflect transitory factors, the credit figures were more of a concern. The sharp pickup in borrowing for consumption, from 2% of personal disposable income at the start of 1999 to almost 5% in O3, coupled with house prices and equity prices well above the central projection in the November Inflation Report, would tend to support robust consumption growth. This would put upward pressure on inflation in the future, despite a further rise in sterling and a welcome recovery in estimates of productivity growth to rather closer to the long-run trend. With annual retail sales growth remaining around 4%, further pressure would be placed on resources in the short term if investment recovered following the millennium change. In addition there was now some evidence that the tightening in the labour market was beginning to feed through into earnings. Average earnings in the private sector were growing at more than 5% on a year earlier, implying earnings growth well above the central projection in the November Inflation Report. Nevertheless, with inflation at present subdued, the costs of waiting a further month before deciding whether a further change in rates was going to be needed were small; the February Inflation Report provided an opportunity to carry out more analysis. Given the uncertainties, a tightening of policy this month by 25 basis points was the appropriate response.

Other members of the Committee agreed that an increase of 31 25 basis points was needed this month, but felt the outlook, particularly for inflation, was rather more benign. The pace of domestic demand appeared to be slowing and the recent news on GDP growth was in the surprisingly strong export figures, where the economy still had considerable room for growth. Inflation was still expected to remain below the $2^{1/2}$ % target for some time. Sterling had strengthened further, and some thought that it might rise even more, which would help to restrain prices. So too might structural changes in the economy over a number of years, perhaps reflecting stronger global competition and greater price sensitivity of consumers as a result of the enhanced price transparency brought about by Internet use. It was plausible that the growth of business-to-business e-commerce would lead to a significant reduction in costs. Average earnings might rise further in coming months, but this would partly reflect one-off factors such as bonuses; it would be important also to look at settlements data, as well as further microeconomic evidence on margins and productivity. It was also suggested that if the neutral level of real interest rates were around 3%, as some historical work suggested, and inflation expectations were firmly anchored at $2^{1/2}$ %, a neutral nominal rate would be around $5^{1/2}$ %. Given the strengthening of the world economy and many of the determinants of UK consumption it was appropriate for monetary policy to be tighter than neutral at present, but not by a great deal, especially given the strength of sterling, and this justified a 25 basis point increase in the repo rate.

32 On another view, an increase of 50 basis points was needed now. The recovery in the world economy and the remarkable strength in the principal determinants and indicators of consumption-such as real wages, secured and unsecured credit to households, wealth, and consumer confidence-suggested that in the absence of a tightening in monetary policy GDP would continue to grow above trend. Against this background the slowdown in final domestic demand in Q3 might well prove to be erratic. Given the strength of nominal earnings growth, it seemed likely that, in the absence of a stronger exchange rate, significant further improvements in productivity growth, or an intensification of the squeeze on margins, greater upward pressure would be placed on inflation in the medium term, even though at present RPIX was rising at less than $2^{1/2}$ %. An increase in rates of 25 basis points had been needed last month, and given developments since then more was needed now. The arguments for waiting a further month, for more data and the analysis underlying the February Inflation Report, were insufficient reason for delay: an increase of 50 basis points in the repo rate was required this month.

33 The Governor invited members of the Committee to vote on the proposition that the Bank's reported be increased by 25 basis points to 5.75%. Eight members of the Committee (the Governor, Mervyn King, David Clementi, Charles Goodhart, DeAnne Julius, Ian Plenderleith, John Vickers and Sushil Wadhwani) voted for the proposition. Willem Buiter voted against, preferring an increase of 50 basis points.

34 The following members of the Committee were present: Eddie George, Governor

Mervyn King, Deputy Governor responsible for monetary policy David Clementi, Deputy Governor responsible for financial stability Willem Buiter Charles Goodhart DeAnne Julius Ian Plenderleith John Vickers Sushil Wadhwani

35 Gus O'Donnell was present as the Treasury representative.

Annex: Summary of data presented by Bank staff

1 This Annex summarises the analysis presented by the Bank staff to the Monetary Policy Committee on 7 January, in advance of its meeting on 12–13 January 2000. At the start of the MPC meeting itself, members were made aware of information that had subsequently become available, and that information is included in this Annex.

I The international environment

2 The global economy had continued to strengthen. Growth in the United States and in the euro area had been robust in Q3; the Japanese economy however remained fragile. There had also been further signs of a strengthening of the recovery in Asia and a turn around in Latin America. But it was not yet clear whether some of the strength in activity in Q4 was related to Y2K effects, which would be unwound in 2000, or reflected more permanent developments. There were still few signs of global inflationary pressure. Oil prices had fallen back somewhat in early January from the levels achieved in November and December. Interest rates implied by futures contracts had increased in the United States, Japan and the euro area since early December.

3 US GDP growth in Q3 had been revised up further on an annualised basis, but the quarterly growth rate was unchanged. Investment growth in Q3 had been revised down to 1.7% from 2.0%. Investment in equipment and software had been strong in Q3, increasing by 3.7%. Consumer confidence had risen to 141.4, the highest since its all-time high of 142.3 in October 1968. Consumer confidence had been positively correlated with equity prices in recent years. US non-farm payrolls had risen 315,000 in December after a rise of 222,000 in November; the unemployment rate had remained at 4.1%. Annual consumer price inflation had remained at 2.6% in November, although core CPI inflation had risen to 2.2% from 2.1%.

Euro-area GDP had risen by 1.0% in Q3. Final domestic 4 demand and net trade had both made significant positive contributions to the rise in GDP. In the three largest euro-area economies (Germany, France and Italy) there had been a similar pattern of quarterly growth in Q3. Euro-area industrial confidence had increased in December, while consumer confidence had remained unchanged. German industrial production had increased 2.0% in the year to November, following an increase of 1.3% in the year to October. Strong growth in German manufacturing orders, increasing 12.5% in the year to November, and a pick-up in the IFO survey measure had suggested a further strengthening in activity. Euro-area unemployment had remained at 9.8% in November. Annual inflation in the euro area had risen to 1.6% in November, from 1.4% in October. The rise in inflation mainly reflected higher energy price inflation.

5 Japanese GDP had fallen by 1.0% in Q3 but was 0.9% higher than a year earlier. Private demand had remained weak in Q3; private consumption had fallen by 0.2% and non-residential investment had fallen by 0.3%. According to the December Tankan survey, enterprises' view of business conditions had improved, although manufacturers' sentiment had improved by more than that of non-manufacturers. Retail sales had fallen by 2.4% in November, a decline of 2.9% on a year earlier. The unemployment rate had fallen by 0.1 percentage point to 4.5% in November, although measured unemployment continued to be depressed by rises in inactivity. The consumer price index had fallen by 1.2% in the year to November, but excluding food had fallen by only 0.2%.

II Monetary and financial conditions

6 Narrow money had grown very rapidly in December. Notes and coin had increased by 4.6% on the month, after adjustment for seasonality and the introduction of the new 50p and £2 coins. The twelve-month growth rate had risen to 12.5%, the highest since 1979. Anecdotal evidence had suggested that a large proportion of December's growth reflected increased holdings by banks and building societies; in particular, ATM stocks were thought to have been higher than normal for the time of year. But the size of these additional bank holdings had been uncertain. ATM withdrawals had also been consistent with higher cash holdings by the public than over a typical Christmas period.

7 The stock of M4 had risen by £2.6 billion (0.3%) in November, and the twelve-month rate had picked up slightly to 3.2%. The weakness of M4 reflected the fall in deposits by the other financial corporations' sector (OFCs) in November, but the M4 holdings of private non-financial corporations (PNFCs) had again risen strongly. M4 lending (excluding securitisations) had grown by £9.7 billion (1.0%) in November, and the twelve-month growth rate had risen sharply to 8.4%. Strong borrowing by households and OFCs continued to drive this robust lending growth.

8 Households' M4 deposits had risen by £2.6 billion (0.5%) in November. M4 lending to households (excluding securitisations) had grown strongly, rising by £4.8 billion (0.9%) in November. The twelve-month growth rate had picked up to 9.2%, the highest rate since 1991 Q2. Within total lending to individuals, total net secured lending had risen by £3.8 billion (0.8%) in November, and the twelve-month growth rate had increased to 8.2%. The value of loan approvals had remained strong (at £10.4 billion). The stock of outstanding loan approvals had fallen (by £0.5 billion) for the first time since January 1999. This was thought to reflect both the relative strength of gross lending and a rise in cancellations in November.

9 Total unsecured lending had risen by ± 1.3 billion (1.2%) in November, but the twelve-month growth rate had declined again (to 13.4%) and had fallen by more than 4 percentage points in the past year. The Bank's estimate of mortgage equity withdrawal in 1999 Q3 had been revised upwards to ± 3.8 billion and 'total borrowing for consumption' (defined as mortgage equity withdrawal plus unsecured lending) grew strongly.

10 The M4 deposits of PNFCs had risen by £1.6 billion (1.3%) in November, and the twelve-month growth rate had picked up to 7.3%. In contrast, M4 lending to PNFCs had risen by only £0.3 billion (0.1%) in November, and the twelve-month growth rate had declined to 3.1%. But PNFCs' total borrowing (including foreign currency borrowing and capital market finance) had increased, with sterling capital issues being particularly strong.

11 OFCs' M4 deposits had fallen by £1.5 billion (-0.9%) in November, and the twelve-month growth rate had declined further to -7.0%. But M4 lending to OFCs had risen strongly, by £4.6 billion (2.2%), and the twelve-month growth rate had picked up sharply to 11.4%.

12 Nominal interest rates from gilts had risen between 30 and 50 basis points on the month, across all maturities. Short-term nominal forward rates at maturities up to five years had initially fallen following the December MPC meeting, but had subsequently firmed. Rising interest rate expectations, particularly at the long end, had also been evident in other countries over this period. Corporate bond spreads had narrowed since the beginning of January. Real interest rates derived from index-linked markets had shown little change at the short end, rising slightly at longer maturities. Survey-based measures of short-term real interest rates had also shown a slight increase in 1999 Q4.

13 Quoted retail rates data suggested that the November rate rise had been fully passed through to time deposit rates, but only partially passed through to sight deposit rates. The November rate rise had now been fully passed through to standard variable mortgage rates. The rate on new fixed rate mortgages had risen a little, despite falls in swap rates of the same maturity.

14 Implied forward inflation expectations had risen slightly, mainly reflecting the firming of nominal interest rates. Changes in survey-based measures of inflation expectations had been, overall, quite mixed over the month, but had shown a small increase in the general public's inflation expectations over the next two years.

15 Over the month UK equity prices had exhibited volatility, rising before year-end and subsequently falling back. A similar pattern had been observed in other international equity markets. The FTSE All-Share index had been broadly unchanged since the December MPC meeting, but it had been 7.5% above the November *Inflation Report* level.

16 The sterling effective exchange rate index had appreciated by 1.3% on the month, and had been 2.6% above the November *Inflation Report* central projection. Over the month, there had been little change in sterling against the euro, but sterling had appreciated against the dollar and yen. Monetary news had not appeared to explain much of these movements, since global interest rate expectations had for the most part risen in parallel.

III Demand and output

17 Quarterly GDP growth at constant market prices had been revised down by 0.1 percentage points in the third quarter to 0.8%. Revisions to previous quarters had reduced growth in 1998 Q4, but stronger growth in the first half of 1999 had left the level of GDP in Q3 little changed. Domestic demand growth had been revised down by 0.2 percentage points to 0.5% in Q3. This had been partly offset by the contribution made by net trade, which had been revised up from 0.2 to 0.3 percentage points. GDP in Q3 had been 1.9% higher than the same quarter a year earlier, revised up from 1.8%. Revisions to previous quarters had changed the pattern of annual GDP growth slightly, leaving the trough in 1998 Q4 and 1999 Q1 shallower.

Quarterly growth of household consumption expenditure 18 (including non-profit institutions serving households) had been unchanged at 0.6% in Q3. However, revisions to previous quarters back to 1998 Q1 had reduced the level of consumption in Q3 by 0.6%. Much of the downward revision in 1999 Q1 and Q2 had reflected changes in the seasonal pattern of expenditure on cars (which had been significantly affected by the introduction of the new registration month in March 1999). Quarterly growth in investment in Q3 had been revised down by 0.1 percentage points to 0.1%, but upward revisions to previous quarters, mainly to investment by the 'other services' sector, had increased the level of investment in Q3. Growth in investment in the services sector had slowed during 1999, and manufacturing investment continued to fall in Q3. Government consumption expenditure growth had been revised upwards to 0.7% in Q3, but downward revisions to previous quarters had left the level 0.3% lower.

19 Final domestic demand in Q3 had been slightly weaker than domestic demand growth because the change in inventories (revised up slightly) had contributed 0.1 percentage points to quarterly GDP growth. Revisions to previous quarters reduced the amount of destocking in 1998. Excluding the alignment adjustment, inventories had risen by ± 230 million in Q3. The revisions made little difference to the pattern of inventories as a proportion of output.

20 The deficit on trade in goods and services had narrowed in Q3 to £2.9 billion. Revisions to 1998 data had reduced the overall current account balance for the year to a £0.5 billion deficit from a surplus of £0.1 billion. Both import and export volumes growth had been strong in Q3 at 4.5% and 6.0% respectively. Monthly goods data had shown that export volumes had fallen 2.4% in October, while import volumes had remained high. Exports to non-EU countries had bounced back slightly in November.

21 Within the household sector, real post tax income had fallen by 2.0% in Q3, but there had been considerable volatility in recent quarters reflecting sharp changes in dividend income. The household saving ratio had fallen to 4.5% as a result of the fall in income. Growth in the gross operating surplus of corporations had been revised up in Q3 to 3.5%. The level of the gross operating surplus in Q3 had been revised up by 5.7%. Net borrowing by PNFCs had increased as a percentage of GDP in Q3 compared with a year ago.

22 Retail sales volume growth had increased by 0.2% in November, following an upwardly-revised 0.8% rise in October. The three-month on three-month growth rate had continued to slow. The CBI distributive trades survey had shown a positive net balance of 41% of retailers reporting increased sales volumes in December, and a balance of 21% expecting volumes to rise in January. Consumer confidence remained high: the GfK measure rose by 3 points to a net balance of +1.7 in December. Figures from the Society of Motor Manufacturers and Traders had shown total new car registrations in December 12.2% up on a year ago, although this comparison had been affected by the new registration month. Registrations for the whole of 1999 had been 2.2% lower than in 1998.

23 The Nationwide measure of annual house price inflation had remained unchanged in December at 13.3%. The Halifax measure had increased to 13.6%, the highest annual growth rate since August 1989. The monthly growth rate of the Halifax index had been 2.6% in December, but this followed a fall in November. Housing transactions, measured by the number of particulars delivered, had increased in December, but remained well below the levels seen in the late 1980s. Data from the Royal Institute of Chartered Surveyors had shown a fall in the seasonally-adjusted net balance of estate agents reporting price rises in the three months to December. The sales balance had indicated a fall in the number of transactions.

24 Data on economic activity in the fourth quarter of 1999 had remained strong in general. The Chartered Institute of Purchasing and Supply (CIPS) manufacturing activity index had increased to 56.1 in December, from 54.7 in the previous month, although the output balance had been broadly flat over the last six months. The CBI monthly industrial trends survey showed a slight strengthening of orders and output expectations. The CIPS construction index rose to 58.2 in December, and although the CIPS services index had fallen to 58.3 in December it continued to indicate growth.

IV The labour market

25 Employment growth had been more subdued than it had seemed from the previous two months' data. LFS employment had increased by 66,000 (0.2%) in the three months to October compared to the previous three months. Workforce jobs had fallen by 48,000 during Q3. Both the slower LFS employment growth (by comparison with previous, overlapping, LFS data) and the decline in workforce jobs had been driven by a large fall in self-employment. Workforce jobs, however, were generally more volatile than LFS employment. Most of the increase in LFS employment had been in full-time employment, which rose by 62,000 (0.3%). Part-time employment had risen by 4,000 (0.1%). As a result, employment growth in full-time equivalent terms had also increased. Total hours worked had fallen by 0.3% in the three months to October compared with the previous three months, and average hours had fallen.

26 Workforce jobs had been revised following the annual benchmarking exercise to make the data consistent with the most recent Annual Employment Survey. The impact of these revisions on the data, however, had been relatively small. Annual productivity growth, calculated using workforce jobs, had increased 0.5 percentage points in Q3, to 1.2%.

27 Survey data confirmed the weaker picture on employment growth. The CIPS manufacturing survey in December had shown manufacturing employment falling again, after two months of stability. In the CIPS services and construction surveys employment had continued to grow, but more slowly than in recent months. The Manpower survey for Q4 had indicated a slowdown in employment growth in all sectors.

28 Despite the weaker employment growth, skill shortages persisted. The Recruitment and Employment Confederation (REC) survey in December had shown that shortages of agency staff had increased again. Similarly, the Bank's Agents had reported that skills shortages persisted and, in some areas, had worsened. New vacancies reported to jobcentres had also fallen in November, while outflows (including placings) had risen, although both flows were volatile.

29 Unemployment had continued to fall on both the LFS and claimant count measures. LFS unemployment had fallen by 12,000 and the unemployment rate by 0.1 percentage point in the three months to October compared to the previous three months. Claimant count unemployment had fallen by 10,600 in November from the previous month. Short-term LFS unemployment had fallen a little, while long-term unemployment had risen. Dispersion of unemployment rates across regions had declined slightly in Q3. However, dispersion of unemployment rates at the county and travel-to-work area level suggested that regional data may understate the increase in dispersion in recent years.

30 Inactivity had fallen by 17,000 during this period compared to the previous three months, due mainly to a decline in the number of people who wanted a job, but were either not seeking or not available to start. This reversed the pattern of the previous two quarters.

31 Earnings growth had increased in most sectors. Whole-economy headline earnings growth had risen 0.2 percentage points to 4.9% in the year to October. Headline earnings growth in the private sector had risen 0.3 percentage points to 5.1%, while public sector growth had been unchanged at 3.9%. Earnings growth in both manufacturing and services was also higher. However, the Reward index had again grown by only 3.5% in November.

32 Wages and salaries per head, calculated from the National Accounts, had grown by 4.7% in Q3, the same rate as the Average Earnings Index. Following revisions, growth in unit wage costs had been falling since a peak in 1998 Q4. The FRES/REC survey had indicated that earnings growth for permanent staff supplied by agencies had remained broadly flat in December, while earnings growth for temporary/contract staff had fallen slightly.

33 There was little new information on settlements, as was typical of this time of year. The Bank's AEI-weighted twelve-month mean had fallen 0.1 percentage point to 3.4% in November. Public sector and private sector settlement means had both fallen slightly.

V Prices

Commodity prices had risen in the last month. The Bank oil-inclusive commodity price index had risen by 2.9% in November, more than recovering the fall in October, and taking the annual inflation rate to 16.8%, its highest since this series began in 1990. Most of the increase was accounted for by the rise in the price of crude oil. While the prices of 'hard' commodities (fuels and metals) had been rising month-on-month for some time, the prices of 'soft' commodities (mainly food) also rose in November. This meant that the Bank oil-exclusive index, which had been broadly flat since the end of 1998, had also risen in November. Oil prices rose only slightly in December but were around 150% higher than a year earlier. There was no evidence to suggest that these price rises were linked to pre-millennium stockpiling, as inventories did not appear to be abnormally high.

35 Manufacturing input prices had risen by 1.7% in November, in part reflecting higher oil prices, taking the annual inflation rate to 9.1%—its highest since September 1995. The CIPS input price index had fallen slightly in December.

36 There had been a slight pick-up in output price inflation (PPIY), largely reflecting higher prices of petroleum products. The CBI output price expectation balance, however, had remained well below its long-run average.

37 There had been significant revisions to the National Accounts deflators. The GDP deflator had risen by 2.4% in the year to 1999 Q3, revised up from 1.8%. This mainly reflected upward revisions to both the government and consumers' expenditure deflators since the start of 1998. The consumers' expenditure deflator had risen by 2.4% in the year to Q3, revised up from 1.8%; on the revised data, inflation on this measure eased between Q2 and Q3, in line with RPIX inflation. The retail sales deflator had risen by 0.2% in November, the first rise in 9 months, leading to a slight fall in the annual rate of deflation.

38 RPIX inflation was 2.2% in November, unchanged from October. RPIX service price inflation had remained at 3.9%, while RPIX goods price inflation had picked up slightly to 0.5%.

VI Reports by the Bank's regional Agents

39 The Bank's regional Agents reported a continued moderate recovery in manufacturing activity, although volume growth had been stronger than value growth in many cases. There had been little evidence of capacity constraints in manufacturing firms. Service sector output growth had stabilised at a high rate. IT-related activity had been flat approaching the year-end but it was expected to resume strongly in the New Year. There had been some evidence of increased capacity constraints in the service sector, mostly as a result of skill shortages. Construction activity had remained strong overall, but with wide regional variations.

40 Agents reported an improvement in retailers' year-on-year sales growth in December, with early indications that there had been solid Christmas trading. New car sales had been broadly flat and the used car market had also remained weak.

41 Manufacturers had continued to find it difficult to pass on increases in input prices, and margins had been squeezed further. In the service sector, input price increases remained easier to pass through to consumers. There had been further downward pressure on retail goods prices, particularly food, clothing and electrical goods. Manufacturing pay settlements in early 2000 were expected to be no higher than a year earlier. But stronger pressure had been seen in the service sector, mostly reflecting skill shortages. City bonuses were expected to be much higher than last year.

VII Market intelligence

42 Market expectations of official UK interest rates implied by short sterling futures contracts had risen since the previous meeting of the Committee; most of this movement had occurred in early January. A large majority of market participants expected the Committee to increase official interest rates by 25 basis points at its next meeting; a few predicted a 50 basis point rise. Interest rate expectations had also risen sharply in the US and euro area, with futures contracts implying that interest rates in each would be increased by a total of 50 basis points in the first quarter of 2000. The smooth transition to the Year 2000 had reinforced expectations of rate rises, particularly in the US. Data releases in the UK, US, and euro area had been interpreted as signalling stronger global economic prospects.

43 Sterling had appreciated against the dollar during the month. It had risen less against the euro, although in late December sterling had reached a new high against the euro. Some market participants had commented that they expected the euro to appreciate over the next year. Data releases indicated that the German economy was recovering, and structural reforms in the euro area were in prospect. On balance, market forecasts for 2000 were for the sterling-dollar exchange rate to remain broadly stable, and for the euro to appreciate against both sterling and the dollar.

Text of Bank of England press notice of 13 January 2000 Bank of England raises interest rates by 0.25% to 5.75%

The Bank of England's Monetary Policy Committee today voted to raise the Bank's repo rate by 0.25% to 5.75%.

The Committee reviewed monetary and economic developments since its previous meeting. The outlook for world economic activity has strengthened. Prospective growth in domestic demand remains strong: increases in wealth, labour income and household borrowing all suggest that consumer spending will continue to grow robustly. Inflation is currently below the $2^{1}/_{2}$ % target and is expected to remain so for a while, but it is likely to rise above target further ahead, reflecting developing pressures in the labour market and on productive capacity. Accordingly the Committee concluded that an increase in interest rates of 0.25% to 5.75% was needed to meet the inflation target in the medium term.

The minutes of the meeting will be published at 9.30 am on Wednesday 26 January.

Text of Bank of England press notice of 10 February 2000 Bank of England raises interest rates by 0.25% to 6.0%

The Bank of England's Monetary Policy Committee today voted to raise the Bank's reportate by 0.25% to 6.0%.

The Committee's latest inflation and output projections will appear in the Inflation Report to be published on Thursday 17 February.

The minutes of the meeting will be published at 9.30 am on Wednesday 23 February.

Glossary and other information

Glossary of selected data

AEI: Average Earnings Index.

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

ERI: exchange rate index.

HICP: Harmonised Index of Consumer Prices.

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.
- **Reward Index:** a six-month moving average measure of growth in total pay in the United Kingdom, produced by The Reward Group.

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.

Three-month annualised: the percentage change in a series over three months, expressed as an annual rate.

Abbreviations

ACT: Advance Corporation Tax. AEI: Average Earnings Index. BCC: British Chambers of Commerce. **CBI:** Confederation of British Industry. CIPS: Chartered Institute of Purchasing and Supply. **DETR:** Department of the Environment, Transport and the Regions. DS: Datastream. FTSE: Financial Times Stock Exchange. GfK: Gesellschaft für Konsum, Great Britain Ltd. IT: Information technology. LIFFE: London International Financial Futures and Options Exchange. LFS: Labour Force Survey. MEW: Mortgage equity withdrawal. MPC: Monetary Policy Committee. NIESR: National Institute of Economic and Social Research. **OECD:** Organisation for Economic Co-operation and Development. **OFCs:** Other financial corporations. **ONS:** Office for National Statistics. **OPEC:** Organisation of Petroleum Exporting Countries. **PBR:** Pre-Budget Report. **PNFCs:** Private non-financial corporations. **REC:** Recruitment and Employment Confederation. S&P: Standard and Poor's. **UIP:** Uncovered interest parity. WTD: Working Time Directive. Y2K: Year 2000.

Symbols and conventions

Except where otherwise stated, the source of the data used in charts and tables is the Office for National Statistics (ONS). n.a. = not available.

Because of rounding, the sum of the separate items may sometimes differ from the total shown. On the horizontal axes of graphs, larger ticks denote the first observation within the relevant period, eg data for the first quarter of the year.

Other information

email: mapublications@bankofengland.co.uk This *Report* is available at: www.bankofengland.co.uk/ir.htm